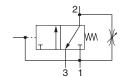
# Combined Soft Start / Dump Valve and Remote Operated Dump Valve



90 Series Combined Soft Start / Dump Valves, provide for the safe introduction of pressure to machines or systems. Soft Start / Dump Valves when set, allow the pressure to gradually build to the set point before fully opening to deliver full flow at line pressure.

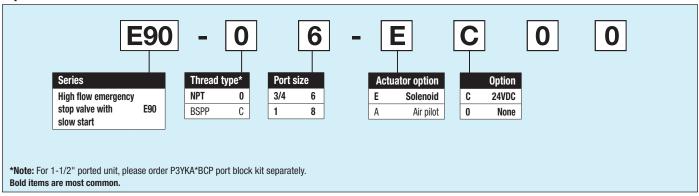
#### **Symbol**



- Modular design with 3/4" & 1" integral ports (BSPP or NPT)
- Provides for the safe introduction of pressure
- Automatically dumps downstream pressure on the loss of pilot signal
- Adjustable slow start
- Solenoid or air pilot options
- High flow & exhaust capability

The controlled introduction of pressure can be an important safety factor and prevent damage to tooling when air pressure is introduced at machine or system start up.

#### **Options**



### **Ordering information**

Port size	Description	Flow scfm	Max. bar (psig)	Min temp °C (°F)	Max temp °C (°F)	Height mm (inches)	Width mm (inches)	Depth mm (inches)	Weight kg (lb)	Part number †
3/4"	Air pilot operated	371	17.5 (254)	-10 (14)	60 (140)	145 (5.71)	90 (3.5)	104 (4.1)	1.4 (3.1)	E90-06-A000
3/4"	24VDC 30mm coil	371	16 (232)	-10 (14)	60 (140)	130 (5.12)	90 (3.5)	104 (4.1)	1.6 (3.5)	E90-06-EC00
1"	Air pilot operated	424	17.5 (254)	-10 (14)	60 (140)	130 (5.12)	90 (3.5)	104 (4.1)	1.4 (3.1)	E90-08-A000
1"	24VDC 30mm coil	424	16 (232)	-10 (14)	60 (140)	130 (5.12)	90 (3.5)	104 (4.1)	1.6 (3.5)	E90-08-EC00

 $<sup>\</sup>dagger$  Standard part numbers shown in bold. For other models refer to Options chart above.

# **Specifications**

Fluid		Compressed air
Max. pressure solenoid operated	30mm coil	16 bar (232 psig)
Minimum operating pressure		2 bar (29 psig)
Temp. range* solenoid operated	-10°C to	60°C (14°F to 140°F)
Temp. range* air pilot operated	-10°C to	60°C (14°F to 140°F)
Air pilot port		1/8"
Exhaust port		1"
Gauge port		1/4"

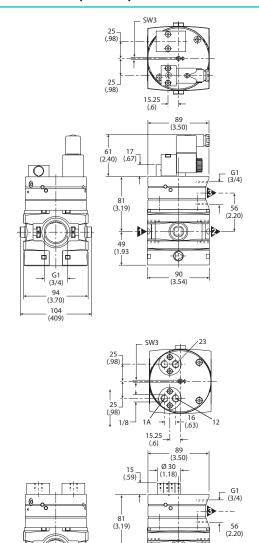
 $<sup>^*</sup>$  Air supply must be dry enough to avoid ice formation at temperatures below 2°C (35.6°F) Snap pressure: Full flow when downstream pressure reaches 50% of the inlet pressure

# **Material specifications**

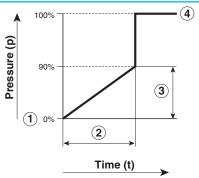
Body	Aluminum
Body cover	ABS
Valve	Brass / NBR composite
Pilot valve booster	Aluminum
Seals	Nitrile NBR

Note: For solenoid coil and cable plug options see page 24.

### **Dimensions mm (inches)**

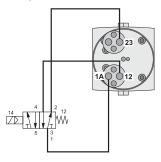


# Flow characteristics

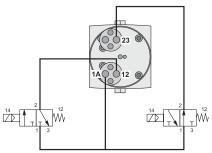


- 1) Start signal
- Switching time delay
- 3 Gradual pressure build up
- 4 Operating pressure  $p^2$  (=  $p^1$ )

#### Combined start / stop function



# Combined start / stop function with acknowledgement



G1 (3/4) 94 (3.70) 104 (409)