

# Selection of available FIREMIKS Fixed - F models

Note! we reserve for changes in specifications, always consult us for latest Data sheet and Dimensional drawing, before designing your system.

PP models		Models using a plunger pump, also called piston pump, suitable for wide flow range and low to medium viscosity (1-1800 cP at 60rpm, or 1-3600 cP at 30 rpm, Brookfield Viscometer spindle #4.) Standard max system pressure 16 bar. For use with higher viscosity, contact Firemiks AB. Water motor available in Hard anodized aluminium, Ni-AI-Bronze and SS316L. Models with selectable dosing rate available with added short-cuts vavles on piston pump. Line of FM-approved models 450 - 3200 lpm with 3% dosing rate available.				
FIREMIKS	Model designation	Nominal admixture	Flow span*	Water motor connection	Approx dimensions**	
	'-FM' (at the end) = FM Approved	(Optional selectable %) Dosing rate %	lpm	Thread (G"): iso 228-1 male Cut Groove (DN): ANSI/AWWA C606/15	LxWxH (mm)	
FIREMIKS	180-1-PP-F G8	(0,5-) 1%	45-180	G 1,5" or Cut Groove DN 40 1,5"	440x250x260	
FIREMIKS	180-1,5-PP-F G8	(0,5-1-) 1,5%	45-180	G 1,5" or Cut Groove DN 40 1,5"	440x250x260	
FIREMIKS	180-3-PP-F G8	(1-2-) 3%	50-180	G 1,5" or Cut Groove DN 40 1,5"	435x285x400	
FIREMIKS	450-1-PP-F G8	(0,3-0,6-) 1%	80-450	G 2" or Cut Groove DN 50 2"	460x296x350	
FIREMIKS	450-3-PP-F G8	(1-2-) 3%	85-450	G 2" or Cut Groove DN 50 2"	515x310x430	
FIREMIKS	450-3-PP-F-FM	3%	112-450	G 2" or Cut Groove DN 50 2"	511x306x412	
FIREMIKS	800-0,5-PP-F G71	0,5%	100-800	G 2,5" or Cut Groove DN 65 2,5"	525x380x275	
FIREMIKS	800-3-PP-F G71	(1-2-) 3%	135-800	G 2,5" or Cut Groove DN 65 2,5"	715x455x490	
FIREMIKS	800-3-PP-F-FM	3%	135-800	G 2,5" or Cut Groove DN65 2,5"	700x455x495	
FIREMIKS	1200-1-PP-F G8	(0,3-0,6-) 1%	150-1200	G 3" or Cut Groove DN80 3"	600x380x460	
FIREMIKS	1200-2-PP-F G71	2%	240-1200	G 3" or Cut Groove DN80 3"	750x455x525	
FIREMIKS	1200-3-PP-F G71	(1-2-) 3%	260-1200	G 3" or Cut Groove DN80 3"	755x455x560	
FIREMIKS	1200-3-PP-F-FM	3%	260-1200	G 3" or Cut Groove DN80 3"	750x455x525	
FIREMIKS	1800-1-PP-F G71	(0,3-0,6-) 1%	160-1800	G 4" or Cut Groove DN 100 4"	710x456x460	
FIREMIKS	1800-2-PP-F G71	2%	220-1800	G 4" or Cut Groove DN 100 4"	835x535x470	
FIREMIKS	1800-3-PP-F G71	(1-2-) 3% 3%	240-1800 240-1800	G 4" or Cut Groove DN 100 4" G 4" or Cut Groove DN 100 4"	850x535x575	
FIREMIKS	1800-3-PP-F-FM 2400-0,5-PP-F G71	0,5%	200-2400	G 4" or Cut Groove DN 100 4"	850x535x545 690x590x430	
FIREMIKS	2400-0,5-PP-F G71 2400-1-PP-F G71	(0,3-0,6-) 1%	200-2400	G 4" or Cut Groove DN 100 4"	795x510x435	
FIREMIKS	2400-1-PP-F G71 2400-3-PP-F G71	(1-2-) 3%	310-2400	G 4" or Cut Groove DN 100 4"	975x560x570	
FIREMIKS	2400-3-PP-F-FM	3%	311-2400	G 4" or Cut Groove DN 100 4"	975x558x560	
FIREMIKS	2400-3-6-PP-F G8	(1-2-) 3%-(4-5-) 6%	600-2400	G 4" or Cut Groove DN 100 4"	1085x605x580	
FIREMIKS	3200-1-PP-F G8	(0,3-0,6-) 1%	300-3200	Cut Groove DN 125 5" (141,3)	970x590x520	
FIREMIKS	3200-2-PP-F G8	2%	330-3200	Cut Groove DN 125 5" (141,3)	1050x615x650	
FIREMIKS	3200-3-PP-F-FM	3%	500-3200	Cut Groove DN 125 5" (141,3)	1055x615x700	
FIREMIKS	3200-3-PP-F G8	(1-2-) 3%	350-3200	Cut Groove DN 125 5" (141,3)	1060x615x665	
FIREMIKS	4500-0.3-PP-FG8	0,3%	250-4500	Cut Groove DN 150 6"	800x590x595	
FIREMIKS	4500-1-PP-F G8	(0,3-0,6-) 1%	350-4500	Cut Groove DN 150 6"	940x590x610	
FIREMIKS	4500-2-PP-F G8	2%	380-4500	Cut Groove DN 150 6"	1010x615x620	
FIREMIKS	4500-3-PP-F G8	(1-2-) 3%	400-4500	Cut Groove DN 150 6"	1030x635x735	
IREMIKS	4500-3-6-PP-F G8	(1-2-) 3%-(4-5-) 6%	1000-4500	Cut Groove DN 150 6"	1150x700x700	
FIREMIKS	5000-1-PP-F G8	(0,3-0,6-) 1%	500-5000	Cut Groove DN 150 6"	940x590x610	
FIREMIKS	6000-0,5-PP-F G8	0,5%	350-6000	Cut Groove DN 150 6"	995x845x590	
FIREMIKS	6000-1-PP-F G8	(0,3-0,6-) 1%	380-6000	Cut Groove DN 150 6"	1080x700x660	
FIREMIKS	6000-3-PP-F G8	(1-2-) 3%	400-6000	Cut Groove DN 150 6"	1240x780x675	
FIREMIKS	6000-3-6-PP-F G8	(1-2-) 3%-(4-5-) 6%	1200-6000	Cut Groove DN 150 6"	1170x830x730	
FIREMIKS	8000-1-PP-F G8	(0,3-0,6-) 1%	400-8000	Cut Groove DN 200 8"	1180x700x690	



FIREMIKS	8000-3-PP-F G8	(1-2-) 3%	700-8000	Cut Groove DN 200 8"	1310x710x780
FIREMIKS	10000-1-PP-F G8	(0,3-0,6-) 1%	500-10000	Cut Groove DN 250 10"	1190x800x630
FIREMIKS	10000-3-PP-F G8	(1-2-) 3%	800-10000	Cut Groove DN 250 10"	1305x880x895

#### \* Notes on dosing and flow on -PP models:

The lowest flow (min flow) is the flow at which the dosing for the first time is nominally correct %. Below min flow there is still dosing as long as the unit is turning.

- Min flow is dependent on dosing rate, viscosity and pressure, the quoted number are valid for 1-20cP and 4 bar system pressure and the highest selectable dosing rate if applicable. Consult most recent data sheet for more information.

- Once min flow is reached, in a typical installation dosing is no longer pressure dependant at higher flows as pressures change (up or down) with increased flow

- If a low min flow is important, please contact your distributor or Firemiks AB what you can expect with your specific installation and if there are is room for improvement with product optimisation or future updates.

- Unlike many other types of dosing systems, dosing is not dependant on a minimum system pressure. Dosing works even if discarge pressure is very low pressure.

\*\* Varies with options

**GP** models

Models using a Gear Pump. Recommended for Deluge applications (full or close to full flow) and for medium to very high viscosity concentrates. Standard max system pressure 12 bar. Water motor available in Hard anodized aluminium, Ni-Al-Bronze and SS316L.

FIREMIKS	Model designation	Nominal admixture	Flow span*	Water motor connection	Approx dimensions**
FIREMIKS	800-3-GP-F G8	3%	800	G 2,5" or Cut Groove DN 65 2,5"	575x410x460
FIREMIKS	1200-3-GP-F G8	3%	1200	G 3" or Cut Groove DN 80 3"	640x410x470
FIREMIKS	1800-3-GP-F G8	3%	1800	G 4" or Cut Groove DN 100 4"	750x500x560
FIREMIKS	2400-3-GP-F G8	3%	2400	G 4" or Cut Groove DN 100 4"	805x500x560
FIREMIKS	3200-3-GP-F G8	3%	3200	Cut Groove DN 150 6"	860x590x570
FIREMIKS	4500-3-GP-F G8	3%	4500	Cut Groove DN 150 6"	920x590x620
FIREMIKS	6000-3-GP-F G8	3%	6000	Cut Groove DN 150 6"	1080x700x720
FIREMIKS	6000-3-GP-BD-F G82	3%	6000	Cut Groove DN 150 6"	660 x700x735
FIREMIKS	8000-3-GP-F G8	3%	8000	Cut Groove DN 200 8"	1120x730x730
FIREMIKS	8000-3-GP-BD-F G83	3%	8000	Cut Groove DN 200 8"	700x685x785
FIREMIKS	10000-3-GP-F G8	3%	10000	Cut Groove DN 250 10"	1220x830x780
FIREMIKS	10000-3-GP-BD-F G83	3%	10000	Cut Groove DN 250 10"	740x800x770

#### Important notes on GP models:

- \* For use of GP models in applications that are not deluge/full flow, always consult your distributor or FIREMIKS AB to establish the best solution.
- system pressure and in-pump viscosity. Therefore, dosing performance at lower flows must be confirmed on a case-bycase basis.
- <sup>-</sup> On some sizes, pumps available with timing gear and UL listing (on pump only).
- are have greater flexibility to optimise performance for specific applications. Above denoted as "GP-BD" in the model designation.
- Some gear pumps are suitable also for use with low viscosity concentrates, consult us for details
- Other dosing % available on special request, with two different sized pumps selectable dosing rates can be made, e.g. 1
  2-3% by using double pumps, etc.
  - \*\* Depending on options and pump model used



## Optional features / items for all units

- Reversed flow direction
- Vertical installation (flow upwards/downwards). Consult us for details.
- Dosing Return Valve (DRV) 3-way valve, and Pressure relief valve (PRV). For testing without consuming concentrate.
- DRV dosing rate measuring equipment; tachometer, concentrate mag flow meter and a pressure regulating valve.
- High temperature application above 55°C (131°F).
- Different dosing %, e.g. 0,1%, 0,5%, 2%, 4% are usually possible, please inquire.
- Adaptors main water connection: Flanges PN10; PN16: ANSI RF #150. On special request flanges can be machined directly on connection pipes. Storz adapter etc.
- Y-strainer
- High-grade stainless-steel ball valves
- Stainless steel selector valves with iso 5211 interface
- Certifications / Factory Acceptance tested (FAT)
- Flap check valve on concentrate inlet, to prevent flushing water to go back to tank if Selector valve Dosing/Flusing valve is incorrectly operated or defective
- Check valve on flushing line and check valve on dosing line with increased opening pressure to prevent concentrate leakage on dry systems
- Pneumatic 2-way actuators for valves
- EN 10204 material certificate for water motor parts (requested at order), etc
- Supervisory switches for Dosing position on valves NO+NC

### Key properties and installation notes for all units

- The FIREMIKS is designed for use with a clean water supply only free from solids. Install suitable strainer upstream to stop all solids.
- The FIREMIKS is designed to serve in fire emergencies, it is not intended for 24/7 continuous use
- Avoid overspeed/overflow of the FIREMIKS, the unit is driven by the pressure difference across the unit, avoid very big pressure difference with high pressure before the unit and low pressure behind (e.g. empty piping).
- Before installing the FIREMIKS, all piping before must be flushed thoroughly.
- Do not expose the FIREMIKS to temperatures above 55 degrees Celcius at any time, see option for high-temperature
- Foam concentrate supply to the FIREMIKS -PP pump inlet must have positive pressure, gravity feed must at all times overcome the friction losses in the piping between the tank and the Firemiks pump inlet. Recommended also for -GP.
- Place the FIREMIKS as close to the Foam concentrate tank as practically possible.
- The FIREMIKS concentrate pump may not run dry.
- The FIREMIKS must be operated/rotated, by water or by hand, at least once a month (-PP) or every three months (-GP) to prevent the seals in the unit from seizing. Exemptions available.
- Actual dosing range allowed is nominal to 1,3 x nominal as according to EN13565, NFPA 11 and FM5130, unless stated otherwise.

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FIREMIKS® is CE-marked and production is made according to European Directive 2006/42/EC. CE Conforms to applicable parts of NFPA 11 and NFPA 1901.