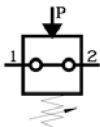
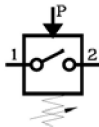


Pressure Switches G1/8", G1/4"



Break contact



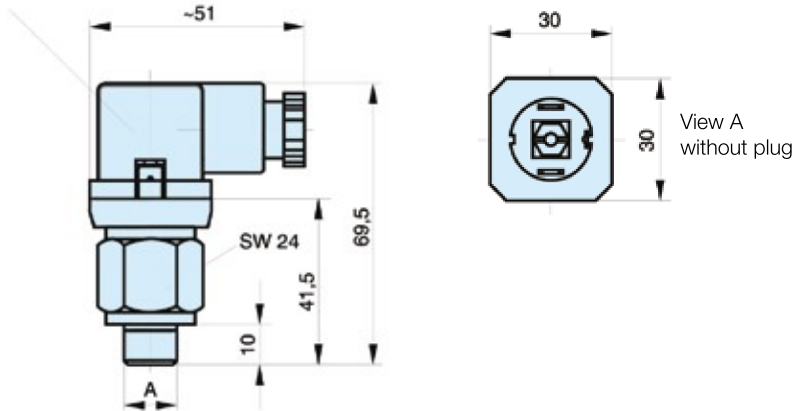
Make contact

Characteristics		Material	
Safety pressure relief P _{max}	300 bar	Housing	Passivated steel
Port size	G1/8, G1/4	Diaphragm	Buna N
Weight (mass)	0.090 kg	Switching function	
Medium and ambient T _{max} temperature range	+100 °C		
Switch back difference	Max. 5 - 15%		
Voltage	Max. 48 V		
Current	0.5 A	Make contact	Closes the circuit when the set pressure is reached
Electrical connection	Plug contacts, plug	Break contact	Interrupts the circuit when the set pressure is reached
Degree of protection	IP 65 with plug		
Switching frequency	Max. 200 s/min		

Dimensions and order instructions

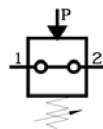
Order instructions	Port size (bar)	Function	Setting range	Order code	Type	A
PR / 0.1-1 NC ST 1/4 48	G1/4	Break contact	0.1-1	KL3439		
PR / 0.1-1 NO ST 1/4 48	G1/4	Make contact	0.1-1	KL3440		
PR / 1-10 NC ST 1/8 48	G1/8	Break contact	1-10	KL3437		
PR / 1-10 NC ST 1/4 48	G1/4	Break contact	1-10	KL3436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

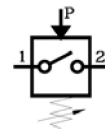


Dimensions in mm

Pressure Switches G1/8", G1/4"



Break contact

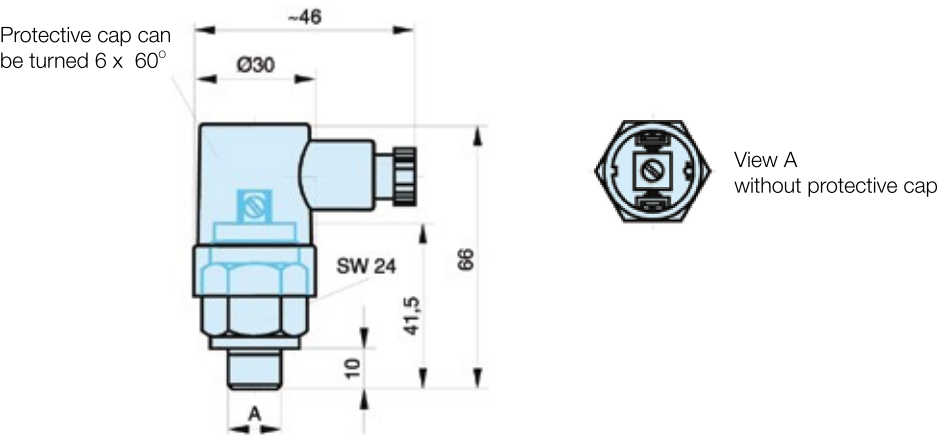


Make contact

Characteristics		Material	
Safety pressure relief P _{max}	300 bar	Housing	Passivated steel
Port size	G1/8, G1/4	Diaphragm	Buna N
Weight (mass)	0.075 kg	Switching function	
Medium and ambient T _{max} temperature range	+100 °C		
Switch back difference	Max. 5 - 15%	Make contact	Closes the circuit when the set pressure is reached
Voltage	Max. 48 V	Break contact	Interrupts the circuit when the set pressure is reached
Current	0.5 A		
Electrical connection	Flat pin plug. protective cap		
Degree of protection	IP 65 with protective cap		
Switching frequency	200 s/min		

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		



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	Voltage type	AC and DC
Type - flange version	G1/4-0P*	G1/4-2P	G1/4-8P	G1/4-16P	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
Setting range P_{min}/max (bar)	-1 to 0	0.2-2	0.5-8	1-16	CE marking	To EC Directive 73/23/EWG
Safety pressure relief P_{max}	80	80	80	80	Electrical connection	Plug to DIN EN 175301-803, Form A, ISO4400 or M12x1 - 4-pin
Port size	Type I: G1/4 internal thread, Type P: flange				Degree of protection	IP65
Mounting	2 through holes Ø 5.2				Switching element	Pole changing switch with catch spring as switching element, with self-cleaning contacts
Installation	In any position				Switching frequency	Max. 200 s/min
Weight (mass)	0.275 kg				* for vacuum operation	
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, vacuum version	<15%					
Vibration resistance	10 g (10 ... 2000 Hz)					
Shock resistance	30 g					
Voltage	Max. 250 V					

Material

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

Selection and Mounting:

Range selection:

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

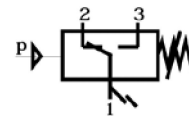
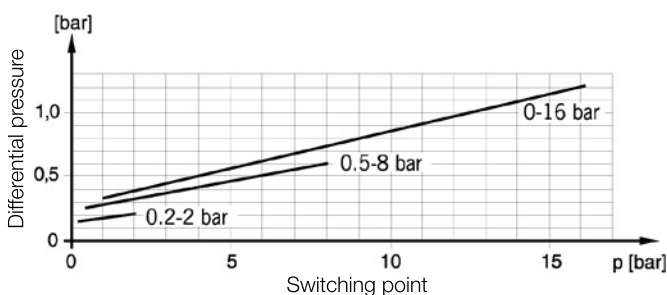
Electrical connection:

Wiring according to VDE regulations.

Tightening torque for plug: 0.7 ± 0.1 Nm

Outdoor use only with sufficient protection against critical environmental conditions (e.g. aggressive atmosphere, salty environments, high temperature changes).

Switch back difference



Pin 1 - 3:

Rising pressure makes contact.

Pin 1 - 2:

Rising pressure breaks contact.

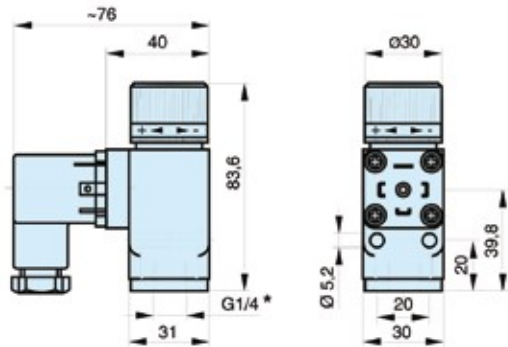
Delivery includes:

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.

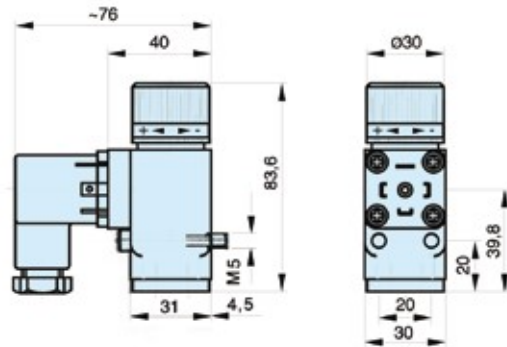
Max. diameter of the pressure opening 3mm.

Dimensions (mm)

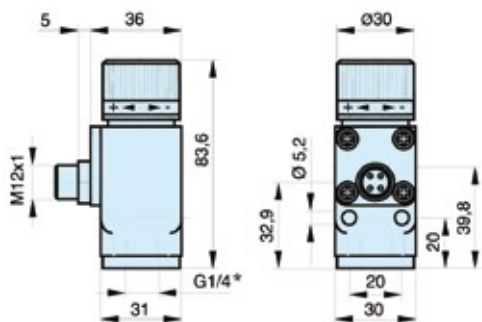
Version with internal thread and plug



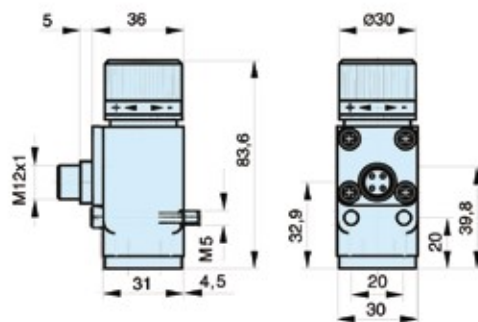
Flange version and plug



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

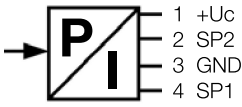
Description	Type	Order code
Standard version	GSD-30DS	KL3349
Version with LEDs 24 V	GSD-30DSL24V	KL3350
Version with LEDs 230 V	GSD-30DSL230V	KL3351

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



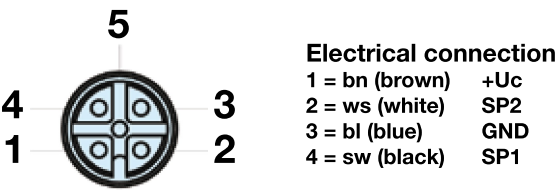
Characteristics

Type - flange version	EDP-V	EDP	Voltage	18 - 32 V
Setting range P _{min} /max (bar)	-1 to 0	0-16	Voltage type	Direct current
Safety pressure relief P _{max}	100 bar	100 bar	Power consumption	< 80 mA without switching outlet
Port size	Flange connection		Switching current	SP1 max. 1.3 A (PIN4) SP2 / ERROR max. 0.3A (PIN2)
Display	3 digit, red 7-Segment LED-Display, programmable 0°/180°		Switching logic	NO / NC programmable
Display for operating status	LED red/green		Switching outlet	Short circuit proof
Linearity %	<± 0.2 to 1.5 p _N		Electrical connection	Plug M12x1
TK zero point %	<± 0.2 p _N		Degree of protection	IP67 to EN 60529
Installation	In any position		Material	
Weight (mass)	0.100 kg		Housing	PA, part in contact with medium: Al
Medium	Filtered compressed air, lubricated or unlubricated, weakly acidic or weakly alkaline fluids		Measuring cell	Ceramic
Ambient T _{min}	-20 °C		Seals	Buna N, part in contact with medium: FKM
temperature range T _{max}	+70 °C			
Medium T _{min}	-20 °C			
temperature range T _{max}	+70 °C			

Applications

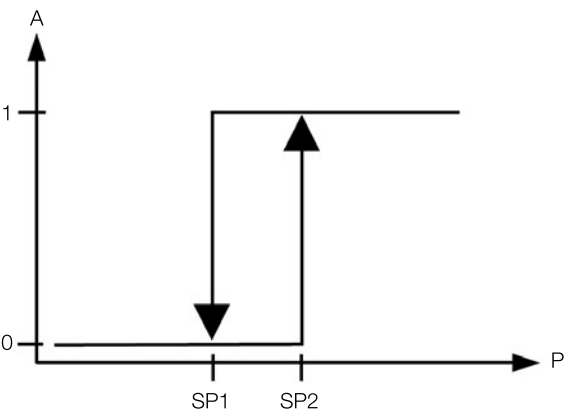
- Pneumatic control systems
- Pressing technology
- Welding technology
- Packing machines and filling systems
- Test systems
- Clamping systems
- Plastic blow-moulding machinery
- Robotics and handling industry

Connection diagram

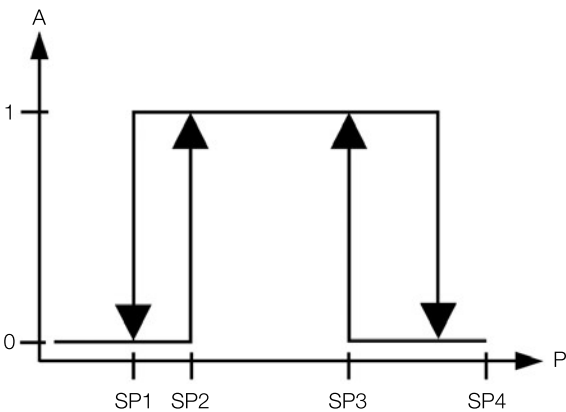


Threshold value comparator / window value comparator functions

Threshold value comparator with hysteresis

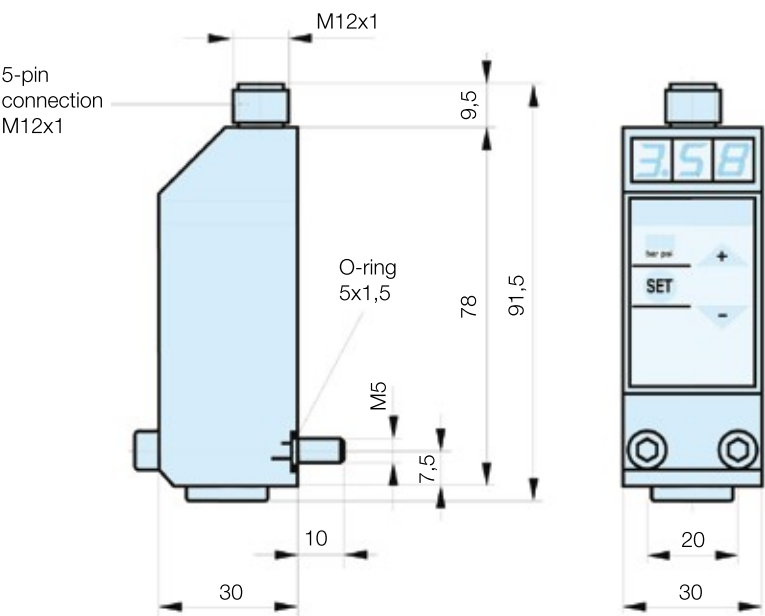


Window comparator with 2 hystereses



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.