

P520 and P530 Series

Acrylic Tube Variable Area Flow Meter

Parker P520 and P530 Series acrylic flowmeters are constructed to the same high quality standards as the entire P series line.

They represent a cost effective alternative to glass tube flowmeters in less critical applications.

The economical machined cast acrylic block construction is ideal for OEM use and the P530 Series includes an inlet precision metering valve for applications requiring flow control.



Contact Information: Product Features and Options:

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- Brass, PVC or stainless steel process connections
- Metering tube of machined cast acrylic
- Max temperature:
130°F (54°C) for liquids
100°F (38°C) for gases
- Capacities:
7 GPH to 20 GPM for water
2.6 SCFH to 60 SCFM for air
- Certified calibrations conforming to ISA RP 16.6 available
- Scales can be produced in any volumetric unit



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Specifications

Materials

Metering Tube	Machined Cast Acrylic
Internal Components	316L Stainless Steel
Inlet/Outlet Fittings	NPT, Horizontal Control Valve Optional
Fitting Material	Standard PVC (Brass for 2C Block Size) Optional 316L Stainless Steel or Brass
Elastomers	Standard EPR Optional Buna, Viton® and Kalrez®

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Options

Certified Calibrations	Conform to ISA RP 16.6
Scales	Can be produced in any volumetric unit

Performance

Capacities	Water 7 GPH to 20 GPM Air 2.6 SCFH to 60 SCF
Scale	50mm, 75 mm, 100mm, 127mm, 250mm Direct reading
Accuracy	50mm ±6% of Full Scale Flow 75 mm ±4% of Full Scale Flow 100mm ±4% of Full Scale Flow 6C-04, 6C-06 ±7% of Full Scale Flow 127mm ±3% of Full Scale Flow 250mm ±2% of Full Scale Flow
Turndown	10:1 to 12.5:1, unless otherwise indicated
Repeatability	50mm 3% 75 mm 2% 100mm 2% 6C-04, 6C-06 4% 127mm 2% 250mm 1/2%
Maximum Temperature	Gases 100°F (38°C) Liquids 130°F (54°C)
Maximum Pressures	Water 125 psig Air 100 psig
Ambient Temperature	33°F to 125°F (1°C to 52°C)

Materials of Construction

Model Number	P520	P520	P530	P530
Block Number	2C	3C, 5C, 6C, 7C	2C	3C, 5C, 6C, 7C
Meter Tube	Cast Acrylic	Cast Acrylic	Cast Acrylic	Cast Acrylic
Fittings	– Brass* 316L SS	PVC* Brass 316L SS	– Brass* 316L SS	PVC* Brass 316L SS
O-Rings	EPR* Buna Viton®	EPR* Buna Viton®	EPR* Buna Viton®	EPR* Buna Viton®
Valve Assembly	Not Available	Not Available	Brass* 316L Stainless Steel	Brass* 316L Stainless Steel

*Standard Construction

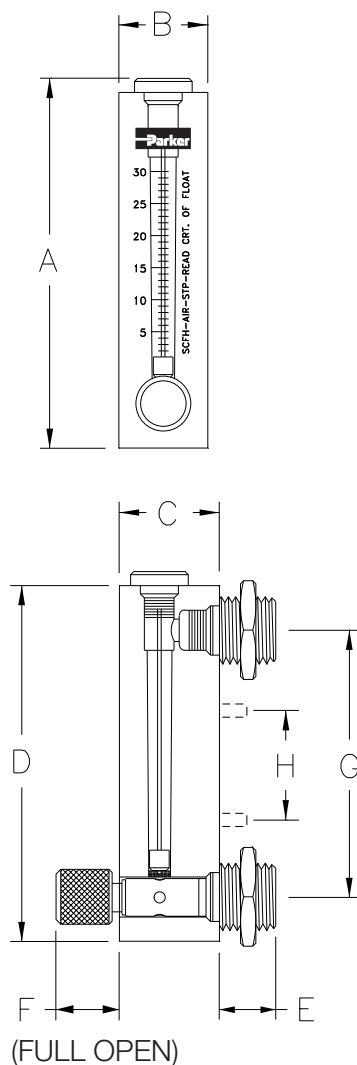
Connections and Mounting Dimensions

Block Number	Connection Size	Centerline H	Thread J	Diameter L
2C	1/4" FNPT	–	–	0.625
3C	1/2" MNPT x 1/4" FNPT	3	.25 – 20	1
5C	1/2" MNPT x 1/4" FNPT	3.937	.25 – 20	1
6C	1" MNPT	4	.25 – 20	1.375
7C	1/2" FNPT	8.75	.375 – 24	1.25

Block 2C is supplied with .875" hex mounting nuts on plumbing connections.

Blocks 3C, 5C, 6C and 7C have mounting studs depicted in dimension "H" and thread "J." (Mounting nuts not supplied.)

Order Numbers, Flow Rates and Dimensions



Order Number	Flow Water	Order Number	Flow Air	Dimensions (Inches)						
				A	B	C	D	E	F	G
Block #2C, 50mm (2") Scale										
—	—	2C-01	2.6 SCFH	4.125	1	1.125	4	.50	1.05	3
—	—	2C-03	5 SCFH	4.125	1	1.125	4	.50	1.05	3
—	—	2C-05	10 SCFH	4.125	1	1.125	4	.50	1.05	3
—	—	2C-07	20 SCFH	4.125	1	1.125	4	.50	1.05	3
2C-02	7 GPH	2C-09	30 SCFH	4.125	1	1.125	4	.50	1.05	3
2C-04	12 GPH	2C-11	60 SCFH	4.125	1	1.125	4	.50	1.05	3
2C-06	22 GPH	2C-13	100 SCFH	4.125	1	1.125	4	.50	1.05	3
2C-08	44 GPH	2C-15	180 SCFH	4.125	1	1.125	4	.50	1.05	3
2C-10	60 GPH	2C-17	4 SCFM	4.125	1	1.125	4	.50	1.05	3
2C-12	75 GPH	—	—	4.125	1	1.125	4	.50	1.05	3
Block #3C, 75mm (3") Scale										
3C-02	1 GPM	3C-01	4 SCFM	6.875	1.20	1.35	6.625	1	1.37	5
3C-04	2 GPM	3C-03	8 SCFM	6.875	1.20	1.35	6.625	1	1.37	5
3C-06	3.5 GPM	3C-05	15 SCFM	6.875	1.20	1.35	6.625	1	1.37	5
3C-08	5 GPM	3C-07	23 SCFM	6.875	1.20	1.35	6.625	1	1.37	5
Block #5C, 127mm (5") Scale										
5C-02	1 GPM	5C-01	4 SCFM	8.45	1.20	1.35	8.25	1	1.25	6.437
5C-04	100 GPH	5C-03	6.8 SCFM	8.45	1.20	1.35	8.25	1	1.37	6.437
5C-06	2 GPM	5C-05	8.2 SCFM	8.45	1.20	1.35	8.25	1	1.37	6.437
5C-08	5 GPM	5C-07	22 SCFM	8.45	1.20	1.35	8.25	1	1.37	6.437
5C-10	10 GPH	5C-11	42 SCFH	8.45	1.20	1.35	8.25	1	1.37	6.437
5C-12	20 GPH	5C-13	100 SCFH	8.45	1.20	1.35	8.25	1	1.37	6.437
5C-14	40 GPH	5C-15	175 SCFH	8.45	1.20	1.35	8.25	1	1.37	6.437
Block #6C, 100mm (4") Scale										
6C-02	10 GPM	6C-01	40 SCFM	9.125	1.78	1.812	8.875	1.25	1.875	6.50
6C-04	15 GPM	6C-03	60 SCFM	9.125	1.78	1.812	8.875	1.25	1.875	6.50
6C-06	20 GPM	—	—	9.125	1.78	1.812	8.875	1.25	1.875	6.50
Block #7C, 250mm (10") Scale										
7C-02	2 GPM	7C-01	8 SCFM	14.50	1.78	1.812	14.25	.75	1.75	12.25
7C-04	3.5 GPM	7C-03	14.4 SCFM	14.50	1.78	1.812	14.25	.75	1.75	12.25
7C-06	5 GPM	7C-05	20 SCFM	14.50	1.78	1.812	14.25	.75	1.75	12.25
7C-08	10 GPM	7C-07	42 SCFM	14.50	1.78	1.812	14.25	.75	1.75	12.25

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Ordering Information

Use the following guide to determine the specific product number you require.

The following example describes a P520 acrylic flow meter with no valve, brass fitting and EPR O-ring.

Example: P5201101

Gases equivalent to Air @
21.1°C 1 atmos (Standard)
Liquid equivalent to water
density
1.0 g/cm³, viscosity 1.0cp

Viton® and Kalrez® is a registered trademark of DuPont Performance Elastomers L.L.C.

Model Number, Example and Options						Description	
P520 or P530	1	1	0	2	C02		
Block Number P520 No Valve P530 With Valve	1					Brass – Block Number 2C	
						Brass – Block Number 3C	
						Brass – Block Number 5C	
						Brass – Block Number 6C	
						Brass – Block Number 7C	
	2					PVC – Block Number 3C	
						PVC – Block Number 5C	
						PVC – Block Number 6C	
						PVC – Block Number 7C	
	3					316L SS – Block Number 2C	
						316L SS – Block Number 3C	
						316L SS – Block Number 5C	
						316L SS – Block Number 6C	
						316L SS – Block Number 7C	
	O-ring Material		1				Ethylene Propylene Rubber (EPR)
2						Nitrile Rubber (NBR)	
3						Fluorinated Propylene Monomer (FPM/FKM)	
Valve Material			0			Without valve	
			1				Brass – Block Number 2C
							Brass – Block Number 3C
							Brass – Block Number 5C
							Brass – Block Number 6C
							Brass – Block Number 7C
							Brass for PVC fitting – Block Number 3C
							Brass for PVC fitting – Block Number 5C
							Brass for PVC fitting – Block Number 6C
							Brass for PVC fitting – Block Number 7C
			2				316L SS – Block Number 2C
							316L SS – Block Number 3C
							316L SS – Block Number 5C
							316L SS – Block Number 6C
							316L SS – Block Number 7C
							316L SS for PVC fitting – Block Number 3C
							316L SS for PVC fitting – Block Number 5C
							316L SS for PVC fitting – Block Number 6C
							316L SS for PVC fitting – Block Number 7C
Order Number				2	C02	See Order Numbers, Flow Rates and Dimensions table in previous pages	