

## DDA 7.5-16 AR-PVC/V/C with access.

Grundfos pump 97974077



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<https://www.lenntech.com/grundfos/DDAFAM/97974077/DDA-7-5-16-WITH-ACCESS.html>

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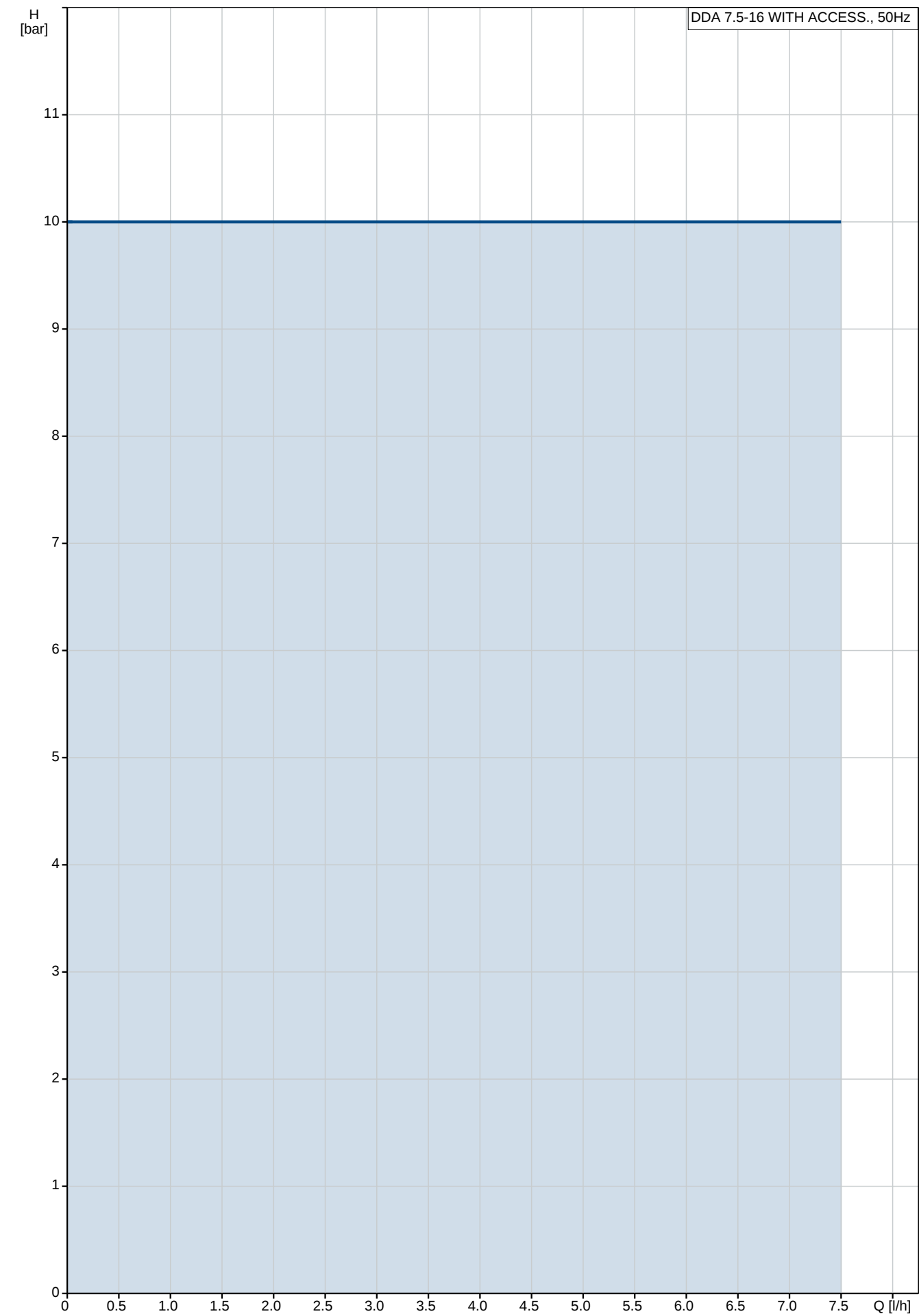
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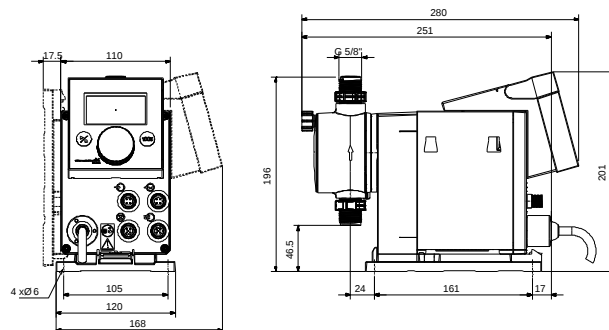
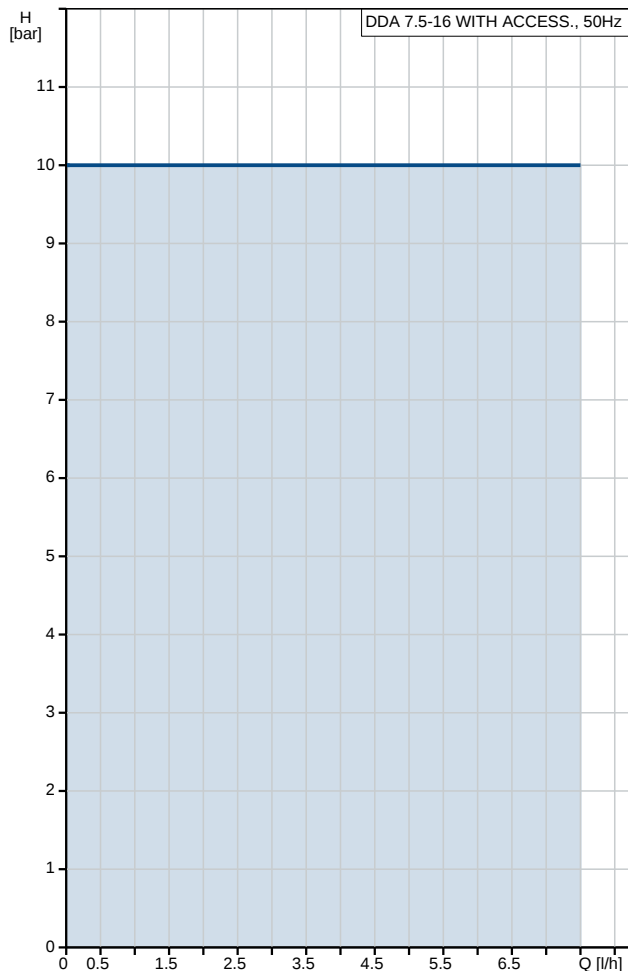
| Position | Qty. | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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|          | 1    | <p><b>DDA 7.5-16 WITH ACCESS.</b></p>  <p><b>Note! Product picture may differ from actual product</b></p> <p>Product No.: On request<br/>DDA 7.5-16 AR-PVC/V/C WITH ACC</p> <p>The SMART Digital DDA is a compact positive displacement, diaphragm dosing pump with variable-speed drive (stepper motor) and intelligent control electronics with minimum energy consumption. The SMART Digital Dosing series operates at full stroke length to ensure optimum accuracy, priming and suction, even for high-viscosity or degassing liquids. The duration of each discharge stroke varies according to the capacity set, resulting in optimum smooth and continuous discharge flow.</p> <p>The click-stop mounting plate allows installation in three different positions without using any additional accessories. The control cube can be turned easily into front, left or right position. The click wheel and the multi-coloured backlit graphical, plain-text LC display make commissioning and operation intuitive. The control elements are protected by a transparent cover.</p> <p>The dosing head is composed of:</p> <ul style="list-style-type: none"> <li>- Long lifetime and universal, chemically resistant full-PTFE diaphragm.</li> <li>- Double ball valves for highest dosing accuracy.</li> <li>- Deaeration valve for easy start-up.</li> </ul> <p>Operation modes:</p> <ul style="list-style-type: none"> <li>- Manual dosing in ml/h, l/h or gph.</li> <li>- Pulse control in ml/pulse (incl. memory function).</li> <li>- Analog control 0/4-20 mA (scalable).</li> <li>- Pulse-based batch function in ml, l or gal.</li> <li>- Timer-based batch function (Dosing timer, cycle or week).</li> <li>- Fieldbus control (ProfibusDP or Modbus with E-box).</li> </ul> <p>Other features:</p> <ul style="list-style-type: none"> <li>- Auto deaeration during pump standby to avoid breakdowns due to air-locking.</li> <li>- Two SlowMode steps (anti-cavitation), 50 % (maximum flow: 3.75 l/h) and 25 % (maximum flow: 1.88 l/h), e.g. for high-viscosity or degassing liquids.</li> <li>- Service information display to show when service and which wear-part order number is required.</li> <li>- Two-step key lock function to protect the pump against unauthorised access.</li> <li>- Additional display function to provide further information, e.g. the actual mA input signal.</li> <li>- Counter for total dosed volume (resettable), operating hours, etc.</li> <li>- Save and load customised settings as well as reload of factory settings.</li> </ul> <p>Signal inputs/outputs:</p> <ul style="list-style-type: none"> <li>- Input for pulse, analog 0/4-20mA, external stop.</li> <li>- Input for low-level and empty-tank signal.</li> <li>- Two potential-free output relays for max. 30 V AC/DC (configurable, e.g. alarm, stroke signal, pump dosing, timer etc.)</li> <li>- Output analog 0/4-20mA.</li> <li>- Fieldbus communication interface (GeniBus, also for additional Profibus DP E-box to retrofit).</li> </ul> <p>Installation set includes:</p> <ul style="list-style-type: none"> <li>- Foot valve with strainer and weight (with two level switch).</li> <li>- Injection unit.</li> <li>- 6 m PE (ETFE with PVDF dosing head) discharge hose.</li> <li>- 2 m PVC (ETFE with PVDF dosing head) suction hose.</li> <li>- 2 m PVC deaeration hose (4/6 mm).</li> <li>- 5 m Control cable for all in and output signals.</li> </ul> |

| Position | Qty. | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |      | <p>- 5 m Control cable for potential-free output relays.</p> <p><b>Controls:</b></p> <p>Control variant: AR</p> <p>Level control: YES</p> <p>Analog input: 0/4-20 MA</p> <p>Pulse control: YES</p> <p>Ext. Stop input: YES</p> <p>Analog output: 0/4-20 MA</p> <p>Output relays: 2</p> <p>Bus communication: YES</p> <p><b>Liquid:</b></p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: -10 .. 45 °C</p> <p>Liquid temperature during operation: 20 °C</p> <p>Density: 998.2 kg/m³</p> <p><b>Technical:</b></p> <p>Type key: DDA 7.5-16 AR-PVC/V/C WITH ACC</p> <p>Max. Flow: 7.5 l/h</p> <p>Max. flow in slow mode 50%: 3.75 l/h</p> <p>Max. flow in slow mode 25%: 1.88 l/h</p> <p>Min flow: 2.5 ml/h</p> <p>Turn-down ratio: 1:3000</p> <p>Approvals on nameplate: CE,CSA-US,NSF61</p> <p>Valve type: Standard</p> <p>Maximum viscosity at 100 %: 50 mPas</p> <p>Maximum viscosity in slow mode 50 %: 1800 mPas</p> <p>Maximum viscosity in slow mode 25 %: 2500 mPas</p> <p>Accuracy of repeatability: 1 %</p> <p><b>Materials:</b></p> <p>Dosing head: PVC (Polyvinyl chloride)</p> <p>Valve ball: Ceramic</p> <p>Gasket: FKM</p> <p><b>Installation:</b></p> <p>Range of ambient temperature: 0 .. 45 °C</p> <p>Maximum operating pressure: 10 bar</p> <p>Installation set: YES</p> <p>Installation type: No installation set</p> <p>Pump inlet: 4/6, 6/9, 6/12, 9/12 mm</p> <p>Pump outlet: 4/6, 6/9, 6/12, 9/12 mm</p> <p>Max. Suction lift during operation: 6 m</p> <p>Max. Suction lift during priming: 2 m</p> <p><b>Electrical data:</b></p> <p>Maximum power input - P1: 24 W</p> <p>Mains frequency: 50 Hz</p> <p>Rated voltage: 1 x 100-240 V</p> <p>Enclosure class (IEC 34-5): IP65 / NEMA 4X</p> <p>Length of cable: 1.5 m</p> <p>Type of cable plug: EU</p> <p>Inrush current: 25A at 230V for 2ms</p> <p><b>Others:</b></p> <p>Net weight: 3 kg</p> <p>Gross weight: 4 kg</p> <p>Color: RED</p> |

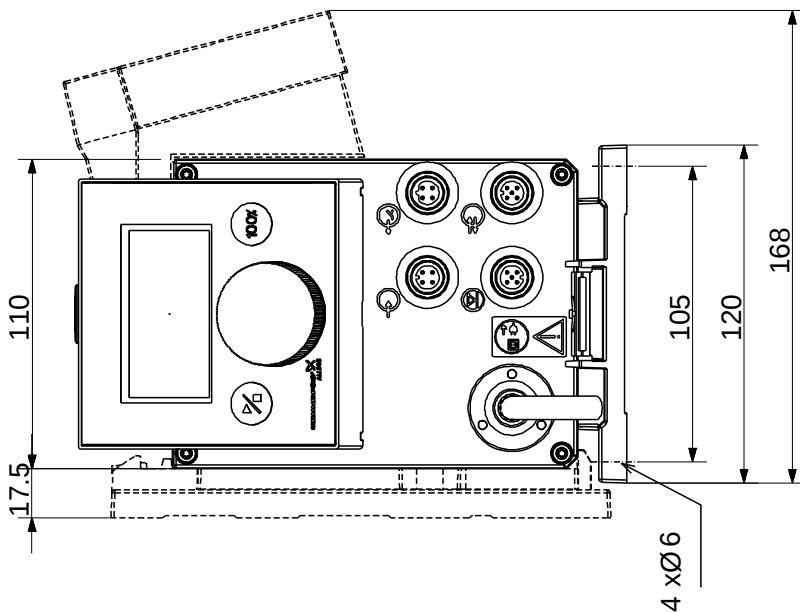
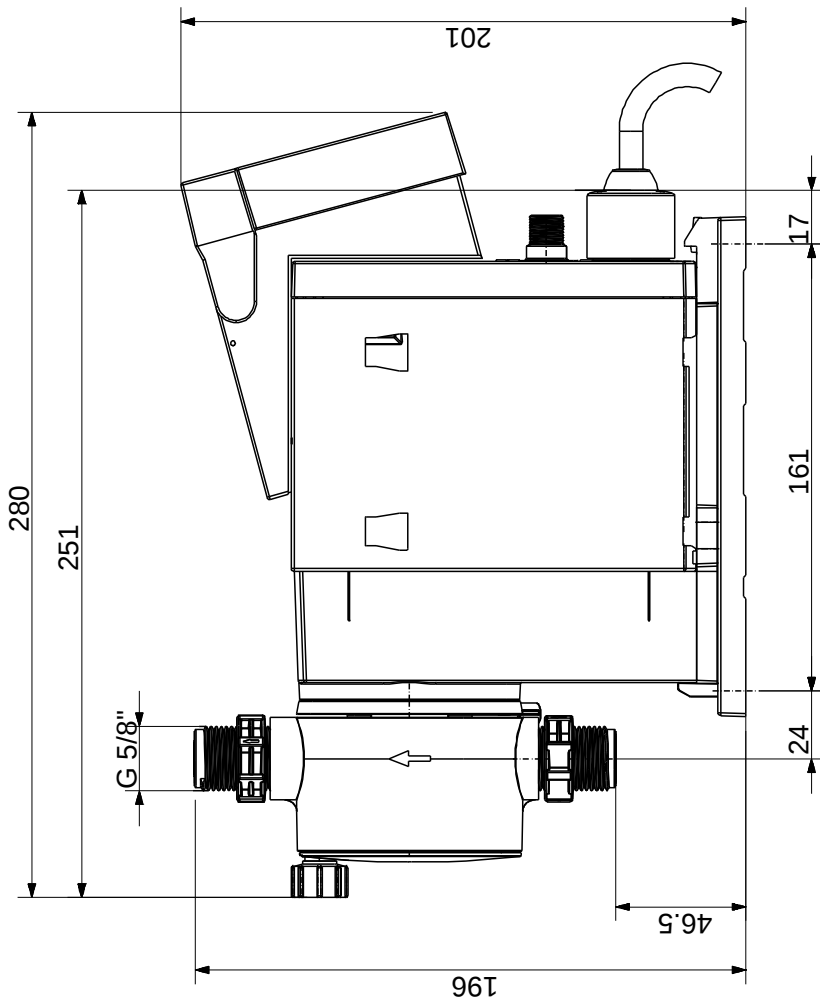
On request DDA 7.5-16 WITH ACCESS. 50 Hz



| Description                          | Value                          |
|--------------------------------------|--------------------------------|
| <b>General information:</b>          |                                |
| Product name:                        | DDA 7.5-16 WITH ACCESS.        |
| Product No:                          | On request                     |
| EAN number:                          | On request                     |
| <b>Technical:</b>                    |                                |
| Type key:                            | DDA 7.5-16 AR-PVC/V/C WITH ACC |
| Max. Flow:                           | 7.5 l/h                        |
| Max. flow in slow mode 50%:          | 3.75 l/h                       |
| Max. flow in slow mode 25%:          | 1.88 l/h                       |
| Min flow:                            | 2.5 ml/h                       |
| Turn-down ratio:                     | 1:3000                         |
| Approvals on nameplate:              | CE,CSA-US,NSF61                |
| Valve type:                          | Standard                       |
| Maximum viscosity at 100 %:          | 50 mPas                        |
| Maximum viscosity in slow mode 50 %: | 1800 mPas                      |
| Maximum viscosity in slow mode 25 %: | 2500 mPas                      |
| Accuracy of repeatability:           | 1 %                            |
| <b>Materials:</b>                    |                                |
| Dosing head:                         | PVC (Polyvinyl chloride)       |
| Valve ball:                          | Ceramic                        |
| Gasket:                              | FKM                            |
| <b>Installation:</b>                 |                                |
| Range of ambient temperature:        | 0 .. 45 °C                     |
| Maximum operating pressure:          | 10 bar                         |
| Installation set:                    | YES                            |
| Installation type:                   | No installation set            |
| Pump inlet:                          | 4/6, 6/9, 6/12, 9/12 mm        |
| Pump outlet:                         | 4/6, 6/9, 6/12, 9/12 mm        |
| Max. Suction lift during operation:  | 6 m                            |
| Max. Suction lift during priming:    | 2 m                            |
| <b>Liquid:</b>                       |                                |
| Pumped liquid:                       | Water                          |
| Liquid temperature range:            | -10 .. 45 °C                   |
| Liquid temperature during operation: | 20 °C                          |
| Density:                             | 998.2 kg/m <sup>3</sup>        |
| <b>Electrical data:</b>              |                                |
| Maximum power input - P1:            | 24 W                           |
| Mains frequency:                     | 50 Hz                          |
| Rated voltage:                       | 1 x 100-240 V                  |
| Enclosure class (IEC 34-5):          | IP65 / NEMA 4X                 |
| Length of cable:                     | 1.5 m                          |
| Type of cable plug:                  | EU                             |
| Inrush current:                      | 25A at 230V for 2ms            |
| <b>Controls:</b>                     |                                |
| Control variant:                     | AR                             |
| Control panel:                       | FRONT-MOUNTED                  |
| Level control:                       | YES                            |
| Analog input:                        | 0/4-20 MA                      |
| Pulse control:                       | YES                            |
| Ext. Stop input:                     | YES                            |
| Analog output:                       | 0/4-20 MA                      |
| Output relays:                       | 2                              |
| Bus communication:                   | YES                            |
| <b>Others:</b>                       |                                |
| Net weight:                          | 3 kg                           |
| Gross weight:                        | 4 kg                           |
| Color:                               | RED                            |



**On request DDA 7.5-16 WITH ACCESS. 50 Hz**



Note! All units are in [mm] unless others are stated.  
Disclaimer: This simplified dimensional drawing does not show all details.

# Exploded view



Sectional drawing (TM058200 for TPE2,TPE3)



TM058200

# Exploded view ( TM057026 for MGE model H/I )



*Disclaimer: The information about the Grundfos pump in this document may be outdated.*

*Data may be subject to alterations without further notice.*

*Please contact us to verify the data above is still accurate/up-to-date.*

*All information is copyright Grundfos.*



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