

N 630.1.2 SERIES

PROCESS VACUUM PUMPS AND COMPRESSORS



N 630.1.2 SP9 E

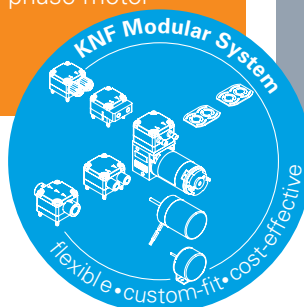
ADVANTAGES

- High level of gas tightness
 $< 5 \times 10^{-5}$ mbar l/s
- High chemical resistance
- Ambient and media temperatures of up to 60 °C (140 °F) possible with water cooling
- 1/4" NPT threaded ports available
- Stable base rails with vibration reducing shock mounts
- Custom configurations of motors, wetted materials, & performance
- The pump can start against the entire vacuum and pressure range with a 3-phase motor

POSSIBLE AREAS OF USE

- Valuable gas recovery
- Noble gas purification
- Dangerous gas transfer
- Clean pressure boost
- Petro/Chemical/Process industries

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to get more information



PERFORMANCE DATA

Series model	N 630.1.2 - 50 Hz Version		N 630.1.2 - 60 Hz Version	
Material design	ST.9 E / ST.13 E	SP.9 E / SP.13 E	ST.9 E / ST.13 E	SP.9 E / SP.13 E
Pump head	316 Stainless Steel		316 Stainless Steel	
Diaphragm	PTFE-coated	EPDM	PTFE-coated	EPDM
Valves	Superflex Stainless Steel		Superflex Stainless Steel	
Flow rate at atm. pressure (l/min)	58.0		68.0	
Ultimate vacuum (mbar abs.)	120		120	
Max. operating pressure (bar g/psig)	7.0/101.5		7.0/101.5	
Permissible ambient temperature (°C/°F)	5 - 60 / 40 - 140 (40/104 without water cooling)		5 - 50 / 40 - 122 (40/104 without water cooling)	
Permissible media temperature (°C/°F)	5 - 60 / 40 - 140 (40/104 without water cooling)		5 - 60 / 40 - 140 (40/104 without water cooling)	
Level of gas tightness (mbar x l/s) .9 / .13	6x10 ⁻³ /5x10 ⁻⁵		6x10 ⁻³ /5x10 ⁻⁵	
Weight (kg/lbs)	45.0/99.2		45.0/99.2	

ELECTRICAL DATA

Voltage (V)	230/400	200/346	220/380	277/480	230	100	220	115
Motor	Three-phase motor				Single-phase capacitor motor			
Motor protection class	IP 55				IP 55			
Pump protection class	IP 20				IP 20			
Frequency (Hz)	50	50/60	60	60	50	50/60	60	60
Power P ₂ (W)	750				750			
I _N (A), 50 Hz	3.3/1.9	3.8/2.2	-	-	5.3	11.8	-	-
I _N (A), 60 Hz	-	3.3/1.9	3.3/1.92	2.6/1.51	-	10.6	5.7	11.0

N 630.1.2 ST.9 E | ST.13 E

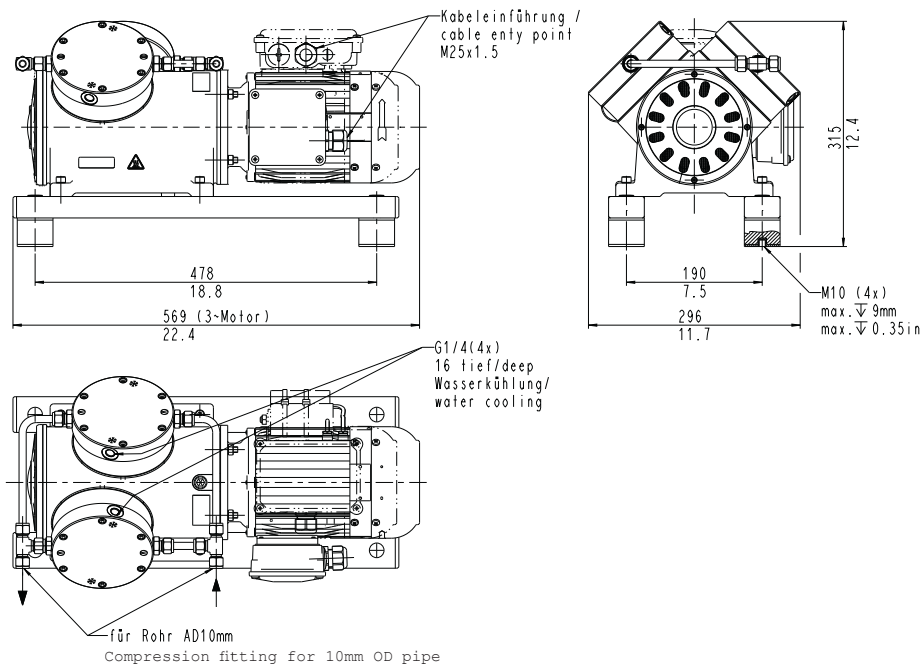
PERFORMANCE DATA

Series model	Flow rate at atm. pressure (l/min) ¹⁾	Max. operating pressure (bar g/psig)	Ultimate vacuum (mbar abs.)
N 630.1.2 ST.9 E - 50 Hz	58.0	7.0/101.5	120
N 630.1.2 ST.13 E - 50 Hz	58.0	7.0/101.5	120
N 630.1.2 ST.9 E - 60 Hz	68.0	7.0/101.5	120
N 630.1.2 ST.13 E - 60 Hz	68.0	7.0/101.5	120

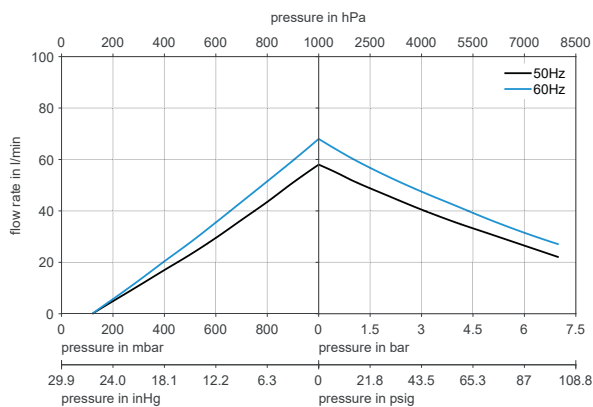
¹⁾ Flow rate determined at 20 °C/68 °F, 1013 mbar abs.

(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

N 630.1.2 ST.9 E | ST.13 E

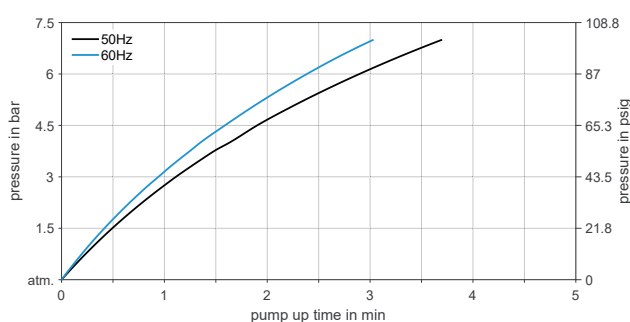


N 630.1.2 ST.9 E | ST.13 E



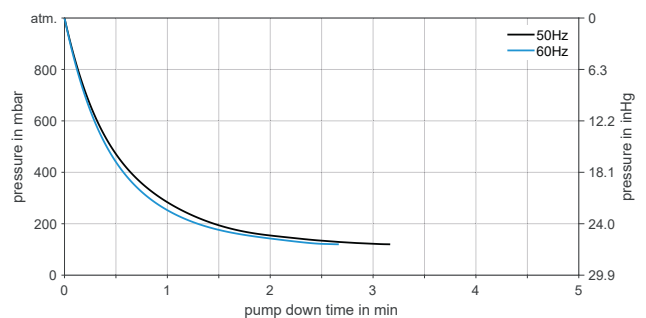
N 630.1.2 ST.9 E | ST.13 E

PUMP UP TIME FOR 20 LITER VESSEL



N 630.1.2 ST.9 E | ST.13 E

PUMP DOWN TIME FOR 20 LITER VESSEL



N 630.1.2 SP.9 E | SP.13 E

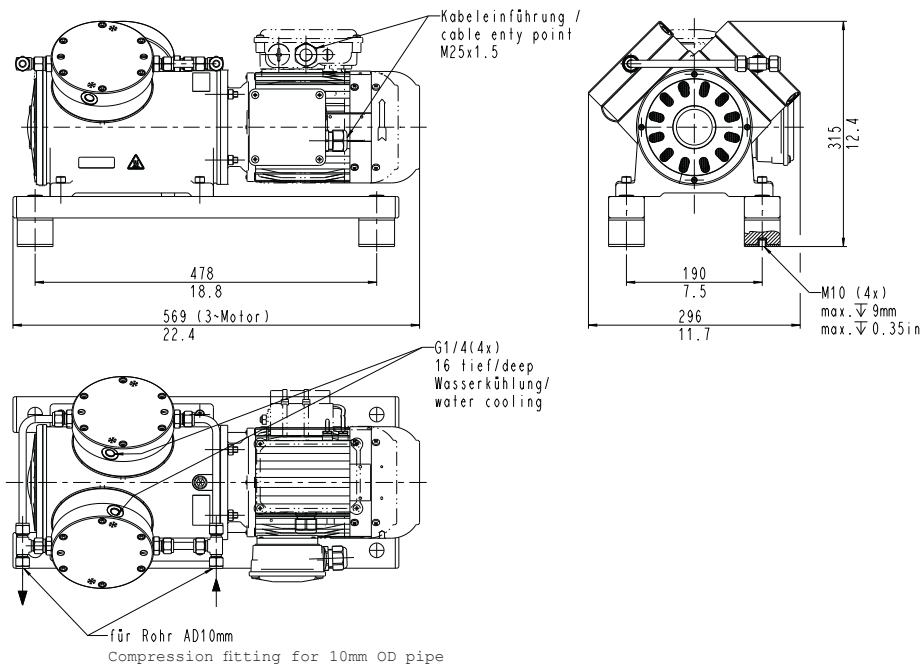
PERFORMANCE DATA

Series model	Flow rate at atm. pressure (l/min) ¹⁾	Max. operating pressure (bar g/psig)	Ultimate vacuum (mbar abs.)
N 630.1.2 SP.9 E - 50 Hz	58.0	7.0/101.5	120
N 630.1.2 SP.13 E - 50 Hz	58.0	7.0/101.5	120
N 630.1.2 SP.9 E - 60 Hz	68.0	7.0/101.5	120
N 630.1.2 SP.13 E - 60 Hz	68.0	7.0/101.5	120

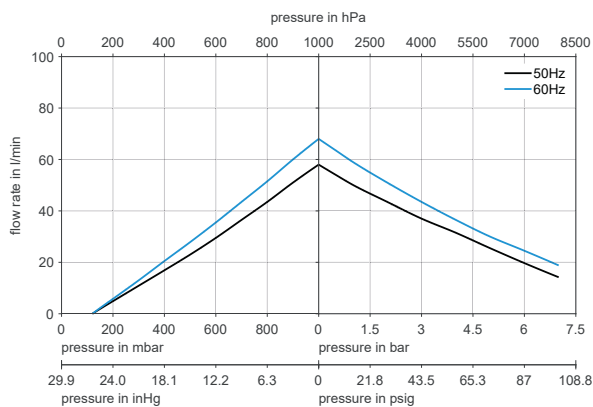
¹⁾ Flow rate determined at 20 °C/68 °F, 1013 mbar abs.

(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

N 630.1.2 SP.9 E | SP.13 E

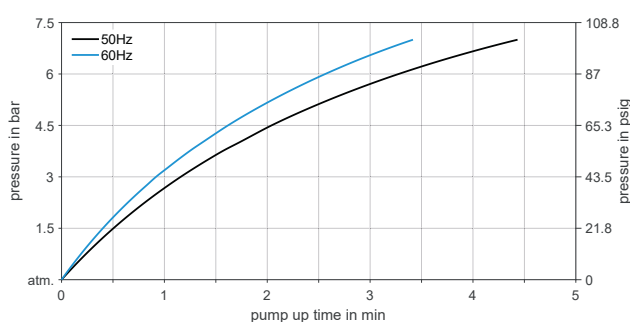


N 630.1.2 SP.9 E | SP.13 E



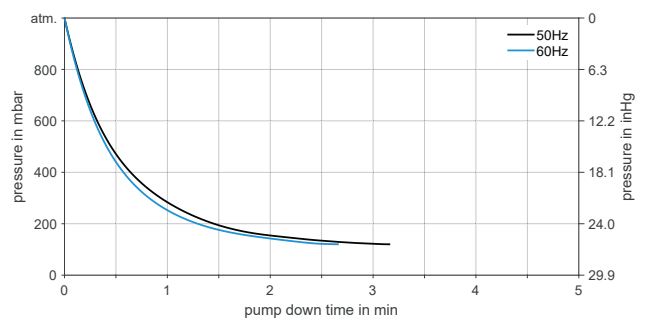
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PUMP UP TIME FOR 20 LITER VESSEL



N 630.1.2 SP.9 E | SP.13 E

PUMP DOWN TIME FOR 20 LITER VESSEL



ACCESSORIES/SPARE PARTS

Description	Illustration	Part No.	Details
Water cooling connection assembly		310443	N 630.1.2 S_.9 E S_.13 E
Inlet filter		316661	
Transport eyebolt		311535	
Wrench for retainer plate		321664	
Retainer plate screw		314279	
Spare parts kit		321882	N 630.1.2 ST.9 E
Spare parts kit		321883	N 630.1.2 ST.13 E
Spare parts kit		321879	N 630.1.2 SP.9 E
Spare parts kit		321880	N 630.1.2 SP.13 E

The performance values for the series models shown on this data sheet were determined under test conditions. The actual performance values may differ and depend in particular on the usage conditions and therefore on the specific application, on the parameters of the components involved in the user's system and on any technical modifications carried out which deviate from the standard configuration or the as delivered condition.

If individual designs have been created for specific customers on the basis of series models, other technical performance data may apply. Before operation begins, the relevant operating instructions and/or assembly or installation instructions should be read and the safety information contained in these instructions should be noted. KNF reserves the right to make changes to the product and the associated documentation without prior notice to the customer.



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