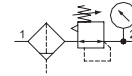


# PARTICULATE FILTER/REGULATOR

- High flow with a wide range of adjustable output pressure ranges
- Optional low profile gauge, round gauge, digital gauge or digital pressure switch
- Optional extended temperature range of -40°F to 176°F (-40°C to 80°C)
- Sintered polyethylene elements, with centrifugal separator, include 5, 25 and 40 Microns
- Threaded ports allow for individual or modular mounting
- Innovative two position plastic drain with manual and semi-automatic functions. Additional drains include an automatic style (brass) and manual (stainless steel)
- Polycarbonate and Aluminum bowls with a selection of sight gauge materials that meet industry and application requirements
- Key lockable and tamper resistant models
- Air purity class according to ISO 8573-1: 2010



Performance Data					
Series		651		652	
Port Sizes		1/8, 1/4		1/4, 3/8, 1/2	
Thread Type		NPTF, G & Rc			
Nominal Flow - Per ISO 6358 P1 = 145 PSI (10 bar) Setpoint P2 = 91.4 PSI (6.3 bar) ΔP = 14.5 PSI (1 bar)		Micron Rating	SCFM (L/min ANR)		
			1/8	5μ	25.1 (710)
		25μ		25.8 (730)	-
		40μ		28.5 (800)	-
		1/4	5μ	79.1 (2240)	133.0 (3800)
			25μ	83.4 (2360)	144.2 (4120)
			40μ	100.1 (2840)	150.5 (4300)
		3/8	5μ	-	155.8 (4450)
			25μ	-	189.7 (5420)
			40μ	-	196 (5590)
		1/2	5μ	-	157.2 (4490)
			25μ	-	192.5 (5500)
			40μ	-	203.0 (5800)
Maximum Inlet Pressure PSIG (bar) P1		Polycarbonate Bowl	232 (16)		
		Aluminum Bowl	232 (16)		
Adjustable Pressure Ranges PSIG (bar) P2		3 to 45 (0.2 to 3)			
		3 to 60 (0.2 to 4)			
		7 to 125 (0.5 to 8)			
		7 to 145 (0.5 to 10)			
Ambient Temperature Range °F (°C)		-4 to 122 (-20 to 50)			
Fluid Temperature Range °F (°C)		-4 to 122 (-20 to 50)			
Fluid		Air or Inert Gas			
Weight lbs. (kg)		w/Polycarbonate Bowl	0.617 (0.304)	1.20 (0.546)	
		w/Aluminum Bowl	0.989 (0.449)	1.52 (0.688)	

Materials in Contact with Fluid	
Body	Aluminum
Seals	NBR/FKM
Springs	Stainless Steel
Filter Element	Sintered Polyethylene
Bowl	Polycarbonate or Aluminum

Air Purity Class - ISO 8573-1: 2010*	
5μ	(5:8:4)
25μ	(6:8:4)
40μ	(7:8:4)

## How to Order

### Particulate Filter/Regulator

**8 651 A P B P 2 F A00 G N**

**Port Type**  
 8 = NPTF  
 G = ISO 228/1-G\*  
 J = ISO 7/1 Rc

**Product Series**  
 651  
 652

**Revision**  
 A

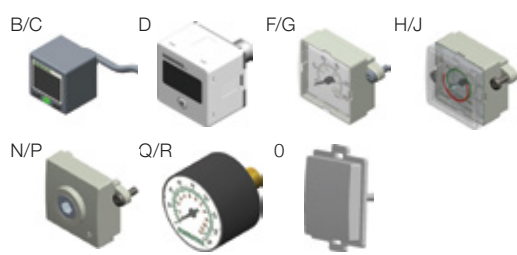
**Product Type**  
 P = Filter/Regulator - Particulate

**Elements**  
 A = 40 Micron (Green)  
 B = 5 Micron (White)  
 J = 25 Micron (Yellow)

**Bowl Type**  
 K = Metal Bowl without Sight Gauge  
 L = Metal Bowl with Sight Gauge (Glass)  
 M = Metal Bowl with Sight Gauge (Polyamide)  
 N = Polycarbonate Bowl without Bowl Guard (651 only)  
 P = Polycarbonate Bowl with Bowl Guard

**Port Size**  
 1 = 1/8 (651 Series)  
 2 = 1/4 (651 or 652 Series)  
 3 = 3/8 (652 Series)  
 4 = 1/2 (652 Series)

**Gauge Type**  
 B = Digital Pressure Switch - PNP  
 C = Digital Pressure Switch - NPN  
 D = Digital Gauge  
 F = Low Profile Gauge PSI/bar  
 G = Low Profile Gauge bar/PSI  
 H = Low Profile Gauge PSI/bar with Pressure Range Indicator  
 J = Low Profile Gauge bar/PSI with Pressure Range Indicator  
 N = No Gauge with Port Plate (1/8 NPTF)  
 P = No Gauge with Port Plate (1/8 ISO 7/1 Rc)  
 Q = Round Gauge bar/PSI  
 R = Round Gauge PSI/bar  
 0 = No Gauge Port



### Drain Type

- 0 = No Drain
- A = Auto Drain Normally Open
- N = Manual - Semi-Automatic Drain
- Q = Manual Drain - Stainless Steel



### Pressure Range

- D = 3-45 PSIG/0.2-3 bar
- E = 3-60 PSIG/0.2-4 bar
- G = 7-125 PSIG/0.5-8 bar
- H = 7-145 PSIG/0.5-10 bar

### Options\*\*\*

- A00 = No Options
- 101 = Side Mounting Brackets
- 102 = Panel Nut
- 103 = Tamper Resistant
- 104 = Key Lockable
- 105 = High Temperature (80°C/176°F)
- 106 = Low Temperature (-40°C/-40°F)\*\*
- 109 = FKM Seals
- 113 = Stainless Steel Fasteners (652 only)
- 114 = Provision for Key Lockable Option
- 117 = ATEX Zones 1-21 ⚠️
- 119 = Panel Bracket with Panel Nut
- 121 = Non-Relieving
- 123 = Gauge Type Mounted for Right-to-Left Flow
- 202 = 105 + 109
- 2A9 = 105 + 106



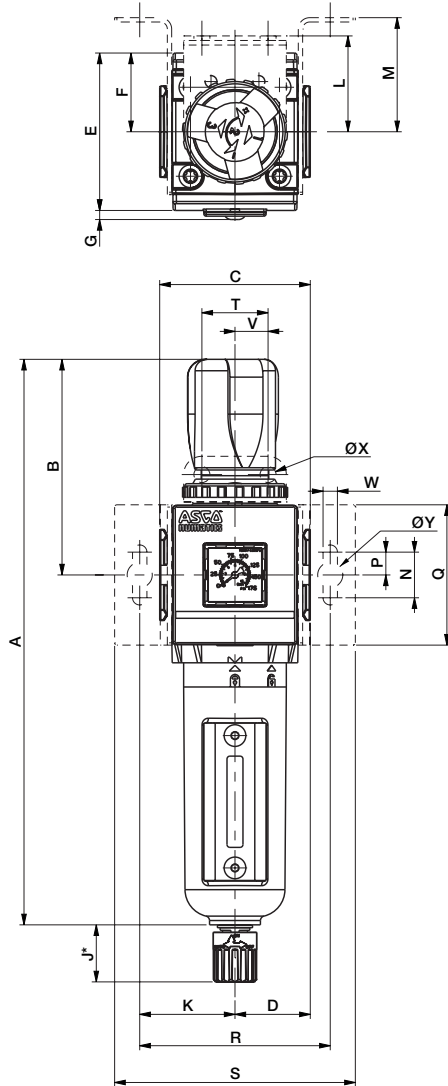
\* Conforms to ISO standards 1179-1

\*\* Compressed air must be dry enough so no ice formation is present on the product. All bowls should be emptied prior to ambient temperatures dropping below 32°F (0°C)

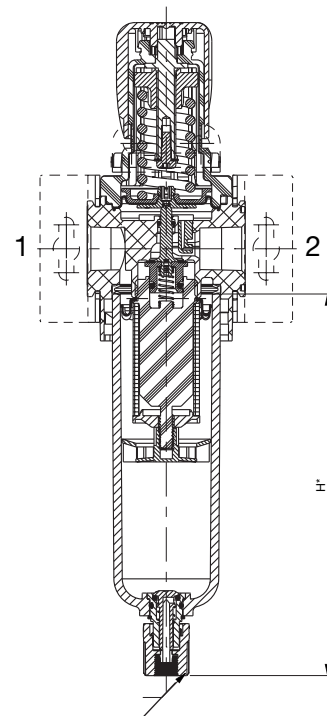
\*\*\* If multiple options are required, please use the on-line CAD configurator on the website to generate the part number ([www.asco.com](http://www.asco.com)), or consult factory.

Dimensions: mm (inches)

**Dimensional Drawing - 651/652 Series Particulate Filter/Regulator**



**Cross Section - 651/652 Series Particulate Filter/Regulator**



To remove bowl allow:  
651 - 44mm (1.8 in)  
652 - 75mm (3.0 in)  
from the bottom of  
the bowl drain.

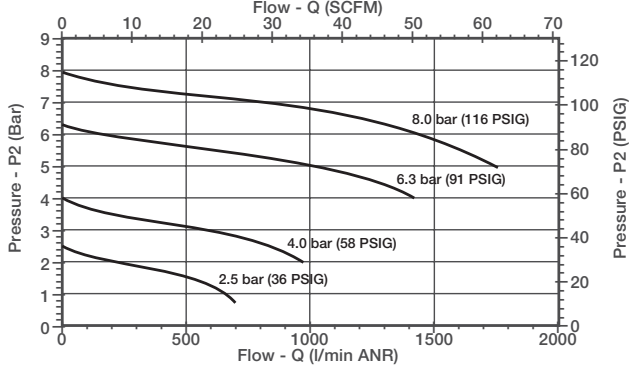
	A	B	C	D	E	F	G	H	J	K	L
<b>651</b>	215.5	77.5	50	25	58	29	3.4	116	25	35	42
	(8.48)	(3.05)	(1.97)	(0.98)	(2.28)	(1.14)	(0.13)	(4.57)	(0.98)	(1.38)	(1.65)
<b>652</b>	248	94.5	66	33	69	30.5	4	160	25	41.75	42
	(9.76)	(3.72)	(2.60)	(1.30)	(2.72)	(1.20)	(0.16)	(6.30)	(0.98)	(1.64)	(1.65)

	M	N	P	Q	R	S	T	V	W	ØX	ØY
<b>651</b>	44.5	20	10	50	70	92	29	14.5	6.3	7	11
	(1.75)	(0.79)	(0.39)	(1.97)	(2.76)	(3.62)	(1.14)	(0.57)	(0.25)	(0.28)	(0.43)
<b>652</b>	50	20	10	61.5	84	105.5	29	14.5	6.3	7	11
	(1.97)	(0.79)	(0.39)	(2.42)	(3.31)	(4.15)	(1.14)	(0.57)	(0.25)	(0.28)	(0.43)

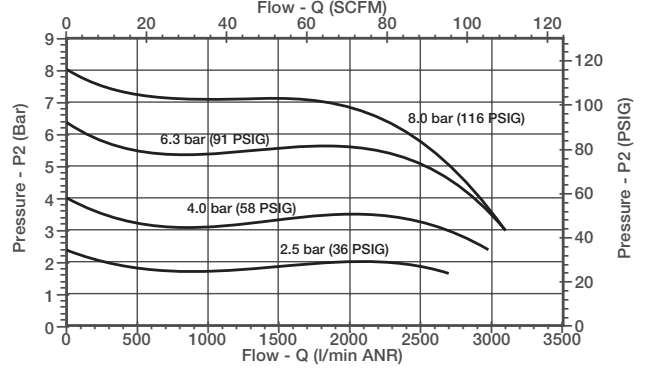
\* Variable dimension based on type of drain that is specified; If an Automatic Drain is specified, add another 5mm to "J" dimension.

**Particulate Filter/Regulator Flow Charts**

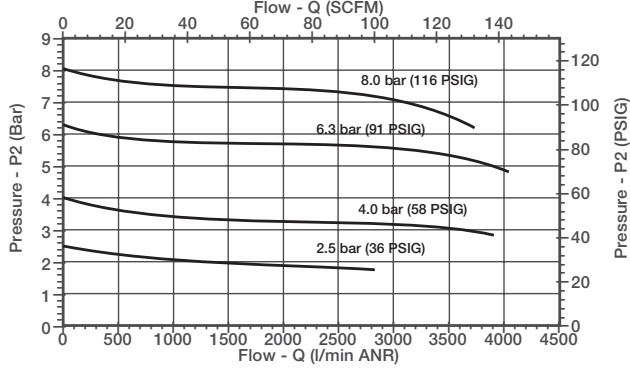
**651 Filter-Regulator | 5µ Filtration | 1/8 Ports**  
P1 = 10 Bar (145 PSIG)



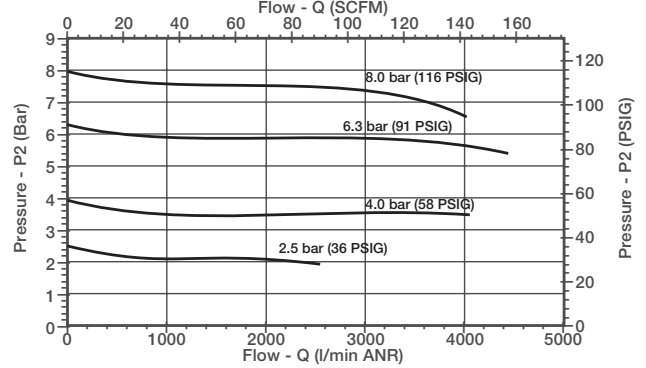
**651 Filter-Regulator | 5µ Filtration | 1/4 Ports**  
P1 = 10 Bar (145 PSIG)



**652 Filter-Regulator | 5µ Filtration | 1/4 Ports**  
P1 = 10 Bar (145 PSIG)



**652 Filter-Regulator | 5µ Filtration | 3/8 Ports**  
P1 = 10 Bar (145 PSIG)



**652 Filter-Regulator | 5µ Filtration | 1/2 Ports**  
P1 = 10 Bar (145 PSIG)

