## **Technical characteristics**

### Types 3Q, 3R



Number of contacts 20-30

Contact spacing (mm) 2.54

Working current

see current carrying capacity chart

Clearance  $\geq$  1.2 mm Creepage  $\geq$  1.2 mm

Working voltage

The working voltage also depends on the clearance and creepage dimensions of the pcb itself, and the associated wiring according to the safety regulations of the equipment

Test voltage  $U_{r.m.s.}$  1 kV Contact resistance  $\leq$  20 m $\Omega$ Insulation resistance  $\geq$  10<sup>12</sup>  $\Omega$ 

Temperature range

The higher temperature limit includes the local ambient and heating effects of the contacts under load During reflow soldering

-55 °C ... + 125 °C - 40 °C ... + 105 °C for press-in connector

ring max. + 240 °C for 15 s for SMC connectors

2 A max

Electrical termination

Solder pins for pcb connections  $\emptyset$  1.0  $\pm$  0.1 mm according to IEC 60 326-3 wrap posts 0.6 x 0.6 mm diagonal 0.79-0.86 mm

Compliant press-in terminations

PCB thickness ≥ 1.6 mm

Recommended PCB holes

for press-in technology

in acc. to EN 60 352-5

Insertion and withdrawal force 20way ≤ 20 N

 $30 \text{way} \leq 30 \text{ N}$ 

Materials

Mouldings Thermoplastic resin,

glass-fibre filled, UL 94-V0

Contacts Copper alloy

Contact surface

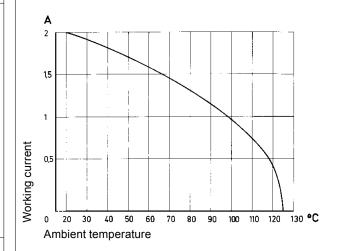
Contact zone Selectively plated according to

performance level

#### 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, non interrupted current loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

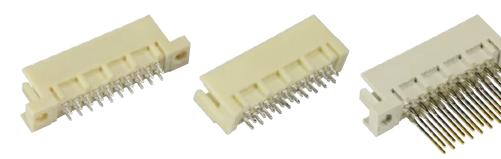
Control and test procedures according to DIN IEC 60512



# DIN 41612 · complementary type 3Q



Number of contacts



### Male connectors

Identification	Number of contacts	Contact arrangement	3	2	1
Identification  Male connector with solder pins 2.5 mm with fixing flange with fixing flange, SMC without fixing flange without fixing flange, SMC  Male connector with solder pins			Part No.	Performance levels according to IEC 60603- 2 1  09 75 120 6902  09 75 120 6519 <sup>d</sup> )  09 75 120 6569 <sup>d</sup> )	
4.0 mm with fixing flange	20	1234 60 ****		09 75 120 6903	
with fixing flange, SMC	20	1234 80	Performance level 3 on request	09 75 120 6520 <sup>d)</sup>	Performance lev on request
without fixing flange	20	1234 a b		09 75 120 6593	
without fixing flange, SMC	20	1234 b ••••		09 75 120 6570 <sup>d)</sup>	
Male connector with solder pins 13 mm with fixing flange with fixing flange, SMC	20	1234 Bo		09 75 120 6577 09 75 120 6521 <sup>d</sup> )	
Male connector with wrap posts1) 13 mm with fixing flange	20	\$ 1234 \$ 0 ****		09 75 120 6907	
Male connector with press-in pins 5.0 mm with fixing flange without fixing flange	20	1234 80 1234 8 1234		09 75 120 6904 09 75 120 6504	
Male connector with press-in pins 13 mm with fixing flange	20	1234		09 75 120 6985 09 75 120 6974°	
without fixing flange	20	1234 b ••••		09 75 120 6574°	

Wrap posts for interfacing selectively gold plated (performance level 3)
 To be used only for wire wrap termination
 CTI > 400

# DIN 41612 · complementary type 3Q

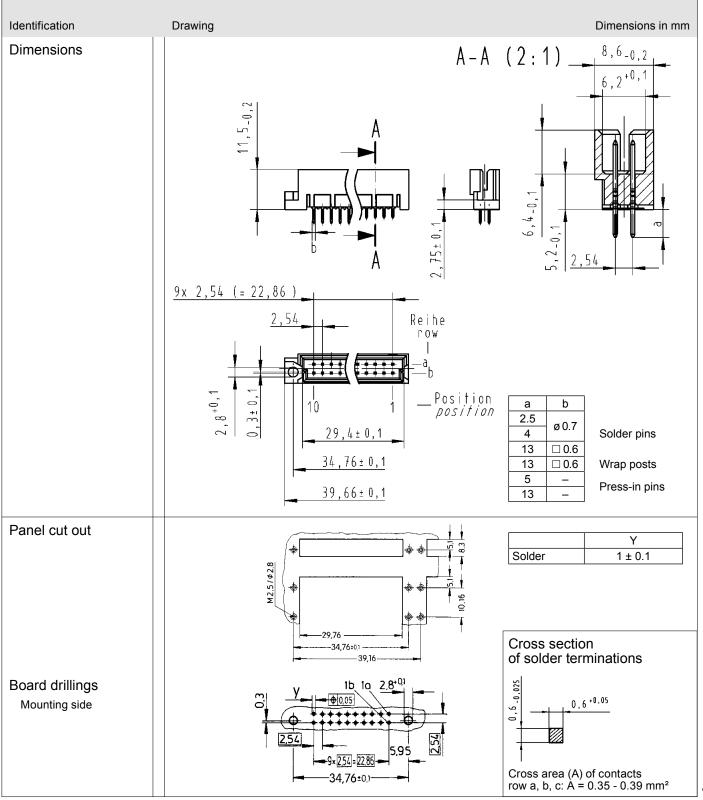


Number of contacts

20



#### Male connectors



Other contact arrangements as well with lagging/leading pins on request

## DIN 41612 · complementary type 3R



Number of contacts

30, 20





### Male connectors

Identification	Number of contacts	Contact arrangement	Part No.	Performance levels according 2	to IEC 60603-2.
Male connector with solder pins 2.5 mm	30	1234		09 29 130 6902	
with fixing flange	20	£0 ****		09 29 120 6902	
with fixing flange, SMC	30	1234		09 29 130 6519 <sup>d)</sup>	
without fixing flange	30	1234 b ••••		09 29 130 6592	
without fixing flange, SMC	30	1234 0 000 0 000		09 29 130 6569 <sup>d)</sup>	
Male connector with solder pins 4.0 mm	30	1234		09 29 130 6903	
with fixing flange	20	1234		09 29 120 6903	
with fixing flange, SMC	30	<b>6</b> • • • • • • • • • • • • • • • • • • •		09 29 130 6520 <sup>d)</sup>	
without fixing flange	30	1234		09 29 130 6593	
without fixing flange, SMC	30	1 2 3 4 0 000 0 0000		09 29 130 6570 <sup>d)</sup>	
Male connector with solder pins 13 mm with fixing flange	30	1234 80 **** 1234 80 ****	Performance level 3 on request	09 29 130 6577 09 29 120 6577	Performance le on request
with fixing flange, SMC	30	1234		09 29 130 6521 <sup>d</sup> )	
Male connector with wrap posts1) 13 mm with fixing flange	30	1234		09 29 130 6907	
Male connector with press-in pins 5.0 mm	30	1234		09 29 130 6904	
with fixing flange	20	<b>ૄ</b>		09 29 120 6904	
without fixing flange	30	1 2 3 4 0 0000 0 0000		09 29 130 6504	
Male connector with press-in pins 13 mm	30	1234		09 29 130 6985 09 29 130 6974•	
with fixing flange	20	<b>E</b> O *****		09 29 120 6974 <b>°</b>	
without fixing flange	30	1 2 3 4 b 0 0 0 0		09 29 130 6574°	

Wrap posts for interfacing selectively gold plated (performance level 3)
 To be used only for wire wrap termination
 CTI > 400

## DIN 41612 · complementary type 3R



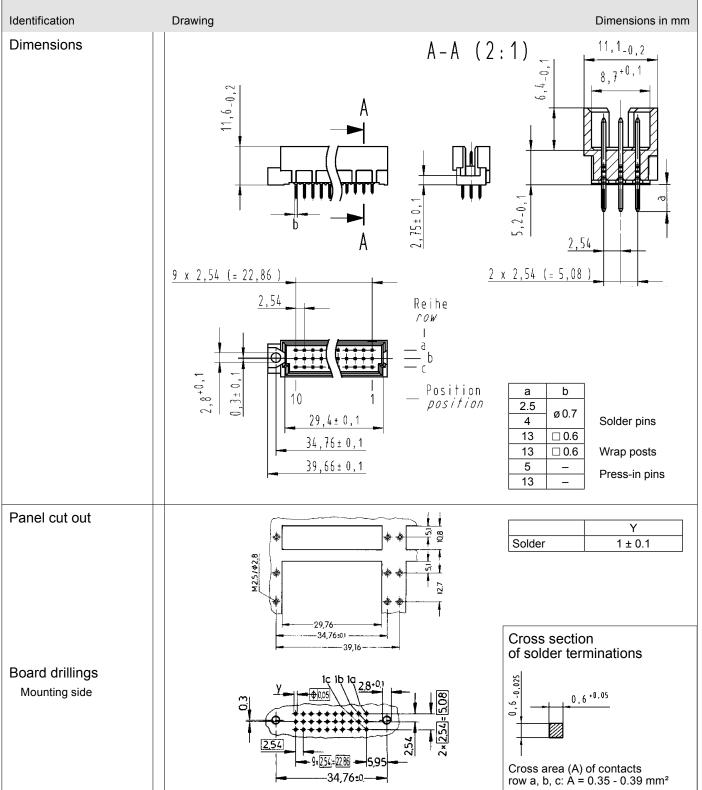
Number of contacts

30, 20





### Male connectors



Other contact arrangements as well with lagging/leading pins on request