

Dimensions: millimeters (inches)

The DS 402 is a dual-stage oil-sealed rotary vane pump that delivers a pumping speed of 17.4 m³/hr/12.3 CFM, and a base pressure of $<2 \times 10^{-3}$ mbar. The DS 402 is available with a universal-voltage single-phase motor rated for <0.9 kW, with integral power switch a 3 Φ motor is also available.

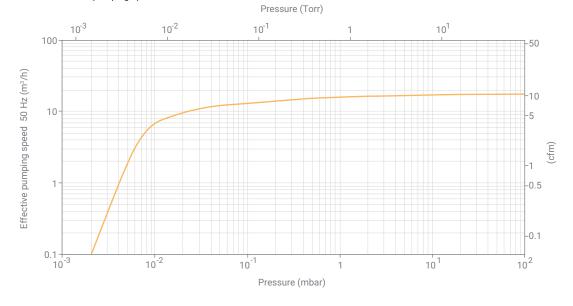
An inlet isolation valve is integrated into the pump to close off the inlet port whenever power to the pump is interrupted. This antibackstream valve maintains vacuum in the roughing, or foreline, and prevents pump oil from contaminating the vacuum chamber. The DS 402 has a manual gas ballast valve, which when opened, allows the pump to achieve its rated water-vapor handling specification of 550 gr/hr.



Free Air Displacement	60 Hz: 410 L/min (14.5 cfm)	50 Hz: 342 L/min (20.5 m³/h)
Pumping Speed*	60 Hz: 12.3 cfm	50 Hz: 17.4 m³/h
Ultimate Partial Pressure*	10 ⁻⁴ mbar	
Ultimate Total Pressure*	2 × 10 ⁻³ mbar	
Ultimate Total Pressure With Gas Ballast*	2 × 10 ⁻² mbar	
Water Vapor Tolerance	30 mbar	
Water Vapor Capacity	350 g/h	
Oil Capacity Min/Max	0.5/1 L	
Motor Rating 1 ph	60 Hz: 0.90 kW	50 Hz: 0.75 kW
Motor Rating 3 ph	60 Hz: 0.90 kW	50 Hz: 0.75 kW
Nominal Rotation Speed	60 Hz: 1,800 rpm	50 Hz: 1,500 rpm
Weight	35 kg (77 lb)	
Inlet Flange	DN 25 ISO-KF	
Exhaust Flange	DN 25 ISO-KF	

^{*} According to PNEUROP 6602







Ordering information

Description	Part Number	
Dual Stage Rotary Vane Pump:		
DS 402 with 1-Phase Worldwide Motor*	9499330	
DS 402 with 3-Phase Worldwide Motor	9499331	
* 1-phase motors (100 to 120/200 to 230) V ±10%, 50/60 Hz. ** 3-phase motors (200 to 220/380 to 415) V ±10% at 50 Hz or (200 to 230/460) V ±10% at 60 Hz All motors comply with CE and UL/CSA standards.		
Maintenance Kits		
Minor Maintenance Kit: Contains all the Valves, O-rings,	9499371	
and Seals to Refurbish the Pump to Vacuum Integrity	9499371	
Major Maintenance Kit: Includes all the Items of the Minor Kit Plus the Vanes	9499382	
Oil and Accessories		
Rotary Vane Fluid, DS19 Type, 1 Liter	9499390	
Rotary Vane Fluid, DS19 Type, 1 Liter (USA)*	K7516301	
Rotary Vane Fluid, DS19 Type, 1 Gallon (USA)	K7516302	
Oil Mist Eliminator	9499395	
Oil Mist Replacement Cartridge (Pkg. of 2)	9499394	
NW 25 Oil Exhaust Filter	9499392	
NW 25 Oil Exhaust Replacement Cartridge	9499342	
Oil Return Kit	9499376	
Oil Drain Extension	9499375	
European Plug Power Cable 2 Meters 1 ph	9499396	
USA Plug Power Cable 2 Meters 1 ph	9499397	
UK Plug Power Cable 2 Meters 1 ph	9499398	
NW 25 Centering Ring Viton	KC25AV	
NW 25 Aluminum Clamp	KQ25AWP	

^{*} When these pumps are used in Leak Detectors applications, we recommend the use of Rotary Vane Fluid (Elite-Z mechanical, part number 695409005) as it features a lower vapor pressure.



www.agilent.com/en/ product/vacuum-technologies/oilsealed-rotary-vane-pumps/dualstage-ds-rotary-vane-pumps/ds-402rotary-vane-pump

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