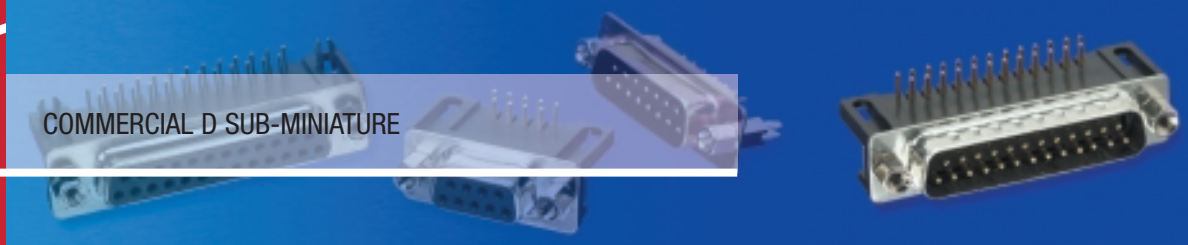
IN2CONNECT
ELECTRONIC CONNECTORS

D range connectors

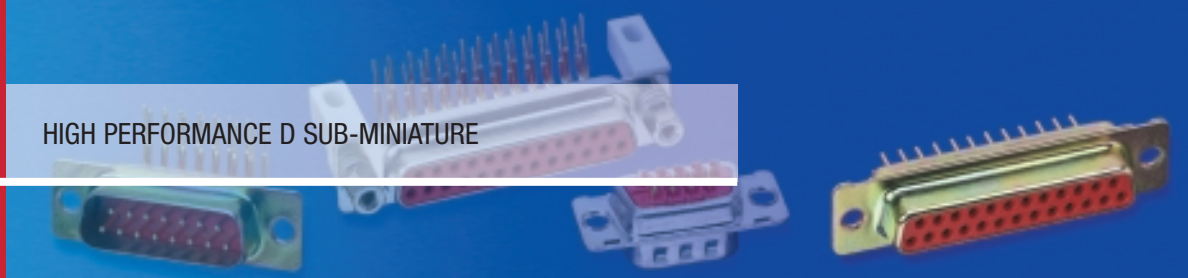
Special D

COMMERCIAL D SUB-MINIATURE



Standard D

HIGH PERFORMANCE D SUB-MINIATURE



Crimp D

FLEXIBLE AND FAST ASSEMBLY D SUB-MINIATURE

High Density D

INCREASED DENSITY D SUB-MINIATURE

D Accessories

Please note that "Budget" plating has been discontinued on all of the ITW McMurdo dsub ranges.

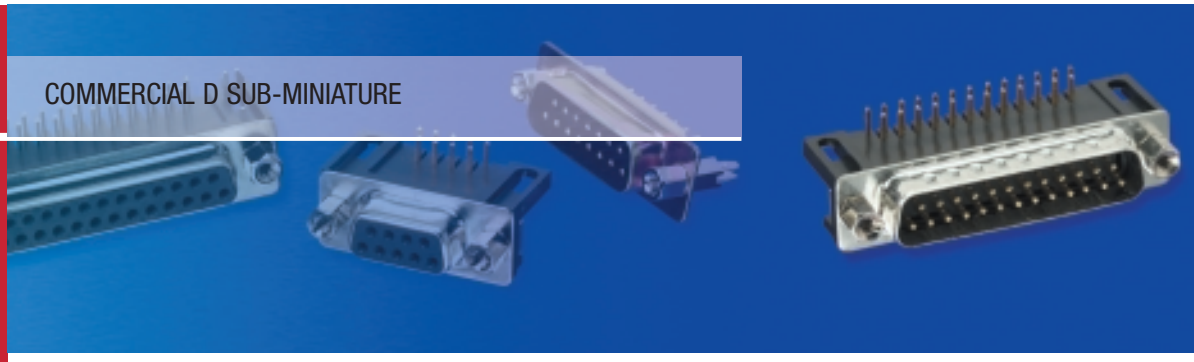
ITW McMurdo Connectors

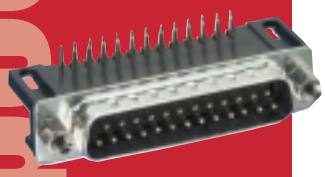
Special D

A range of D connectors utilising stamped and formed or turned contacts to provide a low cost option for commercial applications.

Special

COMMERCIAL D SUB-MINIATURE





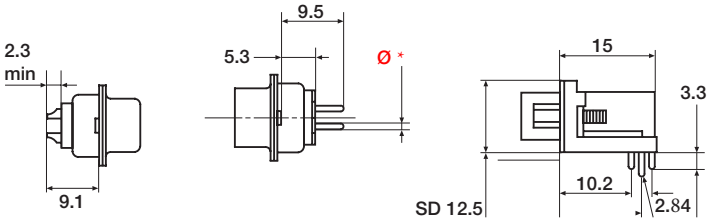
FEATURES

Choice of three termination styles – solder bucket, straight p.c. and 90° p.c.

Threaded inserts on 90° p.c. versions as standard – accepts a wide range of mounting hardware.

Tinned and dimpled shell options – for EMI/RFI shielding.

Optional solderable boardlock features for 90° p.c. types – reduces installation time.



* 0.64 mm x 0.64mm +/- 0.05mm

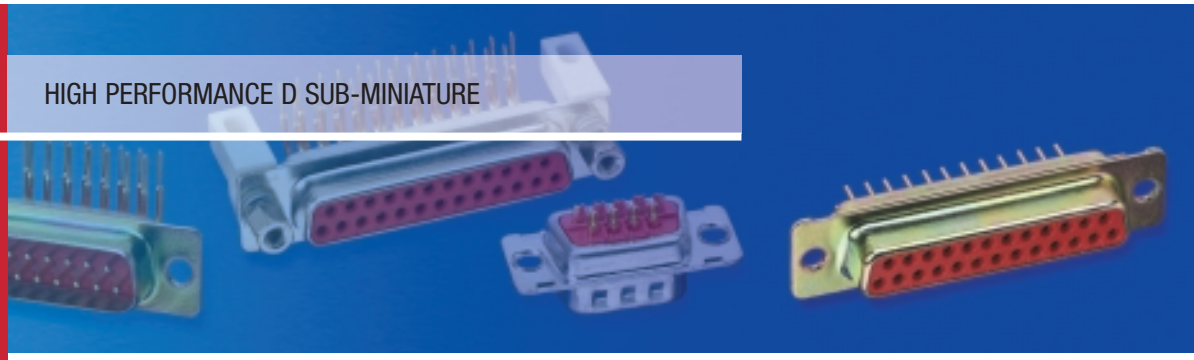
Solder Bucket | Straight P. C. | 90° P. C.

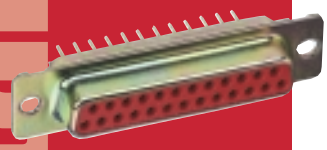
Standard D

Designed for demanding industrial applications, McMurdo's D connectors offer precision turned contacts. Standard D offers a minimum of 500 cycles

Standard

HIGH PERFORMANCE D SUB-MINIATURE





FEATURES

Standard D meets the most demanding requirements.

Precision turned contacts.
European Footprint

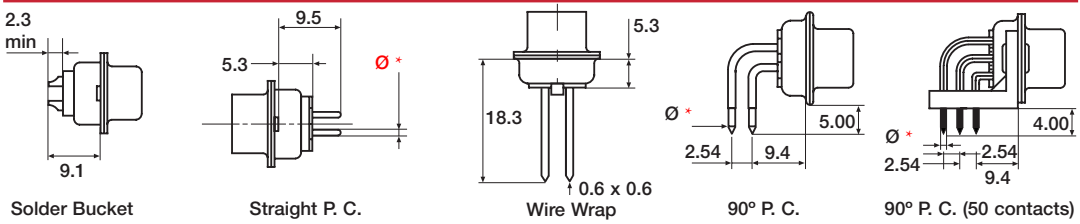
* 0.64 mm x 0.64mm +/- 0.05mm

Available in five shell sizes, providing up to 50 contacts.

Solder bucket, straight p.c., 90° p.c. and wire wrapping termination styles – to suit all your applications.

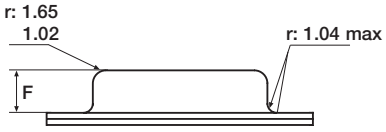
Tinned and dimpled shell options – for EMI/RFI shielding.

Wide range of accessories – greater user flexibility.

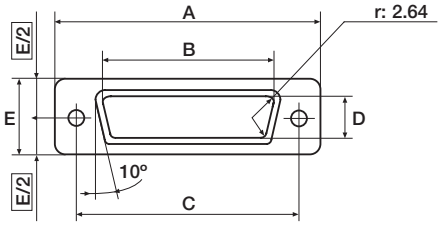


Solder Bucket | Straight P. C. | Wire Wrap | 90° P. C. | 90° P. C. (50 contacts)

All ranges: male



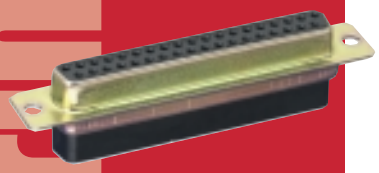
FRONT FACE



No.of contacts	A	B	C	D	E	F
9	31.19 30.43	17.04 16.79	25.12 24.87	8.48 8.23	12.93 12.17	6.12 5.82
15	39.52 38.76	25.37 25.12	33.45 33.20	8.48 8.23	12.93 12.17	6.12 5.82
25	53.42 52.65	39.09 38.84	47.17 46.91	8.48 8.23	12.93 12.17	5.99 5.69
37	69.70 68.94	55.55 55.30	63.63 63.37	8.48 8.23	12.93 12.17	5.99 5.69
50	67.34 66.55	52.93 52.68	61.24 60.99	11.33 10.95	15.75 14.99	5.99 5.69

Crimp D

Maximum flexibility and reduced assembly costs are achieved through full or partial loading of selectively plated stamped and formed contacts.



FLEXIBLE AND FAST ASSEMBLY D SUB-MINIATURE

FEATURES

Replaceable contacts – no connector wastage.

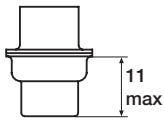
Two contact performance levels – Budget for commercial and Standard for industrial applications.

Accepts wire sizes of 20 to 28 AWG – offers greater flexibility.

Tinned and dimpled shell options – for effective EMI/RFI shielding.

Complete selection of crimp tooling enables quick assembly.

Wire strip length 2.4 ± 0.2mm.



Crimp

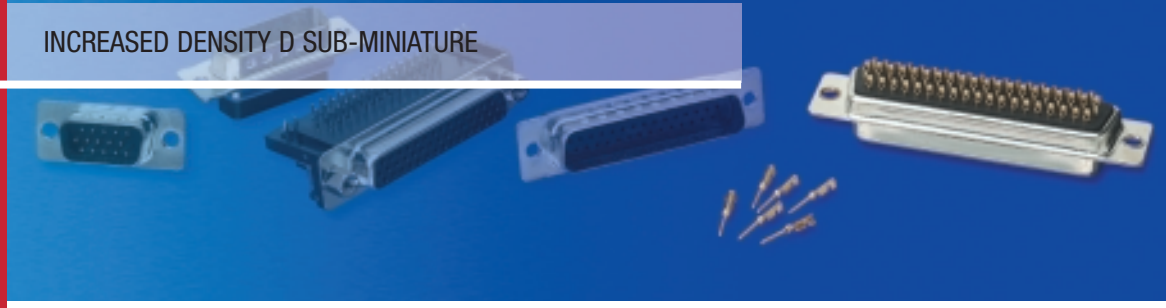
ASSEMBLY TOOLS AND HAND TOOLS

Hand Crimp Tool MP600-D/HD
Insertion/extraction tool MP601-D or MP601-HD

High Density D

Increased contact density is provided in five industry standard shell sizes providing up to 78 contacts. A choice of four termination styles including crimp are available making this range one of the most versatile.

INCREASED DENSITY D SUB-MINIATURE



FEATURES

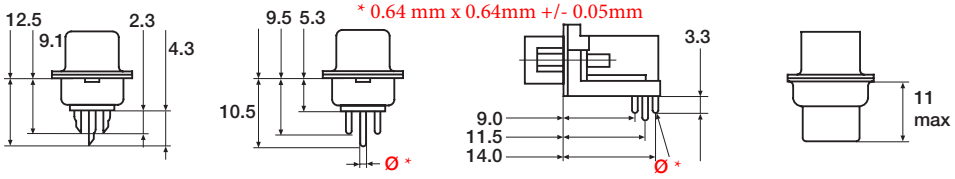
Tinned and dimpled shell as standard for enhanced electrical continuity and effective EMI/RFI shielding.

Threaded inserts – enable quick assembly of mounting hardware to 90° p.c. versions.

Solder bucket, straight p.c. 90° p.c. and crimp termination styles.

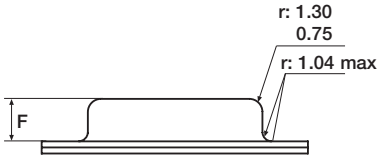
Optional screwlocks and solderable boardlocks fitted to 90° p.c. versions.

Compatible with Standard D range accessories.

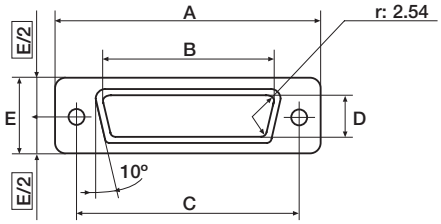


Solder Bucket | Straight P. C. | 90° P. C. | Crimp

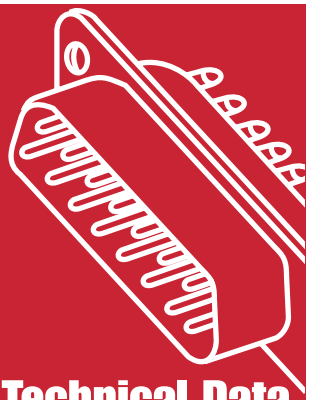
All ranges: female



FRONT FACE



No.of contacts	A	B	C	D	E	F
9	31.19 30, 43	16.46 16.21	25.12 24.87	8.03 7.77	12.93 12.17	6.30 6.05
15	39.52 38.76	24.79 24.54	33.45 33.20	8.03 7.77	12.93 12.17	6.30 6.05
25	53.42 52.65	38.51 38.25	47.17 46.91	8.03 7.77	12.93 12.17	6.30 6.05
37	69.70 68.94	54.97 54.71	63.63 63.37	8.03 7.77	12.93 12.17	6.30 6.05
50	67.34 66.55	52.56 52.30	61.24 60.99	10.87 10.62	15.75 14.99	6.30 6.05



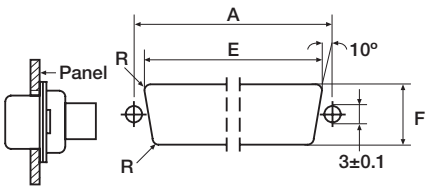
D range connectors

Technical Data

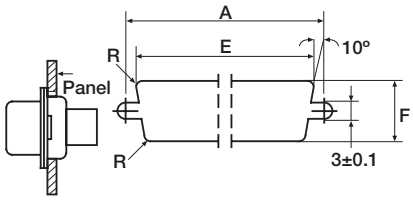
	Special D	Standard D	Crimp D	High Density D
FEATURES				
Shell		Tin plated steel shell		
Insulator		Thermoplastic rated UL94V-0		
Contact		Copper alloy plated hard acid gold		
Termination – solder bucket	Tin	Gold	–	Tin
– straight PC	Tin	Gold	–	Tin
– 90° PC	Tin	Gold	–	Tin
– CRIMP	–	–	Gold	Tin
MECHANICAL				
Operations	100	500 (standard)	500 (standard)	100 50 or 200 crimp
Temperature range		-55°C to +105°C		
ELECTRICAL				
Current – individual contact (in isolation) at 70°C	3A	6.5A	3A	3A
– All contacts (simultaneously) at 70°C	2A	3.3A	2A	2A
Working voltage (DC or AC PEAK)	350V	500V	350V	300V
Proof voltage (DC or AC PEAK)	1500V	1500V	1500V	1000V
Contact resistance	15mΩ max	10mΩ max	15mΩ max	15mΩ max
Insulation resistance	5000mΩ min	1000mΩ min	5000mΩ min	1000mΩ min

All ranges: panel mounting options

Contact Arrangement				Rear Panel Mounting					Front Panel Mounting				
Shell size	No of Contacts D,SD	HD	A	E Std	E Float	F Std	F Float	R	E Std	E Float	F Std	F Float	R
E	9	15	25.00	20.32	21.16	11.30	12.09	3.50	22.07	22.88	12.90	13.71	2.25
A	15	26	33.32	28.70	29.49	11.30	12.09	3.50	30.40	31.22	12.90	13.71	2.25
B	25	44	47.04	42.42	43.20	11.30	12.09	3.50	44.14	44.96	12.90	13.71	2.25
C	37	62	63.50	58.93	59.77	11.30	12.09	3.50	60.60	61.42	12.90	13.71	2.25
D	50	78	61.10	56.26	57.02	13.97	14.78	3.50	58.21	59.44	15.69	16.51	2.25



Rear Panel Mounting

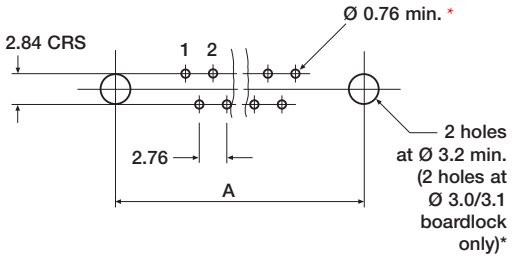


Front Panel Mounting

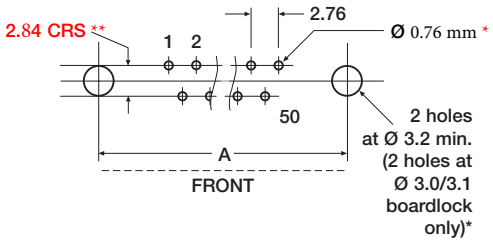
PCB layouts

Plug viewed from above, socket viewed from below.

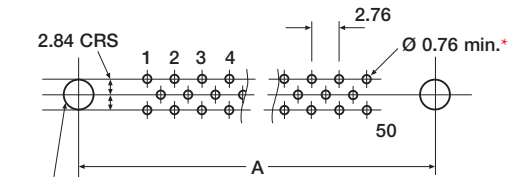
Straight p.c. 9-37 way



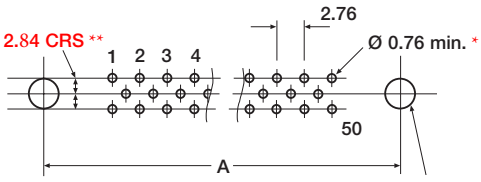
90º p.c. 9-37 way



50 way



50 way



* 1.05 mm for **Special D**
** 2.54 mm for Standard D

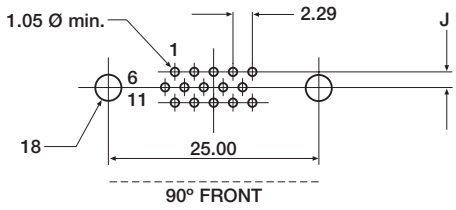
DIMENSIONS

Contact Arrangement	A crs
9	25.00
15	33.32
25	47.04
37	63.50
50	61.10

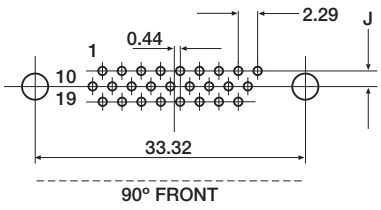
High Density D only

Plug viewed from above, socket viewed from below.

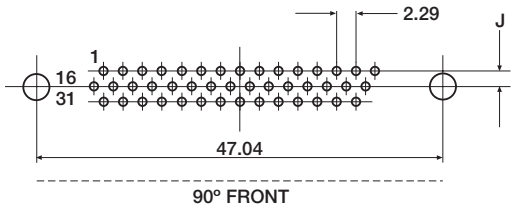
15 way High Density D



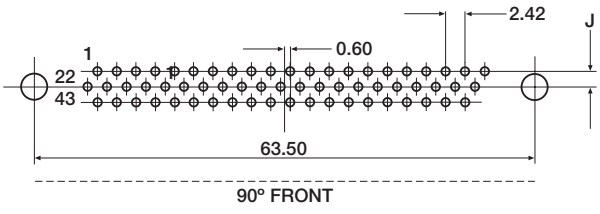
26 way High Density D



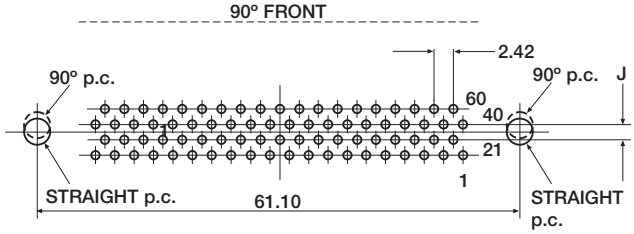
44 way High Density D



62 way High Density D



78 way High Density D



DIMENSIONS

Contact Arrangement	Straight p.c J	90º p.c J
15	1.98	2.54
26	1.98	2.54
44	1.98	2.54
62	1.98	2.54
78	2.08	2.54

ORDERING information

for CONNECTORS

Series
D – Standard/Crimp SD – Special D
HD-High Density

Shell size
E, A, B, C and D

Mounting options/crimp select
No designator – Standard fixing holes

S – Screwlock fitted
T – Boardlocks fitted
X – Screwlocks and Boardlocks fitted
C - Crimp (contacts ordered separately)

D B X 25 P N B T D

Shell finish
T – Tinned (socket only)
TD – Tinned and dimpled (plug only)

Performance code
No designator – standard, HD, special, crimp

Termination type
No designator – Solder bucket (and crimped when selector code has been used)
N – 90º p.c.
OL – Straight p.c.
W – Wire wrapping

Contact type
P – Plug S – Socket

Contact arrangement
9, 15, 25, 37 and 50
High Density 15, 26, 44, 62 and 78

CONTACT ORDERING INFORMATION

Contact/Wire Gauge
MP642-Pin, 24/28 A.W.G (HD only)
MP643-Socket, 24/28 A.W.G (HD only)
MP647-Pin, 24/28 A.W.G (crimp D only)
MP648-Socket, 24/28 A.W.G (crimp D only)
MP649-Pin, 20/24 A.W.G (crimp D only)
MP650-Socket, 20/24 A.W.G (crimp D only)

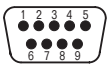
MP642 R 06

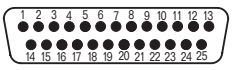
Method of supply
No designator – in packs of 100
R – 10,000 on a reel

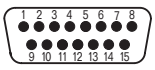
Performance Code
High Density
05-Pin, 200 operations
06-Pin, 50 operations
15-Socket, 200 operations
16-Socket, 50 operations
Crimp D
45-Pin, standard 500 operations
46-Pin, budget 300 operations
55-Socket, standard 500 operations
56-Socket, budget 300 operations

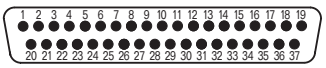
CONTACT ARRANGEMENT(viewed from mating face of male connector)

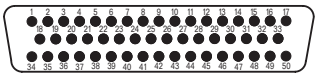
Special, Standard and Crimp D


E - **9** contacts

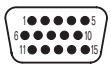

B - **25** contacts

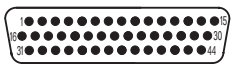

A - **15** contacts

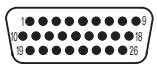

C - **37** contacts

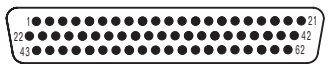

D - **50** contacts

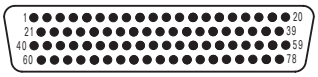
High Density D


E - **15** contacts


B - **44** contacts


A - **26** contacts


C - **62** contacts


D - **78** contacts

Accessories

A range of accessories are available including automatic and hand crimp tools, insertion and extraction tools – ask our sales office for details.

Due to our policy of continuous product development, ITW McMurdo Connectors retain the right to change the specification at any time without prior notice. Designed & printed in the UK.

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