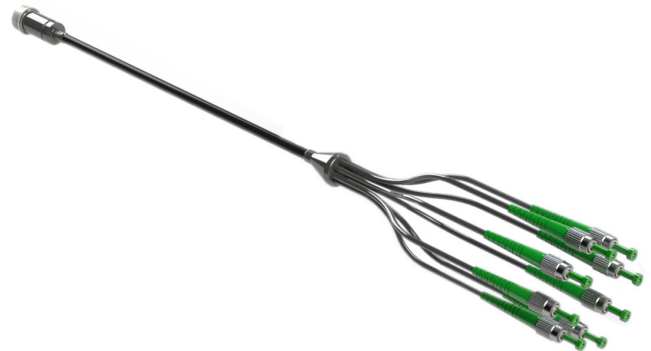


DATA SHEET

Interconnection Cable

SPECIAL FEATURES

- Inherently immune to EMI
- Electrically passive
- Designed for connecting a connection box to the interrogator
- EN45545 certified



DESCRIPTION

This cable is part of a set of fiber optic accessories used in HBK FiberSensing Pantograph Monitoring Solution for connecting the FS65HDA Heavy Duty Accelerometers and the FS66HDL Heavy Duty Force sensors to the optical interrogator.

The Interconnection Cable can be used inside the train on any of the two separate connections arising from

the Interconnection Box as a link to the optical interrogator. It is a breakout cable for 8 fibers with FC/APC connectors (compatible with MXFS).

BENEFITS AND APPLICATION

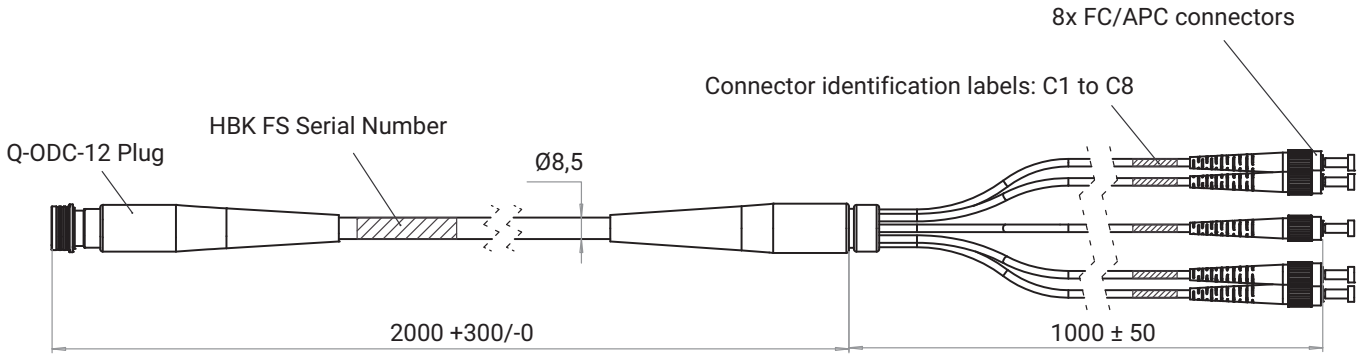
Cable design

- Ease of installation
- System reliability
- Flexibility to use with any sensor combination
- Specifications compatible with railway applications

Fiber Bragg grating technology



- No drift, absolute referenced measurements
- Immune to electro-magnetic and radio frequency interferences
- Passive technology fitting applications in explosive areas
- Reduced cable requirements with intrinsic multiplexing capability
- Long distances between sensors and the interrogators attainable
- Combinable with other FBG sensor types on the same fiber and same interrogator

DIMENSIONS



Dimensions in mm

SPECIFICATIONS

Cables			
		From single cable to furcation	From furcation to connector
Cross section	n.a.		
Cable external diameter	mm	8.5	3
Main materials ¹⁾	n.a.	RADOX®	LSZH
Operating temperature	°C	-40 ... 85	-20 ... 70
Storage temperature	°C	-40 ... 80	-20 ... 70
Attenuation loss @1550nm ²⁾	dB/km	0.5	0.2
Bend radius (during installation)	mm	> 105	> 10
Bend radius (in service)	mm	> 40	> 25
Cable length	mm	2150±150	1000±50
# of fibers	un	8	1
Connectors			
		On the cable	On the breakout
Type	n.a.	Q-ODC-12	FC/APC
# of fiber connections	un	8	1
Dimensions	mm	Ø 20 x 49.6	Ø 10 x 60
Main Materials ¹⁾	n.a.	Nickel-plated brass	
Operating temperature	°C	-40 ... 85	-20 ... 80
Optical losses ²⁾	dB	<0.35	<0.4

1) The full composition of the cable and connectors complies with RoHS, REACH, Conflict Minerals. EN45545 certified.

2) Typical values. Two-way loss as FBG signals are seen in reflection.

ORDERING INFORMATION

Standard Item

1-FSOEM-1701-04-01

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They are not to be understood as a guarantee of quality or durability.