



A Polyhydon Group Company

PRESSURE SWITCH 1PS/F

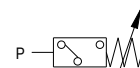
ENGINEERING

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Ref. No. D 90100
Release 08/2011

Description

Non adjustable differential type. Spring loaded sealed piston construction. Encapsulated design for protection against dust. Six pressure ranges available, which can be adjustable upto 10, 50, 100, 200, 350 and 420 bar. Transparent plug-in connector is available with LED

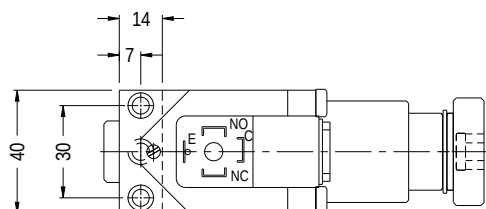
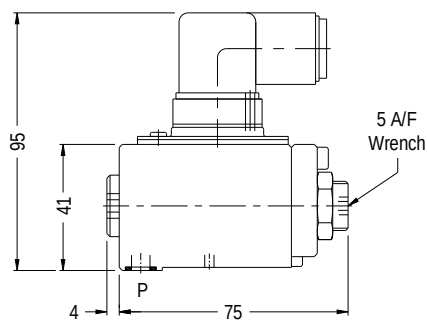
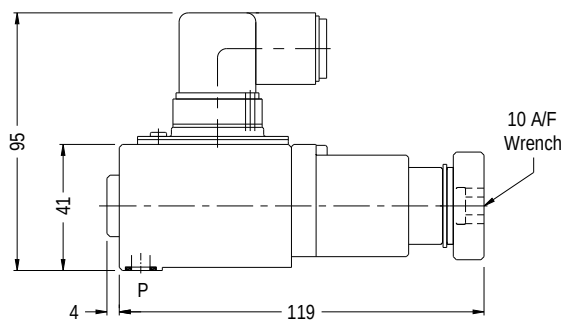
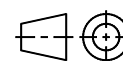


Hydraulic Symbol

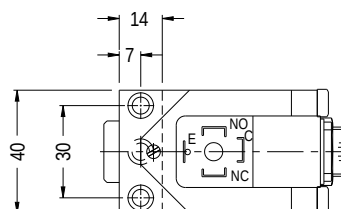
Unit dimension

Subplate mounting Body:

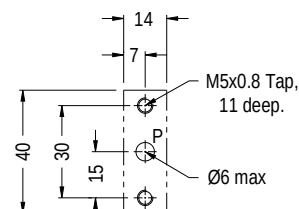
Dimensions in mm.



MODEL : 1PS



MODEL : 1PS10



Interface Details

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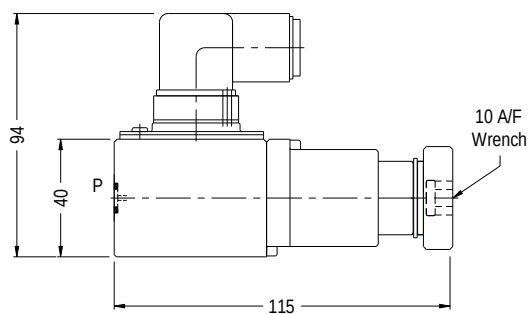
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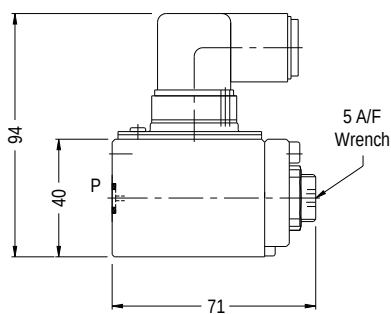
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Ref. No. D 90100

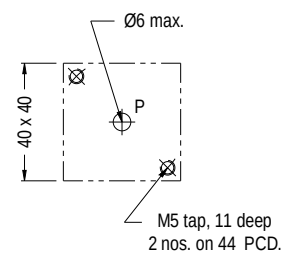
Face mounting Body :



MODEL : 1PF



MODEL : 1PF10



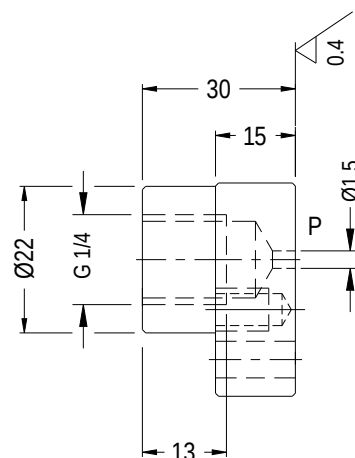
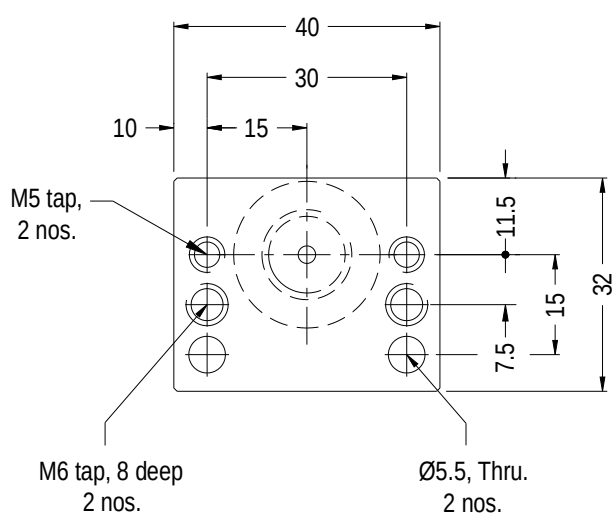
Mounting Interface
for 1PF & 1PF10
M5x60 L Mounting screw, 2 nos.

Subplate :

1. Threaded Subplate :

Model : 1PS / 1PS10

Ordering code : 1SPSG02





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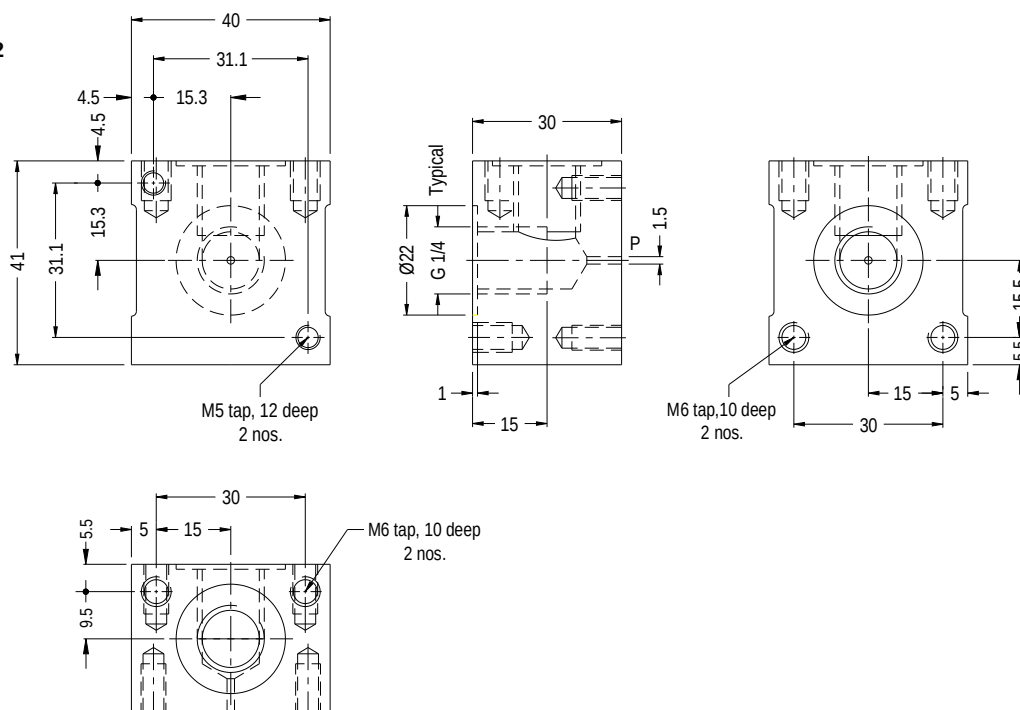
PRESSURE SWITCH 1PS/F

ENGINEERING

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Ref. No. D 90100

Model : 1PF / 1PF10
Ordering code : 1SPFG02



Technical specification

Construction	Spring loaded sealed piston type.
Mounting style	Subplate mounting.
Interface	Factory standard.
Mounting position	Optional. (Pressure sensing port facing downward preferred)
Hydraulic medium	Mineral oil.
Viscosity range	10 cSt to 380 cSt.
Fluid temperature range	-20 °C to +70 °C.
Oil cleanliness requirement	As per ISO 16/13.
Maximum operating pressure	Refer Table no.1.
Pressure ranges available	Adjustable upto 10, 50,100, 200, 350 and 420 bar.
Switching pressure differential	Refer graph.
Switching frequency	120 / min.
Switching accuracy	< ± 1 %
Life	1 million cycles min.
Electrical rating	250 VAC 5.0 A 50 VAC 1.0 A 250 VDC 0.2 A
Electrical connection	Plug - in connector conforms to DIN 43650, ISO 4400. Transperant plug in connector with LED, which gives indication when pressure in the line is above the set pressure. 230 VAC 5 A max. 24 VDC 1 A max.

Mass Pressure switch

1PS	1PS10	1 PF	1PF10
0.43 kg.	0.37 kg.	0.37 kg.	0.34 kg.

Subplate

1PS	1PS
0.12 kg	0.12 kg.

Pressure setting (bar)	Model	Increasing pr.		Decreasing pr.		Operating pr.
		min.	max.	min.	max.	
	1P * 10	4	10	2.5	7	100
	1P * 50	8	50	5	44	420
	1P * 100	14	100	10	90	420
	1P * 200	20	200	15	185	420
	1P * 350	25	350	20	330	420
	1P * 420	28	420	22	390	420



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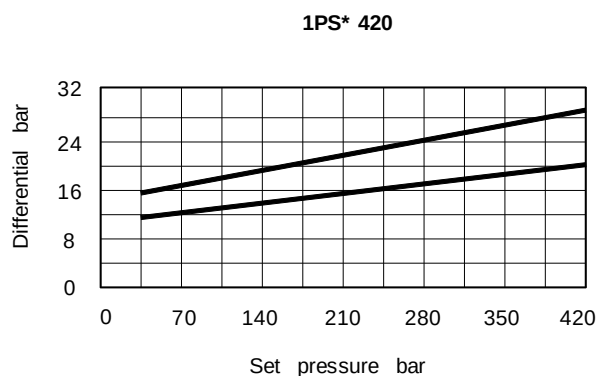
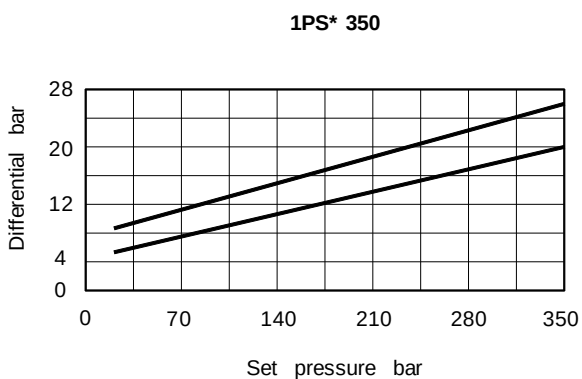
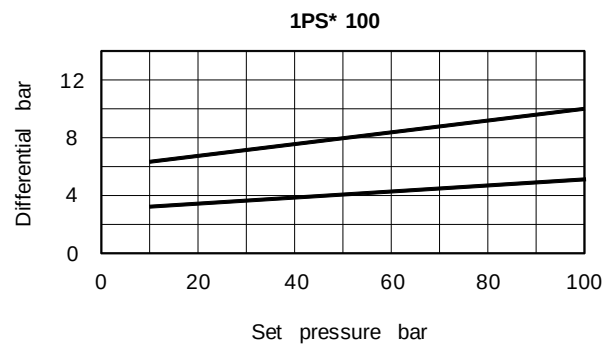
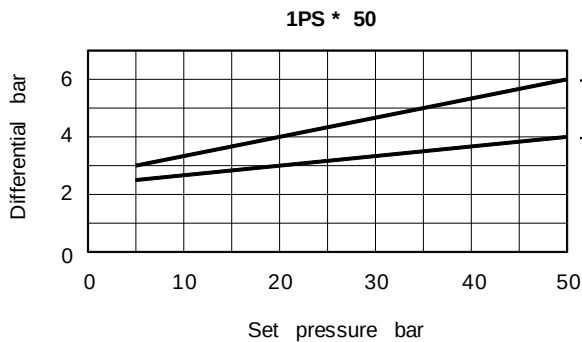
PRESSURE SWITCH 1PS/F

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Ref. No. D 90100

Switching pressure differential graph

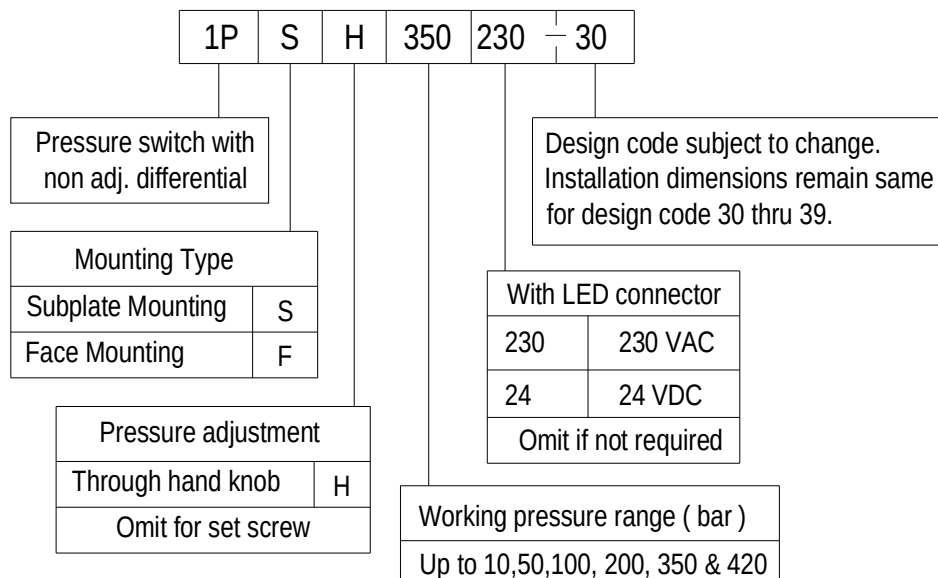


These are non-adjustable differential type pressure switches. These pressure switches are generally used for setting either rising pressure or falling pressure signal.

For adjustable differential type, use two pressure switches by setting one for rising pressure and other for falling pressure.

The above graphs show the variation range for resetting of the Pr. Switch. E.g. When 1PS100-** pr. switch is Set at 80 bar rising pressure signal, the pr. switch will reset anywhere between 71 [80-9] bar to 75 [80-5] bar. Similarly If the Pr. Switch is set for falling pressure signal the variation range is applicable to rising pressure at which the pressure switch resets.

Ordering code





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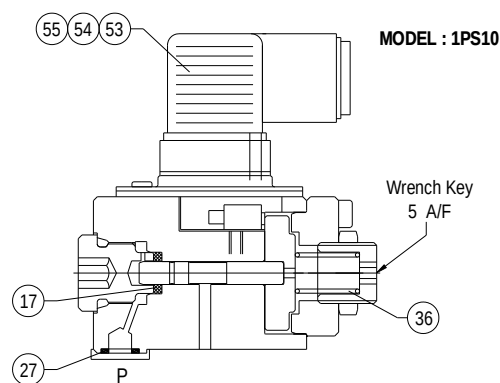
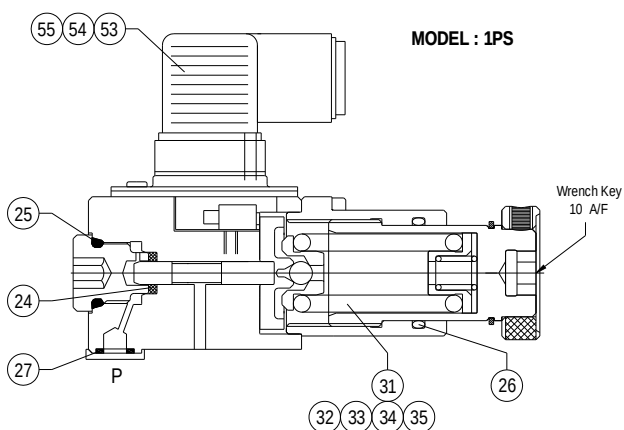
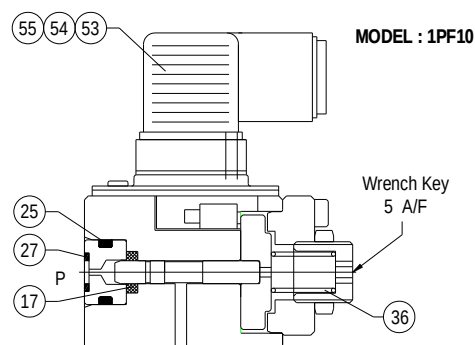
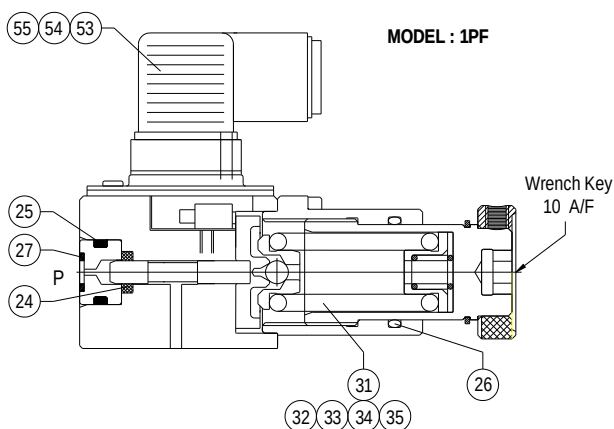
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SERVICE

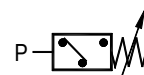
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Ref. No. D 90100

Sectional View & Part Details



Part No.	S.No	Description	Drg No./ Specs.	Qty
* 90117	17	Step seal (1PS/F 10, 50)		01
* 90124	24	Step Seal (1PS/F 100,200,350,420)		01
* 90125	25	O'Ring (1PS200,350,420 & 1PF)	13.4 id x 2.5 csd	01
* 90126	26	O'Ring (1PS/F 50,100,200,350,420)	25 id x 2.5 csd	01
* 90127	27	O'Ring	7 id x 1.5 csd	01
# 90131	31	Spring (50 bar) code90131		01
# 90132	32	(100 bar) Code 90132		01
# 90133	33	(200 bar) Code 90133		01
# 90134	34	(350 bar) Code 90134		01
# 90135	35	(420 bar) Code 90135		01
# 90136	36	Spring 10 bar,Code 90136		01
# 90153	53	Socket	HD-311/SL(Grey)	01
# 90154	54	Socket LED - 230	HD-311/SL 230 VAC	01
# 90155	55	Socket LED - 24	HD-311/SL 24 VAC	01



Hydraulic Symbol

Note :

* Recommended seal kit.

Recommended spare parts.

While ordering the individual spares / spare kit / seal kit, give complete details of model code as on the label.

Seal kit :

1PS/F10 SLKT - 30 (For 10 bar)

1PS/F SLKT - 30 (For 50, 100, 200, 350 & 420 bar)