



preLink® System



General information

Mating Face	RJ45 acc. to IEC 60603-7, M12 D-coded acc. to IEC 61076-2-101 or M12 X-coded acc. to IEC 61076-2-109		
Number of contacts	8		
Transmission performance	RJ45/ M12 X-coded	M12 D-coded	
	acc. to ISO 11801 category 6 / class E _x up to 500 MHz		
	acc. to ISO 11801 category 5 / class D up to 100 MHz		
Transmission rate	10/100 Mbit/s 1/2,5/5/10 Gbit/s		
Shielding	10/100Mbits		
Shielding	Fully shielded, 360° shielding contact		
Termination technology	preLink® IDC termination acc. to IEC 60352-4		
Power over Ethernet	usable for PoE (IEEE 802.3af) and PoE+ (IEEE 802.3at)		
Cable diameter	see table preLink® types		
Conductor cross section (solid and stranded)	wire gauge	wire diameter	
20 82 000 0001 *	AWG 23 - 22 (contact block yellow)	1,3 - 1,6mm	
20 82 000 0003	AWG 27 - 26 (contact block white)	0,8 - 1,1mm	
20 82 000 0005 / ...0005XL	AWG 23 - 22 (contact block black / PROFINET)	1,3 - 1,6mm	
Current	1,18A at 20°C (see derating diagram)		
Operating voltage	max. 57V DC		
Contact resistance	≤ 20mΩ		
Insulating resistance between contacts	≥ 500MΩ		
Electric strength contact - contact	RJ45/ M12 D-coded 1,0kV	M12 X-coded 0,5kV	
Electric strength contact - shielding	RJ45/ M12 D-coded 1,5kV	M12 X-coded 0,5kV	
Degree of protection	see table preLink® types		
Temperature range	-40°C ... +70°C		
Mating cycles	RJ45 termination	M12 termination	preLink termination
	min. 750	min. 100	min. 10
UL file	pending		
RoHS - compliant	Yes		

* AWG 24/1 and AWG 24/7 possible, depending on isolation material; Termination evaluation test needed.

Material

Housing material see table preLink® types

Contact plating

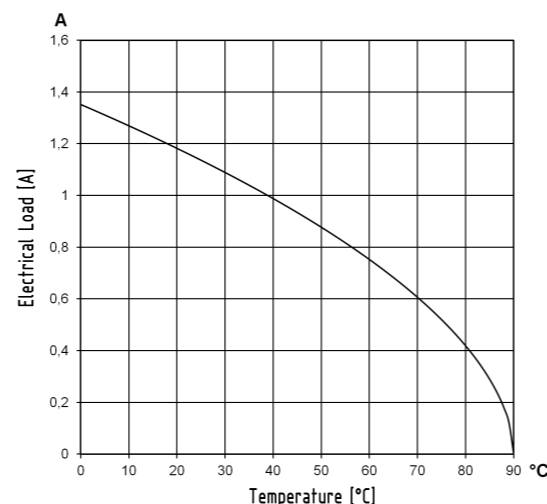
Plating contact zone 50µm Au over Ni

Derating diagram acc. to IEC 60512-5 (current carrying capacity)

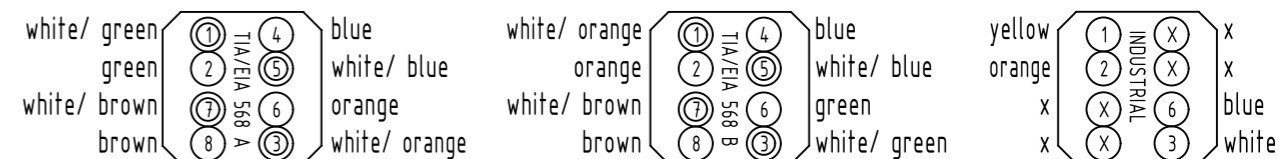
The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals.

The current capacity curve is valid for continuous, non 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



Wire map



preLink® types

p/n	type	cable diameter	material	degree protection
20 82 500 0001	preLink® RJ45 Keystone jack w/o preLink block	5 ... 9 mm	zinc die-cast	IP20
20 82 500 0002	preLink® RJ45 Keystone jack angled w/o preLink block	5 ... 9 mm	zinc die-cast	IP20
20 82 501 0001	preLink® RJ45 Keystone jack AWG 24-22	5 ... 9 mm	zinc die-cast	IP20
20 82 001 0001	preLink® RJ45 HIFF jack AWG 24-22	5 ... 9 mm	zinc die-cast	IP20
20 82 001 0002	preLink® RJ45 HIFF jack AWG 27-26	5 ... 9 mm	zinc die-cast	IP20
20 82 000 0002	preLink® RJ45 HIFF jack w/o preLink block	5 ... 9 mm	zinc die-cast	IP20
20 82 101 0001	preLink® extender	5 ... 9 mm	zinc die-cast	IP20
20 82 101 0010	preLink® RJ45 plug w/o preLink block	5 ... 9 mm	zinc die-cast	IP20
20 82 002 0001	Han® 3 A preLink® RJ45 plug insert	5 ... 9 mm	plastic	IP 65/67
20 82 204 0001	Han® PushPull RJ45 plug plastic	6.3 ... 8.8 mm	plastic	IP 65/67
20 82 104 0001	Han® PushPull RJ45 plug metal	5 ... 9.5 mm	zinc die-cast	IP 65/67
20 82 104 0045	Han® PushPull RJ45 plug metal 45°	5 ... 9.5 mm	zinc die-cast	IP 65/67
20 82 005 0001	preLink® M12 connector D-coding, 4 poles	5 ... 9.5 mm	zinc die-cast	IP 65/67
20 82 005 1214	preLink® connector insert, male, M12 D-coding, 4 poles			
20 82 005 0002	preLink® M12 connector X-coding, 8 poles	5 ... 9.5 mm	zinc die-cast	IP 65/67
20 82 006 1218	preLink® connector insert, male, M12 X-coding, 8 poles			
20 82 000 1210	preLink® M12 housing, empty	5 ... 9.5 mm	zinc die-cast	IP 65/67
20 82 005 2001	preLink® M12 cable jack D-coding, 4 poles	5 ... 9.5 mm	zinc die-cast	IP 65/67
20 82 006 2001	preLink® M12 cable jack X-coding, 8 poles	5 ... 9.5 mm	zinc die-cast	IP 65/67
20 82 007 1100	preLink® PCB jack, THR, 8 poles	5 ... 9.5 mm	plastic/metal shielding	IP20

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