Mechanical single switch
Repeatability ±2.0 % at constant temperature

Features

Diaphragm seal piston pressure switch,
scale for setpoint reference

Adjustment ranges

-0.28 ... -0.9 bar, vacuum
0.1 ... 34 bar, pressure

Applications

Machine and tool engineering,
Dosing machines,
Plant engineering,
Lubricant monitoring

Technical Data

Wetted parts: Diaphragm: Process connection:	 NBR Optional: FKM, PTFE, EPDM, CR anodized aluminium Optional: brass, polysulfone, aluminium nickel-plated
Repeatability:	±1 % at constant temperature
Switching rate:	max. 20/min
Temperature range:	-30 °C... +70 °C
Protection class:	IP00
Housing:	Without housing for installation in control panels
Process connection: Pressure switches: Vacuum switches (VAC):	 1/4" NPT female Optional: 1/8" NPT female + 1/2" NPT male (P6) G1/4 female (P7) 1/4" NPT female (P4) 1/8" NPT female +1/2" NPT male (P6)

Electrical connection:	Screw terminals
Electrical rating and hysteresis:	Many micro switch versions with different switching powers and hysteresis are applicable and make it possible to make customized changes.
Weight:	E1S-...: approx. 0.35 kg
Set point adjustment: Pressure switches: Vacuum switches:	 Turn the adjustment screw clockwise to increase the set point. Switching point lowers by turning the adjustment screw clockwise.
Intrinsically safe:	The switches are designed for intrinsically safe applications. Please add "Exi" to your ordering details when placing an order. To comply with the intrinsically safe approval following max. ratings must not be exceeded: Umax = 28 V Imax = 50 mA
Approval:	---

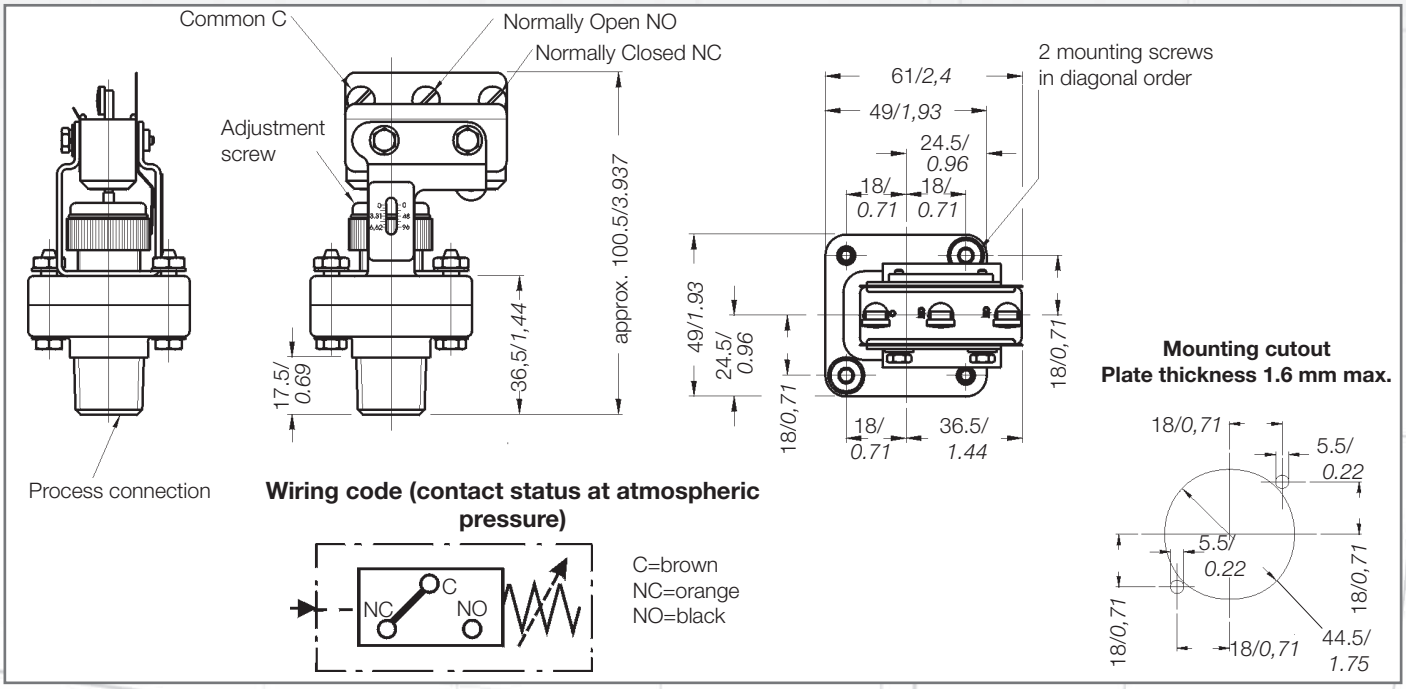
Pressure ranges

* Designed for 70 bar proof pressure, for practical production reasons, however, the standard proofing pressure is 30 bar.

Pressure range code	Adjustment range [bar]		Max. operating pressure [bar]	Proof pressure [bar] *	Max. hysteresis of switch types in bar (end of range)	
	Increasing press.	Decreasing press.		(short term)	H, GH [bar]	M, GM [bar]
Pressure switches						
15	0.10 ... 1.0	0.04 ... 1.0	46	30/70	0.08	0.080
90	0.80 ... 6.0	0.20 ... 5.0	46	30/70	0.55	0.680
250	2.10 ... 17.0	0.70 ... 16.0	46	30/70	1.37	1.440
500	3.70 ... 34.0	1.72 ... 32.0	46	30/70	1.93	2.750
Vacuum switches						
VAC	-0.28 ... -0.9	-0.20 ... -0.82	2.0	-1.0	0.08	0.077

Diaphragm Seal Piston Press. Switches — *Type E1S-...*

Dimensions (in mm / *inch*)



Electrical ratings

Micro switch	Special features	Volt AC 50/60 Hz	Ind. load A	Res. load A	Volt DC	Ind. load A	Res. load A	Comments
H	Micro switch with silver contacts	125 250	10 10	10 10	6 to 24	0.50	0.5	Small hysteresis; High AC / low DC loads
M	Micro switch with silver contacts	125 250	10 10	10 10	12 24 250	5.00 1.00 0.25	15.0 2.0 0.4	Medium hysteresis; High AC and DC loads
GH	Micro switch with gold-plated contacts for low voltage and/or low current	125	1	1	24	1.00	1.0	Small hysteresis
GM		30	0.1	0.1	30	0.10	0.1	Medium hysteresis

Process connection / diaphragm / option

Process connection			Diaphragm	
Pressure switches		Vacuum switches	VAC	not VAC
(**P4**)	1/4" NPT female	(**P4**) 1/4" NPT female	( ) NBR	( ) NBR
(**P6**)	1/8" NPT female + 1/2" NPT male	(**P6**) 1/8" NPT female + 1/2" NPT male	(**V**) FKM	(**V**) FKM
(**P6-PLS**)	material PLS, up to 17 bar only			(**T**) PTFE
(**P7**)	G1/4 female			(**N**) CR
				(**E**) EPDM

Ordering

Example for order number

Type		Micro switch		Pressure range code		Process connection		Diaphragm
E1S	–	**H**	–	**250**	–	**P6**	–	**V**

Your order number

Type		Micro switch		Pressure range code		Process connection		Diaphragm
	–		–		–		–	