

N 630.1.2 SERIES EXPLOSION PROOF PUMPS



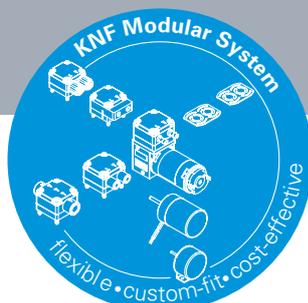
N 630.1.2 ST.9 E Ex

ADVANTAGES

- High chemical resistance
- Durable even with difficult operating conditions
- High gas tightness up to 5×10^{-5} mbar x l/s as a standard
- Flameproof motor with intrinsically safe terminal box for simple installation
- .12 version with additional safety diaphragm for preventing gas from escaping through cracks in the working diaphragm

POSSIBLE AREAS OF USE

- Environmental monitoring – especially in potentially explosive fields
- Process industry
- Chemical industry
- Energy technology
- Maritime – especially for engine monitoring and emission measurement



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PERFORMANCE DATA				
Series model	N 630.1.2 - 50 Hz Version		N 630.1.2 - 60 Hz Version	
Material design	ST.9 E Ex	ST.12 E Ex	ST.9 E Ex	ST.12 E Ex
Pump head	Stainless steel			
Diaphragm	PTFE-coated			
Valves	Stainless steel			
Flow rate at atm. pressure (l/min)	58.0		68.0	
Ultimate vacuum (mbar abs.)	120			
Max. operating pressure (bar rel./psig)	4.0/58.0	3.0/43.5	4.0/58.0	3.0/43.5
Permissible ambient temperature (°C)	+5 ... +40			
Permissible media temperature (°C)	+5 ... +40			
Gas tightness (mbar x l/s)	6×10^{-3}	5×10^{-5}	6×10^{-3}	5×10^{-5}
Weight (kg/lbs)	47.5/104.7	49.5/109.1	47.5/104.7	49.5/109.1
ELECTRICAL DATA				
Voltage (V)	230/400	200/346	220/380	277/480
Motor	Three-phase motor			
Protection class motor	IP 55			
Protection class pump	IP 20			
Frequency (Hz)	50	50/60	60	
Power P ₂ (W)	370			
Explosion protection three-phase motor	Ex II 2G Ex de IIC T4 Gb			
I _N (A), 50 Hz	1.65/0.95	1.92/1.11	-	
I _N (A), 60 Hz	-	1.8/1.04	1.73/1.0	1.44/0.83
Explosion protection pump parts	Ex II 2G Ex h IIB+H2 T3 Gb			

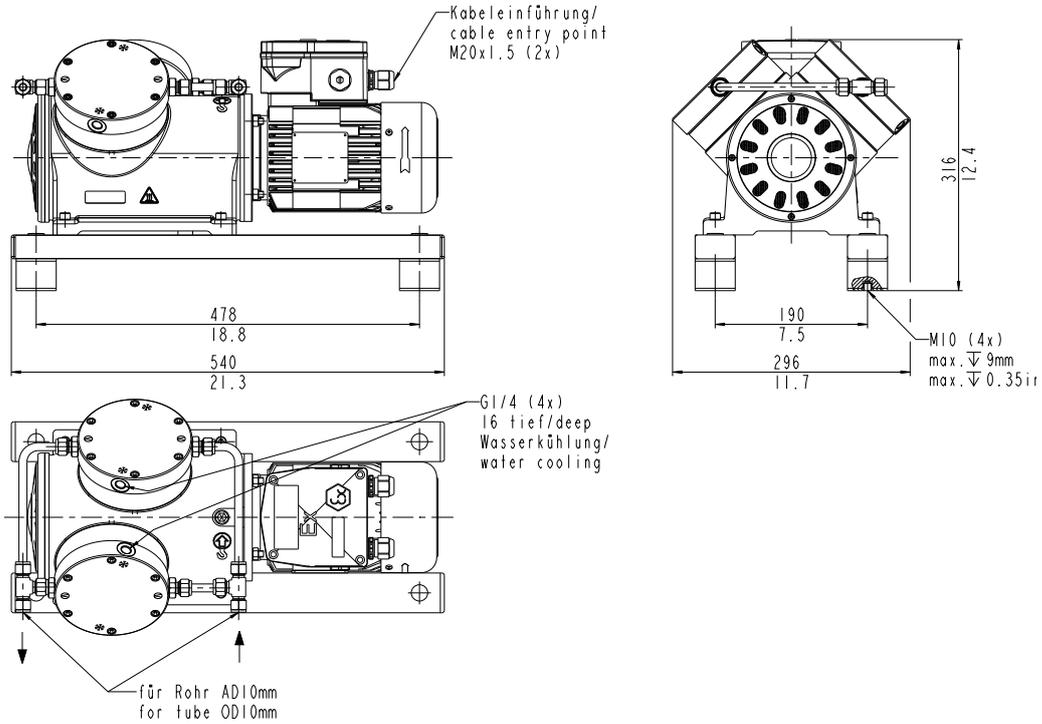
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PERFORMANCE DATA

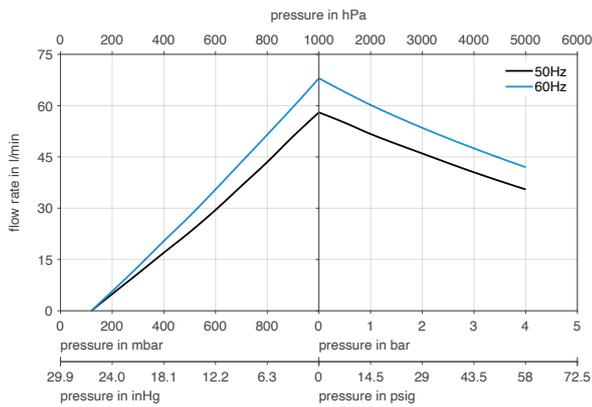
Series model	Flow rate at atm. pressure (l/min)	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
N 630.1.2 ST.9 E Ex - 50 Hz	58.0	4.0/58.0	120
N 630.1.2 ST.9 E Ex - 60 Hz	68.0	4.0/58.0	120

Flow rate determined at 20 °C, 1013 mbar abs.
 (Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

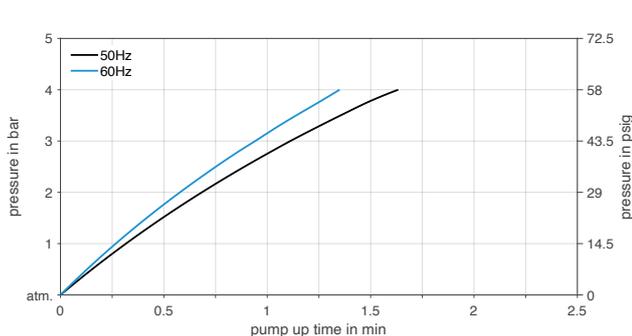
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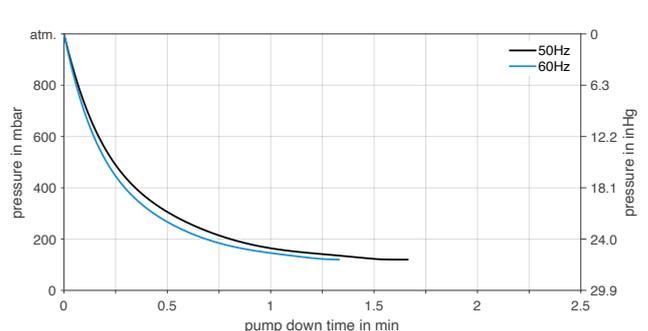
N 630.1.2 ST.9 E EX



N 630.1.2 ST.9 E EX | PUMP UP TIME FOR 20 LITER VESSEL



N 630.1.2 ST.9 E EX | PUMP DOWN TIME FOR 20 LITER VESSEL



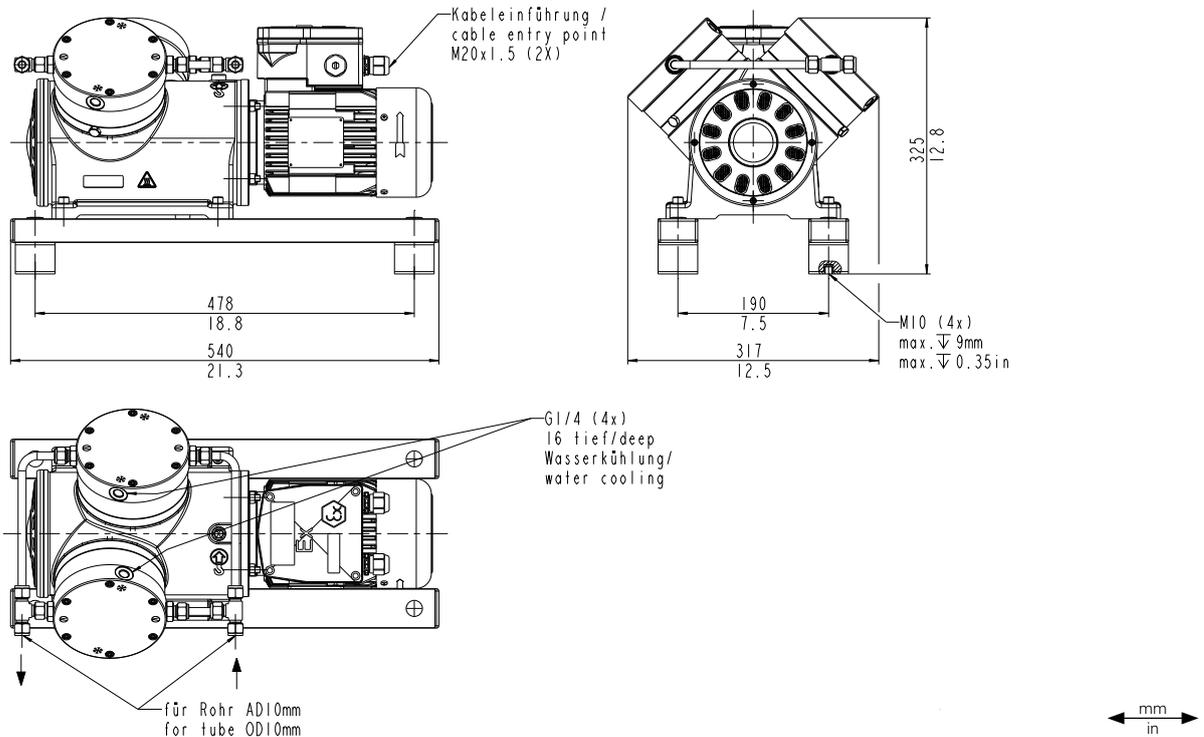
N 630.1.2 ST.12 E EX

PERFORMANCE DATA

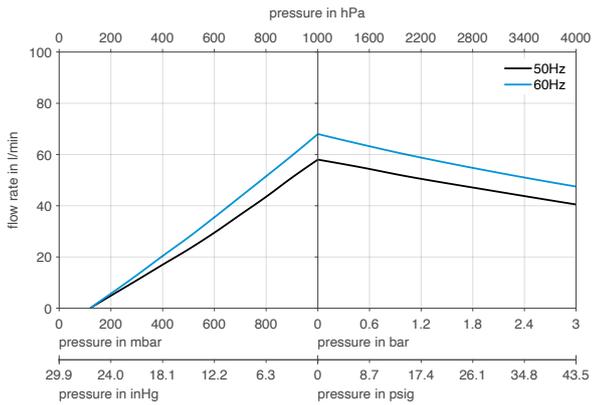
Series model	Flow rate at atm. pressure (l/min)	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
N 630.1.2 ST.12 E Ex - 50 Hz	58.0	3.0/43.5	120
N 630.1.2 ST.12 E Ex - 60 Hz	68.0	3.0/43.5	120

Flow rate determined at 20 °C, 1013 mbar abs.
 (Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

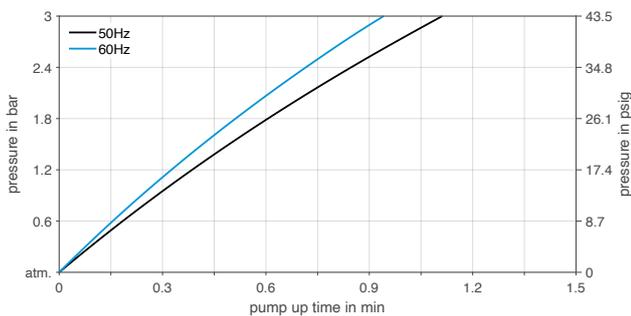
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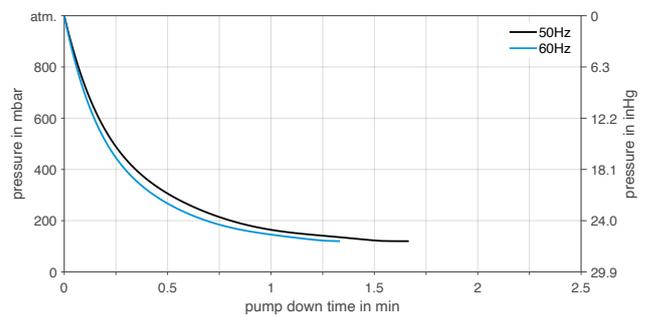
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N 630.1.2 ST.12 E EX | PUMP UP TIME FOR 20 LITER VESSEL



N 630.1.2 ST.12 E EX | PUMP DOWN TIME FOR 20 LITER VESSEL



OPTIONS

Description	Illustration	Details
Mechanical adjustment of pumping capacity	 <p>A circular gauge with a needle pointing to the right, labeled 'FLOW' below it.</p>	The pumping capacity can be adjusted at the factory to accommodate inlet pressure and for accurate alignment with the customer's system
Versions for special gases	 <p>A blue rectangular box with the text 'CORROSION RESISTANT' inside.</p>	Adjustment of the pump head for use with highly corrosive gases, for example with certain ozone or chlorine concentrations. Options include Hastelloy or PTFE pump head components or SilcoTek™ coating
Cleaned contact material parts	 <p>An illustration of a pump head component with a starburst effect, indicating cleaning or certification.</p>	For the use of the pump with gases with high oxygen concentrations the parts that come into contact with the medium can be cleaned using a certified process
Special coating	 <p>An illustration of a spray gun, representing a coating process.</p>	Special coatings for high corrosion protection (C4) for use in industrial areas and coastal areas with moderate salinity, such as maritime applications
Certified head components	 <p>An illustration of a pump head component next to a document with a checkmark, representing certification.</p>	The components that come into contact with the medium are available with material certificates
Country-specific Ex certificates	 <p>A globe next to a yellow hexagonal sign with the text 'Ex' inside, representing explosion protection certificates.</p>	Pumps with certificates for NEC Ex, KOSHA, PESO, NEPSI and JIS are also available

ACCESSORIES

Description	Illustration	Part No.
Connection water cooling device N 630.1.2 ST.9 E Ex		310443
Connection water cooling device N 630.1.2 ST.12 E Ex		310444
Inlet filter		316661
Wrench for retainer plate		321664
Retainer plate screw N 630.1.2 ST.9 E Ex		314279
Retainer plate screw N 630.1.2 ST.12 E Ex		314280
Sprocket for coupling		322095
Test adapter for coupling		322184

SPARE PARTS

Description	Part No.
Spare parts kit N 630.1.2 ST.9 E Ex	321882
Spare parts kit N 630.1.2 ST.12 E Ex	325527

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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