

# UN 035 EX SERIES VACUUM PUMPS & COMPRESSORS FOR HAZLOC AREAS



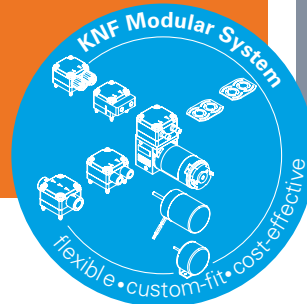
UN 035 ST I EX

## ADVANTAGES

- For use in Class 1, Division 1, Groups C&D hazardous location areas
- High flow through a single head: 29 l/min
- High maximum outlet pressure: 50 psig/3.5 barg
- Can be mounted in any orientation
- T3B maximum surface temperature motor rating (165 °C / 329 °F)
- Thermal reset motor protection
- 1/4" NPT ports

## POSSIBLE AREAS OF USE

- Solvent recovery (or botanical extraction - oil processing)
- Handling dangerous and precious media
- Research & development
- Chemical & Process
- Oil & gas



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## PERFORMANCE DATA

Series model	UN 035
Material design	ST I EX
Pump head	316 stainless steel
Diaphragm	PTFE-coated
Valves	PTFE
Flow rate at atm. pressure (l/min)	29.2 ± 10 %
Ultimate vacuum (mbar abs./inHg)	100/27
Max. operating pressure (bar g/psig)	3.5/50
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)	22.0/48.4

## ELECTRICAL DATA

Voltage (V)	115/230 single-phase
Motor certification	UL/CSA
Motor protection class	Class 1, Div 1, Groups C&D (T3B)
Frequency (Hz)	60
Power P <sub>1</sub> (W)	900
I <sub>max</sub> (A)	6.0/3.3

# UN 035 ST | EX

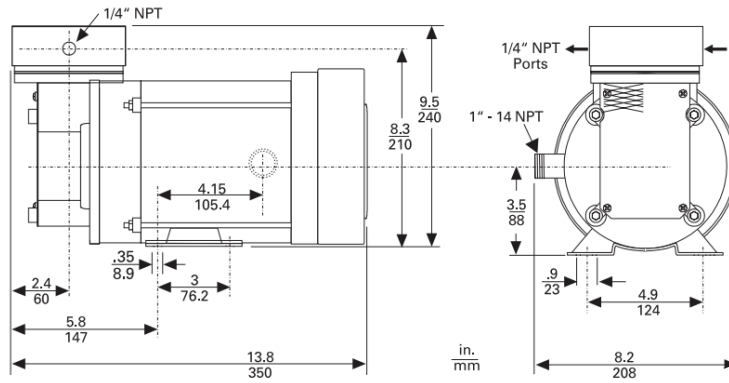
## PERFORMANCE DATA

Series model	Flow rate at atm. pressure (l/min)	Max. operating pressure (bar g/psig)	Ultimate vacuum (mbar abs./inHg)
UN 035 ST   EX	29.2 ± 10 %	3.5/50	100/27

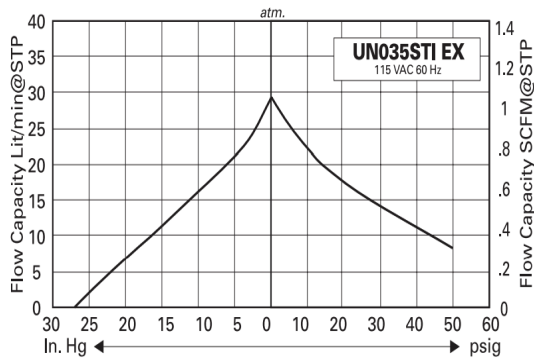
Flow rate determined at 20 °C, 1013 mbar abs.

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



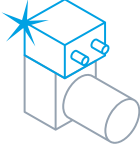
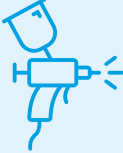


## UN 035 ST | EX



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## OPTIONS

Description	Illustration	Details
Performance	 A circular gauge with a needle pointing to the right, labeled 'FLOW' below it.	The pumping capacity can be mechanically adjusted at the factory to accommodate inlet pressure and for improved alignment with system requirements.
Materials	 A blue rectangular box with rounded corners containing the text 'CORROSION RESISTANT' in white capital letters.	Options are available for the pump heads used with highly corrosive gases that include coatings or alloys, such as Hastelloy, Monel, Carpenter, Haynes, and others.
Cleaning	 A blue line-art illustration of a cleaning nozzle with a starburst effect at the tip, attached to a cylindrical handle.	Certified parts cleaning is available for head parts used with high oxygen concentrations and other specialty applications.
Special coatings	 A blue line-art illustration of a spray gun with a nozzle emitting a spray.	Special coatings with high corrosion protection (C4) for use in industrial areas, coastal areas, and maritime applications with moderate salinity.
Certifications	 A blue line-art illustration of a document with a checklist, a globe, and a small box with a checkmark.	Material certifications are available for components that come in contact with the media. Motor certifications may also be possible.
Explosion-proof	 A blue globe icon next to a yellow hexagonal symbol with a black border containing the text 'Ex' in black.	Pumps for explosion-proof areas may be available with the following certifications on request: HazLoc, IEC Ex, KOSHA, PESO, NEPSI, JIS.

## ACCESSORIES

Description	Illustration	Part No.	Details
Pressure gauge		216778	0-60 psig glycerin filled
Compound gauge		216777	30" Hg-60 psig glycerin filled
Flow adjust valve 1/4" NPT		217275	316SS body precision - high pressure
Street tee 1/4" NPT		216775	Stainless steel 1 x NPTM 2 x NPTF
Straight connector 1/4" NPT		217276	Stainless steel 1 7/16" long
Adapter bushing 1/4" to 3/8" NPT		334471	316SS high pressure
Pressure control valve (See FDV datasheet) 3/8" NPT		UFDV300	7.5 to 30 psig

## SPARE PARTS

Description	Illustration	Part No.	Details
<b>UN 035 ST I EX</b>			
Diaphragm PTFE-coated CR		001406	requires 1 qty
Valveplate PTFE		001407	requires 1 qty
Full repair kit (valve plate & diaphragm)		071734	requires 1 qty

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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