

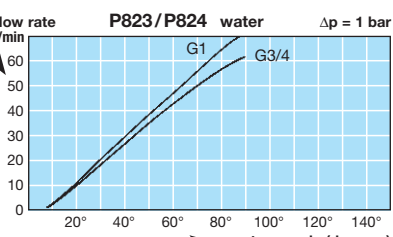
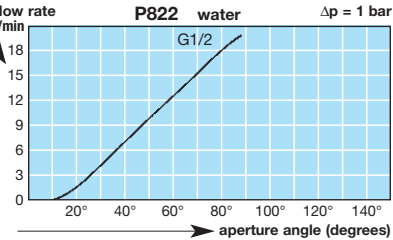
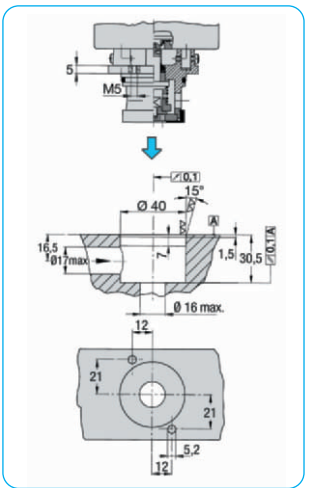
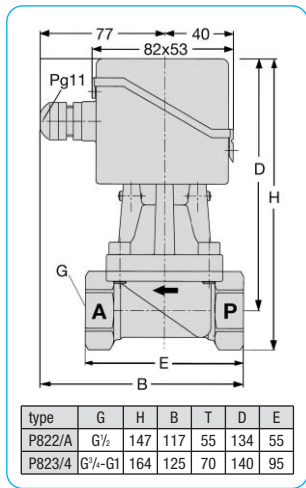
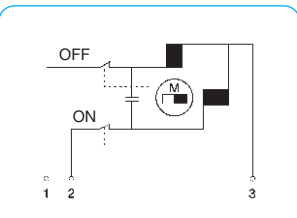
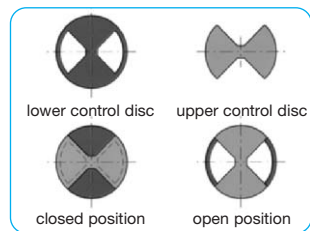
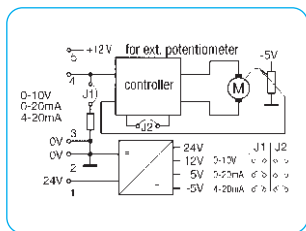
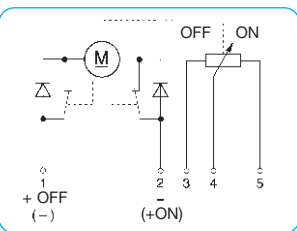
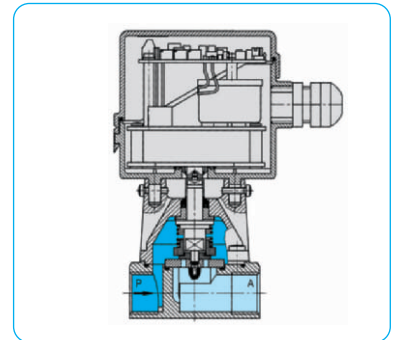
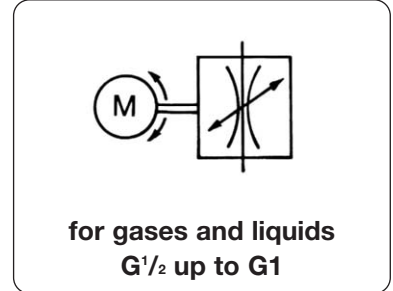
| | | | |
|---------------------------|---|----------------|------------------------------|
| Description | Motorised proportional flow valve for compressed air, hot water, oil, and also soiled liquids. With a choice of compact drives with low power consumption, for liquids up to 40 mm ³ /s (cST). | | |
| Principle | Throttle setting by wear-resistant control drives made of oxide-ceramic. Throttle setting with overlap but not gas-tight. | | |
| Drive | DC, synchronous or stepping motor with standard voltage of 24V DC or AC ±10% and IP54. All motors fulfil standards EN50.081-1, EN50.082-2 and 89/336/EEC. | | |
| Stepper motor (38) | Bipolar, by means of SAA1042A (Motorola) with drop resistance of 44 Ω per phase at a driver (full-step) operating voltage of 24V ± 5%. | | |
| DC motor (15/24) | Motor with feedback potentiometer for servo-amplifier. 2028 steps for 90° control disc turn, may 200 Hz Resistor 1kΩ ± 20 %, control e.g. by servo-amplifier. Only part of potentiometer range is used. | | |
| DC motor (50/51) | With integrated position controller. Setpoint input using jumpers: 0 ... 10V, 0/4 ... 20 mA Input resistance: 200 kΩ with voltage signal, 500 Ω with current signal, Voltage for poti: 12V, 10 mA | | |
| Temperature | -10 °C to 90 °C / 14 °F to 190 °F fluid medium 0 °C to 40 °C / 32 °F to 100 °F ambient | | |
| Protection class | IP 54 | | |
| Materials | Housing: brass | Elastomer: NBR | Control discs: oxide-ceramic |

| Dimensions | | | Nominal size | Operating pressure | K _v -value | Control range | Connection | Order number |
|------------|----|----|--------------|--------------------|-----------------------|---------------|------------|--------------|
| B | H | W | DN | max. bar | (m ³ /h) | water / air | thread | |
| mm | mm | mm | | | | l/min*1 | G | |

| Proportional flow valve | | | | | | | | DC motor type 15, 120 Ncm 24V DC, closing time 10-14 s*2 | P820 |
|-------------------------|-----|----|----|--------|-----|---------------|-------|---|------|
| 147 | 117 | 55 | 15 | 10 | 1.1 | 0...20 / 1000 | G 1/2 | P822 - 15 | |
| 147 | 117 | 55 | 20 | 6 | 3.4 | 0...60 / 3000 | G 1/2 | P82A - 15 | |
| 164 | 125 | 70 | 20 | 6/10*3 | 4.4 | 0...70 / 3500 | G 3/4 | P823 - 15 | |
| 164 | 125 | 70 | 20 | 6/10*3 | 4.4 | 0...70 / 3500 | G 1 | P824 - 15 | |

| Description | Drawing number | Watts | P ₁ / Torque | Oper. time | Motor type | Order number |
|-----------------|----------------|-------|-------------------------|------------|------------|--------------|
| motor / access. | | W | bar / Ncm | s*2 | | |

| Special options | add or change the appropriate letter or number | | | | | |
|-----------------------|--|--------------------------|-----------------------------------|------------|----|---------------|
| cartridge | Ⓐ | | only for DN 15, instead of thread | | 5 | P825 - . . |
| DC motor with poti | Ⓐ | 1.5 | 6 bar / 120 | 10-14 | 15 | P82 . - 15 |
| DC motor + controller | Ⓑ | 1.5 | 6 bar / 120 | 10-16 | 50 | P82 . - 50 |
| DC motor with poti | Ⓒ | 2.0 | 10 bar / 200 | 13 | 24 | P82 . - 24 |
| DC motor + controller | Ⓒ | 2.5 | 10 bar / 200 | 13-16 | 51 | P82 . - 51 |
| 50 Hz AC-motor | Ⓓ | 3.0 | 6 bar / 120 | 10 | 36 | P82 . - 36 |
| stepper motor | Ⓔ | 5.0 | 6 bar / 120 | 10 | 38 | P82 . - 38 |
| FPM elastomer | | Viton | | | V | P82 . - . . V |
| EPDM elastomer | | | | | E | P82 . - . . E |
| housing of SST | | stainless steel and EPDM | | only G 1/2 | S | P82 . - . . S |



*1 at 6 bar supply and Δp = 1 bar *2 depending on operating pressure *3 10 bar only for 200 Ncm motor, otherwise 6 bar

| | | | |
|------------------------------|------------------|---------------------|------------------|
| For your information: | 1 bar: 14.8 psi | 1 l/min: 0.035 scfm | 1 mm: 0.039 inch |
| | 1 psi: 0.069 bar | 1 scfm: 28.3 l/min | 1 inch: 25.4 mm |

Order example:
P822 - 15