

N 922 STAINLESS STEEL SERIES EXPLOSION PROOF PUMPS



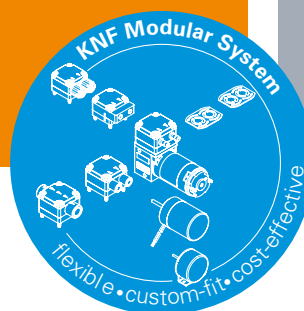
N 922 STE Ex

ADVANTAGES

- Motor approved in accordance with ATEX⁴⁾/IECEX⁵⁾
- High level of gas tightness: 6×10^{-3} mbar x l/s according to type examination
- Durable even with difficult operating conditions
- Compressor housing can be turned in 90° intervals as required

POSSIBLE AREAS OF USE

- Environmental monitoring
- Process industry
- Chemical industry



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PERFORMANCE DATA

Series model	N 922 - 50 Hz Version	N 922 - 60 Hz Version
Material design	STE Ex	
Pump head	Stainless steel	
Diaphragm	PTFE-coated	
Valves	Stainless steel	
Flow rate at atm. pressure (l/min) ¹⁾³⁾	20.0 ± 10 %	23.0 ± 10 %
Ultimate vacuum (mbar abs.) ¹⁾	110	
Max. operating pressure (bar rel./psig) ¹⁾²⁾	2.5/36.3	
Permissible ambient temperature (°C) ¹⁾	+5 ... +50	
Permissible media temperature (°C) ¹⁾	+5 ... +50	
Weight (kg/lbs)	8.6/19.0	

ELECTRICAL DATA

Voltage (V)	230 ⁴⁾	100 ⁵⁾	220 ⁵⁾	115 ⁵⁾	230/400 ⁴⁾
Motor	Capacitor motor				Three-phase motor
Protection class motor	IP 66				
Protection class pump	IP 54				
Frequency (Hz)	50	50/60	50/60	50/60	50
Power P ₂ (W)	120				
I _{max} (A), 50 Hz	1.09	2.28	1.09	2.18	0.85/0.49
I _{max} (A), 60 Hz	-	2.26	1.06	2.12	-
Explosion protection pump parts	Ex II 2/2G Ex h IIB+H2 T3 Gb ⁴⁾				
Explosion protection motor	Ex II 2G Ex db eb IIC T4 Gb ⁴⁾	Ex db eb IIC T4 Gb ⁵⁾			Ex II 2G Ex db eb IIC T4 Gb ⁴⁾

¹⁾expanded performance available upon request | ²⁾bar rel relative to 1013 hPa | ³⁾Flow rate determined at 20 °C, 1000 mbar abs. (Pressure 0 to 1000 mbar abs. in accordance with ISO 21360/ISO 8778) ⁴⁾ATEX only applies within the EU. | ⁵⁾IECEX only applies outside the EU. Operation of this pump is not permitted in the EU! The pump does not comply with EU directives.

N 922 STE EX | CAPACITOR MOTOR

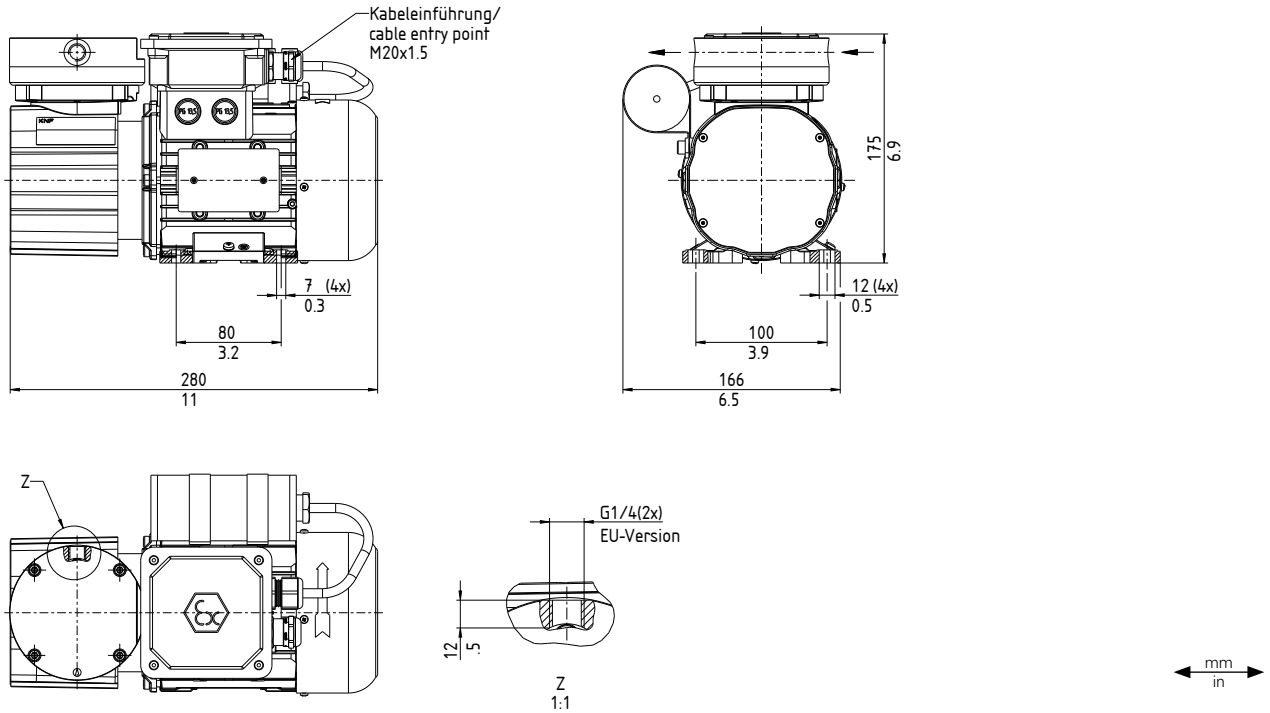
PERFORMANCE DATA

Series model	Flow rate at atm. pressure (l/min) ³⁾	Max. operating pressure (bar rel./psig) ²⁾	Ultimate vacuum (mbar abs.)
N 922 STE Ex- 50 Hz	20.0 ± 10 %	2.5/36.3	110
N 922 STE Ex- 60 Hz	23.0 ± 10 %	2.5/36.3	110

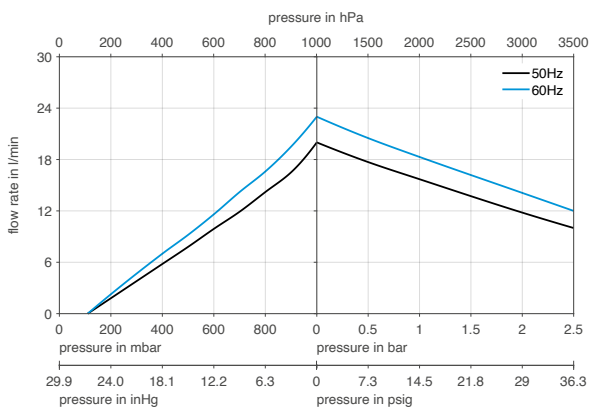
²⁾bar rel relative to 1013 hPa

³⁾Flow rate determined at 20 °C, 1000 mbar abs. (Pressure 0 to 1000 mbar abs. in accordance with ISO 21360/ISO 8778)

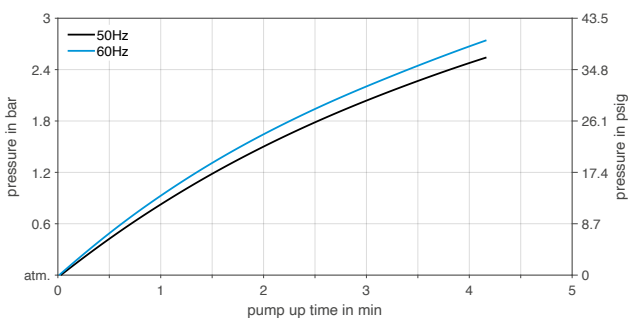
N 922 STE EX



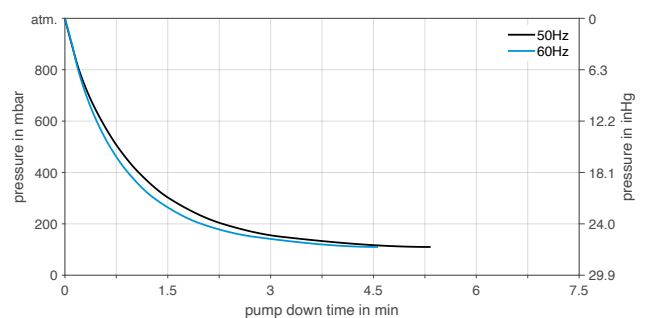
N 922 STE EX



N 922 STE EX | PUMP UP TIME FOR 20 LITER VESSEL



N 922 STE EX | PUMP DOWN TIME FOR 20 LITER VESSEL



N 922 STE EX | THREE-PHASE MOTOR

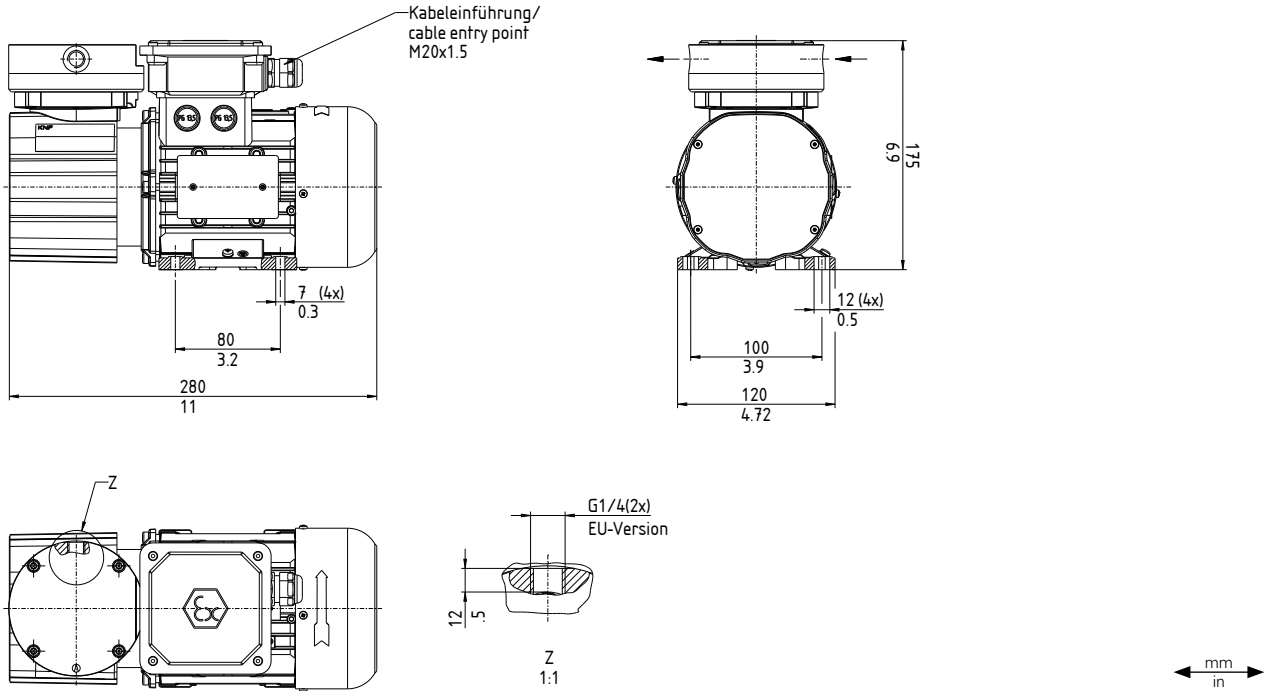
PERFORMANCE DATA

Series model	Flow rate at atm. pressure (l/min)	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
N 922 STE Ex- 50 Hz	20.0 ± 10 %	2.5/36.3	110
N 922 STE Ex- 60 Hz	23.0 ± 10 %	2.5/36.3	110

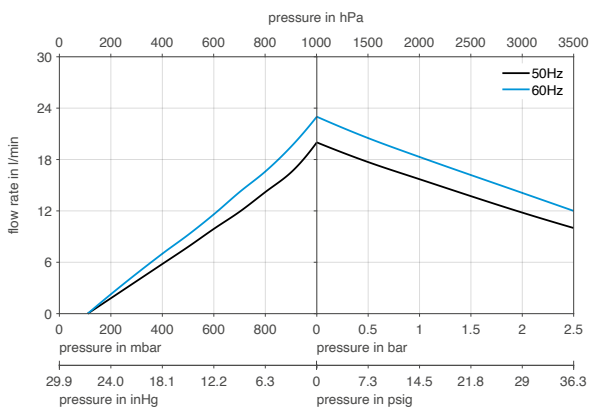
²⁾bar rel relative to 1013 hPa

³⁾Flow rate determined at 20 °C, 1000 mbar abs. (Pressure 0 to 1000 mbar abs. in accordance with ISO 21360/ISO 8778)

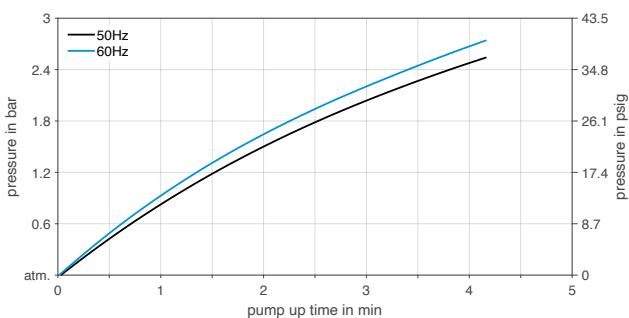
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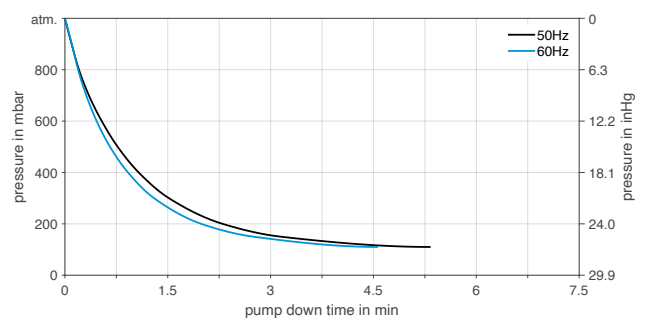
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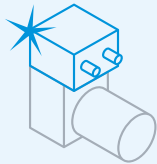

N 922 STE EX | PUMP UP TIME FOR 20 LITER VESSEL



N 922 STE EX | PUMP DOWN TIME FOR 20 LITER VESSEL



OPTIONS

Description	Illustration	Details
Mechanical adjustment of pumping capacity		The pumping capacity can be adjusted at the factory to accommodate inlet pressure and for accurate alignment with the customer's system.
Pump housing can be rotated at 90° intervals		Pumps with a pump housing rotated at 90° intervals can be mounted at the factory. The customer may also rotate the pump housing later.
Pump with mounting bracket		The mounting bracket can be mounted at the factory.
Cleaned contact material parts		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.
Silcotec coating		The head components may be coated with SilcoTek™.
Country-specific Ex certificates		Pumps with certificates for KOSHA, PESO and NEPSI are also available.

ACCESSORIES

Description	Illustration	Part No.	Details
Straight compression fitting OD 10		317086	Stainless steel, G 1/4
Elbow compression fitting OD 10		318946	Stainless steel, G 1/4
Mounting kit shock mounts		313180	
Mounting kit shock mounts and mounting bracket		313181	

SPARE PARTS

Description	Illustration	Part No.	Details
Spare parts kit N 922 STE Ex		328447	Spare parts kit consists of: 1x diaphragm, 2x reed valve, 2x valve stopper, 2x screw, 3x O-ring. This set is required to maintain the pump.

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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