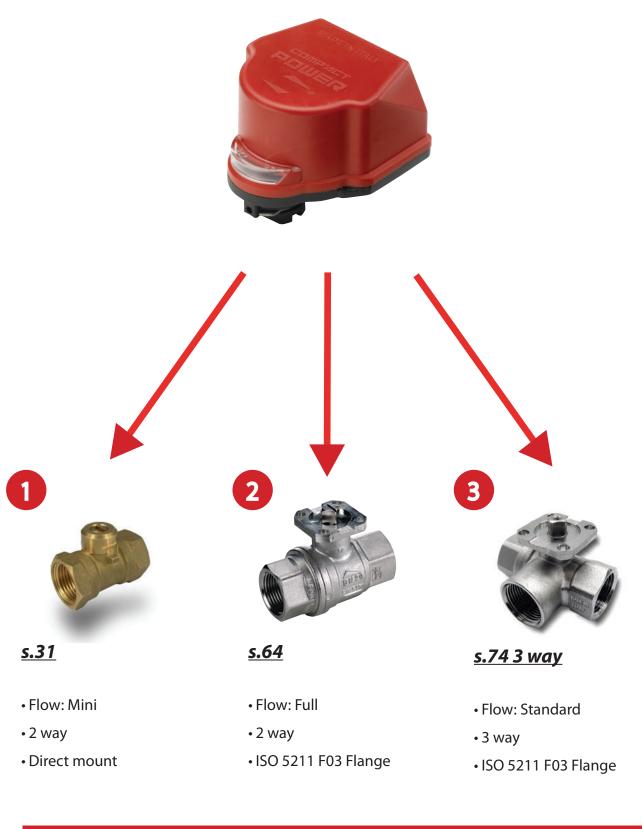






Configurations:

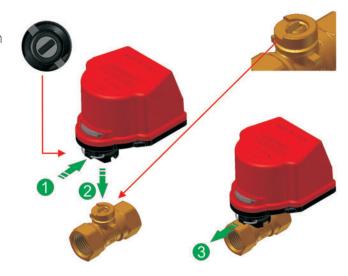




Assembly Instructions:

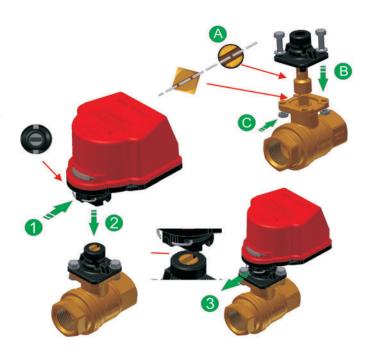
Quick Direct Assembly on s.31 mini valve:

- 1. Push the spring clip in order to set the actuator in open position
- 2. Assemble the actuator on top of valve
- 3. Pull spring clip to lock actuator on valve



Assembly on s.64 and s.74 valves:

- 1. Position the ball of the valve to match the position (open / closed) of the actuator
- 2. Mount stem adaptor (B) and F03 adaptor (A) on top of valve flange and fix it with two screws and nuts (C)
- 3. Push the spring clip in order to set the actuator in open position
- 4. Assemble the actuator on top of adaptor
- 5. Pull spring clip to lock actuator on valve







Electric Actuator

Technical Features:

- Suitable for actuatable valves up to 1.1/4" size (only for s.64 LT)
- Compact package to fit in restricted spaces
- Power supply 230V AC 50Hz / 24V AC 50-60Hz
- Motor power consumption 10W
- Torque output up to 5 Nm (44 in-lb)
- Operation time 20 to 25 sec
- Working temperature -20°C (-4°F) $+80^{\circ}\text{C}$ ($+180^{\circ}\text{F}$)
- Protection class IP65 comparable to NEMA 4X
- Micro-switches for open-close signals
- Micro-switches can pass up to 1A

Options:

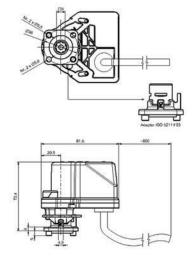
- Power supply 110V AC 60Hz
- Adaptor F03 square 8 mm

Example:

CP5A3 is an CP actuator, 5 Nm 230V AC, 3-WIRES with connection screw driver male and adaptor ISO 5211 F03 square 9 mm

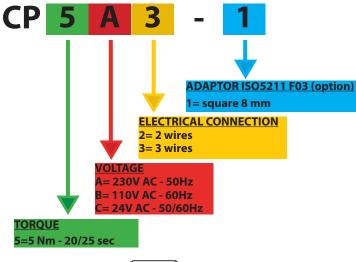
CP5A3-1 is an CP actuator, 5 Nm, 230V AC, 3-WIRES with connection screw driver male and adaptor ISO 5211 F03 square 8 mm

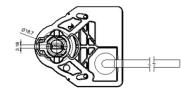
Dimension mm:



- · Reversing motor
- Direct mount on valve for perfect shaft alignment
- · Positive orientation between ball valve and actuator
- · Actuator easily removable for manual operating
- · Visual position indicator
- Corrosion resistant plastic housing
- Actuator has successfully passed 100,000 cycle life tests
- Duty cycle 60%

How to order:





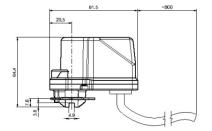
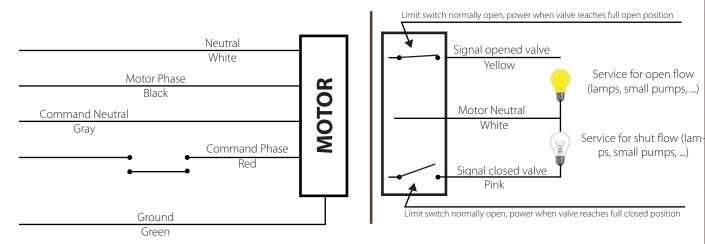


DIAGRAM FOR 2-WIRE CONTROL (ONLY CW CLOSING)

<u>COMMAND</u> <u>FEEDBACK</u>



2 point command: the command is made by a simple switch or button (manually or automatically operated e.g. Traditional thermostat). Closing the control switch will cause the actuator to travel to the full CCW position. Opening the control switch will cause the actuator to travel to the full CW position. If the actuator is mounted on a ball valve, closing the control switch will open the ball valve, and vice versa. Upon request, the command voltage may differ from the motor power voltage.

DIAGRAM FOR 3-WIRE CONTROL (CW CLOSING)

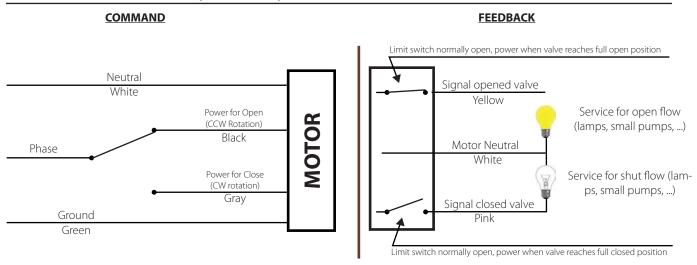
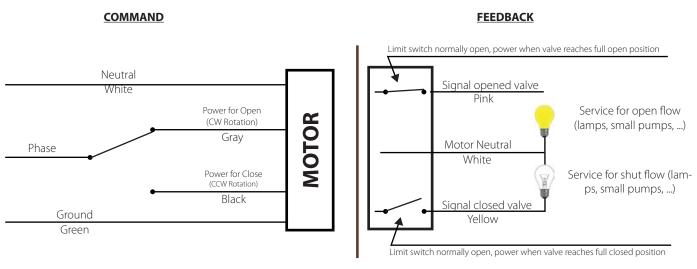


DIAGRAM FOR 3-WIRE CONTROL (CCW CLOSING)



Note: If the limit switch signals are not to be used the yellow and pink wires must be capped to prevent accidental short circuits

3 point command: the command is made by a switch (manually or automatically operated e.g. 3 points thermostat), which diverts the voltage to the opening wire or to the closing wire reaching the actuator; the switch may be on open or on closed position; using a specific control, engine can stop in any intermediate position.





& s.31 Mini Valve

This newly engineered valve features all the good characteristics of the s35 mini valve, in particular:

Technical Features:

- Strong one piece body construction
- Finest brass according to EN 12165 and EN 12164 specifications
- · Chrome plated ball for longer life
- Dual sealing system allows valve to be operated in either direction making installation easier
- Blowout-proof brass stem
- Pure PTFE self-lubricating seats
- Two FPM O-rings at the stem for maximum safety
- Compatible with most industrial fluids including those too viscous for pilot operated valves
- 100% seal test guaranteed in according to EN12266-1 RATE A in either direction

- EN 10226-1, ISO 228 parallel female by female threads
- · Silicone-free lubricant
- · No metal-to-metal moving parts
- · No maintenance ever required
- Shell rating: 40 Bar non-shock cold working pressure
- Seat rating: Delta P max permissible 16 Bar
- · Can operate also in vacuum line
- Range: -20° C (-4° F) $+120^{\circ}$ C ($+250^{\circ}$ F) temperature (Warning: freezing of the fluid in the installation may severely damage the valve)

PED Directives:

• The product meets the requirements of PED Directive 97/23 and according to art.3 par.3, it does not require CE marking

Options:

- ISO 7/1, BS 21 BSPT Taper threads
- NPT taper ANSI B.1.20.1 threads





Approved by or in compliance with:

- Danish Board of European Technical Approval for Construction Products VA Approval (Denmark)
- RoHS Compliant





NOTE: Approvals apply to specific configurations only

Torque for Actuator Sizing

Delta P →	0 ÷ 16 Bar
Valve size	N.m
1/4" ÷ 1/2"	1.8
3/4"	2.5

Torque correction factors

Valve torque can vary according to operating frequency, temperature, and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

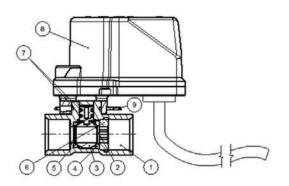
 Lubricating oils or liquids
 0.8

 Dry gases, superheated steam
 1.5

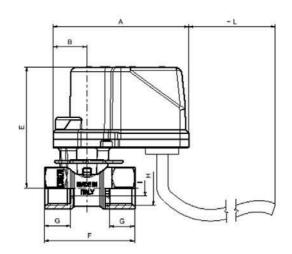
 Slurries or liquids bearing abrasive particles
 1.5-2.5

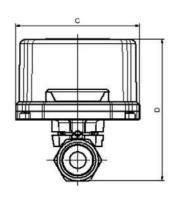
I

POWER



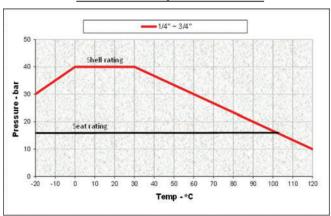
	Part Description	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Ball seat	2	CW617N
3	Chrome plated ball	1	CW617N
4	Nickel plated end cap	1	PTFE
5	Washer	1	PTFE
6	O-ring	1	CW617N
7	O-Ring	2	FPM
8	Compact power electro actuator	1	
9	Spring clip	1	AISI304



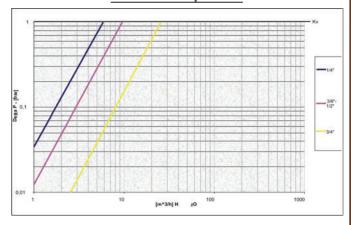


Dimensions	1/4	3/8	1/2	3/4
A (mm)	81.5	81.5	81.5	81.5
B (mm)	20.5	20.5	20.5	20.5
C (mm)	74.5	74.5	74.5	74.5
D (mm)	85	85	85	91
E (mm)	72.5	72.5	72.5	75.5
F (mm)	45.5	45.5	54	61.5
G (mm)	12	12	15.5	17
Н	Rp 1/4"	Rp 3/8"	Rp 1/2"	Rp 3/4"
I (mm)	8	10	10	12.7
L (mm)	800	800	800	800
Threads Standard	EN 10)226-1	50228	

Pressure-Temperature Chart



Pressure Drop Chart







& s.64LT Full Port

ball valve is specifically designed for heavy duty actuation and offers upmost reliability and performance, in particular:

Technical Features:

- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications
- ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- 100% full port for maximum flow
- 100% seal test guaranteed in according to EN12266-1 RATE A
- Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design
- Dual sealing system allows valve to be operated in either direction making installation easier
- Chrome plated solid brass ball

- No metal-to-metal moving parts
- Nickel plated blowout-proof brass stem
- Two FPM O-rings at the stem for maximum safety
- No maintenance ever required
- EN 10226-1, ISO 228 parallel Female by Female threads
- Silicone-free lubricant on all seals
- Shell rating: 40 Bar non-shock cold working pressure
- Seat rating: Delta P max permissible 16 Bar only for 1" and 1.1/4" sizes
- Range: -20°C +170°C temperature (Warning: freezing of the fluid in the installation may severely damage the valve)

PED Directives:

• According to 97/23 CE module A: it cannot be used with dangerous gases in sizes larger than 25mm





Options:

- Special valve configurations available upon request
- s.64 configuration featuring NPT taper ANSI B.1.20.1 female by female threads, unplated body, reinforced seats, stainless steel ball and stem
- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact Power electric actuator

Approved by or in compliance with:

- Danish Board of European Technical Approval for Construction Products VA Approval (Denmark)
- GOST-R (Russia)
- Hygenic (Russia)
- Rostekhnadzor (Russia)
- UkrSepro (UKraine)
- RoHS Compliant





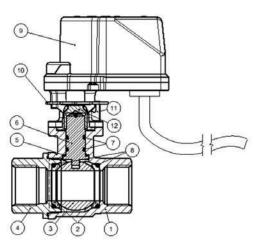








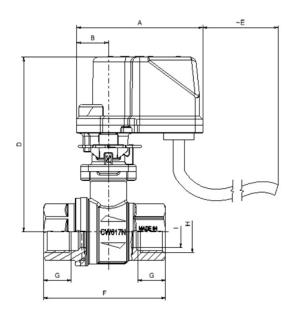
NOTE: Approvals apply to specific configurations only

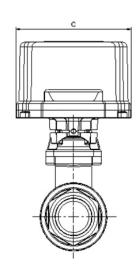


Ball valves are marked CE on body for 1.1/4" as follow: \times XXCODEXX Cat I-A

	PART DESCRIPTION	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Ball seat	2	Ptfe graphite* filled 15%
3	Chrome plated ball	1	CW617N
4	Nickel plated end cap	1	CW617N
5	Washer	1	Ptfe carbon filled 25%
6	Nickel plated stem O-Ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Compact power electro actuator	1	-
10	Spring clip	1	AISI 304
11	Adaptor ISO 5211 F03	1	Polycarbonate
12	Transmission motion	1	CW617N

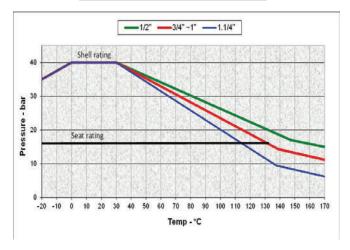
*For 1" and 1.1/4" sizes material seats is carbographite





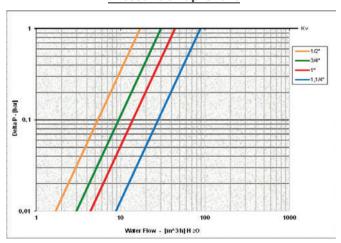
Valve Size	1/2"	3/4"	1"	1.1/4"
A (mm)	81.5	81.5	81.5	81.5
B (mm)	20.5	20.5	20.5	20.5
C (mm)	74	74	74	74
D (mm)	103	111	115	122
E (mm)	800	800	800	800
F (mm)	75	80	90	110
G (mm)	15.5	18	21	23
Н	Rp 1/2"	Rp 3/4"	Rp 1"	Rp 1.1/4"
I (mm)	15	20	25	32

Pressure-Temperature Chart



Seat rating: Delta P max permissible 16 Bar only for 1" and 1.1/4" sizes

Pressure Drop Chart







& s.74 3 Way

s.7400 range is the right choice for fluid diversion. It is designed with robust maintenance-free components ensuring ease of operation and safety.

Technical Features:

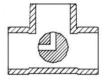
- 3-way L design for flow diversions
- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications
- ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Full port 1/2" size, standard port others
- Electronic 100% seal test guaranteed
- Reinforced PTFE self-lubricating seats with flexible-lip and wear compensationdesign
- Chrome plated solid brass ball

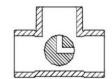
- No metal-to-metal moving parts
- Nickel plated blowout-proof brass stem
- Two FPM O-rings at the stem for maximum safety
- No maintenance ever required
- EN 10226-1, ISO 228 parallel Female by Female threads
- Silicone-free lubricant on all seals
- 30 Bar non-shock cold working pressure
- Range: -20°C +170°C temperature (Warning: freezing of the fluid in the installation may severely damage the valve)

PED Directives:

• The product meets the requirements of PED Directive 97/23 and according to art.3 par.3, it does not require CE marking

S.74 3-way "L" port mounting plan









Options:

- Compact Power electric actuator
- Rack and pinion pneumatic actuator (spring return or double acting)
- Direct actuator mounting ISO 5211
- Lockable handle with stop
- Adapter flange kit with screws
- Stainless trim
- Special valve configurations available upon request

Approved by or in compliance with:

- GOST-R (Russia)
- Rostekhnadzor (Russia)
- Hvgenic (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant



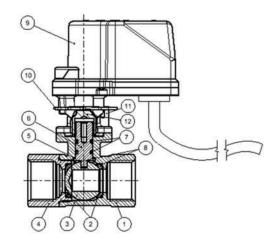




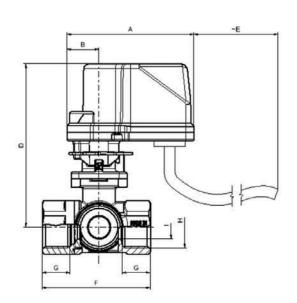


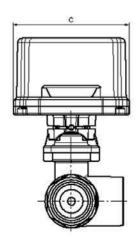


NOTE: Approvals apply to specific configurations only



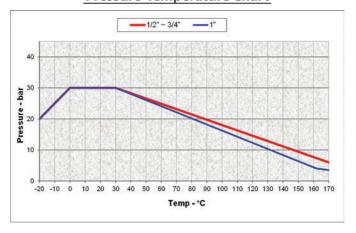
	PART DESCRIPTION	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Seat	2	Ptfe graphite filled 15%
3	Chrome plated ball	1	CW617N
4	Nickel plated end cap	1	CW617N
5	Washer	1	Ptfe carbon filled 25%
6	Nickel plated stem O-Ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Compact power electro actuator	1	-
10	Spring clip	1	AISI 304
11	Adaptor ISO 5211 F03	1	Polycarbonate
12	Transmission motion	1	CW617N





Valve Size	1/2"	3/4"	1"
A (mm)	81.5	81.5	81.5
B (mm)	20.5	20.5	20.5
C (mm)	74	74	74
D (mm)	103	103	111
E (mm)	800	800	800
F (mm)	67	69.5	82
G (mm)	15.5	18	21
Н	Rp 1/2*	Rp 3/4"	Rp 1*
I (mm)	15	15	19

Pressure-Temperature Chart



Pressure Drop Chart

