

**D-Sub – SEaled subminiature D connectors, 2.54 mm pitch**

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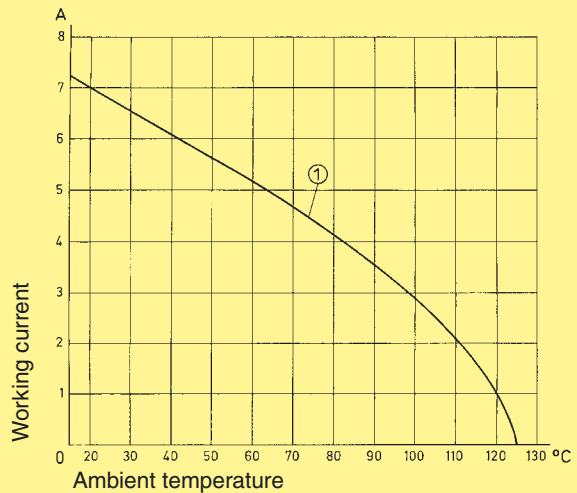


Number of contacts	9, 15, 25, 37, 50 UL recognized
Working current	5 A
Test voltage	1200 V/mm between 2 contacts / contact and shell
Clearance and creepage	≥ 1.0 mm
Contact resistance	
Straight contact	≤ 10 mΩ
Angled contact	≤ 25 mΩ
Angled contact 50 pole	≤ 35 mΩ
Insulation resistance	≥ 5000 MΩ between contacts
Dielectric strength	50 kV/mm
Temperature range	-25 °C ... +70 °C
Protection	IP 67 (per DIN 40 050 / IEC 529)
Termination	
Solder cup	max. AWG 20
Solder pin straight	0.6 mm diameter
Solder pin angled	0.6 mm diameter
Material	
Shell	Brass, tin plated over nickel
Insulator and plastic watertight frame	Thermoplastic, glass-fibre filled, UL 94-V0
Metal watertight frame	Nickel plated zinc die cast
Contact material	Machined copper alloy
Contact plating	0.76 μm Au min over Ni, tinned on termination area
Waterproofing element	Silicone
Mechanical	
Mating cycles	≥ 500
Mating force per signal contact	≤ 3.4 N
Unmating force per signal contact	≥ 0.2 N

### 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.

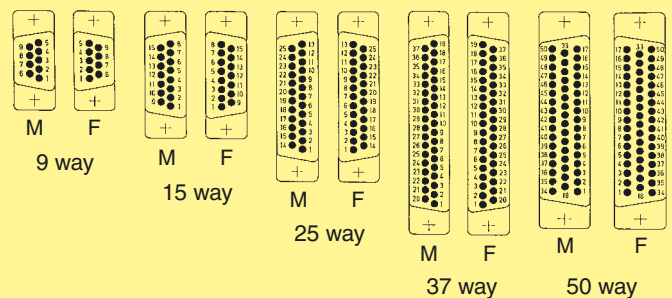
Control and test procedures according to DIN IEC 60 512.



Example: 25 way connector

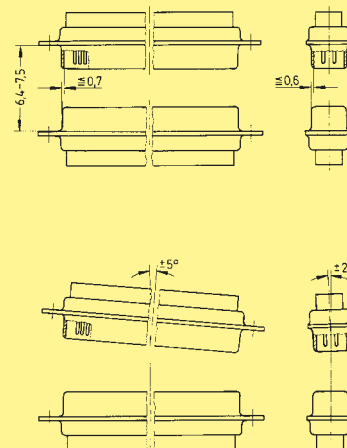
① Turned contacts

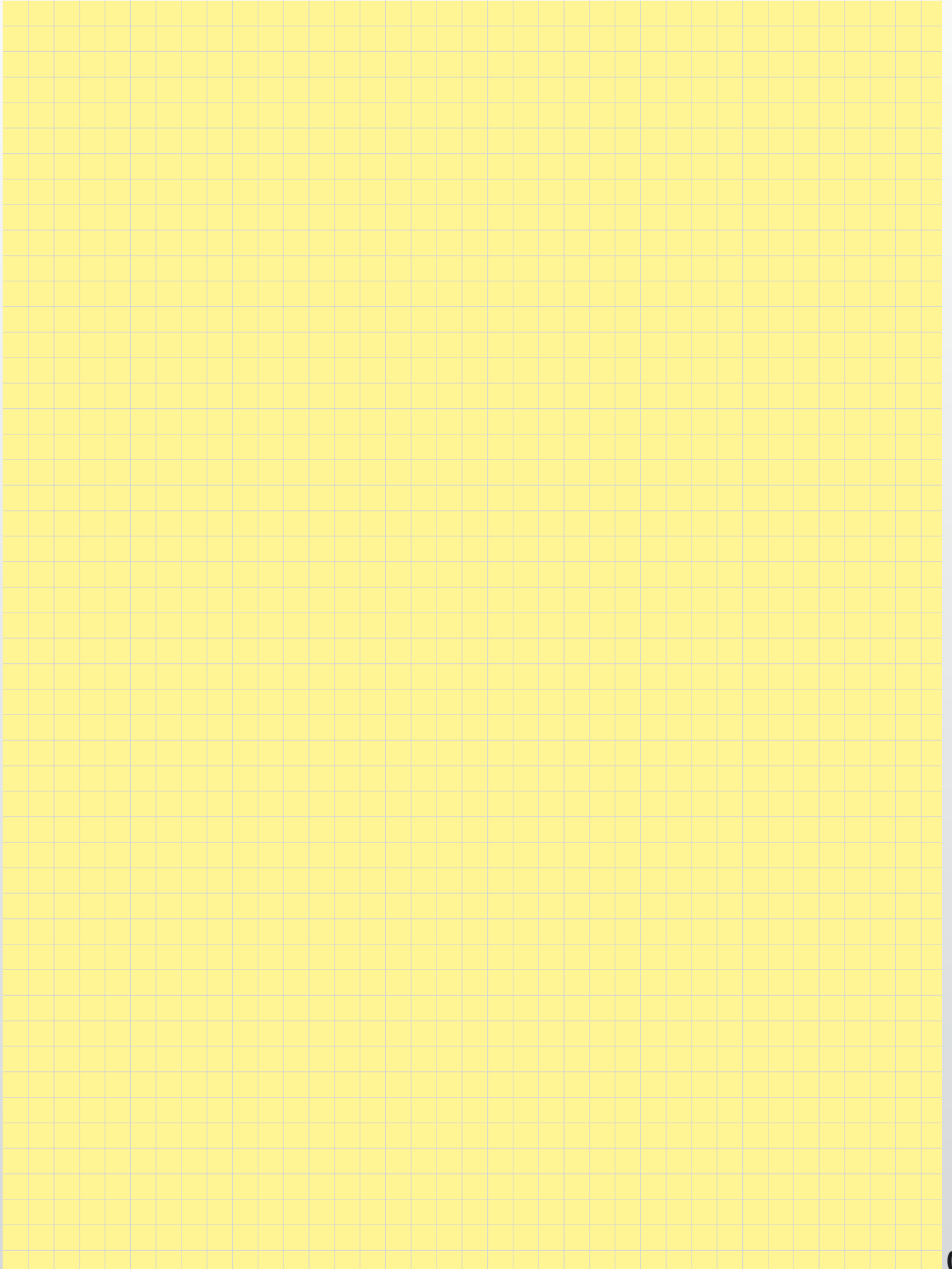
### Contact arrangement View from termination side



M = Male connector  
F = Female connector

### Mating conditions as per DIN 41 652





Number of contacts

**9–50**



IP 67, turned solder cups

Identification	No. of contacts	Part No.
		Performance level S4 <sup>1)</sup>
<b>Male connector</b> tinned metal shell with dimples	9 15 25 37 50	09 67 409 5615 09 67 415 5615 09 67 425 5615 09 67 437 5615 09 67 450 5615
<b>Female connector</b> tinned metal shell	9 15 25 37 50	09 67 409 4715 09 67 415 4715 09 67 425 4715 09 67 437 4715 09 67 450 4715

<sup>1)</sup> S4: ≥ 0.76 µm Au (30 µinch)

Number of contacts

9-50



IP 67, turned solder cups

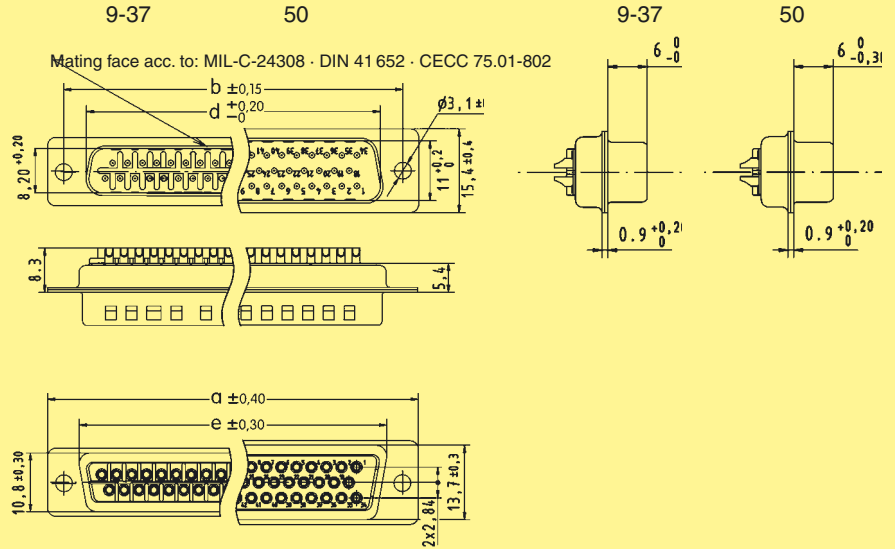
Identification

Drawing

Dimensions in mm

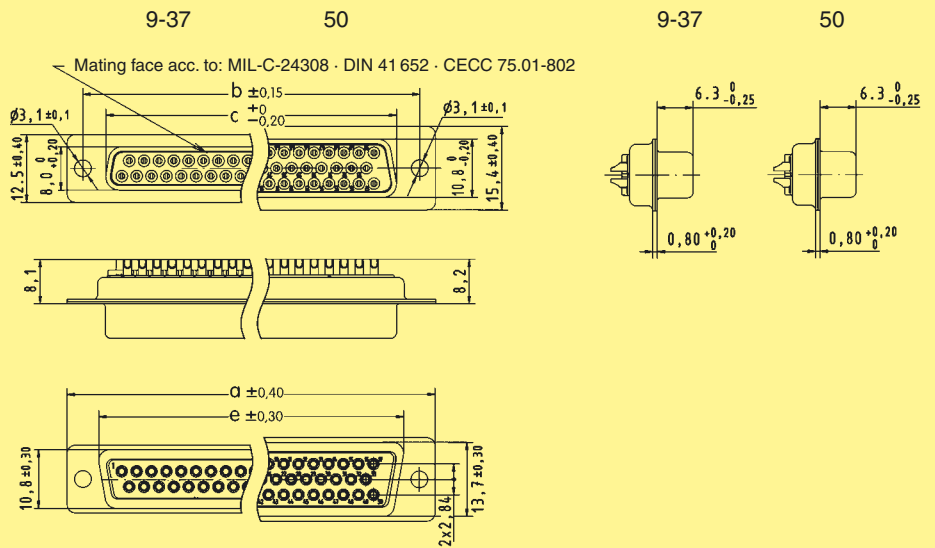
Male connector

9 – 50 contacts



Female connector

9 – 50 contacts



	a	b	c	d	e
9	30.8	25.00	16.4	16.9	19.3
15	39.1	33.30	24.7	25.2	27.5
25	53.0	47.04	38.5	38.9	41.3
37	69.3	63.50	54.9	55.3	57.7
50	66.9	61.10	52.5	52.8	55.3

Number of contacts

# 9-25



IP 67, turned solder cups, with rear plastic mounting plate

Identification	No. of contacts	Part No.	
		Performance level S4 <sup>1)</sup>	
<b>Male connector</b> tinned metal shell with dimples	9 15 25	09 67 509 . 615 09 67 515 . 615 09 67 525 . 615	
Please insert digit for flange thread			
4-40 UNC ▶ 7 M3 ▶ 9			
<b>Female connector</b> tinned metal shell	9 15 25	09 67 509 . 715 09 67 515 . 715 09 67 525 . 715	
Please insert digit for flange thread			
4-40 UNC ▶ 6 M3 ▶ 8			

<sup>1)</sup> S4: ≥ 0.76 µm Au (30 µinch)

Number of contacts

# 9-25



IP 67, turned solder cups, with rear plastic mounting plate

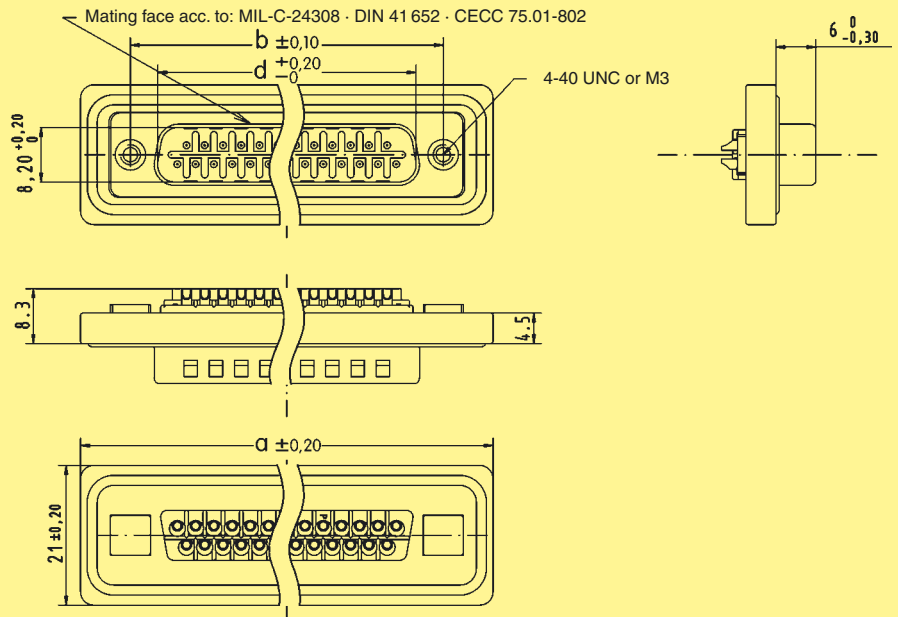
Identification

Drawing

Dimensions in mm

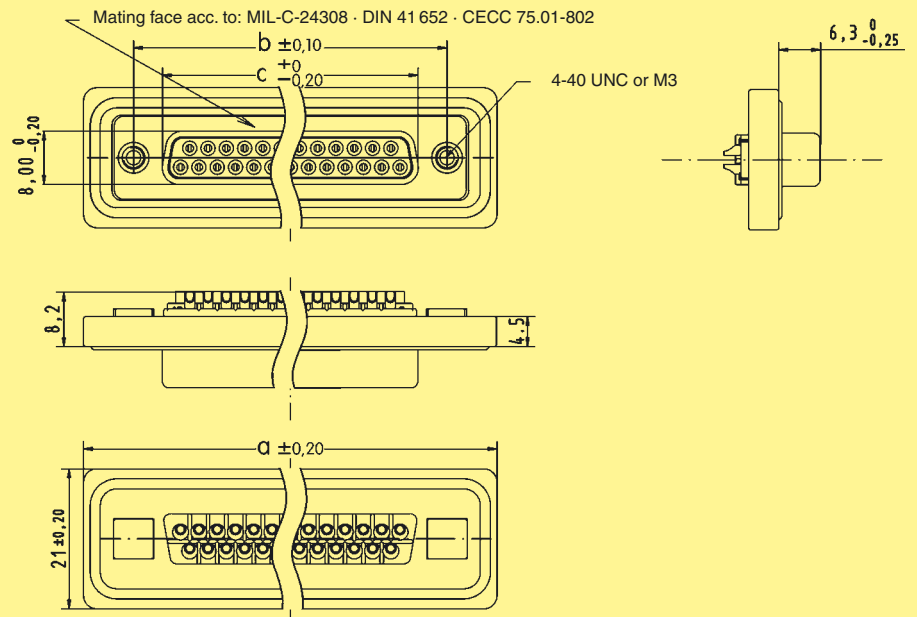
## Male connector

9 – 25 contacts



## Female connector

9 – 25 contacts



	a	b	c	d
9	40.0	25.00	16.4	16.9
15	48.3	33.30	24.7	25.2
25	62.0	47.04	38.5	38.9

Number of contacts

# 9-50



IP 67, turned solder cups, with rear metal mounting plate

Identification	No. of contacts	Part No.	
		Performance level S4 <sup>1)</sup>	
<b>Male connector</b> tinned metal shell with dimples	9 15 25 37 50	09 67 609 09 67 615 09 67 625 09 67 637 09 67 650	. 615 . 615 . 615 . 615 . 615
Please insert digit for flange thread			
4-40 UNC ▶ 7 M3 ▶ 9			
<b>Female connector</b> tinned metal shell	9 15 25 37 50	09 67 609 09 67 615 09 67 625 09 67 637 09 67 650	. 715 . 715 . 715 . 715 . 715
Please insert digit for flange thread			
4-40 UNC ▶ 6 M3 ▶ 8			

<sup>1)</sup> S4: ≥ 0.76 µm Au (30 µinch)



Number of contacts

# 9-50



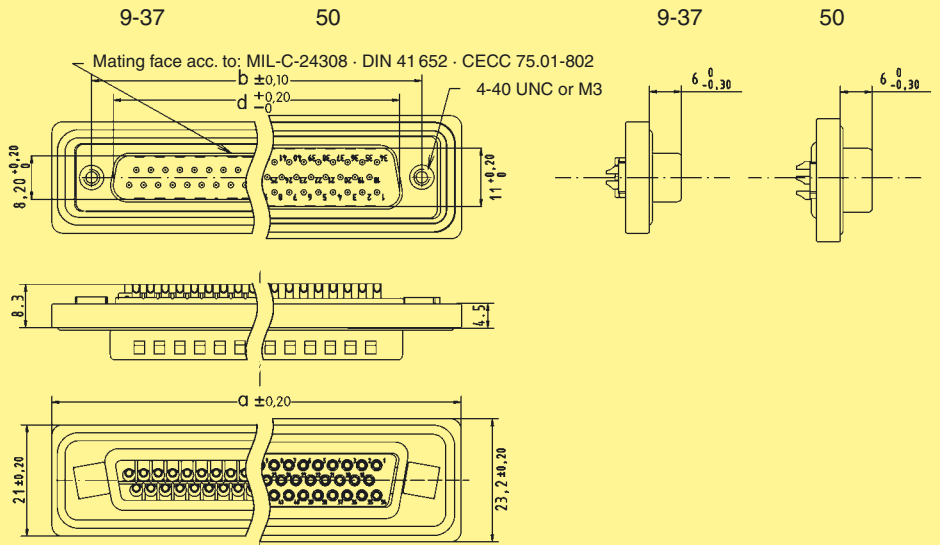
IP 67, turned solder cups, with rear metal mounting plate

Identification

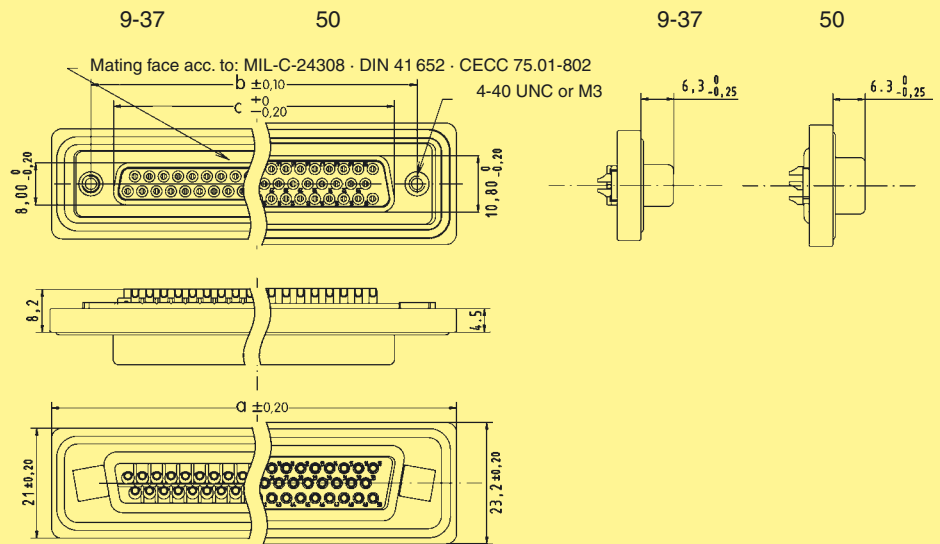
Drawing

Dimensions in mm

**Male connector**  
9 – 50 contacts



**Female connector**  
9 – 50 contacts



	a	b	c	d
9	40.0	25.00	16.4	16.9
15	48.3	33.30	24.7	25.2
25	62.0	47.04	38.5	38.9
37	78.5	63.50	54.9	55.3
50	76.1	61.10	52.5	52.8

Number of contacts

# 9-25



IP 67, straight turned solder pins,  
with rear plastic mounting plate, spacer and board lock

Identification	No. of contacts	Part No.	
		Performance level S4 <sup>1)</sup>	
<b>Male connector</b> tinned metal shell with dimples	9 15 25	09 67 509 . 675 09 67 515 . 675 09 67 525 . 675	
Please insert digit for flange thread			
4-40 UNC ▶ 7 M3 ▶ 9			
<b>Female connector</b> tinned metal shell	9 15 25	09 67 509 . 775 09 67 515 . 775 09 67 525 . 775	
Please insert digit for flange thread			
4-40 UNC ▶ 6 M3 ▶ 8			

<sup>1)</sup> S4: ≥ 0.76 µm Au (30 µinch)

Number of contacts

# 9-25



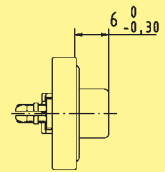
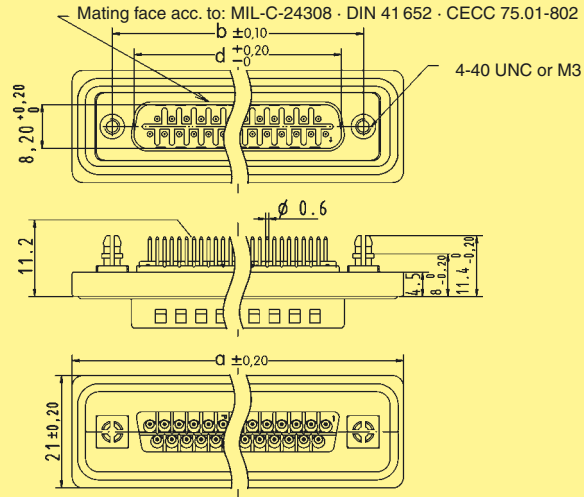
IP 67, straight turned solder pins, with rear plastic mounting plate, spacer and board lock

Identification

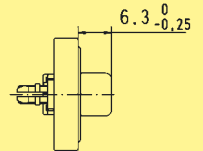
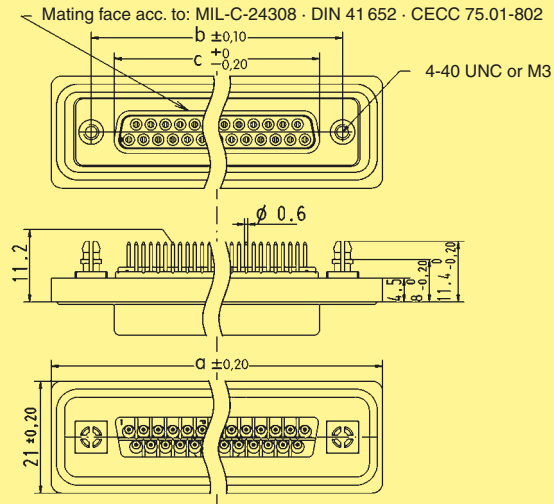
Drawing

Dimensions in mm

**Male connector**  
9 – 25 contacts

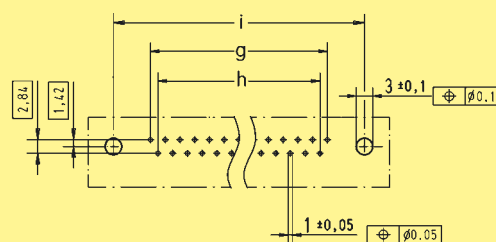


**Female connector**  
9 – 25 contacts



	a	b	c	d	g	h	i
9	40.0	25.00	16.4	16.9	4 x 2.74 = 10.96	3 x 2.74 = 8.22	25.0
15	48.3	33.30	24.7	25.2	7 x 2.74 = 19.18	6 x 2.74 = 16.44	33.3
25	62.0	47.04	38.5	38.9	12 x 2.76 = 33.12	11 x 2.76 = 30.36	47.0

Board drillings



Number of contacts

# 9-25



IP 67, angled turned solder pins,  
with rear plastic mounting plate, bracket and board lock

Identification	No. of contacts	Part No.	
		Performance level S4 <sup>1)</sup>	
<b>Male connector</b> tinned metal shell with dimples	9 15 25	09 67 509 . 658 09 67 515 . 658 09 67 525 . 658	
Please insert digit for flange thread			
4-40 UNC ▶ 7 M3 ▶ 9			
<b>Female connector</b> tinned metal shell	9 15 25	09 67 509 . 758 09 67 515 . 758 09 67 525 . 758	
Please insert digit for flange thread			
4-40 UNC ▶ 6 M3 ▶ 8			

<sup>1)</sup> S4: ≥ 0.76 µm Au (30 µinch)

Number of contacts

# 9-25



IP 67, angled turned solder pins,  
with rear plastic mounting plate, bracket and board lock

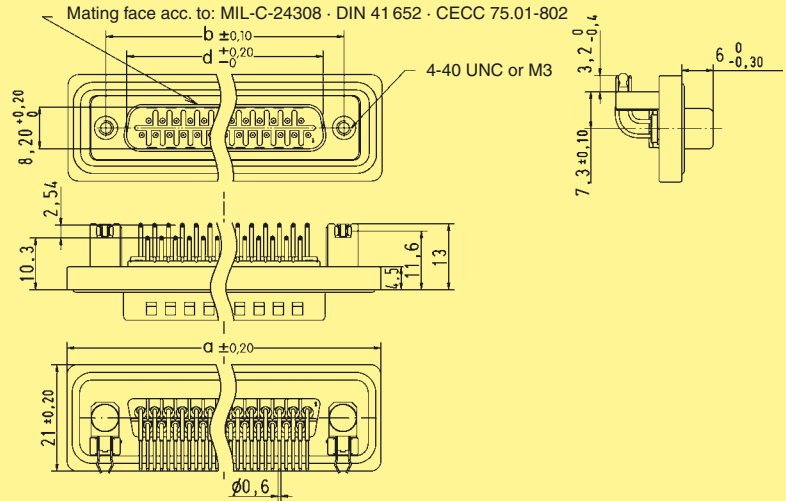
Identification

Drawing

Dimensions in mm

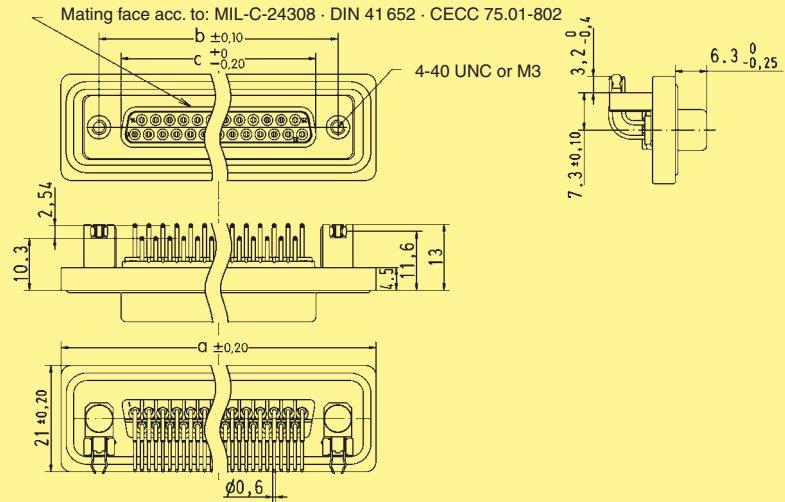
Male connector

9 – 25 contacts



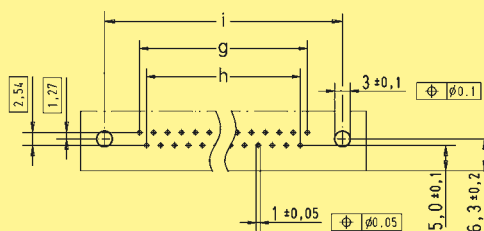
Female connector

9 – 25 contacts


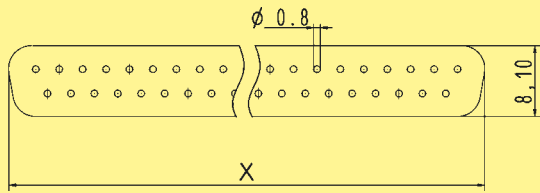
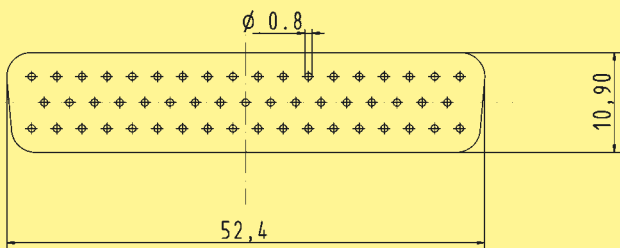

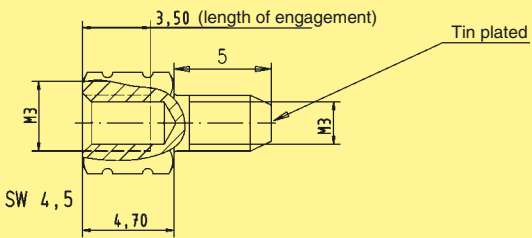

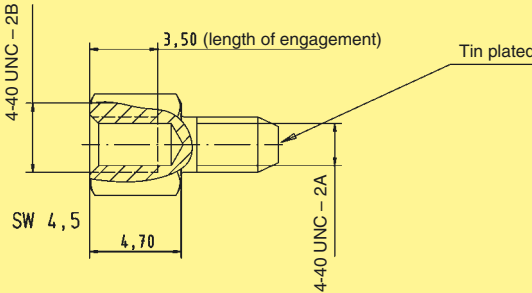


	a	b	c	d	g	h	i
9	40.0	25.00	16.4	16.9	4 x [2.74] = 10.96	3 x [2.74] = 8.22	25.0
15	48.3	33.30	24.7	25.2	7 x [2.74] = 19.18	6 x [2.74] = 16.44	33.3
25	62.0	47.04	38.5	38.9	12 x [2.76] = 33.12	11 x [2.76] = 30.36	47.0

Board drillings



## Accessories for IP 67 connectors

Identification	No. of contacts	Part No.	Drawing	Dimensions in mm										
Front sealing rubber IP 67 	9 15 25 37	09 67 002 9001 09 67 002 9002 09 67 002 9003 09 67 002 9004		<table border="1"> <thead> <tr> <th></th> <th>x</th> </tr> </thead> <tbody> <tr> <td>9</td> <td>16.7</td> </tr> <tr> <td>15</td> <td>24.8</td> </tr> <tr> <td>25</td> <td>38.8</td> </tr> <tr> <td>37</td> <td>54.7</td> </tr> </tbody> </table>		x	9	16.7	15	24.8	25	38.8	37	54.7
		x												
9	16.7													
15	24.8													
25	38.8													
37	54.7													
50	09 67 002 9005													
Female screw lock M3 		09 67 002 9006												
Female screw lock 4-40 UNC 		09 67 002 9007												

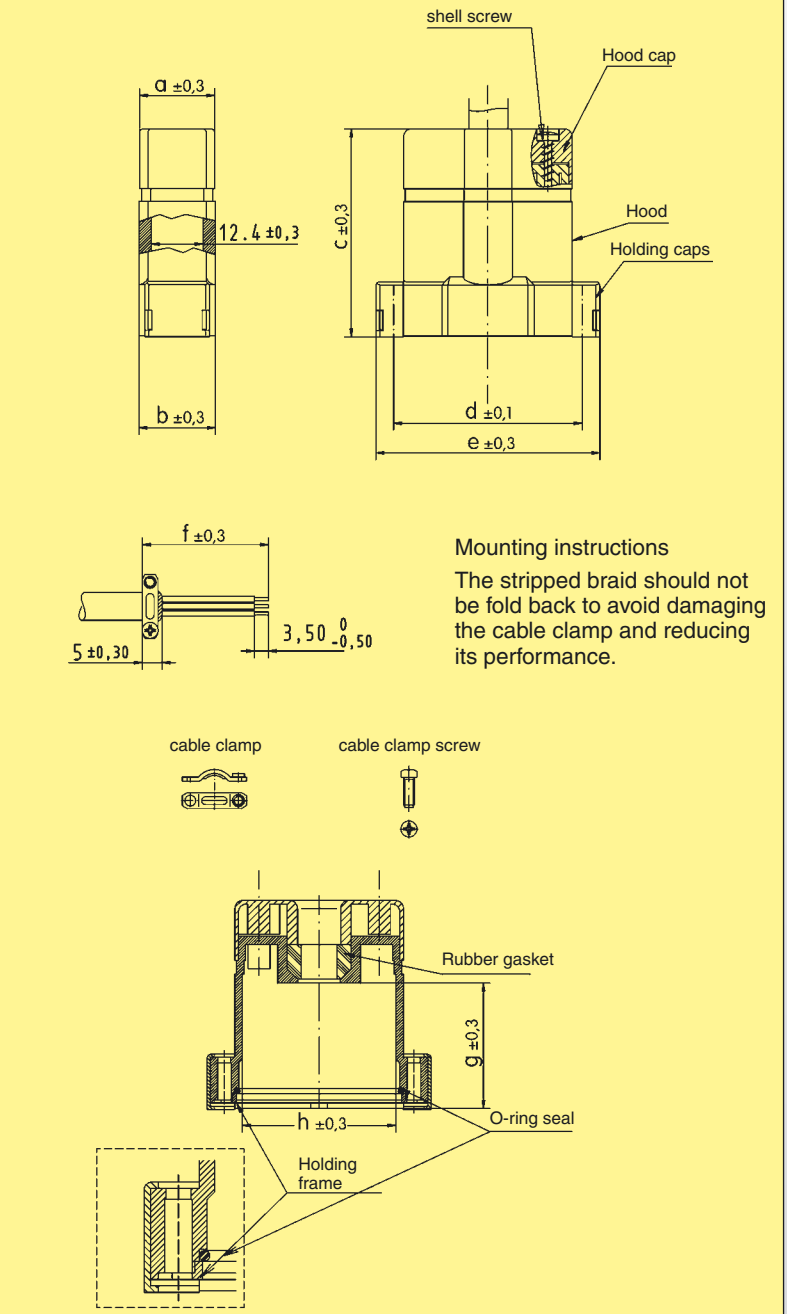


IP 67 plastic hoods

Identification      No. of contacts      Part No.      Drawing      Dimensions in mm

Hood  
Black thermoplastic

9	09 67 009 0436
15	09 67 015 0436
25	09 67 025 0436



**Mounting instructions**  
The stripped braid should not be fold back to avoid damaging the cable clamp and reducing its performance.

	a	b	c	d	e	f	g	h
9	15.6	15.6	41.0	25.00	33.6	23.0	25.0	17.0
15	15.6	15.6	46.8	33.30	42.0	27.5	30.8	25.1
25	18.8	19.1	52.0	47.04	55.7	31.5	33.8	38.8

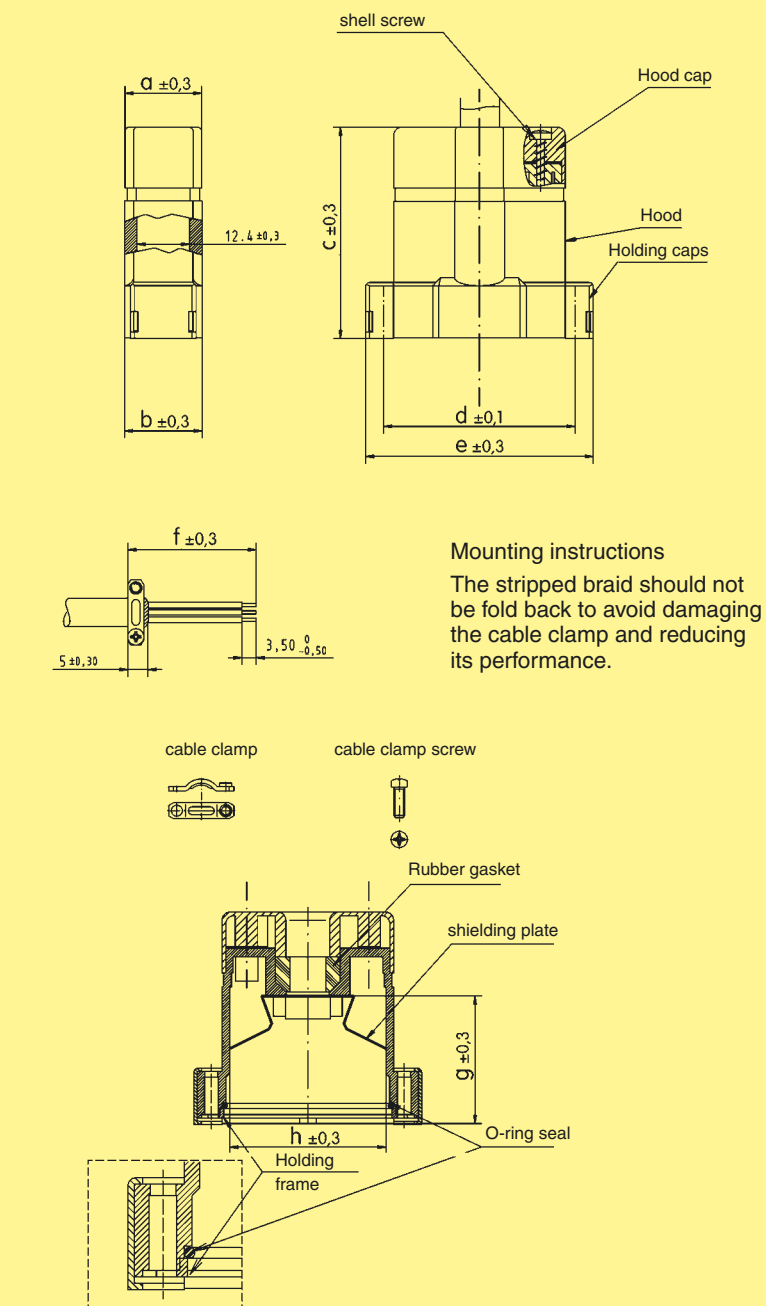


IP 67 metallized plastic hoods

Identification      No. of contacts      Part No.      Drawing      Dimensions in mm

Hood  
Metallized  
thermoplastic

9	09 67 009 0437
15	09 67 015 0437
25	09 67 025 0437


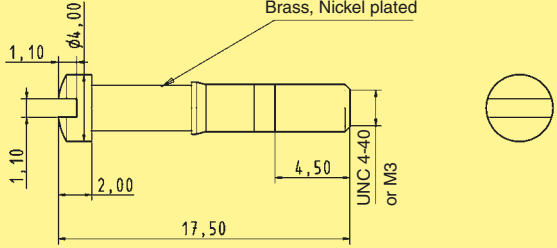


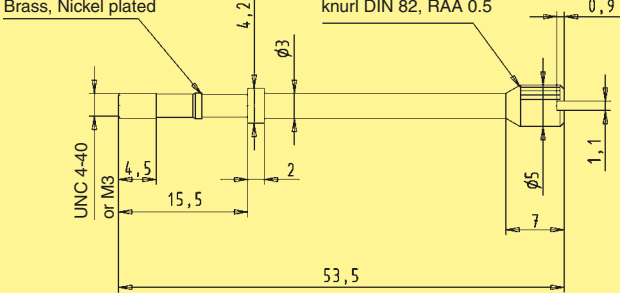


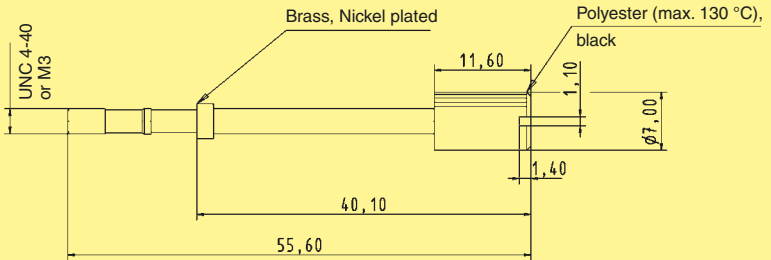



**Mounting instructions**  
The stripped braid should not be fold back to avoid damaging the cable clamp and reducing its performance.

	a	b	c	d	e	f	g	h
9	15.6	15.6	41.0	25.00	33.6	23.0	25.0	17.0
15	15.6	15.6	46.8	33.30	42.0	27.5	30.8	25.1
25	18.8	19.1	52.0	47.04	55.7	31.5	33.8	38.8



## Accessories for IP 67 hoods

Identification	No. of contacts	Part No.	Drawing	Dimensions in mm
Short locking screw 4-40 UNC 		09 67 002 9008	 <p>Brass, Nickel plated</p> <p>1,10</p> <p>1,10</p> <p>2,00</p> <p>4,50</p> <p>17,50</p> <p>UNC 4-40 or M3</p> <p><math>\phi 4,00</math></p>	
Short locking screw M3 		09 67 002 9009		
Knurled locking screw 4-40 UNC 		09 67 002 9010	 <p>Brass, Nickel plated</p> <p>knurl DIN 82, RAA 0.5</p> <p>0,9</p> <p>1,1</p> <p>15,5</p> <p>4,2</p> <p>2</p> <p>53,5</p> <p>UNC 4-40 or M3</p> <p><math>\phi 3</math></p> <p><math>\phi 5</math></p> <p>4,5</p>	
Knurled locking screw M3 		09 67 002 9011		
Knurled locking screw 4-40 UNC with plastic cap 		09 67 002 9012	 <p>Brass, Nickel plated</p> <p>Polyester (max. 130 °C), black</p> <p>11,60</p> <p>1,10</p> <p>1,40</p> <p>55,60</p> <p>40,10</p> <p>UNC 4-40 or M3</p> <p><math>\phi 7,00</math></p>	
Knurled locking screw M3 with plastic cap 		09 67 002 9013		

