

Flow Controls

Materials of Construction (FQPS Models)

Adjusting Knob and Thread:	Brass (RoHS approved)
Body:	Thermoplastic Polymer
Tubing:	Nylon and polyurethane tubing
Maximum Operating Pressure:	150 PSI air only
Operating Temperature Range:	30° F to 140° F (0° C to 60° C)

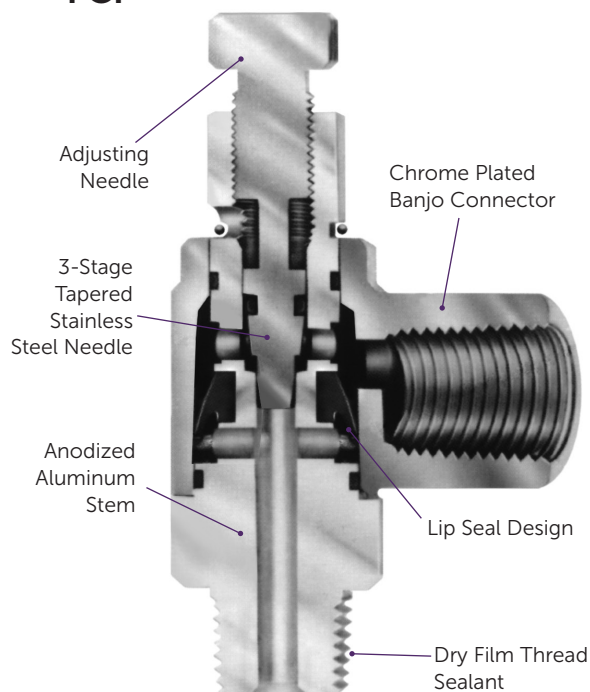
Materials of Construction (FCP Models)

Banjo Connector:	Chrome plated, zinc die cast
Banjo Retaining Ring:	Zinc plated steel
Stem:	High strength anodized aluminum alloy
Adjusting Needle:	Stainless steel
"O" Rings and Lip Seal:	Buna N
Maximum Operating Pressure:	150 PSI air only
Operating Temperature Range:	-20° to 200° F (-25° C to 95° C)

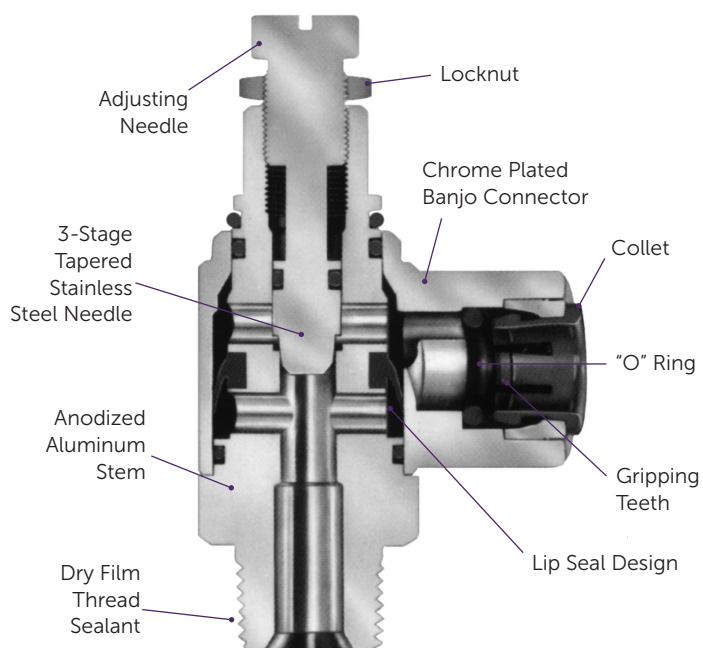
Materials of Construction (FQP Models)

Banjo Connector:	Chrome plated, zinc die cast
Banjo Retaining Ring:	Zinc plated steel
Stem:	High strength anodized aluminum alloy
Adjusting Needle:	Stainless steel
O-Rings and Lip Seal:	Buna N
Collet:	Acetal copolymer
Gripping Teeth:	Stainless steel
Collet Retainer (if applicable):	Brass
Locknut:	416 Stainless steel
Tube Types:	All plastic tubing, including nylon and polyethylene
Maximum Operating Pressure:	150 PSI air only
Operating Temperature Range:	14° to 167° F (-25°C to 75°C)

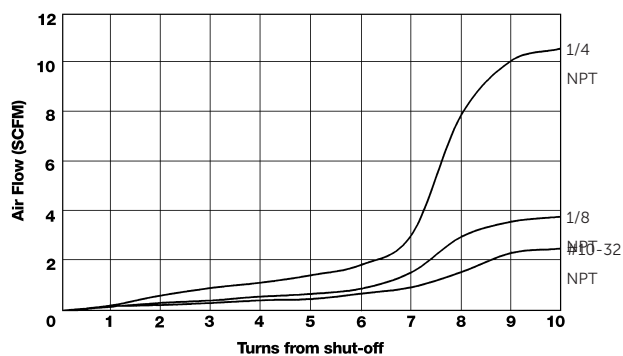
FCP



FQP

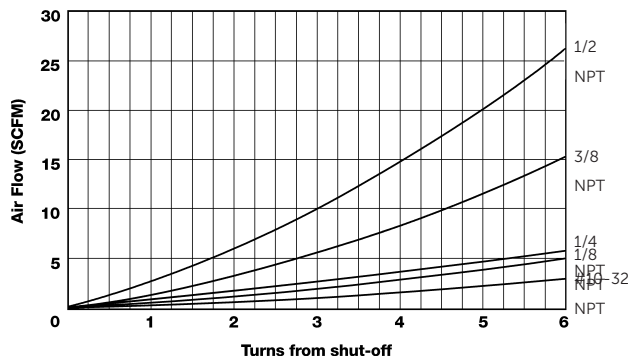


Flow Data @ 72psi



FQPS Series

Flow Data @ 60psi

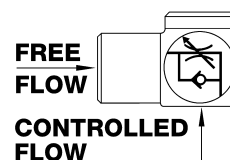


FQP & FCP Series

C_v Factors for IMI Bimba Flow Controls

The following estimated C_v factors apply to IMI Bimba Flow Controls in both the FCP and FQP Series.

Models	Free Flow	Controlled Flow
FCP1, FCP1K, FCP1L, FQP1, FQP1K	0.12	0.09
FCP2, FCP2K, FCP2L, FQP21L, FQP2, FQP2K, FQP21K	0.24	0.21
FCP4, FCP4K, FCP4L, FQP4, FQP4K, FQP44, FQP44K	0.50	0.44
FCP6, FCP6K, FCP6L, FQP6, FQP6K	0.91	0.73
FCP8, FCP8K, FCP8L, FQP8, FQP8K	1.33	1.19



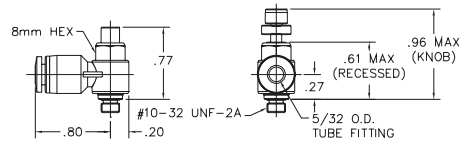
IMI Bimba Miniature Quik-Flo® Flow Controls – FQPS Series

For 10-32 port, 5/32" OD tubing:

FQPS1

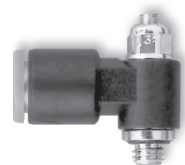


FQPS1K

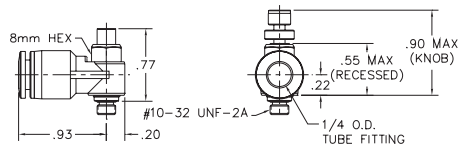


For 10-32 port, 1/4" OD tubing:

FQPS12



FQPS12K

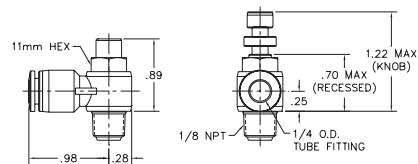


For 1/8 port, 1/4" OD tubing:

FQPS2



FQPS2K

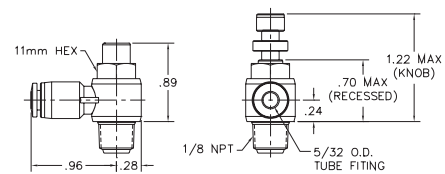


For 1/8 port, 5/32" OD tubing:

FQPS21



FQPS21K

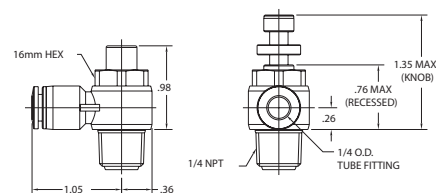


For 1/4 port, 1/4" OD tubing:

FQPS44



FQPS44K

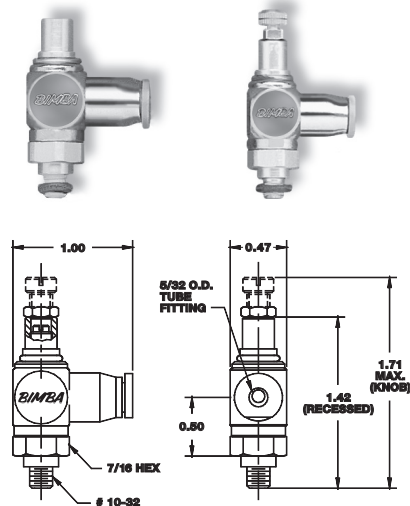


IMI Bimba Quik-Flo® Flow Controls – FQP Series

For 10-32 port, 5/32" OD tubing:

FQP1

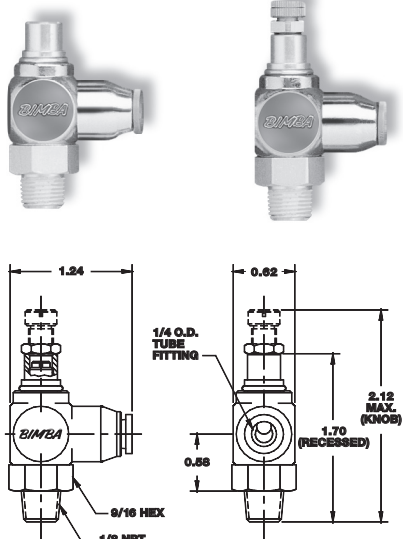
FQwP1K



For 1/8 port, 1/4" OD tubing:

FQP2

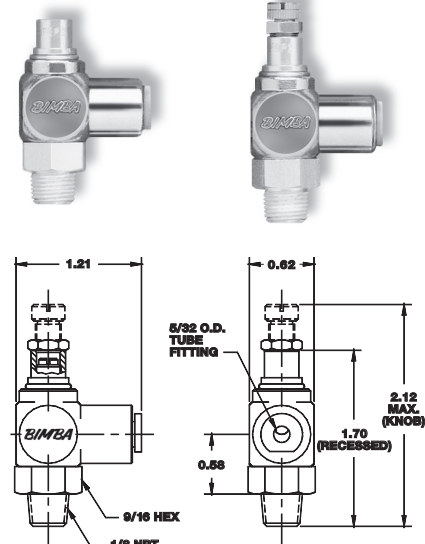
FQP2K



For 1/8 port, 5/32" OD tubing:

FQP21

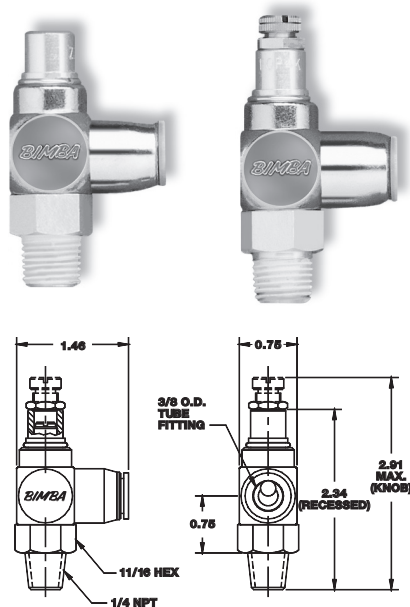
FQP21K



For 1/4 port, 3/8" OD tubing:

FQP4

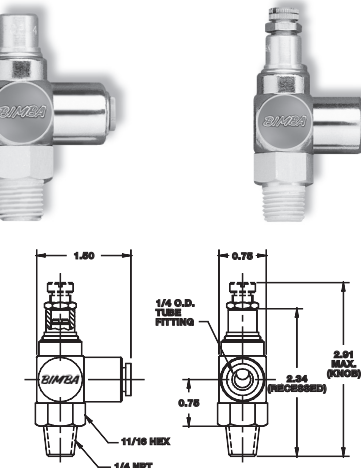
FQP4K



For 1/4 port, 1/4" OD tubing:

FQP44

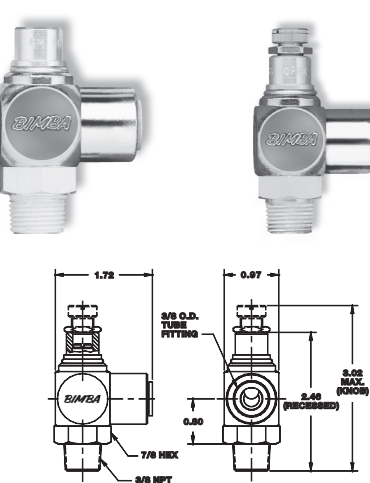
FQP44K



For 3/8 port, 3/8" OD tubing:

FQP6

FQP6K

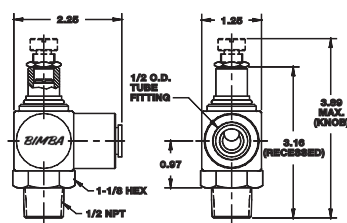


IMI Bimba Quik-Flo® Flow Controls – FQP Series

For 1/2 port, 1/2" OD tubing:

FQP8

FQP8K



IMI Bimba Needle Valves

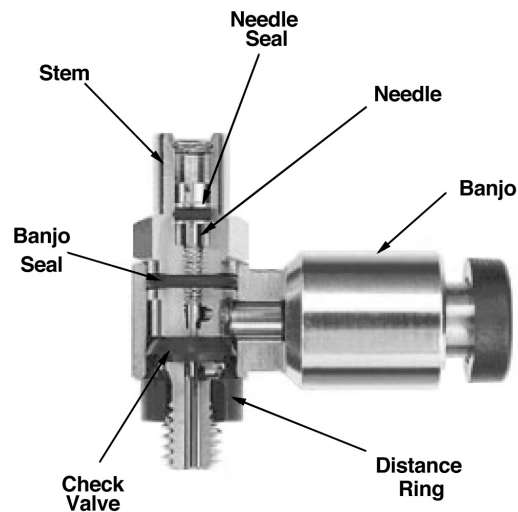
IMI Bimba offers a range of Quik-Flo® Needle Valves, allowing for controlled flow of both the air intake and exhaust through the same valve. A needle valve can control a double acting cylinder's extension and retraction by controlling the volume of air entering the cylinder and the volume of air leaving the cylinder.

For additional dimensional information, reference Quik-Flo® Flow Controls on pages 559-561. For example, reference FQP1 for QNV1 dimensions.

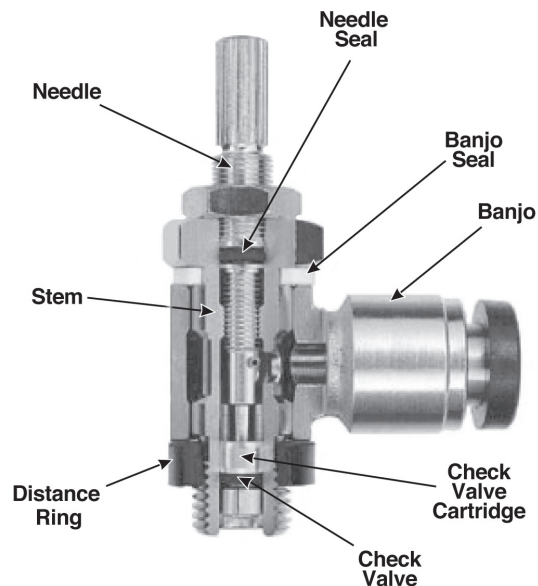
Model	Price	Tube Size	Port Size	C _v
QNV1	\$13.52	5/32"	#10-32	.09
QNV1K	15.65	5/32"	#10-32	.09
QNV2	16.12	1/4"	1/8" NPT	.21
QNV2K	18.56	1/4"	1/8" NPT	.21
QNV44	20.59	1/4"	1/4" NPT	.44
QNV44K	23.50	1/4"	1/4" NPT	.44
QNV6	25.53	3/8"	3/8" NPT	.73
QNV6K	29.02	3/8"	3/8" NPT	.73

Metric Flow Control Specifications (FCPM Models)

Fluid:	Air
Maximum Operating Pressure:	10 bar (145 PSI)
Minimum Operating Pressure:	0.1 bar (1.5 PSI)
Temperature Range:	-10° C to +80°C (-14° F to +176° F)



Material Specifications for M5	
Banjo	Nickel Plated Brass
Stem	Nickel Plated Brass
Needle	Nickel Plated Brass
Check Valve	NBR (Buna-N)
Needle Seal	NBR (Buna-N)
Banjo Seal	NBR (Buna-N)
Distance Ring	Reinforced Nylon



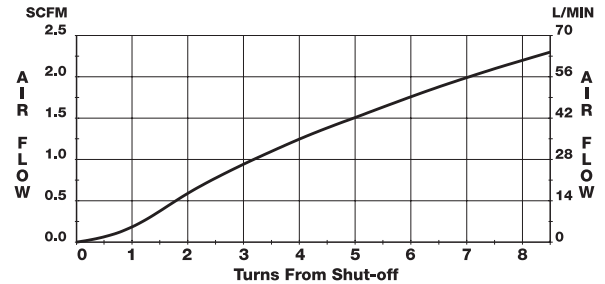
Material Specifications for G1/8" and G1/4"	
Banjo	Nickel Plated Brass
Stem	Nickel Plated Brass
Needle	Nickel Plated Brass
Check Valve	NBR (Buna-N)
Check Valve Cartridge	Brass
Needle Seal	NBR (Buna-N)
Banjo Seal	Reinforced Nylon
Distance Ring	Reinforced Nylon

Metric Flow Control Specifications (FCPM Models)

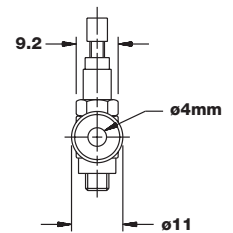
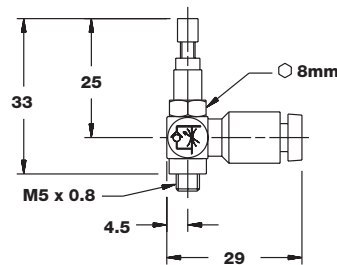
M5 Port Mounted Flow Control Valves



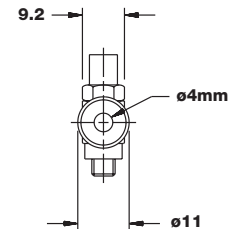
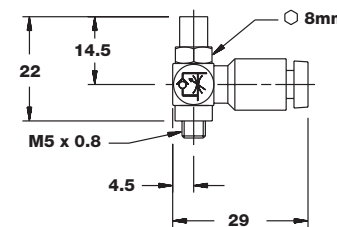
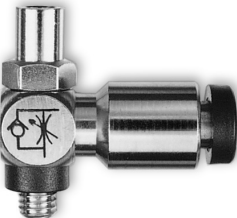
M5 Controlled Flow Chart (at 5 Bar)
Maximum Free Flow Capacity 91-122 l/min



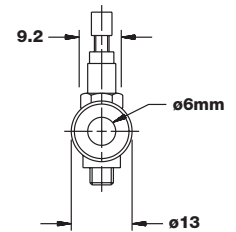
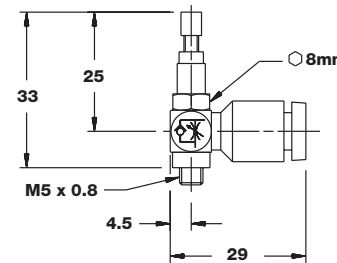
For M5 port, FCPM-1-Q4-L
4mm OD tubing
2mm ID tubing



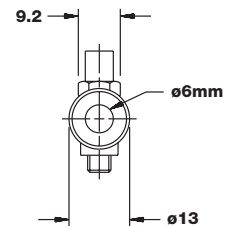
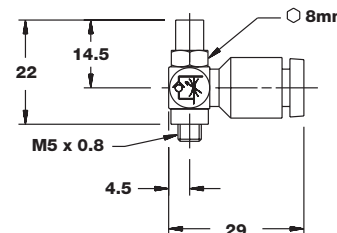
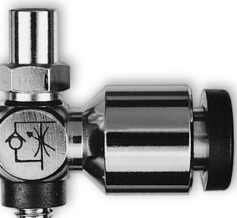
For M5 port, FCPM-1-Q4-R
4mm OD tubing
2mm ID tubing



For M5 port, FCPM-1-Q6-L
6mm OD tubing
4mm ID tubing



For M5 port, FCPM-1-Q6-R
6mm OD tubing
4mm ID tubing

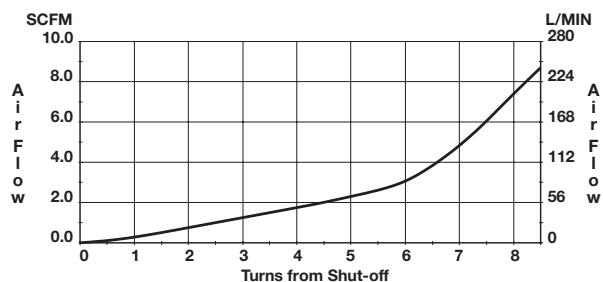


Metric Flow Control Specifications (FCPM Models)

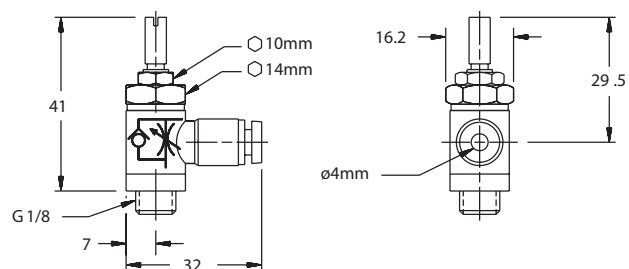
G1/8 Port Mounted Flow Control Valves



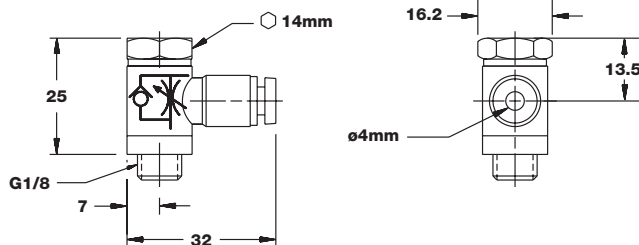
G1/8 Controlled Flow Chart (at 5 Bar)
Maximum Free Flow Capacity 110-334 l/min



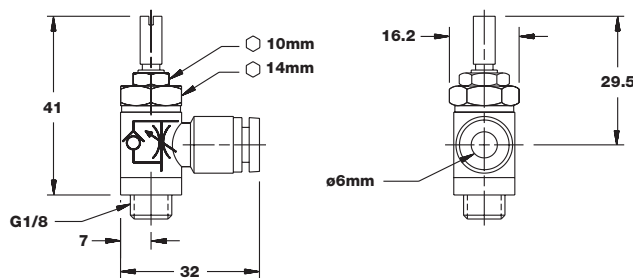
For G-1/8 port, FCPM-2-Q4-L
4mm OD tubing
2mm ID tubing



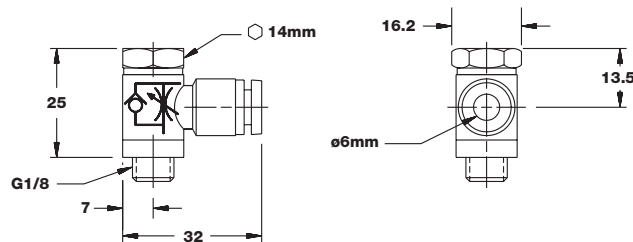
For G-1/8 port, FCPM-2-Q4-R
4mm OD tubing
2mm ID tubing



For G-1/8 port, FCPM-2-Q6-L
6mm OD tubing
4mm ID tubing



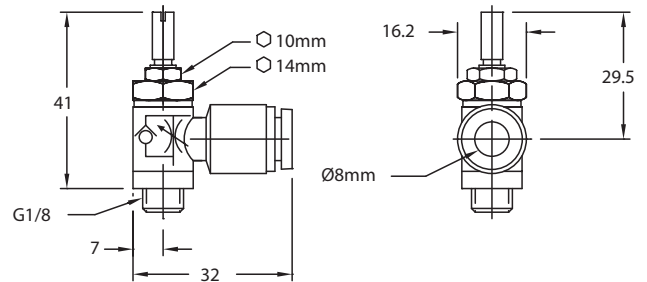
For G-1/8 port, FCPM-2-Q6-R
6mm OD tubing
4mm ID tubing



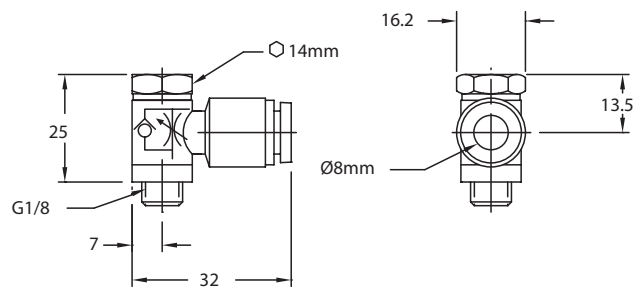
Metric Flow Control Specifications (FCPM Models)

G1/8 Port Mounted Flow Control Valves

For G-1/8 port, FCPM-2-Q8-L
8mm OD tubing
6mm ID tubing

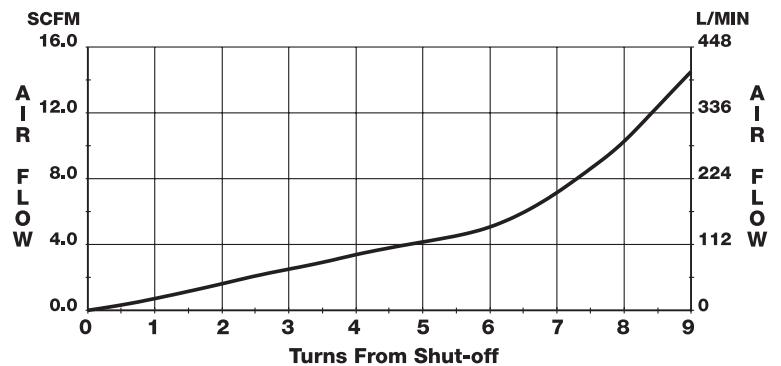


For G-1/8 port, FCPM-2-Q8-R
8mm OD tubing
6mm ID tubing

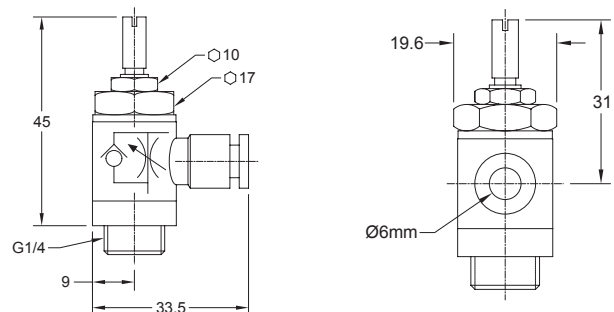


G1/4 Port Mounted Flow Control Valves

G1/4 Controlled Flow Chart (at 5 Bar)
Maximum Free Flow Capacity 394-634 l/min



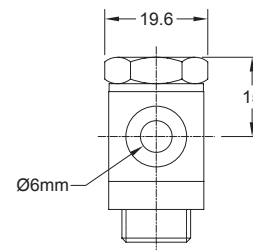
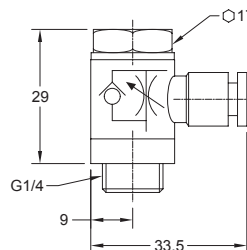
For G1/4 port, FCPM-4-Q6-L
6mm OD tubing
4mm ID tubing



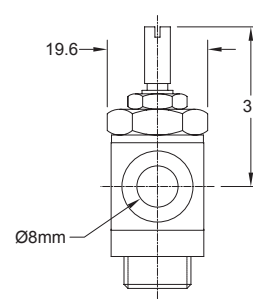
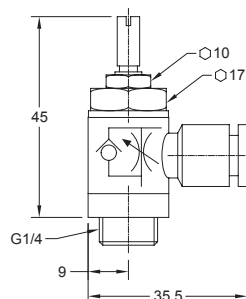
Metric Flow Control Specifications (FCPM Models)

G1/4 Port Mounted Flow Control Valves

For G1/4 port, FCPM-4-Q6-R
6mm OD tubing
4mm ID tubing



For G1/4 port, FCPM-4-Q8-L
8mm OD tubing
6mm ID tubing



For G1/4 port, FCPM-4-Q8-R
8mm OD tubing
6mm ID tubing

