

Nass magnet offers solenoid valve connectors „with molded cable“ in the most popular pin patterns. These are: Form A, 18mm pin spacing (ISO 4400, EN 175301-803, and old DIN 43650A standards), Form B, 10mm pin spacing (ISO 6952, EN 175301-803, and old DIN 43650B standards), Form C, 8.0mm pin spacing (ISO 15217, EN 175301-803, and old DIN 43650C standards), Industrial Form Type B, 11mm pin spacing, and Micro Type C, 9.4mm pin spacing.

Common applications are hydraulic and pneumatic solenoid valves, machines, cranes and other industrial electronic equipment. These connectors save wiring time because the cable is already assembled and molded into the connector and they are IP67 rated.

The standard cable lengths are 2 and 5 meters. The connectors are available without circuit and with LED/surge protection in 24V AC/DC, 110V AC/DC, and 250V AC/DC circuits. The LED light is perfect indication that power is on at the connector as this assist in trouble shooting. Additional circuits such as LED only, rectified, energy saving (PWM), Timer, bicolor LED for pressure switch, TVS diode and many others are also available.

The Form A, Form C, and Micro Type C connectors have double grounds in the 6 and 12h positions to allow mounting flexibility for the direction of the cable. The standard cable jacket material is PVC with PUR jacket material available as an option. The traditional gasket is eliminated as it is integrated into the connector head. The center fixing screw „is made of stainless steel“ and is included.

The overmolding material of the connector heads is on request oil and UV safe resistant which proves the capability of our molded connectors for outdoor applications.



General Information

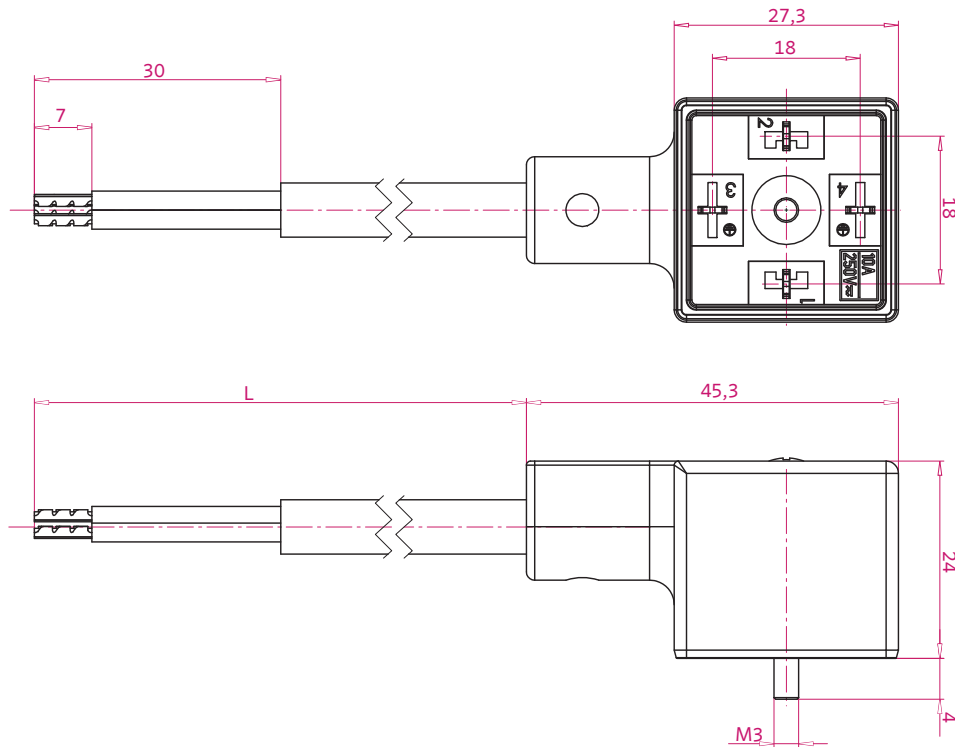
Voltage range general	0-250 V AC/DC
Voltage range with circuit	See the specific product page
Maximum current	10 A, See the product list for further details
Contact resistance	max. 15 mΩ
Standard cable colour	PVC cable: black, PUR-cable: grey
Standard cable material	PVC-cable: harmonised; PUR-cable (PUR-cable standard oil and UV-resistant, CSA/UL-certified on request); other cables on request
Cable ends	Stripping 30 mm, free end with wire end sleeves
Standard cable lengths	2 and 5m, other cable lengths on request
Standard wire cross section	Form A, B, B-Industrie: 0,75mm ² , Form C, Micro: 0,5mm ² , others on request
Protection class (DIN EN 60529)	IP67
Connector ambient temperature range	-25...+ 90 ° C (short-term: +105°C)
Standard cable ambient temperature range	PVC- cable: -5...+70°C, PUR-cable: -40...+90°C, other cable on request
Tightening torque for the central fixing screw	0,4 Nm ± 0,1Nm
Central fixing screw size	Form A, B, Industrial Type B: M3 x 26mm, Micro Type C: M3 x 22,5mm, Form C: M2,5 x 22,5mm
Flammability (UL94)	HB
Overmolding material (connector)	TPU
Terminal block material	PA6GF15
Material and surface plating of contacts	CuZn, Cu/Sn-coating
Central fixing screw material	A2-50 (stainless steel)
Standard circuit versions	LED, LED+VDR, GL+VDR, GL+VDR+LED, other circuits on request, for details see page: 16-17

Valve Connectors

Connection type Form A
 Standardisation: EN 175301-803 -A

General Data:

Contact spacing 18 mm
 Number of pins: 2+2 Grounds; 3+ Ground
 Electrical resistance of contacts: Maximum 15 mΩ
 Max. current: 10 A, see the product list for further details
 Voltage range: 0-250 V AC/DC
 Standard circuits: LED, LED+VDR, GL+VDR, GL+VDR+LED



Technical Data without circuit

Item number	Connector color	Voltage	Cable	Cable length	Max. current
611-202-0335	anthracite	0-250 V	PVC	2 m	10 A
611-202-0364	anthracite	0-250 V	PVC	5 m	10 A
611-202-0365	anthracite	0-250 V	PUR	2 m	10 A
611-202-0366	anthracite	0-250 V	PUR	5 m	10 A

Technical Data with circuit
LED (AC/DC)

Item number	Connector color	Voltage	Cable	Cable length	Max. current
611-202-0367	anthracite translucent	12-48 V	PVC	2 m	10 A
611-202-0368	anthracite translucent	12-48 V	PVC	5 m	10 A
611-202-0369	anthracite translucent	110-250 V	PVC	2 m	10 A
611-202-0370	anthracite translucent	110-250 V	PVC	5 m	10 A
611-202-0371	anthracite translucent	12-48 V	PUR	2 m	10 A
611-202-0372	anthracite translucent	12-48 V	PUR	5 m	10 A
611-202-0373	anthracite translucent	110-250 V	PUR	2 m	10 A
611-202-0374	anthracite translucent	110-250 V	PUR	5 m	10 A

LED+VDR (AC/DC)

Item number	Connector color	Voltage	Cable	Cable length	Max. current
611-202-0375	anthracite translucent	12-24 V	PVC	2 m	1,5 A
611-202-0376	anthracite translucent	12-24 V	PVC	5 m	1,5 A
611-202-0377	anthracite translucent	110-250 V	PVC	2 m	1,5 A
611-202-0378	anthracite translucent	110-250 V	PVC	5 m	1,5 A
611-202-0379	anthracite translucent	12-24 V	PUR	2 m	1,5 A
611-202-0380	anthracite translucent	12-24 V	PUR	5 m	1,5 A
611-202-0381	anthracite translucent	110-250 V	PUR	2 m	1,5 A
611-202-0382	anthracite translucent	110-250 V	PUR	5 m	1,5 A

**Technical Data with circuit
Rectifier+VDR (AC/DC)**

Item number	Connector color	Voltage	Cable	Cable length	Max. current
611-202-0383	anthracite	0-250 V	PVC	2 m	1,5 A
611-202-0384	anthracite	0-250 V	PVC	5 m	1,5 A
611-202-0385	anthracite	0-250 V	PUR	2 m	1,5 A
611-202-0386	anthracite	0-250 V	PUR	5 m	1,5 A

Rectifier+VDR+LED (AC/DC)

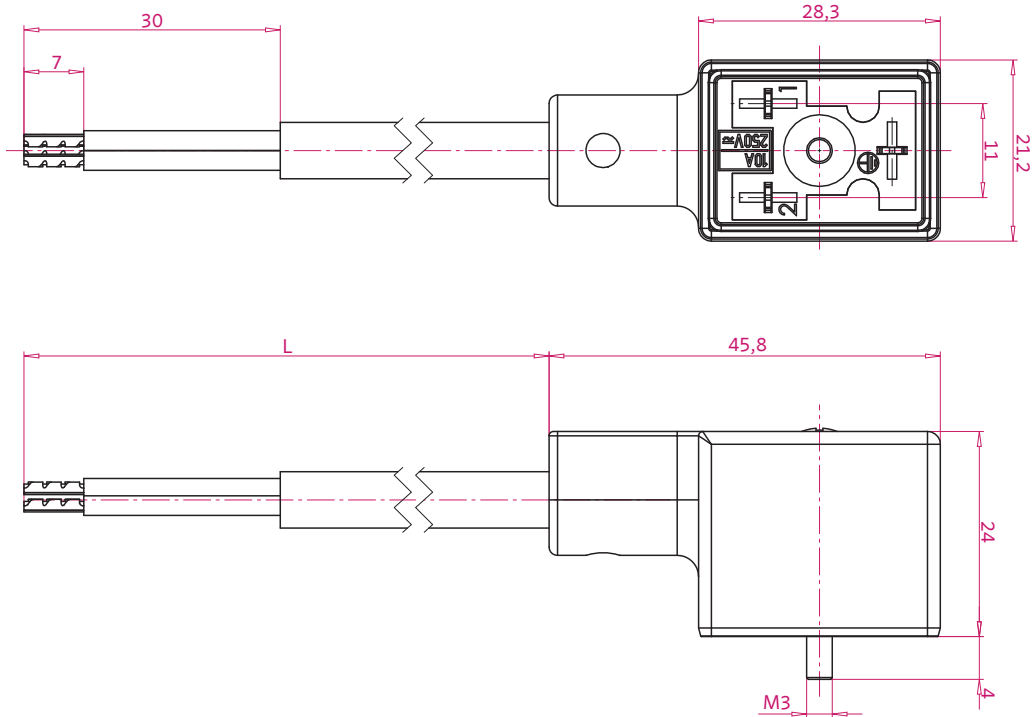
Item number	Connector color	Voltage	Cable	Cable length	Max. current
611-202-0387	anthracite translucent	12-48 V	PVC	2 m	1,5 A
611-202-0388	anthracite translucent	12-48 V	PVC	5 m	1,5 A
611-202-0389	anthracite translucent	110-250 V	PVC	2 m	1,5 A
611-202-0390	anthracite translucent	110-250 V	PVC	5 m	1,5 A
611-202-0391	anthracite translucent	12-48 V	PUR	2 m	1,5 A
611-202-0392	anthracite translucent	12-48 V	PUR	5 m	1,5 A
611-202-0393	anthracite translucent	110-250 V	PUR	2 m	1,5 A
611-202-0394	anthracite translucent	110-250 V	PUR	5 m	1,5 A

Valve Connectors

Connection type Form B Industrial
 Standardisation: Industrial Form

General Data:

Contact spacing 11 mm
 Number of pins: 2+ Grounds
 Electrical resistance of contacts: Maximum 15 mΩ
 Max. current: 10 A, see the product list for further details
 Voltage range: 0-250 V AC/DC
 Standard circuits: LED, LED+VDR, GL+VDR



Technical Data without circuit

Item number	Connector color	Voltage	Cable	Cable length	Max. current
612-202-0187	anthracite	0-250 V	PVC	2 m	10 A
612-202-0226	anthracite	0-250 V	PVC	5 m	10 A
612-202-0227	anthracite	0-250 V	PUR	2 m	10 A
612-202-0228	anthracite	0-250 V	PUR	5 m	10 A

Technical Data with circuit
LED (AC/DC)

Item number	Connector color	Voltage	Cable	Cable length	Max. current
612-202-0229	anthracite translucent	12-48 V	PVC	2 m	10 A
612-202-0230	anthracite translucent	12-48 V	PVC	5 m	10 A
612-202-0231	anthracite translucent	110-250 V	PVC	2 m	10 A
612-202-0232	anthracite translucent	110-250 V	PVC	5 m	10 A
612-202-0233	anthracite translucent	12-48 V	PUR	2 m	10 A
612-202-0234	anthracite translucent	12-48 V	PUR	5 m	10 A
612-202-0235	anthracite translucent	110-250 V	PUR	2 m	10 A
612-202-0236	anthracite translucent	110-250 V	PUR	5 m	10 A

LED+VDR (AC/DC)

Item number	Connector color	Voltage	Cable	Cable length	Max. current
612-202-0237	anthracite translucent	12-24 V	PVC	2 m	1,5 A
612-202-0238	anthracite translucent	12-24 V	PVC	5 m	1,5 A
612-202-0239	anthracite translucent	110-250 V	PVC	2 m	1,5 A
612-202-0240	anthracite translucent	110-250 V	PVC	5 m	1,5 A
612-202-0241	anthracite translucent	12-24 V	PUR	2 m	1,5 A
612-202-0242	anthracite translucent	12-24 V	PUR	5 m	1,5 A
612-202-0243	anthracite translucent	110-250 V	PUR	2 m	1,5 A
612-202-0244	anthracite translucent	110-250 V	PUR	5 m	1,5 A

**Technical Data with circuit
Rectifier+VDR (AC/DC)**

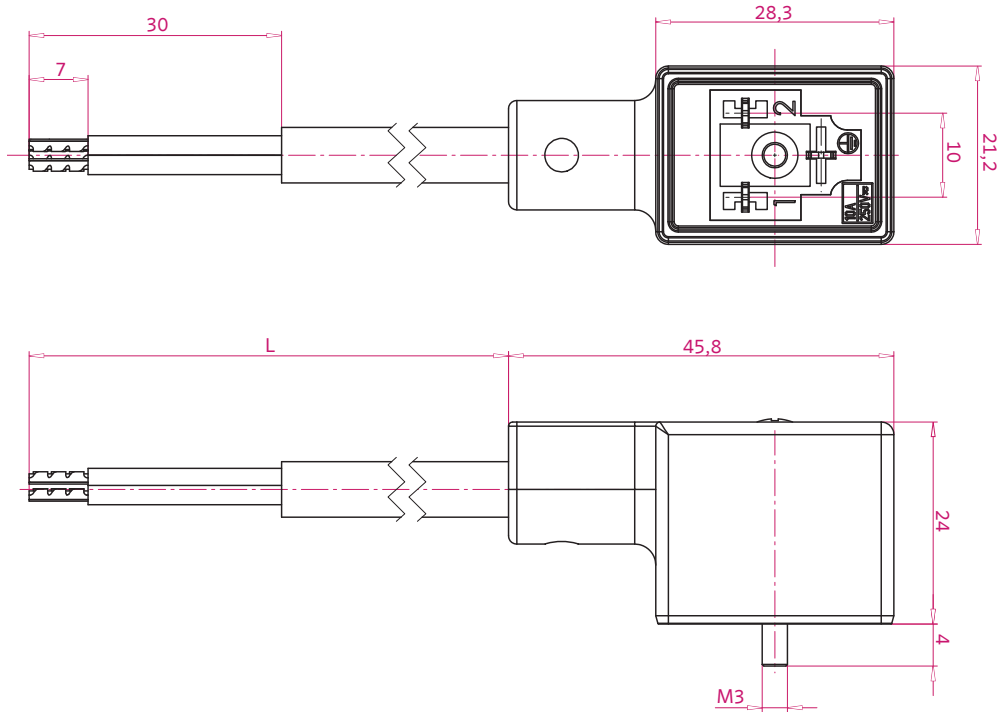
Item number	Connector color	Voltage	Cable	Cable length	Max. current
612-202-0245	anthracite	0-250 V	PVC	2 m	1,5 A
612-202-0246	anthracite	0-250 V	PVC	5 m	1,5 A
612-202-0247	anthracite	0-250 V	PUR	2 m	1,5 A
612-202-0248	anthracite	0-250 V	PUR	5 m	1,5 A

Valve Connectors

Connection type Form B
 Standardisation: EN 175301-803-B

General Data:

Contact spacing 10 mm
 Number of pins: 2+ Grounds
 Electrical resistance of contacts: Maximum 15 mΩ
 Max. current: 10 A, see the product list for further details
 Voltage range: 0-250 V AC/DC
 Standard circuits: LED, LED+VDR



Technical Data without circuit

Item number	Connector color	Voltage	Cable	Cable length	Max. current
613-202-0019	anthracite	0-250 V	PVC	2 m	10 A
613-202-0020	anthracite	0-250 V	PVC	5 m	10 A
613-202-0021	anthracite	0-250 V	PUR	2 m	10 A
613-202-0022	anthracite	0-250 V	PUR	5 m	10 A

Technical Data with circuit
LED (AC/DC)

Item number	Connector color	Voltage	Cable	Cable length	Max. current
613-202-0023	anthracite translucent	12-48 V	PVC	2 m	10 A
613-202-0024	anthracite translucent	12-48 V	PVC	5 m	10 A
613-202-0025	anthracite translucent	110-250 V	PVC	2 m	10 A
613-202-0026	anthracite translucent	110-250 V	PVC	5 m	10 A
613-202-0027	anthracite translucent	12-48 V	PUR	2 m	10 A
613-202-0028	anthracite translucent	12-48 V	PUR	5 m	10 A
613-202-0029	anthracite translucent	110-250 V	PUR	2 m	10 A
613-202-0030	anthracite translucent	110-250 V	PUR	5 m	10 A

LED+VDR (AC/DC)

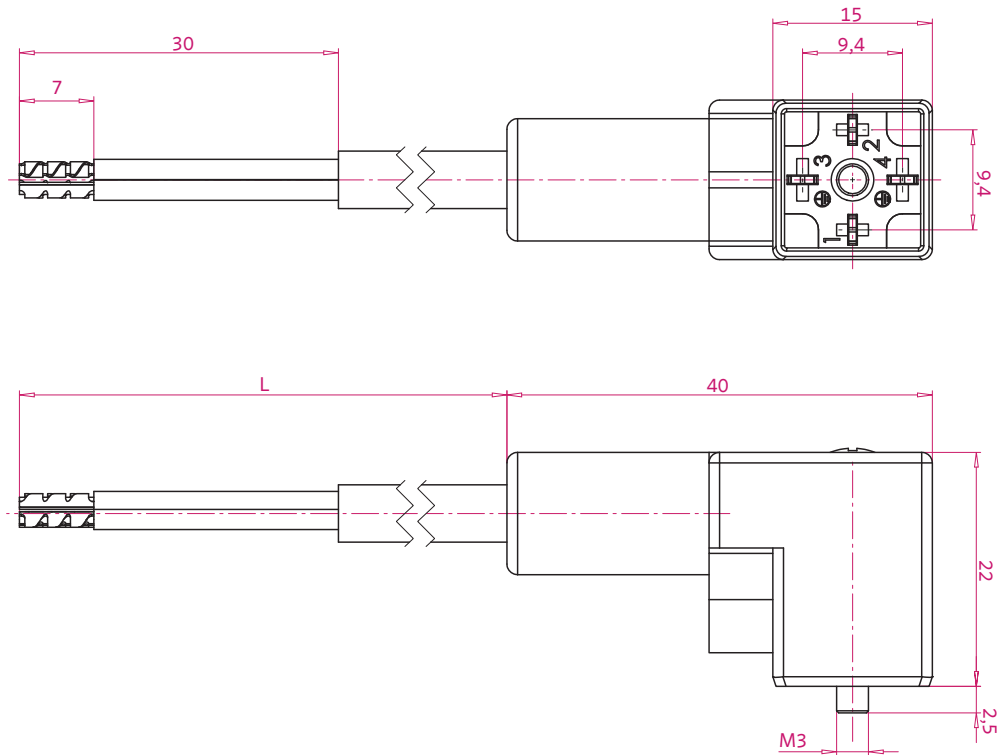
Item number	Connector color	Voltage	Cable	Cable length	Max. current
613-202-0031	anthracite translucent	12-24 V	PVC	2 m	1,5 A
613-202-0032	anthracite translucent	12-24 V	PVC	5 m	1,5 A
613-202-0033	anthracite translucent	110-250 V	PVC	2 m	1,5 A
613-202-0034	anthracite translucent	110-250 V	PVC	5 m	1,5 A
613-202-0035	anthracite translucent	12-24 V	PUR	2 m	1,5 A
613-202-0036	anthracite translucent	12-24 V	PUR	5 m	1,5 A
613-202-0037	anthracite translucent	110-250 V	PUR	2 m	1,5 A
613-202-0038	anthracite translucent	110-250 V	PUR	5 m	1,5 A

Valve Connectors

Connection type Form Micro
 Standardisation: Micro Form

General Data:

Contact spacing 9,4 mm
 Number of pins: 2+2 Grounds
 Electrical resistance of contacts: Maximum 15 mΩ
 Max. current: 6 A, see the product list for further details
 Voltage range: 0-250 V AC/DC
 Standard circuits: LED, LED+VDR



Technical Data without circuit

Item number	Connector color	Voltage	Cable	Cable length	Max. current
614-202-0044	anthracite	0-250 V	PVC	2 m	6 A
614-202-0056	anthracite	0-250 V	PVC	5 m	6 A
614-202-0057	anthracite	0-250 V	PUR	2 m	6 A
614-202-0058	anthracite	0-250 V	PUR	5 m	6 A

Technical Data with circuit LED (AC/DC)

Item number	Connector color	Voltage	Cable	Cable length	Max. current
614-202-0059	anthracite translucent	12-48 V	PVC	2 m	6 A
614-202-0060	anthracite translucent	12-48 V	PVC	5 m	6 A
614-202-0061	anthracite translucent	110-250 V	PVC	2 m	6 A
614-202-0062	anthracite translucent	110-250 V	PVC	5 m	6 A
614-202-0063	anthracite translucent	12-48 V	PUR	2 m	6 A
614-202-0064	anthracite translucent	12-48 V	PUR	5 m	6 A
614-202-0065	anthracite translucent	110-250 V	PUR	2 m	6 A
614-202-0066	anthracite translucent	110-250 V	PUR	5 m	6 A

LED+VDR (AC/DC)

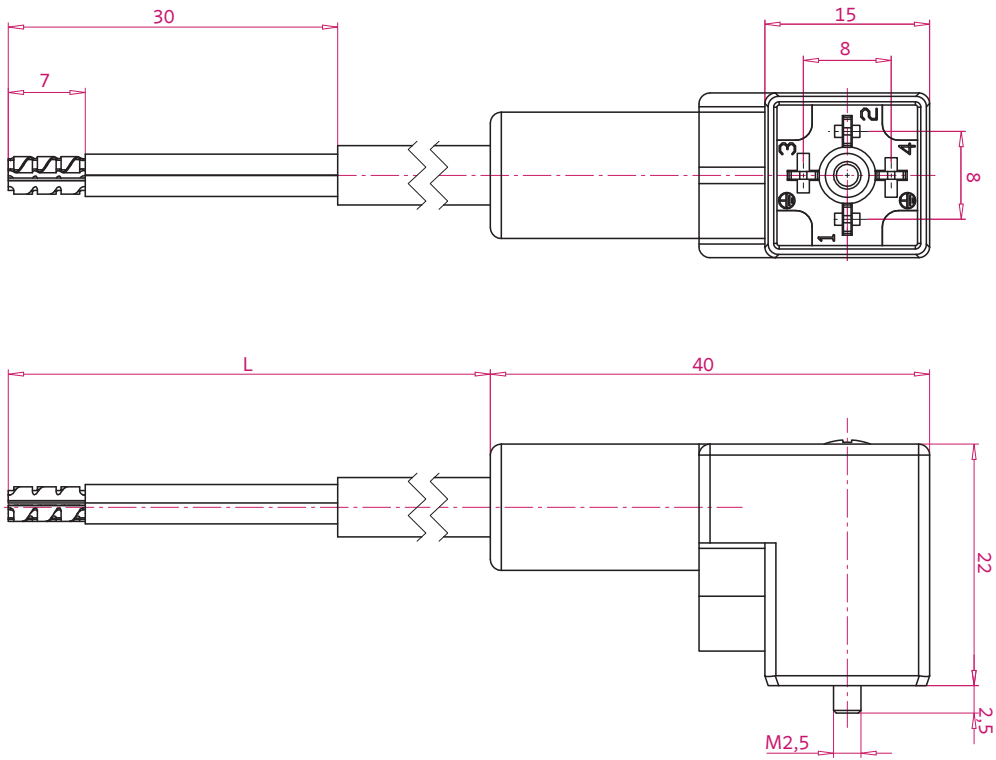
Item number	Connector color	Voltage	Cable	Cable length	Max. current
614-202-0067	anthracite translucent	12-24 V	PVC	2 m	1,5 A
614-202-0068	anthracite translucent	12-24 V	PVC	5 m	1,5 A
614-202-0069	anthracite translucent	110-250 V	PVC	2 m	1,5 A
614-202-0070	anthracite translucent	110-250 V	PVC	5 m	1,5 A
614-202-0071	anthracite translucent	12-24 V	PUR	2 m	1,5 A
614-202-0072	anthracite translucent	12-24 V	PUR	5 m	1,5 A
614-202-0073	anthracite translucent	110-250 V	PUR	2 m	1,5 A
614-202-0074	anthracite translucent	110-250 V	PUR	5 m	1,5 A

Valve Connectors

Connection type Form C
 Standardisation: EN 175301-803-C

General Data:

Contact spacing 8 mm
 Number of pins: 2+2 Grounds
 Electrical resistance of contacts: Maximum 15 mΩ
 Max. current: 6 A, see the product list for further details
 Voltage range: 0-250 V AC/DC
 Standard circuits: LED, LED+VDR



Technical Data without circuit

Item number	Connector color	Voltage	Cable	Cable length	Max. current
615-202-0014	anthracite	0-250 V	PVC	2 m	6 A
615-202-0086	anthracite	0-250 V	PVC	5 m	6 A
615-202-0087	anthracite	0-250 V	PUR	2 m	6 A
615-202-0088	anthracite	0-250 V	PUR	5 m	6 A

Technical Data with circuit

LED (AC/DC)

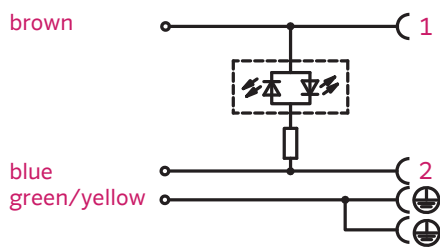
Item number	Connector color	Voltage	Cable	Cable length	Max. current
615-202-0089	anthracite translucent	12-48 V	PVC	2 m	6 A
615-202-0090	anthracite translucent	12-48 V	PVC	5 m	6 A
615-202-0091	anthracite translucent	110-250 V	PVC	2 m	6 A
615-202-0092	anthracite translucent	110-250 V	PVC	5 m	6 A
615-202-0093	anthracite translucent	12-48 V	PUR	2 m	6 A
615-202-0094	anthracite translucent	12-48 V	PUR	5 m	6 A
615-202-0095	anthracite translucent	110-250 V	PUR	2 m	6 A
615-202-0096	anthracite translucent	110-250 V	PUR	5 m	6 A

LED+VDR (AC/DC)

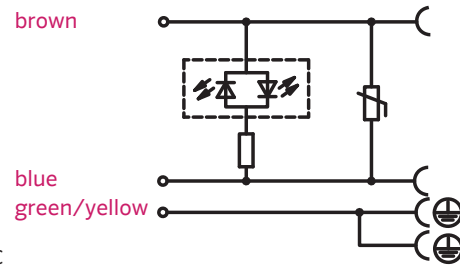
Item number	Connector color	Voltage	Cable	Cable length	Max. current
615-202-0097	anthracite translucent	12-24 V	PVC	2 m	1,5 A
615-202-0098	anthracite translucent	12-24 V	PVC	5 m	1,5 A
615-202-0099	anthracite translucent	110-250 V	PVC	2 m	1,5 A
615-202-0100	anthracite translucent	110-250 V	PVC	5 m	1,5 A
615-202-0101	anthracite translucent	12-24 V	PUR	2 m	1,5 A
615-202-0102	anthracite translucent	12-24 V	PUR	5 m	1,5 A
615-202-0103	anthracite translucent	110-250 V	PUR	2 m	1,5 A
615-202-0104	anthracite translucent	110-250 V	PUR	5 m	1,5 A

Description of the circuit

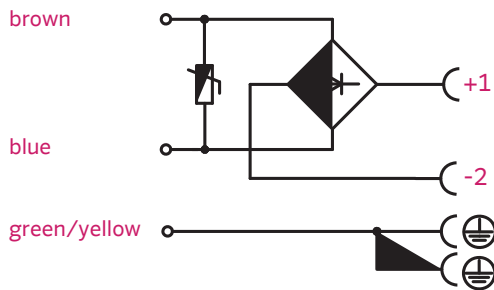
Description	Voltage	Voltage	Form A	Form B Industrial	Form B	Form Micro	Form C
LED	12-48 V	AC/DC	x	x	x	x	x
LED	110-250 V	AC/DC	x	x	x	x	x
LED+VDR	12-24 V	AC/DC	x	x	x	x	x
LED+VDR	110-250 V	AC/DC	x	x	x	x	x



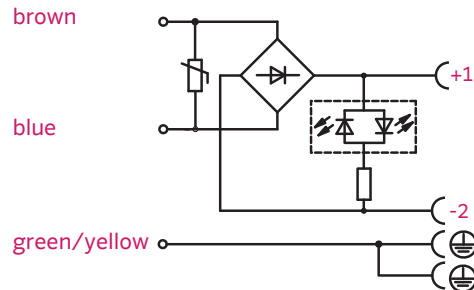
form A, Micro, C



Description	Voltage	Voltage	Form A	Form B Industrial	Form B	Form Micro	Form C
GL+VDR	0-250 V	AC	x	x	o.r.	o.r.	o.r.
GL+LED+VDR	12-48 V	AC/DC	x	o.r.	o.r.	o.r.	o.r.
GL+LED+VDR	110-250 V	AC/DC	x	o.r.	o.r.	o.r.	o.r.

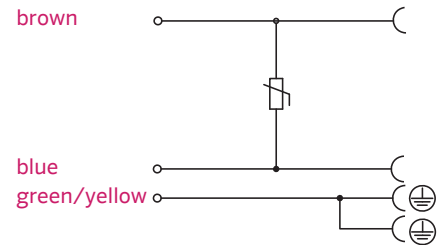
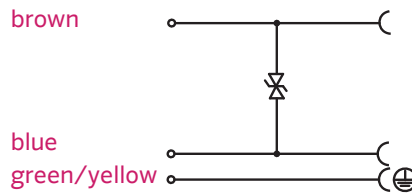
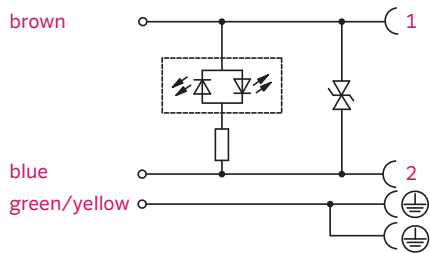


form A, Micro, C



Description of the circuit (on request)

Description	Voltage	Voltage	Form A	Form B Industrial	Form B	Form Micro	Form C
LED+TVS	12-24 V	AC/DC	x	x	x	x	x
LED+TVS	110-250 V	AC/DC	x	x	x	x	x
TVS	12-24 V	AC/DC	x	x	x	x	x
TVS	110-250 V	AC/DC	x	x	x	x	x
VDR	12-24 V	AC/DC	x	x	x	x	x
VDR	110-250 V	AC/DC	x	x	x	x	x



form A, Micro, C

Description	Voltage	Voltage	Form A	Form B Industrial	Form B	Form Micro	Form C
Power reducing molded connector	12-24 V	DC	x	x	x	x	x
Molded connector timer	12-24 V	DC	x	x	x	x	x

Molded Connector for Energy Saving (Power Reducer-PWM)

Description:

Valve connector with molded cable and integrated energy saving circuit PWM (Pulse Width Modulation). The PWM connector receives the nominal voltage (12 to 24 VDC) in order to fully energize the solenoid. Then after a timed period (aprox. 150 ms), the circuit reduces the full voltage to a reliable holding power, resulting in energy savings. The coil heat is also reduced, which extends the life of the coil. The power reduction is accomplished through pulses with modulation of the output voltage.

Features:

- Available in Form A, Industrial Type B, Form B, Micro Type C and Form C sizes.
- Reduces coil heat/extends coil life/less maintenance required.
- Duty cycle of 25% to 80%.
- Preprogrammed according to the customers request. The standard savings level is 50%.
- LED indication and surge protection are available.
- 2+2 Ground (Form A, Form C, Micro Type C)
- 2+ Ground (Form B, Industrial Type B)

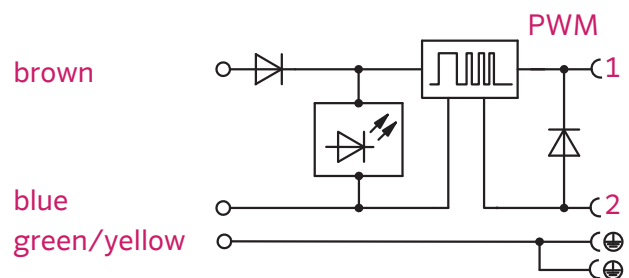
Technical Parameters:

Nominal voltage: 12-24VDC
 (Warning: Higher voltages will easily destroy the circuit.)
 Output frequency: approx. 2kHz

Max. current: 2A Form A, B, Industrial Type B
 0.4A Form C, Micro Type C

In order to protect the built-in electrical circuit, we recommend using a fast acting fuse in your electrical network, which is max. 150% stronger than the listed max. currents.

Circuit Diagramm:



Molded Connector with Timer functionI

Description:

Valve connector with molded cable and integrated timer circuit.
Allows the coil to operate in preprogrammed/adjusted intervals.
Typical applications are condensate or dust drain valves, and lubricant dose valves.

Technical Parameters:

Available in Form A, Industrial Type B, Form B, Micro Type C,
and Form C sizes
Input voltage range: 12-24 VDC
Max. output current: 1 A form micro, form C = 0,2 mA
Pre-programmed time ranges: TOn, TOff, TDelay
0.1 sec to 250 hours (programmed at factory)
Timing accuracy: $\pm 5\%$

Built-in surge protection and LED.

