

Diaphragm Seal Piston Press. Switches

Type E1H-...

Mechanical single switch
Repeatability $\pm 2.0\%$ at constant temperature

Features

Diaphragm seal piston pressure switch,
 set point can be adjusted with corresponding reference unit
 during operation

Measuring ranges

-0.28 ... -0.9 bar and
 0.1 ... 34 bar

Applications

Machine and tool engineering,
 Dosing machines,
 Plant engineering,
 Sprinkler control

Technical Data

Wetted parts:	
Diaphragm:	NBR
Process connection:	Optional: FKM, PTFE Anodized aluminium Optional: brass, polysulfone, aluminium nickel-plated
Repeatability:	$\pm 1\%$ at constant temperature
Switching rate:	max. 20/min
Temperature range:	-30 °C... +70 °C
System of protection	IP65
Housing:	Without housing for installation in control panels
Process connection:	
Overpressure switches:	1/4" NPT female 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 and cable gland PG13.5
Electrical ratings and hysteresis:	A large variety of microswitches offers different electrical ratings and hysteresis for many applications.
Weight:	E1S-...: approx. 0.35 kg
Set point adjustment:	
Overpressure switches:	Turn the adjustment screw clockwise to increase the set point.
Vacuum switches:	Turn the adjustment screw clockwise to decrease the set point.
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: U _{max} = 28 V I _{max} = 50 mA
Approval:	---

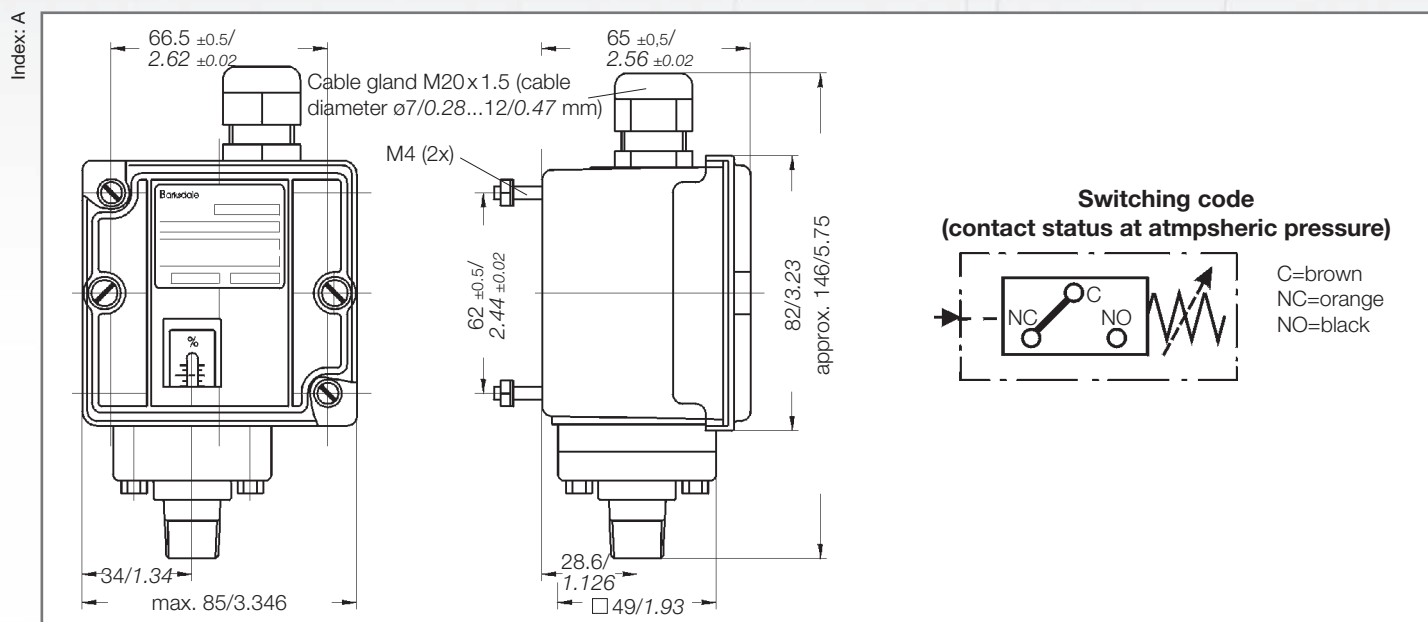
Adjustable ranges

Values shown in red (max. increasing pressure) = **max. operating pressure**

Pressure range code	Adjustable range [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]
Overpressure					
15	0.10 ... 1,0	0.04... 1,00	30/70	0.08	0.080
90	0.80 ... 6,0	0.20 ... 5,00	30/70	0.55	0.680
250	2.10 ... 17,0	0.70 ... 16,00	30/70	1.37	1.440
500	3.70 ... 34,0	1.72... 32,00	30/70	1.93	2.750
Vacuum					
VAC	-0.28 ... -0.9	0.20... 0,82	0,2	0.08	0.077



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	Microswitch with silver contacts	125 250	10 10	10 10	6 to 28	0.50	0.5	Small hysteresis; High AC / low DC loads
M	Microswitch 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	Microswitch with gold contacts for low voltage and 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

Process connection		Diaphragm	
Overpressure	Vacuum	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

Options

ST1	Plug, 3-pin + E, DIN EN 175 301-801-A (prev. DIN 43650)
ST2	Amphenol plug 4-pin + E
EXI	for intrinsically safe application
VAC	Vacuum

Ordering

Example for order number

Type	Microswitch	Pressure range	Process connection.	Diaphragm	Option
E1H	H	250	P6	V	ST2

Your order number

Type	Microswitch	Pressure range	Process connection.	Diaphragm	Option