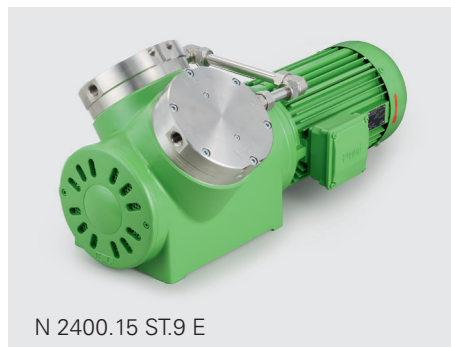


N 2400 SERIES

PROCESS VACUUM PUMPS AND COMPRESSORS



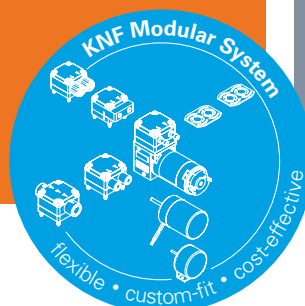
N 2400.15 ST.9 E

ADVANTAGES

- Provides extremely high continuous pressure of 174 PSIG (12 bar) - 232 PSIG (16 bar) intermittently
- High level of gas tightness - Leakage per model type:
.9 all materials $\leq 6 \times 10^{-3}$ mbar l/s
.12 & .13 EPDM $\leq 6 \times 10^{-6}$ mbar l/s
.12 & .13 PTFE $\leq 1 \times 10^{-5}$ mbar l/s
- Class 1, Div 1 HazLoc versions available
- Available with NPT ports

POSSIBLE AREAS OF USE

- Energy technology – especially in nuclear facilities
- Handling dangerous and precious media
- Solvent recovery (or botanical extraction - oil processing)
- Research & development
- Chemical & process
- Oil & gas



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PERFORMANCE DATA

Series model	N 2400.15			
Material design	SP9 E	SP.13 E	ST.9 E	ST.13 E
Pump head	316 stainless steel			
Diaphragm	EPDM		PTFE-coated	
Valves	316 stainless steel			
Flow rate at atm. pressure (l/min)	150.0 ± 10 %		140.0 ± 10 %	
Ultimate vacuum (mbar abs./inHg)	100/27			
Max. operating pressure (bar g/psig)	12.0/174.0			
Permissible ambient temperature (°C/°F)	5° C to 40° C/ 41° F to 104° F			
Permissible media temperature (°C/°F)	5° C to 40° C/ 41° F to 104° F			
Weight (kg/lbs)	83.0/183.0		79.0/174.2	

ELECTRICAL DATA

Voltage (V)	230/400
Motor	3-phase motor
Motor protection class	IP 55
Frequency (Hz)	60
Power P ₁ (W)	1500
I _{max} (A)	9.10/5.25

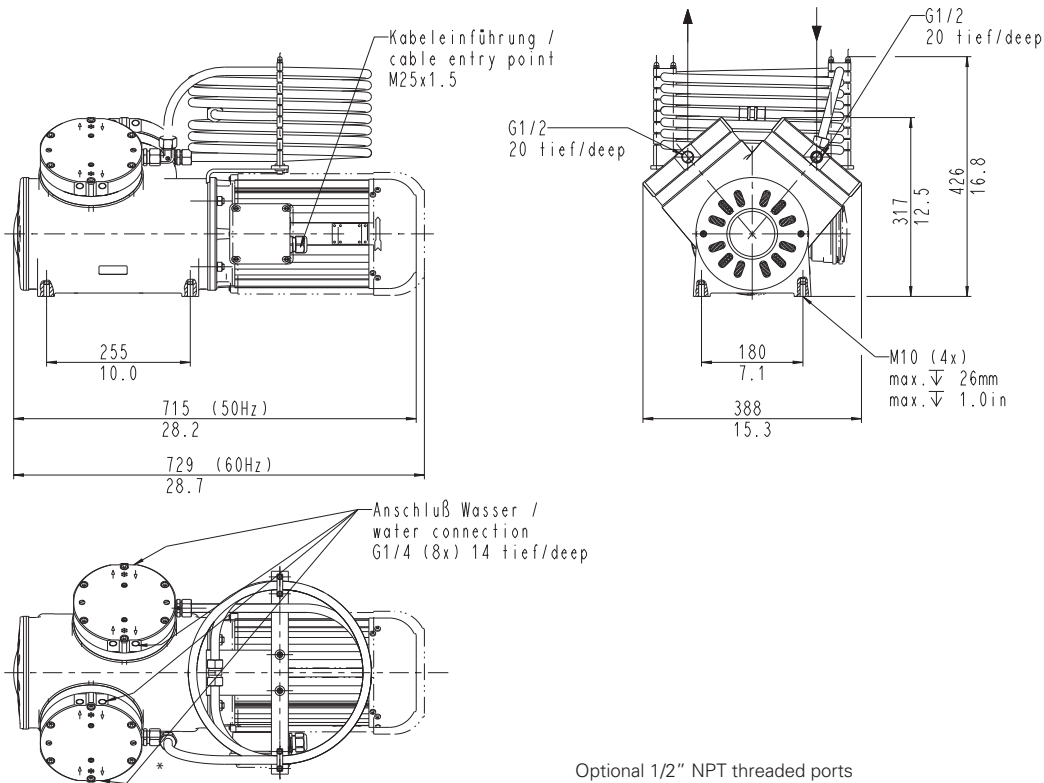
N 2400.15 SP.9 E | SP.13 E

PERFORMANCE DATA

Series model	Flow rate at atm. pressure (l/min)	Max. operating pressure (bar g/psig)	Ultimate vacuum (mbar abs. /inHg)
N 2400.15 SP.9 E	150.0 ± 10 %	12.0/174.0	100/27
N 2400.15 SP.13 E	150.0 ± 10 %	12.0/174.0	100/27

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

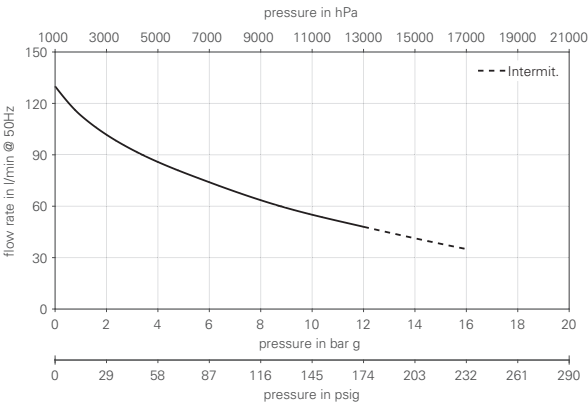
N 2400.15 SP.9 E | SP.13 E



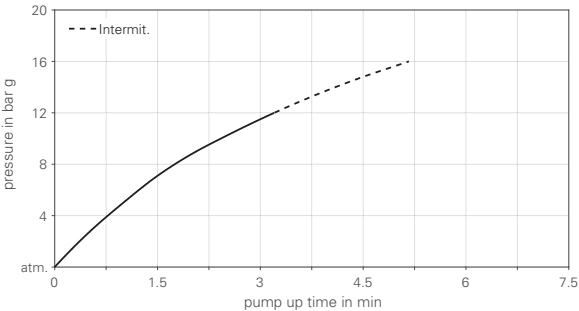
Flow rate on 60Hz version will be ~ 20% higher than shown
in the following 50Hz performance curve

Pump up times on 60Hz version will be ~ 20% less than
shown in the following 50Hz version curve

N 2400.15 SP.9 E



N 2400.15 SP.9 E PUMP UP TIME FOR 20 LITER VESSEL



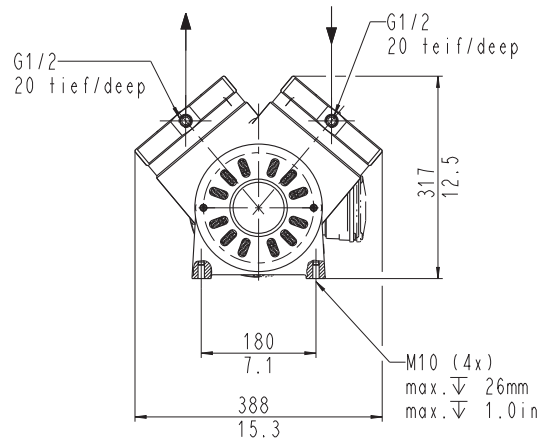
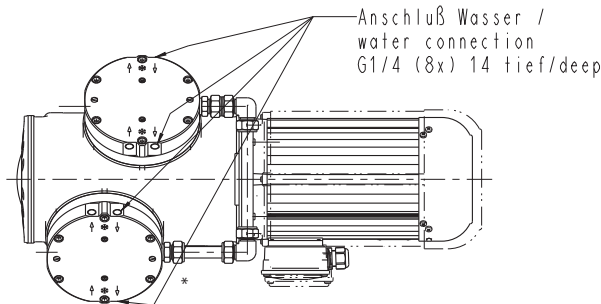
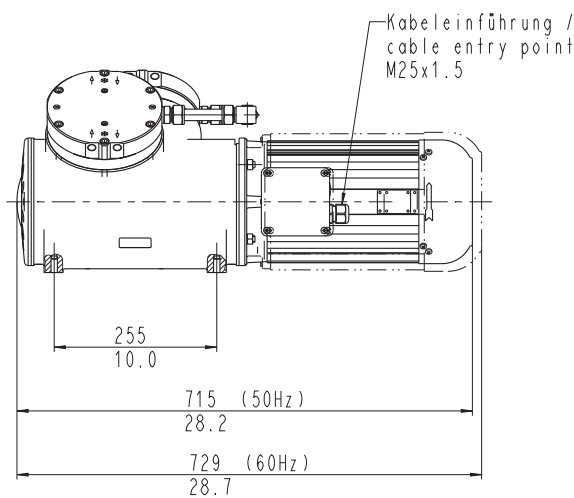
N 2400.15 ST.9 E | ST.13 E

PERFORMANCE DATA

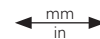
Series model	Flow rate at atm. pressure (l/min)	Max. operating pressure (bar g/psig)	Ultimate vacuum (mbar abs. /inHg)
N 2400.15 ST.9 E	140.0 ± 10 %	12.0/174.0	< 100/27
N 2400.15 ST.13 E	140.0 ± 10 %	12.0/174.0	< 100/27

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 ST.9 E | ST.13 E



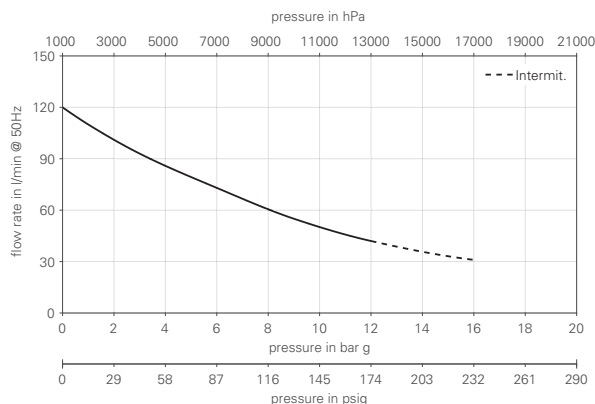
Optional 1/2" NPT threaded ports



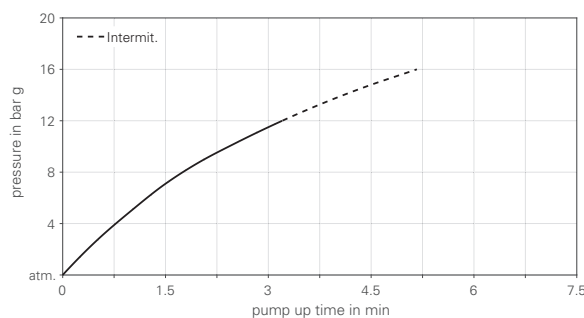
Flow rate on 60Hz version will be ~ 20% higher than shown in the following 50Hz performance curve

Pump up times on 60Hz version will be ~ 20% less than shown in the following 50Hz version curve

N 2400.15 ST.9 E



N 2400.15 ST.9 E PUMP UP TIME FOR 20 LITER VESSEL



OPTIONS			
Description	Illustration	Part No.	Details

ACCESSORIES			
Description	Illustration	Part No.	Details
Connection water cooling S_9 S_13		305444	
Wrench for retainer plate		128753	
Inlet filter G 1/2		316662	
Base plate with shock mounts		304476	

SPARE PARTS			
Description	Illustration	Part No.	Details
N 2400.15 SP.9 E SP.13 E			
Diaphragm		027252	2
Reed valve		003475	4
Valve stopper		001714	4
O-ring D55x3.0 EPDM		047016	4
Full repair kit (valve plate, diaphragm, O-ring)		315482 / 313336	contains all necessary spare parts in one package
O-ring (.13 only) D150x3.0 EPDM		047372	2
O-ring (.13 only) D34x3.0 EPDM		047373	2
N 2400.15 ST.9 E ST.13 E			
Diaphragm		118095	2
Reed valve		003475	4
Valve stopper		001714	4
O-ring D55x3.0 FPM		002458	4
Full repair kit (valve plate, diaphragm, O-ring)		315484 / 315485	contains all necessary spare parts in one package
O-ring (.13 only) D150x3.0 FPM		002461	2
O-ring (.13 only) D34x3.0 FPM		045499	2

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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