

Diaphragm Seal Piston Press. Switches

E1S

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:	NBR Optional: FKM, PTFE, EPDM, CR anodized aluminium
Process connection:	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:	1/4" NPT female
Pressure switches:	Optional: 1/8" NPT female + 1/2" NPT male (P6) G1/4 female (P7)
Vacuum switches (VAC):	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:	Turn the adjustment screw clockwise to increase the set point.
Vacuum switches:	Switching point lowers by turning the adjustment screw clockwise.
Intrinsically safe:	on request
Approval:	---

Pressure Ranges

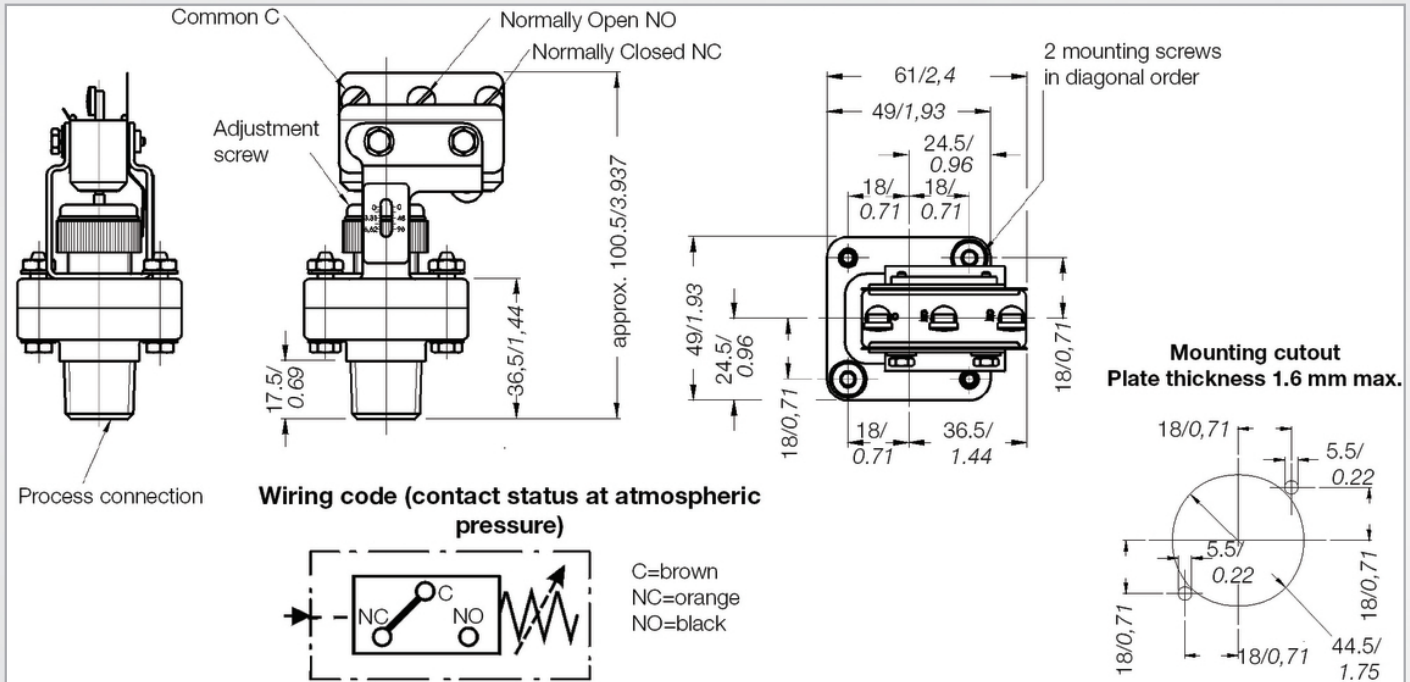
* Designed for 70 bar proof pressure, for practical production reasons, however, the standard proofing pressure is 30 bar.

Pressure range code	Adjustment range [bar]		Max. operating pressure [bar]	Proof pressure [bar] * (short term)	Max. hysteresis of switch types in bar (end of range)	
	Increasing press.	Decreasing press.			H, GH [bar]	M, [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

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Dimensions (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	0.50	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	1.00	Small hysteresis

Process Connection / Diaphragm

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 *

* on request

Order Code

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