Connector Plugs and Light Emitting Seals

- **Available in cable gland and moulded cable types with or without indicators**
- **Indicator plugs illuminate to show solenoid operation**
- **Popular voltage options are available**
- **Light Emitting Seals show power-on, include built-in surge suppression and reverse polarity protection**
- **Indicator plugs and Light Emitting Seals have low power consumption**



Technical Data

Plugs

Contact Rating:
10 A nominal, 6 A operating
Contact Resistance:
4 mΩ
Voltages:
see table overleaf
Conductor cross-section:
3 x 0,5 mm^2 moulded cable
Indicator Circuit Current Consumption:
5-10 mA
Protection Class:
IP65 (DIN 40050)
(IP64 for indicator plugs)
Insulation Class:
Group C (VDE 0110)
Materials:
Plug housing - black polyamide with glass fibre
Indicator Plug housing - transparent polyamide

Light Emitting Seals

Voltage Range:
see table overleaf
Power Consumption:
0.25W (DC) and 0.75VA - 1.25VA (AC)
Temperature range:
-25 °C to +50 °C
LED colour:
Green
Material:
Polyurethane

Ordering Information

To order, quote model number:
e.g. V10012-D13 for the 12-24 V a.c or d.c. plug with cable gland for a Form-C type connection.

Our policy is one of continued research and development. We therefore reserve the right to amend, without notice, the specifications given in this document.

General Information

DIN 43650 (Form C) - Connector plugs for 15mm coils

Model No.	Description	Cable Length	Gland Size	Voltage	Features
V10027-D00	Plug with cable gland	-	Pg7	-	-
V10012-D13	Plug with cable gland and indicator	-	Pg7	12-24 V a.c. / d.c.	LED / VDR
V10012-D18	Plug with cable gland and indicator	-	Pg7	110 V a.c. / d.c.	LED / VDR
V10012-D19	Plug with cable gland and indicator	-	Pg7	220 V a.c. / d.c.	LED / VDR
V10013-D01	Plug with moulded cable	1m	-	-	-
V10013-D03	Plug with moulded cable	3m	-	-	-
V10014-D01	Plug with moulded cable and indicator	1m	-	24 V a.c. / d.c.	LED / VDR
V10014-D03	Plug with moulded cable and indicator	3m	-	24 V a.c. / d.c.	LED / VDR
V10015-D01	Plug with moulded cable and indicator	1m	-	110 V a.c. / d.c.	LED / VDR
V10015-D03	Plug with moulded cable and indicator	3m	-	110 V a.c. / d.c.	LED / VDR
V10016-D01	Plug with moulded cable and indicator	1m	-	220 V a.c. / d.c.	LED / VDR
V10016-D03	Plug with moulded cable and indicator	3m	-	220 V a.c. / d.c.	LED / VDR

Used on:

Nugget 40 (V08, V09 & V10 Manifolds & Valve Islands)

Nugget 120 (V14 Manifolds & Valve Islands)

Industrial Standard - Connector plugs for 22mm coils

Model No.	Description	Cable Length	Gland Size	Voltage	Features
M/P19063	Plug with cable gland	-	Pg9	-	-
M/P24121/1	Plug with cable gland and indicator	-	Pg9	12-24 V a.c. / d.c.	Lamp
M/P24121/2	Plug with cable gland and indicator	-	Pg9	90-130 V a.c. / d.c.	Neon
M/P24121/3	Plug with cable gland and indicator	-	Pg9	150-230 V a.c. / d.c.	Neon
M/P43313/1	Plug with moulded cable	1m	-	-	-
M/P43313/3	Plug with moulded cable	3m	-	-	-
M/P43314/11	Plug with moulded cable and indicator	1m	-	24 V a.c. / d.c.	LED / VDR
M/P43314/13	Plug with moulded cable and indicator	3m	-	24 V a.c. / d.c.	LED / VDR
M/P43314/21	Plug with moulded cable and indicator	1m	-	110 V a.c. / d.c.	LED / VDR
M/P43314/23	Plug with moulded cable and indicator	3m	-	110 V a.c. / d.c.	LED / VDR
M/P43314/31	Plug with moulded cable and indicator	1m	-	220 V a.c. / d.c.	LED / VDR
M/P43314/33	Plug with moulded cable and indicator	3m	-	220 V a.c. / d.c.	LED / VDR

Used on:

M/7700/M, M/7800/M

ISO*Star, Midi*Star

M/48, M49

Super X,

M/20000

M/1700

DIN 43650 (Form A) - Connector plugs for 30/32mm coils

Model No.	Description	Cable Length	Gland Size	Voltage	Features
M/P15737	Plug with cable gland	-	Pg11	-	-
M/P24120/1	Plug with cable gland and indicator	-	Pg11	12-48 V a.c. / d.c.	Lamp
M/P24120/2	Plug with cable gland and indicator	-	Pg11	90-130 V a.c. / d.c.	Neon
M/P24120/3	Plug with cable gland and indicator	-	Pg11	150-230 V a.c. / d.c.	Neon
M/P24120/4	Plug with cable gland and indicator	-	Pg11	20-24 V a.c. / d.c.	LED
M/P43315/1	Plug with moulded cable	1m	-	-	-
M/P43315/3	Plug with moulded cable	3m	-	-	-
M/P43316/11	Plug with moulded cable and indicator	1m	-	24 V a.c. / d.c.	LED / VDR
M/P43316/13	Plug with moulded cable and indicator	3m	-	24 V a.c. / d.c.	LED / VDR
M/P43316/21	Plug with moulded cable and indicator	1m	-	110 V a.c. / d.c.	LED / VDR
M/P43316/23	Plug with moulded cable and indicator	3m	-	110 V a.c. / d.c.	LED / VDR
M/P43316/31	Plug with moulded cable and indicator	1m	-	220 V a.c. / d.c.	LED / VDR
M/P43316/33	Plug with moulded cable and indicator	3m	-	220 V a.c. / d.c.	LED / VDR

Used on:

Excel (V03, V04 & V05)

Pascaflex

M/7300

M/7400

M/7600

Light Emitting Seals

Model No.	Plug / Solenoid size	Voltage	Form	Power Consumption
V10037-E13	15 mm	12-24 V d.c.	C	0.25W at 24V
V10037-E18	15 mm	110-120 V a.c.	C	0.75VA
V10037-E19	15 mm	220-240 V a.c.	C	1.0VA
M/P40859	22 mm	12-24 V a.c. / d.c.	IND	0.25W at 24V
M/P40886	22 mm	110-120 V a.c. / d.c.	IND	1.0VA
M/P40860	22 mm	220-240 V a.c. / d.c.	IND	1.25VA
M/P40861	30/32 mm	12-24 V a.c. / d.c.	A	0.25W at 24V
M/P40880	30/32 mm	110-120 V a.c. / d.c.	A	1.0VA
M/P40862	30/32 mm	220-240 V a.c. / d.c.	A	1.25VA

* Reduced light intensity at 12 V

a.c. models suitable for use at any frequency

ALL MODELS FEATURE GREEN LED.

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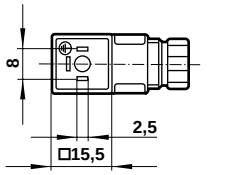
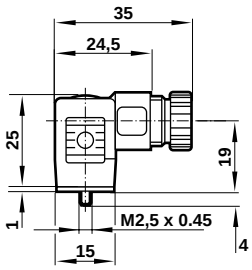
Plugs for 15mm coils





with cable gland

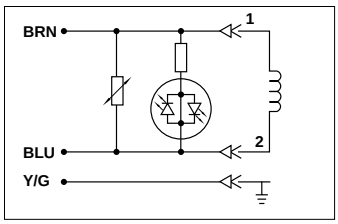
V10027-D00

Type: 3 pin plug with 8 mm centres

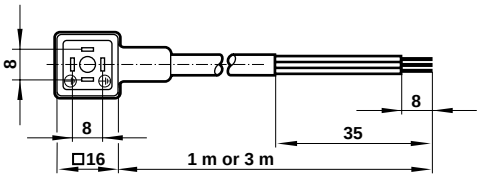
with cable gland and indicator

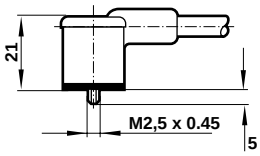
V10012-D13 (12 - 24 V a.c. / d.c.)
V10012-D18 (110 V a.c. / d.c.)
V10012-D19 (220 V a.c. / d.c.)

Type: 3 pin plug with 8 mm centres, red LED indicator and VDR



Circuit
Bipolar LED and VDR to protect supply and switch (the energy in the coil is limited by the VDR).

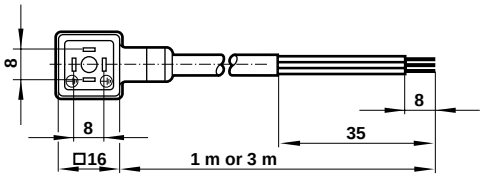


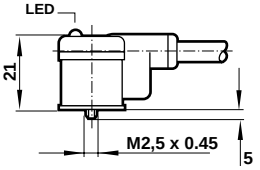


with moulded cable

V10013-D01 1 m cable
V10013-D03 3 m cable

Type: 3 pin plug with 8 mm centres
Polarity: Brown +/~ + or LIVE
Blue -/~ - or NEUTRAL
Yellow-green earth
Cable size: 3 x 0,5 mm²

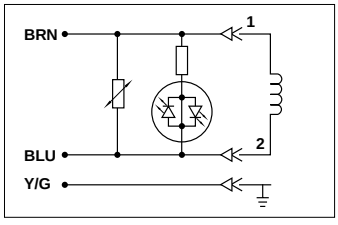




with moulded cable and indicator

V10014-D01 1 m cable (12 - 24 V a.c. / d.c.)
V10014-D03 3 m cable (12 - 24 V a.c. / d.c.)
V10015-D01 1 m cable (110 V a.c. / d.c.)
V10015-D03 3 m cable (110 V a.c. / d.c.)
V10016-D01 1 m cable (220 V a.c. / d.c.)
V10016-D03 3 m cable (220 V a.c. / d.c.)

Type: 3 pin plug with 8 mm centres, red LED indicators and VDR
Polarity: Brown +/~ + or LIVE
Blue -/~ - or NEUTRAL
Yellow-green earth
Cable size: 3 x 0,5 mm²



Circuit
Bipolar LED and VDR to protect supply and switch (the energy in the coil is limited by the VDR).

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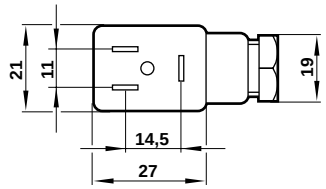
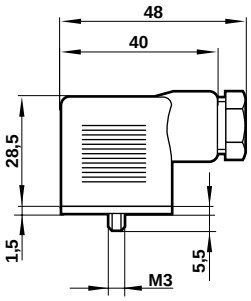
Plugs for 22mm coils





with cable gland

M/P19063

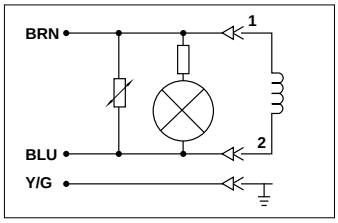
Type: 3 pin plug

with cable gland and indicator

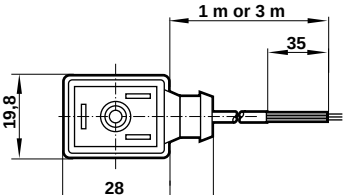
M/P24121/1 Lamp (12 - 24 V a.c. / d.c.)
M/P24121/2 Neon* (90 - 130 V a.c. / d.c.)
M/P24121/3 Neon* (150 - 220 V a.c. / d.c.)

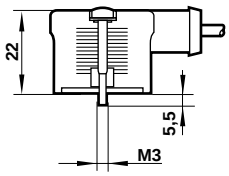
Type: 3 pin plug with indicator and VDR

*(see page 6 for circuit drawings)



Circuit





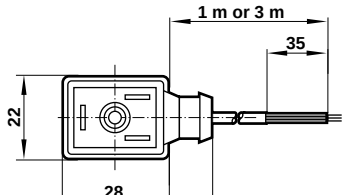
with moulded cable

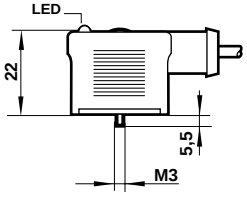
M/P43313/1 1 m cable
M/P43313/3 3 m cable

Type: 3 pin plug

Polarity: Brown +/~ + or LIVE
Blue -/~ - or NEUTRAL
Yellow-green earth

Cable size: 3 x 0,5 mm^2





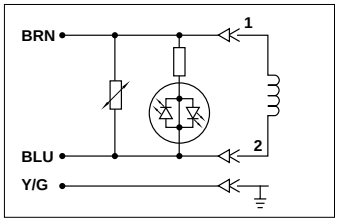
with moulded cable and indicator

M/P43314/11 1 m cable (24 V a.c. / d.c.)
M/P43314/13 3 m cable (24 V a.c. / d.c.)
M/P43314/21 1 m cable (110 V a.c. / d.c.)
M/P43314/23 3 m cable (110 V a.c. / d.c.)
M/P43314/31 1 m cable (220 V a.c. / d.c.)
M/P43314/33 3 m cable (220 V a.c. / d.c.)

Type: 3 pin plug with red LED indicators and VDR

Polarity: Brown +/~ + or LIVE
Blue -/~ - or NEUTRAL
Yellow-green earth

Cable size: 3 x 0,5 mm^2



Circuit

Bipolar LED and VDR to protect supply and switch (the energy in the coil is limited by the VDR).

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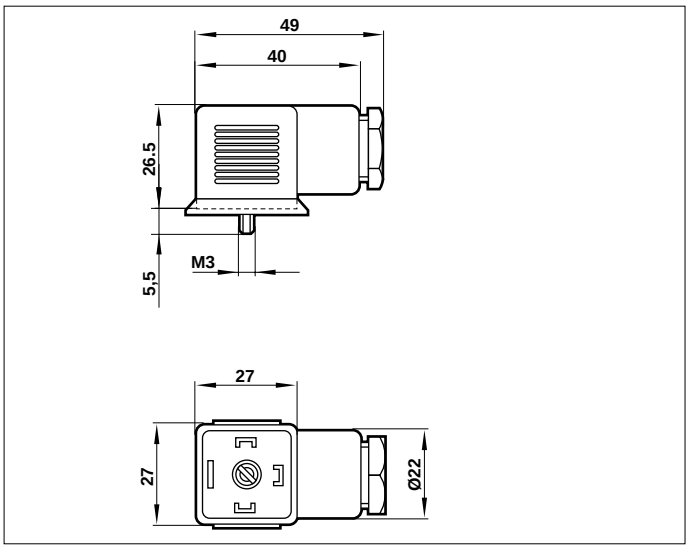
Plugs for 32 mm coils



with cable gland

M/P15737

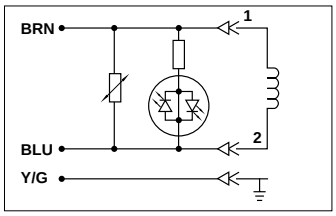
Type: 3 pin plug

with cable gland and indicator

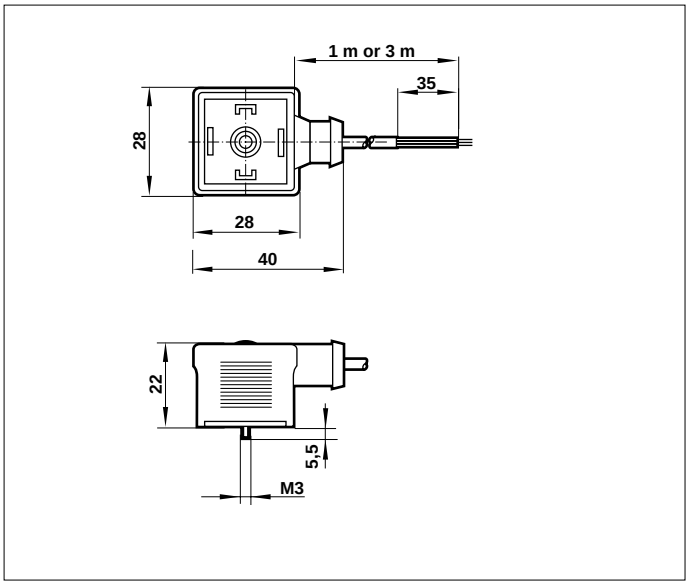
M/P24120/1 Lamp* (12 - 48 V a.c. / d.c.)
M/P24120/2 Neon* (90 - 130 V a.c. / d.c.)
M/P24120/3 Neon* (150 - 230 V a.c. / d.c.)
M/P24120/4 LED (20 - 24 V a.c. / d.c.)

Type: 3 pin plug with indicator and VDR

*(see page 6 for circuit drawings)



Circuit



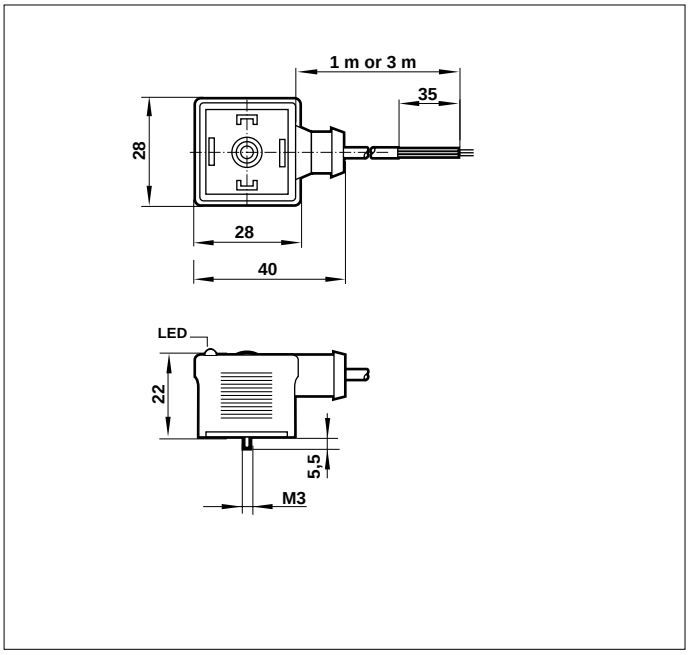
with moulded cable

M/P43315/1 1 m cable
M/P43315/3 3 m cable

Type: 3 pin plug

Polarity: Brown +/~ + or LIVE
Blue -/~ - or NEUTRAL
Yellow-green earth

Cable size: 3 x 0,5 mm^2



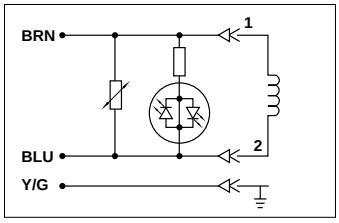
with moulded cable and indicator

M/P43316/11 1 m cable (24 V a.c. / d.c.)
M/P43316/13 3 m cable (24 V a.c. / d.c.)
M/P43316/21 1 m cable (110 V a.c. / d.c.)
M/P43316/23 3 m cable (110 V a.c. / d.c.)
M/P43316/31 1 m cable (220 V a.c. / d.c.)
M/P43316/33 3 m cable (220 V a.c. / d.c.)

Type: 3 pin plug with red LED indicators and VDR

Polarity: Brown +/~ + or LIVE
Blue -/~ - or NEUTRAL
Yellow-green earth

Cable size: 3 x 0,5 mm^2



Circuit

Bipolar LED and VDR to protect supply and switch (the energy in the coil is limited by the VDR).

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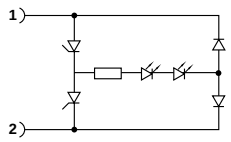
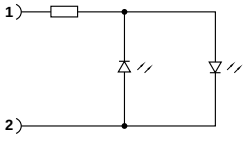
Light Emitting Seals

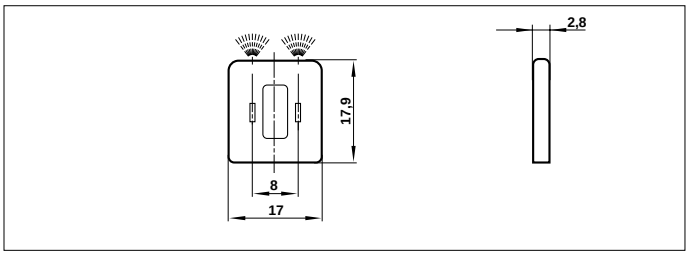


Circuit A
d.c.

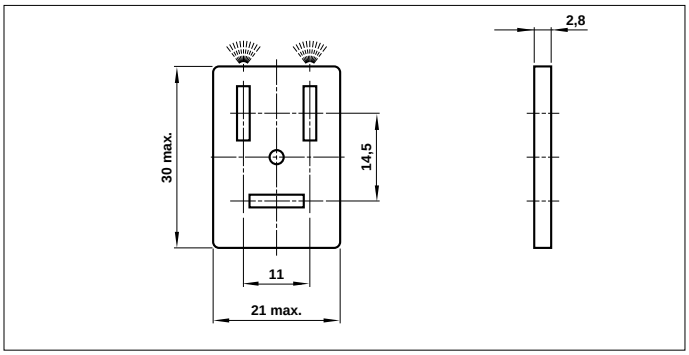


Circuit B
a.c.

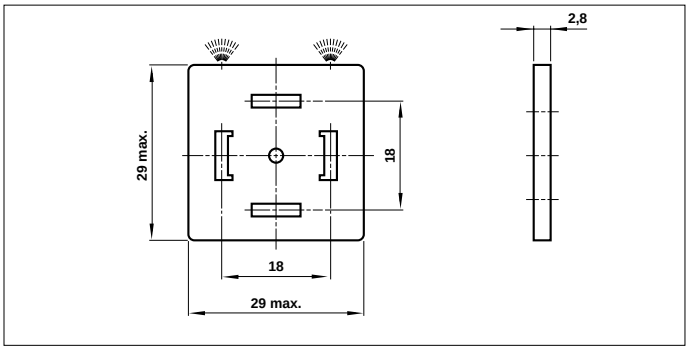
Circuit
Incorporates LED and reverse polarity protection. Indicates when the power is on.



Suitable for 15 mm solenoids (Form C)
V10037-E13 Circuit A (12 - 24 V d.c.)
V10037-E18 Circuit B (110 - 120 V a.c.)
V10037-E19 Circuit B (220 - 240 V a.c.)



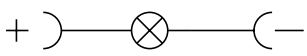
Suitable for 22 mm solenoids (Industrial)
M/P40859 Circuit A (12 - 24 V dc)
M/P40860 Circuit B (220 - 240 Vac)
M/P40886 Circuit B (110 - 120 Vac)



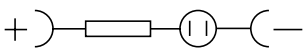
Suitable for 32 mm solenoids (Form A)
M/P40861 Circuit A (12 - 24 V dc)
M/P40862 Circuit B (220 - 240 Vac)
M/P40880 Circuit B (110 - 120 Vac)

Circuit Drawings

Lamp



Neon



Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where *pressures* and *temperatures* can exceed those listed under **'Technical Data'**.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

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