

Technical characteristics

Specifications IEC 60352-4
IEC 61076-2-101

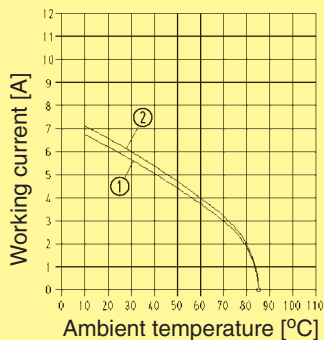
Approval

Construction type	HARAX® M8-S/M12-S	HARAX® M12 angled	HARAX® M12-L 3 poles, 4 poles	HARAX® M12-L screened version, A-coded
Working voltage	32 V	32 V	50 V	50 V
Working current (see current carrying capacity)	4 A	4 A	6 A	4 A
Conductor cross section	0.14 - 0.34 mm ² AWG 26 - 22	0.25 - 0.5 mm ² AWG 24/7 - 20	0.34 - 0.75 mm ² AWG 22 - 18	0.14 - 0.34 mm ² AWG 26 - 22
Diameter of individual strands	≥ 0.1 mm	≥ 0.1 mm	≥ 0.1 mm	≥ 0.1 mm
Conductor insulation material	PVC / PP / TPE	PVC	PVC	PVC
Conductor diameter	1.0 - 1.6 mm	1.2 - 1.6 mm	1.6 - 2.0 mm	1.2 - 1.6 mm
Cable diameter	M8-S: 3.2 - 5.4 mm M12-S: 2.9 - 5.1 mm	4 - 5.1 mm	3 poles: 5.5 - 7.2 mm 4 poles: 6 - 8 mm	7 - 8.8 mm
Limiting temperatures	- 25 °C / + 85 °C	- 25 °C / + 85 °C	- 25 °C / + 85 °C	- 25 °C / + 85 °C
Temperature during connection	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C
Degree of protection	IP 67	IP 67	IP 65 / IP 67	IP 67
Termination cycles with the same cross section	10	10	10	10

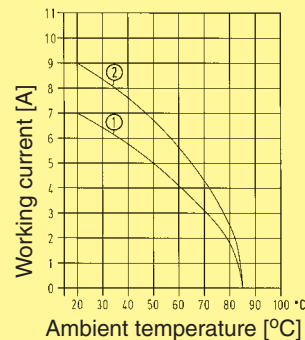
Current carrying capacity The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60512-5.

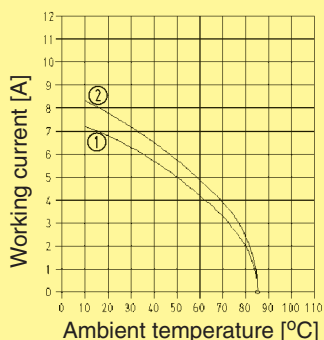
M8-S, 4 poles 1 = wire gauge 0.25 mm²
M12-S, 4 poles 2 = wire gauge 0.34 mm²



M12-L 3 poles, 4 poles 1 = wire gauge 0.34 mm²
2 = wire gauge 0.75 mm²



M12, 4 poles, angled 1 = wire gauge 0.25 mm²
2 = wire gauge 0.5 mm²



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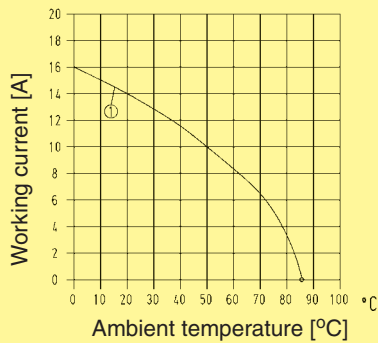
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IEC 61076-2-101

Approval

Construction type	HARAX® M12-L screened version Ethernet	Profibus	Han® 7/8"	HARAX® M12-L 5 poles	Han® M12 Crimp
Working voltage	50 V	32 V	230 V / 400 V	50 V	50 V
Working current (see current carrying capacity)	4 A	4 A	10 A	4 A	4 A
Conductor cross section	① 0.14 - 0.34 mm ² AWG 26 - 22 ② 0.34 - 0.5 mm ² AWG 22-20	0.25 - 0.34 mm ² AWG 24- 22	0.75 - 1.5 mm ² AWG 18 - 16	0.25 - 0.34 mm ² AWG 24 - 22 0.34 - 0.5 mm ² AWG 22 - 20	0.34 - 0.5 mm ² AWG 22 - 20
Diameter of individual strands	≥ 0.1 mm	≥ 0.1 mm	≥ 0.15 mm	≥ 0.1 mm	
Conductor insulation material	PVC / PE	PVC, Zell-PE	PVC, PP, TPE	PVC	
Conductor diameter	1.2 - 2.0 mm	2 - 2.6 mm	≤ 2.8 mm	1.2 - 2.0 mm	2.0 - 2.3 mm
Cable diameter	① 5.5 - 7.2 mm (black) ② 7 - 8.8 mm (light grey)	7 - 8.8 mm	6.8 - 9.5 mm (black) 9 - 12.5 mm (grey)	6 - 8 mm	4.5 - 5.4 mm (transp.) 7 - 8.8 mm (light grey)
Limiting temperatures	- 25 °C / + 85 °C	- 25 °C / + 85 °C	- 40 °C / + 85 °C	- 40 °C / + 85 °C	- 40 °C / + 85 °C
Temperature during connection	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C
Degree of protection	IP 67	IP 67	IP 65 / IP 67	IP 65 / IP 67	IP 67
Termination cycles with the same cross section	10	10	10	10	

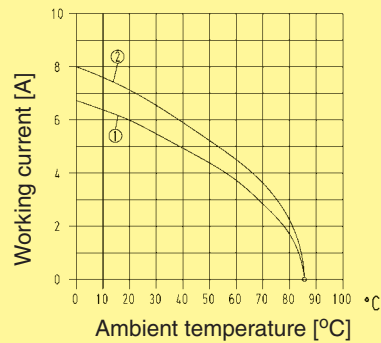
7/8"

1 = wire gauge 0.75 mm² / 1.5 mm²



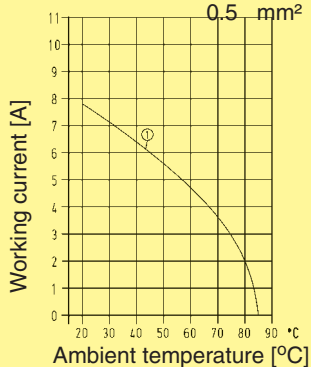
M12L, 5 poles

1 = wire gauge 0.25 mm²
2 = wire gauge 0.34 mm²



M12, Crimp

1 = wire gauge 0.34 mm² / 0.5 mm²



M12L, 5 poles

1 = wire gauge 0.34 mm²
2 = wire gauge 0.5 mm²

