

P N E U M A T I C
P R O P O R T I O N A L V A L V E
C A T A L O G



Pneumatic Proportional Technology

SENTRONIC Pneumatic Proportional Valves



The Sentronic Pneumatic Proportional valve is a closed loop control valve capable of controlling pressures from vacuum up to 725 psi. This 3-way valve has the control electronics and pressure sensor built into the valve. It is a compact valve package for its capabilities. Controlling voltages are 0-10 V DC, 4-20 mA, 0-20 mA and 8-bits digital.

PULSTRONIC Pneumatic Proportional Valves



The Pulstronic is a compact electropneumatic pressure regulator, which converts an electronic signal into a pneumatic pressure using two valves that pulse back and forth to control the pressure. It is particularly suited for precise pressure regulation due to its integrated control loop.

SERVOTRONIC Pneumatic Solenoid Operated Servovalves



There are two models of the Servotronic valve. The flow version is a 3-port/3-position slide servovalve with an electronic control supplying a flow rate proportional to a given set point. The other version is a 3-port/3-position pressure control valve with electronic control supplying a pressure proportional to a given set point.

SENTRONIC Pneumatic Proportional Valves with Bus interface



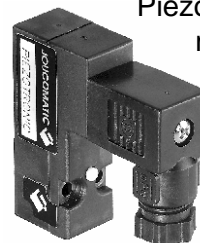
The Sentronic Pneumatic Proportional valve is a closed loop control valve capable of controlling pressures from vacuum up to 725 psi. This 3-way valve has the control electronics and pressure sensor built into the valve. This valve package has Bus capabilities that include the following: Interbus-S, Profibus-DP and DeviceNet.

SENTRONIC Pneumatic Proportional Valves (Servo Model)



The Servo model of Sentronic Pneumatic Proportional Valve is an open loop 3-way valve that can be controlled by working in conjunction with a PI card, separate pressure transducer and a PLC or PC to close the loop. These controls are external of the valve. The electronics can be located separately from the valve due to temperature or atmospheric conditions.

PIEZOTRONIC Subbase Mounted Pneumatic Proportional Valves



Piezotronic Subbase Mounted Pneumatic Proportional Valve is a small valve using a multi layer Piezo element to regulate pressure. The electronics that control this valve are made onto the end of the Piezo element to keep the size to a minimum.

For More Information: Phone 803/548-1300



ASCO Pneumatic Controls • 460-J Greenway Industrial Drive
Fort Mill, SC 29708 • www.ascovalve.com

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PULSTRONIC Pneumatic Proportional Valve

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PNEUMATIC PROPORTIONAL VALVE SENTRONIC

Electropneumatic 3-Port Valve with **Internal** supply or **External** pressure port for sensor

**SERIES
601**

GENERAL SPECIFICATIONS

FLUIDS	Air or inert gas filtered to 25 µm, without condensate, lubricated or dry
PIPE SIZE	1/8, 1/4, 1/2, 1
MAXIMUM AIR PRESSURE (MAP)	(see "PP" in table below)
TEMPERATURE (FLUID)	32°F - 140°F (122°F 1/8 size)(0°C - 60°C (50°C 1/8 size)
TEMPERATURE (AMBIENT)	32°F - 105°F (0°F - 40°F)
VOLTAGE	24VDC +/- 10% (max. ripple 10%)
SET-POINT (ANALOG)	0 - 10 Volts sensitivity <50mV - impedance 100K Ohms 0 - 20 mA or 4 - 20mA (as option) (sensitivity <0.1 mA - impedance 500 Ohms)
SET-POINT (DIGITAL AS OPTION)	8 bits +memory function 8 bits + pressure reset
HYSTERESIS	<1% of the maximum pressure (Max. Reg. Press.)
LINEARITY	<0.5% of (Max. Reg. Press.)
REPEATABILITY	<0.5% of (Max. Reg. Press.)
MINIMUM SET-POINT	50 +/-20mV (0.1 mA) with switch-off function

CONSTRUCTION

VALVE TYPE	Direct operated poppet valve
BODY MATERIAL	body of brass or anodised aluminium or stainless steel
INTERNAL PARTS	stainless steel and brass
SEALING MATERIAL	(1/8):Viton (FPM) (1/4 to 1):Nitrile (NBR)

INSTALLATION

ASSEMBLY POSITION	Any direction
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ELECTRICAL CHARACTERISTICS

Ports	Max. Power (W)	Max. Current (mA)
1/8	15	600
1/4	29	1200
1/2	34	1400
1	44	1800

INSULATION CLASS: Type F
PROTECTION: IP 65
CONNECTION: Plug-in connector 7 pins DIN 43651 (16 pins for digital)

ORDERING INFORMATION

EXAMPLE: 833 - 35C A S I D PP + OPTIONS

C = PRESSURE SUPPLY

- 4 = Internal Pressure Supply
- 5 = External Pressure Supply

A = CONSTRUCTION

- 0 = G1/4", Aluminum
- 1 = G1/2", Aluminum
- 2 = G1", Aluminum
- 4 = NPT1/4", Aluminum
- 5 = NPT1/2", Aluminum
- 6 = NPT1", Aluminum
- 7 = G1/8", Brass
- 8 = G1/4", Brass
- 9 = NPT1/8", Brass
- A = NPT1/4", Brass (0 to 290 psi)
- C = G1/4", Stainless Steel
- G = NPT1/4" High Pressure Control (435 to 725 psi), Aluminum
- N = G1/8", Subbase Mt.
- T = NPT1/4", Position Control

S = SETTING

- 0 = 0...10V
- 1 = 0...20mA
- 2 = 4...20mA
- 3 = Digital input, 8 bit, Hold, 24VDC
- 4 = Digital input, 8 bit, pressure reset
- 6 = Digital input, 8 bit, Hold, TTL

I = SENSOR OUTPUT

- 0 = Without sensor input
- 1 = 0...10V
- 2 = 0...20mA
- 3 = 4...20mA
- 4 = Sensor input: 0...10V
- 5 = Sensor input: 0...20mA
- 6 = Sensor input: 4...20mA
- 7 = LED Display

D = PRESSURE SWITCH

- 0 = Without
- 1 = +/-5%, PNP, feedback=setpoint
- 2 = +/-5%, NPN, feedback=setpoint
- 3 = +/-5%, PNP, feedback≠setpoint
- 4 = +/-5%, NPN, feedback≠setpoint
- 8 = 1, 0.5sec Delay
- 9 = 2, 0.5sec Delay

OPTIONS:

- Oxygen Cleaning
- EPDM Seals
- Viton Seals
- Pressure sealed coil
- 12VDC option on 1/8" and 1/4"

PP = PRESSURE RANGE

Relative Pressure Ranges:

- 40 = 0-1.5 psi
- 50 = 0-7.5 psi
- 60 = 0-15 psi
- 02 = 0-30 psi
- 03 = 0-45 psi
- 05 = 0-75 psi
- 06 = 0-90 psi
- 10 = 0-145 psi
- 12 = 0-175 psi
- 16 = 0-230 psi (1/8 & 1/4 only)
- 20 = 0-290 psi (1/8 & 1/4 only)
- 30 = 0-435 psi (1/4 brass only)
- 4H = 0-580 psi (1/4 brass only)
- 5H = 0-725 psi (1/4 brass only)

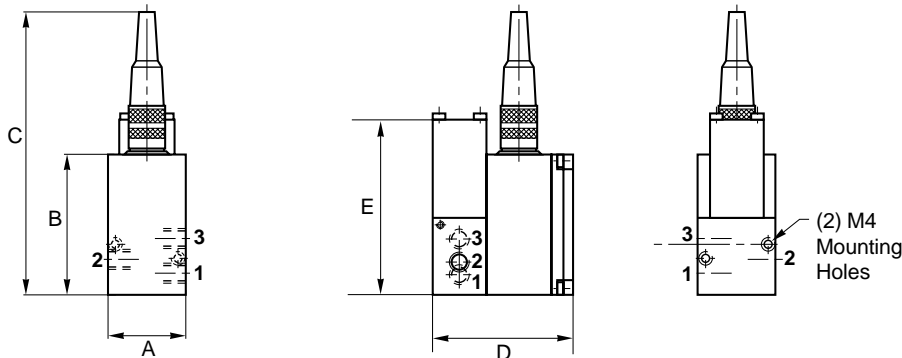
Absolute pressure Ranges:

- 4A = 0-1.5 psi, absolute
- 5A = 0-7.5 psi, absolute
- 6A = 0-15 psi, absolute
- A2 = 0-30 psi, absolute
- A3 = 0-45 psi, absolute
- A4 = 0-75 psi, absolute
- A6 = 0-90 psi, absolute
- A8 = 0-115 psi, absolute
- 1A = 0-145 psi, absolute
- 1B = 0-175 psi, absolute
- 1C = 0-230 psi, absolute
- 1D = 0-290 psi, absolute

Vacuum Applications:

- V1 = 0...-15 psi, (shut off)
- V2 = 0...-15 psi, (bypass)

1/8



GENERAL NOTES

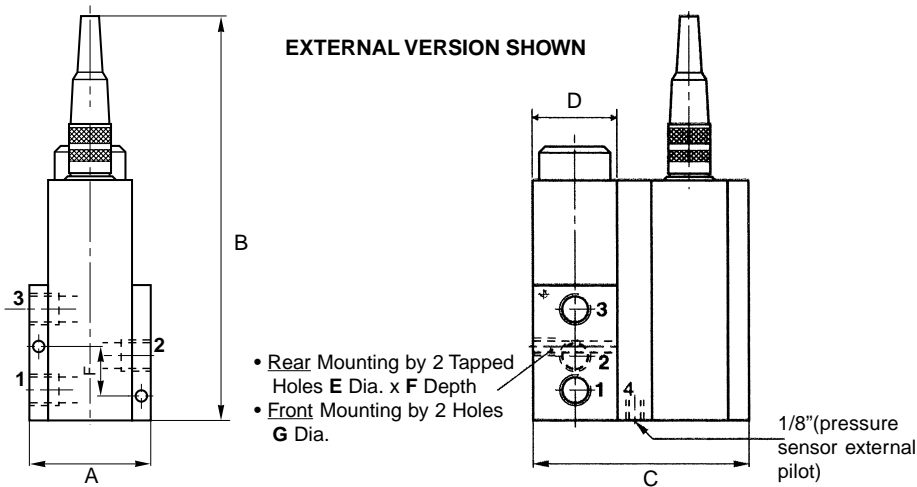
Orifice Diameters

- 1/8 Size 0.12 in.(3mm)
- 1/4 Size 0.24 in.(6mm)
- 1/2 Size 0.47 in.(12mm)
- 1 Size 0.79 in.(20mm)

Flows

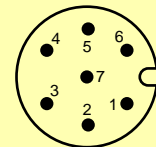
- 1/8 Size 0.21Cv(0.18 Kv)
- 1/4 Size 0.7 Cv(0.60 Kv)
- 1/2 Size 1.4 Cv(1.20 Kv)
- 1 Size 5.6 Cv(4.80 Kv)

1/4 to 1



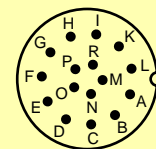
* For "C" dimension of **INTERNAL** version - **SUBTRACT**: .71 or 18mm

CONNECTOR WIRING



ANALOG Version Set-point
(Top View)

- 1 -- Power +24V
- 2 -- GND (Power)
- 3 -- Input set-point
- 4 -- GND (Input)
- 5 -- Output voltage stabilized 12V, max. 30mA
- 6 -- Actual pressure (sensor output) (signal 0-10 V band of max. regulation PMR - max. 10mA)
- 7 -- Not connected (standard)



DIGITAL Version Set-point
(Top View)

- A -- Power +24V
- B -- GND (Power)
- C -- Bit 1 (LSB)
- D -- Bit 2
- E -- Bit 3
- F -- Bit 4
- G -- Bit 5
- H -- Bit 6
- I -- Bit 7
- K -- Bit 8
- L -- Memory function (option 010 537)
Pressure reset (option 010 606)
- M -- Not connected (standard)
Option : pressure switch output connection NPN or PNP (500 mA max.)
- N -- Not connected
- O -- Not connected
- P -- Pressure signal (pressure sensor output 0-10V for the pressure range)

CONSTRUCTION REF. 2

Pipe Size	A		B		C		D		E		F		G		Weight	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	Lbs.	Kg.
1/8	1.4	35	2.6	65	5.7	145	2.5	63	3.2	80.5	—	—	—	—	1.4	0.65
1/4	2.1	52	6.9	175	* 3.6	92	1.4	35	M5	M5	.79	20	.16	4.0	2.1	0.95
1/2	2.8	70	8.1	205	* 4.4	111	1.8	45	M6	M6	1.1	28	.18	4.5	4.2	1.90
1	3.8	96	9.5	240	* 5.3	135	2.4	60	M8	M8	1.3	33	.26	6.5	8.6	3.90

PNEUMATIC PROPORTIONAL VALVE SENTRONIC

Electropneumatic 3-Port Valve with Bus Interface

**SERIES
601**

GENERAL SPECIFICATIONS

FLUIDS	Air or inert gas filtered to 25 µm, without condensate, lubricated or dry
PIPE SIZE	1/4, 1/2, 1
MAXIMUM AIR PRESSURE (MAP)	(see table below)
ADJUSTMENT RANGE	(see table below)
TEMPERATURE (FLUID)	32°F - 140°F (0°C - 60°C)
TEMPERATURE (AMBIENT)	32°F - 104°F (0°C - 40°C)
VOLTAGE	24VDC +/- 10% (max. ripple 10%)
SET-POINT	8 bits
ERROR DIAGNOSTICS	Supply voltage control, monitoring of control electronics
HYSTERESIS	<1% of Max. Reg. Press.
LINEARITY	<0.5% of Max. Reg. Press.
REPEATABILITY	<0.5% of Max. Reg. Press.

CONSTRUCTION

VALVE TYPE	Direct operated poppet valve
BODY MATERIAL	Brass or anodised aluminum or stainless steel
INTERNAL PARTS	stainless steel and brass
SEALING MATERIAL	Nitrile (NBR)

INSTALLATION

ASSEMBLY POSITION	Any direction
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ELECTRICAL CHARACTERISTICS

Ports	Max. Power (W)	Max. Current (mA)
1/4	24	1000
1/2	34	1400
1	44	1800

INSULATION CLASS: Type F
 PROTECTION: IP 65
 CONNECTION: Supply voltage: Female connector M18. Fieldbus: circular connector IP 65

DESCRIPTION

The Sentronic valve operates as a slave in the fieldbus system. The setpoint is entered with an 8-bit output data word. The feedback value and the pressure switch function can be read in with an input data word.

- INTERBUS-S: The valve is a participant in the remote installation bus. 33H is used as ident code. This corresponds to an analog remote bus participant with input/output addresses.
- PROFIBUS-DP: ... The participant's address is set with two rotary switches (03 ... 09). The baud rate is entered over the master. The ident number is 0454 Hex. A diskette with the appropriate GSD is supplied.
- DEVICENET: The Sentronic valve operates as a slave. The address and baud rate are set with DIP switches.

ORDERING INFORMATION

EXAMPLE: 833 - 35C A S I D PP + OPTIONS

C = PRESSURE SUPPLY

- 4 = Internal Pressure Supply
- 5 = External Pressure Supply

A = CONSTRUCTION

- 0 = G1/4", Aluminum
- 1 = G1/2", Aluminum
- 2 = G1", Aluminum
- 4 = NPT1/4", Aluminum
- 5 = NPT1/2", Aluminum
- 6 = NPT1", Aluminum
- 8 = G1/4", Brass
- A = NPT1/4", Brass
- C = G1/4", Stainless Steel
- T = Position Control, NPT1/4"

S = SETTING

- 7 = Interbus-S
- 8 = Profibus-DP
- 9 = DeviceNet
- A = PWM Signal

I = SENSOR OUTPUT

- 0 = Without sensor input
- 1 = 0...10V
- 2 = 0...20mA
- 3 = 4...20mA
- 4 = Sensor input: 0...10V
- 5 = Sensor input: 0...20mA
- 6 = Sensor input: 4...20mA

D = PRESSURE SWITCH

- 0 = Without
- 1 = +/-5%, PNP, feedback=setpoint
- 2 = +/-5%, NPN, feedback=setpoint
- 3 = +/-5%, PNP, feedback≠setpoint
- 4 = +/-5%, NPN, feedback≠setpoint
- 8 = 1, 0.5sec Delay
- 9 = 2, 0.5sec Delay

PP = PRESSURE RANGE

Relative Pressure Ranges:

- 40 = 0-1.5 psi
- 50 = 0-7.5 psi
- 60 = 0-15 psi
- 02 = 0-30 psi
- 03 = 0-45 psi
- 05 = 0-75 psi
- 06 = 0-90 psi
- 10 = 0-145 psi
- 12 = 0-175 psi
- 16 = 0-230 psi (1/8 & 1/4 only)
- 20 = 0-290 psi (1/8 & 1/4 only)
- 30 = 0-435 psi (1/4 brass only)
- 4H = 0-580 psi (1/4 brass only)
- 5H = 0-725 psi (1/4 brass only)

Absolute pressure Ranges:

- 4A = 0-1.5 psi, absolute
- 5A = 0-7.5 psi, absolute
- 6A = 0-15 psi, absolute
- A2 = 0-30 psi, absolute
- A3 = 0-45 psi, absolute
- A4 = 0-75 psi, absolute
- A6 = 0-90 psi, absolute
- A8 = 0-115 psi, absolute
- 1A = 0-145 psi, absolute
- 1B = 0-175 psi, absolute
- 1C = 0-230 psi, absolute
- 1D = 0-290 psi, absolute

OPTIONS:

- Oxygen Cleaning
- EPDM Seals
- Viton Seals
- Pressure sealed coil

1/4 Construction Ref.1

Weight: 2.4 Lbs. (1.1 Kg)

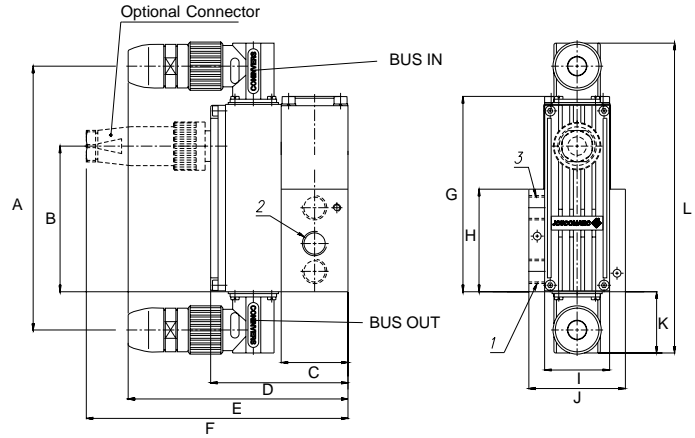
GENERAL NOTES

Orifice Diameters

- 1/4 Size 0.24 in.(6mm)
- 1/2 Size 0.47 in.(12mm)
- 1 Size 0.79 in.(20mm)

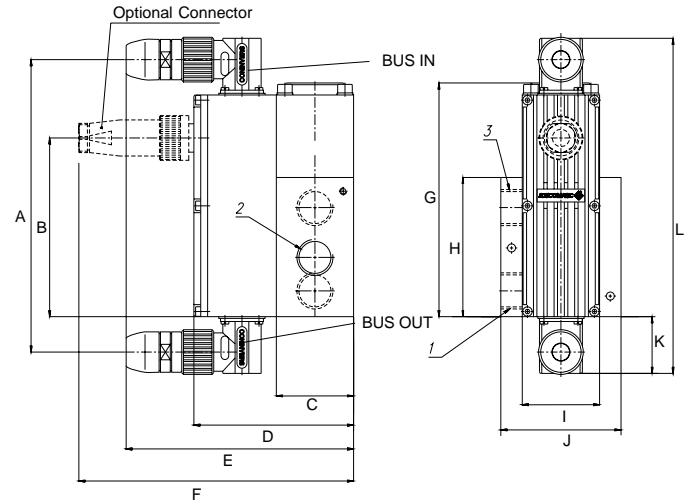
Flows

- 1/4 Size 0.7 Cv(0.6 Kv)
- 1/2 Size 1.4 Cv(1.2 Kv)
- 1 Size 5.6 Cv(4.8 Kv)



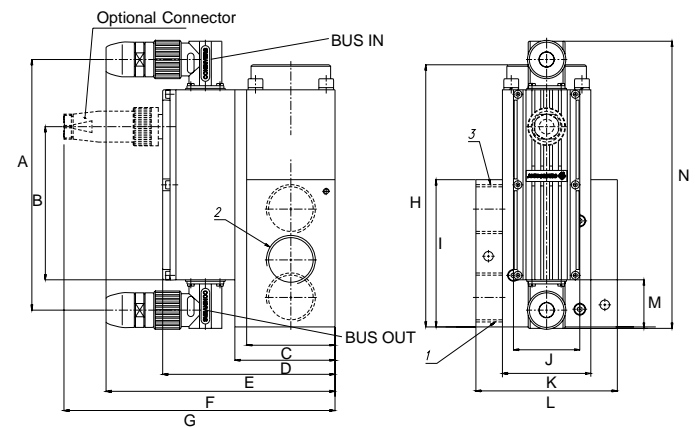
1/2 Construction Ref.2

Weight: 4.7 Lbs. (2.15 Kg)



1 Construction Ref.3

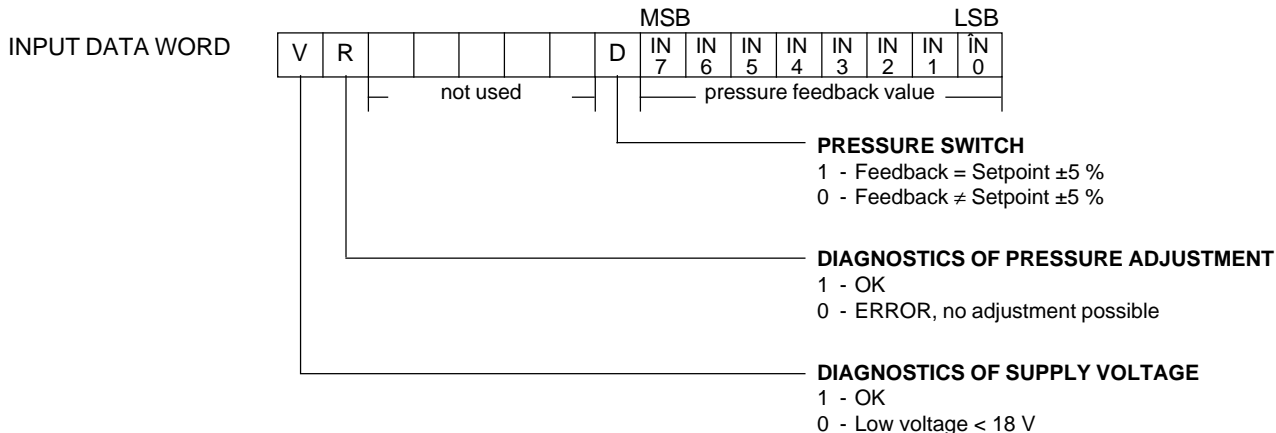
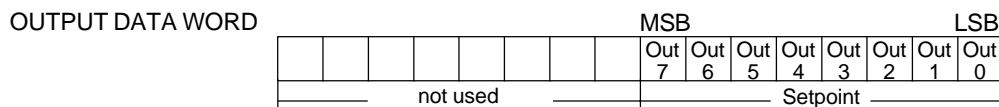
Weight: 9.6 Lbs. (4.34 Kg)



CONSTRUCTION REFS. 1, 2 & 3

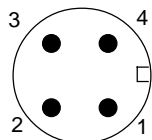
Pipe Size	A		B		C		D		E		F		G		H		I		J		K		L		M		N	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
1/4	5.6	143	3.1	78.5	1.4	36	2.9	74	4.8	122	5.7	145	4.1	105.3	2.2	55.3	1.4	35	2.0	52	1.3	33	6.6	168	-	-	-	-
1/2	6.7	170	4.1	104	1.8	45	3.7	93	5.2	132.5	6.3	160	5.4	136	3.2	81	1.78	45	2.8	70	1.3	33	7.7	195	-	-	-	-
1	6.7	170	4.1	104	2.4	60	2.7	68	4.6	117	6.1	155.5	7.2	184	7.0	178	3.9	100	1.8	45	2.4	60	3.8	96	1.3	33	7.7	195

SIGNIFICANCE OF DATA WORDS



CONNECTION OF OPERATING VOLTAGE (not for DeviceNet)

View on screw side of female connector, female thread M18 (Code 881 61 903)
 Cable feed-through: 6.5 - 8 mm (supplied)



- 1 - + 24V
- 2 - not connected
- 3 - GND
- 4 - not connected

Interbus-S (remote installation bus)

Circular 9-pin connector to IP 65
 Male connector: CONINVERS
 (Code: 881 61 952)
 Interbus-S output

Circular 9-pin connector to IP 65
 Female connector: CONINVERS
 (Code: 881 61 951)
 Interbus-S input

Cable feed-through: 5 - 8 mm (supplied)

Signal	Circular 9-pin male connector	Circular 9-pin female connector	Color
DO	1	1	yellow
DO	2	2	green
DI	3	3	grey
DI	4	4	pink
Ground	5	5	brown
PE	6	6	green/yellow (1 mm ²)
+24 V	7	7	red (1 mm ²)
0 V	8	8	blue (1 mm ²)
	9	-	
Shield	Housing	Housing	braid

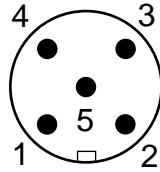
Not connected internally and looped.
 Supply voltage over M18 female connector.

Pin assignment IBS CCO-R-KONFEK-T
 Pin 5 and pin 9 must be bridged at the Interbus-S output.

CONNECTOR WIRING

■ Profibus-DP (bus cable)

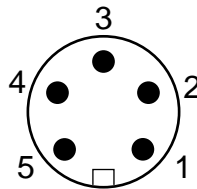
View on screw side of female connector (Code: 881 00 304)
Cable feed-through: 4 - 6 mm
(supplied)



Pin	Signal name	Description
1	R x D/T x D - P	Data line B/B
2	5V - Bus (*)	-
3	R x D/T x D - N	Data line A/A
4	GND - BUS (*)	-
5	PE (**)	Protection earth

Lines B/B' and A/A are one line each of the cable twisted in pairs.
(*) These signals are only necessary for the terminating resistor, they are not wired.
(**) Connect the cable shield to pin 5 of the female connector.

■ DeviceNet (bus cable)



24V DC voltage supply over bus cable (see table below).

Pin	Signal name	Description	DeviceNet cable (colors)
1	DRAIN	Shield, capacitive ground	(shield)
2	+24V	Voltage supply over bus cable	red
3	GND	Ground	black
4	CAN-H	Data - "high" active	white
5	CAN-L	Data - "low" active	blue

The male panel connector is on the top side of the valve. Two connections are possible:

- Plug the T-connector (881 61 932) directly into the male panel connector.
 - Connect the T-connector (881 61 932) with a stub (max. length: 3 m).
- Both ends of the bus line must be provided with a terminating resistor.

Accessories to be supplied separately:

- Terminating resistor with male thread:
Code: **881 61 934**
- Terminating resistor with female thread:
Code: 881 61 933
- Straight 5-pin male connector
Thread: 7/8" - 16 UN (250 V 9A)
Cable feed-through: 9 - 12 mm
Code: **881 61 931**
- 5-pin T-connector (with female thread)
Thread: 7/8" - 18 UN (250 V, 9A)
Cable feed-through: 9 - 12 mm
Code: **881 61 932** (see also accessories for DeviceNet)

PNEUMATIC PROPORTIONAL VALVE

SENTRONIC

Proportional 3 - Port Solenoid Valve

SERIES
602

GENERAL INFORMATION

Together with an electronic PI card and separate pressure detector, this solenoid valve is the equivalent to a servo valve SENTRONIC.

This modular arrangement allows the components to be built into specific regulation systems. Installation of the proportional valve allows a higher ambient temperature range than the SENTRONIC valve.

GENERAL SPECIFICATIONS

FLUIDS : Air or inert gas filtered to 25 µm, without condensate, lubricated or dry
 PIPE SIZE : 1/4, 1/2, 1
 MAXIMUM AIR PRESSURE (MAP) : 115 or 230 PSI (8 or 16 bar) (1/4 - see table below)
 175 PSI (12 bar) (1/2 to 1)
 MAXIMUM REGULATED PRESSURE ... : 90 or 230 PSI (6 or 16 bar) (1/4 - see table below)
 175 PSI (12 bar) (1/2 to 1)
 TEMPERATURE (FLUID)..... : 15°F - 140°F (-9°C - 60°C)
 TEMPERATURE (AMBIENT) : 15°F - 140°F (-9°C - 60°C)
 VOLTAGE : 24VDC +/- 10% (max. ripple 10%)

CONSTRUCTION

VALVE TYPE : Direct operated poppet valve
 BODY MATERIAL..... : anodized aluminium
 INTERNAL PARTS : stainless steel and brass
 SEALING MATERIAL : Nitrile(NBR), Viton(FPM) optional

INSTALLATION

ASSEMBLY POSITION : Any direction



ELECTRICAL CHARACTERISTICS

Ports	Max. Power (W)	Max. Current (mA)
1/4	20	800
1/2	27	1100
1	35	1400

INSULATION CLASS : Type F
 PROTECTION : IP 65
 CONNECTION : Connector ISO 4400 rotatable 90° x 90° - CM 10 (Pg11P)

SELECTION CHART

Pipe Size	Orifice Dia. in. (mm)	Flow (Cv)	MAP (psi)	Regulation Band (psi)	Model Number (NPT or G)	
					NPT	G
1/4	.236 (6)	.7	115	0 - 90	602 00 103	602 00 002
			230	0 - 230	602 00 010	602 00 001
1/2	.472 (12)	1.4	175	0 - 175	602 00 013	602 00 004
1	.787 (20)	5.6	175	0 - 175	602 00 016	602 00 007

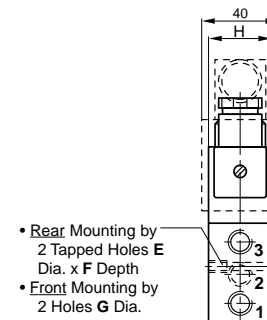
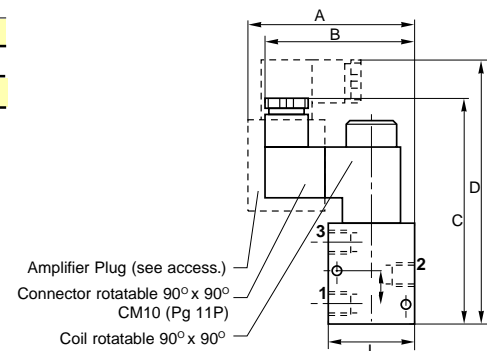
OPTION: Viton(FPM) Sealing material - code: **460 594**

DIMENSIONS & WEIGHTS

1/4 to 1

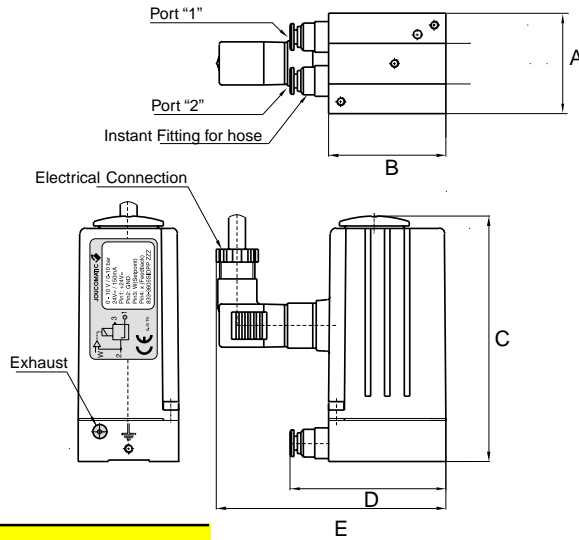
CONSTRUCTION REF. 1

Pipe Size	A		B		C		D		E		F		G		H		I		Weight	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	Lbs.	Kg.
1/4	4.2	107	3.2	82	4.8	123	6.1	153	M5	M5	.39	10	.16	4.0	1.4	35	2.0	52	1.5	0.70
1/2	4.7	119	3.8	96	5.9	151	7.5	190	M6	M6	.39	10	.18	4.5	1.8	45	2.7	70	3.3	1.50
1	-	-	4.6	116	7.2	184	-	-	M8	M8	.60	15	.25	6.5	.25	60	3.8	96	7.3	3.30



VERSION W/INSTANT FITTING O.D. 4mm

Weight: 0.39 Lbs. (175 g)



GENERAL NOTES

Orifice Diameters

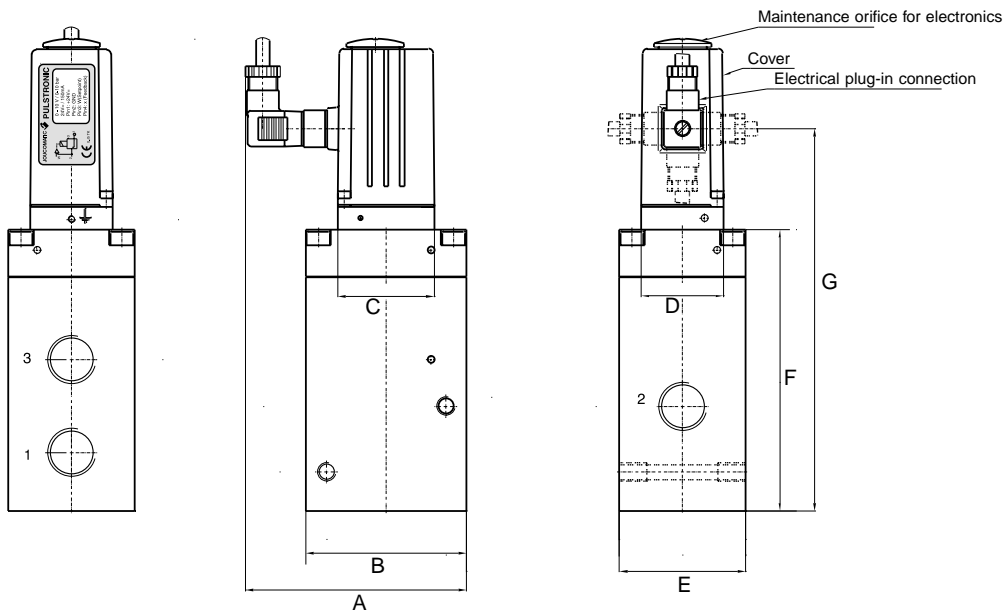
- Inst. Ftg. (0.5mm)
- 1/8 Size 0.12 in.(3mm)
- 1/4 Size 0.24 in.(6mm)
- 1/2 Size 0.47 in.(12mm)

Flows

- Inst. Ftg. 0.007 Cv(0.006 Kv)
- 1/8 Size 0.29 Cv(0.25 Kv)
- 1/4 Size 0.81 Cv(0.69 Kv)
- 1/2 Size 1.81 Cv(1.54 Kv)

INSTANT FTG. VERSION										
Nom. Dia	A		B		C		D		E	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
0.5	1.4	36	1.7	42	3.5	88	2.2	55.8	3.3	83

VERSIONS: 1/8 - 1/4 - 1/2



VERSIONS 1/8, 1/4 & 1/2																
Nom. Dia	A		B		C		D		E		F		G		Weight	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	Lb.	g
1/8	3.3	83	1.7	42	1.7	42	1.4	36	1.4	36	2.1	51.9	3.8	95.9	.88	400
1/4	3.7	94	2.4	60	1.7	42	1.4	36	1.8	46	3.0	75	4.7	119	1.54	700
1/2	3.9	98	2.7	70	1.7	42	1.4	36	2.2	55	4.8	122.7	6.6	166.7	2.20	1000

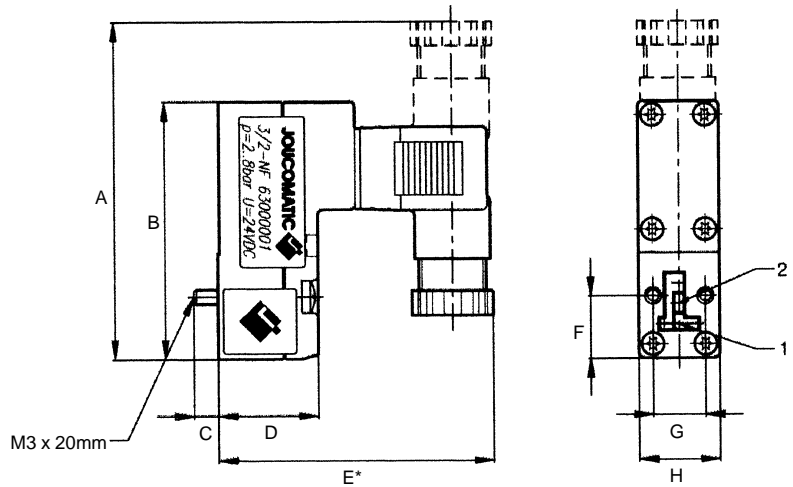
MINI VALVE WITH STD. CONNECTOR

Construction Ref.1

Weight: 0.05 Lbs. (24 g) without connector
0.07 Lbs. (34 g) with connector

PROPORTIONAL VERSION

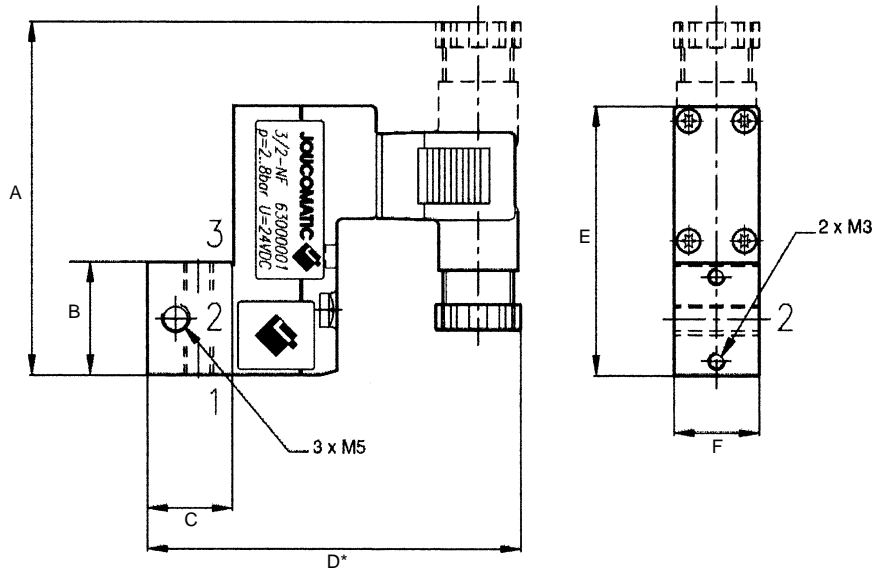
NOTE: The current must be limited by a serial resistor greater than 30 ohms.



MINI VALVE ON SINGLE SUBBASE 882 63 002

Construction Ref.2

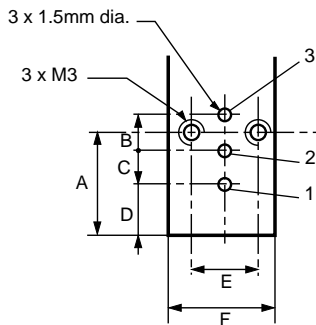
Weight: 0.15 Lbs. (68 g)



Construction Ref.3

MOUNTING FACE

Subbase for mini piezo-valve
CNOMO E06.36.120N (size 15)



SINGLE SUBBASE CONNECTION

Outlet (2) can be connected on the left or the right of subbase; closed unused port with a M5 dia. plug (supplied).

① Connector size 15 rotatable by 90° CM6 (Pg 7P)

② Manual override by impulse

(*) + 10 mm for clearance

NOTE : port 3 not used

CONSTRUCTION REFS. 1, 2 & 3

Constr. Ref.	A		B		C		D		E		F		G		H	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
1	2.5	63	1.9	48	.18	4.5	.73	18.5	2.0	51	.45	11.5	.38	9.7	.60	15
2	2.5	63	.78	20	.60	15	2.6	66	1.9	48	.60	15	-	-	-	-
3	.45	11.5	.15	3.8	.15	3.8	.25	6.3	.38	9.7	.60	15	-	-	-	-

PNEUMATIC SERVOVALVE

SERVOTRONIC

Electropneumatic 3-Port Servo Valve for
Flow-rate Control

SERIES
607

GENERAL SPECIFICATIONS

CONTROLLED FLUIDS : Air or inert gas filtered to 5 µm, without condensate, lubricated or dry

CONNECTION : G1/4

MAXIMUM AIR PRESSURE (MAP) : 145 PSI (10 bar)

FLOW RATE : 1400 l/min (ANR), when fully open

MAX. LEAKAGE : 50 l/min (ANR) (setpoint at 0V)

TEMPERATURE (FLUID) : 40°F - 105°F (5°C - 40°C)

TEMPERATURE (AMBIENT) : 40°F - 105°F (5°C - 40°C)

VOLTAGE : 24VDC +/- 10% (max. ripple 10%)

SET-POINT (ANALOG) : +/-10 Volts (impedance 100K Ohms)

MECHANICAL RESPONSE TIME : 5 ms (at 50% amplitude)

BANDWIDTH : 150 Hz (at - 3 dB, and at 50% amplitude)

CONSTRUCTION

VALVE TYPE : Direct acting spool valve

HOUSING : Treated light alloy

INTERNAL PARTS : Treated light alloy

INSTALLATION

ASSEMBLY POSITION : Any direction



OPTION

010 643 ... : Floating input (Common mode voltage accepted: +/- 24V to ground)

SELECTION CHART

Pipe Size	Current function	Load pressure (psi)	Max. flow (Cv)	Model Number
1/4	<p>Pressure released (open center)</p>	0 - 145	1.4	607 00 005
	<p>Flow held (closed center)</p>	0 - 145	1.4	607 00 006

ELECTRICAL CHARACTERISTICS

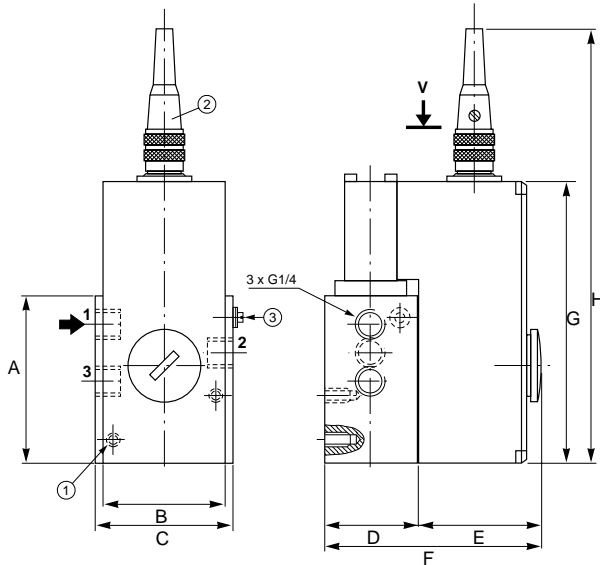
Ports	Max. Power (W)	Max. Current (mA)
1/4	30	1250

INSULATION CLASS : Type F
 PROTECTION : IP 65
 CONNECTION : Plug-in connector 7 pins DIN 43651

Electromagnetic compatibility : electrostatic discharge IEC 61000-4-2 fast electrical transience (coupling clip) IEC 61000-4-4

SERVOTRONIC 607

Weight: 2.4 Lbs. (1.1 kg)



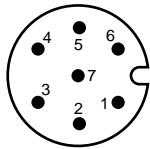
- ① - Lower attachment : 2 M5 holes tapped depth: 12mm
- ② - Electric connection by plug-in connector
- ③ - External ground terminal

DIMENSIONS																
Port Size	A		B		C		D		E		F		G		H	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
1/4	3.0	77	2.2	55	2.5	63	1.7	42	2.2	56	3.9	98	5.1	130	7.9	201

CONNECTION OF OPERATING VOLTAGES

Version : Analog set-point

View on soldered side of female connector



Flow control

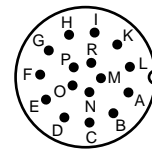
- 1 - +24V power supply
- 2 - Ground (power supply)
- 3 - + set-point input
- 4 - Ground (set-point)
- 5 - Not connected
- 6 - Not connected
- 7 - Not connected

Pressure control

- 1 - +24V power supply
- 2 - Ground (power supply)
- 3 - + set-point input
- 4 - Ground (set-point)
- 5 - 12V stabilized voltage output (30 mA max)
- 6 - Pressure signal (pressure sensor output 0-10V for the pressure range in question)
- 7 - Not connected (standard)
On option : pressure switch output connection NPN or PNP (500 mA max)

Version : Digital set-point

View on soldered side of female connector



Pressure control

- A - +24V power supply
- B - Ground (power supply)
- C - Bit 1 (LSB)
- D - Bit 2
- E - Bit 3
- F - Bit 4
- G - Bit 5
- H - Bit 6
- I - Bit 7
- K - Bit 8 (MSB)
- L - Memory function (option 010650)
Pressure reset function (option 010651)
- M - Not connected (standard)
On option: pressure switch output connection NPN or PNP (500 mA max)
- N - Not connected
- O - Not connected
- P - Pressure signal (pressure sensor output 0-10V for the pressure range in question)
- R - Not connected

The digital set-point version is not proposed in the flow control mode.

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