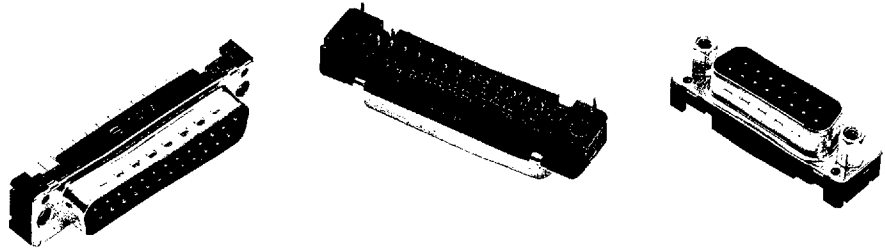


Number of contacts

9-50



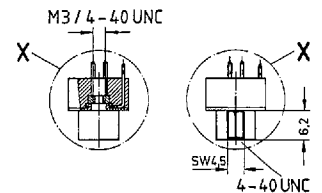
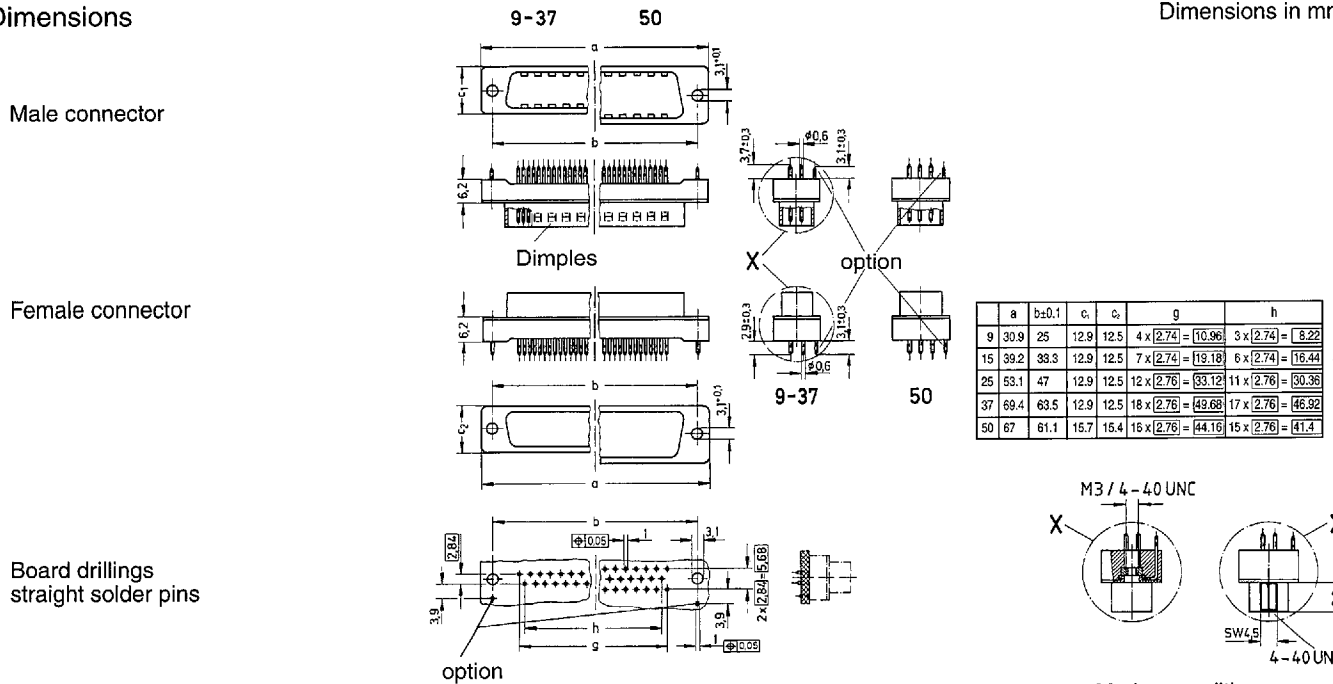
Solder pins, straight – with/without grounding-pins

Identification	No. of contacts	Performance Level	Part No.
Performance Levels Explanations page 6 Other performance levels on request		3	2
Male connector – straight solder pins tinned metal shell with dimples	9	without grounding	without grounding
	15	09 66 121 770 .	09 66 121 670 .
	25	09 66 221 770 .	09 66 221 670 .
	37	09 66 321 770 .	09 66 321 670 .
	50	09 66 421 770 .	09 66 421 670 .
		09 66 521 770 . *	09 66 521 670 .
	9	with grounding- pins	with grounding- pins
	15	09 66 161 770 .	09 66 161 670 .
	25	09 66 261 770 .	09 66 261 670 .
	37	09 66 361 770 .	09 66 361 670 .
50	09 66 461 770 .	09 66 461 670 .	
	09 66 561 770 . *	09 66 561 670 .	
Female connector – straight solder pins tinned metal shell	9	without grounding	without grounding
	15	09 66 111 750 .	09 66 111 650 .
	25	09 66 211 750 .	09 66 211 650 .
	37	09 66 311 750 .	09 66 311 650 .
	50	09 66 411 750 .	09 66 411 650 .
		09 66 511 750 . *	09 66 511 650 .
	9	with grounding- pins	with grounding- pins
	15	09 66 151 750 .	09 66 151 650 .
	25	09 66 251 750 .	09 66 251 650 .
	37	09 66 351 750 .	09 66 351 650 .
50	09 66 451 750 .	09 66 451 650 .	
	09 66 551 750 . *	09 66 551 650 .	

Please insert digit for
flange thread or fitted female screw locks
M3 ▶ 1
4-40 UNC ▶ 2
fitted screw locks 4-40 UNC ▶ 3**

Dimensions

Dimensions in mm



Mating conditions page 6

* Not normally kept in stock

** Fitted screw locks 4-40 UNC not normally kept in stock for performance level 3

Number of contacts 9, 15, 25, 37, 50
UL recognized

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 m Ω
Insulation resistance $\geq 10^{10}$ Ω

Temperature range -55 °C + 125 °C
-55 °C > + 200 °C *
* solder high temperature and press in

The higher temperature limit includes the local ambient and heating effect of the contacts under load

Terminations

- Solder buckets max 0.5 mm²
- Solder pins \varnothing 0.6 mm for P.C.B. holes \varnothing 0.8/1 mm
- Press-in terminations
Recommended P.C.B. trough holes

	press-in pin	Grounding pin
Hole:	1.15 ^{+0.03} mm	3.15 ^{+0.025} mm
Cu:	25-75 μ m	25-75 μ m
Sn:	5-15 μ m	4-10 μ m
Plated hole	0.94-1.09 mm	3.0-3.15 mm

P.C.B. board thickness: 1.4-3.2 mm

- Solder pins, angled 90°
 \varnothing 0.6 mm for P.C.B. holes \varnothing 1 mm
- Wrap posts 0.6 x 0.6 mm diagonal 0.8-0.86 mm length 13 mm
- Crimp contacts 0.09-0.56 mm² AWG 28-20
- 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), except solder high temperature and press-in version, which are in Liquid Crystal Polymer (LCP), UL 94-VO

Contacts
Part. No. 09 66 ...
Part. No. 09 67 0 ...
Part. No. 09 67 2 ...
Part. No. 09 68 ...

Copper alloy
Male und Female : stamped
Male and Female : turned
Male and Female : stamped
Male and Female : stamped

Contact surface¹⁾
Contact zone: selectively gold-plated according to performance level¹⁾

Termination zone:
a) Soldering: SnPb
b) Press-in: Ni

Metal shell Steel surface, tinned

Insertion and withdrawal force
Connector on P.C.B.

Solder, straight with clips	insertion max. per connector: 60 N withdrawal min. per connector: 10 N
Press-in without grounding pins	insertion max. per contact: 120 N withdrawal min. per contact: 20 N
Press-in with grounding pins	insertion max. per grounding pin: 250 N withdrawal min. per grounding pin: 30 N
Female connector with male connector	9 way \leq 30 N, 15 way \leq 50 N, 25 way \leq 83 N, 37 way \leq 123 N, 50 way \leq 167 N

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

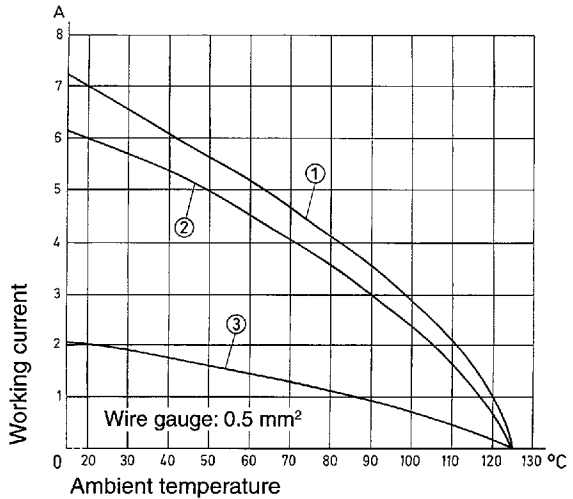
¹⁾ Performance Level 2 as per DIN 41 652, part 2
 ≥ 200 mating cycles, 4 days gas test using 10 ppm SO₂

⁶ Other performance levels on request

Current carrying capacity

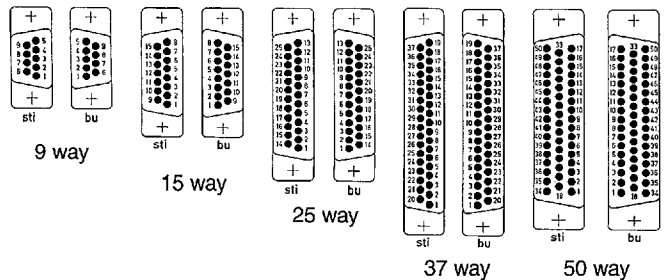
The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the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

