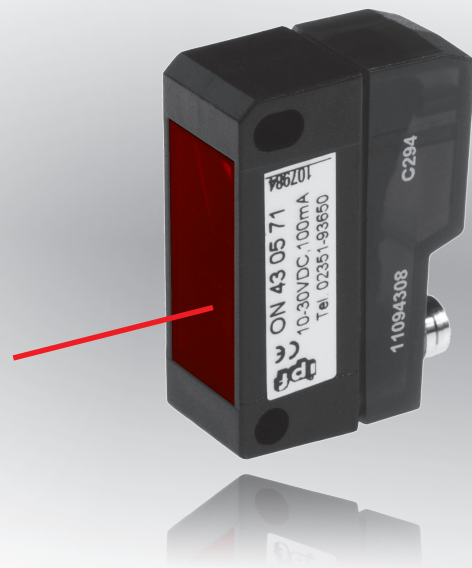


dimensions **43 x 14.8 x 32.5mm**

auto-reflective sensor operating range **50 to 800mm**
 200 to 800mm

- ✓ plastic housing, compact design
- ✓ setting via teach-in
- ✓ LED-display with setting control
- ✓ connection with M8-connector, 4-pin



new: functions like a retro-reflective sensor – without a reflector



description

The devices of this series utilize an entirely new technology. For those who are not able to use one of the established optical systems – such as through-beam sensors, retro-reflective sensors or diffuse reflection sensors – these devices offer a solution.

The operating principle of these „auto-reflective devices“ is similar to that of a retro-reflective sensor, except that instead of a reflector that is sensitive to soiling, an arbitrary, diffuse-reflecting object is used as reference surface. A metal part is best suited for this.

The reference surface may be up to 800mm from the sensor. This is taught as the background position via the teach-in line (white wire, PIN 2). Any object located between the sensor and background position is detected and causes a signal change at

the switching output. The system is very insensitive to soiling; only the position of the background must remain constant during operation.

Two devices are available in this series. The **ON430570** is designed for standard industrial applications and operates at a distance of 50 to 800mm.

The second device, the **ON430571**, is suitable for the recognition of transparent objects. The reference surface may be between 200 and 800mm from the sensor.

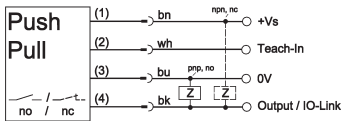
application examples

- ▶ checking the presence of various objects
- ▶ avoiding collision, in the case of feeding movements
- ▶ limit switches, position switches and pulse generators

article-no.	ON430570	ON430571
operating range	50 ... 800mm	200 ... 800mm
version	auto-reflective sensor	auto-reflective sensor for transparent objects
output	push-pull, light-on/dark-on mode	push-pull, light-on/dark-on mode
TECHNICAL DATA		
operating range	50 ... 800mm	200 ... 800mm
output signal	push-pull, light-on/dark-on mode	push-pull, light-on/dark-on mode
operating voltage	10 ... 30V DC	10 ... 30V DC
current consumption (w/o load)	< 35mA	< 35mA
output current (max. load)	100mA	100mA
voltage drop (max. load)	2.0V DC	2.0V DC
transmitting element	LED, red light, pulsed	LED, red light, pulsed
wavelength	660nm	660nm
response/decay time	< 1.8ms	< 1.8ms
sampling frequency	25Hz	25Hz
display (signal)	red LED	red LED
display (operation)	green LED	green LED
display (functional reserve)	red LED, flashing	red LED, flashing
sensitivity adjustment	external teach-in	external teach-in
short-circuit protection	+	+
reverse polarity protection	+	+
dimensions	43x14.8x32.5mm	43x14.8x32.5mm
housing material	ASA	ASA
front screen material	PMMA	PMMA
operating temperature	-30 ... +60°C	-30 ... +60°C
degree of protection (EN 60529)	IP67	IP67
connection	M8-connector, 4-pin	M8-connector, 4-pin
connection accessories	e.g. VK205375	e.g. VK205375
mounting accessories (bracket)	AO000082	AO000082
mounting accessories (universal holder)	AY000120	AY000120

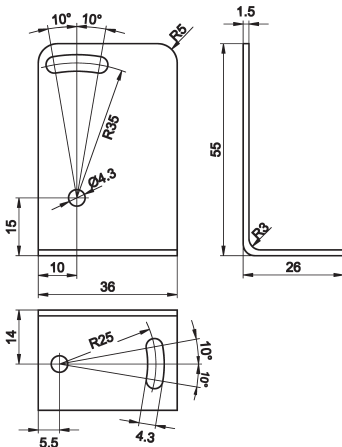
connection

connector version

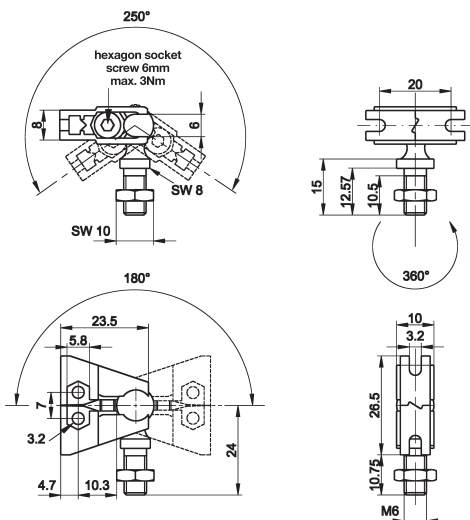


wire colors: bn = brown (1), wh = white (2), bu = blue (3), bk = black (4)
do not connect pnp / npn simultaneously!

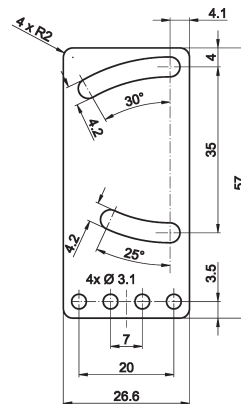
mounting bracket AO00082



universal holder AY000120
consisting of base module



... and fitting panel



ACCESSORIES

article-no.	description	note
AY000088	base module *	jaw: stainless steel, ball pin: galvanized steel
AY000120	mounting kit for sensors Ox43	stainless steel
AO000082	bracket	aluminum

* The **AY000088** base module is contained in every mounting kit.
Material of bolts and nuts: galvanized steel.

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.

This data sheet as well as your personal contact can be found at www.ipf-electronic.com

NOTES

A large grid area for taking notes, consisting of a 20x30 grid of small squares. The grid is empty and occupies the majority of the page below the 'NOTES' header.