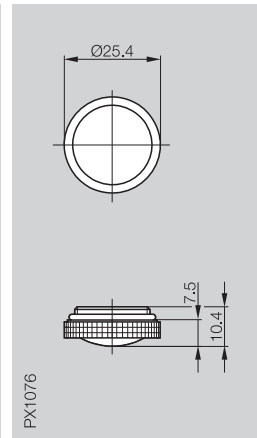
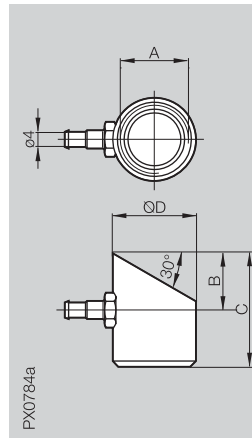
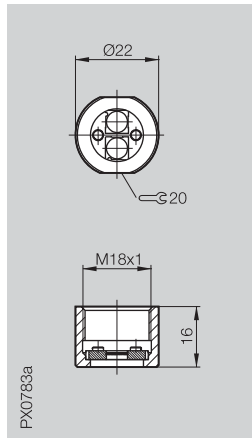
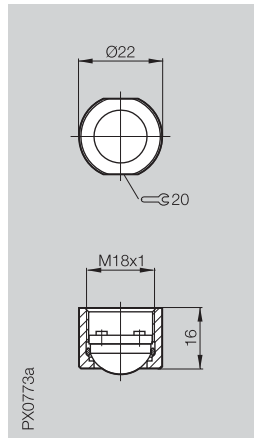


Plano-convex lens, lens, polarizing filters, air shield

	Plano-convex lens	Polarizing filter	Air shield	Lens
Use	for all BOS 18 diffuse for background suppression and small parts detection	only for BOS 18M-...-1RD-...	for BOS 12/BOS 18 for 4 mm I. D. tube	for BKT and BLT for extending range



Ordering code	BOS 18-PK-1	BOS 18-PF-1	BOS 1_-LT-1	BKT M-PK-1
---------------	-------------	-------------	-------------	------------

- Advantages:
- Sensing range adjustable 0...40 mm
 - Low switching point shift, e.g. for different colors or surface properties
 - Background suppression allows detection of objects in front of a reflective background
 - Small parts detection down to 0.05 mm using focusing plano-convex lens with a working range of approx. 0...13 mm

Housing material: PA 6
Plano-convex lens: Glass

Polarizing filters are used for reliably sensing highly reflective objects. They prevent spurious switching. Reflecting or shiny parts will then not cause faulty switching. The polarizing filters guarantee that only the light reflected back by the reflector is detected. They reduce the sensing range by 50%.

Housing material: PA 6
Polarizing filter: IR polarizer

The air shield with a compressed air source prevents premature contamination of the optics.

	BOS 12-LI-1	BOS 18-LI-1
A	M12x1	M18x1
B	14	15
C	25	30
D	14	22

Using the supplementary lens increases the range of the BKT from 9 mm to 18 mm. This corresponds to a working range of 15...30 mm when using with the BLT.

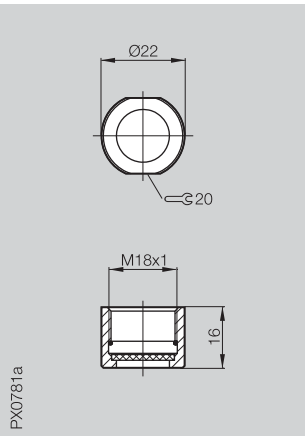


Neutral density filter
for BOS 18

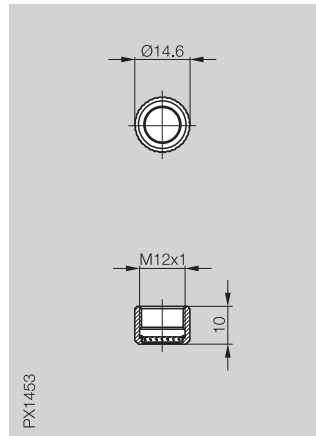
Protective end cap
for BOS 12

Protective end cap
for BOS 18

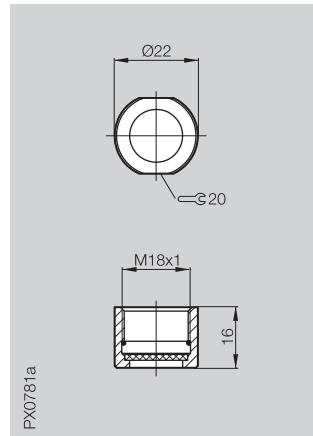
Protective end cap
for BOS 18
with flat front surface



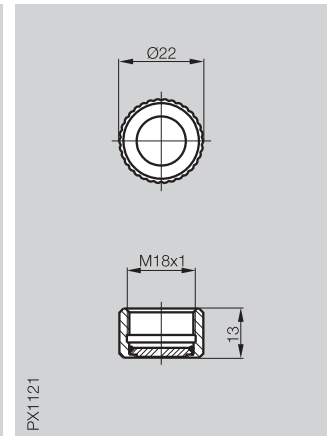
BOS 18-NF-_*



BOS 12-SM-1



BOS 18-SM-1



BOS 18-SM-2

* 1 = 50 % transmission
2 = 75 % transmission

Neutral density filters weaken the in-falling light, without changing its spectral characteristics. The neutral filter is made of glass with a vacuum coated material layer. This is hard, non-peeling and resistant to aging. Clean the filter using standard commercial optical cleaners.

Housing: PA 6

The protective end cap is made with tempered glass and can be used with all M12 photoelectric switches. These caps are used to protect the optics from mechanical or thermal damage. Sparks from welding will not damage the hardened glass lens.

The protective end cap is made with tempered glass and can be used with all M18 opto switches. These caps are used to protect the optics from mechanical or thermal damage. Sparks from welding will not damage the hardened glass lens.

The protective cap can be used in combination with all BOS 18M and BOS 18K sensors. It protects the optics from the effects of welding splatter for example. For increased protection the BOS 18-SM-2 is made of metal, providing even better protection for the sensor optics. The heat-resistant glass closes flush with the front surface of the protective cap, preventing dust deposits to accumulate and degrade the range. A ring between the sensor and protective glass makes sure the system is sealed.

