

# N 286 SERIES

## PROCESS VACUUM PUMPS AND COMPRESSORS



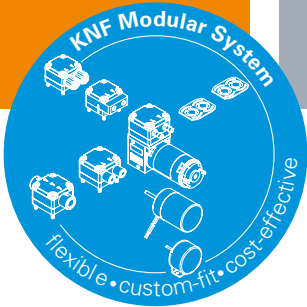
N 286.15 SP.9 E

### 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  $\triangleq$  <  $6 \times 10^{-3}$  mbar l/s  
SP.13  $\triangleq$  <  $6 \times 10^{-6}$  mbar l/s  
ST.13  $\triangleq$  <  $1 \times 10^{-5}$  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 286.15			
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)	22 ± 10 %		20 ± 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)	29.5/64.9			
ELECTRICAL DATA				
Voltage (V)	230/400			
Motor	Three-phase motor			
Protection class motor	IP 55			
Frequency (Hz)	50			
Power P <sub>1</sub> (W)	420			
I <sub>max</sub> (A)	3.30/1.90			

ACCESSORIES	
Description	Part No.
Base plate with rubber-bonded metals	310102
Water cooling S_.9   S_.13	303901

SPARE PARTS	
Description	Part No.
Spare parts kit N 286.15 SP.9 E	315464
Spare parts kit N 286.15 SP.13 E	315465
Spare parts kit N 286.15 ST.9 E	315466
Spare parts kit N 286.15 ST.13 E	315467

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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# N 286.15 SP.9 E | SP.13 E | ST.9 E | ST.13 E

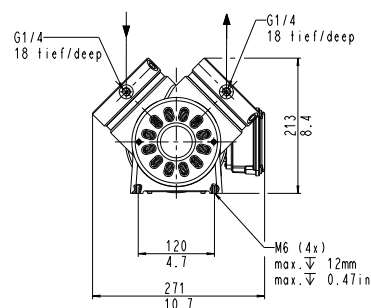
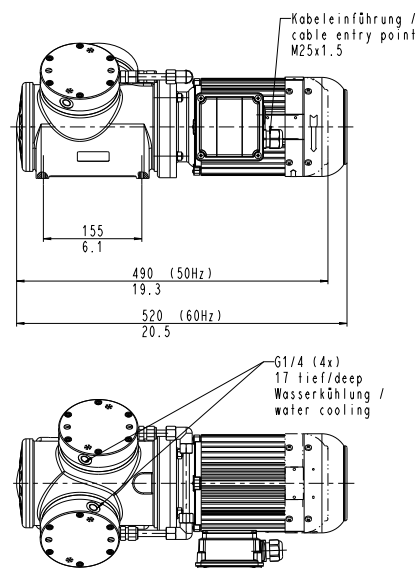
## PERFORMANCE DATA

Series model	Flow rate at atm. pressure (l/min)	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
N 286.15 SP.9 E	22.0 ± 10 %	12.0/174.0	< 100
N 286.15 SP.13 E	22.0 ± 10 %	12.0/174.0	< 100
N 286.15 ST.9 E	20.0 ± 10 %	12.0/174.0	< 100
N 286.15 ST.13 E	20.0 ± 10 %	12.0/174.0	< 100

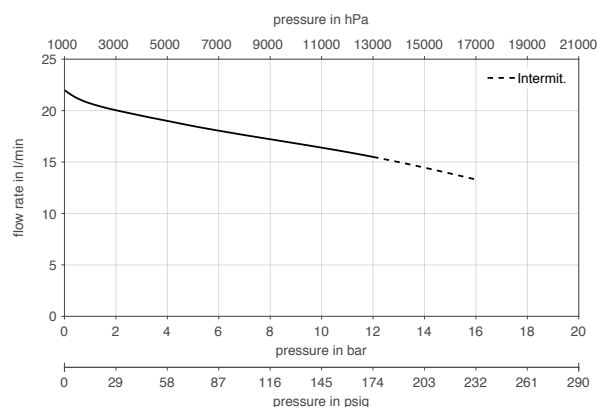
Flow rate determined at 20 °C, 1013 mbar abs.

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

## N 286.15 S\_.9 E | S\_.13 E



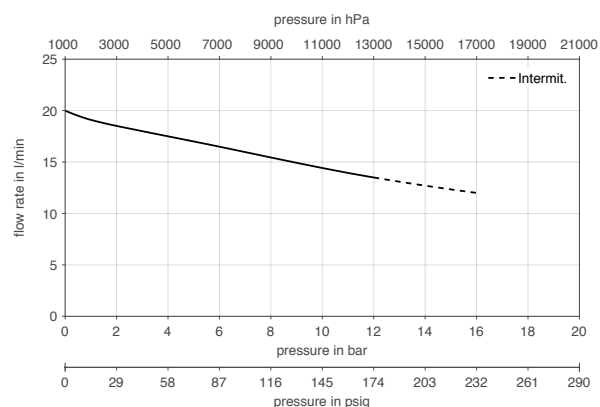
## N 286.15 SP.\_ E



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

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

## N 286.15 ST.\_ E



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

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

## N 286.15 | PUMP UP TIME FOR 20 LITER VESSEL

