



V6

Accessories for bus connection
DeviceNet, CANopen and
Modbus-RTU





Accessories for bus connection
DeviceNet, CANopen and Modbus-RTU

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Technical changes reserved



FieldBusPlug

DeviceNet-, CANopen-, Modbus-RTU Accessories

Technical Description

V 6

DNX11-FBP.100, DNX11-FBP.300, DNX11-FBP.500

Extension cables (lengths 1 m, 3 m, 5 m)

Connection cable, socket/plug (M12)
with self-locking screwed connection

Temperature range -25°C ... + 90°C

Materials

Moulded body	TPU, self-extinguishing
Contact (female)	CuSn, pre-nickeled and 0.3 µm gold-plated
Contact (male)	CuZn, pre-nickeled and 0.8 µm gold-plated
Body	TPU, self-extinguishing
Knurled screw, knurled nut	CuZn, nicked
O-ring	Viton

Mechanical data

Degree of protection IP 68
(only in fully locked position
with their plugs)

Good resistance to oil and chemicals.

Use of this connector range in aggressive
environments must be tested in each case.

Electrical data

Max. current load	4 A (CSA = 3 A)
Nominal voltage	30 V AC / 36 V DC
Insulation group	C acc. to VDE 0110
Test voltage	1.5 kV AC / 60 s
Insulation resistance	> 10 ⁹ Ω

Cable data

Number of poles	5
Colours of cores	1 = SHIELD (bare flexible lead) 2 = red (+24 V DC) 3 = black (0 V) 4 = white (CAN_H) 5 = blue (CAN_L)

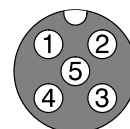
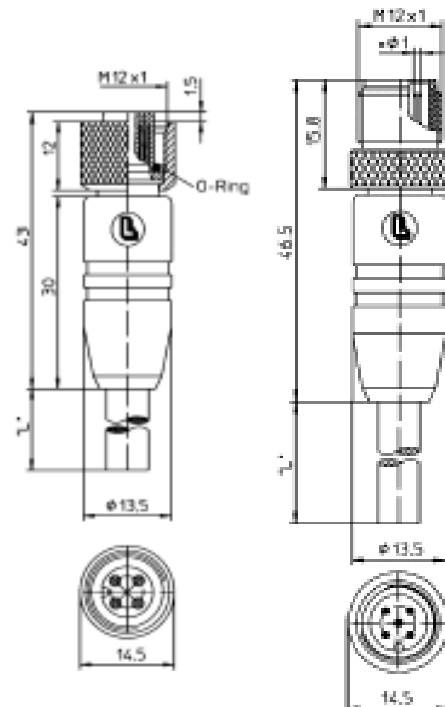
Sheath/jacket **PUR**
(free of PVC and halogen)

Cable colour black

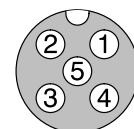
Further cable data see page 7

Order numbers

DNX11-FBP.100	1SAJ 923 001 R0010
DNX11-FBP.300	1SAJ 923 001 R0030
DNX11-FBP.500	1SAJ 923 001 R0050



female



male

FieldBusPlug

DeviceNet-, CANopen-, Modbus-RTU Accessories

Technical Description



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DNF11-FBP.050

Round cable with female plug, 0.5 m

Female connector with self-locking screwed connection and integrally extruded cable

Difference to standard:

Cable end sheath stripped 50 mm in length with shrunk-on insulation sleeving, wire-end ferrules attached to the cores

Temperature range -25°C ... + 90°C

Materials

Moulded body	TPU, self-extinguishing
Contact	CuZn, pre-nickel and 0.3 µm gold-plated
Body	TPU, self-extinguishing
Knurled nut	CuZn, nickel
O-ring	Viton

Mechanical data

Degree of protection IP 68
(only in fully locked position with their plugs)

Good resistance to oil and chemicals.

Use of this connector range in aggressive environments must be tested in each case.

Electrical data

Max. current load	4 A (CSA = 3 A)
Nominal voltage	30 V AC / 36 V DC
Insulation group	C acc. to VDE 0110
Test voltage	1.5 kV AC / 60 s
Insulation resistance	> 10 ⁹ Ω

Cable data

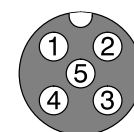
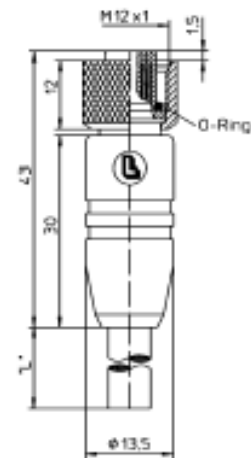
Number of poles	5
Colours of cores	1 = SHIELD (bare flexible lead)
	2 = red (+24 V DC)
	3 = black (0 V)
	4 = white (CAN_H)
	5 = blue (CAN_L)

Sheath/jacket **PUR**
(free of PVC and halogen)

Cable colour	black
Further cable data	see page 7

Order number

DNF11-FBP.050	1SAJ 923 002 R0005
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female



FieldBusPlug DeviceNet-, CANopen-, Modbus-RTU Accessories Technical Description

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DNM11-FBP.050

Round cable with male plug, 0.5m

Male connector with self-locking screwed connection and integrally extruded cable

Difference to standard:

Cable end sheath stripped 50 mm in length with shrunk-on insulation sleeving, wire-end ferrules attached to the cores

Temperature range -25°C ... + 90°C

Materials

Moulded body	TPU, self-extinguishing
Contact	CuZn, pre-nickeled and 0.8 µm gold-plated
Body	TPU, self-extinguishing
Knurled nut	CuZn, nickeled
O-ring	Viton

Mechanical data

Degree of protection IP 68
(only in fully locked position with their plugs)

Good resistance to oil and chemicals.

Use of this connector range in aggressive environments must be tested in each case.

Electrical data

Max. current load	4 A (CSA = 3 A)
Nominal voltage	30 V AC / 36 V DC
Insulation group	C acc. to VDE 0110
Test voltage	1.5kV AC / 60 s
Insulation resistance	> 10 ⁹ Ω

Cable data

Number of poles	5
Colours of cores	1 = SHIELD (bare flexible lead) 2 = red (+24 V DC) 3 = black (0 V) 4 = white (CAN_H) 5 = blue (CAN_L)

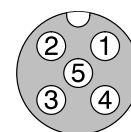
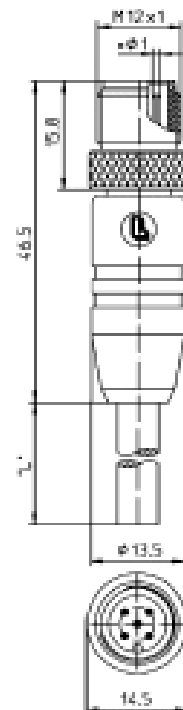
Sheath/jacket **PUR**
(free of PVC and halogen)

Cable colour black

Further cable data see page 7

Order number

DNM11-FBP.050 1SAJ 9223 003 R0005



male

FieldBusPlug

DeviceNet-, CANopen-, Modbus-RTU Accessories

Technical Description



V6

DNC11-FBP.999

Drop cable 100 m

Extension cable (ring)

Construction

Supply voltage

Conductors	22 AWG (0.34 mm ²), tinned
Core insulation	TPE
Core colours	red and black

Data lines

Conductors	24 AWG (0.25 mm ²), tinned
Core insulation	Cell-PE
Core colours	blue and white

Shielding	each pair of cores with AL-PT foil, covering 100 %, cores are twisted in pairs
Bare flexible lead	22 AWG (0.34 mm ²), tinned
Common shield	C shield, tinned, covering ca. 65 %
Sheath/jacket	PUR dull, Ø 6.8 mm colour: black

Electrical data

Supply voltage

Test voltage	1.2 kV AC
Conductor resistance	≤ 57.4 Ω/km
Insulation resistance	≥ 10 ¹² Ω/km

Data lines

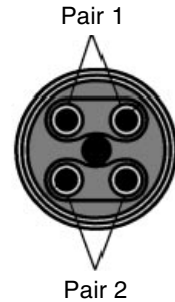
Test voltage	1.2 kV AC
Conductor resistance	≤ 91.9 Ω/km
Insulation resistance	≥ 10 ¹² Ω/km
Capacity in operation	39 pF/m, 0.8 - 1.2 MHz (A/A) 79 pF/m, 0.8 - 1.2 MHz (A/S)
Attenuation	≤ 9.5 dB/km, 125 kHz ≤ 16.4 dB/km, 500 kHz ≤ 22.9 dB/km, 1 MHz
Impedance	120 Ω ± 10 %, 1 MHz

Mechanical data

can be used as trailing cable,
bending radius min. 100 mm,
temperature range, static: -40° C / +70° C
temperature range, under movement: -10° C / +70° C

Other data

meets DeviceNet specifications,
flammability according to DIN VDE 0472-804 test type B,
cable is free of halogen and PVC,
good resistance to oil, chemicals, hydrolysis and microbes



Technical changes reserved

Order number

DNC11-FBP.999 1SAJ 923 004 R1000



FieldBusPlug

DeviceNet-, CANopen-, Modbus-RTU Accessories

Technical Description

V 6

DNM11-FBP.0

Male connector for round cable

Male connector with screwed connection, for cable

Temperature range -25°C ... + 90°C

Materials

Moulded body	PA, self-extinguishing
Contact	CuZn, 2-4 µm CuSnZn
Body	PA, self-extinguishing
Knurled screw	CuZn, nickered
O-ring	NBR or FKM



Mechanical data

Degree of protection IP 67
(only in fully locked position with their plugs)

Good resistance to oil and chemicals.

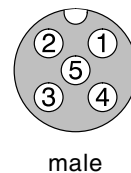
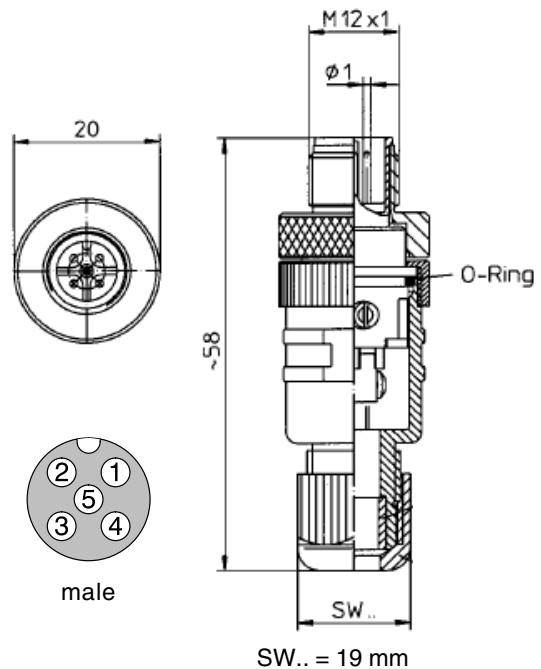
Use of this connector range in aggressive environments must be tested in each case.

Electrical data

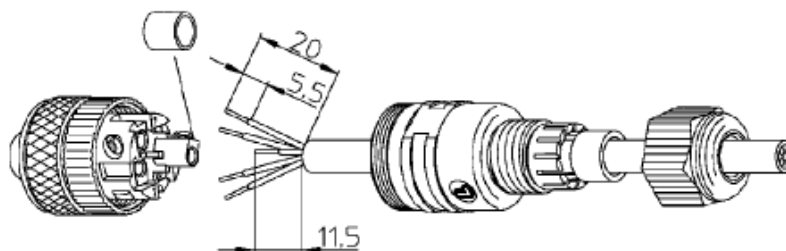
Max. current load	4 A
Nominal voltage	30 V AC / 36 V DC
Insulation group	C acc. to VDE 0110
Test voltage	1.0 kV AC / 60 s
Insulation resistance	> 10 ⁹ Ω

Connection data

Number of poles	5 pin 5 early-closing
Connection type	screw-type terminals
Cond. cross section	max. 0.75 mm ²
Cable gland	Ø 4.0 ... 8.0 mm



SW.. = 19 mm



Order number

DNM11-FBP.0 1SAJ 923 005 R0001

FieldBusPlug DeviceNet-, CANopen-, Modbus-RTU Accessories Technical Description



V6

DNF11-FBP.0 Female connector for round cable

Female connector with screwed connection, for cable

Temperature range -25°C ... + 90°C

Materials

Moulded body	PA, self-extinguishing
Contact	CuZn, 2-4 µm CuSnZn
Body	PA, self-extinguishing
Knurled screw	CuZn, nicked
O-ring	NBR or FKM



Mechanical data

Degree of protection IP 67
(only in fully locked position with their plugs)

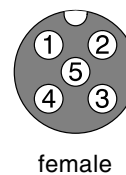
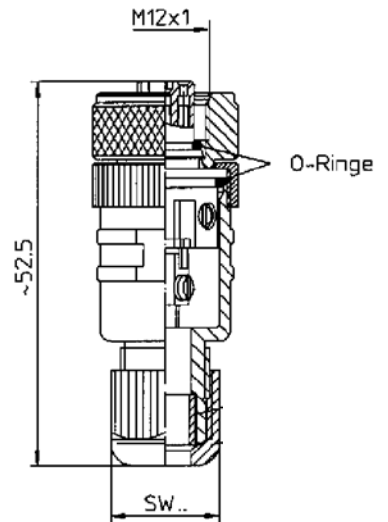
Good resistance to oil and chemicals.
Use of this connector range in aggressive environments must be tested in each case.

Electrical data

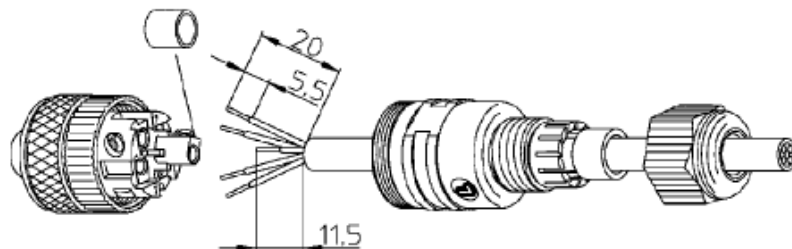
Max. current load	4 A
Nominal voltage	30 V AC / 36 V DC
Insulation group	C acc. to VDE 0110
Test voltage	1.25 kV AC / 60 s
Insulation resistance	> 10 ⁹ Ω

Connection data

Number of poles	5
Connection type	screw-type terminals
Cond. cross section	max. 0.75 mm ²
Cable gland	∅ 4.0 ... 8.0 mm



SW.. = 19 mm



Order number

DNF11-FBP.0 1SAJ 923 006 R0001



FieldBusPlug DeviceNet-, CANopen-, Modbus-RTU Accessories Technical Description

V 6

DNR11-FBP.120 Terminating resistor

Male plug M 12, 5 poles

Temperature range -25°C ... + 90°C

Materials

Moulded body	PA, self-extinguishing
Contact	CuZn, pre-nickeled and 0.8 µm gold-plated
Body	TPU, self-extinguishing
Knurled screw	CuZn, nickeled

Mechanical data

Degree of protection IP 67
(only in fully locked position with their plugs)

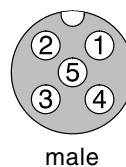
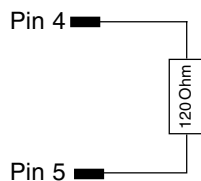
Good resistance to oil and chemicals.

Use of this connector range in aggressive environments must be tested in each case.

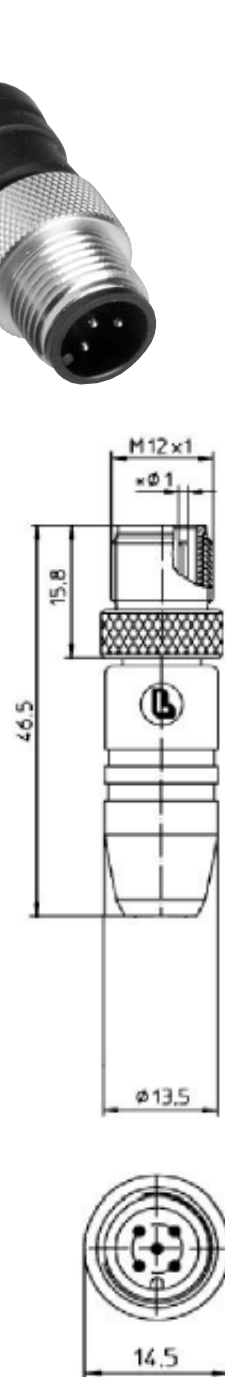
Connection data

Number of poles 5

Pin assignment Pins 1- 3 = unused



male



Technical changes reserved

Order number

ASF11-FBP.0 1SAJ 922 006 R0001



ABB STOTZ-KONTAKT GmbH

Eppelheimer Straße 82 Postfach 101680
69123 Heidelberg 69006 Heidelberg
Germany Germany

Telefon (06221) 701-0
Telefax (06221) 701-240
E-Mail desst.helpine@de.abb.com
Internet <http://www.abb.de/stotz-kontakt>