

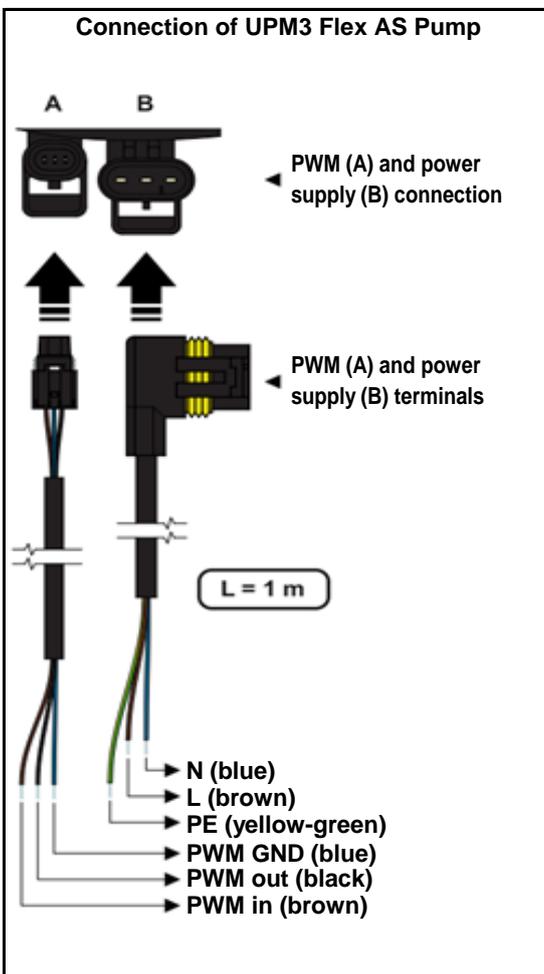
RGMAT E G Pump Station

v1.6_04/2020



Main features	
Application	keeping water temperature at boiler (fire) inlet by means of a thermostatic valve
Description	consists of UPM3 FLEX AS pump, threaded fittings with shut-off ball valve, TSV3B valve (with automatic by-pass balancing), thermometer, insulation
Function	pump station for solid-fuel boilers and fires, prevents low-temperature corrosion and boiler clogging
Working fluid	water, water-glycol mix (max. 1:1) or water-glycerine mix (max. 2:1)
Installation	on return pipe, min. pipe centre distance from wall = 100 mm

Code	max. boiler output
14925 for 45 °C valve opening temperature	max. 48 kW
15910 for 50 °C valve opening temperature	max. 44 kW
14926 for 55 °C valve opening temperature	max. 37 kW
15911 for 60 °C valve opening temperature	max. 33 kW
14927 for 65 °C valve opening temperature	max. 27 kW
15912 for 70 °C valve opening temperature	max. 23 kW



Pump Station Technical Data	
Fluid operating temp.	2 - 95 °C
Max. working pressure	10 bar
Ambient temperature	70 °C
Max. relative humidity	95 % non condensing
Power supply	230 V, 50 Hz
Insulation material	EPP RG 60 g/l
Overall dimensions	325 x 140 x 220 mm
Total weight	3,25 kg
Connection	3 x G 1" F

Accessories	
By-pass with non-return v.	code 16126

UPM3 Flex AS 25-70 180 Pump Data	
Electric data	
Power supply	230 V, 50 Hz
Power input (min./max.)	2/52 W
Current (min./max)	0,04/0,50 A
IP rating	IP44
Max. speed	5766 rpm
Weighted average power	≤ 23 W
Energy efficiency index	≤ 0.20 per EN 16 297/3
Motor protection	not needed

Min. pressures at the suction port to avoid cavitation	
Min. pressures at pump suction port	0.5 mH ₂ O at 75 °C
	5.1 mH ₂ O at 95 °C
	11 mH ₂ O at 110 °C

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Detail of connection on pump



Operation data

Fluid operating temp.	2 - 110 °C
Max. working pressure	10 bar
Max. ambient temperature	70 °C
Max. relative humidity	95 % non condensing

Power supply cables and PWM cables are included in supply.

Selected profile display during pump operation

control button



curve 1 (4 m)



curve 2 (5 m)



curve 3 (6 m)



curve 4 (7 m)

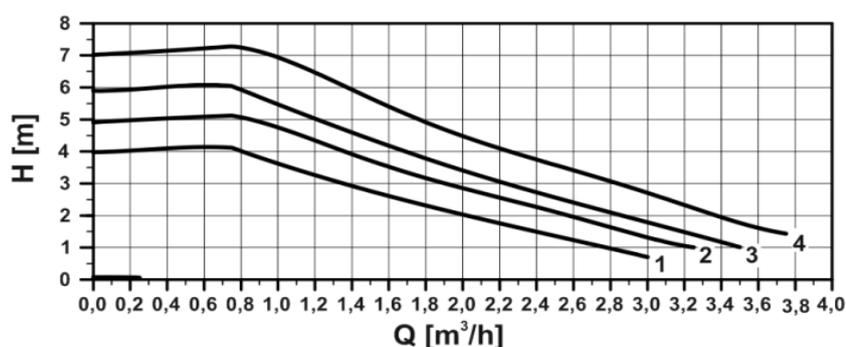


→ when the control button is pressed for less than 2 s, the currently selected curve is shown

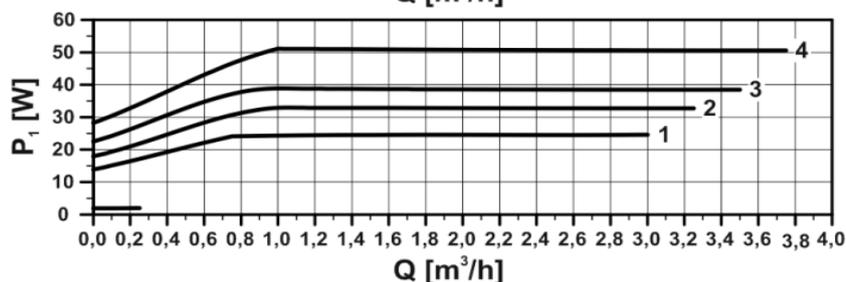
→ with no PWM signal the pump runs at max. speed according to the selected curve

→ with PWM signal the pump speed changes with the signal value up to the maximum of the selected curve

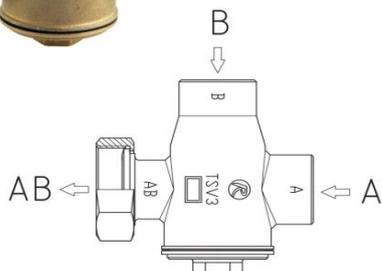
UPM3 Flex AS pump performance curves



Curve	Max. H (upper graph)	Max. P ₁ (lower graph)
1	4 m	25 W
2	5 m	33 W
3	6 m	39 W
4	7 m	52 W



TSV3B valve



TSV3B Thermostatic valve data

Technical data

Max. operating temp.	95 °C
Max. working pressure	6 bar
Valve opening temp.	as the thermostatic element
Range of control	t _{v,o} + 5 °C
Valve Kvs (A→AB direction)	6,2 m³/hod
Valve Kvs (B→AB direction)	4,4 m³/hod
Connection	2x G 1" F, 1x G 6/4" Fu union nut
Nominal inner diameter	DN 25

Materials

Housing, cone and plug	brass
Spring	stainless steel
Element and plug seal	EPDM
Cone seal	NBR

Valve pressure drop diagram

