

N 96 SERIES VACUUM PUMPS AND COMPRESSORS



N 96 KNDC-B-M



N 96 KNE-W



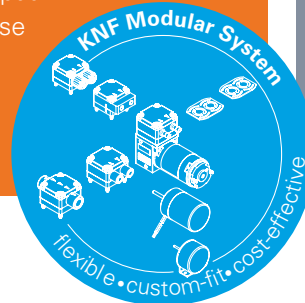
N 96 STDC-B-M

ADVANTAGES

- Copes well with vapor and condensation
- The pump can start against the entire pressure and vacuum range without discharging
- Brushless DC motor for custom-fit rotational speed control
- Extended temperature range for ambient temperatures up to 50 °C / 122 °F and media temperatures up to 70 °C / 158 °F
- High level of gas tightness: 6 x 10⁻³ mbar abs. x l/s according to type examination
- AC version with multi-voltage power supply input for worldwide use

POSSIBLE AREAS OF USE

- Stationary emission measurement technology
- Mobile/portable gas measurement technology
- Instrumental analysis
- Medical technology – especially diagnostics
- Fuel cells



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PERFORMANCE DATA

Series model	N 96						
Material design	KTDC-B-M	KNDC-B-M	KTE-W	KNE-W	ATDC-B-M	STDC-B-M	
Pump head	PPS					Aluminum	Stainless steel
Diaphragm	PTFE-coated	EPDM	PTFE-coated	EPDM	PTFE-coated		
Valves	FKM					FFKM	
Flow rate at atm. pressure (l/min)	7.0 ± 10 %	8.5 ± 10 %	7.0 ± 10 %	8.5 ± 10 %	7.0 ± 10 %		
Ultimate vacuum (mbar abs./inHg)	< 130/26.0	< 100/26.9	< 130/26.0	< 100/26.9	< 130/26.0		
Max. operating pressure (bar g/psig)	2.5/36.3						
Permissible ambient temperature (°C/°F)	5° C to 50° C / 41° F to 122° F (> 2 bar g: 5° C to 40° C / 41° F to 104° F) 0° C / 32° F if frost-free (non-condensing)						
Permissible media temperature (°C/°F)	0° C to 70° C / 32° F to 158° F	0° C to 50° C / 32° F to 122° F	0° C to 70° C / 32° F to 158° F	0° C to 50° C / 32° F to 122° F	0° C to 70° C / 32° F to 158° F		
Weight (kg/lbs)	0.6/1.3		0.7/1.5		0.65/1.4	0.9/2.0	

ELECTRICAL DATA

Voltage (V)	24 DC		100 - 240 AC		24 DC	
Motor	Brushless DC motor, PWM-signal: 55...0 %	Brushless DC motor, PWM-signal: 30...0 %	Brushless DC motor with AC power supply		Brushless DC motor, PWM-signal: 55...0 %	
Frequency (Hz)	-		50/60		-	
Protection class motor	IP 20					
Power P ₁ (W)	19	23	21	25	19	
I _N (A)	0.9	1.05	0.23 (230 V) / 0.39 (100 V)	0.24 (230 V) / 0.46 (100 V)	0.9	

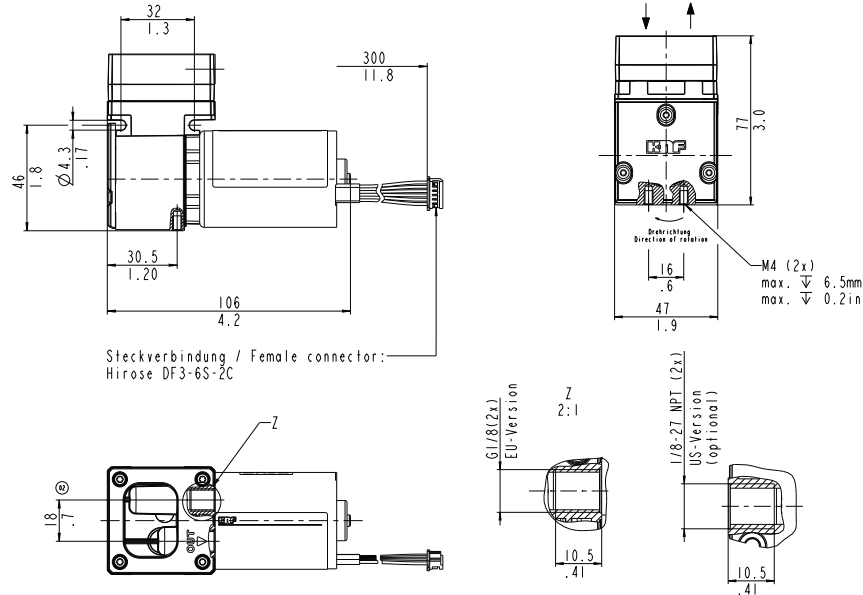
N 96 KTDC-B-M

PERFORMANCE DATA

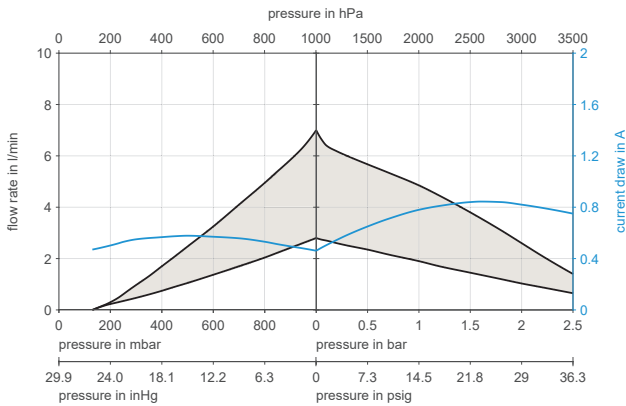
Series model	Flow rate at atm. pressure (l/min) ¹⁾	Max. operating pressure (bar g/psig)	Ultimate vacuum (mbar abs./inHg)
N 96 KTDC-B-M	7.0 ± 10 %	2.5/36.3	< 130/26.0

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

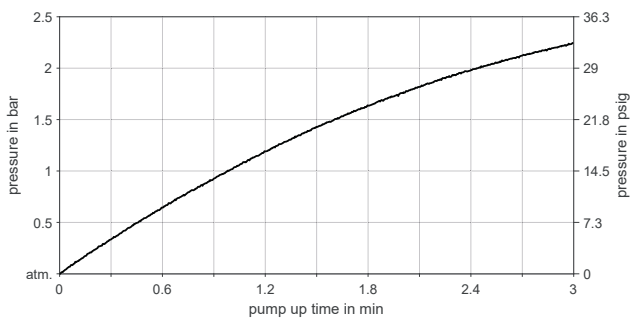
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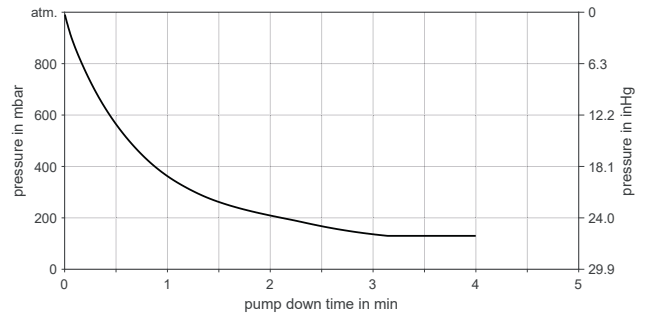
N 96 KTDC-B-M



N 96 KTDC-B-M | PUMP UPTIME FOR 5 LITER VESSEL



N 96 KTDC-B-M | PUMP DOWNTIME FOR 5 LITER VESSEL



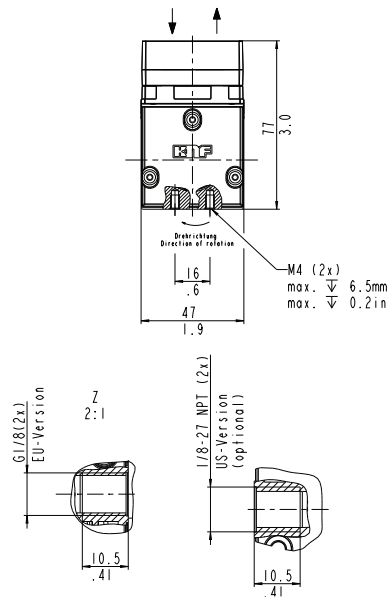
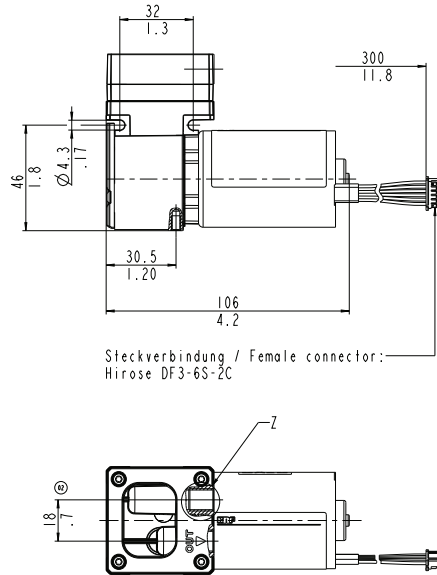
N 96 KNDC-B-M

PERFORMANCE DATA

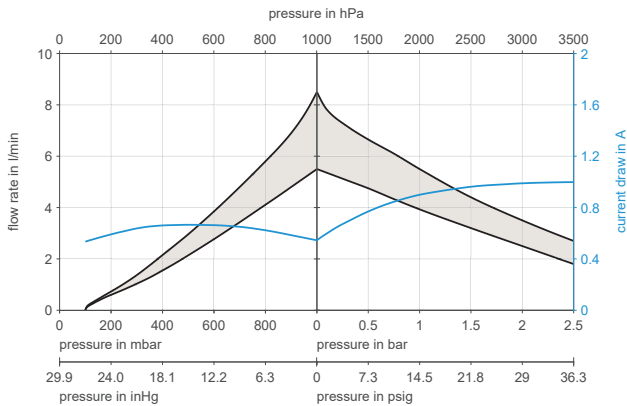
Series model	Flow rate at atm. pressure (l/min) ¹⁾	Max. operating pressure (bar g/psig)	Ultimate vacuum (mbar abs./inHg)
N 96 KNDC-B-M	8.5 ± 10 %	2.5/36.3	< 100/26.9

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

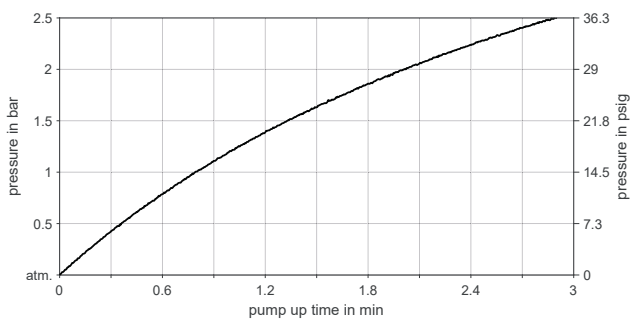
N 96 KNDC-B-M



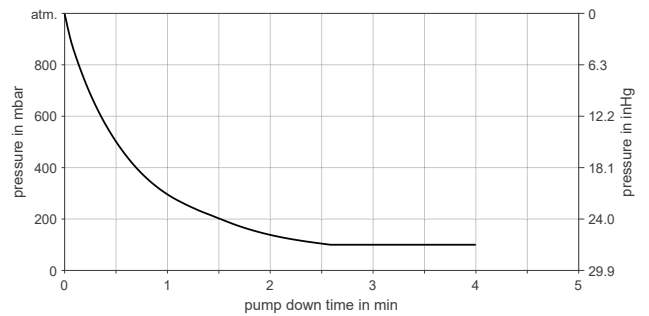
N 96 KNDC-B-M



N 96 KNDC-B-M | PUMP UP TIME FOR 5 LITER VESSEL



N 96 KNDC-B-M | PUMP DOWN TIME FOR 5 LITER VESSEL



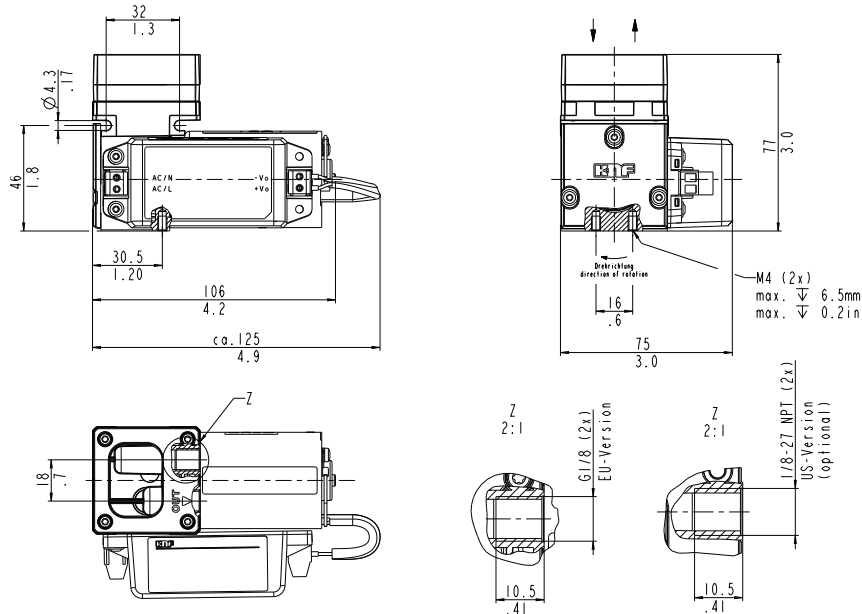
N 96 KTE-W

PERFORMANCE DATA

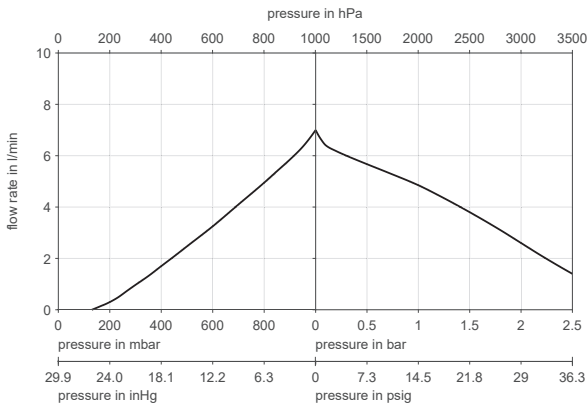
Series model	Flow rate at atm. pressure (l/min) ¹⁾	Max. operating pressure (bar g/psig)	Ultimate vacuum (mbar abs./inHg)
N 96 KTE-W	7.0 ± 10 %	2.5/36.3	< 130/26.0

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

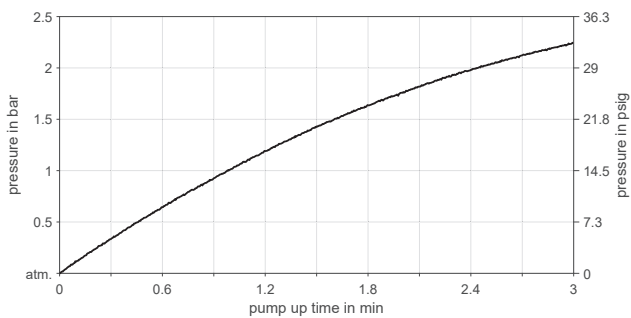
N 96 KTE-W



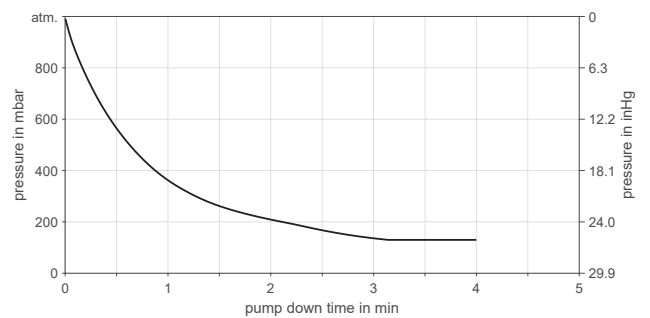
N 96 KTE-W



N 96 KTE-W | PUMP UP TIME FOR 5 LITER VESSEL



N 96 KTE-W | PUMP DOWN TIME FOR 5 LITER VESSEL



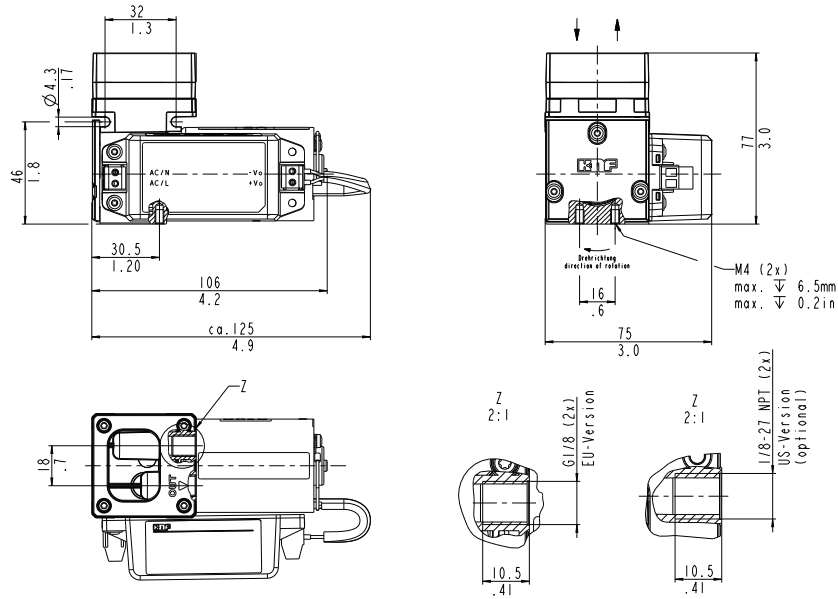
N 96 KNE-W

PERFORMANCE DATA

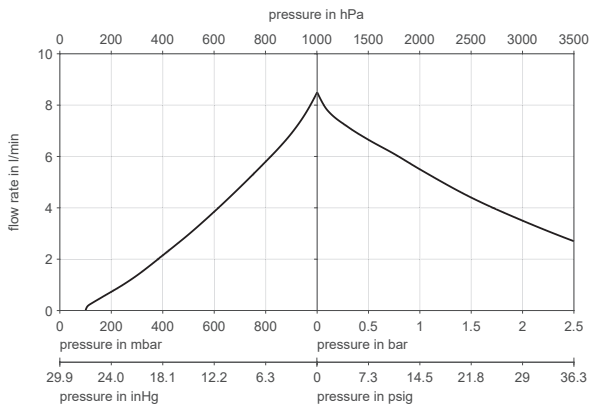
Series model	Flow rate at atm. pressure (l/min) ¹⁾	Max. operating pressure (bar g/psig)	Ultimate vacuum (mbar abs./inHg)
N 96 KNE-W	8.5 ± 10 %	2.5/36.3	< 100/26.9

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

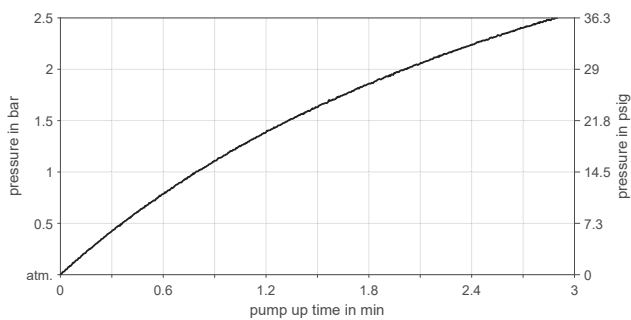
N 96 KNE-W



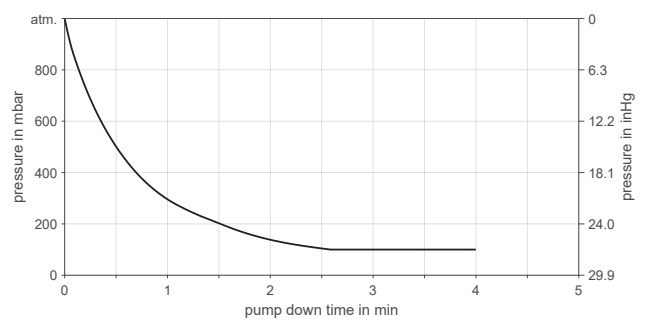
N 96 KNE-W



N 96 KNE-W | PUMP UP TIME FOR 5 LITER VESSEL



N 96 KNE-W | PUMP DOWN TIME FOR 5 LITER VESSEL



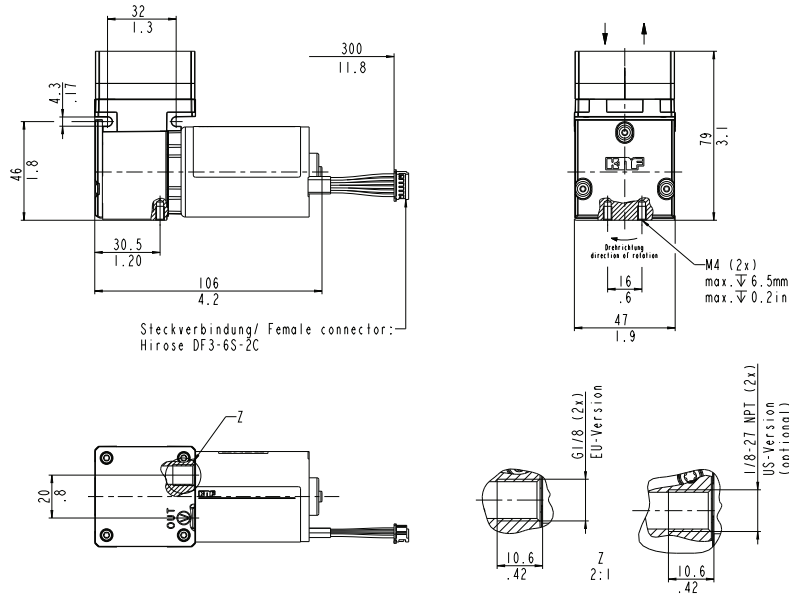
N 96 ATDC-B-M

PERFORMANCE DATA

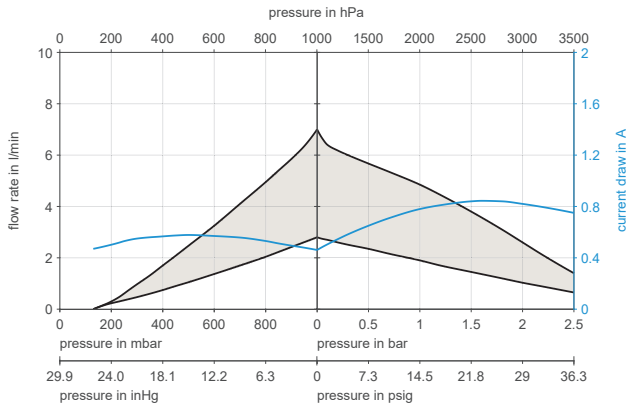
Series model	Flow rate at atm. pressure (l/min) ¹⁾	Max. operating pressure (bar g/psig)	Ultimate vacuum (mbar abs./inHg)
N 96 ATDC-B-M	7.0 ± 10 %	2.5/36.3	< 130/26.0

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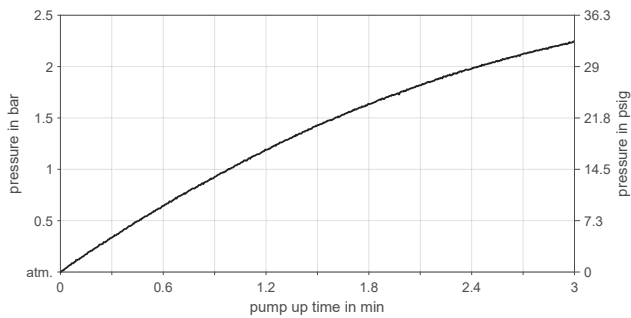
N 96 ATDC-B-M



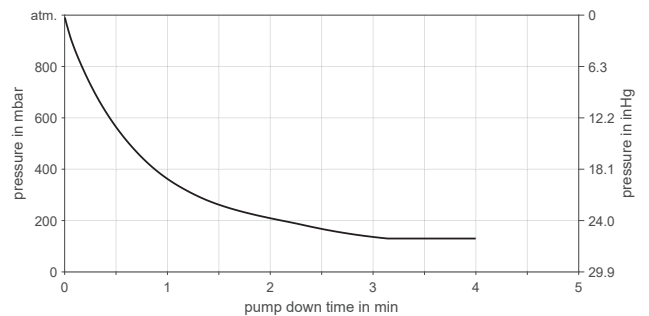
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N 96 ATDC-B-M | PUMP UP TIME FOR 5 LITER VESSEL



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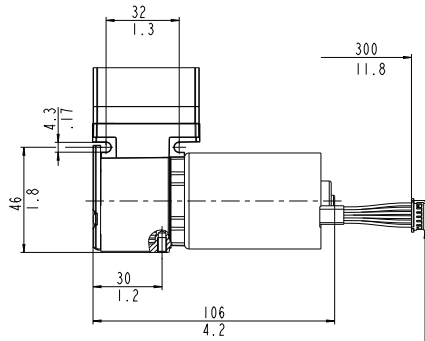
N 96 STDC-B-M

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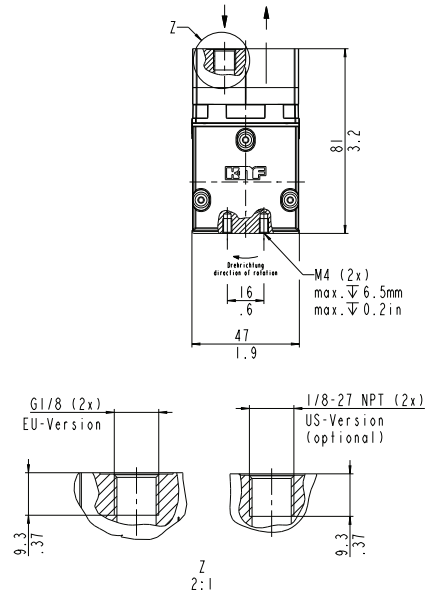
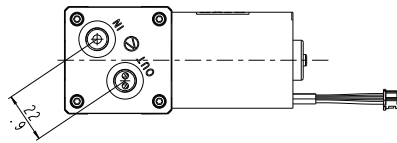
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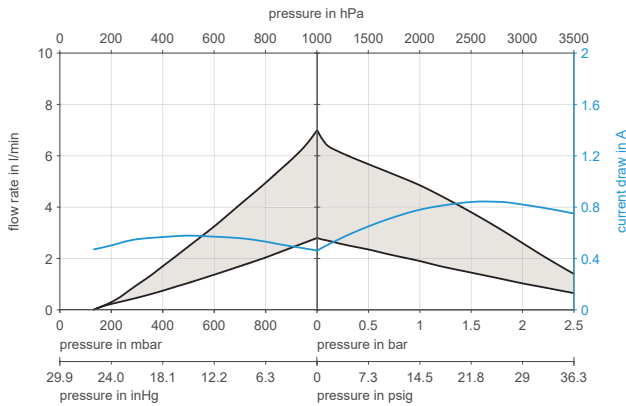
N 96 STDC-B-M



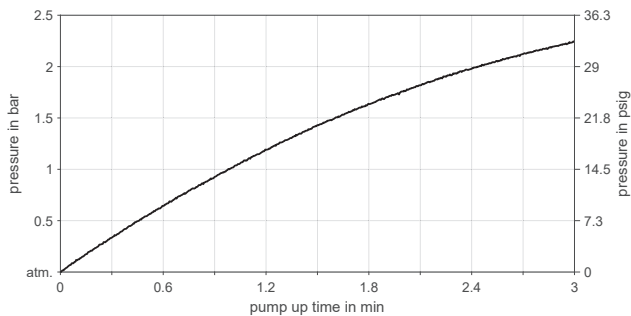
Steckverbindung/ Female connector:
Hirose DF3-6S-2C



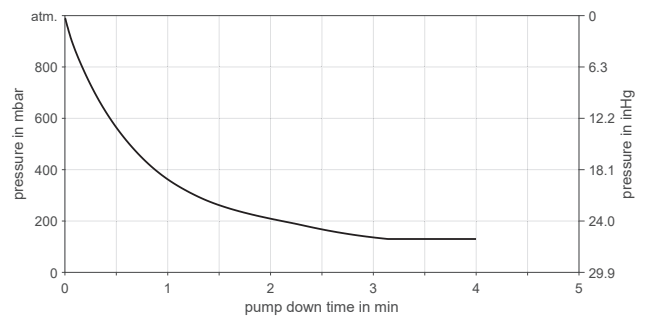
N 96 STDC-B-M



N 96 STDC-B-M | PUMP UPTIME FOR 5 LITER VESSEL



N 96 STDC-B-M | PUMP DOWNTIME FOR 5 LITER VESSEL



OPTIONS

Description	Illustration	Part No.	Details

ACCESSORIES

Description	Illustration	Part No.	Details
Silencer		000345	1/8" G (Male). Good for noise suppression
Inlet filter		000346	1/8" G (Male). Good for particle filtration
Hose connector ID 4		001936	1/8" MNPT or 1/8" G (Male) to barb for 4MM (1/8") ID tubing. PA (Nylon)
Hose connector ID 4		025671	1/8" G (Male) to barb for 4MM (1/8") ID tubing. PVDF
Hose connector ID 6		123363	1/8" G (Male) to barb for 6MM (1/4") ID tubing. PVDF
Shock mount		320986	M4x8 male thread and M3x5 female thread. 3/8" x 3/8" elastomer size. Natural rubber (Durometer 55A).
Mounting kit		327888	Mounting Kit includes: 1 base plate and 4 shock mounts.
Cable Harness			Harness extension with loose ends

SPARE PARTS

Description	Part No.	Details
Spare parts kit N 96 KT and AT version	322636	1pc PTFE Coated Diaphragm. 2pcs FPM valve plates
Spare parts kit N 96 KN version	322637	1pc EPDM Diaphragm. 2pcs FPM valve plates
Spare parts kit N 96 ST version	326868	1pc PTFE Coated Diaphragm. 2pcs FPM valve plates

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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