



# Circular Connectors - M12 Power

## Technical Data

### Materials and Technical Data

Housing	Copper-Zinc alloy / Die Cast INOX AISI 316 L TPU (Molded versions)	
Housing surface	Nickel plated Black chrome-plated	
Inserts (for contacts)	PBT	Fire protection class V-0
Contacts	Copper alloy	
Contact surface at point of contact	Gold plated	
Minimum mating cycles	> 100	
Seals / O-Rings	FKM / NBR	
Temperature range	-40°C – 125°C (-40°F – 257°F)	
Type of contacts	Crimp, screw	
Protection	IP 67 / IP 69K	
Cable diameter range	3 – 11 mm (.08 – .43“)	

### Electrical Data

Coding	S (Screw)	T (Screw)	K (Crimp)	L (Crimp)
Colors	black	dark grey	blue	grey
Number of positions	4 (3 + PE)	4	5 (4 + PE)	5 (4 + PE)
(mm²) AWG	(0,5 – 1,5) AWG 20 – 16	(0,5 – 1,5) AWG 20 – 16	(0,75 – 2,5) AWG 18 – 14	(0,75 – 2,5) AWG 18 – 14
Nominal current [A]	12	12	16	16
Nominal voltage [V~] degree of protection 3	630	63	630	63
Test voltage (Breakdown voltage) [V~]	6000	1500	6000	1500
Insulation resistance [MΩ]	> 10 <sup>6</sup>	> 10 <sup>6</sup>	> 10 <sup>6</sup>	> 10 <sup>6</sup>
Max. contact resistance [mΩ]	< 3	< 3	< 3	< 3

### Technical Information

**Nominal Current:** Allowable current (Amp), that can be transmitted by each contact continuously and simultaneously.

**Nominal Voltage:** Allowable voltage (Volt), that can be applied to each contact continuously and simultaneously.

**Test Voltage:** Voltage which, under certain conditions, a connector can be exposed to without breakdown.

**Degree of Protection:** Potential dirt accumulation of a disconnected connector in a certain environment.

Don't connect or disconnect HUMMEL Connectors under load.

### Derating M12

