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 2 [4]	630	630	320	630	300	800
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		10	12 + 3		18
Number of contacts		10	12	3	18
Contact-Ø [mm]		1	0,8	1,25	0,8
AWG [mm²]		0,14 – 0,75	0,08 – 0,34	0,5 – 1,5	0,08 – 0,34
Nominal current [1] [A]		8	3	10	3
Nominal voltage [2] [V~] degree of protection 2 [4]		230	60	160	60
Nominal voltage [2] [V~] degree of protection 3 [4]		160	24	60	24
Test voltage (Breakdown voltage) [3] [V~]		1500	1500	2500	1500
Insulation resistance [MΩ]		> 10^{6}	> 10^{10}		> 10^{10}
Max. contact resistance [mΩ]		3	3	3	3

[1], [2], [3], [4] See Technical Information page 14