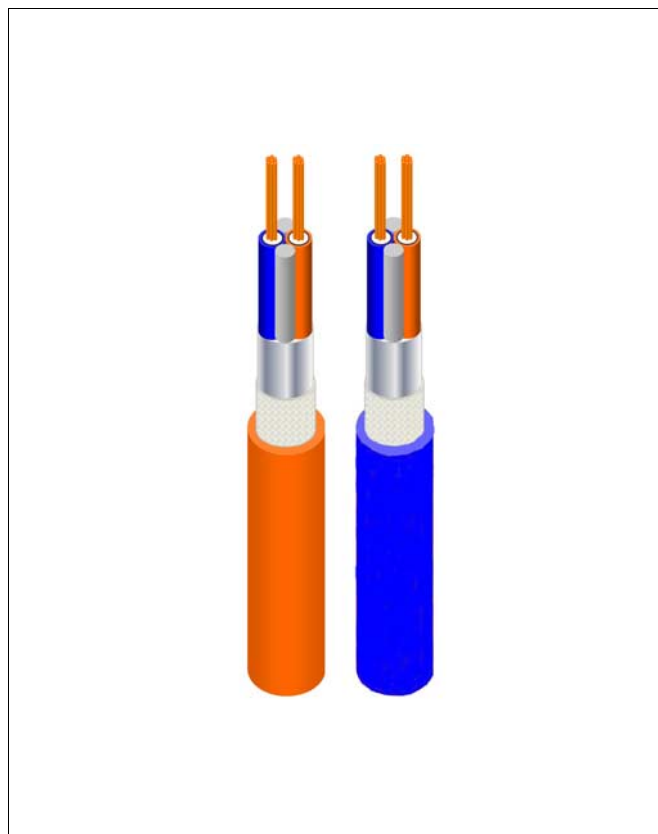
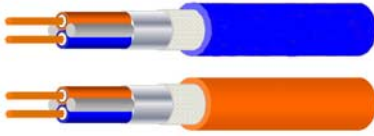
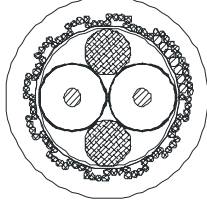


■ **FOUNDATION Fieldbus-H1 cable**

Non Ex(Hazardous) applications  
Ex(Hazardous) applications



FOUNDATION Fieldbus-H1 cable			
			
	<b>NFC080-NO</b> (CFN080) <b>NFC080-EX</b> (CFE080-Ex)	<b>NFC150-NO</b> (CFN150) <b>NFC150-EX</b> (CFE150-Ex)	<b>NFC250-NO</b> (CFN250) <b>NFC250-EX</b> (CFE250-Ex)
Application 	Standard Fieldbus cable for FOUNDATION Fieldbus-H1 with additional power supply for the devices, suitable for insulation displacement connections or M12 connectors. Recommended for indoor and outdoor installation, in dry and wet locations, on racks, on trays, in conduits. Not suitable for direct burial.	Long-distance Fieldbus cable for FOUNDATION Fieldbus-H1 with additional power supply for the devices, cable with low voltage drop along the line. Recommended for indoor and outdoor installation, in dry and wet locations, on racks, on trays, in conduits. Not suitable for direct burial.	Long-distance Fieldbus cable for FOUNDATION Fieldbus-H1 with additional power supply for the devices, cable with low voltage drop along the line. Recommended for indoor and outdoor installation, in dry and wet locations, on racks, on trays, in conduits. Not suitable for direct burial.
Internet Industrial <sup>IT</sup> enabled	<a href="http://www.abb.com/fieldbus">www.abb.com/fieldbus</a> Information Level	<a href="http://www.abb.com/fieldbus">www.abb.com/fieldbus</a> Information Level	<a href="http://www.abb.com/fieldbus">www.abb.com/fieldbus</a> Information Level
Standard	IEC 61158 Part 2		
Classification	Type A		
Interface	IEC 61158		
Conductor	stranded plain copper, <b>AWG 18/7, 0.88 mm<sup>2</sup></b>	stranded plain copper, <b>AWG 16/7, 1.3 mm<sup>2</sup></b>	stranded plain copper, <b>AWG 14/7, 2.1 mm<sup>2</sup></b>
Insulation	foamed polyethylene with skin layer	Polyethylen	Polyethylen
Colour code	(+) core: orange, (-) core: blue		
Screen	plastic coated aluminium tape, metallic surface outside in contact with a tinned copper drain wire and wire braid		
Outer sheath	polyvinyl chloride PVC, colour: orange ( <b>NFCnnn-NO</b> ), blue [IS] ( <b>NFCnnn-EX</b> )		
Cable marking	Fieldbus Cable IEC 61158-2 FF UL-marking PLTC xx/7 AWG 300 V 75 °C sun res-lenght marking		
Overall diameter	approx. 7.9 mm	approx. 9.5 mm	approx. 11.5 mm
Weight	approx. 85 kg/km	approx. 110 kg/km	approx. 160 kg/km
Max. pulling tension	90 N	130 N	200 N
Min. bending radius	5 x cable overall diameter	5 x cable overall diameter	5 x cable overall diameter
Temperature range	-40...+75 °C during operation, -5...+50 °C for installation		
UV resistant	UL 1581 article 1200		
Oil resistant	ICEA S-82-552		
Flame propagation	UL 13 vertically tray test, IEC 60332-3		
Smoke density	-		
Halogenfree	-		
HCL emission	IEC 60754-1, max. 17 %		
Oxygen index of outer sheath	IEC 60332-3, min. 30 %		
Explosion protection	<b>(NFCnnn-EX only)</b> for EEx i applications [IS], Class I/II division 2 acc. to NEC 501-4(b) and NEC 502-4(b) or Zone 1/2, group II, acc. 60079-14.		
FISCO approval	FISCO not for passive components		
Approval	CE, UL (listed as PLTC acc. to UL 13)		
Electrical properties at 20 °C			
Conductor resistance (Loop)	max. 43.6 Ω/km	max. 27.4 Ω/km	max. 17.2 Ω/km
Screen resistance	nom. 9 Ω/km	nom. 6 Ω/km	nom. 6 Ω/km
Attenuation at 39 kHz	nom. 3.0 dB/km	nom. 2.7 dB/km	nom. 2.7 dB/km
Inductance	nom. 0.65 mH/km	nom. 0.65 mH/km	nom. 0.65 mH/km
Mutual capacitance:	nom. 60 nF/km		
Capacitance unbalance to earth	max. 2000 pF/km		
Impedance	100 ±20 Ω		
Propagation delay change (7.9...39 kHz)	max. 1.7 μs/km		
Test voltage (Core/core and core/screen)	1500 V		
Operating voltage	max. 300 V		

## Ordering information

FOUNDATION Fieldbus-H1 cable	Catalog No.			
<b>NFC080-NO</b> (76770102) FF H1 cable, orange, 2 x 0.88 mm <sup>2</sup> (AWG 18/7), Type A loop resistance 43.6 Ohms/km, UL approval on request, for fixed installation indoor and outdoor, on racks and in conduits 65 m 330 m 1000 m	63668-9890166 1) 63668-9890167 1) 2) 63668-9890168			
<b>NFC150-NO</b> (79290105) FF H1 cable, orange, 2 x 1.3 mm <sup>2</sup> (AWG 16/7), Type A loop resistance 27.4 Ohms/km, UL approval, for fixed installation indoor and outdoor, on racks and in conduits 1000 m	1) 63668-9890169			
<b>NFC250-NO</b> (79290107) FF H1 cable, orange, 2 x 2.1 mm <sup>2</sup> (AWG 14/7), Type A loop resistance 17.2 Ohms/km, UL approval, for fixed installation indoor and outdoor, on racks and in conduits 1000 m	1) 63668-9890170			
<b>NFC080-EX</b> (76770103) FF H1 cable, blue, 2 x 0.88 mm <sup>2</sup> (AWG 18/7), Type A, for intrinsic safety applications (EEx i) loop resistance 43.6 Ohms/km, UL approval on request, for fixed installation indoor and outdoor, on racks and in conduits 65 m 330 m 1000 m	63668-9890171 1) 63668-9890172 1) 2) 63668-9890173			
<b>NFC150-EX</b> (79290104) FF H1 cable, blue, 2 x 1.3 mm <sup>2</sup> (AWG 16/7), Type A, for intrinsic safety applications (EEx i) loop resistance 27.4 Ohms/km, UL approval, for fixed installation indoor and outdoor, on racks and in conduits 1000 m	1) 63668-9890174			
<b>NFC250-EX</b> (79290106) FF H1 cable, blue, 2 x 2.1 mm <sup>2</sup> (AWG 14/7), Type A, for intrinsic safety applications (EEx i) loop resistance 17.2 Ohms/km, UL approval, for fixed installation indoor and outdoor, on racks and in conduits 1000 m	1) 63668-9890175			

1) incl. no-return cable drum

2) Delivery time 8 weeks by order quantity &gt; 1000 m.

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