# Q, 2Q, 3Q, R, R (HE 11), 2R, 3R



Number of contacts	16-96
Contact spacing (mm)	2.54
Working current see current carrying capacity chart Clearance Creepage Working voltage	2 A max. 1 A with insulation displacement 40 A max. type M ≥ 1.2 mm ≥ 1.2 mm
The working voltage also depends	according to the actatu regulations

1 kV

 $\leq$  20 m $\Omega$ 

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 Explanations see chapter 00

Test voltage U<sub>r.m.s.</sub> Contact resistance Insulation resistance

 $\geq 10^{12} \Omega$  for standard articles  $\geq$  10<sup>11</sup>  $\Omega$  for special NFF articles (with part-no. ending 222)

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

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

Degree of protection for crimp terminal IP 20 according to DIN 40 050

#### Electrical termination

Male and female connector Solder pins for pcb connections

Ø 1.0 ± 0.1 mm according to IEC 60 326-3 wrap posts 0.6 x 0.6 mm diagonal 0.79-0.86 mm Crimp terminal 0.09-0.5 mm<sup>2</sup> Insulation displacement connection AWG 28/7

Compliant press-in terminations PCB thickness

Recommended PCB holes for press-in technology

≥ 1.6 mm

See recommendation page 00.25 in acc. to EN 60 352-5

Insertion and withdrawal force 16way ≤ 15 N

20way ≤ 20 N 30way  $\leq 30$  N 32way ≤ 30 N 48way ≤ 45 N 64way≀ ≤ 60 N 96way ≤ 90 N

#### Materials

Mouldings Thermoplastic resin. glass-fibre filled, UL 94-V0

Contacts Copper alloy

Contact surface

Contact zone Selectively plated according to

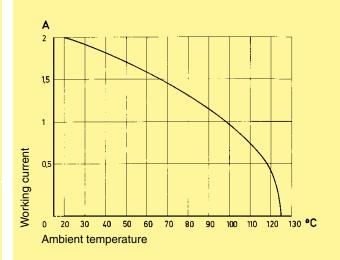
performance level1)

1) Explanation performance levels see chapter 00

#### 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



#### Pin shroud for male and female connectors with 0.6 x 0.6 mm pins

A secure interfacing system for signals from the rear of 19" racks to connectors with wrap posts 0.6 x 0.6 mm is possible with the use of a pin shroud.

The pin shroud protects the wrap posts on the rear side of the rack and can be screwed to the printed circuit board (screw fixing) or can be pressed onto the pins (press-in fixing).

After assembly the rear ends of the wire wrap posts become the mating areas of a type C resp. type 2C male connector.

This system can now accept:

- female connectors type C
- female connectors type 2C
- female connectors type R
- female connectors type 2R

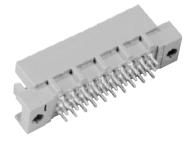
The locking levers provide security for the mated connectors. Fast and simple disconnection is possible (see application examples, pages 01.64 ff).

### Fitting and removing crimp contacts

see technical characteristics chapter 03

# 30, 20

Number of contacts



## Male connectors

Number Contact Part No. Performance levels according to IEC 60603-2. Explanation chapter 00					
Identification	of contacts	arrangement	3	2	1
Male connector with solder pins 2.5 mm	30	1234 b 0 000 1234		09 29 130 6902	
with fixing flange	20	₽ ····		09 29 120 6902	
with fixing flange, SMC	30	1234		09 29 130 6519 <sup>d)</sup>	
without fixing flange	30	1 2 3 4 b ••••		09 29 130 6592	
without fixing flange, SMC	30	1234 b 0000		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	€ <u></u>		09 29 120 6903	
with fixing flange, SMC	30	1234		09 29 130 6520 <sup>d)</sup>	
without fixing flange	30	1234 0 000 0 000		09 29 130 6593	
without fixing flange, SMC	30	1234 0000 0000		09 29 130 6570 <sup>d)</sup>	
Male connector with solder pins 13 mm	30	1234	Performance level 3 on request	09 29 130 6577	Performance level 1 on request
with fixing flange	20	<b>€</b>		09 29 120 6577	
with fixing flange, SMC	30	1234		09 29 130 6521 <sup>d)</sup>	
Male connector with wrap posts <sup>1)</sup> 13 mm		1734			
with fixing flange	30			09 29 130 6907	
Male connector with press-in pins 5.0 mm	30	1234		09 29 130 6904	
with fixing flange	20	1234		09 29 120 6904	
without fixing flange	30	1234 b 0000		09 29 130 6504	
Male connector with press-in pins 13 mm	30	1234		09 29 130 6985 <sup>w)</sup> 09 29 130 6974 <sup>*</sup>	
with fixing flange	20	<b>E </b>		09 29 120 6974°	
without fixing flange	30	1234 b ••••		09 29 130 6574°	

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

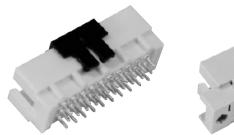
w) Wrap posts not for interfacing, no performance level

## DIN 41 612 · complementary type 3R



Number of contacts

30, 20





#### Male connectors

