N 2400 SERIES
PROCESS VACUUM PUMPS AND COMPRESSORS

N 2400.15 ST.9 E

ADVANTAGES

- The robust design will hold up to challenging operating conditions
- Extremely high pressure up to 12 bar rel./174 psig
- High level of gas tightness Following leakage rates are available:
  .9 ≙ < 6 x 10^{-3} mbar l/s
  SP.13 ≙ < 6 x 10^{-6} mbar l/s
  ST.13 ≙ < 1 x 10^{-5} mbar l/s

POSSIBLE AREAS OF USE

- Energy technology – especially in nuclear facilities
- Chemical industry
- Process industry
- Research and development

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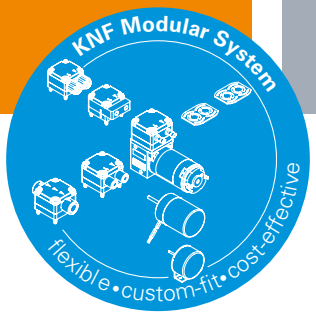


PERFORMANCE DATA				
Series model	**N 2400.15**			
Material design	**SP.9 E**	**SP.13 E**	**ST.9 E**	**ST.13 E**
Pump head	Stainless steel			
Diaphragm	EPDM		PTFE-coated	
Valves	Stainless steel			
Flow rate at atm. pressure (l/min)	130.0 ± 10 %		120.0 ± 10 %	
Ultimate vacuum (mbar abs.)	< 100			
Max. operating pressure (bar rel./psig)	12.0/174.0			
Permissible ambient temperature (°C)	+5 ... +40			
Permissible media temperature (°C)	+5 ... +40			
Weight (kg/lbs)	83.0/183.0		79.0/174.2	
ELECTRICAL DATA				
Voltage (V)	230/400			
Motor	Three-phase motor			
Protection class motor	IP 55			
Frequency (Hz)	50			
Power P_1 (W)	1500			
I_{max} (A)	9.10/5.25			

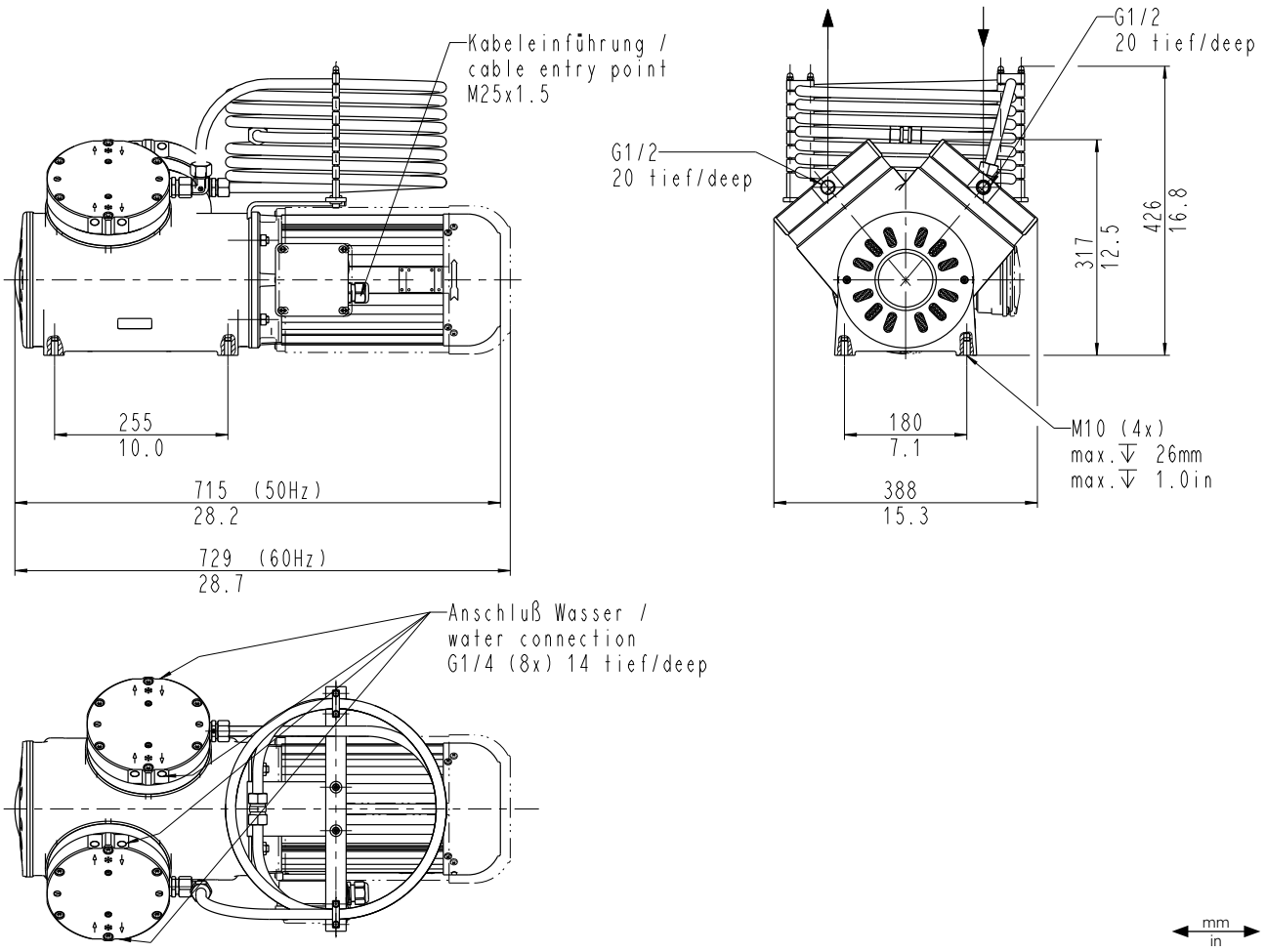
N 2400.15 SP.9 E | SP.13 E

PERFORMANCE DATA

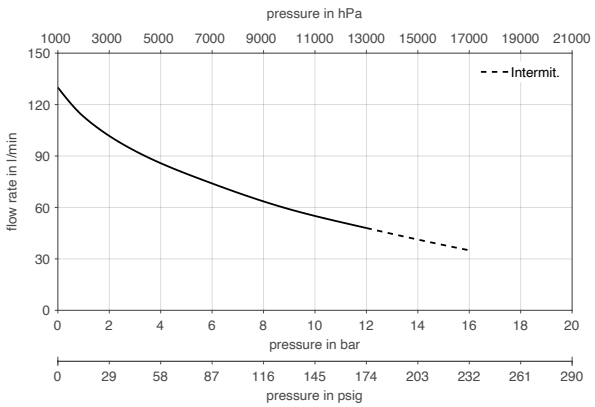
Series model	Flow rate at atm. pressure (l/min)	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
N 2400.15 SP.9 E	130.0 ± 10 %	12.0/174.0	< 100
N 2400.15 SP.13 E	130.0 ± 10 %	12.0/174.0	< 100

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

N 2400.15 SP.9 E | SP.13 E

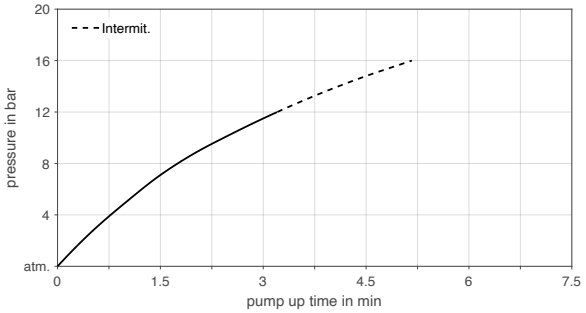


N 2400.15 SP.__ E



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

N 2400.15 SP.__ E | PUMP UP TIME FOR 20 LITER VESSEL



N 2400.15 ST.9 E | ST.13 E

PERFORMANCE DATA

Series model	Flow rate at atm. pressure (l/min)	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
N 2400.15 ST.9 E	120.0 ± 10 %	12.0/174.0	< 100
N 2400.15 ST.13 E	120.0 ± 10 %	12.0/174.0	< 100

Flow rate determined at 20 °C, 1013 mbar abs.
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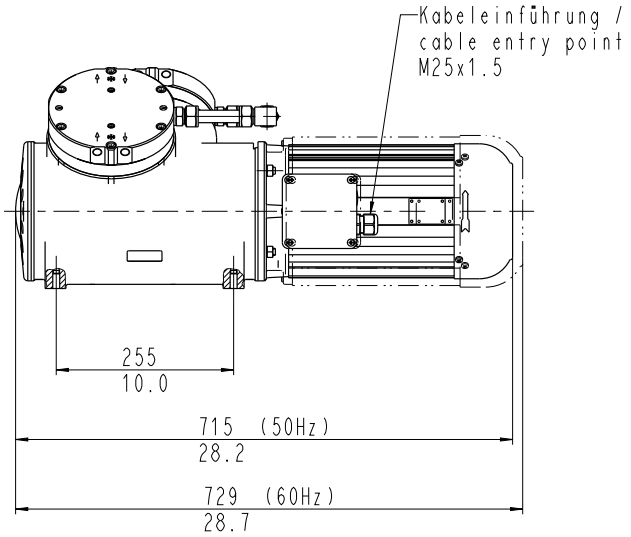
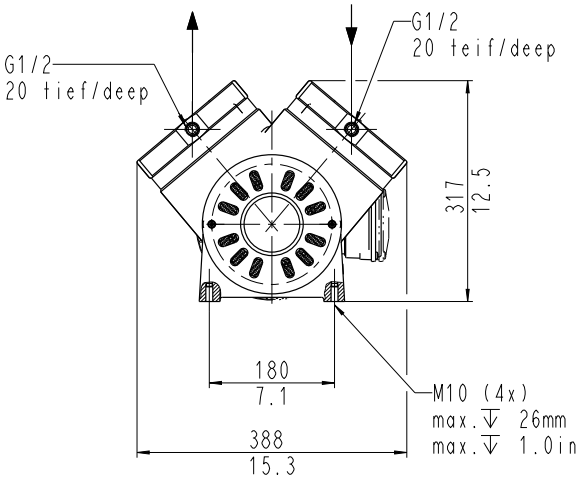
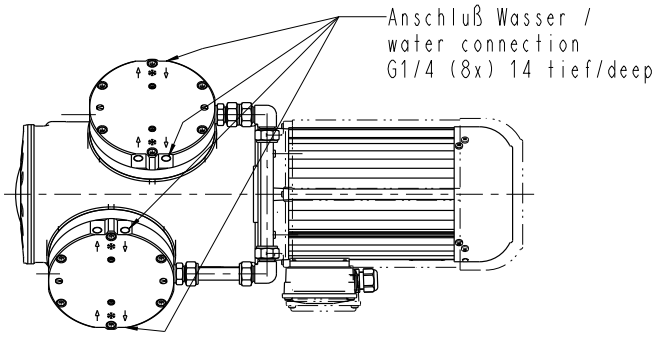
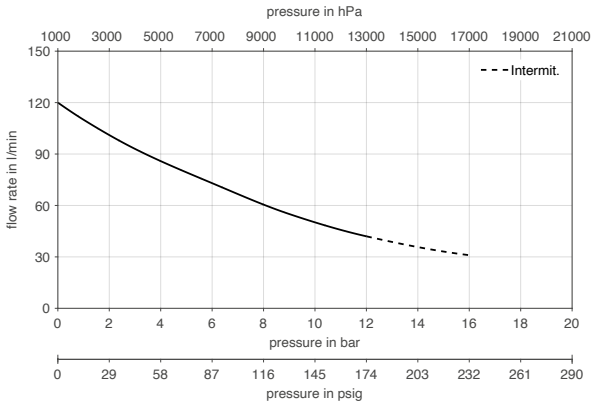






mm
in

N 2400.15 ST.__ E



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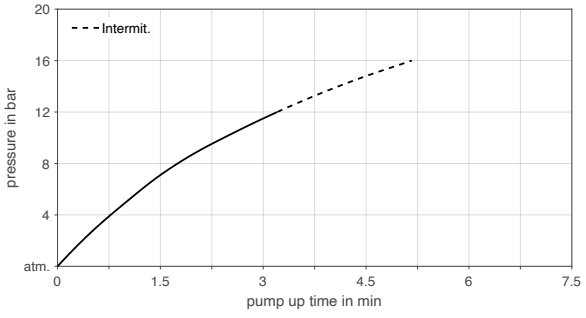
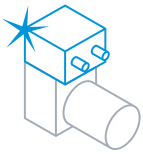
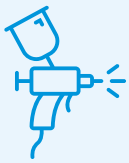


OPTIONS

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.
Versions for special gases		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.
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.
Special coating		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		The components that come into contact with the medium are available with material certificates.
Ex-proof pumps		Pumps for explosion-proof areas are available with the following certificates on request: IECEx, NEC Ex, KOSHA, PESO, NEPSI, JIS

ACCESSORIES

Description	Illustration	Part No.
Connection water cooling S_.9 | S_.13		305444
Wrench for retainer plate		128753
Inlet filter G 1/2		316662
Base plate with rubber-bonded metals		304476

SPARE PARTS

Description	Illustration	Part No.	Details
N 2400.15 SP.9 E		315482	Spare parts kit consists of: 2x diaphragm, 4x reed valve, 4x valve stopper, 4x O-rings, 4x screws. This set is required to maintain the pump.
N 2400.15 SP.13 E		313336	Spare parts kit consists of: 2x diaphragm, 4x reed valve, 4x valve stopper, 8x O-rings, 4x screws. This set is required to maintain the pump.
N 2400.15 ST.9 E		315484	Spare parts kit consists of: 2x diaphragm, 4x reed valve, 4x valve stopper, 4x O-rings, 4x screws. This set is required to maintain the pump.
N 2400.15 ST.13 E		315485	Spare parts kit consists of: 2x diaphragm, 4x reed valve, 4x valve stopper, 8x O-rings, 4x screws. 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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