

Metal Diaphragm Pressure Switches

D1S/D2S

Mechanical single/dual pressure switch
Repeatability ± 1.0 % at constant temperature

Features

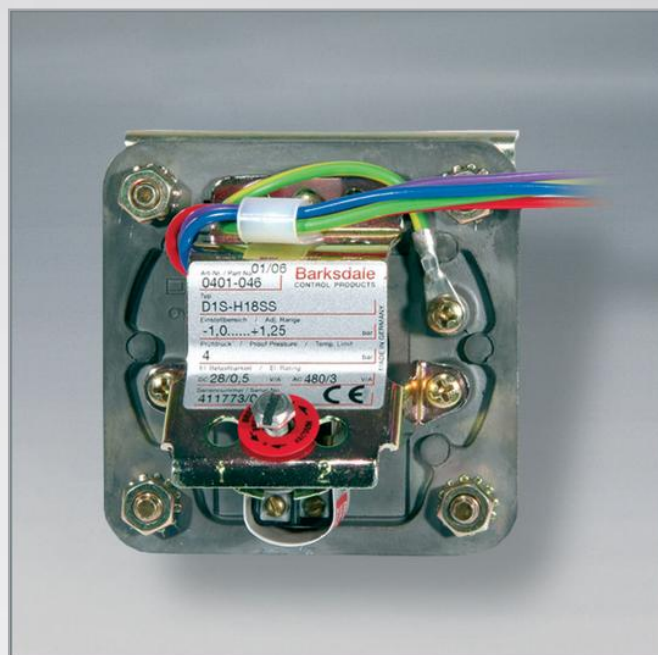
Metal diaphragm pressure switch
Wetted parts welded.
Direct action, no friction, high accuracy

Adjustment ranges

0.005 ... 10.3 bar and
-0.006 ... -1 bar (Vacuum)

Applications

Machine and tool engineering,
Autoclaves,
Pump control,
Refrigerant monitoring



Technical Data

| | |
|---------------------|---|
| Wetted parts: | Stainless steel 17 - 7PH/SS304 |
| Repeatability: | ± 1 % at constant temperature |
| Switching rate: | max. 20/min |
| Temperature range: | -40 °C... +75 °C |
| Protection class: | IP00 |
| Housing: | Without housing for installation in control panels |
| Process connection: | 1/4" NPT female thread Optional: 1/2" NPT female thread (P2) |

| | |
|------------------------------------|---|
| Electrical connection: | Lead wire PVC 1.5 mm ² , length appr. 450 mm |
| Electrical ratings and hysteresis: | A large variety of micro switches offers different electrical ratings and hysteresis for many applications. |
| Weight: | D1S-....: approx. 0.6 kg D2S-....: approx. 0.7 kg |
| Set point adjustment: | Turn the adjustment screw clockwise to decrease the set point |
| Approval: | --- |

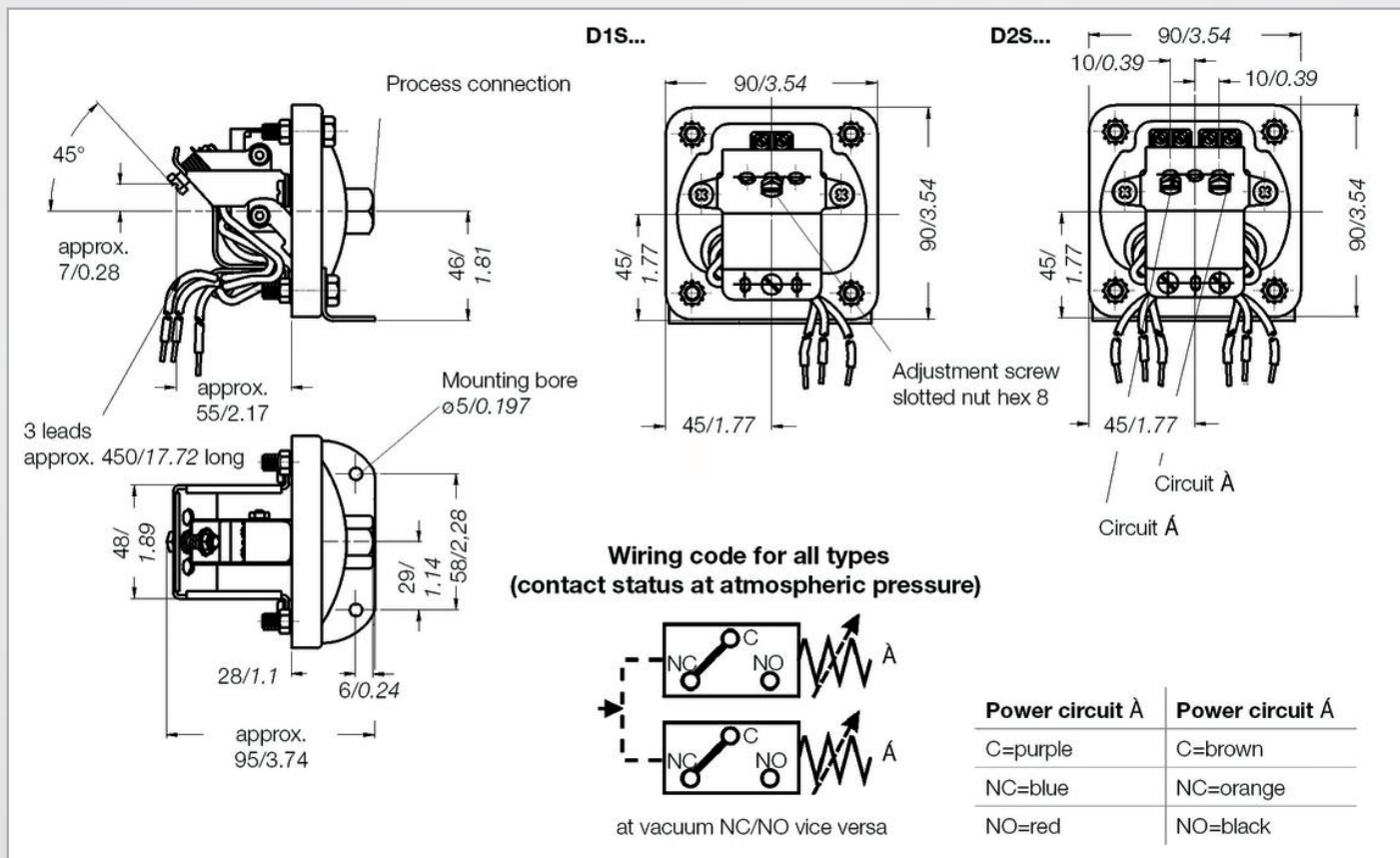
Pressure Ranges

| Pressure range code | Adjustment range [bar] | | Max. operating pressure [bar] | Proof pressure [bar] (short term) | The resulting hysteresis is approx. ... bar at the end of range | |
|---------------------|------------------------|-------------------|-------------------------------|--------------------------------------|---|-------------|
| | Increasing press. | Decreasing press. | | | H, GH [bar] | M, GM [bar] |
| Overpressure | | | | | | |
| 2SS | 0.005 ... 0.11 | 0.001 ... 0.11 | 0.13 | 0.2 | 0.004 | 0.006 |
| 3SS | 0.012 ... 0.20 | 0.002 ... 0.196 | 0.47 | 0.7 | 0.005 | 0.010 |
| 18SS | 0.050 ... 1.20 | 0.030 ... 1.20 | 2.7 | 4.0 | 0.018 | 0.040 |
| 80SS | 0.300 ... 5.50 | 0.030 ... 5.30 | 7.1 | 10.7 | 0.110 | 0.240 |
| 150SS | 0.500 ... 10.30 | 0.100 ... 9.90 | 13.3 | 20.0 | 0.190 | 0.420 |
| Vacuum | | | | | | |
| 3SS | -0.006 ... -0.20 | -0.002 ... -0.196 | 0.13 | 0.2 | 0.004 | 0.009 |
| 18SS | -0.040 ... -1.00 | -0.020 ... -0.970 | 0.67 | 1.00 | 0.030 | 0.060 |

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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 | 10 | 10 | 6 | 0.50 | 0.5 | Small hysteresis; High AC-/low DC-load |
| | | 250 | 10 | 10 | to 24 | | | |
| | | 480* | 3 | 3 | | | | |
| M | Micro switch with silver contacts | 125 | 10 | 10 | 12 | 5.00 | 15.0 | Medium hysteresis; High AC- and DC-loads |
| | | 250 | 10 | 10 | 24 | 1.00 | 2.0 | |
| | | 480* | 3 | 3 | 250 | 0.25 | 0.4 | |
| GH | Micro switch with gold contacts for low voltage and low current | 125 | 1 | 1 | 24 | 1.00 | 1.00 | Small hysteresis |
| GM | | 30 | 0.1 | 0.1 | 30 | 0.10 | 0.1 | Medium hysteresis |

Options

P2 = 1/2" NPT F SS Process connection

Order Code

Example for order number

| Type | Micro switch | Pressure range code | Options |
|------------|--------------|---------------------|---------|
| D1S or D2S | H | 3SS | P2 |

Your order number

| Type | Micro switch | Pressure range code | Options |
|------|--------------|---------------------|---------|
| | | | |