Air Flow Control
Flow Control Valves

Product Catalog

ROSS™
a global family

Flow Control Valves 19 & 11 Series
Product Overview

Flow Control Function

Flow control valves provide high air flow rates into a cylinder, and precisely controlled flow rates out of the cylinder. The adjustable flow can range from near zero to full flow.

Valve Schematic

Selecting flow control valves with sufficient flow capacity is important so that they do not become the limiting factor in the cylinder control system. Full flow capacity should match that of the control valve to keep cylinder motion smooth and predictable in both directions.

Low-Profile		Heavy-Duty		Right-Angle	
with Slot Adjustment	with Knob Adjustment	High-Capacity	Low-Profile High-Capacity	with Slot Adjustment	with Knob Adjustment
					

VALVE FEATURES

Poppet Design	Dirt-tolerant poppet design; available in alternate materials for extreme temperature applications
High Flow	High flow capacity in free-flow direction (port 1 to 2), same high flow available in reverse direction
Visible Indication	Low-Profile High-Capacity valves – Brass stem gives visible indication of flow rate in controlled direction (port 2 to 1)
Positive Locking	Low-Profile High-Capacity valves – Prevents change of adjustment knob due to vibration or tampering
Adjustable Flow	Knob hand or skrewdriver slot adjustmen to control flow

บริษัท ฟลูเทค จำกัด
FLU-TECH CO.,LTD
845/3-4 หมู่ 3 ถ.เทพารักษ์ ต.เทพารักษ์ อ.เมือง จ.สมุทรปราการ 10270
845/3-4 Thepharak RD., T.Thepharak, A.Muang, Samutprakarn 10270 THAILAND
Tel. 0 2384 6060, Fax 0 2384 5701, Email : sales@flutech.co.th, www.flutech.co.th

Specifications

STANDARD SPECIFICATIONS				
GENERAL	Function			Flow Control
	Construction Design			Poppet
	Actuation			Pneumatic
	Mounting	Type	Low-Profile High-Capacity Low-Profile High-Capacity	Inline
			Right-Angle	Screws directly into cylinder port
		Orientation	Low-Profile	Any, preferably vertical
			High-Capacity Low-Profile High-Capacity	Inline, Offset
			Right-Angle	Inlet port can be swiveled 360° for optimum placement
	Connection			Threaded; G, NPT
	Minimum Operation Frequency			Once per month, to ensure proper function
OPERATING CONDITIONS	Temperature	Ambient/Media	Low-Profile	41° to 140°F (5° to 60°C)
				-40° to 175°F (-40° to 80°C)
			High-Capacity Low-Profile High-Capacity	*For temperatures below 40°F (4°C) air must be free of water vapor to prevent formation of ice.*
				For temperatures below -40°F (-40°C), consult ROSS.
			Right-Angle	40° to 175°F (4° to 80°C)
	Flow Media			Filtered air
	Operating Pressure	Low-Profile	Supply Pressure	217 psi (14.9 bar)
			Maximum Pressure	150 psi (10.3 bar)
		High-Capacity Low-Profile High-Capacity Right-Angle		5 to 150 psig (0.3 to 10 bar)
CONSTRUCTION MATERIAL	Valve Body	Low-Profile High-Capacity Low-Profile High-Capacity		Cast Aluminum
		Right-Angle		Nickel-plated brass body, black anodized aluminum swivel
	Poppet			Acetal and Stainless Steel
	Spring	Right-Angle		Stainless Steel
	Seals			Buna-N

IMPORTANT NOTE: Please read carefully and thoroughly all of the CAUTIONS, WARNINGS on the inside back cover.

PRODUCT CREDENTIALS

EAC Conformity Declaration	Canadian Registration Number (CRN)
EAC	Available for appropriately tested valves

Ordering Information

FLOW CONTROL VALVES — 2-Way Valves

Valve Style		Size			Valve Model Number		Flow C_v	Weight lb (kg)
		Port 1	Port 2	Body	G Thread	NPT Thread	1-2	
Low-Profile	with Slot Adjustment	1/8	1/8	1/8	D1968F1004	1968F1004	0.5	0.1 (0.1)
		1/4	1/4	1/4	D1968F2004	1968F2004	0.5	0.1 (0.1)
	with Knob Adjustment	1/4	1/4	3/8	D1968F2007	1968F2007	2.3	0.4 (0.2)
		3/8	3/8	3/8	D1968F3007	1968F3007	2.3	0.4 (0.2)
		1/2	1/2	3/8	D1968F4007	1968F4007	2.3	0.4 (0.2)
High-Capacity		1/4	1/4	3/8	D1968B2007	1968B2007	2.3	0.5 (0.2)
		3/8	3/8	3/8	D1968B3007	1968B3007	2.6	0.5 (0.2)
		1/2	1/2	3/8	D1968B4017	1968B4017	2.6	0.5 (0.2)
		1/2	1/2	3/4	D1968B4007	1968B4007	7.5	0.8 (0.4)
		3/4	3/4	3/4	D1968B5007	1968B5007	8.3	0.8 (0.4)
		1	1	3/4	D1968B6017	1968B6017	8.3	0.8 (0.4)
		1	1	1-1/4	D1968B6007	1968B6007	17	2.2 (1.0)
		1-1/4	1-1/4	1-1/4	D1968B7007	1968B7007	22	2.2 (1.0)
		1-1/2	1-1/2	1-1/4	D1968B8017	1968B8017	22	2.2 (1.0)
		1-1/2	1-1/2	2	D1968B8007	1968B8007	50	4.3 (1.9)
		2	2	2	D1968B9007	1968B9007	50	4.3 (1.9)
		2-1/2	2-1/2	2	D1968B9017	1968B9017	50	4.3 (1.9)
Low-Profile High-Capacity		1/2	1/2	3/4	D1968E4007	1968E4007	7.5	0.8 (0.4)
		3/4	3/4	3/4	D1968E5007	1968E5007	8.3	0.8 (0.4)
		1	1	1-1/4	D1968E6007	1968E6007	17	2.1 (1.0)
		1-1/2	1-1/2	1-1/4	D1968E7007	1968E7007	22	2.1 (1.0)

Valve Style		Connection	Size			Valve Model Number		Flow C_v	Weight lb (kg)
			Port 1	Port 2	Body	G Thread	NPT Thread	1-2	
Right-Angle	with Slot Adjustment	Threaded Inlet	1/8	1/8	1/4	D1968A1008	1968A1008	0.3	0.06 (0.03)
			1/4	1/4	1/4	D1968A2008	1968A2008	0.6	0.12 (0.05)
			3/8	3/8	3/8	D1968A3008	1968A3008	1.9	0.20 (0.09)
			1/2	1/2	3/8	D1968A4008	1968A4008	2.8	0.34 (0.15)
		Tube Fitting	1/8	1/8	1/4	–	1968A1108#	0.3	0.06 (0.03)
			1/4	1/4	1/4	–	1968A2108	0.6	0.12 (0.05)
			3/8	3/8	3/8	D1968A3108	1968A3108	1.9	0.20 (0.09)
			1/2	1/2	3/8	–	–	2.8	0.34 (0.15)
	with Knob Adjustment	Threaded Inlet	1/8	1/8	1/4	–	1968A1008	0.3	0.08 (0.04)
			1/4	1/4	1/4	D1968A2018	1968A2008	0.6	0.14 (0.06)
			3/8	3/8	3/8	D1968A3018	1968A3008	1.9	0.20 (0.09)
			1/2	1/2	3/8	D1968A4018	1968A4008	2.8	0.34 (0.15)
		Tube Fitting	1/8	1/8	1/4	D1968A1118#	1968A1108#	0.3	0.08 (0.04)
			1/4	1/4	1/4	D1968A2118	1968A2108	0.6	0.14 (0.06)
			3/8	3/8	3/8	D1968A3118	1968A3108	1.9	0.20 (0.09)
			1/2	1/2	3/8	–	–	2.8	0.34 (0.15)

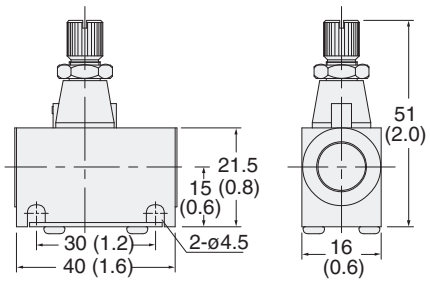
These models have 1/8 threaded outlet, but with 1/4 inlet tube fittings.

DIMENSIONS

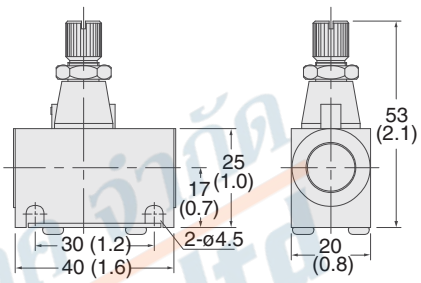
Inches (mm)

Body Size 1/8

with Slot Adjustment



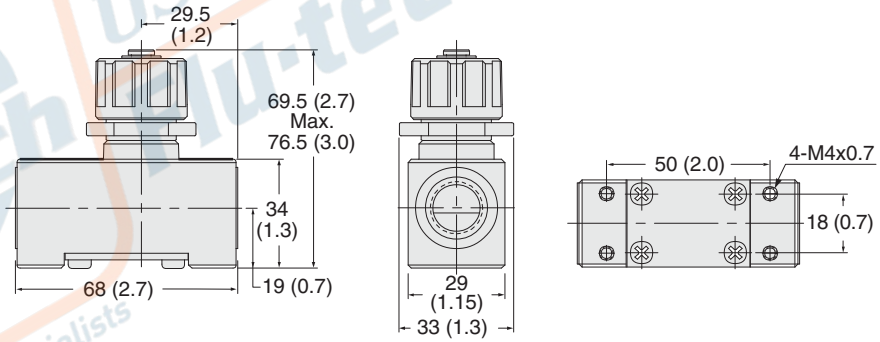
Body Size 1/4



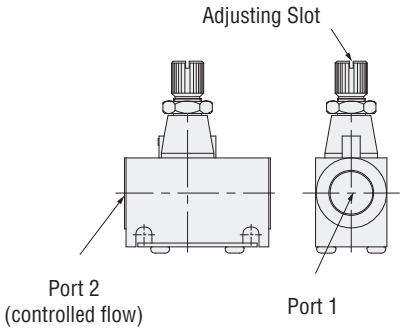
Low-Profile

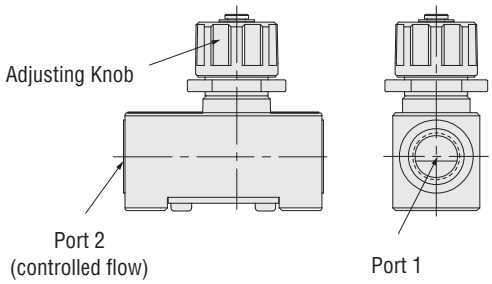
Body Size 3/8

with Knob Adjustment



For additional information, and to assist you with piping and connectivity designs, our products are available in downloadable 2D drawings and 3D CAD models in a wide range of options including native formats, visit www.rosscontrols.com.





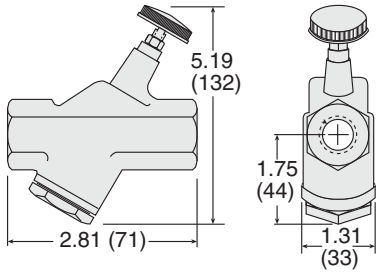
Valve Technical Data

DIMENSIONS

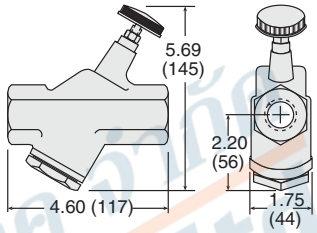
Inches (mm)

High-Capacity

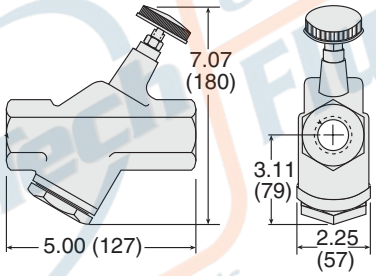
Body Size 3/8



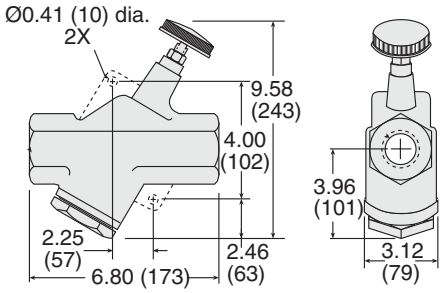
Body Size 3/4



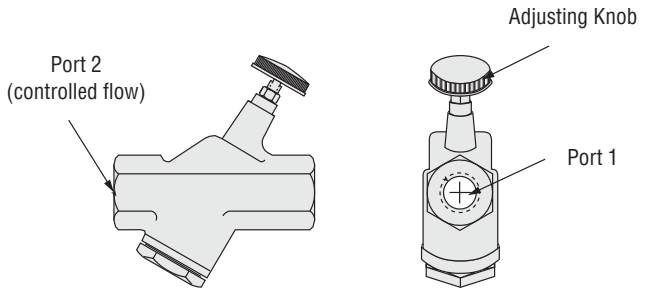
Body Size 1-1/4



Body Size 2



For additional information, and to assist you with piping and connectivity designs, our products are available in downloadable 2D drawings and 3D CAD models in a wide range of options including native formats, visit www.rosscontrols.com.

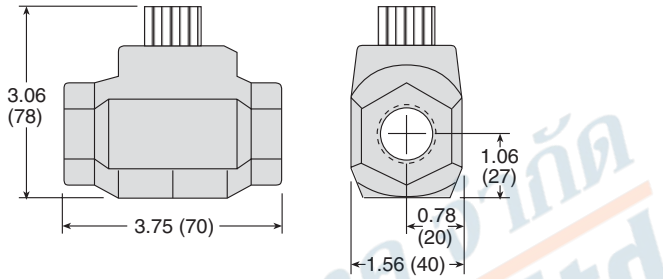


DIMENSIONS

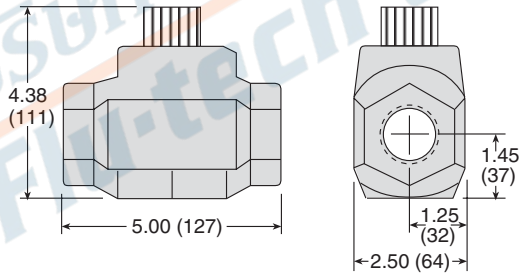
Inches (mm)

Low-Profile High-Capacity

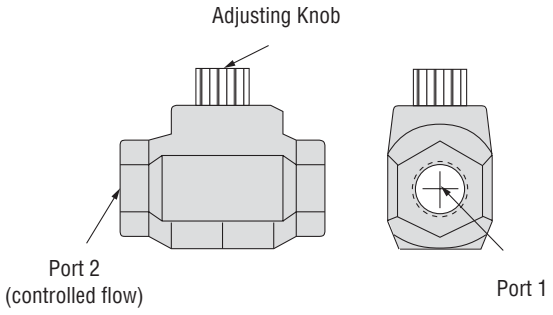
Body Size 3/4



Body Size 1-1/4



For additional information, and to assist you with piping and connectivity designs, our products are available in downloadable 2D drawings and 3D CAD models in a wide range of options including native formats, visit www.rosscontrols.com.



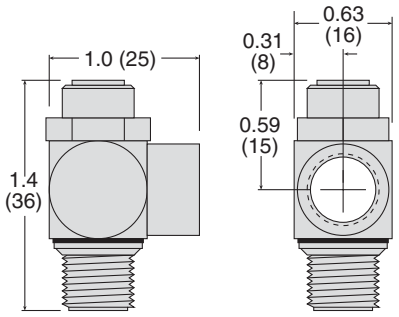
Valve Technical Data

DIMENSIONS

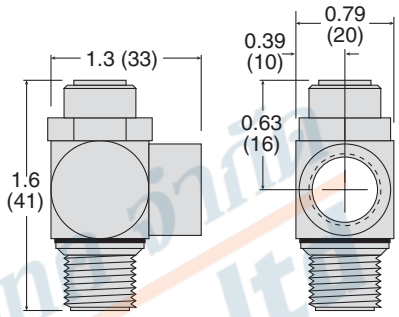
Inches (mm)

Right Angle

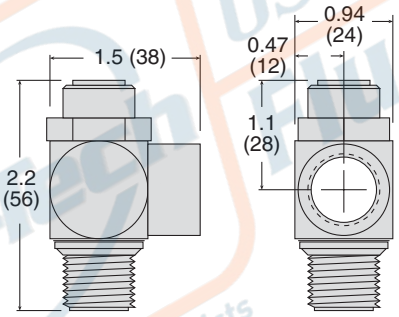
Body Size 1/8



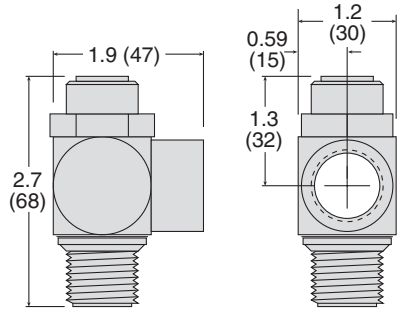
Body Size 1/4



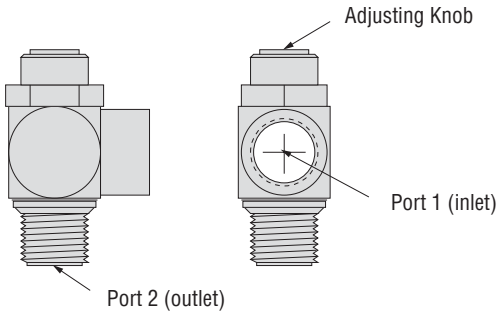
Body Size 3/8



Body Size 1/2



For additional information, and to assist you with piping and connectivity designs, our products are available in downloadable 2D drawings and 3D CAD models in a wide range of options including native formats, visit www.rosscontrols.com.



บริษัท ฟลูเทค จำกัด
FLU-TECH CO.,LTD
845/3-4 หมู่ 3 ถ.เทพารักษ์ ต.เทพารักษ์ อ.เมือง จ.สมุทรปราการ 10270
845/3-4 Thepharak RD., T.Thepharak, A.Muang, Samutprakarn 10270 THAILAND
Tel. 0 2384 6060, Fax 0 2384 5701, Email : sales@flutech.co.th, www.flutech.co.th