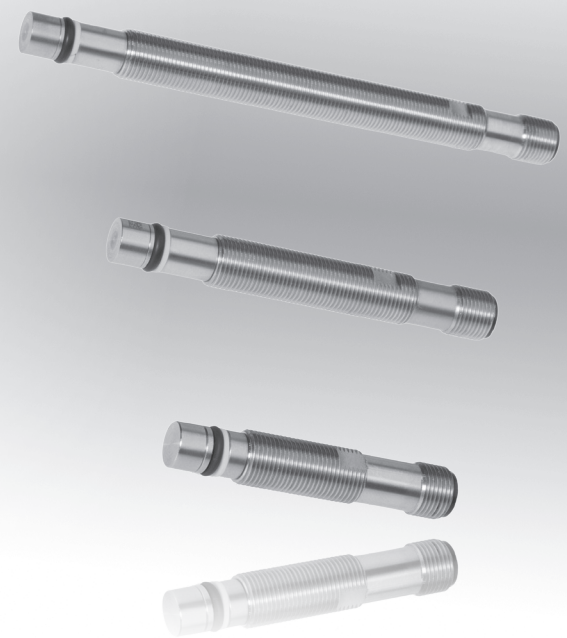
dimensions	**M12x1**	
flush	switching distance	**2.0mm**



- ✓ **operating temperature up to +100°C**
- ✓ **housing made of stainless steel**
- ✓ **stainless steel sensor surface**
- ✓ **integrated amplifier**
- ✓ **connection with M12-connector**

high-pressure-proof up to 500bar
temperature resistant up to +90°C/+100°C

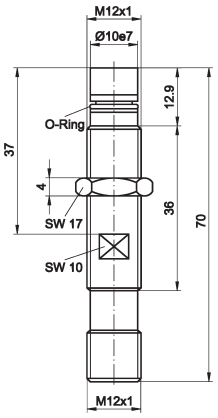
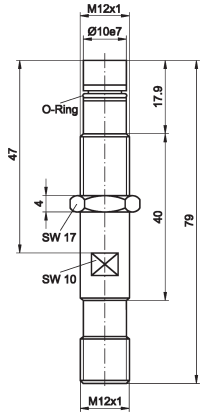
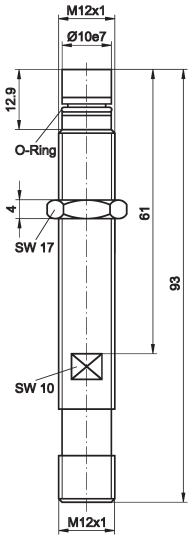
description

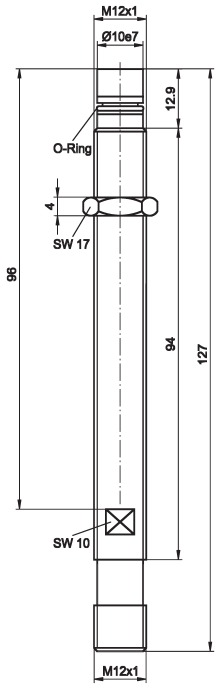
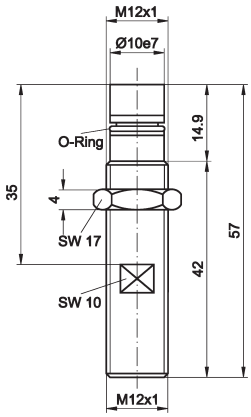
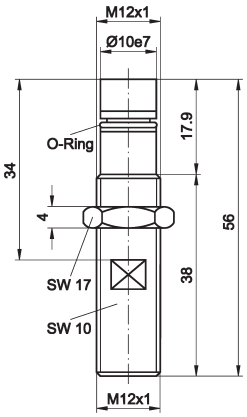
These devices are perfectly suited for applications with high dynamic pressure loads.
The main problem with pressure-proof inductive proximity switches is the thick coverage of the active surface (generally from a ceramic material) required to obtain the pressure resistance.
The new pressure-proof ipf sensors consist of a one-piece, all stainless steel housing. Thus, proven technology is at work.
The devices have a switching distance of 2mm and are temperature resistant up to +100°C.

The active surfaces are identical in construction to those of conventional pressure-proof proximity switches and, through appropriate fit and sealing with an O-ring, are very well sealed. As a result, the devices can replace existing systems without problem.

application examples

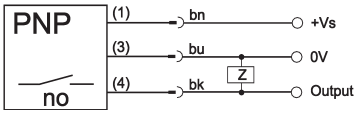
- ▶ position recognition of hydraulic cylinder pistons

article-no.	IP129120	IP129121	IP129122
switching distance	2.0mm	2.0mm	2.0mm
			
TECHNICAL DATA			
switching distance (Sn)	2.0mm	2.0mm	2.0mm
mounting	flush	flush	flush
pressure resistance (operation)	500bar	500bar	500bar
output signal	pnp, no	pnp, no	pnp, no
operating voltage	10 ... 30V DC	10 ... 30V DC	10 ... 30V DC
current consumption (w/o load)	≤ 10mA	≤ 10mA	≤ 10mA
output current (max. load)	200mA	200mA	200mA
voltage drop (max. load)	2.4V DC	2.4V DC	2.4V DC
hysteresis	< 15%	< 15%	< 15%
repeat accuracy	< 5%	< 5%	< 5%
readiness delay	≤ 100ms	≤ 100ms	≤ 100ms
switching frequency	400Hz	400Hz	400Hz
display (signal)	-	-	-
short-circuit protection	+	+	+
reverse polarity protection	+	+	+
dimensions	M12x1	M12x1	M12x1
length (thread/complete)	36mm/70mm	40mm/79mm	42mm/78mm
housing material	stainless steel	stainless steel	stainless steel
material (front cap)	stainless steel	stainless steel	stainless steel
operating temperature	-25 ... +100°C	-25 ... +100°C	-25 ... +100°C
degree of protection (EN 60529)	IP67/IP69k	IP67/IP69k	IP67/IP69k
connection	M12-connector, 3-pin	M12-connector, 3-pin	M12-connector, 3-pin
connection accessories	e.g. **VK200025**	e.g. **VK200025**	e.g. **VK200025**

article-no.	IP129123	IP129124	IP129125
switching distance	2.0mm	2.0mm	2.0mm
			
TECHNICAL DATA			
switching distance (Sn)	2.0mm	2.0mm	2.0mm
mounting	flush	flush	flush
pressure resistance (operation)	500bar	500bar	500bar
output signal	pnp, no	pnp, no	pnp, no
operating voltage	10 ... 30V DC	10 ... 30V DC	10 ... 30V DC
current consumption (w/o load)	≤ 10mA	≤ 10mA	≤ 10mA
output current (max. load)	200mA	200mA	200mA
voltage drop (max. load)	2.4V DC	2.4V DC	2.4V DC
hysteresis	< 15%	< 15%	< 15%
repeat accuracy	< 5%	< 5%	< 5%
readiness delay	≤ 100ms	≤ 100ms	≤ 100ms
switching frequency	400Hz	400Hz	400Hz
display (signal)	-	-	-
short-circuit protection	+	+	+
reverse polarity protection	+	+	+
dimensions	M12x1	M12x1	M12x1
length (thread/complete)	94mm/127mm	42mm/57mm	38mm/56mm
housing material	stainless steel	stainless steel	stainless steel
material (front cap)	stainless steel	stainless steel	stainless steel
operating temperature	-25 ... +100°C	-25 ... +90°C	-25 ... +90°C
degree of protection (EN 60529)	IP67/IP69k	IP67/IP69k	IP67/IP69k
connection	M12-connector, 3-pin	M12-connector, 3-pin	M12-connector, 3-pin
connection accessories	e.g. **VK200025**	e.g. **VK200025**	e.g. **VK200025**

connection

connector device



wire colors: bn = brown (1), bu = blue (3), bk = black (4)

This data sheet only contains the available standard variants. For other output / connection variants, we kindly ask that you contact us.

We are happy to supply the right cable socket for the plug equipment. You will find a list in the “accessories” section of the catalog under ***ipf -SENSORFLEX®***” “cable sockets” or in the search window on our homepage www.ipf-electronic.com (using the search term “VK”).

Warning: Never use these devices in applications where the safety of a person depends on their functionality.