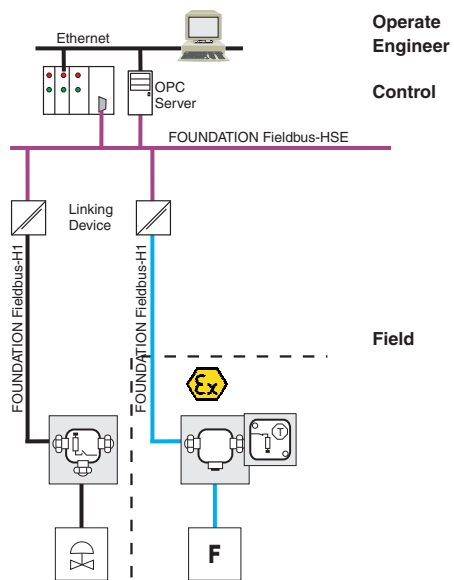


FOUNDATION Fieldbus Junctions, Connectors, Accessories



FOUNDATION Fieldbus-H1

- Junctions
- Connectors
- Accessories



The FOUNDATION Fieldbus-H1 T-Connectors are available as Standard and Ex(Haz.) version. They are used for coupling 1 up to 4 transmitters to the H1 trunk via spurs. The spurs can be connected direct via the EMC cable gland.

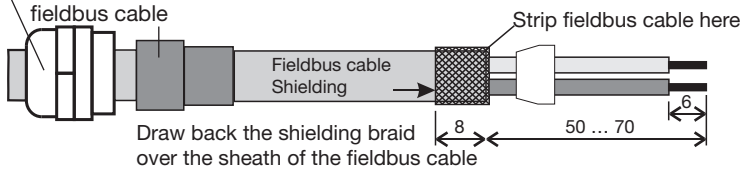
- Non-interrupted BUS operation when exchanging or extending a H1 transmitter
- Easy to use
- Low installation costs
- External grounding cable
- Pressure-compensation element
- EMC cable gland
- Tension spring connection
- Aluminium (standard) housing
- Non-Ex design (integrated bus termination, switchable)
- Ex(Haz.) design acc. to ATEX (external bus termination with NPZ100-EX)

NPJ130-NO, NPJ460-NO – FOUNDATION Fieldbus-H1 Junctions – Non-Ex version

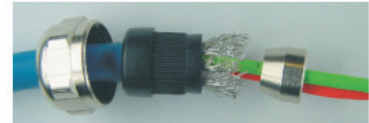
Recommendation of mounting

Shield is connected to the enclosure via the EMC cable glands.

Thread the cable gland onto the seal, on the unprepared



Use ferrules!



M00694

Technical data

Temperature range	-40 ... 85 °C
Operating temperature	IP 66
Type of protection	High-quality aluminium alloy (AL-Si 12)
Material of housing	Stove-enamelled NPJxxx: RAL 7001
Surface	Tension spring 0.5 ... 1.5 mm ²
FOUNDATION Fieldbus-H1 connection	EMC cable gland M16
Cable bushing	5.5 ... 9.6 mm
Clamping area	

Installation advice

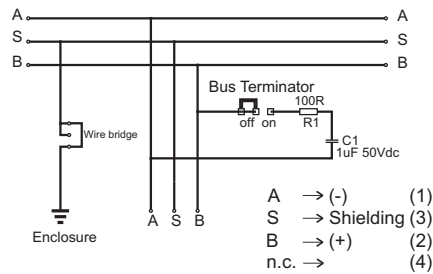
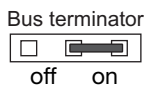
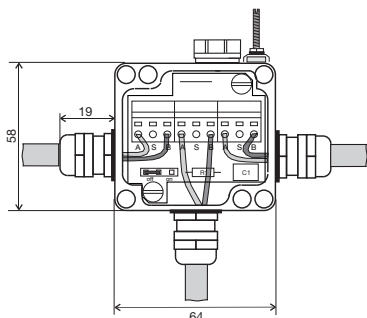
Torques	
M16 cable gland on housing	~ 5.00 Nm
Coupling ring M16 cable gland	~ 3.75 Nm
Housing lid	1.8 ... 2.0 Nm
External earthing cable	1.8 ... 2.0 Nm



M00728

NPJ130-NO FOUNDATION Fieldbus-H1 Junction – Non-Ex version, with bus termination

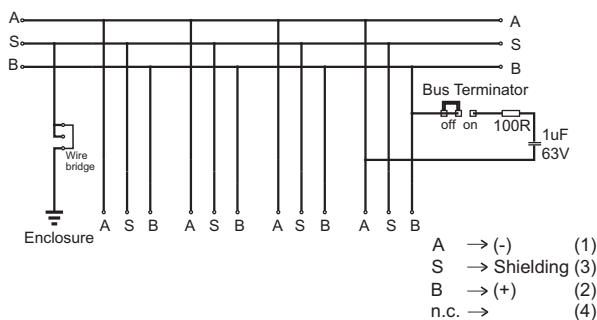
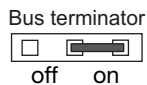
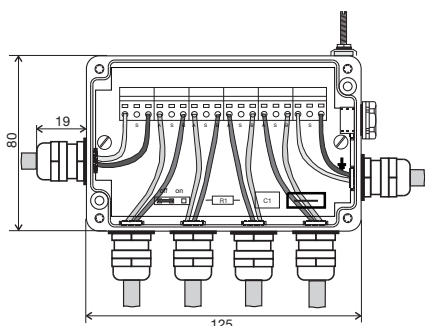
The Transmitter (spur, 1-way) are connected using cable bushing



M00729

NPJ460-NO FOUNDATION Fieldbus-H1 Junction – Non-Ex version, with bus termination

The Transmitter (spurs, 4-way) are connected using cable bushing

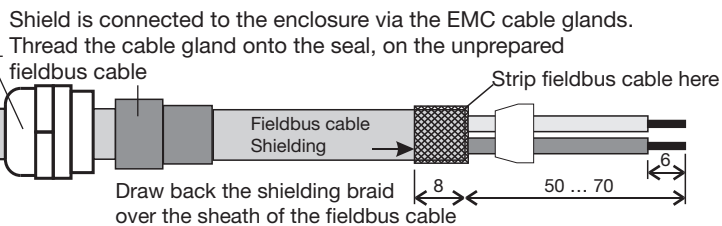


M00730

All drawings not scaled! All units in millimeter!

NPJ130-EX, NPJ460-EX – FOUNDATION Fieldbus-H1 Junctions – Ex area Ex (ia) ATEX

Recommendation of mounting



Use ferrules!



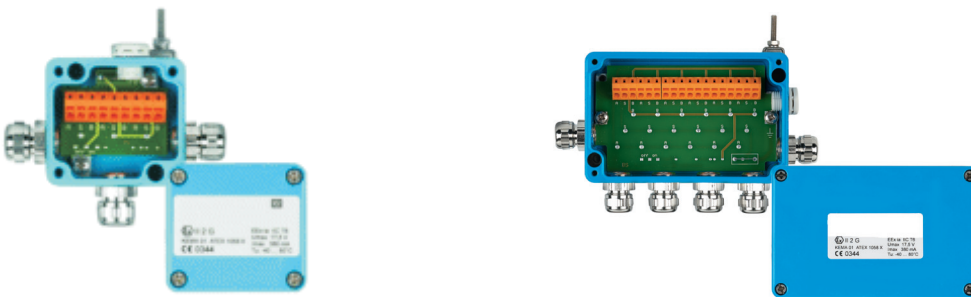
M00694

Technical data

Temperature range	-40 ... 80 °C
Operating temperature	IP 66
Type of protection	High-quality aluminium alloy (AL-Si 12)
Material of housing	Stove-enamelled NPJxxx: RAL 5015
Surface	Tension spring 0.5 ... 1.5 mm ²
FOUNDATION Fieldbus-H1 connection	EMC cable gland M16
Cable bushing	5.5 ... 9.6 mm
Clamping area	Ex ia IIC T6
ATEX Certification	

Installation advice

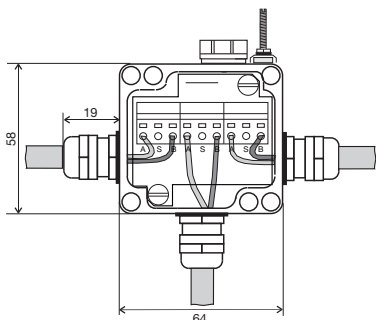
Torques	
M16 cable gland on housing	~ 5.00 Nm
Coupling ring M16 cable gland	~ 3.75 Nm
Housing lid	1.8 ... 2.0 Nm
Adapter / spur cable	Hand-tight
External earthing cable	1.8 ... 2.0 Nm



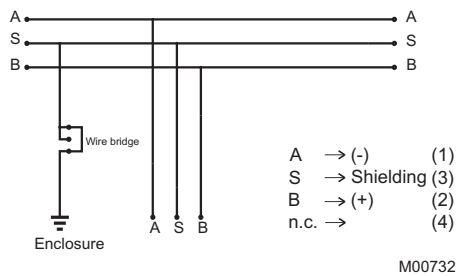
M00731

NPJ130-EX FOUNDATION Fieldbus-H1 Junction – Ex area Ex (ia) ATEX, without bus termination

The Transmitter (spur, 1-way) are connected using cable bushing



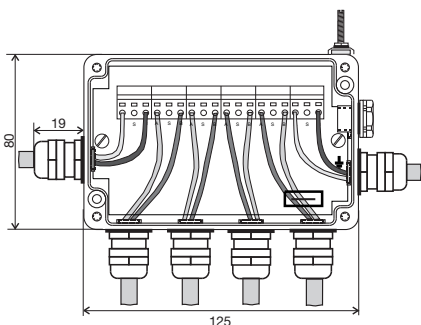
Bus terminator:
With external
NPZ100-EX only



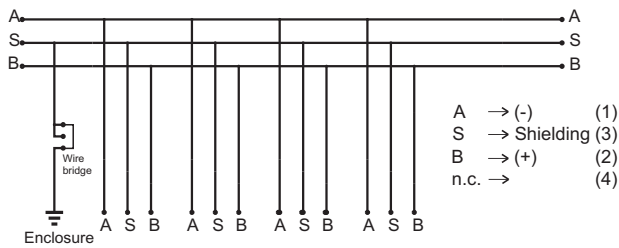
M00732

NPJ460-EX FOUNDATION Fieldbus-H1 Junction – Ex area Ex (ia) ATEX, without bus termination

The Transmitter (spurs, 4-way) are connected using cable bushing



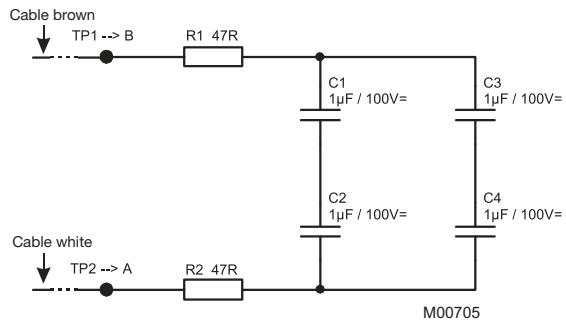
Bus terminator:
With external
NPZ100-EX only



M00733

All drawings not scaled! All units in millimeter!

NPZ100-EX FOUNDATION Fieldbus-H1 Bus Terminator – Ex area Ex (ia) ATEX

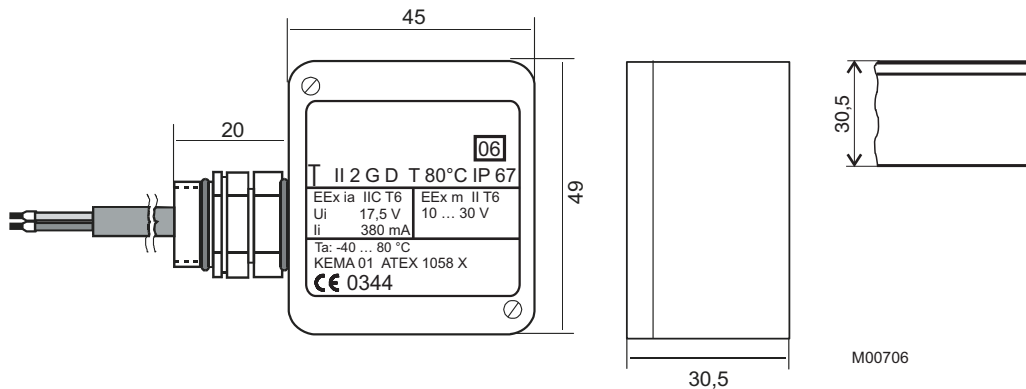


Technical data

Temperature range	-40 ... 80 °C
Operating temperature	-40 ... 80 °C
Type of protection	IP 66
Material of housing	High-quality aluminium alloy (AL-Si 12)
Surface	Black powder coated
Connecting cable	2 x 0.14 mm ²
Cable bushing	Bus adapter M16
ATEX Certification	II 2 G Ex ia IIC T6, II 2 G Ex m II T6

Installation advice

Torques	
M16 adapter on the housing	6.0 Nm
External earthing cable (if necessary)	1.8 ... 2.0 Nm



All drawings not scaled! All units in millimeter!

NFE100-NE FOUNDATION Fieldbus-H1 plug – 7/8", for Ex and Non-Ex area



M00736

Technical data

Poles	4 poles
Interlock	Screw 7/8" UNF
Type of connection	Screw
Cross-sectional area of connection	Max. 1.5 mm ²
Cross-sectional area of connection	16 AWG
Cable diameter	Ø 6 ... 8 mm
Housing protection	IP 67
Mechanical life	> 500 plug cycles
Upper temperature limit	85 °C
Lower temperature limit	-40 °C

Electrical data

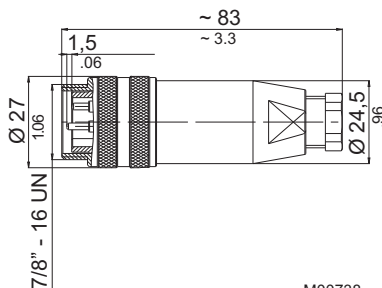
Rated voltage	250 V
Rated surge voltage	4000 V
Contamination class	3
Overvoltage category	II
Isolation group	III
Test voltage	4800 V
Rated current	9 A (40 °C)
Volume resistivity	≤ 5 MΩ
Insulation resistance	≥ 10 ¹⁰ Ω

Materials

Contact pin	CuZn (brass)
Contact surface	Au (gold)
Socket	PUR/PA (UL 94 HB)
Plug	PBT (UL 94 V-0)
Thread ring	Aluminum eloxaded

Installation advice

Screw terminals	Torques
Coupling ring PG cable gland	0.4 Nm
Knurled screw	4.0 Nm
	Hand-tight



M00738

Male	wire-colour	bus	referenz
1	blue	(-)	A
2	orange	(+)	B
3		shield	S
4	not used	n.c.	

All drawings not scaled! All units in millimeter!

NFE300-NE FOUNDATION Fieldbus-H1 socket – 7/8", for Ex and Non-Ex area



M00737

Technical data

Poles	4 poles
Interlock	Screw 7/8" UNF
Type of connection	Screw
Cross-sectional area of connection	Max. 1.5 mm ²
Cross-sectional area of connection	16 AWG
Cable diameter	Ø 6 ... 8 mm
Housing protection	IP 67
Mechanical life	> 500 plug cycles
Upper temperature limit	85 °C
Lower temperature limit	-40 °C

Electrical data

Rated voltage	250 V
Rated surge voltage	4000 V
Contamination class	3
Overvoltage category	II
Isolation group	III
Test voltage	4800 V
Rated current	9 A (40 °C)
Volume resistivity	≤ 5 MΩ
Insulation resistance	≥ 10 ¹⁰ Ω

Materials

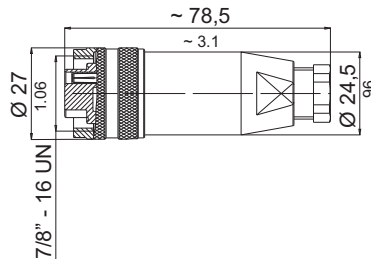
Contact pin	CuZn (brass)
Contact surface	Au (gold)
Socket	PUR/PA (UL 94 HB)
Plug	PBT (UL 94 V-0)
Thread ring	Aluminum eloxaded

Installation advice

Screw terminals	Torques
Coupling ring PG cable gland	0.4 Nm
Knurled screw	4.0 Nm
	Hand-tight



Male	wire-colour	bus	referenz
1	blue	(-)	A
2	orange	(+)	B
3		shield	S
4	not used	n.c.	



M00739

All drawings not scaled! All units in millimeter!

Ordering information

FOUNDATION Fieldbus-H1 Junctions (IP 66 case)		Catalog No.
NPJ130-NO (856409) PROFIBUS PA / FOUNDATION Fieldbus-H1 T (one-way) junction, IP 66 case, 3 x cable bushing, incl. switchable bus termination		9890102
NPJ460-NO (856411) PROFIBUS PA / FOUNDATION Fieldbus-H1 four-way junction, IP 66 case, 6 x cable bushing, incl. switchable bus termination		9890104
NPJ130-EX (856418) PROFIBUS PA / FOUNDATION Fieldbus-H1 T (one-way) junction, IP 66 case, 3 x cable bushing, for the Ex (Haz.) area		9890106
NPJ460-EX (856420) PROFIBUS PA / FOUNDATION Fieldbus-H1 four-way junction, IP 66 case, 6 x cable bushing, for the Ex (Haz.) area		9890108
NPZ100-EX (860619) PROFIBUS PA / FOUNDATION Fieldbus-H1 bus termination for junction modules NPJ_ _0-EX, IP 66 case for the Ex (Haz.) area		9890120
FOUNDATION Fieldbus-H1 Connectors		Catalog No.
NFE100-NE (180884) FOUNDATION Fieldbus-H1 plug for cable, metal / plastic case, 7/8", for the Ex (Haz.) and Non-Ex area		3KDE636640L0101
NFE300-NE (181248) FOUNDATION Fieldbus-H1 socket for cable, metal / plastic case, 7/8", for the Ex (Haz.) and Non-Ex area		3KDE636640L0102

Ordering information

FOUNDATION Fieldbus-H1 Junctions (IP 20 modules)	Catalog No.	
NGJ100-NE		
Fieldbus junctions: Line In module for PROFIBUS PA / FOUNDATION Fieldbus-H1 to connect the trunk to the Current Limiter module, Trunk line is prevented against over voltage (OVP), Input (Trunk line) max. 17.5 V DC / 380 mA IP 20, for the Non-Ex area, Dimensions (L x W x H) 88.4 x 8 x 52 mm	(877005)	3KXN623100L0010
Fieldbus junctions: Current Limiter module for PROFIBUS PA / FOUNDATION Fieldbus-H1 as (one-way) junction to build up spur lines Max. 20 spurs (Modules) per fieldbus segment (Line In module), Field device disconnected by 60 mA or short circuit cases, Output (Spur line) max. 17.5 V DC / 60 mA IP 20, for the Non-Ex area, Dimensions (L x W x H) 88.4 x 8 x 52 mm	(877002)	3KXN623100L0020
Fieldbus junctions: Bus Terminator module for PROFIBUS PA / FOUNDATION Fieldbus-H1 as lock for each trunk line for NGJ100-NE IP 20, for the Non-Ex area, Dimensions (L x W x H) 88.4 x 8 x 52 mm	(877004)	3KXN623100L0040
Fieldbus junctions: Shield module for PROFIBUS PA / FOUNDATION Fieldbus-H1 as stabilization of fieldbus shields IP 20, for the Non-Ex area, Dimensions (L x W x H) 88.4 x 8 x 52 mm	(878144)	3KXN623100L0050
Accessories (IP 20 modules)	Catalog No.	
NGZ100-NE		
Accessories (IP 20 modules), 2 pol jumper to wrap the modules easily. Packing unit 50 pcs.	(046110)	3KXN622100L0002
Accessories (IP 20 modules), 4 pol jumper to wrap the modules easily. Packing unit 50 pcs.	(046130)	3KXN622100L0004
Accessories (IP 20 modules), 15 pol jumper to wrap the modules easily. Packing unit 10 pcs.	(190479)	3KXN622100L0006

Contact us

ABB Automation Products GmbH

Borsigstr. 2

63755 Alzenau

Germany

Tel: +49 551 905-534

Fax: +49 551 905-555

www.abb.com

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