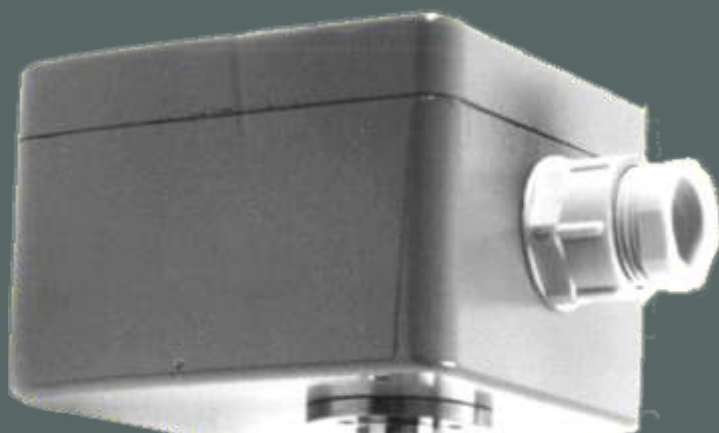


VRC/VRP Vacuum Switches



VRC

Electronic Vacuum Switch Absolute Pressure 1200 to 5 mbar

The VRC electronic vacuum switch can be used as a security switch or for directly switching a pump or valve in the rough vacuum range.

An additional recorder output allows a continuous monitoring of the process.

The IP54 category housing ensures protection in rough environmental conditions.



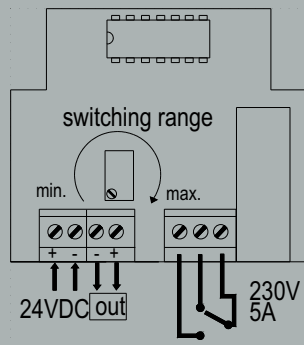
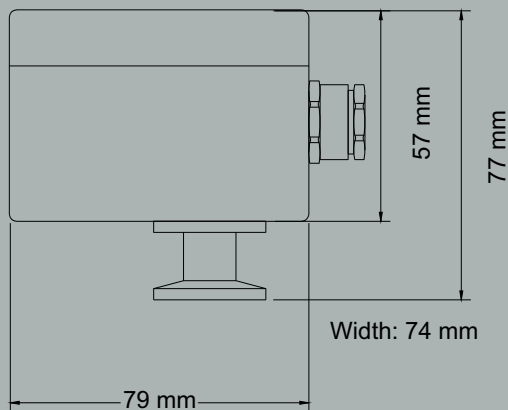
Typical Applications

- Control of vacuum appliances
- Operational control of vacuum pumps and plants
- Security switching
- Additional pump switching
- Pressure control in the rough vacuum range, e. g. for vacuum furnaces or control and regulation boards
- Process engineering
- Plant construction

Benefits

- Chemically resistant ceramic sensor with FKM sealing, FFKM sealing on request
- Dry relay switch point (switch-over relay)
- High reliability
- Excellent reproducibility
- After detaching the top the switch point is exactly adjustable over the whole range by means of a potentiometer
- Connection to vacuum source by KF small flange or G1/4 female thread
- Robust metal housing with IP54 protection class





Technical Data

Measuring Principle	Piezo resistive, independent of gas type
Materials In Contact With Vacuum	Stainless steel 1.4305, Al ₂ O ₃ , FKM (FFKM on request)
Measurement Range	1200 - 5 mbar (1050 - 4 Torr), max. overpressure: 4 bar absolute
Accuracy	+0.3% full scale
Setting Time	20 ms
Power Supply	18 - 30 VDC
Electrical Connection	Phoenix screw terminals
Power Consumption	Without relay 50 mA, with relay 70 mA
Operating Temperature	0...+40°C
Storage Temperature	-10...+60°C
Recorder Output	Actual value 10 mV/mbar, 5 mA
Switch Point	Set point output 0 - 1.2 V (1 mv / mbar), alternating relay contact 230 V, 5 A, hysteresis 7 mbar (standard, others on request)
Vacuum Connection	Stainless steel small flange DN 16 ISO-KF, G1/4 female thread
Protection Class	IP54
Weight	Approx. 450 g

Product Codes

- **VRC**
Electronic vacuum switch,
1200 to 5 mbar, vacuum connection
small flange DN 16 ISO-KF with G1/4
female thread, stainless steel

VRP

Electronic Vacuum Switch Absolute Pressure 20 to 1×10^{-3} mbar

The VRP electronic vacuum switch can be used as a security switch or for directly switching a pump or valve in the fine vacuum range.

An additional recorder output allows a continuous monitoring of the process.

The IP54 category housing ensures protection in rough environmental conditions.



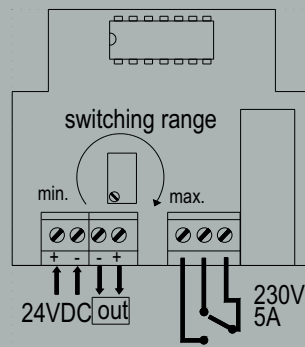
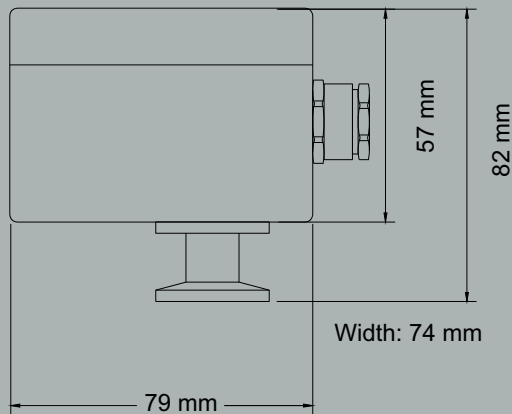
Typical Applications

- Controlling of vacuum appliances
- Operational control of vacuum pumps and plants
- Security switching
- Additional pump switching
- Pressure control in fine the vacuum range
- Process engineering
- Plant construction

Benefits

- Dry relay switch point (switch-over relay)
- High reliability
- Excellent reproducibility
- Economical Pirani measuring principle
- Long life Pirani filament
- After detaching the top the switch point is exactly adjustable over the whole range by means of a potentiometer
- Vacuum compatible connection
- Robust metal housing with IP54 protection class



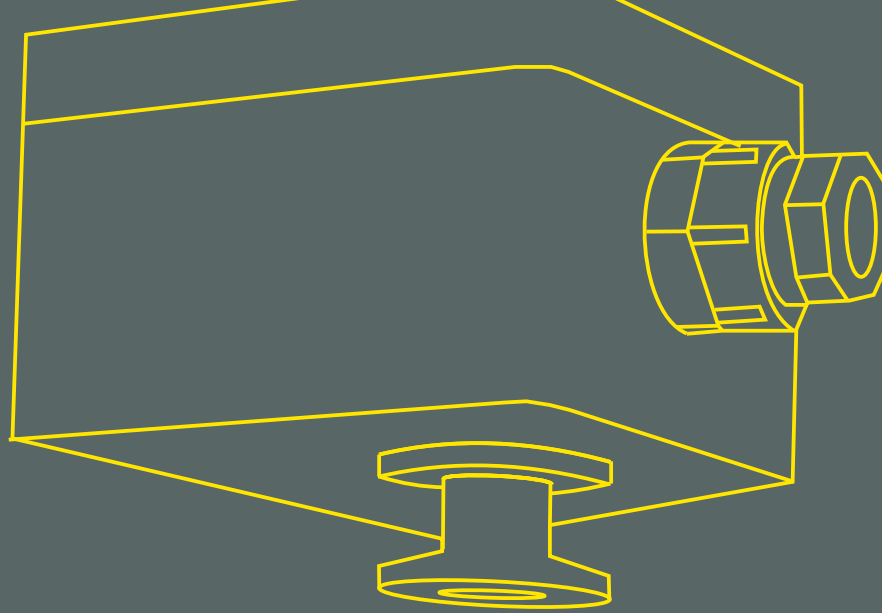


Technical Data

Measuring Principle	Pirani, depending on gas type
Materials In Contact With Vacuum	Stainless steel 1.4307, tungsten, nickel, glass
Measurement Range	20 - 1×10^{-3} mbar ($15 - 1 \times 10^{-3}$ Torr), max. overpressure 4 bar absolute
Accuracy	20 - 1×10^{-2} mbar: Approx. 10% from reading
Resolution	200 ms
Power Supply	18 - 30 VDC
Electrical Connection	Phoenix screw terminals
Power Consumption	Without relay: 80 mA, with relay 100 mA
Operating Temperature	0...+40°C
Storage Temperature	-10...+60°C
Recorder Output	0 - 1 V or 0 - 10 V; 5 mA
Switch Point	Alternating relay contact 230 V, 5 A, hysteresis depending on pressure range
Vacuum Connection	Stainless steel small flange DN 16 ISO-KF
Protection Class	IP54
Weight	Approx. 450 g

Product Codes

- **VRP**
Electronic Vacuum Switch,
20 to 1×10^{-3} mbar, vacuum
connection small flange
DN 16 ISO-KF, stainless steel



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