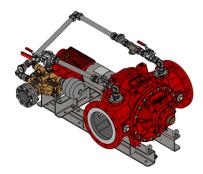
### DATA SHEET PROPORTIONER FD10000 GEN III FOR STATIONARY EXTINGUISHING SYSTEMS.

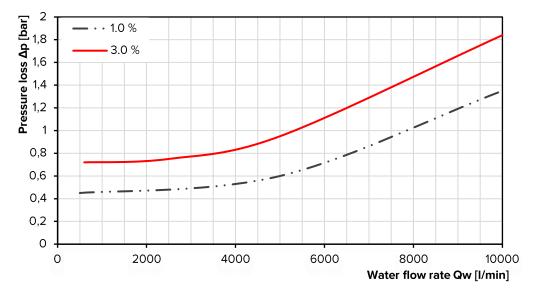


### **1. TECHNICAL DATA.**

Approvals Flow directions of water motor	FM <sup>2)</sup> VdS <sup>2)</sup>	0.5 % _ _	1%	<b>3 %</b> proval PR452158 VdS G421001	3% + 3% = 6% 		
Approvals Flow directions of water motor		-			-		
Flow directions of water motor	VdS <sup>2)</sup>	-	-	VdS G421001	_		
water motor							
		Horizontal: "left $\rightarrow$ right" or "right $\rightarrow$ left"					
Min water flow rat	water motor		Vertical: "top $\rightarrow$ bottom" or "bottom $\rightarrow$ top"				
win. water now rat	Min. water flow rate <sup>1)</sup>		400 l/min	450 l/min	650 l/min		
Min. water flow rate FM		_	690 l/min	1060 l/min	_		
Max. water flow rate		10000 l/min					
Operating temperature <sup>3)</sup>		5° C – 50° C (standard version)					
		5 °C – 80 °C (High-Temp version) ×)					
Storage temperatu	re	-20 °C – 80 °C					
Operating pressure		5 – 16 bar					
Weight <sup>4)</sup> Freshwater version Seawater version <sup>x)</sup>		280 kg 678 kg	335 kg 645 kg	505 kg 815 kg	665 kg 975 kg		
Seawater version $\checkmark$ 678 kg645 kgATEX classification $^{\times}$ $\textcircled{\baselineskip}{\baselineskip}$ $\textcircled{\baselineskip}{\baselineskip}$ $\textcircled{\baselineskip}{\baselineskip}$ for +5 °C ≤ Ta ≤ +60 °C $\textcircled{\baselineskip}{\baselineskip}$ $\textcircled{\baselineskip}{\baselineskip}$ $\textcircled{\baselineskip}{\baselineskip}$			h IIC T4 Gb				
operating pressure of 5 ba 2) For information regardin 3) Operating temp. is the n	ar. For more de ng FM Approve nax. ambient a	tailed information, refer to d data, please refer to ww ind medium (foam and exti	page 2, item 3. " <i>Minimum</i> w.approvalguide.com. For '	water flow rate". VdS Approval conditions, s ture. Max. foam agent temp	of fluid Newtonian foam age see VdS Certificate G4200; p. is generally limited to 50		

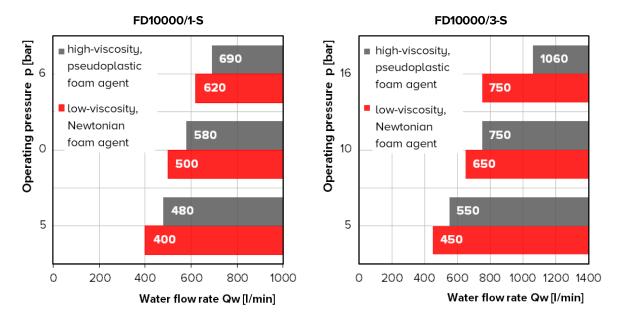
#### 2. PRESSURE LOSS.

Indication valid for operating pressure of 10 bar. For more information on different system conditions or proportioning rates, 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 (valid for viscosities in the graph at para. 4).

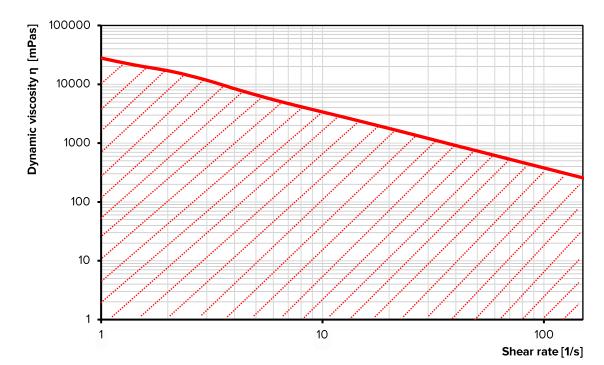


#### Comment:

The values can be reduced to approx. 35% by an optional flow reduction. The values increase by approx. 40% in the high-temp version. For values at other proportioning rates, please contact us.

### 4. FOAM AGENT VISCOSITY.

*FireDos* proportioners are suitable for all foam agents available on the market. For reference regarding units with an FM Approval, please find the corresponding/associated range of dynamic viscosity below (www.approvalguide.com). 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.



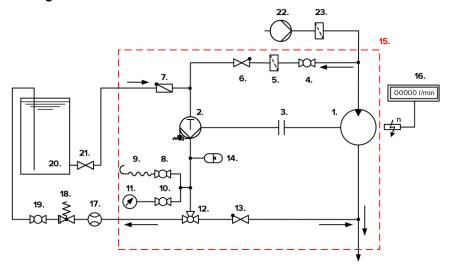
5. MATERIALS.

	Freshwater version	Seawater version			
Water motor <sup>4)</sup>	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			
Proportioning pump <sup>4)</sup>	Stainless steel 316 / SS316Ti / 318 LN, POM, FKM, Aluminium oxide ceramic Al2O3, Aluminium-Bronze CuAl10Ni5Fe5-C-GC				
Pipework 4)	Stainless steel 316 / CF8M / SS316Ti, PTFE, FKM				
Support frame	Stainless steel 304 / 316				

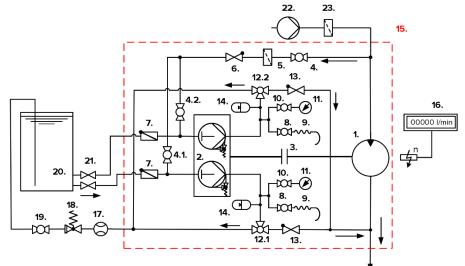
4) media-exposed materials

#### 6. FLOW DIAGRAM.

Proportioning rate 0.5% / 1% / 3%



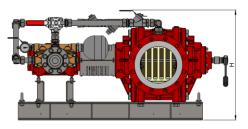
Proportioning rate 3% + 3% = 6%

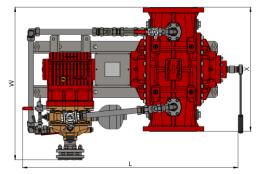


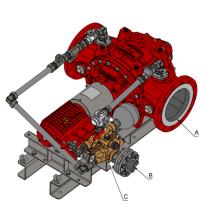
- 1. Water motor
- 2. Proportioning pump
- 3. Coupling
- 4. 2-way ball valve "Flushing/Priming"
- 4.1 "Flushing/Priming" pump head I
- 4.2 "Flushing/Priming" pump head II
- 5. Filter in the flushing line
- 6. Check valve in the flushing line
- 7. Non-return flap in the suction line
- 8. Air bleed valve
- 9. Air bleed hose
- 10. Shut-off valve pressure gauge
- 11. Pressure gauge
- 12. 3-way ball valve "Returning/Proportioning"
- X) Special version

- 12.1 "Returning/Proportioning" pump head I
- 12.2 "Returning/Proportioning" pump head II
- 13. Check valve in the proportioning line
- 14. Pulsation damper
- 15. Standard scope of supply of *FireDos* proportioner
- 16. Revolution counter with flow rate display  $x^{(x)}$
- 17. Flow meter for return line  $^{\times)}$
- 18. Pressure sustaining valve for return  $l^{(x)}$
- 19. 2-way ball valve in return line x)
- 20. Foam agent supply
- 21. Shut-off valve in the suction line
- 22. Extinguishing water supply
- 23. Water filter

#### 7. EXAMPLE FIGURE / DIMENSIONS.







Туре	FD10000/0,5-S	FD10000/1-S	FD10000/3-S	FD10000/3/3-S	
Proportioning rate	0.5 %	1 %	3 %	3% + 3% = 6%	
Connection water motor A	Optionally: Flange DIN EN 1092-1, DN250 PN16 RF Flange ASME B16.5, 10" Class 150 RF				
Installation length water motor X <sup>5)</sup>	825 mm				
Connection suction line B	2" MT BSP 2" MT NPT <sup>X)</sup>	2.1/2" FT BSP Flange ASME B16.5 2.1/2" Class 150 <sup>x)</sup>	4" FT BSP Flange ASME B16.5 4" Class 150 <sup>X)</sup>	2x 4" MT BSP 2x Flange ASME B16.5 4" Class 150 <sup>X)</sup>	
Connection return line C	1" FT BSP 1" MT NPT <sup>X)</sup>	1.1/4" FT BSP 1.1/4" MT NPT <sup>X)</sup>	2.1/2" FT BSP Victaulic OGS DN50 <sup>X)</sup>	2x 2.1/2" FT BSP 2x Victaulic OGS DN50 <sup>X)</sup>	
Length L <sup>5)</sup>	1328 mm	1475 mm	1670 mm	1770 mm	
Width W <sup>5)</sup>	787 mm	1015 mm	1225 mm	1450 mm	
Height H <sup>5)</sup>	722 mm	735 mm	840 mm	990 mm	

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

X) Special version.

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.

*FireDos* GmbH, Auf der Kaulbahn 6, 61200 Woelfersheim, Germany Phone +49 (0) 6036 9796-0, Email: info@firedos.de

We reserve the right to make modifications at any time.