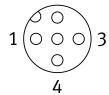
Connecting cable NEBA-M12G5-U-5-N-LE3

FESTO

Part number: 8078237





Data sheet

EN 61984 Certification c UL us - Listed (OL) Intended use The connecting cable connects field devices (sensors, actuators) with controllers. Explosion prevention and protection Observe the information on the certificate Zone 22 (ATEX) Zone 22 (ATEX) Certificate issuing authority UL E253748 Cable designation Without label holder Contact durability 100 Product weight 102 Application note Meets the requirements of IEC 61010-1 and 61010-2-202, in particular for electrically operated valves from Festo. Only energy-limited circuits with a maximum current of 4 A at a max. open circuit voltage of 30 VDC are permitted to be used for supplying electrically connection 1, function Field device end Electrical connection 1, connection type Electrical connection 1, connection type Electrical connection 1, connection technology M12x1 A-coded as per EN 61076-2-101 Electrical connection 1, tonnection technology M12x1 A-coded as per EN 61076-2-101 Electrical connection 1, tonnection technology Electrical connection 1, tonnection technology Screw-type lock with hexagon AF13 and vertical knurling rotatable Compatible with rotatable/non-rotatable screw-type lock Electrical connection 1, terminal allocation Pin 1 = BN Pin 3 = BU Pin 4 = BK Electrical connection 1, display without Electrical connection 2, function Control side	Feature	Value
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Electrical connection 1, design Electrical connection 1, connection type Electrical connection 1, cable outlet Electrical connection 1, connection technology M12x1 A-coded as per EN 61076-2-101 Electrical connection 1, number of pins/wires Electrical connection 1, occupied pins/wires Electrical connection 1, type of mounting Electrical connection 1, type of mounting Electrical connection 1, terminal allocation Electrical connection 1, terminal allocation Pin 1 = BN Pin 3 = BU Pin 4 = BK Electrical connection 1, display without Electrical connection 2, function Control side	Application note	for electrically operated valves from Festo. Only energy-limited circuits with a maximum current of 4 A at a max. open circuit voltage of 30 VDC are permitted to be used for supplying
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Electrical connection 1, cable outlet Electrical connection 1, connection technology M12x1 A-coded as per EN 61076-2-101 Electrical connection 1, number of pins/wires 5 Electrical connection 1, occupied pins/wires 3 Electrical connection 1, type of mounting Screw-type lock with hexagon AF13 and vertical knurling rotatable Compatible with rotatable/non-rotatable screw-type lock Electrical connection 1, terminal allocation Pin 1 = BN Pin 3 = BU Pin 4 = BK Electrical connection 2, function Control side	Electrical connection 1, design	Round
Electrical connection 1, connection technology M12x1 A-coded as per EN 61076-2-101 Electrical connection 1, number of pins/wires 5 Electrical connection 1, occupied pins/wires 3 Electrical connection 1, type of mounting Screw-type lock with hexagon AF13 and vertical knurling rotatable Compatible with rotatable/non-rotatable screw-type lock Electrical connection 1, terminal allocation Pin 1 = BN Pin 3 = BU Pin 4 = BK Electrical connection 2, function Control side	Electrical connection 1, connection type	Socket
Electrical connection 1, number of pins/wires Electrical connection 1, occupied pins/wires Electrical connection 1, type of mounting Screw-type lock with hexagon AF13 and vertical knurling rotatable Compatible with rotatable/non-rotatable screw-type lock Electrical connection 1, terminal allocation Pin 1 = BN Pin 3 = BU Pin 4 = BK Electrical connection 1, display without Electrical connection 2, function Control side	Electrical connection 1, cable outlet	Straight
Electrical connection 1, occupied pins/wires Electrical connection 1, type of mounting Screw-type lock with hexagon AF13 and vertical knurling rotatable Compatible with rotatable/non-rotatable screw-type lock Electrical connection 1, terminal allocation Pin 1 = BN Pin 3 = BU Pin 4 = BK Electrical connection 1, display without Electrical connection 2, function Control side	Electrical connection 1, connection technology	M12x1 A-coded as per EN 61076-2-101
Screw-type lock with hexagon AF13 and vertical knurling rotatable	Electrical connection 1, number of pins/wires	5
rotatable Compatible with rotatable/non-rotatable screw-type lock Electrical connection 1, terminal allocation Pin 1 = BN Pin 3 = BU Pin 4 = BK Electrical connection 1, display without Electrical connection 2, function Control side	Electrical connection 1, occupied pins/wires	3
Pin 3 = BU Pin 4 = BK Electrical connection 1, display without Electrical connection 2, function Control side	Electrical connection 1, type of mounting	rotatable
Electrical connection 2, function Control side	Electrical connection 1, terminal allocation	Pin 3 = BU
	Electrical connection 1, display	without
Electrical connection 2, connection type Cable	Electrical connection 2, function	Control side
	Electrical connection 2, connection type	Cable

Feature	Value
Electrical connection 2, connection technology	Open end
Electrical connection 2, number of pins/wires	3
Electrical connection 2, occupied pins/wires	3
Electrical connection 2, terminal allocation	Pin 1 = BN Pin 3 = BU Pin 4 = BK
Electrical connection 2, display	without
DC operating voltage range	0 V250 V
Operating voltage range AC	0 V250 V
Note on operating voltage range AC	0 - 30 V for UL applications
Current rating at 40° C	4 A
Surge resistance	2.5 kV
Cable length	5 m
Cable characteristic	suitable for energy chains/robot applications abrasion-resistant low adhesion Flame-retardant and self-extinguishing
Connector cable test conditions	Test conditions on request Torsion resistance: > 300,000 cycles, ±270°/0.1 m Flexural strength: > 50000 cycles, bending radius 5 mm Energy chain: > 5 million cycles, bending radius 28 mm
Note on connector cable test conditions	tested at 23 °C
Bending radius, fixed cable installation	12 mm
Bending radius, flexible cable installation	39 mm
Cable diameter	3.8 mm
Cable design	3 x 0.25 mm ²
Nominal conductor cross section	0.25 mm ²
Wire ends	Stripped Cut off bluntly
Degree of protection	IP65 IP68 IP69K
Special features	UV-resistant hydrolysis resistant Resistant to cooling lubricants Resistant to microbes Oil-resistant Ozone-resistant
Use in exterior area	Locations of use with direct outdoor climatic exposure Class D1 based on IEC 60654-1
Ambient temperature	-40 °C85 °C
Note on ambient temperature	-40 - 50 °C for UL applications
Ambient temperature with flexible cable installation	-20 °C85 °C
Note on ambient temperature with flexible cable installation	-20 - 50 °C for UL applications
Storage temperature	-25 °C55 °C
Note on storage temperature	short-term for transport in packaging -40 85 °C
Relative air humidity	Max. 93% at 40 °C
Nominal altitude of use above sea level	<= 2000 m NHN
Overvoltage category	II
CE marking (see declaration of conformity)	As per EU low voltage directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK RoHS instructions To UK instructions for electrical equipment
LABS (PWIS) conformity	VDMA24364-B2-L
Suitability for the production of Li-ion batteries	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Cleanroom suitability, measured according to ISO 14644-14	Class 4 according to ISO 14644-1

Feature	Value
Note on materials	CFC-free RoHS-compliant Cadmium-free Halogen-free Free of phosphoric acid ester
Contamination level	3
Corrosion resistance class (CRC)	1 - Low corrosion stress
Material of cable sheath	TPE-U(PUR)
Color cable sheath	Gray
Housing material	TPE-U(PUR)
Housing colour	Black
Material of screw-type lock	Die-cast zinc, nickel-plated
Seals material	FPM
Material of pin contacts	Copper alloy, gold-plated
Insulating sheath material	PP