

# DATA SHEET

## MGP75-21ATV-XT SERIES DIAPHRAGM PUMP



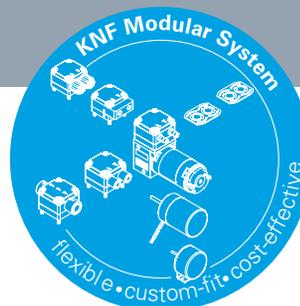
### ADVANTAGES

- Long service life
- High pneumatic performance with compact size
- Quiet and low-vibration operation
- Parameterizable pump configuration
- Boost function
- Extended flow rate adjustment range
- Analog and digital speed control
- Improved safety functions
- New warning and fault management system

### TYPICAL AREAS OF APPLICATION

- Fuel cells –  
Recirculation of hydrogen
- Measurement technology –  
Transfer pump for environmental analysis
- Instrumental analysis  
(incl. sample preparation)
- Diagnostics –  
Extraction of sample residues
- Vacuum technology –  
Pick and Place applications
- Medical technology –  
Use in surgical suction devices, diagnosis, histology, cardiology
- Laser technology –  
Evacuation of laser chambers

For further information  
please visit our  
website [www.knf.com](http://www.knf.com)



# TECHNICAL DATA

## PNEUMATIC DATA

|   |              |
|---|--------------|
| Flow rate at atm. pressure (l/min)*       | 71.0         |
| Ultimate vacuum (mbar abs. / inHg)        | 140.0 / 4.13 |
| Max. operating pressure (bar rel. / psig) | 0.3 / 4.35   |

\*Flow rate determined at 20 °C, 1000 hPa with air  
(pressure range 0 to 1000 hPa based on ISO 21360-1/2)

## ELECTRICAL DATA

|                                   |                    |
|-----------------------------------|--------------------|
| Motor type                        | Brushless DC motor |
| Voltage (V)                       | 24                 |
| Power P <sub>i</sub> (W)          | 123                |
| Max. current I <sub>max</sub> (A) | 5.1                |
| Motor protection class            | IP 20              |
| Pump protection class             | IP 20              |

## DIMENSIONS, WEIGHT AND PNEUMATIC CONNECTIONS

|                                    |                                  |
|------------------------------------|----------------------------------|
| Dimensions (L x W x H (mm / inch)) | 198 x 88 x 138 / 7.8 x 3.5 x 5.4 |
| Weight (kg / lbs)                  | 3.2 / 7.1                        |
| Pneumatic connections              | G 1/8                            |

## MATERIALS

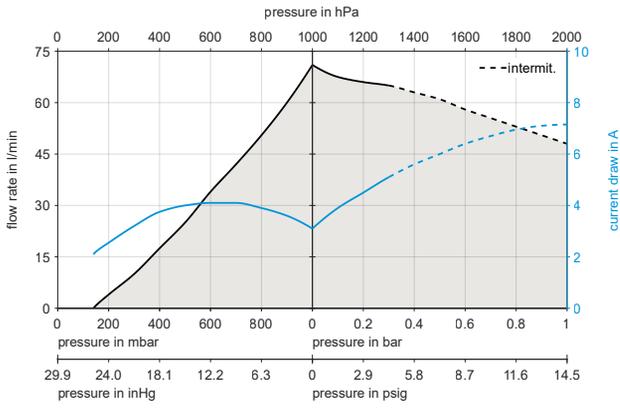
|           |          |
|-----------|----------|
| Pump head | Aluminum |
| Diaphragm | PTFE     |
| Valves    | FKM      |
| O-ring    | FKM      |

## OPERATING RANGE

|  |              |
|--|--------------|
| Permissible ambient temperature (°C)                 | + 5 ... + 50 |
| Permissible media temperature (°C)                   | + 5 ... + 50 |
| Maximum installation altitude<br>(m above sea level) | 2000         |

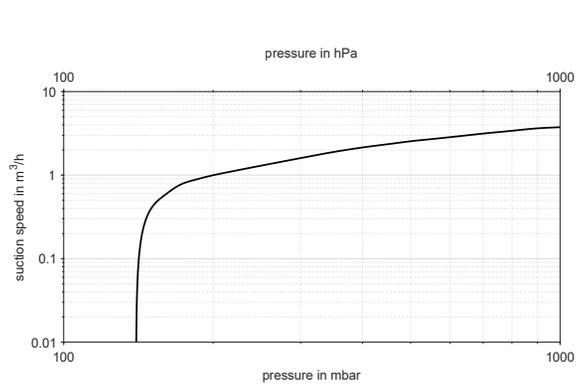
# MGP75-21ATV-XT

## MGP75-21ATV-XT

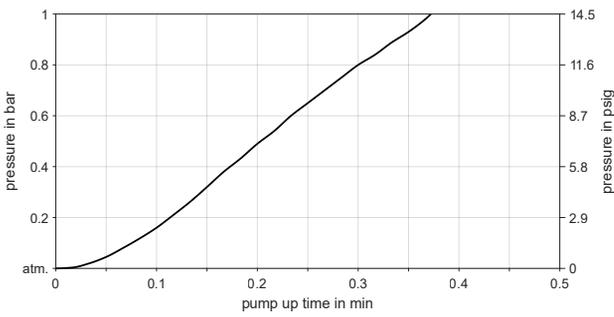


Flow rate determined at 20°C, 1000 hPa with air  
(pressure range 0 to 1000 hPa based on ISO 21360-1/2)

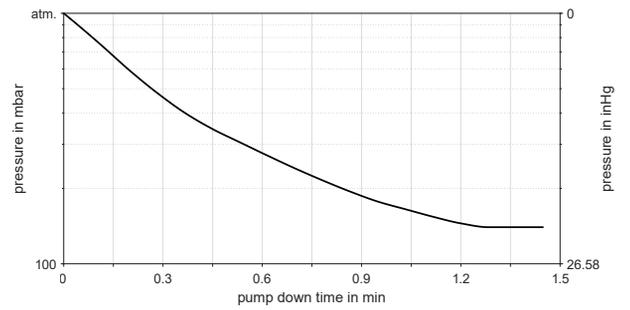
## VOLUME FLOW RATE CURVE



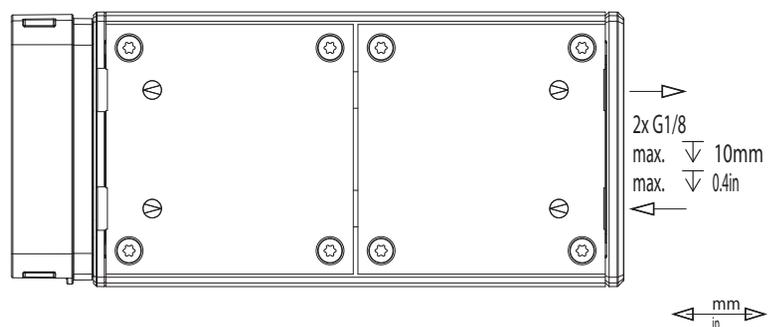
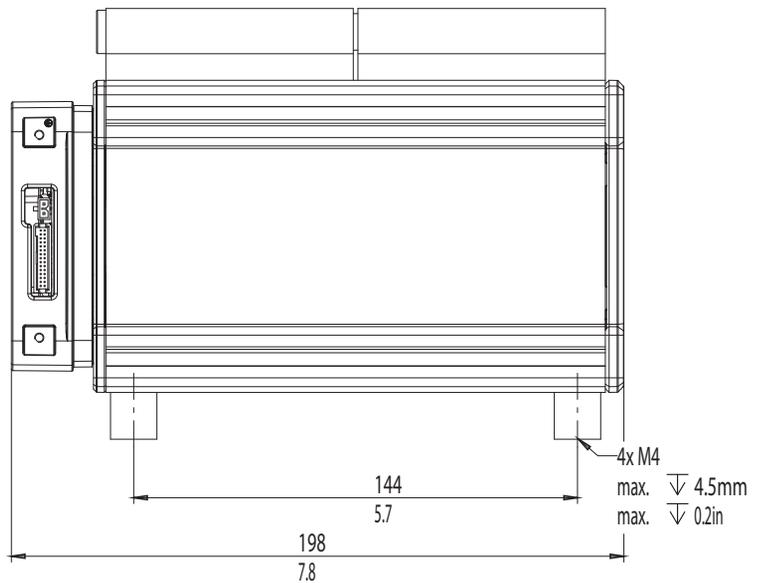
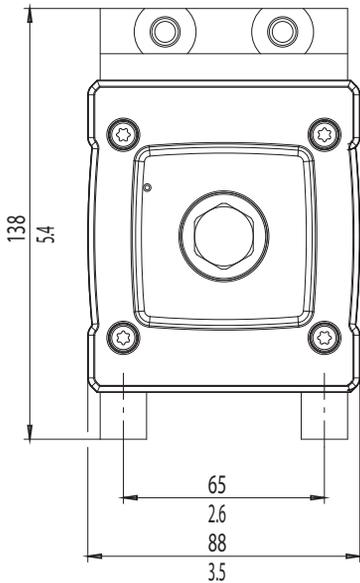
## PUMP-UP TIME FOR 20-LITER CONTAINER



## PUMP-DOWN TIME FOR 20-LITER CONTAINER

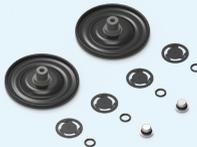


# MGP75-21ATV-XT



# SPARE PARTS AND ACCESSORIES

## SPARE PARTS

| Designation                    | Figure  | Order no. | Details   |
|--------------------------------|---|-----------|---|
| Spare part set MGP75-2_-_PV-XT |  | 353118    | This spare part set consists of:<br>2x diaphragms,<br>4x valves,<br>4x O-rings<br>2x sealing plugs.<br>This set is required for pump maintenance. |
| Spare part set MGP75-2_-_TV-XT |  | 353117    | This spare part set consists of:<br>2x diaphragms,<br>4x valves,<br>4x O-rings<br>2x sealing plugs.<br>This set is required for pump maintenance. |

## ACCESSORIES

| Designation              | Figure  | Order no. | Details                                      |
|--------------------------|---|-----------|--|
| Silencer / intake filter |    | 007006    | G 1/8  |
| Adapter                  |   | 339159    | G 1/8 AG, NPT 1/8 IG, stainless steel 1.4571 |
| Hose nipple (straight)   |  | 004975    | G 1/8, PA, inner diameter 8mm                |
| Sealing ring             |  | 026906    | G 1/8  |

The performance values for the series production models described in this data sheet were determined under test conditions. The actual performance values may deviate from these and are dependent, in particular, on the conditions of use and thus the specific application, the parameters of the components involved in the user's system and on any technical changes or modifications that deviate from the standard configuration or the as-delivered condition.

If customized versions have been produced based on series production models, different technical performance data may apply to them.

Before commissioning, the associated operating instructions and/or assembly instructions must be read and the safety information provided in them must be observed.

KNF reserves the right to make modifications to the product and associated documentation without prior notice.