

# Industry link TWINFIX – glass-armoured breakout cables



## Design

Cable design	2 single fiber cables with tight tubes
Strain relief	glass-armoured
Jacket material	LSFH™
Jacket colour	black

## Properties

- For indoor and outdoor
- For direct connector assembly with strain relief
- Rodent-protected, glass-armoured
- Easy stripping
- Low smoke, halogen free and self-extinguishing
- Metal free
- Improved crush resistance
- For high thermal and mechanical stability
- UV protected, suitable for outdoor use
- Longitudinal and transversal watertight cable

## Applications

- For fixed installation
- Industrial Ethernet and LAN
- Machine cabling
- As control or data cable in factory automation
- Data cabling for harsh environment
- Connection to outdoor devices
- LSFH™ - for applications involving high safety requirements in case of fire

According to IEC 60794-1-2

## Conformance

TWINFIX cables with H200 and POF meet PROFINET specification

## Approvals

UL listed acc. OFN / OFNG

## Ordering information

02-.../(ZNG)H-...22

02-.../(ZNG)H-...22\_UN (optional)

Please see page 158

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Specification					
Cable type	Industry Link TWINFIX				
Fiber types	E9, G50, G62	H200	POF980		
Jacket Ø	7.5	7.5	7.5	mm	
Single fiber cable Ø	2.2	2.2		mm	
Tube Ø	0.9	0.9	2.2	mm	
Channel marking on single fiber	black and orange with arrows				
Approx. weight	59	67	67	kg/km	

Mechanical properties						
Tensile strength	during installation	2000	2000	2000	N	IEC 60794-1-2 E1
	in service	1000	1000	1000	N	
Min. bend radius	during installation	40	105	25	mm	IEC 60794-1-2 E11
	in service	25	70	25	mm	
Crush resistance	short-term	600	600	500	N/cm	IEC 60794-1-2 E3
	long-term	200	200	200	N/cm	
Impact resistance	Wp = 2.2 J	200	200	200	impacts	IEC 60794-1-2 E4
Repeated bending	r = 60 mm / 1 kg	10'000	10'000	10'000	cycles	IEC 60794-1-2 E6
Torsion	± 360°	10	10	10	cycles	IEC 60794-1-2 E7
Water penetration	h=1m, 24d, p<3m	p	p	p		IEC 60794-1-2 F5A

Thermal properties						
Temperature range	during installation	-20 to +60	-20 to +60	-20 to +60	°C	IEC 60794-1-2 F1
	in service	-40 to +70	-20 to +70	-30 to +70	°C	
	in storage	-45 to +70	-25 to +70	-30 to +70	°C	

Combustion properties						
Fire load		1.1	1.1	1.25	MJ/m	
Fire propagation	on a vertical cable bundle	p	p			IEC 60332-3-24
Fire test	with circuit integrity (CI)	90	90		min	IEC 60331-25
Halogen acid gas	jacket material	p	p	p		IEC 60754-1
Degree of acidity	jacket material	p	p	p		IEC 60754-2
2002/95/EC (RoHS)		compliant				

Conformance						
PROFINET	specification <sup>1)</sup>		yes	yes		

1) Standard black jacket and with H+S marking. According to PROFINET specification with green jacket and PROFINET marking (PROFINET Type B 2K200/230 or PROFINET Type B 2P980/1000)

p = passed