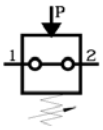
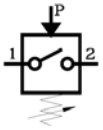
Pressure Switches G1/8”, G1/4”



Break contact



Make contact

Characteristics

Safety pressure relief P_{max}	300 bar
Port size	G1/8, G1/4
Weight (mass)	0.090 kg
Medium and ambient T_{max} temperature range	+100 °C
Switch back difference	Max. 5 - 15%
Voltage	Max. 48 V
Current	0.5 A
Electrical connection	Plug contacts, plug
Degree of protection	IP 65 with plug
Switching frequency	Max. 200 s/min

Material

Housing	Passivated steel
Diaphragm	Buna N

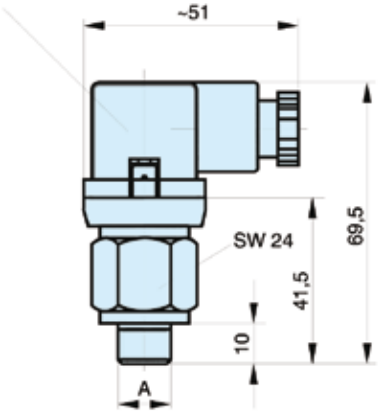
Switching function

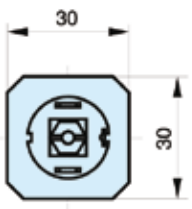
Make contact	Closes the circuit when the set pressure is reached
Break contact	Interrupts the circuit when the set pressure is reached

Dimensions and order instructions

Order instructions	Port size (bar)	Function	Setting range	**Order code**	Type	A
PR / 0.1-1 NC ST 1/4 48	G1/4	Break contact	0.1-1	**KL3439**		
PR / 0.1-1 NO ST 1/4 48	G1/4	Make contact	0.1-1	**KL3440**		
PR / 1-10 NC ST 1/8 48	G1/8	Break contact	1-10	**KL3437**		
PR / 1-10 NC ST 1/4 48	G1/4	Break contact	1-10	**KL3436**		
PR / 1-10 NO ST 1/8 48	G1/8	Make contact	1-10	**KL3438**		
PR / 1-10 NO ST 1/4 48	G1/4	Make contact	1-10	**KL3435**		

Plug can be turned 90°

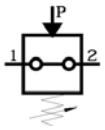




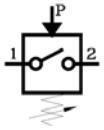
View A
without plug

Dimensions in mm

Pressure Switches G1/8”, G1/4”



Break contact



Make contact

Characteristics

Safety pressure relief P_{max}	300 bar
Port size	G1/8, G1/4
Weight (mass)	0.075 kg
Medium and ambient T_{max} temperature range	+100 °C
Switch back difference	Max. 5 - 15%
Voltage	Max. 48 V
Current	0.5 A
Electrical connection	Flat pin plug. protective cap
Degree of protection	IP 65 with protective cap
Switching frequency	200 s/min

Material

Housing	Passivated steel
Diaphragm	Buna N

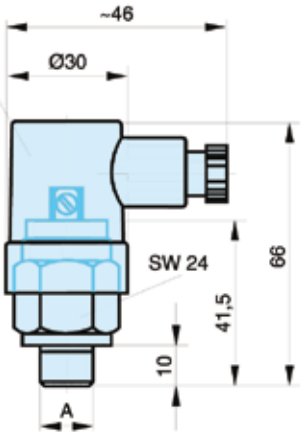
Switching function

Make contact	Closes the circuit when the set pressure is reached
Break contact	Interrupts the circuit when the set pressure is reached

Dimensions and order instructions

Order instructions	Port size (bar)	Function	Setting range	**Order code**	Type	A
PR / 0.2-1 NO SR 1/4 48	G1/4	Make contact	0.2-1	**KL3445**		
PR / 0.1-1 NC SR 1/4 48	G1/4	Break contact	0.1-1	**KL3454**		
PR / 0.1-1 NO SR 1/4 48	G1/4	Make contact	0.1-1	**KL3455**		
PR / 1-10 NC SR 1/8 48	G1/8	Break contact	1-10	**KL3452**		
PR / 1-10 NC SR 1/4 48	G1/4	Break contact	1-10	**KL3451**		
PR / 1-10 NO SR 1/8 48	G1/8	Make contact	1-10	**KL3453**		
PR / 1-10 NO SR 1/4 48	G1/4	Make contact	1-10	**KL3450**		

Protective cap can be turned 6 x 60°



View A
without protective cap

Dimensions in mm

Pressure Switches G1/8", G1/4" Series G1/4-..I / ..P

- Suited for intrinsically safe operation
- Especially compact design
- High switching frequency
- Attractive design
- Shock proof up to 30 g

Characteristics

Type - thread version	G1/4-0I*	G1/4-2I	G1/4-8I	G1/4-16I
Type - flange version	G1/4-0P*	G1/4-2P	G1/4-8P	G1/4-16P
Setting range $P_{min/max}$ (bar)	-1 to 0	0.2-2	0.5-8	1-16
Safety pressure relief P_{max}	80	80	80	80
Port size	Type I: G1/4 internal thread, Type P: flange			
Mounting	2 through holes Ø 5.2			
Installation	In any position			
Weight (mass)	0.275 kg			
Medium	Filtered compressed air (10µm), lubricated or unlubricated			
Medium and ambient T_{min}	-10 °C			
temperature range T_{max}	+80 °C			
Consistency	±2 in relation to end-of-range value			
Hysteresis, vaccum version	<15%			
Vibration resistance	10 g (10 ... 2000 Hz)			
Shock resistance	30 g			
Voltage	Max. 250 V			

Voltage type	AC and DC
Operating current and	AC12 to VDE0660 4A at 250 VAC AC14 to VDE0660 1A at 250 VAC DC12 to VDE0660 3A at 28 VDC DC13 to VDE0660 1A at 28 VDC
CE marking	To EC Directive 73/23/EWG
Electrical connection	Plug to DIN EN 175301-803, Form A, ISO4400 or M12x1 - 4-pin
Degree of protection	IP65
Switching element	Pole changing switch with catch spring as switching element, with self-cleaning contacts
Switching frequency	Max. 200 s/min

* for vacuum operation

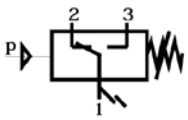
Material

Housing powder coated	Special aluminium die casting,
Diaphragm, seals	Buna N

Selection and Mounting:

Range selection:
Selection is optimal when the switching points are in the middle of the switching range.

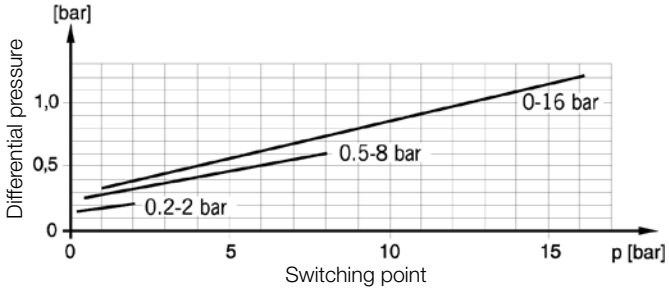
Electrical connection:
Wiring according to VDE regulations.
Tightening torque for plug: 0.7 ± 0.1 Nm
Outdoor use only with sufficient pretection against critical environmental conditions (e.g. aggressive atmosphere, salty environments, high temperature changes).



Pin 1 - 3:
Rising pressure makes contact.

Pin 1 - 2:
Rising pressure breaks contact.

Switch back difference

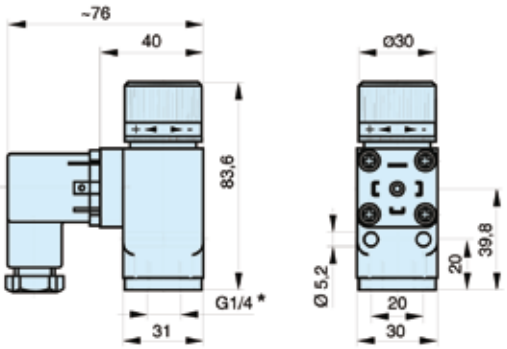


Delivery includes:
The flange version (surface roughness of flange surface 12µm) is supplied with an O-ring 5 x 1.5mm and 2 screws 5 x 35 DIN 912. Minimum thread length to be used: 4mm.

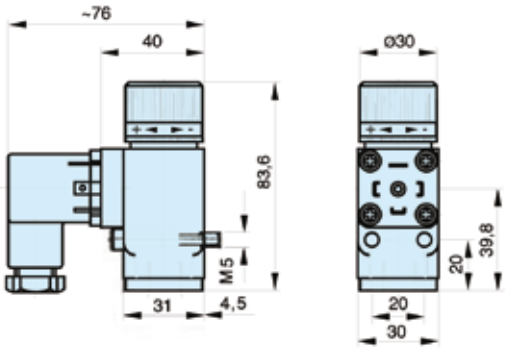
Max. diameter of the pressure opening 3mm.

Dimensions (mm)

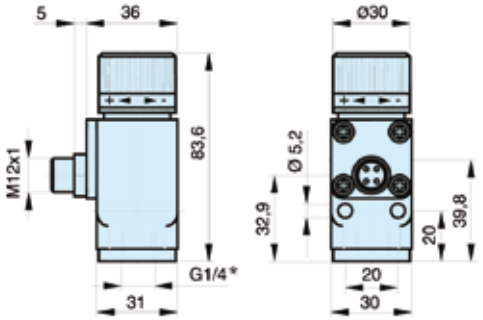
Version with internal thread and plug



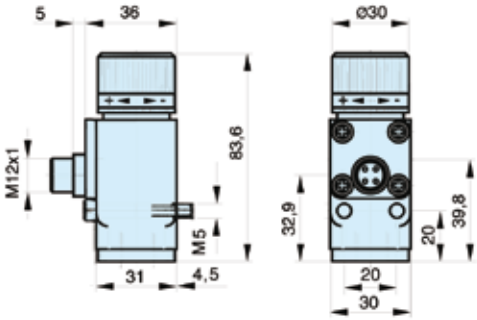
Flange version and plug



with M12 connector



with M12 connector



* Thread 11mm deep

Setting range (bar)	Type	**Order code**
-1 to 0	G1/4-0I-DIN	**KL3200**
-1 to 0	G1/4-0I-M12	**KL3208**
0.2 to 2	G1/4-2I-DIN	**KL3201**
0.2 to 2	G1/4-2I-M12	**KL3209**
0.5 to 8	G1/4-8I-DIN	**KL3202**
0.5 to 8	G1/4-8I-M12	**KL3210**
1.0 to 16	G1/4-16I-DIN	**KL3203**
1.0 to 16	G1/4-16I-M12	**KL3211**

Setting range (bar)	Type	**Order code**
-1 to 0	G1/4-0P-DIN	**KL3204**
-1 to 0	G1/4-0P-M12	**KL3212**
0.2 to 2	G1/4-2P-DIN	**KL3205**
0.2 to 2	G1/4-2P-M12	**KL3213**
0.5 to 8	G1/4-8P-DIN	**KL3206**
0.5 to 8	G1/4-8P-M12	**KL3214**
1.0 to 16	G1/4-16P-DIN	**KL3207**
1.0 to 16	G1/4-16P-M12	**KL3215**

Plugs to DIN EN 175301-803, Form A, ISO 4400

Standard version

Version with LEDs

Plugs to DIN EN 175301-803, Form A, ISO 4400

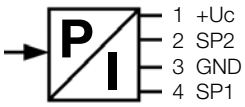
Description	Type	**Order code**
Standard version	GSD-30DS	**KL3349**
Version with LEDs 24 V	GSD-30DSL24V	**KL3350**
Version with LEDs 230 V	GSD-30DSL230V	**KL3351**

Pressure Switches Electronic Series EDP

The EDP electronically actuated pressure switches are used to convert pneumatic signals into electrical signals. The pressure range 0-16 bar can be adjusted individually, in either bar or psi.
The pressure switches can be used as threshold value comparators with one hysteresis or as window comparators with two hystereses.
A robust ceramic measuring cell acts as a measured value transducer.

- Simple, menu-driven programming via 3 membrane keys
- 3-digit red LED display (pressure gauge function)
- Electronic locking
- Versions for specific applications on request

Symbol



Characteristics

Type - flange version	EDP-V	EDP
Setting range $P_{min/max}$ (bar)	-1 to 0	0-16
Safety pressure relief P_{max}	100 bar	100 bar
Port size	Flange connection	
Display	3 digit, red 7-Segment LED-Display, programmable $0^{o}/180^{o}$	
Display for operating status	LED red/green	
Linearity %	<± 0.2 to 1.5 p_N	
TK zero point %	<± 0.2 p_N	
Installation	In any position	
Weight (mass)	0.100 kg	
Medium	Filtered compressed air, lubricated or unlubricated, weakly acidic or weakly alkaline fluids	
Ambient T_{min}	-20 °C	
temperature range T_{max}	+70 °C	
Medium T_{min}	-20 °C	
temperature range T_{max}	+70 °C	

Voltage	18 - 32 V
Voltage type	Direct current
Power consumption	< 80 mA without switching outlet
Switching current	SP1 max. 1.3 A (PIN4) SP2 / ERROR max. 0.3A (PIN2)
Switching logic	NO / NC programmable
Switching outlet	Short circuit proof
Electrical connection	Plug M12x1
Degree of protection	IP67 to EN 60529

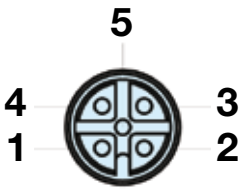
Material

Housing	PA, part in contact with medium: Al
Measuring cell	Ceramic
Seals	Buna N, part in contact with medium: FKM

Applications

- Pneumatic control systems
- Pressing technology
- Welding technology
- Packing machines and filling systems
- Test systems
- Clamping systems
- Plastic blow-moulding machinery
- Robotics and handling industry

Connection diagram



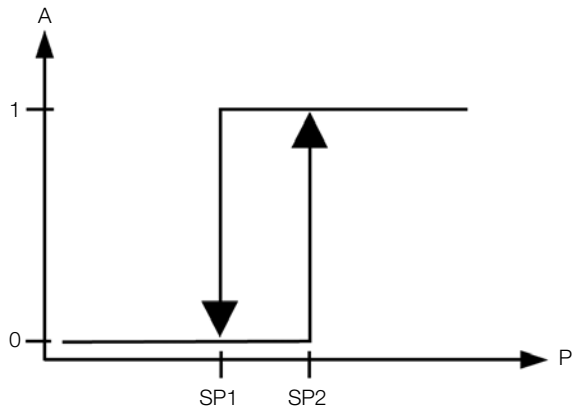
Electrical connection

1 = bn (brown)	**+Uc**
2 = ws (white)	**SP2**
3 = bl (blue)	**GND**
4 = sw (black)	**SP1**

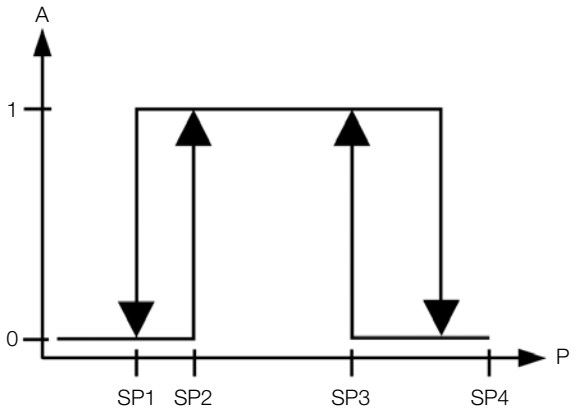
Parker Hannifin Corporation
Pneumatic Division - Europe

Threshold value comparator / window value comparator functions

Threshold value comparator with hysteresis

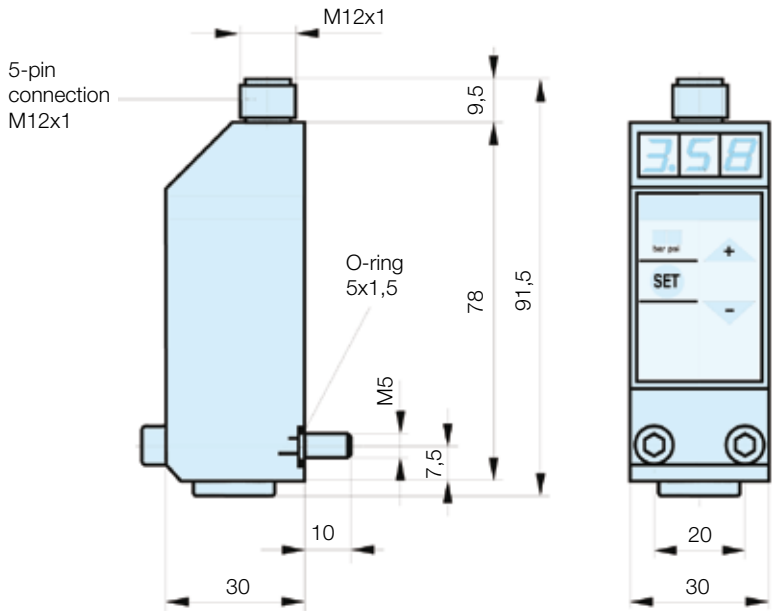


Window comparator with 2 hystereses



The illustrations show the NO (normally open) presetting.
For the NC (normally closed) presetting, the diagrams are horizontally mirror-imaged, so that the start value is at 1.

Dimensions - Flange version with M12x1 connector



Setting range (bar)	Type	**Order code**
-1 to 1	EDP-V	**KL3385**
0 to 16	EDP	**KL3384**

Dimensions in mm.