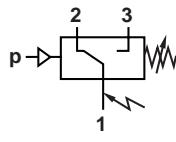


Herion 18D

Hydraulic pressure switches (piston type)

70 to 6100 psi



DIN 43650

Adjustable setpoint

Gold-plated contacts

Vibration resistant to 15 g

Microswitch approved by UL and CSA



Technical data

Medium

Hydraulics, lubricating and light fuel oils

Operation

Piston

Mounting position

Optional

Operating pressure

70 to 6100 psi

Over pressure

5800 psi,

08824xx: 8700 psi

Ambient temperature

-4°F to 175°F (-20°C to +80°C)

Viscosity

Up to 1000 mm²/s (± 450 ssu).

Fluid temperature

-4°F to 175°F (-20°C to +80°C)

Repeatability

$\pm 3\%$

Electrical connection

DIN 43 650

Switching element

Microswitch

Degree of protection

IP 65

Weight

.2 lbs (0.2 kg)

Materials

Housing aluminum

Port: stainless steel

Seals: Teflon/Buna-N

Model numbers - hydraulic applications

| Port Size | Type | Pressure Range psi (bar) | | Switching Pressure Difference (Hysteresis)* | | Model | Dimension Drawing No. | | |
|-------------|--------|--------------------------|-------------|---|--------|-------|-----------------------|---------|---|
| | | Lower Range | Upper Range | psi (bar) | bar | | | | |
| - | flange | 70 – 1015 | (5 – 70) | 152 | (10.5) | 218 | (15) | 0883100 | 2 |
| 7/16-20 UNF | female | 70 – 1015 | (5 – 70) | 152 | (10.5) | 218 | (15) | 0882119 | 1 |
| 1/4 NPT | female | 70 – 1015 | (5 – 70) | 152 | (10.5) | 218 | (15) | 0882120 | 1 |
| - | flange | 150 – 2320 | (10 – 160) | 160 | (11) | 247 | (17) | 0883200 | 2 |
| 7/16-20 UNF | female | 150 – 2320 | (10 – 160) | 160 | (11) | 247 | (17) | 0882219 | 1 |
| 1/4 NPT | female | 150 – 2320 | (10 – 160) | 160 | (11) | 247 | (17) | 0882220 | 1 |
| - | flange | 360 – 3600 | (25 – 250) | 160 | (11) | 247 | (17) | 0883300 | 2 |
| 7/16-20 UNF | female | 360 – 3600 | (25 – 250) | 160 | (11) | 247 | (17) | 0882319 | 1 |
| 1/4 NPT | female | 360 – 3600 | (25 – 250) | 160 | (11) | 247 | (17) | 0882320 | 1 |
| - | flange | 580 – 6100 | (40 – 420) | 247 | (17) | 508 | (35) | 0883400 | 2 |
| 7/16-20 UNF | female | 580 – 6100 | (40 – 420) | 247 | (17) | 508 | (35) | 0882419 | 1 |
| 1/4 NPT | female | 580 – 6100 | (40 – 420) | 247 | (17) | 508 | (35) | 0882420 | 1 |

Note: Switches are supplied with DIN 43650 mating connector

* Switching pressure difference (hysteresis) is not adjustable. Maximum values are shown.

Herion 18D

Hydraulic pressure switches

Vac - 435 psi

Making And/Or Breaking Capacity

| Load Level* | Type of Current | Type of Load | Vmin [V] | Maximum Permanent Current Imax [A] at V | | | Contact life electrical at I _{max} | Contact life mechanical at I = 0 |
|------------------------------------|-----------------|--------------------------|----------|---|-------|-------|---|--|
| | | | | 24 V | 125 V | 250 V | | |
| Standard (relays, solenoids) | AC | Resistive | 12 | 5 | 5 | 5 | 5×10^4 switching cycles | approx 10^7 switching cycles |
| | AC | Inductive PF = .7 | 12 | 3 | 3 | 3 | | |
| | DC | Resistive | 12 | 5 | .4 | - | | |
| | DC | Inductive L/R = 10 ms | 12 | 3 | .05 | - | | |
| Low (electronic circuits) | AC | Resistive | 5 | .34 | .08 | .04 | 2×10^5 switching cycles | approx 10^7 switching cycles |
| | DC | Inductive L/R = 10 ms | 5 | .1 | - | - | | |

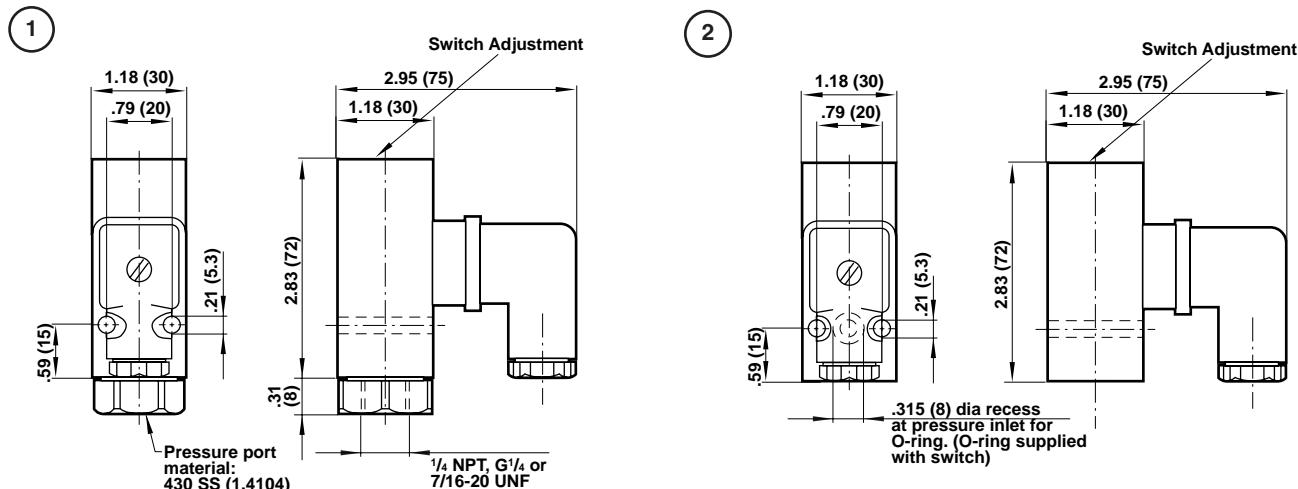
*Load Level Explanation

Series 18D Pressure Switches have microswitch contacts with gold-plating over silver base metal. The gold plating remains intact when "low level" voltage / current levels are observed. This feature assures highly reliable switching in low-level electronic circuits.

Standard applications do not require the gold plating – which will decay naturally when switching larger electrical loads.

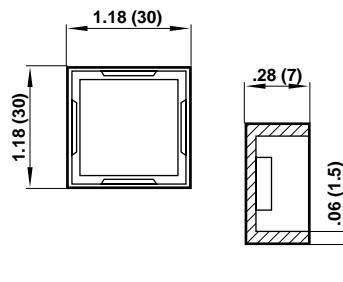
Notes:

1. Reference conditions: 30 cycles per min and 86°F (30°C) ambient.
2. Reducing load current to 50% of I_{max} approximately doubles contact life.
3. Creepage and clearance distances correspond to insulation group B per VDE Reg. 0110 (except contact clearance of microswitch).



Protective Cover

An optional elastomer cover for protection of the switch adjustment against dirt and splashing liquids Part No. 0554737



PSC-5