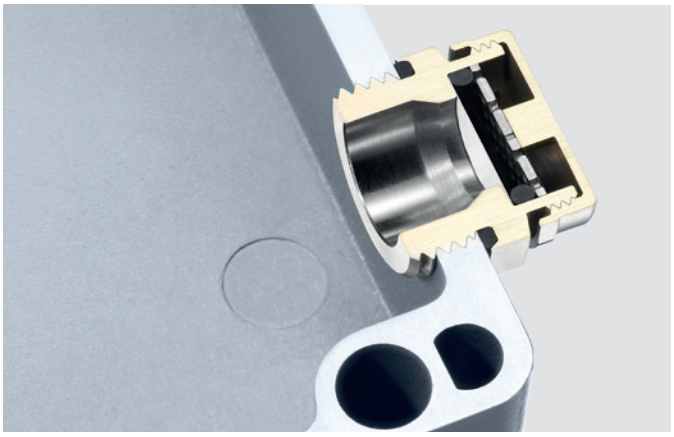
Pressure balance with membrane

Use

Many electro-technical housings are always protected against water and dust (IP 68) but are not gastight. This results in access by humidity which condenses if below the dew point line. The water which is present often leads to corrosion and malfunctions. In order to prevent differences in pressure, high levels of humidity and the formation of condensation in the housing, there must always be constant pressure equalization and air exchange. The pressure balance and drainage elements in electrical and electronics housings prevent pressure differences, temperature variations and formation of condensation. Two opposite elements installed in the same housing allow for optimal circulation of air.

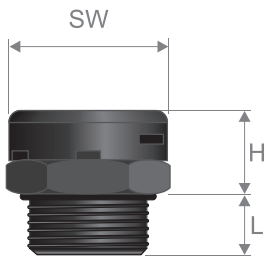
Technical data

Characteristics	Value/property
Material	Polyamide PA 6 (plastic version) and nickel-plated brass (metallic versions)
Membrane material	PES (polyethersulfone)
O-ring material	NBR
Temperature range	-40°C, +100°C (plastic version) -40°C, +110°C (metallic version)
Protection class	IP 66, IP 68, IP 69K
Water intrusion pressure	> 12.0 psi / 0.83 bar
Air flow rate	> 90 ml/min/cm^2 @ 10 mbar



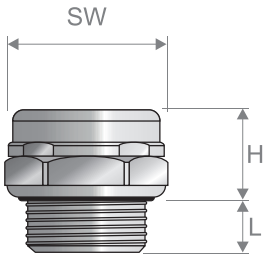
Coding and dimensions

Plastic pressure balance



Code	Thread	Tightening key SW [mm]	Sizes [mm]		Packaging [pcs]
			H	L	
PCSPB1_M012NE	M12x1,5	17	9,0	10,0	25

Metallic pressure balance



Code	Thread	Tightening key SW [mm]	Sizes [mm]		Packaging [pcs]
			H	L	
PCSMB1_M012	M12x1,5	18	9,5	8,0	25
PCSMB1_M016	M16x1,5	18	9,5	8,0	20
PCSMB1_M020	M20x1,5	22	10,0	8,0	20
PCSMB1_P007	Pg 7	18	9,5	8,0	25
PCSMB1_P011	Pg 11	22	10,0	8,0	20