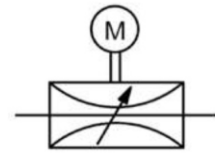


P8 - Régulateur de débit volumétrique proportionnel à commande motorisée

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 EN 61000-6-3, EN 61000-6 and 2014/30/EU.	
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 Mounting position: vertical upwards ± 60 °C



G_{1/2} up to G1
compressed air or liquids

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	
mm	mm	mm							

Proportional flow valve					DC motor type 50, with potentiometer, 120 Ncm, 24 V DC, switching time 5 s*2			P8	
65	147	13	15	1.1	0...20	0...1000	16	G _{1/2}	P822-50
65	147	13	20	3.4	0...60	0...3000	6	G _{1/2}	P82A-50
95	164	24	20	4.4	0...70	0...3500	6	G _{3/4}	P823-50
95	164	24	20	4.4	0...70	0...3500	6	G1	P824-50

Special options, add the appropriate letter

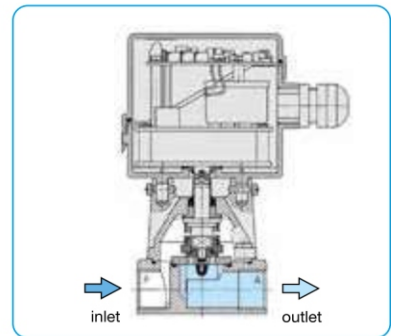
cartridge installation instead of thread for DN 15 P825-..



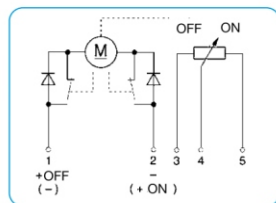
P8

Description	Figure-No.	Watt	Δp max./Torque	Switching time*2
DC motor w/ potentiometer, 120 Ncm	①	1,5 W	10 bar/ 120 Ncm f. G _{1/2}	10-14 s
DC motor w/ potentiometer, 120 Ncm	①	1,5 W	6 bar/ 120 Ncm f. G _{3/4} , G1	10-14 s
DC motor w/ controllerr	②	3,8 W	16 bar/ 220 Ncm f. G _{1/2}	10-11 s
AC motor 50 Hz	③	3,0 W	6 bar/ 120 Ncm f. G _{3/4} , G1	10 s
stepper motor	④	5,0 W	6 bar/ 120 Ncm f. G _{3/4} , G1	10 s
FKM elastomer				P82... V
EPDM elastomer				P82... E
free of grease and oil				P82... L

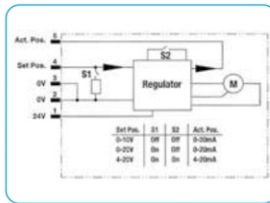
specially cleaned, suitable for oxygen



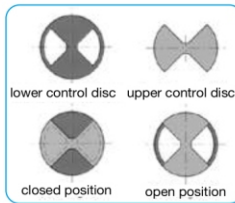
cross-section



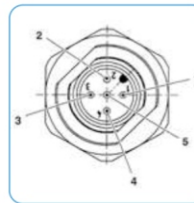
① DC motor w/ potentiometer 15



② with position controller 51



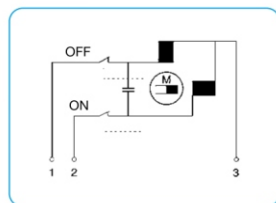
control disc



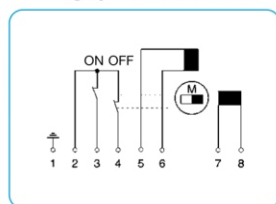
pin configuration 50

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

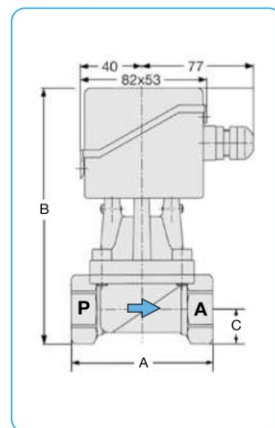
connection diagram



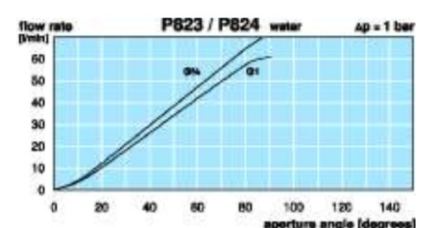
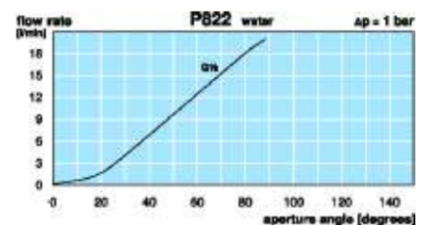
③ synchronous motor 36



④ stepper motor 38



P8



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

*2 subject to supply pressure