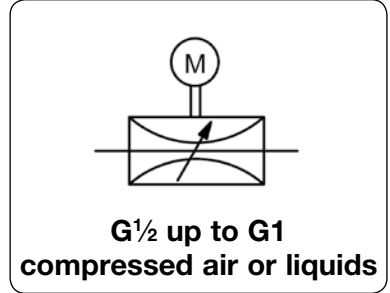


Description	Motorised proportional flow valve with low power consumption and resistance to contamination. Throttle setting by wear-resistant control drives made of oxide ceramic. Throttling occurs with drip-tight zero shut-off but no gas tightness.	
Media	compressed air, vacuum or liquids up to viscosity of 40 mm ² /s	Hysteresis ± 4%
Operation	DC, synchronous or stepping motor with standard voltage of 24 V DC or AC ±10% residual ripple. All motors fulfil standards EN50.081-1, EN50.082-2 and 89/336/EEC.	
DC motor (15 / 24)	Motor with feedback potentiometer for servo-amplifier. Resistor 1kΩ ± 20 %, control e.g. by servo-amplifier. Only part of potentiometer range is used. Voltage for potentiometer: 12 V, max. 10 mA.	
DC motor (50 / 51)	With integrated position controller. Setpoint input using jumpers: 0...10 V, 0/4...20 mA. Input resistance: 200 kΩ at voltage signal, 500 Ω at current signal.	
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 24 V ± 5%. 2028 steps for 90° control disc turn, 200 Hz nominal step frequency.	
Temperature range	10 °C to 90 °C / 14 °F to 194 °F	
Material	Body: brass Elastomer: NBR/Buna-N, optionally FKM or EPDM	Protection class IP 54 Control discs: oxide ceramic



Prop.-V.
11

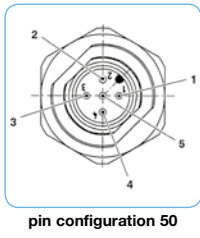
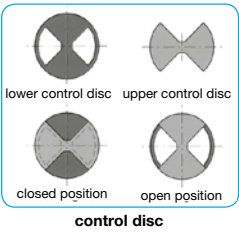
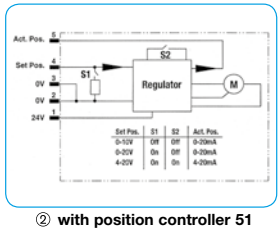
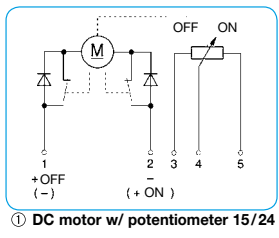
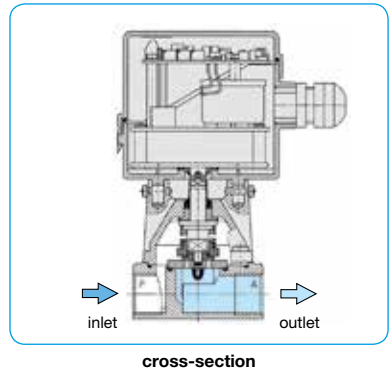
Dimensions			Nominal size	K _v -value	Flow rate		Supply max.	Connection thread	Order number
A	B	C	DN	(m ³ /h)	water l/min*1	air l/min*1	bar	G	

Proportional flow valve									
DC motor type 15, with potentiometer, 120 Ncm, 24 V DC, switching time 10...14 s*2									
55	147	13	15	1.1	0...20	0...1000	10	G ^{1/2}	P822-15
55	147	13	20	3.4	0...60	0...3000	6	G ^{1/2}	P82A-15
95	164	24	20	4.4	0...70	0...3500	6*3	G ^{3/4}	P823-15
95	164	24	20	4.4	0...70	0...3500	6*3	G1	P824-15



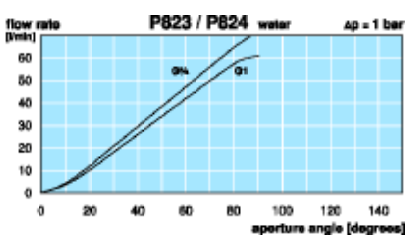
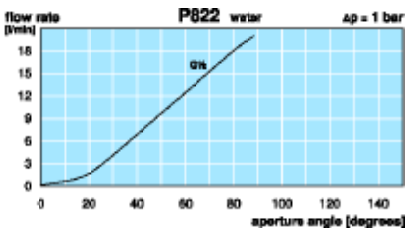
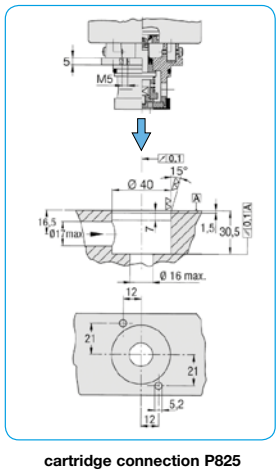
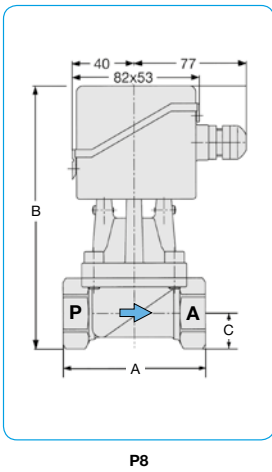
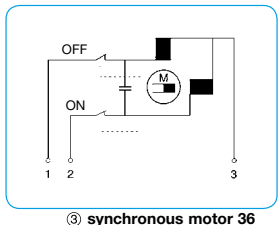
Special options, add the appropriate letter
 cartridge installation instead of thread for DN 15 P825-..

Description	Figure-No.	Watt	Δp max./Torque	Switching time*2
DC motor w/ potentiometer, 120 Ncm	①	1,5 W	6 bar/120 Ncm	10-14 s
DC motor w/ potentiometer, 200 Ncm	①	2,0 W	10 bar/200 Ncm	13 s
DC motor w/ controller	②	3,3 W	16 bar/120 Ncm f. G ^{1/2}	5 s
DC motor w/ controller	②	3,3 W	6 bar/120 Ncm f. G ^{3/4} , G1	5 s
DC motor w/ controller	②	3,8 W	.. bar/ .. Ncm f. G ^{3/4} , G1	.. s
AC motor 50 Hz	③	3,0 W	6 bar/120 Ncm	10 s
stepper motor	④	5,0 W	6 bar/120 Ncm	10 s
FKM elastomer				P82-.. V
EPDM elastomer				P82-.. E
free of grease and oil			especially cleaned, suitable for oxygen	P82-.. L
body nickel-plated				P82-.. X25



PIN	Description
Pin 1	supply voltage 24 Volt
Pin 2	supply voltage 0 Volt
Pin 3	ground potential for set value input and feedback outlet
Pin 4	set value input 0 - 10 V / 0 (4) - 20 mA
Pin 5	feedback outlet 0 (4) - 20 mA

connection diagram



*1 at 6 bar supply pressure and Δp = 1 bar

*2 subject to supply pressure

*3 10 bar at motor for 200 Ncm

PDF CAD
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Order example:
P822-15