

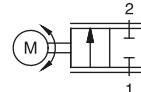


MOTORISED CONTROL VALVE

MOTORFLOW^D

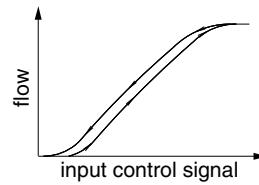
3/4

2/2
Series
610



FEATURES

- Variable valve opening (flow), proportional to the control signal
- Digital controller with two operating buttons and position indication
- Valves do not require a minimum operating pressure
- Low power consumption
- Wear-resistant ceramic control discs
- Insensitive to contamination
- Suitable for vacuum and overpressure applications
- Mechanical separation of electrical actuator from fluid-carrying parts
- Valve position maintained on loss of power
- Valves can be mounted in any position
- The solenoid valves satisfy all relevant EC directives



B

CE

GENERAL

Differential pressure

-0,9 to +10 bar (usable in 0,1 bar abs. vacuum) [1 bar = 100 kPa]

Ambient temperature range

0°C to +50°C

Maximum viscosity

80 cSt (mm²/s)

Actuating time

2 s

fluids (*)	temperature range (TS) ⁽¹⁾	seal materials (*)
air, inert gas, water, oil	- 5°C to + 90°C	oxide ceramics EPDM (ethylene-propylene)

MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

Body Brass

Internal parts POM, stainless steel

Seals Oxide ceramics, EPDM

ELECTRICAL CHARACTERISTICS

Connector 5-pin female M12 connector

Electrical enclosure protection IP65 (EN 60529)

Standard voltage DC (=): 24V

Power consumption 6 W (max. 10 W at end of stroke)

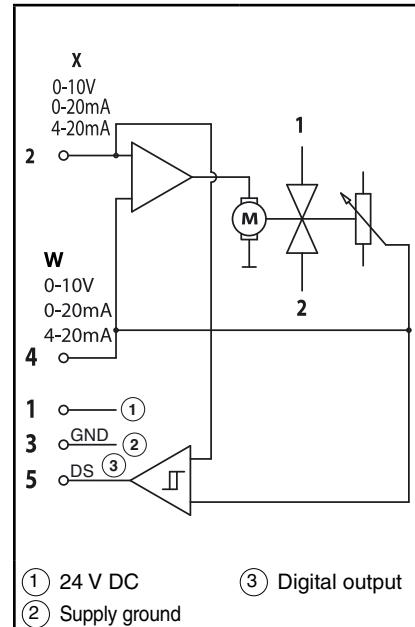
Flow regulation characteristics⁽²⁾ Hysteresis < 3%; Repeatability < 2% ; Sensitivity < 2%

SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)		setpoint	feedback output	catalogue number			
				max. (PS)							
				min.	=			=	=		
G	(mm)	(m ³ /h)	(l/min)								
3/4	15	1,1	18	-0,9	10	10	0-10 V	0-10 V	6100011x		
								0-20 mA	6100021x		
								4-20 mA	6100031x		
							0-20 mA	0-10 V	6100111x		
								0-20 mA	6100121x		
								4-20 mA	6100131x		
							4-20 mA	0-10 V	6100211x		
								0-20 mA	6100221x		
								4-20 mA	6100231x		

⁽¹⁾ Damage may occur when liquids solidify above the specified minimum temperature.

⁽²⁾ Values related to valve position.



(1) 24 V DC

(2) Supply ground

(3) Digital output

controller structure		x
standard version (position controller)		0
External feedback input 0 - 10 V (double loop (cascade) control)		1
External feedback input 0 - 20 mA (double loop (cascade) control)		2
External feedback input 4 - 20 mA (double loop (cascade) control)		3
External frequency input NPN (after GND) (double loop (cascade) control)		4
External frequency input PNP (after +24 V) (double loop (cascade) control)		5

OPTIONS AND ACCESSORIES

- Female M12 connector:
 - 5 pins, with screw terminals,
 - Supply cable 2 m, 5 x 0,25 mm², catalogue number: 88100256 straight
 - Supply cable 5 m, 6 x 0,56 mm², catalogue number: 88100726 right-angle
 - Supply cable 10 m, 6 x 0,56 mm², catalogue number: 88100728
 - Supply cable 10 m, 6 x 0,56 mm², catalogue number: 88100730
- Software tool for PC "ASCO-MotorCom" available for download at: www.asconumatics.eu
- RS-232 converter, 2 m cable with 9 pin Sub-D connector for PC link, catalogue number 88100732

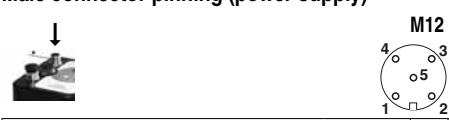
INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- Threaded pipe connection is standard: G = G (ISO 228/1)
- Installation/maintenance instructions are included with each valve
- LED display

LED red = low voltage or overvoltage (blinking)
 LED green = pressure switch
 LED yellow = manual operation

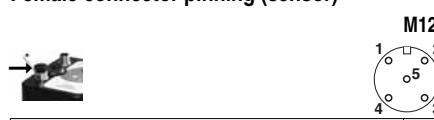
- Electrical connection:

Male connector pinning (power supply)



	M12	5-wire cable (2 m)	6-wire cable (5 m, 10 m)
+ 24 V DC, supply	1	brown	brown
analog setpoint input	2	white	white
supply ground	3	blue	green
analog ground ⁽¹⁾			yellow
analog output (feedback)	4	black	pink
digital output (pressure switch)	5	grey	grey
EMC shield	housing ⁽²⁾	shield	shield

Female connector pinning (sensor)



	M12	+	1	2	3	4	5	6	7
+ 24 V DC, supply			1						
external feedback input			2						
supply ground			3						
frequency input			4						
unused			5						
EMC shield									
housing ⁽²⁾									

⁽¹⁾ A 6-wire cable with separate analog ground is used for cable lengths over 2 m to set off the voltage drop for the setpoint.

⁽²⁾ The housing of the M12 male connector/M12 female connector is connected to the valve body.

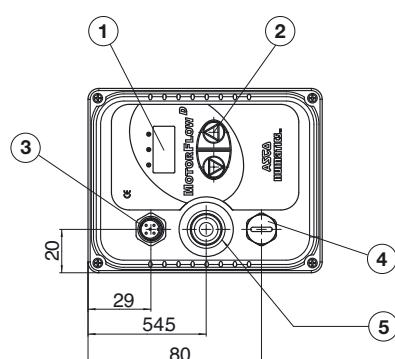
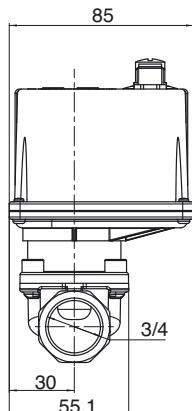
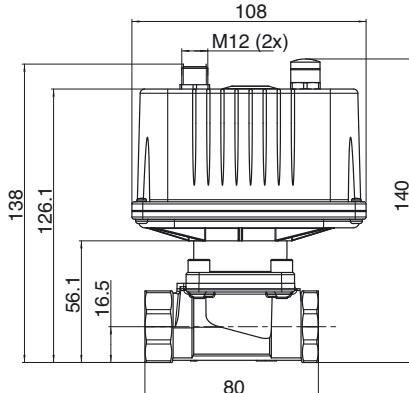
ORDERING EXAMPLES:

610	0	0	1	1	0	
610	0	1	2	1	1	
610	0	2	3	1	2	
series						controller structure
pipe thread						
setpoint						
feedback output						digital output (pressure switch)

DIMENSIONS (mm), WEIGHT (kg)



IP65



weight	
1,1	

- (1) Valve opening display (0-100%)
 (2) Operating buttons (manual operation)
 (3) Power supply

- (4) Sensor input
 (5) Programming hole