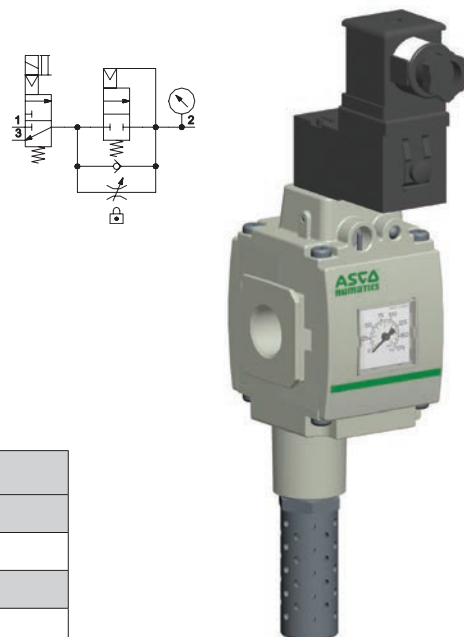


- This unit provides two main functions:
 - Pneumatic system venting
 - Gradual pressurisation after an outage leading to venting of the system
- This product allows for machines and installations to conform to the European Directives
- High exhaust capacity for quick depletion of downstream pressure
- Optional low profile integrated gauge, round gauge, digital gauge or digital pressure switch
- Constructions includes: 3/2 Quick Exhaust, 3/2 Slow-Start/Quick-Exhaust, and 2/2 Slow Start
- Electrical connections: Coil with DIN terminals; DIN Plug, DIN Plug with LED, and coil with built-in M12 3 Pin male connection (24 VDC)



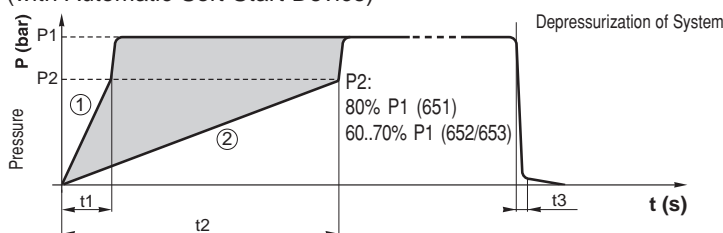
Performance Data							
Series	651		652		653		
Port sizes	1/8, 1/4		1/4, 3/8, 1/2		3/4, 1		
Thread type	G (NPTF in option)						
Nominal flow - ISO 6358 P1 = 6,3 bar ΔP = 1 bar	l/min (ANR)						
		1 → 2	2 → 3	1 → 2	2 → 3	1 → 2	2 → 3
	1/8	780	1040	-	-	-	-
	1/4	1000	1120	1500	2100	-	-
	3/8	-	-	3750	4300	-	-
	1/2	-	-	4650	5000	-	-
	3/4	-	-	-	-	7280	8890
	1	-	-	-	-	8230	8960
Minimum operating pressure (bar)	3,8 *						
Maximum operating pressure (bar)	10				16		
Ambient temperature range (°C)	-10 to +50						
Fluid temperature range (°C)	-10 to +50						
Fluid	air or inert gas						
Weight (kg)	0,387		0,438		1,592		

*If P(1) supply flow is restricted on valves with internal pilot supply, momentary exhaust leakage can occur.

Materials in contact with fluid	
Body	Aluminium
Seals	NBR/FKM
Springs	Stainless steel
Poppet piston	Brass

Operating Data				
	24/DC	115/50	230/50	24/50
Power	—	9 VA	9 VA	9 VA
Holding	3 W	4 VA (3 W)		

System Pressurization and Depressurization Curves (with Automatic Soft-Start Device)



The adjustment range for the pressurization time lies between curves (1) and (2).

The transition to full flow takes place automatically as soon as the downstream pressure reaches 80% (651)/60% to 70% (652/653) of the upstream pressure.

Filling and venting times (seconds)			
	651 Series	652 Series	653 Series
t1 (with screw loosened by 6 (651)/7 (652)/8 (653) turns)	8	3,2	2,8
t2 (with screw loosened by 1 turn)	112	23	18,5
t3 (venting time)	5	1	0,5

These times correspond to a supply pressure (P1) of 6.3 bar, a transition pressure (P2) of 80% (651)/60% to 70% (652/653) P1 (not adjustable) and a downstream capacity of 10 liters.

All leaflets are available on: www.asco.com

SERIES
651
652
653



HOW TO ORDER

Slow Start-Quick Exhaust Valve

[Configurator - CAD Files](#)

G 651 A 6 S 6 2 G A00 F1

Thread connection

- G = ISO 228/1-G ⁽¹⁾
- 8 = NPTF

Product series

- 651
- 652
- 653

Revision letter

- A

Product type

- 4 = 2/2 - Slow start
- 5 = 3/2 - Quick exhaust
- 6 = 3/2 - Slow start/Quick exhaust

Valve type

- E = External air pilot
- P = Internal air pilot
(Available on 2/2 Slow Start only)
- S = Solenoid air pilot

Pilot valve/Electrical connection

- 0 = No Electrical Connection
- 1 = Vertical Solenoid Pilot, without DIN Connector
(must order with option 110)
- 2 = Vertical Solenoid Pilot, DIN Connector with LED
(must order with option 110)
- 3 = Vertical Solenoid Pilot, DIN Connector w/o LED
(must order with option 110)
- 4 = Vertical Solenoid Pilot, 3 Pin M12 Connection ⁽²⁾
(must order with option 110)
- 5 = Horizontal Solenoid Pilot, without DIN Connector
- 6 = Horizontal Solenoid Pilot, DIN Connector with LED
- 7 = Horizontal Solenoid Pilot, DIN Connector without LED
- 8 = Horizontal Solenoid Pilot with 3 Pin M12 Connection ⁽²⁾
- 9 = Without pilot operator

Port size

- 1 = 1/8 (651 Series)
- 2 = 1/4 (651 or 652 Series)
- 3 = 3/8 (652 Series)
- 4 = 1/2 (652 Series)
- 5 = 3/4 (653 Series)
- 6 = 1 (653 Series)

⁽¹⁾ Conforms to ISO standards 1179-1.

⁽²⁾ Available for DC voltage only.

⁽³⁾ [If multiple options are required, please use the on-line CAD configurator on the website to generate the part number \(www.asco.com\).](#)

⁽⁴⁾ Option 117 (ATEX 1-21) is available with Valve Type "E" or "P". For Valve Type "S" (Solenoid Pilot), please select "9" under the "Pilot Valve/Electrical Connection. Contact us for further information.

Voltage

- EW = 115 50/60 VAC
- F1 = 24 VDC
- FQ = 24 50/60 VAC
- FH = 230 50/60 VAC (651 or 652)
- F8 = 230/50 VAC (653 only)
- DE = 230/60 VAC (653 only)
- 00 = No voltage

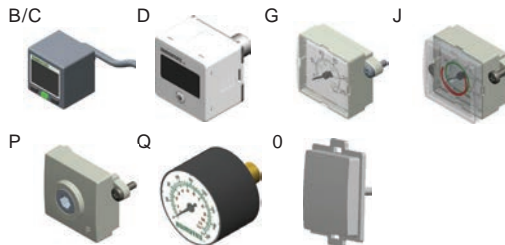
Options ⁽³⁾

- A00 = Without option
- 101 = Side Mounting Brackets
- 109 = FPM seals
- 110 = Without manual operator
- 111 = Metal Muffler
- 112 = Polyethylene Muffler
- 113 = Stainless steel fasteners
- 117 = ATEX zones 1/21 ⁽⁴⁾
- 122 = Inverter Mounting
- 123 = Gauge type mounted for right-to-left flow
- 124 = CUTR Certification (EAC)
- 125 = CUTR Ex
- 201 = 110 + 111



Gauge type

- B = Digital pressure switch - PNP
- C = Digital pressure switch - NPN
- D = Digital gauge
- G = Low profile integrated gauge bar/PSI
- J = Low profile integrated gauge bar/PSI with pressure range indicators
- Q = Round gauge bar/PSI
- 0 = No gauge port
- P = Port Plate Rc 1/8

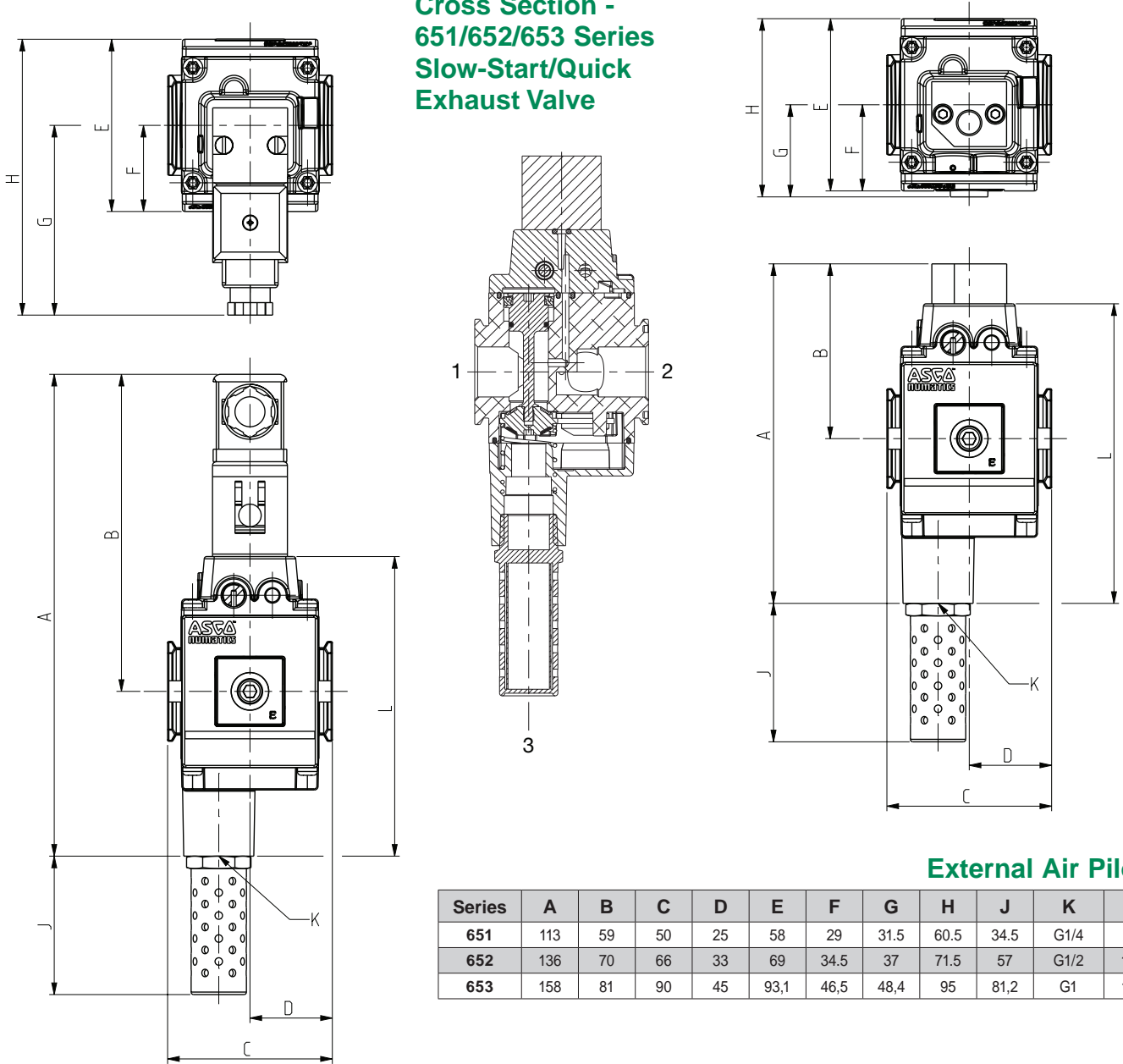


Dimensions: mm

Dimensional Drawing - 651/652/653 Series Slow-Start/Quick Exhaust Valve

[Configurator - CAD Files](#)

Cross Section - 651/652/653 Series Slow-Start/Quick Exhaust Valve



External Air Pilot

Series	A	B	C	D	E	F	G	H	J	K	L
651	113	59	50	25	58	29	31.5	60.5	34.5	G1/4	97
652	136	70	66	33	69	34.5	37	71.5	57	G1/2	120
653	158	81	90	45	93,1	46,5	48,4	95	81,2	G1	142

Solenoid Pilot

Series	A	B	C	D	E	F	G	H	J	K	L
651	170	116	50	25	58	29	72	101	34,5	G1/4	97
652	193	127	66	33	69	34,5	76	110,5	57	G1/2	120
653	214	137	90	45	93,1	46,5	94	140,5	81,2	G1	142

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