

design	19 x 78.5 x 9mm	
non-flush static	sensing range	10mm
non-flush dynamic	sensing range	16mm



- ✓ robust plastic housing
- ✓ LED display
- ✓ static or dynamic switching output
- ✓ dynamic pulse stretching 100msec
- ✓ connection with M8-connector or M12-cable connector

direct mounting on plastic hoses with cable straps



description

The sensors offer the opportunity of recognizing metallic objects in transparent or non-transparent supply hoses. In relation to this, the sensor can be fastened to the hose with the aid of cable clips.

Static embodiments generate an output signal as long as metallic parts are found in the detection range. This is how supply processes, e.g. conveyed screws or blockage checks can be achieved.

Dynamic sensors are employed if the detection involves particularly small parts with a small mass. If a metallic object is passing the device, a short pulse (can be set to 100msec) is generated at the output. As a condition of this (that only

material which is moved is detected), metallic abrasion in the hose is suppressed and in these applications as well, the resolution remains intact.

For realizing the maximum sensing range, care should be taken in relation to the size and characteristics of the object to be detected (standard target). A free zone of 30mm should be adhered to around the sensor.

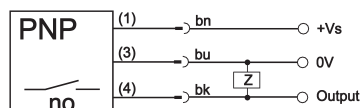
application examples

- ▶ for use in supply hoses
- ▶ blockage checks
- ▶ counting tasks

article-no.	IY190120	IY190170	IY190175
operating range	16mm	16mm	10mm
output signal	pnp, no, dynamic	pnp, no, dynamic	pnp, no, static
connection	M12-cable connector	M8-connector	M8-connector
TECHNICAL DATA			
sensing range (Sn)	16mm	16mm	10mm
output signal	pnp, no, dynamic	pnp, no, dynamic	pnp, no, static
mounting	non-flush	non-flush	non-flush
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 (real sensing range Sr)	< 15%	< 15%	< 15%
repeat accuracy (of Sr) typical	< 10%	< 10%	< 10%
pulse stretching	100msec	100msec	-
sampling frequency	-	-	300Hz
display (signal)	yellow LED	yellow LED	yellow LED
short-circuit protection	+	+	+
reverse polarity protection	+	+	+
design	19x78.5x9mm	19x78.5x9mm	19x78.5x9mm
housing material	plastic	plastic	plastic
operating temperature	-25 ... +75°C	-25 ... +75°C	-25 ... +75°C
system of protection (EN 60529)	IP67	IP67	IP67
connection	M12-cable connector 4-pin, 3 assigned, 50mm	M8-connector, 3-pin	M8-connector, 3-pin
connection accessories	e.g. VK200025 2m, straight, PUR	e.g. VK200075 2m, straight, PUR	e.g. VK200075 2m, straight, PUR

connection

normally open



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

This data sheet contains the standard versions only. Kindly request the availability of other output- and connection functions.

We will be pleased to supply the matching cable socket for your devices with connector. Please refer to the list in catalog chapter "accessories" under "cable sockets **ipf-SENSORFLEX®**" or search our website for "VK".

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