

TABLE OF CONTENTS

Push Button and Rocker Switches	Pag. 4
Signal Lights and Lenses	Pag. 14
Pressure Switches	Pag. 24

Push button and Rocker Switches

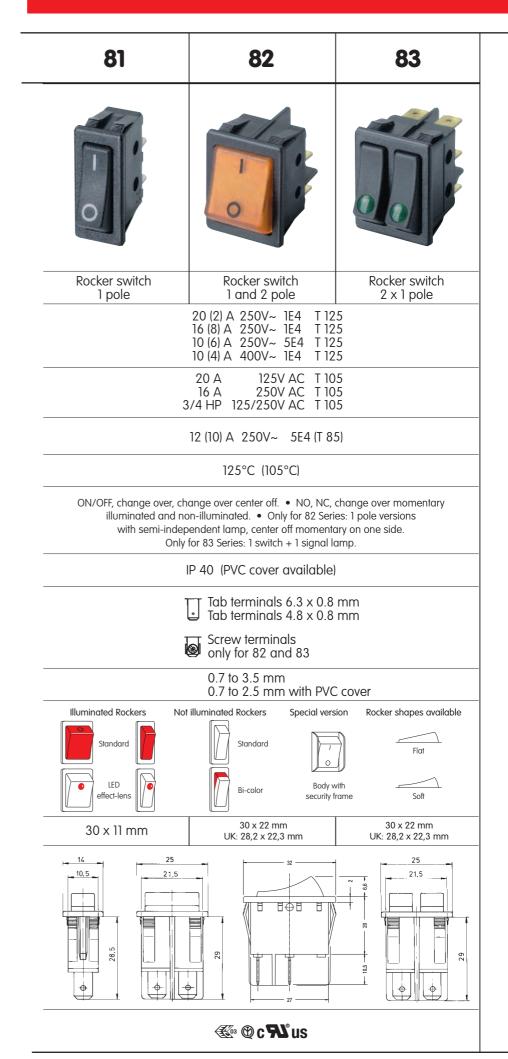
Push button

SERIES	L4	L4 Bowl	L4 Rubber Body
Suitable for class II appliances > 3mm contact gap.			
Version		Push button switch 1 and 2 pole	
Switch Rating EN 61058-1	16 (4) A 250V~ 1E4 T 125 10 (6) A 250V~ 5E4 T 125		
UL 1054	16 A 125/250VAC T 100 3/4 HP 125/250VAC T 100		
Special version: EN 61058-1	12 (8) A 250V~ 5E4 T 85		
Max. working temperature EN (UL)	125°C (100°C)		
Switch Function	ON/OFF, momentary NO illuminated or non-illuminated 1 pole NO + 1 pole NC		
Water/Dust protection	IP 40 (IP 64 with PVC cover)	IP 40	IP 65
Electrical connection	6.3 x 0.8 mm (available horizontal and down vertical) 4.8 x 0.8 mm Solder pins for pcb mounting		rizontal and down vertical)
Panel thickness	0.5 to 3.0 mm 0.5 to 2.2 mm with PVC and Rubber Body		
Features	Special buttons with holes designed for use with customer's own push-button switch styles		
Panel cut-out	19 x 13 mm		
Drawing			
Approvals		⋘ @ c % us	

Push button

L5	L5 Wings	LR Rubber Body
Push butto 1 and 2		Push button switch 1 and 2 pole
16 (4) A 250V~ 1E4 T 125 10 (6) A 250V~ 5E4 T 125 12 (8) A 250V~ 1E4 T 125		16 (4) A 250V~ 1E4 T 125 10 (2) A 250V~ 5E4 T 125
16 A 125/23 3/4 HP 125/23	50VAC T 100 50VAC T 100	12 A 1/4HP 125VAC T 100 12 A 1/2 HP 250VAC T 100
12 (8) A 250\	/~ 5E4 T 85	_
125°C (100°C)		T 125°C (100°C)
ON/OFF, mor illuminated with LED 1 pole NO +	or non-illuminated	ON/OFF momentary illuminated or non illuminated
IP 2	40	IP 65
6.3 x 0.8 mm, 4.8 x 0.8 mm down vertical or horizontal Solder pins for pcb mounting vertical or (1 pole) horizontal		6.3 x 0.8 mm 4.8 x 0.8 mm Special solder
Without fixing clips		eyelets 0.7 to 2.5 mm
Actuator Shapes	king clips	0.7 10 2.5 111111
Standard Short	Special Wings	
_	_	diameter Ø 25 mm
57 × L 57 × L 7 × L 18.9 – 12.1 – 12.1 – 12.1 – 12.1 – 12.1 – 12.1 – 12.1 – 12.1 – 12.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 – 13.1 –	13,8	025
		

Rocker



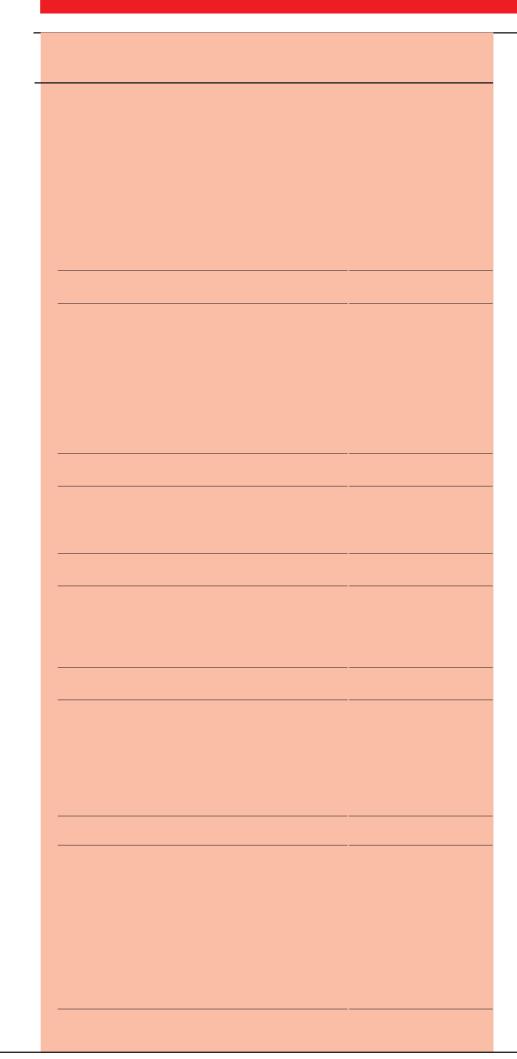
Rocker

DI	A4	A3
Frameless rocker switch 1 pole	Push button switch 1 and 2 pole	Push button switch 1 pole
16 (4) A 250V~ 1E4 T 125 10 (8) A 250V~ 5E4 T 125	16 (8) A 250V~ 1E4 T 125 16 (6) A 250V~ 5E4 T 125 10 (4) A 400V~ 1E4 T 125	16 (6) A 250V~ 1E4 10 (4) A 250V~ 5E4 10 (4) A 400V~ 1E4
16 A 125/250VAC T 105 1 HP 125/250VAC T 105	16 A 125/250VAC T 105 3/4 HP 125/250VAC T 105	16 A 125/250VAC T 105 3/4HP 125/250VAC T 105
_	12 (10) A 250V~ 5E4 T 85	_
T 125°C (105°C)	T 125°C (105°C)	T 125°C (105°C)
ON/OFF illuminated or not illuminated latched or momentary	ON/OFF, momentary NO change over illuminated and non illuminated	ON/OFF change over non illuminated
IP 40	IP 54 (IP 55)	IP 54
6.3 x 0.8 mm 4.8 x 0.8 mm	6.3 x 0.8 mm 4.8 x 0.8 mm Screw terminals	6.3 x 0.8 mm 4.8 x 0.8 mm
Any according to the application drawing.	0.7 to 3.5 mm	0.7 to 3.5 mm
Shapes available: Round Oval Rectangular	Penetration of dust and water into the body is prevented by the special shape of the push button caps and their special guides Sealing between the body and the panel is made by a PVC seal fixed on the body.	Penetration of dust and water into the body is prevented by the special shape of the push button caps and their special guides Sealing between the body and the panel is made by an O-ring. Special panel cut-out is necessary.*
Details on panel cut out available on request	30 x 22 mm	30 x 11 mm*
213 213 10° 10° 10° 10° 10°	34.6 × 27.6 ————————————————————————————————————	16.2 - 16.2 - 16.2 - 11 11 11 11 11 12.2 × 10.5 - 1
		

Rocker

Al	A2	V8
080		
Rocker switch 1 pole	Rocker switch 1 and 2 pole	Rocker switch 1 and 2 pole
16 (6) A 250V~ T 100	16 (6) A 250V~ T 100	12 (4) A 250V~ T 125 8 (2) A 250V~ 5E4 T 100
		10 A 125/250VAC
_	_	_
T 100°C	T 100°C	T 125°C (T65°C)
ON/OFF ON/OFF illuminated Change over	ON/OFF ON/OFF illuminated Change over	ON/OFF, ON/OFF illuminated change over, change over illuminated, momentary NO, NO illuminated
IP 40	IP 40	IP 40
6.3 x 0.8 mm 4.8 x 0.8 mm	6.3 × 0.8 mm 4.8 × 0.8 mm	6.3 x 0.8 mm 4.8 x 0.8 mm
0.7 to 4.0 mm	0.7 to 3.5 mm	0.8 to 1.5 mm
	The twin-wall feature ensures that any splash water which enters into the appliance cannot get into the switch chamber.	
30 x 11 mm	30 x 22 mm	34,2 x 12,6 mm
8.2 20 20 20 20 20 20 20 20 20 2	25	2 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3 - 12.3
	3 🔞	

C2 Standard	C2 Softline	8A
	The state of the s	
	switch 2 pole	Rocker switch 1 pole
	V~ 1E4 T 125 V~ 5E4 T 125	20 (2) A 250V~ 1E4T 125 16 (8) A 250V~ 1E4T 125 10 (6) A 250V~ 5E4T 125 10 (4) A 400V~ 1E4T 125
	250VAC T 105 50VAC T 105	20 A 125VAC T 105 16 A 250VAC T 105 3/4HP 125/250VAC T 105
	50V~ 1E4 rsion only)	12 (10) A 250V~ 5E4 (T 85°C)
T 125°C	(105°C)	T 125°C (105°C)
1 pole NC + 1 pol	and non illuminated, e NO, illuminated Iluminated	ON/OFF, momentary NO, change over, center off, illuminated and non illuminated
IP 40 (IP 64	with PVC cover)	IP 40
4.8 x 0.8 mm	Solder eyelets	4.8 x 0.8 mm 6.3 x 0.8 mm
	Special solder eyelets	
0.5 to 3.0 m 0.5 to 2.0 m	nm nm (with PVC cover)	0.7 - 3.5 mm
Illuminated Rockers Standard LED effect-lens	Not illuminated Rockers Standard	Standard Standard Standard Shandard
19 x 13 mm	19 x 13 mm	28.2 x 14 mm
07 - 10,8 - 57 - 10,5 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 - 17,2 -	\$\frac{10.8}{17.2}	25.55
₹ 63 ()	c % us	



Other features



Markings

Rockers and frames can be printed with various symbols by hot stamping.

Please request our list of standard markings.

Special printing and screen printing are available on request.

Colours

Standard colours for bodies, non-illuminated and rockers: black, white, brown.

Standard colours for illuminated rockers:

red, yellow, green (translucent), transparent.

A wide range of alternative shades and special colours is available on request.

Approvals

All Signal Lux switches have been tested according to EN 61058-1, in accordance with the standards of all European inspection offices. In addition, the most important production series also have the North American UL and CSA test marks according to UL 1054. Please, indicate clearly the requested approval/or approvals and rating (circuit-breaking capacity) you need.

Technical information

Complete product range.

This catalogue gives details of the main types of our switch range. In addition we produce many special versions for different applications. Please do not hesitate to contact us if your particular requirements are not shown.

Materials used

Switch bodies: PA6.6

Illuminated actuators and lenses: Polycarbonate Inflammability: V2 according to UL 94 Current carrying parts: Brass (CuZn 37) Contact points: Silver alloy

Circuit-breaking capacity

Details of the circuit-breaking capacity for each switch are given for the relevant productions series. The number in the brackets indicates the maximum rated current on inductive load. Some switch series are designed for capacitive loads or high inrush currents, additionally they have been submitted for approval. Please contact us if you need switches for these purposes.

Rated voltage

All appliance switches are designed as standard for 250V AC. However, we also have test marks for 400 V.

On request we can also supply illuminated switches with bulbs for 6V,12 (14)V or 24 (28)V.

Ambient temperature

T85 to T125 refers to the temperature class for which the individual switch series have been approved by the inspection office.

Electrical life

1E4 = 10,000 switching cycles 5E4 = 50,000 switching cycles

The electrical switching cycles refers to the number of operations of the switch based on the nominal load. If the circuit breaking capacity is reduced, the switch cycles will increase accordingly. The mechanical life of the switch is not included in that indication. Normally the mechanical life would overtake the electrical life by many times.

Connection types

Depending on the type of switch, the following connections are available:

tab terminals 6.3x0.8 mm tab terminals 4.8x0.8 mm

screw terminals M3

pcb-pins

solder evelet

Please note the data in each production series.

Fitting

Many switches have sprung plastic clips. To fit simply press into the panel cut out. Please ask for application drawing before using our switches.

We reserve the right to improve or modify our product range. All dimensions shown in this catalogue are not binding. Samples and assembly diagrams are available on request.

Signal Lights and Lenses

Signal lights

SERIES	17.1/17.3	18.3	28.9
Voltages 110 V, 230 (250) V, 400 V 6 V, 12 (14) V, 24 (28) V Further versions on request Ambient temperatures 75° C 90° C 120° C 150° C Data to be checked for each version			
Panel cut out	_	_	_
Fitting methods	_	_	_
Panel thickness	_	_	_
Connections (2.8 x 0.8 mm on request)	₩ Leads	₩ Leads	4.8 x 0.8 mm 6.3 x 0.8 mm Leads Signal Click® Crimped
Parallel resistor	On request	_	On request
Rectangular signal lights see our short list "Rocker switches" and "Push button switches".			Fixing arrangement
Special features	Insulated style with heat shrinkable sleeve on request. LED version available on request.	Signal lamps with leads and resine sealing are waterproof.	Signal lamps with integral clips for fixing directly into appliance body. LED version available on request.
Anti-rotation rib	_	_	_
Dimensions Please consider the different overall lengths between the different connection types. Tab terminal Signal Click® Signal Click® Leads	13(16) -29,4(32,4)	- 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.7.
Approvals			≙ c % ³us

— 5.4 x 9 mm Ø 6 mm — Assembly by connecting the lamp and lens from either side of panel — — — — — — — — — — — — — — — — — — —	
Assembly by connecting the lamp and lens from either side of panel — — — — — — — — — — — — — — — — — — —	
the lamp and lens from either side of panel	
☐ 6.3 x 0.8 mm ☐ Leads ☐ Signal Click® ☐ Crimped ☐ Crimped ☐ On request ☐ Fixing arrangement ☐ 24.2 ☐ 21.4 ☐ 24.2 ☐ 24.2 ☐ 21.4 ☐ 21.4 ☐ 22.2 ☐ 24.2 ☐ 24.2 ☐ 25.2 ☐ 26.3 x 0.8 mm ☐ Leads ☐ Leads ☐ Crimped ☐ Crimped ☐ Crimped ☐ On request ☐ 24.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐ 27.2 ☐	
☐ 6.3 x 0.8 mm ☐ Leads ☐ Signal Click® ☐ Crimped ☐ On request ☐ Fixing arrangement ☐ 24.2 ☐ 21.4 ☐ 24.2 ☐ 24.2 ☐ 26.3 x 0.8 mm ☐ Leads ☐ Leads ☐ Crimped ☐ Crimped ☐ On request ☐ 24.2 ☐ 21.4 ☐ 21.4 ☐ 21.4 ☐ 21.4 ☐ 22.2 ☐ 23.2 ☐ 24.2 ☐ 24.2 ☐ 25.2 ☐ 26.3 x 0.8 mm ☐ Leads ☐ Leads ☐ Crimped ☐ Crimped ☐ On request ☐ 24.2 ☐ 25.2 ☐ 26.3 x 0.8 mm ☐ Leads ☐ Leads ☐ Crimped ☐ Crimped ☐ On request ☐ 24.2 ☐ 25.2 ☐ 26.3 x 0.8 mm ☐ Leads ☐ Crimped ☐ Crimped ☐ On request ☐ 24.2 ☐ 25.2 ☐ 26.3 x 0.8 mm ☐ Leads ☐ Crimped ☐ Crim	
— On request — Fixing arrangement 24.2	
Fixing arrangement 24.2	
21.4	
Signal lamps with integral clips for fixing directly into appliance body. LED version available on request.	
99 976 976 976 99 15.2 977 97 99 99 974 8 15.2 97 97 97 97 97 97 97 97 97 97 97 97 97	9
≙ c % us	T

24.4/24.5	27	27.P
Ø 6 mm	Ø 6 mm	Ø 8 mm
_	Assembly by connecting the lamp and lens from either side of panel.	Assembly by connecting the lamp and lens from either side of panel.
0.5 - 2.0 mm	0.5 - 4.0 mm	0.5 - 2.0 mm
TTT Leads	4.8 x 0.8 mm 6.3 x 0.8 mm Leads Signal Click® Crimped	4.8 × 0.8 mm 6.3 × 0.8 mm Leads Signal Click® Crimped
_	On request	On request
24.5	27.2 27.8 7 27.0 Other shapes available	1 + 51
	LED version available on request.	For limited space behind panel.
Panel piercing	Ponel piercing	S S S S S S S S S S S S S S S S S S S
≙ c 9 1°us	≙ c 9 3°us	≙ c 9 √us
16		

28	28.H/28.5	31
Ø 9 mm	Ø 9 mm	Ø 10 mm
Plastic clips.	_	Serrated ring M 10 x 1 mm
0.8 - 2.0 mm	0.8 - 2.0 mm	0.5 - 9.0 mm
4.8 x 0.8 mm 6.3 x 0.8 mm Leads Signal Click®	4.8 x 0.8 mm 6.3 x 0.8 mm Leads Signal Click®	 4.8 x 0.8 mm 6.3 x 0.8 mm Leads Signal Click®
Crimped	Crimped	Crimped
		On request
28.6 28.8 28.4 28.4 Other shapes available	28.H 28.5 Other shapes available	31.2 31.0 31.4 0ther shapes available
Two-piece style. Signal lights supplied with separate lens. LED version available on request.	LED version available on request.	A separate rubber washer for use between lens and panel is available. LED version available on request.
See drawing	See drawing	_
Panel piercing Panel piercing	Panel piercing Panel piercing Panel piercing	of 13.5 M10x Panel piercing
≙ c 91 °us	≙ c 91 °us	≙ c 91 °us
	<u> </u>	17

## Plastic clips. ## Plastic cl	33	41	51
Plastic clips. Plastic clips. Serrated ring M 13 x 1 mm 0.8 - 2.0 mm 0.8 - 2.0 mm 0.5 - 6.5 mm 4.8 x 0.8 mm 6.3 x 0.8 mm 16.3 x 0.8 mm 17.4 x 1.0 x 1.	2		
0.8 - 2.0 mm 0.8 - 2.0 mm 0.8 - 2.0 mm 0.5 - 6.5 mm 4.8 x 0.8 mm 6.3 x 0.8 mm Leads Signal Click® Crimped On request On request On request On request 41.1* 41.4 41.4 51.1* Other shapes available LED version available on request. LED version available on request. On request See drawing M 13 x 1 mm O.5 - 6.5 mm 4.8 x 0.8 mm 4.8 x 0.8 mm 4.8 x 0.8 mm On request On request On request On request Additional rubber washer for use between lens and panel is available. LED version available on request.	Ø 10 mm	Ø 12 mm	Ø 12 mm
4.8 × 0.8 mm 6.3 × 0.8 mm Leads Signal Click On request On request On request On request Other shapes available LED version available on request. On request See drawing 4.8 × 0.8 mm 4.8 × 0.8 mm 4.8 × 0.8 mm 6.3 × 0.8 mm Additional rubber washer for use between lens and panel is available on request. ED version available on request. On request See drawing Additional rubber washer for use between lens and panel is available on request. ED version available on request.	Plastic clips.	Plastic clips.	
Signal Click® On request 133.2 33.0 41.2* 41.0* 41.1* 41.4 51.1* Other shapes available request. Further lens styles available on request. LED version available on request. On request See drawing Additional rubber washer for use between lens and panel is available. *Chrome bezel on request. LED version available on request. The panel piercing pie	0.8 - 2.0 mm	0.8 - 2.0 mm	0.5 - 6.5 mm
33.2 33.0 41.2* 41.0* 51.2* 51.0* 33.4 41.1* 41.4 51.1* Other shapes available Further lens styles available on request. ED version available on request. On request See drawing Additional rubber washer for use between lens and panel is available. *Chrome bezel on request. LED version available on request. The panel piercing pie	Leads Signal Click®	4.8 × 0.8 mm 6.3 × 0.8 mm	4.8 × 0.8 mm 6.3 × 0.8 mm
Further lens styles available. LED version available on request. On request See drawing See drawing Other shapes available on request. See drawing Additional rubber washer for use between lens and panel is available. *Chrome bezel on request. LED version available on request. ED version available on request. See drawing Other shapes available *Chrome bezel on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request. LED version available on request.	On request	On request	On request
Further lens styles available. LED version available on request. On request See drawing *Chrome bezel on request. LED version available on request. See drawing *Chrome bezel on request. ED version available on request. See drawing *Chrome bezel on request. LED version available.	33.4	41.1* 41.4 41.4 41.4	51.1*
Panel piercing Panel piercing Panel piercing Panel piercing	available. LED version available on request.	*Chrome bezel on request. LED version available on request.	for use between lens and panel is available. *Chrome bezel on request. LED version available on
Panel piercing		g14	·
211 /2 2	Panel Panel	Panel piercing Panel piercing Panel piercing 910,8	M12x1 95 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
e c re us	₾ c % us	≙ c ¶ 3°us	≙ c % us

### Plastic clips. ### Plastic clips. ### Serrated ring M13 x 1 mm ### Plastic clips. ### Destric clip	43	53	42
Plastic clips. Serrated ring M 13 x 1 mm 0.8 - 2.0 mm 0.8 - 2.0 mm 1.4.8 x 0.8 mm 1.6.3 x 0.			
On request Also available with additional rubber washer for use between lens and panel is available. *Chrome bezel on request. LED version available on request. LED version available on request. Chrome bezel on request. LED version available on request. See drawing On request On request Also available with additional fresnel lens for high illumination. LED version available on request. See drawing			
On request 43.2* 43.0* 53.2* 53.0* Other shapes available *Chrome bezel on request. LED version available on request. Tequest Additional rubber washer for use between lens and panel is available. *Chrome bezel on request. LED version available on request. Tequest Additional rubber washer for use between lens and panel is available. *Chrome bezel on request. LED version available on request. See drawing Panel piercing	Plastic clips.		Plastic clips.
On request On request On request On request On request On request 43.2* 43.0* 53.2* 53.0* 42 R 43.1* 43.4 53.1* Other shapes ovallable *Chrome bezel on request. LED version available on request. LED version available on request. LED version available on request. Additional rubber washer for use between lens and panel is available on request. LED version available on request. See drawing	0.8 - 2.0 mm	0.5 - 6.5 mm	0.8 - 2.0 mm
43.2* 43.0* 53.2* 53.0* 42 R 43.1* 43.4 53.1* 42 U 42 U 43.1* 43.4 53.1* Additional rubber washer for use between lens and panel is available. *Chrome bezel on request. LED version available on request. LED version available on request. LED version available on request. See drawing Panel piercing	4.8 × 0.8 mm 6.3 × 0.8 mm	4.8 × 0.8 mm 6.3 × 0.8 mm	6.3 x 0.8 mm
*Chrome bezel on request. LED version available on request. *Chrome bezel on request. LED version available on request. *Chrome bezel on request. LED version available on request. *Chrome bezel on request. LED version available on request. *Chrome bezel on request. LED version available on request. *Chrome bezel on request. *Chrome bezel on request. *Chrome bezel on request. *Chrome bezel on request. *See drawing *Graph of the shapes available with additional fresnel lens for high illumination. LED version available on request. *See drawing *Also available on request. *See drawing *The shapes available on request. *The shap	On request	On request	On request
*Chrome bezel on request. LED version available on request. LED version available. *Chrome bezel on request. LED version available on request. LED version available. *Chrome bezel on request. LED version available on request. *Chrome bezel on request. LED version available on request. See drawing *See drawing *Also available with additional fresnel lens for high illumination. LED version available on request. See drawing	43.2* 43.0*	l	(a)
*Chrome bezel on request. LED version available on request. *Chrome bezel on request for use between lens and panel is available. *Chrome bezel on request. *Chrome bezel on request. *Chrome bezel on request. LED version available on request. *See drawing *See drawing *Also available with additional fresnel lens for high illumination. LED version available on request. *See drawing *Also available with additional fresnel lens for high illumination. LED version available on request. *See drawing *Also available with additional fresnel lens for high illumination. LED version available on request. *See drawing *Also available with additional fresnel lens for high illumination. LED version available on request. *See drawing *Also available with additional fresnel lens for high illumination. LED version available on request. *See drawing *Also available with additional fresnel lens for high illumination. LED version available on request. *See drawing *Also available with additional fresnel lens for high illumination. LED version available on request. *Also available with additional fresnel lens for high illumination. LED version available on request. **Deal of the part of	15 0		17,5
request. See drawing other piercing panel piercing	*Chrome bezel on request. LED version available on	for use between lens and panel is available. *Chrome bezel on request.	tional fresnel lens for high illumination. LED version
Panel piercing pierci	_		See drawing
	Panel piercing 2.1 6 01 Panel piercing Panel pierci	M13x1 Silver Panel	Panel piercing E
△ 91 °us △ 91 °us △ 91 °us	♠ 93 ° us	△ 91 ° us	△ 91 ° us

Lenses



Lenses available for Series 21. Technical information in 21 Series column.

On request	On request	_



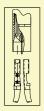
Lenses available for Series 21. Technical information in 21 Series column.

On request	_	On request

Technical Information

Signal click

Signal click is a patented system of quick connection for signal lights. Two versions are available: one with leads with cylindrical terminals of 2 mm nominal diameter that can be easily inserted in the internal parts of signal lamps;



another one that is equipped with an innovative connecting system with a terminal with an hook at the end and a locking tongue in plastic material. This solution allows a quick and effective assembly without orientation problems.



Signal lights with leads

The signal lights can be sealed with resin to the base on request. This improves the strength of extraction and assures the water protection. Special design, different types and length of leads and cables are available.

Bulb models

6 V, 12 (14) V, 24 (28) V with filament bulbs or LEDS.

110 V, 230 (250) V, 400 V with neon or fluorescent bulbs. Standard: 230 (250) V.

Standard rating

6 - 28 V = 1.0 W max110 - 400 V = 0.5 W max

Neon, fluorescent and led light sources

Neon bulbs are suitable for signal lights with red, yellow, transparent or orange lens color. For blue or green lenses we recommend to use fluorescent bulbs. It is now available the version with led, that offers vivid colours, higher brightness and longer life.

Ignition voltage

For 110 V = 70 - 95 VFor 230/250 V = 130 VFor 400 V = 187 V

Special versions are available on request.

Complete range of products

The above information gives details of the most common series of standard signal lights. For more information on custom solutions please contact us.

Modifications

We reserve the right to improve or modify our range of products. All dimensions shown on this catalogue are not binding. Samples and drawings are available on request.

Pressure Switches

SERIES	Pl	
Electrical function	1 pole NO	
Switch Rating	250 mA 250V~ 1E4 20 mA 250V~ 5E4 250 mA 125/250VAC UL/CSA	
Ambient temperature	85°C	
Temperature of pressure medium	85°C	
Electrical connections	Solder pins 1.0 mm - Leads with various insulation, diameter and length	
Pressure range Pressure:	+ 15 to +800 mbar 15–20 mbar: +/- 25% 21–25 mbar: +/- 15%	
Vacuum:	- 800 to -15 mbar 25–800 mbar: +/- 10%	
Pressure connections	Inlet 4.0mm for tube connection	
Max. Working pressure	1000 mbar	
Switch hysteresis	Nearly no hysteresis	
Pressure medium	Air or non hazardous gases only	
Fixing methods	Soldering on PBC/leads on request	
Materials	Cover: PA 6.6 Base: PBT Adjustment screw: PA 6.6 Contact carrying parts: brass silver plated (gold plating on request) Membrane: nitrile, EPDM (Silicone, Perbunan on request) according to application	
Drawings	23.5 8.5 10 12.5 Pressure Vacuum	
Approvals According to UL 508 and ENEC 60703	c % us	



1 pole NO	1 pole NC	
2,5(0,5) A 250V ~ 1E4 (pmax:2,5 bar) 1 A 250V ~ 5E4 (pmax:0,8 bar) 0,02 A 250V ~ 5E4 (pmax:0,8 bar) 2,5A 125/250VAC UL/CSA	2,5(0,5) A 250V ~ 1E4 (pmax:2,5 bar) 0,5 A 250V ~ 5E4 (pmax:2,5 bar) 0,02 A 250V ~ 5E4 (pmax:2,5 bar) 2,5A 125/250VAC UL/CSA	
8.	5°C	
8.	5°C	
	s 6,3 x 0,8 mm s 4,8 x 0,8 mm	
+ 15 to +2500 mbar +/- 10%	+ 15 to +2500 mbar +/- 15%	
- 800 to -15 mbar +/- 15%	- 800 to -15 mbar +/- 15%	
Inlet 4.0 or 5,5mm (up to 500 mbar) Threaded inlet M10 x 1mm or 1/4" Gas Snap inlet		
3000) mbar	
Nearly no	o hysteresis	
Pressure: Non hazardous gases - Vacuum: Non hazardous gases	Liquids (up to 24V only)	
Plastic clips for 0,5÷2,5 mm pane	el thickness (version with inlet only)	
Lower bo	ody: PA 6.6	
Upper bo	ody: PA 6.6	
	screw: PA 6.6	
, , ,	er plated (gold plating on request)	
Membrane: nitrile, EPDM (Silicone, Perb	unan on request) according to application	
16 16 17 13 18 18 18 18 18 18 18 18 18 18 18 18 18	Vacuum — Proceuro	
P1	Pressure	

M3



1 pole NO, 1 pole NC, 1 pole change over

16(4) A 250V ~ 5E4 10(3) A 250V ~ 5E4 3(1) A 250V ~ 5E4

85°C

85°C

Tabs terminals $6.3 \times 0.8 \text{ mm}$ Tabs terminals $4.8 \times 0.8 \text{ mm}$

+ 30 to +2500 mbar +/- 10%

- 800 to -30 mbar +/- 15%

Inlet 4.0 or 5,5mm (up to 500 mbar)
Threaded inlet M10 x 1mm, 1/4" Gas, 1/8" Gas

3000 mbar

Between 10% and 30% depending on calibration and type of micro switch

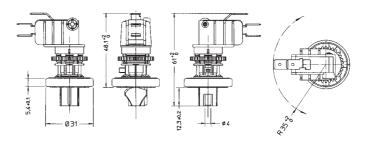
Non hazardous gases and liquids

Plastic clips (version with inlet only) / Threaded inlet

Lower body: PA 6.6 - Upper body: PA 6.6

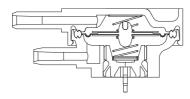
Membranes: EPDM, others on request

Micro switches: special types on request.

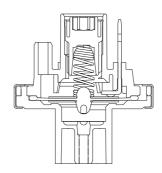


Other features

P1



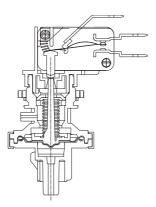
79



The sectional drawing explains the function of our pressure switches series P1 and 79. This design does not cater for a hysteresis. The method of fixing the solder pins or tabs to the switch body does not allow for absolute air tightness.

For this reason the P1 and 79 series are well suited for detection of dinamic pressure (or vacuum) levels, while some precautions are recommended for applications in which static vacuum or pressure has to be maintained.

M3



As opposed to series 79 and P1 where the electrical part is integrated into the pressure chamber of the switches, the electrical unit of our pressure switches M3 consists in a standard micro switch

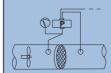
Therefore it is possible to use these type not only for transmission of electrical signals but also for direct switching of high resistive loads.

Applications

Generally all applications are based on electric switching (opening/closing) of contacts with a set pressure value. Particular attention should be taken in evaluating the type of fluid chosen to transmit the pressure or the decreased pressure to the manostat.

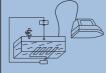
In general, the transmission of pressure through fluids such as air, nitrogen, non-explosive gas and vapour is considered standard. Water and all fluids that can conduct electricity need special precautions. Special versions of these applications are available upon request.

The examples of application are numerous, such as, 'full bag' indication on vacuum cleaners, level of the liquid on dishwashers and coffee machines, pneumatic safety edges, gates automation, detection of CO2 level on drinks vending machines, water level on irons, protection devices of pumps, medical appliances.



Air filters

Pressure switch detects the variation in delta pressure due to filter and pilots the switching off of the ventilator or gives the alarm through a signal light.



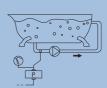
Home steam generators

Pressure switch controls the heater resistor in order to maintain steam pressure.



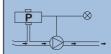
Fluids level control

Pressure switch maintains the desired level of the fluid.



Whirlpool security switch

Pressure switch blocks the pump if the water flow is interrupted by the presence of a body on suction gate.



Vacuum pump control

Pressure switch stops the pump at the vacuum setting calibrated by the user.



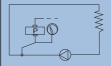
Gate security systems

Pressure switch measures the pressure applied to the rubber protection on the gate and stops the electric actuator.



Chimney

Pressure switch detects insufficient air depression or fan malfunctioning.



Hydraulic circuits

Pressure switch detects insufficient water pressure or pump malfunctioning.



Via Milano, 27 I - 20010 Cornaredo (MI) Phone +39-02-93514321 Fax +39-02-93514278

www.signal-lux.com

Your local contact: