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Patch cable, $CAT6_A$, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length 10 m



Ethernet CC-Link IE

Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 805087
GTIN	4046356805087

Technical data

Dimensions

Length of cable	10 m

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C 60 °C (RJ45 connector)

General data

Rated current at 40°C	0.5 A
Rated voltage	48 V
Number of positions	8
Alternative short product description	Patch cable
Rated voltage (III/3)	72 V (DC)

Cable

Cable type	Ethernet 10 Gbit
Cable type (abbreviation)	94F
UL AWM style	20963 (80°C/30 V)
Signal type/category	Ethernet CAT6 _A , 10 Gbps



Technical data

Cable

Cable structure	4x2xAWG26/7; S/FTP			
Conductor cross section	4x 2x 0.14 mm ²			
AWG signal line	26			
Conductor structure signal line	7x 0.16 mm			
Core diameter including insulation	1.04 mm			
Wire colors	white/blue-blue, white/orange-orange, white/green-green, white/brown			
Twisted pairs	2 cores to the pair			
Type of pair shielding	Aluminum-lined foil			
Overall twist	4 pairs for core			
Shielding	Tinned copper braided shield			
Optical shield covering	70 %			
External sheath, color	water blue RAL 5021			
Outer sheath thickness	0.65 mm			
External cable diameter D	6.4 mm ±0.2 mm			
Minimum bending radius, fixed installation	4 x D			
Minimum bending radius, flexible installation	8 x D			
Tensile strength GRP	≤ 100 N			
Cable weight	42 kg/km			
Outer sheath, material	PUR			
Material conductor insulation	Foamed PE			
Conductor material	Bare Cu litz wires			
Insulation resistance	≥ 500 MΩ*km			
Loop resistance	≤ 290.00 Ω/km			
Wave impedance	100 Ω ±5 Ω (at 100 MHz)			
Near end crosstalk attenuation (NEXT)	75.3 dB (with 1 MHz)			
	66.3 dB (at 4 MHz)			
	61.8 dB (at 8 MHz)			
	60.3 dB (at 10 MHz)			
	57.2 dB (at 16 MHz)			
	55.8 dB (at 20 MHz)			
	54.3 dB (at 25 MHz)			
	52.8 dB (at 31.25 MHz)			
	48.4 dB (at 62.5 MHz)			
	45.3 dB (at 100 MHz)			
	40.8 dB (at 200 MHz)			
	39.3 dB (at 250 MHz)			
	38.1 dB (at 300 MHz)			
	36.3 dB (at 400 MHz)			
	34.8 dB (at 500 MHz)			
Power-summated near end crosstalk attenuation (PSNEXT)	72.3 dB (with 1 MHz)			
	08/17/2018 Page 2 / 5			



Technical data

Cable

· · · · · · · · · · · · · · · · · · ·	63.3 dB (at 4 MHz) 58.8 dB (at 8 MHz) 57.3 dB (at 10 MHz) 54.2 dB (at 16 MHz)		
	57.3 dB (at 10 MHz)		
	52.8 dB (at 20 MHz)		
	51.3 dB (at 25 MHz)		
	49.9 dB (at 31.25 MHz)		
	45.4 dB (at 62.5 MHz)		
4	42.3 dB (at 100 MHz)		
	37.8 dB (at 200 MHz)		
	36.3 dB (at 250 MHz)		
	35.1 dB (at 300 MHz)		
	33.3 dB (at 400 MHz)		
	31.8 dB (at 500 MHz)		
	3.1 dB (with 1 MHz)		
	5.7 dB (at 4 MHz)		
{	8 dB (at 8 MHz)		
	8.9 dB (at 10 MHz)		
	11.2 dB (at 16 MHz)		
	12.6 dB (at 20 MHz)		
	14.1 dB (at 25 MHz)		
	15.8 dB (at 31.25 MHz)		
:	22.5 dB (at 62.5 MHz)		
:	28.7 dB (at 100 MHz)		
	41.4 dB (at 200 MHz)		
	46.6 dB (at 250 MHz)		
	51.4 dB (at 300 MHz)		
f	60.1 dB (at 400 MHz)		
•	67.9 dB (at 500 MHz)		
Return loss (RL)	20 dB (with 1 MHz)		
	23 dB (at 4 MHz)		
:	24.5 dB (at 8 MHz)		
-	25 dB (at 10 MHz)		
:	25 dB (at 16 MHz)		
:	25 dB (at 20 MHz)		
:	24.2 dB (at 25 MHz)		
:	23.3 dB (at 31.25 MHz)		
:	20.7 dB (at 62.5 MHz)		
	19 dB (at 100 MHz)		
	16.4 dB (at 200 MHz)		



Technical data

Cable

	(F 0 ID ((050 MIL)			
	15.6 dB (at 250 MHz)			
	15.6 dB (at 300 MHz)			
	15.6 dB (at 400 MHz)			
	15.6 dB (at 500 MHz)			
Signal runtime	5.13 ns/m			
Shield attenuation	≥ 80 dB (at 30 100 MHz)			
Nominal voltage, cable	≤ 100 V			
Test voltage Core/Core	700 V (50 Hz, 1 min.)			
Test voltage Core/Shield	700 V (50 Hz, 1 min.)			
Flame resistance	according to IEC 60332-1-2			
Halogen-free	according to IEC 60754-1			
Resistance to oil	in accordance with DIN EN 60811-2-1			
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)			
	-20 °C 80 °C (cable, flexible installation)			
Ambient temperature (installation)	-20 °C 80 °C			
Ambient temperature (storage/transport)	-20 °C 80 °C			

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e	
	No hazardous substances above threshold values	

Drawings

Schematic diagram



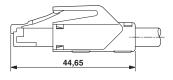
Cable cross section



Connector pin assignment plug RJ45

Ethernet 10 Gbit [94F]

Dimensional drawing





RJ45 connector, IP20



Approvals			
Approvals Approvals			
Approvals			
EAC			
Ex Approvals			
Approval details			
EAC	ERC		B.00767

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PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany

Tel. +49 5235 300 Fax +49 5235 3 41200

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