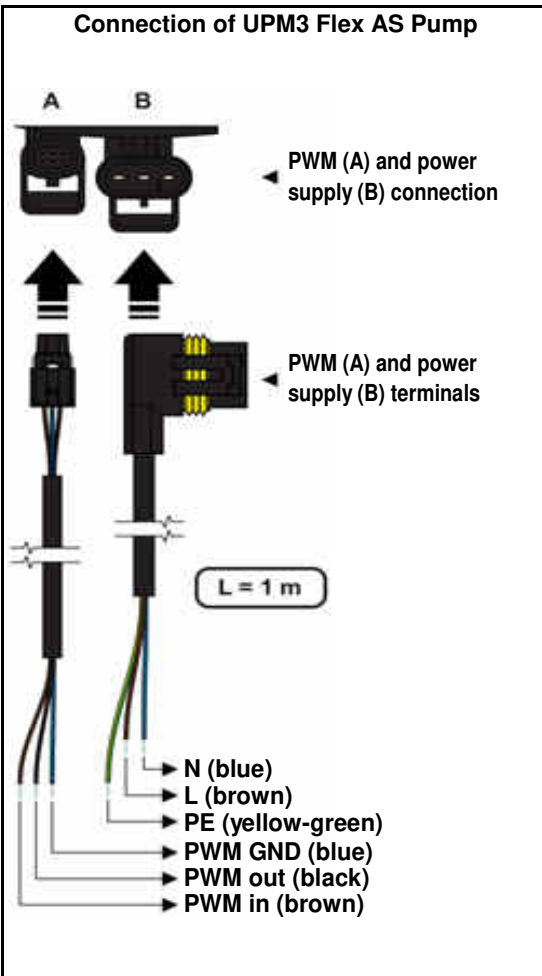


REGOMAT E G 5/4 Pump Station



| Main features | |
|---------------|--|
| Application | keeping water temperature at boiler (fire) inlet by means of a thermostatic valve |
| Description | consists of UPM3 FLEX AS pump, TSV5B 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 |
|--|--------------------|
| 16 393 for 45 °C valve opening temperature | max. 67 kW |
| 16 394 for 50 °C valve opening temperature | max. 62 kW |
| 16 395 for 55 °C valve opening temperature | max. 53 kW |
| 16 396 for 60 °C valve opening temperature | max. 47 kW |
| 16 397 for 65 °C valve opening temperature | max. 38 kW |
| 16 398 for 70 °C valve opening temperature | max. 32 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 | 3,7 kg |
| Connection | 3 x G 5/4" F |

| Accessories | |
|----------------------------|-------------|
| By-pass with non-return v. | code 16 139 |

| UPM3 Flex AS 25-75 130 Pump Data | |
|----------------------------------|------------------------|
| Electric data | |
| Power supply | 230 V, 50 Hz |
| Power input (min./max.) | 2/60 W |
| Current (min./max) | 0,04/0,58 A |
| IP rating | IP44 |
| Max. speed | 5991 rpm |
| Weighted average power | ≤ 28 W |
| Energy efficiency index | ≤ 0.20 per EN 16 297/3 |
| Motor protection | not needed |

| Min. pressure at pump suction port | |
|--|--|
| Min. pressures at the suction port to avoid cavitation | 0.05 m at 75 °C 0.50 m at 95 °C 1,08 m at 110 °C |

REGOMAT E G 5/4 Pump Station

v1.0.1_10/2017

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 (7,5 m)

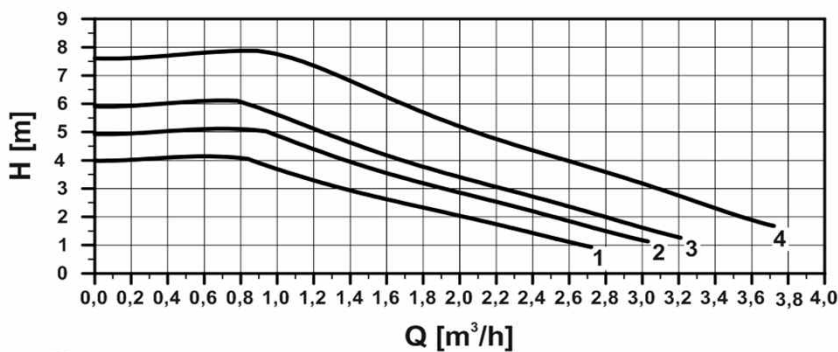


→ when the control button is pressed for less than 2 s, the currently selected curve is shown

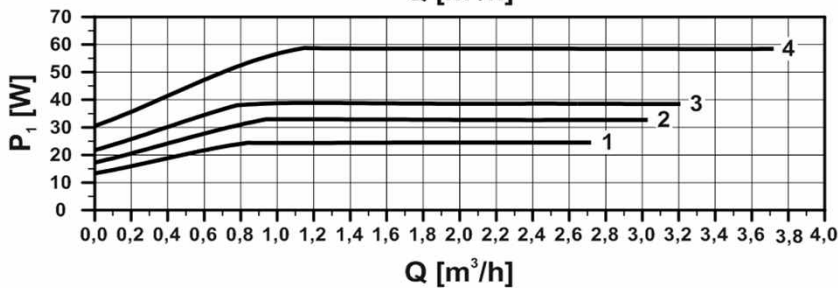
→ with no PWM signal the pump runs at max. speed according to the selected curve

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

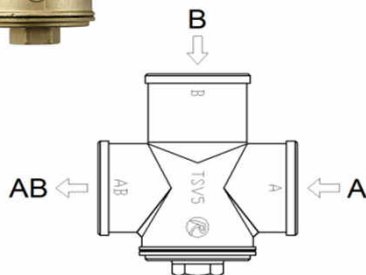
UPM3 Flex AS pump performance curves



| Curve | Max. H (upper graph) | Max. P ₁ (lower graph) |
|-------|-------------------------|--------------------------------------|
| 1 | 4,0 m | 25 W |
| 2 | 5,0 m | 33 W |
| 3 | 6,0 m | 39 W |
| 4 | 7,5 m | 60 W |



TSV5B valve



TSV5B 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) | 7,0 m³/hod |
| Valve Kvs (B→AB direction) | 4,9 m³/hod |
| Connection | 3x G 5/4" F |
| Nominal inner diameter | DN 32 |

Materials

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

Valve pressure drop diagram

