

M 16 Control Signal Connectors

Mechanical Data	Materials and Technical Data
Housing	Copper-Zinc alloy Die Cast
Housing surface	Nickel plated other surface upon request
Inserts (for contacts)	Thermoplastic Polyamid PA 6 (Nylon 6/6), PBT Fire protection class V-0
Contacts	Brass Alloy
Contact surface at point of contact	Nickel and gold plated (0,25µm Au)
Minimum mating cycles	> 1000
Seals / O-Rings	Buna-N standard, optional Viton® (Viton is a registered trademark of DuPont)
Temperature range	-40° C – 125° C (-40 °F – 257 °F)
Type of contacts	Crimp, dip-solder (PCB)
Protection	IP 67 / IP 69 K per EN 60 529 (connected), NEMA 4x
Cable diameter range	2 – 11 mm (.08 – .43")

Electrical Data					
Number of positions	3 (3 x 1 mm)	3 (3 x 2 mm)	4 + 3 + PE / 320 V	4 + 3 + PE / 630 V	
Number of contacts	3	3	4 4	4 4	
Contact-Ø [mm]	1	2	0,8 1,6	0,8 1,25	
AWG [mm²]	0,14 – 1	0,5 – 2,5	0,08 – 0,34 0,34 – 1,5	0,08 – 0,34 0,34 – 1,5	
Nominal current ¹⁾ [A]	8	20	5 16	5 16	
Nominal voltage ²⁾ [V~] degree of protection 3 ⁴⁾	400	400	160 320	300 630	
Test voltage (Breakdown voltage) ³⁾ [V~]	2500	2500	1500 2500	1500 2500	
Insulation resistance [MΩ]	> 10 ¹⁰	> 10 ¹⁰	> 10 ¹⁰	> 10 ¹⁰	
Max. contact resistance [mΩ]	3	3	3	3 3	
Number of positions	6+PE	10	12 + 3	18	
Number of contacts	7	10	12 3	18	
Contact-Ø [mm]	1,25	1	0,8 1,25	0,8	
AWG [mm²]	0,5 – 1,5	0,14 – 0,75	0,08 – 0,34 0,5 – 1,5	0,08 – 0,34	
Nominal current ¹⁾ [A]	16	8	3 10	3	
Nominal voltage ²⁾ [V~] degree of protection 3 ⁴⁾	630	160	24 60	24	
Test voltage (Breakdown voltage) ³⁾ [V~]	2500	1500	1500 2500	1500	
Insulation resistance [MΩ]	> 10 ¹⁰	> 10 ⁶	> 10 ¹⁰	> 10 ¹⁰	
Max. contact resistance [mΩ]	3	3	3 3	3	

^{1), 2), 3), 4)} See Technical Information page 14

