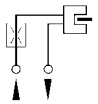
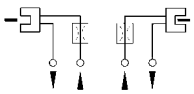
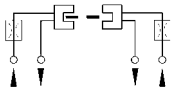
Pneumatic Limit-Switch Assemblies

Typ **P**

This data sheet contains the important features of the available pneumatic limit-switch versions with explanatory notes on make/ break operations and the connections.
Detailed information about operation methods and applications of mechanical, inductive and pneumatic limit switch assemblies are to find in our **general information leaflet 9000.**
For dimensional drawings and ordering codes please look at the data sheets for the individual gauge models (data sheets with numbers ending on ..**9**0, ..**9**1).

Make/Break Operations

with code letter **P** for pneumatic limit-switch assembly, and code number, e.g. 12, for make / break operation:

Circuit Diagram	Make/Break Operation[3]) with Pointer Moving Clockwise	Type
Contact Assembly with One Limit-Switch **Nominal Sizes 100 (4"), 160 (6")**		
	breaking [1])	**P 2**
	making [2])	**P 1**
Contact Assembly with Two Limit-Switches **Nominal Size 160 (6") only**		
	1st contact breaking [1]) 2nd contact making [2])	**P 21**
	1st contact making [2]) 2nd contact breaking [1])	**P 12**

[1] Breaking Contact:
The vane is moved into the control head when the pointer moves in clockwise direction. This interrupts a stream of control air (breaks the control air circuit).

Output signal from PP converter: 0 bar / 0 psi

Output signal from PE converter (see Special Options): contact broken

[2] Making Contact:
The vane is moved out of the control head when pointer moves in clockwise direction. This unblocks the stream of control air (makes the control air circuit).

Output signal from PP converter: 1.4 bar / 20 psi (acc. air supply)

Output signal from PE converter (see Special Options): contact made

[3] Reversing of the Switching Function:
The switching function can be reversed by changing the pipebridge at the micro switch from 4 to 5.

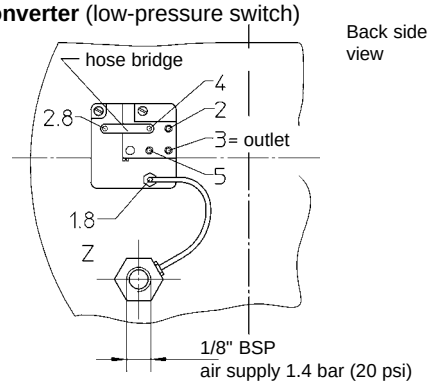
Adjustment

External adjustment device with removable key

Connections

Outlet connection (3) with low-pressure switch (PP-converter) mounted on the back side of the pressure gauge, hose connection 2 x 1 mm (.08 x .04"); separate converters for each limit-switch required; separate connection 1/8" BSP female for air supply

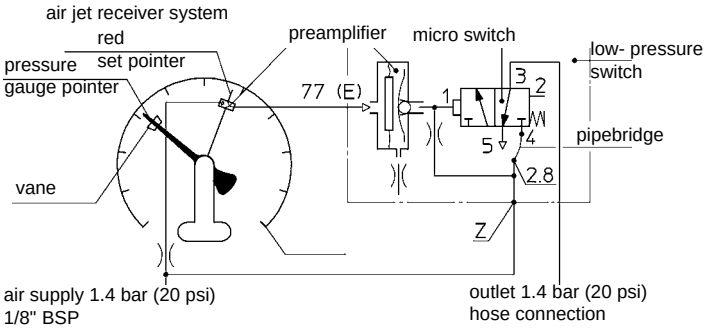
PP converter (low-pressure switch)



Technical Data PP-Converter [4]

Protection type:	IP 30
Mechanical life:	10^8 switching cycles
Operating air pressure:	1.4 bar ± 0,2 bar (20 psi ± 2.9 psi)
Air consumption:	< 40Nl / h (at 1.4 bar)
Required purity of compressed air supply:	Contaminant particles ≤ 0,01 µm (0,01 microns)
Operating temperature:	-20 °C...+60 °C (-4...+140 °F)

Functioning Diagram [5]



[4]) Details for PE converter (see Special Options) upon request.
[5]) For functioning description see general information leaflet 9000.

Special Options

- Switching function P11 or P22 (For receiving type P 11 and P 22 we reverse the basic type P 21 by changing the pipebridge of the first respectively the second limit switch accordingly.)
- Double limit-switch assembly (nom. size 160 / 6" only) with fixed distance, e.g. 3 ∢ ° distance between the limits.
- Connection with PE converter (pneumatic/electrical converter)
- Adjustment device with non-removable key

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