

# 0150

Vacuum switch up to 250 V with snap action switch

- Aluminium housing
- Operating voltage up to 250 V
- Snap action with silver contacts
- Overpressure safety up to 290 psi (20 bar)<sup>1)</sup>
- Socket device similar to DIN EN 175301 (DIN 43650)
- Differential approx. 1.5" - 3" HG (50 – 150 mbar)(non-adjustable)

P <sub>max.</sub> in psi (bar)	Adjustment range in HG (mbar) (relative)	Tolerance in HG (mbar) at room temperature	Thread	Order number
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### 0150 Vacuum switch

290 psi <sup>1)</sup> (20 bar) <sup>1)</sup>	3" - 29" (100-950 mbar)	± 1.5" (± 50 mbar)	1/8" BSPP female	0150 - 456 15 - 4 - 001
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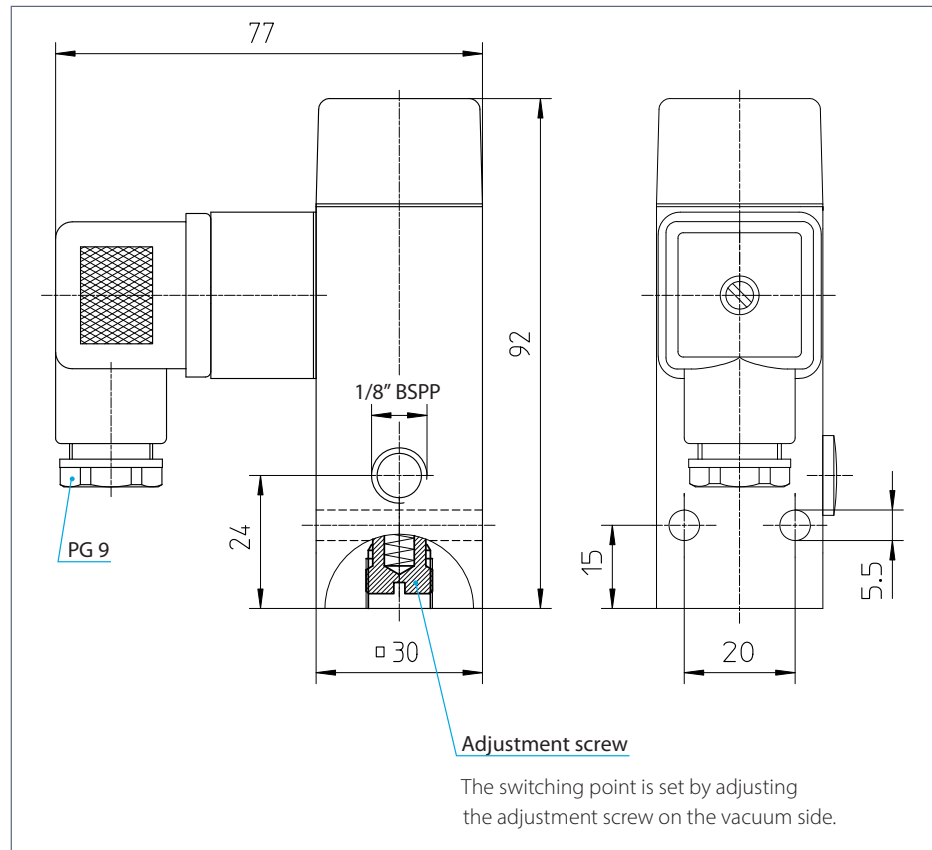
### Seal material – Application areas

ECO	Air, oils, greases, fuel/gasoline	4
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Temperature resistance: - 4 °F... +212 °F (-20 °C... +100 °C)

**Your order number:**

**0150 - 456 15 - 4 - 001**



<sup>1)</sup> Static value. Dynamic value is 30-50% lower. Values pertain to the hydraulic/pneumatic part of the pressure switch.

# Vacuum switches

## Technical data

M.9

Vacuum



Type:	<b>0150</b>	<b>0151</b>
Operating voltage:	10 ... 250 VAC/DC	10 ... 42 VAC/DC
Rated current (resistive load):	Refer to electrical values below	10 mA ... 4 A
Switching power:	Refer to electrical values below	100 VA
Temperature resistance of sealing materials:	-4 °F ... +212 °F (-20 °C ... +100 °C)	+5 °F ... +248 °F (-15 °C ... +120 °C)
Switching frequency:	200 / min.	
Mechanical life expectancy:	1,000,000 cycles	
Pressure rise rate:	≤ 14.5 psi/ms (≤ 1 bar/ms)	
Vibration resistance:	10 g; 5 ... 200 Hz sine wave; DIN EN 60068-2-6	
Shock resistance:	294 m/s <sup>2</sup> ; 14 ms half sine wave; DIN EN 60068-2-27	
Housing material:	Aluminium	Brass
Protection class:	IP65 with socket device	IP65, terminals IP00
Weight:	approx. 9.5 oz (270 g)	approx. 5 oz (140 g)

### 0150 Electrical values (also refer to page 14 for technical explanations)

Rated working voltage $U_e$	Rated working current $I_e$ (usage category)
250 VAC 50 / 60 Hz	5 A (AC 12)
250 VAC 50 / 60 Hz	1 A (AC 14)
24 VDC	3.5 / 3.5 A (DC 12 / DC 13)
50 VDC	2 / 1 A (DC 12 / DC 13)
75 VDC	1 / 0.5 A (DC 12 / DC 13)
125 VDC	0.3 / 0.2 A (DC 12 / DC 13)
250 VDC	0.25 / 0.2 A (DC 12 / DC 13)
Rated insulation voltage $U_i$ :	300 V
Rated impulse withstand voltage $U_{imp}$ :	2.5 kV
Conventional thermal current $I_{the}$ :	6 A
Switching overvoltage:	< 2.5 kV
Rated frequency:	DC and 50 / 60 Hz
Nominal current of short-circuit mechanism:	up to 6.3 A
Conditional short-circuit current:	< 350 A
Tightening torque of terminal screws:	< 0.35 Nm
Connector cross-section:	0.5 ... 1.5 mm <sup>2</sup>

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<p><b>Socket device</b></p> <p>to DIN EN 175301-803-A (DIN 43650)</p> <p>PG9 screw fitting (tightening range 6 – 9 mm) terminals for wire cross-sections: 0.34 ... 1.5 mm<sup>2</sup> (AWG 22 ... AWG 16), tightening torque for terminal screw 0.4 Nm</p> <p><b>With socket device fitted: IP65</b></p> <p>Suitable for voltages up to 250 V</p>	<p><b>Socket device</b></p> <p>With indicator lamp to DIN EN 175301-803-A (DIN 43650)</p> <p>PG9 screw fitting (tightening range 6 – 9 mm) terminals for wire cross-sections: 0.34 ... 1.5 mm<sup>2</sup> (AWG 22 ... AWG 16), tightening torque for terminal screw 0.4 Nm</p> <p><b>With socket device fitted: IP65</b></p> <p>Suitable for voltage 24 or 250 V</p>	<p><b>Socket device</b></p> <p>M 12x1 DIN EN 61071-2-101 D Straight 4-pin</p> <p>Terminals for wire cross-section 0.75 mm<sup>2</sup> (AWG 18), tightening torque for terminal screw 0.4 Nm</p> <p><b>With socket device fitted: IP65</b></p> <p>Suitable for voltages up to 48 V</p>	<p><b>Socket device</b></p> <p>M 12x1 DIN EN 61071-2-101 D Angled 4-pin</p> <p>Terminals for wire cross-section 0.75 mm<sup>2</sup> (AWG 18), tightening torque for terminal screw 0.4 Nm</p> <p><b>With socket device fitted: IP65</b></p> <p>Suitable for voltages up to 48 V</p>
<p>suitable for series</p> <p><b>0150 / 0161 / 0162 / 0175 0184 / 0185 / 0194 / 0195</b></p>	<p>suitable for series</p> <p><b>0150 / 0161 / 0162 / 0175 0184 / 0185 / 0194 / 0195</b></p>	<p>suitable for series</p> <p><b>0122 / 0123 / 0124 / 0125 0134 / 0135 / 0424 / 0425</b></p> <p>and for all transmitters and electronic pressure switches with an M12 connector</p>	<p>suitable for series</p> <p><b>0122 / 0123 / 0124 / 0125 0134 / 0135 / 0424 / 0425</b></p> <p>and for all transmitters and electronic pressure switches with an M12 connector</p>
<p>Order number: <b>1-1-84-652-009</b></p>	<p>Order number: for 24 VDC: <b>1-1-84-652-011</b> for 250 VAC: <b>1-1-84-652-010</b></p>	<p>Order number: <b>1-6-00-652-016</b></p>	<p>Order number: <b>1-6-00-652-017</b></p>

# Vacuum switches



- Switching point can be adjusted when fitted on site <sup>1)</sup>
- High overpressure resistance
- Long service life even under harsh conditions
- 0150 series available as a snap action switch, up to 250 V
- 0151 series available as NC or NO up to 42 V

<sup>1)</sup> Pressure switches can also be supplied preset at factory.  
Our preset switches are sealed with lacquer paint, set points are embossed on the housing.