

**SPECIFICATIONS FOR ROTARY VANE HIGH VACUUM PUMP,
DIGITAL VACUUM GAUGE AND COLD TRAP INTEGRATED WITH
DEWAR FLASK**

S. No.	Description of item	Quantity
1	<p style="text-align: center;"><u>Rotary Vane High Vacuum Pump</u></p> <p>A complete set up of Rotary Vane High Vacuum Pump including Digital Vacuum Gauge and Cold trap integrated with Dewar flask with the following technical specifications.</p> <p><u>1. Rotary Vane High Vacuum Pump:</u></p> <p><u>General Specifications:</u> High flow rates even at vacuum levels approaching ultimate vacuum High water vapor tolerance due to efficient gas ballast; very good ultimate vacuum even with gas ballast. Vacuum-tight at switch-off; external anti-suckback valve not needed Large oil volume: Long intervals between oil changes Ease of maintenance due to telescopic design</p> <p><u>Technical specifications:</u></p> <ul style="list-style-type: none"> • Number of stages: 2 • Max. Pumping Speed @ 50 Hz: 5.7 m³/hr • Ultimate Vacuum (abs.) without GB: 2 x 10⁻³ mbar • Ultimate Vacuum (abs.) with GB: 1 x 10⁻² mbar • With integrated vacuum controller. • Water Vapor Tolerance with GB: 40 mbar • Ambient temperature range (operation): 12 – 40 °C • Oil capacity (B-Oil) min./max.: 0.5-0.73 litres • Rated Motor Power: 0.18 kW • Rated Motor Speed 50 – 60 Hz: 1500 – 1800 rpm • Degree of Protection: IP 40 • Voltage: 230 V <p>Warranty min 3 Years</p> <p><u>2. Digital Vacuum Gauge</u></p> <p><u>General specifications:</u></p> <ul style="list-style-type: none"> • Precision and chemical resistance in an exceptionally wide range from atmosphere down to 10⁻³ mbar, one gauge only for both rough and fine vacuum • Compact design with integrated sensors for useful setup in laboratory and process 	<p style="text-align: center;">1 No</p> <p style="text-align: center;">1 No</p>

	<ul style="list-style-type: none"> • Chemical resistant combination of ceramic diaphragm sensor and ceramic jacketed Pirani sensor ensuring long product life even with aggressive chemicals • Illuminated display, easy to read • Display with user friendly handling <p><u>Technical Specifications for Digital Vacuum Gauge</u></p> <ul style="list-style-type: none"> • Vacuum sensor: Integrated • ATEX-approval: II 3/- G Ex h IIC T4 Gc X Internal Atm. Only • Upper measuring limit: 1100 mbar • Lower measuring limit: 1×10^{-3} mbar • Measurement principle: Ceramic diaphragm sensor + ceramic jacketed Pirani sensor • Accuracy of measurement: $\pm 10\%$ of indicated value in the range 0.01-5 mbar • Ambient temperature range (operation): 10 – 40 °C • Material of outer housing: Robust plastic housing with good chemical resistance • Interface: RS232C • Protection class: should be IP 54 <p><u>3. Cold trap integrated with Dewar flask:</u></p> <ul style="list-style-type: none"> • Dewar flasks according to DIN 12492 • Glass material borosilicate glass 3.3 ISO 3585 (DURAN) • Protective casing of Dewar flask made of blue coated metal or aluminum • For liquid cooling agents, e.g. LN2 (-196°C) • For solid cooling agents CO2 (-77°C) with solvent (CO2-wire basket necessary) • Pressure-free coolant sphere inside the Dewar flask • Reliable and easy handling • Should occupy minimum bench space 	1 No
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*Any deviations from the specified specifications will not be entertained.