



0520

Electronic Pressure Switches

Zinc-plated steel body

With ceramic sensor

Overpressure safe to 20 / 200 / 500 bar *)

Hysteresis programmable in our works from 2 ... 95%

Supply voltage 18 ... 36 V DC



With internal thread

- Also available with switching point preset in our works.

- Simple, mechanical adjustment of switching point

0520 Electronic Pressure Switch

Adjustment range in bar	Thread	p_{max} in bar	Burst press. in bar	Normally open (no) → :	Normally closed (nc) → :
0 – 10	G 1/4" internal	20 ^{*)}	30	0520 470 14 X 001	0520 471 14 X 001
0 – 100		200 ^{*)}	300	0520 472 14 X 001	0520 473 14 X 001
0 – 250		500 ^{*)}	600	0520 474 14 X 001	0520 475 14 X 001

Order number:

Add figure for diaphragm/seal material 0520 XXX XX X XXX 0520 XXX XX X XXX

NBR	Hydraulic / machine oil, turpentine, heating oil, air etc.	=	1	=	1
EPDM	Hydrogen, acetylene, ozone, brake fluid etc.	=	2	=	2
FKM	Hydraulic fluids (HFA, HFB, HFC, HFD), petrol/gasoline etc..	=	3	=	3

Temperature ranges of diaphragm materials

Temperature stability:		
	NBR	-30° ... +100°C
	EPDM	-30° ... +120°C
	FKM	-5° ... +120°C

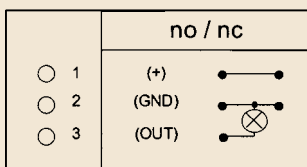
Warning!

When using with oxygen, the relevant accident-prevention regulations must be observed. In addition, we recommend that a maximum operating pressure of 10 bar is not exceeded.

*) Static pressure, dynamic pressures should be 30 to 50% lower. These values refer to the hydraulic or pneumatic part of the pressure switch.

Degree of protection IP 65

The type approval does not apply without restriction to all environmental conditions. It is the responsibility of the user to check whether the connection complies with regulations other than those stated, and whether it can be used for special applications which could not be foreseen by us in advance.



- For further technical data, see page 49

Electronic Pressure Monitoring



Electronic switches

- Precision pressure sensors for high accuracy (0.5 %)
- Electronic evaluation of switching point permits extremely small or very large hysteresis settings
- Switching point easily set by the user

Transmitters

- Medium-contact parts are all made of stainless steel for high resistance to chemicals
- No seals, and thus low leakage rate even with difficult gases
- Very small size for compact sub-assemblies
- High overpressure safety makes them suitable for use in hydraulic systems
- Flexible supply voltage, and current (4-20 mA) or voltage (10 V) output signal for your control electronics
- High accuracy (0.5 %) and reliability for secure process monitoring
- IP 67 with robust connections for reliable wiring
- Long working life even with high rates of pressure change

Technical data for electronic pressure switches

	0520	0570
Switching function:	Normally open / normally closed	Normally open / normally closed, programmable, time-delayed switching, zero-resetting, peak-value memory (within setting range), switching-pointcounter
Hysteresis:	2...95% programmable at our works (max. Tolerance $\pm 1.0\%$)	1...99% programmable using key-pad
Adjustment:	Switching point can be set on site by the customer using a screwdriver via a central setting potentiometer when operating voltage is applied	Programmable using membrane key-pad on front face
Outputs:	Transistor output (1.4 A / PNP)	2 Transistor outputs (each 1.4 A / PNP) 1 analogue output (4...20 mA)
Indication of circuit status:	—	By 2 LEDs (yellow)
Time-delayed switching:	—	Adjustable 0...3.0 s
Pressure display:	—	Current pressure can be shown in bar or PSI on 3-digit LED-display (red)
Materials:	Zinc-plated steel body (Fe/Zn12cC)	Medium-contact parts anodised aluminium, body is zinc die-casting
Access coding:	—	The switch can have a number code between 1 and 999
Supply voltage:	18...36 V DC	12...30 V DC
Degree of protection:	IP 65	
Switching time:	< 4 ms	
Temperature range:	-20°...+80°C (FKM -5°... +80°C)	
Temperature compensation:	-20°...+80°C, error = 1.5% overall	
Temperature drift:	$\pm 0.2\%$ / 10 K	
Life expectancy:	5 x 10 ⁶ cycles	
Vibration resistance:	10 g at 4 - 2000 Hz sine-wave	
Shock resistance:	294 m/s ² , 14 ms half-sine-wave to DIN 40046	
EMC:	To EN 50081-1, EN 50081-2, EN 50082-2	

Technical data for pressure transmitters

	0610	0620
Output:	0...10 V	4...20 mA (2-wire)
Supply voltage:	12 ... 30 VDC	
Accuracy:	$\pm 0.5\%$ at RT	
Temperature range:	-40°... +120°C	-40°... +100°C
Temperature drift:	ca. $\pm 0.2\%$ / 10 K	
Mechanical life expectancy:	10 ⁷ pulsations up to nominal pressure p _{nom.}	
Degree of protection:	IP 65 (IP 67 for M12x1 variant)	
Overpressure safety:	2 x p _{nom.}	
Bursting pressure:	3 x p _{nom.}	
Materials:	Stainless steel - body: 1.4301 / diaphragm: 1.4542	
Reverse-polarity protection:	Installed	
Max. length of connection cable:	30 m	

CE Marking

Directives of the European Council

**Machinery Directive,
EMC Directive
Low Voltage Directive
ATEX Directive**

Equipment that falls under these directives must have a declaration of conformity and carry the CE marking.

SUCO electronic switches comply with the EMC Directive 89/336/EC.

A EC Declaration of Conformity has been prepared for all products that fall under these directives and is kept on our premises. The catalogue pages for the relevant switches carry the CE marking.

