

SECTION 1

D-SUBMINIATURE CONNECTORS

CONEC D-Subminiature connector dimensions conform to IEC 60807-2 (formerly DIN 41652) or MIL-C-24308. These cable/device connectors each consist of a plug/jack mating pair which meets IEC Recommendation 48 B, deliverable in five standardized housing sizes with standard pole counts of 9, 15, 25, 37 and 50. In addition to this, we also have a high density series deliverable with pole counts of 15, 26, 44, 62 and 78.

These connectors are utilized in control, regulation and communications technology. The machined, precision contacts are hard-gold plated over a nickel barrier layer appropriate to the given application requirements.

The isolating body is made of polyester GF, self-extinguishing per UL 94 V0, and can also be adapted on an application-specific basis.





The trapezoid shaped housing (shell) provides mechanical protection, electrical shielding and ensures proper plug-in alignment. CONEC connectors are compatible with industry standards. Hoods and Backshells are configured for either straight or side cable entry.

An extensive assortment consisting of protective caps, hard ware and latches can be supplied.

Need a custom design? Please contact us.



D-SUB STANDARD

Solder cup – Precision machined contacts – For wire size AWG 20

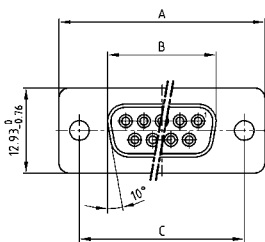


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

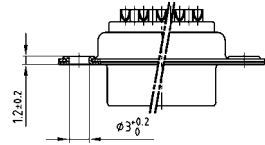
- Suitable for wire size AWG 20
- Mounting styles:
 - with through-hole, Ø .118" / 3 mm
 - with M3 or 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

SOCKET CONNECTOR

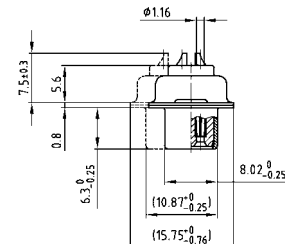


No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 +0.12
15	39.52	24.79	33.30 +0.15 -0.10
25	53.42	38.50	47.04 +0.13
37	69.70	54.96	63.50 +0.13
50	67.31	52.55	61.10 +0.14 -0.11

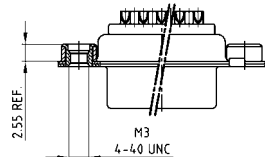
Mounting style: Through-hole



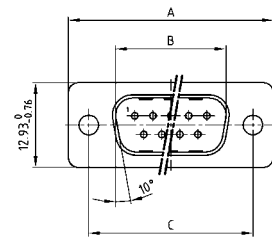
Mounting style: Threaded insert



50 pos. = Dim. in (_)

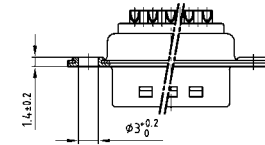


PLUG CONNECTOR

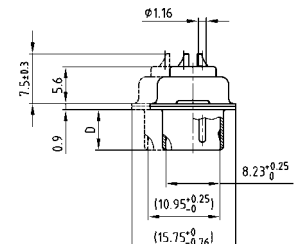


No. of pos.	A -0.76	B +0.25	C	D -0.3
09	31.19	16.79	25.00 +0.12	6.12
15	39.52	25.12	33.30 +0.15 -0.10	6.12
25	53.42	38.84	47.04 +0.13	5.99
37	69.70	55.30	63.50 +0.13	5.99
50	67.31	52.68	61.10 +0.14 -0.11	5.99

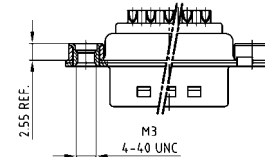
Mounting style: Through-hole



Mounting style: Threaded insert



50 pos. = Dim. in (_)



ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	164A10019X
15	Through-hole	164A10029X
25	Through-hole	164A10039X
37	Through-hole	164A10049X
50	Through-hole	164A10059X
09	4-40 UNC Threaded insert	164A10219X
15	4-40 UNC Threaded insert	164A10229X
25	4-40 UNC Threaded insert	164A10239X
37	4-40 UNC Threaded insert	164A10249X
50	4-40 UNC Threaded insert	164A10259X
09	M3 Threaded insert	164A10269X
15	M3 Threaded insert	164A10279X
25	M3 Threaded insert	164A10289X
37	M3 Threaded insert	164A10299X
50	M3 Threaded insert	164A10309X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	163A11069X
15	Through-hole	163A11079X
25	Through-hole	163A11089X
37	Through-hole	163A11099X
50	Through-hole	163A11109X
09	4-40 UNC Threaded insert	163A11269X
15	4-40 UNC Threaded insert	163A11279X
25	4-40 UNC Threaded insert	163A11289X
37	4-40 UNC Threaded insert	163A11299X
50	4-40 UNC Threaded insert	163A11309X
09	M3 Threaded insert	163A11319X
15	M3 Threaded insert	163A11329X
25	M3 Threaded insert	163A11339X
37	M3 Threaded insert	163A11349X
50	M3 Threaded insert	163A11359X

D-SUB STANDARD

Solder cup – Stamped contacts – For wire size AWG 20

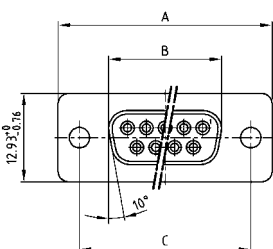


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

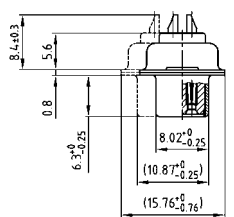
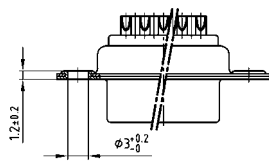
- Suitable for wire size AWG 20
- Mounting style: with through-hole, Ø .118" / 3 mm
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

SOCKET CONNECTOR



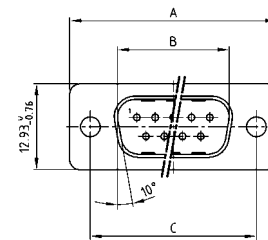
No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 +0.12
15	39.52	24.79	33.30 +0.15 -0.10
25	53.42	38.50	47.04 ±0.13
37	69.70	54.96	63.50 ±0.13
50	67.31	52.55	61.10 +0.14 -0.11

Mounting style: Through-hole



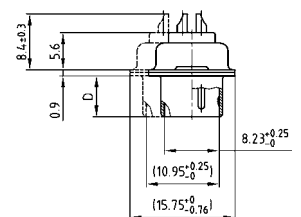
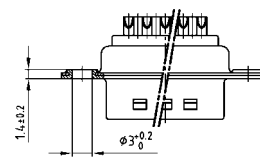
50 pos. = Dim. in (_)

PLUG CONNECTOR



No. of pos.	A -0.76	B -0.25	C	D -0.3
09	31.19	16.79	25.00 -0.12	6.12
15	39.52	25.12	33.30 +0.15 -0.10	6.12
25	53.42	38.84	47.04 ±0.13	5.99
37	69.70	55.30	63.50 ±0.13	5.99
50	67.31	52.68	61.10 -0.14 -0.11	5.99

Mounting style: Through-hole



50 pos. = Dim. in (_)

ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	302A10019X
15	Through-hole	302A10029X
25	Through-hole	302A10059X
37	Through-hole	302A10069X
50	Through-hole	302A10079X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	301A10019X
15	Through-hole	301A10029X
25	Through-hole	301A10059X
37	Through-hole	301A10069X
50	Through-hole	301A10079X

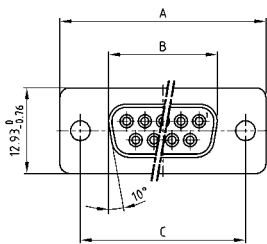
D-SUB STANDARD

Solder pin – Straight – Precision machined contacts



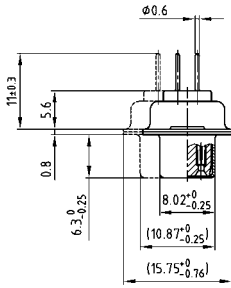
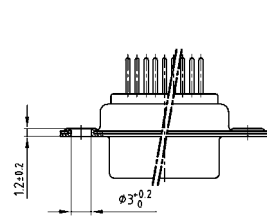
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

SOCKET CONNECTOR



No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 +0.12
15	39.52	24.79	33.30 +0.15 / -0.10
25	53.42	38.50	47.04 +0.13
37	69.70	54.96	63.50 +0.13
50	67.31	52.55	61.10 +0.14 / -0.11

PCB-Layout: Kat1kFUA

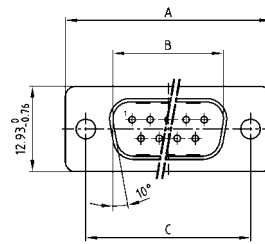


50 pos. = Dim. in (_)

DESCRIPTION

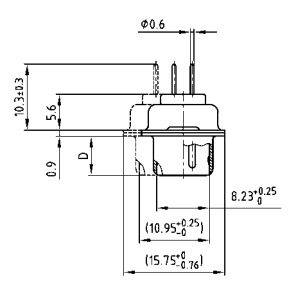
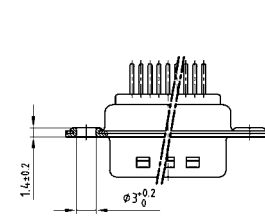
- Mounting styles:
 - with through-hole, Ø .118"/3 mm
 - with 4-40 UNC or M3 threaded insert
 - with 4-40 UNC or M3 threaded rear spacer
 - with 4-40 UNC or M3 front and threaded rear spacer
 - with 4-40 UNC front/M3 threaded rear spacer
 - with M3 front/4-40 UNC or M3 threaded rear spacer with PCB clip
 - with 4-40 UNC or M3 Front/Threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

PLUG CONNECTOR



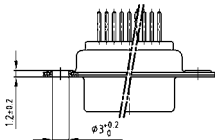
No. of pos.	A -0.76	B -0.25	C	D -0.3
09	31.19	16.79	25.00 +0.12	6.12
15	39.52	25.12	33.30 +0.15 / -0.10	6.12
25	53.42	38.84	47.04 +0.13	5.99
37	69.70	55.30	63.50 +0.13	5.99
50	67.31	52.68	61.10 +0.14 / -0.11	5.99

PCB-Layout: Kat1kFUA



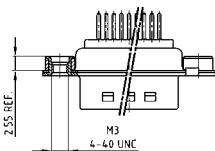
50 pos. = Dim. in (_)

ORDER DATA



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	164A10069X
15	Through-hole	164A10079X
25	Through-hole	164A10089X
37	Through-hole	164A10099X
50	Through-hole	164A10109X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	163A11119X
15	Through-hole	163A11129X
25	Through-hole	163A11139X
37	Through-hole	163A11149X
50	Through-hole	163A11159X



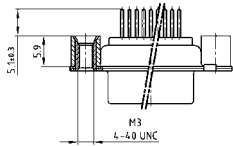
SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded insert	164A10319X
15	4-40 UNC Threaded insert	164A10329X
25	4-40 UNC Threaded insert	164A10339X
37	4-40 UNC Threaded insert	164A10349X
50	4-40 UNC Threaded insert	164A10359X
09	M3 Threaded insert	164A10369X
15	M3 Threaded insert	164A10379X
25	M3 Threaded insert	164A10389X
37	M3 Threaded insert	164A10399X
50	M3 Threaded insert	164A10409X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded insert	163A11369X
15	4-40 UNC Threaded insert	163A11379X
25	4-40 UNC Threaded insert	163A11389X
37	4-40 UNC Threaded insert	163A11399X
50	4-40 UNC Threaded insert	163A11409X
09	M3 Threaded insert	163A11419X
15	M3 Threaded insert	163A11429X
25	M3 Threaded insert	163A11439X
37	M3 Threaded insert	163A11449X
50	M3 Threaded insert	163A11459X

D-SUB STANDARD – MOUNTING STYLES

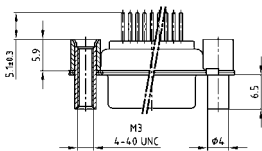
Solder pin – Straight – Precision machined contacts

ORDER DATA



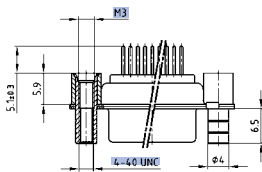
SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded rear spacer	164A12029X
15	4-40 UNC Threaded rear spacer	164A12039X
25	4-40 UNC Threaded rear spacer	164A12049X
37	4-40 UNC Threaded rear spacer	164A12059X
50	4-40 UNC Threaded rear spacer	164A12069X
09	M3 Threaded rear spacer	164A12079X
15	M3 Threaded rear spacer	164A12089X
25	M3 Threaded rear spacer	164A12099X
37	M3 Threaded rear spacer	164A12109X
50	M3 Threaded rear spacer	164A12119X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded rear spacer	163A13629X
15	4-40 UNC Threaded rear spacer	163A13639X
25	4-40 UNC Threaded rear spacer	163A13649X
37	4-40 UNC Threaded rear spacer	163A13659X
50	4-40 UNC Threaded rear spacer	163A13669X
09	M3 Threaded rear spacer	163A13679X
15	M3 Threaded rear spacer	163A13689X
25	M3 Threaded rear spacer	163A13699X
37	M3 Threaded rear spacer	163A13709X
50	M3 Threaded rear spacer	163A13719X



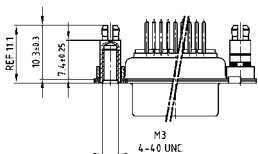
SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Front/Threaded rear spacer	164A12129X
15	4-40 UNC Front/Threaded rear spacer	164A12139X
25	4-40 UNC Front/Threaded rear spacer	164A12149X
37	4-40 UNC Front/Threaded rear spacer	164A12159X
50	4-40 UNC Front/Threaded rear spacer	164A12169X
09	M3 Front/Threaded rear spacer	164A12179X
15	M3 Front/Threaded rear spacer	164A12189X
25	M3 Front/Threaded rear spacer	164A12199X
37	M3 Front/Threaded rear spacer	164A12209X
50	M3 Front/Threaded rear spacer	164A12219X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Front/Threaded rear spacer	163A13729X
15	4-40 UNC Front/Threaded rear spacer	163A13739X
25	4-40 UNC Front/Threaded rear spacer	163A13749X
37	4-40 UNC Front/Threaded rear spacer	163A13759X
50	4-40 UNC Front/Threaded rear spacer	163A13769X
09	M3 Front/Threaded rear spacer	163A13779X
15	M3 Front/Threaded rear spacer	163A13789X
25	M3 Front/Threaded rear spacer	163A13799X
37	M3 Front/Threaded rear spacer	163A13809X
50	M3 Front/Threaded rear spacer	163A13819X



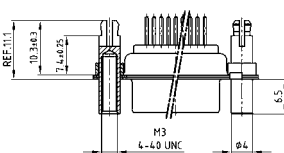
SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Front /M3 Threaded rear spacer	164A12919X
15	4-40 UNC Front /M3 Threaded rear spacer	164A12929X
25	4-40 UNC Front /M3 Threaded rear spacer	164A12939X
37	4-40 UNC Front /M3 Threaded rear spacer	164A12949X
50	4-40 UNC Front /M3 Threaded rear spacer	164A12959X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Front /M3 Threaded rear spacer	163A14439X
15	4-40 UNC Front /M3 Threaded rear spacer	163A14449X
25	4-40 UNC Front /M3 Threaded rear spacer	163A14459X
37	4-40 UNC Front /M3 Threaded rear spacer	163A14469X
50	4-40 UNC Front /M3 Threaded rear spacer	163A14479X



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded rear spacer PCB clip	164A16569X
15	4-40 UNC Threaded rear spacer PCB clip	164A16579X
25	4-40 UNC Threaded rear spacer PCB clip	164A16589X
37	4-40 UNC Threaded rear spacer PCB clip	164A16599X
50	4-40 UNC Threaded rear spacer PCB clip	164A16609X
09	M3 Threaded rear spacer PCB clip	164A16619X
15	M3 Threaded rear spacer PCB clip	164A16629X
25	M3 Threaded rear spacer PCB clip	164A16639X
37	M3 Threaded rear spacer PCB clip	164A16649X
50	M3 Threaded rear spacer PCB clip	164A16659X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded rear spacer PCB clip	163A16159X
15	4-40 UNC Threaded rear spacer PCB clip	163A16169X
25	4-40 UNC Threaded rear spacer PCB clip	163A16179X
37	4-40 UNC Threaded rear spacer PCB clip	163A16189X
50	4-40 UNC Threaded rear spacer PCB clip	163A16199X
09	M3 Threaded rear spacer PCB clip	163A16209X
15	M3 Threaded rear spacer PCB clip	163A16219X
25	M3 Threaded rear spacer PCB clip	163A16229X
37	M3 Threaded rear spacer PCB clip	163A16239X
50	M3 Threaded rear spacer PCB clip	163A16249X



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Front/Threaded rear spacer PCB clip	164A16669X
15	4-40 UNC Front/Threaded rear spacer PCB clip	164A16679X
25	4-40 UNC Front/Threaded rear spacer PCB clip	164A16689X
37	4-40 UNC Front/Threaded rear spacer PCB clip	164A16699X
50	4-40 UNC Front/Threaded rear spacer PCB clip	164A16709X
09	M3 Front/Threaded rear spacer PCB clip	164A16719X
15	M3 Front/Threaded rear spacer PCB clip	164A16729X
25	M3 Front/Threaded rear spacer PCB clip	164A16739X
37	M3 Front/Threaded rear spacer PCB clip	164A16749X
50	M3 Front/Threaded rear spacer PCB clip	164A16759X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Front/Threaded rear spacer PCB clip	163A16259X
15	4-40 UNC Front/Threaded rear spacer PCB clip	163A16269X
25	4-40 UNC Front/Threaded rear spacer PCB clip	163A16279X
37	4-40 UNC Front/Threaded rear spacer PCB clip	163A16289X
50	4-40 UNC Front/Threaded rear spacer PCB clip	163A16299X
09	M3 Front/Threaded rear spacer PCB clip	163A16309X
15	M3 Front/Threaded rear spacer PCB clip	163A16319X
25	M3 Front/Threaded rear spacer PCB clip	163A16329X
37	M3 Front/Threaded rear spacer PCB clip	163A16339X
50	M3 Front/Threaded rear spacer PCB clip	163A16349X

PCB clip for .126" / 3.2 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness.

PCB-Layout: Kat1kFUA

PCB-Layout: Kat1kFUA

D-SUB STANDARD

Solder pin – Straight – Stamped contacts

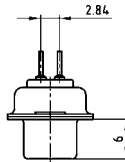
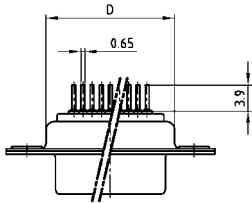
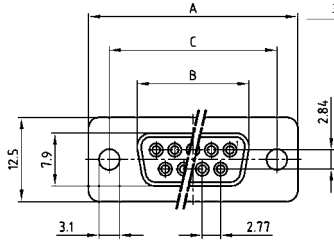


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

SOCKET CONNECTOR

9-37 pos.

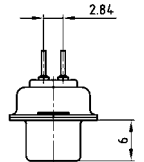
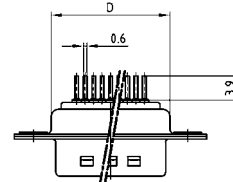
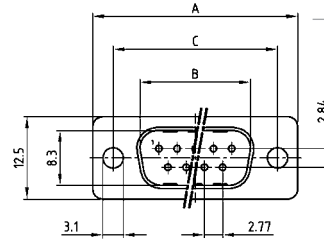
No. of pos.	A	B	C	D
09	30.80	16.30	25.00	19.20
15	39.20	24.60	33.30	27.70
25	53.10	38.30	47.04	41.10
37	69.40	54.80	63.50	57.30



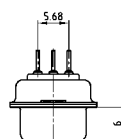
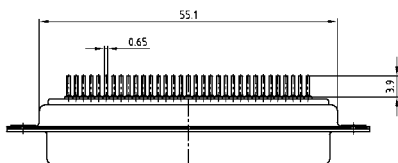
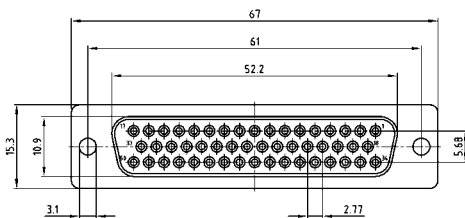
PLUG CONNECTOR

9-37 pos.

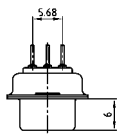
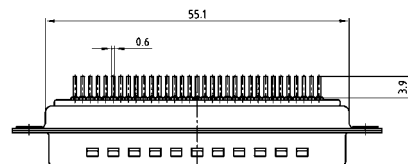
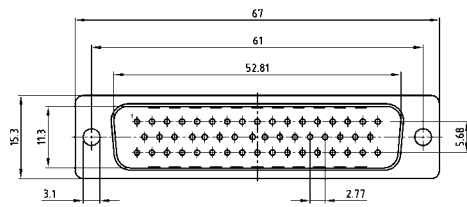
No. of pos.	A	B	C	D
09	30.80	16.92	25.00	19.20
15	39.20	25.25	33.30	27.70
25	53.10	38.96	47.04	41.10
37	69.40	55.42	63.50	57.30



50 pos.



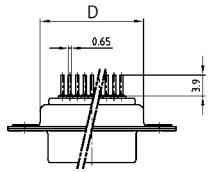
50 pos.



D-SUB STANDARD – MOUNTING STYLES

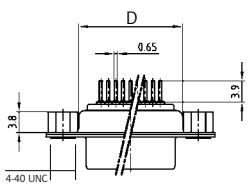
Solder pin – Straight – Stamped contacts

ORDER DATA



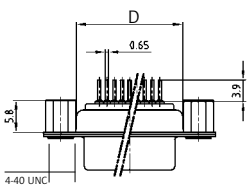
SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	DLS1XS4AD01X
15	Through-hole	DLS2XS4AD01X
25	Through-hole	DLS3XS4AD01X
37	Through-hole	DLS4XS4AD01X
50	Through-hole	DLS5XS4AD01X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	DLS1XP4AD01X
15	Through-hole	DLS2XP4AD01X
25	Through-hole	DLS3XP4AD01X
37	Through-hole	DLS4XP4AD01X
50	Through-hole	DLS5XP4AD01X



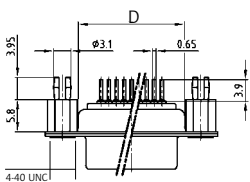
SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded insert	DLS1XS4AG06X
15	Threaded insert	DLS2XS4AG06X
25	Threaded insert	DLS3XS4AG06X
37	Threaded insert	DLS4XS4AG06X
50	Threaded insert	DLS5XS4AG06X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded insert	DLS1XP4AG06X
15	Threaded insert	DLS2XP4AG06X
25	Threaded insert	DLS3XP4AG06X
37	Threaded insert	DLS4XP4AG06X
50	Threaded insert	DLS5XP4AG06X



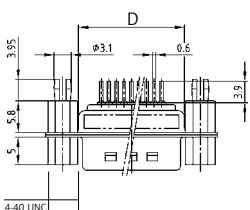
SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded rear spacer	DLS1XS4AA37X
15	Threaded rear spacer	DLS2XS4AA37X
25	Threaded rear spacer	DLS3XS4AA37X
37	Threaded rear spacer	DLS4XS4AA37X
50	Threaded rear spacer	DLS5XS4AA37X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded rear spacer	DLS1XP4AA37X
15	Threaded rear spacer	DLS2XP4AA37X
25	Threaded rear spacer	DLS3XP4AA37X
37	Threaded rear spacer	DLS4XP4AA37X
50	Threaded rear spacer	DLS5XP4AA37X



SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded rear spacer PCB clip	DLS1XS4AA35X
15	Threaded rear spacer PCB clip	DLS2XS4AA35X
25	Threaded rear spacer PCB clip	DLS3XS4AA35X
37	Threaded rear spacer PCB clip	DLS4XS4AA35X
50	Threaded rear spacer PCB clip	DLS5XS4AA35X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded rear spacer PCB clip	DLS1XP4AA35X
15	Threaded rear spacer PCB clip	DLS2XP4AA35X
25	Threaded rear spacer PCB clip	DLS3XP4AA35X
37	Threaded rear spacer PCB clip	DLS4XP4AA35X
50	Threaded rear spacer PCB clip	DLS5XP4AA35X



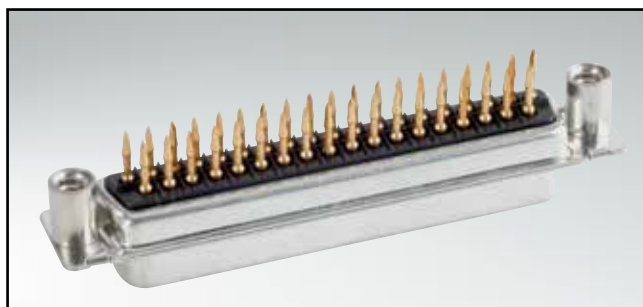
SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Front/Threaded rear spacer PCB clip	DLS1XS4AA39X
15	Front/Threaded rear spacer PCB clip	DLS2XS4AA39X
25	Front/Threaded rear spacer PCB clip	DLS3XS4AA39X
37	Front/Threaded rear spacer PCB clip	DLS4XS4AA39X
50	Front/Threaded rear spacer PCB clip	DLS5XS4AA39X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Front/Threaded rear spacer PCB clip	DLS1XP4AA39X
15	Front/Threaded rear spacer PCB clip	DLS2XP4AA39X
25	Front/Threaded rear spacer PCB clip	DLS3XP4AA39X
37	Front/Threaded rear spacer PCB clip	DLS4XP4AA39X
50	Front/Threaded rear spacer PCB clip	DLS5XP4AA39X

PCB clip for .126"/3.2 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness.

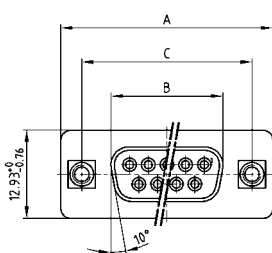
D-SUB STANDARD

Press-fit contact – Straight – Precision machined contacts



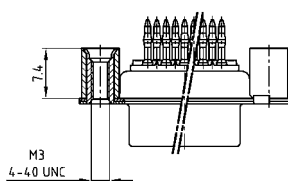
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

SOCKET CONNECTOR

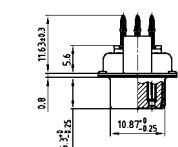
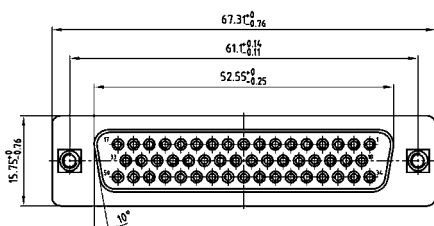
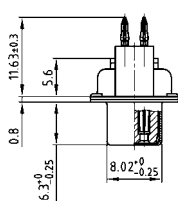


No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 ± 0.12
15	39.52	24.79	33.30 $\begin{smallmatrix} +0.15 \\ -0.10 \end{smallmatrix}$
25	53.42	38.50	47.04 ± 0.13
37	69.70	54.96	63.50 ± 0.13

9-37 pos.



50 pos.



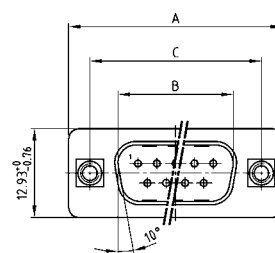
ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded rear spacer	DSS1XSFAA49X
15	4-40 UNC Threaded rear spacer	DSS2XSFAA49X
25	4-40 UNC Threaded rear spacer	DSS3XSFAA49X
37	4-40 UNC Threaded rear spacer	DSS4XSFAA49X
50	4-40 UNC Threaded rear spacer	DSS5XSFAA49X
09	M3 Threaded rear spacer	DSS1XPF50X
15	M3 Threaded rear spacer	DSS2XPF50X
25	M3 Threaded rear spacer	DSS3XPF50X
37	M3 Threaded rear spacer	DSS4XPF50X
50	M3 Threaded rear spacer	DSS5XPF50X

DESCRIPTION

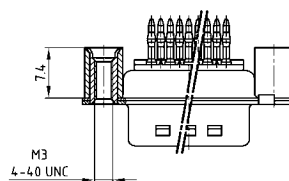
- Mounting style:
with M3 or 4-40 UNC threaded rear spacer
- For .040" / 1.0 mm $\begin{smallmatrix} +0.003 \\ -0.002 \end{smallmatrix}$ / 0.09 mm $\begin{smallmatrix} +0.09 \\ -0.06 \end{smallmatrix}$ finished through-hole diameter
Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- Order press-fit tool separately

PLUG CONNECTOR

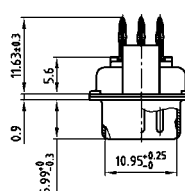
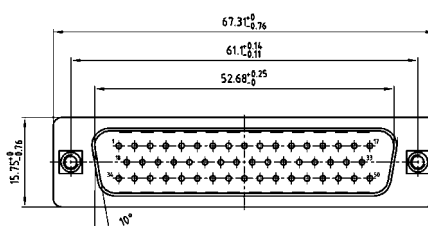
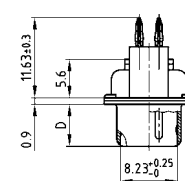


No. of pos.	A -0.76	B +0.25	C	D -0.3
09	31.19	16.79	25.00 ± 0.12	6.12
15	39.52	25.12	33.30 $\begin{smallmatrix} +0.15 \\ -0.10 \end{smallmatrix}$	6.12
25	53.42	38.84	47.04 ± 0.13	5.99
37	69.70	55.30	63.50 ± 0.13	5.99

9-37 pos.



50 pos.



PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded rear spacer	DSS1XPFAA49X
15	4-40 UNC Threaded rear spacer	DSS2XPFAA49X
25	4-40 UNC Threaded rear spacer	DSS3XPFAA49X
37	4-40 UNC Threaded rear spacer	DSS4XPFAA49X
50	4-40 UNC Threaded rear spacer	DSS5XPFAA49X
09	M3 Threaded rear spacer	DSS1XPFAA50X
15	M3 Threaded rear spacer	DSS2XPFAA50X
25	M3 Threaded rear spacer	DSS3XPFAA50X
37	M3 Threaded rear spacer	DSS4XPFAA50X
50	M3 Threaded rear spacer	DSS5XPFAA50X

D-SUB STANDARD

Press-fit contact – Straight – Precision machined contacts – Rear press-fit spacer

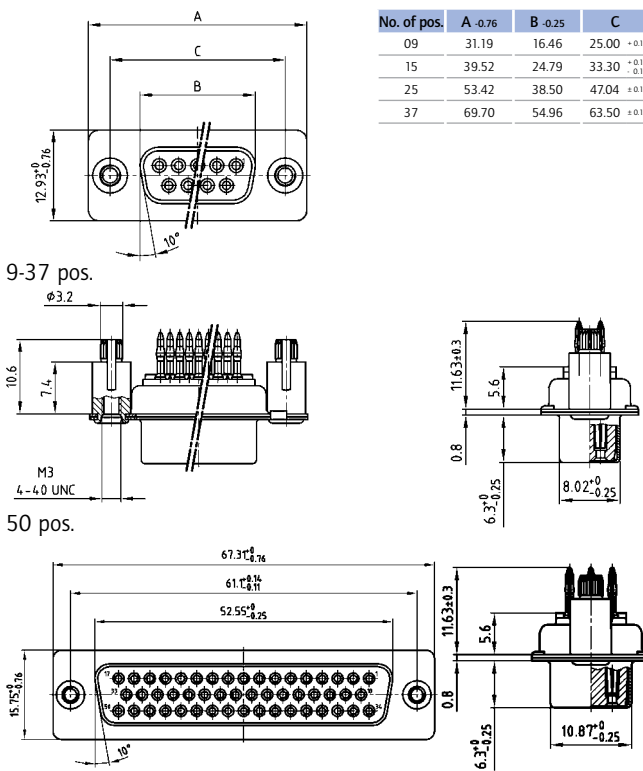


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

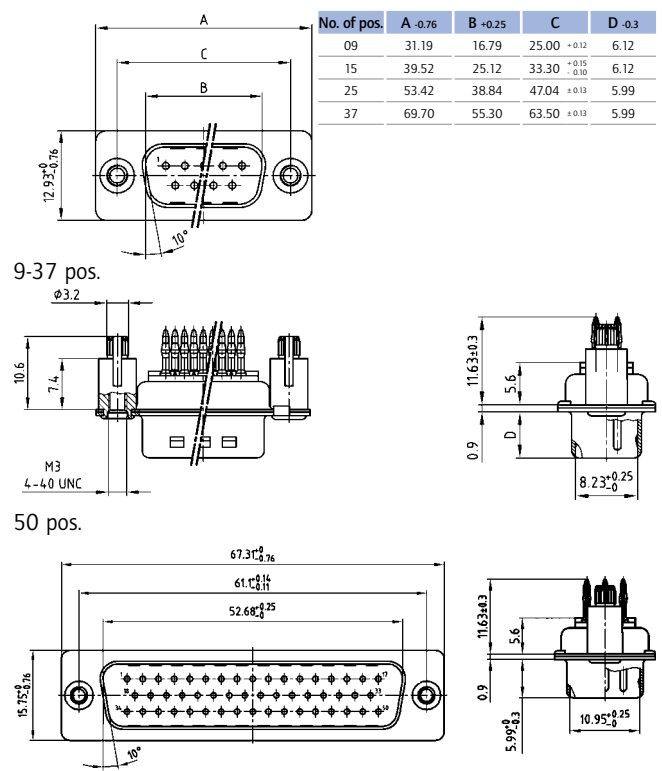
DESCRIPTION

- Mounting style:
with M3 or 4-40 UNC rear press-fit spacer
- For .040" / 1.0 mm $\pm \begin{matrix} .003^+ / .09 \text{ mm} \\ .002^- / .06 \text{ mm} \end{matrix}$ finished through-hole diameter
Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- Order press-fit tool separately

SOCKET CONNECTOR



PLUG CONNECTOR



ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Rear press-fit spacer	DSS1XSFAA54X
15	4-40 UNC Rear press-fit spacer	DSS2XSFAA54X
25	4-40 UNC Rear press-fit spacer	DSS3XSFAA54X
37	4-40 UNC Rear press-fit spacer	DSS4XSFAA54X
50	4-40 UNC Rear press-fit spacer	DSS5XSFAA54X
09	M3 Rear press-fit spacer	DSS1XPFAA53X
15	M3 Rear press-fit spacer	DSS2XPFAA53X
25	M3 Rear press-fit spacer	DSS3XPFAA53X
37	M3 Rear press-fit spacer	DSS4XPFAA53X
50	M3 Rear press-fit spacer	DSS5XPFAA53X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Rear press-fit spacer	DSS1XPFAA54X
15	4-40 UNC Rear press-fit spacer	DSS2XPFAA54X
25	4-40 UNC Rear press-fit spacer	DSS3XPFAA54X
37	4-40 UNC Rear press-fit spacer	DSS4XPFAA54X
50	4-40 UNC Rear press-fit spacer	DSS5XPFAA54X
09	M3 Rear press-fit spacer	DSS1XPFAA53X
15	M3 Rear press-fit spacer	DSS2XPFAA53X
25	M3 Rear press-fit spacer	DSS3XPFAA53X
37	M3 Rear press-fit spacer	DSS4XPFAA53X
50	M3 Rear press-fit spacer	DSS5XPFAA53X

Rear press-fit spacer for .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness.

D-SUB STANDARD

Wire wrap – Precision machined contacts

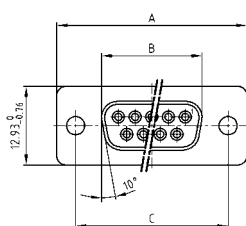


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

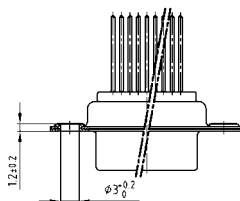
- Mounting styles:
 - with through-hole, $\varnothing .118''/3 \text{ mm}$
 - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

SOCKET CONNECTOR

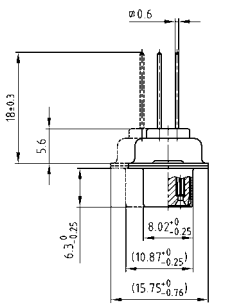
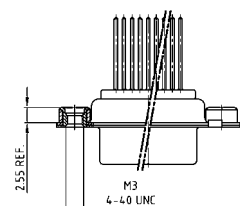


No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 $+0.12$
15	39.52	24.79	33.30 $+0.15$ -0.10
25	53.42	38.50	47.04 $+0.13$
37	69.70	54.96	63.50 $+0.13$
50	67.31	52.55	61.10 $+0.14$ -0.11

Mounting style: Through-hole

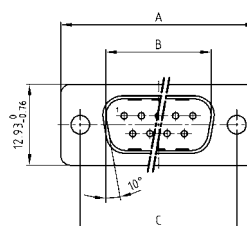


Mounting style: Threaded insert



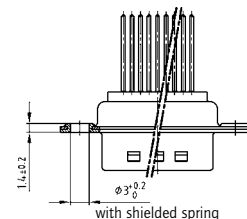
50 pos. = Dim. in (_)

PLUG CONNECTOR

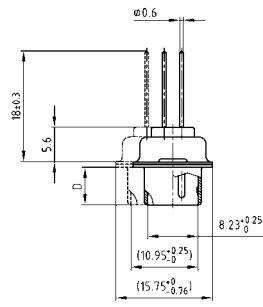
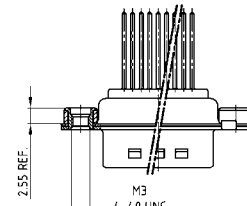


No. of pos.	A -0.76	B -0.25	C	D -0.3
09	31.19	16.79	25.00 $+0.12$	6.12
15	39.52	25.12	33.30 $+0.15$ -0.10	6.12
25	53.42	38.84	47.04 $+0.13$	5.99
37	69.70	55.30	63.50 $+0.13$	5.99
50	67.31	52.68	61.10 $+0.14$ -0.11	5.99

Mounting style: Through-hole



Mounting style: Threaded insert



50 pos. = Dim. in (_)

ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	164A10119X
15	Through-hole	164A10129X
25	Through-hole	164A10139X
37	Through-hole	164A10149X
50	Through-hole	164A10159X
09	4-40 UNC Threaded insert	164A10419X
15	4-40 UNC Threaded insert	164A10429X
25	4-40 UNC Threaded insert	164A10439X
37	4-40 UNC Threaded insert	164A10449X
50	4-40 UNC Threaded insert	164A10459X
09	M3 Threaded insert	164A10469X
15	M3 Threaded insert	164A10479X
25	M3 Threaded insert	164A10489X
37	M3 Threaded insert	164A10499X
50	M3 Threaded insert	164A10509X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	163A11169X
15	Through-hole	163A11179X
25	Through-hole	163A11189X
37	Through-hole	163A11199X
50	Through-hole	163A11209X
09	4-40 UNC Threaded insert	163A11469X
15	4-40 UNC Threaded insert	163A11479X
25	4-40 UNC Threaded insert	163A11489X
37	4-40 UNC Threaded insert	163A11499X
50	4-40 UNC Threaded insert	163A11509X
09	M3 Threaded insert	163A11519X
15	M3 Threaded insert	163A11529X
25	M3 Threaded insert	163A11539X
37	M3 Threaded insert	163A11549X
50	M3 Threaded insert	163A11559X

D-SUB STANDARD

IDC for flat cable – Stamped contacts – For wire size AWG 26...28

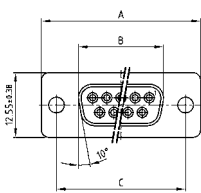


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

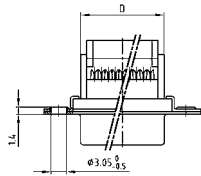
- For wire size AWG 26...28 flat cable
- Mounting style: with through-hole, Ø .118"/3 mm with 4-40 UNC threaded insert
- Connector includes strain relief
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

SOCKET CONNECTOR

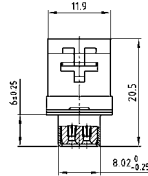


No. of pos.	A ±0.25	B ±0.25	C ±0.13	D ±0.25
09	30.80	16.46	25.00	16.10
15	39.10	24.79	33.30	24.00
25	53.09	38.50	47.04	38.14
37	69.40	54.96	63.50	54.60

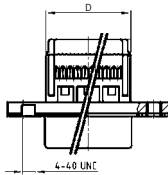
Mounting style: Through-hole



Upper part grouted with strain relief



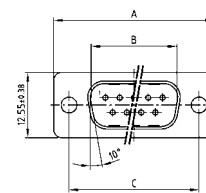
Mounting style: Threaded insert



Strain relief

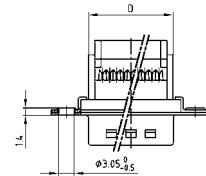


PLUG CONNECTOR

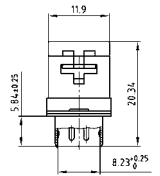


No. of pos.	A ±0.25	B ±0.25	C ±0.13	D ±0.25
09	30.80	16.79	25.00	16.10
15	39.10	25.12	33.30	24.00
25	53.09	83.84	47.04	38.14
37	69.40	55.30	63.50	54.60

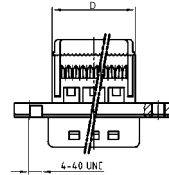
Mounting style: Through-hole



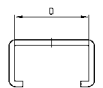
Upper part grouted with strain relief



Mounting style: Threaded insert



Strain relief



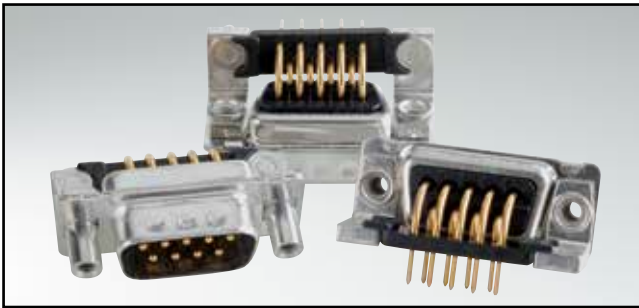
ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	302A10089X
15	Through-hole	302A10099X
25	Through-hole	302A10109X
37	Through-hole	302A10119X
09	Threaded insert	DLS1XSSAG04X
15	Threaded insert	DLS2XSSAG04X
25	Threaded insert	DLS3XSSAG04X
37	Threaded insert	DLS4XSSAG04X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	301A10089X
15	Through-hole	301A10099X
25	Through-hole	301A10109X
37	Through-hole	301A10119X
09	Threaded insert	DLS1XPSAG04X
15	Threaded insert	DLS2XPSAG04X
25	Threaded insert	DLS3XPSAG04X
37	Threaded insert	DLS4XPSAG04X

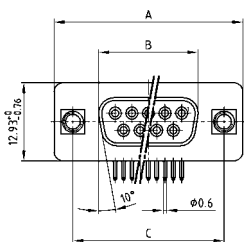
D-SUB STANDARD

Solder pin – Angled – .318" / 7.19 mm – Precision machined contacts – Metal bracket



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

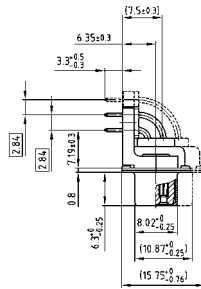
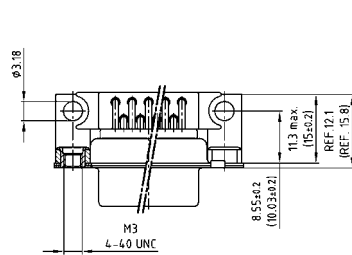
SOCKET CONNECTOR



No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 +0.12
15	39.52	24.79	33.30 +0.15 -0.10
25	53.42	38.50	47.04 +0.13
37	69.70	54.96	63.50 +0.13
50	67.31	52.55	61.10 +0.14 -0.11

PCB-Layout: Kat1kGEA

Mounting style: Threaded insert

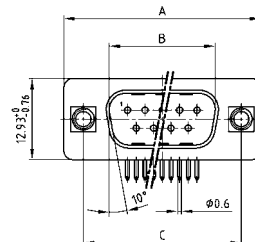


50 pos. = Dim. in (_)

DESCRIPTION

- Mounting styles:
 - with mounting bracket and 4-40 UNC or M3 threaded insert
 - with mounting bracket and 4-40 UNC or M3 front spacer
 - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

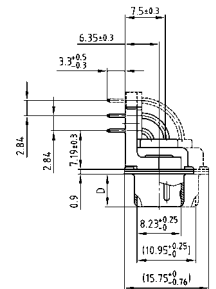
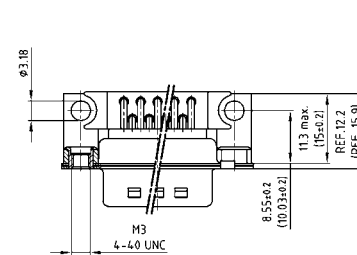
PLUG CONNECTOR



No. of pos.	A -0.76	B -0.25	C	D -0.3
09	31.19	16.79	25.00 +0.12	6.12
15	39.52	25.12	33.30 +0.15 -0.10	6.12
25	53.42	38.84	47.04 +0.13	5.99
37	69.70	55.30	63.50 +0.13	5.99
50	67.31	52.68	61.10 +0.14 -0.11	5.99

PCB-Layout: Kat1kGFA

Mounting style: Threaded insert



50 pos. = Dim. in (_)

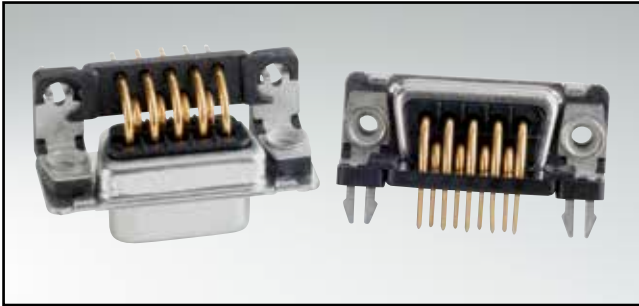
ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded insert	164A11519X
15	4-40 UNC Threaded insert	164A11529X
25	4-40 UNC Threaded insert	164A11539X
37	4-40 UNC Threaded insert	164A11549X
50	4-40 UNC Threaded insert	164A18969X
09	M3 Threaded insert	164A13439X
15	M3 Threaded insert	164A13449X
25	M3 Threaded insert	164A13459X
37	M3 Threaded insert	164A13469X
50	M3 Threaded insert	164A18979X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded insert	163A13069X
15	4-40 UNC Threaded insert	163A13079X
25	4-40 UNC Threaded insert	163A13089X
37	4-40 UNC Threaded insert	163A13099X
50	4-40 UNC Threaded insert	163A18549X
09	M3 Threaded insert	163A14959X
15	M3 Threaded insert	163A14969X
25	M3 Threaded insert	163A14979X
37	M3 Threaded insert	163A14989X
50	M3 Threaded insert	163A18559X

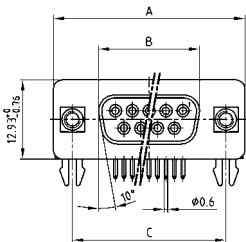
D-SUB STANDARD

Solder pin – Angled – .318" / 7.19 mm – Precision machined contacts – Plastic bracket



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

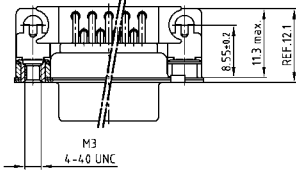
SOCKET CONNECTOR



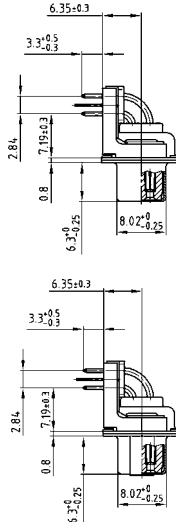
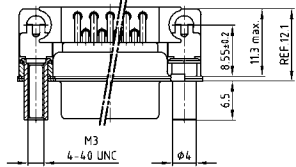
No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 ±0.12
15	39.52	24.79	33.30 ^{+0.15} / _{-0.10}
25	53.42	38.50	47.04 ±0.13
37	69.70	54.96	63.50 ±0.13

PCB-Layout: Kat1kGEA

Mounting style: PCB clip, threaded insert



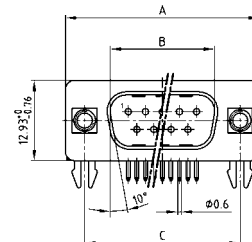
Mounting style: PCB clip, front spacer



DESCRIPTION

- Mounting styles:
 - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

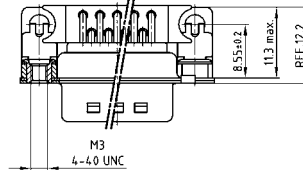
PLUG CONNECTOR



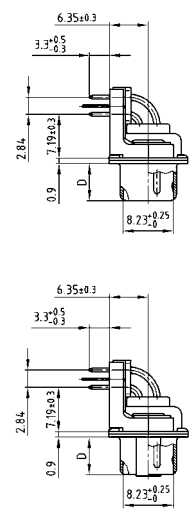
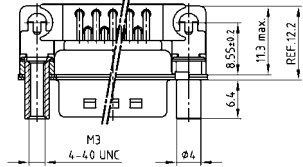
No. of pos.	A -0.76	B +0.25	C	D -0.3
09	31.19	16.79	25.00 ±0.12	6.12
15	39.52	25.12	33.30 ^{+0.15} / _{-0.10}	6.12
25	53.42	38.84	47.04 ±0.13	5.99
37	69.70	55.30	63.50 ±0.13	5.99

PCB-Layout: Kat1kGFA

Mounting style: PCB clip, threaded insert



Mounting style: PCB clip, front spacer



ORDER DATA

SOCKET CONNECTOR

No. of pos.	Mounting style	Part Number
09	PCB clip / 4-40 UNC Threaded insert	164A18809X
15	PCB clip / 4-40 UNC Threaded insert	164A18819X
25	PCB clip / 4-40 UNC Threaded insert	164A18829X
37	PCB clip / 4-40 UNC Threaded insert	164A18839X
09	PCB clip / M3 Threaded insert	164A18849X
15	PCB clip / M3 Threaded insert	164A18859X
25	PCB clip / M3 Threaded insert	164A18869X
37	PCB clip / M3 Threaded insert	164A18879X
09	PCB clip / 4-40 UNC Front spacer	164A18889X
15	PCB clip / 4-40 UNC Front spacer	164A18899X
25	PCB clip / 4-40 UNC Front spacer	164A18909X
37	PCB clip / 4-40 UNC Front spacer	164A18919X
09	PCB clip / M3 Front spacer	164A18929X
15	PCB clip / M3 Front spacer	164A18939X
25	PCB clip / M3 Front spacer	164A18949X
37	PCB clip / M3 Front spacer	164A18959X

PLUG CONNECTOR

No. of pos.	Mounting style	Part Number
09	PCB clip / 4-40 UNC Threaded insert	163A18389X
15	PCB clip / 4-40 UNC Threaded insert	163A18399X
25	PCB clip / 4-40 UNC Threaded insert	163A18409X
37	PCB clip / 4-40 UNC Threaded insert	163A18419X
09	PCB clip / M3 Threaded insert	163A18429X
15	PCB clip / M3 Threaded insert	163A18439X
25	PCB clip / M3 Threaded insert	163A18449X
37	PCB clip / M3 Threaded insert	163A18459X
09	PCB clip / 4-40 UNC Front spacer	163A18469X
15	PCB clip / 4-40 UNC Front spacer	163A18479X
25	PCB clip / 4-40 UNC Front spacer	163A18489X
37	PCB clip / 4-40 UNC Front spacer	163A18499X
09	PCB clip / M3 Front spacer	163A18509X
15	PCB clip / M3 Front spacer	163A18519X
25	PCB clip / M3 Front spacer	163A18529X
37	PCB clip / M3 Front spacer	163A18539X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

D-SUB STANDARD

Solder pin – Angled – .318" / 7.19 mm – Stamped contacts – Plastic bracket

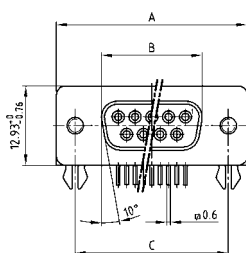


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

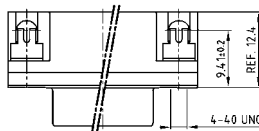
- Mounting styles:
 - with mounting bracket, PCB clip and 4-40 UNC threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC hex bolt
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

SOCKET CONNECTOR

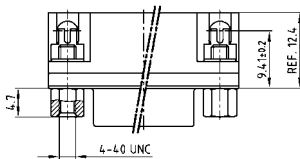


No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 ±0.12
15	39.52	24.79	33.30 ±0.15 ±0.10
25	53.42	38.50	47.04 ±0.13
37	69.70	54.96	63.50 ±0.13

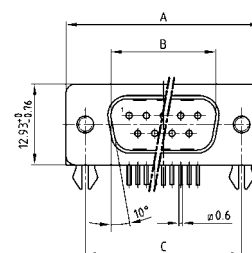
Mounting style: PCB clip, threaded insert



Mounting style: PCB clip, front spacer

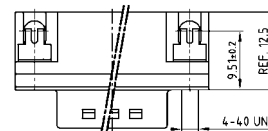


PLUG CONNECTOR

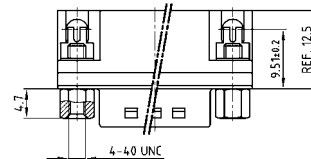


No. of pos.	A -0.76	B +0.25	C	D -0.3
09	31.19	16.79	25.00 ±0.12	6.12
15	39.52	25.12	33.30 ±0.15 ±0.10	6.12
25	53.42	38.84	47.04 ±0.13	5.99
37	69.70	55.30	63.50 ±0.13	5.99

Mounting style: PCB clip, threaded insert



Mounting style: PCB clip, front spacer



ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	PCB clip/Threaded insert	302A11339X
15	PCB clip/Threaded insert	302A11349X
25	PCB clip/Threaded insert	302A11359X
37	PCB clip/Threaded insert	302A11369X
09	PCB clip/Hex bolt	302A11249X
15	PCB clip/Hex bolt	302A11259X
25	PCB clip/Hex bolt	302A11269X
37	PCB clip/Hex bolt	302A11279X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	PCB clip/Threaded insert	301A11029X
15	PCB clip/Threaded insert	301A11039X
25	PCB clip/Threaded insert	301A11049X
37	PCB clip/Threaded insert	301A11059X
09	PCB clip/Front spacer	301A10939X
15	PCB clip/Front spacer	301A10949X
25	PCB clip/Front spacer	301A10959X
37	PCB clip/Front spacer	301A10969X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

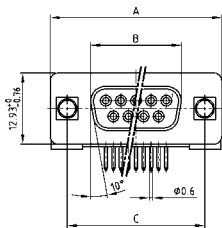
D-SUB STANDARD

Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Plastic bracket



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

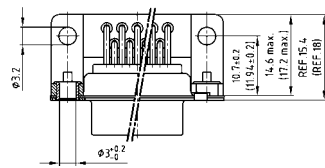
SOCKET CONNECTOR



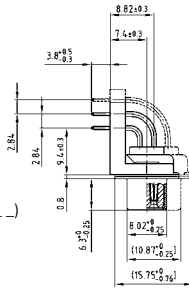
No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 +0.12
15	39.52	24.79	33.30 +0.15 -0.10
25	53.42	38.50	47.04 +0.13
37	69.70	54.96	63.50 +0.13
50	67.31	52.55	61.10 +0.14 -0.11

PCB-Layout: Kat1kGGA

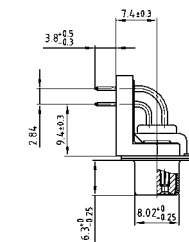
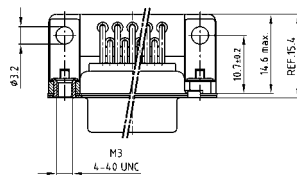
Mounting style: Through-hole



50 pos. = Dim. in (_)



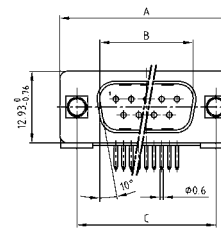
Mounting style: Threaded insert



DESCRIPTION

- Mounting styles:
 - with mounting bracket and Ø .118"/3 mm through-hole
 - with mounting bracket, grounding strap and 4-40 UNC or M3 threaded insert
 - with mounting bracket, grounding strap and 4-40 UNC or M3 front spacer
 - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

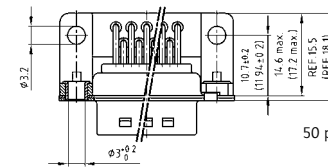
PLUG CONNECTOR



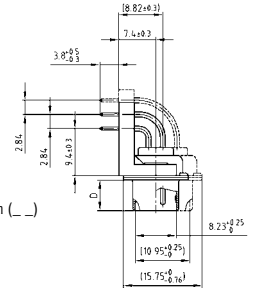
No. of pos.	A -0.76	B -0.25	C	D -0.3
09	31.19	16.79	25.00 +0.12	6.12
15	39.52	25.12	33.30 +0.15 -0.10	6.12
25	53.42	38.84	47.04 +0.13	5.99
37	69.70	55.30	63.50 +0.13	5.99
50	67.31	52.68	61.10 +0.14 -0.11	5.99

PCB-Layout: Kat1kGHA

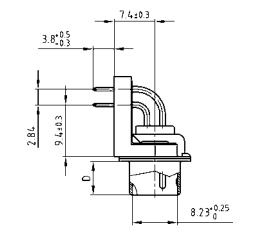
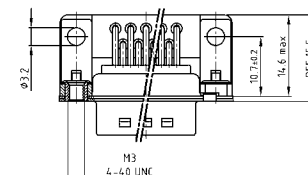
Mounting style: Through-hole



50 pos. = Dim. in (_)



Mounting style: Threaded insert



ORDER DATA

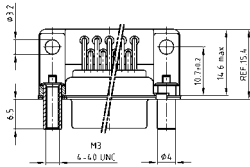
SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	164A10669X
15	Through-hole	164A10679X
25	Through-hole	164A10689X
37	Through-hole	164A10699X
50	Through-hole	164A10709X
09	Grounding strap/4-40 UNC Threaded insert	164A12329X
15	Grounding strap/4-40 UNC Threaded insert	164A12339X
25	Grounding strap/4-40 UNC Threaded insert	164A12349X
37	Grounding strap/4-40 UNC Threaded insert	164A12359X
09	Grounding strap/M3 Threaded insert	164A12519X
15	Grounding strap/M3 Threaded insert	164A12529X
25	Grounding strap/M3 Threaded insert	164A12539X
37	Grounding strap/M3 Threaded insert	164A12549X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	163A11719X
15	Through-hole	163A11729X
25	Through-hole	163A11739X
37	Through-hole	163A11749X
50	Through-hole	163A11759X
09	Grounding strap/4-40 UNC Threaded insert	163A14119X
15	Grounding strap/4-40 UNC Threaded insert	163A14129X
25	Grounding strap/4-40 UNC Threaded insert	163A14139X
37	Grounding strap/4-40 UNC Threaded insert	163A14149X
09	Grounding strap/M3 Threaded insert	163A14169X
15	Grounding strap/M3 Threaded insert	163A14179X
25	Grounding strap/M3 Threaded insert	163A14189X
37	Grounding strap/M3 Threaded insert	163A14199X

D-SUB STANDARD – MOUNTING STYLES

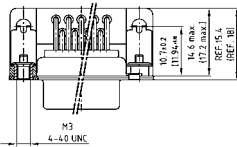
Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Plastic bracket

ORDER DATA



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Grounding strap/4-40 UNC Front spacer	164A12229X
15	Grounding strap/4-40 UNC Front spacer	164A12239X
25	Grounding strap/4-40 UNC Front spacer	164A12249X
37	Grounding strap/4-40 UNC Front spacer	164A12259X
09	Grounding strap/M3 Front spacer	164A12279X
15	Grounding strap/M3 Front spacer	164A12289X
25	Grounding strap/M3 Front spacer	164A12299X
37	Grounding strap/M3 Front spacer	164A12309X

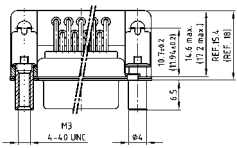
PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Grounding strap/4-40 UNC Front spacer	163A13829X
15	Grounding strap/4-40 UNC Front spacer	163A13839X
25	Grounding strap/4-40 UNC Front spacer	163A13849X
37	Grounding strap/4-40 UNC Front spacer	163A13859X
09	Grounding strap/M3 Front spacer	163A13879X
15	Grounding strap/M3 Front spacer	163A13889X
25	Grounding strap/M3 Front spacer	163A13899X
37	Grounding strap/M3 Front spacer	163A13909X



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	PCB clip/4-40 UNC Threaded insert	164A12969X
15	PCB clip/4-40 UNC Threaded insert	164A12979X
25	PCB clip/4-40 UNC Threaded insert	164A12989X
37	PCB clip/4-40 UNC Threaded insert	164A12999X
50	PCB clip/4-40 UNC Threaded insert	164A19139X
09	PCB clip/M3 Threaded insert	164A13009X
15	PCB clip/M3 Threaded insert	164A13019X
25	PCB clip/M3 Threaded insert	164A13029X
37	PCB clip/M3 Threaded insert	164A13039X
50	PCB clip/M3 Threaded insert	164A19149X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	PCB clip/4-40 UNC Threaded insert	163A14489X
15	PCB clip/4-40 UNC Threaded insert	163A14499X
25	PCB clip/4-40 UNC Threaded insert	163A14509X
37	PCB clip/4-40 UNC Threaded insert	163A14519X
50	PCB clip/4-40 UNC Threaded insert	163A18709X
09	PCB clip/M3 Threaded insert	163A14529X
15	PCB clip/M3 Threaded insert	163A14539X
25	PCB clip/M3 Threaded insert	163A14549X
37	PCB clip/M3 Threaded insert	163A14559X
50	PCB clip/M3 Threaded insert	163A18719X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	PCB clip/4-40 UNC Front spacer	164A13089X
15	PCB clip/4-40 UNC Front spacer	164A13099X
25	PCB clip/4-40 UNC Front spacer	164A13109X
37	PCB clip/4-40 UNC Front spacer	164A13119X
50	PCB clip/4-40 UNC Front spacer	164A19159X
09	PCB clip/M3 Front spacer	164A13129X
15	PCB clip/M3 Front spacer	164A13139X
25	PCB clip/M3 Front spacer	164A13149X
37	PCB clip/M3 Front spacer	164A13159X
50	PCB clip/M3 Front spacer	164A19169X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	PCB clip/4-40 UNC Front spacer	163A14609X
15	PCB clip/4-40 UNC Front spacer	163A14619X
25	PCB clip/4-40 UNC Front spacer	163A14629X
37	PCB clip/4-40 UNC Front spacer	163A14639X
50	PCB clip/4-40 UNC Front spacer	163A18729X
09	PCB clip/M3 Front spacer	163A14649X
15	PCB clip/M3 Front spacer	163A14659X
25	PCB clip/M3 Front spacer	163A14669X
37	PCB clip/M3 Front spacer	163A14679X
50	PCB clip/M3 Front spacer	163A18739X

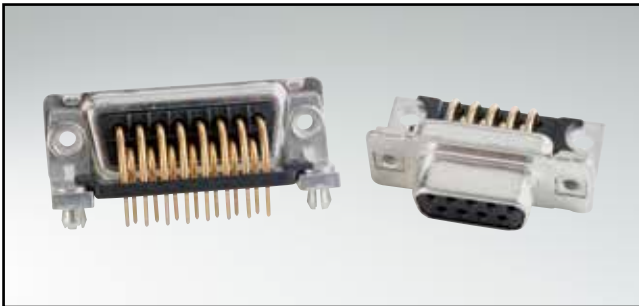
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

PCB-Layout: Kat1kGGA

PCB-Layout: Kat1kGHA

D-SUB STANDARD

Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket

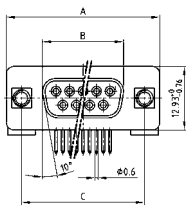


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

- Mounting styles:
 - with mounting bracket and 4-40 UNC or M3 threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

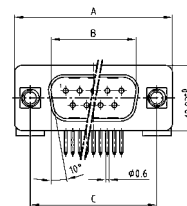
SOCKET CONNECTOR



No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 +0.12
15	39.52	24.79	33.30 +0.15
25	53.42	38.50	47.04 +0.13
37	69.70	54.96	63.50 +0.13
50	67.31	52.55	61.10 +0.14

PCB-Layout: KAT1KGA

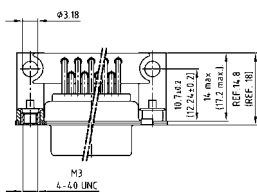
PLUG CONNECTOR



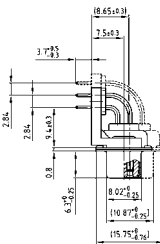
No. of pos.	A -0.76	B -0.25	C	D -0.3
09	31.19	16.79	25.00 +0.12	6.12
15	39.52	25.12	33.30 +0.15	6.12
25	53.42	38.84	47.04 +0.13	5.99
37	69.70	55.30	63.50 +0.13	5.99
50	67.31	52.68	61.10 +0.14	5.99

PCB-Layout: Kat1KHA

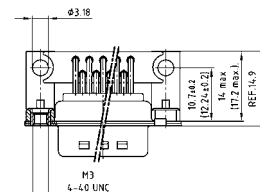
Mounting style: Threaded insert



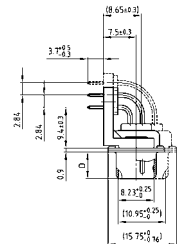
50 pos. = Dim. in (_)



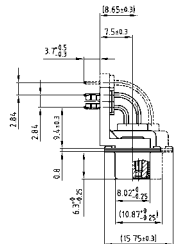
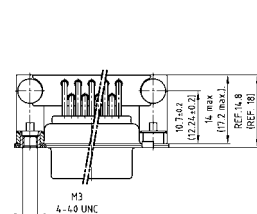
Mounting style: Threaded insert



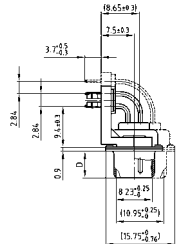
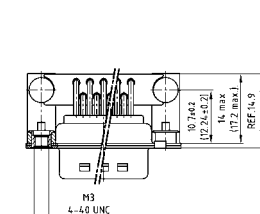
50 pos. = Dim. in (_)



Mounting style: PCB clip, threaded insert



Mounting style: PCB clip, threaded insert



ORDER DATA

SOCKET CONNECTOR

No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded insert	164A10969X
15	4-40 UNC Threaded insert	164A10979X
25	4-40 UNC Threaded insert	164A10989X
37	4-40 UNC Threaded insert	164A10999X
50	4-40 UNC Threaded insert	164A18739X
09	M3 Threaded insert	164A11019X
15	M3 Threaded insert	164A11029X
25	M3 Threaded insert	164A11039X
37	M3 Threaded insert	164A11049X
50	M3 Threaded insert	164A18749X
09	PCB clip / 4-40 UNC Threaded insert	164A16769X
15	PCB clip / 4-40 UNC Threaded insert	164A16779X
25	PCB clip / 4-40 UNC Threaded insert	164A16789X
37	PCB clip / 4-40 UNC Threaded insert	164A16799X
50	PCB clip / 4-40 UNC Threaded insert	164A18759X
09	PCB clip / M3 Threaded insert	164A16809X
15	PCB clip / M3 Threaded insert	164A16819X
25	PCB clip / M3 Threaded insert	164A16829X
37	PCB clip / M3 Threaded insert	164A16839X
50	PCB clip / M3 Threaded insert	164A18769X

PLUG CONNECTOR

No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded insert	163A12019X
15	4-40 UNC Threaded insert	163A12029X
25	4-40 UNC Threaded insert	163A12039X
37	4-40 UNC Threaded insert	163A12049X
50	4-40 UNC Threaded insert	163A18319X
09	M3 Threaded insert	163A12069X
15	M3 Threaded insert	163A12079X
25	M3 Threaded insert	163A12089X
37	M3 Threaded insert	163A12099X
50	M3 Threaded insert	163A18329X
09	PCB clip / 4-40 UNC Threaded insert	163A16359X
15	PCB clip / 4-40 UNC Threaded insert	163A16369X
25	PCB clip / 4-40 UNC Threaded insert	163A16379X
37	PCB clip / 4-40 UNC Threaded insert	163A16389X
50	PCB clip / 4-40 UNC Threaded insert	163A18339X
09	PCB clip / M3 Threaded insert	163A16399X
15	PCB clip / M3 Threaded insert	163A16409X
25	PCB clip / M3 Threaded insert	163A16419X
37	PCB clip / M3 Threaded insert	163A16429X
50	PCB clip / M3 Threaded insert	163A18349X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

D-SUB STANDARD

Solder pin – Angled – .370"/9.4 mm – Stamped contacts

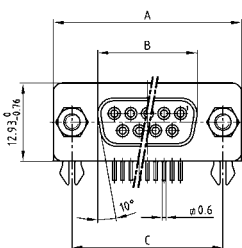


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

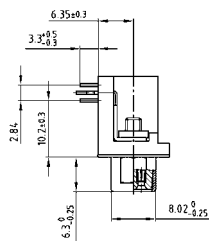
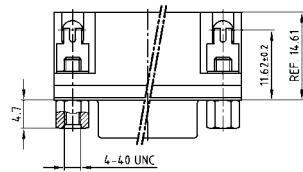
- Mounting style:
with mounting bracket, PCB clip and 4-40 UNC hex bolt
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

SOCKET CONNECTOR

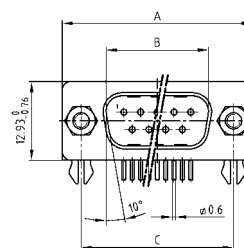


No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 ±0.12
15	39.52	24.79	33.30 ±0.15 ±0.10
25	53.42	38.50	47.04 ±0.13
37	69.70	54.96	63.50 ±0.13

Mounting style: PCB clip, front spacer

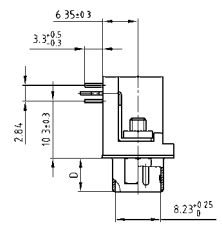
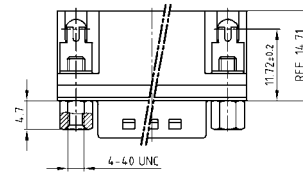


PLUG CONNECTOR



No. of pos.	A -0.76	B +0.25	C	D -0.3
09	31.19	16.79	25.00 ±0.12	6.12
15	39.52	25.12	33.30 ±0.15 ±0.10	6.12
25	53.42	38.84	47.04 ±0.13	5.99
37	69.70	55.30	63.50 ±0.13	5.99

Mounting style: PCB clip, front spacer



ORDER DATA

SOCKET CONNECTOR

No. of pos.	Mounting style 4-40 UNC	Part Number
09	PCB clip/Hex bolt	302A10779X
15	PCB clip/Hex bolt	302A10789X
25	PCB clip/Hex bolt	302A10799X
37	PCB clip/Hex bolt	302A10809X

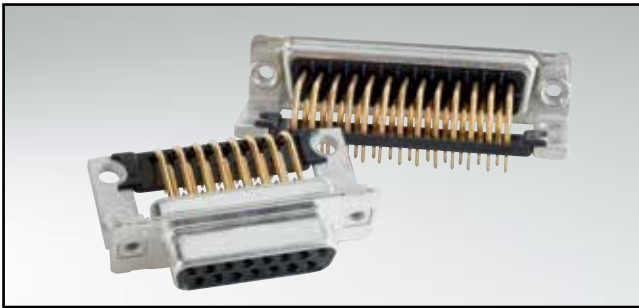
PLUG CONNECTOR

No. of pos.	Mounting style 4-40 UNC	Part Number
09	PCB clip/Hex bolt	301A10679X
15	PCB clip/Hex bolt	301A10689X
25	PCB clip/Hex bolt	301A10699X
37	PCB clip/Hex bolt	301A10709X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

D-SUB STANDARD

Solder pin – Angled – .590" / 14.19 mm – Precision machined contacts – Metal bracket

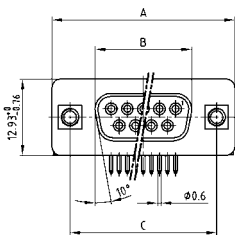


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

- Mounting styles:
 - with mounting bracket and 4-40 UNC threaded insert
 - with mounting bracket and 4-40 UNC front spacer
 - with mounting bracket, PCB clip and 4-40 UNC threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

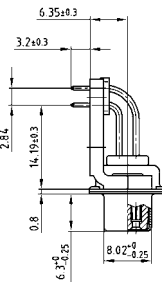
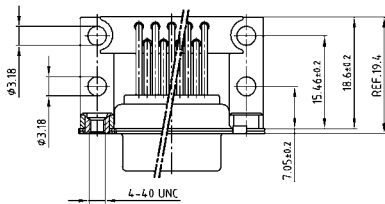
SOCKET CONNECTOR



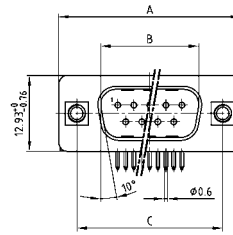
No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 ±0.12
15	39.52	24.79	33.30 ^{+0.15} / _{-0.10}
25	53.42	38.50	47.04 ±0.13
37	69.70	54.96	63.50 ±0.13

PCB-Layout: Kat1kGIA

Mounting style: Threaded insert



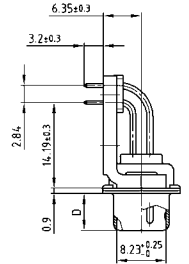
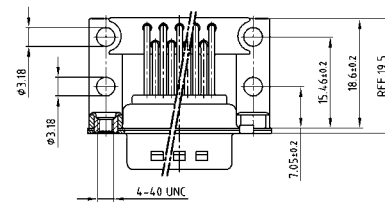
PLUG CONNECTOR



No. of pos.	A -0.76	B +0.25	C	D -0.3
09	31.19	16.79	25.00 ±0.12	6.12
15	39.52	25.12	33.30 ^{+0.15} / _{-0.10}	6.12
25	53.42	38.84	47.04 ±0.13	5.99
37	69.70	55.30	63.50 ±0.13	5.99

PCB-Layout: Kat1kGJA

Mounting style: Threaded insert



ORDER DATA

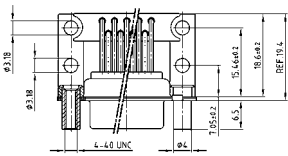
SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded insert	164A19599X
15	Threaded insert	164A19609X
25	Threaded insert	164A19619X
37	Threaded insert	164A19629X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded insert	163A19169X
15	Threaded insert	163A19179X
25	Threaded insert	163A19189X
37	Threaded insert	163A19199X

D-SUB STANDARD – MOUNTING STYLES

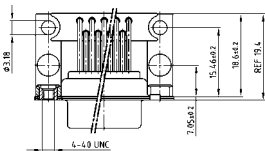
Solder pin – Angled – .590" / 14.19 mm – Precision machined contacts – Metal bracket

ORDER DATA



SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Front spacer	164A19679X
15	Front spacer	164A19689X
25	Front spacer	164A19699X
37	Front spacer	164A19709X

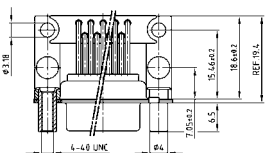
PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Front spacer	163A19249X
15	Front spacer	163A19259X
25	Front spacer	163A19269X
37	Front spacer	163A19279X



SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	PCB clip/Threaded insert	164A19639X
15	PCB clip/Threaded insert	164A19649X
25	PCB clip/Threaded insert	164A19659X
37	PCB clip/Threaded insert	164A19669X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	PCB clip/Threaded insert	163A19209X
15	PCB clip/Threaded insert	163A19219X
25	PCB clip/Threaded insert	163A19229X
37	PCB clip/Threaded insert	163A19239X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness



SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	PCB clip / Front spacer	164A19719X
15	PCB clip / Front spacer	164A19729X
25	PCB clip / Front spacer	164A19739X
37	PCB clip / Front spacer	164A19749X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	PCB clip / Front spacer	163A19289X
15	PCB clip / Front spacer	163A19299X
25	PCB clip / Front spacer	163A19309X
37	PCB clip / Front spacer	163A19319X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

PCB-Layout: Kat1kGIA

PCB-Layout: Kat1kGJA

D-SUB STANDARD

Solder pin – Angled – .590" / 14.19 mm – Precision machined contacts – Plastic bracket

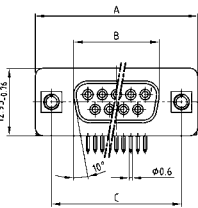


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

- Mounting styles:
 - with mounting bracket and 4-40 UNC threaded insert
 - with mounting bracket and 4-40 UNC front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

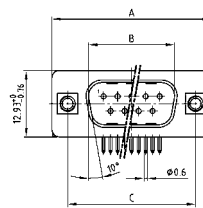
SOCKET CONNECTOR



No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 ±0.12
15	39.52	24.79	33.30 ^{+0.15} / _{-0.10}
25	53.42	38.50	47.04 ±0.13
37	69.70	54.96	63.50 ±0.13

PCB-Layout: Kat1kGKA

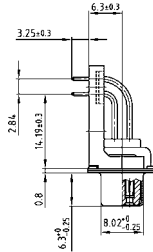
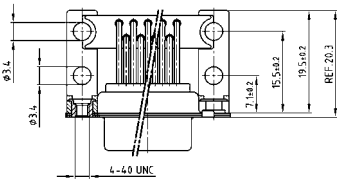
PLUG CONNECTOR



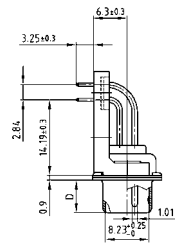
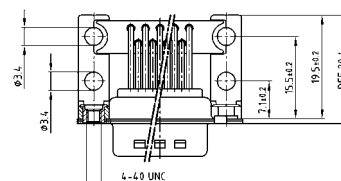
No. of pos.	A -0.76	B +0.25	C	D -0.3
09	31.19	16.79	25.00 ±0.12	6.12
15	39.52	25.12	33.30 ^{+0.15} / _{-0.10}	6.12
25	53.42	38.84	47.04 ±0.13	5.99
37	69.70	55.30	63.50 ±0.13	5.99

PCB-Layout: Kat1kGLA

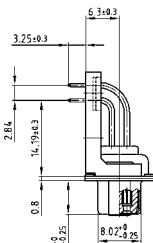
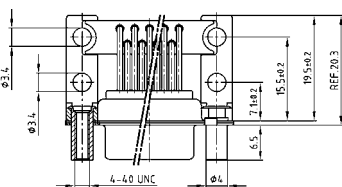
Mounting style: Threaded insert



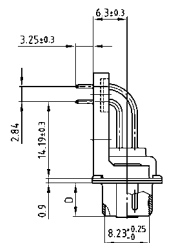
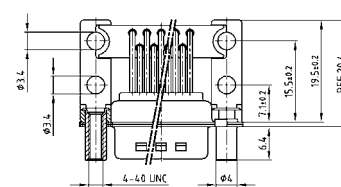
Mounting style: Threaded insert



Mounting style: Front spacer



Mounting style: Front spacer



ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded insert	164A19519X
15	Threaded insert	164A19529X
25	Threaded insert	164A19539X
37	Threaded insert	164A19549X
09	Front spacer	164A19559X
15	Front spacer	164A19569X
25	Front spacer	164A19579X
37	Front spacer	164A19589X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded insert	163A19089X
15	Threaded insert	163A19099X
25	Threaded insert	163A19109X
37	Threaded insert	163A19119X
09	Front spacer	163A19129X
15	Front spacer	163A19139X
25	Front spacer	163A19149X
37	Front spacer	163A19159X

D-SUB STANDARD

Solder pin – Angled – .590" / 14.19 mm – Stamped contacts – Plastic bracket

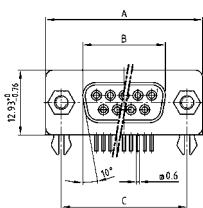


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

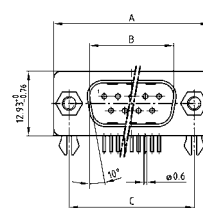
- Mounting style:
with mounting bracket, PCB clip and 4-40 UNC hex bolt
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

SOCKET CONNECTOR



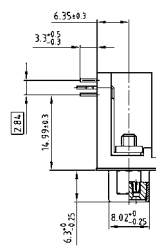
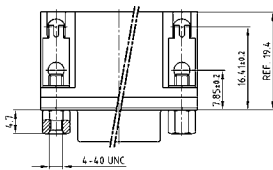
No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 ± 0.12
15	39.52	24.79	33.30 $\begin{smallmatrix} +0.15 \\ -0.10 \end{smallmatrix}$
25	53.42	38.50	47.04 ± 0.13
37	69.70	54.96	63.50 ± 0.13

PLUG CONNECTOR

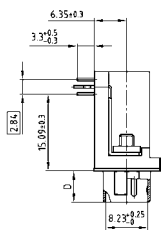
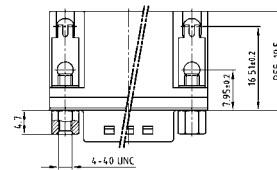


No. of pos.	A -0.76	B +0.25	C	D -0.3
09	31.19	16.79	25.00 ± 0.12	6.12
15	39.52	25.12	33.30 $\begin{smallmatrix} +0.15 \\ -0.10 \end{smallmatrix}$	6.12
25	53.42	38.84	47.04 ± 0.13	5.99
37	69.70	55.30	63.50 ± 0.13	5.99

Mounting style: PCB clip, front spacer



Mounting style: PCB clip, front spacer



ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	PCB clip / Hex bolt	302A11289X
15	PCB clip / Hex bolt	302A11299X
25	PCB clip / Hex bolt	302A11309X
37	PCB clip / Hex bolt	302A11319X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	PCB clip / Hex bolt	301A10979X
15	PCB clip / Hex bolt	301A10989X
25	PCB clip / Hex bolt	301A10999X
37	PCB clip / Hex bolt	301A11009X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

D-SUB STANDARD – DUAL PORT

Solder pin – Angled – Precision machined contacts – .625" / 15.88 mm Connector spacing



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

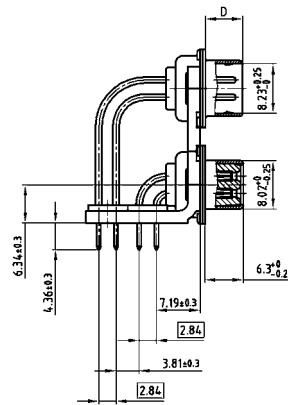
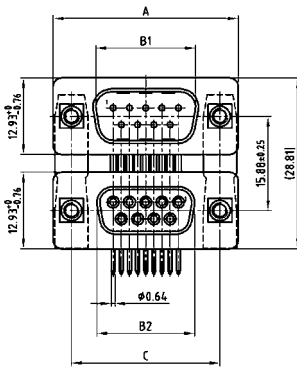
DESCRIPTION

- Variations: pin – pin; socket – socket; pin – socket
- Mounting styles:
 - with mounting bracket and 4-40 UNC or M3 threaded insert
 - with mounting bracket and 4-40 UNC or M3 front spacer
 - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

PRODUCT DRAWING

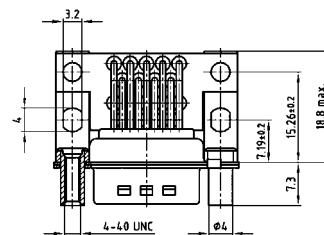
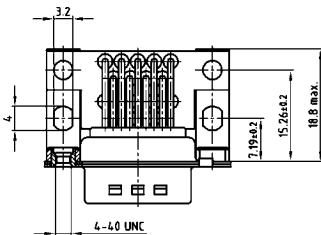
No. of pos.	A -0.76	B1 +0.25	B2 -0.25	C	D -0.30
2X 09	31.19	16.79	16.46	25.00 +0.12	6.12
2X 15	39.52	25.12	24.79	33.30 +0.15 -0.10	6.12
2X 25	53.42	38.84	38.50	47.04 +0.13	5.99
2X 37	69.70	55.30	54.96	63.50 +0.13	5.99

Graphical representation of only one variant!



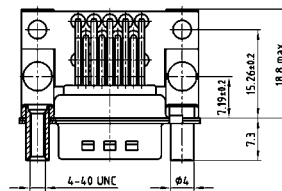
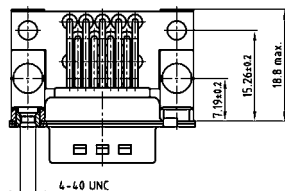
Mounting style: Threaded insert

Mounting style: Front spacer



Mounting style: PCB clip, threaded insert

Mounting style: PCB clip, front spacer

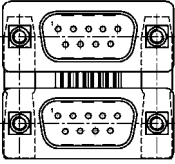


D-SUB STANDARD – DUAL PORT VARIATIONS

Solder pin – Angled – Precision machined contacts – .625" / 15.88 mm Connector spacing

ORDER DATA

PCB-Layout: Kat1iU5A

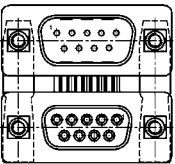


Variation:
plug upper –
plug bottom

No. of pos.	Mounting style 4-40 UNC	Part Number
09 /09	Threaded insert	163A15199X
15 /15	Threaded insert	163A15209X
25 /25	Threaded insert	163A15219X
37 /37	Threaded insert	163A15229X
09 /09	Front spacer	163A15359X
15 /15	Front spacer	163A15369X
25 /25	Front spacer	163A15379X
37 /37	Front spacer	163A15389X
09 /09	PCB clip / Threaded insert	163A19969X
15 /15	PCB clip / Threaded insert	163A19979X
25 /25	PCB clip / Threaded insert	163A19989X
37 /37	PCB clip / Threaded insert	163A19999X
09 /09	PCB clip / Front spacer	163A19329X
15 /15	PCB clip / Front spacer	163A19339X
25 /25	PCB clip / Front spacer	163A19349X
37 /37	PCB clip / Front spacer	163A19359X

No. of pos.	Mounting style M3	Part Number
09 /09	Threaded insert	163A15279X
15 /15	Threaded insert	163A15289X
25 /25	Threaded insert	163A15299X
37 /37	Threaded insert	163A15309X
09 /09	Front spacer	163A15439X
15 /15	Front spacer	163A15449X
25 /25	Front spacer	163A15459X
37 /37	Front spacer	163A15469X
09 /09	PCB clip / Threaded insert	163A20049X
15 /15	PCB clip / Threaded insert	163A20059X
25 /25	PCB clip / Threaded insert	163A20069X
37 /37	PCB clip / Threaded insert	163A20079X
09 /09	PCB clip / Front spacer	163A19409X
15 /15	PCB clip / Front spacer	163A19419X
25 /25	PCB clip / Front spacer	163A19429X
37 /37	PCB clip / Front spacer	163A19439X

PCB-Layout: Kat1iU6A

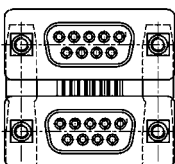


Variation:
plug upper –
socket bottom

No. of pos.	Mounting style 4-40 UNC	Part Number
09 /09	Threaded insert	163A15239X
15 /15	Threaded insert	163A15249X
25 /25	Threaded insert	163A15259X
37 /37	Threaded insert	163A15269X
09 /09	Front spacer	163A15399X
15 /15	Front spacer	163A15409X
25 /25	Front spacer	163A15419X
37 /37	Front spacer	163A15429X
09 /09	PCB clip / Threaded insert	163A20009X
15 /15	PCB clip / Threaded insert	163A20019X
25 /25	PCB clip / Threaded insert	163A20029X
37 /37	PCB clip / Threaded insert	163A20039X
09 /09	PCB clip / Front spacer	163A19369X
15 /15	PCB clip / Front spacer	163A19379X
25 /25	PCB clip / Front spacer	163A19389X
37 /37	PCB clip / Front spacer	163A19399X

No. of pos.	Mounting style M3	Part Number
09 /09	Threaded insert	163A15319X
15 /15	Threaded insert	163A15329X
25 /25	Threaded insert	163A15339X
37 /37	Threaded insert	163A15349X
09 /09	Front spacer	163A15479X
15 /15	Front spacer	163A15489X
25 /25	Front spacer	163A15499X
37 /37	Front spacer	163A15509X
09 /09	PCB clip / Threaded insert	163A20089X
15 /15	PCB clip / Threaded insert	163A20099X
25 /25	PCB clip / Threaded insert	163A20109X
37 /37	PCB clip / Threaded insert	163A20119X
09 /09	PCB clip / Front spacer	163A19449X
15 /15	PCB clip / Front spacer	163A19459X
25 /25	PCB clip / Front spacer	163A19469X
37 /37	PCB clip / Front spacer	163A19479X

PCB-Layout: Kat1iU6A

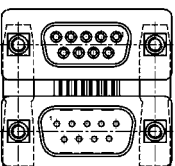


Variation:
socket upper –
socket bottom

No. of pos.	Mounting style 4-40 UNC	Part Number
09 /09	Threaded insert	164A15609X
15 /15	Threaded insert	164A15619X
25 /25	Threaded insert	164A15629X
37 /37	Threaded insert	164A15639X
09 /09	Front spacer	164A15769X
15 /15	Front spacer	164A15779X
25 /25	Front spacer	164A15789X
37 /37	Front spacer	164A15799X
09 /09	PCB clip / Threaded insert	164A20409X
15 /15	PCB clip / Threaded insert	164A20419X
25 /25	PCB clip / Threaded insert	164A20429X
37 /37	PCB clip / Threaded insert	164A20439X
09 /09	PCB clip / Front spacer	164A19759X
15 /15	PCB clip / Front spacer	164A19769X
25 /25	PCB clip / Front spacer	164A19779X
37 /37	PCB clip / Front spacer	164A19789X

No. of pos.	Mounting style M3	Part Number
09 /09	Threaded insert	164A15689X
15 /15	Threaded insert	164A15699X
25 /25	Threaded insert	164A15709X
37 /37	Threaded insert	164A15719X
09 /09	Front spacer	164A15849X
15 /15	Front spacer	164A15859X
25 /25	Front spacer	164A15869X
37 /37	Front spacer	164A15879X
09 /09	PCB clip / Threaded insert	164A20489X
15 /15	PCB clip / Threaded insert	164A20499X
25 /25	PCB clip / Threaded insert	164A20509X
37 /37	PCB clip / Threaded insert	164A20519X
09 /09	PCB clip / Front spacer	164A19839X
15 /15	PCB clip / Front spacer	164A19849X
25 /25	PCB clip / Front spacer	164A19859X
37 /37	PCB clip / Front spacer	164A19869X

PCB-Layout: Kat1iU5A



Variation:
socket upper –
plug bottom

No. of pos.	Mounting style 4-40 UNC	Part Number
09 /09	Threaded insert	164A15649X
15 /15	Threaded insert	164A15659X
25 /25	Threaded insert	164A15669X
37 /37	Threaded insert	164A15679X
09 /09	Front spacer	164A15809X
15 /15	Front spacer	164A15819X
25 /25	Front spacer	164A15829X
37 /37	Front spacer	164A15839X
09 /09	PCB clip / Threaded insert	164A20449X
15 /15	PCB clip / Threaded insert	164A20459X
25 /25	PCB clip / Threaded insert	164A20469X
37 /37	PCB clip / Threaded insert	164A20479X
09 /09	PCB clip / Front spacer	164A19799X
15 /15	PCB clip / Front spacer	164A19809X
25 /25	PCB clip / Front spacer	164A19819X
37 /37	PCB clip / Front spacer	164A19829X

No. of pos.	Mounting style M3	Part Number
09 /09	Threaded insert	164A15729X
15 /15	Threaded insert	164A15739X
25 /25	Threaded insert	164A15749X
37 /37	Threaded insert	164A15759X
09 /09	Front spacer	164A15889X
15 /15	Front spacer	164A15899X
25 /25	Front spacer	164A15909X
37 /37	Front spacer	164A15919X
09 /09	PCB clip / Threaded insert	164A20529X
15 /15	PCB clip / Threaded insert	164A20539X
25 /25	PCB clip / Threaded insert	164A20549X
37 /37	PCB clip / Threaded insert	164A20559X
09 /09	PCB clip / Front spacer	164A19879X
15 /15	PCB clip / Front spacer	164A19889X
25 /25	PCB clip / Front spacer	164A19899X
37 /37	PCB clip / Front spacer	164A19909X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

D-SUB STANDARD – DUAL PORT

Solder pin – Angled – Precision machined contacts – .750" / 19.05 mm Connector spacing



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

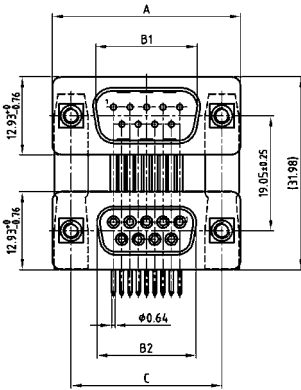
DESCRIPTION

- Variations: pin – pin; socket – socket; pin – socket
- Mounting styles:
 - with mounting bracket and 4-40 UNC or M3 threaded insert
 - with mounting bracket and 4-40 UNC or M3 front spacer
 - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

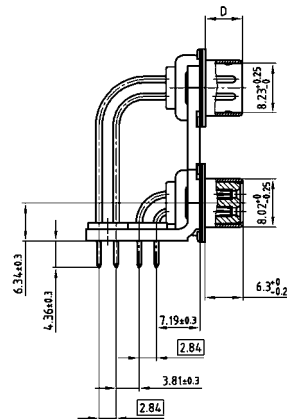
PRODUCT DRAWING

No. of pos.	A -0.76	B1 +0.25	B2 -0.25	C	D -0.30
2X 09	31.19	16.79	16.46	25.00 +0.12	6.12
2X 15	39.52	25.12	24.79	33.30 +0.15 +0.10	6.12
2X 25	53.42	38.84	38.50	47.04 +0.13	5.99
2X 37	69.70	55.30	54.96	63.50 +0.13	5.99

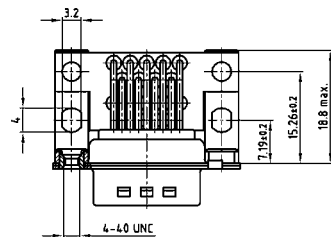
Graphical representation of only one variant!



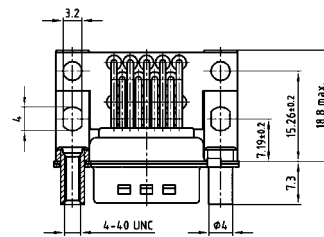
Mounting style: Threaded insert



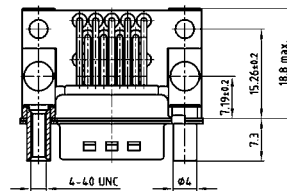
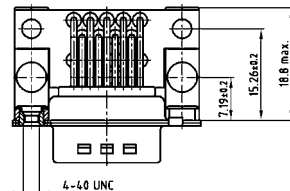
Mounting style: Front spacer



Mounting style: PCB clip, threaded insert



Mounting style: PCB clip, front spacer

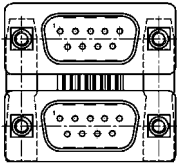


D-SUB STANDARD – DUAL PORT VARIATIONS

Solder pin – Angled – Precision machined contacts – .750" / 19.05 mm Connector spacing

ORDER DATA

PCB-Layout: Kat1iU5A

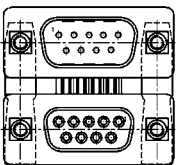


Variation:
plug upper –
plug bottom

No. of pos.	Mounting style 4-40 UNC	Part Number
09 / 09	Threaded insert	163A15519X
15 / 15	Threaded insert	163A15529X
25 / 25	Threaded insert	163A15539X
37 / 37	Threaded insert	163A15549X
09 / 09	Front spacer	163A15679X
15 / 15	Front spacer	163A15689X
25 / 25	Front spacer	163A15699X
37 / 37	Front spacer	163A15709X
09 / 09	PCB clip / Threaded insert	163A19489X
15 / 15	PCB clip / Threaded insert	163A19499X
25 / 25	PCB clip / Threaded insert	163A19509X
37 / 37	PCB clip / Threaded insert	163A19519X
09 / 09	PCB clip / Front spacer	163A19649X
15 / 15	PCB clip / Front spacer	163A19659X
25 / 25	PCB clip / Front spacer	163A19669X
37 / 37	PCB clip / Front spacer	163A19679X

No. of pos.	Mounting style M3	Part Number
09 / 09	Threaded insert	163A15599X
15 / 15	Threaded insert	163A15609X
25 / 25	Threaded insert	163A15619X
37 / 37	Threaded insert	163A15629X
09 / 09	Front spacer	163A15759X
15 / 15	Front spacer	163A15769X
25 / 25	Front spacer	163A15779X
37 / 37	Front spacer	163A15789X
09 / 09	PCB clip / Threaded insert	163A19569X
15 / 15	PCB clip / Threaded insert	163A19579X
25 / 25	PCB clip / Threaded insert	163A19589X
37 / 37	PCB clip / Threaded insert	163A19599X
09 / 09	PCB clip / Front spacer	163A19729X
15 / 15	PCB clip / Front spacer	163A19739X
25 / 25	PCB clip / Front spacer	163A19749X
37 / 37	PCB clip / Front spacer	163A19759X

PCB-Layout: Kat1iU6A

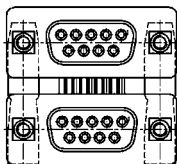


Variation:
plug upper –
socket bottom

No. of pos.	Mounting style 4-40 UNC	Part Number
09 / 09	Threaded insert	163A15559X
15 / 15	Threaded insert	163A15569X
25 / 25	Threaded insert	163A15579X
37 / 37	Threaded insert	163A15589X
09 / 09	Front spacer	163A15719X
15 / 15	Front spacer	163A15729X
25 / 25	Front spacer	163A15739X
37 / 37	Front spacer	163A15749X
09 / 09	PCB clip / Threaded insert	163A19529X
15 / 15	PCB clip / Threaded insert	163A19539X
25 / 25	PCB clip / Threaded insert	163A19549X
37 / 37	PCB clip / Threaded insert	163A19559X
09 / 09	PCB clip / Front spacer	163A19689X
15 / 15	PCB clip / Front spacer	163A19699X
25 / 25	PCB clip / Front spacer	163A19709X
37 / 37	PCB clip / Front spacer	163A19719X

No. of pos.	Mounting style M3	Part Number
09 / 09	Threaded insert	163A15639X
15 / 15	Threaded insert	163A15649X
25 / 25	Threaded insert	163A15659X
37 / 37	Threaded insert	163A15669X
09 / 09	Front spacer	163A15799X
15 / 15	Front spacer	163A15809X
25 / 25	Front spacer	163A15819X
37 / 37	Front spacer	163A15829X
09 / 09	PCB clip / Threaded insert	163A19609X
15 / 15	PCB clip / Threaded insert	163A19619X
25 / 25	PCB clip / Threaded insert	163A19629X
37 / 37	PCB clip / Threaded insert	163A19639X
09 / 09	PCB clip / Front spacer	163A19769X
15 / 15	PCB clip / Front spacer	163A19779X
25 / 25	PCB clip / Front spacer	163A19789X
37 / 37	PCB clip / Front spacer	163A19799X

PCB-Layout: Kat1iU6A

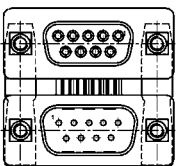


Variation:
socket upper –
socket bottom

No. of pos.	Mounting style 4-40 UNC	Part Number
09 / 09	Threaded insert	164A15929X
15 / 15	Threaded insert	164A15939X
25 / 25	Threaded insert	164A15949X
37 / 37	Threaded insert	164A15959X
09 / 09	Front spacer	164A16089X
15 / 15	Front spacer	164A16099X
25 / 25	Front spacer	164A16109X
37 / 37	Front spacer	164A16119X
09 / 09	PCB clip / Threaded insert	164A19919X
15 / 15	PCB clip / Threaded insert	164A19929X
25 / 25	PCB clip / Threaded insert	164A19939X
37 / 37	PCB clip / Threaded insert	164A19949X
09 / 09	PCB clip / Front spacer	164A20079X
15 / 15	PCB clip / Front spacer	164A20089X
25 / 25	PCB clip / Front spacer	164A20099X
37 / 37	PCB clip / Front spacer	164A20109X

No. of pos.	Mounting style M3	Part Number
09 / 09	Threaded insert	164A16009X
15 / 15	Threaded insert	164A16019X
25 / 25	Threaded insert	164A16029X
37 / 37	Threaded insert	164A16039X
09 / 09	Front spacer	164A16169X
15 / 15	Front spacer	164A16179X
25 / 25	Front spacer	164A16189X
37 / 37	Front spacer	164A16199X
09 / 09	PCB clip / Threaded insert	164A19999X
15 / 15	PCB clip / Threaded insert	164A20009X
25 / 25	PCB clip / Threaded insert	164A20019X
37 / 37	PCB clip / Threaded insert	164A20029X
09 / 09	PCB clip / Front spacer	164A20159X
15 / 15	PCB clip / Front spacer	164A20169X
25 / 25	PCB clip / Front spacer	164A20179X
37 / 37	PCB clip / Front spacer	164A20189X

PCB-Layout: Kat1iU5A



Variation:
socket upper –
plug bottom

No. of pos.	Mounting style 4-40 UNC	Part Number
09 / 09	Threaded insert	164A15969X
15 / 15	Threaded insert	164A15979X
25 / 25	Threaded insert	164A15989X
37 / 37	Threaded insert	164A15999X
09 / 09	Front spacer	164A16129X
15 / 15	Front spacer	164A16139X
25 / 25	Front spacer	164A16149X
37 / 37	Front spacer	164A16159X
09 / 09	PCB clip / Threaded insert	164A19959X
15 / 15	PCB clip / Threaded insert	164A19969X
25 / 25	PCB clip / Threaded insert	164A19979X
37 / 37	PCB clip / Threaded insert	164A19989X
09 / 09	PCB clip / Front spacer	164A20119X
15 / 15	PCB clip / Front spacer	164A20129X
25 / 25	PCB clip / Front spacer	164A20139X
37 / 37	PCB clip / Front spacer	164A20149X

No. of pos.	Mounting style M3	Part Number
09 / 09	Threaded insert	164A16049X
15 / 15	Threaded insert	164A16059X
25 / 25	Threaded insert	164A16069X
37 / 37	Threaded insert	164A16079X
09 / 09	Front spacer	164A16209X
15 / 15	Front spacer	164A16219X
25 / 25	Front spacer	164A16229X
37 / 37	Front spacer	164A16239X
09 / 09	PCB clip / Threaded insert	164A20039X
15 / 15	PCB clip / Threaded insert	164A20049X
25 / 25	PCB clip / Threaded insert	164A20059X
37 / 37	PCB clip / Threaded insert	164A20069X
09 / 09	PCB clip / Front spacer	164A20199X
15 / 15	PCB clip / Front spacer	164A20209X
25 / 25	PCB clip / Front spacer	164A20219X
37 / 37	PCB clip / Front spacer	164A20229X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

D-SUB STANDARD – DUAL PORT

Solder pin – Angled – Stamped contacts –
 .625" / 15.88 mm and .750" / 19.05 mm Connector spacing



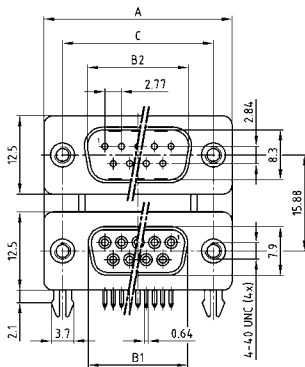
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

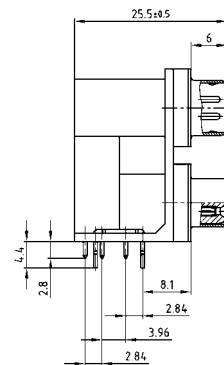
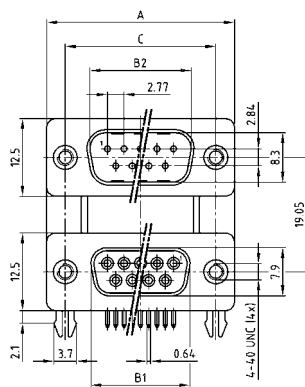
- Variations: pin – pin; socket – socket; pin – socket
- Mounting style:
with mounting bracket, PCB clip and
4-40 UNC threaded insert
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

PRODUCT DRAWING

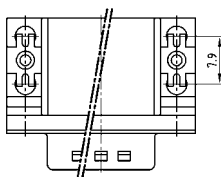
Connector spacing 15.88 mm



Connector spacing 19.05 mm



Mounting style: PCB clip, threaded insert



No. of pos.	A	B1	B2	C
2X 09	30.80	16.30	16.92	25.00
2X 15	39.20	24.60	25.25	33.30
2X 25	53.10	38.30	38.96	47.04
2X 37	69.40	54.80	55.42	63.50

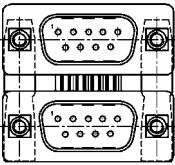
Graphical representation of only one variant!

D-SUB STANDARD – DUAL PORT VARIATIONS

Solder pin – Angled – Stamped contacts –

.625" / 15.88 mm and .750" / 19.05 mm Connector spacing

ORDER DATA



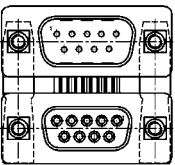
Connector spacing .625" / 15.88 mm

No. of pos.	Mounting style 4-40 UNC	Part Number
09 / 09	PCB clip/Threaded insert	DLS1PP5AN21X
15 / 15	PCB clip/Threaded insert	DLS2PP5AN21X
25 / 25	PCB clip/Threaded insert	DLS3PP5AN21X
37 / 37	PCB clip/Threaded insert	DLS4PP5AN21X

Connector spacing .750" / 19.05 mm

No. of pos.	Mounting style 4-40 UNC	Part Number
09 / 09	PCB clip/Threaded insert	DLS1PP5AN23X
15 / 15	PCB clip/Threaded insert	DLS2PP5AN23X
25 / 25	PCB clip/Threaded insert	DLS3PP5AN23X
37 / 37	PCB clip/Threaded insert	DLS4PP5AN23X

Variation:
plug upper –
plug bottom



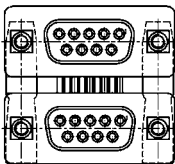
Connector spacing .625" / 15.88 mm

No. of pos.	Mounting style 4-40 UNC	Part Number
09 / 09	PCB clip/Threaded insert	DLS1PS5AN21X
15 / 15	PCB clip/Threaded insert	DLS2PS5AN21X
25 / 25	PCB clip/Threaded insert	DLS3PS5AN21X
37 / 37	PCB clip/Threaded insert	DLS4PS5AN21X

Connector spacing .750" / 19.05 mm

No. of pos.	Mounting style 4-40 UNC	Part Number
09 / 09	PCB clip/Threaded insert	DLS1PS5AN23X
15 / 15	PCB clip/Threaded insert	DLS2PS5AN23X
25 / 25	PCB clip/Threaded insert	DLS3PS5AN23X
37 / 37	PCB clip/Threaded insert	DLS4PS5AN23X

Variation:
plug upper –
socket bottom



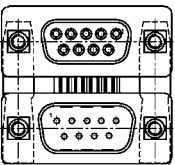
Connector spacing .625" / 15.88 mm

No. of pos.	Mounting style 4-40 UNC	Part Number
09 / 09	PCB clip/Threaded insert	DLS1SS5AN21X
15 / 15	PCB clip/Threaded insert	DLS2SS5AN21X
25 / 25	PCB clip/Threaded insert	DLS3SS5AN21X
37 / 37	PCB clip/Threaded insert	DLS4SS5AN21X

Connector spacing .750" / 19.05 mm

No. of pos.	Mounting style 4-40 UNC	Part Number
09 / 09	PCB clip/Threaded insert	DLS1SS5AN23X
15 / 15	PCB clip/Threaded insert	DLS2SS5AN23X
25 / 25	PCB clip/Threaded insert	DLS3SS5AN23X
37 / 37	PCB clip/Threaded insert	DLS4SS5AN23X

Variation:
socket upper –
socket bottom



Connector spacing .625" / 15.88 mm

No. of pos.	Mounting style 4-40 UNC	Part Number
09 / 09	PCB clip/Threaded insert	DLS1SP5AN21X
15 / 15	PCB clip/Threaded insert	DLS2SP5AN21X
25 / 25	PCB clip/Threaded insert	DLS3SP5AN21X
37 / 37	PCB clip/Threaded insert	DLS4SP5AN21X

Connector spacing .750" / 19.05 mm

No. of pos.	Mounting style 4-40 UNC	Part Number
09 / 09	PCB clip/Threaded insert	DLS1SP5AN23X
15 / 15	PCB clip/Threaded insert	DLS2SP5AN23X
25 / 25	PCB clip/Threaded insert	DLS3SP5AN23X
37 / 37	PCB clip/Threaded insert	DLS4SP5AN23X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

Variation:
socket upper –
plug bottom

D-SUB STANDARD

Crimp body (without contacts) – For wire size AWG 24...20 and AWG 28...24

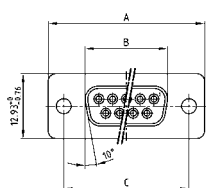


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

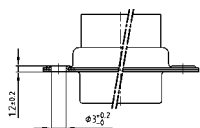
- For machined and stamped contacts, AWG 24...20 and AWG 28...24
- Mounting styles:
 - with through-hole, $\varnothing .118''/3 \text{ mm}$
 - with 4-40 UNC or M3 threaded insert
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

SOCKET CONNECTOR



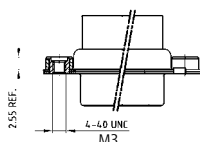
No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 $+0.12$
15	39.52	24.79	33.30 $+0.15$ -0.10
25	53.42	38.50	47.04 $+0.13$
37	69.70	54.96	63.50 $+0.13$
50	67.31	52.55	61.10 $+0.14$ -0.11

Mounting style: Through-hole

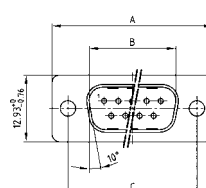


50 pos. = Dim. in (_)

Mounting style: Threaded insert

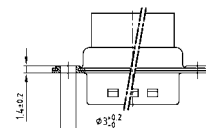


PLUG CONNECTOR



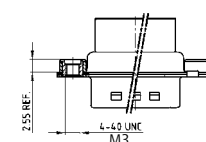
No. of pos.	A -0.76	B -0.25	C	D -0.3
09	31.19	16.79	25.00 $+0.12$	6.12
15	39.52	25.12	33.30 $+0.15$ -0.10	6.12
25	53.42	38.84	47.04 $+0.13$	5.99
37	69.70	55.30	63.50 $+0.13$	5.99
50	67.31	52.68	61.10 $+0.14$ -0.11	5.99

Mounting style: Through-hole



50 pos. = Dim. in (_)

Mounting style: Threaded insert



ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	164X11769X
15	Through-hole	164X11779X
25	Through-hole	164X11789X
37	Through-hole	164X11799X
50	Through-hole	164X11809X
09	4-40 UNC Threaded insert	DSS1XSXXG04X
15	4-40 UNC Threaded insert	DSS2XSXXG04X
25	4-40 UNC Threaded insert	DSS3XSXXG04X
37	4-40 UNC Threaded insert	DSS4XSXXG04X
50	4-40 UNC Threaded insert	DSS5XSXXG04X
09	M3 Threaded insert	DSS1XSXXG03X
15	M3 Threaded insert	DSS2XSXXG03X
25	M3 Threaded insert	DSS3XSXXG03X
37	M3 Threaded insert	DSS4XSXXG03X
50	M3 Threaded insert	DSS5XSXXG03X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
09	Through-hole	163X10019X
15	Through-hole	163X10029X
25	Through-hole	163X10039X
37	Through-hole	163X10049X
50	Through-hole	163X10059X
09	4-40 UNC Threaded insert	DSS1XPXXG04X
15	4-40 UNC Threaded insert	DSS2XPXXG04X
25	4-40 UNC Threaded insert	DSS3XPXXG04X
37	4-40 UNC Threaded insert	DSS4XPXXG04X
50	4-40 UNC Threaded insert	DSS5XPXXG04X
09	M3 Threaded insert	DSS1XPXXG03X
15	M3 Threaded insert	DSS2XPXXG03X
25	M3 Threaded insert	DSS3XPXXG03X
37	M3 Threaded insert	DSS4XPXXG03X
50	M3 Threaded insert	DSS5XPXXG03X

D-SUB STANDARD

Crimp Contacts – Machined or stamped – For wire size AWG 24...20 and AWG 28...24

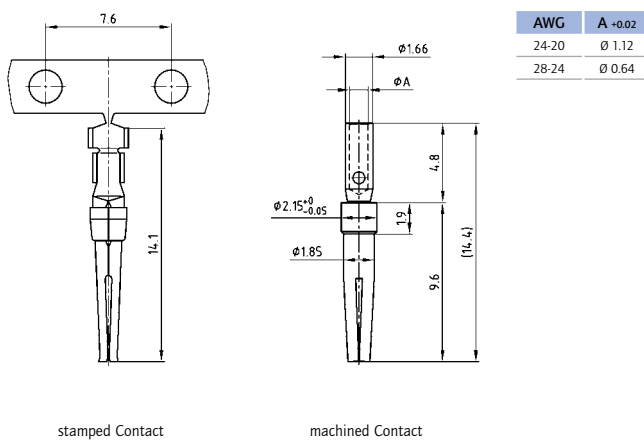


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

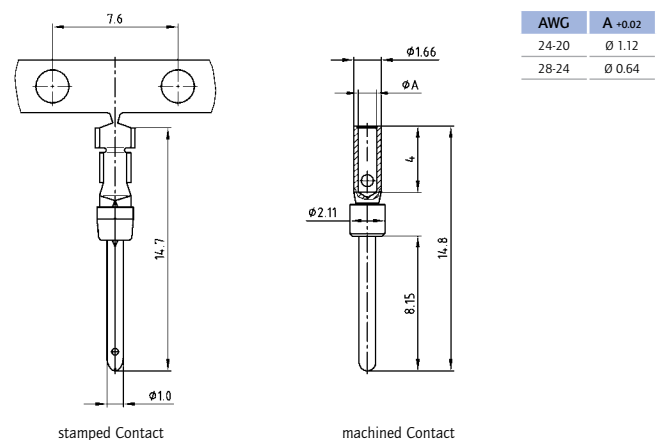
DESCRIPTION

- For wire size AWG 24...20 and AWG 28...24
- Stamped contacts with reel length of 500 or 10,000 contacts
- Loose contacts in poly bag (500/100 pieces)
- Quality class 3 (also available in quality class 1)

FEMALE CONNECTOR



MALE CONNECTOR



Technical Data

Contact material Precision machined contacts	Brass
Contact material Stamped contacts	Phosphor bronze
Contact plating Precision machined contacts	Gold plated over nickel
Contact plating Stamped contacts	Selective gold plated
Temperature range	-55°C to +125°C
Rated current for AWG 24...20	7.5 A
Rated current for AWG 28...24	5 A
Contact resistance	≤ 10 mΩ

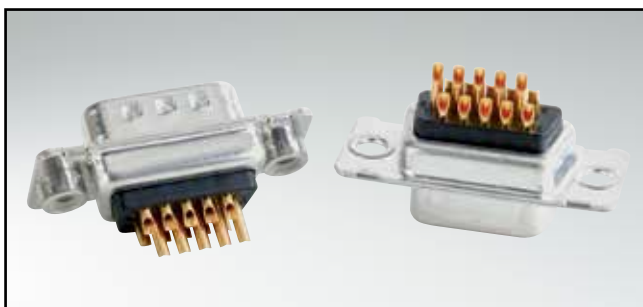
ORDER DATA

FEMALE CONTACTS	
Contact type / AWG	Part Number
Stamped / 24...20 / Big reel wheeled left (10.000)	162A11819X
Stamped / 24...20 / Big reel wheeled right (10.000)	162A11829X
Stamped / 24...20 / Small reel wheeled right (500)	162A11839X
Stamped / 24...20 / Loose contacts (500)	162A11849X
Machined / 24...20 / Loose contacts (500)	162A18709X
Machined / 24...20 / Loose contacts (100)	16-001653
Stamped / 28...24 / Big reel wheeled left (10.000)	162A11859X
Stamped / 28...24 / Big reel wheeled right (10.000)	162A11869X
Stamped / 28...24 / Small reel wheeled right (500)	162A11879X
Stamped / 28...24 / Loose contacts (500)	162A11889X
Machined / 28...24 / Loose contacts (500)	162A18719X
Machined / 28...24 / Loose contacts (100)	16-001663

MALE CONTACTS	
Contact type / AWG	Part Number
Stamped / 24...20 / Big reel wheeled left (10.000)	161A13369X
Stamped / 24...20 / Big reel wheeled right (10.000)	161A13379X
Stamped / 24...20 / Small reel wheeled right (500)	161A13389X
Stamped / 24...20 / Loose contacts (500)	161A13399X
Machined / 24...20 / Loose contacts (500)	161A18299X
Machined / 24...20 / Loose contacts (100)	16-001673
Stamped / 28...24 / Big reel wheeled left (10.000)	161A13409X
Stamped / 28...24 / Big reel wheeled right (10.000)	161A13419X
Stamped / 28...24 / Small reel wheeled right (500)	161A13429X
Stamped / 28...24 / Loose contacts (500)	161A13439X
Machined / 28...24 / Loose contacts (500)	161A18309X
Machined / 28...24 / Loose contacts (100)	16-001683

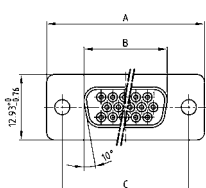
D-SUB HIGH DENSITY

Solder cup – Precision machined contacts – For wire size AWG 22



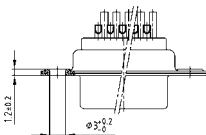
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

SOCKET CONNECTOR

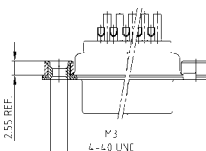


No. of pos.	A -0.76	B -0.25	C
15	31.19	16.46	25.00 +0.12
26	39.52	24.79	33.30 +0.15 -0.10
44	53.42	38.50	47.04 +0.13
62	69.70	54.96	63.50 +0.13
78	67.31	52.55	61.10 +0.14 -0.11

Mounting style: Through-hole



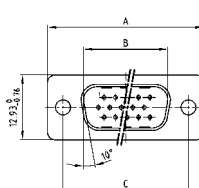
Mounting style: Threaded insert



DESCRIPTION

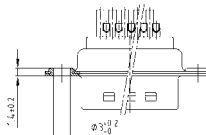
- Suitable for wire size AWG 22
- Mounting styles:
 - with through-hole, Ø .118" / 3 mm
 - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

PLUG CONNECTOR

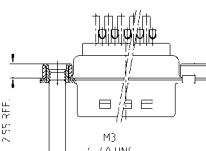


No. of pos.	A -0.76	B -0.25	C	D -0.3
15	31.19	16.79	25.00 +0.12	6.12
26	39.52	25.12	33.30 +0.15 -0.10	6.12
44	53.42	38.84	47.04 +0.13	5.99
62	69.70	55.30	63.50 +0.13	5.99
78	67.31	52.68	61.10 +0.14 -0.11	5.99

Mounting style: Through-hole



Mounting style: Threaded insert



78 pos. = Dim. in (_ _)

78 pos. = Dim. in (_ _)

ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Through-hole	164A17009X
26	Through-hole	164A17019X
44	Through-hole	164A17029X
62	Through-hole	164A17039X
78	Through-hole	164A17049X
15	4-40 UNC Threaded insert	164A17059X
26	4-40 UNC Threaded insert	164A17069X
44	4-40 UNC Threaded insert	164A17079X
62	4-40 UNC Threaded insert	164A17089X
78	4-40 UNC Threaded insert	164A17099X
15	M3 Threaded insert	164A17109X
26	M3 Threaded insert	164A17119X
42	M3 Threaded insert	164A17129X
62	M3 Threaded insert	164A17139X
78	M3 Threaded insert	164A17149X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Through-hole	163A16599X
26	Through-hole	163A16609X
44	Through-hole	163A16619X
62	Through-hole	163A16629X
78	Through-hole	163A16639X
15	4-40 UNC Threaded insert	163A16649X
26	4-40 UNC Threaded insert	163A16659X
44	4-40 UNC Threaded insert	163A16669X
62	4-40 UNC Threaded insert	163A16679X
78	4-40 UNC Threaded insert	163A16689X
15	M3 Threaded insert	163A16699X
26	M3 Threaded insert	163A16709X
44	M3 Threaded insert	163A16719X
62	M3 Threaded insert	163A16729X
78	M3 Threaded insert	163A16739X

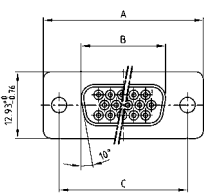
D-SUB HIGH DENSITY

Solder cup – Stamped contacts – For wire size AWG 22



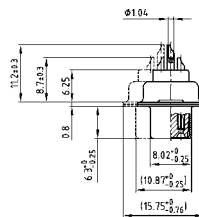
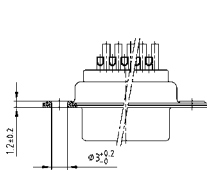
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

SOCKET CONNECTOR



No. of pos.	A -0.76	B -0.25	C
15	31.19	16.46	25.00 ^{+0.12}
26	39.52	24.79	33.30 ^{+0.15} _{-0.10}
44	53.42	38.50	47.04 ^{+0.13}
62	69.70	54.96	63.50 ^{+0.13}
78	67.31	52.55	61.10 ^{+0.14} _{-0.11}

Mounting style: Through-hole

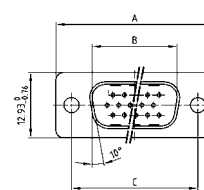


78 pos. = Dim. in (_)

DESCRIPTION

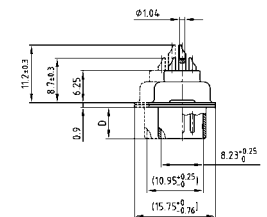
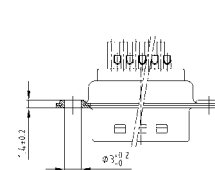
- Suitable for wire size AWG 22
- Mounting style:
with through-hole Ø .118" / 3 mm
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

PLUG CONNECTOR



No. of pos.	A -0.76	B +0.25	C	D -0.3
15	31.19	16.79	25.00 ^{+0.12}	6.12
26	39.52	25.12	33.30 ^{+0.15} _{-0.10}	6.12
44	53.42	38.84	47.04 ^{+0.13}	5.99
62	69.70	55.30	63.50 ^{+0.13}	5.99
78	67.31	52.68	61.10 ^{+0.14} _{-0.11}	5.99

Mounting style: Through-hole



78 pos. = Dim. in (_)

ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Through-hole	302A10129X
26	Through-hole	302A10139X
44	Through-hole	302A10149X
62	Through-hole	302A10159X
78	Through-hole	302A11329X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Through-hole	301A10129X
26	Through-hole	301A10139X
44	Through-hole	301A10149X
62	Through-hole	301A10159X
78	Through-hole	301A11019X

D-SUB HIGH DENSITY

Solder pin – Straight – Precision machined contacts

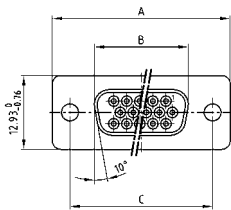


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

- Mounting styles:
 - with through-hole, Ø .118" / 3 mm
 - with 4-40 UNC or M3 threaded insert
 - with 4-40 UNC front / M3 threaded rear spacer
 - with M3 front / 4-40 UNC or M3 threaded rear spacer with PCB clip
 - with 4-40 UNC or M3 front and threaded rear spacer with PCB clip
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

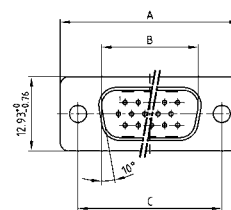
SOCKET CONNECTOR



No. of pos.	A -0.76	B -0.25	C
15	31.19	16.46	25.00 ^{+0.12}
26	39.52	24.79	33.30 ^{+0.15} _{-0.10}
44	53.42	38.50	47.04 ^{+0.13}
62	69.70	54.96	63.50 ^{+0.13}
78	67.31	52.55	61.10 ^{+0.14} _{-0.11}

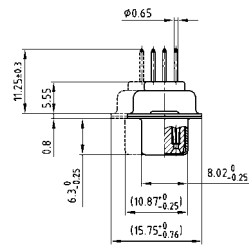
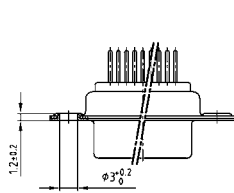
PCB-Layout: Kat1iI9A

PLUG CONNECTOR

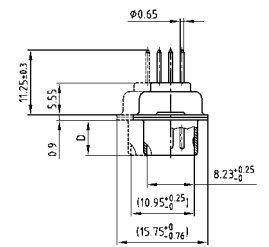
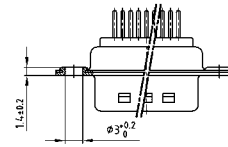


No. of pos.	A -0.76	B +0.25	C	D -0.3
15	31.19	16.79	25.00 ^{+0.12}	6.12
26	39.52	25.12	33.30 ^{+0.15} _{-0.10}	6.12
44	53.42	38.84	47.04 ^{+0.13}	5.99
62	69.70	55.30	63.50 ^{+0.13}	5.99
78	67.31	52.68	61.10 ^{+0.14} _{-0.11}	5.99

PCB-Layout: Kat1iU0A

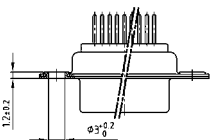


78 pos. = Dim. in (_ _)



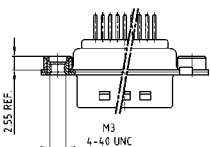
78 pos. = Dim. in (_ _)

ORDER DATA



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Through-hole	164A17159X
26	Through-hole	164A17169X
44	Through-hole	164A17179X
62	Through-hole	164A17189X
78	Through-hole	164A17199X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Through-hole	163A16749X
26	Through-hole	163A16759X
44	Through-hole	163A16769X
62	Through-hole	163A16779X
78	Through-hole	163A16789X



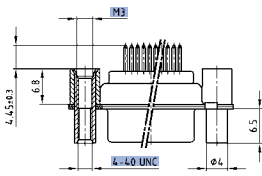
SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	4-40 UNC Threaded insert	164A17209X
26	4-40 UNC Threaded insert	164A17219X
44	4-40 UNC Threaded insert	164A17229X
62	4-40 UNC Threaded insert	164A17239X
78	4-40 UNC Threaded insert	164A17249X
15	M3 Threaded insert	164A17259X
26	M3 Threaded insert	164A17269X
44	M3 Threaded insert	164A17279X
62	M3 Threaded insert	164A17289X
78	M3 Threaded insert	164A17299X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	4-40 UNC Threaded insert	163A16799X
26	4-40 UNC Threaded insert	163A16809X
44	4-40 UNC Threaded insert	163A16819X
62	4-40 UNC Threaded insert	163A16829X
78	4-40 UNC Threaded insert	163A16839X
15	M3 Threaded insert	163A16849X
26	M3 Threaded insert	163A16859X
44	M3 Threaded insert	163A16869X
62	M3 Threaded insert	163A16879X
78	M3 Threaded insert	163A16889X

D-SUB HIGH DENSITY – MOUNTING STYLES

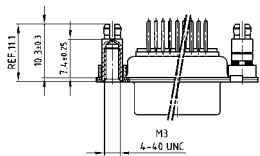
Solder pin – Straight – Precision machined contacts

ORDER DATA



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	4-40 UNC Front/M3 Threaded rear spacer	164A17309X
26	4-40 UNC Front/M3 Threaded rear spacer	164A17319X
44	4-40 UNC Front/M3 Threaded rear spacer	164A17329X
62	4-40 UNC Front/M3 Threaded rear spacer	164A17339X
78	4-40 UNC Front/M3 Threaded rear spacer	164A17349X

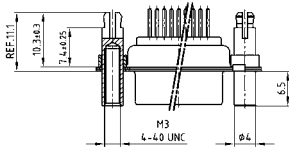
PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	4-40 UNC Front/M3 Threaded rear spacer	163A16899X
26	4-40 UNC Front/M3 Threaded rear spacer	163A16909X
44	4-40 UNC Front/M3 Threaded rear spacer	163A16919X
62	4-40 UNC Front/M3 Threaded rear spacer	163A16929X
78	4-40 UNC Front/M3 Threaded rear spacer	163A16939X



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	4-40 UNC Threaded rear spacer PCB clip	164A17359X
26	4-40 UNC Threaded rear spacer PCB clip	164A17369X
44	4-40 UNC Threaded rear spacer PCB clip	164A17379X
62	4-40 UNC Threaded rear spacer PCB clip	164A17389X
78	4-40 UNC Threaded rear spacer PCB clip	164A17399X
15	M3 Threaded rear spacer PCB clip	164A17409X
26	M3 Threaded rear spacer PCB clip	164A17419X
44	M3 Threaded rear spacer PCB clip	164A17429X
62	M3 Threaded rear spacer PCB clip	164A17439X
78	M3 Threaded rear spacer PCB clip	164A17449X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	4-40 UNC Threaded rear spacer PCB clip	163A16949X
26	4-40 UNC Threaded rear spacer PCB clip	163A16959X
44	4-40 UNC Threaded rear spacer PCB clip	163A16969X
62	4-40 UNC Threaded rear spacer PCB clip	163A16979X
78	4-40 UNC Threaded rear spacer PCB clip	163A16989X
15	M3 Threaded rear spacer PCB clip	163A16999X
26	M3 Threaded rear spacer PCB clip	163A17009X
44	M3 Threaded rear spacer PCB clip	163A17019X
62	M3 Threaded rear spacer PCB clip	163A17029X
78	M3 Threaded rear spacer PCB clip	163A17039X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	4-40 UNC Front/Threaded rear spacer PCB clip	164A17459X
26	4-40 UNC Front/Threaded rear spacer PCB clip	164A17469X
44	4-40 UNC Front/Threaded rear spacer PCB clip	164A17479X
62	4-40 UNC Front/Threaded rear spacer PCB clip	164A17489X
78	4-40 UNC Front/Threaded rear spacer PCB clip	164A17499X
15	M3 Front/Threaded rear spacer PCB clip	164A17509X
26	M3 Front/Threaded rear spacer PCB clip	164A17519X
44	M3 Front/Threaded rear spacer PCB clip	164A17529X
62	M3 Front/Threaded rear spacer PCB clip	164A17539X
78	M3 Front/Threaded rear spacer PCB clip	164A17549X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	4-40 UNC Front/Threaded rear spacer PCB clip	163A17049X
26	4-40 UNC Front/Threaded rear spacer PCB clip	163A17059X
44	4-40 UNC Front/Threaded rear spacer PCB clip	163A17069X
62	4-40 UNC Front/Threaded rear spacer PCB clip	163A17079X
78	4-40 UNC Front/Threaded rear spacer PCB clip	163A17089X
15	M3 Front/Threaded rear spacer PCB clip	163A17099X
26	M3 Front/Threaded rear spacer PCB clip	163A17109X
44	M3 Front/Threaded rear spacer PCB clip	163A17119X
62	M3 Front/Threaded rear spacer PCB clip	163A17129X
78	M3 Front/Threaded rear spacer PCB clip	163A17139X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

PCB-Layout: Kat11T9A

PCB-Layout: Kat11U0A

D-SUB HIGH DENSITY

Press-fit contact – Straight – Precision machined contacts

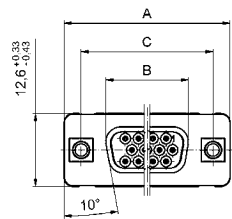


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

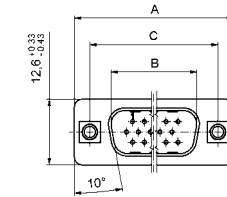
- Mounting styles:
 - with .268"/6.8 mm threaded rear spacer and 4-40 UNC
 - with .287"/7.3 mm threaded rear spacer and 4-40 UNC
- For .040"/1.0 mm $\pm \begin{matrix} .003^*/0.09 \text{ mm} \\ .002^*/0.06 \text{ mm} \end{matrix}$ finished through-hole diameter
Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

SOCKET CONNECTOR



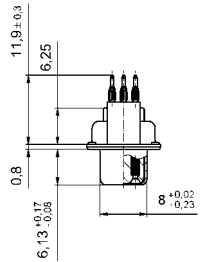
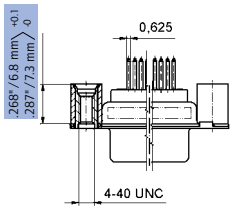
No. of pos.	A	B	C
15	30.88 $\begin{matrix} +0.31 \\ -0.45 \end{matrix}$	16.41 $\begin{matrix} +0.05 \\ -0.20 \end{matrix}$	24.99 $\begin{matrix} +0.13 \\ -0.12 \end{matrix}$
26	39.22 $\begin{matrix} +0.30 \\ -0.46 \end{matrix}$	24.74 $\begin{matrix} +0.05 \\ -0.20 \end{matrix}$	33.32 $\begin{matrix} +0.13 \\ -0.12 \end{matrix}$
44	53.09 $\begin{matrix} +0.33 \\ -0.43 \end{matrix}$	38.51 $\begin{matrix} +0 \\ -0.26 \end{matrix}$	47.04 $\begin{matrix} +0.13 \\ -0.12 \end{matrix}$
62	69.50 $\begin{matrix} +0.20 \\ -0.56 \end{matrix}$	54.94 $\begin{matrix} +0.05 \\ -0.23 \end{matrix}$	63.50 $\begin{matrix} +0.13 \\ -0.12 \end{matrix}$

PLUG CONNECTOR

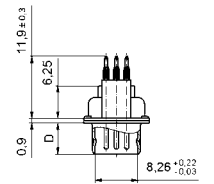
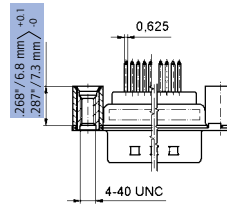


No. of pos.	A	B	C	D
15	30.88 $\begin{matrix} +0.31 \\ -0.45 \end{matrix}$	16.41 $\begin{matrix} +0.05 \\ -0.20 \end{matrix}$	24.99 $\begin{matrix} +0.13 \\ -0.12 \end{matrix}$	6.00 $\begin{matrix} +0.12 \\ -0.18 \end{matrix}$
26	39.22 $\begin{matrix} +0.30 \\ -0.46 \end{matrix}$	24.74 $\begin{matrix} +0.05 \\ -0.20 \end{matrix}$	33.32 $\begin{matrix} +0.13 \\ -0.12 \end{matrix}$	6.00 $\begin{matrix} +0.12 \\ -0.18 \end{matrix}$
44	53.09 $\begin{matrix} +0.33 \\ -0.43 \end{matrix}$	38.51 $\begin{matrix} +0 \\ -0.26 \end{matrix}$	47.04 $\begin{matrix} +0.13 \\ -0.12 \end{matrix}$	6.00 $\begin{matrix} +0.13 \\ -0.30 \end{matrix}$
62	69.50 $\begin{matrix} +0.20 \\ -0.56 \end{matrix}$	54.94 $\begin{matrix} +0.05 \\ -0.23 \end{matrix}$	63.50 $\begin{matrix} +0.13 \\ -0.12 \end{matrix}$	6.00 $\begin{matrix} +0.13 \\ -0.30 \end{matrix}$

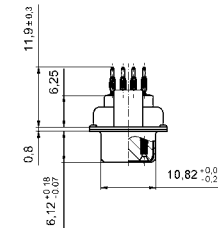
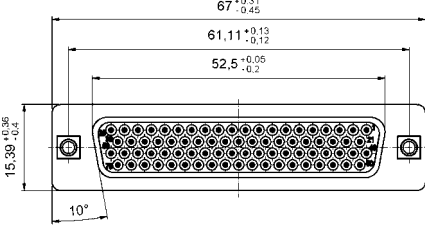
15-62 pos.



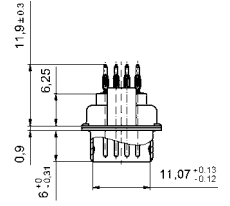
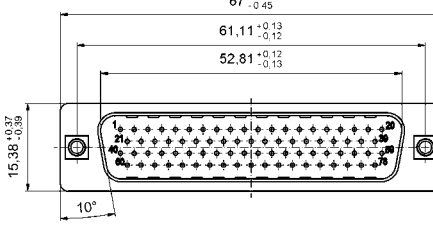
15-62 pos.



78 pos.



78 pos.



ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC thread	Part Number
15	Threaded rear spacer .268"/6.8 mm	DSH1XSGAA48X
26	Threaded rear spacer .268"/6.8 mm	DSH2XSGAA48X
44	Threaded rear spacer .268"/6.8 mm	DSH3XSGAA48X
62	Threaded rear spacer .268"/6.8 mm	DSH4XSGAA48X
78	Threaded rear spacer .268"/6.8 mm	DSH5XSGAA48X
15	Threaded rear spacer .287"/7.3 mm	DSH1XSHAA49X
26	Threaded rear spacer .287"/7.3 mm	DSH2XSHAA49X
44	Threaded rear spacer .287"/7.3 mm	DSH3XSHAA49X
62	Threaded rear spacer .287"/7.3 mm	DSH4XSHAA49X
78	Threaded rear spacer .287"/7.3 mm	DSH5XSHAA49X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC thread	Part Number
15	Threaded rear spacer .268"/6.8 mm	DSH1XPGAA48X
26	Threaded rear spacer .268"/6.8 mm	DSH2XPGAA48X
44	Threaded rear spacer .268"/6.8 mm	DSH3XPGAA48X
62	Threaded rear spacer .268"/6.8 mm	DSH4XPGAA48X
78	Threaded rear spacer .268"/6.8 mm	DSH5XPGAA48X
15	Threaded rear spacer .287"/7.3 mm	DSH1XPHAA49X
26	Threaded rear spacer .287"/7.3 mm	DSH2XPHAA49X
44	Threaded rear spacer .287"/7.3 mm	DSH3XPHAA49X
62	Threaded rear spacer .287"/7.3 mm	DSH4XPHAA49X
78	Threaded rear spacer .287"/7.3 mm	DSH5XPHAA49X

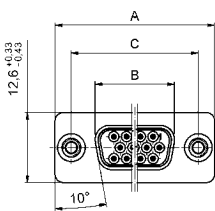
D-SUB HIGH DENSITY

Press-fit contact – Straight – Precision machined contacts – Rear press-fit spacer



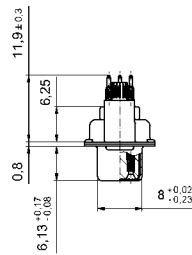
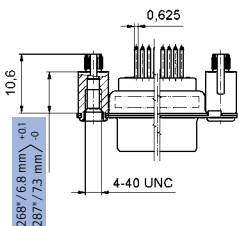
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

SOCKET CONNECTOR

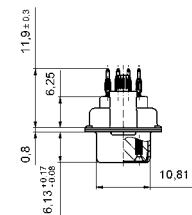
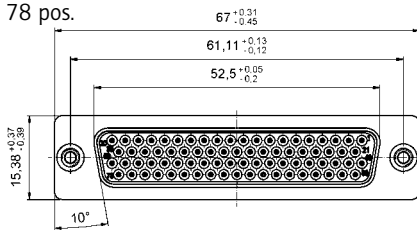


No. of pos.	A	B	C
15	30.88 ^{+0.31} _{-0.45}	16.41 ^{+0.05} _{-0.20}	24.99 ^{+0.13} _{-0.12}
26	39.22 ^{+0.30} _{-0.46}	24.74 ^{+0.05} _{-0.20}	33.32 ^{+0.13} _{-0.12}
44	53.09 ^{+0.33} _{-0.43}	38.51 ⁺⁰ _{-0.26}	47.04 ^{+0.13} _{-0.12}
62	69.50 ^{+0.20} _{-0.56}	54.94 ^{+0.05} _{-0.23}	63.50 ^{+0.13} _{-0.12}

15-62 pos.



78 pos.



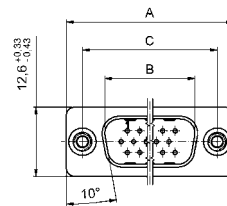
ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC thread	Part Number
15	Rear press-fit spacer .268" / 6.8 mm	DSH1XSGAA58X
26	Rear press-fit spacer .268" / 6.8 mm	DSH2XSGAA58X
44	Rear press-fit spacer .268" / 6.8 mm	DSH3XSGAA58X
62	Rear press-fit spacer .268" / 6.8 mm	DSH4XSGAA58X
78	Rear press-fit spacer .268" / 6.8 mm	DSH5XSGAA58X
15	Rear press-fit spacer .287" / 7.3 mm	DSH1XSHAA54X
26	Rear press-fit spacer .287" / 7.3 mm	DSH2XSHAA54X
44	Rear press-fit spacer .287" / 7.3 mm	DSH3XSHAA54X
62	Rear press-fit spacer .287" / 7.3 mm	DSH4XSHAA54X
78	Rear press-fit spacer .287" / 7.3 mm	DSH5XSHAA54X

DESCRIPTION

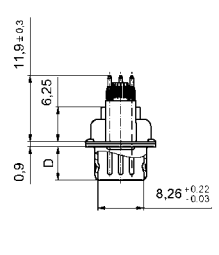
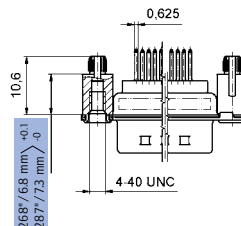
- Mounting styles:
 - with .268" / 6.8 mm rear press-fit spacer and 4-40 UNC
 - with .287" / 7.3 mm rear press-fit spacer and 4-40 UNC
- For .040" / 1.0 mm ^{+0.003"/0.09mm} / _{-.002"/0.06mm} finished through-hole diameter
Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

PLUG CONNECTOR

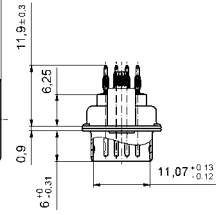
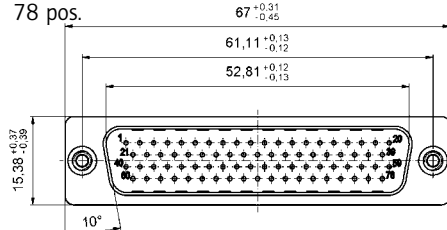


No. of pos.	A	B	C	D
15	30.88 ^{+0.31} _{-0.45}	16.41 ^{+0.05} _{-0.20}	24.99 ^{+0.13} _{-0.12}	6.00 ^{+0.12} _{-0.18}
26	39.22 ^{+0.30} _{-0.46}	24.74 ^{+0.05} _{-0.20}	33.32 ^{+0.13} _{-0.12}	6.00 ^{+0.12} _{-0.18}
44	53.09 ^{+0.33} _{-0.43}	38.51 ⁺⁰ _{-0.26}	47.04 ^{+0.13} _{-0.12}	6.00 ^{+0.12} _{-0.18}
62	69.50 ^{+0.20} _{-0.56}	54.94 ^{+0.05} _{-0.23}	63.50 ^{+0.13} _{-0.12}	6.00 ^{+0.12} _{-0.18}

15-62 pos.



78 pos.



PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC thread	Part Number
15	Rear press-fit spacer .268" / 6.8 mm	DSH1XPGAA58X
26	Rear press-fit spacer .268" / 6.8 mm	DSH2XPGAA58X
44	Rear press-fit spacer .268" / 6.8 mm	DSH3XPGAA58X
62	Rear press-fit spacer .268" / 6.8 mm	DSH4XPGAA58X
78	Rear press-fit spacer .268" / 6.8 mm	DSH5XPGAA58X
15	Rear press-fit spacer .287" / 7.3 mm	DSH1XPHAA54X
26	Rear press-fit spacer .287" / 7.3 mm	DSH2XPHAA54X
44	Rear press-fit spacer .287" / 7.3 mm	DSH3XPHAA54X
62	Rear press-fit spacer .287" / 7.3 mm	DSH4XPHAA54X
78	Rear press-fit spacer .287" / 7.3 mm	DSH5XPHAA54X

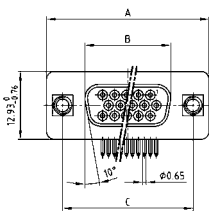
D-SUB HIGH DENSITY

Solder pin – Angled – .350" / 7.98 mm – Precision machined contacts – Plastic bracket



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

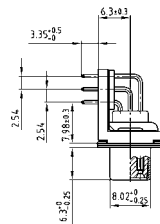
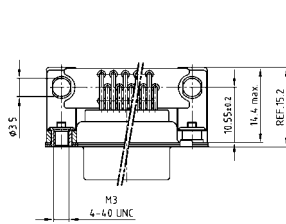
SOCKET CONNECTOR



No. of pos.	A -0.76	B -0.25	C
15	31.19	16.46	25.00 +0.12
26	39.52	24.79	33.30 +0.15 -0.10
44	53.42	38.50	47.04 +0.13
62	69.70	54.96	63.50 +0.13

PCB-Layout: Kat1iU1A

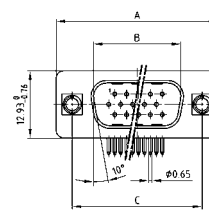
Mounting style: Grounding strap, threaded insert



DESCRIPTION

- Mounting styles:
 - with mounting and grounding strap, 4-40 UNC or M3 threaded insert
 - with mounting and grounding strap, 4-40 UNC or M3 front spacer
 - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

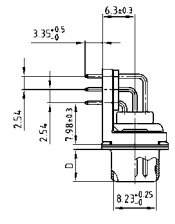
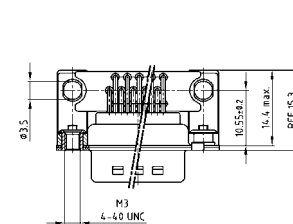
PLUG CONNECTOR



No. of pos.	A -0.76	B +0.25	C	D -0.3
15	31.19	16.79	25.00 +0.12	6.12
26	39.52	25.12	33.30 +0.15 -0.10	6.12
44	53.42	38.84	47.04 +0.13	5.99
62	69.70	55.30	63.50 +0.13	5.99

PCB-Layout: Kat1iU2A

Mounting style: Grounding strap, threaded insert



ORDER DATA

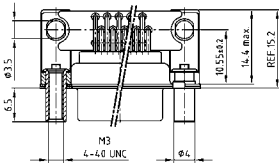
SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Grounding strap / 4-40 UNC Threaded insert	164A18019X
26	Grounding strap / 4-40 UNC Threaded insert	164A18029X
44	Grounding strap / 4-40 UNC Threaded insert	164A18039X
62	Grounding strap / 4-40 UNC Threaded insert	164A18049X
15	Grounding strap / M3 Threaded insert	164A18059X
26	Grounding strap / M3 Threaded insert	164A18069X
44	Grounding strap / M3 Threaded insert	164A18079X
62	Grounding strap / M3 Threaded insert	164A18089X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Grounding strap / 4-40 UNC Threaded insert	163A17609X
26	Grounding strap / 4-40 UNC Threaded insert	163A17619X
44	Grounding strap / 4-40 UNC Threaded insert	163A17629X
62	Grounding strap / 4-40 UNC Threaded insert	163A17639X
15	Grounding strap / M3 Threaded insert	163A17649X
26	Grounding strap / M3 Threaded insert	163A17659X
44	Grounding strap / M3 Threaded insert	163A17669X
62	Grounding strap / M3 Threaded insert	163A17679X

D-SUB HIGH DENSITY – MOUNTING STYLES

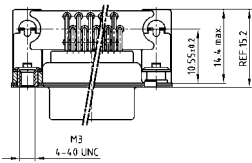
Solder pin – Angled – .350" / 7.98 mm – Precision machined contacts – Plastic bracket

ORDER DATA



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Grounding strap / 4-40 UNC Front spacer	164A18099X
26	Grounding strap / 4-40 UNC Front spacer	164A18109X
44	Grounding strap / 4-40 UNC Front spacer	164A18119X
62	Grounding strap / 4-40 UNC Front spacer	164A18129X
15	Grounding strap / M3 Front spacer	164A18139X
26	Grounding strap / M3 Front spacer	164A18149X
44	Grounding strap / M3 Front spacer	164A18159X
62	Grounding strap / M3 Front spacer	164A18169X

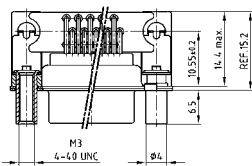
PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Grounding strap / 4-40 UNC Front spacer	163A17689X
26	Grounding strap / 4-40 UNC Front spacer	163A17699X
44	Grounding strap / 4-40 UNC Front spacer	163A17709X
62	Grounding strap / 4-40 UNC Front spacer	163A17719X
15	Grounding strap / M3 Front spacer	163A17729X
26	Grounding strap / M3 Front spacer	163A17739X
44	Grounding strap / M3 Front spacer	163A17749X
62	Grounding strap / M3 Front spacer	163A17759X



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	PCB clip / 4-40 UNC Threaded insert	164A20929X
26	PCB clip / 4-40 UNC Threaded insert	164A20939X
44	PCB clip / 4-40 UNC Threaded insert	164A20949X
62	PCB clip / 4-40 UNC Threaded insert	164A20959X
15	PCB clip / M3 Threaded insert	164A20969X
26	PCB clip / M3 Threaded insert	164A20979X
44	PCB clip / M3 Threaded insert	164A20989X
62	PCB clip / M3 Threaded insert	164A20999X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	PCB clip / 4-40 UNC Threaded insert	163A20489X
26	PCB clip / 4-40 UNC Threaded insert	163A20499X
44	PCB clip / 4-40 UNC Threaded insert	163A20509X
62	PCB clip / 4-40 UNC Threaded insert	163A20519X
15	PCB clip / M3 Threaded insert	163A20529X
26	PCB clip / M3 Threaded insert	163A20539X
44	PCB clip / M3 Threaded insert	163A20549X
62	PCB clip / M3 Threaded insert	163A20559X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness



SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	PCB clip / 4-40 UNC Front spacer	164A21009X
26	PCB clip / 4-40 UNC Front spacer	164A21019X
44	PCB clip / 4-40 UNC Front spacer	164A21029X
62	PCB clip / 4-40 UNC Front spacer	164A21039X
15	PCB clip / M3 Front spacer	164A21049X
26	PCB clip / M3 Front spacer	164A21059X
44	PCB clip / M3 Front spacer	164A21069X
62	PCB clip / M3 Front spacer	164A21079X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	PCB clip / 4-40 UNC Front spacer	163A20569X
26	PCB clip / 4-40 UNC Front spacer	163A20579X
44	PCB clip / 4-40 UNC Front spacer	163A20589X
62	PCB clip / 4-40 UNC Front spacer	163A20599X
15	PCB clip / M3 Front spacer	163A20609X
26	PCB clip / M3 Front spacer	163A20619 X
44	PCB clip / M3 Front spacer	163A20629X
62	PCB clip / M3 Front spacer	163A20639X

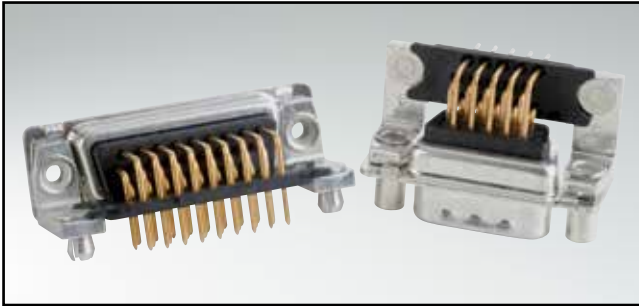
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

PCB-Layout: Kat1iU1A

PCB-Layout: Kat1iU2A

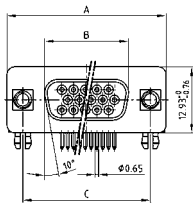
D-SUB HIGH DENSITY

Solder pin – Angled – .350"/7.98 mm – Precision machined contacts – Metal bracket



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

SOCKET CONNECTOR



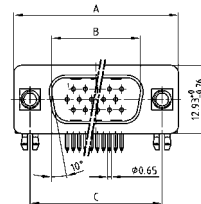
No. of pos.	A -0.76	B -0.25	C
15	31.19	16.46	25.00 +0.12
26	39.52	24.79	33.30 +0.15 -0.10
44	53.42	38.50	47.04 +0.13
62	69.70	54.96	63.50 +0.13
78	67.31	52.55	61.10 +0.14 -0.14

PCB-Layout: Kat1iU1A

DESCRIPTION

- Mounting styles:
 - with mounting bracket, PCB clip and 4-40 UNC or M3 threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC or M3 front spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

PLUG CONNECTOR

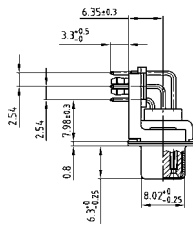
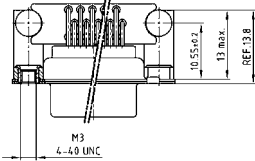


No. of pos.	A -0.76	B -0.25	C	D -0.3
15	31.19	16.79	25.00 +0.12	6.12
26	39.52	25.12	33.30 +0.15 -0.10	6.12
44	53.42	38.84	47.04 +0.13	5.99
62	69.70	55.30	63.50 +0.13	5.99
78	67.31	52.68	61.10 +0.14 -0.14	5.99

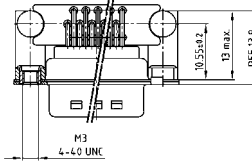
PCB-Layout: Kat1iU2A

15-62 pos.

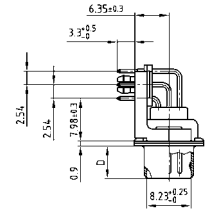
Mounting style: PCB clip, threaded insert



Mounting style: PCB clip, threaded insert

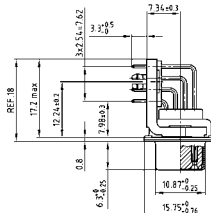
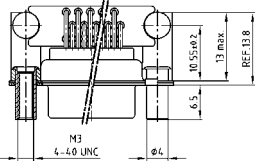


15-62 pos.

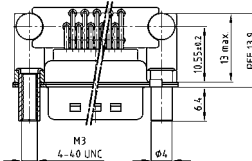


78 pos.

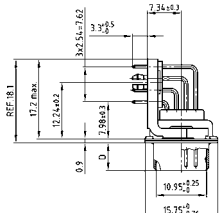
Mounting style: PCB clip, front spacer



Mounting style: PCB clip, front spacer



78 pos.



ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	PCB clip / 4-40 UNC Threaded insert	164A18179X
26	PCB clip / 4-40 UNC Threaded insert	164A18189X
44	PCB clip / 4-40 UNC Threaded insert	164A18199X
62	PCB clip / 4-40 UNC Threaded insert	164A18209X
78	PCB clip / 4-40 UNC Threaded insert	164A18629X
15	PCB clip / M3 Threaded insert	164A18219X
26	PCB clip / M3 Threaded insert	164A18229X
44	PCB clip / M3 Threaded insert	164A18239X
62	PCB clip / M3 Threaded insert	164A18249X
78	PCB clip / M3 Threaded insert	164A18639X
15	PCB clip / 4-40 UNC Front spacer	164A18259X
26	PCB clip / 4-40 UNC Front spacer	164A18269X
44	PCB clip / 4-40 UNC Front spacer	164A18279X
62	PCB clip / 4-40 UNC Front spacer	164A18289X
78	PCB clip / 4-40 UNC Front spacer	164A18649X
15	PCB clip / M3 Front spacer	164A18299X
26	PCB clip / M3 Front spacer	164A18309X
44	PCB clip / M3 Front spacer	164A18319X
62	PCB clip / M3 Front spacer	164A18329X
78	PCB clip / M3 Front spacer	164A18659X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	PCB clip / 4-40 UNC Threaded insert	163A17769X
26	PCB clip / 4-40 UNC Threaded insert	163A17779X
44	PCB clip / 4-40 UNC Threaded insert	163A17789X
62	PCB clip / 4-40 UNC Threaded insert	163A17799X
78	PCB clip / 4-40 UNC Threaded insert	163A18219X
15	PCB clip / M3 Threaded insert	163A17809X
26	PCB clip / M3 Threaded insert	163A17819X
44	PCB clip / M3 Threaded insert	163A17829X
62	PCB clip / M3 Threaded insert	163A17839X
78	PCB clip / M3 Threaded insert	163A18229X
15	PCB clip / 4-40 UNC Front spacer	163A17849X
26	PCB clip / 4-40 UNC Front spacer	163A17859X
44	PCB clip / 4-40 UNC Front spacer	163A17869X
62	PCB clip / 4-40 UNC Front spacer	163A17879X
78	PCB clip / 4-40 UNC Front spacer	163A18239X
15	PCB clip / M3 Front spacer	163A17889X
26	PCB clip / M3 Front spacer	163A17899X
44	PCB clip / M3 Front spacer	163A17909X
62	PCB clip / M3 Front spacer	163A17919X
78	PCB clip / M3 Front spacer	163A18249X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

D-SUB HIGH DENSITY

Solder pin – Angled – .350"/7.98 mm – Stamped contacts – Plastic bracket

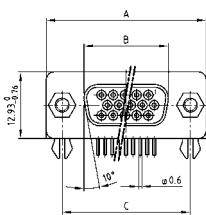


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

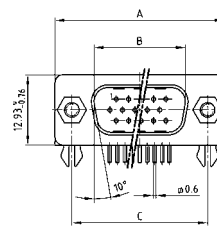
- Mounting styles:
 - with mounting bracket, PCB clip and 4-40 UNC hex bolt
 - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

SOCKET CONNECTOR

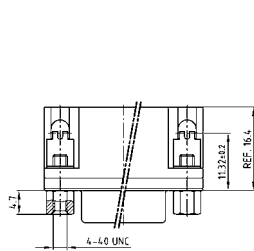


No. of pos.	A -0.76	B +0.25	C
15	31.19	16.46	25.00 +0.12
26	39.52	24.79	33.30 +0.15 -0.10
44	53.42	38.50	47.04 +0.13
62	69.70	54.96	63.50 +0.13
78	67.31	52.55	61.10 +0.14 -0.11

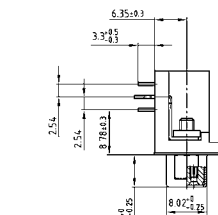
PLUG CONNECTOR



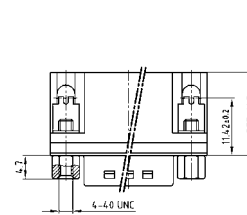
No. of pos.	A -0.76	B +0.25	C	D -0.3
15	31.19	16.79	25.00 +0.12	6.12
26	39.52	25.12	33.30 +0.15 -0.10	6.12
44	53.42	38.84	47.04 +0.13	5.99
62	69.70	55.30	63.50 +0.13	5.99
78	67.31	52.68	61.10 +0.14 -0.11	5.99



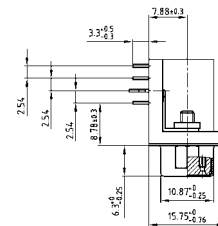
15-62 pos.



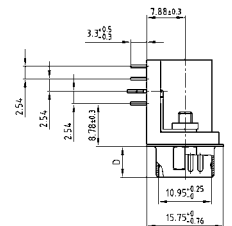
15-62 pos.



78 pos.



78 pos.



ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
15	PCB clip / Hex bolt	302A10869X
26	PCB clip / Hex bolt	302A10879X
44	PCB clip / Hex bolt	302A10889X
62	PCB clip / Hex bolt	302A10899X
78	PCB clip / Hex bolt	302A11629X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
15	PCB clip / Hex bolt	301A10869X
26	PCB clip / Hex bolt	301A10879X
44	PCB clip / Hex bolt	301A10889X
62	PCB clip / Hex bolt	301A10899X
78	PCB clip / Hex bolt	301A11369X

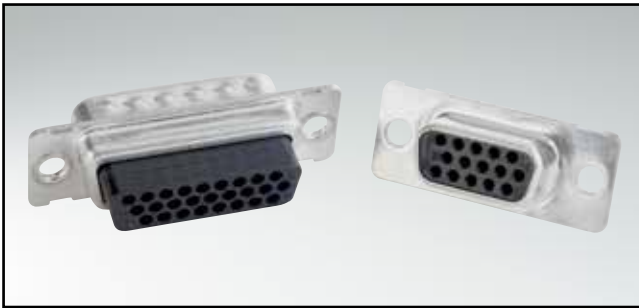
SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
15	PCB clip / Threaded insert	DLH1XS8AK53X
26	PCB clip / Threaded insert	DLH2XS8AK53X
44	PCB clip / Threaded insert	DLH3XS8AK53X
62	PCB clip / Threaded insert	DLH4XS8AK53X
78	PCB clip / Threaded insert	DLH5XS8AK53X

PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
15	PCB clip / Threaded insert	DLH1XP8AK53X
26	PCB clip / Threaded insert	DLH2XP8AK53X
44	PCB clip / Threaded insert	DLH3XP8AK53X
62	PCB clip / Threaded insert	DLH4XP8AK53X
78	PCB clip / Threaded insert	DLH5XP8AK53X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

D-SUB HIGH DENSITY

Crimp body (without contacts) – For wire size AWG 28 - 22

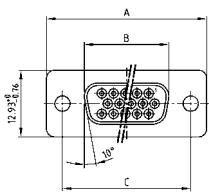


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

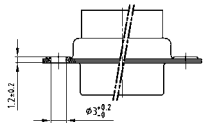
- For wire size AWG 22 precision machined contacts
- Mounting style:
with through-hole \varnothing .118" / 3 mm
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

SOCKET CONNECTOR

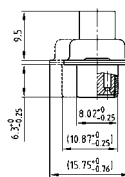


No. of pos.	A -0.76	B -0.25	C	
15	31.19	16.46	25.00	+0.12
26	39.52	24.79	33.30	+0.15 -0.10
44	53.42	38.50	47.04	+0.13
62	69.70	54.96	63.50	+0.13
78	67.31	52.55	61.10	+0.14 -0.11

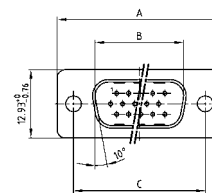
Mounting style: Through-hole



78 pos. = Dim. in (_ _)

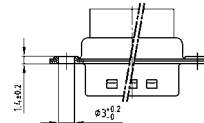


PLUG CONNECTOR

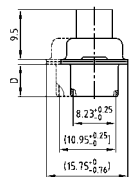


No. of pos.	A -0.76	B -0.25	C	D -0.3
15	31.19	16.79	25.00	+0.12
26	39.52	25.12	33.30	+0.15 -0.10
44	53.42	38.84	47.04	+0.13
62	69.70	55.30	63.50	+0.13
78	67.31	52.68	61.10	+0.14 -0.11

Mounting style: Through-hole



78 pos. = Dim. in (_ _)



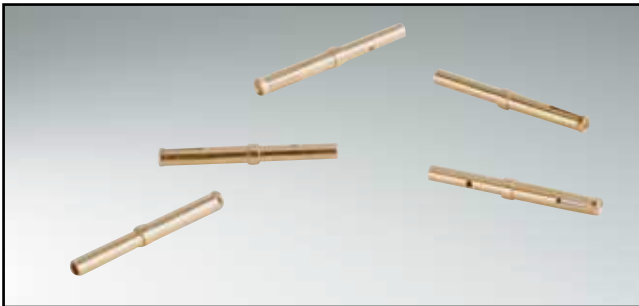
ORDER DATA

SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Through-hole	164X11949X
26	Through-hole	164X11959X
44	Through-hole	164X11969X
62	Through-hole	164X11979X
78	Through-hole	164X11989X

PLUG CONNECTOR		
No. of pos.	Mounting style	Part Number
15	Through-hole	163X10169X
26	Through-hole	163X10179X
44	Through-hole	163X10189X
62	Through-hole	163X10199X
78	Through-hole	163X10209X

D-SUB HIGH DENSITY

Crimp Contacts – Screw machine design – For wire size AWG 28 - 22



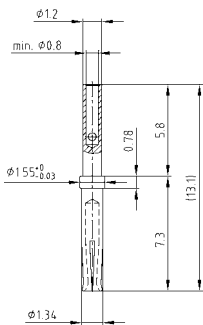
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

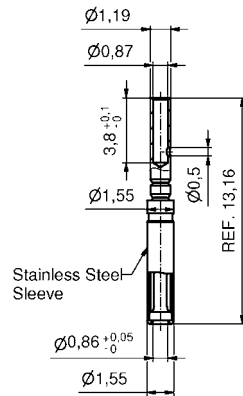
- For wire size AWG 28-22
- Loose contacts, in poly bag (500 pieces)
- Quality class 3 (also available in quality class 1)

SOCKET CONNECTOR

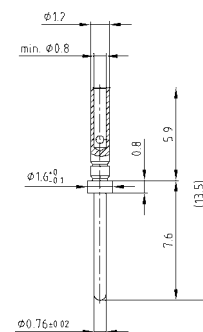
Standard version



Closed entry version



PLUG CONNECTOR



Technical Data

Contact material	Precision machined contacts	Brass
Contact plating		Gold plated over nickel
Temperature range		-55°C to +125°C
Rated current for AWG 24		3 A
Contact resistance		≤ 10 mΩ

ORDER DATA

FEMALE CONTACTS

Contact type	Part Number
AWG 22 / Loose contact	162A18419X
AWG 22 / Loose contact closed entry version	16-000693

MALE CONTACTS

Contact type	Part Number
AWG 22 / Loose contact	161A18009X

D-SUB HIGH DENSITY

Interface adapter – Connector Saver

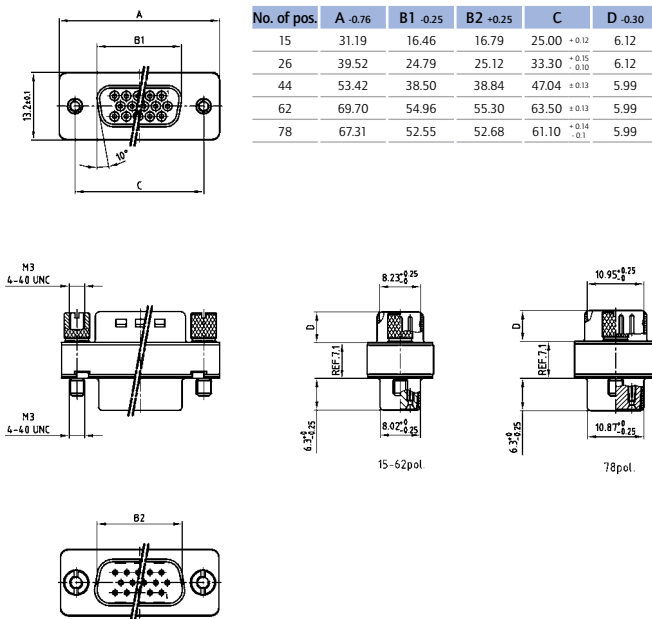


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

- Variation plug to socket
- Precision machined contacts
- Threaded lock, 4-40 UNC or M3, on the plug side
- Threaded lock on the socket side available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

PRODUCT DRAWING



ORDER DATA

PLUG CONNECTOR – SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	4-40 UNC Threaded lock	164A03399X
26	4-40 UNC Threaded lock	164A03919X
44	4-40 UNC Threaded lock	164A03929X
62	4-40 UNC Threaded lock	164A03939X
78	4-40 UNC Threaded lock	DAH5XAAAR04X

PLUG CONNECTOR – SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
15	M3 Threaded lock	164A03949X
26	M3 Threaded lock	164A03959X
44	M3 Threaded lock	164A03969X
62	M3 Threaded lock	164A03979X
78	M3 Threaded lock	DAH5XAAAR03X

D-SUB STANDARD

Interface adapter – Connector Saver

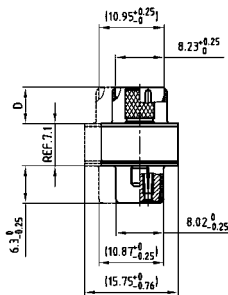
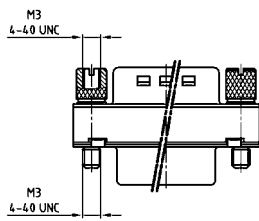
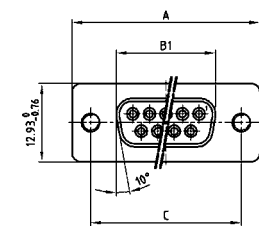


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

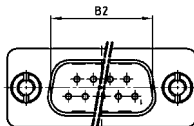
DESCRIPTION

- Variation plug to socket
- Precision machined contacts
- Threaded lock, 4-40 UNC or M3, on the plug side
- Threaded lock on the socket side available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated

PRODUCT DRAWING



50 pos. = Dim. in (_)



No. of pos.	A -0.76	B1 -0.25	B2 +0.25	C	D -0.30
09	31.19	16.46	16.79	25.00 ±0.12	6.12
15	39.52	24.79	25.12	33.30 ^{+0.15} _{-0.10}	6.12
25	53.42	38.50	38.84	47.04 ±0.13	5.99
37	69.70	54.96	55.30	63.50 ±0.13	5.99
50	67.31	52.55	52.68	61.10 ^{+0.14} _{-0.1}	5.99

ORDER DATA

PLUG CONNECTOR – SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	4-40 UNC Threaded lock	163A50009X
15	4-40 UNC Threaded lock	163A50019X
25	4-40 UNC Threaded lock	163A50029X
37	4-40 UNC Threaded lock	163A50039X
50	4-40 UNC Threaded lock	163A50049X

PLUG CONNECTOR – SOCKET CONNECTOR		
No. of pos.	Mounting style	Part Number
09	M3 Threaded lock	163A50059X
15	M3 Threaded lock	163A50069X
25	M3 Threaded lock	163A50079X
37	M3 Threaded lock	163A50089X
50	M3 Threaded lock	163A50099X

D-SUB STANDARD

Interface adapter – Gender Changer – Configuration of contacts 1:1



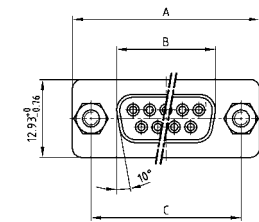
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E202784

DESCRIPTION

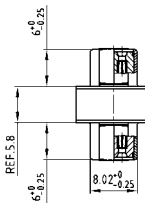
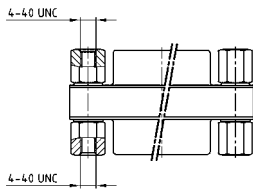
- Variation plug to plug and socket to socket
- Stamped contacts
- 4-40 UNC threaded lock
- Quality class 3 (other quality classes on request)
- Shell: Steel tin plated

SOCKET CONNECTOR

Variation socket to socket

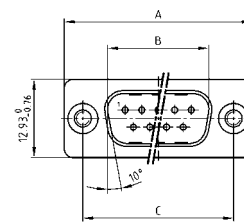


No. of pos.	A -0.76	B -0.25	C
09	31.19	16.46	25.00 ± 0.12
15	39.52	24.79	33.30 ^{+0.15} _{-0.10}
25	53.42	38.50	47.04 ± 0.13
37	69.70	54.96	63.50 ± 0.13

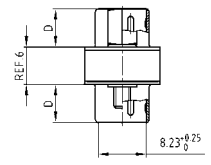
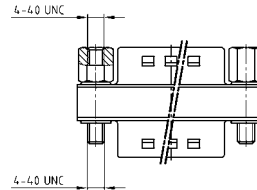


PLUG CONNECTOR

Variation plug to plug



No. of pos.	A -0.76	B -0.25	C	D -0.30
09	31.19	16.79	25.00 ± 0.12	16.46
15	39.52	25.12	33.30 ^{+0.15} _{-0.10}	24.79
25	53.42	38.84	47.04 ± 0.13	38.50
37	69.70	55.30	63.50 ± 0.13	54.96



ORDER DATA

SOCKET CONNECTOR – SOCKET CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded lock	320X12519X
15	Threaded lock	320X12539X
25	Threaded lock	320X10559X
37	Threaded lock	320X12559X

PLUG CONNECTOR – PLUG CONNECTOR		
No. of pos.	Mounting style 4-40 UNC	Part Number
09	Threaded lock	320X12509X
15	Threaded lock	320X12529X
25	Threaded lock	320X10549X
37	Threaded lock	320X12549X

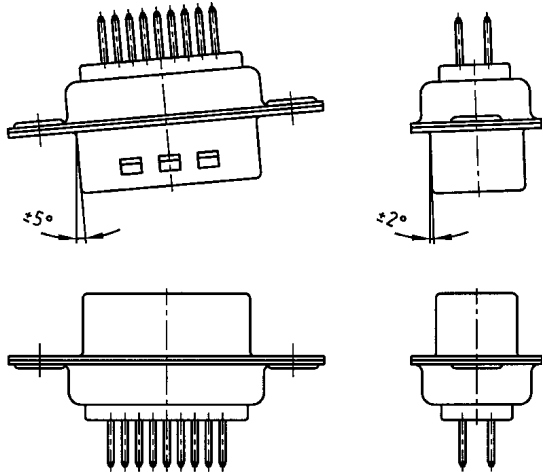
TECHNICAL DATA

Materials	D-Subminiature, Standard 9, 15, 25, 37 and 50 position	D-Subminiature, High Density 15, 26, 44, 62 and 78 position
Insulator	Polyester GF UL94 V-0	
Contacts	CU alloy	
Contact plating	Gold plated over nickel	
Shell	Steel tin plated (on request: brass tin plated / stainless steel)	
Mechanical and electrical characteristics		
Test voltage U eff / NN	1000 V	
Working voltage	125 V ≈ Depending on isolation coordination (refer to DIN VDE 0110 / IEC 664-1)	60 V ≈
Current rating	7,5 A (UL) / 5 A (CSA,VDE)	3 A (UL,VDE) / 2,5 A (CSA)
Contact resistance	Max. 10 mΩ prior to stressing, Δ R max. 10 mΩ after stressing per DIN 41652, Part 2	
Insulation resistance	≥5 GΩ	
Clearance and creepage distance	Contact – contact ≥ 0.04"/1.0 mm Contact – earth ≥ .047"/1.2 mm	≥ .024"/0,6 mm
Operating temperature	- 55 °C to + 125 °C	
Mating and unmating forces	9 pos. ≤ 30 N 15 pos. ≤ 50 N 25 pos. ≤ 83 N 37 pos. ≤ 123 N 50 pos. ≤ 167 N	15 pos. ≤ 50 N 26 pos. ≤ 84 N 44 pos. ≤ 120 N 62 pos. ≤ 170 N 78 pos. ≤ 200 N
Quality class	A = Quality class 3 = 50 mating cycles B = Quality class 2 = 200 mating cycles C = Quality class 1 = 500 mating cycles	

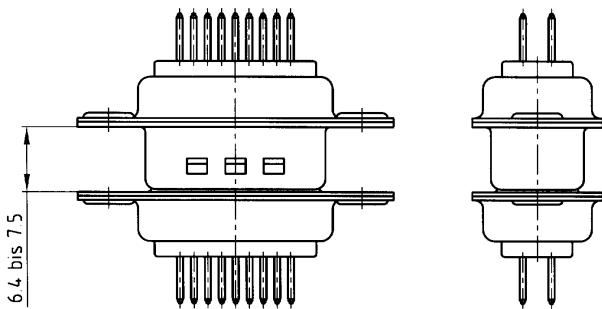
Technical specifications are subject to change without notice.

MATING CONDITIONS

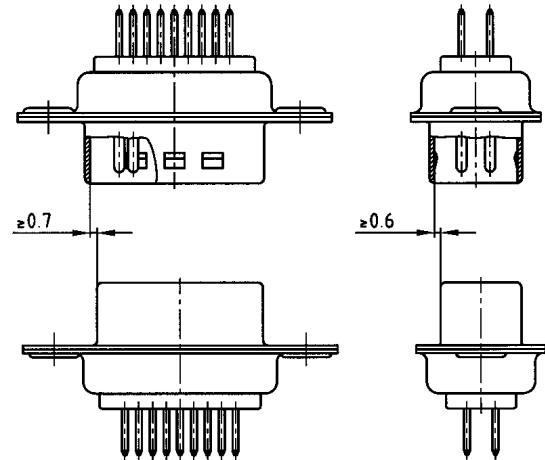
Float mount tolerance guide



Rigid mount vertical to tolerance guide

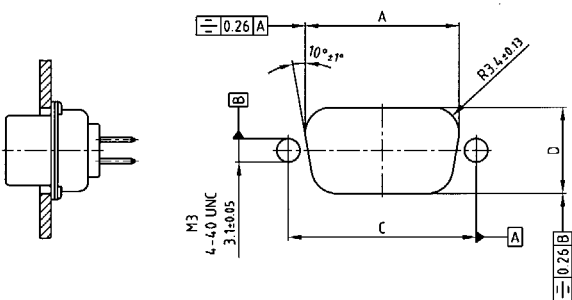


Rigid mount tolerance guide

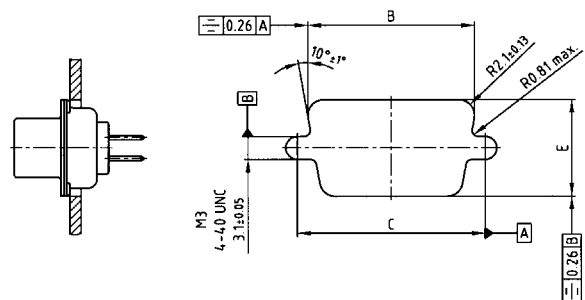


PANEL CUT-OUT

Rear panel mounting



Front panel mounting

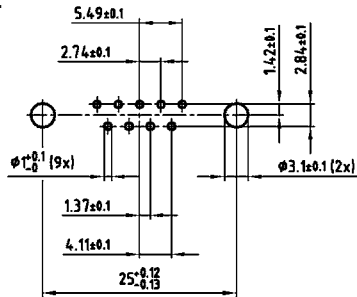


Shell size	A ± 0,13	B ± 0,13	C ± 0,13	D ± 0,13	E ± 0,13
9	15	20.50	22.20	25.00	11.40
15	26	28.80	30.50	33.30	11.40
25	44	42.50	44.30	47.04	11.40
37	62	59.10	60.70	63.50	11.40
50	78	56.30	61.10	61.10	11.40

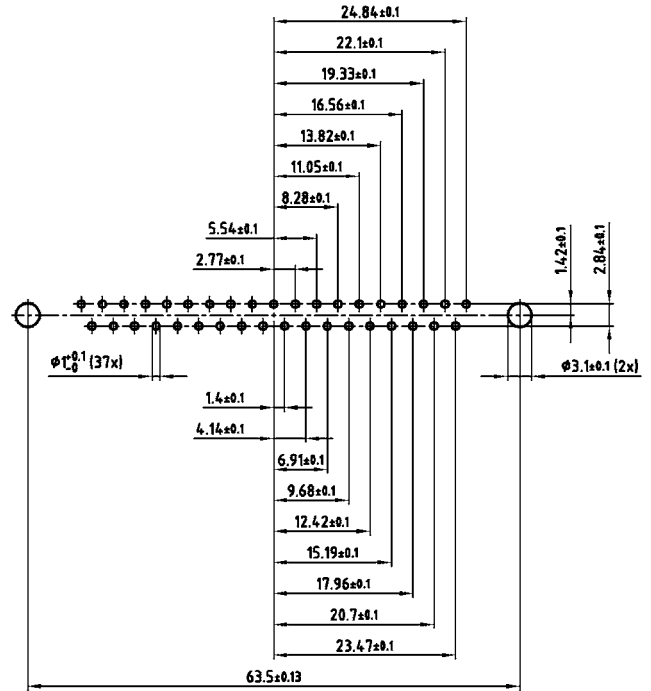
PCB LAYOUT D-SUB STANDARD

Solder pin, straight – Plug and Socket connector

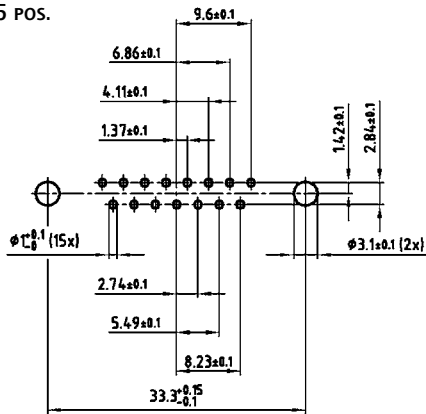
9 POS.



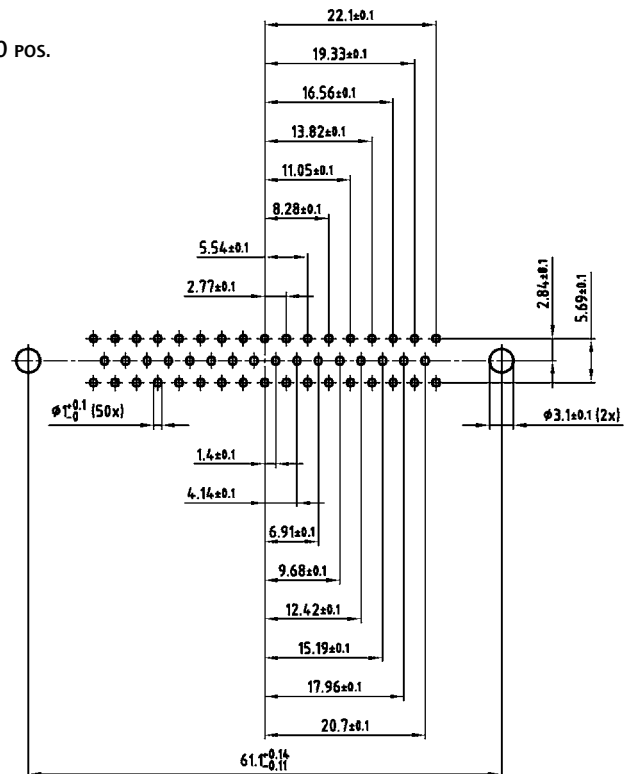
37 POS.



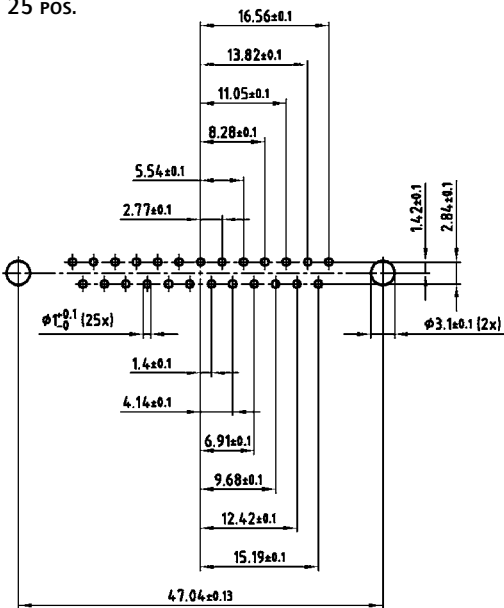
15 POS.



50 POS.



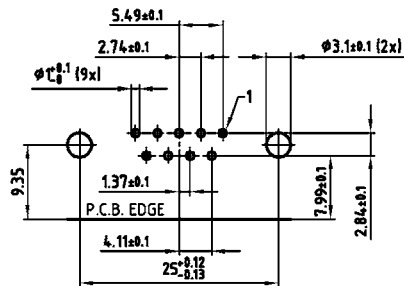
25 POS.



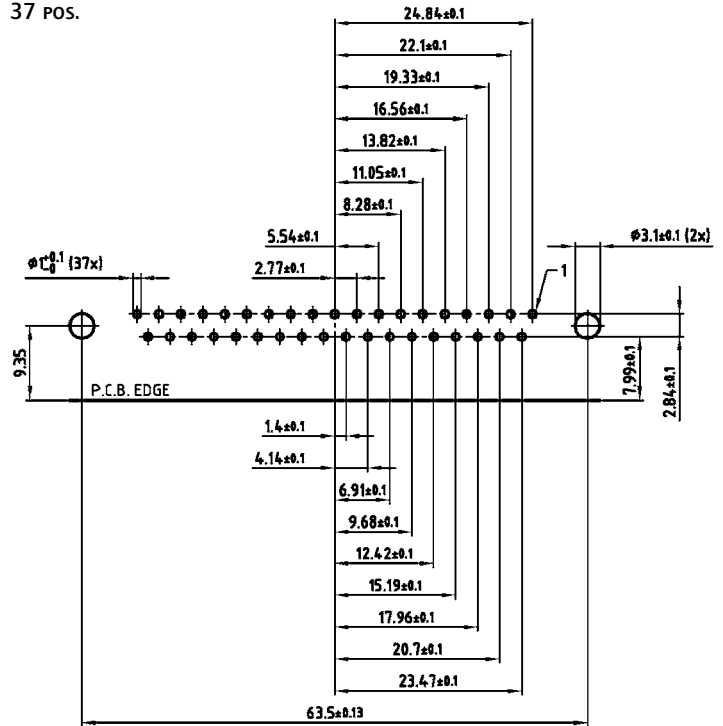
PCB LAYOUT D-SUB STANDARD

Solder pin, angled – .318" / 7.19 mm – Socket connector

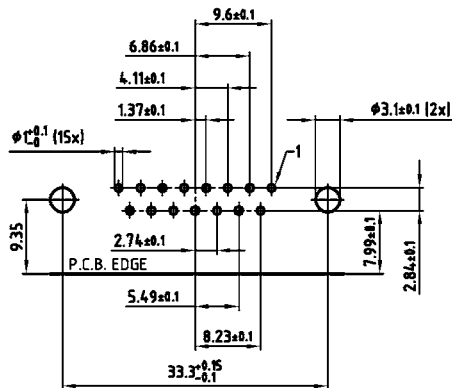
9 POS.



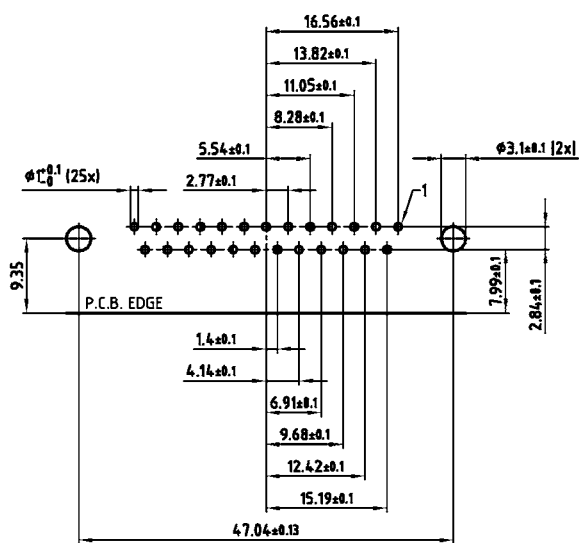
37 POS.



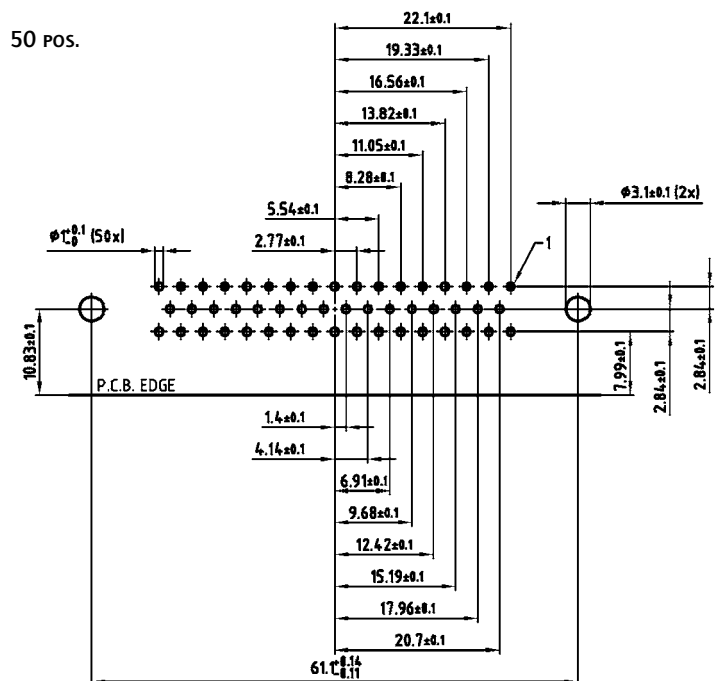
15 POS.



25 POS.



50 POS.

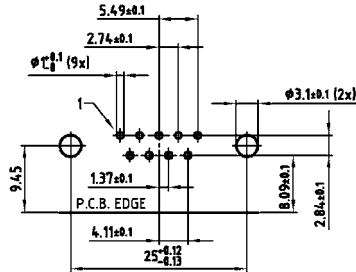


PCB layout Kat1 kGEA (View: component side)

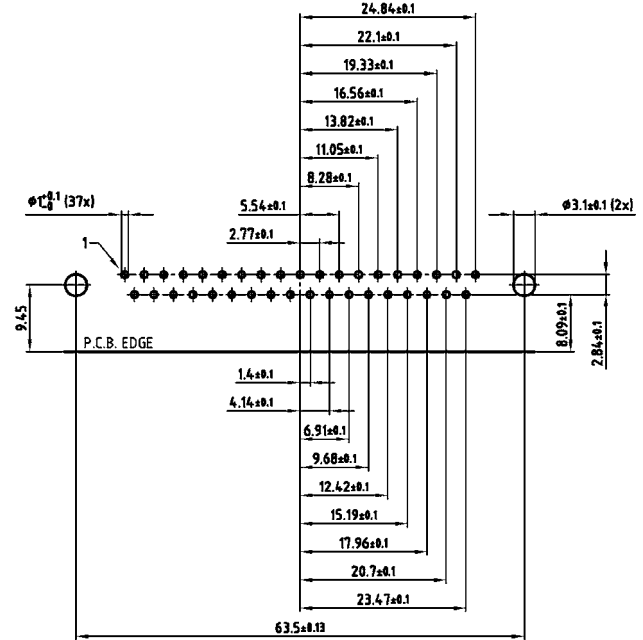
PCB LAYOUT D-SUB STANDARD

Solder pin, angled – .318" / 7.19 mm – Plug connector

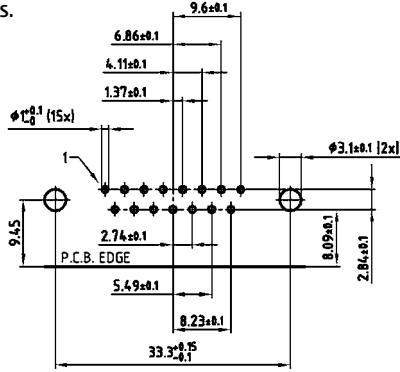
9 POS.



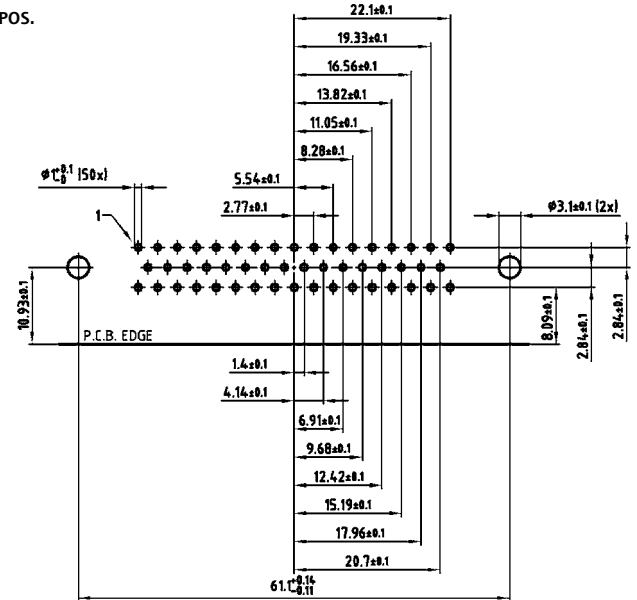
37 POS.



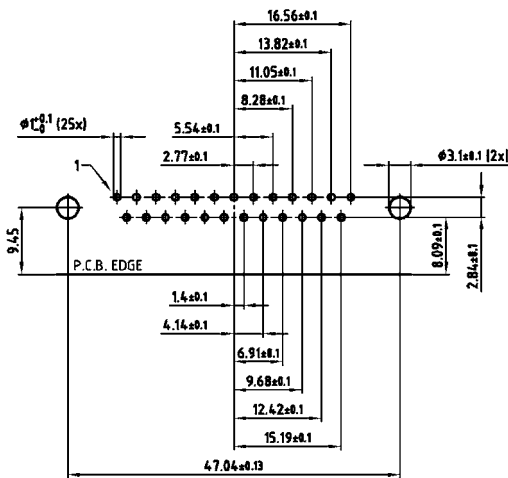
15 POS.



50 POS.



25 POS.

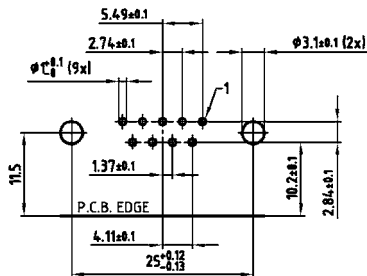


PCB layout Kat1 kgFA (View: component side)

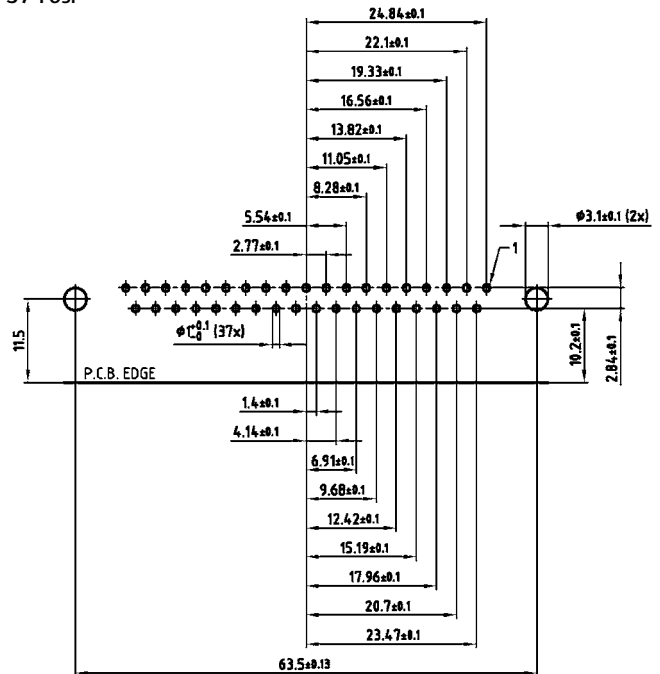
PCB LAYOUT D-SUB STANDARD

Solder pin, angled – .370" / 9.4 mm – Socket connector

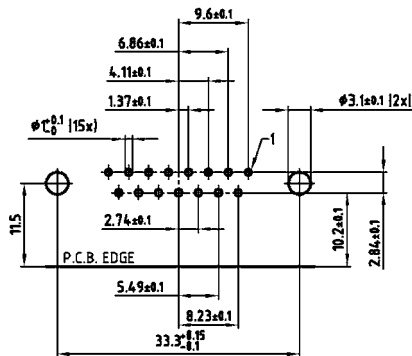
9 POS.



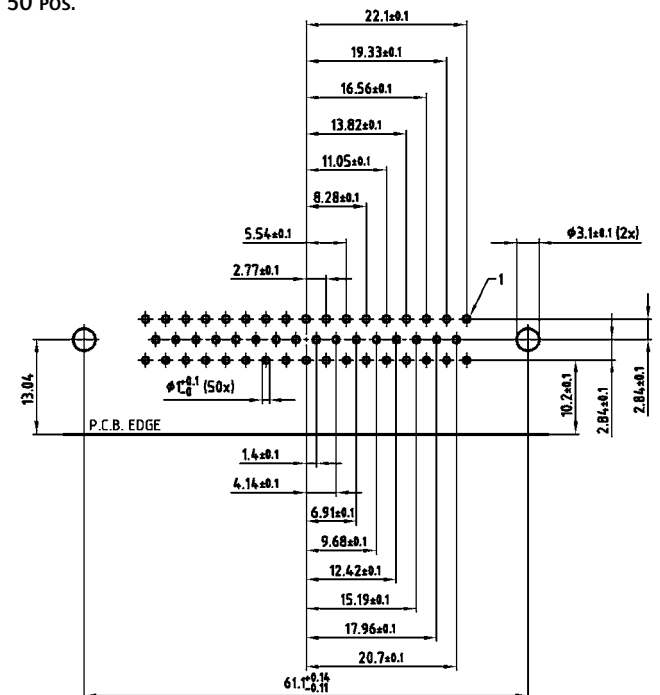
37 POS.



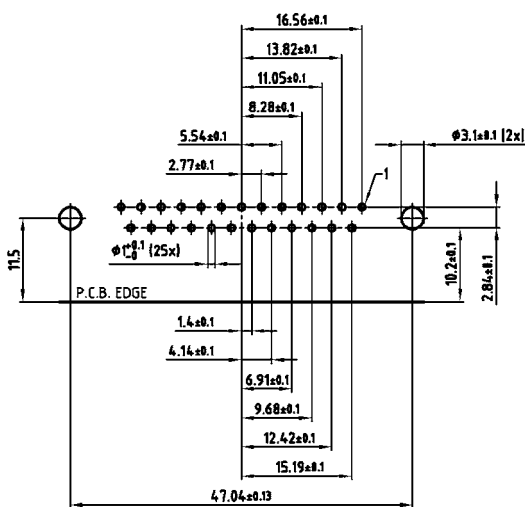
15 POS.



50 POS.



25 POS.

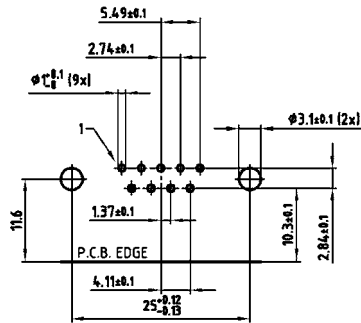


PCB layout Kat1 kGGA (View: component side)

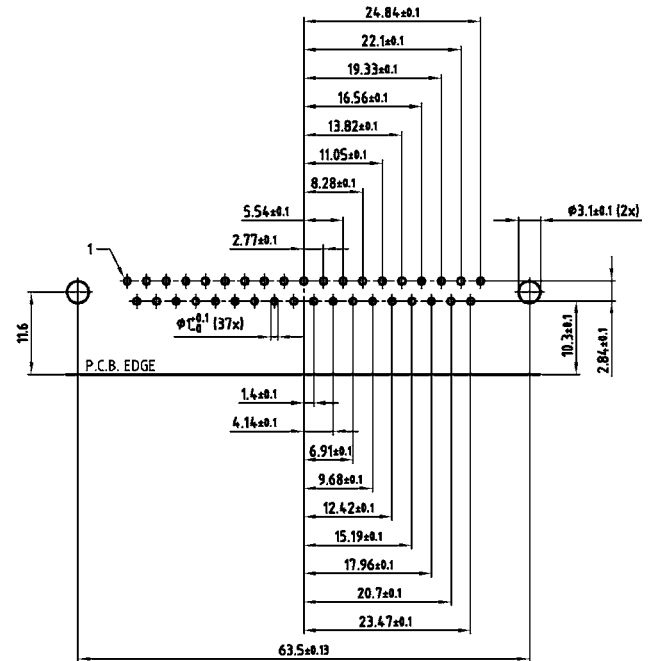
PCB LAYOUT D-SUB STANDARD

Solder pin, angled – .370" / 9.4 mm – Plug connector

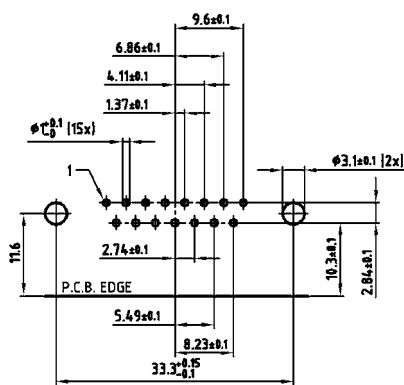
9 POS.



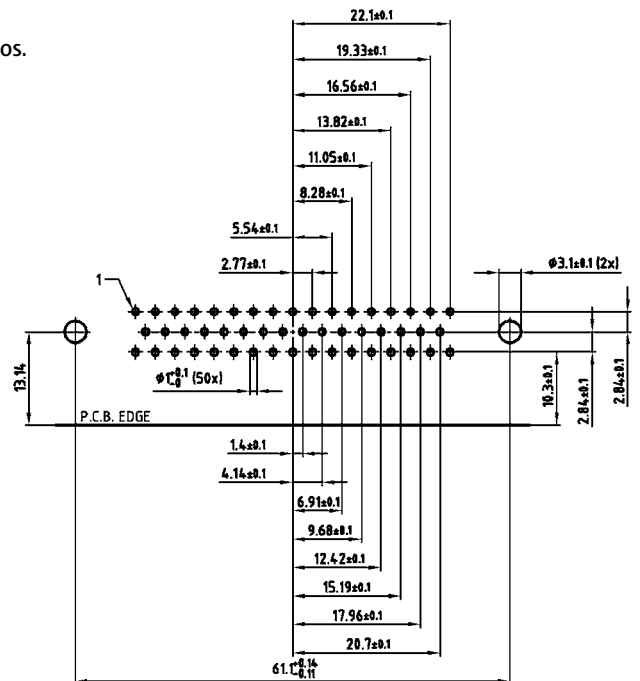
37 POS.



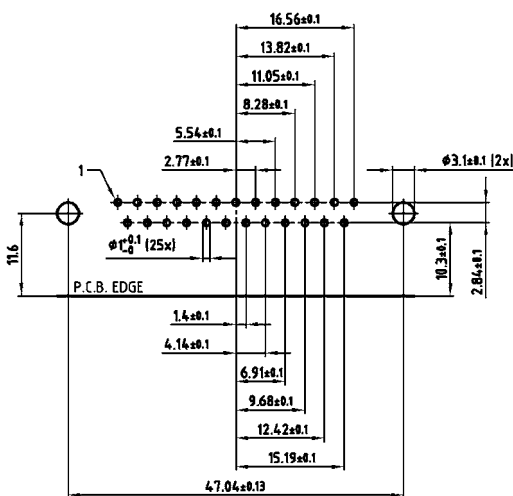
15 POS.



50 POS.



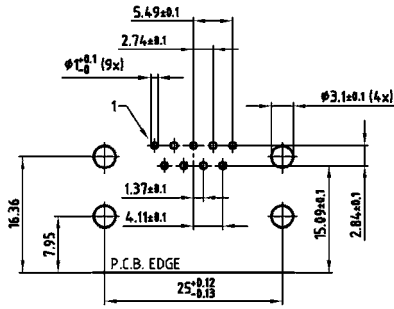
25 POS.



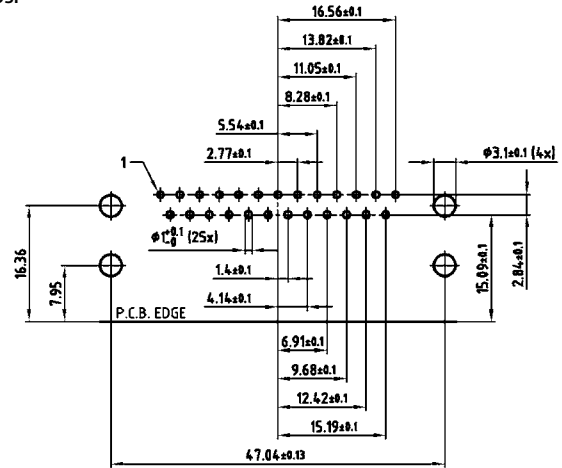
PCB LAYOUT – D-SUB STANDARD

Solder pin, angled – .590" / 14.19 mm – Metal bracket – Plug connector

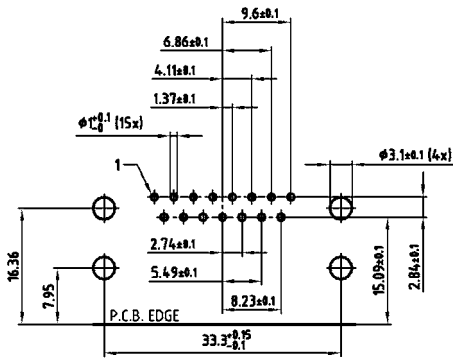
9 POS.



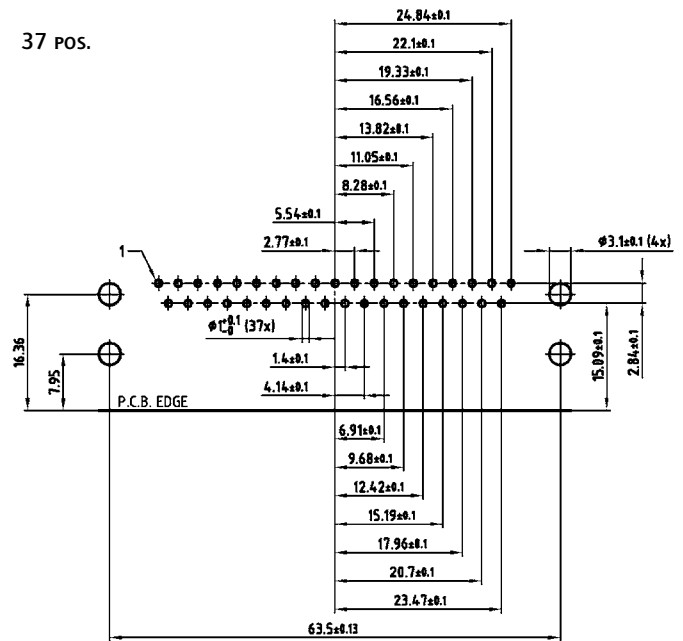
25 POS.



15 POS.



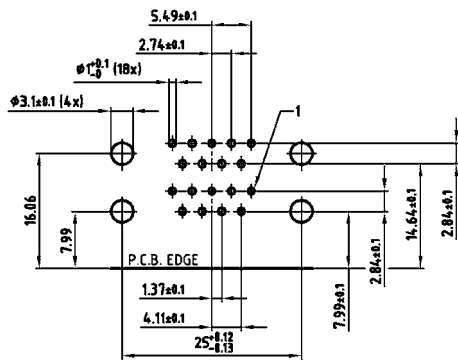
37 POS.



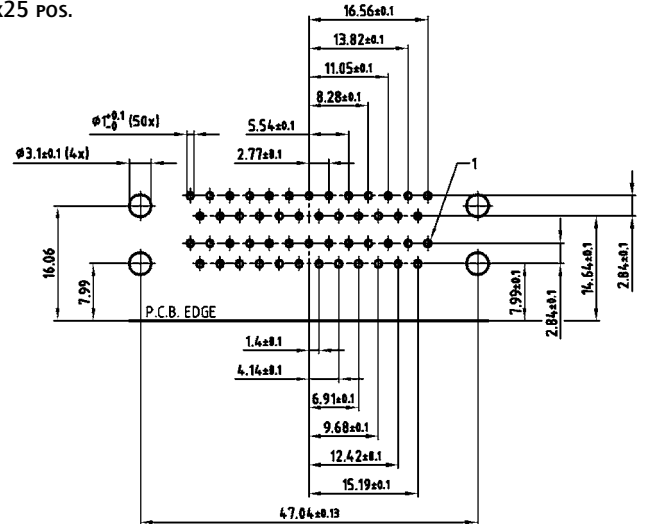
PCB LAYOUT D-SUB STANDARD

Dual port style – Socket connector bottom

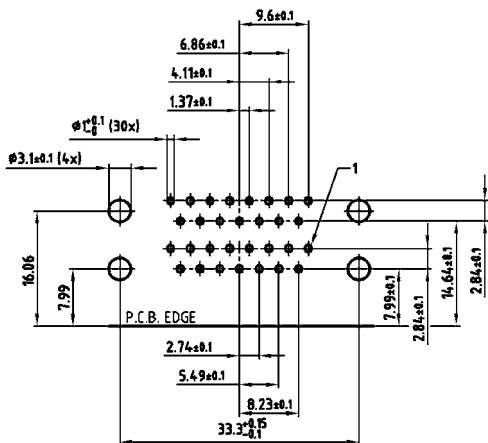
2x9 POS.



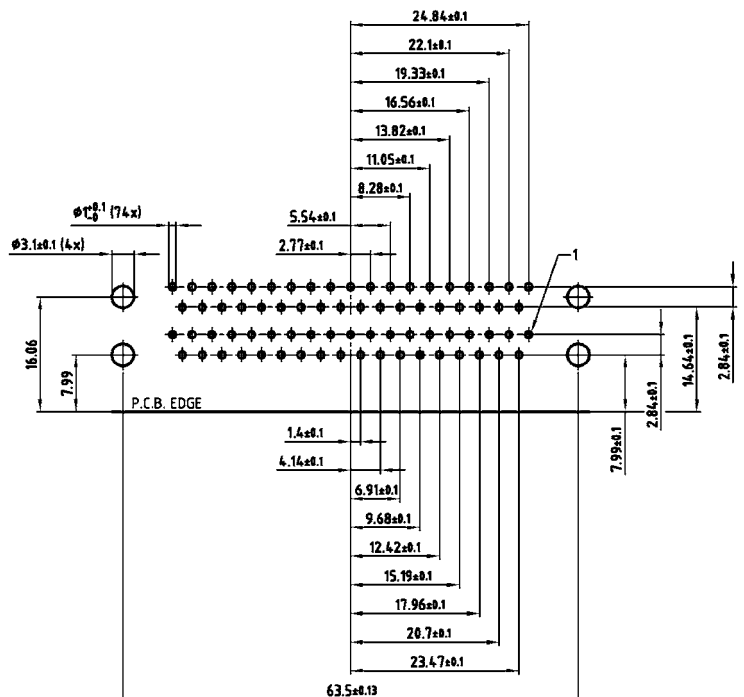
2x25 POS.



2x15 POS.



2x37 POS.

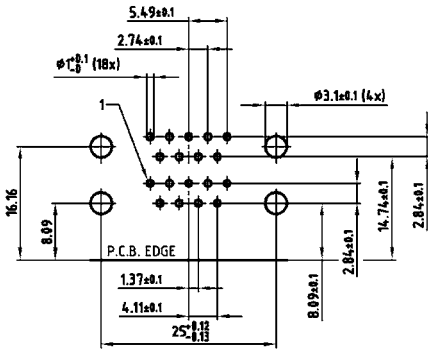


PCB layout Kat1iU6A (View: component side)

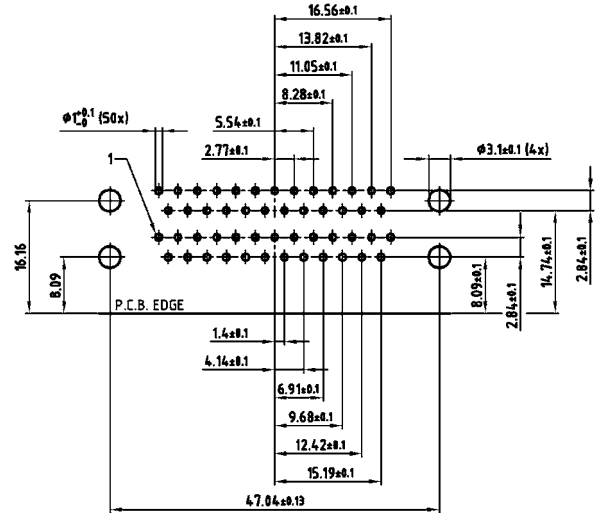
PCB LAYOUT D-SUB STANDARD

Dual port style – Plug connector bottom

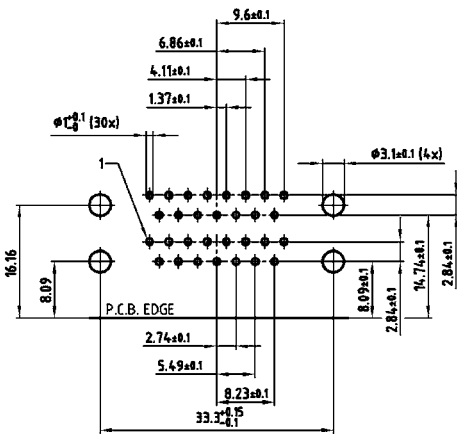
2x9 Pos.



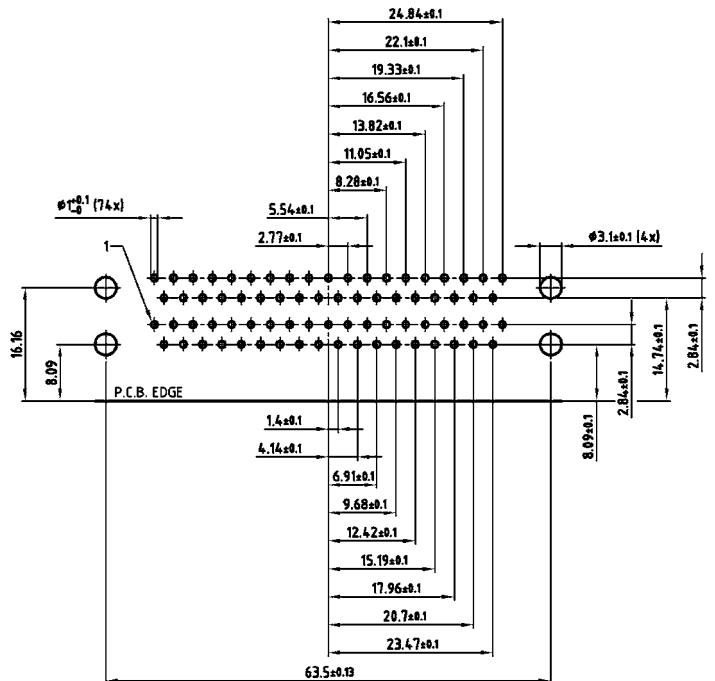
2x25 Pos.



2x15 Pos.



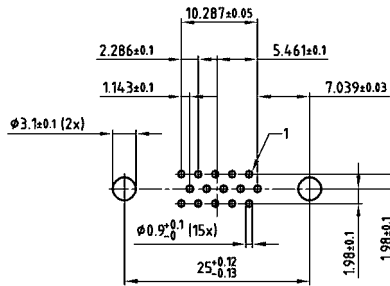
2x37 Pos.



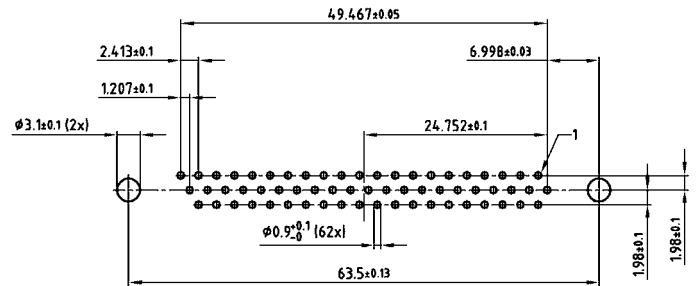
PCB LAYOUT D-SUB HIGH DENSITY

Solder pin, straight – Socket connector

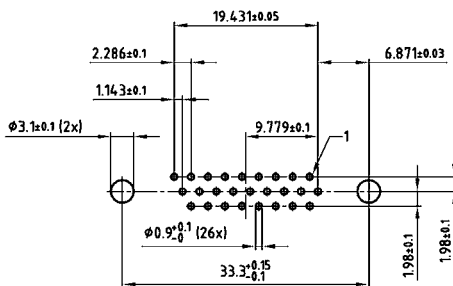
15 POS.



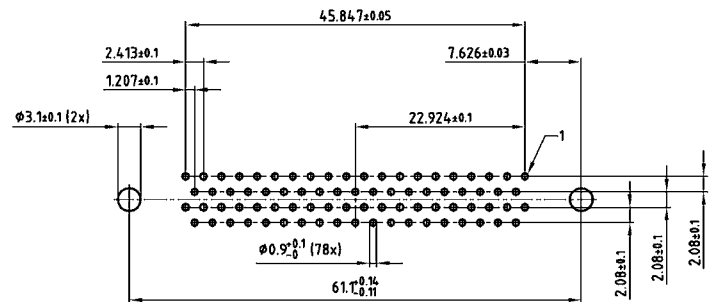
62 POS.



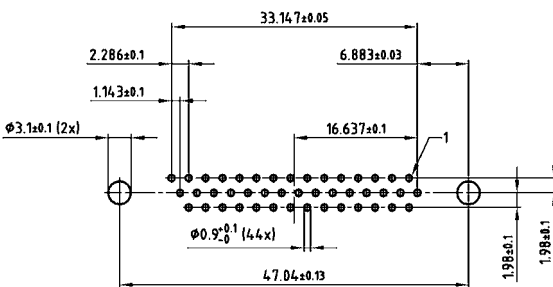
26 POS.



78 POS.



44 POS.

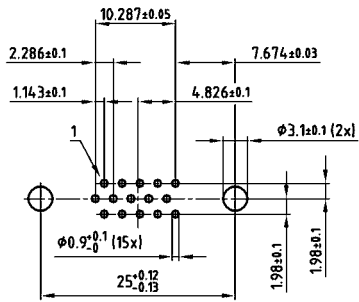


PCB layout Kat1it9A (View: component side)

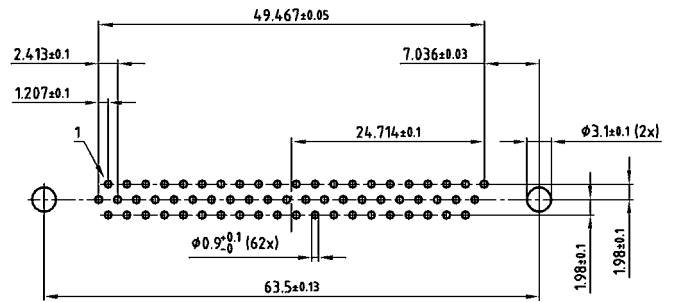
PCB LAYOUT D-SUB HIGH DENSITY

Solder pin, straight – Plug connector

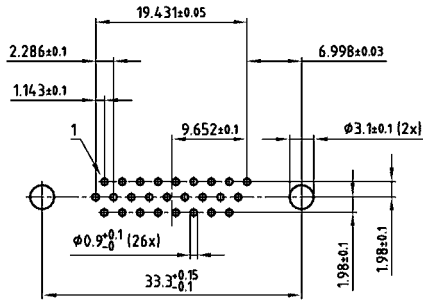
15 POS.



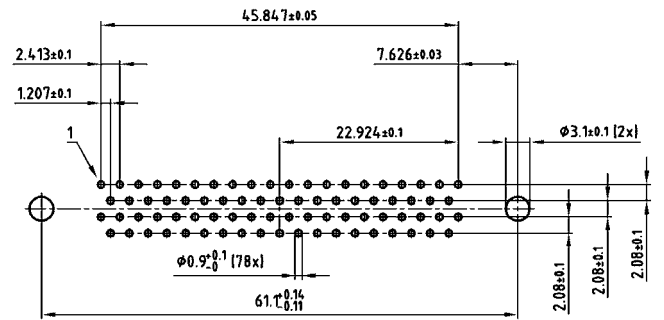
62 POS.



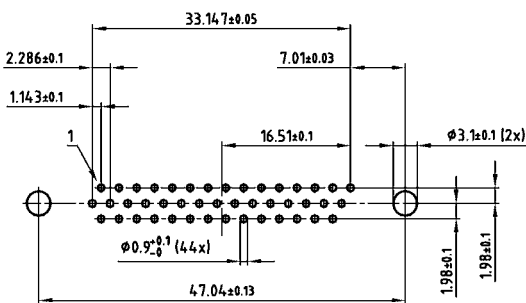
26 POS.



78 POS.



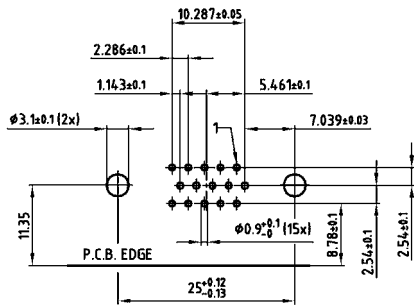
44 POS.



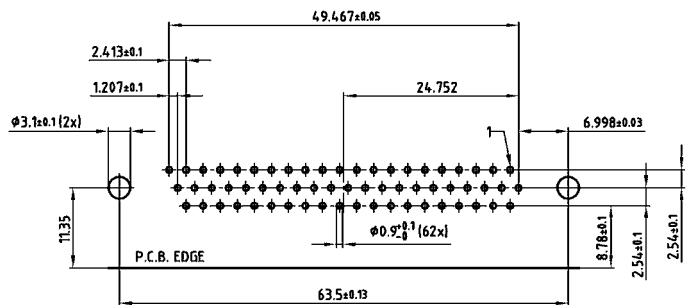
PCB LAYOUT D-SUB HIGH DENSITY

Solder pin, angled – .350" / 7.98 mm – Socket connector

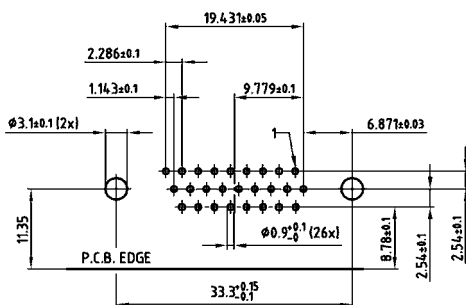
15 POS.



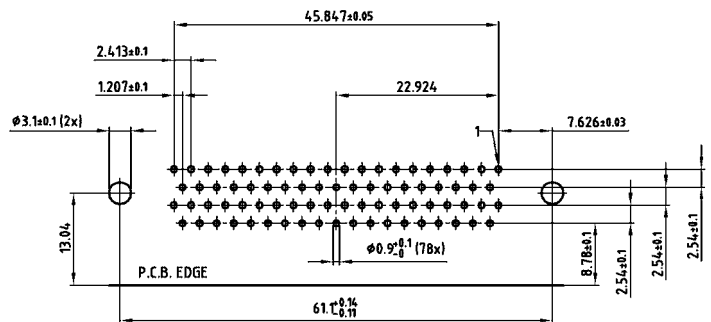
62 POS.



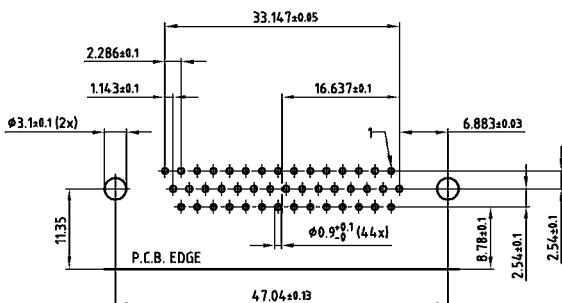
26 POS.



78 POS.



44 POS.



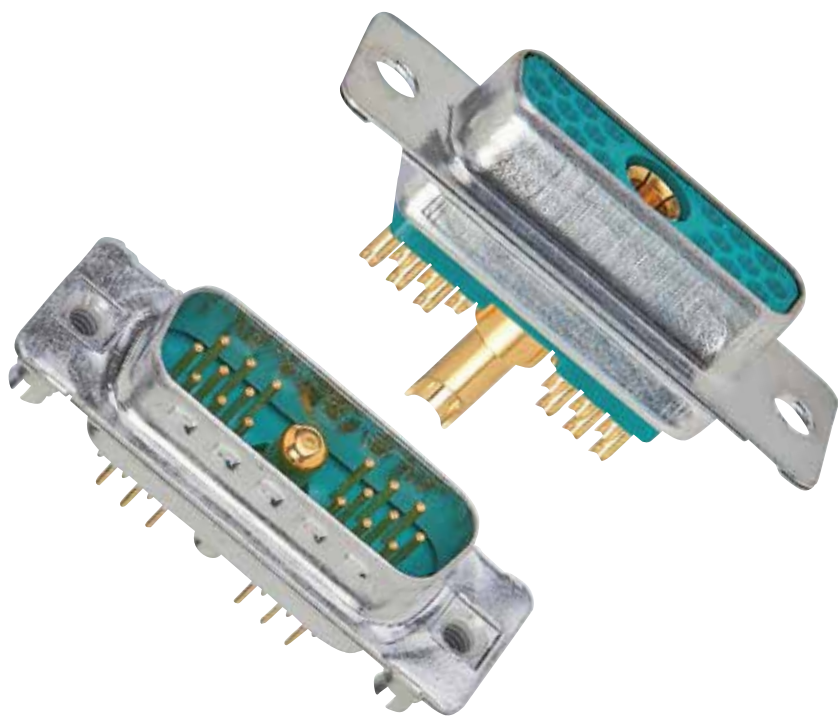
PCB layout Kat1iU1A (View: component side)

SECTION 2

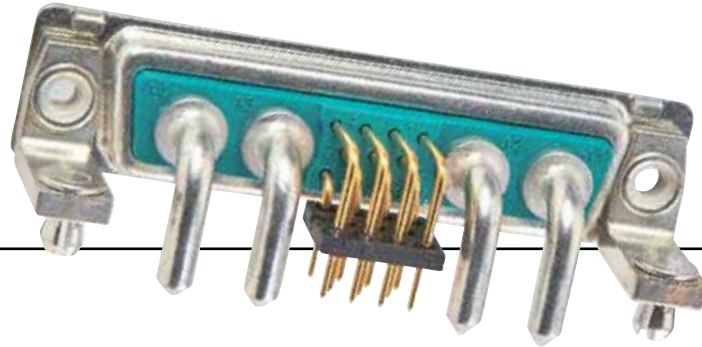
COMBINATION D-SUB CONNECTORS

Combination D-SUB Connectors provide the ideal solution for applications to require power, signal and coaxial connections within one connector. This series of connectors achieves space saving on PCB's and I/O designs.

Within this product family are various pin out configurations possible. Almost endless selections can be created mixing power, signal and coaxial contacts.



Examples are coaxial contacts handling frequencies up to 2 GHz. Power contacts from 10 amp to 40 amp current handling. Signal contacts in various styles complete the product offering.



Industry standard terminations types, solder cup, PCB contacts in straight and angled pin configurations. Crimp types and wire wrap contacts.

Here are just a few Product characteristics:

- Space savings on the PCB
- Different wire terminations are possible in a single connector
- Cost savings - mixed layout
- Insertable and removable coaxial, power, high voltage and signal contacts
- Precision machined contacts
- Various quality classes are available
- Wide product range

A wide range of standard pin configurations fully loaded with signal contacts are available. Specially configured contacts with power, coaxial and signal contacts can be constructed. Please use the Part Number Creator on page 2|2 and 2|3 or contact technical support at your closest CONEC office.



PART NUMBER CREATOR

for standard version

3 003W3 S X X 6 1 A 1 0 X

Product Line 3 = Shell steel tin plated 1 = Brass tin plated* 5 = Shell yellow chromated* (not RoHS compliant) A = Stainless steel*		*on request	
Shell size and design 1 = 5W1, 2W2C 2 = 3W3, 7W2, 11W1, 3W3C 3 = 5W5, 9W4, 13W3, 17W2, 21W1 4 = 8W8, 13W6, 17W5, 21WA4, 25W3, 27W2 5 = 24W7, 36W4, 43W2, 47W1		Empty positions ADD „0“ = 003W3	
Contact type P = Plug connector S = Socket connector			
Surface/Quality class for SIGNAL contacts A = Quality class 3 = 50 mating cycles B = Quality class 2 = 200 mating cycles* C = Quality class 1 = 500 mating cycles J = Special application = > 500 mating cycles (on request)* X = Crimp and 3W3, 5W5, 8W8, 2W2C, 3W3C (no contacts are supplied with the connector)		*on request	
Termination only for SIGNAL contacts K = Crimp without contacts M = Solder cup N = Wire wrap, .500" / 12.7 mm P = Press fit R = Solder pin, straight, .220" / 5.6 mm T = Solder pin, angled, .280" / 7.19 mm		U = Solder pin, angled, .370" / 9.40 mm W* = Solder pin, angled, .450" / 11.43 mm X = 3W3, 5W5, 8W8, 2W2C, 3W3C Z* = Solder pin, angled, .540" / 13.84 mm * = please contact us	
Termination for HIGH POWER- or COAXIAL contacts			
Quality class 3 / Quality class 1 C1 = Solder/Crimp angled 10 A C2 = Solder/Crimp angled 20 A C3 = Solder/Crimp angled 30 A C4 = Solder/Crimp angled 40 A F2,61 / F1,41 = Solder cup 10 A F4,62 / F3,42 = Solder cup 20 A F6,63 / F5,43 = Solder cup 30 A F8,64 / F7,44 = Solder cup 40 A 68 / 48 = Solder pin, straight 20 A, D= .077" / 1.95 mm 69 / 49 = Solder pin, straight 20 A, D= .102" / 2.60 mm 70 / 50 = Solder pin, straight 20 A, D= .110" / 2.85 mm 71 / 51 = Solder pin, straight 30 A, D= .130" / 3.18 mm 72 / 52 = Solder pin, straight 40 A, D= .150" / 3.75 mm		Quality class 3 / Quality class 1 59 / 55 = Solder pin, angled 15 A 73 / 56 = Solder pin, angled 20 A 74 / 57 = Solder pin, angled 30 A 75 / 58 = Solder pin, angled 40 A 77 / 60 = Solder pin, angled 40 A 81 / 66 = Solder pin, angled 20 A 82 / 67 = Solder pin, angled 30 A 85 / 65 = Solder pin, angled 30 A G7 / 76 = 3 Solder pins Straight 50 Ω G9 / 78 = 3 Solder pins angled 50 Ω H1 / 79 = 3 Solder pins angled 50 Ω H4 / 80 = 5 Solder pins angled 50 Ω G8 / 86 = 3 Solder pins Straight 75 Ω	
		Quality class 3 / Quality class 1 H2 / 88 = 3 Solder pins angled 75 Ω H3 / 89 = 3 Solder pins angled 75 Ω H5 / 90 = 5 Solder pins angled 75 Ω 91 = Screw termination 20 A / P1 = press fit 30A / P2 = press fit 30A / P4 = press fit 30A 99 = no high power, coax or crimp contacts loaded Coaxial contacts with cable termination must be ordered separately.	
Mounting style A1 = Riveted A2 = M3 threaded insert A3 = 4-40 UNC threaded insert A4 = M3 threaded rear spacer A5 = 4-40 UNC threaded rear spacer A6 = Float fastening A7 = Threaded rear spacer for M3 press fit A8 = Threaded rear spacer for 4-40 UNC press fit C1 = M3 threaded rear spacer with PCB clip, PCB .063" / 1.60 mm C2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063" / 1.60 mm C3 = M3 threaded rear spacer with PCB clip, PCB .091" / 2.30 mm C4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091" / 2.30 mm C5 = M3 threaded rear spacer with PCB clip, PCB .126" / 3.20 mm C6 = 4-40 UNC Threaded rear spacer with PCB clip, PCB .126" / 3.20 mm D1 = M3 clip and threaded rear spacer with PCB clip, PCB .063" / 1.60 mm D2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063" / 1.60 mm D3 = M3 clip and threaded rear spacer with PCB clip, PCB .091" / 2.30 mm D4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091" / 2.30 mm D5 = M3 clip and threaded rear spacer with PCB clip, PCB .126" / 3.20 mm D6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126" / 3.20 mm E1 = M3 threaded rear spacer with PCB clip, PCB .063" / 1.60 mm E2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063" / 1.60 mm E3 = M3 threaded rear spacer with PCB clip, PCB .091" / 2.30 mm E4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091" / 2.30 mm E5 = M3 threaded rear spacer with PCB clip, PCB .126" / 3.20 mm		E6 = 4-40 UNC threaded rear spacer with PCB clip, PCB .126" / 3.20 mm F1 = M3 clip and threaded rear spacer with PCB clip, PCB .063" / 1.60 mm F2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063" / 1.60 mm F3 = M3 clip and threaded rear spacer with PCB clip, PCB .091" / 2.30 mm F4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091" / 2.30 mm F5 = M3 clip and threaded rear spacer with PCB clip, PCB .126" / 3.20 mm F6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126" / 3.20 mm G1 = Metal bracket, M3 threaded insert for .370" / 9.40 mm G2 = Metal bracket, 4-40 UNC threaded insert for .370" / 9.40 mm G3 = Metal bracket, M3 threaded insert and clip for .370" / 9.40 mm G4 = Metal bracket, 4-40 UNC threaded insert and clip for .370" / 9.40 mm H1 = Metal bracket, M3 threaded lock for .370" / 9.40 mm H2 = Metal bracket, 4-40 UNC threaded lock for .370" / 9.40 mm H3 = Metal bracket, M3 threaded lock and clip for .370" / 9.40 mm H4 = Metal bracket, 4-40 UNC threaded lock and clip for .370" / 9.40 mm N1 = Metal bracket, M3 threaded insert for .280" / 7.19 mm N2 = Metal bracket, 4-40 UNC threaded insert for .280" / 7.19 mm N3 = Metal bracket, M3 threaded insert and clip for .280" / 7.19 mm N4 = Metal bracket, 4-40 UNC threaded insert and clip for .280" / 7.19 mm P1 = Metal bracket, M3 threaded lock for .280" / 7.19 mm P2 = Metal bracket, 4-40 UNC threaded lock for .280" / 7.19 mm P3 = Metal bracket, M3 threaded lock and clip for .280" / 7.19 mm P4 = Metal bracket, 4-40 UNC threaded lock and clip for .280" / 7.19 mm W1 = Threaded rear spacer with M3 press in pin W2 = Threaded rear spacer with 4-40 UNC press in pin	
OX = Standard			

PART NUMBER CREATOR

for High Density

3 H19W1 S C M 4 1 A 1 O X

Product Line

- 1 = Shell brass tin plated
- 3 = Shell tin plated*
- 5 = Shell yellow chromated* (not RoHS compliant)
- A = Shell stainless steel* *on request

Shell size and design

- 2 =19W1
- 3 =15W4
- 4 =45W2 H = High Density

Contact type

- P = Plug connector
- S = Socket connector

Quality class for SIGNAL contacts

- A = Quality class 3 = 50 mating cycles
- B = Quality class 2 = 200 mating cycles*
- C = Quality class 1 = 500 mating cycles
- J = Special application = > 500 mating cycles* *on request

Termination only for SIGNAL contacts

- M = Solder cup
- P = Press-fit*
- R = Solder pin, straight
- W = Solder pin, angled .450" / 11,43 mm*
- T = Solder pin, angled .350" / 7,98 mm *on request

Termination for HIGH POWER- or COAXIAL contacts

Quality class 3/Quality class 1

- F2,61/F1,41 = Solder cup 10 A
- F4,62/F3,42 = Solder cup 20 A
- F6,63/F5,43 = Solder cup 30 A
- F8,64/F7,44 = Solder cup 40 A
- 68/48 = Solder pin, straight 20 A, D= .077"/1.95 mm
- 69/49 = Solder pin, straight 20 A, D= .102"/2.60 mm
- 70/50 = Solder pin, straight 20 A, D= .110"/2.85 mm
- 71/51 = Solder pin, straight 30 A, D= .130"/3.18 mm
- 72/52 = Solder pin, straight 40 A, D= .150"/3.75 mm
- 59/55 = Solder pin, angled 15 A
- 73/56 = Solder pin, angled 20 A
- 74/57 = Solder pin, angled 30 A
- 75/58 = Solder pin, angled 40 A

Quality class 3/Quality class 1

- 77/60 = Solder pin, angled 40 A
- 81/66 = Solder pin, angled 20 A
- 82/67 = Solder pin, angled 30 A
- 85/65 = Solder pin, angled 30 A
- G7/76 = 3 Solder pins Straight 50 Ω
- G9/78 = 3 Solder pins angled 50 Ω
- H1/79 = 3 Solder pins angled 50 Ω
- H4/80 = 5 Solder pins angled 50 Ω
- G8/86 = 3 Solder pins Straight 75 Ω
- H2/88 = 3 Solder pins angled 75 Ω
- H3/89 = 3 Solder pins angled 75 Ω
- H5/90 = 5 Solder pins angled 75 Ω
- 91 = Screw termination 20 A

Quality class 1

- P1 = press fit 30A
 - P2 = press fit 30A
 - P4 = press fit 30A
 - 99 = no high power, coax or crimp contacts loaded
- Coaxial contacts with cable termination must be ordered separately.

Mounting style

- | | |
|--|--|
| A1 = Riveted | F3 = M3 clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm |
| A2 = M3 threaded insert | F4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm |
| A3 = 4-40 UNC threaded insert | F5 = M3 clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm |
| A4 = M3 threaded rear spacer | F6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm |
| A5 = 4-40 UNC threaded rear spacer | G5 = Metal bracket, M3 threaded insert for .350"/7,98 mm |
| A6 = Float fastening | G6 = Metal bracket, 4-40 UNC threaded insert for .350"/7,98 mm |
| A7 = Threaded rear spacer for M3 press fit | G7 = Metal bracket, M3 threaded insert and Clip for .350"/7,98 mm |
| A8 = Threaded rear spacer for 4-40 UNC press fit | G8 = Metal bracket, 4-40 UNC threaded insert and Clip for .350"/7,98 mm |
| E1 = M3 threaded rear spacer with PCB clip, PCB .063"/1.60 mm | H5 = Metal bracket, M3 threaded lock for .350"/7,98 mm |
| E2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm | H6 = Metal bracket, 4-40 UNC threaded lock for .350"/7,98 mm |
| E3 = M3 threaded rear spacer with PCB clip, PCB .091"/2.30 mm | H7 = Metal bracket, M3 threaded lock and Clip for .350"/7,98 mm |
| E4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm | H8 = Metal bracket, 4-40 UNC threaded lock and Clip for .350"/7,98 mm |
| E5 = M3 threaded rear spacer with PCB clip, PCB .126"/3.20 mm | W1 = Threaded rear spacer with M3 press in pin |
| E6 = 4-40 UNC threaded rear spacer with PCB clip, PCB .126"/3.20 mm | W2 = Threaded rear spacer with 4-40 UNC press in pin |
| F1 = M3 clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm | |
| F2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm | |

- OX = Standard

TECHNICAL DATA

Standard version

Materials	Connector with signal contacts	Coaxial contacts	High power contacts	High voltage contacts
Insulator Green standard / black crimp	PBTP, GV (UL94 V-0)			
Shell	steel tin plated brass tin / stainless steel on request			
Contact plating	Gold plated over nickel			
Contact material	CU alloy			
Retaining clip	CU alloy			
Insulator		PTFE/PBTP/PI		PTFE
Mechanical and electrical characteristics				
Current rating	7,5A (UL) / 5A (CSA, VDE)			
Test voltage between 2 contacts contact and shell	1000 V, 50Hz 1 min.		1000 V, 50Hz 1 min.	
Resistance between mated contacts	max. 8 mΩ	max. 2.7 mΩ	max. 1 mΩ	max. 2.7 mΩ
Insulation resistance	≥5 GΩ	≥ 10 GΩ	≥ 5 GΩ	≥ 2x10 ⁷ MΩ
Volume resistivity	10 ¹⁶ Ωcm			
Dielectric impedance	50KV/mm			
Characteristic impedance		50/75 Ω		
VSWR-value at according MIL-C-39012	1.2GHz 1.5GHz 2.0GHz		≤1,2 ≤1,3 ≤1,5	
Dielectric voltage		750V 50Hz		3.8kV
Frequency range		0-2GHz		
Working voltage	250 V	250 V	250 V	max. 2.8kV
Temperature range	-55°C to +125°C			
Insertion force per contact	3.4N	7N	7N	5N
Extraction force per contact	0.2N	7N	approx. 5N	approx. 2.5N
Mating cycles	A = Quality class 3 = 50 mating cycles, B = Quality class 2 = 200 mating cycles, C = Quality class 1 = 500 mating cycles			

Technical specifications are subject to change without notice.

TECHNICAL DATA

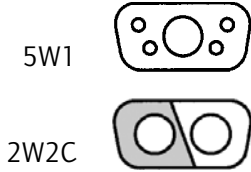
High Density

Materials	Connector with signal contacts	Coaxial contacts	High power contacts	High voltage contacts
Insulator Green standard / black crimp	PBTP, GV (UL94 V-0)			
Shell	steel tin plated brass tin / stainless steel on request			
Contact plating	Gold plated over nickel			
Contact material	CU alloy			
Retaining clip	CU alloy			
Insulator		PTFE/PBTP/PI		PTFE
Mechanical and electrical characteristics				
Current rating	3 A (ULVDE) / 2,5 A (CSA)			
Test voltage between 2 contacts contact and shell	1000 V, 50Hz 1 min.		1000 V, 50Hz 1 min.	
Resistance between mated contacts	max. 10m Ω	max. 2.7m Ω	max. 1m Ω	max. 2.7m Ω
Insulation resistance	$\geq 5G\Omega$	$\geq 10G\Omega$	$\geq 5G\Omega$	$2 \times 10^7 M\Omega$
Volume resistivity	$10^{16} \Omega \text{cm}$			
Dielectric impedance	50kV/mm			
Characteristic impedance		50/75 Ω		
VSWR-value at according MIL-C-39012	1.2GHz 1.5GHz 2.0GHz	≤ 1.2 ≤ 1.3 ≤ 1.5		
Dielectric voltage		750V 50Hz		3.8kV
Frequency range		0-2GHz		
Working voltage	60V	250 V	250 V	max. 2.8kV
Temperature range	-55°C to +125°C			
Insertion force per contact	3,4N	7N	7N	5N
Extraction force per contact	0,2N	7N	approx. 5N	approx. 2.5N
Mating cycles	A =Quality class 3 = 50 mating cycles, B =Quality class 2 = 200 mating cycles, C = Quality class 1 = 500 mating cycles			

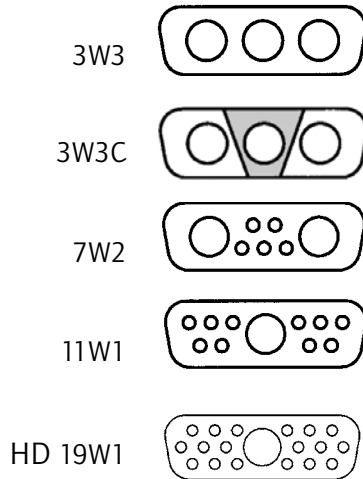
Technical specifications are subject to change without notice.

PIN CONFIGURATION – MATING SIDE OF SOCKET CONNECTOR

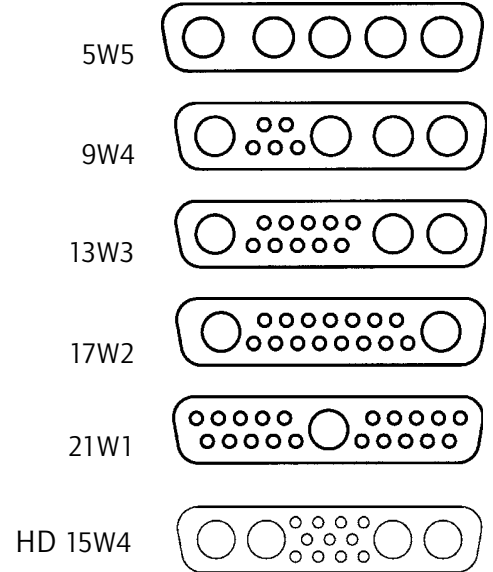
SHELL SIZE 1



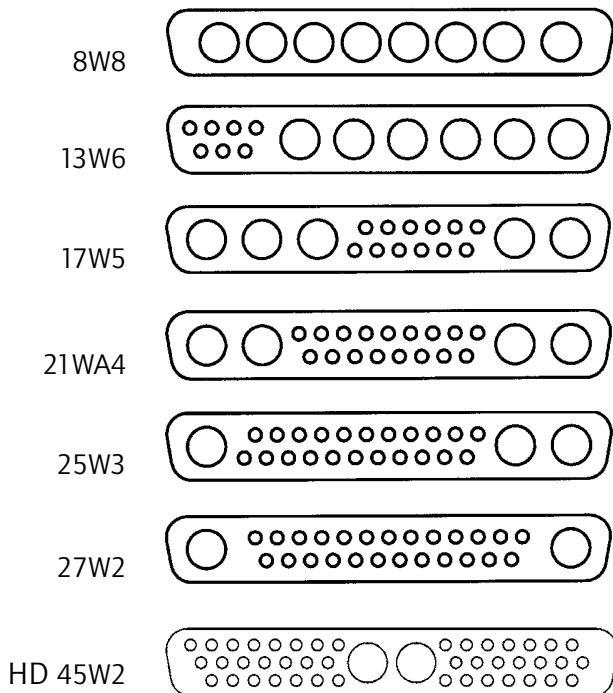
SHELL SIZE 2



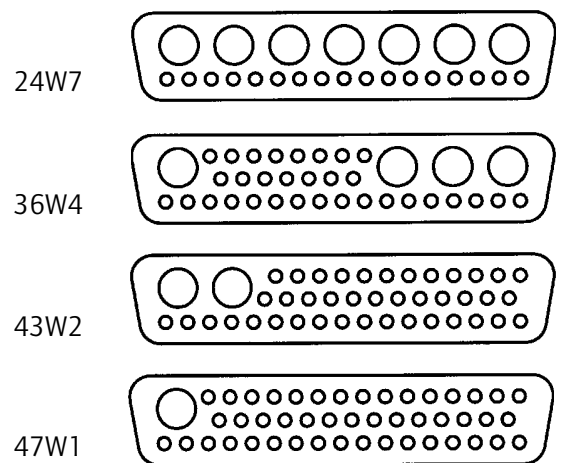
SHELL SIZE 3



SHELL SIZE 4



SHELL SIZE 5



Connectors 3W3, 5W5 and 8W8 with female insulators: Socket contacts are fingerprobe safe according to UL 1950 and CSA 22.2.950.

TECHNICAL INFORMATION

SKIN EFFECT

Alternating currents do not uniformly occupy the entire cross section of the conductor, rather inductance effect in the conductor deflects the current towards the surface of the conductor, whereby this deflection increases with the frequency.

The resistive attenuation of a transmission line increases with the frequency as a result of this skin effect.

The skin depth (equivalent thickness of the layer in which current flows) can be determined using

$$\delta = \frac{1}{\sqrt{f \pi \sigma \mu_0 \mu_r}}$$

f = frequency

σ = conductivity of the conductor material

$\sigma_{Ag} = 62 \times 10^6 \text{ S/m}$

$\sigma_{Cu} = 58 \times 10^6 \text{ S/m}$

$\mu_0 = 1,256 \cdot 10^{-6} \text{ Vs / Am}$

μ_r ... relative permeability constant for the employed material

VSWR-VALUE

The ratio between the value of the largest and the smallest voltages on a loss-free line is known as the ripple or voltage standing wave ratio s (where $1 \leq s < \infty$). The reciprocal value of the VSWR is known as the inverse voltage standing wave ratio m (where $0 < m \leq 1$).

(VSWR = Voltage standing wave ratio)

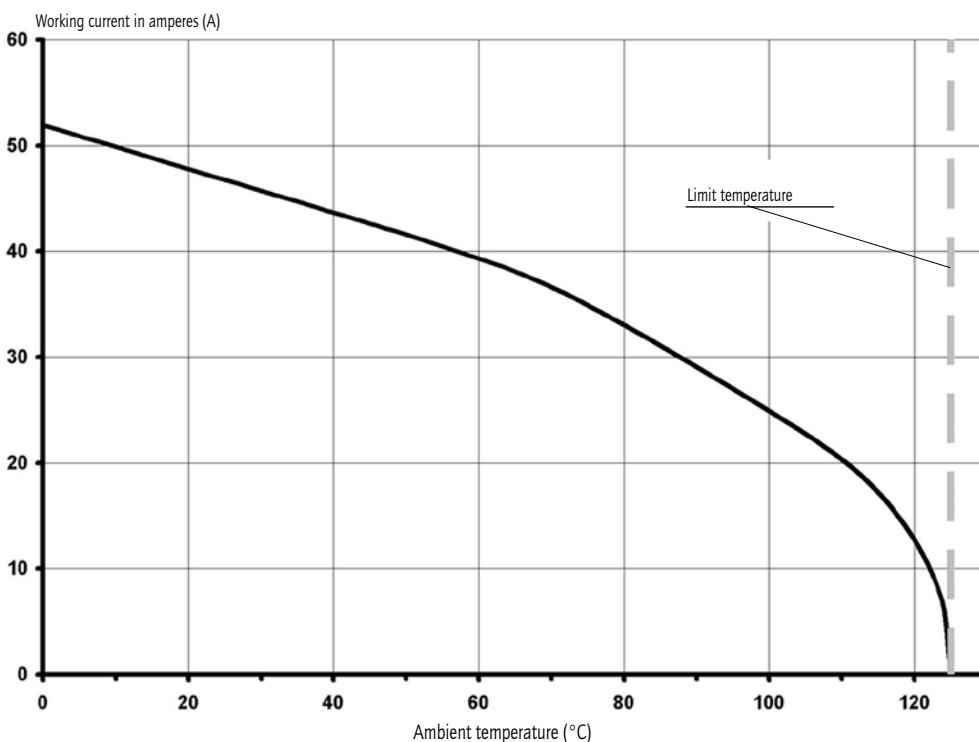
The value of s is linked with the → reflection coefficient r on s transmission line according to the equation

$$s = \frac{(1 + |r|)}{(1 - |r|)}$$

DERATING CURVE

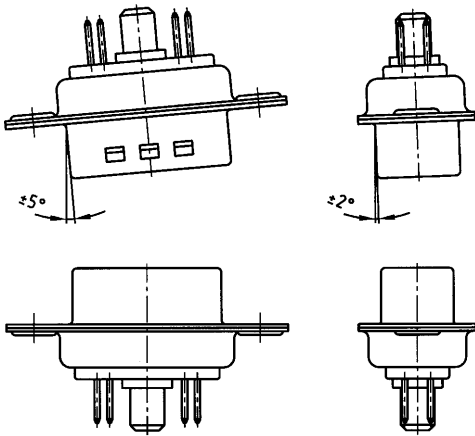
Measurement is according to DIN 41640 part 3 whereas all power contacts are connected in series.

For test procedure – product-no. 3008W8SXX99A has been equipped with 132C11049X and 3008W8PXX99AA10X with 131C11049X.

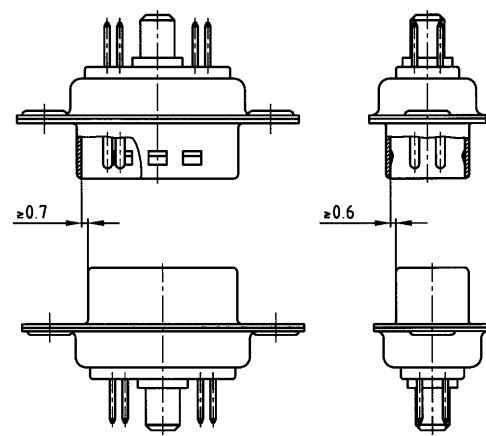


MATING CONDITIONS

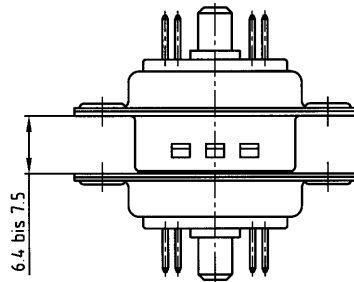
Float mount tolerance guide



Rigid mount tolerance guide



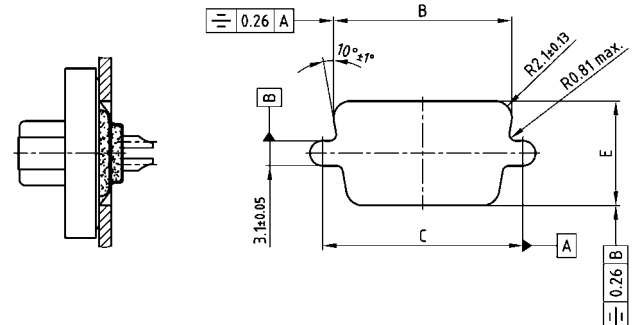
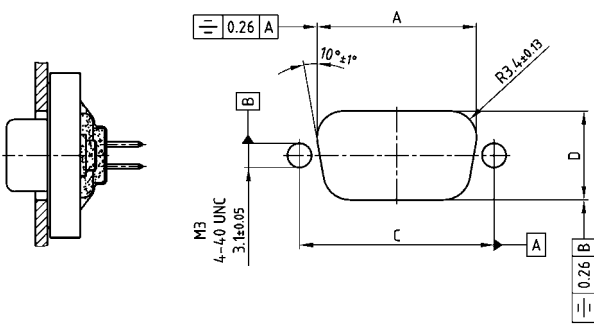
Rigid mount vertical to tolerance guide



PANEL CUT-OUT

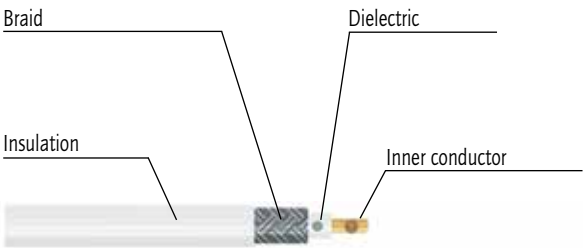
Rear panel mounting

Front panel mounting



Shell size	A ± 0,13	B ± 0,13	C ± 0,13	D ± 0,13	E ± 0,13
1	20.50	22.20	25.00	11.40	13.00
2	28.80	30.50	33.30	11.40	13.00
3	42.50	44.30	47.04	11.40	13.00
4	59.10	60.70	63.50	11.40	13.00
5	56.30	58.30	61.10	14.10	15.80

CRIMPING INSTRUCTIONS FOR COAX CONTACTS



Strip the wire
Using dimensions shown on the
individual product drawings



Slide sleeve over coax cable



Crimp the inner contact on the
inner conductor



Snap the inner contact into
the outer contact



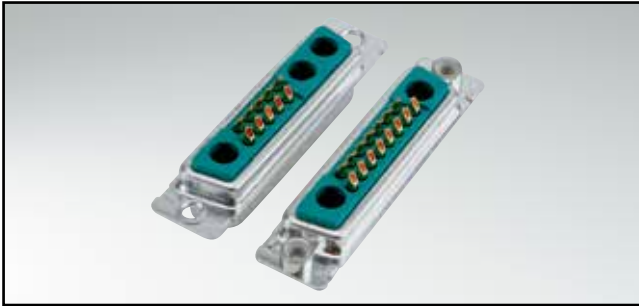
Slide braid over outer contact



Crimp the sleeve on to outer
contact

COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder cup – Precision machined contacts – For wire size AWG 20

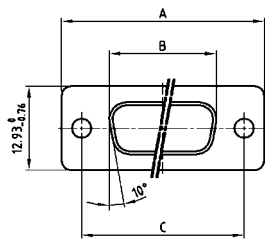


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

DESCRIPTION

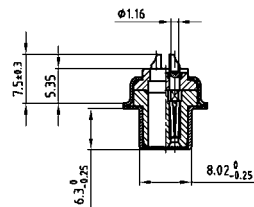
- Suitable for wire size AWG 20
- Mounting styles:
 - with through-hole, $\varnothing .118'' / 3 \text{ mm}$
 - with 4-40 UNC or M3 threaded insert
 - with floating mount
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
(brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7 | 16, 7 | 17

SOCKET CONNECTOR

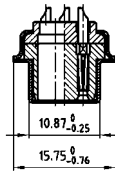


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 ^{+0.12} _{-0.13}
2	39.52	24.79	33.30 ^{+0.15} _{-0.10}
3	53.42	38.50	47.04 ^{+0.13}
4	69.70	54.96	63.50 ^{+0.13}
5	67.31	52.55	61.10 ^{+0.14} _{-0.11}

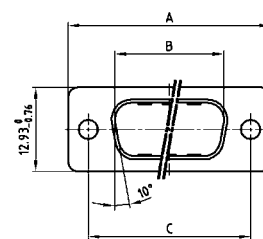
Shell size 1-4



Shell size 5

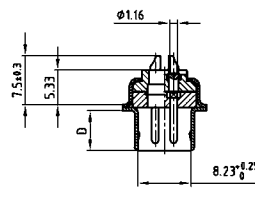


PLUG CONNECTOR

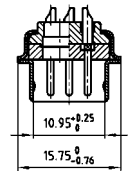


Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 ^{+0.12} _{-0.13}	6.12
2	39.52	25.12	33.30 ^{+0.15} _{-0.10}	6.12
3	53.42	38.84	47.04 ^{+0.13}	5.99
4	69.70	55.30	63.50 ^{+0.13}	5.99
5	67.31	52.68	61.10 ^{+0.14} _{-0.11}	5.99

Shell size 1-4



Shell size 5



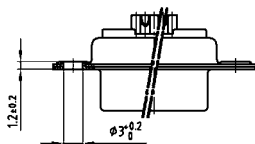
ORDER DATA

SOCKET CONNECTOR

Design	Mounting style	Part Number
5W1	Through-hole	3005W1SAM99A10X
7W2	Through-hole	3007W2SAM99A10X
11W1	Through-hole	3011W1SAM99A10X
9W4	Through-hole	3009W4SAM99A10X
13W3	Through-hole	3013W3SAM99A10X
17W2	Through-hole	3017W2SAM99A10X
21W1	Through-hole	3021W1SAM99A10X
13W6	Through-hole	3013W6SAM99A10X
17W5	Through-hole	3017W5SAM99A10X
21WA4	Through-hole	321WA4SAM99A10X
25W3	Through-hole	3025W3SAM99A10X
27W2	Through-hole	3027W2SAM99A10X
24W7	Through-hole	3024W7SAM99A10X
36W4	Through-hole	3036W4SAM99A10X
43W2	Through-hole	3043W2SAM99A10X
47W1	Through-hole	3047W1SAM99A10X

PLUG CONNECTOR

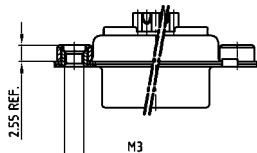
Design	Mounting style	Part Number
5W1	Through-hole	3005W1PAM99A10X
7W2	Through-hole	3007W2PAM99A10X
11W1	Through-hole	3011W1PAM99A10X
9W4	Through-hole	3009W4PAM99A10X
13W3	Through-hole	3013W3PAM99A10X
17W2	Through-hole	3017W2PAM99A10X
21W1	Through-hole	3021W1PAM99A10X
13W6	Through-hole	3013W6PAM99A10X
17W5	Through-hole	3017W5PAM99A10X
21WA4	Through-hole	321WA4PAM99A10X
25W3	Through-hole	3025W3PAM99A10X
27W2	Through-hole	3027W2PAM99A10X
24W7	Through-hole	3024W7PAM99A10X
36W4	Through-hole	3036W4PAM99A10X
43W2	Through-hole	3043W2PAM99A10X
47W1	Through-hole	3047W1PAM99A10X



COMBINATION D-SUB – MOUNTING STYLES

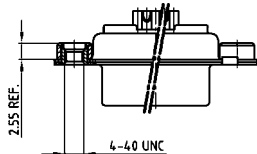
Solder cup – Precision machined contacts – For wire size AWG 20

ORDER DATA



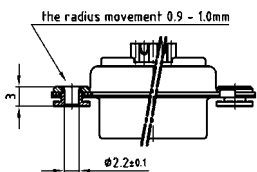
SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1SAM99A20X
7W2	Threaded insert	3007W2SAM99A20X
11W1	Threaded insert	3011W1SAM99A20X
9W4	Threaded insert	3009W4SAM99A20X
13W3	Threaded insert	3013W3SAM99A20X
17W2	Threaded insert	3017W2SAM99A20X
21W1	Threaded insert	3021W1SAM99A20X
13W6	Threaded insert	3013W6SAM99A20X
17W5	Threaded insert	3017W5SAM99A20X
21WA4	Threaded insert	321WA4SAM99A20X
25W3	Threaded insert	3025W3SAM99A20X
27W2	Threaded insert	3027W2SAM99A20X
24W7	Threaded insert	3024W7SAM99A20X
36W4	Threaded insert	3036W4SAM99A20X
43W2	Threaded insert	3043W2SAM99A20X
47W1	Threaded insert	3047W1SAM99A20X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1PAM99A20X
7W2	Threaded insert	3007W2PAM99A20X
11W1	Threaded insert	3011W1PAM99A20X
9W4	Threaded insert	3009W4PAM99A20X
13W3	Threaded insert	3013W3PAM99A20X
17W2	Threaded insert	3017W2PAM99A20X
21W1	Threaded insert	3021W1PAM99A20X
13W6	Threaded insert	3013W6PAM99A20X
17W5	Threaded insert	3017W5PAM99A20X
21WA4	Threaded insert	321WA4PAM99A20X
25W3	Threaded insert	3025W3PAM99A20X
27W2	Threaded insert	3027W2PAM99A20X
24W7	Threaded insert	3024W7PAM99A20X
36W4	Threaded insert	3036W4PAM99A20X
43W2	Threaded insert	3043W2PAM99A20X
47W1	Threaded insert	3047W1PAM99A20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAM99A30X
7W2	Threaded insert	3007W2SAM99A30X
11W1	Threaded insert	3011W1SAM99A30X
9W4	Threaded insert	3009W4SAM99A30X
13W3	Threaded insert	3013W3SAM99A30X
17W2	Threaded insert	3017W2SAM99A30X
21W1	Threaded insert	3021W1SAM99A30X
13W6	Threaded insert	3013W6SAM99A30X
17W5	Threaded insert	3017W5SAM99A30X
21WA4	Threaded insert	321WA4SAM99A30X
25W3	Threaded insert	3025W3SAM99A30X
27W2	Threaded insert	3027W2SAM99A30X
24W7	Threaded insert	3024W7SAM99A30X
36W4	Threaded insert	3036W4SAM99A30X
43W2	Threaded insert	3043W2SAM99A30X
47W1	Threaded insert	3047W1SAM99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAM99A30X
7W2	Threaded insert	3007W2PAM99A30X
11W1	Threaded insert	3011W1PAM99A30X
9W4	Threaded insert	3009W4PAM99A30X
13W3	Threaded insert	3013W3PAM99A30X
17W2	Threaded insert	3017W2PAM99A30X
21W1	Threaded insert	3021W1PAM99A30X
13W6	Threaded insert	3013W6PAM99A30X
17W5	Threaded insert	3017W5PAM99A30X
21WA4	Threaded insert	321WA4PAM99A30X
25W3	Threaded insert	3025W3PAM99A30X
27W2	Threaded insert	3027W2PAM99A30X
24W7	Threaded insert	3024W7PAM99A30X
36W4	Threaded insert	3036W4PAM99A30X
43W2	Threaded insert	3043W2PAM99A30X
47W1	Threaded insert	3047W1PAM99A30X

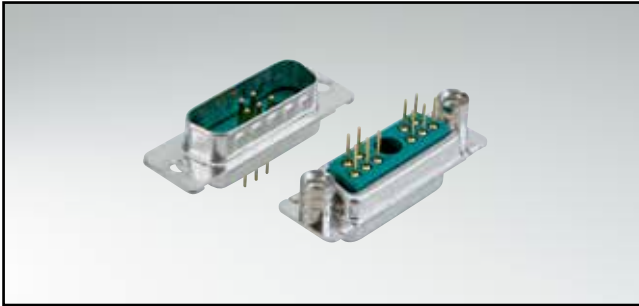


SOCKET CONNECTOR		
Design	Mounting style	Part Number
5W1	Floating mount	3005W1SAM99A60X
7W2	Floating mount	3007W2SAM99A60X
11W1	Floating mount	3011W1SAM99A60X
9W4	Floating mount	3009W4SAM99A60X
13W3	Floating mount	3013W3SAM99A60X
17W2	Floating mount	3017W2SAM99A60X
21W1	Floating mount	3021W1SAM99A60X
13W6	Floating mount	3013W6SAM99A60X
17W5	Floating mount	3017W5SAM99A60X
21WA4	Floating mount	321WA4SAM99A60X
25W3	Floating mount	3025W3SAM99A60X
27W2	Floating mount	3027W2SAM99A60X
24W7	Floating mount	3024W7SAM99A60X
36W4	Floating mount	3036W4SAM99A60X
43W2	Floating mount	3043W2SAM99A60X
47W1	Floating mount	3047W1SAM99A60X

PLUG CONNECTOR		
Design	Mounting style	Part Number
5W1	Floating mount	3005W1PAM99A60X
7W2	Floating mount	3007W2PAM99A60X
11W1	Floating mount	3011W1PAM99A60X
9W4	Floating mount	3009W4PAM99A60X
13W3	Floating mount	3013W3PAM99A60X
17W2	Floating mount	3017W2PAM99A60X
21W1	Floating mount	3021W1PAM99A60X
13W6	Floating mount	3013W6PAM99A60X
17W5	Floating mount	3017W5PAM99A60X
21WA4	Floating mount	321WA4PAM99A60X
25W3	Floating mount	3025W3PAM99A60X
27W2	Floating mount	3027W2PAM99A60X
24W7	Floating mount	3024W7PAM99A60X
36W4	Floating mount	3036W4PAM99A60X
43W2	Floating mount	3043W2PAM99A60X
47W1	Floating mount	3047W1PAM99A60X

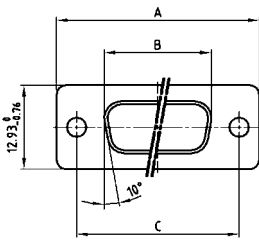
COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Straight – Precision machined contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

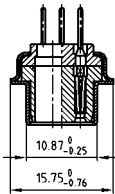
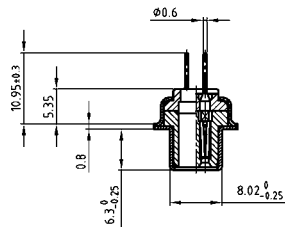
SOCKET CONNECTOR



Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 ^{+0.12} _{-0.13}
2	39.52	24.79	33.30 ^{+0.15} _{-0.10}
3	53.42	38.50	47.04 ^{+0.13}
4	69.70	54.96	63.50 ^{+0.13}
5	67.31	52.55	61.10 ^{+0.14} _{-0.11}

Shell size 1-4

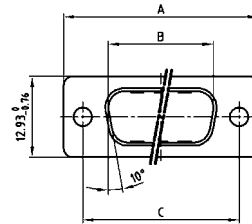
Shell size 5



DESCRIPTION

- Mounting styles:
 - with through-hole, Ø .118"/3 mm
 - with 4-40 UNC or M3 threaded insert
 - with 4-40 UNC or M3 threaded rear spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
(brass tin plated or stainless steel available on request)

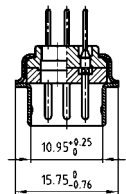
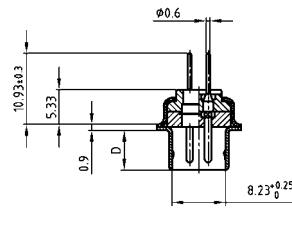
PLUG CONNECTOR



Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 ^{+0.12} _{-0.13}	6.12
2	39.52	25.12	33.30 ^{+0.15} _{-0.10}	6.12
3	53.42	38.84	47.04 ^{+0.13}	5.99
4	69.70	55.30	63.50 ^{+0.13}	5.99
5	67.31	52.68	61.10 ^{+0.14} _{-0.11}	5.99

Shell size 1-4

Shell size 5



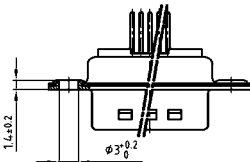
ORDER DATA

SOCKET CONNECTOR

Design	Mounting style	Part Number
5W1	Through-hole	3005W1SAR99A10X
7W2	Through-hole	3007W2SAR99A10X
11W1	Through-hole	3011W1SAR99A10X
9W4	Through-hole	3009W4SAR99A10X
13W3	Through-hole	3013W3SAR99A10X
17W2	Through-hole	3017W2SAR99A10X
21W1	Through-hole	3021W1SAR99A10X
13W6	Through-hole	3013W6SAR99A10X
17W5	Through-hole	3017W5SAR99A10X
21WA4	Through-hole	321WA4SAR99A10X
25W3	Through-hole	3025W3SAR99A10X
27W2	Through-hole	3027W2SAR99A10X
24W7	Through-hole	3024W7SAR99A10X
36W4	Through-hole	3036W4SAR99A10X
43W2	Through-hole	3043W2SAR99A10X
47W1	Through-hole	3047W1SAR99A10X

PLUG CONNECTOR

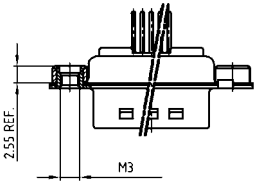
Design	Mounting style	Part Number
5W1	Through-hole	3005W1PAR99A10X
7W2	Through-hole	3007W2PAR99A10X
11W1	Through-hole	3011W1PAR99A10X
9W4	Through-hole	3009W4PAR99A10X
13W3	Through-hole	3013W3PAR99A10X
17W2	Through-hole	3017W2PAR99A10X
21W1	Through-hole	3021W1PAR99A10X
13W6	Through-hole	3013W6PAR99A10X
17W5	Through-hole	3017W5PAR99A10X
21WA4	Through-hole	321WA4PAR99A10X
25W3	Through-hole	3025W3PAR99A10X
27W2	Through-hole	3027W2PAR99A10X
24W7	Through-hole	3024W7PAR99A10X
36W4	Through-hole	3036W4PAR99A10X
43W2	Through-hole	3043W2PAR99A10X
47W1	Through-hole	3047W1PAR99A10X



COMBINATION D-SUB – MOUNTING STYLES

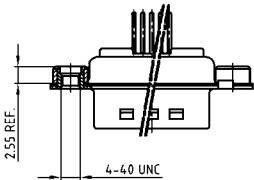
Solder pin – Straight – Precision machined contacts

ORDER DATA



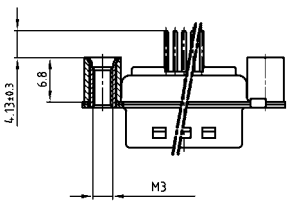
SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1SAR99A20X
7W2	Threaded insert	3007W2SAR99A20X
11W1	Threaded insert	3011W1SAR99A20X
9W4	Threaded insert	3009W4SAR99A20X
13W3	Threaded insert	3013W3SAR99A20X
17W2	Threaded insert	3017W2SAR99A20X
21W1	Threaded insert	3021W1SAR99A20X
13W6	Threaded insert	3013W6SAR99A20X
17W5	Threaded insert	3017W5SAR99A20X
21WA4	Threaded insert	321WA4SAR99A20X
25W3	Threaded insert	3025W3SAR99A20X
27W2	Threaded insert	3027W2SAR99A20X
24W7	Threaded insert	3024W7SAR99A20X
36W4	Threaded insert	3036W4SAR99A20X
43W2	Threaded insert	3043W2SAR99A20X
47W1	Threaded insert	3047W1SAR99A20X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1PAR99A20X
7W2	Threaded insert	3007W2PAR99A20X
11W1	Threaded insert	3011W1PAR99A20X
9W4	Threaded insert	3009W4PAR99A20X
13W3	Threaded insert	3013W3PAR99A20X
17W2	Threaded insert	3017W2PAR99A20X
21W1	Threaded insert	3021W1PAR99A20X
13W6	Threaded insert	3013W6PAR99A20X
17W5	Threaded insert	3017W5PAR99A20X
21WA4	Threaded insert	321WA4PAR99A20X
25W3	Threaded insert	3025W3PAR99A20X
27W2	Threaded insert	3027W2PAR99A20X
24W7	Threaded insert	3024W7PAR99A20X
36W4	Threaded insert	3036W4PAR99A20X
43W2	Threaded insert	3043W2PAR99A20X
47W1	Threaded insert	3047W1PAR99A20X



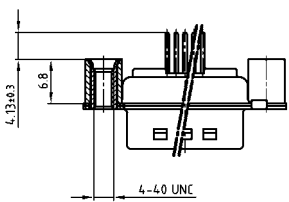
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAR99A30X
7W2	Threaded insert	3007W2SAR99A30X
11W1	Threaded insert	3011W1SAR99A30X
9W4	Threaded insert	3009W4SAR99A30X
13W3	Threaded insert	3013W3SAR99A30X
17W2	Threaded insert	3017W2SAR99A30X
21W1	Threaded insert	3021W1SAR99A30X
13W6	Threaded insert	3013W6SAR99A30X
17W5	Threaded insert	3017W5SAR99A30X
21WA4	Threaded insert	321WA4SAR99A30X
25W3	Threaded insert	3025W3SAR99A30X
27W2	Threaded insert	3027W2SAR99A30X
24W7	Threaded insert	3024W7SAR99A30X
36W4	Threaded insert	3036W4SAR99A30X
43W2	Threaded insert	3043W2SAR99A30X
47W1	Threaded insert	3047W1SAR99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAR99A30X
7W2	Threaded insert	3007W2PAR99A30X
11W1	Threaded insert	3011W1PAR99A30X
9W4	Threaded insert	3009W4PAR99A30X
13W3	Threaded insert	3013W3PAR99A30X
17W2	Threaded insert	3017W2PAR99A30X
21W1	Threaded insert	3021W1PAR99A30X
13W6	Threaded insert	3013W6PAR99A30X
17W5	Threaded insert	3017W5PAR99A30X
21WA4	Threaded insert	321WA4PAR99A30X
25W3	Threaded insert	3025W3PAR99A30X
27W2	Threaded insert	3027W2PAR99A30X
24W7	Threaded insert	3024W7PAR99A30X
36W4	Threaded insert	3036W4PAR99A30X
43W2	Threaded insert	3043W2PAR99A30X
47W1	Threaded insert	3047W1PAR99A30X



SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded rear spacer	3005W1SAR99A40X
7W2	Threaded rear spacer	3007W2SAR99A40X
11W1	Threaded rear spacer	3011W1SAR99A40X
9W4	Threaded rear spacer	3009W4SAR99A40X
13W3	Threaded rear spacer	3013W3SAR99A40X
17W2	Threaded rear spacer	3017W2SAR99A40X
21W1	Threaded rear spacer	3021W1SAR99A40X
13W6	Threaded rear spacer	3013W6SAR99A40X
17W5	Threaded rear spacer	3017W5SAR99A40X
21WA4	Threaded rear spacer	321WA4SAR99A40X
25W3	Threaded rear spacer	3025W3SAR99A40X
27W2	Threaded rear spacer	3027W2SAR99A40X
24W7	Threaded rear spacer	3024W7SAR99A40X
36W4	Threaded rear spacer	3036W4SAR99A40X
43W2	Threaded rear spacer	3043W2SAR99A40X
47W1	Threaded rear spacer	3047W1SAR99A40X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded rear spacer	3005W1PAR99A40X
7W2	Threaded rear spacer	3007W2PAR99A40X
11W1	Threaded rear spacer	3011W1PAR99A40X
9W4	Threaded rear spacer	3009W4PAR99A40X
13W3	Threaded rear spacer	3013W3PAR99A40X
17W2	Threaded rear spacer	3017W2PAR99A40X
21W1	Threaded rear spacer	3021W1PAR99A40X
13W6	Threaded rear spacer	3013W6PAR99A40X
17W5	Threaded rear spacer	3017W5PAR99A40X
21WA4	Threaded rear spacer	321WA4PAR99A40X
25W3	Threaded rear spacer	3025W3PAR99A40X
27W2	Threaded rear spacer	3027W2PAR99A40X
24W7	Threaded rear spacer	3024W7PAR99A40X
36W4	Threaded rear spacer	3036W4PAR99A40X
43W2	Threaded rear spacer	3043W2PAR99A40X
47W1	Threaded rear spacer	3047W1PAR99A40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer	3005W1SAR99A50X
7W2	Threaded rear spacer	3007W2SAR99A50X
11W1	Threaded rear spacer	3011W1SAR99A50X
9W4	Threaded rear spacer	3009W4SAR99A50X
13W3	Threaded rear spacer	3013W3SAR99A50X
17W2	Threaded rear spacer	3017W2SAR99A50X
21W1	Threaded rear spacer	3021W1SAR99A50X
13W6	Threaded rear spacer	3013W6SAR99A50X
17W5	Threaded rear spacer	3017W5SAR99A50X
21WA4	Threaded rear spacer	321WA4SAR99A50X
25W3	Threaded rear spacer	3025W3SAR99A50X
27W2	Threaded rear spacer	3027W2SAR99A50X
24W7	Threaded rear spacer	3024W7SAR99A50X
36W4	Threaded rear spacer	3036W4SAR99A50X
43W2	Threaded rear spacer	3043W2SAR99A50X
47W1	Threaded rear spacer	3047W1SAR99A50X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer	3005W1PAR99A50X
7W2	Threaded rear spacer	3007W2PAR99A50X
11W1	Threaded rear spacer	3011W1PAR99A50X
9W4	Threaded rear spacer	3009W4PAR99A50X
13W3	Threaded rear spacer	3013W3PAR99A50X
17W2	Threaded rear spacer	3017W2PAR99A50X
21W1	Threaded rear spacer	3021W1PAR99A50X
13W6	Threaded rear spacer	3013W6PAR99A50X
17W5	Threaded rear spacer	3017W5PAR99A50X
21WA4	Threaded rear spacer	321WA4PAR99A50X
25W3	Threaded rear spacer	3025W3PAR99A50X
27W2	Threaded rear spacer	3027W2PAR99A50X
24W7	Threaded rear spacer	3024W7PAR99A50X
36W4	Threaded rear spacer	3036W4PAR99A50X
43W2	Threaded rear spacer	3043W2PAR99A50X
47W1	Threaded rear spacer	3047W1PAR99A50X

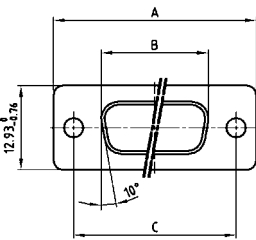
COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Straight – Precision machined contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

SOCKET CONNECTOR



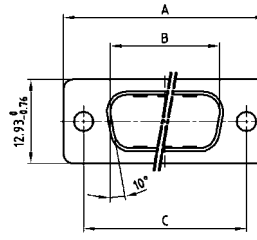
Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 ^{+0.12} _{-0.13}
2	39.52	24.79	33.30 ^{+0.15} _{-0.10}
3	53.42	38.50	47.04 ^{+0.13}
4	69.70	54.96	63.50 ^{+0.13}
5	67.31	52.55	61.10 ^{+0.14} _{-0.11}

Shell size 1-4

DESCRIPTION

- **Threaded rear spacer .291" / 7.4 mm**
(the same installation high as D-SUB Standard on PCB)
- **Mounting styles:**
 - with 4-40 UNC threaded rear spacer with PCB clip (M3 on request)
 - with 4-40 UNC front and threaded rear spacer with PCB clip (M3 on request)
for PCB thickness .063" / 1.6 mm and .091" / 2.3 mm
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
(brass tin plated or stainless steel available on request)

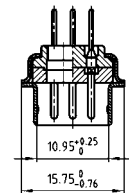
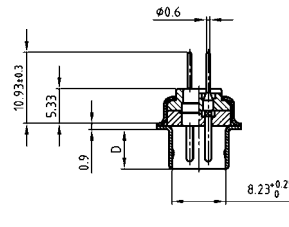
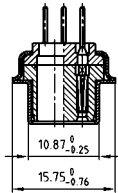
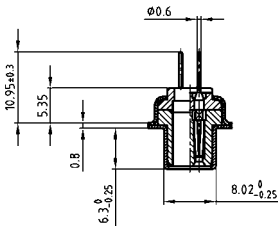
PLUG CONNECTOR



Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 ^{+0.12} _{-0.13}	6.12
2	39.52	25.12	33.30 ^{+0.15} _{-0.10}	6.12
3	53.42	38.84	47.04 ^{+0.13}	5.99
4	69.70	55.30	63.50 ^{+0.13}	5.99
5	67.31	52.68	61.10 ^{+0.14} _{-0.11}	5.99

Shell size 1-4

Shell size 5



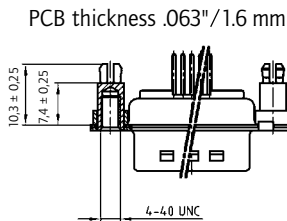
ORDER DATA

SOCKET CONNECTOR

Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99E20X
7W2	Threaded rear spacer PCB clip	3007W2SAR99E20X
11W1	Threaded rear spacer PCB clip	3011W1SAR99E20X
9W4	Threaded rear spacer PCB clip	3009W4SAR99E20X
13W3	Threaded rear spacer PCB clip	3013W3SAR99E20X
17W2	Threaded rear spacer PCB clip	3017W2SAR99E20X
21W1	Threaded rear spacer PCB clip	3021W1SAR99E20X
13W6	Threaded rear spacer PCB clip	3013W6SAR99E20X
17W5	Threaded rear spacer PCB clip	3017W5SAR99E20X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99E20X
25W3	Threaded rear spacer PCB clip	3025W3SAR99E20X
27W2	Threaded rear spacer PCB clip	3027W2SAR99E20X
24W7	Threaded rear spacer PCB clip	3024W7SAR99E20X
36W4	Threaded rear spacer PCB clip	3036W4SAR99E20X
43W2	Threaded rear spacer PCB clip	3043W2SAR99E20X
47W1	Threaded rear spacer PCB clip	3047W1SAR99E20X

PLUG CONNECTOR

Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99E20X
7W2	Threaded rear spacer PCB clip	3007W2PAR99E20X
11W1	Threaded rear spacer PCB clip	3011W1PAR99E20X
9W4	Threaded rear spacer PCB clip	3009W4PAR99E20X
13W3	Threaded rear spacer PCB clip	3013W3PAR99E20X
17W2	Threaded rear spacer PCB clip	3017W2PAR99E20X
21W1	Threaded rear spacer PCB clip	3021W1PAR99E20X
13W6	Threaded rear spacer PCB clip	3013W6PAR99E20X
17W5	Threaded rear spacer PCB clip	3017W5PAR99E20X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99E20X
25W3	Threaded rear spacer PCB clip	3025W3PAR99E20X
27W2	Threaded rear spacer PCB clip	3027W2PAR99E20X
24W7	Threaded rear spacer PCB clip	3024W7PAR99E20X
36W4	Threaded rear spacer PCB clip	3036W4PAR99E20X
43W2	Threaded rear spacer PCB clip	3043W2PAR99E20X
47W1	Threaded rear spacer PCB clip	3047W1PAR99E20X



PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter

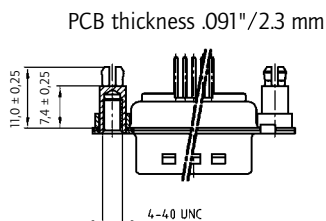
COMBINATION D-SUB – MOUNTING STYLES

Solder pin – Straight – Precision machined contacts

ORDER DATA

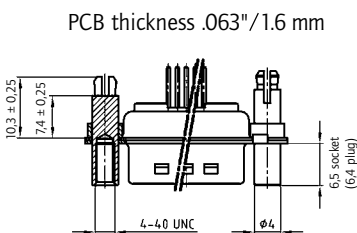
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99E40X
7W2	Threaded rear spacer PCB clip	3007W2SAR99E40X
11W1	Threaded rear spacer PCB clip	3011W1SAR99E40X
9W4	Threaded rear spacer PCB clip	3009W4SAR99E40X
13W3	Threaded rear spacer PCB clip	3013W3SAR99E40X
17W2	Threaded rear spacer PCB clip	3017W2SAR99E40X
21W1	Threaded rear spacer PCB clip	3021W1SAR99E40X
13W6	Threaded rear spacer PCB clip	3013W6SAR99E40X
17W5	Threaded rear spacer PCB clip	3017W5SAR99E40X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99E40X
25W3	Threaded rear spacer PCB clip	3025W3SAR99E40X
27W2	Threaded rear spacer PCB clip	3027W2SAR99E40X
24W7	Threaded rear spacer PCB clip	3024W7SAR99E40X
36W4	Threaded rear spacer PCB clip	3036W4SAR99E40X
43W2	Threaded rear spacer PCB clip	3043W2SAR99E40X
47W1	Threaded rear spacer PCB clip	3047W1SAR99E40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99E40X
7W2	Threaded rear spacer PCB clip	3007W2PAR99E40X
11W1	Threaded rear spacer PCB clip	3011W1PAR99E40X
9W4	Threaded rear spacer PCB clip	3009W4PAR99E40X
13W3	Threaded rear spacer PCB clip	3013W3PAR99E40X
17W2	Threaded rear spacer PCB clip	3017W2PAR99E40X
21W1	Threaded rear spacer PCB clip	3021W1PAR99E40X
13W6	Threaded rear spacer PCB clip	3013W6PAR99E40X
17W5	Threaded rear spacer PCB clip	3017W5PAR99E40X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99E40X
25W3	Threaded rear spacer PCB clip	3025W3PAR99E40X
27W2	Threaded rear spacer PCB clip	3027W2PAR99E40X
24W7	Threaded rear spacer PCB clip	3024W7PAR99E40X
36W4	Threaded rear spacer PCB clip	3036W4PAR99E40X
43W2	Threaded rear spacer PCB clip	3043W2PAR99E40X
47W1	Threaded rear spacer PCB clip	3047W1PAR99E40X



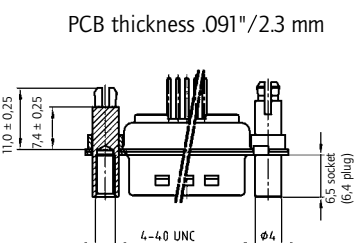
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front/Threaded rear spacer PCB clip	3005W1SAR99F20X
7W2	Front/Threaded rear spacer PCB clip	3007W2SAR99F20X
11W1	Front/Threaded rear spacer PCB clip	3011W1SAR99F20X
9W4	Front/Threaded rear spacer PCB clip	3009W4SAR99F20X
13W3	Front/Threaded rear spacer PCB clip	3013W3SAR99F20X
17W2	Front/Threaded rear spacer PCB clip	3017W2SAR99F20X
21W1	Front/Threaded rear spacer PCB clip	3021W1SAR99F20X
13W6	Front/Threaded rear spacer PCB clip	3013W6SAR99F20X
17W5	Front/Threaded rear spacer PCB clip	3017W5SAR99F20X
21WA4	Front/Threaded rear spacer PCB clip	321WA4SAR99F20X
25W3	Front/Threaded rear spacer PCB clip	3025W3SAR99F20X
27W2	Front/Threaded rear spacer PCB clip	3027W2SAR99F20X
24W7	Front/Threaded rear spacer PCB clip	3024W7SAR99F20X
36W4	Front/Threaded rear spacer PCB clip	3036W4SAR99F20X
43W2	Front/Threaded rear spacer PCB clip	3043W2SAR99F20X
47W1	Front/Threaded rear spacer PCB clip	3047W1SAR99F20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front/Threaded rear spacer PCB clip	3005W1PAR99F20X
7W2	Front/Threaded rear spacer PCB clip	3007W2PAR99F20X
11W1	Front/Threaded rear spacer PCB clip	3011W1PAR99F20X
9W4	Front/Threaded rear spacer PCB clip	3009W4PAR99F20X
13W3	Front/Threaded rear spacer PCB clip	3013W3PAR99F20X
17W2	Front/Threaded rear spacer PCB clip	3017W2PAR99F20X
21W1	Front/Threaded rear spacer PCB clip	3021W1PAR99F20X
13W6	Front/Threaded rear spacer PCB clip	3013W6PAR99F20X
17W5	Front/Threaded rear spacer PCB clip	3017W5PAR99F20X
21WA4	Front/Threaded rear spacer PCB clip	321WA4PAR99F20X
25W3	Front/Threaded rear spacer PCB clip	3025W3PAR99F20X
27W2	Front/Threaded rear spacer PCB clip	3027W2PAR99F20X
24W7	Front/Threaded rear spacer PCB clip	3024W7PAR99F20X
36W4	Front/Threaded rear spacer PCB clip	3036W4PAR99F20X
43W2	Front/Threaded rear spacer PCB clip	3043W2PAR99F20X
47W1	Front/Threaded rear spacer PCB clip	3047W1PAR99F20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front/Threaded rear spacer PCB clip	3005W1SAR99F40X
7W2	Front/Threaded rear spacer PCB clip	3007W2SAR99F40X
11W1	Front/Threaded rear spacer PCB clip	3011W1SAR99F40X
9W4	Front/Threaded rear spacer PCB clip	3009W4SAR99F40X
13W3	Front/Threaded rear spacer PCB clip	3013W3SAR99F40X
17W2	Front/Threaded rear spacer PCB clip	3017W2SAR99F40X
21W1	Front/Threaded rear spacer PCB clip	3021W1SAR99F40X
13W6	Front/Threaded rear spacer PCB clip	3013W6SAR99F40X
17W5	Front/Threaded rear spacer PCB clip	3017W5SAR99F40X
21WA4	Front/Threaded rear spacer PCB clip	321WA4SAR99F40X
25W3	Front/Threaded rear spacer PCB clip	3025W3SAR99F40X
27W2	Front/Threaded rear spacer PCB clip	3027W2SAR99F40X
24W7	Front/Threaded rear spacer PCB clip	3024W7SAR99F40X
36W4	Front/Threaded rear spacer PCB clip	3036W4SAR99F40X
43W2	Front/Threaded rear spacer PCB clip	3043W2SAR99F40X
47W1	Front/Threaded rear spacer PCB clip	3047W1SAR99F40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front/Threaded rear spacer PCB clip	3005W1PAR99F40X
7W2	Front/Threaded rear spacer PCB clip	3007W2PAR99F40X
11W1	Front/Threaded rear spacer PCB clip	3011W1PAR99F40X
9W4	Front/Threaded rear spacer PCB clip	3009W4PAR99F40X
13W3	Front/Threaded rear spacer PCB clip	3013W3PAR99F40X
17W2	Front/Threaded rear spacer PCB clip	3017W2PAR99F40X
21W1	Front/Threaded rear spacer PCB clip	3021W1PAR99F40X
13W6	Front/Threaded rear spacer PCB clip	3013W6PAR99F40X
17W5	Front/Threaded rear spacer PCB clip	3017W5PAR99F40X
21WA4	Front/Threaded rear spacer PCB clip	321WA4PAR99F40X
25W3	Front/Threaded rear spacer PCB clip	3025W3PAR99F40X
27W2	Front/Threaded rear spacer PCB clip	3027W2PAR99F40X
24W7	Front/Threaded rear spacer PCB clip	3024W7PAR99F40X
36W4	Front/Threaded rear spacer PCB clip	3036W4PAR99F40X
43W2	Front/Threaded rear spacer PCB clip	3043W2PAR99F40X
47W1	Front/Threaded rear spacer PCB clip	3047W1PAR99F40X



PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

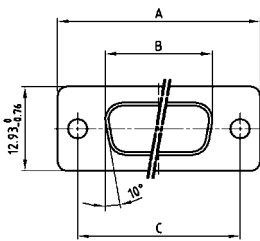
COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Straight – Precision machined contacts



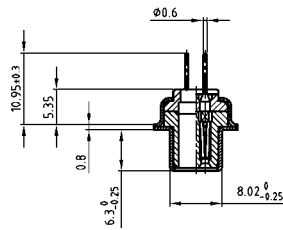
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

SOCKET CONNECTOR

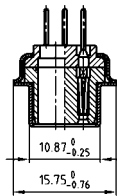


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 ^{+0.12} _{-0.13}
2	39.52	24.79	33.30 ^{+0.15} _{-0.10}
3	53.42	38.50	47.04 ^{+0.13}
4	69.70	54.96	63.50 ^{+0.13}
5	67.31	52.55	61.10 ^{+0.14} _{-0.11}

Shell size 1-4



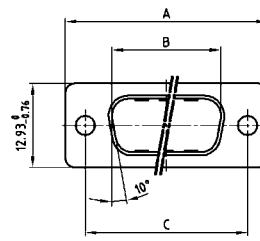
Shell size 5



DESCRIPTION

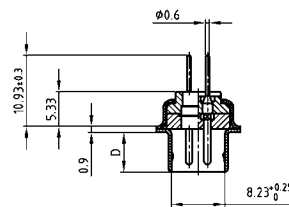
- Threaded rear spacer .256"/6.5 mm
- Mounting style:
 - with 4-40 UNC threaded rear spacer with PCB clip for PCB thickness .063"/1.6 mm
 - for PCB thickness .091"/2.3 mm
 - for PCB thickness .126"/3.2 mm
- M3 and PCB clip with front spacer available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)

PLUG CONNECTOR

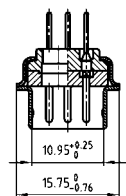


Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 ^{+0.12} _{-0.13}	6.12
2	39.52	25.12	33.30 ^{+0.15} _{-0.10}	6.12
3	53.42	38.84	47.04 ^{+0.13}	5.99
4	69.70	55.30	63.50 ^{+0.13}	5.99
5	67.31	52.68	61.10 ^{+0.14} _{-0.11}	5.99

Shell size 1-4



Shell size 5



ORDER DATA

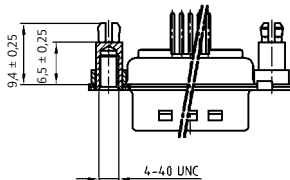
SOCKET CONNECTOR

Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99C20X
7W2	Threaded rear spacer PCB clip	3007W2SAR99C20X
11W1	Threaded rear spacer PCB clip	3011W1SAR99C20X
9W4	Threaded rear spacer PCB clip	3009W4SAR99C20X
13W3	Threaded rear spacer PCB clip	3013W3SAR99C20X
17W2	Threaded rear spacer PCB clip	3017W2SAR99C20X
21W1	Threaded rear spacer PCB clip	3021W1SAR99C20X
13W6	Threaded rear spacer PCB clip	3013W6SAR99C20X
17W5	Threaded rear spacer PCB clip	3017W5SAR99C20X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99C20X
25W3	Threaded rear spacer PCB clip	3025W3SAR99C20X
27W2	Threaded rear spacer PCB clip	3027W2SAR99C20X
24W7	Threaded rear spacer PCB clip	3024W7SAR99C20X
36W4	Threaded rear spacer PCB clip	3036W4SAR99C20X
43W2	Threaded rear spacer PCB clip	3043W2SAR99C20X
47W1	Threaded rear spacer PCB clip	3047W1SAR99C20X

PLUG CONNECTOR

Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99C20X
7W2	Threaded rear spacer PCB clip	3007W2PAR99C20X
11W1	Threaded rear spacer PCB clip	3011W1PAR99C20X
9W4	Threaded rear spacer PCB clip	3009W4PAR99C20X
13W3	Threaded rear spacer PCB clip	3013W3PAR99C20X
17W2	Threaded rear spacer PCB clip	3017W2PAR99C20X
21W1	Threaded rear spacer PCB clip	3021W1PAR99C20X
13W6	Threaded rear spacer PCB clip	3013W6PAR99C20X
17W5	Threaded rear spacer PCB clip	3017W5PAR99C20X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99C20X
25W3	Threaded rear spacer PCB clip	3025W3PAR99C20X
27W2	Threaded rear spacer PCB clip	3027W2PAR99C20X
24W7	Threaded rear spacer PCB clip	3024W7PAR99C20X
36W4	Threaded rear spacer PCB clip	3036W4PAR99C20X
43W2	Threaded rear spacer PCB clip	3043W2PAR99C20X
47W1	Threaded rear spacer PCB clip	3047W1PAR99C20X

PCB thickness .063"/1.6 mm



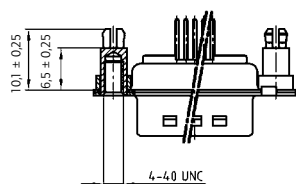
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

COMBINATION D-SUB – MOUNTING STYLES

Solder pin – Straight – Precision machined contacts

ORDER DATA

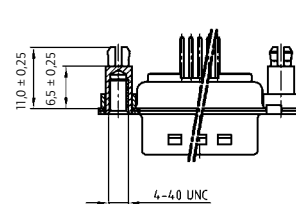
PCB thickness .091"/2.3 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99C40X
7W2	Threaded rear spacer PCB clip	3007W2SAR99C40X
11W1	Threaded rear spacer PCB clip	3011W1SAR99C40X
9W4	Threaded rear spacer PCB clip	3009W4SAR99C40X
13W3	Threaded rear spacer PCB clip	3013W3SAR99C40X
17W2	Threaded rear spacer PCB clip	3017W2SAR99C40X
21W1	Threaded rear spacer PCB clip	3021W1SAR99C40X
13W6	Threaded rear spacer PCB clip	3013W6SAR99C40X
17W5	Threaded rear spacer PCB clip	3017W5SAR99C40X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99C40X
25W3	Threaded rear spacer PCB clip	3025W3SAR99C40X
27W2	Threaded rear spacer PCB clip	3027W2SAR99C40X
24W7	Threaded rear spacer PCB clip	3024W7SAR99C40X
36W4	Threaded rear spacer PCB clip	3036W4SAR99C40X
43W2	Threaded rear spacer PCB clip	3043W2SAR99C40X
47W1	Threaded rear spacer PCB clip	3047W1SAR99C40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99C40X
7W2	Threaded rear spacer PCB clip	3007W2PAR99C40X
11W1	Threaded rear spacer PCB clip	3011W1PAR99C40X
9W4	Threaded rear spacer PCB clip	3009W4PAR99C40X
13W3	Threaded rear spacer PCB clip	3013W3PAR99C40X
17W2	Threaded rear spacer PCB clip	3017W2PAR99C40X
21W1	Threaded rear spacer PCB clip	3021W1PAR99C40X
13W6	Threaded rear spacer PCB clip	3013W6PAR99C40X
17W5	Threaded rear spacer PCB clip	3017W5PAR99C40X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99C40X
25W3	Threaded rear spacer PCB clip	3025W3PAR99C40X
27W2	Threaded rear spacer PCB clip	3027W2PAR99C40X
24W7	Threaded rear spacer PCB clip	3024W7PAR99C40X
36W4	Threaded rear spacer PCB clip	3036W4PAR99C40X
43W2	Threaded rear spacer PCB clip	3043W2PAR99C40X
47W1	Threaded rear spacer PCB clip	3047W1PAR99C40X

PCB thickness .126"/3.2 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99C60X
7W2	Threaded rear spacer PCB clip	3007W2SAR99C60X
11W1	Threaded rear spacer PCB clip	3011W1SAR99C60X
9W4	Threaded rear spacer PCB clip	3009W4SAR99C60X
13W3	Threaded rear spacer PCB clip	3013W3SAR99C60X
17W2	Threaded rear spacer PCB clip	3017W2SAR99C60X
21W1	Threaded rear spacer PCB clip	3021W1SAR99C60X
13W6	Threaded rear spacer PCB clip	3013W6SAR99C60X
17W5	Threaded rear spacer PCB clip	3017W5SAR99C60X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99C60X
25W3	Threaded rear spacer PCB clip	3025W3SAR99C60X
27W2	Threaded rear spacer PCB clip	3027W2SAR99C60X
24W7	Threaded rear spacer PCB clip	3024W7SAR99C60X
36W4	Threaded rear spacer PCB clip	3036W4SAR99C60X
43W2	Threaded rear spacer PCB clip	3043W2SAR99C60X
47W1	Threaded rear spacer PCB clip	3047W1SAR99C60X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99C60X
7W2	Threaded rear spacer PCB clip	3007W2PAR99C60X
11W1	Threaded rear spacer PCB clip	3011W1PAR99C60X
9W4	Threaded rear spacer PCB clip	3009W4PAR99C60X
13W3	Threaded rear spacer PCB clip	3013W3PAR99C60X
17W2	Threaded rear spacer PCB clip	3017W2PAR99C60X
21W1	Threaded rear spacer PCB clip	3021W1PAR99C60X
13W6	Threaded rear spacer PCB clip	3013W6PAR99C60X
17W5	Threaded rear spacer PCB clip	3017W5PAR99C60X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99C60X
25W3	Threaded rear spacer PCB clip	3025W3PAR99C60X
27W2	Threaded rear spacer PCB clip	3027W2PAR99C60X
24W7	Threaded rear spacer PCB clip	3024W7PAR99C60X
36W4	Threaded rear spacer PCB clip	3036W4PAR99C60X
43W2	Threaded rear spacer PCB clip	3043W2PAR99C60X
47W1	Threaded rear spacer PCB clip	3047W1PAR99C60X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter

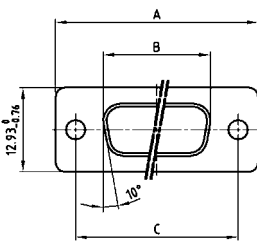
COMBINATION D-SUB WITH SIGNAL CONTACTS

Press-fit – Straight – Precision machined contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

SOCKET CONNECTOR



Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 ^{+0.12} _{-0.13}
2	39.52	24.79	33.30 ^{+0.15} _{-0.10}
3	53.42	38.50	47.04 ^{+0.13}
4	69.70	54.96	63.50 ^{+0.13}
5	67.31	52.55	61.10 ^{+0.14} _{-0.11}

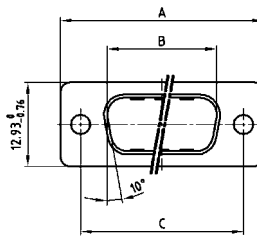
Shell size 1-4

Shell size 5

DESCRIPTION

- Mounting styles:
 - with 4-40 UNC or M3 threaded rear spacer
 - with M3 or 4-40 UNC rear press-fit spacer
- For .040" / 1.0 mm^{+0.003"/0.09 mm}_{-.002"/0.06 mm} finished through-hole diameter
Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
(brass tin plated or stainless steel available on request)
- For power contacts please contact factory

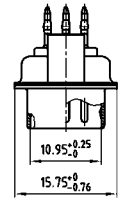
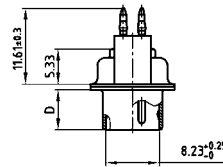
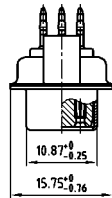
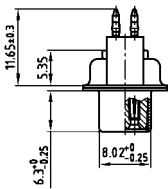
PLUG CONNECTOR



Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 ^{+0.12} _{-0.13}	6.12
2	39.52	25.12	33.30 ^{+0.15} _{-0.10}	6.12
3	53.42	38.84	47.04 ^{+0.13}	5.99
4	69.70	55.30	63.50 ^{+0.13}	5.99
5	67.31	52.68	61.10 ^{+0.14} _{-0.11}	5.99

Shell size 1-4

Shell size 5



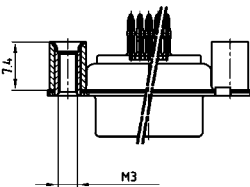
ORDER DATA

SOCKET CONNECTOR

Design	Mounting style M3	Part Number
5W1	Threaded rear spacer	3005W1SAP99A70X
7W2	Threaded rear spacer	3007W2SAP99A70X
11W1	Threaded rear spacer	3011W1SAP99A70X
9W4	Threaded rear spacer	3009W4SAP99A70X
13W3	Threaded rear spacer	3013W3SAP99A70X
17W2	Threaded rear spacer	3017W2SAP99A70X
21W1	Threaded rear spacer	3021W1SAP99A70X
13W6	Threaded rear spacer	3013W6SAP99A70X
17W5	Threaded rear spacer	3017W5SAP99A70X
21WA4	Threaded rear spacer	321WA4SAP99A70X
25W3	Threaded rear spacer	3025W3SAP99A70X
27W2	Threaded rear spacer	3027W2SAP99A70X
24W7	Threaded rear spacer	3024W7SAP99A70X
36W4	Threaded rear spacer	3036W4SAP99A70X
43W2	Threaded rear spacer	3043W2SAP99A70X
47W1	Threaded rear spacer	3047W1SAP99A70X

PLUG CONNECTOR

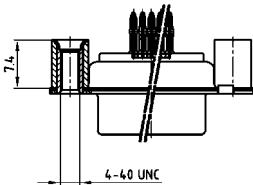
Design	Mounting style M3	Part Number
5W1	Threaded rear spacer	3005W1PAP99A70X
7W2	Threaded rear spacer	3007W2PAP99A70X
11W1	Threaded rear spacer	3011W1PAP99A70X
9W4	Threaded rear spacer	3009W4PAP99A70X
13W3	Threaded rear spacer	3013W3PAP99A70X
17W2	Threaded rear spacer	3017W2PAP99A70X
21W1	Threaded rear spacer	3021W1PAP99A70X
13W6	Threaded rear spacer	3013W6PAP99A70X
17W5	Threaded rear spacer	3017W5PAP99A70X
21WA4	Threaded rear spacer	321WA4PAP99A70X
25W3	Threaded rear spacer	3025W3PAP99A70X
27W2	Threaded rear spacer	3027W2PAP99A70X
24W7	Threaded rear spacer	3024W7PAP99A70X
36W4	Threaded rear spacer	3036W4PAP99A70X
43W2	Threaded rear spacer	3043W2PAP99A70X
47W1	Threaded rear spacer	3047W1PAP99A70X



COMBINATION D-SUB – MOUNTING STYLES

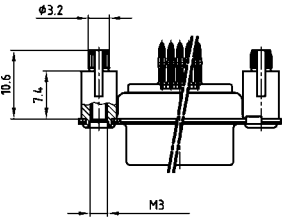
Press-fit – Straight – Precision machined contacts

ORDER DATA



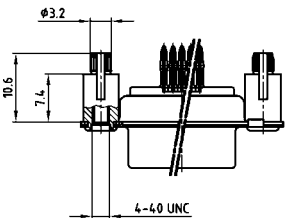
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer	3005W1SAP99A80X
7W2	Threaded rear spacer	3007W2SAP99A80X
11W1	Threaded rear spacer	3011W1SAP99A80X
9W4	Threaded rear spacer	3009W4SAP99A80X
13W3	Threaded rear spacer	3013W3SAP99A80X
17W2	Threaded rear spacer	3017W2SAP99A80X
21W1	Threaded rear spacer	3021W1SAP99A80X
13W6	Threaded rear spacer	3013W6SAP99A80X
17W5	Threaded rear spacer	3017W5SAP99A80X
21WA4	Threaded rear spacer	321WA4SAP99A80X
25W3	Threaded rear spacer	3025W3SAP99A80X
27W2	Threaded rear spacer	3027W2SAP99A80X
24W7	Threaded rear spacer	3024W7SAP99A80X
36W4	Threaded rear spacer	3036W4SAP99A80X
43W2	Threaded rear spacer	3043W2SAP99A80X
47W1	Threaded rear spacer	3047W1SAP99A80X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer	3005W1PAP99A80X
7W2	Threaded rear spacer	3007W2PAP99A80X
11W1	Threaded rear spacer	3011W1PAP99A80X
9W4	Threaded rear spacer	3009W4PAP99A80X
13W3	Threaded rear spacer	3013W3PAP99A80X
17W2	Threaded rear spacer	3017W2PAP99A80X
21W1	Threaded rear spacer	3021W1PAP99A80X
13W6	Threaded rear spacer	3013W6PAP99A80X
17W5	Threaded rear spacer	3017W5PAP99A80X
21WA4	Threaded rear spacer	321WA4PAP99A80X
25W3	Threaded rear spacer	3025W3PAP99A80X
27W2	Threaded rear spacer	3027W2PAP99A80X
24W7	Threaded rear spacer	3024W7PAP99A80X
36W4	Threaded rear spacer	3036W4PAP99A80X
43W2	Threaded rear spacer	3043W2PAP99A80X
47W1	Threaded rear spacer	3047W1PAP99A80X



SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Rear press-fit spacer	3005W1SAP99W10X
7W2	Rear press-fit spacer	3007W2SAP99W10X
11W1	Rear press-fit spacer	3011W1SAP99W10X
9W4	Rear press-fit spacer	3009W4SAP99W10X
13W3	Rear press-fit spacer	3013W3SAP99W10X
17W2	Rear press-fit spacer	3017W2SAP99W10X
21W1	Rear press-fit spacer	3021W1SAP99W10X
13W6	Rear press-fit spacer	3013W6SAP99W10X
17W5	Rear press-fit spacer	3017W5SAP99W10X
21WA4	Rear press-fit spacer	321WA4SAP99W10X
25W3	Rear press-fit spacer	3025W3SAP99W10X
27W2	Rear press-fit spacer	3027W2SAP99W10X
24W7	Rear press-fit spacer	3024W7SAP99W10X
36W4	Rear press-fit spacer	3036W4SAP99W10X
43W2	Rear press-fit spacer	3043W2SAP99W10X
47W1	Rear press-fit spacer	3047W1SAP99W10X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Rear press-fit spacer	3005W1PAP99W10X
7W2	Rear press-fit spacer	3007W2PAP99W10X
11W1	Rear press-fit spacer	3011W1PAP99W10X
9W4	Rear press-fit spacer	3009W4PAP99W10X
13W3	Rear press-fit spacer	3013W3PAP99W10X
17W2	Rear press-fit spacer	3017W2PAP99W10X
21W1	Rear press-fit spacer	3021W1PAP99W10X
13W6	Rear press-fit spacer	3013W6PAP99W10X
17W5	Rear press-fit spacer	3017W5PAP99W10X
21WA4	Rear press-fit spacer	321WA4PAP99W10X
25W3	Rear press-fit spacer	3025W3PAP99W10X
27W2	Rear press-fit spacer	3027W2PAP99W10X
24W7	Rear press-fit spacer	3024W7PAP99W10X
36W4	Rear press-fit spacer	3036W4PAP99W10X
43W2	Rear press-fit spacer	3043W2PAP99W10X
47W1	Rear press-fit spacer	3047W1PAP99W10X



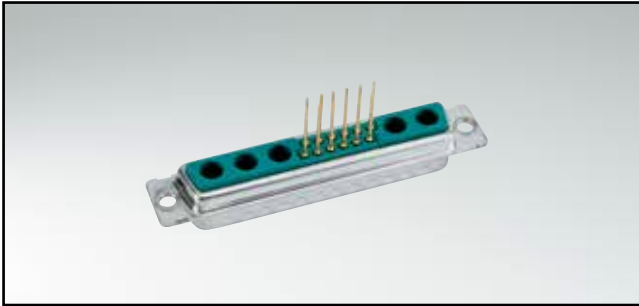
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Rear press-fit spacer	3005W1SAP99W20X
7W2	Rear press-fit spacer	3007W2SAP99W20X
11W1	Rear press-fit spacer	3011W1SAP99W20X
9W4	Rear press-fit spacer	3009W4SAP99W20X
13W3	Rear press-fit spacer	3013W3SAP99W20X
17W2	Rear press-fit spacer	3017W2SAP99W20X
21W1	Rear press-fit spacer	3021W1SAP99W20X
13W6	Rear press-fit spacer	3013W6SAP99W20X
17W5	Rear press-fit spacer	3017W5SAP99W20X
21WA4	Rear press-fit spacer	321WA4SAP99W20X
25W3	Rear press-fit spacer	3025W3SAP99W20X
27W2	Rear press-fit spacer	3027W2SAP99W20X
24W7	Rear press-fit spacer	3024W7SAP99W20X
36W4	Rear press-fit spacer	3036W4SAP99W20X
43W2	Rear press-fit spacer	3043W2SAP99W20X
47W1	Rear press-fit spacer	3047W1SAP99W20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Rear press-fit spacer	3005W1PAP99W20X
7W2	Rear press-fit spacer	3007W2PAP99W20X
11W1	Rear press-fit spacer	3011W1PAP99W20X
9W4	Rear press-fit spacer	3009W4PAP99W20X
13W3	Rear press-fit spacer	3013W3PAP99W20X
17W2	Rear press-fit spacer	3017W2PAP99W20X
21W1	Rear press-fit spacer	3021W1PAP99W20X
13W6	Rear press-fit spacer	3013W6PAP99W20X
17W5	Rear press-fit spacer	3017W5PAP99W20X
21WA4	Rear press-fit spacer	321WA4PAP99W20X
25W3	Rear press-fit spacer	3025W3PAP99W20X
27W2	Rear press-fit spacer	3027W2PAP99W20X
24W7	Rear press-fit spacer	3024W7PAP99W20X
36W4	Rear press-fit spacer	3036W4PAP99W20X
43W2	Rear press-fit spacer	3043W2PAP99W20X
47W1	Rear press-fit spacer	3047W1PAP99W20X

Rear press-fit spacer (snap in) .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

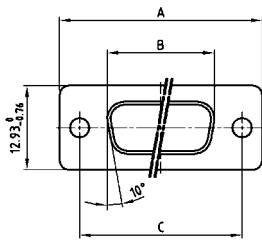
COMBINATION D-SUB WITH SIGNAL CONTACTS

Wire wrap – Precision machined contacts



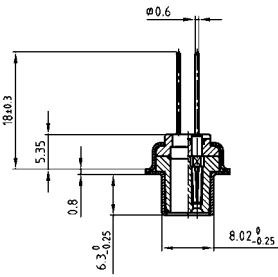
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

SOCKET CONNECTOR

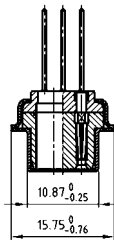


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 ^{+0.12} _{-0.13}
2	39.52	24.79	33.30 ^{+0.15} _{-0.10}
3	53.42	38.50	47.04 ^{+0.13}
4	69.70	54.96	63.50 ^{+0.13}
5	67.31	52.55	61.10 ^{+0.14} _{-0.11}

Shell size 1-4



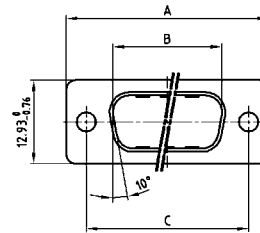
Shell size 5



DESCRIPTION

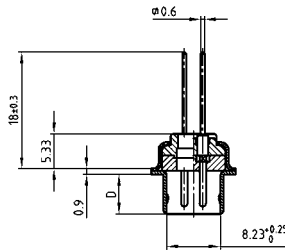
- Mounting styles:
 - with through-hole, Ø .118"/3 mm
 - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
(brass tin plated or stainless steel available on request)

PLUG CONNECTOR

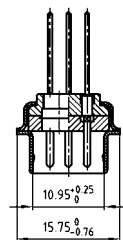


Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 ^{+0.12} _{-0.13}	6.12
2	39.52	25.12	33.30 ^{+0.15} _{-0.10}	6.12
3	53.42	38.84	47.04 ^{+0.13}	5.99
4	69.70	55.30	63.50 ^{+0.13}	5.99
5	67.31	52.68	61.10 ^{+0.14} _{-0.11}	5.99

Shell size 1-4



Shell size 5



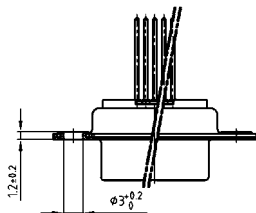
ORDER DATA

SOCKET CONNECTOR

Design	Mounting style	Part Number
5W1	Through-hole	3005W1SAN99A10X
7W2	Through-hole	3007W2SAN99A10X
11W1	Through-hole	3011W1SAN99A10X
9W4	Through-hole	3009W4SAN99A10X
13W3	Through-hole	3013W3SAN99A10X
17W2	Through-hole	3017W2SAN99A10X
21W1	Through-hole	3021W1SAN99A10X
13W6	Through-hole	3013W6SAN99A10X
17W5	Through-hole	3017W5SAN99A10X
21WA4	Through-hole	321WA4SAN99A10X
25W3	Through-hole	3025W3SAN99A10X
27W2	Through-hole	3027W2SAN99A10X
24W7	Through-hole	3024W7SAN99A10X
36W4	Through-hole	3036W4SAN99A10X
43W2	Through-hole	3043W2SAN99A10X
47W1	Through-hole	3047W1SAN99A10X

PLUG CONNECTOR

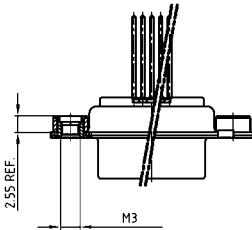
Design	Mounting style	Part Number
5W1	Through-hole	3005W1PAN99A10X
7W2	Through-hole	3007W2PAN99A10X
11W1	Through-hole	3011W1PAN99A10X
9W4	Through-hole	3009W4PAN99A10X
13W3	Through-hole	3013W3PAN99A10X
17W2	Through-hole	3017W2PAN99A10X
21W1	Through-hole	3021W1PAN99A10X
13W6	Through-hole	3013W6PAN99A10X
17W5	Through-hole	3017W5PAN99A10X
21WA4	Through-hole	321WA4PAN99A10X
25W3	Through-hole	3025W3PAN99A10X
27W2	Through-hole	3027W2PAN99A10X
24W7	Through-hole	3024W7PAN99A10X
36W4	Through-hole	3036W4PAN99A10X
43W2	Through-hole	3043W2PAN99A10X
47W1	Through-hole	3047W1PAN99A10X



COMBINATION D-SUB – MOUNTING STYLES

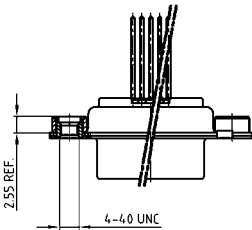
Wire wrap – Precision machined contacts

ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1SAN99A20X
7W2	Threaded insert	3007W2SAN99A20X
11W1	Threaded insert	3011W1SAN99A20X
9W4	Threaded insert	3009W4SAN99A20X
13W3	Threaded insert	3013W3SAN99A20X
17W2	Threaded insert	3017W2SAN99A20X
21W1	Threaded insert	3021W1SAN99A20X
13W6	Threaded insert	3013W6SAN99A20X
17W5	Threaded insert	3017W5SAN99A20X
21WA4	Threaded insert	321WA4SAN99A20X
25W3	Threaded insert	3025W3SAN99A20X
27W2	Threaded insert	3027W2SAN99A20X
24W7	Threaded insert	3024W7SAN99A20X
36W4	Threaded insert	3036W4SAN99A20X
43W2	Threaded insert	3043W2SAN99A20X
47W1	Threaded insert	3047W1SAN99A20X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1PAN99A20X
7W2	Threaded insert	3007W2PAN99A20X
11W1	Threaded insert	3011W1PAN99A20X
9W4	Threaded insert	3009W4PAN99A20X
13W3	Threaded insert	3013W3PAN99A20X
17W2	Threaded insert	3017W2PAN99A20X
21W1	Threaded insert	3021W1PAN99A20X
13W6	Threaded insert	3013W6PAN99A20X
17W5	Threaded insert	3017W5PAN99A20X
21WA4	Threaded insert	321WA4PAN99A20X
25W3	Threaded insert	3025W3PAN99A20X
27W2	Threaded insert	3027W2PAN99A20X
24W7	Threaded insert	3024W7PAN99A20X
36W4	Threaded insert	3036W4PAN99A20X
43W2	Threaded insert	3043W2PAN99A20X
47W1	Threaded insert	3047W1PAN99A20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAN99A30X
7W2	Threaded insert	3007W2SAN99A30X
11W1	Threaded insert	3011W1SAN99A30X
9W4	Threaded insert	3009W4SAN99A30X
13W3	Threaded insert	3013W3SAN99A30X
17W2	Threaded insert	3017W2SAN99A30X
21W1	Threaded insert	3021W1SAN99A30X
13W6	Threaded insert	3013W6SAN99A30X
17W5	Threaded insert	3017W5SAN99A30X
21WA4	Threaded insert	321WA4SAN99A30X
25W3	Threaded insert	3025W3SAN99A30X
27W2	Threaded insert	3027W2SAN99A30X
24W7	Threaded insert	3024W7SAN99A30X
36W4	Threaded insert	3036W4SAN99A30X
43W2	Threaded insert	3043W2SAN99A30X
47W1	Threaded insert	3047W1SAN99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAN99A30X
7W2	Threaded insert	3007W2PAN99A30X
11W1	Threaded insert	3011W1PAN99A30X
9W4	Threaded insert	3009W4PAN99A30X
13W3	Threaded insert	3013W3PAN99A30X
17W2	Threaded insert	3017W2PAN99A30X
21W1	Threaded insert	3021W1PAN99A30X
13W6	Threaded insert	3013W6PAN99A30X
17W5	Threaded insert	3017W5PAN99A30X
21WA4	Threaded insert	321WA4PAN99A30X
25W3	Threaded insert	3025W3PAN99A30X
27W2	Threaded insert	3027W2PAN99A30X
24W7	Threaded insert	3024W7PAN99A30X
36W4	Threaded insert	3036W4PAN99A30X
43W2	Threaded insert	3043W2PAN99A30X
47W1	Threaded insert	3047W1PAN99A30X

COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Angled – .318" / 7.19 mm – Precision machined contacts – Metal bracket



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

DESCRIPTION

- Mounting styles:
 - with mounting bracket and 4-40 UNC threaded insert
 - with mounting bracket and 4-40 UNC front spacer
 - with mounting bracket, PCB clip and 4-40 UNC threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
(brass tin plated or stainless steel available on request)

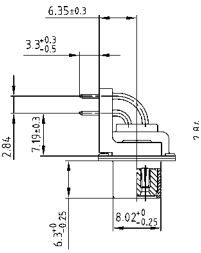
SOCKET CONNECTOR



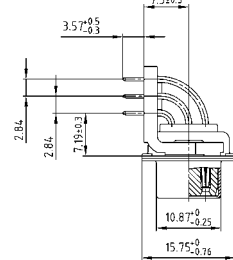
PLUG CONNECTOR



Shell size 1-4



Shell size 5



Shell size 1-4



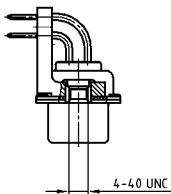
Shell size 5



ORDER DATA

SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAT99N20X
7W2	Threaded insert	3007W2SAT99N20X
11W1	Threaded insert	3011W1SAT99N20X
9W4	Threaded insert	3009W4SAT99N20X
13W3	Threaded insert	3013W3SAT99N20X
17W2	Threaded insert	3017W2SAT99N20X
21W1	Threaded insert	3021W1SAT99N20X
13W6	Threaded insert	3013W6SAT99N20X
17W5	Threaded insert	3017W5SAT99N20X
21WA4	Threaded insert	321WA4SAT99N20X
25W3	Threaded insert	3025W3SAT99N20X
27W2	Threaded insert	3027W2SAT99N20X
24W7	Threaded insert	3024W7SAT99N20X
36W4	Threaded insert	3036W4SAT99N20X
43W2	Threaded insert	3043W2SAT99N20X
47W1	Threaded insert	3047W1SAT99N20X

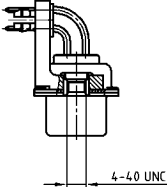
PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAT99N20X
7W2	Threaded insert	3007W2PAT99N20X
11W1	Threaded insert	3011W1PAT99N20X
9W4	Threaded insert	3009W4PAT99N20X
13W3	Threaded insert	3013W3PAT99N20X
17W2	Threaded insert	3017W2PAT99N20X
21W1	Threaded insert	3021W1PAT99N20X
13W6	Threaded insert	3013W6PAT99N20X
17W5	Threaded insert	3017W5PAT99N20X
21WA4	Threaded insert	321WA4PAT99N20X
25W3	Threaded insert	3025W3PAT99N20X
27W2	Threaded insert	3027W2PAT99N20X
24W7	Threaded insert	3024W7PAT99N20X
36W4	Threaded insert	3036W4PAT99N20X
43W2	Threaded insert	3043W2PAT99N20X
47W1	Threaded insert	3047W1PAT99N20X



COMBINATION D-SUB – MOUNTING STYLES

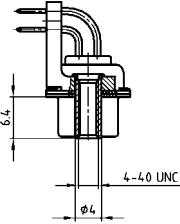
Solder pin – Angled – .318" / 7.19 mm – Precision machined contacts – Metal bracket

ORDER DATA



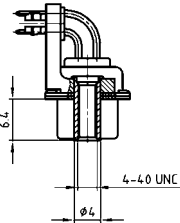
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert / PCB clip	3005W1SAT99N40X
7W2	Threaded insert / PCB clip	3007W2SAT99N40X
11W1	Threaded insert / PCB clip	3011W1SAT99N40X
9W4	Threaded insert / PCB clip	3009W4SAT99N40X
13W3	Threaded insert / PCB clip	3013W3SAT99N40X
17W2	Threaded insert / PCB clip	3017W2SAT99N40X
21W1	Threaded insert / PCB clip	3021W1SAT99N40X
13W6	Threaded insert / PCB clip	3013W6SAT99N40X
17W5	Threaded insert / PCB clip	3017W5SAT99N40X
21WA4	Threaded insert / PCB clip	321WA4SAT99N40X
25W3	Threaded insert / PCB clip	3025W3SAT99N40X
27W2	Threaded insert / PCB clip	3027W2SAT99N40X
24W7	Threaded insert / PCB clip	3024W7SAT99N40X
36W4	Threaded insert / PCB clip	3036W4SAT99N40X
43W2	Threaded insert / PCB clip	3043W2SAT99N40X
47W1	Threaded insert / PCB clip	3047W1SAT99N40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert / PCB clip	3005W1PAT99N40X
7W2	Threaded insert / PCB clip	3007W2PAT99N40X
11W1	Threaded insert / PCB clip	3011W1PAT99N40X
9W4	Threaded insert / PCB clip	3009W4PAT99N40X
13W3	Threaded insert / PCB clip	3013W3PAT99N40X
17W2	Threaded insert / PCB clip	3017W2PAT99N40X
21W1	Threaded insert / PCB clip	3021W1PAT99N40X
13W6	Threaded insert / PCB clip	3013W6PAT99N40X
17W5	Threaded insert / PCB clip	3017W5PAT99N40X
21WA4	Threaded insert / PCB clip	321WA4PAT99N40X
25W3	Threaded insert / PCB clip	3025W3PAT99N40X
27W2	Threaded insert / PCB clip	3027W2PAT99N40X
24W7	Threaded insert / PCB clip	3024W7PAT99N40X
36W4	Threaded insert / PCB clip	3036W4PAT99N40X
43W2	Threaded insert / PCB clip	3043W2PAT99N40X
47W1	Threaded insert / PCB clip	3047W1PAT99N40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer	3005W1SAT99P20X
7W2	Front spacer	3007W2SAT99P20X
11W1	Front spacer	3011W1SAT99P20X
9W4	Front spacer	3009W4SAT99P20X
13W3	Front spacer	3013W3SAT99P20X
17W2	Front spacer	3017W2SAT99P20X
21W1	Front spacer	3021W1SAT99P20X
13W6	Front spacer	3013W6SAT99P20X
17W5	Front spacer	3017W5SAT99P20X
21WA4	Front spacer	321WA4SAT99P20X
25W3	Front spacer	3025W3SAT99P20X
27W2	Front spacer	3027W2SAT99P20X
24W7	Front spacer	3024W7SAT99P20X
36W4	Front spacer	3036W4SAT99P20X
43W2	Front spacer	3043W2SAT99P20X
47W1	Front spacer	3047W1SAT99P20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer	3005W1PAT99P20X
7W2	Front spacer	3007W2PAT99P20X
11W1	Front spacer	3011W1PAT99P20X
9W4	Front spacer	3009W4PAT99P20X
13W3	Front spacer	3013W3PAT99P20X
17W2	Front spacer	3017W2PAT99P20X
21W1	Front spacer	3021W1PAT99P20X
13W6	Front spacer	3013W6PAT99P20X
17W5	Front spacer	3017W5PAT99P20X
21WA4	Front spacer	321WA4PAT99P20X
25W3	Front spacer	3025W3PAT99P20X
27W2	Front spacer	3027W2PAT99P20X
24W7	Front spacer	3024W7PAT99P20X
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43W2	Front spacer	3043W2PAT99P20X
47W1	Front spacer	3047W1PAT99P20X



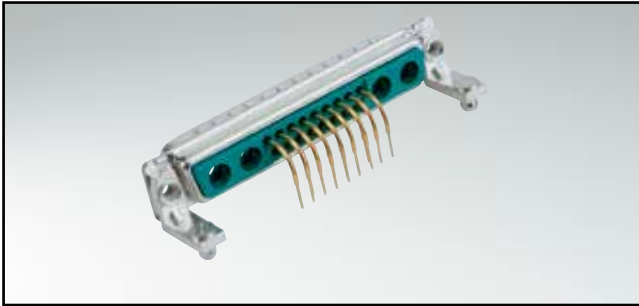
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer / PCB clip	3005W1SAT99P40X
7W2	Front spacer / PCB clip	3007W2SAT99P40X
11W1	Front spacer / PCB clip	3011W1SAT99P40X
9W4	Front spacer / PCB clip	3009W4SAT99P40X
13W3	Front spacer / PCB clip	3013W3SAT99P40X
17W2	Front spacer / PCB clip	3017W2SAT99P40X
21W1	Front spacer / PCB clip	3021W1SAT99P40X
13W6	Front spacer / PCB clip	3013W6SAT99P40X
17W5	Front spacer / PCB clip	3017W5SAT99P40X
21WA4	Front spacer / PCB clip	321WA4SAT99P40X
25W3	Front spacer / PCB clip	3025W3SAT99P40X
27W2	Front spacer / PCB clip	3027W2SAT99P40X
24W7	Front spacer / PCB clip	3024W7SAT99P40X
36W4	Front spacer / PCB clip	3036W4SAT99P40X
43W2	Front spacer / PCB clip	3043W2SAT99P40X
47W1	Front spacer / PCB clip	3047W1SAT99P40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer / PCB clip	3005W1PAT99P40X
7W2	Front spacer / PCB clip	3007W2PAT99P40X
11W1	Front spacer / PCB clip	3011W1PAT99P40X
9W4	Front spacer / PCB clip	3009W4PAT99P40X
13W3	Front spacer / PCB clip	3013W3PAT99P40X
17W2	Front spacer / PCB clip	3017W2PAT99P40X
21W1	Front spacer / PCB clip	3021W1PAT99P40X
13W6	Front spacer / PCB clip	3013W6PAT99P40X
17W5	Front spacer / PCB clip	3017W5PAT99P40X
21WA4	Front spacer / PCB clip	321WA4PAT99P40X
25W3	Front spacer / PCB clip	3025W3PAT99P40X
27W2	Front spacer / PCB clip	3027W2PAT99P40X
24W7	Front spacer / PCB clip	3024W7PAT99P40X
36W4	Front spacer / PCB clip	3036W4PAT99P40X
43W2	Front spacer / PCB clip	3043W2PAT99P40X
47W1	Front spacer / PCB clip	3047W1PAT99P40X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

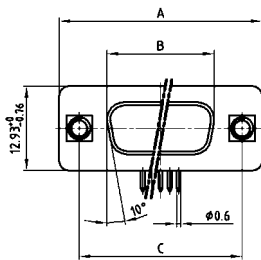
COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket

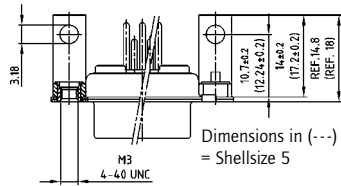


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

SOCKET CONNECTOR

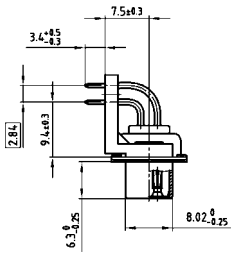


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 ^{+0.12} / _{-0.13}
2	39.52	24.79	33.30 ^{+0.15} / _{-0.10}
3	53.42	38.50	47.04 ^{+0.13} / _{-0.10}
4	69.70	54.96	63.50 ^{+0.13} / _{-0.14}
5	67.31	52.55	61.10 ^{+0.14} / _{-0.11}

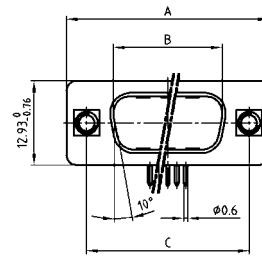
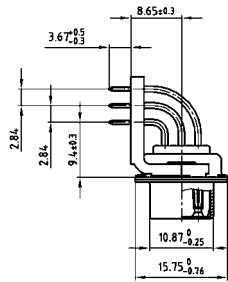


Dimensions in (---)
= Shellsize 5

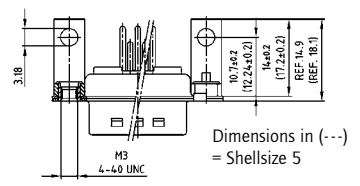
Shell size 1-4



Shell size 5

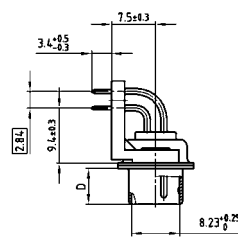


Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 ^{+0.12} / _{-0.13}	6.12
2	39.52	25.12	33.30 ^{+0.15} / _{-0.10}	6.12
3	53.42	38.84	47.04 ^{+0.13} / _{-0.10}	5.99
4	69.70	55.30	63.50 ^{+0.13} / _{-0.14}	5.99
5	67.31	52.68	61.10 ^{+0.14} / _{-0.11}	5.99

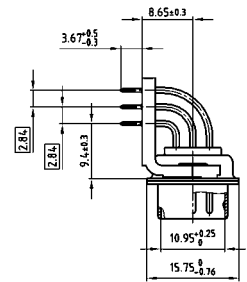


Dimensions in (---)
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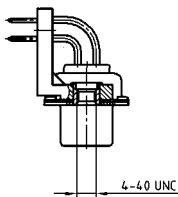
Shell size 1-4



Shell size 5



ORDER DATA



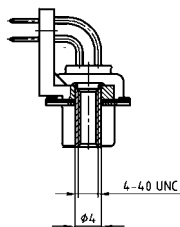
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAU99G20X
7W2	Threaded insert	3007W2SAU99G20X
11W1	Threaded insert	3011W1SAU99G20X
9W4	Threaded insert	3009W4SAU99G20X
13W3	Threaded insert	3013W3SAU99G20X
17W2	Threaded insert	3017W2SAU99G20X
21W1	Threaded insert	3021W1SAU99G20X
13W6	Threaded insert	3013W6SAU99G20X
17W5	Threaded insert	3017W5SAU99G20X
21WA4	Threaded insert	321WA4SAU99G20X
25W3	Threaded insert	3025W3SAU99G20X
27W2	Threaded insert	3027W2SAU99G20X
24W7	Threaded insert	3024W7SAU99G20X
36W4	Threaded insert	3036W4SAU99G20X
43W2	Threaded insert	3043W2SAU99G20X
47W1	Threaded insert	3047W1SAU99G20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAU99G20X
7W2	Threaded insert	3007W2PAU99G20X
11W1	Threaded insert	3011W1PAU99G20X
9W4	Threaded insert	3009W4PAU99G20X
13W3	Threaded insert	3013W3PAU99G20X
17W2	Threaded insert	3017W2PAU99G20X
21W1	Threaded insert	3021W1PAU99G20X
13W6	Threaded insert	3013W6PAU99G20X
17W5	Threaded insert	3017W5PAU99G20X
21WA4	Threaded insert	321WA4PAU99G20X
25W3	Threaded insert	3025W3PAU99G20X
27W2	Threaded insert	3027W2PAU99G20X
24W7	Threaded insert	3024W7PAU99G20X
36W4	Threaded insert	3036W4PAU99G20X
43W2	Threaded insert	3043W2PAU99G20X
47W1	Threaded insert	3047W1PAU99G20X

COMBINATION D-SUB – MOUNTING STYLES

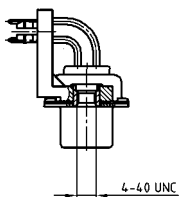
Solder pin – Angled – .370" / 9.4 mm – Precision machined contacts – Metal bracket

ORDER DATA



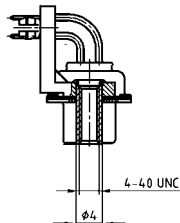
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer	3005W1SAU99H20X
7W2	Front spacer	3007W2SAU99H20X
11W1	Front spacer	3011W1SAU99H20X
9W4	Front spacer	3009W4SAU99H20X
13W3	Front spacer	3013W3SAU99H20X
17W2	Front spacer	3017W2SAU99H20X
21W1	Front spacer	3021W1SAU99H20X
13W6	Front spacer	3013W6SAU99H20X
17W5	Front spacer	3017W5SAU99H20X
21WA4	Front spacer	321WA4SAU99H20X
25W3	Front spacer	3025W3SAU99H20X
27W2	Front spacer	3027W2SAU99H20X
24W7	Front spacer	3024W7SAU99H20X
36W4	Front spacer	3036W4SAU99H20X
43W2	Front spacer	3043W2SAU99H20X
47W1	Front spacer	3047W1SAU99H20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer	3005W1PAU99H20X
7W2	Front spacer	3007W2PAU99H20X
11W1	Front spacer	3011W1PAU99H20X
9W4	Front spacer	3009W4PAU99H20X
13W3	Front spacer	3013W3PAU99H20X
17W2	Front spacer	3017W2PAU99H20X
21W1	Front spacer	3021W1PAU99H20X
13W6	Front spacer	3013W6PAU99H20X
17W5	Front spacer	3017W5PAU99H20X
21WA4	Front spacer	321WA4PAU99H20X
25W3	Front spacer	3025W3PAU99H20X
27W2	Front spacer	3027W2PAU99H20X
24W7	Front spacer	3024W7PAU99H20X
36W4	Front spacer	3036W4PAU99H20X
43W2	Front spacer	3043W2PAU99H20X
47W1	Front spacer	3047W1PAU99H20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert / PCB clip	3005W1SAU99G40X
7W2	Threaded insert / PCB clip	3007W2SAU99G40X
11W1	Threaded insert / PCB clip	3011W1SAU99G40X
9W4	Threaded insert / PCB clip	3009W4SAU99G40X
13W3	Threaded insert / PCB clip	3013W3SAU99G40X
17W2	Threaded insert / PCB clip	3017W2SAU99G40X
21W1	Threaded insert / PCB clip	3021W1SAU99G40X
13W6	Threaded insert / PCB clip	3013W6SAU99G40X
17W5	Threaded insert / PCB clip	3017W5SAU99G40X
21WA4	Threaded insert / PCB clip	321WA4SAU99G40X
25W3	Threaded insert / PCB clip	3025W3SAU99G40X
27W2	Threaded insert / PCB clip	3027W2SAU99G40X
24W7	Threaded insert / PCB clip	3024W7SAU99G40X
36W4	Threaded insert / PCB clip	3036W4SAU99G40X
43W2	Threaded insert / PCB clip	3043W2SAU99G40X
47W1	Threaded insert / PCB clip	3047W1SAU99G40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert / PCB clip	3005W1PAU99G40X
7W2	Threaded insert / PCB clip	3007W2PAU99G40X
11W1	Threaded insert / PCB clip	3011W1PAU99G40X
9W4	Threaded insert / PCB clip	3009W4PAU99G40X
13W3	Threaded insert / PCB clip	3013W3PAU99G40X
17W2	Threaded insert / PCB clip	3017W2PAU99G40X
21W1	Threaded insert / PCB clip	3021W1PAU99G40X
13W6	Threaded insert / PCB clip	3013W6PAU99G40X
17W5	Threaded insert / PCB clip	3017W5PAU99G40X
21WA4	Threaded insert / PCB clip	321WA4PAU99G40X
25W3	Threaded insert / PCB clip	3025W3PAU99G40X
27W2	Threaded insert / PCB clip	3027W2PAU99G40X
24W7	Threaded insert / PCB clip	3024W7PAU99G40X
36W4	Threaded insert / PCB clip	3036W4PAU99G40X
43W2	Threaded insert / PCB clip	3043W2PAU99G40X
47W1	Threaded insert / PCB clip	3047W1PAU99G40X



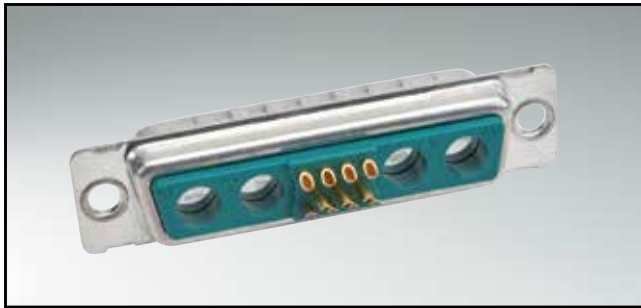
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer / PCB clip	3005W1SAU99H40X
7W2	Front spacer / PCB clip	3007W2SAU99H40X
11W1	Front spacer / PCB clip	3011W1SAU99H40X
9W4	Front spacer / PCB clip	3009W4SAU99H40X
13W3	Front spacer / PCB clip	3013W3SAU99H40X
17W2	Front spacer / PCB clip	3017W2SAU99H40X
21W1	Front spacer / PCB clip	3021W1SAU99H40X
13W6	Front spacer / PCB clip	3013W6SAU99H40X
17W5	Front spacer / PCB clip	3017W5SAU99H40X
21WA4	Front spacer / PCB clip	321WA4SAU99H40X
25W3	Front spacer / PCB clip	3025W3SAU99H40X
27W2	Front spacer / PCB clip	3027W2SAU99H40X
24W7	Front spacer / PCB clip	3024W7SAU99H40X
36W4	Front spacer / PCB clip	3036W4SAU99H40X
43W2	Front spacer / PCB clip	3043W2SAU99H40X
47W1	Front spacer / PCB clip	3047W1SAU99H40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer / PCB clip	3005W1PAU99H40X
7W2	Front spacer / PCB clip	3007W2PAU99H40X
11W1	Front spacer / PCB clip	3011W1PAU99H40X
9W4	Front spacer / PCB clip	3009W4PAU99H40X
13W3	Front spacer / PCB clip	3013W3PAU99H40X
17W2	Front spacer / PCB clip	3017W2PAU99H40X
21W1	Front spacer / PCB clip	3021W1PAU99H40X
13W6	Front spacer / PCB clip	3013W6PAU99H40X
17W5	Front spacer / PCB clip	3017W5PAU99H40X
21WA4	Front spacer / PCB clip	321WA4PAU99H40X
25W3	Front spacer / PCB clip	3025W3PAU99H40X
27W2	Front spacer / PCB clip	3027W2PAU99H40X
24W7	Front spacer / PCB clip	3024W7PAU99H40X
36W4	Front spacer / PCB clip	3036W4PAU99H40X
43W2	Front spacer / PCB clip	3043W2PAU99H40X
47W1	Front spacer / PCB clip	3047W1PAU99H40X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

COMBINATION D-SUB HIGH DENSITY WITH SIGNAL CONTACTS

Solder cup – Precision machined contacts – For wire size AWG 22

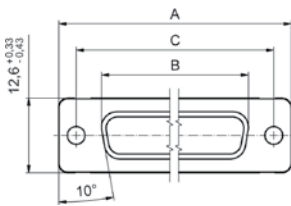


RoHS compliant

DESCRIPTION

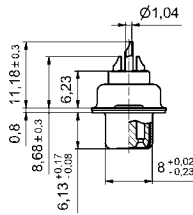
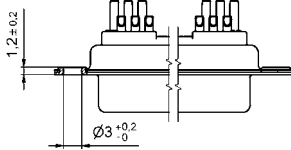
- Suitable for wire size AWG 22
- Mounting styles:
 - with through-hole, \varnothing .118" / 3 mm
 - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
(brass tin plated or stainless steel available on request)

SOCKET CONNECTOR

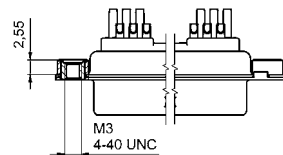


Shellsize	A -0.76	B -0.25	C		
2	39.52	24.79	33.30	$^{+0.15}$	$^{-0.10}$
3	53.42	38.50	47.04	$^{+0.13}$	
4	69.70	54.96	63.50	$^{+0.13}$	

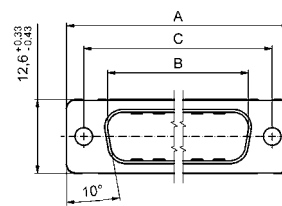
Mounting style: Through-hole



Mounting style Threaded insert

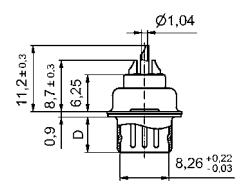
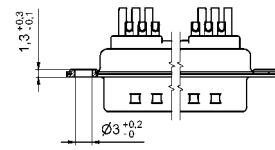


PLUG CONNECTOR

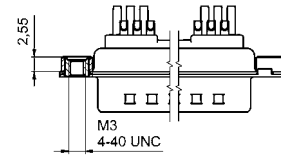


Shellsize	A -0.76	B -0.25	C	D -0.30	
2	39.52	25.12	33.30	$^{+0.15}$	6.12
3	53.42	38.84	47.04	$^{+0.13}$	5.99
4	69.70	55.30	63.50	$^{+0.13}$	5.99

Mounting style: Through-hole



Mounting style Threaded insert



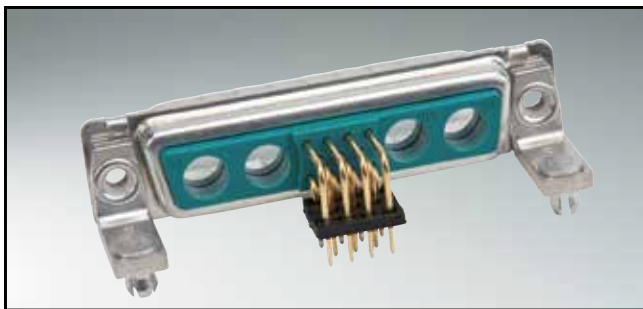
ORDER DATA

SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	Through-hole	3H19W1SAM99A10X
15W4	Through-hole	3H15W4SAM99A10X
45W2	Through-hole	3H45W2SAM99A10X
19W1	M3 threaded insert	3H19W1SAM99A20X
15W4	M3 threaded insert	3H15W4SAM99A20X
45W2	M3 threaded insert	3H45W2SAM99A20X
19W1	4-40 UNC threaded insert	3H19W1SAM99A30X
15W4	4-40 UNC threaded insert	3H15W4SAM99A30X
45W2	4-40 UNC threaded insert	3H45W2SAM99A30X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	Through-hole	3H19W1PAM99A10X
15W4	Through-hole	3H15W4PAM99A10X
45W2	Through-hole	3H45W2PAM99A10X
19W1	M3 threaded insert	3H19W1PAM99A20X
15W4	M3 threaded insert	3H15W4PAM99A20X
45W2	M3 threaded insert	3H45W2PAM99A20X
19W1	4-40 UNC threaded insert	3H19W1PAM99A30X
15W4	4-40 UNC threaded insert	3H15W4PAM99A30X
45W2	4-40 UNC threaded insert	3H45W2PAM99A30X

COMBINATION D-SUB HIGH DENSITY WITH SIGNAL CONTACTS

Solder pin – angled – ,350"/7,98 mm – Precision machined contacts – Metal bracket

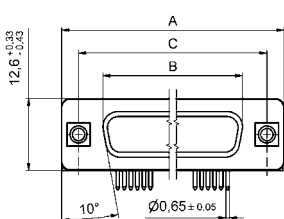


RoHS compliant

DESCRIPTION

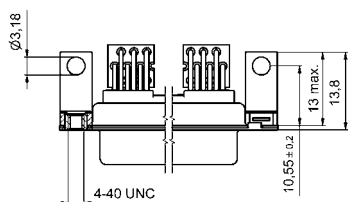
- Mounting styles:
 - mounting bracket and threaded insert 4-40 UNC
 - mounting bracket with front spacer 4-40 UNC
 - mounting bracket, PCB clip and threaded insert 4-40 UNC
 - mounting bracket, PCB clip and frontspacer 4-40 UNC
- Threaded lock M3 available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
(brass tin plated or stainless steel available on request)

SOCKET CONNECTOR

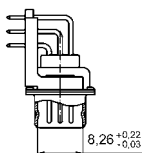


Shellsize	A -0.76	B -0.25	C
2	39.52	24.79	33.30 ^{+0.15} / _{-0.10}
3	53.42	38.50	47.04 ^{+0.13} / _{-0.10}
4	69.70	54.96	63.50 ^{+0.13} / _{-0.10}

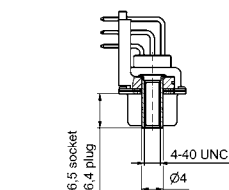
Mounting style: Through-hole



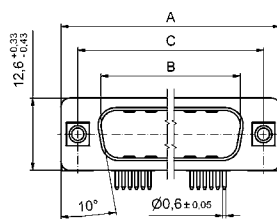
Mounting style: Threaded insert



Mounting style: Front spacer

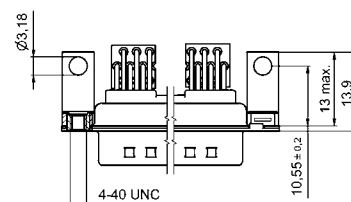


PLUG CONNECTOR

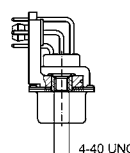


Shellsize	A -0.76	B -0.25	C	D -0.30
2	39.52	25.12	33.30 ^{+0.15} / _{-0.10}	6.12
3	53.42	38.84	47.04 ^{+0.13} / _{-0.10}	5.99
4	69.70	55.30	63.50 ^{+0.13} / _{-0.10}	5.99

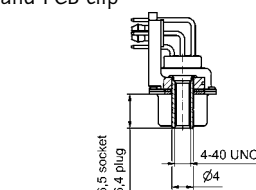
Mounting style: Through-hole



Mounting style: Threaded insert



Mounting style: Front spacer and PCB clip



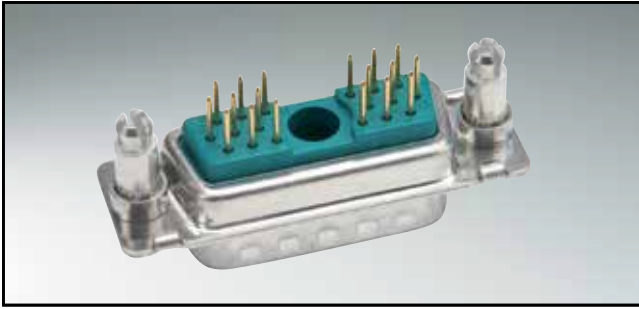
ORDER DATA

SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded insert	3H19W1SAT99G60X
15W4	4-40 UNC threaded insert	3H15W4SAT99G60X
45W2	4-40 UNC threaded insert	3H45W2SAT99G60X
19W1	4-40 UNC threaded insert and PCB clip	3H19W1SAT99G80X
15W4	4-40 UNC threaded insert and PCB clip	3H15W4SAT99G80X
45W2	4-40 UNC threaded insert and PCB clip	3H45W2SAT99G80X
19W1	4-40 UNC front spacer	3H19W1SAT99H60X
15W4	4-40 UNC front spacer	3H15W4SAT99H60X
45W2	4-40 UNC front spacer	3H45W2SAT99H60X
19W1	4-40 UNC front spacer and PCB clip	3H19W1SAT99H80X
15W4	4-40 UNC front spacer and PCB clip	3H15W4SAT99H80X
45W2	4-40 UNC front spacer and PCB clip	3H45W2SAT99H80X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded insert	3H19W1PAT99G60X
15W4	4-40 UNC threaded insert	3H15W4PAT99G60X
45W2	4-40 UNC threaded insert	3H45W2PAT99G60X
19W1	4-40 UNC threaded insert and PCB clip	3H19W1PAT99G80X
15W4	4-40 UNC threaded insert and PCB clip	3H15W4PAT99G80X
45W2	4-40 UNC threaded insert and PCB clip	3H45W2PAT99G80X
19W1	4-40 UNC front spacer	3H19W1PAT99H60X
15W4	4-40 UNC front spacer	3H15W4PAT99H60X
45W2	4-40 UNC front spacer	3H45W2PAT99H60X
19W1	4-40 UNC front spacer and PCB clip	3H19W1PAT99H80X
15W4	4-40 UNC front spacer and PCB clip	3H15W4PAT99H80X
45W2	4-40 UNC front spacer and PCB clip	3H45W2PAT99H80X

COMBINATION D-SUB HIGH DENSITY – WITH SIGNAL CONTACTS

Solder pin – Straight – Precision machined contacts

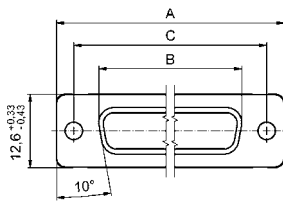


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

DESCRIPTION

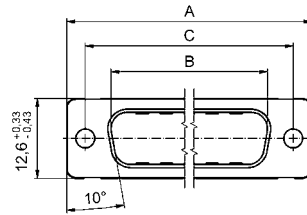
- Mounting styles:
 - with through-hole, $\varnothing .118''/3 \text{ mm}$
 - with 4-40 UNC threaded insert
 - with 4-40 UNC threaded rear spacer
 - with 4-40 UNC threaded lock and spacer clip
- M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated
(brass tin plated or stainless steel available on request)

SOCKET CONNECTOR



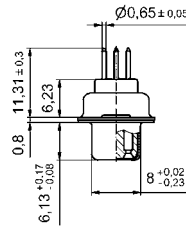
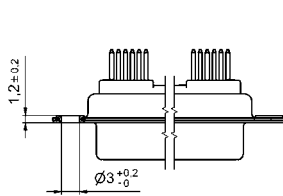
Shellsize	A -0.76	B -0.25	C	
2	39.52	24.79	33.30	$^{+0.15}_{-0.10}$
3	53.42	38.50	47.04	± 0.13
4	69.70	54.96	63.50	± 0.13

PLUG CONNECTOR

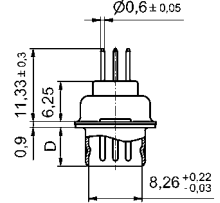
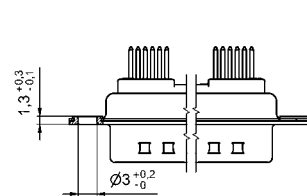


Shellsize	A -0.76	B +0.25	C	D -0.30	
2	39.52	25.12	33.30	$^{+0.15}_{-0.10}$	6.12
3	53.42	38.84	47.04	± 0.13	5.99
4	69.70	55.30	63.50	± 0.13	5.99

Mounting style: Through-hole



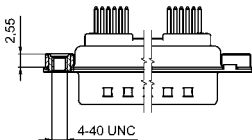
Mounting style: Through-hole



ORDER DATA

SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	Through-hole	3H19W1SAR99A10X
15W4	Through-hole	3H15W4SAR99A10X
45W2	Through-hole	3H45W2SAR99A10X
19W1	4-40 UNC threaded insert	3H19W1SAR99A30X
15W4	4-40 UNC threaded insert	3H15W4SAR99A30X
45W2	4-40 UNC threaded insert	3H45W2SAR99A30X

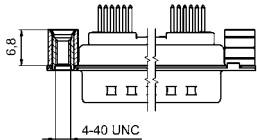
PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	Through-hole	3H19W1PAR99A10X
15W4	Through-hole	3H15W4PAR99A10X
45W2	Through-hole	3H45W2PAR99A10X
19W1	4-40 UNC threaded insert	3H19W1PAR99A30X
15W4	4-40 UNC threaded insert	3H15W4PAR99A30X
45W2	4-40 UNC threaded insert	3H45W2PAR99A30X



COMBINATION D-SUB HIGH DENSITY – MOUNTING STYLES

Solder pin – Straight – Precision machined contacts

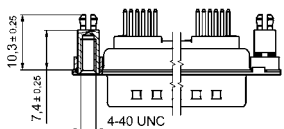
ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer	3H19W1SAR99A50X
15W4	4-40 UNC threaded rear spacer	3H15W4SAR99A50X
45W2	4-40 UNC threaded rear spacer	3H45W2SAR99A50X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer	3H19W1PAR99A50X
15W4	4-40 UNC threaded rear spacer	3H15W4PAR99A50X
45W2	4-40 UNC threaded rear spacer	3H45W2PAR99A50X

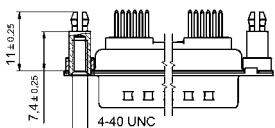
PCB thickness .063"/1,6 mm



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer with PCB clip	3H19W1SAR99E20X
15W4	4-40 UNC threaded rear spacer with PCB clip	3H15W4SAR99E20X
45W2	4-40 UNC threaded rear spacer with PCB clip	3H45W2SAR99E20X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer with PCB clip	3H19W1PAR99E20X
15W4	4-40 UNC threaded rear spacer with PCB clip	3H15W4PAR99E20X
45W2	4-40 UNC threaded rear spacer with PCB clip	3H45W2PAR99E20X

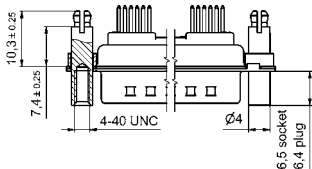
PCB thickness .091"/2,3 mm



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer with PCB clip	3H19W1SAR99E40X
15W4	4-40 UNC threaded rear spacer with PCB clip	3H15W4SAR99E40X
45W2	4-40 UNC threaded rear spacer with PCB clip	3H45W2SAR99E40X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer with PCB clip	3H19W1SAR99E40X
15W4	4-40 UNC threaded rear spacer with PCB clip	3H15W4SAR99E40X
45W2	4-40 UNC threaded rear spacer with PCB clip	3H45W2SAR99E40X

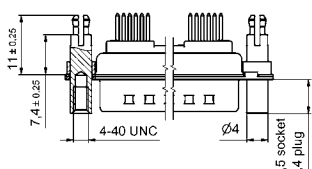
PCB thickness .063"/1,6 mm



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded lock and spacer clip	3H19W1SAR99F20X
15W4	4-40 UNC threaded lock and spacer clip	3H15W4SAR99F20X
45W2	4-40 UNC threaded lock and spacer clip	3H45W2SAR99F20X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded lock and spacer clip	3H19W1PAR99F20X
15W4	4-40 UNC threaded lock and spacer clip	3H15W4PAR99F20X
45W2	4-40 UNC threaded lock and spacer clip	3H45W2PAR99F20X

PCB thickness .091"/2,3 mm



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded lock and spacer clip	3H19W1SAR99F40X
15W4	4-40 UNC threaded lock and spacer clip	3H15W4SAR99F40X
45W2	4-40 UNC threaded lock and spacer clip	3H45W2SAR99F40X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded lock and spacer clip	3H19W1PAR99F40X
15W4	4-40 UNC threaded lock and spacer clip	3H15W4PAR99F40X
45W2	4-40 UNC threaded lock and spacer clip	3H45W2PAR99F40X

PCB clip .122" x 3.1 ± .004" / 0.10 mm hole diameter

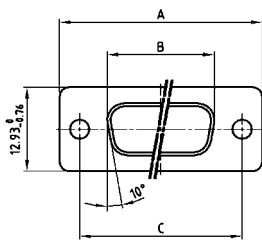
COMBINATION D-SUB WITHOUT CONTACTS

For straight high power, coaxial or high voltage contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

SOCKET CONNECTOR

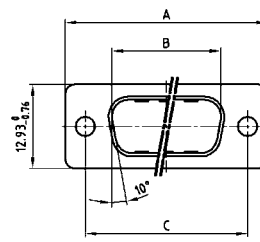


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 ^{+0.12} / _{-0.13}
2	39.52	24.79	33.30 ^{+0.15} / _{-0.10}
3	53.42	38.50	47.04 ^{+0.13}
4	69.70	54.96	63.50 ^{+0.13}

DESCRIPTION

- Designs: 2W2C; 3W3; 3W3C; 5W5; 8W8
- Mounting styles:
 - with through-hole, Ø .118"/3 mm, with 4-40 UNC threaded insert, with 4-40 UNC threaded rear spacer,
 - with 4-40 UNC threaded rear spacer with PCB clip .291"/7.4 mm for PCB thickness .063"/1.6 mm, .091"/2.3 mm, .126"/3.2 mm
- On request: Threaded rear spacer with PCB clip .256"/6.5 mm available
- On request: M3 thread design available
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7 | 16, 7 | 17

PLUG CONNECTOR

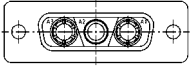


Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 ^{+0.12} / _{-0.13}	6.12
2	39.52	25.12	33.30 ^{+0.15} / _{-0.10}	6.12
3	53.42	38.84	47.04 ^{+0.13}	5.99
4	69.70	55.30	63.50 ^{+0.13}	5.99

Coded socket connectors

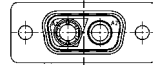


2W2C = 1 Socket – 1 Plug

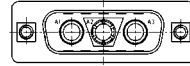


3W3C = 2 Sockets – 1 Plug

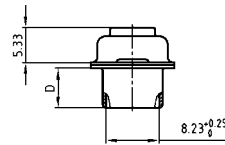
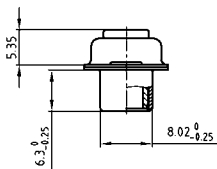
Coded plug connectors



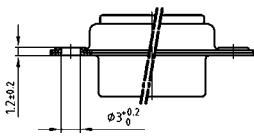
2W2C = 1 Plug – 1 Socket



3W3C = 2 Plugs – 1 Socket

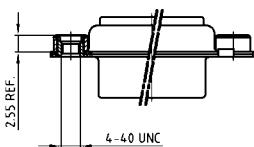


ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style	Part Number
3W3	Through-hole	3003W3SXX99A10X
5W5	Through-hole	3005W5SXX99A10X
8W8	Through-hole	3008W8SXX99A10X
Coded version		
2W2C	Through-hole	302W2CSXX99A10X
3W3C	Through-hole	303W3CSXX99A10X

PLUG CONNECTOR		
Design	Mounting style	Part Number
3W3	Through-hole	3003W3PXX99A10X
5W5	Through-hole	3005W5PXX99A10X
8W8	Through-hole	3008W8PXX99A10X
Coded version		
2W2C	Through-hole	302W2CPXX99A10X
3W3C	Through-hole	303W3CPXX99A10X



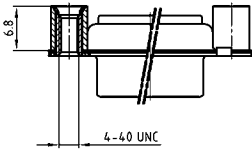
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3SXX99A30X
5W5	Threaded insert	3005W5SXX99A30X
8W8	Threaded insert	3008W8SXX99A30X
Coded version		
2W2C	Threaded insert	302W2CSXX99A30X
3W3C	Threaded insert	303W3CSXX99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3PXX99A30X
5W5	Threaded insert	3005W5PXX99A30X
8W8	Threaded insert	3008W8PXX99A30X
Coded version		
2W2C	Threaded insert	302W2CPXX99A30X
3W3C	Threaded insert	303W3CPXX99A30X

COMBINATION D-SUB – MOUNTING STYLES

For straight high power, coaxial or high voltage contacts

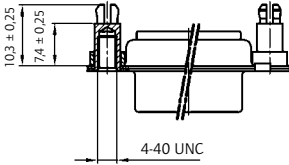
ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer	3003W3SXX99A50X
5W5	Threaded rear spacer	3005W5SXX99A50X
8W8	Threaded rear spacer	3008W8SXX99A50X
Coded version		
2W2C	Threaded rear spacer	302W2CSXX99A50X
3W3C	Threaded rear spacer	303W3CSXX99A50X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer	3003W3PXX99A50X
5W5	Threaded rear spacer	3005W5PXX99A50X
8W8	Threaded rear spacer	3008W8PXX99A50X
Coded version		
2W2C	Threaded rear spacer	302W2CPXX99A50X
3W3C	Threaded rear spacer	303W3CPXX99A50X

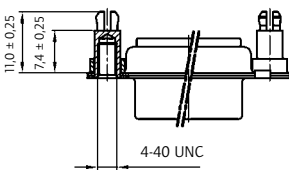
PCB thickness .063"/1.6 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3SXX99E20X
5W5	Threaded rear spacer PCB clip	3005W5SXX99E20X
8W8	Threaded rear spacer PCB clip	3008W8SXX99E20X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CSXX99E20X
3W3C	Threaded rear spacer PCB clip	303W3CSXX99E20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3PXX99E20X
5W5	Threaded rear spacer PCB clip	3005W5PXX99E20X
8W8	Threaded rear spacer PCB clip	3008W8PXX99E20X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CPXX99E20X
3W3C	Threaded rear spacer PCB clip	303W3CPXX99E20X

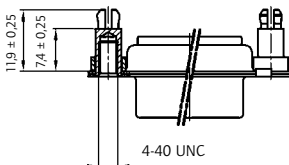
PCB thickness .091"/2.3 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3SXX99E40X
5W5	Threaded rear spacer PCB clip	3005W5SXX99E40X
8W8	Threaded rear spacer PCB clip	3008W8SXX99E40X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CSXX99E40X
3W3C	Threaded rear spacer PCB clip	303W3CSXX99E40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3PXX99E40X
5W5	Threaded rear spacer PCB clip	3005W5PXX99E40X
8W8	Threaded rear spacer PCB clip	3008W8PXX99E40X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CPXX99E40X
3W3C	Threaded rear spacer PCB clip	303W3CPXX99E40X

PCB thickness .126"/3.2 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3SXX99E60X
5W5	Threaded rear spacer PCB clip	3005W5SXX99E60X
8W8	Threaded rear spacer PCB clip	3008W8SXX99E60X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CSXX99E60X
3W3C	Threaded rear spacer PCB clip	303W3CSXX99E60X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3PXX99E60X
5W5	Threaded rear spacer PCB clip	3005W5PXX99E60X
8W8	Threaded rear spacer PCB clip	3008W8PXX99E60X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CPXX99E60X
3W3C	Threaded rear spacer PCB clip	303W3CPXX99E60X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter

COMBINATION D-SUB WITHOUT CONTACTS

For angled high power or coaxial contacts – Short metal bracket

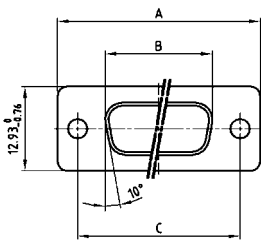


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

DESCRIPTION

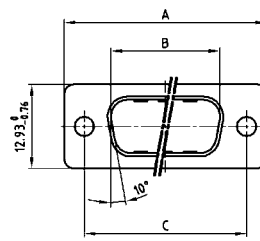
- Designs: 2W2C; 3W3; 3W3C; 5W5; 8W8
- Mounting styles:
 - Mounting bracket and 4-40 UNC threaded insert
 - Mounting bracket with 4-40 UNC front spacer
 - Mounting bracket, PCB clip and 4-40 UNC threaded insert
 - Mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Shell: Steel tin plated
(brass tin plated or stainless steel available on request)

SOCKET CONNECTOR



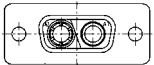
Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 ^{+0.12} / _{-0.13}
2	39.52	24.79	33.30 ^{+0.15} / _{-0.10}
3	53.42	38.50	47.04 ^{+0.13} / _{-0.10}
4	69.70	54.96	63.50 ^{+0.13} / _{-0.10}

PLUG CONNECTOR

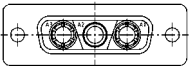


Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 ^{+0.12} / _{-0.13}	6.12
2	39.52	25.12	33.30 ^{+0.15} / _{-0.10}	6.12
3	53.42	38.84	47.04 ^{+0.13} / _{-0.10}	5.99
4	69.70	55.30	63.50 ^{+0.13} / _{-0.10}	5.99

Coded socket connectors

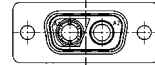


2W2C = 1 Socket – 1 Plug



3W3C = 2 Sockets – 1 Plug

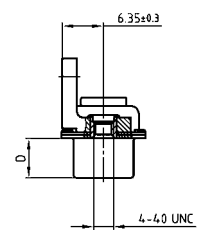
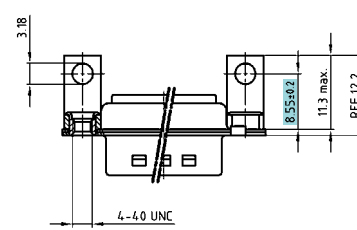
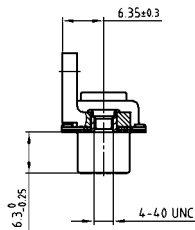
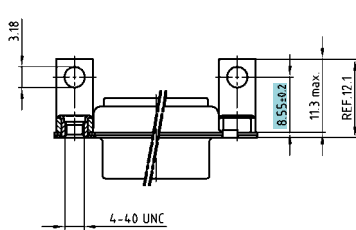
Coded plug connectors



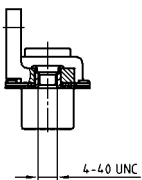
2W2C = 1 Plug – 1 Socket



3W3C = 2 Plugs – 1 Socket



ORDER DATA



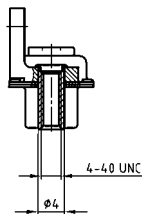
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3SXX99N20X
5W5	Threaded insert	3005W5SXX99N20X
8W8	Threaded insert	3008W8SXX99N20X
Coded version		
2W2C	Threaded insert	302W2CSXX99N20X
3W3C	Threaded insert	303W3CSXX99N20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3PXX99N20X
5W5	Threaded insert	3005W5PXX99N20X
8W8	Threaded insert	3008W8PXX99N20X
Coded version		
2W2C	Threaded insert	302W2CPXX99N20X
3W3C	Threaded insert	303W3CPXX99N20X

COMBINATION D-SUB – MOUNTING STYLES

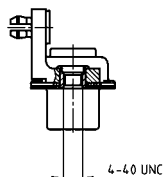
For angled high power or coaxial contacts – Short metal bracket

ORDER DATA



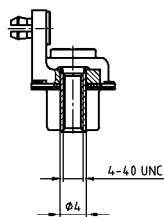
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer	3003W3SXX99P20X
5W5	Front spacer	3005W5SXX99P20X
8W8	Front spacer	3008W8SXX99P20X
Coded version		
2W2C	Front spacer	302W2CSXX99P20X
3W3C	Front spacer	303W3CSXX99P20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer	3003W3PXX99P20X
5W5	Front spacer	3005W5PXX99P20X
8W8	Front spacer	3008W8PXX99P20X
Coded version		
2W2C	Front spacer	302W2CPXX99P20X
3W3C	Front spacer	303W3CPXX99P20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert/PCB clip	3003W3SXX99N40X
5W5	Threaded insert/PCB clip	3005W5SXX99N40X
8W8	Threaded insert/PCB clip	3008W8SXX99N40X
Coded version		
2W2C	Threaded insert/PCB clip	302W2CSXX99N40X
3W3C	Threaded insert/PCB clip	303W3CSXX99N40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert/PCB clip	3003W3PXX99N40X
5W5	Threaded insert/PCB clip	3005W5PXX99N40X
8W8	Threaded insert/PCB clip	3008W8PXX99N40X
Coded version		
2W2C	Threaded insert/PCB clip	302W2CPXX99N40X
3W3C	Threaded insert/PCB clip	303W3CPXX99N40X



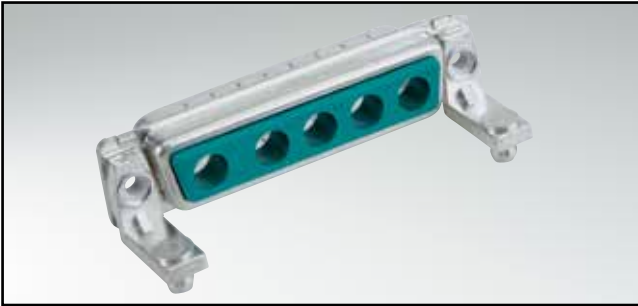
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer/PCB clip	3003W3SXX99P40X
5W5	Front spacer/PCB clip	3005W5SXX99P40X
8W8	Front spacer/PCB clip	3008W8SXX99P40X
Coded version		
2W2C	Front spacer/PCB clip	302W2CSXX99P40X
3W3C	Front spacer/PCB clip	303W3CSXX99P40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer/PCB clip	3003W3PXX99P40X
5W5	Front spacer/PCB clip	3005W5PXX99P40X
8W8	Front spacer/PCB clip	3008W8PXX99P40X
Coded version		
2W2C	Front spacer/PCB clip	302W2CPXX99P40X
3W3C	Front spacer/PCB clip	303W3CPXX99P40X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

COMBINATION D-SUB WITHOUT CONTACTS

For angled high power or coaxial contacts – Long metal bracket

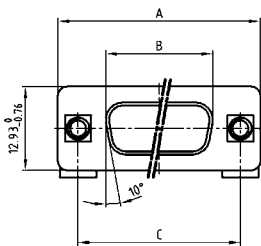


RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

DESCRIPTION

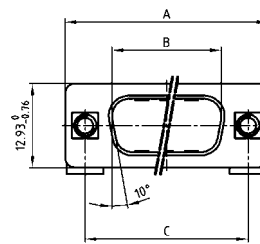
- Designs: 2W2C; 3W3; 3W3C; 5W5; 8W8
- Mounting styles:
 - with mounting bracket and 4-40 UNC threaded insert
 - with mounting bracket with 4-40 UNC front spacer
 - with mounting bracket, PCB clip and 4-40 UNC threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Shell: Steel tin plated
(brass tin plated or stainless steel available on request)

SOCKET CONNECTOR



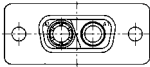
Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 ^{+0.12} / _{-0.13}
2	39.52	24.79	33.30 ^{+0.15} / _{-0.10}
3	53.42	38.50	47.04 ^{+0.13}
4	69.70	54.96	63.50 ^{+0.13}

PLUG CONNECTOR

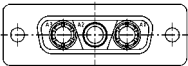


Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 ^{+0.12} / _{-0.13}	6.12
2	39.52	25.12	33.30 ^{+0.15} / _{-0.10}	6.12
3	53.42	38.84	47.04 ^{+0.13}	5.99
4	69.70	55.30	63.50 ^{+0.13}	5.99

CODED SOCKET CONNECTORS

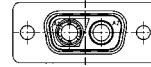


2W2C = 1 Socket – 1 Plug

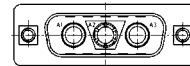


3W3C = 2 Sockets – 1 Plug

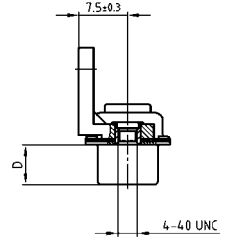
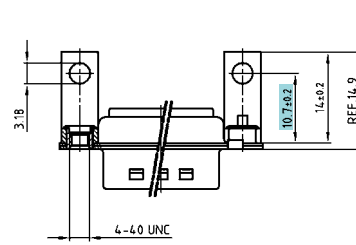
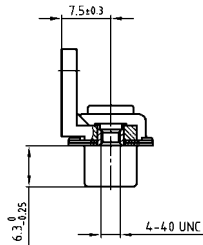
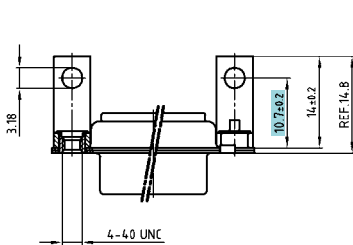
CODED PLUG CONNECTORS



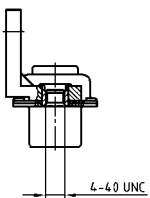
2W2C = 1 Plug – 1 Socket



3W3C = 2 Plugs – 1 Socket



ORDER DATA



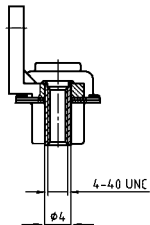
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3SXX99G20X
5W5	Threaded insert	3005W5SXX99G20X
8W8	Threaded insert	3008W8SXX99G20X
Coded version		
2W2C	Threaded insert	302W2CSXX99G20X
3W3C	Threaded insert	303W3CSXX99G20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3PXX99G20X
5W5	Threaded insert	3005W5PXX99G20X
8W8	Threaded insert	3008W8PXX99G20X
Coded version		
2W2C	Threaded insert	302W2CPXX99G20X
3W3C	Threaded insert	303W3CPXX99G20X

COMBINATION D-SUB – MOUNTING STYLES

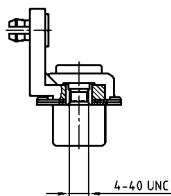
For angled high power or coaxial contacts – Long metal bracket

ORDER DATA



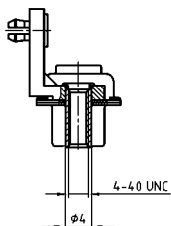
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer	3003W3SXX99H20X
5W5	Front spacer	3005W5SXX99H20X
8W8	Front spacer	3008W8SXX99H20X
Coded version		
2W2C	Front spacer	302W2CSXX99H20X
3W3C	Front spacer	303W3CSXX99H20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer	3003W3PXX99H20X
5W5	Front spacer	3005W5PXX99H20X
8W8	Front spacer	3008W8PXX99H20X
Coded version		
2W2C	Front spacer	302W2CPXX99H20X
3W3C	Front spacer	303W3CPXX99H20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert / PCB clip	3003W3SXX99G40X
5W5	Threaded insert / PCB clip	3005W5SXX99G40X
8W8	Threaded insert / PCB clip	3008W8SXX99G40X
Coded version		
2W2C	Threaded insert / PCB clip	302W2CSXX99G40X
3W3C	Threaded insert / PCB clip	303W3CSXX99G40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert / PCB clip	3003W3PXX99G40X
5W5	Threaded insert / PCB clip	3005W5PXX99G40X
8W8	Threaded insert / PCB clip	3008W8PXX99G40X
Coded version		
2W2C	Threaded insert / PCB clip	302W2CPXX99G40X
3W3C	Threaded insert / PCB clip	303W3CPXX99G40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer / PCB clip	3003W3SXX99H40X
5W5	Front spacer / PCB clip	3005W5SXX99H40X
8W8	Front spacer / PCB clip	3008W8SXX99H40X
Coded version		
2W2C	Front spacer / PCB clip	302W2CSXX99H40X
3W3C	Front spacer / PCB clip	303W3CSXX99H40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer / PCB clip	3003W3PXX99H40X
5W5	Front spacer / PCB clip	3005W5PXX99H40X
8W8	Front spacer / PCB clip	3008W8PXX99H40X
Coded version		
2W2C	Front spacer / PCB clip	302W2CPXX99H40X
3W3C	Front spacer / PCB clip	303W3CPXX99H40X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

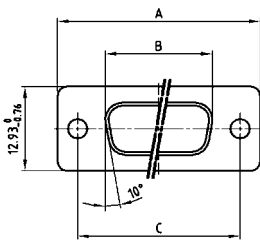
COMBINATION D-SUB WIHTOUT CONTACTS

Crimp body – For wire size AWG 20...24 and AWG 26...28



RoHS compliant – CSA listed, File No.: LR 115000-1 –UL listed, File No.: E 228329

SOCKET CONNECTOR

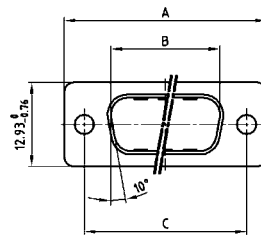


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 ^{+0.12} _{-0.13}
2	39.52	24.79	33.30 ^{+0.15} _{-0.10}
3	53.42	38.50	47.04 ^{+0.13}
4	69.70	54.96	63.50 ^{+0.13}
5	67.31	52.55	61.10 ^{+0.14} _{-0.11}

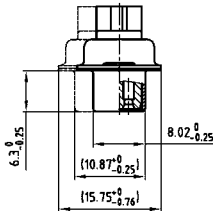
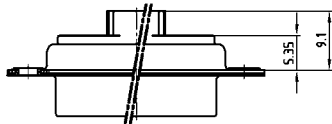
DESCRIPTION

- For precision machined contacts for wire size AWG 20...24 and AWG 26...28
- Mounting styles:
 - with through-hole, Ø .118" / 3 mm
 - with 4-40 UNC or M3 threaded insert
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7 | 16, 7 | 17

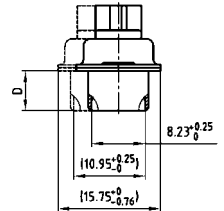
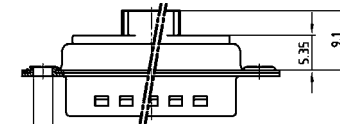
PLUG CONNECTOR



Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 ^{+0.12} _{-0.13}	6.12
2	39.52	25.12	33.30 ^{+0.15} _{-0.10}	6.12
3	53.42	38.84	47.04 ^{+0.13}	5.99
4	69.70	55.30	63.50 ^{+0.13}	5.99
5	67.31	52.68	61.10 ^{+0.14} _{-0.11}	5.99

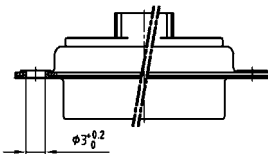


Shell size 5 = Dim. in (.)



Shell size 5 = Dim. in (.)

ORDER DATA



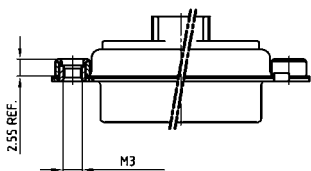
SOCKET CONNECTOR		
Design	Mounting style	Part Number
5W1	Through-hole	3005W1SXX99A10X
7W2	Through-hole	3007W2SXX99A10X
11W1	Through-hole	3011W1SXX99A10X
9W4	Through-hole	3009W4SXX99A10X
13W3	Through-hole	3013W3SXX99A10X
17W2	Through-hole	3017W2SXX99A10X
21W1	Through-hole	3021W1SXX99A10X
13W6	Through-hole	3013W6SXX99A10X
17W5	Through-hole	3017W5SXX99A10X
21WA4	Through-hole	321WA4SXX99A10X
25W3	Through-hole	3025W3SXX99A10X
27W2	Through-hole	3027W2SXX99A10X
24W7	Through-hole	3024W7SXX99A10X
36W4	Through-hole	3036W4SXX99A10X
43W2	Through-hole	3043W2SXX99A10X
47W1	Through-hole	3047W1SXX99A10X

PLUG CONNECTOR		
Design	Mounting style	Part Number
5W1	Through-hole	3005W1PXX99A10X
7W2	Through-hole	3007W2PXX99A10X
11W1	Through-hole	3011W1PXX99A10X
9W4	Through-hole	3009W4PXX99A10X
13W3	Through-hole	3013W3PXX99A10X
17W2	Through-hole	3017W2PXX99A10X
21W1	Through-hole	3021W1PXX99A10X
13W6	Through-hole	3013W6PXX99A10X
17W5	Through-hole	3017W5PXX99A10X
21WA4	Through-hole	321WA4PXX99A10X
25W3	Through-hole	3025W3PXX99A10X
27W2	Through-hole	3027W2PXX99A10X
24W7	Through-hole	3024W7PXX99A10X
36W4	Through-hole	3036W4PXX99A10X
43W2	Through-hole	3043W2PXX99A10X
47W1	Through-hole	3047W1PXX99A10X

COMBINATION D-SUB – MOUNTING STYLES

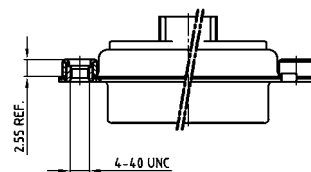
Crimp body (without contacts) – For wire size AWG 20...24 and AWG 26...28

ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1SXX99A20X
7W2	Threaded insert	3007W2SXX99A20X
11W1	Threaded insert	3011W1SXX99A20X
9W4	Threaded insert	3009W4SXX99A20X
13W3	Threaded insert	3013W3SXX99A20X
17W2	Threaded insert	3017W2SXX99A20X
21W1	Threaded insert	3021W1SXX99A20X
13W6	Threaded insert	3013W6SXX99A20X
17W5	Threaded insert	3017W5SXX99A20X
21WA4	Threaded insert	321WA4SXX99A20X
25W3	Threaded insert	3025W3SXX99A20X
27W2	Threaded insert	3027W2SXX99A20X
24W7	Threaded insert	3024W7SXX99A20X
36W4	Threaded insert	3036W4SXX99A20X
43W2	Threaded insert	3043W2SXX99A20X
47W1	Threaded insert	3047W1SXX99A20X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1PXX99A20X
7W2	Threaded insert	3007W2PXX99A20X
11W1	Threaded insert	3011W1PXX99A20X
9W4	Threaded insert	3009W4PXX99A20X
13W3	Threaded insert	3013W3PXX99A20X
17W2	Threaded insert	3017W2PXX99A20X
21W1	Threaded insert	3021W1PXX99A20X
13W6	Threaded insert	3013W6PXX99A20X
17W5	Threaded insert	3017W5PXX99A20X
21WA4	Threaded insert	321WA4PXX99A20X
25W3	Threaded insert	3025W3PXX99A20X
27W2	Threaded insert	3027W2PXX99A20X
24W7	Threaded insert	3024W7PXX99A20X
36W4	Threaded insert	3036W4PXX99A20X
43W2	Threaded insert	3043W2PXX99A20X
47W1	Threaded insert	3047W1PXX99A20X

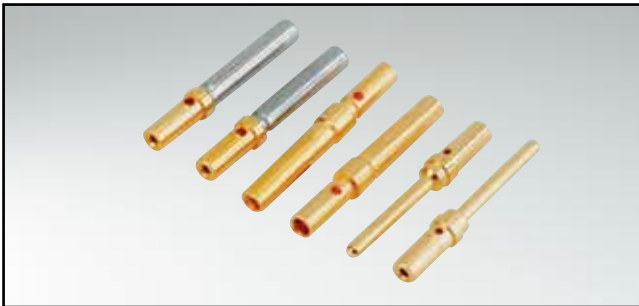


SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SXX99A30X
7W2	Threaded insert	3007W2SXX99A30X
11W1	Threaded insert	3011W1SXX99A30X
9W4	Threaded insert	3009W4SXX99A30X
13W3	Threaded insert	3013W3SXX99A30X
17W2	Threaded insert	3017W2SXX99A30X
21W1	Threaded insert	3021W1SXX99A30X
13W6	Threaded insert	3013W6SXX99A30X
17W5	Threaded insert	3017W5SXX99A30X
21WA4	Threaded insert	321WA4SXX99A30X
25W3	Threaded insert	3025W3SXX99A30X
27W2	Threaded insert	3027W2SXX99A30X
24W7	Threaded insert	3024W7SXX99A30X
36W4	Threaded insert	3036W4SXX99A30X
43W2	Threaded insert	3043W2SXX99A30X
47W1	Threaded insert	3047W1SXX99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PXX99A30X
7W2	Threaded insert	3007W2PXX99A30X
11W1	Threaded insert	3011W1PXX99A30X
9W4	Threaded insert	3009W4PXX99A30X
13W3	Threaded insert	3013W3PXX99A30X
17W2	Threaded insert	3017W2PXX99A30X
21W1	Threaded insert	3021W1PXX99A30X
13W6	Threaded insert	3013W6PXX99A30X
17W5	Threaded insert	3017W5PXX99A30X
21WA4	Threaded insert	321WA4PXX99A30X
25W3	Threaded insert	3025W3PXX99A30X
27W2	Threaded insert	3027W2PXX99A30X
24W7	Threaded insert	3024W7PXX99A30X
36W4	Threaded insert	3036W4PXX99A30X
43W2	Threaded insert	3043W2PXX99A30X
47W1	Threaded insert	3047W1PXX99A30X

COMBINATION D-SUB CONTACTS

Crimp contacts – Precision machined – For wire size AWG 20...24 and AWG 26...28



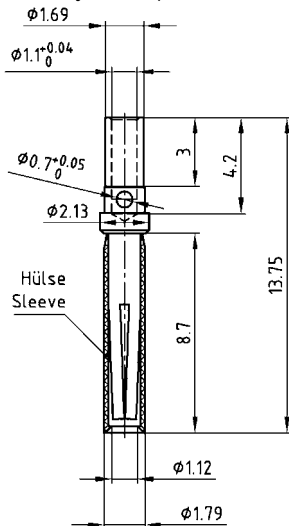
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

DESCRIPTION

- For wire size AWG 20...24 and AWG 26–28
- Quality class 3
- Quality class 1 and another quality classes on request

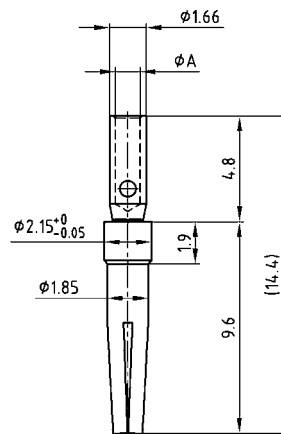
PRODUCT DRAWING

Signal socket crimp contact
(Closed entry version)

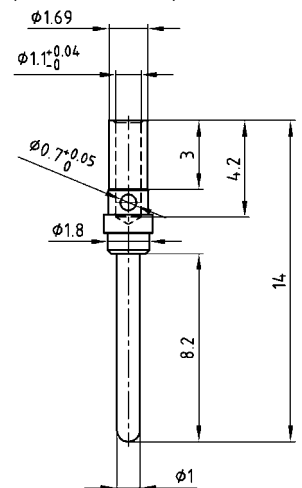


AWG	A +0.04
20-24	Ø 1.16
26-28	Ø 0.65

Signal socket crimp contact
(Standard version)



Signal plug crimp contact
(Standard version)



Designs

Contact material Socket	Copper alloy
Closed entry version	Stainless steel sleeve
Contact material plug	Brass
Quality class 1	500 mating cycles
Quality class 3	50 mating cycles

ORDER DATA

SOCKET CONTACT

Contact type	AWG	Quality class	Part Number
Socket* / Closed entry	20...24	1	132C15019X
Socket* / Closed entry	26...28	1	132C15029X
Socket / Standard	20...24	3	162A18709X
Socket / Standard	26...28	3	162A18719X

*Preferred type

PLUG CONTACT

Contact type	AWG	Quality class	Part Number
Plug / Standard	20...24	1	131C15019X
Plug / Standard	26...28	1	131C15029X
Plug / Standard	20...24	3	131A15019X
Plug / Standard	26...28	3	131A15029X

COMBINATION D-SUB CONTACTS

High power contacts – Solder cup – Straight



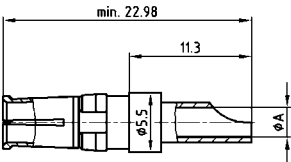
RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

DESCRIPTION

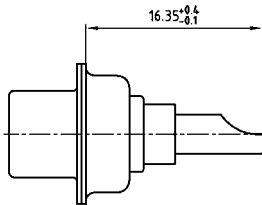
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side gold or tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

PRODUCT DRAWING

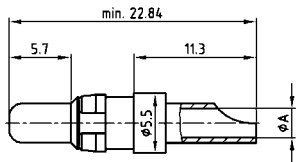
Socket contact



Installation dimension

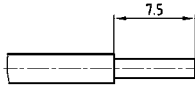


Plug contact

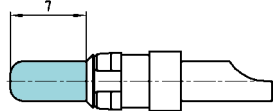


AWG	Current rating	ØA+0.15
16-20	10A	1.80
12-14	20A	2.70
10-12	30A	3.50
8-10	40A	4.80

Wire stripping



Premating contact



ORDER DATA

SOCKET CONTACT					
AWG	Quality class	Code* tin plated	Part Number tin plated	Code* gold plated	Part Number gold plated
16...20	1	F1	13-003501	41	132C10019X
16...20	3	F2	13-003503	61	132A10019X
12...14	1	F3	13-003511	42	132C10029X
12...14	3	F4	13-003513	62	132A10029X
10...12	1	F5	13-003521	43	132C10039X
10...12	3	F6	13-003523	63	132A10039X
8...10	1	F7	13-003531	44	132C10049X
8...10	3	F8	13-003533	64	132A10049X

PLUG CONTACT					
AWG	Quality class	Code* tin plated	Part Number tin plated	Code* gold plated	Part Number gold plated
16...20	1	F1	13-003541	41	131C10019X
16...20	3	F2	13-003543	61	131A10019X
12...14	1	F3	13-003551	42	131C10029X
12...14	3	F4	13-003553	62	131A10029X
10...12	1	F5	13-003561	43	131C10039X
10...12	3	F6	13-003563	63	131A10039X
8...10	1	F7	13-003571	44	131C10049X
8...10	3	F8	13-003573	64	131A10049X

PREMATING CONTACT					
AWG	Ampere	Quality class	Part Number tin plated	Quality class	Part Number gold plated
16-20	10 A	1	13-003581	1	131C10119X
12-14	20 A	1	13-003591	1	131C10129X
10-12	30 A	1	13-003601	1	131C10139X
8-10	40 A	1	13-003611	1	131C10149X

*Code use with part number creator

COMBINATION D-SUB CONTACTS

High power contacts – Screw termination – Straight – For wire size AWG 14



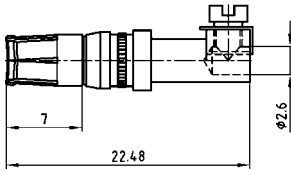
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

DESCRIPTION

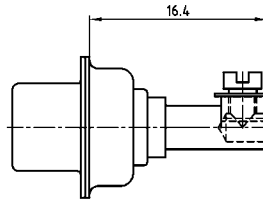
- Precision machined contacts for wire size **AWG 14**, max. 20 A
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request
- For field attachable applications

PRODUCT DRAWING

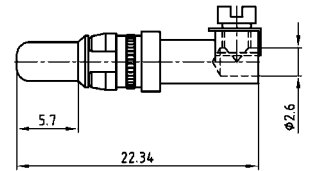
Socket contact



Installation dimension

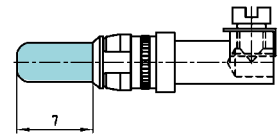


Plug contact



AWG	Current rating	ØA ^{+0.15}
16-20	10A	1.80
12-14	20A	2.70
10-12	30A	3.50
8-10	40A	4.80

Premating contact



ORDER DATA

SOCKET CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Socket	14	20 A	1	132C36009X
Socket	14	20 A	3	132A36009X

PLUG CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Plug	14	20 A	1	131C36009X
Plug	14	20 A	3	131A36009X
Plug premating	14	20 A	1	131C36109X

COMBINATION D-SUB CONTACTS

High power contacts – Crimp – Straight



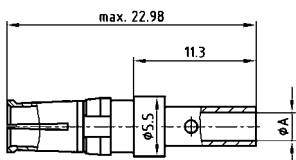
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

DESCRIPTION

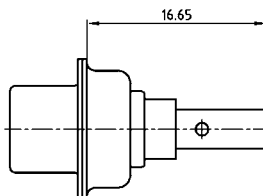
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side gold or tin plated
- Other quality classes on request

PRODUCT DRAWING

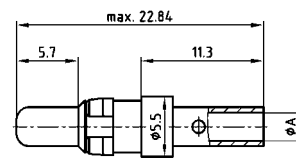
Socket contact



Installation dimension



Plug contact

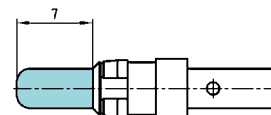


AWG	Current rating	ØA ^{+0.15}
16-20	10A	1.70
12-14	20A	2.60
10-12	30A	3.70
8-10	40A	4.60

Wire stripping



Premating contact



ORDER DATA

SOCKET CONTACT					
AWG	Ampere	Quality class	Part Number tin plated	Quality class	Part Number gold plated
16-20	10 A	1	13-003621	1	132C11019X
16-20	10 A	3	13-003623	3	132A11019X
12-14	20 A	1	13-003631	1	132C11029X
12-14	20 A	3	13-003633	3	132A11029X
10-12	30 A	1	13-003641	1	132C11039X
10-12	30 A	3	13-003643	3	132A11039X
8-10	40 A	1	13-003651	1	132C11049X
8-10	40 A	3	13-003653	3	132A11049X

PLUG CONTACT					
AWG	Ampere	Quality class	Part Number tin plated	Quality class	Part Number gold plated
16-20	10 A	1	13-003661	1	131C11019X
16-20	10 A	3	13-003663	3	131A11019X
12-14	20 A	1	13-003671	1	131C11029X
12-14	20 A	3	13-003673	3	131A11029X
10-12	30 A	1	13-003681	1	131C11039X
10-12	30 A	3	13-003683	3	131A11039X
8-10	40 A	1	13-003691	1	131C11049X
8-10	40 A	3	13-003693	3	131A11049X

PREMATING CONTACT					
AWG	Ampere	Quality class	Part Number tin plated	Quality class	Part Number tin plated
16-20	10 A	1	13-003701	1	131C11119X
12-14	20 A	1	13-003711	1	131C11129X
10-12	30 A	1	13-003721	1	131C11139X
8-10	40 A	1	13-003731	1	131C11149X

COMBINATION D-SUB CONTACTS

High power contacts – Solder cup or crimp – angled



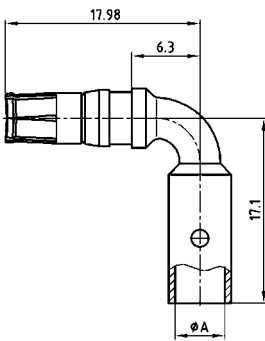
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

DESCRIPTION

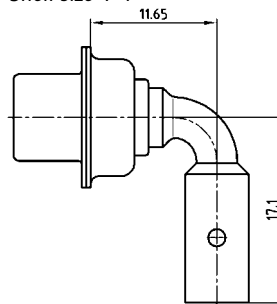
- Precision machined contacts
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request

PRODUCT DRAWING

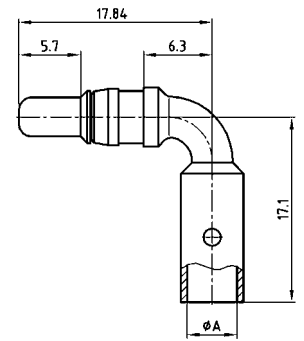
Socket contact



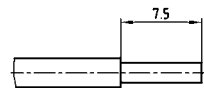
Installation dimension
Shell size 1-4



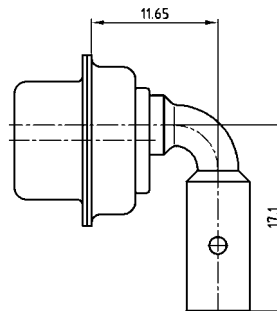
Plug contact



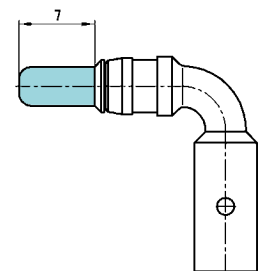
Wire stripping



Installation dimension
Shell size 5



Premating contact



AWG	Current rating	Ø A +0.15	Crimp Plier Part.no. 360X12269X
16-20	10A	1.70	1.40/1.25
12-14	20A	2.60	1.85/1.65
10-12	30A	3.70	2.30/2.05
8-10	40A	4.60	2.30/2.05

ORDER DATA

SOCKET CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Socket	16...20	10 A	1	132C16019X
Socket	16...20	10 A	3	132A16019X
Socket	12...14	20 A	1	132C16029X
Socket	12...14	20 A	3	132A16029X
Socket	10...12	30 A	1	132C16039X
Socket	10...12	30 A	3	132A16039X
Socket	8...10	40 A	1	132C16049X
Socket	8...10	40 A	3	132A16049X

PLUG CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Plug	16...20	10 A	1	131C16019X
Plug	16...20	10 A	3	131A16019X
Plug	12...14	20 A	1	131C16029X
Plug	12...14	20 A	3	131A16029X
Plug	10...12	30 A	1	131C16039X
Plug	10...12	30 A	3	131A16039X
Plug	8...10	40 A	1	131C16049X
Plug	8...10	40 A	3	131A16049X

PREMATING CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Plug premating	16...20	10 A	1	131C16119X
Plug premating	12...14	20 A	1	131C16129X
Plug premating	10...12	30 A	1	131C16139X
Plug premating	8...10	40 A	1	131C16149X

COMBINATION D-SUB CONTACTS

High power contacts – Solder pin – angled



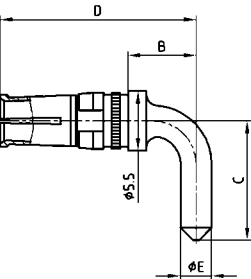
RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

DESCRIPTION

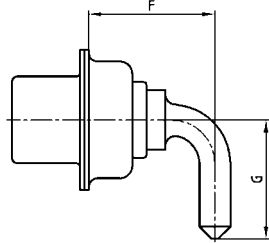
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

PRODUCT DRAWING

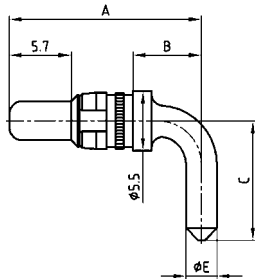
Socket contact



Installation dimension Shell size 1-4

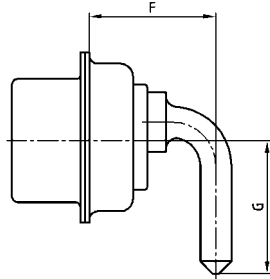


Plug contact

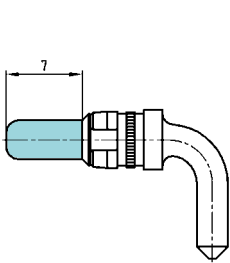


Shellsize	Current rating	Termination	A	B	C	D	ØE	F	G
1-4	15A	55/59	14.54	3.00	10.50	14.68	1.90	8.35	10.50
1-4	20A	56/73	17.84	6.30	11.00	17.98	2.85	11.65	11.00
1-4	30A	57/74	26.54	15.00	9.50	26.68	3.20	20.35	9.50
1-4	40A	58/75	17.84	6.30	11.00	17.98	3.75	11.65	11.00
5	20A	66/81	20.39	8.85	14.00	20.53	2.85	14.20	12.58
5	30A	67/82	20.39	8.85	14.00	20.53	3.20	14.20	12.58
5	30A	65/85	26.54	15.00	13.50	26.68	3.20	20.35	12.08
5	40A	60/77	20.39	8.85	14.00	20.53	3.75	14.20	12.58

Installation dimension Shell size 5



Premating contact



hole diameter of PCB:

- 1.95 = 2.30 ± 0.1
- 2.60 = 3.00 ± 0.1
- 2.85 = 3.20 ± 0.1
- 3.18 = 3.60 ± 0.1
- 3.75 = 4.10 ± 0.1

ORDER DATA

SOCKET CONTACT				
Contact type	Shell size	Quality class	Termination*	Part Number
Socket	1-4	1	55	132C13009X
Socket	1-4	3	59	132A13009X
Socket	1-4	1	56	132C13019X
Socket	1-4	3	73	132A13019X
Socket	1-4	1	57	132C13029X
Socket	1-4	3	74	132A13029X
Socket	1-4	1	58	132C13039X
Socket	1-4	3	75	132A13039X
Socket	5	1	66	132C13060X
Socket	5	3	81	132A13060X
Socket	5	1	67	132C13070X
Socket	5	3	82	132A13070X
Socket	5	1	65	132C13059X
Socket	5	3	85	132A13059X
Socket	5	1	60	132C13049X
Socket	5	3	77	132A13049X

PLUG CONTACT				
Contact type	Shell size	Quality class	Termination*	Part Number
Plug	1-4	1	55	131C13009X
Plug	1-4	3	59	131A13009X
Plug	1-4	1	56	131C13019X
Plug	1-4	3	73	131A13019X
Plug	1-4	1	57	131C13029X
Plug	1-4	3	74	131A13029X
Plug	1-4	1	58	131C13039X
Plug	1-4	3	75	131A13039X
Plug	5	1	66	131C13060X
Plug	5	3	81	131A13060X
Plug	5	1	67	131C13070X
Plug	5	3	82	131A13070X
Plug	5	1	65	131C13059X
Plug	5	3	85	131A13059X
Plug	5	1	60	131C13049X
Plug	5	3	77	131A13049X
Plug premating	1-4	1		131C13109X
Plug premating	1-4	1		131C13119X
Plug premating	1-4	1		131C13129X
Plug premating	1-4	1		131C13139X
Plug premating	5	1		131C13160X
Plug premating	5	1		131C13170X
Plug premating	5	1		131C13159X
Plug premating	5	1		131C13149X

*Code use with part number creator

COMBINATION D-SUB CONTACTS

High power contacts – Solder pin – Straight



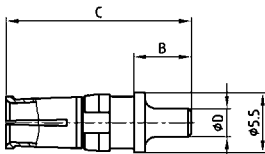
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

DESCRIPTION

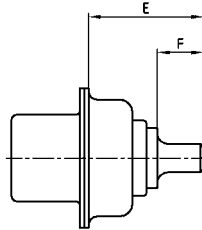
- Precision machined contacts
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Mating side gold plated
- Termination side tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

PRODUCT DRAWING

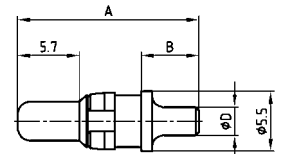
Socket contact



Installation dimension

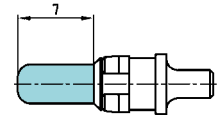


Plug contact



Current rating	Termination	A	B	C	Ø D	E	F
20A	48/68**	15.84	4.60	15.98	1.95	9.65	3.80
20A	49/69	16.84	5.30	16.98	2.60	10.65	4.30
20A	50/70**	16.24	4.70	16.38	2.85	10.05	3.70
30A	51/71	19.04	7.50	19.18	3.18	12.85	6.70
40A	52/72	17.29	5.75	17.43	3.75	11.10	4.75

Premating contact



PCB hole diameter at:

- 1.95 = 2.30 ± 0.1
- 2.60 = 3.00 ± 0.1
- 2.85 = 3.20 ± 0.1
- 3.18 = 3.60 ± 0.1
- 3.75 = 4.10 ± 0.1

ORDER DATA

SOCKET CONTACT				
Contact type	Ampere	Quality class	Termination*	Part Number
Socket	20 A	1	48**	132C12019X
Socket	20 A	3	68**	132A12019X
Socket	20 A	1	49	132C12029X
Socket	20 A	3	69	132A12029X
Socket	20 A	1	50**	132C12039X
Socket	20 A	3	70**	132A12039X
Socket	30 A	1	51	132C12049X
Socket	30 A	3	71	132A12049X
Socket	40 A	1	52	132C12059X
Socket	40 A	3	72	132A12059X

PLUG CONTACT				
Contact type	Ampere	Quality class	Termination*	Part Number
Plug	20 A	1	48**	131C12019X
Plug	20 A	3	68**	131A12019X
Plug	20 A	1	49	131C12029X
Plug	20 A	3	69	131A12029X
Plug	20 A	1	50**	131C12039X
Plug	20 A	3	70**	131A12039X
Plug	30 A	1	51	131C12049X
Plug	30 A	3	71	131A12049X
Plug	40 A	1	52	131C12059X
Plug	40 A	3	72	131A12059X

PREMATING CONTACT			
Contact type	Ampere	Quality class	Part Number
Plug premating	20A/ Ø .077"/1.95	1	131C12119X
Plug premating	20A/ Ø .102"/2.60	1	131C12129X
Plug premating	20A/ Ø .112"/2.85	1	131C12139X
Plug premating	30A/ Ø .125"/3.18	1	131C12149X
Plug premating	40A/ Ø .148"/3.75	1	131C12159X

*Code use with part number creator
 **not suitable for PCB 2.3 + 3.2 mm

COMBINATION D-SUB CONTACTS

High power contacts – Press-fit version – Straight



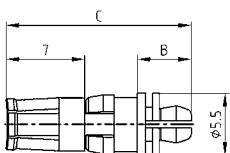
RoHS compliant

DESCRIPTION

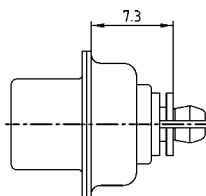
- Precision machined contacts
- Quality class 1: 500 mating cycles
- Mating area gold plated
- Press-fit area tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

PRODUCT DRAWING

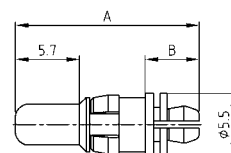
Socket contact



Installation dimension

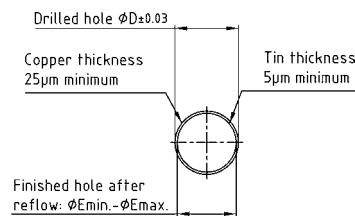


Plug contact



Termination Type	Ampere	A	B	C	D +0.03	E min.	E max.
P1	30A	16.34	4.8	16.48	3.13	2.96	3.11
P2	30A	16.34	4.8	16.48	3.27	3.10	3.25
P4	30A	15.94	4.4	16.08	3.22	3.02	3.20

PCB hole drilling for high power pressfit contact



ORDER DATA

SOCKET CONTACT				
Contact type	Ampere	Quality class	Termination*	Part Number
Socket	30 A	1	P1	132C00229A
Socket	30 A	1	P2	132C00299A
Socket	30 A	1	P4	132C19019X

PLUG CONTACT				
Contact type	Ampere	Quality class	Termination*	Part Number
Plug	30 A	1	P1	131C00319A
Plug	30 A	1	P2	131C00389A
Plug	30 A	1	P4	131C19019X

COMBINATION D-SUB CONTACTS

High voltage contacts – Solder termination – Straight and angled – For wire size AWG 20



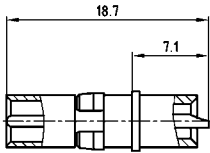
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

DESCRIPTION

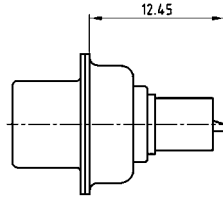
- Precision machined contacts for wire size **AWG 20**, max. 2,8 kV
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request

PRODUCT DRAWING

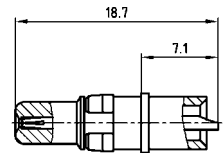
Socket contact straight



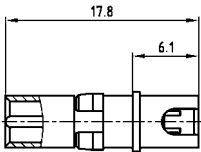
Installation dimension straight



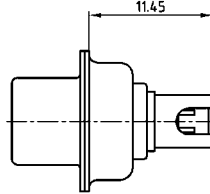
Plug contact straight



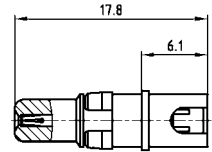
Socket contact angled



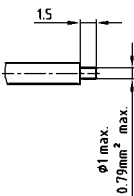
Installation dimension angled



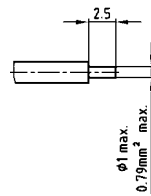
Plug contact angled



Wire stripping



Wire stripping



ORDER DATA

SOCKET CONTACT			PLUG CONTACT		
Contact type	AWG	Part Number	Contact type	AWG	Part Number
Socket/Straight	20	132J14019X	Plug/Straight	20	131J14019X
Socket/Angled	20	132J14519X	Plug/Angled	20	131J14519X

COMBINATION D-SUB CONTACTS

Coaxial contacts – Straight – Inner conductor solder-, outer conductor crimp- / solder termination



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

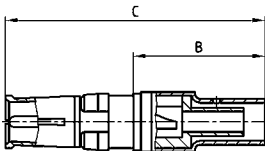
DESCRIPTION

- 50 Ω and 75 Ω-design
- Contact platings mating area:
 - .051 μm / 1.3 μm Au inner conductor /
 - .032 μm / 0.8 μm Au outer conductor
 - .008 μm / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
 - .008 μm / 0.2 μm Au
 - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

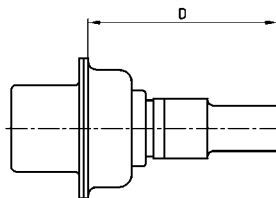
PRODUCT DRAWING

50 Ω version

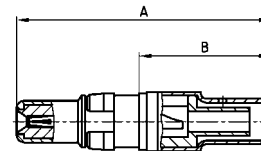
Socket contact



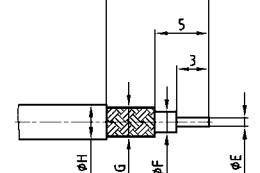
Installation dimension



Plug contact



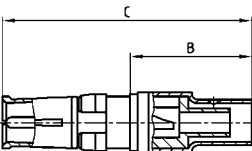
Wire stripping



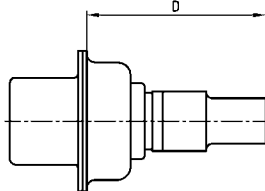
Usable Cables RG	A	B	C	D max.	Ø E max.	Ø F max.	Ø G max.	Ø H max.
178BU, 196AU, 404 U	22.50	11.20	23.00	17.55	0.85	1.20	1.40	2.30
174U, 188AU, 316U	22.50	11.20	23.00	17.55	0.85	1.90	2.30	3.20
180BU	22.50	11.20	23.00	17.55	0.85	2.80	3.10	4.50
58CU, 141AU	26.30	14.80	26.80	20.15	1.00	3.00	3.60	5.20
316U double braided	23.50	12.20	24.00	17.55	0.85	1.90	2.70	3.20

75 Ω version

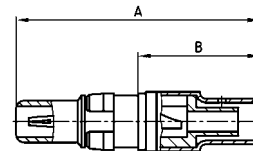
Socket contact



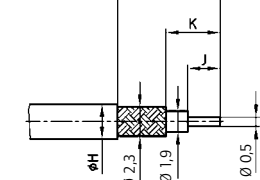
Installation dimension



Plug contact



Wire stripping



Usable Cables RG	A	B	C	D max.	Ø H max.	J	K	L
179BU, 187AU	18.55	7.30	19.05	12.80	3.20	2.00	3.10	6.00
179BU, 187AU	22.50	11.20	23.00	16.70	3.20	3.00	5.00	9.50

ORDER DATA

SOCKET CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003004	132J20019X
50 Ω	174U, 188AU, 316U	13-003014	132J20029X
50 Ω	180BU	13-003024	132J20039X
50 Ω	58CU, 141AU	13-003034	132J20049X
50 Ω	316U double braided	13-003044	132J20059X
75 Ω	179BU, 187AU (B=.287"/7.3mm)	13-003054	132J30019X
75 Ω	179BU, 187 AU (B=.441"/11.2 mm)	13-003064	132J30029X

PLUG CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003074	131J20019X
50 Ω	174U, 188AU, 316U	13-003084	131J20029X
50 Ω	180BU	13-003094	131J20039X
50 Ω	58CU, 141AU	13-003104	131J20049X
50 Ω	316U double braided	13-003114	131J20059X
75 Ω	179BU, 187AU (B=.287"/7.3mm)	13-003124	131J30019X
75 Ω	179BU, 187 AU (B=.441"/11.2 mm)	13-003134	131J30029X

SOCKET CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003003	132A20019X
50 Ω	174U, 188AU, 316U	13-003013	132A20029X
50 Ω	180BU	13-003023	132A20039X
50 Ω	58CU, 141AU	13-003033	132A20049X
50 Ω	316U double braided	13-003043	132A20059X
75 Ω	179BU, 187AU (B=.287"/7.3mm)	13-003053	132A30019X
75 Ω	179BU, 187 AU (B=.441"/11.2 mm)	13-003063	132A30029X

PLUG CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003073	131A20019X
50 Ω	174U, 188AU, 316U	13-003083	131A20029X
50 Ω	180BU	13-003093	131A20039X
50 Ω	58CU, 141AU	13-003103	131A20049X
50 Ω	316U double braided	13-003113	131A20059X
75 Ω	179BU, 187AU (B=.287"/7.3mm)	13-003123	131A30019X
75 Ω	179BU, 187 AU (B=.441"/11.2 mm)	13-003133	131A30029X

COMBINATION D-SUB CONTACTS

Coaxial contacts – Straight – Inner and outer conductor crimp termination



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

DESCRIPTION

- 50 Ω and 75 Ω-design
- Contact platings mating area:
 - .051 μm / 1.3 μm Au inner conductor /
 - .032 μm / 0.8 μm Au outer conductor
 - .008 μm / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
 - .008 μm / 0.2 μm Au
 - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

PRODUCT DRAWING

50 Ω version

Socket contact



Installation dimension



Plug contact



Wire stripping



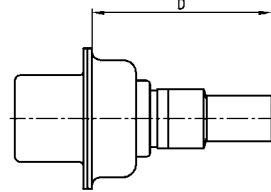
Usable Cables RG	A	B	C	D max.	Ø E max.	Ø F max.	Ø G max.	Ø H max.
174Bu, 188AU, 316U	22.50	11.20	23.00	16.60	0.60	1.90	2.30	3.20
316U double braided	22.50	11.20	23.00	16.60	0.60	1.90	3.00	3.80
58CU, 141AU	22.20	10.90	22.70	16.30	1.30	3.70	4.30	5.20

75 Ω version

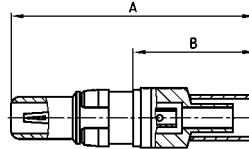
Socket contact



Installation dimension



Plug contact



Wire stripping



Usable Cables RG	A	B	C	D	Ø F max.	Ø G max.	Ø H max.	L
179BU, 187AU	22.45	11.20	22.95	16.70	1.90	2.30	3.20	9.30
180BU	21.65	10.40	22.15	15.90	2.80	3.20	4.50	8.80

ORDER DATA

SOCKET CONTACT

Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003144	132J21019X
50 Ω	316U double braided	13-003154	132J21029X
50 Ω	58CU, 141AU	13-003164	132J21039X
75 Ω	179BU, 187AU	13-003174	132J31019X
75 Ω	180BU	13-003184	132J31029X

PLUG CONTACT

Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003194	131J21019X
50 Ω	316U double braided	13-003204	131J21029X
50 Ω	58CU, 141AU	13-003214	131J21039X
75 Ω	179BU, 187AU	13-003224	131J31019X
75 Ω	180BU	13-003234	131J31029X

BUCHSENKONTAKT

Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003143	132A21019X
50 Ω	316U double braided	13-003153	132A21029X
50 Ω	58CU, 141AU	13-003163	132A21039X
75 Ω	179BU, 187AU	13-003173	132A31019X
75 Ω	180BU	13-003183	132A31029X

PLUG CONTACT

Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003193	131A21019X
50 Ω	316U double braided	13-003203	131A21029X
50 Ω	58CU, 141AU	13-003213	131A21039X
75 Ω	179BU, 187AU	13-003223	131A31019X
75 Ω	180BU	13-003233	131A31029X

COMBINATION D-SUB CONTACTS

Coaxial contacts – Angled – Inner conductor solder-, outer conductor crimp- / Solder termination



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

DESCRIPTION

- 50 Ω design
- Contact platings mating area:
 - .051 μ" / 1.3 μm Au inner conductor /
 - .032 μ" / 0.8 μm Au outer conductor
 - .008 μ" / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
 - .008 μ" / 0.2 μm Au
 - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

PRODUCT DRAWING

50 Ω version

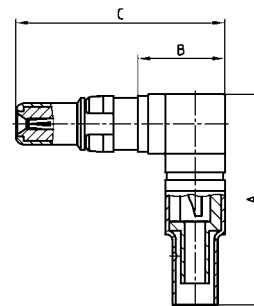
Socket contact



Installation dimension



Plug contact



Wire stripping



Usable Cables RG	A	B	C	D	E	Ø F max.	Ø G max.	Ø H max.	Ø J max.
174U, 188AU, 316U	18.50	8.20	19.30	19.80	15.70	0.85	1.90	2.30	3.20
178BU, 196AU, 404U	18.50	8.20	19.30	19.80	15.70	0.85	1.20	1.40	2.30
316U double braided	19.50	8.20	19.30	19.80	16.70	0.85	1.90	2.70	3.50

ORDER DATA

SOCKET CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003244	132J22029X
50 Ω	174U, 188AU, 316U	13-003254	132J22019X
50 Ω	316U double braided	13-003264	132J22039X

PLUG CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003274	131J22029X
50 Ω	174U, 188AU, 316U	13-003284	131J22019X
50 Ω	316U double braided	13-003294	131J22039X

SOCKET CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003243	132A22029X
50 Ω	174U, 188AU, 316U	13-003253	132A22019X
50 Ω	316U double braided	13-003263	132A22039X

PLUG CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003273	131A22029X
50 Ω	174U, 188AU, 316U	13-003283	131A22019X
50 Ω	316U double braided	13-003293	131A22039X

COMBINATION D-SUB CONTACTS

Coaxial contacts – Angled – Inner- and outer conductor crimp termination



RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
 - .051 μ"/1.3 μm Au inner conductor /
 - .032 μ"/0.8 μm Au outer conductor
 - .008 μ"/0.2 μm Au inner and outer conductor
- Contact platings termination area:
 - .008 μ"/0.2 μm Au
 - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

PRODUCT DRAWING

50 Ω version

Socket contact



Installation dimension



Plug contact

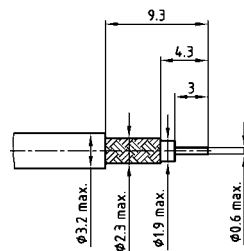


75 Ω version

Socket contact

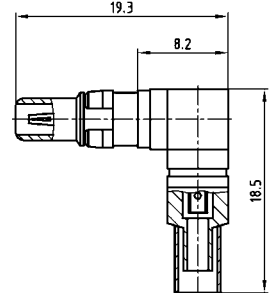


Wire stripping



verwendbare Kabel: RG- 174U, 188AU, 316U
Usable Cables

Plug contact



ORDER DATA

SOCKET CONTACT

Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003304	132J23019X
75 Ω	179BU, 187AU	13-003314	132J33019X

PLUG CONTACT

Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003324	131J23019X
75 Ω	179BU, 187AU	13-003334	131J33019X

SOCKET CONTACT

Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003303	132A23019X
75 Ω	179BU, 187AU	13-003313	132A33019X

PLUG CONTACT

Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003323	131A23019X
75 Ω	179BU, 187AU	13-003333	131A33019X

COMBINATION D-SUB CONTACTS

Coaxial contacts – Straight – PCB termination – 3 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
 - .051 μ" / 1.3 μm Au inner conductor /
 - .032 μ" / 0.8 μm Au outer conductor
 - .008 μ" / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
 - .008 μ" / 0.2 μm Au
 - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

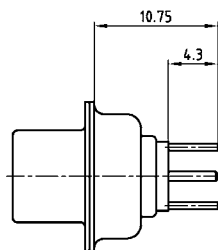
PRODUCT DRAWING

50 Ω version

Socket contact



Installation dimension



Plug contact



75 Ω version

Socket contact



Plug contact



ORDER DATA

SOCKET CONTACT				
Imp.	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	L1	13-003344	76	132J24019X
75 Ω	L2	13-003354	86	132J34019X

PLUG CONTACT				
Imp.	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	L1	13-003364	76	131J24019X
75 Ω	L2	13-003374	86	131J34019X

SOCKET CONTACT				
Imp.	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	L3	13-003343	G7	132A24019X
75 Ω	L4	13-003353	G8	132A34019X

PLUG CONTACT				
Imp.	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	L3	13-003363	G7	131A24019X
75 Ω	L4	13-003373	G8	131A34019X

*Code use with part number creator

COMBINATION D-SUB CONTACTS

Coaxial contacts – Angled – PCB termination – 3 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

DESCRIPTION

- 50 Ω and 75 Ω-design
- Contact platings mating area:
 - .051 μm / 1.3 μm Au inner conductor /
 - .032 μm / 0.8 μm Au outer conductor
 - .008 μm / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
 - .008 μm / 0.2 μm Au
 - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

PRODUCT DRAWING

50 Ω version

Socket contact

Installation dimension

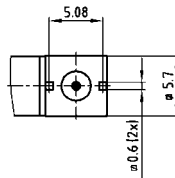
Plug contact



75 Ω version

Socket contact

Plug contact



Shellsize	A	B	C	D	E	F
1-4	13.80	9.30	20.70	21.20	11.00	9.30
5	16.80	11.80	23.20	23.70	14.00	11.80

ORDER DATA

SOCKET CONTACT					
Imp.	Shell size	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	1-4	L5	13-003384	78	132J25019X
50 Ω	5	L6	13-003394	79	132J25029X
75 Ω	1-4	L7	13-003404	88	132J35019X
75 Ω	5	L8	13-003414	89	132J35029X

PLUG CONTACT					
Imp.	Shell size	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	1-4	L5	13-003424	78	131J25019X
50 Ω	5	L6	13-003434	79	131J25029X
75 Ω	1-4	L7	13-003444	88	131J35019X
75 Ω	5	L8	13-003454	89	131J35029X

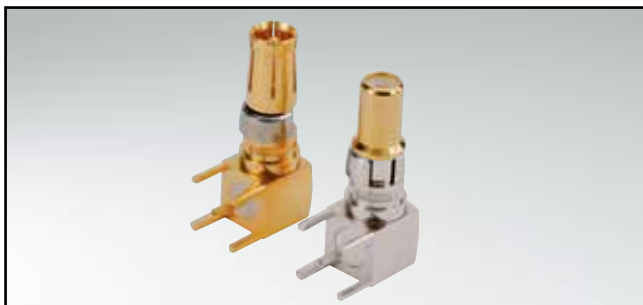
SOCKET CONTACT					
Imp.	Shell size	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	1-4	L9	13-003383	G9	132A25019X
50 Ω	5	M1	13-003393	H1	132A25029X
75 Ω	1-4	M2	13-003403	H2	132A35019X
75 Ω	5	M3	13-003413	H3	132A35029X

PLUG CONTACT					
Imp.	Shell size	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	1-4	L9	13-003423	G9	131A25019X
50 Ω	5	M1	13-003433	H1	131A25029X
75 Ω	1-4	M2	13-003443	H2	131A35019X
75 Ω	5	M3	13-003453	H3	131A35029X

*Code use with part number creator

COMBINATION D-SUB CONTACTS

Coaxial contacts – Angled – PCB termination – 5 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

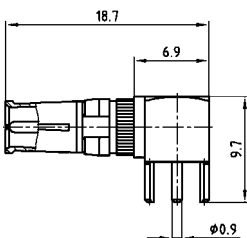
DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
 - .051 μ"/1.3 μm Au inner conductor /
 - .032 μ"/0.8 μm Au outer conductor
 - .008μ"/0.2 μm Au inner and outer conductor
- Contact platings termination area:
 - .008 μ"/0.2 μm Au
 - tin plated
- Other platings on request

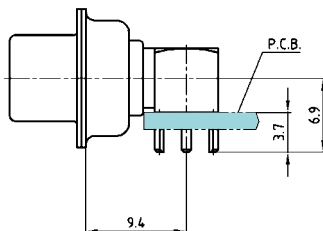
PRODUCT DRAWING

50 Ω version

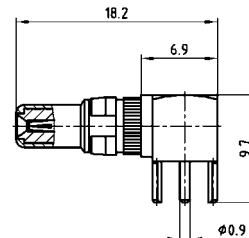
Socket contact



Installation dimension

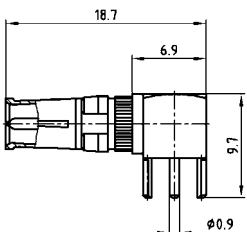


Plug contact

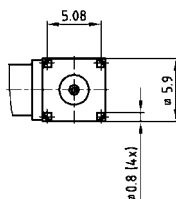


75 Ω version

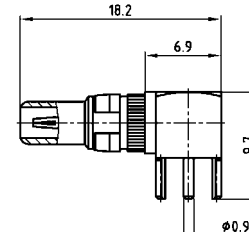
Socket contact



For mounting connector on edge of PCB without metal bracket



Plug contact



ORDER DATA

SOCKET CONTACT				
Imp.	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	M4	13-003464	80	132J25519X
75 Ω	M5	13-003474	90	132J35519X

PLUG CONTACT				
Imp.	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	M4	13-003484	80	131J25519X
75 Ω	M5	13-003494	90	131J35519X

SOCKET CONTACT				
Imp.	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	M6	13-003463	H4	132A25519X
75 Ω	M7	13-003473	H5	132A35519X

PLUG CONTACT				
Imp.	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	M6	13-003483	H4	131A25519X
75 Ω	M7	13-003493	H5	131A35519X

*Code use with part number creator

COMBINATION D-SUB – DUAL PORT WITH SIGNAL AND POWER CONTACTS

Solder pin – Angled – Precision machined contacts – Connector spacing .750" / 19,05 mm



RoHS compliant

DESCRIPTION

- Designs: 5W1/ 7W2/ 13W3/ 17W2/ 17W5
- Mounting styles:
 - with mounting bracket and 4-40 UNC threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- Other variations on request
- Upper connector is rotated 180 degrees

PRODUCT DRAWING

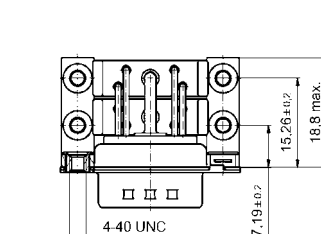
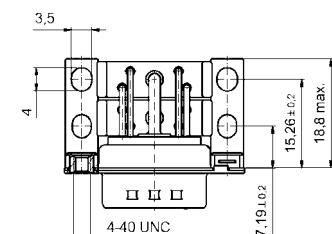
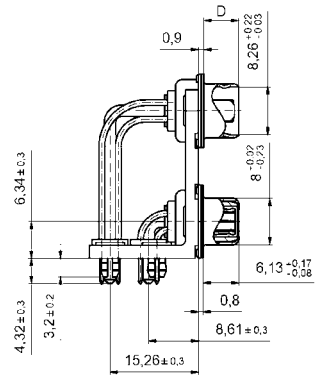
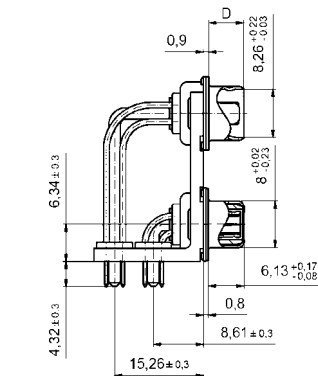
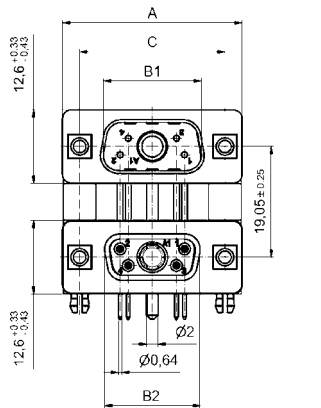
Type	A ⁺⁰ / _{-0.76}	B1 ^{+0.25} / ₋₀	B2 ⁺⁰ / _{-0.25}	C	D ⁺⁰ / _{-0.3}
5W1	31.19	16.79	16.46	25.00 ^{+0.02} / _{-0.02}	6.12
7W2	39.52	25.12	24.79	33.30 ^{+0.02} / _{-0.02}	6.12
13W3	53.42	38.84	38.50	47.04 ^{+0.02} / _{-0.02}	5.99
17W2	53.42	38.84	38.50	47.04 ^{+0.02} / _{-0.02}	5.99
17W5	69.70	55.30	54.96	63.50 ^{+0.02} / _{-0.02}	5.99

Graphical representation of only one variant!

Mounting style: 4-40 UNC threaded insert



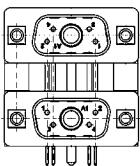
Mounting style: PCB clip and 4-40 UNC threaded insert



COMBINATION D-SUB – DUAL PORT VARIATIONS

Solder pin – Angled – Precision machined contacts – Connector spacing .750" / 19,05 mm

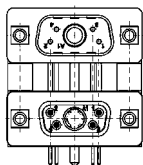
ORDER DATA



Variation:
plug upper –
plug bottom

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert	13-001013
2 X 7W2	Threaded insert	13-001023
2 X 13W3	Threaded insert	13-001033
2 X 17W2	Threaded insert	13-001043
2 X 17W5	Threaded insert	13-001053

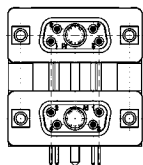
Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert/PCB clip	13-001213
2 X 7W2	Threaded insert/PCB clip	13-001223
2 X 13W3	Threaded insert/PCB clip	13-001233
2 X 17W2	Threaded insert/PCB clip	13-001243
2 X 17W5	Threaded insert/PCB clip	13-001253



Variation:
plug upper –
socket bottom

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert	13-001063
2 X 7W2	Threaded insert	13-001073
2 X 13W3	Threaded insert	13-001083
2 X 17W2	Threaded insert	13-001093
2 X 17W5	Threaded insert	13-001103

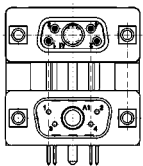
Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert/PCB clip	13-001263
2 X 7W2	Threaded insert/PCB clip	13-001273
2 X 13W3	Threaded insert/PCB clip	13-001283
2 X 17W2	Threaded insert/PCB clip	13-001293
2 X 17W5	Threaded insert/PCB clip	13-001303



Variation:
socket upper –
socket bottom

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert	13-001113
2 X 7W2	Threaded insert	13-001123
2 X 13W3	Threaded insert	13-001133
2 X 17W2	Threaded insert	13-001143
2 X 17W5	Threaded insert	13-001153

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert/PCB clip	13-001313
2 X 7W2	Threaded insert/PCB clip	13-001323
2 X 13W3	Threaded insert/PCB clip	13-001333
2 X 17W2	Threaded insert/PCB clip	13-001343
2 X 17W5	Threaded insert/PCB clip	13-001353



Variation:
socket upper –
plug bottom

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert	13-001163
2 X 7W2	Threaded insert	13-001173
2 X 13W3	Threaded insert	13-001183
2 X 17W2	Threaded insert	13-001193
2 X 17W5	Threaded insert	13-001203

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert/PCB clip	13-001363
2 X 7W2	Threaded insert/PCB clip	13-001373
2 X 13W3	Threaded insert/PCB clip	13-001383
2 X 17W2	Threaded insert/PCB clip	13-001393
2 X 17W5	Threaded insert/PCB clip	13-001403

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

COMBINATION D-SUB – DUAL PORT WITH POWER CONTACTS

Solder pin – Angled – Precision machined contacts – Connector spacing .750" / 19,05 mm



RoHS compliant

DESCRIPTION

- Designs: 2W2C/3W3/3W3C/5W5/8W8
- Mounting styles:
 - with mounting bracket and 4-40 UNC threaded insert
 - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- Upper connector is rotated 180 degrees

PRODUCT DRAWING

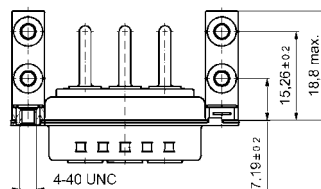
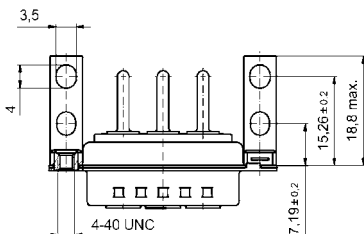
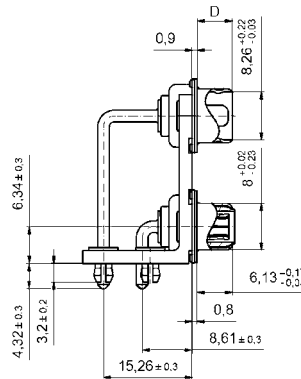
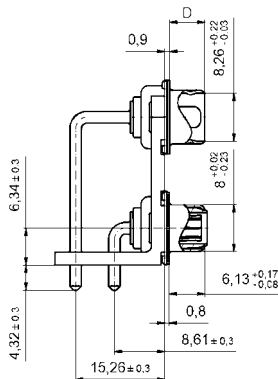
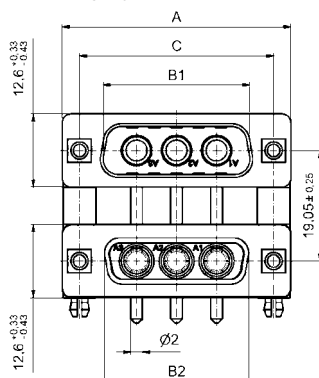
Type	A ⁺⁰ / _{-0.76}	B1 ^{+0.25} / ₋₀	B2 ⁺⁰ / _{-0.25}	C	D ⁺⁰ / _{-0.3}
2W2C	31.19	16.79	16.46	25.00 ^{+0.12} / _{-0.13}	6.12
3W3	39.52	25.12	24.79	33.30 ^{+0.15} / _{-0.10}	6.12
3W3C	39.52	25.12	24.79	33.30 ^{+0.15} / _{-0.10}	6.12
5W5	53.42	38.84	38.50	47.04 ^{+0.13} / _{-0.13}	5.99
8W8	69.70	55.30	54.96	63.50 ^{+0.13} / _{-0.13}	5.99

Graphical representation of only one variant!

Mounting style: 4-40 UNC threaded insert



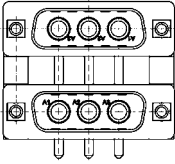
Mounting style: PCB clip and 4-40 UNC threaded insert



COMBINATION D-SUB – DUAL PORT VARIATIONS

Solder pin – Angled – Precision machined contacts – Connector spacing .750" / 19,05 mm

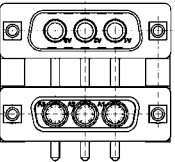
ORDER DATA



Design	Mounting style 4-40 UNC	Part Number
2 X 3W3	Threaded insert	13-001413
2 X 3W3	Threaded insert	13-001423
2 X 3W3C	Threaded insert	13-001433
2 X 5W5	Threaded insert	13-001443
2 X 8W8	Threaded insert	13-001453

Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert/PCB clip	13-001613
2 X 3W3	Threaded insert/PCB clip	13-001623
2 X 3W3C	Threaded insert/PCB clip	13-001633
2 X 5W5	Threaded insert/PCB clip	13-001643
2 X 8W8	Threaded insert/PCB clip	13-001653

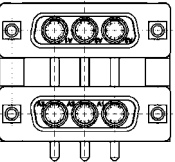
Variation:
plug upper –
plug bottom



Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert	13-001463
2 X 3W3	Threaded insert	13-001473
2 X 3W3C	Threaded insert	13-001483
2 X 5W5	Threaded insert	13-001493
2 X 8W8	Threaded insert	13-001503

Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert/PCB clip	13-001663
2 X 3W3	Threaded insert/PCB clip	13-001673
2 X 3W3C	Threaded insert/PCB clip	13-001683
2 X 5W5	Threaded insert/PCB clip	13-001693
2 X 8W8	Threaded insert/PCB clip	13-001703

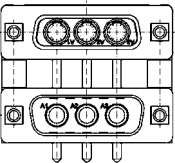
Variation:
plug upper –
socket bottom



Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert	13-001513
2 X 3W3	Threaded insert	13-001523
2 X 3W3C	Threaded insert	13-001533
2 X 5W5	Threaded insert	13-001543
2 X 8W8	Threaded insert	13-001553

Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert/PCB clip	13-001713
2 X 3W3	Threaded insert/PCB clip	13-001723
2 X 3W3C	Threaded insert/PCB clip	13-001733
2 X 5W5	Threaded insert/PCB clip	13-001743
2 X 8W8	Threaded insert/PCB clip	13-001753

Variation:
socket upper –
socket bottom



Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert	13-001563
2 X 3W3	Threaded insert	13-001573
2 X 3W3C	Threaded insert	13-001583
2 X 5W5	Threaded insert	13-001593
2 X 8W8	Threaded insert	13-001603

Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert/PCB clip	13-001763
2 X 3W3	Threaded insert/PCB clip	13-001773
2 X 3W3C	Threaded insert/PCB clip	13-001783
2 X 5W5	Threaded insert/PCB clip	13-001793
2 X 8W8	Threaded insert/PCB clip	13-001803

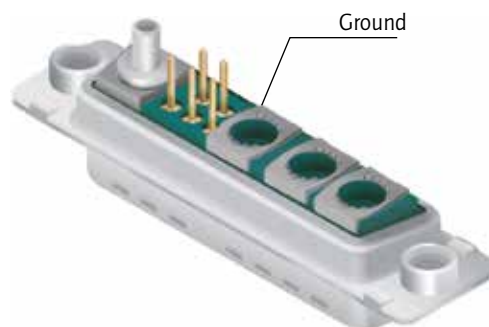
Variation:
socket upper –
plug bottom

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

COMBINATION D-SUB ACCESSORIES

Grounding for coaxial contacts

To optimize a perfect ground connection from the coaxial contact (outer conductor) to the metal shell. (Factory installed)..



Guide post

For safe mating of male and female connectors with contact loss. Guide post made for metal can be installed after connector is mounted.



Part Number

Guide post 160X11279X

Hole plug

The hole plug can be used for both male and female connector. The assembly is implemented from the mating side. The hole plug is used to plug un wanted holes in the insulator.

Material: Polyester GF UL 94 V-0

Colour: black

Part Number

Hole plug 160X0939X



CONVERSION TABLE

μm 1/1000 mm	μinch 1/1000 inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
0,10	4	3,30	.130	10,16	.400	19,50	.768	30,90	1.217	49,50	1.949
0,20	8	3,40	.134	10,26	.402	19,70	.776	31,00	1.220	49,90	1.965
0,25	10	3,50	.138	10,36	.406	19,80	.780	31,20	1.228	50,10	1.972
0,30	12	3,60	.142	10,56	.413	19,90	.783	31,50	1.240	50,30	1.980
0,50	20	3,70	.146	10,66	.417	20,00	.787	31,70	1.248	50,50	1.988
0,70	28	3,80	.150	10,76	.421	20,10	.791	32,00	1.260	50,70	1.996
0,75	30	3,81	.150	11,00	.433	20,30	.799	32,20	1.268	50,80	2.000
0,80	32	3,90	.154	11,20	.441	20,32	.800	32,30	1.272	51,40	2.024
1,00	39	4,00	.158	11,40	.449	20,50	.807	32,50	1.280	51,50	2.028
1,27	50	4,10	.161	11,50	.453	21,00	.827	32,80	1.291	52,00	2.047
2,00	79	4,20	.165	11,60	.457	21,10	.831	33,00	1.299	52,30	2.059
2,50	98	4,30	.169	11,90	.469	21,70	.854	33,10	1.303	52,80	2.079
3,00	118	4,50	.177	12,00	.472	22,00	.866	33,30	1.311	53,00	2.087
4,00	157	4,70	.185	12,20	.480	22,10	.870	33,80	1.331	53,20	2.095
5,00	197	4,90	.193	12,30	.484	22,20	.874	34,00	1.339	53,80	2.118
mm	inch	5,00	.197	12,40	.488	22,30	.878	34,20	1.346	54,00	2.126
0,10	.004	5,08	.200	12,50	.492	22,40	.882	34,40	1.354	54,20	2.134
0,20	.008	5,10	.201	12,70	.500	22,50	.886	35,00	1.378	54,90	2.161
0,25	.012	5,20	.205	12,90	.508	22,60	.890	35,40	1.394	55,00	2.165
0,35	.014	5,30	.209	13,00	.512	22,80	.898	35,50	1.398	55,40	2.181
0,40	.016	5,40	.213	13,10	.516	22,86	.900	35,56	1.400	55,70	2.193
0,45	.018	5,50	.217	13,20	.520	22,90	.902	35,60	1.402	56,60	2.228
0,50	.020	5,60	.220	13,50	.532	23,00	.906	36,00	1.417	57,40	2.260
0,55	.022	5,70	.224	13,60	.535	23,10	.909	36,50	1.437	57,80	2.276
0,60	.024	5,80	.228	13,70	.539	23,30	.917	36,60	1.441	57,90	2.280
0,64	.025	6,00	.236	13,90	.547	23,50	.925	36,70	1.445	58,42	2.300
0,65	.026	6,10	.240	14,00	.551	24,00	.945	37,00	1.457	59,00	2.323
0,70	.028	6,40	.252	14,30	.563	24,30	.957	37,30	1.469	59,20	2.331
0,75	.030	6,50	.256	14,40	.567	24,60	.969	37,50	1.476	59,80	2.354
0,80	.032	6,60	.260	14,50	.571	24,90	.980	37,60	1.480	59,90	2.358
0,85	.034	6,70	.264	14,70	.579	25,00	.984	37,70	1.484	60,00	2.362
0,90	.035	6,80	.268	14,80	.583	25,10	.998	37,90	1.492	60,96	2.400
1,00	.039	6,90	.272	14,90	.587	25,40	1.000	38,00	1.496	61,10	2.406
1,20	.047	7,00	.276	14,98	.590	25,60	1.008	38,10	1.500	62,00	2.441
1,25	.049	7,10	.280	15,00	.591	25,90	1.020	39,00	1.535	63,00	2.480
1,27	.050	7,20	.283	15,20	.598	26,00	1.024	39,20	1.543	63,50	2.500
1,30	.051	7,40	.291	15,24	.600	26,30	1.035	39,30	1.547	64,00	2.520
1,35	.053	7,50	.295	15,40	.606	26,60	1.047	39,90	1.571	65,00	2.560
1,40	.055	7,60	.299	15,50	.610	26,70	1.051	40,00	1.575	67,00	2.638
1,45	.057	7,62	.300	15,60	.614	27,00	1.063	40,30	1.587	68,00	2.677
1,50	.059	7,70	.303	15,90	.626	27,20	1.071	40,40	1.591	69,00	2.717
1,60	.063	7,80	.307	16,00	.630	27,40	1.079	40,60	1.598	70,00	2.756
1,70	.067	7,98	.314	16,20	.638	27,50	1.093	41,00	1.614	71,00	2.795
1,80	.071	8,00	.315	16,50	.650	27,90	1.098	41,60	1.638	74,00	2.913
1,85	.073	8,18	.318	16,60	.654	27,94	1.100	42,70	1.681	75,00	2.953
1,90	.075	8,20	.323	16,80	.661	28,00	1.102	43,18	1.700	76,20	3.000
2,00	.079	8,30	.327	17,00	.669	28,20	1.110	44,20	1.740	77,00	3.032
2,10	.083	8,40	.331	17,20	.677	28,50	1.122	44,80	1.764	78,74	3.100
2,20	.087	8,50	.335	17,30	.681	28,70	1.130	45,80	1.803	80,00	3.150
2,30	.091	8,60	.339	17,50	.689	29,00	1.142	46,30	1.823	81,28	3.200
2,40	.095	8,90	.350	17,60	.693	29,20	1.150	46,70	1.839	84,00	3.307
2,50	.098	9,00	.354	17,70	.697	29,40	1.158	47,00	1.850	85,00	3.346
2,54	.100	9,10	.358	17,78	.700	29,50	1.161	47,20	1.858	86,36	3.400
2,60	.102	9,20	.362	17,80	.701	29,70	1.169	47,30	1.862	88,90	3.500
2,70	.106	9,30	.366	17,90	.705	29,90	1.177	47,50	1.870	90,00	3.543
2,80	.110	9,40	.370	18,00	.709	30,00	1.181	47,80	1.882	91,44	3.600
2,84	.112	9,50	.374	18,10	.713	30,20	1.189	48,00	1.890	94,00	3.701
2,90	.114	9,60	.378	18,30	.721	30,40	1.197	48,10	1.894	95,00	3.740
3,00	.118	9,70	.382	18,60	.732	30,48	1.200	48,26	1.900	100,00	3.937
3,10	.122	9,90	.390	19,00	.748	30,50	1.201	48,80	1.921	110,00	4.331
3,20	.126	10,00	.395	19,20	.756	30,80	1.213	49,10	1.933	120,00	4.724