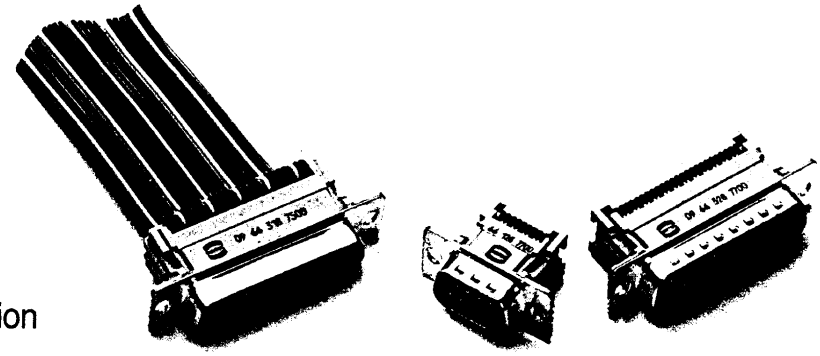
D-Sub DIN 41652 · MIL-C-24 308

Number of contacts

9–37



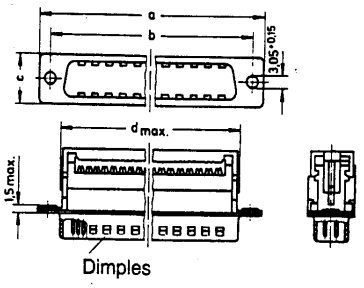
Insulation displacement termination

Identification	No. of contacts	Part No. Performance level 3 Preferred types	Part No. Performance level 2
Performance levels ▶ Explanations page 6 Other contact surfaces on request			
Male connector – insulation displacement termination pitch 1.27 mm tinned metal shell and dimples	9	09 66 128 7700	09 66 128 6700
	15	09 66 228 7700	09 66 228 6700
	25	09 66 328 7700	09 66 328 6700
	37	09 66 428 7700	09 66 428 6700
Female connector – insulation displacement termination pitch 1.27 mm tinned metal shell	9	09 66 118 7500	09 66 118 6500
	15	09 66 218 7500	09 66 218 6500
	25	09 66 318 7500	09 66 318 6500
	37	09 66 418 7500	09 66 418 6500
Strain relief clamp corrosion resistant steel for male and female connectors	9	09 66 108 0000	09 66 108 0000
	15	09 66 208 0000	09 66 208 0000
	25	09 66 308 0000	09 66 308 0000
	37	09 66 408 0000	09 66 408 0000

Dimensions

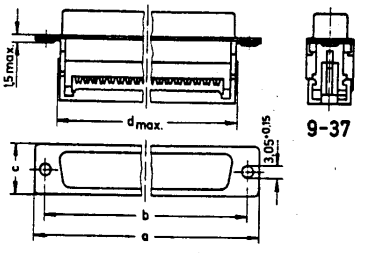
Dimensions in mm

Male connector



	a-0,76	b	c-0,76	d
9	31,19	25	12,93	18,6
15	39,52	33,3	12,93	26,9
25	53,42	47	12,93	40,6
37	69,7	63,5	12,93	57,1

Female connector

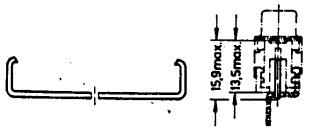


Specified conductors

stranded wires AWG 28/7
AWG 26/7

solid wires AWG 30/1
AWG 28/1

Strain relief clamp



Mating conditions page 6
Panel cut out page 17

Technical characteristics

Number of contacts	9, 15, 25, 37, 50
Working current	
see current carrying capacity chart	
Turned contacts	7.5 A max.
Stamped contacts	6.5 A max.
Insulation displacement	2 A max.
Test voltage $U_{r.m.s}$	1 kV
Clearance and creepage	≧ 1.0 mm ≧ 0.7 mm (insulation displacement)
Contact resistance	≦ 10 mΩ
Insulation resistance	≧ 10^{10} Ω
Temperature range	- 55 °C + 125 °C
The higher temperature limit includes the local ambient and heating effect of the contacts under load	

Terminations

a) Solder buckets max. 0.5 mm²
b) Solder pins ∅ 0.6 mm
for P.C.B. holes
∅ 0.8/1 mm
c) Solder pins, angled 90°
∅ 0.6 mm
for P.C.B. holes
∅ 1 mm
d) Wrap posts 0.6 x 0.6 mm
diagonal 0.8–0.86 mm
length 13 mm
e) Crimp contacts 0.09–0.56 mm²
AWG 28-20
f) Insulation displacement
AWG 28/7 and AWG 26/7
AWG 28/1 and AWG 30/1

Materials

Mouldings and hoods	Thermoplastic resin, glass-fibre filled (PBTP) UL 94-VO
Contacts	Copper alloy Contact versions Part No. 09 66 . . . Male : solid Female : stamped Insulation displacement : stamped Part No. 09 67 . . . Male and female : turned also stamped versions, for details see following pages
Contact surface[1])	Contact zone: selectively gold-plated according to performance level[1]) Termination zone: tinned
Metal shell	Steel Surface a) tinned b) zinc-plated and yellow chromatized
Insertion and withdrawal force	9 way ≦ 30 N 15 way ≦ 50 N 25 way ≦ 83 N 37 way ≦ 123 N 50 way ≦ 167 N

[1]) Performance Level 3 as per DIN 41 652, part 2
≧ 50 mating cycles
no gas test

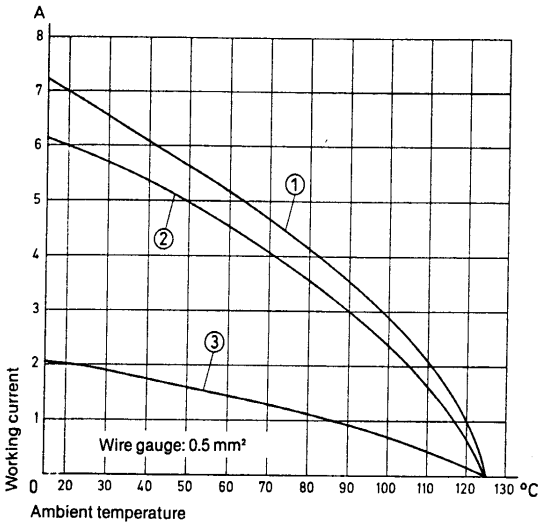
[1]) Performance Level 2 as per DIN 41 652, part 2
≧ 200 mating cycles
4 day gas test using 10 ppm SO_2

Other contact surfaces on request

Current carrying capacity

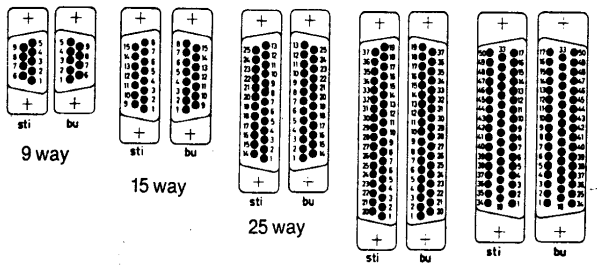
The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN 41 640, part 3.



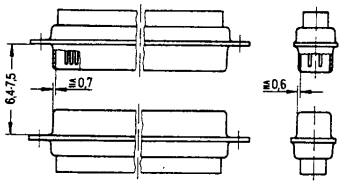
Example: 25 way connector
① Turned contacts
② Stamped contacts
③ Insulation displacement contacts

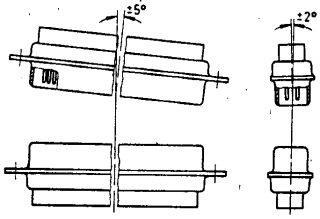
Contact arrangement View from termination side



sti = Male connector
bu = Female connector

Mating conditions as per DIN 41 652





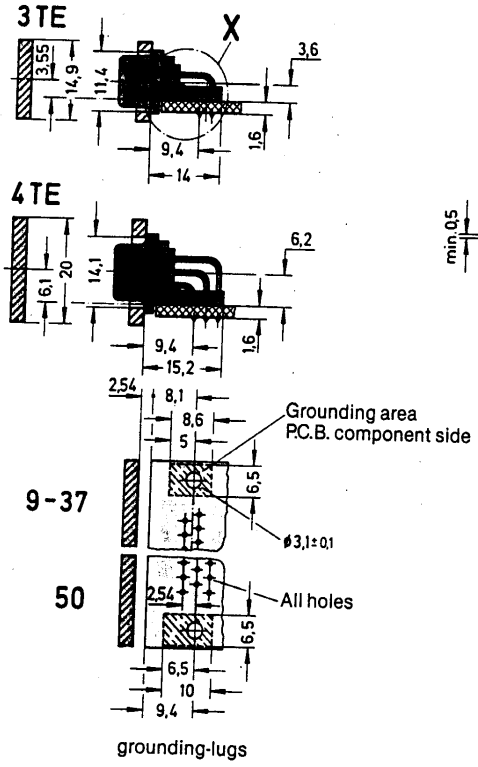
Identification | Drawing | Dimensions in mm

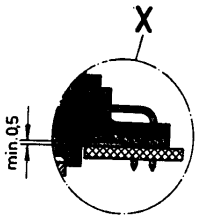
Low Profile Versions

Mounting height 3.6 mm
9-37 way
for front panel
3 units of width (TE)

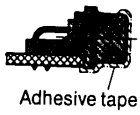
Mounting height 6.2 mm
50 way
for front panel
4 units of width (TE)

for connectors page 12-13





When flow soldering protect the mating face of the connector with adhesive tape e.g. Tesaband 4657 grey.

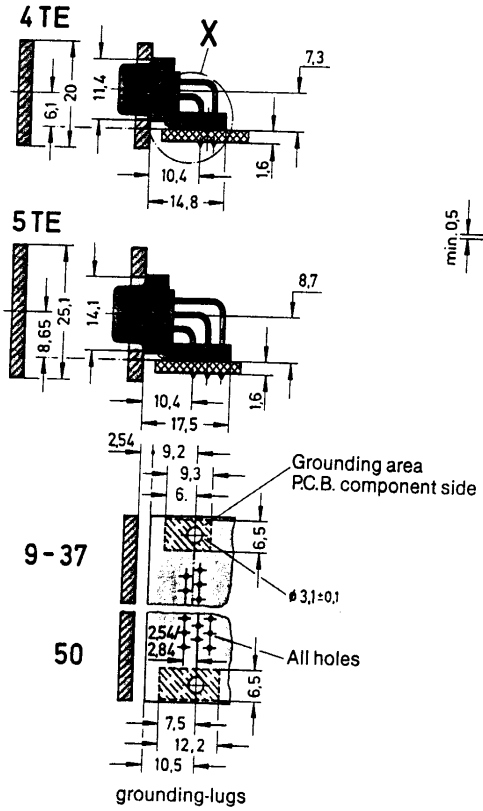


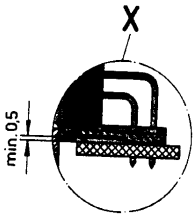
Standard Versions

Mounting height 7.3 mm
9-37 way
for front panel
4 units of width (TE)

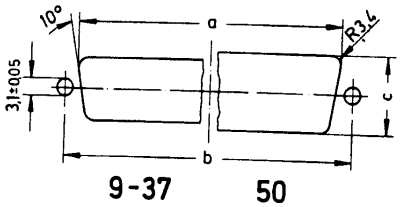
Mounting height 8.7 mm
50 way
for front panel
5 units of width (TE)

for connectors page 14-16





Panel cut out for front panel



	a	b±0,1	c
9	20,5	25	11,4
15	28,8	33,3	11,4
25	42,5	47	11,4
37	59,1	63,5	11,4
50	56,3	61,1	14,1

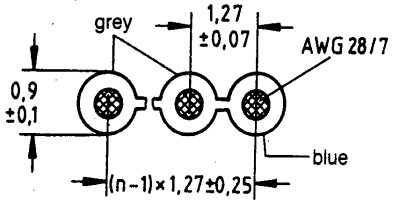
Cables and tools

Identification	Part No. Preferred types	Dimensions in mm

Flat cable

AWG 28/7

9 way	09 18 009 700 .
15 way	09 18 015 700 .
25 way	09 18 025 700 .
37 way	09 18 037 700 .



Wire (tinned) Cu
Gauge AWG 28/7 0.089 mm²
Insulation material PVC
as per UL 2651

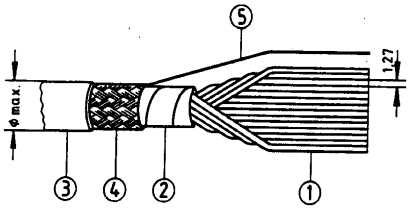
grey	30.48 m	3
grey	152.40 m	4
colour coded	30.48 m	5

Important:
always store reels vertically

Round flat cable

AWG 28/7

9 way	09 18 009 700 .
15 way	09 18 015 700 .
25 way	09 18 025 700 .
37 way	09 18 037 700 .



Part No. \ No. of contacts*	∅ max.			
	9	15	25	37
09 18 ... 7007	8,3	9,1	10,2	11,2
09 18 ... 7008	7,7	8,6	9,7	10,6

*Others sizes on request

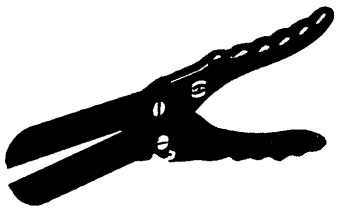
Length per reel 30.48 m (100 feet)

① Flat cable, grey AWG 28/7
② Barrier tape
③ Outer insulation PVC, grey
④ Tinned copper screen (shielded version)
⑤ Drain Wire AWG 28 (shielded version)

with screening	7
without screening	8

Cable cutter

for flat cables — 09 99 000 0116



Spare parts

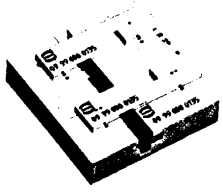
Blade	09 99 000 0179
Cutting plate	09 99 000 0180

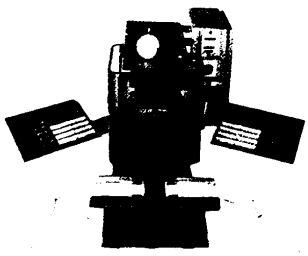
Bench press

for termination of insulation displacement connectors and assembly of hoods — 09 99 000 0114

Base plate

for termination of flat cables — 09 99 000 0135





Harnessing work station and test equipment for flat cable assembly available on request.

Hand tool with base plates (included in tool kit)

for termination of insulation displacement connectors — 09 99 000 0149