



Accessories

Relay plug for use in the field



Switching amplifiers for the conversion of sensor signals



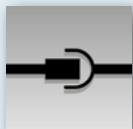
Ideal for field applications thanks to protection class IP 67

Reliable M12 connection technology

2-channel version

Wear and bounce-free semiconductor relays

Electrical separation between input and output




Relay in the field instead of in the control cabinet

More and more components for automation technology are suitable for use in the field thanks to high IP protection and M12 connection technology. As a rule, they have semiconductor outputs with 24 V levels and maximum switching currents between 20 and 300 mA. If other voltages, higher switching currents or electrical separation are required, relays are a popular solution - for which, however, a detour via a control cabinet was necessary until now.

With the new relay plugs from ifm, field-compatible relays are now available which can be connected easily and reliably thanks to the M12 connection technology commonly used in the field. Due to their compact design, they can be screwed directly onto sensors, e.g. using a Y-adapter.



Type	Number of inputs	Number of outputs	Output function	Order no.
	2	2	normally open	DP1603
	2	2	normally closed	DP1613

Safely separated

Thanks to the electrical separation between input and output, a 24 V DC signal at the input can switch another, independent voltage potential at the output.

Small switches big

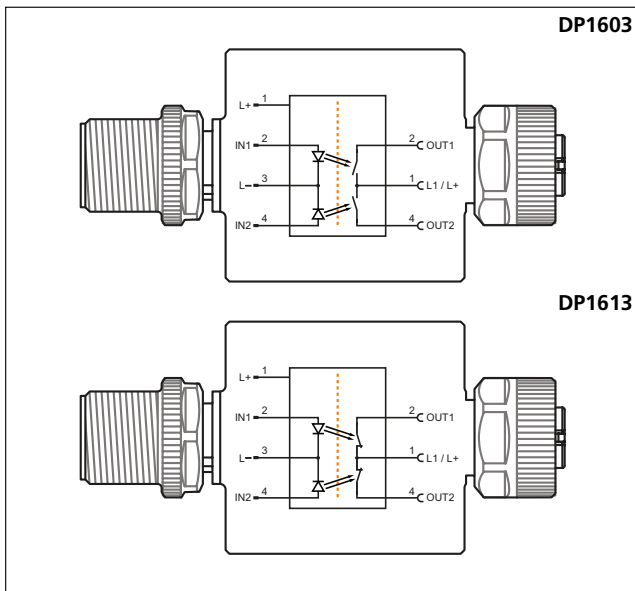
The relay plug switches larger currents of up to 1 A on the output side with small currents, such as those available at the outputs of sensors.

Reliable and wear-free

The semiconductor relays used in the plug switch "cleanly", that is: no switching bounce, no welding of the contact surfaces and above all: no wear. This makes the relay extremely durable.


Easy connection

The direct connection to other devices in the field is made via robust and industrially compatible M12 connection technology. If required, an external power supply can be connected on the input side via EBC 116 Y-splitter and on the output side via EVCA47 Y-connection cable.







Further technical data		
Operating voltage (inputs)	[V DC]	18...30
Current consumption	[mA]	< 10
Number of digital inputs		2
Number of semiconductor relay outputs		2
Switching voltage (outputs)	[V]	0...32 (DC) / 0...24 (AC)
Switching current (per output)	[A]	1 (up to 6 A for 100 ms)
Switching frequency	[Hz]	1
Switching delay	[ms]	10
Ambient temperature	[°C]	-25...60
Protection rating		IP 67

Accessories

Type	Description	Order no.
	Mounting clip	E89208

Connection technology

Type	Description	Order no.
	Y-connection cable 1 x socket 2x plug	EVCA47
	Y-splitter 2 x socket 1x plug	EBC116
	Wirable socket	EVC810
	Wirable plug	EVC812

We reserve the right to make technical alterations without prior notice. · 04.2022



Accessories

Never miss an event thanks to the pulse stretcher



Signal converters



Stretching and/or delaying of 24 V switching pulses

Suitable for use in the field

2-channel version

Reliable M12 connection technology

Parameter setting via IO-Link possible




Never miss a pulse

Especially in processes with short switching pulses it is a challenge for the control system to reliably detect every single switching pulse of a sensor. This is where the pulse stretcher comes in: every input pulse, no matter how short, is output as a switching signal with a defined duration. In addition, a delay time can be set for the output of the switching signals.

Two parameter setting options

The LED display and the two buttons allow easy parameter setting directly on the device. Alternatively, the pulse stretcher can also be set via IO-Link.



Type	Description	Order no.
	Pulse stretcher	DP2402

Easy connection

The direct connection to other devices in the field is made via robust and industrially compatible M12 connection technology. The pulse stretcher can be connected directly to a sensor with an M12 connector, for example.

Use in the field

Common timer relays are designed for use in the control cabinet. In contrast, the pulse stretcher can be used directly in the field thanks to its high IP protection. This saves valuable space in the control cabinet.

Output pulses can be defined via three parameters

Switching delay:

The output pulse switches later than the input pulse.

Switch-off delay:



The output pulse switches off later than the input pulse.

Hold time:

Defines the duration of the output pulse.

Technical data		
Nominal voltage	[V DC]	24
Operating voltage	[V DC]	18...30
Current consumption	[mA]	< 380
Number of digital inputs		2
Number of digital outputs		2
Output function		NO / NC (configurable)
Measuring frequency	[Hz]	< 2000
Switching delay	[ms]	0...9999
Switch-off delay	[ms]	0...9999
Hold time	[ms]	0...9999
Protection rating		IP 67
Ambient temperature	[°C]	-25...60
Operation	LED	green
Switching status indication	LED	2 x yellow
Connection		M12 connector
Communication interface		IO-Link (parameter setting)

Accessories

Type	Description	Order no.
	Mounting clip, robust design for use in harsh industrial environments	E89208
	USB IO-Link master for parameter setting and analysis of devices, supported communication protocols: IO-Link (4.8, 38.4 and 230 kbits/s)	ZZ1060