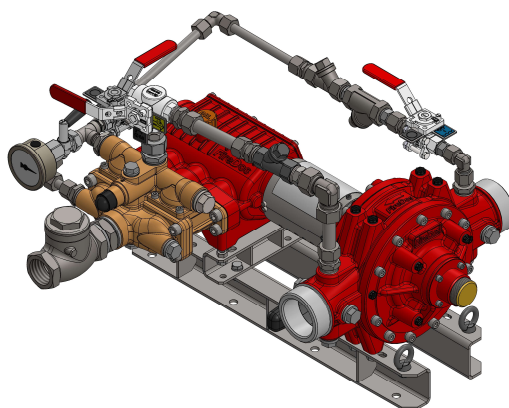


## ■ DATA SHEET PROPORTIONER FD500 GEN III FOR STATIONARY EXTINGUISHING SYSTEMS



### ■ 1. TECHNICAL DATA

Type	FD500/1-S	FD500/3-S
Proportioning rate	1 %	3 %
Approvals	-	
Flow directions of water motor	Horizontal: "left → right" or "right → left"	
	Vertical: "top → bottom" or "bottom → top"	
Water flow rate <sup>1)</sup>	70 l/min – 500 l/min	80 l/min – 500 l/min
Operating temperature <sup>2)</sup>	5 °C – 50 °C (standard version)	
	5 °C – 80 °C (High-Temp version) <sup>x)</sup>	
Storage temperature	-20 °C – 80 °C	
Operating pressure	5 – 16 bar	
Weight <sup>3)</sup>		
Freshwater version	40 kg	42 kg
Seawater version <sup>x)</sup>	66 kg	68 kg
ATEX classification <sup>x)</sup> for +5 °C ≤ T <sub>a</sub> ≤ +60 °C	II 2G Ex h IIC T4 Gb II 2D Ex h IIC T130 °C Gb	

1) The nominal proportioning rate is achieved when reaching the specified minimum figure. Indication for proportioning of fluid Newtonian foam agents at operating pressure of 5 bar. For more detailed information, refer to page 2, item 3. "Minimum water flow rate".

2) Operating temperature is the maximum ambient and medium (foam and extinguishing water) temperature. Maximum foam agent temperature is generally limited to 50 °C.

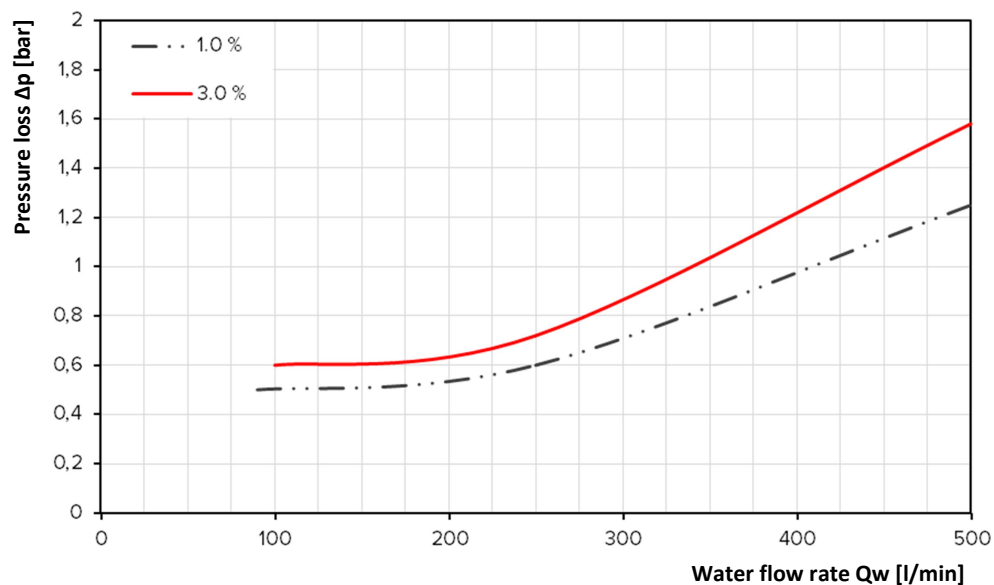
3) Weight indications are based upon the standard version in dry condition. Special versions will differ.

x) Optional equipment.



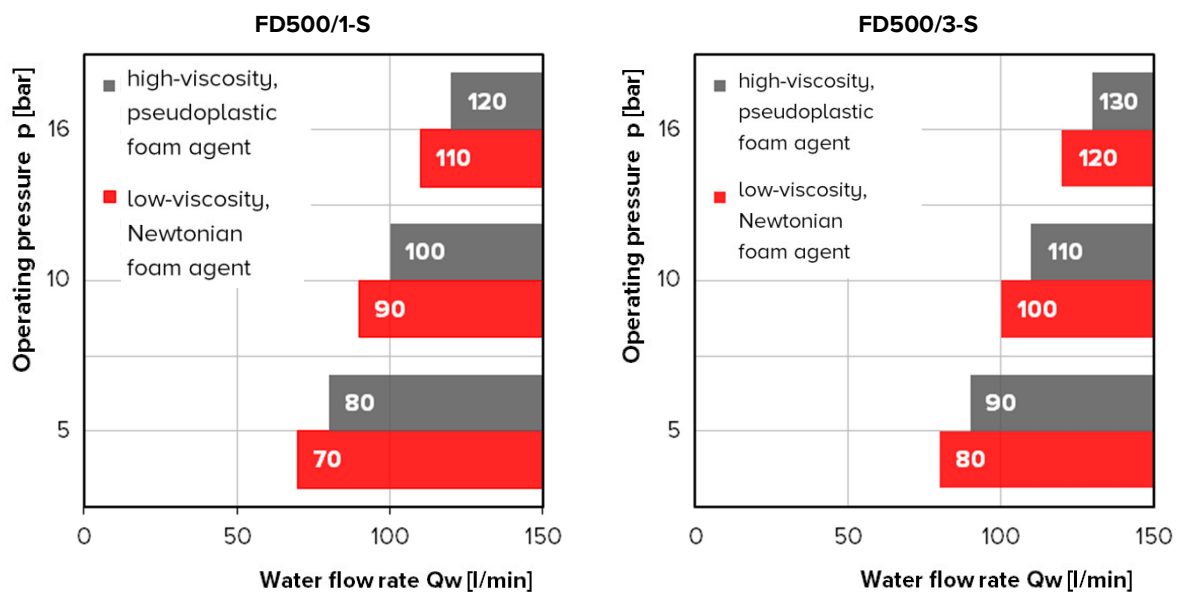
## 2. PRESSURE LOSS

Indication valid for operating pressure of 10 bar. For more information on different system conditions, please contact us.



## 3. MINIMUM WATER FLOW RATE

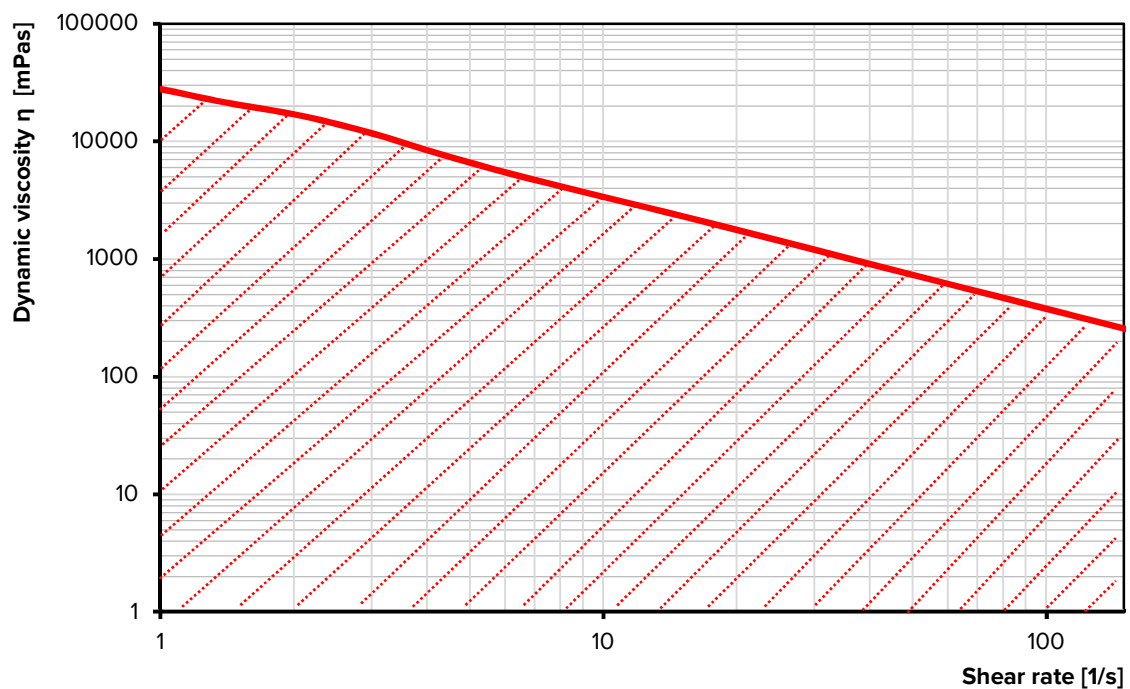
The following diagrams show the effect of the operating pressure and foam agent viscosity on the minimum water flow rate.



Comment: The values specified for the minimum extinguishing water flow rate increase by approx. 30% in the high-temperature version. The specified figures apply to the foam agent viscosity range stated in paragraph 4 only.

## 4. FOAM AGENT VISCOSITY

**FireDos** proportioners are suitable for all foam agents available on the market. For your reference, please find the corresponding (associated) range of dynamic viscosity below. Contact us if the dynamic viscosity of your foam agent is higher than the values in the diagram. **Do not hesitate to request our support for the correct dimensioning of your suction line.**

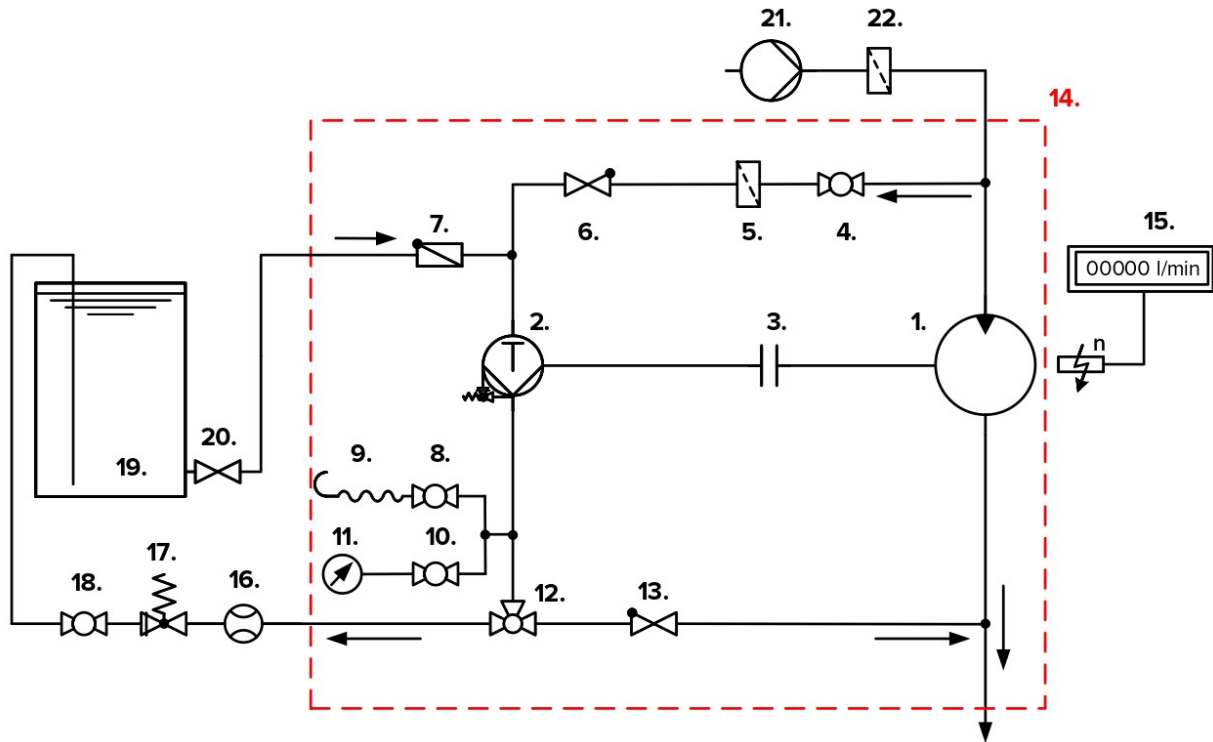


## 5. MATERIALS

	Freshwater version	Seawater version
<b>Water motor <sup>4)</sup></b>	Cast Aluminium G-AlSi7Mg HC-coated, AlMgSi1 HC-PTFE-coated, stainless steel 316 / 316Ti, POM, PVDF, NBR, FKM	Cast Bronze G-CuSn10, stainless steel 316 / 316Ti, Aluminium-Bronze CuAl10Fe5Ni5-C-GC, POM, PVDF, NBR, FKM
<b>Proportioning pump <sup>4)</sup></b>	Stainless steel 316 / SS316Ti, POM, FKM, Aluminium oxide ceramic Al2O3, Aluminium-Bronze CuAl10Ni5Fe5-C-GC	
<b>Pipework <sup>4)</sup></b>	Stainless steel 316 / CF8M / SS316Ti, PTFE,	
<b>Support frame</b>	Stainless steel 304 / 316	

<sup>4)</sup> media-exposed materials

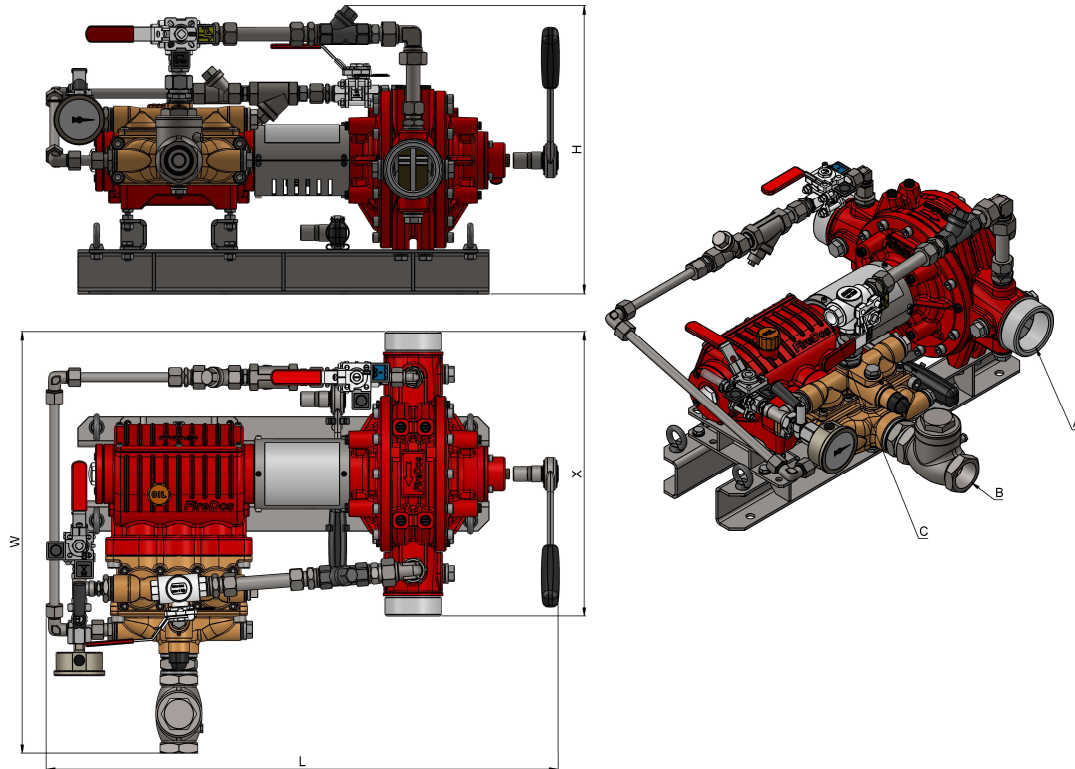
## ■ 6. FLOW DIAGRAM



- |  |   |
|--|---|
| 1. Water motor                         | 12. 3-way ball valve "Returning/Proportioning"              |
| 2. Proportioning pump                  | 13. Check valve in the proportioning line                   |
| 3. Coupling                            | 14. Standard scope of supply of <b>FireDos</b> proportioner |
| 4. 2-way ball valve "Flushing/Priming" | 15. Revolution counter with flow rate display <sup>x)</sup> |
| 5. Filter in the flushing line         | 16. Flow meter for return line <sup>x)</sup>                |
| 6. Check valve in the flushing line    | 17. Pressure retention valve for return line <sup>x)</sup>  |
| 7. Non-return flap in the suction line | 18. 2-way ball valve in return line <sup>x)</sup>           |
| 8. Air bleed valve                     | 19. Foam agent supply                                       |
| 9. Air bleed hose                      | 20. Shut-off valve in the suction line                      |
| 10. Shut-off valve pressure gauge      | 21. Extinguishing water supply                              |
| 11. Pressure gauge                     | 22. Water filter  |

X) Optional equipment

## 7. EXAMPLE FIGURE / DIMENSIONS



Type	FD500/1-S	FD500/3-S
Proportioning rate	1 %	3 %
Connection water motor A	Optionally: 2.1/2" MT BSP, 2" FT BSP (Standard) flange DIN EN 1092-1, DN65 PN16 flange ASME B16.5, 2.1/2" Class 150	
Installation length water motor X <sup>5)</sup>	383 mm	
Connection suction line B	1.1/4" FT BSP	1.1/4" FT BSP
Connection return line C	1/2" FT BSP	3/4" FT BSP
Length L <sup>5)</sup>	690 mm	700 mm
Width W <sup>5)</sup>	566 mm	566 mm
Height H <sup>5)</sup>	390 mm	400 mm

All figures are approximate only and depend on the particular version/equipment options.

5) Further accessories to the proportioner may require more installation space.

Please allow sufficient accessibility of the proportioner for maintenance work. For assistance to ensure sufficient accessibility, please refer to our planning manual for proportioners.

## 8. MANUFACTURER

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Phone +49 (0) 6036 9796-0, Email: [info@firedos.de](mailto:info@firedos.de)

We reserve the right to make modifications at any time.