


Data Sheet (EN)

Translation of the german original



Designation, Model:	Order number:
Multi-range vacuum gauge, chemical resistant, VMpro 1	600092

Figure:	Description:
	<p>VMpro 1 chemical resistant multi-range vacuum gauge combines Pirani technology with the advantages of a ceramic capacitance diaphragm sensor in a single gauge.</p> <p>In the measurement range between 10 mbar and atmospheric pressure the capacitance diaphragm technology provides gas-type independent, highly accurate values for reliable pressure measurement.</p> <p>The built-in digital display gives clear readability for easy vacuum level monitoring and also shows the current measuring principle. There is a status indication light on top of the sensor.</p>

Technical data:		
Parameter	Data	Unit
Measuring range	1500 – 5x10 ⁻⁵	mbar
	1125 – 3.8x10 ⁻⁵	Torr
Accuracy		
5x10 ⁻⁴ – 1x10 ⁻³ mbar	±50	% of reading
1x10 ⁻³ – 100 mbar	±15	
100 – 950 mbar	±5	
950 – 1050 mbar	±2.5	
Repeatability		
1x10 ⁻³ – 1100 mbar	±2	% of reading
Max Pressure	10	bar
Admissible temperature		
Operation	+10 – +50	°C
Storage	-20 – +65	
Bakeout at flange	≤ +80	
Bakeout at flange long tube	≤ +250	
Vacuum connection	16 KF	DN
Maximum altitude	2000	m
Relative humidity, annual mean	≤ 65	% (non-condensing)
Voltage	100 - 240	V
Frequency	50 / 60	Hz
Plug adapters	EU (Schuko) & UK	-
Mounting orientation	Any	-
Internal volume	4.7	cm ³
Sensor weight	< 120	g
Sensor dimensions W/D/H	159 / 45 / 28	mm (including cable bend)

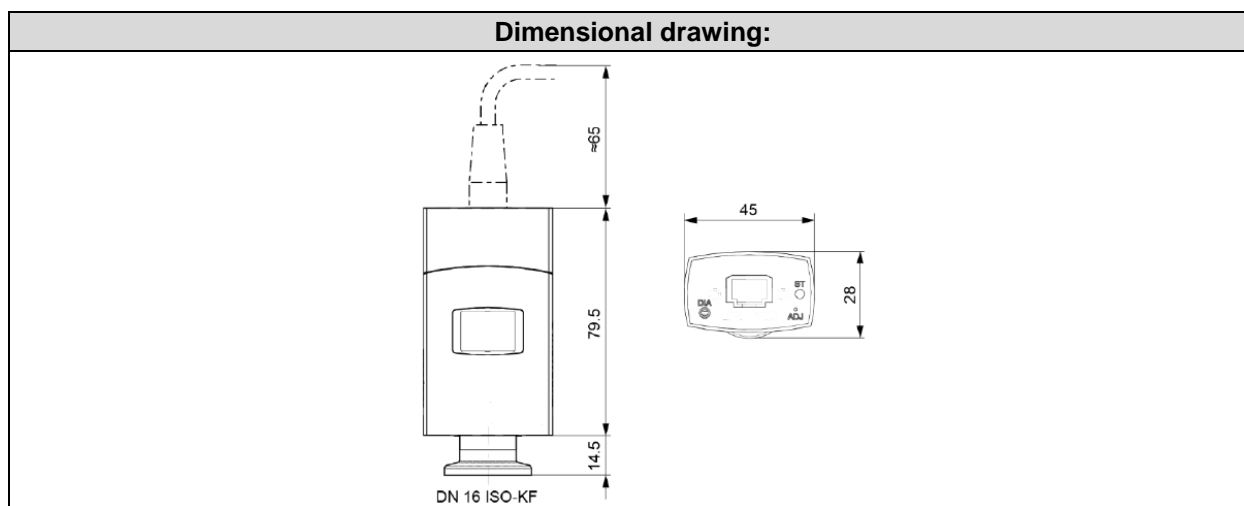
Scope of delivery: VMpro 1 vacuum gauge, AC/DC power adapter with EU and UK plug adapters, connection cable.

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Application:	Materials of the medium-affecting parts:	
The vacuum gauge VMpro 1 is intended for: <ul style="list-style-type: none"> Measuring absolute pressures in the rough and fine vacuum range which is created by, for example, diaphragm pumps, piston pumps, rotary vane pumps and similar devices Use in physical laboratories in education, R&D and industry Use for vacuum monitoring in general vacuum technology applications and fore vacuum measurement in UHV systems. 	Diaphragm sensor	Al ₂ O ₃ ceramic
	Pirani filament	Tungsten
	Feedthrough	Glass
	Flange	Stainless Steel
	Orifice	Stainless Steel
	Other parts	Ni, NiFe, Stainless Steel, SnAg



Accessories:	
Description	Order number
DN16KF clamping ring, Aluminium	701011
DN16KF external centring ring, Aluminium with FKM O-ring	701151
DN16KF internal centring ring with screen, Stainless Steel with FKM O-ring	701191
Hose nozzle adapter DN16KF flange - DN8-10 nozzle, Stainless Steel	710743
Hose nozzle adapter DN16KF flange - DN12 nozzle, Stainless Steel	701702
Schlenkline adapter DN16KF flange - NS14/23 cone, Stainless Steel	710213
Red rubber vacuum hose, 8mm ID, 5mm wall thickness	828310-4
Red rubber vacuum hose, 10mm ID, 5mm wall thickness	828310-3
Reducer flange, DN25/16KF, Stainless Steel	701401
Factory Calibration certificate for WELCH Vacuum gauges	L955112

Alternative items:	
Description	Order number
VMpro 2 chemical resistant multi-range vacuum gauge	600094
Vacuum measurement kit, DN16KF - includes VMpro 2 gauge, T-piece and connecting pieces	330051

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