

**Characteristics / Ordering Code**

The electro-hydraulic pressure switch provides an electric signal when the sensed pressure goes above or below the selected setting.

**Function**

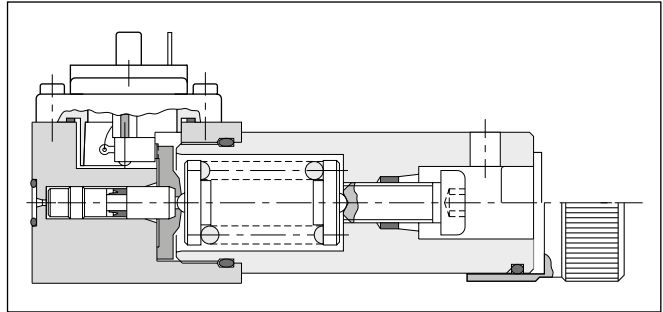
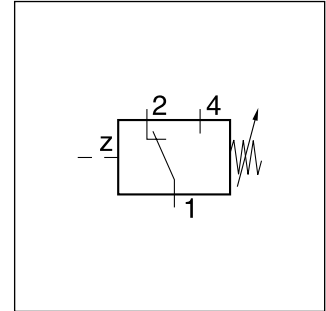
The spring loaded piston is hydraulically dampened. The PSB provides a very accurate hysteresis between the switching points (see diagram).

The required operating pressure is adjusted by the set-screw. Unauthorised adjustments can be prevented by the optional cylinder lock. The electric element is a micro switch with snap-action contact. Three terminals permit application as "On", "Off" or "Changeover" switch.

The electrical connection is made with a 3-pole plug-in connector to EN 175301-803 with ground.

**Note**

For inductive DC loads a spark discharger should be used to increase service life.



**Features**

- Flange or pipe mounting
- 4 pressure ranges
- Can be used as opener or closer
- Cylinder lock optional

**Ordering code**

<b>PSB</b>						
<b>Pressure switch with manual switching point adjustment</b>	<b>Switching pressure range</b>	<b>Adjustment</b>	<b>Connec-tion</b>	<b>Seal</b>	<b>Design series</b> <small>(not required for ordering)</small>	<b>Lock</b>

Code	Switching pressure range
<b>040</b>	<b>3 to 40 bar</b>
<b>100</b>	<b>10 to 100 bar</b>
<b>160</b>	<b>10 to 160 bar</b>
<b>250</b>	<b>20 to 250 bar</b>

Code	Adjustment
<b>A</b>	<b>Hexagon socket</b>
S	Knob with scale

Code	Connection
<b>F1</b>	<b>Flange (front face)</b>
<b>V1</b>	<b>Fitting (front face, tube Ø6)</b>

Code	Lock
-	<b>without lock</b>
Z	Cylinder lock (not for scale knob)

Code	Seal
<b>A</b>	<b>NBR</b>
1	FPM

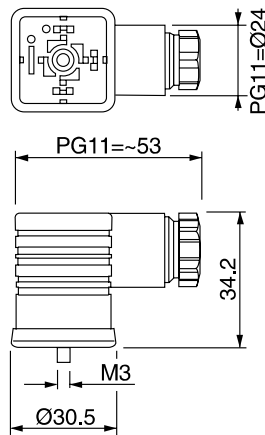
**Bold letters = Short-term availability**

**Technical data**

General			
Symbol	DIN 24340		
Design	Plunger type switch		
Mounting	PSB*F1* flange (front face) PSB*V1 pipe mounting		
Mounting position	unrestricted		
Ambient temperature	[°C]	-20 ... +60	
MTTF <sub>D</sub> value	[years]	150	
Weight	[kg]	1.0	
Hydraulic			
Operating pressure	[bar]	to 315	
Actuating pressure difference	see diagram		
Duty cycle	max. 1/s		
Fluid	Hydraulic oil according to DIN 51524		
Fluid temperature	[°C]	-20...+70 (NBR: -25...+70)	
Viscosity, permitted	[cSt] / [mm <sup>2</sup> /s]	20 ... 400	
	recommended	[cSt] / [mm <sup>2</sup> /s]	30 ... 80
Filtration	ISO 4406 (1999); 18/16/13		
Electrical connection	Plug-in connector to EN 175301-803		
Insulation	IP65 as per EN 60529 (with correctly mounted plug-in connector)		
Contact load carrying capacity	5 A at 250 VAC; 1 A at 50 VDC; 0.2 A at 250 VDC		

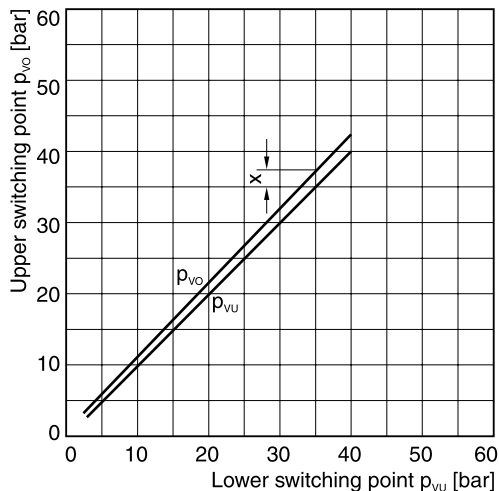
**Plug EN 175301-803**

Description	Threaded cable joint	Ordering code
Plug EN 175301-803, design type AF, protection class IP65	PG11	<b>HR 21500157</b>
Plug with LED, 12...230 V AC/DC, protection class IP65	PG11	<b>HR 21502321</b>

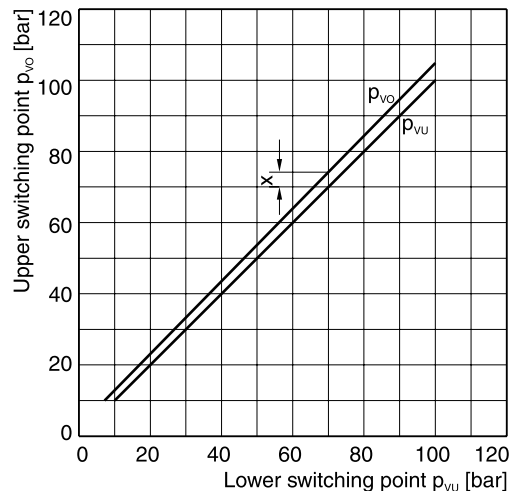


**Switching pressure difference**

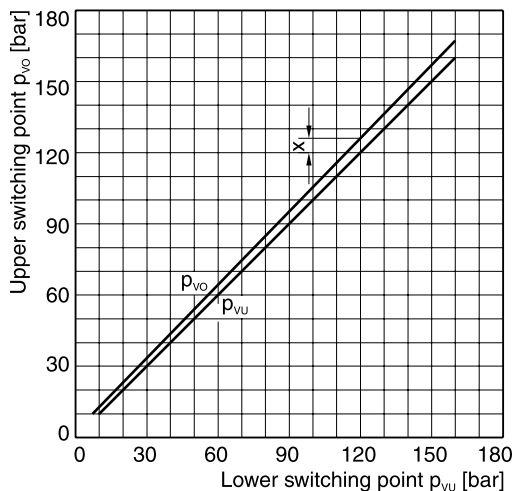
**PSB040**



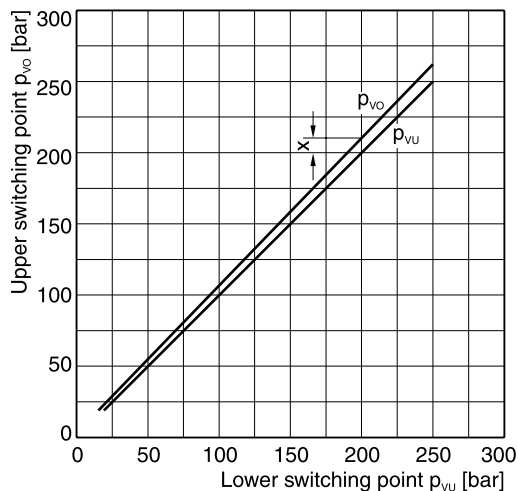
**PSB100**



**PSB160**



**PSB250**

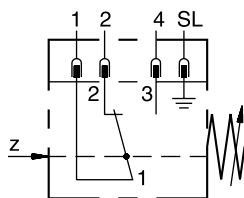


X = switching differential

All characteristic curves measured with HLP46 at 50 °C.

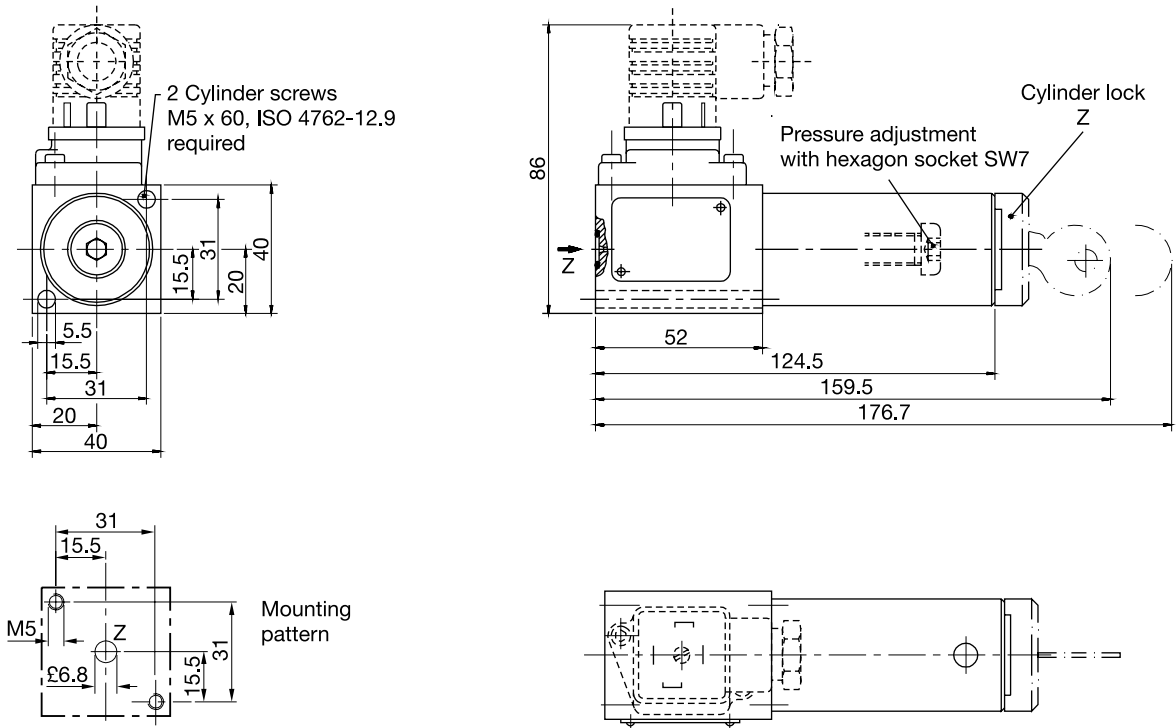
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**Electrical connections**

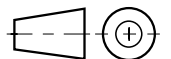
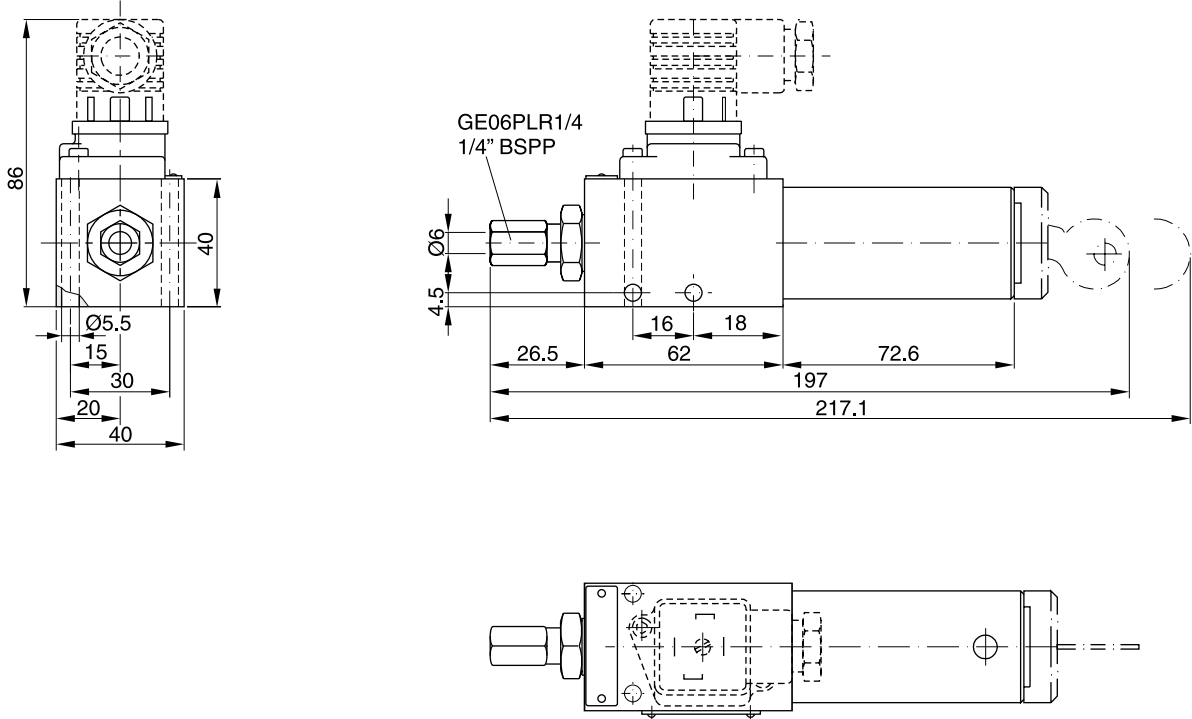


Electrical connection EN175301-803

**PSB\*F1\***



**PSB\*V1\***



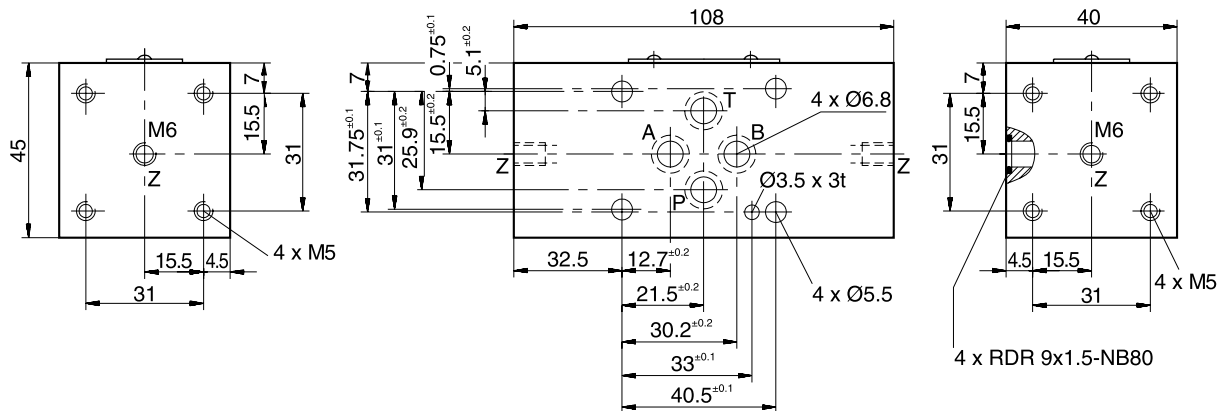
Intermediate Plates for Pressure Switch PSB

Technical Data

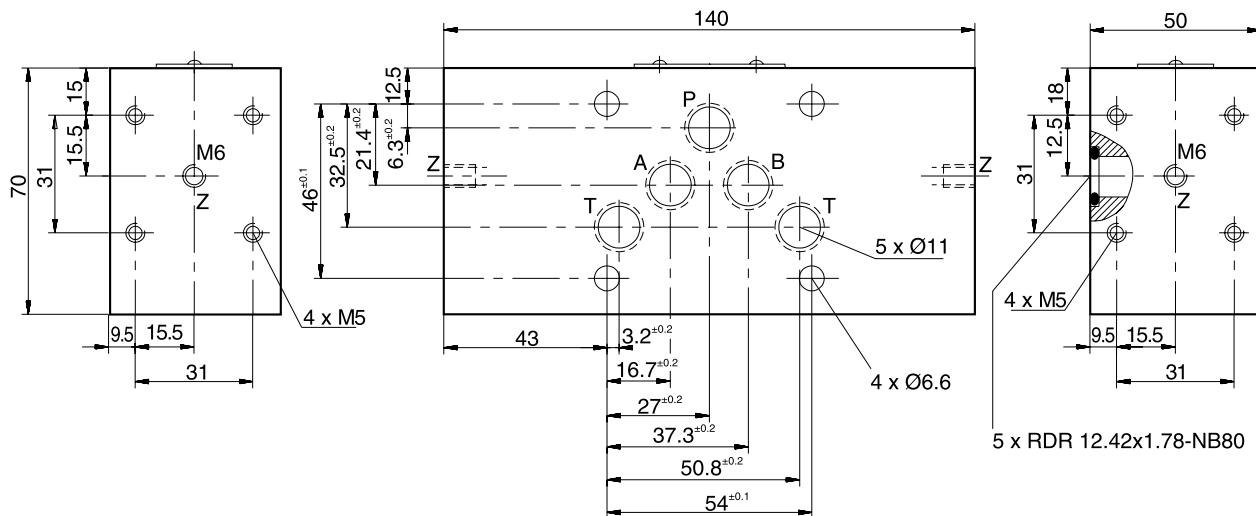
Switch code	Ordering code	Nominal size	Function
	H06PSB-994 H10PSB-996	06 10	Pressure switch connection to A or B or A and B: Connections not used are closed by plug.
	H06PSB-993 H10PSB-995	06 10	Pressure switch connection to P (left or right mounting is possible). Connection not used is closed by plug.

**Bold letters =**  
Short-term availability

Dimensions NG06



Dimensions NG10



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