Hydraulic Pressure Switches
G 1/4, 7/16 - 20 UNF (SAE 4), 1/4 NPT, Flange

- **Gold-plated contacts in microswitch**
- **High number of switching cycles**
- **Vibration resistant to 15g**
- **Microswitch approved by UL and CSA**
- **Intrinsically safe operation**



Technical Data

Fluid:
Hydraulic, lubricating and light fuel oils
Soft seal for neutral
Self lubricating fluids

Operation:
Piston type sensor system

Port sizes:
G1/4 (BSP), 7/16-20 UNF (SAE-4), 1/4 NPT, Flange

Operating Pressure Ranges:
5 - 420 bar

Ambient temperature:
-25 to + 80 ˚C

Operating Viscosity:
Up to 1000 mm²/s (±450ssu)

Fluid Temperature:
-25 to +80˚C

Maximum temperature at switching element:
+80˚C

Repeatability:
± 3%

Electrical Connection:
- Acc. to DIN 43650 A
- Acc. to IEC 947-5-2 (M 12 x 1)

Switching Element:
Microswitch (gold plated contacts)

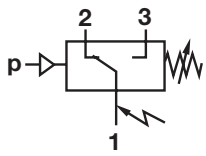
Degree of Protection:
IP65 for conn. DIN 43650
IP67 for conn. M 12 x 1

Mounting:
Optional

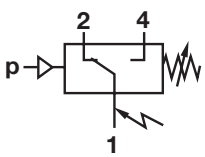
Material:
Sensor and seal see table overleaf

Ordering Information

To order, quote part number from table overleaf, e.g. a G1/4" ported switch with a pressure range of 5-70 bar is 0882100.



Switching function:
Microswitch SPDT
Terminals 1 - 3:
Contacts close on rising pressure.
Terminals 1 - 2:
Contacts open on rising pressure.



Switching function M12 x 1:
Microswitch SPDT
Terminals 1 - 4:
Contacts close on rising pressure.
Terminals 1 - 2:
Contacts open on rising pressure.

General Information:
18 D variations with electrical connection DIN 43650 A

Part Number	Pressure Range † (bar)	Switching Pressure Difference ** (bar)		Maximum Over Pressure * (bar)	Switching (Cycles per min)	Pressure Sensor Materials		Fluid Connection		Weight (kg)	Dimension Drawing No.
		Lower Range †	Upper Range †			Housing Piston	Seal Dyn./Static	Type	Size		
0882100	5 – 70	10,5	15	400	100	AL/Steel	PTFE/NBR	Female	G1/4	0,2	01
0883100	5 – 70	10,5	15	400	100	AL/Steel	PTFE/NBR	Flange	-	0,2	02
0882119	5 – 70	10,5	15	400	100	AL/Steel	PTFE/NBR	Female	7/16-20 UNF	0,2	01
0882120	5 – 70	10,5	15	400	100	AL/Steel	PTFE/NBR	Female	1/4 NPT	0,2	01
0871200	10 – 100	8	16	250	100	CN/Steel	NBR	Flange	-	0,3	03
0882200	10 – 160	11	17	400	100	AL/Steel	PTFE/NBR	Female	G1/4	0,2	01
0883200	10 – 160	11	17	400	100	AL/Steel	PTFE/NBR	Flange	-	0,2	02
0882219	10 – 160	11	17	400	100	AL/Steel	PTFE/NBR	Female	7/16-20 UNF	0,2	01
0882220	10 – 160	11	17	400	100	AL/Steel	PTFE/NBR	Female	1/4 NPT	0,2	01
0871300	12 – 160	8	16	250	100	CN/Steel	NBR	Flange	-	0,3	03
0870400	15 – 250	7	20	500	100	CN/Steel	PU	Flange	-	0,3	03
0870500	20 – 350	6	25	500	100	CN	POM	Flange	-	0,3	03
0882300	25 – 250	11	17	400	100	AL/Steel	PTFE/NBR	Female	G1/4	0,2	01
0883300	25 – 250	11	17	400	100	AL/Steel	PTFE/NBR	Flange	-	0,2	02
0882319	25 – 250	11	17	400	100	AL/Steel	PTFE/NBR	Female	7/16-20 UNF	0,2	01
0882320	25 – 250	11	17	400	100	AL/Steel	PTFE/NBR	Female	1/4 NPT	0,2	01
0882400	40 – 420	17	38	600	100	AL/Steel	PTFE/NBR	Female	G1/4	0,2	01
0883400	40 – 420	17	38	600	100	AL/Steel	PTFE/NBR	Flange	-	0,2	03
0882419	40 – 420	17	38	600	100	AL/Steel	PTFE/NBR	Female	7/16-20 UNF	0,2	01
0882420	40 – 420	17	38	600	100	CN/Brass	PTFE/NBR	Female	1/4 NPT	0,2	01

18 D variations with electrical connection M 12 x 1 (max allowable voltage 30 V)***

Part Number	Pressure Range † (bar)	Switching Pressure Difference ** (bar)		Maximum Over Pressure * (bar)	Switching (Cycles per min)	Pressure Sensor Materials		Fluid Connection		Weight (kg)	Dimension Drawing No.
		Lower Range †	Upper Range †			Housing Piston	Seal Dyn./Static	Type	Size		
0882160	5 – 70	10,5	15	400	100	AL/Steel	PTFE/NBR	Female	G1/4	0,2	04
0882260	10 – 160	11	17	400	100	AL/Steel	PTFE/NBR	Female	G1/4	0,2	04
0882360	25 – 250	11	17	400	100	AL/Steel	PTFE/NBR	Female	G1/4	0,2	06
0882460	40 – 420	17	35	600	100	AL/Steel	PTFE/NBR	Female	G1/4	0,2	06
0883160	5 – 70	10,5	15	400	100	CN/Steel	PTFE/NBR	Flange	-	0,3	05
0883260	10 – 160	11	17	400	100	AL/Steel	PTFE/NBR	Flange	-	0,2	05
0883360	25 – 250	11	17	400	100	AL/Steel	PTFE/NBR	Flange	-	0,2	05
0883460	40 – 420	17	35	600	100	AL/Steel	PTFE/NBR	Flange	-	0,2	05

* Observe switching range. Do not subject switch to max. allowable pressure during normal operation. Even short pressure peaks must not exceed this value.
** Max. values.
*** M 12 plug not included. If required, please order separately. Table on page 3.
† 1 bar = 14.503 psi.

Key to materials:
AL = Aluminium
NBR = Perbunan
PTFE = Teflon
CN = Zinc die cast
Pu = Polyurethane
POM = Delrin