

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.

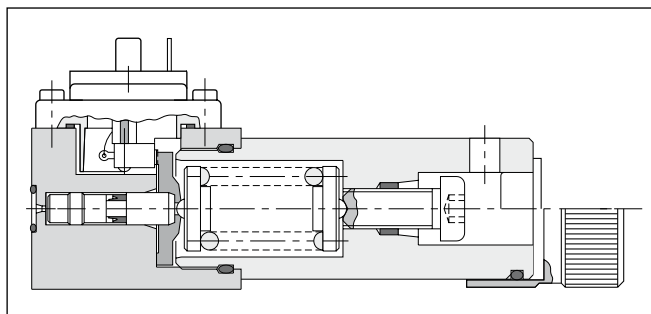
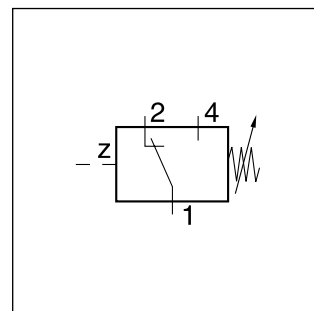
The electrical connection is made with a 3-pole plug-in connector to EN 175301-803 with ground.

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**

PSB						
Pressure switch with manual switching point adjustment	Switching pressure range	Adjustment	Con- nection	Seal	Design series (not required for ordering)	Lock

Code	Switching pressure range
040	3 to 40 bar
100	10 to 100 bar
160	10 to 160 bar
250	20 to 250 bar

Code	Lock
-	without lock
Z	Cylinder lock (not for scale knob)

Code	Adjustment
A	Hexagon socket
S	Knob with scale

Code	Seal
A	NBR
1	FPM

Code	Connection
F1	Flange (front face)
V1	Fitting (front face, tube Ø6)

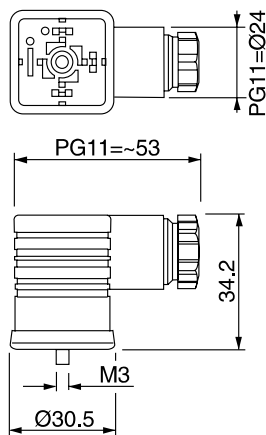
Bold letters =
Short-term availability

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 _D 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] /	20 ... 400
	recommended	[cSt] /	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	

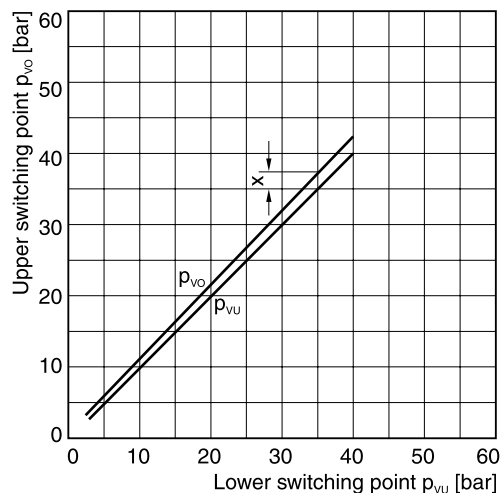
Plug EN 175301-803

Description	Threaded cable joint	Ordering code
Plug EN 175301-803, design type AF, protection class IP 65	PG11	HR 21500157
Plug with LED, 12...230V AC/DC, protection class IP 65	PG11	HR 21502321

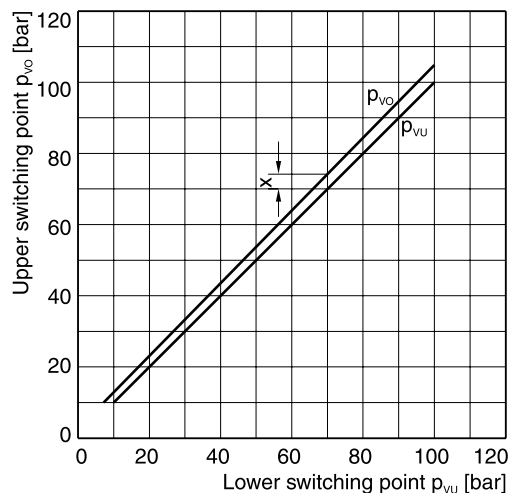


Switching pressure difference

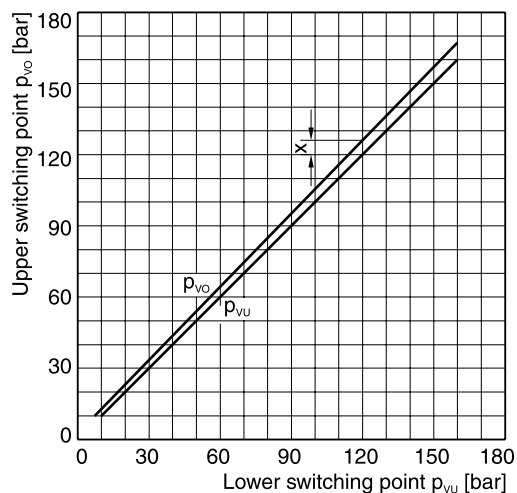
PSB040



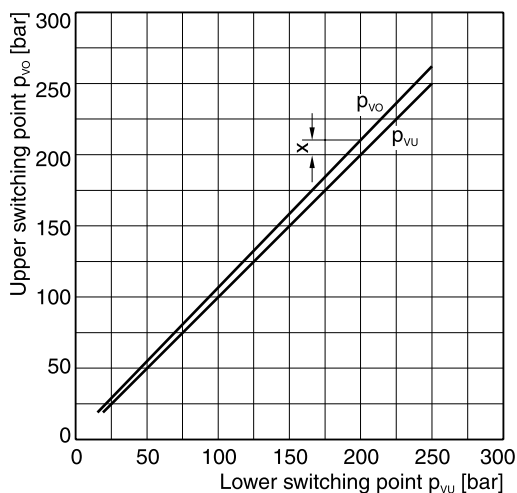
PSB100



PSB160



PSB250

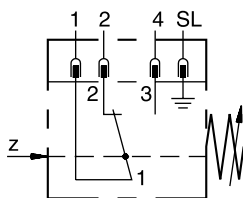


X = switching differential

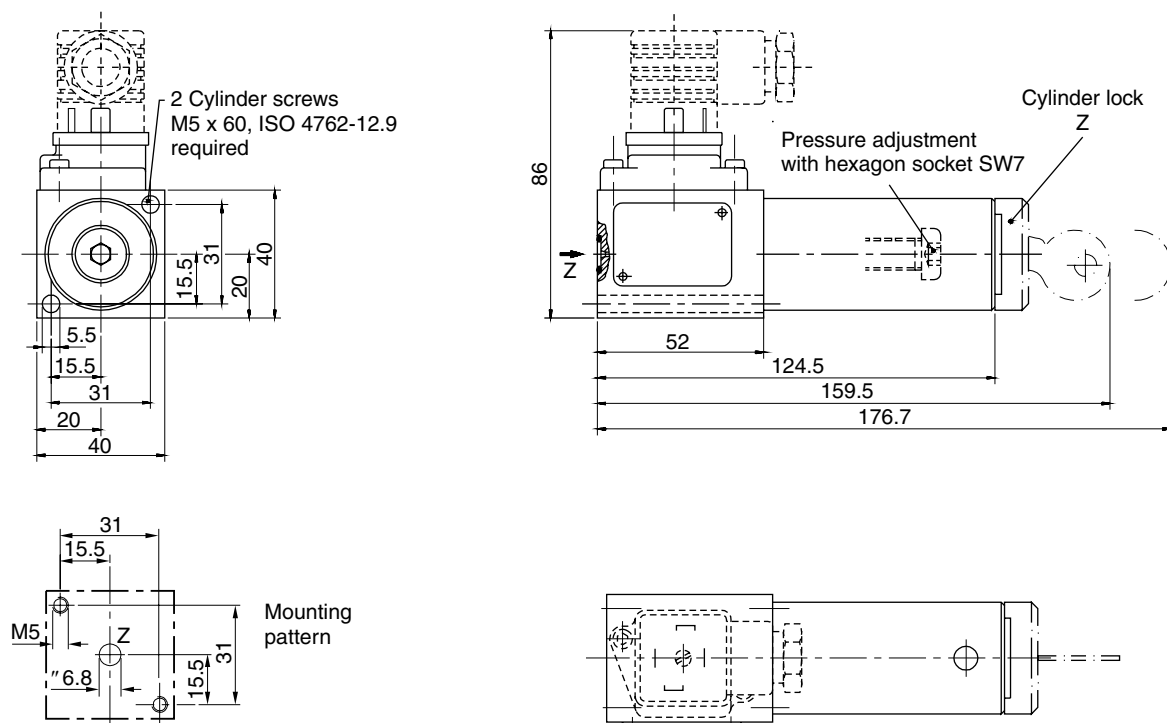
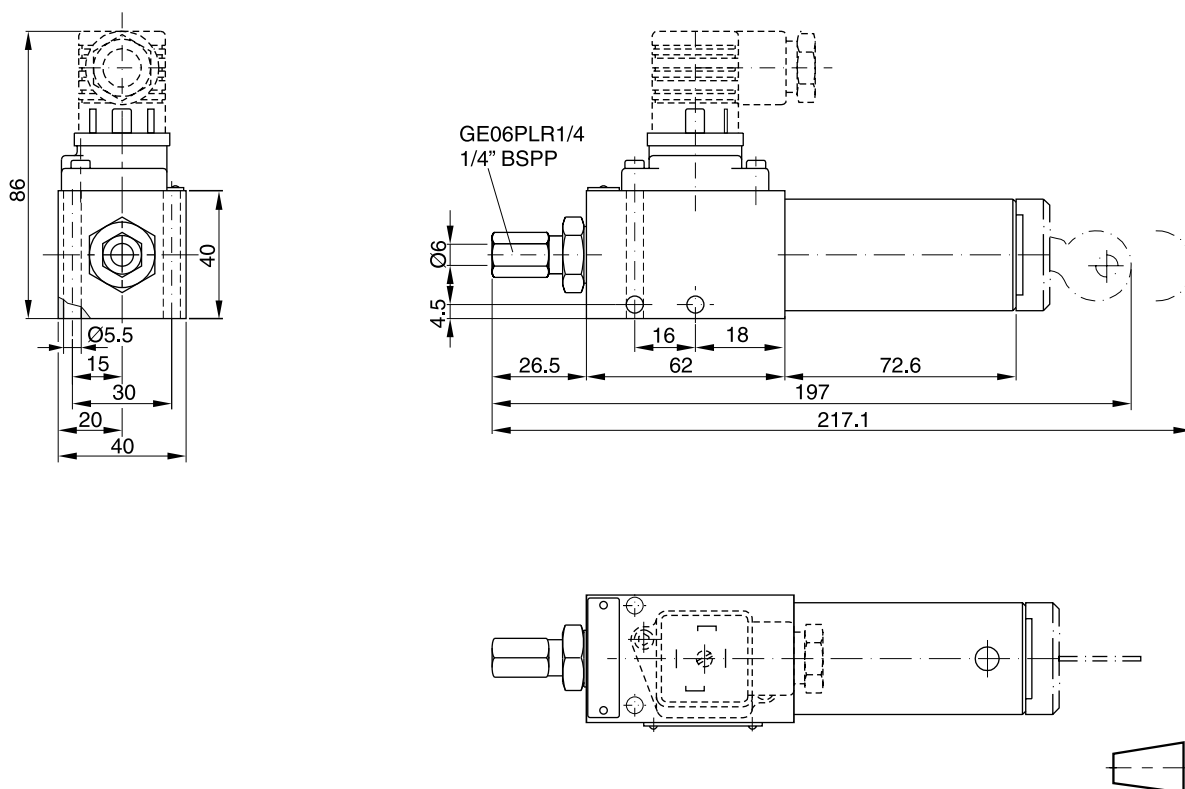
All characteristic curves measured with HLP46 at 50 °C.

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Electrical connections



Electrical connection EN175301-803

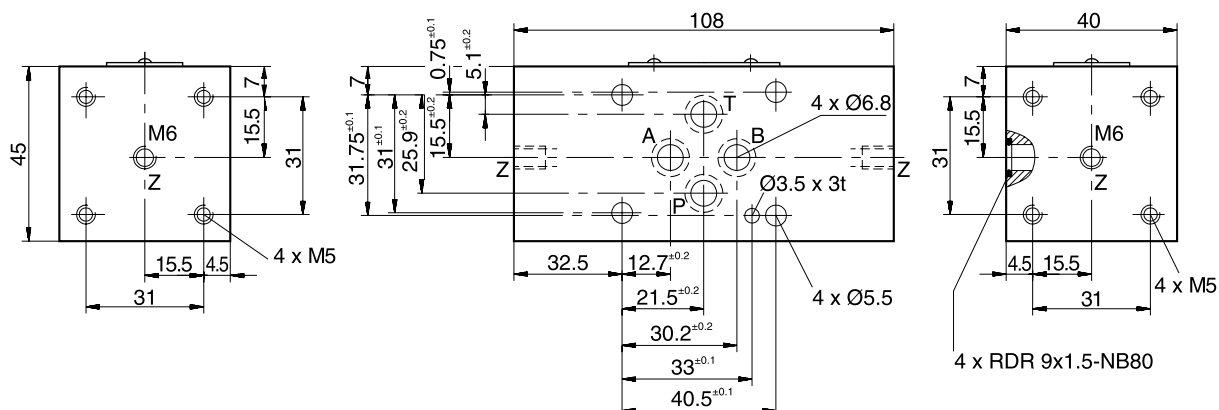
Dimensions**Pressure Switch
Series PSB****Type PSB*F1*****Type PSB*V1***

Technical Data

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

Bold letters =
Short-term availability

Dimensions NG06



Dimensions NG10

