

# Circular connectors

## M58 power connectors

### Mechanical and electrical data

#### Mechanical data

Housing material:	Aluminum
Housing surface:	Aluminum, anodized
Insulating body:	Polyamide (PA 66)
Contact surface:	Power and PE contacts: silver-plated (Ag), signal contacts: gold-plated (Au)
Connection technology:	Crimp connection
Sealing and O-ring:	Fluororubber (FPM)
Ambient temperature:	-40°C ... 120°C
Cable entry:	Cable and coupler connectors for an outer cable diameter of 17 to <b>36 mm</b> , shielded
Type of locking:	M58 x 2 screw locking
Mechanical insertion/withdrawal cycles:	Standard: 100
Protection class:	IP67 when locked

#### Electrical data

Number of positions	6 (2 + 3 + PE)			8 (4 + 3 + PE)						
	2	+	3	+	PE	4	+	3	+	PE
Contacts	2	+	3	+	PE	4	+	3	+	PE
Contact Ø [mm]	1.6		10		10	1.6		10		10
Litz wire cross section										
Crimp contacts, turned [mm <sup>2</sup> ]	0.75 ... 1.5		10 ... 50		10 ... 50	0.75 ... 1.5		10 ... 50		10 ... 50
Nominal current per contact at 25°C <sup>1)</sup> [A]	12		150		–	12		150		–
<b>Specifications in accordance with DIN EN 61984:2009</b>										
Rated voltage [V AC/DC]	250		630		–	250		630		–
Test/surge voltage [kV AC]	4		6		–	4		6		–
Overvoltage category			III					III		
Pollution degree			3					3		
Installation height [m]			Up to 2000					Up to 2000		
Cable clamping area <sup>2)</sup> Max. Ø [mm]			36					36		

<sup>1)</sup> Determine the effective current carrying capacity in accordance with the application, if necessary, using a derating curve.

<sup>2)</sup> The cable clamping areas specified on the following pages may vary depending on the cable material and structure. Selection and testing is the responsibility of the user.

#### Note:

In contrast to connecting equipment, connectors may only be inserted/withdrawn with the power supply disconnected.