

Identification	Part No. Male contacts for...	Performance level 2 Female contacts for...	Drawing	Dimensions in mm												
High current contacts for straight crimp terminations	10 A 20 A 40 A	..male connector 09 03 000 6113 09 03 000 6114 09 03 000 6115	..female connector 09 03 000 6213 09 03 000 6214 09 03 000 6215	 <table border="1"> <tr><td></td><td>Ø A</td><td>Ø B</td></tr> <tr><td>10 A</td><td>1,85</td><td>2,55</td></tr> <tr><td>20 A</td><td>2,8</td><td>3,7</td></tr> <tr><td>40 A</td><td>4,4</td><td>5,6</td></tr> </table>		Ø A	Ø B	10 A	1,85	2,55	20 A	2,8	3,7	40 A	4,4	5,6
	Ø A	Ø B														
10 A	1,85	2,55														
20 A	2,8	3,7														
40 A	4,4	5,6														
Crimping tool for high current contacts	09 99 000 0196															
High current contacts for straight solder terminations	10 A 20 A 40 A	..male connector 09 03 000 6101 09 03 000 6102 09 03 000 6103	..female connector 09 03 000 6201 09 03 000 6202 09 03 000 6203	 <table border="1"> <tr><td></td><td>φ</td></tr> <tr><td>10 A</td><td>1,7</td></tr> <tr><td>20 A</td><td>2,8</td></tr> <tr><td>40 A</td><td>4,8</td></tr> </table>		φ	10 A	1,7	20 A	2,8	40 A	4,8				
	φ															
10 A	1,7															
20 A	2,8															
40 A	4,8															
High current contacts for printed circuit terminations	10 A	..male connector 09 03 000 6104		 1) Solder pins for hole $\varnothing 1 \pm 0.1$ mm												
High voltage contacts for straight solder terminations	2.8 kV	..male connector 09 03 000 6140	..female connector 09 03 000 6240	 Wire gauge max. 0.5 mm ²												
Coaxial contacts for straight solder and/or crimp terminations		..female connector 09 03 000 6160	..male connector without knurled area 09 03 000 6260 with knurled area 09 03 000 6274	 with/without knurled area												
Coaxial contacts for angled solder and/or crimp terminations		09 03 000 6161														
Coaxial contacts for printed circuit terminations			09 03 000 6262	 1) Solder pins for hole $\varnothing 1 \pm 0.1$ mm												
Crimping tool for coaxial contacts	09 99 000 0194															
Removal tool for contacts	09 99 000 0174															

Characteristics for contacts and wires

	Coaxial contacts	High current contacts	High voltage contacts
Impedance	50Ω	—	—
Insulation resistance	10 ¹² Ω	—	—
Contact resistance	—	max. 1.5 mΩ	—
Internal wire	≲ 10 mΩ	—	≲ 3 mΩ
External wire	≲ 3 mΩ	—	—
Working voltage	250 V ~	—	2.8 kV
Voltage resistance	750 V ~	—	3.8 kV
Max. working current	1.5 A	40 A	1.5 A
Contact finish	perf. level 2	perf. level 2	perf. level 2
Cable group	2	—	—

Cable group 2 flexible wires	Shell Ø	Screening Ø	Dielectric Ø	Internal wire Ø	Hexagonal crimp Spanner width
RG 174 A/U	2.5	2.0	1.5	0.48	3.25
RG 188 A/U	2.6	2.0	1.5	0.54	3.25
RG 316/U	2.5	2.0	1.5	0.54	3.25

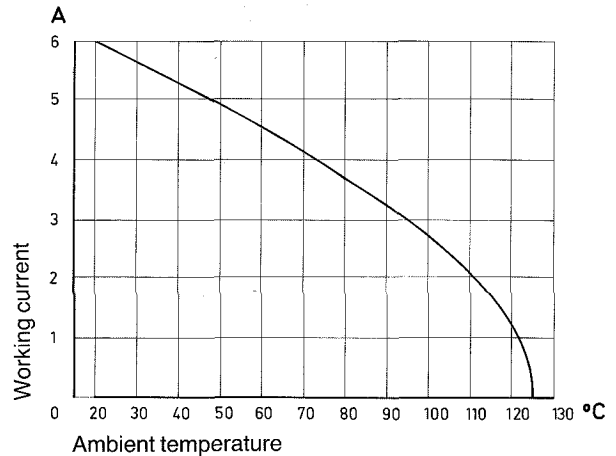
Number of contacts	
Gds A-D	32
Gds A-E	48
Contact spacing (mm)	
Gds A-D	5.08
Gds A-E	male connector 5.08 x 5.08 male connector 2.54 x 5.08 female connector 5.08 x 5.08
Working current	6 A max.
see current carrying capacity chart	
Clearance	
Gds A-D, Gds A-E	≧ 3.0 mm
Gds A-E male connector	≧ 1.6 mm
row separation	2.54 mm
Creepage	≧ 3.0 mm
Working voltage	according to the safety regulations of the equipment. Explanations page 6
The working voltage also depends on the clearance and creepage dimensions of the P.C. Board itself, and the associated wiring	
Test voltage $U_{r.m.s.}$	1.55 kV
Contact resistance	≧ 15 mΩ ≧ 20 mΩ including crimp connection
Insulation resistance	≧ 10 ¹² Ω
Temperature range	- 65 °C + 125 °C
The higher temperature limit includes the local ambient and heating effect of the contacts under load	
Degree of protection for crimp terminal	IP 20
according to DIN 40 050	
Electrical termination	
Male connector	Solder pins 0.6 x 0.6 mm for P.C.B. connections ∅ 0.8 + 0.3 mm
Female connector	Wrap posts 1 x 1 mm diagonal 1.34–1.45 mm Solder pins ∅ 0.7 mm for P.C.B. connections ∅ 1.0 ± 0.1 mm according to IEC 326 Angled solder pins 1 x 1 mm for P.C.B. connections ∅ 1.6 ± 0.1 mm Solder lugs Crimp terminal 0.09–1.5 mm ²
Insertion and withdrawal force	32 way ≧ 40 N 48 way ≧ 75 N
Materials	
Mouldings	Thermoplastic resin, glass-fibre filled
Contacts	Copper alloy
Contact surface	Contact zone: selectively gold plated according to performance level ¹⁾ Termination zone: tinned

¹⁾ Explanations of performance levels page 10

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.



Fitting the crimp contacts

After crimping the wires onto the contacts the crimp contacts are correctly orientated and inserted into cavities in the connector body in the required configuration. They snap into position and are firmly held in place. A light pull on the wire will check that they are correctly located. When using stranded wire having a gauge below 0.37 mm², an insertion tool is required.

Removing the crimp contacts

The removal tool is inserted into a slot on the side of the respective crimp cavity. This action compresses the contact retaining spring and the contact can then be easily withdrawn using a light pull on the wire. This action will cause no damage to the contact/wire which can be repositioned/refitted as necessary. The diagram demonstrates the crimp removal procedure (max. 5 x).

