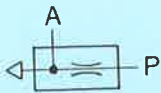


Back pressure level sensor Type SD-3-N

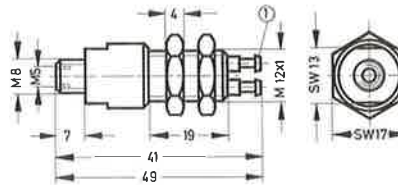
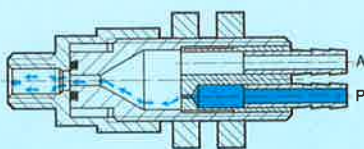


This back pressure level sensor emits a signal when a specific liquid level is reached.

The device is supplied with compressed air via port P (black). The recommended supply pressure is 0.1 to 0.15 bar. When the sensor is in a non-actuated state, the supply air escapes at the immersion tube. As soon as the rising liquid closes the opening of the immersion tube, a signal is produced at outlet A (yellow). The pressure of this signal is proportional to the level of the liquid above the tube opening and to the specific gravity, up to the level of the supply pressure. The signal pressure remains as long as the outlet opening is closed by the liquid.

The nominal sizes of the pipes or tubes between the liquid level and the back pressure level sensor should be matched to the distance, as shown in the following table.

Distance	Nominal size
0.50 m	2.5 mm
1.00 m	3 mm
2.50 m	4 mm
5.00 m	6 mm



- ① Barbed fitting for 3 mm plastic tubing
Port P black,
port A yellow



- 1 (P) = Supply port
2 (A) = Outlet line

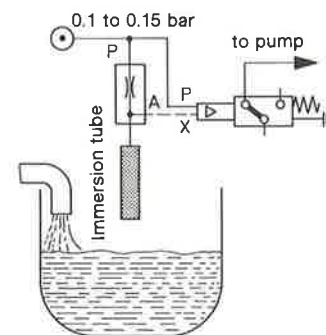
As the immersion tube comes into contact with the liquid, care should be taken that a material is selected which will not be affected by the liquid or its vapours. Probable temperatures should also be taken into account.

It surfaces subject to a lot of movement are to be sensed cushioning should be provided. For this purpose, the immersion tube can be fitted with a sealed jacket with one or more small holes in the bottom. This smooths out the liquid level in the interior.

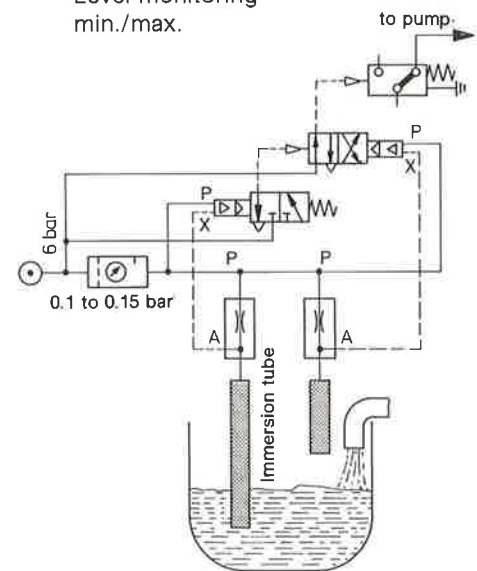
In the case of high-foaming liquids, pneumatic sensing is particularly advantageous. Whereas electronic sensing systems frequently react to the foam, the pressure change in a pneumatic signal generator does not occur until the specifically, denser liquid surface is reached.

Simple level monitoring

0.1 to 0.15 bar
to pump
Immersion tube



Level monitoring min./max.



Order code	Part No./Type	7457 SD-3-N
Medium	Compressed air, filtered, non-lubricated	
Design	Nozzle, without moving parts	
Mounting	M 12 x 1 with mounting nuts	
Installation dia.	12.5	
Connection	Barbed fitting for 3 mm tubing	
Nominal size	2.5 (restrictor 0.5 mm)	
Supply pressure range at P	0 to 8 bar (optimum range 0.1 to 0.15)	
Signal pressure range at A	0 to supply pressure	
Air consumption at 0.1 bar	1 l/min	
Ambient temperature	-40 to +100° C*	
Medium temperature	-10 to +60° C	
Materials	Housing: stainless steel, aluminium; seals: perbunan	
Weight	0.025 kg	

* depending on tubing used