

E 18/E 28 SLOW-START / QUICK DUMP VALVE



The E18 and E28 Slow-Start / Quick Dump Valves are designed as three-way quick dump valves with a built-in slow-start capability. This unique combination reduces the number of components in a pneumatic circuit by combining an electronic on/off valve with a slow-start valve in a single unit. The E18/E28 is designed with the same modular concept as Wilkerson's 18/28 modular FRL product line and incorporates the same modern appearance and size. The E18/E28 also provides the same high flow rates as the S18/S28 slow-start valves.

The slow-start portion of the valve is adjustable and since it does not use a "bleed up to pressure" system, the Wilkerson unit is truly volume-independent. This is a unique advantage in that this design allows any number of additions to the pneumatic circuit without having to re-adjust the slow-start function.

The E18/E28 will exhaust when the actuating valve on the unit is deactivated. The valves will exhaust on the P2 side of the unit with a Cv will completely shut off the P1 side. Exhaust ports are conveniently located on the rear and downstream sides of the unit.

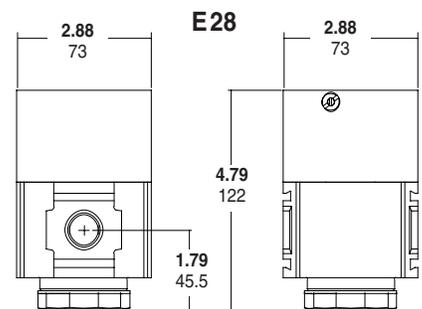
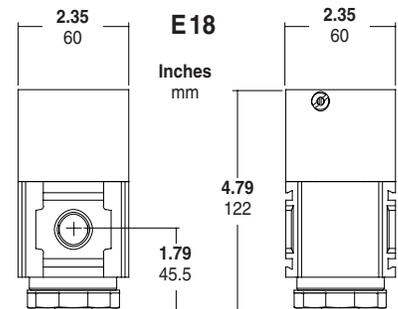
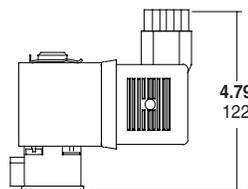
Features and Benefits

- Modular design
- Modern appearance
- True volume independence
- High flow capacity
- Choice of 2 exhaust ports

Specifications

Slow-start adjusting range:	1.0 to 20 seconds
Exhaust time:	1 second max. to start exhaust
Exhaust rate:	Cv 3.0
Actuating valves:	Solenoid with KR mount standard (either 24 VDC or 110 VAC). C.N.O.M.O. mount with adapter available as an option. Any three-way actuating valve with adapter can be used.

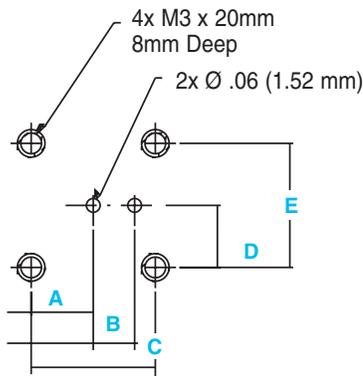
SOLENOID



Operation

The time required to reach line pressure can be regulated by turning the adjusting screw on the front of the unit. Once this time is set, the unit will maintain this start time regardless of changes in volume, up to and including an open line on the downstream (P2) side. This **volume-independent** rise in secondary pressure is accomplished by balanced pistons located inside the exhaust valve that slowly regulate the pressure up to line pressure. This design is a departure from bleeding through a control orifice to increase downstream pressure, which has been the commonly used volume-dependent approach. The Wilkerson volume-independent design also allows for a slow, controlled rise in pressure to a full 100% of line pressure. [This is a significant advantage over the commonly used volume-dependent approach, where pressure bleeds to the P2 side and suddenly jumps to line pressure when downstream pressure reaches 40%-80% of the upstream line pressure.] The Wilkerson volume-independent design eliminates this problem and the potential damage to delicate equipment that may result.

Detail for KR Mount Pattern Solenoid Actuating Valve (Standard)



Dimensions

Models	Inches mm	A	B	C	D	E
Standard Unit E18-XX-EC00		.28 7.0	.18 4.6	.55 14	.28 7.0	.55 14
Standard Unit E28-XX-EC00		.28 7.0	.18 4.6	.55 14	.28 7.0	.55 14

Specifications

Flow Capacity*	E18	1/4	95 scfm (44,8 dm ³ /s)
		3/8	101 scfm (47,6 dm ³ /s)
		1/2	113 scfm (53,3 dm ³ /s)
	E28	3/8	196 scfm (92,5 dm ³ /s)
		1/2	210 scfm (99,0 dm ³ /s)
		3/4	230 scfm (108,5 dm ³ /s)
Maximum Operating Temperature		150°F (65,5°C)	
Maximum Supply Pressure		150 psig (10 bar)	
Minimum Pressure		30 psig (2,1 bar)	
Port Size	NPT/BSPP-G	E18	1/4, 3/8, 1/2
		E28	3/8, 1/2, 3/4
Exhaust Ports Right side and rear	NPT/BSPP-G	E18	3/8
		E28	3/8
Weight	lb. (kg)	E18	2.23 (1,01)
		E28	2.50 (1,14)

*Inlet pressure 150 psig (10 bar). Pressure drop 5 psid (0,3 bar).

Materials of Construction

Body	Aluminum
Bottom Plug	33% glass-filled nylon
Valve Assembly	Brass/Nitrile
Springs	S.S.
Seals	Nitrile

Ordering Information

Model Type	24V/DC N.C.	120V/60 Hz N.C.
E18	E18-02-EC00	E18-02-ED00
	E18-03-EC00	E18-03-ED00
	E18-04-EC00	E18-04-ED00
E28	E28-03-EC00	E28-03-ED00
	E28-04-EC00	E28-04-ED00
	E28-06-EC00	E28-06-ED00

Ordering Information Options - To order an option supplied with the unit model, add the appropriate coded suffix letter in the designated position of the model number.

*"EC" Solenoid Option (24 VDC) shown above. Options "ED" (120 VAC, 50/60) and "00" with Solenoid are also available.

Unit models are available in BSPP by placing a "C" in the 4th position of the unit model number.

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