BIMBA®

EFP INDUSTRIAL AUTOMATION
ERNST FLUID POWER

We make things MOVE®

AIROS™
Air Preparation Equipment

Bimba is part of IMI Precision Engineering

We Make Things Move®

A forward-thinking innovator, Bimba provides industry-leading pneumatic, hydraulic and electric motion solutions that are easy-to-use, reliable and ready for your engineering challenges.

Doing whatever it takes to help you get the job done is what the Bimba companies do best. With an extensive line of industry-leading air cylinders, rotary actuators, linear thrusters, rodless cylinders, NFPA, hydraulics, flow controls, position-sensing cylinders, valves, switches and air preparation equipment, the people of Bimba are ready to tackle your toughest applications.

Bimba is part of IMI Precision Engineering, a world leader in motion and fluid control technologies. Wherever precision, speed and engineering reliability are essential, we deliver exceptional solutions which improve the productivity and efficiency of customers' equipment.

Our range of high-performance products, such as actuators, valves, valve islands, pressure monitoring controls and air preparation products together with trusted products brands including IMI Norgren, IMI Buschjost, IMI FAS, IMI Herion and IMI Maxseal underpin our position as a leading global supplier.

Part of IMI plc, we have a sales and service network in 75 countries, as well as manufacturing capability in the USA, Germany, China, UK, Switzerland.

AIROS™: All-Encompassing Air Preparation Options

AIROS is Bimba's complete family of air preparation equipment. The AIROS line encompasses the full breadth of filter, regulator, and lubricator (FRL) technologies on the market, as well as the supporting accessories. Paired with Bimba's full line of pneumatic options gives you unprecedented access to the complete pneumatic circuit, all in one place.

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MGA Series Air Preparation Equipment

AIROS™ MGA Series air preparation equipment provides crucial support to all kinds of basic pneumatic circuits. MGA Series filters, regulators, and lubricators provide an economical way to improve operation in pneumatic valves and actuators in a modular package. The MGA Series brings accessible, affordable FRL options to the AIROS air preparation family.

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MGAF Series Filters

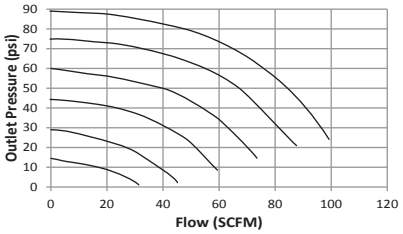
Engineering Specifications

Model	MGAF200	MGAF300	MGAF400	MGAF600
Fluid	Air			
Pressure Range	20 - 145 psi (0.15 - 1.0 MPa)			
Proof Pressure	215 psi (1.5 MPa)			
Temperature Range	23 °F to 158 °F (-5 °C to 70 °C)			
Bowl Capacity	0.85 fl oz (25cc)	2.03 fl oz (60cc)	3.38 fl oz (100cc)	6.93 fl oz (205cc)
Bowl Material	Polycarbonate Bowl with Metal Bowl Guard or Metal Bowl with Polycarbonate Level Indicator or Nylon Bowl with Metal Bowl Guard			Metal Bowl with Polycarbonate Level Indicator
Material	Aluminum Alloy Body			
Mounting	Individual Stamped Steel Bracket or Modular Connecting Kit			
Includes	Stamped Steel Bracket			

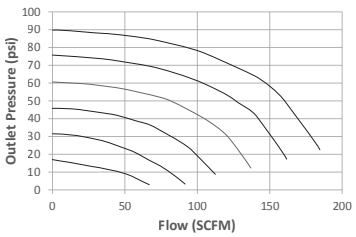
See page 35 for service parts.

Performance Data MGAF

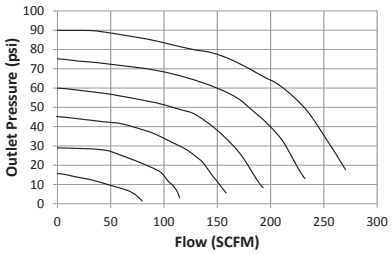
Flow Characteristics MGAF200



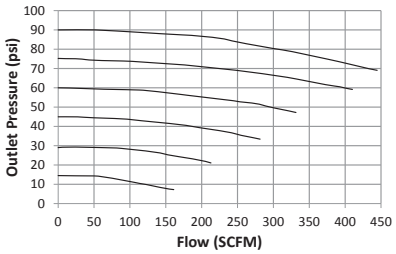
Flow Characteristics MGAF300



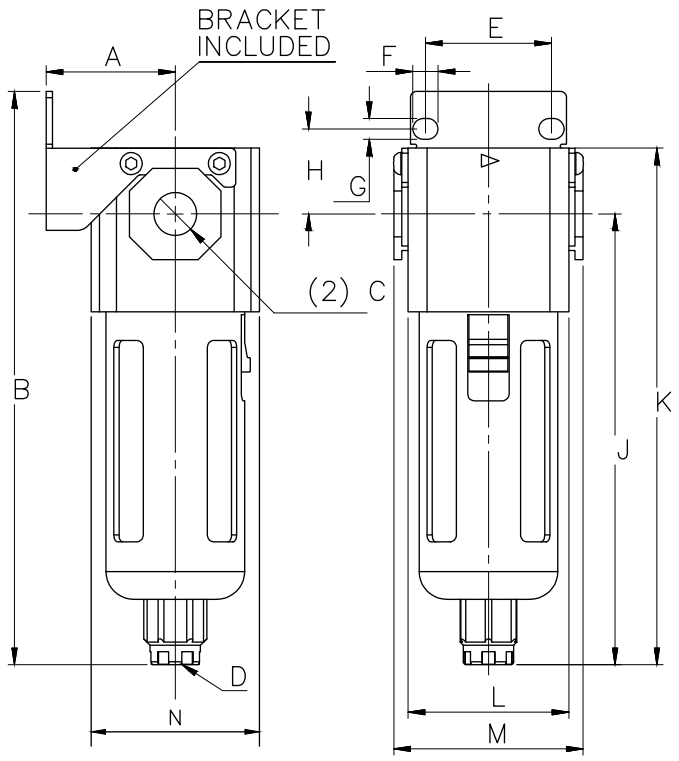
Flow Characteristics MGAF400



Flow Characteristics MGAF600



MGAF Series Dimensions (mm)



Model	A	B	C	D	E	F
MGAF200-06	33	150	1/8 NPT	M5X0.8	27	8.4
MGAF200-08	33	150	1/4 NPT	M5X0.8	27	8.4
MGAF300-08	41	197	1/4 NPT	G 1/4	40	8
MGAF300-10	41	197	3/8 NPT	G 1/4	40	8
MGAF400-15	50	220	1/2 NPT	G 1/4	55	11
MGAF600-20	70	266	3/4 NPT	G 1/4	66	13
MGAF600-25	70	266	1 NPT	G 1/4	66	13

Model	G	H	J	K	L	M	N
MGAF200-06	5.4	23	120	137	43	52.5	43
MGAF200-08	5.4	23	120	137	43	52.5	43
MGAF300-08	6.5	27	158	179	53.5	62.5	53
MGAF300-10	6.5	27	158	179	53.5	62.5	53
MGAF400-15	8.5	33.5	177.5	202.5	67.8	80	68
MGAF600-20	11	50	205	242	85.8	100	86
MGAF600-25	11	50	205	242	85.8	100	86

How to Order

MGAF filter models can be configured using basic alphanumeric clusters. To create an MGAF series part number, choose model, port size, drain, filtering, and bowl type. Sample MGAF series part numbers and available options are featured below.

MGAF 300 - 08 - SM - W - D

Model	
200	200 Series
300	300 Series
400	400 Series
600	600 Series

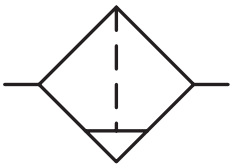
Port Size	
06	1/8 NPT (200 Series)
08	1/4 NPT (200, 300 Series)
10	3/8 NPT (300 Series)
15	1/2 NPT (400 Series)
20	3/4 NPT (600 Series)
25	1 NPT (600 Series)

Drain	
Blank	Auto Drain
SM	Semi-Auto/ Manual Drain

Filtering	
Blank	40µm
W	5µm

Bowl Type	
Blank	Polycarbonate Bowl with Metal Bowl Guard
D	Metal Bowl[1]
N	Nylon Bowl with Metal Bowl Guard

[1] 600 series is only available with -D metal bowl



MGAFB Series Coalescing Filters

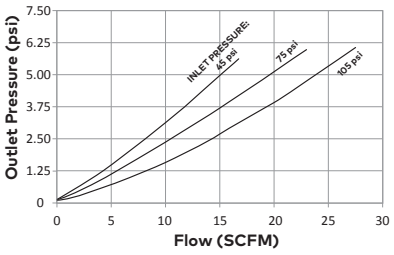
Engineering Specifications

Model	MGAFB200	MGAFB300	MGAFB400
Fluid	Air to be filtered to 5µ or better		
Pressure Range	20 - 145 psi (0.15 - 1.0 MPa)		
Proof Pressure	215 psi (1.5 MPa)		
Temperature Range	23 to 158 °F (-5 to 70 °C)		
Filtration Rating	0.3µ (99.9% efficiency) 0.01µ (99.9% efficiency)		
Bowl Capacity	0.64 fl oz (19cc)	1.84 fl oz (54.5cc)	3.01 fl oz (89cc)
Bowl Material	Polycarbonate Bowl with Metal Bowl Guard or Metal Bowl with Polycarbonate Level Indicator or Nylon Bowl with Metal Bowl Guard		
Material	Aluminum Alloy Body		
Mounting	Individual Stamped Steel Bracket or Modular Connecting Kit		
Includes	Stamped Steel Bracket		

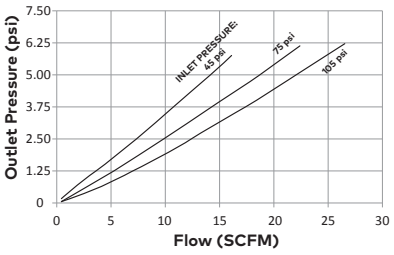
See page 35 for service parts.

Performance Data MGAFB

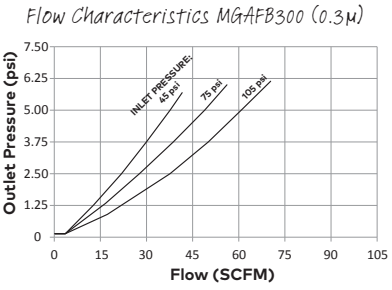
Flow Characteristics MGAFB200 (0.3µ)



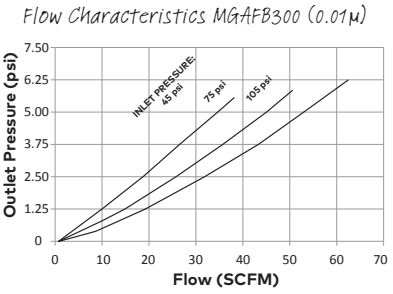
Flow Characteristics MGAFB200 (0.01µ)



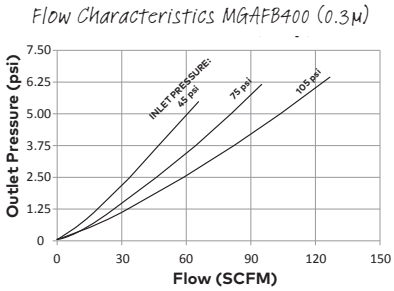
Flow Characteristics MGAFB300 (0.3µ)



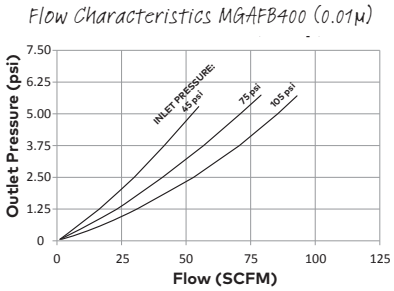
Flow Characteristics MGAFB300 (0.01µ)



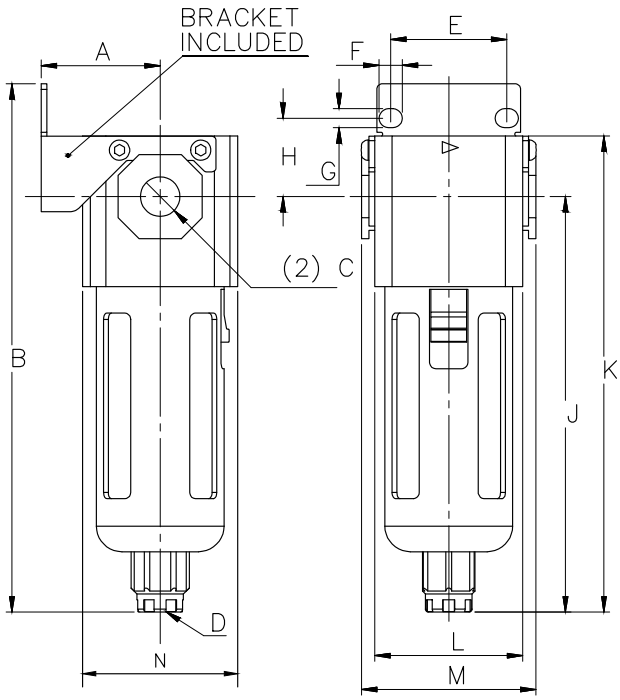
Flow Characteristics MGAFB400 (0.3µ)



Flow Characteristics MGAFB400 (0.01µ)



MGAFB Series Dimensions (mm)



Model	A	B	C	D	E	F
MGAFB200-06	33	150	1/8 NPT	M5X0.8	27	8.4
MGAFB200-08	33	150	1/4 NPT	M5X0.8	27	8.4
MGAFB300-08	41	197	1/4 NPT	G 1/4	40	8
MGAFB300-10	41	197	3/8 NPT	G 1/4	40	8
MGAFB400-15	50	220	1/2 NPT	G 1/4	55	11

Model	G	H	J	K	L	M	N
MGAFB200-06	5.4	23	120	137	38	52.5	43
MGAFB200-08	5.4	23	120	137	38	52.5	43
MGAFB300-08	6.5	27	158	179	50.8	62.5	53.6
MGAFB300-10	6.5	27	158	179	50.8	62.5	53.6
MGAFB400-15	8.5	33.5	177.5	202.5	67.5	80	67.8

How to Order

MGAFB coalescing filter models can be configured using basic alphanumeric clusters. To create an MGAFB series part number, choose model, port size, drain, filtering, and bowl type. Sample MGAFB series part numbers and available options are featured below.

MGAFB 300 - 08 - SM - 1 - D

Model	
200	200 Series
300	300 Series
400	400 Series

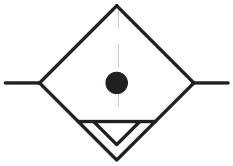
Port Size	
06	1/8 NPT (200 Series)
08	1/4 NPT (200, 300 Series)
10	3/8 NPT (300 Series)
15	1/2 NPT (400 Series)

Drain	
Blank	Auto Drain[1]
SM	Semi-Auto/ Manual Drain

[1] Not available on 200 series

Filtering	
1	0.01µ Coalescing
3	0.3µ Coalescing

Bowl Type	
Blank	Polycarbonate Bowl with Metal Bowl Guard
D	Metal Bowl
N	Nylon Bowl with Metal Bowl Guard



MGAL Series Lubricators

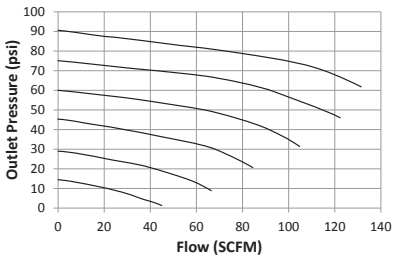
Engineering Specifications

Model	MGAL200	MGAL300	MGAL400	MGAL600
Fluid	Air (Clean/Dry)			
Type	Fine Oil Mist			
Pressure Range	7 to 145 psi (0.05 to 1.0 MPa)			
Proof Pressure	215 psi (1.5 MPa)			
Temperature Range	23 °F to 158 °F (-5 °C to 70 °C)			
Bowl Capacity	1.22 fl oz (36cc)	3.31 (98cc)	6.26 fl oz (185cc)	13.86 fl oz (410cc)
Bowl Material	Polycarbonate Bowl with Metal Bowl Guard or Metal Bowl with Polycarbonate Level Indicator or Nylon Bowl with Metal Bowl Guard			Metal Bowl with Polycarbonate Level Indicator
Material	Aluminum Alloy Body			
Recommended Lubricant	ISO VG32 or equivalent			
Mounting	Individual Stamped Steel Bracket or Modular Connecting Kit			
Includes	Stamped Steel Bracket			

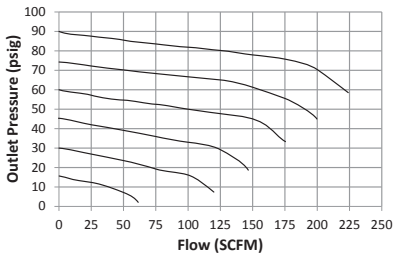
See page 35 for service parts.

Performance Data MGAL

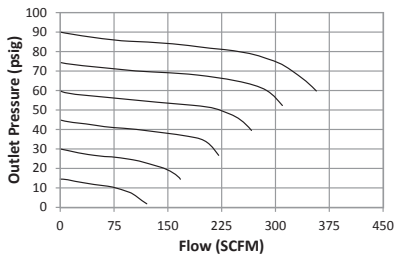
Flow Characteristics MGAL200



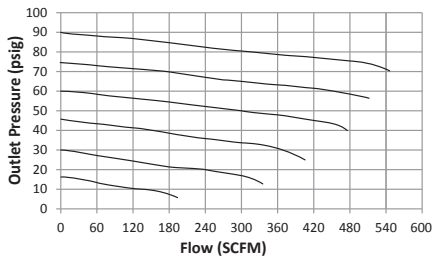
Flow Characteristics MGAL300



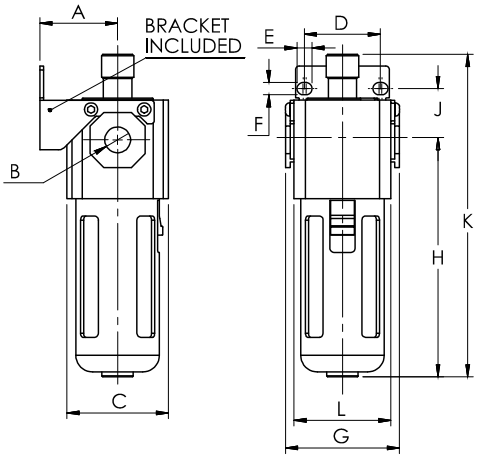
Flow Characteristics MGAL400



Flow Characteristics MGAL600



MGAL Series Dimensions (mm)



Model	A	B	C	D	E
MGAL200-06	33	1/8 NPT	43	27	8.5
MGAL200-08	33	1/4 NPT	43	27	8.5
MGAL300-08	41	1/4 NPT	53	40	8
MGAL300-10	41	3/8 NPT	53	40	8
MGAL400-15	50	1/2 NPT	68	55	11
MGAL600-20	70	3/4 NPT	86	66	13
MGAL600-25	70	1 NPT	86	66	13

Model	F	G	H	J	K	L
MGAL200-06	5.4	52.5	107	23	146.5	43
MGAL200-08	5.4	52.5	107	23	146.5	43
MGAL300-08	6.5	62.5	136	27	181	53.5
MGAL300-10	6.5	62.5	136	27	181	53.5
MGAL400-15	8.5	80	155	33.5	204.5	67.9
MGAL600-20	11	100	182.5	50	246	85.8
MGAL600-25	11	100	182.5	50	246	85.8

MGAL lubricator models can be configured using basic alphanumeric clusters. To create an MGAL series part number, choose model, port size, and bowl type. Sample MGAL series part numbers and available options are featured below.

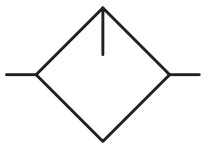
MGAL 300 - 08 - D

Model	
200	200 Series
300	300 Series
400	400 Series
600	600 Series

Port Size	
06	1/8 NPT (200 Series)
08	1/4 NPT (200, 300 Series)
10	3/8 NPT (300 Series)
15	1/2 NPT (400 Series)
20	3/4 NPT (600 Series)
25	1 NPT (600 Series)

Bowl Type	
Blank	Polycarbonate Bowl with Metal Bowl Guard
D	Metal Bowl[1]
N	Nylon Bowl with Metal Bowl Guard

[1] 600 series only available with -D metal bowl



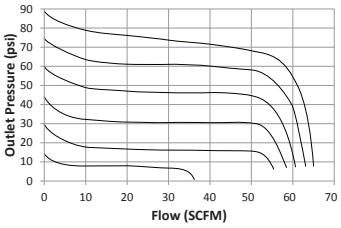
MGAR Series Regulators

Engineering Specifications

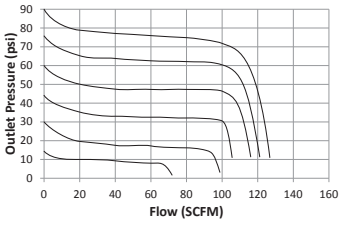
Model	MGAR
Fluid	Air (Clean/Dry)
Type	Relieving Regulator with Push to Lock Adjustment Knob
Pressure Range	Blank - 7 to 130 psi (0.05 to 0.9 MPa) L - 7 to 60 psi (0.05 to 0.4 MPa)
Proof Pressure	215 psi (1.5 MPa)
Temperature Range	-4 °F to 158 °F (-20 °C to 70 °C)
Material	Aluminum Alloy Body
Pressure Gauge	Large round flush mounted gauge
Mounting	Individual Stamped Steel Bracket or Modular Connecting Kit or Panel Mount
Includes	Stamped Steel Bracket / Panel Nut

Performance Data MGAR

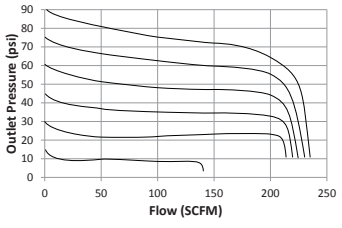
Flow Characteristics MGAR200



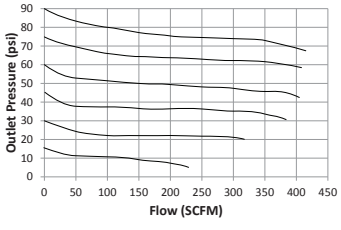
Flow Characteristics MGAR300



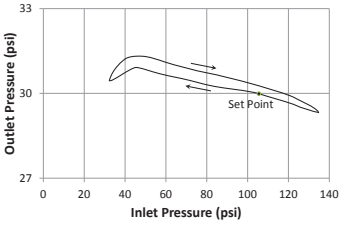
Flow Characteristics MGAR400



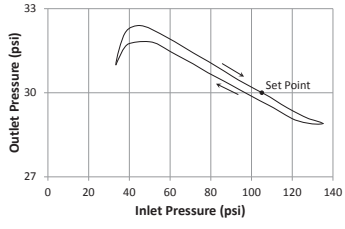
Flow Characteristics MGAR600



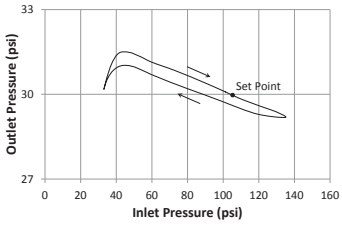
Regulator Characteristics MGAR200



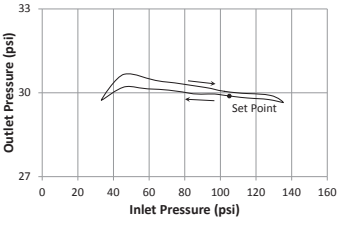
Regulator Characteristics MGAR300



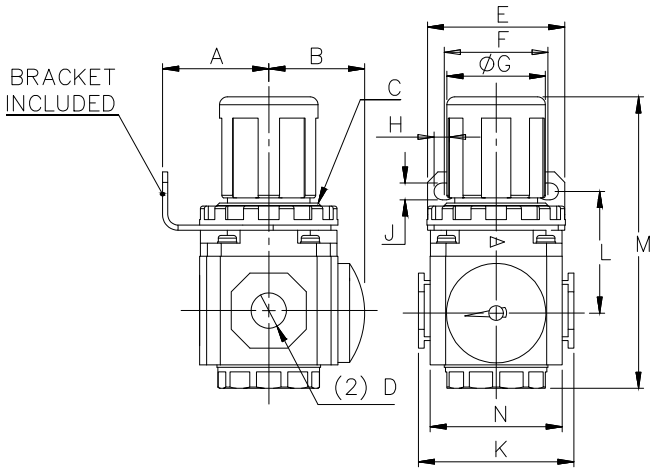
Regulator Characteristics MGAR400



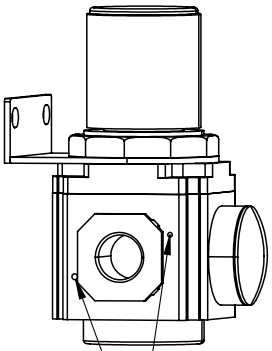
Regulator Characteristics MGAR600



MGAR Series Dimensions (mm)



Model	A	B	C	D	E	F	G	H	J	K	L	M	N
MGAR_200-06	30	39	M33 x 1.5	1/8 NPT	55	34	31	15.4	5.4	52.5	45	91	43
MGAR_200-08	30	39	M33 x 1.5	1/4 NPT	55	34	31	15.4	5.4	52.5	45	91	43
MGAR_300-08	41	41.5	M40 x 1.5	1/4 NPT	53	40	38	8	6.5	62.5	46	112	53.4
MGAR_300-10	41	41.5	M40 x 1.5	3/8 NPT	53	40	38	8	6.5	62.5	46	112	53.4
MGAR_400-15	50	49	M55 x 2.0	1/2 NPT	72	55	52	11	8.5	80	53	140.5	67.8
MGAR600-20	70	58	M62 x 1.5	3/4 NPT	90	66	59	13	11	100	73.5	179.5	85.8
MGAR600-25	70	58	M62 x 1.5	1 NPT	90	66	59	13	11	100	73.5	179.5	85.8



FOR GAUGE OR BLANKING PLATE INSTALL:
LOOSEN SET SCREW, ROTATE PLATE 1/4 TURN CCW, THEN REMOVE. TO INSTALL, ROTATE CW 1/4 TURN, THEN SNUG SET SCREW (DO NOT OVERTIGHTEN)

How to Order

MGAR regulator models can be configured using basic alphanumeric clusters. To create an MGAR series part number, choose series, model, port size, pressure range, and gauge type. Sample MGAR series part numbers and available options are featured below.

MGAR K 300 - 08 - L

Series	
Blank	Standard Relieving Regulator
K	Relieving Regulator with Reverse Flow[1]

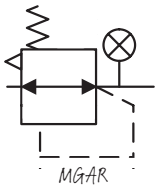
[1] K option only available with 200, 300 & 400 series

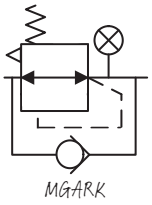
Model	
200	200 Series
300	300 Series
400	400 Series
600	600 Series

Port Size	
06	1/8 NPT (200 Series)
08	1/4 NPT (200, 300 Series)
10	3/8 NPT (300 Series)
15	1/2 NPT (400 Series)
20	3/4 NPT (600 Series)
25	1 NPT (600 Series)

Pressure Range	
Blank	7 to 130 psi
L	7-60 psi[2]

[2] L option only available with 200, 300 & 400 series





MSR Series Mini Regulators

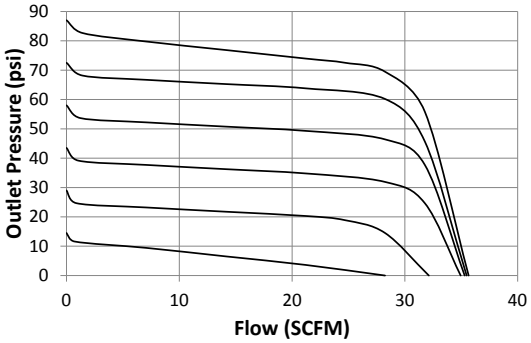
Engineering Specifications

Model	MSR200-06	MSR200-08
Fluid	Air (Clean/Dry)	
Port Size	1/8 NPT	1/4 NPT
Type	Relieving Regulator with Push to Lock Adjustment Knob	
Pressure Range	7 to 130 psi (0.05 to 0.9 MPa)	
Proof Pressure	215 psi (1.5 MPa)	
Temperature Range	-4 °F to 158 °F (-20 °C to 70 °C)	
Material	Aluminum Alloy Body	
Mounting	Inline via Bracket / Panel Mount	
Includes	Gauge[1] / Stamped Steel Bracket / Panel Nut / 2 Gauge Locations	

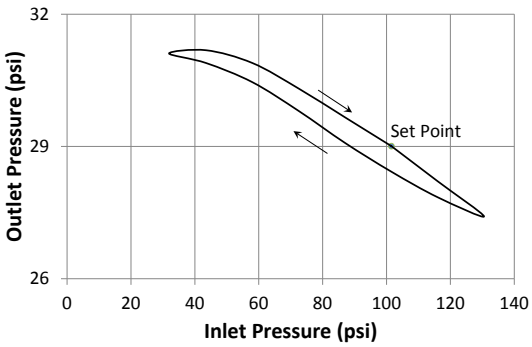
[1] 1/8 NPT, 40mm round gauge, 0-140 psi

Performance Data MSR200

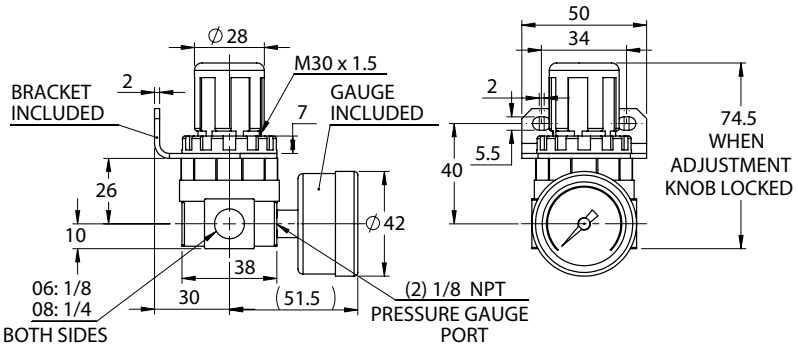
Flow Characteristics



Regulation Characteristics



Dimensions



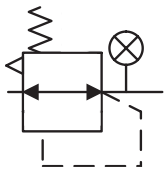
How to Order

MSR regulator models can be configured using basic alphanumeric clusters. To create an MSR series part number, choose model and port size. Sample MSR series part numbers and available options are featured below.

MSR 200-08

Model	
200	200 Series

Port Size	
06	1/8 NPT
08	1/4 NPT



MGAFR Series Filter-Regulators

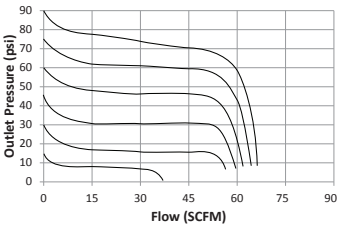
Engineering Specifications

Model	MGAFR200	MGAFR300	MGAFR400	MGAFR600
Fluid	Air			
Type	Relieving Regulator with Push to Lock Adjustment Knob			
Pressure Range	Standard Pressure: 20 to 130 psi (0.15 to 0.9 MPa) Low Pressure: 20 to 60 psi (0.15 to 0.4 MPa)			
Proof Pressure	215 psi (1.5 MPa)			
Temperature Range	23 °F to 158 °F (-5 °C to 70 °C)			
Bowl Capacity	0.85 fl oz (25cc)	2.03 fl oz (60cc)	3.38 fl oz (100cc)	6.93 fl oz (205cc)
Bowl Material	Polycarbonate Bowl with Metal Bowl Guard or Metal Bowl with Polycarbonate Level Indicator or Nylon Bowl with Metal Bowl Guard			Metal Bowl with Polycarbonate Level Indicator
Material	Aluminum Alloy Body			
Mounting	Individual Stamped Steel Bracket or Modular Connecting Kit or Panel Mount			
Includes	Stamped Steel Bracket / Panel Nut			

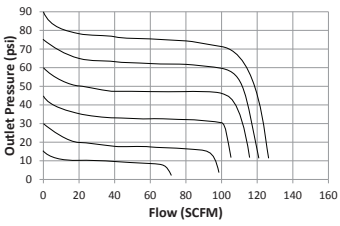
See page 35 for service parts.

Performance Data MGAFR

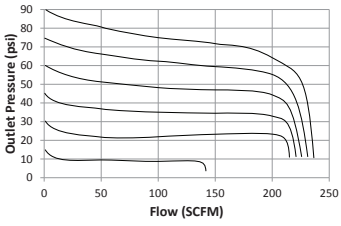
Flow Characteristics MGAFR200



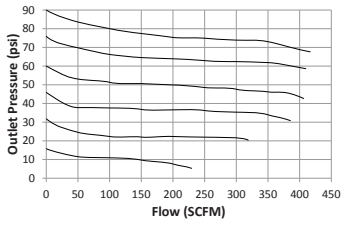
Flow Characteristics MGAFR300



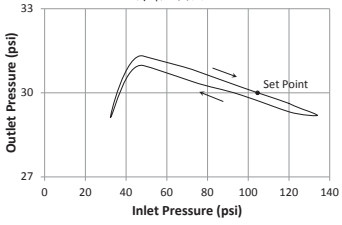
Flow Characteristics MGAFR400



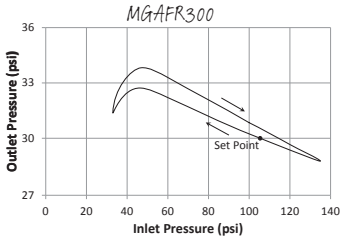
Flow Characteristics MGAFR600



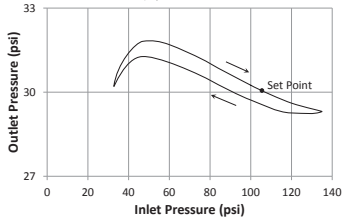
Regulation Characteristics MGAFR200



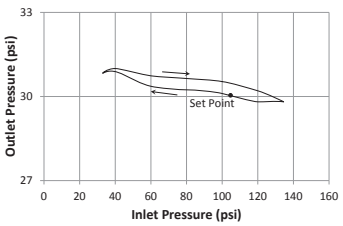
Regulation Characteristics MGAFR300



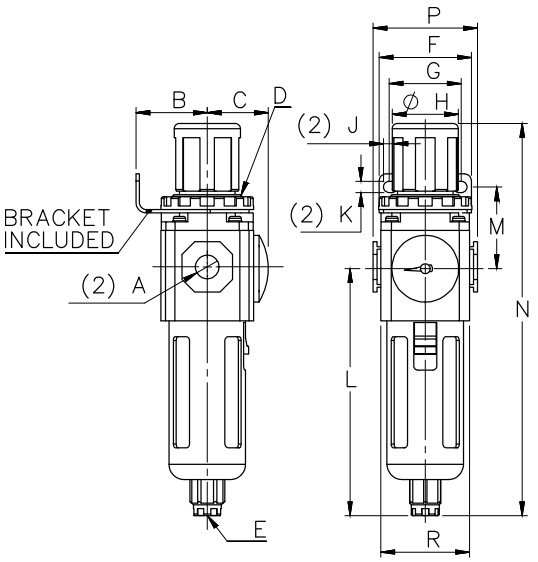
Regulation Characteristics MGAFR400



Regulation Characteristics MGAFR600

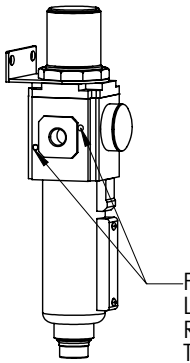


MGAFR Series Dimensions (mm)



Model	A	B	C	D	E	F	G
MGAFR200-06	1/8 NPT	30	39	M33X1.5	M5X0.8	55	34
MGAFR200-08	1/4 NPT	30	39	M33X1.5	M5X0.8	55	34
MGAFR300-08	1/4 NPT	41	41.5	M40X1.5	G 1/4	53	40
MGAFR300-10	3/8 NPT	41	41.5	M40X1.5	G 1/4	53	40
MGAFR400-15	1/2 NPT	50	49	M55X2.0	G 1/4	72	55
MGAFR600-20	3/4 NPT	70	58	M62X1.5	G 1/4	90	66
MGAFR600-25	1 NPT	70	58	M62X1.5	G 1/4	90	66

Model	H	J	K	L	M	N	P	R
MGAFR200-06	31	15.4	5.4	120	52	192.5	52.5	43
MGAFR200-08	31	15.4	5.4	120	52	192.5	52.5	43
MGAFR300-08	38	8	6.5	158	52.5	247	62.5	53.4
MGAFR300-10	38	8	6.5	158	52.5	247	62.5	53.4
MGAFR400-15	52	11	8.5	177.5	57	285.5	80	67.8
MGAFR600-20	59	13	11	205	76	336.5	100	85.8
MGAFR600-25	59	13	11	205	76	336.5	100	85.8



FOR GAUGE OR BLANKING PLATE INSTALL:
LOOSEN SET SCREW, ROTATE PLATE 1/4 TURN CCW, THEN REMOVE. TO INSTALL, ROTATE CW 1/4 TURN, THEN SNUG SET SCREW (DO NOT OVERTIGHTEN)

MGAFR filter/regulator models can be configured using basic alphanumeric clusters. To create an MGAFR series part number, choose model, port size, drain, pressure range, filtering, bowl type, and gauge type. Sample MGAFR series part numbers and available options are featured below.

MGAFR 300 - 08 - SM - L - W - D

Model	
200	200 Series
300	300 Series
400	400 Series
600	600 Series

Port Size	
06	1/8 NPT (200 Series)
08	1/4 NPT (200, 300 Series)
10	3/8 NPT (300 Series)
15	1/2 NPT (400 Series)
20	3/4 NPT (600 Series)
25	1 NPT (600 Series)

Drain	
Blank	Auto Drain
SM	Semi-Auto/ Manual Drain

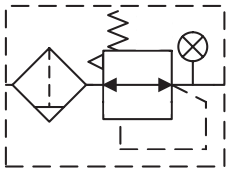
Pressure Range[1]	
Blank	Standard
L	Low[2]

[1] See Engineering Specifications for Pressure Range
[2] L option only available with 200, 300 and 400 series

Filtering	
Blank	40µm
W	5µm

Bowl Type	
Blank	Polycarbonate Bowl with Metal Bowl Guard
D	Metal Bowl[3]
N	Nylon Bowl with Metal Bowl Guard

[3] 600 series is only available with -D metal bowl



MGAFC Series Filter-Regulator-Lubricators

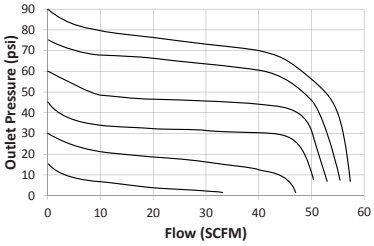
Engineering Specifications

Model	MGAFC200-06-S	MGAFC200-08-S	MGAFC300-08	MGAFC300-10	MGAFC400-15
Fluid	Air				
Port Size	1/8 NPT	1/4 NPT	1/4 NPT	3/8 NPT	1/2 NPT
Type	Relieving Regulator with Push to Lock Adjustment Knob and Fine Oil Mist Lubricator				
Pressure Range	20 to 130 psi (0.15 to 0.9 MPa)				
Proof Pressure	215 psi (1.5 MPa)				
Temperature Range	23 °F to 158 °F (-5 °C to 70 °C)				
Drain Bowl Capacity	0.84 fl oz (25cc)		2.03 fl oz (60cc)		3.38 fl oz (100cc)
Oil Bowl Capacity	1.22 fl oz (36cc)		3.31 fl oz (98cc)		6.26 fl oz (185cc)
Bowl Material	Polycarbonate Bowl with Metal Bowl Guard				
Material	Aluminum Alloy Body				
Mounting	Modular Connecting Kit included				
Recommended Lubricant	ISO VG32 or equivalent				
Drain	Semi-Auto Drain		Auto Drain		
Includes	T Style Modular Connecting Kit / Panel Nut				

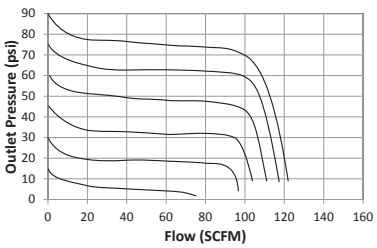
See page 35 for service parts.

Performance Data MGAFC

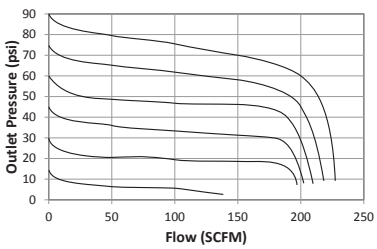
Flow Characteristics MGAFC200



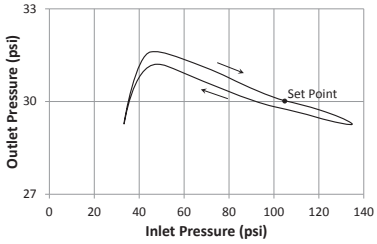
Flow Characteristics MGAFC300



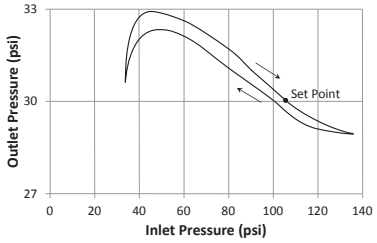
Flow Characteristics MGAFC400



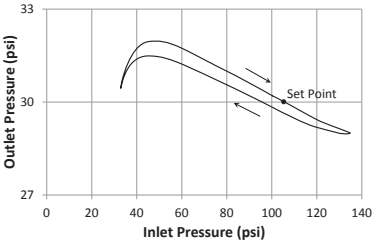
Regulation Characteristics MGAFC200



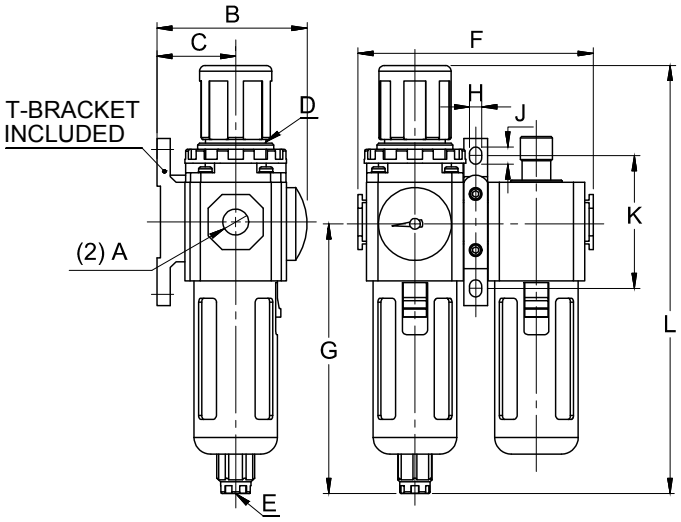
Regulation Characteristics MGAFC300



Regulation Characteristics MGAFC400

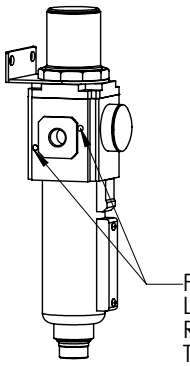


Dimensions (mm)



Model	A	B	C	D	E
MGAFC200-06-S	1/8 NPT	69	30	M33X1.5	M5X0.8
MGAFC200-08-S	1/4 NPT	69	30	M33X1.5	M5X0.8
MGAFC300-08	1/4 NPT	83	41.5	M40X1.5	G 1/4
MGAFC300-10	3/8 NPT	83	41.5	M40X1.5	G 1/4
MGAFC400-15	1/2 NPT	99	50	M55X2.0	G 1/4

Model	F	G	H	J	K	L
MGAFC200-06-S	107.5	120	5.5	8.5	50	192.5
MGAFC200-08-S	107.5	120	5.5	8.5	50	192.5
MGAFC300-08	128.5	158	6.5	9	70	247
MGAFC300-10	128.5	158	6.5	9	70	247
MGAFC400-15	164	177.5	8.5	12	80	285.5



FOR GAUGE OR BLANKING PLATE INSTALL:
LOOSEN SET SCREW, ROTATE PLATE 1/4 TURN CCW, THEN REMOVE. TO INSTALL, ROTATE CW 1/4 TURN, THEN SNUG SET SCREW (DO NOT OVERTIGHTEN)

How to Order

MGAFC filter/regulator-lubricator models can be configured using basic alphanumeric clusters. To create an MGAFC series part number, choose model, port size, drain, and filtering. Sample MGAFC series part numbers and available options are featured below.

MGAFC 200 - 08 - SM - W

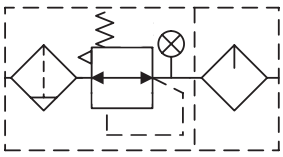
Model	
200	200 Series
300	300 Series
400	400 Series

Port Size	
06	1/8 NPT (200 Series)
08	1/4 NPT (200, 300 Series)
10	3/8 NPT (300 Series)
15	1/2 NPT (400 Series)

Drain	
Blank	Auto Drain[1]
SM	Semi-Auto/ Manual Drain[2]

[1] Not available on 200 series
[2] Not available on 300 & 400 series

Filtering	
Blank	40µm
W	5µm

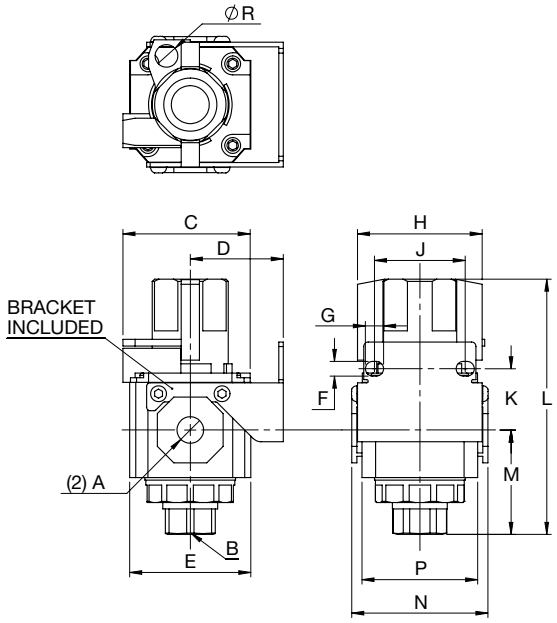


MGZ Series Relief Valves

Engineering Specifications

Model	MGZ
Fluid	Air (Clean/Dry)
Actuation	Manual
Valve Type	3 Port - 2 Position
Pressure Range	0 to 130 psi (0 to 0.9 MPa)
Proof Pressure	215 psi (1.5 MPa)
Temperature Range	-4 °F to 158 °F (-20 °C to 70 °C)
Material	Aluminum Alloy Body
Mounting	Individual Stamped Steel Bracket or Modular Connecting Kit
Knob Motion	90° Twist
Includes	Modular Connecting Kit / Stamped Steel Bracket / Lock and Key

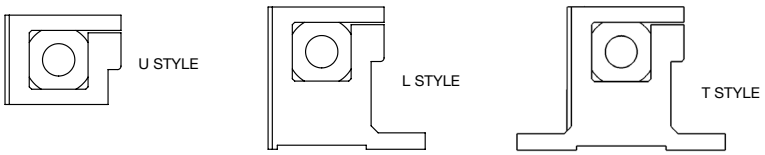
Dimensions (mm)



Model	A	B	C	D	E	F	G
MGZ200-06	1/8 NPT	1/4 NPT	42.5	30	40	5.5	8.5
MGZ200-08	1/4 NPT	1/4 NPT	42.5	30	40	5.5	8.5
MGZ300-08	1/4 NPT	3/8 NPT	56.5	41	53.4	6.5	8
MGZ300-10	3/8 NPT	3/8 NPT	56.5	41	53.4	6.5	8
MGZ400-15	1/2 NPT	1/2 NPT	66	50	64	8.5	11

Model	H	J	K	L	M	N	P	R
MGZ200-06	42	27	23	89	36.5	47	38	7.1
MGZ200-08	42	27	23	89	36.5	47	38	7.1
MGZ300-08	55	40	27	112.5	46	60	51	9.3
MGZ300-10	55	40	27	112.5	46	60	51	9.3
MGZ400-15	65	55	33.5	134	58.5	75	63	10.5

Modular Connecting Kit *(included)*



How to Order

MGZ series relief valve models can be configured using basic alphanumeric clusters. To create an MGZ series part number, choose model, port size, drain, and filtering. Sample MGZ series part numbers and available options are featured below.

MGZ 300 - 08 - T

Model	
200	200 Series
300	300 Series
400	400 Series

Port Size	
06	1/8 NPT (200 Series)
08	1/4 NPT (200, 300 Series)
10	3/8 NPT (300 Series)
15	1/2 NPT (400 Series)

Modular Connecting Kit[1]	
T	T Style
L	L Style
U	U Style

[1] All Pressure Relief Valves also include stamped bracket

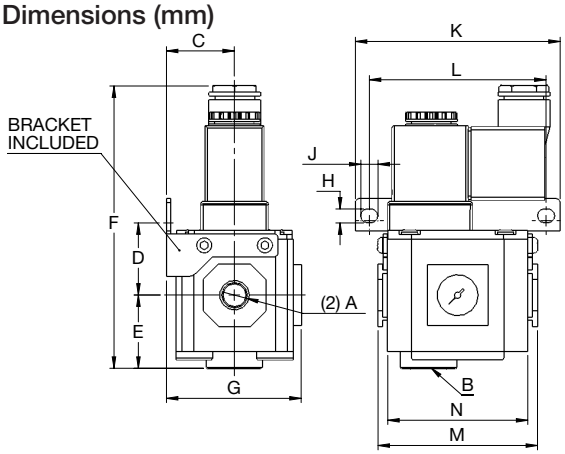
MGV Series Soft Start Valves

Engineering Specifications

Model	MGV200-06	MGV200-08	MGV300-08	MGV300-10	MGV400-15
Fluid	Air (Clean/Dry)				
Actuation	Solenoid Operated, 3/2 Soft Start				
Port Size	1/8 NPT	1/4 NPT	1/4 NPT	3/8 NPT	1/2 NPT
Exhaust Port Size	1/4 NPT		3/8 NPT		1/2 NPT
Pressure Range	36 to 130 psi (0.25 to 0.9 MPa)				
Proof Pressure	215 psi (1.5 MPa)				
Temperature Range	-4 °F to 158 °F (-20 °C to 70 °C) (Explosion Proof -4 °F to 140 °F [-20 °C to 60 °C])				
Electrical Connection	DIN / LED Connector or Flying Leads or Explosion Proof Coil Conduit Entry				
Voltage Range	-15% to +10%				
Insulation	Class B				
Power Consumption[1]	AC: 3.5VA / DC: 2.5W				
Mounting	Individual Stamped Steel Bracket or Modular Connecting Kit				
Material	Aluminum Alloy Body				
Connector/Coil[1]	11mm DIN Connector, Industrial Form B				
Includes	Modular Connecting Kit / Stamped Steel Bracket				

[1] See Valves catalog for explosion proof specifications

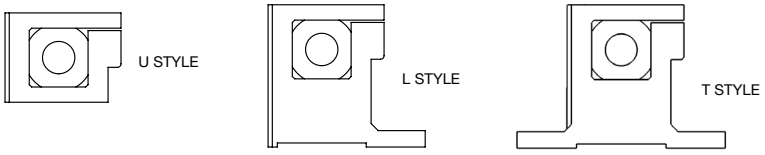
Dimensions (mm)



Model	A	B	C	D	E	F
MGV200-06	1/8 NPT	1/4 NPT	24.5	30.5	30	123.5
MGV200-08	1/4 NPT	1/4 NPT	24.5	30.5	30	123.5
MGV300-08	1/4 NPT	3/8 NPT	31.5	34.5	34	131
MGV300-10	3/8 NPT	3/8 NPT	31.5	34.5	34	131
MGV400-15	1/2 NPT	1/2 NPT	40.5	39	40.5	142.5

Model	G	H	J	K	L	M	N
MGV200-06	57	5.5	8	80	67	59	50
MGV200-08	57	5.5	8	80	67	59	50
MGV300-08	62.2	6.5	8	95	82	74	65
MGV300-10	62.2	6.5	8	95	82	74	65
MGV400-15	80	8.5	11	120	102	90	78

Modular Connection Kit *(included)*



How to Order

MGV series soft start valve models can be configured using basic alphanumeric clusters. To create an MGV series part number, choose model, port size, drain, and filtering. Sample MGV series part numbers and available options are featured below.

MGV 300 - 08 - T - 24VDC - X

Model	
200	200 Series
300	300 Series
400	400 Series

Port Size	
06	1/8 NPT (200 Series)
08	1/4 NPT (200, 300 Series)
10	3/8 NPT (300 Series)
15	1/2 NPT (400 Series)

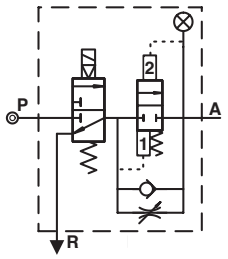
Modular Connecting Kit[1]	
T	T Style
L	L Style
U	U Style

[1] All Soft Start Valves also include stamped bracket

Voltage	
12VDC	12VDC
24VDC	24VDC
24VAC	24VAC 50/60 Hz
120VAC	120VAC 50/60 Hz

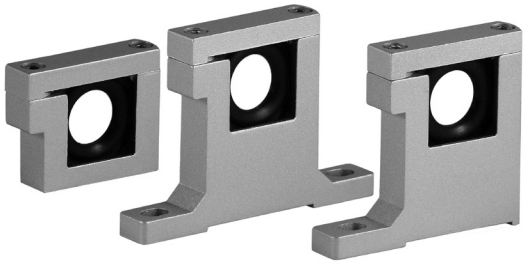
Electrical Connection	
Blank	DIN Connector
FL	Flying Leads[2]
X	Explosion Proof[3]

[2] Not available with 24VAC. Flying Leads are 300mm long.
[3] See Valves catalog for specifications. Leads are 580mm long.

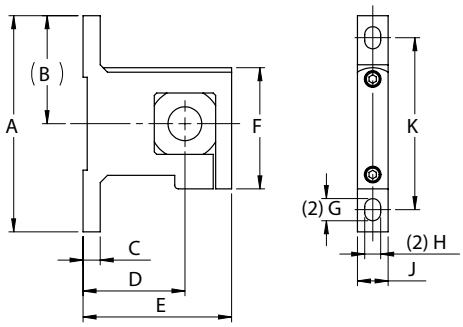


Modular Connecting Kits

Dimensions (mm)

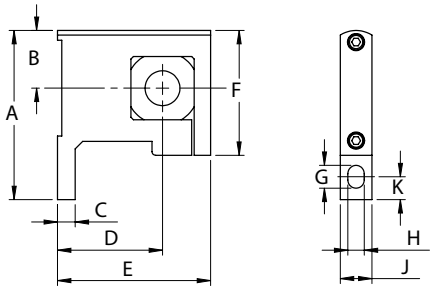


T Style



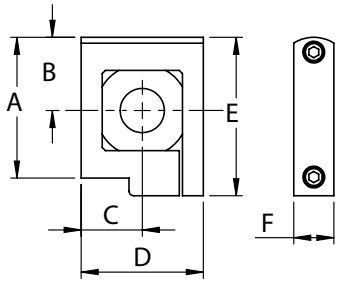
Model	A	B	C	D	E	F	G	H	J	K
MGA201-P1	66	33	5	30	45	38.3	8.5	5.5	11.5	50
MGA301-P1	88	44	7	41.5	60.4	49.3	9	6.5	13	70
MGA401-P1	104	52	7	50	76	58.5	12	8.6	15.5	80
MGA601-P1	128	64	10	70	104	79.5	16	11	19.8	100

L Style



Model	A	B	C	D	E	F	G	H	J	K
MGA202-P1	51	18.3	5	30	45	38.3	8.4	5.4	11.5	8
MGA302-P1	69	22.9	7	41.5	60.4	49.3	9	6.5	13	10.8
MGA402-P1	80	27.5	7	50	76	58.5	12	8.6	15.5	11.8
MGA602-P1	103.4	38.5	10	70	104	79.3	16	11	19.8	13.8

U Style



Model	A	B	C	D	E	F
MGA203-P1	35	18.3	15	30	38.3	11.5
MGA303-P1	43.8	22.9	19.5	38	49.3	13
MGA403-P1	52.5	27.5	26	52	58.5	15.5
MGA603-P1	76	38.5	34	68	79.3	19.8

How to Order

MGA series modular connecting kits can be configured using basic alphanumeric clusters. To create an MGA series part number, choose model, type, and material. Sample MGA series part numbers and available options are featured below.

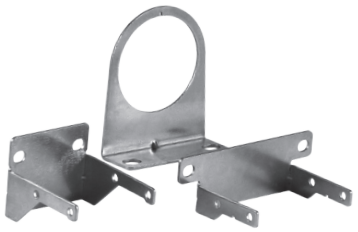
MGA 3 02 - P1

Model	
2	200 Series
3	300 Series
4	400 Series
6	600 Series

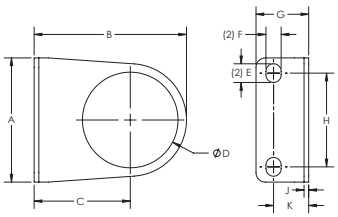
Type	
01	T Style (connecting and mounting)
02	L Style (connecting and mounting)
03	U Style (connecting only)

Material	
P1	Aluminum

MGB Series Mounting Brackets

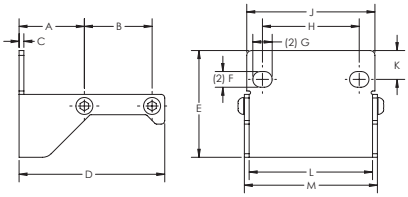


Brackets for MGAFR, MGAR Series



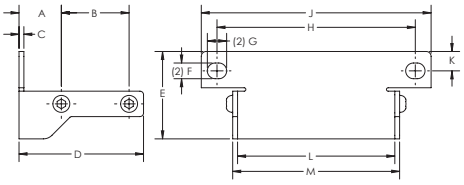
Model	A	B	C	D	E	F	G	H	J	K
MGB201-P2	55	49	30	30	15	5.2	24	34.5	2	17.5
MGB301-P2	53	65	41	40.8	8	6.5	22.5	40	2	15
MGB401-P2	72	83	56	55	11	8.5	27	55	2	18
MGB601-P2	90	110.5	70	68	13	11	35	66	2.5	24

Brackets for MGAF, MGAL Series



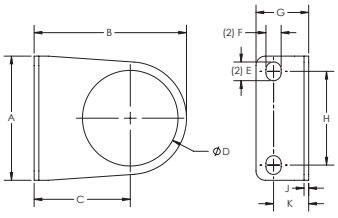
Model	A	B	C	D	E	F	G	H	J	K	L	M
MGB202-P2	20	20	2	45	33	5.4	8.4	27	40	6.4	38.2	42.3
MGB302-P2	27	28	2	60	44	6.5	8	40	55	11.7	51	55
MGB402-P2	30	42	2	75.5	47.3	8.5	11	55	72	9.5	68	72
MGB602-P2	42.4	53.2	2.5	104	51	11	13	66	90	10.7	84.5	90

Brackets for MGV Series



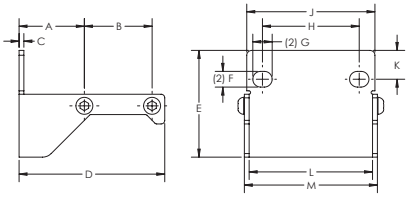
Model	A	B	C	D	E	F	G	H	J	K	L	M
MGB203-P2	14.8	20	2	39	27.7	5.3	8	67	80	6	50.2	54.2
MGB303-P2	19	25	2	50.2	32.5	6.5	8	82	95	8	65	69
MGB403-P2	21.5	36	2	65.3	40	8.5	11	102	120	8	78	82

Brackets for MSR Series



Model	A	B	C	D	E	F	G	H	J	K
MGB204-P2	50	49	30	30	7.2	5.5	20	34	2	14

Brackets for MGZ Series



Model	A	B	C	D	E	F	G	H	J	K	L	M
MGB205-P2	20	20	2	45	33	5.4	8.4	27	40	6.4	38.2	42.3
MGB305-P2	27	28	2	60	44	6.5	8	40	55	11.7	51	55
MGB405-P2	30	42	2	75	48	8.5	11	55	72	9.5	64	67

How to Order

MGB series mounting brackets can be configured using basic alphanumeric clusters. To create an MGB series part number, choose model, type, and material. Sample MGB series part numbers and available options are featured below.

MGB 3 02 - P2

Model	
2	200 Series
3	300 Series
4	400 Series
6	600 Series

Type	
01	Bracket for MGAFR, MGAR Series
02	Bracket for MGAF, MGAL Series
03	Bracket for MGV Series
04	Bracket for MSR Series
05	Bracket for MGZ Series

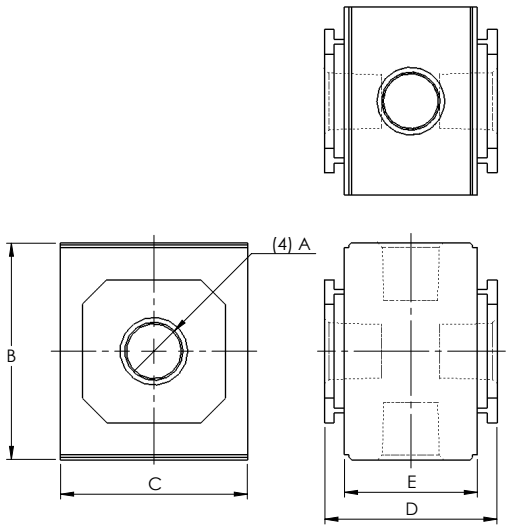
Material	
P2	Steel

MGA Series Distribution Block

Engineering Specifications

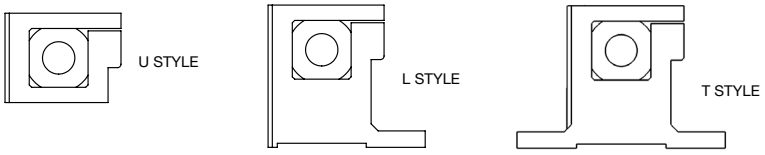
Model	MGA Distribution Block
Fluid	Air (Clean/Dry)
No. of Auxiliary Ports	2
Pressure Range	0 to 130 psi (0 to 0.9 MPa)
Proof Pressure	215 psi (1.5 MPa)
Temperature Range	-4 °F to 158 °F (-20 °C to 70 °C)
Material	Aluminum Alloy Body
Includes	Modular Connecting Kit

Dimensions (mm)



Model	A	B	C	D	E
MGA200-06-T	1/8 NPT	36	30	28.5	19
MGA200-08-T	1/4 NPT	36	30	28.5	19
MGA300-08-T	1/4 NPT	44	38	35	26
MGA300-10-T	3/8 NPT	44	38	35	26
MGA400-15-T	1/2 NPT	52	52	42	29.5
MGA600-20-T	3/4 NPT	76	68	60	47
MGA600-25-T	1 NPT	76	68	60	47

Modular Connecting Kit *(included)*



How to Order

MGA series distribution blocks can be configured using basic alphanumeric clusters. To create an MGA series part number, choose model, type, and material. Sample MGA series part numbers and available options are featured below.

MGA 314 - 08 - T

Model	
214	200 Series
314	300 Series
414	400 Series
614	600 Series

Port Size	
06	1/8 NPT (200 Series)
08	1/4 NPT (200, 300 Series)
10	3/8 NPT (300 Series)
15	1/2 NPT (400 Series)
20	3/4 NPT (600 Series)
25	1 NPT (600 Series)

Modular Connecting Kit[1]	
T	T Style
L	L Style
U	U Style

[1] All Distribution Blocks also include stamped bracket

Filter Elements

Filtering

Filtering	Material
40µm	White high density polyethylene
5µm	Blue high density polyethylene
0.3µm	Blue dual-layer borosilicate glass
0.01µm	Red glass fiber filtering layer

How To Order

MGAF series filter elements can be configured using basic alphanumeric clusters. To create an MGAF element part number, choose product line, model, and filtering. Sample MGAF element part numbers and available options are featured below.

MGAF 300 - 004 - 1

Product Line	
MGAF	Filter Element

Model	
200	200 Series
300	300 Series
400	400 Series
600	600 Series[1]

[1] Filtering options 3 and 4 are not available on 600 Series.

Filtering	
1	40µm[2]
2	5µm[2]
3	0.3µm[3]
4	0.01µm[3]

[2] Usable with MGAF, MGAFR, and MGAFC models
[3] Usable with MGAFB models

Replacement Filter, Filter/Regulator, and Lubricator Bowls

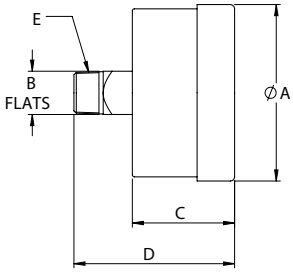
Type	Drain Style	Description	Part Number	Compatibility
Filter and Filter/ Regulator Bowls	Semi-Auto/Manual Drain	200 Series Polycarbonate Bowl	MGAF200-SM-P	200 Series MGAF, MGAFB, MGAFR, MGAFC
		200 Series Nylon Bowl	MGAF200-SM-N	200 Series MGAF, MGAFB, MGAFR, MGAFC
		200 Series Metal Bowl	MGAF200-SM-D	200 Series MGAF, MGAFB, MGAFR, MGAFC
		300 Series Polycarbonate Bowl	MGAF300-SM-P	300 Series MGAF, MGAFB, MGAFR, MGAFC
		300 Series Nylon Bowl	MGAF300-SM-N	300 Series MGAF, MGAFB, MGAFR, MGAFC
		300 Series Metal Bowl	MGAF300-SM-D	300 Series MGAF, MGAFB, MGAFR, MGAFC
		400 Series Polycarbonate Bowl	MGAF400-SM-P	400 Series MGAF, MGAFB, MGAFR, MGAFC
		400 Series Nylon Bowl	MGAF400-SM-N	400 Series MGAF, MGAFB, MGAFR, MGAFC
		400 Series Metal Bowl	MGAF400-SM-D	400 Series MGAF, MGAFB, MGAFR, MGAFC
		600 Series Metal Bowl	MGAF600-SM-D	600 Series MGAF, MGAFR
	Auto Drain	200 Series Polycarbonate Bowl	MGAF200-A-P	200 Series MGAF, MGAFB, MGAFR, MGAFC
		200 Series Nylon Bowl	MGAF200-A-N	200 Series MGAF, MGAFB, MGAFR, MGAFC
		200 Series Metal Bowl	MGAF200-A-D	200 Series MGAF, MGAFB, MGAFR, MGAFC
		300 Series Polycarbonate Bowl	MGAF300-A-P	300 Series MGAF, MGAFB, MGAFR, MGAFC
		300 Series Nylon Bowl	MGAF300-A-N	300 Series MGAF, MGAFB, MGAFR, MGAFC
		300 Series Metal Bowl	MGAF300-A-D	300 Series MGAF, MGAFB, MGAFR, MGAFC
		400 Series Polycarbonate Bowl	MGAF400-A-P	400 Series MGAF, MGAFB, MGAFR, MGAFC
		400 Series Nylon Bowl	MGAF400-A-N	400 Series MGAF, MGAFB, MGAFR, MGAFC
		400 Series Metal Bowl	MGAF400-A-D	400 Series MGAF, MGAFB, MGAFR, MGAFC
		600 Series Metal Bowl	MGAF600-A-D	600 Series MGAF, MGAFR
Lubricator Bowls		200 Series Polycarbonate Bowl	MGAL200-P	200 Series MGAL
		200 Series Nylon Bowl	MGAL200-N	200 Series MGAL
		300 Series Polycarbonate Bowl	MGAL300-P	300 Series MGAL
		300 Series Nylon Bowl	MGAL300-N	300 Series MGAL
		400 Series Polycarbonate Bowl	MGAL400-P	400 Series MGAL
		400 Series Nylon Bowl	MGAL400-N	400 Series MGAL

Pressure Gauges

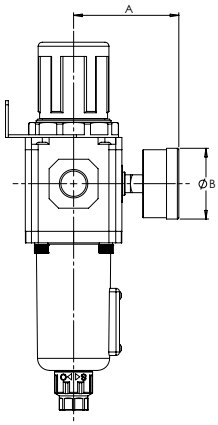
Engineering Specifications

Model	Round Gauges
Fluid	Air (Clean/Dry)
Units	psi and kgf/cm2
Pressure Range	Blank: 0 to 140 psi (0 to 1.0 MPa) Low Pressure: 0 to 60 psi (0 to 0.4 MPa)
Temperature Range	-4 °F to 140 °F (-20 °C to 60 °C)
Material	Shell: SPCC Steel Core: Brass

Dimension (mm)



Model	A	B	C	D	E
RGK/RG-40	42	11	24.5	38.5	1/8 NPT
RGK/RG-50	52	14	26.5	44.5	1/4 NPT



Model	A	B
MGAFR200/MGAR200	62	42
MGAFR300/MGAR300	61.7	42
MGAFR400/MGAR400	77.3	52
MGAFR600/MGAR600	85	52

Round Gauges

Order as a Kit

Model	Includes
RGK	Gauge, Adapter Plate, (2) Assembly Screws, O-Ring
RG	Gauge Only
RK	Adapter Plate, (2) Assembly Screws, O-Ring

RGK - 40 - L

Product Line[1]	
RGK[2]	Gauge, Adapter, Hardware
RG	Gauge Only
RK[2]	Adapter and Hardware

[1] See "Order as a Kit" section above for model descriptions
[2] RGK and RK models are only compatible with MGV Soft Start Valves.

Gauge Size	
40	1/8 NPT, 40mm Round
50	1/4 NPT, 50mm Round

Pressure Range	
Blank	0-140 psi
L	0-60 psi[2]

[2] Only available on RGK-40 & RG-40

How to Order

MGAR, MGAFR, and MGAFC Series Gauge Adapter

MGAR - 300 - GA - NPT

Product Line	
MGAR	MGAR Series Regulators

Model	
200	200 Series
300	300 Series
400	400 Series
600	600 Series

Type	
GA	Gauge Adapter
013	Blanking Cover

Port Style[1]
NPT
ISO G
PT

[1] Not used for blanking cover.

NOTE: 200 and 300 series are 1/8.
400 and 600 series are 1/4.

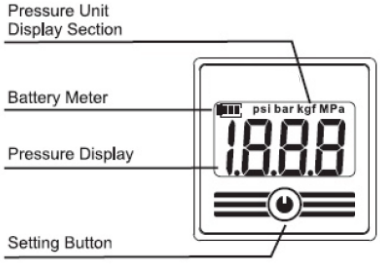
Digital Pressure Gauge

DG - 08

Port Size	
06	1/8 NPT, 10-32 UNF1
08	1/4 NPT, 10-32 UNF2

[1] RK-40 needed for installation on MGAFR or MGAR (not included)
[2] RK-50 needed for installation on MGAFR or MGAR (not included)

Display Description

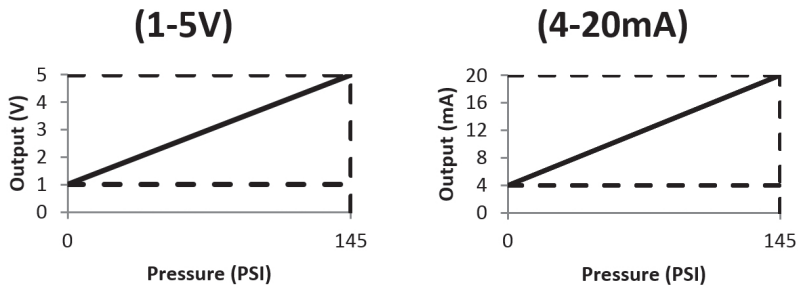


Digital Pressure Switches

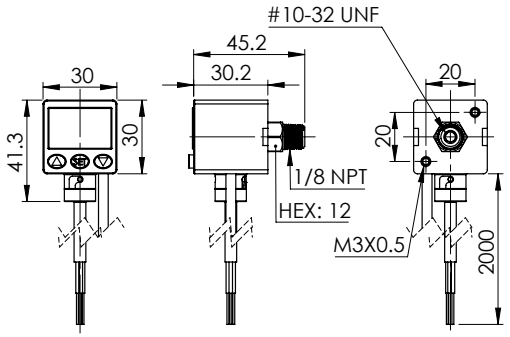
Engineering Specifications

Model		DPSP-A	DPSP-B	DPSP-C	DPSP-D	DPSP-E	DPSP-F
Fluid		Air or Inert Gas (Clean/Dry)					
Rated Pressure Range		0 to 145 psi (0 to 1.0 Mpa)					
Proof Pressure		217 psi (1.5 Mpa)					
Pressure Setting Range		-14.5 to 145 psi (-0.1 to 1.0 Mpa)					
Temperature Range		32 °F to 120 °F (0 °C to 50 °C)					
Voltage		12 to 24 VDC +/- 10%, 10% max. ripple (P-P)					
Current Consumption		<= 40mA (no loads)					
Digital Outputs	Type	2 - NPN (Sinking)			2 - PNP (Sourcing)		
	Max. Load	125mA (each)					
	Residual Voltage	<= 1.5V					
	Response Time	<= 2.5ms (user-selectable: 25ms, 100ms, 250ms, 500ms, 1000ms, 1500ms anti-chatter function)					
	Short Circuit Protection	Yes					
	Repeatability	+/-0.2% F.S. +/-1 digit					
Analog Output	Type	1-5V (+/- 2.5% F.S.)	4-20mA (+/- 2.5% F.S.)	-	1-5V (+/- 2.5% F.S.)	4-20mV (+/- 2.5% F.S.)	-
	Impedance	~1kΩ	20-250Ω (12V Supply), 50-600Ω (24V Supply)	-	~1kΩ	20-250Ω (12V Supply), 50-600Ω (24V Supply)	-
	Linearity	+/- 1% F.S.		-	+/- 1% F.S.		-
Display	Type	3-1/2 digit, 7-segment (red, green, orange)					
	Resolution	0.001 Mpa, 0.01 kgf/cm2, 0.01 bar, 0.1 psi					
	Switch Indicator	One per digital output					
	Refresh Rate	~0.2s					
	Indicator Accuracy	+/-2% F.S. +/-1 digit at 77+/-5 °F (25+/-3 °C)					
Enclosure Rating		IP65 (with breather tube installed)					
Storage Temperature Rating		14 °F to 140 °F (-10 °C to 60 °C)					
Ambient Humidity Range		35 - 85% RH (no condensation)					
Withstand Voltage		1000VAC for 1 min between case and lead wire					
Insulation Resistance		50MΩ (at 500VDC between case and lead wire)					
Vibration Resistance		Total amplitude 1.5mm or 10g, 10Hz-55Hz-10Hz (one minute scan), two hours in X, Y, and Z					
Shock		100m/s2 (10g), three times X, Y, and Z					
Temperature Characteristic		+/-2% F.S. of detected pressure at 77°F (25°C)					
Included Cable		Oil-resistant, 2m long					
Weight		86g					

Analog Output Characteristics

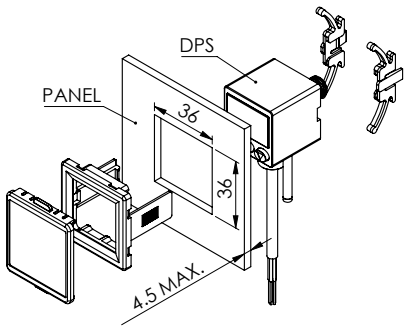


Dimensions (mm)



Accessories

Panel Adapter and Cover: DPS-PA



5m Data Cable: DPS-C5M

DPS series digital pressure switches can be configured using basic alphanumeric clusters. To create an DPS series part number, choose model, type, and material. Sample DPS series part numbers and available options are featured below.

DPS P - A - 06 - T

Pressure Range		Output		Port		Thread	
P	-14.5 to 145 psi	A	2 NPN digital, 1 (1-5V) analog	06	1/8"	T	NPT
		B	2 NPN digital, 1 (4-20mA) analog				
		C	2 NPN digital, copy function				
		D	2 PNP digital, 1 (1-5V) analog				
		E	2 PNP digital, 1 (4-20mA)				

Notes

PG Series Air Preparation Equipment

The AIROS™ PG Series is the latest generation of Bimba air preparation equipment developed to meet the needs of today's customer. It offers exceptional performance, is compact and lightweight with no compromise on robustness, and is suitable for all industrial applications. Specialized options add flexibility for ultra sensitive and unique applications.

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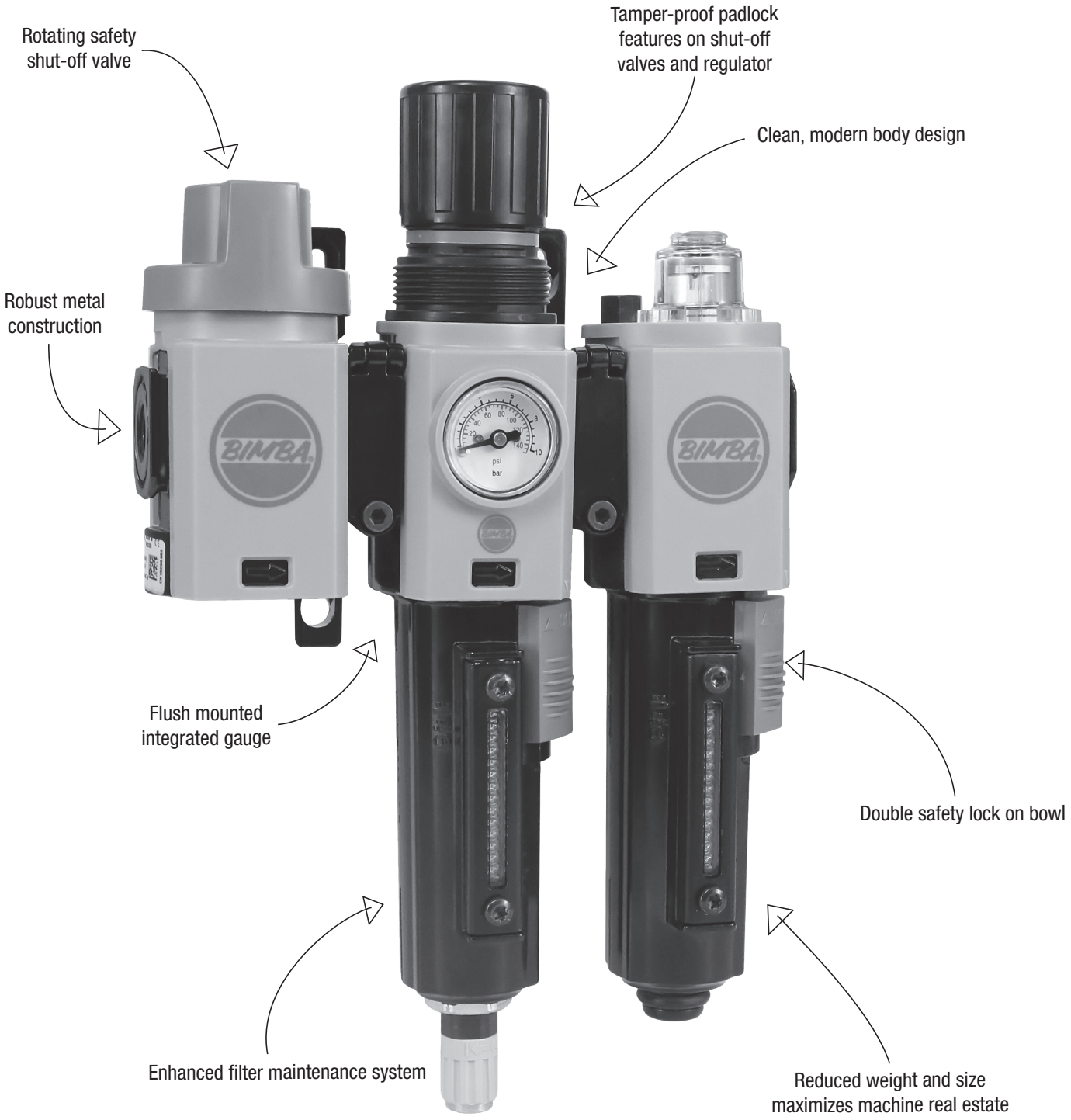


PG Series Specifications

General Specifications

- Port sizes 1/4", 3/8", 1/2", or 3/4"
- Thread type ISO G or NPT
- Fluid: Compressed air
- Maximum inlet pressure:
  - Guarded polycarbonate bowl 150 psig (10 bar)
  - PG200 metal bowl: 246 psig (17 bar)
  - PG400 metal bowl: 290 psig (20 bar)
- Maximum temperature:
  - Polycarbonate bowl 140° F (60° C)
  - Metal bowl 149° F (65° C)
- All internal and external surfaces are protected with an electrophoretic paint coating providing excellent corrosion and chip resistant protection

Product Features

PG Series Filters

PGF Series General Purpose Filters – (Water and particle removal)

PGF general purpose filters offer high levels of particulate removal, including water extraction levels greater than 95%!

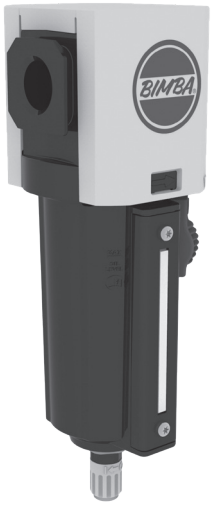
Maintenance of these units is quick and easy: the filter remains inside the bowl while the cartridge easily unclips, allowing for clean and efficient disposal and replacement with a new cartridge.

This improved maintenance system also means that the maintenance clearance needed below the unit is a maximum of 1", which reduces the overall space required around a machine.

General purpose filters are available with standard lightweight polycarbonate or full metal bowls that incorporate unique prismatic liquid level indicators for more challenging applications.

All bowls include a design focus on safety. They incorporate a specialized double lock feature that has an easy-to-use release clip to enable bowl removal. This large clip utilizes an audible “click” once the bowl is reassembled, ensuring the bowl is in the correct position for use. A detent in the assembly also engages when the unit is pressurized, ensuring that the bowl cannot be rotated while in use. This unique feature makes the PG Series one of the safest filters on the market.

Filters are offered with either a ¼ turn manual drain or the new lever assisted fast-acting float-type auto-drain, which minimizes air wastage during operation.



PGFL Series Coalescing Filters - (Oil aerosol removal)

The PGFL coalescing filter removes oil down to levels no greater than 0.01mg/m^3 - 0.01 micron particulate removal. The pleated element design means this can be achieved in a compact space, while still keeping pressure drop to a minimum.

PGFL coalescing filters have an integrated pressure drop meter to indicate when service is needed.

Coalescing filters are offered with the same bowl and drain options as the general purpose filters, and also include in-bowl cartridge removal and double safety locks.

PGFV Series Activated Carbon Filters – (Oil vapor removal)

The PGFV series carbon filter ensures oil vapor (odor) is removed from the compressed air supply (0.003mg/m^3 remaining oil).

Our carbon filters are offered with guarded polycarbonate bowls and metal bowls, and include the in-bowl cartridge removal and double safety lock. These filters do not include drains, as vapor contamination is retained in the carbon element.

When used together, the coalescing and activated carbon filters ensure any compressed air system can be used for most ultra sensitive applications.

PGF General Purpose Filters Specifications

- > PGF200 port size: 1/4" and 3/8" (ISO G/PTF)
- > PGF400 port size: 3/8", 1/2", 3/4" (ISO G/PTF)
- > PG series design allows in-line installation or modular installation with other PG series products
- > 5 or 40 micron particle and high efficiency water removal (> 95%)
- > Double safety lock bowl
- > Metal bowl with prismatic liquid level indicator lens
- > Lightweight polycarbonate bowl
- > Air purity classes in accordance to ISO 8573-1:2010 particles class 6 or 7 and liquid water class 8

Technical Features

Medium:
Compressed air only

Maximum supply pressure:
Polycarbonate bowl: 145 psi (10 bar)
PG200 metal bowl: 246 psi (17 bar)
PG400 metal bowl: 290 psi (20 bar)

Filter element:
5 µm & 40 µm

Port size:
1/4, 3/8, 1/2, 3/4

Drain:
Manual or automatic

Automatic drain operating conditions (float operated):
Bowl pressure required to close drain: > 5 psi (0.35 bar)

Bowl pressure required to open drain: ≤ 2.9 psi (0.2 bar)

Minimum air flow required to close drain: 1dm^3/s (2 scfm)

Ambient/Media temperature:
Polycarbonate bowl:
14 to 140° F (-10 to 60° C)

Metal bowl:
-4 to 149° F (-20 to 65° C)

Air supply must be dry enough to avoid ice formation at temperatures below 35° F (2° C).

Materials:
Body: Die cast aluminium
Body covers: ABS
Bowl: Transparent PC with PP guard or die cast zinc (PG200) / aluminum (PG400)
Liquid level indicator lens (metal bowl): PA
Filter element: sintered PP
Bowl 'o'- ring: Chloroprene
Elastomers: NBR

Technical Data PGF 200

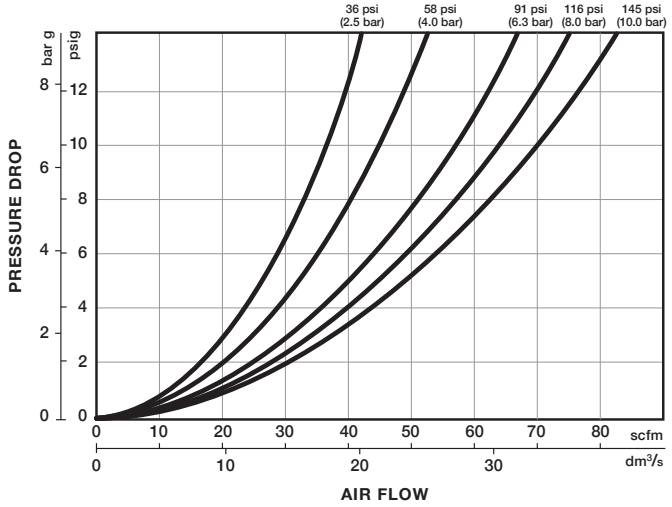
Symbol	Port Size	Drain	Filter Element (µm)	Bowl	Weight lb (kg)	Model
	1/4	Auto	40	Guarded polycarbonate	0.49 (0.22)	PGF200-08A-40 P-T
	3/8	Auto	40	Guarded polycarbonate	0.49 (0.22)	PGF200-10A-40 P-T
	1/4	Auto	40	Metal with level indicator	0.90 (0.41)	PGF200-08A-40 D-T
	3/8	Auto	40	Metal with level indicator	0.90 (0.41)	PGF200-10A-40 D-T
	1/4	Manual	40	Guarded polycarbonate	0.44 (0.20)	PGF200-08M-40 P-T
	3/8	Manual	40	Guarded polycarbonate	0.44 (0.20)	PGF200-10M-40 P-T
	1/4	Manual	40	Metal with level indicator	0.88 (0.40)	PGF200-08M-40 D-T
	3/8	Manual	40	Metal with level indicator	0.88 (0.40)	PGF200-10M-40 D-T

Technical Data PGF 400

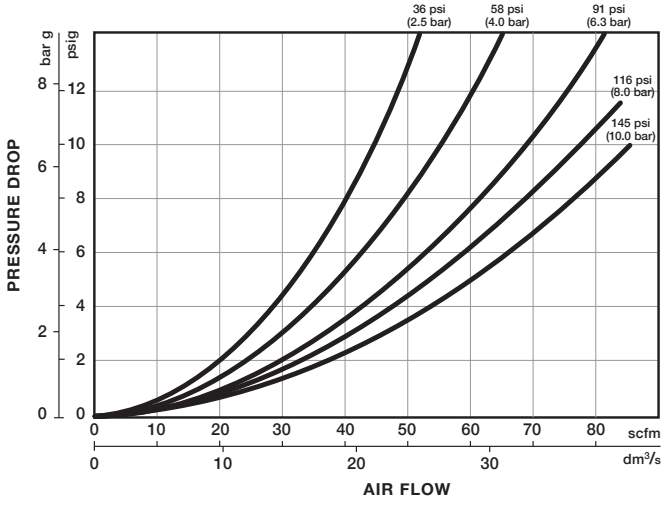
Symbol	Port Size	Drain	Filter Element (µm)	Bowl	Weight lb (kg)	Model
	3/8	Auto	40	Guarded polycarbonate	0.8 (0.38)	PGF400-10A-40 P-T
	1/2	Auto	40	Guarded polycarbonate	0.8 (0.38)	PGF400-15A-40 P-T
	3/4	Auto	40	Guarded polycarbonate	0.8 (0.38)	PGF400-20A-40 P-T
	3/8	Auto	40	Metal with level indicator	1.1 (0.52)	PGF400-10A-40 D-T
	1/2	Auto	40	Metal with level indicator	1.1 (0.52)	PGF400-15A-40 D-T
	3/4	Auto	40	Metal with level indicator	1.1 (0.52)	PGF400-20A-40 D-T
	3/8	Manual	40	Guarded polycarbonate	0.8 (0.38)	PGF400-10M-40 P-T
	1/2	Manual	40	Guarded polycarbonate	0.8 (0.38)	PGF400-15M-40 P-T
	3/4	Manual	40	Guarded polycarbonate	0.8 (0.38)	PGF400-20M-40 P-T
	3/8	Manual	40	Metal with level indicator	1.1 (0.52)	PGF400-10M-40 D-T
	1/2	Manual	40	Metal with level indicator	1.1 (0.52)	PGF400-15M-40 D-T
	3/4	Manual	40	Metal with level indicator	1.1 (0.52)	PGF400-20M-40 D-T

PGF200 Flow Characteristics

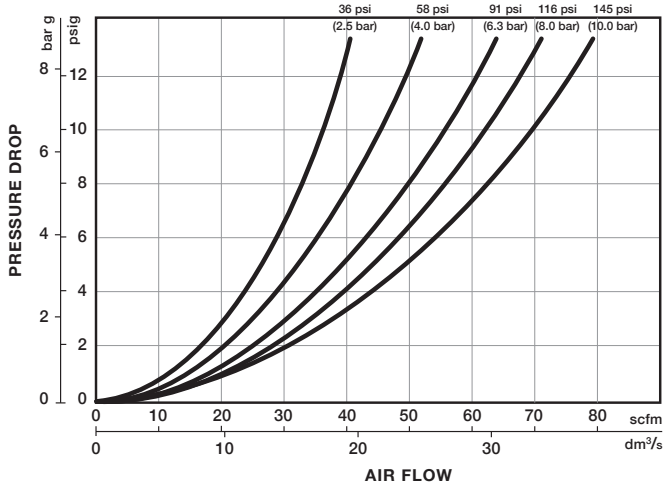
Port size: 1/4”, 5 µm



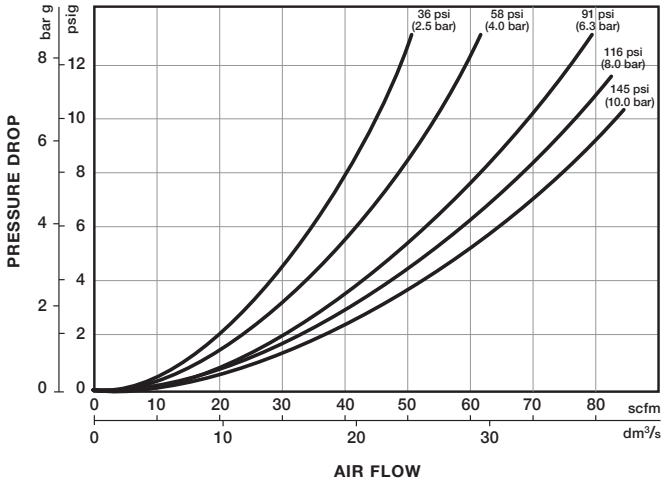
Port size: 3/8”, 5 µm



Port size: 1/4”, 40 µm

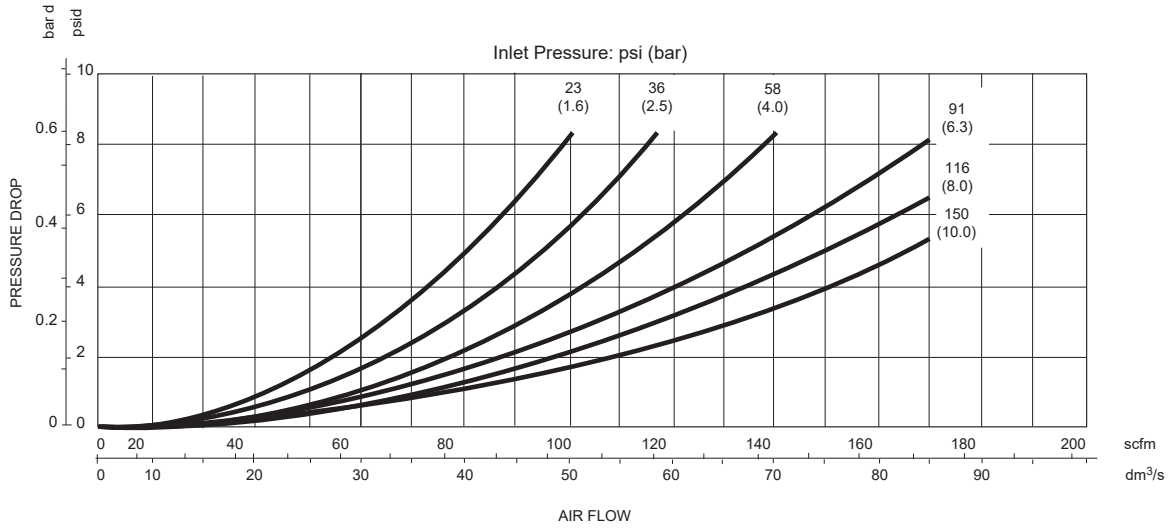


Port size: 3/8”, 40 µm

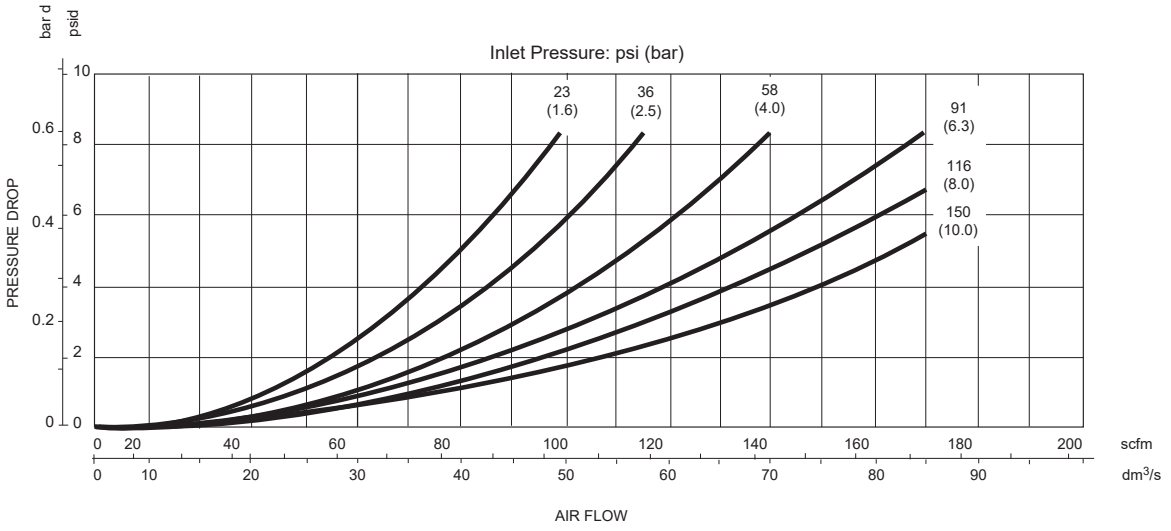


PGF400 Flow Characteristics

Element 40 µm
Port size: 1/2”



Element 5 µm
Port size: 1/2”



How to Order

PGF series filters can be configured using basic alphanumeric clusters. To create a PGF series part number, choose port size, drain, element, bowl type, and thread form. Sample PGF series part numbers and available options are featured below.

PGF 200 - 08 A - 40 P - T

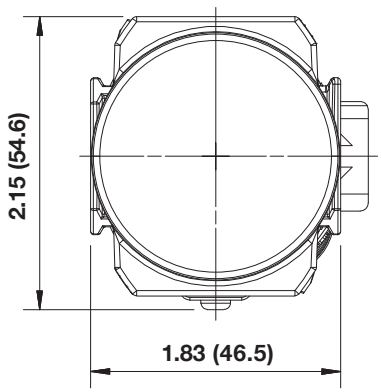
Port Size		Drain		Element		Bowl Type		Thread Form	
08	1/4"	A	Auto drain	5	5 µm	P	Transparent with guard	T	NPT
10	3/8"	M	Manual	40	40 µm	D	Metal with liquid indicator	G	ISO G parallel

PGF 400 - 15 A - 40 P - T

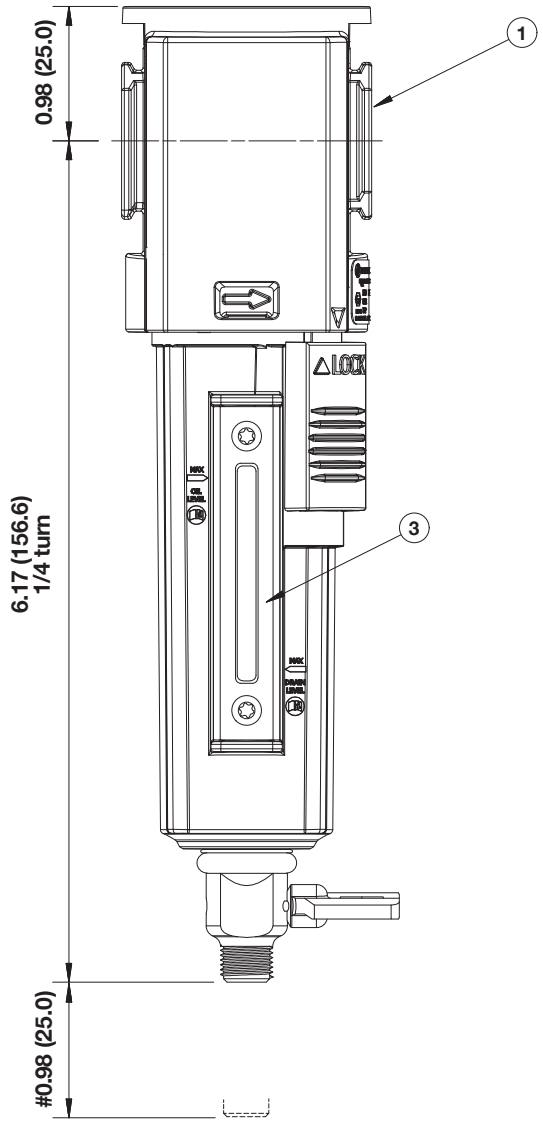
Port Size		Drain		Element		Bowl Type		Thread Form	
10	3/8"	A	Auto drain	5	5 µm	P	Transparent with guard	T	NPT
15	1/2"	M	Manual	40	40 µm	D	Metal with liquid indicator	G	ISO G parallel
20	3/4"								

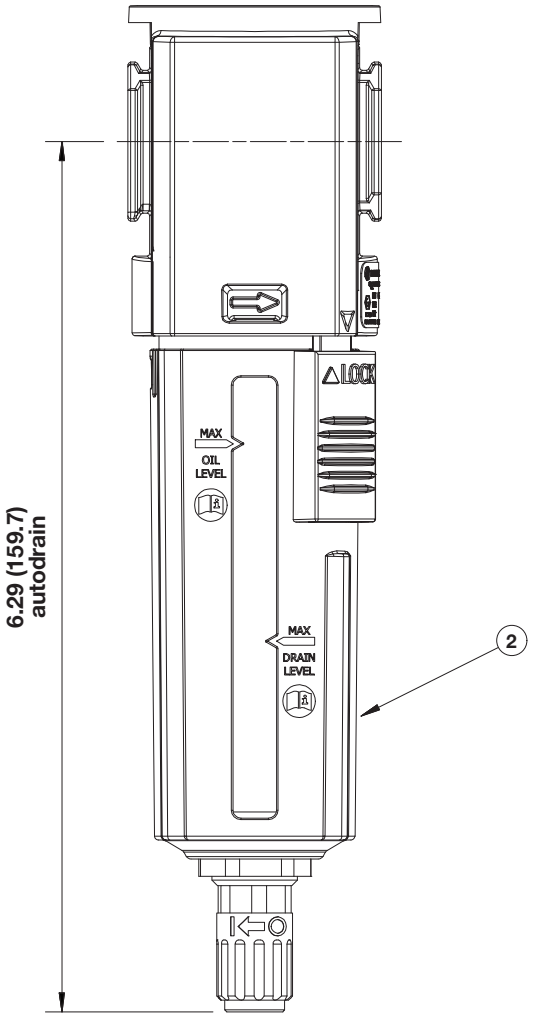
Dimensions (200 Series)

Dimensions in inches (mm)
Projection/Third angle



1. Main ports 1/4", 3/8" (ISO G/PTF)
2. Transparent bowl with guard
3. Metal bowl with liquid level indicator lens

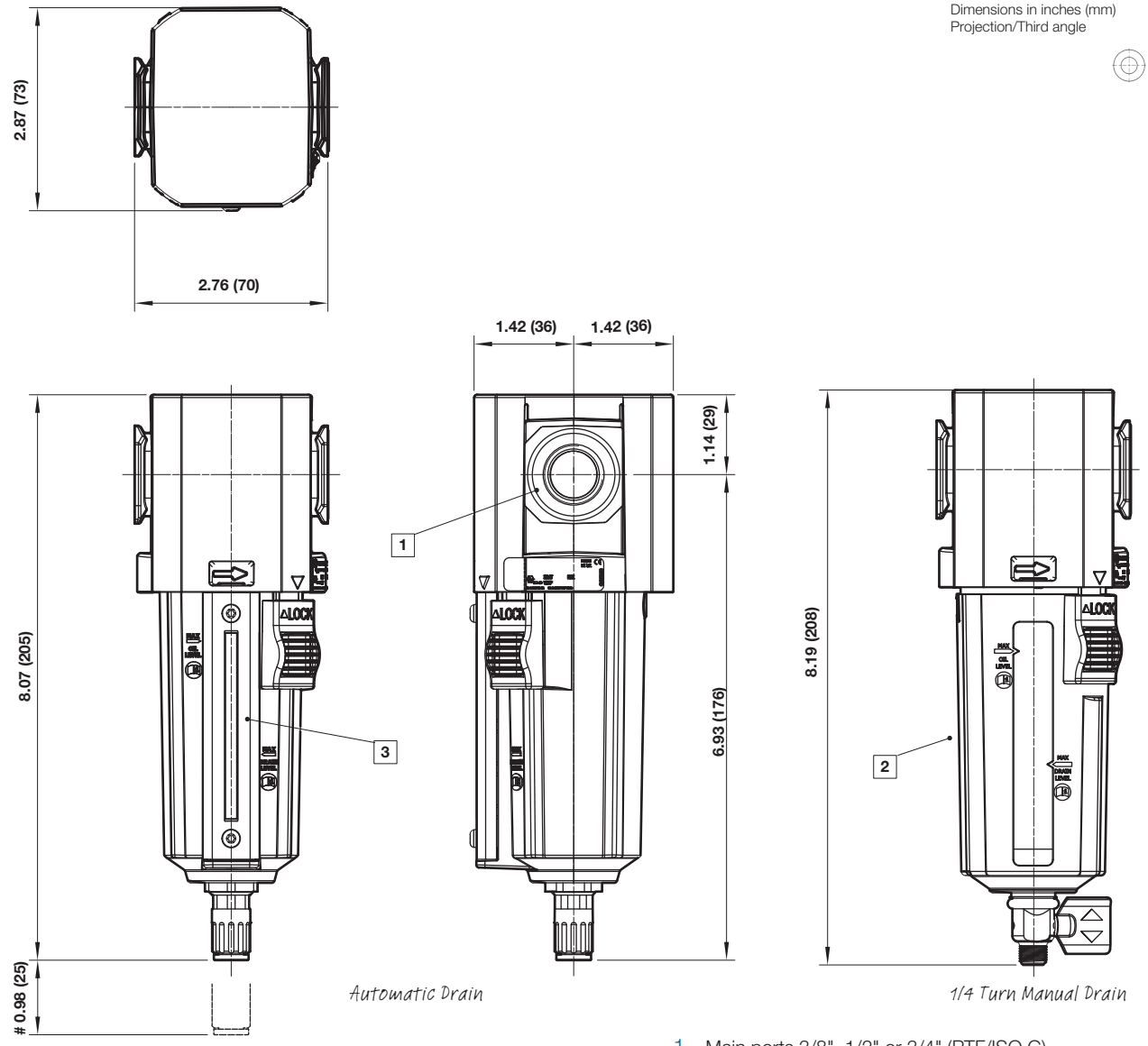




Minimum clearance for bowl removal

Dimensions (400 Series)

Dimensions in inches (mm)
Projection/Third angle



Minimum clearance for bowl removal

1. Main ports 3/8", 1/2" or 3/4" (PTF/ISO G)
2. Transparent bowl with guard
3. Metal bowl with liquid level indicator lens

PGFL Coalescing Filter Specifications

- > PGFL 200 port size: 1/4" and 3/8" (ISO G/PTF)
- > PGFL 400 port size: 3/8", 1/2", 3/4" (ISO G/PTF)
- > PG series design allows in-line installation or modular installation with other PG series products
- > High efficiency oil and particle removal
- > Double safety lock bowl
- > Metal bowl with prismatic liquid level indicator lens
- > Lightweight polycarbonate bowl
- > Service indicator standard
- > Air purity class in accordance with ISO 8573-1: Remaining oil aerosol to class 1

Technical Features

Medium:
Compressed air only

Maximum operating pressure:
Polycarbonate bowl: 145 psi (10 bar)
PG200 metal bowl: 246 psi (17 bar)
PG400 metal bowl: 290 psi (20 bar)

Oil removal:
Remaining oil content: 0.01 mg/m^3 at 69° F (21° C)

Particle removal:
To 0.01 µm

Port size:
1/4, 3/8, 1/2, 3/4
PTF or ISO G

Drain:
Manual or automatic

Automatic drain operating conditions (float operated):
Bowl pressure required to close drain: > 5 psi (0.35 bar)

Bowl pressure required to open drain: ≤2.9 psi (0.2 bar)

Minimum air flow required to close drain: 1 dm^3/s (2 scfm)

Ambient/Media temperature:
Polycarbonate bowl: 14 to 140° F (-10 - 60° C)

Metal bowl: -4 to 149° F (-20 - 65° C)

Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2° C).

Note: Install an PGF filter with a 5 µm filter element upstream of the PGFL filter for maximum service life.

Materials:
Body: Die cast aluminium
Body covers: ABS
Bowl: Transparent PC
with PP guard or die cast zinc (PG200) / aluminum (PG400)
Liquid level indicator lens (metal bowl): PA
Filter element: Synthetic fiber
Bowl O-ring: Chloroprene
Elastomers: NBR

Technical Data PGFL 200

Symbol	Port Size	Drain	Bowl	Weight lbs (kg)	Model
	1/4	Auto	Guarded polycarbonate	0.57 (0.26)	PGFL200-08A-1P-T
	3/8	Auto	Guarded polycarbonate	0.57 (0.26)	PGFL200-10A-1P-T
	1/4	Auto	Metal with level indicator	1.0 (0.46)	PGFL200-08A-1D-T
	3/8	Auto	Metal with level indicator	1.0 (0.46)	PGFL200-10A-1D-T
	1/4	Manual	Guarded polycarbonate	0.55 (0.25)	PGFL200-08M-1P-T
	3/8	Manual	Guarded polycarbonate	0.55 (0.25)	PGFL200-10M-1P-T
	1/4	Manual	Metal with level indicator	0.99 (0.45)	PGFL200-08M-1D-T
	3/8	Manual	Metal with level indicator	0.97 (0.44)	PGFL200-10M-1D-T

Technical Data PGFL 400

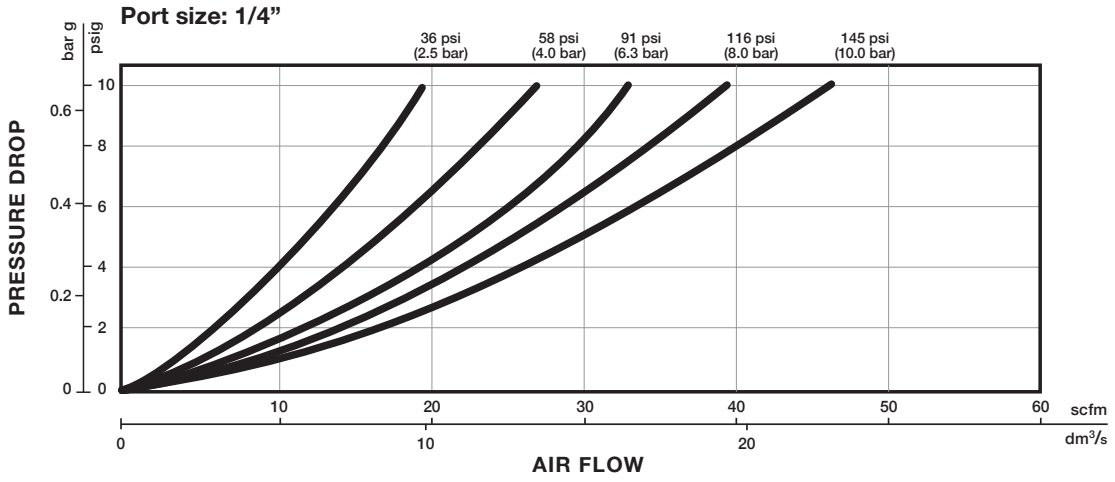
Symbol	Port Size	Drain	Bowl	Weight lbs (kg)	Model
	3/8	Auto	Guarded polycarbonate	0.8 (0.38)	PGFL400-10A-1P-T
	1/2	Auto	Guarded polycarbonate	0.8 (0.38)	PGFL400-15A-1P-T
	3/4	Auto	Guarded polycarbonate	0.8 (0.38)	PGFL400-20A-1P-T
	3/8	Auto	Metal with level indicator	1.1 (0.52)	PGFL400-10A-1D-T
	1/2	Auto	Metal with level indicator	1.1 (0.52)	PGFL400-15A-1D-T
	3/4	Auto	Metal with level indicator	1.1 (0.52)	PGFL400-20A-1D-T
	3/8	Manual	Guarded polycarbonate	0.8 (0.38)	PGFL400-10M-1P-T
	1/2	Manual	Guarded polycarbonate	0.8 (0.38)	PGFL400-15M-1P-T
	3/4	Manual	Guarded polycarbonate	0.8 (0.38)	PGFL400-20M-1P-T
	3/8	Manual	Metal with level indicator	1.1 (0.52)	PGFL400-10M-1D-T
	1/2	Manual	Metal with level indicator	1.1 (0.52)	PGFL400-15M-1D-T
	3/4	Manual	Metal with level indicator	1.1 (0.52)	PGFL400-20M-1D-T

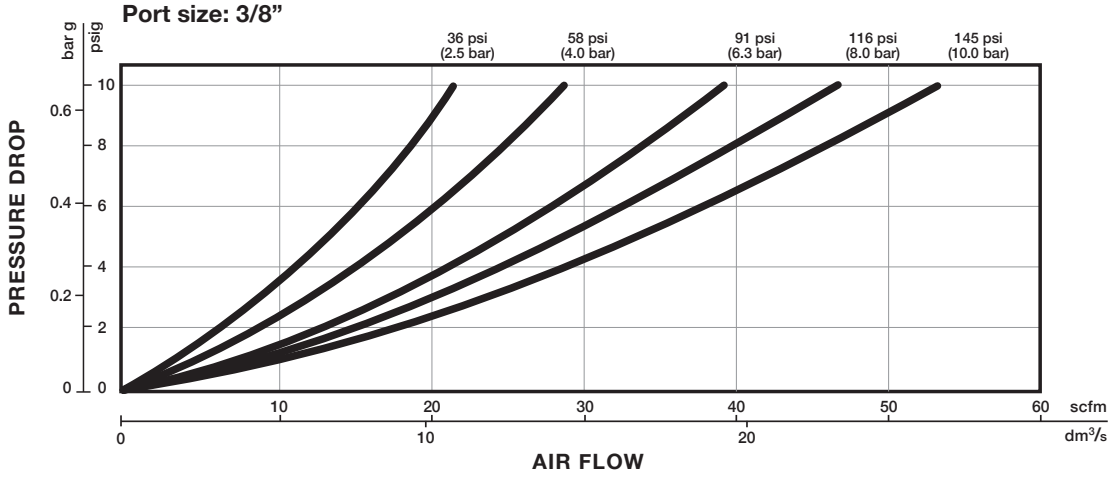
PGFL200 Flow Characteristics

Port size: 1/4”
Oil Removal Flow

Inlet Pressure psi (bar)	Flow-rate to maintain media velocity of ISO12500-1 test on oil coalescing filter (L/sec)
36 (2.5)	2.6
58 (4.0)	3.7
91 (6.3)	5.5
116 (8.0)	6.8
145 (10.0)	8.3

Dry Flow



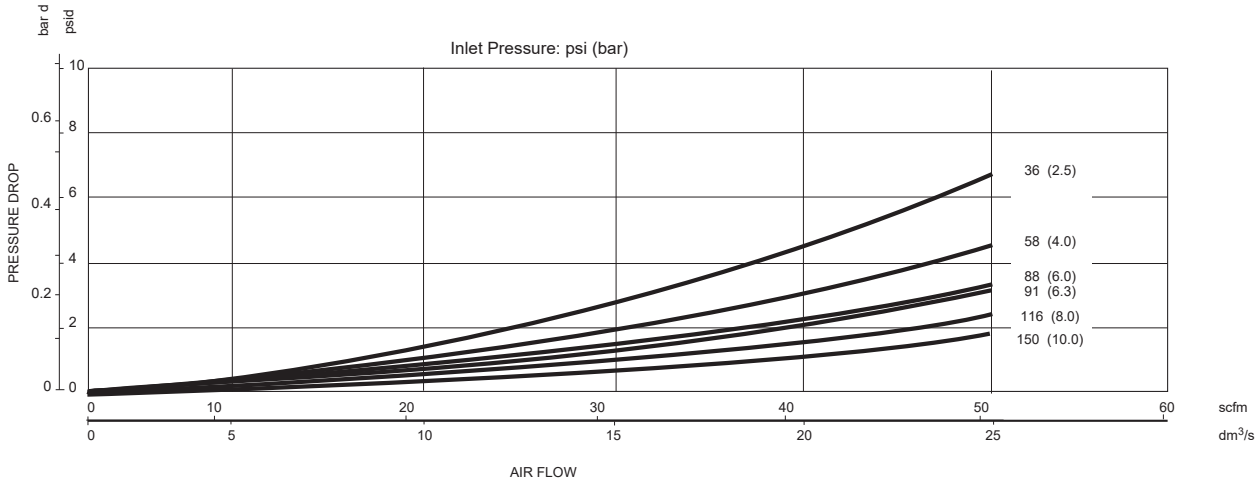


PGFL400 Flow Characteristics

Port size: 1/2”
Oil Removal Flow

Inlet Pressure psi (bar)	Maximum flow scfm (dm^3/s)[1]
36 (2.5)	25 (12)
58 (4)	36 (17)
91 (6.3)	53 (25)
116 (8)	63 (30)
145 (10)	74 (35)

[1] Maximum flow to maintain stated oil removal performance



How to Order

PGFL series filters can be configured using basic alphanumeric clusters. To create a PGFL series part number, choose port size, drain, element, bowl type, and thread form. Sample PGFL series part numbers and available options are featured below.

PGFL 200 - 08 A - 1 P - T

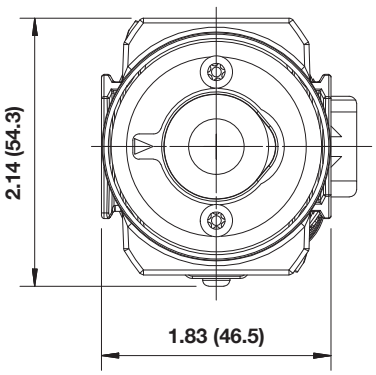
Port Size		Drain		Filtering		Bowl Type		Thread Form	
08	1/4"	A	Auto drain	1	0.01 µm	P	Transparent with guard	T	NPT
10	3/8"	M	Manual			D	Metal with liquid indicator	G	ISO G parallel

PGFL 400 - 15 A - 1 P - T

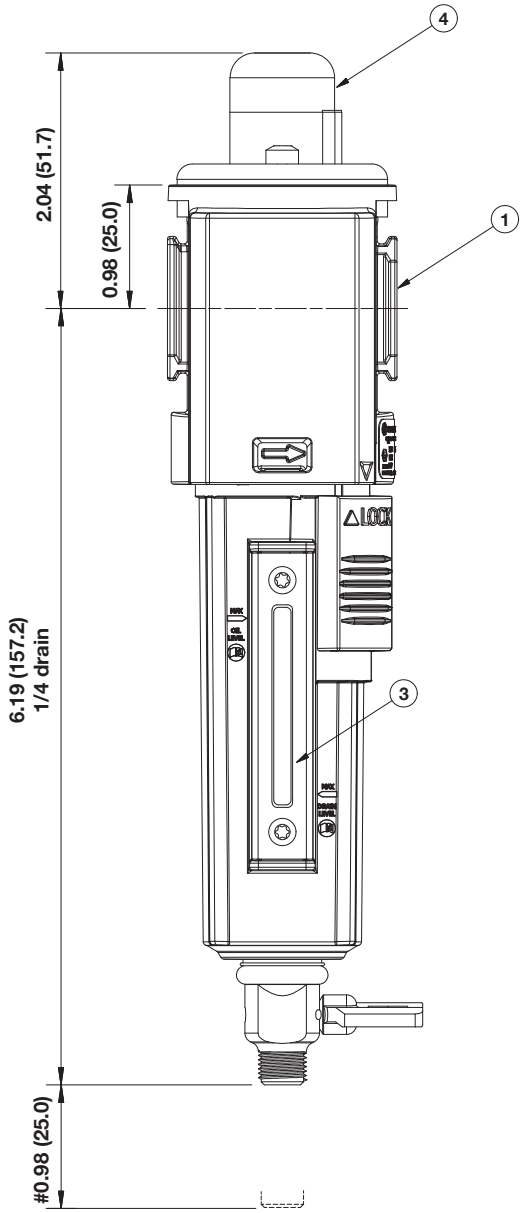
Port Size		Drain		Filtering		Bowl Type		Thread Form	
10	3/8"	A	Auto drain	1	0.01 µm	P	Transparent with guard	T	NPT
15	1/2"	M	Manual			D	Metal with liquid indicator	G	ISO G parallel
20	3/4"								

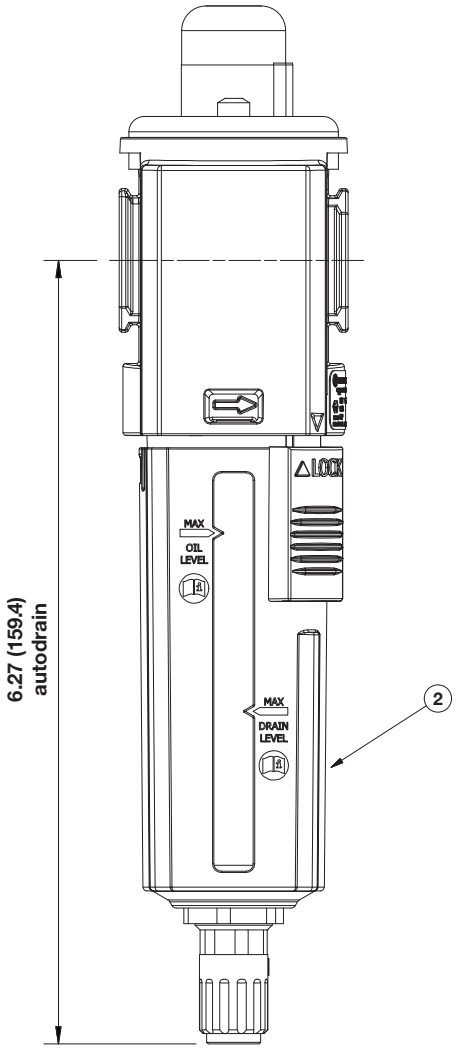
Dimensions (200 Series)

Dimensions in inches (mm)
Projection/Third angle



1. Main ports 1/4”, 3/8” (ISO G/PTF)
2. Transparent bowl with guard
3. Metal bowl with liquid level indicator lens
4. Service indicator

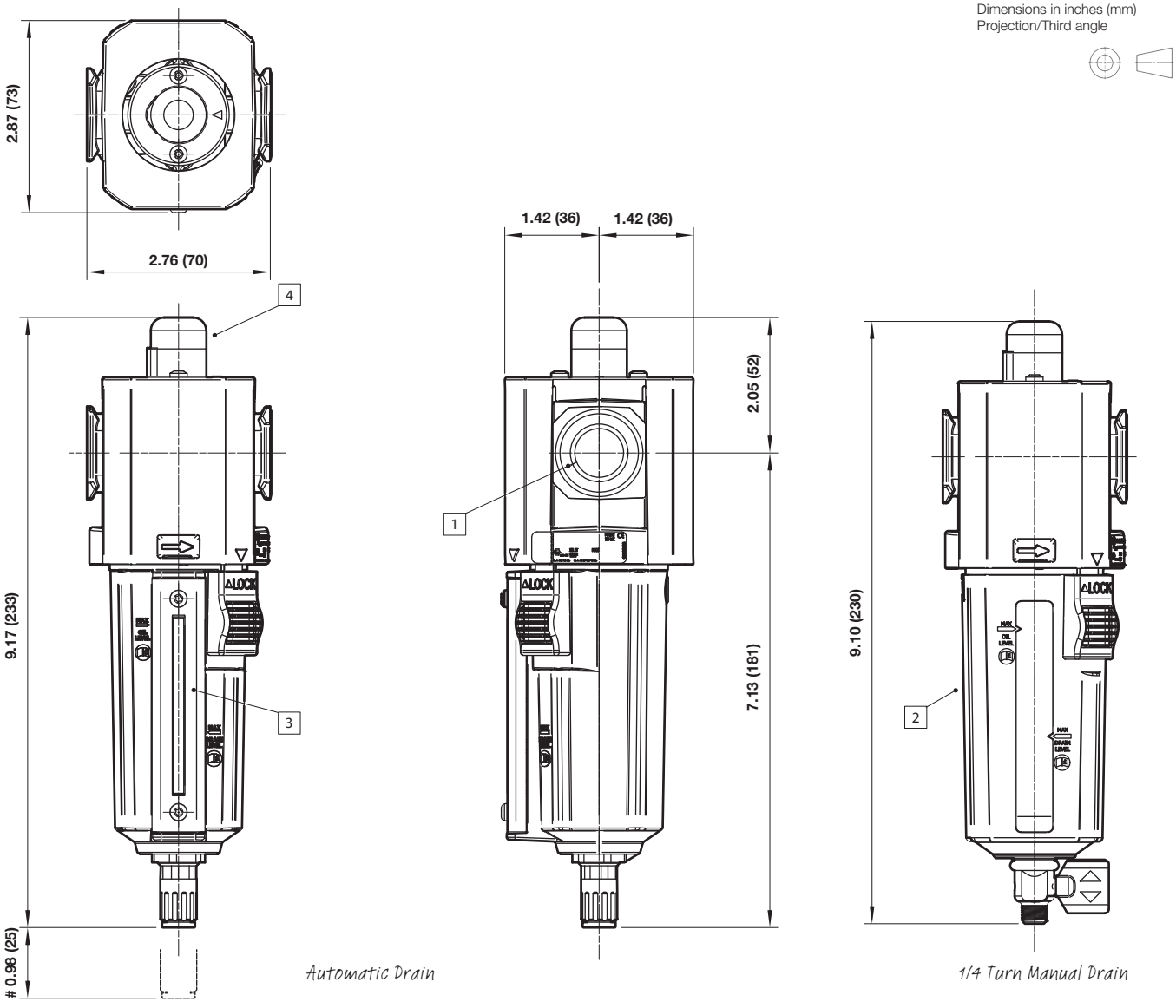




Minimum clearance for bowl removal

Dimensions (400 Series)

Dimensions in inches (mm)
Projection/Third angle



Automatic Drain

1/4 Turn Manual Drain

Minimum clearance for bowl removal

1. Main ports 3/8", 1/2" or 3/4" (ISO G/PTF)
2. Transparent bowl with guard
3. Metal bowl with liquid level indicator lens
4. Service indicator

PGFV Vapor Removal Filter Specifications

- > PGFV 200 port size: 1/4" and 3/8" (ISO G/NPT)
- > PGFV 400 port size: 3/8", 1/2", 3/4" (ISO G/NPT)
- > PG series design allows in-line installation or modular installation with other PG series products
- > Adsorbing type activated carbon element removes oil vapors and most hydrocarbon odors
- > Double safety lock bowl
- > Lightweight polycarbonate bowl
- > Metal bowl option
- > Air purity class in accordance with ISO 8573-1: Remaining oil aerosol to class 0

Technical Features

Medium:
Compressed air only

Maximum operating pressure:
Polycarbonate bowl: 145 psi (10 bar)
PG200 metal bowl: 248 psi (17 bar)
PG400 metal bowl: 290 psi (20 bar)
Remaining oil content: 0,003 mg/m^3 max. at 69°F (21°C)

PGFV 200 port size:
G1/4, G3/8, 1/4 PTF, 3/8 PTF

PGFV 400 port size:
G3/8, G1/2, G3/4, 3/8 PTF, 1/2 PTF, 3/4 PTF

Ambient/Media temperature:
Polycarbonate bowl: 14 - 140º F (-10 - 60º C)
Metal bowl: -4 - 149° F (-20 - 65° C)

Air supply must be dry enough to avoid ice formation at temperatures below 35° F (2° C).

Note: Install an PGFL coalescing filter upstream of the PGFV filter for maximum service life.

PGFV 200 Flow:
40 scfm
91 psi (6.3 bar) inlet
7.25 psi (0.5 bar) pressure drop
1/4" flow = 40 scfm (18.8 dm^3/s)

PGFV 400 flow:
53 scfm (25 dm^3/s)
To maintain stated oil content at port size: 1/2"
Operating pressure: 91 psi (6.3 bar)
Materials:
Body: Die cast aluminium
Body covers: ABS
Bowl: Transparent PC with PP guard or die cast zinc (PG200) / aluminum (PG400)
Bowl "o"- ring: Chloroprene
Elastomers: NBR

Technical Data PGFV 200

Symbol	Port Size	Drain	Filter Element	Bowl	Weight lbs (kg)	Model
	1/4	Closed bowl	Vapor removal	Guarded polycarbonate	0.46 (0.21)	PGFV 200-08C-P-T
	3/8	Closed bowl	Vapor removal	Guarded polycarbonate	0.44 (0.20)	PGFV 200-10C-P-T
	1/4	Closed bowl	Vapor removal	Metal bowl with sight glass	0.88 (0.40)	PGFV 200-08C-D-T
	3/8	Closed bowl	Vapor removal	Metal bowl with sight glass	0.88 (0.40)	PGFV 200-10C-D-T

Technical Data PGFV 400

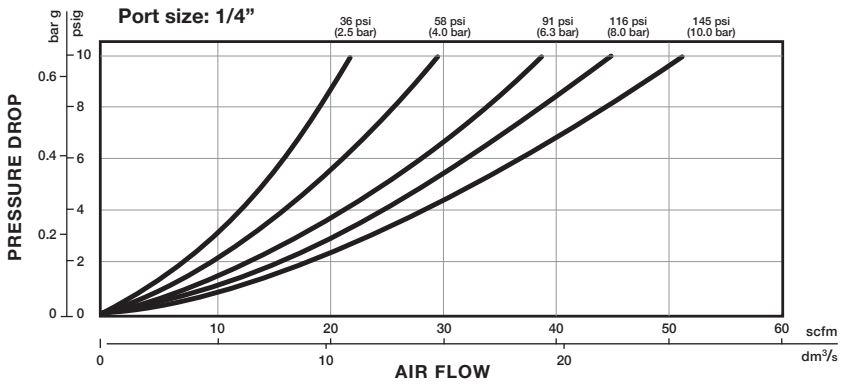
Symbol	Port Size	Drain	Filter element	Bowl	Weight lbs (kg)	Model
	1/4	Closed bowl	Vapor removal	Guarded polycarbonate	0.8 (0.38)	PGFV 400-10C-P-T
	3/8	Closed bowl	Vapor removal	Guarded polycarbonate	0.8 (0.38)	PGFV 400-15C-P-T
	1/4	Closed bowl	Vapor removal	Guarded polycarbonate	0.8 (0.38)	PGFV 400-20C-P-T
	3/8	Closed bowl	Vapor removal	Metal bowl	1.1 (0.52)	PGFV 400-10C-M-T
	1/4	Closed bowl	Vapor removal	Metal bowl	1.1 (0.52)	PGFV 400-15C-M-T
	3/8	Closed bowl	Vapor removal	Metal bowl	1.1 (0.52)	PGFV 400-20C-M-T

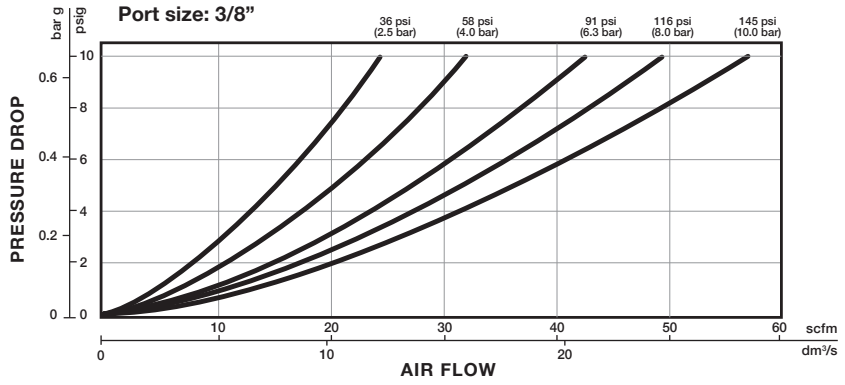
PGFV200 Flow Characteristics

Port size: 1/4”
Vapor Removal Flow

Inlet Pressure psi (bar)	Flow-rate to maintain media velocity of ISO12500-1 test on oil vapor filter (L/sec)
36 (2.5)	1.9
58 (4)	2.8
91 (6.3)	4.0
116 (8)	5.0
145 (10)	6.1

Dry Flow





PGFV400 Flow Characteristics

Port size: 1/2”
Vapor Removal Flow

Inlet Pressure psi (bar)	Maximum flow scfm (dm³/s)[1]
36 (2.5)	32 (15)
58 (4)	42 (20)
91 (6.3)	53 (25)
116 (8)	59 (28)
145 (10)	63 (30)

[1] Maximum flow to maintain stated oil removal performance

PGFV series filters can be configured using basic alphanumeric clusters. To create a PGFV series part number, choose port size, drain, element, bowl type, and thread form. Sample PGFV series part numbers and available options are featured below.

PGFV 200 - 08 C - P - T

Port Size	
08	1/4”
10	3/8“

Drain	
C	Closed bowl

Bowl Type	
P	Transparent with guard
D	Metal with liquid indicator

Thread Form	
T	NPT
G	ISO G parallel

PGFV 400 - 15 C - P - T

Port Size	
10	3/8“
15	1/2”
20	3/4”

Drain	
C	Closed bowl

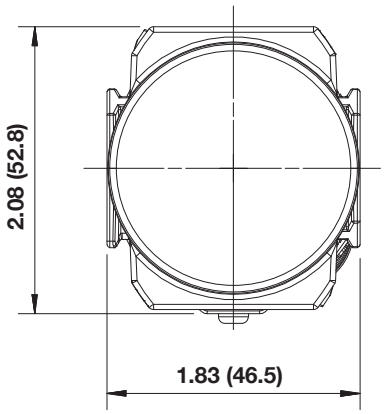
Bowl Type	
P	Transparent with guard
M	Metal

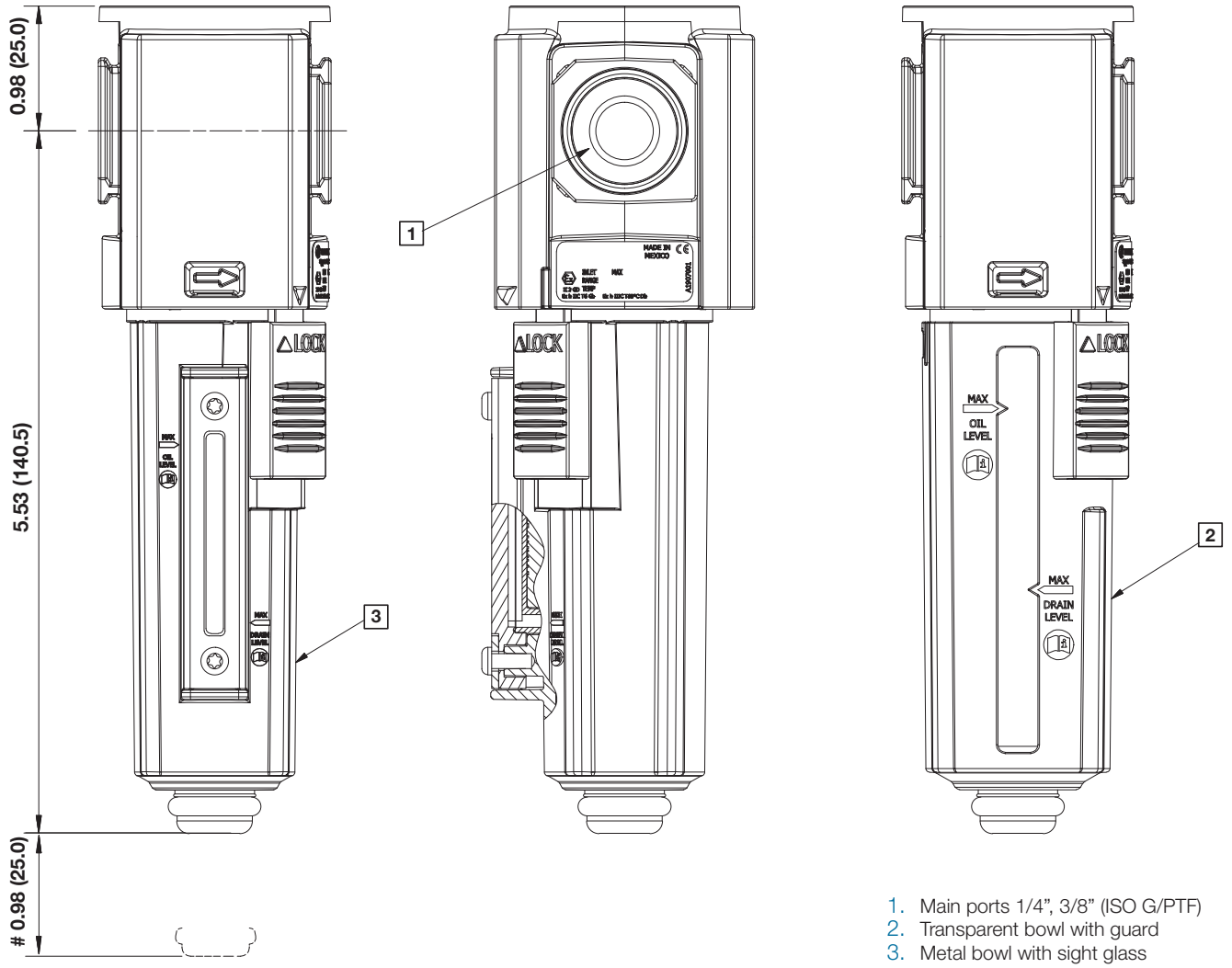
Thread Form	
T	NPT
G	ISO G parallel

How to Specify

Dimensions (200 Series)

Dimensions in inches (mm)
Projection/Third angle



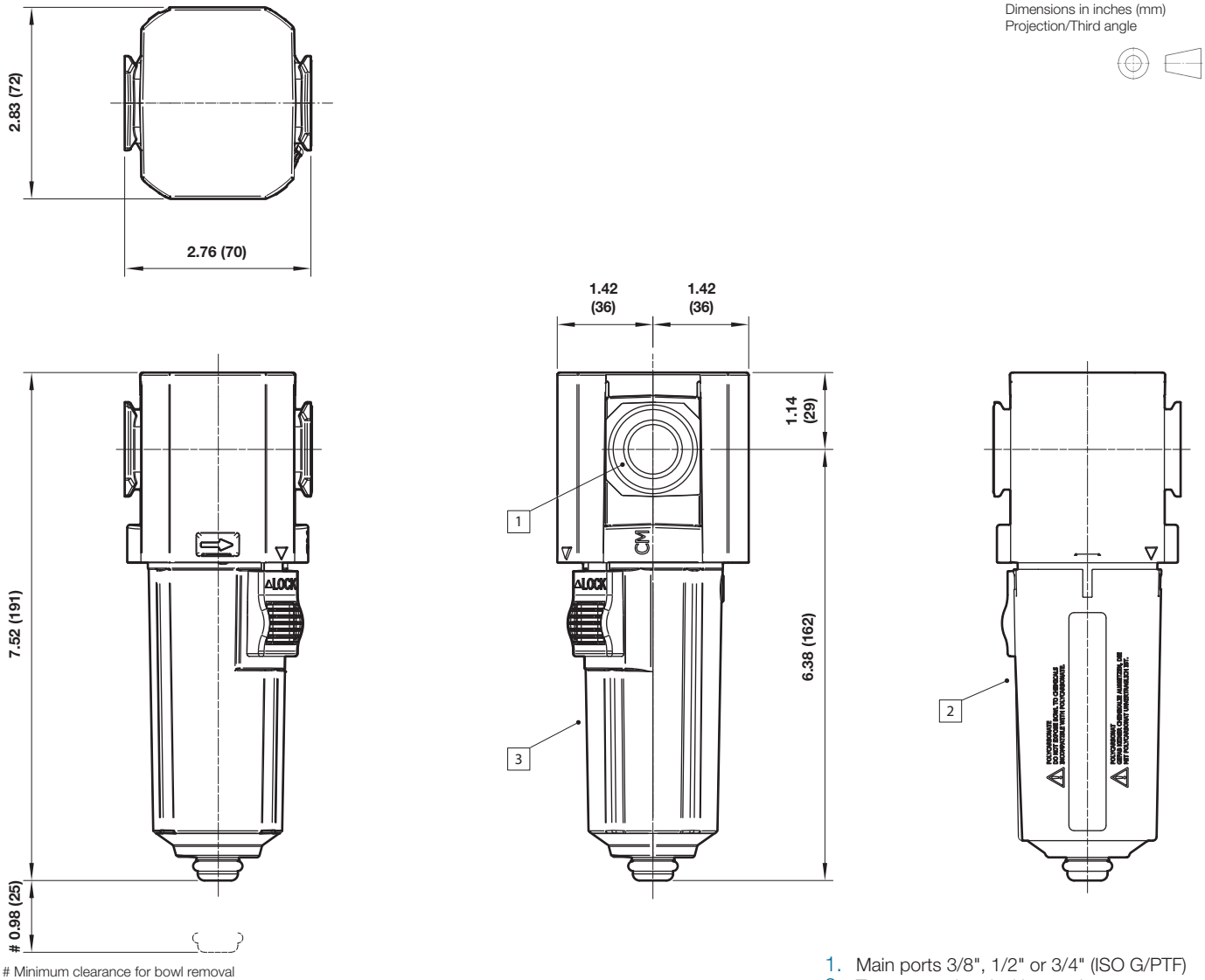


Minimum clearance for bowl removal

1. Main ports 1/4”, 3/8” (ISO G/PTF)
2. Transparent bowl with guard
3. Metal bowl with sight glass

Dimensions (400 Series)

Dimensions in inches (mm)
Projection/Third angle



Minimum clearance for bowl removal

1. Main ports 3/8", 1/2" or 3/4" (ISO G/PTF)
2. Transparent bowl with guard
3. Metal bowl

Product Features

PG Series Regulators

PGR Series General Purpose Regulators

PGR regulators offer a variety of outlet pressure ranges: 60 psig (4 bar), 150 psig (10 bar) and 250 psig (17 bar).

The non-rising adjustment knob displays a blue band while pressure is being adjusted. Once desired pressure is reached, this disappears when the knob is pushed down into the fixed position. This action also reveals a padlock hole, allowing the regulator to be locked with little hassle.

The 17 bar version has a metal bonnet and a T-bar adjustment. This is necessary to ensure easy operation and accurate pressure control at higher pressures.

Both versions are supplied with an integrated pressure gauge as standard. This high visibility gauge fits inside the main body of the regulator, significantly reducing the risk of damage to the gauge, which has long been the most vulnerable part of an FRL assembly.

PGFR Series General Purpose Filter/Regulators

PGFR Series filter/regulators combine all the features of general purpose filters and regulators, including built in padlock holes, in-bowl filtration cartridge removal, and bowl double safety lock.

PGR General Purpose Regulator Specifications

- > PGR 200 port size: 1/4" and 3/8" (ISO G/PTF)
- > PGR 400 port size: 3/8", 1/2", 3/4" (ISO G/PTF)
- > PG series design allows in-line installation or modular installation with other PG series products
- > Push to lock adjusting knob with built in tamper resistant feature
- > Easy to read flush mounted integrated pressure gauge as standard

Technical Features

Medium:
Compressed air only

Maximum supply pressure:
290 psi (20 bar)

Outlet pressure ranges:
4 to 145 psi (0.3 to 10 bar),
4 to 58 psi (0.3 to 4 bar),
10 to 246 psi (0.7 to 17 bar)

PGR 200 port size:
G1/4, G3/8,1/4 PTF, 3/8 PTF

PGR 400 port size:
G3/8, G1/2, G3/4, 3/8 PTF,
1/2 PTF, 3/4 PTF

Gauge:
Integrated as standard
Gauge port 1/8 as option

Diaphragm type:
Relieving

Ambient/Media temperature:
-4 to 149° F (-20 to 65° C)

Air supply must be dry enough to avoid ice formation at temperatures below 35° F (2° C).

Materials:
Body: Die cast aluminium
Body covers: ABS
Bonnet: POM/Aluminium
Valve: PP
Elastomers: NBR

PGR 200 Flow:
69 scfm (33 dm^3/s) at port size 1/4", 66 scfm (31 dm^3/s) at port size 3/8", inlet pressure 145 psi (10 bar), 91 psi (6.3 bar) set pressure and a Δp: 14.5 psi (1 bar) droop from set.

PGR 400 Flow:
265 scfm (125 dm^3/s) at port size: 1/2", inlet pressure 145 psi (10 bar), 91 psi (6.3 bar) set pressure and a Δp: 14.5 psi (1 bar) droop from set.

Technical Data PGR200

Symbol	Port Size	Pressure Range (bar)	Adjustment	Integrated Gauge (bar)	Weight lbs (kg)	Model*
	1/4	0.3 - 10	Knob	0 - 10	0.51 (0.23)	PGR200-08K-MG-T
	3/8	0.3 - 10	Knob	0 - 10	0.51 (0.23)	PGR200-10K-MG-T

*All models shown here are supplied with integrated gauge applicable for flow direction left to right.

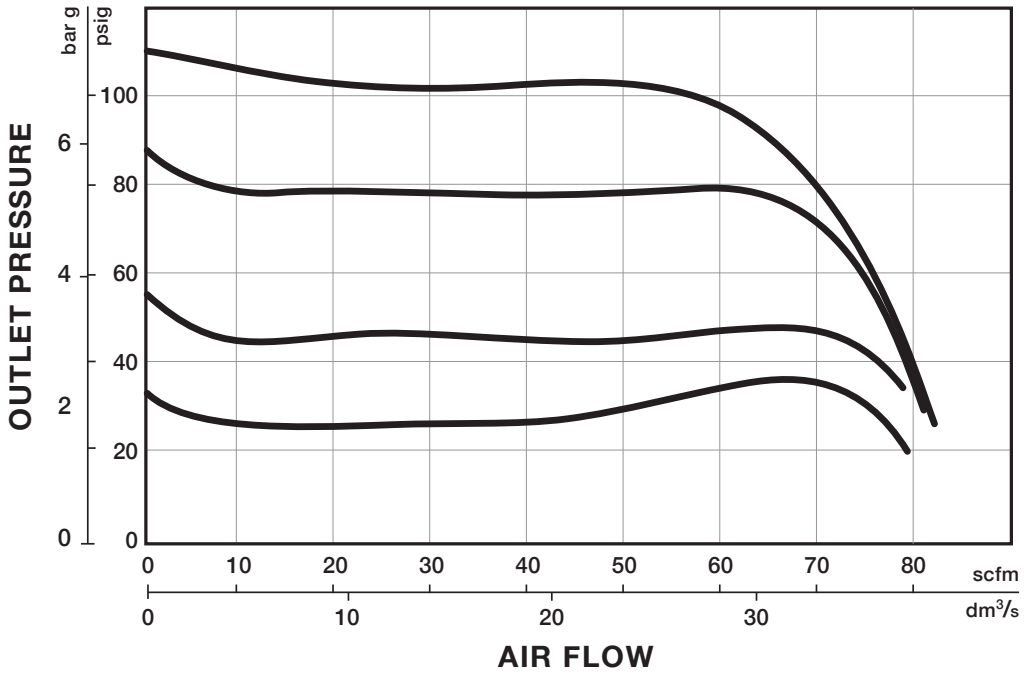
Technical Data PGR400

Symbol	Port Size	Pressure Range (bar)	Adjustment	Integrated Gauge (bar)	Weight lbs (kg)	Model*
	3/8	0.3 - 10	Knob	0 to 10	1.30 (0.59)	PGR400-10K-MG-T
	1/2	0.3 - 10	Knob	0 to 10	1.30 (0.59)	PGR400-15K-MG-T
	3/4	0.3 - 10	Knob	0 to 10	1.30 (0.59)	PGR400-20K-MG-T

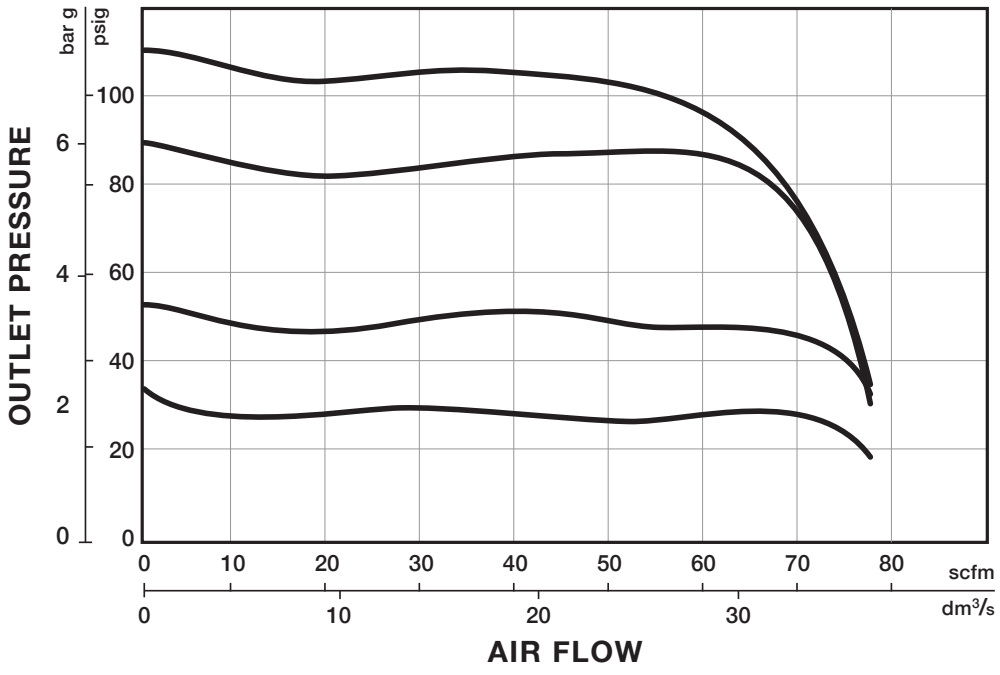
*All models shown here are supplied with integrated gauge applicable for flow direction left to right.

PGR200 Flow Characteristics

Inlet pressure: 145 psi (10 bar)
Range: 4 to 145 psi
(0.3 to 10 bar)
Port size: 1/4”

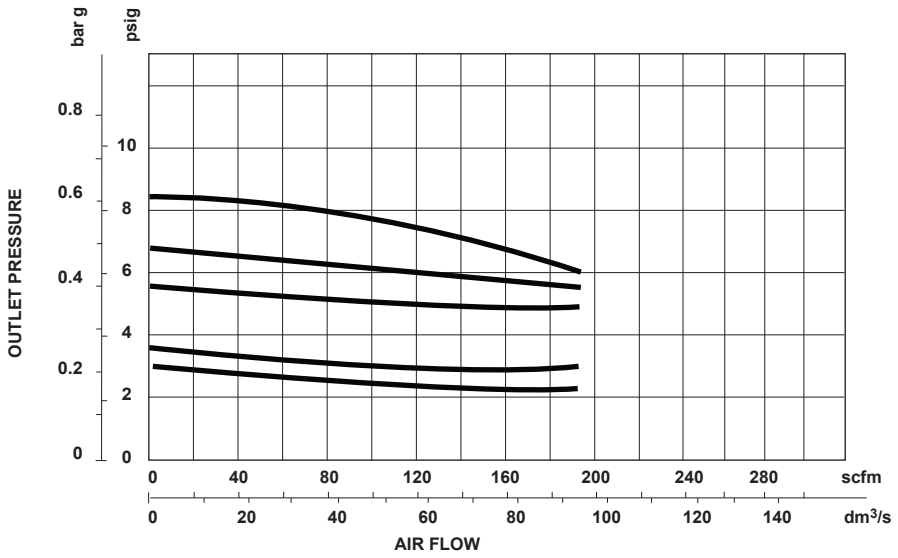


Inlet pressure: 145 psi (10 bar)
Range: 4 to 145 psi
(0.3 to 10 bar)
Port size: 3/8”

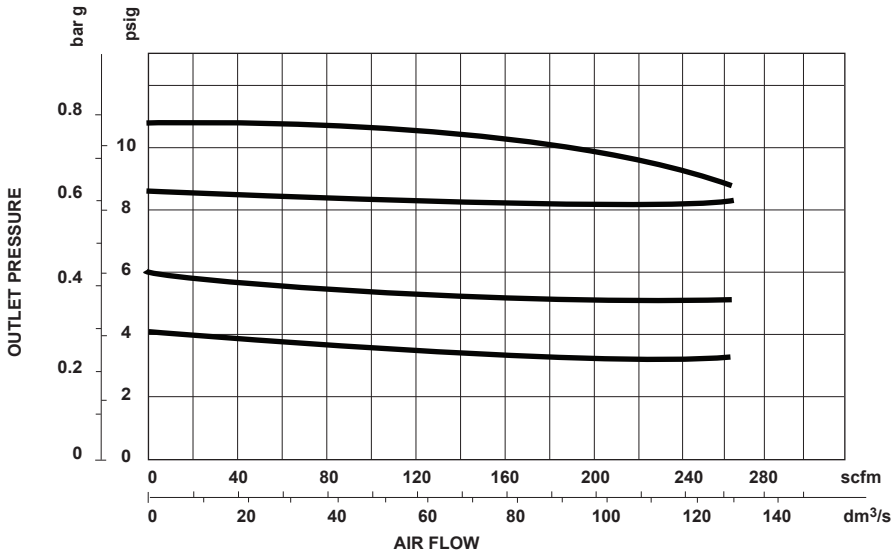


PGR400 Flow Characteristics

Port size: 1/2"
Inlet pressure: 101 psi (7 bar)



Port size: 1/2"
Inlet pressure: 145 psi (10 bar)



How to Order

PGR series regulators can be configured using basic alphanumeric clusters. To create a PGR series part number, choose model, port size, adjustment, pressure range, gauge, and thread form. Sample PGR series part numbers and available options are featured below.

PGR 200 - 08 K - M G - T

Model	
PGR	General
PGRK	Reverse flow

Port Size	
08	1/4 NPT
10	3/8 NPT

Adjustment	
K	Knob (standard)
T	T-bar*

*T-bar with 0.7-17 only

Pressure Range	
L	0.3-4 bar
M	0.3-10 bar
H	0.7-17 bar*

* 0.7 -17 bar with T-bar only

Gauge	
G	With fitted integrated gauge
N	Without integrated gauge, with gauge port 1/8"

Thread Form	
T	NPT
G	ISO G parallel

PGR 400 - 15 K - M G - T

Model	
PGR	General

Port Size	
10	3/8 NPT
15	1/2 NPT
20	3/4 NPT

Adjustment	
K	Knob (standard)
T	T-bar*

Pressure Range	
L	0.3-4 bar
M	0.3-10 bar
H	0.7-17 bar*

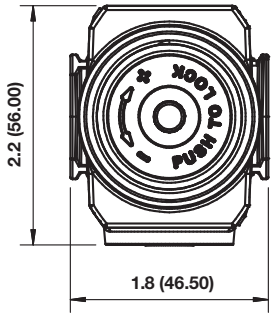
* 0.7 -17 bar with T-bar only

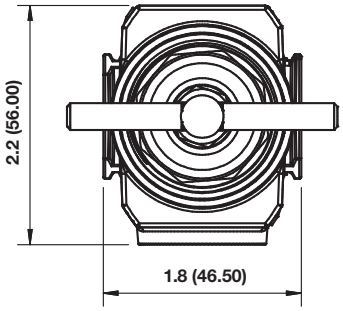
Gauge	
G	With fitted integrated gauge
N	Without integrated gauge, with gauge port 1/8"

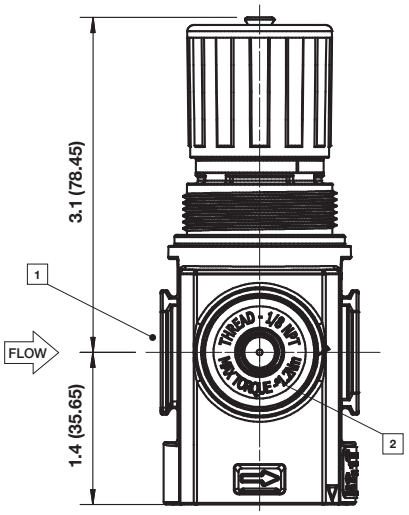
Thread Form	
T	NPT
G	ISO G

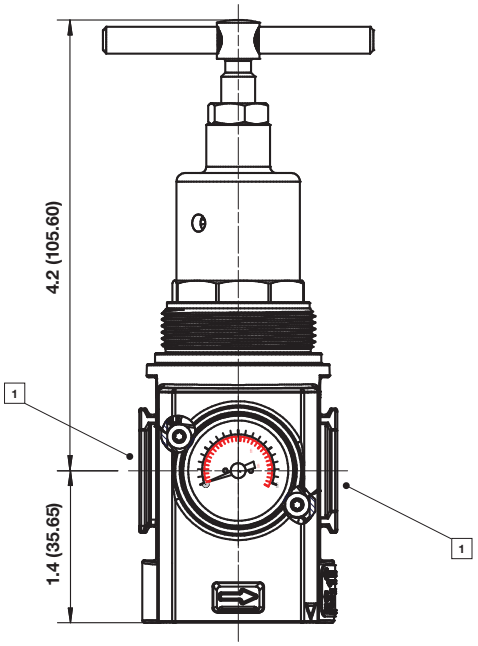
Dimensions (200 Series)

Dimensions in inches (mm)
Projection/Third angle





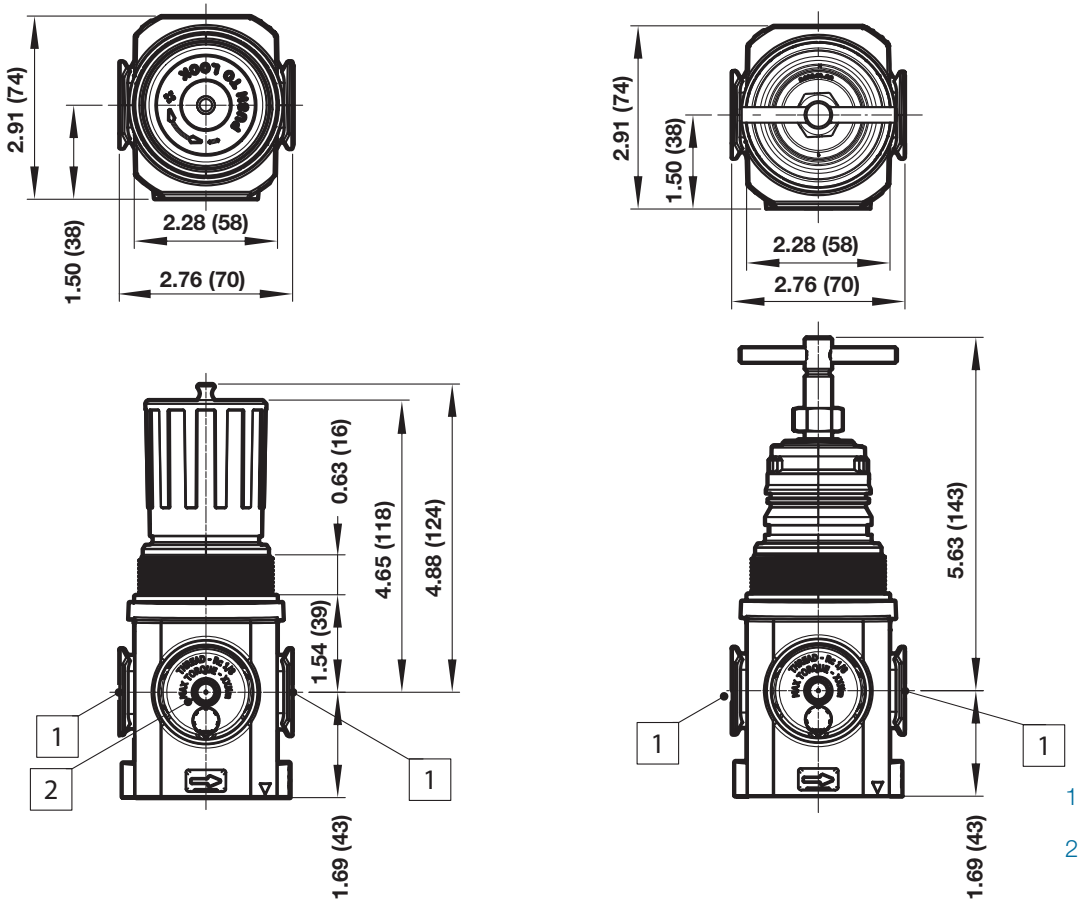




1. Main ports 1/4", 3/8", (ISO G/PTF)
2. Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports

Dimensions (400 Series)

Dimensions in inches (mm)
Projection/Third angle



1. Main ports 3/8", 1/2" or 3/4" (ISO G/PTF)
2. Gauge Port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports

PGFR Filter/Regulator Specifications

- > PGFR 200 port size: 1/4" and 3/8" (PTF/ISO G)
- > PGFR 400 port size: 3/8", 1/2", 3/4" (PTF/ISO G)
- > PG series design allows in-line installation or modular installation with other PG series products
- > 5 or 40 micron particle and high efficiency water removal (> 95%)
- > Double safety lock bowl
- > Push to lock adjusting knob with built-in tamper resistant feature
- > Metal bowl with prismatic liquid level indicator lens
- > Lightweight polycarbonate bowl with guard
- > Easy to read flush mounted integrated pressure gauge

Technical Features

Medium:
Compressed air only

Maximum supply pressure:
Polycarbonate bowl: 145 psi (10 bar)
PG200 metal bowl: 248 psi (17 bar)
PG400 metal bowl: 290 psi (20 bar)

Outlet pressure ranges:
4 to 145 psi (0.3 to 10 bar),
4 to 58 psi (0.3 to 4 bar),
2 to 250 psi (0.7 to 17 bar)

Filter element:
5 µm & 40 µm

PGFR 200 port size:
G1/4, G3/8, 1/4 PTF, 3/8 PTF

PGFR 400 port size:
G3/8, G1/2, G3/4, 3/8 PTF,
1/2 PTF, 3/4 PTF

Gauge:
Integrated as standard
Gauge port 1/8 as option

Diaphragm type:
Relieving

Drain:
Manual or automatic

Automatic drain operating conditions (float operated): Bowl pressure required to close drain: > 5 psi (0.35 bar)

Bowl pressure required to open drain: ≤ 2.9 psi (0.2 bar)

Minimum air flow required to close drain: 2 scfm (1 dm^3/s)

Ambient/Media temperature:
Polycarbonate bowl: 14 to 140° F (-10 to 60° C)

Metal bowl: -4 to 149° F (-20 to 65° C)

Air supply must be dry enough to avoid ice formation at temperatures below 35° F (2° C).

PG200 flow:
79 scfm (37 dm^3/s) at port size 1/4", 79 scfm (37 dm^3/s) at port size 3/8", inlet pressure 145 psi (10 bar), 91 psi (6.3 bar) set pressure and a Δp: 14.5 psi (1 bar) droop from set.

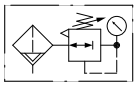
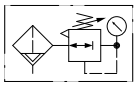
PG400 flow:
212 scfm (100 dm^3/s) At port size: 1/2", inlet pressure 145 psi (10 bar), 91 psi (6.3 bar) set pressure and a Δp: 14.5 psi (1 bar) droop from set.
Filter element: 40 µm

Materials:
Body: Die cast aluminum
Body covers: ABS
Bonnet: Acetal/ Aluminum
Valve: PP
Bowl: Transparent PC with PP guard or die cast zinc (PG200) / aluminum (PG400)
Liquid level indicator lens (metal bowl): PA
Filter element: sintered PP
Bowl 'o'- ring: Chloroprene
Elastomers: NBR

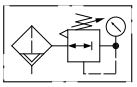
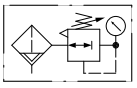
How to Specify

PGFR Filter/Regulator Specifications

Technical Data PGFR200

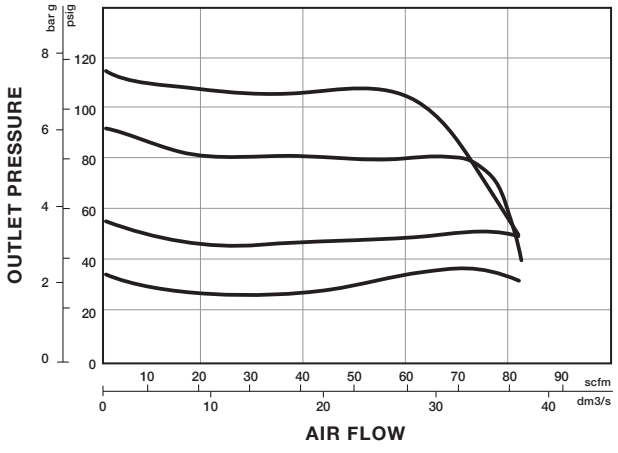
Symbol	Port PTF	Drain	Pressure Range psig (bar)	Filter Element (µm)	Bowl	Weight lbs (kg)	Model
	1/4	Auto	4.4 - 145 (0.3 - 10)	40	Guarded polycarbonate	0.68 (0.31)	PGFR 200-08A-40P-KMG-T
	3/8	Auto	4.4 - 145 (0.3 - 10)	40	Guarded polycarbonate	0.66 (0.30)	PGFR 200-10A-40P-KMG-T
	1/4	Auto	4.4 - 145 (0.3 - 10)	40	Metal with level indicator	1.1 (0.50)	PGFR 200-08A-40D-KMG-T
	3/8	Auto	4.4 - 145 (0.3 - 10)	40	Metal with level indicator	1.1 (0.49)	PGFR 200-10A-40D-KMG-T
	1/4	Manual	4.4 - 145 (0.3 - 10)	40	Guarded polycarbonate	0.64 (0.29)	PGFR 200-08M-40P-KMG-T
	3/8	Manual	4.4 - 145 (0.3 - 10)	40	Guarded polycarbonate	0.64 (0.29)	PGFR 200-10M-40P-KMG-T
	1/4	Manual	4.4 - 145 (0.3 - 10)	40	Metal with level indicator	1.1 (0.49)	PGFR 200-08M-40D-KMG-T
	3/8	Manual	4.4 - 145 (0.3 - 10)	40	Metal with level indicator	1.1 (0.48)	PGFR 200-10M-40D-KMG-T

Technical Data PGFR400

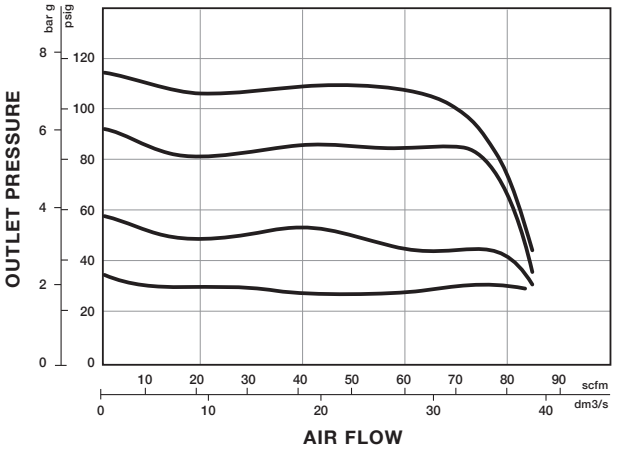
Symbol	Port PTF	Drain	Pressure Range psig (bar)	Filter Element (µm)	Bowl	Weight lbs (kg)	Model
	3/8	Auto	4.4 - 145 (0.3 - 10)	40	Guarded polycarbonate	1.6 (0.73)	PGFR 400-10A-40P-KMG-T
	1/2	Auto	4.4 - 145 (0.3 - 10)	40	Guarded polycarbonate	1.6 (0.73)	PGFR 400-15A-40P-KMG-T
	3/4	Auto	4.4 - 145 (0.3 - 10)	40	Guarded polycarbonate	1.6 (0.73)	PGFR 400-20A-40P-KMG-T
	3/8	Auto	4.4 - 145 (0.3 - 10)	40	Metal with level indicator	1.6 (0.73)	PGFR 400-10A-40D-KMG-T
	1/2	Auto	4.4 - 145 (0.3 - 10)	40	Metal with level indicator	1.6 (0.73)	PGFR 400-15A-40D-KMG-T
	3/4	Auto	4.4 - 145 (0.3 - 10)	40	Metal with level indicator	1.6 (0.73)	PGFR 400-20A-40D-KMG-T
	3/8	Manual	4.4 - 145 (0.3 - 10)	40	Guarded polycarbonate	1.6 (0.73)	PGFR 400-10M-40P-KMG-T
	1/2	Manual	4.4 - 145 (0.3 - 10)	40	Guarded polycarbonate	1.6 (0.73)	PGFR 400-15M-40P-KMG-T
	3/4	Manual	4.4 - 145 (0.3 - 10)	40	Guarded polycarbonate	1.6 (0.73)	PGFR 400-20M-40P-KMG-T
	3/8	Manual	4.4 - 145 (0.3 - 10)	40	Metal with level indicator	1.6 (0.73)	PGFR 200-10M-40D-KMG-T
	1/2	Manual	4.4 - 145 (0.3 - 10)	40	Metal with level indicator	1.6 (0.73)	PGFR 400-15M-40D-KMG-T
	3/4	Manual	4.4 - 145 (0.3 - 10)	40	Metal with level indicator	1.6 (0.73)	PGFR 400-20M-40D-KMG-T

PGFR200 Flow Characteristics

Inlet pressure: 145 psi (10 bar)
Range: 4 to 145 psi
(0.3 to 10 bar)
Port size: 1/4", 5 µm element

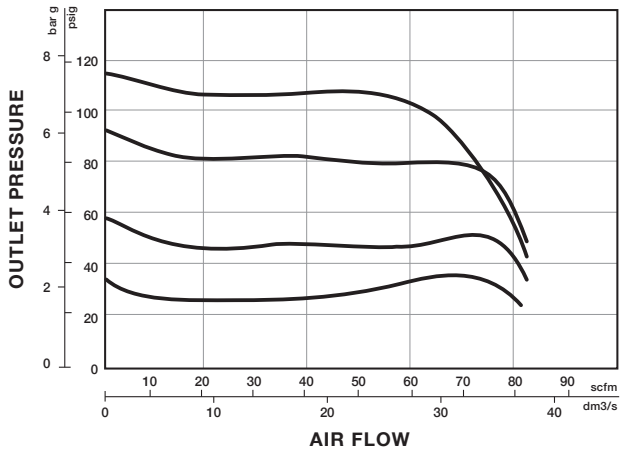


Inlet pressure: 145 psi (10 bar)
Range: 4 to 145 psi
(0.3 to 10 bar)
Port size: 3/8", 5 µm element

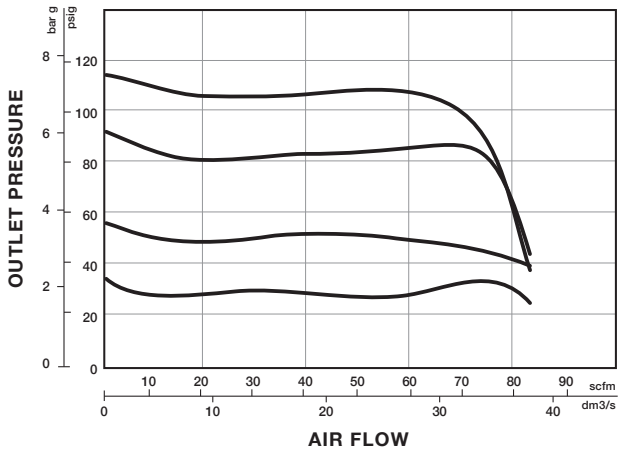


PGFR200 Flow Characteristics

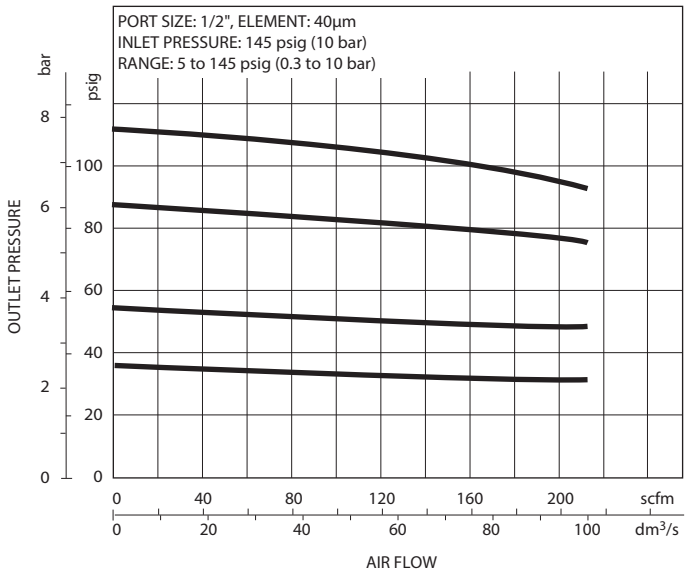
Inlet pressure: 145 psi (10 bar)
Range: 4 to 145 psi
(0.3 to 10 bar)
Port size: 1/4", 40 µm element



Inlet pressure: 145 psi (10 bar)
Range: 4 to 145 psi
(0.3 to 10 bar)
Port size: 3/8", 40 µm element



PGFR400 Flow Characteristics



How to Order

PGFR series filter-regulators can be configured using basic alphanumeric clusters. To create a PGFR series part number, choose port size, drain, filtering, bowl type, adjustment, pressure range, gauge, and thread form. Sample PGFR series part numbers and available options are featured below.

PGFR 200 - 08 A - 40 P - K M G - T

Port Size

08	1/4 NPT
10	3/8 NPT

Filtering

5	5µm
40	40µm

Bowl Type

P	Transparent with guard***
D	Metal with liquid indicator

***Not with 17 bar spring

Pressure Range

L	0.3-4 bar
M	0.3-10 bar
H	0.7-17 bar*

* 0.7 -17 bar with T-bar only

Thread Form

T	NPT
G	ISO G parallel

Drain

A	Auto drain
M	Manual drain

Adjustment

K	Knob
T	T-bar**

**T-bar with 0.7-17 only

Gauge

G	With fitted integrated gauge
N	Without integrated gauge, with gauge port 1/8"

PGFR 400 - 15 A - 40 P - K M G - T

Port Size

10	3/8 NPT
15	1/2 NPT
20	3/4 NPT

Filtering

5	5µm
40	40µm

Bowl Type

P	Transparent with guard**
D	Metal with liquid indicator

**Not with 17 bar spring

Pressure Range

L	0.3-4 bar
M	0.3-10 bar
H	0.7-17 bar*

* 17 bar requires a T-bar

Thread Form

T	NPT
G	ISO G parallel

Drain

A	Auto drain
M	Manual drain

Adjustment

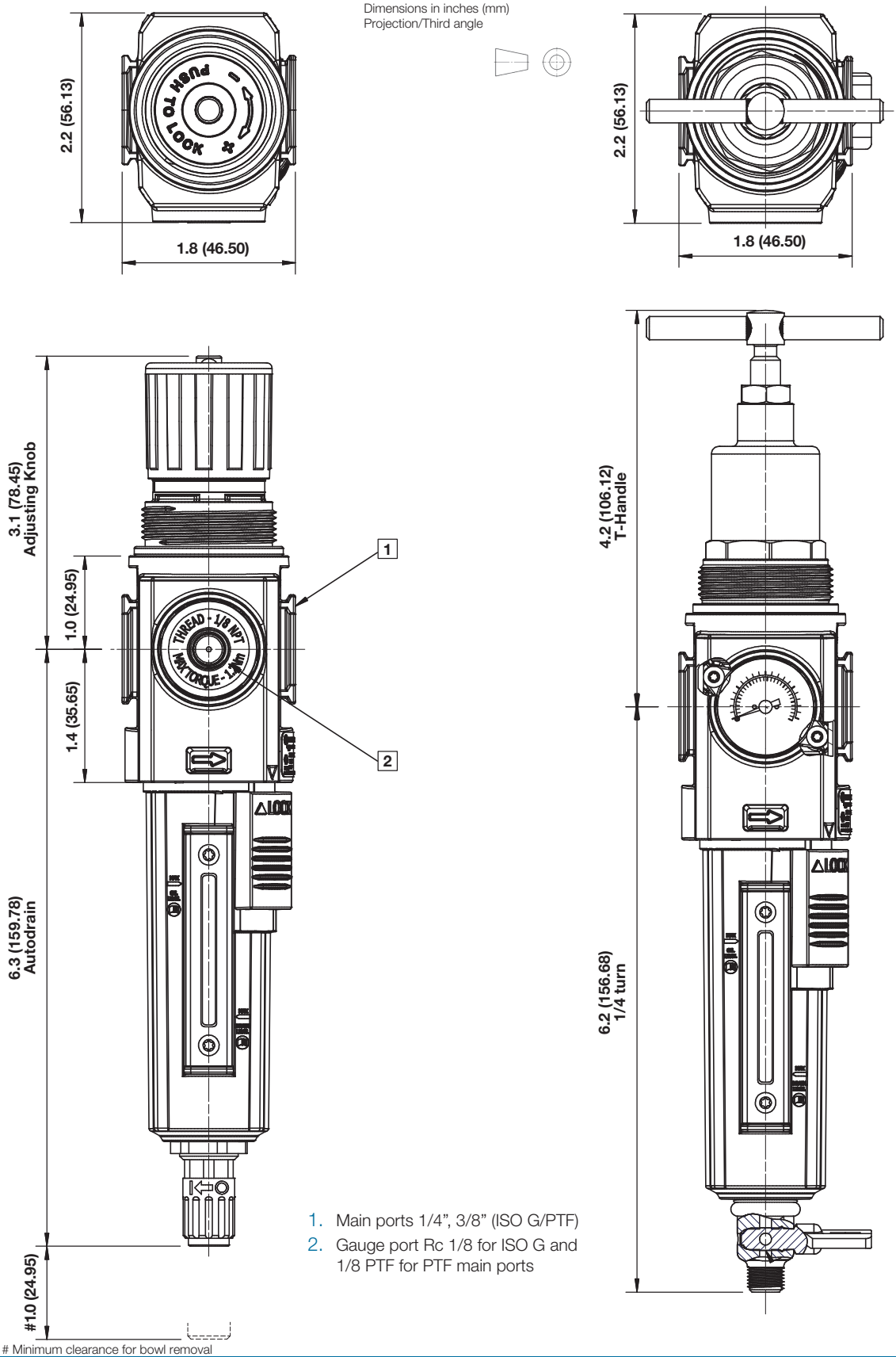
K	Knob
T	T-bar

Gauge

G	With fitted integrated gauge
N	Without integrated gauge, with gauge port 1/8"

Dimensions (200 Series)

Dimensions in inches (mm)
Projection/Third angle

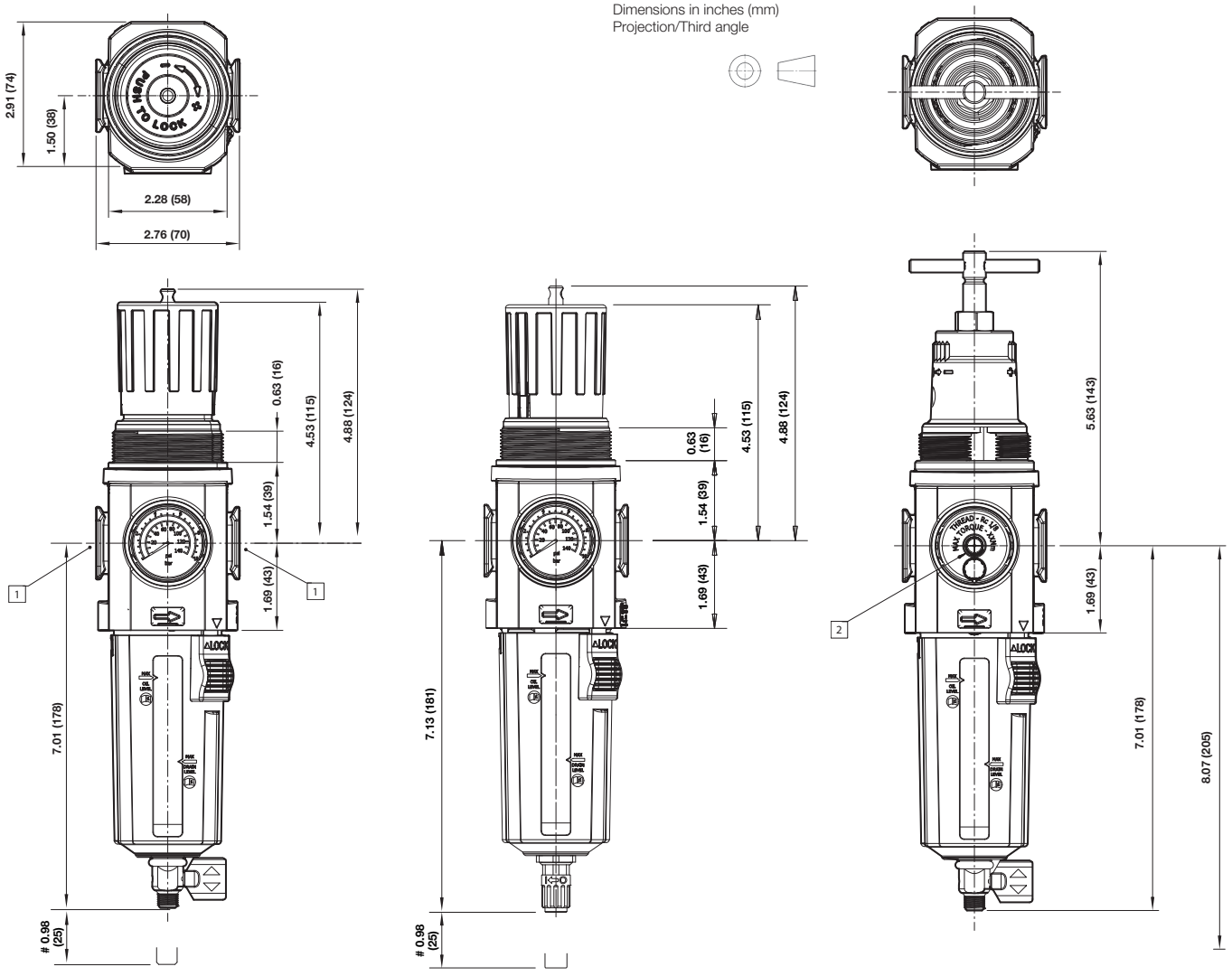


1. Main ports 1/4", 3/8" (ISO G/PTF)
2. Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports

Minimum clearance for bowl removal

Dimensions (400 Series)

Dimensions in inches (mm)
Projection/Third angle



1/4 Turn Manual Drain
With knob

Automatic Drain

1/4 Turn Manual Drain
With T-bar

Minimum clearance for bowl removal

1. Main ports 3/8", 1/2" or 3/4" (ISO G/PTF)
2. Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports

PG Series Lubricators

PGL Series Oil Fog Lubricators

PGL series oil fog lubricators generate a coarse mist (~100 micron). These standard models are frequently used in heavy actuation applications and work best when used close to the part requiring lubrication. This model allows for the oil reservoir to be filled while the system is running.

Both micro-fog® and oil fog lubricators are offered with guarded polycarbonate or full metal bowls, prismatic sight glass, and double lock safety features. Bowls for lubricators do not offer any drain features.

PGL Series Micro-fog® Lubricators

PGL micro-fog® lubricators have a unique micro-mist fog generator built into the unit that can create a very fine mist of particles (<2 micron). These particles are suspended in the airline, and can travel through longer, more complex pathways than traditional oil lubrication. They allow extremely fine control, ensuring that the systems are not over-lubricated – a common problem with intricate pneumatic circuits – and are perfect for small, rapidly moving applications.

PGZ Series Shut Off Valves

PGZ lockable shut-off valves are available in 3/2 configurations with threaded exhaust and a blue knob. They are full-flow rotating ball valves; the restricted 1/4 inch exhaust port is threaded to allow a noise-reducing silencer or to pipe away exhaust air. The valve has a 'pop up' padlock feature, allowing the valve to be locked in the closed position for safety.

PGL Lubricator Specifications

- > PGL 200 port size: 1/4" and 3/8" (ISO G/PTF)
- > PGL 400 port size: 3/8", 1/2", 3/4" (ISO G/PTF)
- > PG series design allows in-line installation or modular installation with other PG series products
- > Flow sensor provides a nearly constant oil/air ratio over a wide range of flows
- > Double safety lock bowl
- > Metal bowl with prismatic liquid level indicator lens
- > Lightweight polycarbonate bowl
- > All round (360°) visibility of sightdome for ease of drip rate setting
- > Choice of micro fog or oil fog oil delivery systems

Technical Features

Medium:
Compressed air only

Maximum operating pressure:
Polycarbonate bowl: 145 psi (10 bar)
PG200 metal bowl: 246 psi (17 bar)
PG400 metal bowl: 290 psi (20 bar)

PGL 200 port size:
G1/4, G3/8, 1/4 PTF, 3/8 PTF

PGL 400 port size:
G3/8, G1/2, G3/4, 3/8 PTF, 1/2 PTF, 3/4 PTF

Ambient/Media temperature:
Polycarbonate bowl: 14 to 140º F (-10 to 60º C)
Metal bowl: -4 to 149º F (-20 to 65º C)

Air supply must be dry enough to avoid ice formation at temperatures below 35° F (2° C)

Materials:
Bowl: PC with PP guard
Metal bowl: Zinc (PG200) / aluminium (PG400)
Body: Aluminum
Body cover: ABS
Sightdome: Transparent PA
Bowl O- ring: Chloroprene
Elastomers: NBR

PG200 flow:
Oil fog: 55 scfm (26 dm^3/s) at port size 1/4", 51 scfm (24 dm^3/s) at port size 3/8"
Micro fog: 46 scfm (22 dm^3/s) at port size 1/4", 45 scfm (21 dm^3/s) at port size 3/8"
Operating pressure: 91 psi (6.3 bar) and Δp: 7.25 psi (0.5 bar)

PG400 flow:
Micro fog : 155 scfm (73 dm^3/s)
Oil fog: 193 scfm (91 dm^3/s) at port size 1/2"
Operating pressure: 91 psi (6.3 bar) and Δp: 7.25 psi (0.5 bar)

PGL Lubricator Specifications

Technical Data PGL200

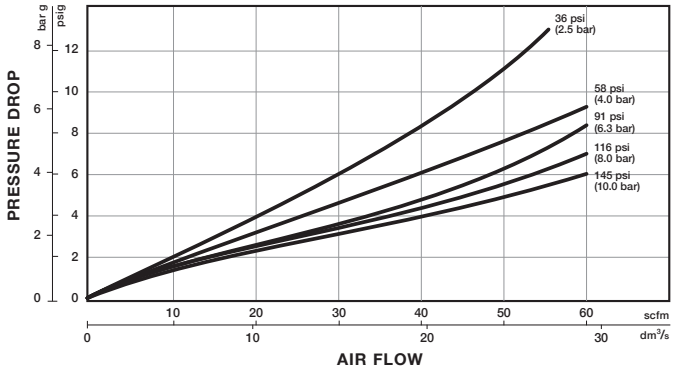
Symbol	Port Size	Lubricator Type	Bowl	Weight lbs (kg)	Model
	1/4	Micro fog	Guarded polycarbonate	0.46 (0.21)	PGL200-08M-P-T
	3/8	Micro fog	Guarded polycarbonate	0.46 (0.21)	PGL200-10M-P-T
	1/4	Micro fog	Metal with level indicator	0.88 (0.40)	PGL200-08M-D-T
	3/8	Micro fog	Metal with level indicator	0.88 (0.40)	PGL200-10M-D-T
	1/4	Oil fog	Guarded polycarbonate	0.46 (0.21)	PGL200-08F-P-T
	3/8	Oil fog	Guarded polycarbonate	0.44 (0.20)	PGL200-10F-P-T
	1/4	Oil fog	Metal with level indicator	0.88 (0.40)	PGL200-08F-D-T
	3/8	Oil fog	Metal with level indicator	0.88 (0.40)	PGL200-10F-D-T

Technical Data PGL400

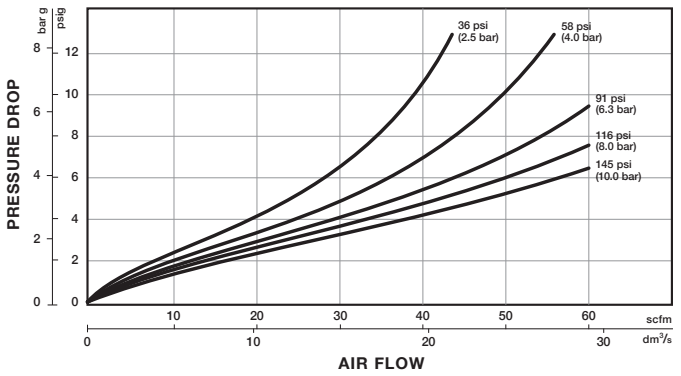
Symbol	Port Size	Lubricator Type	Bowl	Weight lbs (kg)	Model
	3/8	Micro fog	Guarded polycarbonate	0.9 (0.40)	PGL400-10M-P-T
	1/2	Micro fog	Guarded polycarbonate	0.9 (0.40)	PGL400-15M-P-T
	3/4	Micro fog	Guarded polycarbonate	0.9 (0.40)	PGL400-20M-P-T
	3/8	Micro fog	Metal with level indicator	1.1 (0.53)	PGL400-10M-D-T
	1/2	Micro fog	Metal with level indicator	1.1 (0.53)	PGL400-15M-D-T
	3/4	Micro fog	Metal with level indicator	1.1 (0.53)	PGL400-20M-D-T
	3/8	Oil fog	Guarded polycarbonate	0.9 (0.40)	PGL400-10F-P-T
	1/2	Oil fog	Guarded polycarbonate	0.9 (0.40)	PGL400-15F-P-T
	3/4	Oil fog	Guarded polycarbonate	0.9 (0.40)	PGL400-10F-P-T
	3/8	Oil fog	Metal with level indicator	1.1 (0.53)	PGL400-10F-D-T
	1/2	Oil fog	Metal with level indicator	1.1 (0.53)	PGL400-15F-D-T
	3/4	Oil fog	Metal with level indicator	1.1 (0.53)	PGL400-20F-D-T

PGL200 Flow Characteristics

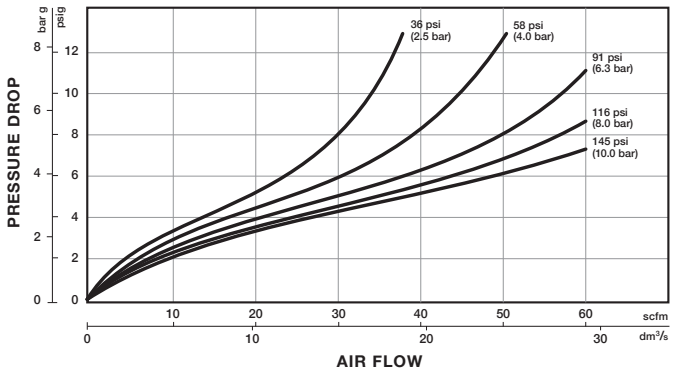
Micro fog
Port size: 1/4”



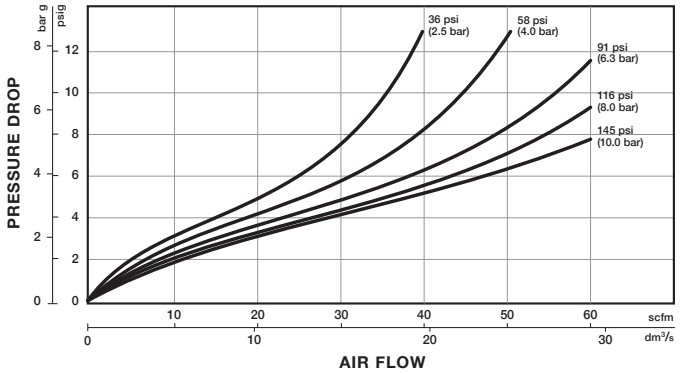
Micro fog
Port size: 3/8”



Oil fog
Port size: 1/4”

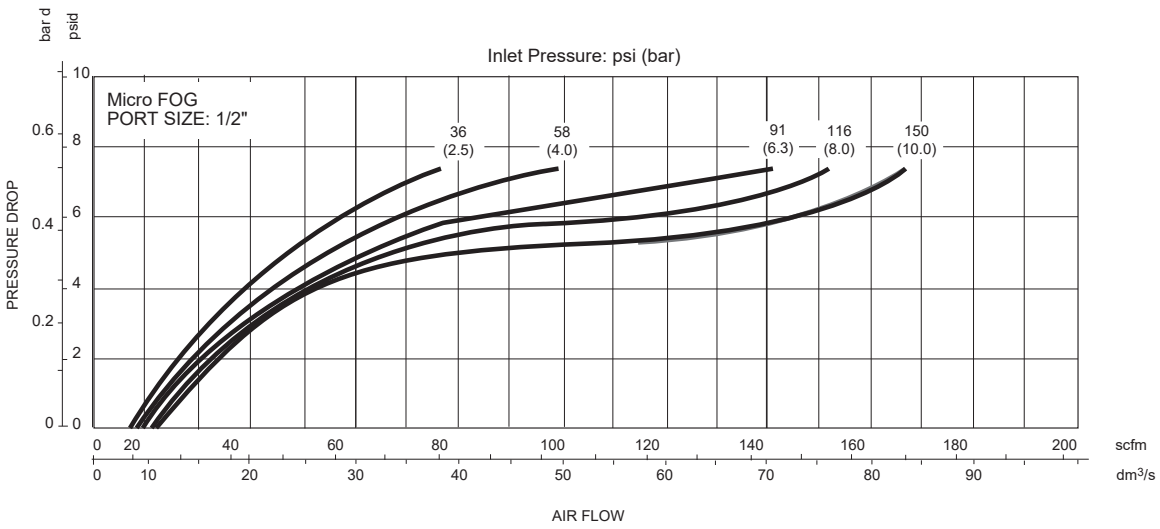


Oil fog
Port size: 3/8”

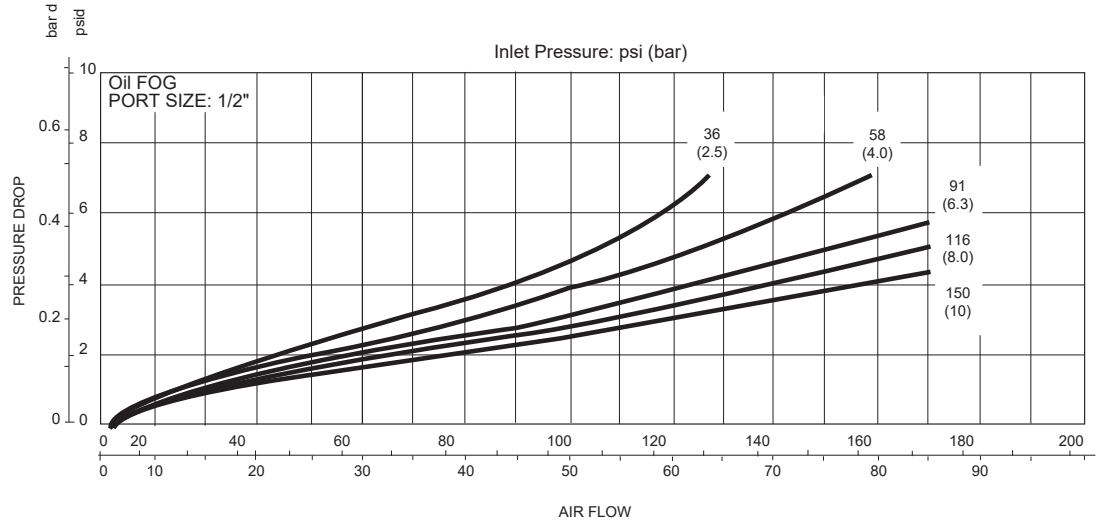


PGL200 Flow Characteristics

Micro fog
Port size: 1/2”



Oil fog
Port size: 1/2”



How to Order

PGL series lubricators can be configured using basic alphanumeric clusters. To create a PGL part number, choose port size, type, bowl, and thread form. Sample PGL series part numbers and available options are featured below.

PGL 200 - 08 F - P - T

Port Size	
08	1/4 NPT
10	3/8 NPT

Type	
F	Oil fog lubricator
M	Micro fog lubricator

Bowl	
P	Transparent with guard
D	Metal with liquid indicator

Thread Form	
T	NPT
G	ISO G parallel (standard)

PGL 400 - 15 F - P - T

Port Size	
10	3/8 NPT
15	1/2 NPT
20	3/4 NPT

Type	
F	Oil fog lubricator
M	Micro fog lubricator

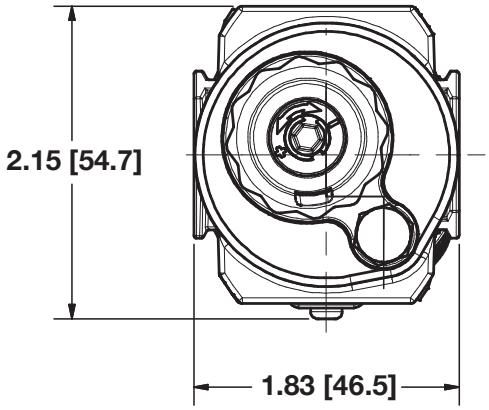
Bowl	
P	Transparent with guard
D	Metal with liquid indicator

Thread Form	
T	NPT
G	ISO G parallel (standard)

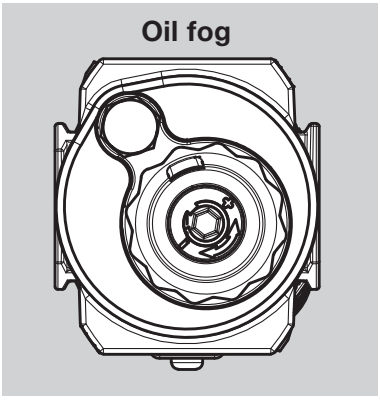
Dimensions (200 Series)

Dimensions in inches [mm]
Projection/Third angle

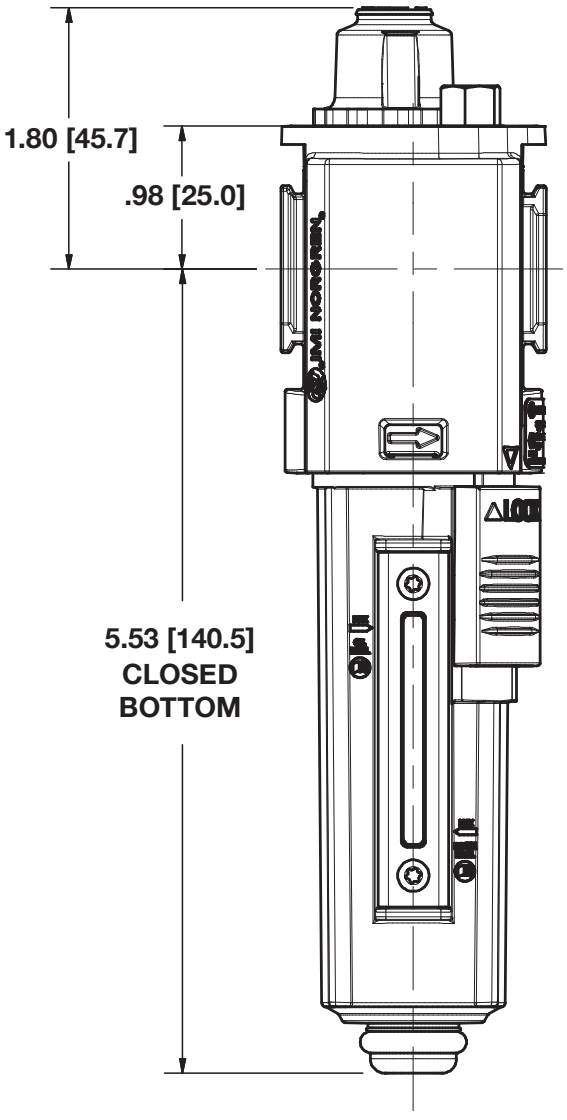
Micro fog

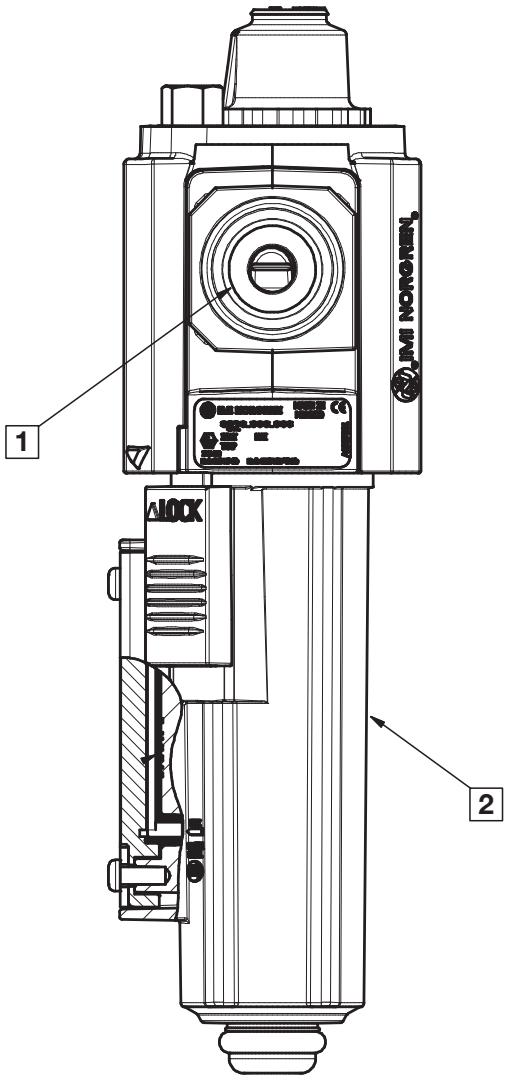


Oil fog



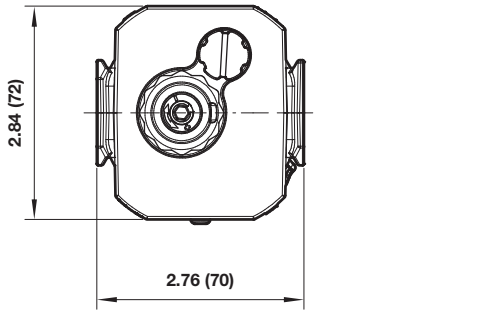
1. Main ports 1/4", 3/8" (ISO G/PTF)
2. Metal bowl with sight glass

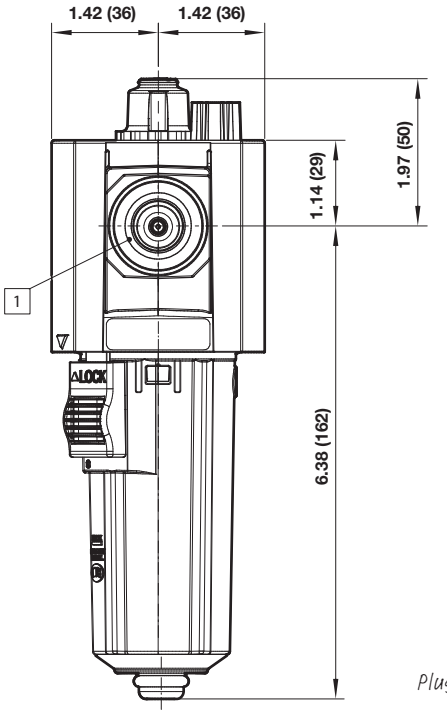




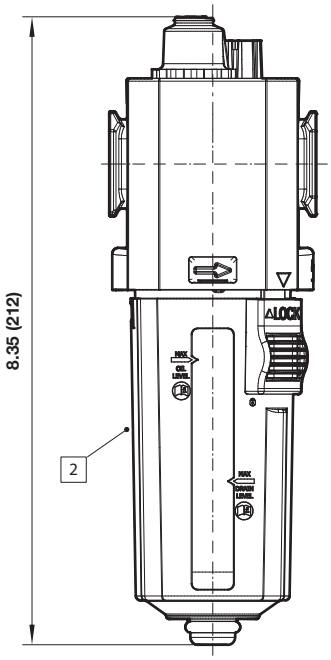
Dimensions (400 Series)

Dimensions in inches (mm)
Projection/Third angle





Plugged bowl



1. Main ports 3/8", 1/2" or 3/4" (ISO G/PTF)
2. Transparent bowl with guard

PGZ 3/2 Shut-Off Valve Specifications

- > PGZ 200 port size: 1/4" and 3/8" (ISO G/NPT)
- > PGZ 400 port size: 3/8", 1/2", 3/4" (ISO G/NPT)
- > PG series design allows in-line installation or modular installation with other PG series products
- > 3/2 way function
- > Threaded exhaust port
- > Lockable in closed position with padlock

Technical Features

Medium:
Compressed air only

Maximum supply pressure:
290 psi (20 bar)

PGZ 200 port size:
G3/8, G1/4, 1/4 PTF, 3/8 PTF

PGZ 400 port size:
G3/8, G1/2, G3/4, 3/8 PTF, 1/2 PTF, 3/4 PTF

Ambient/media temperature:
-4 to 149° F (-20 to 65° C)

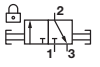
Air supply must be dry enough to avoid ice formation at temperatures below 35° F (2° C).

Materials:
Body: Die cast aluminium
Body covers: ABS
Elastomers: NBR

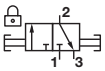
PGZ200 flow:
96 scfm (45 dm^3/s) at port size 1/4", 86 scfm (41 dm^3/s) at port size 3/8", operating pressure 91 psi (6.3 bar) and a Δp: 7.25 psi (0.5 bar) drop from set.
Exhaust flow: 3.26 scfm (1.54 dm3/s)

PGZ400 flow:
1/2": 343 scfm (162 dm^3/s) at 91 psi (6.3 bar) and Δp 7 psi (0.5 bar) pressure drop, 3.8 scfm (1.8 dm^3/s) from OUT to exhaust port.

Technical Data PGZ 200

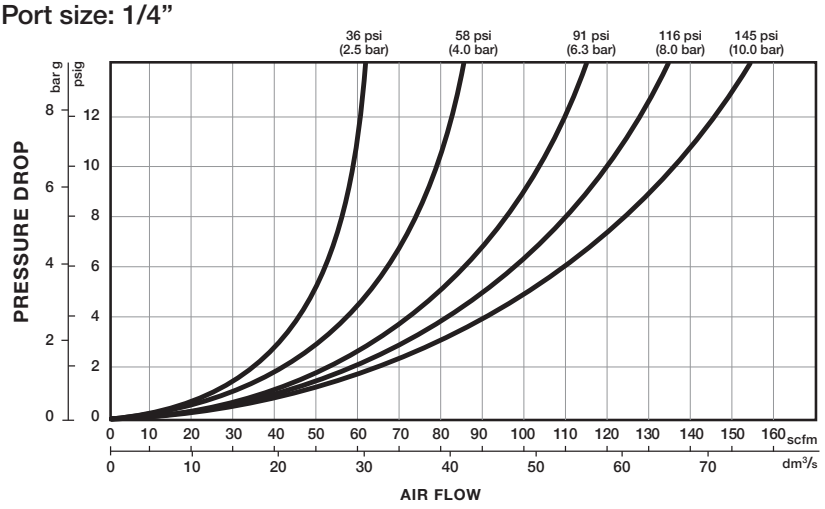
Symbol	Port Size	Function	Valve Type	Exhaust Port Forms	Weight lbs (kg)	Model
	1/4	3/2	Ball valve	Exhaust port threaded 1/4	0.44 (0.20)	PGZ200-08-T
	3/8	3/2	Ball valve	Exhaust port threaded 1/4	0.42 (0.19)	PGZ200-10-T

Technical Data PGZ 400

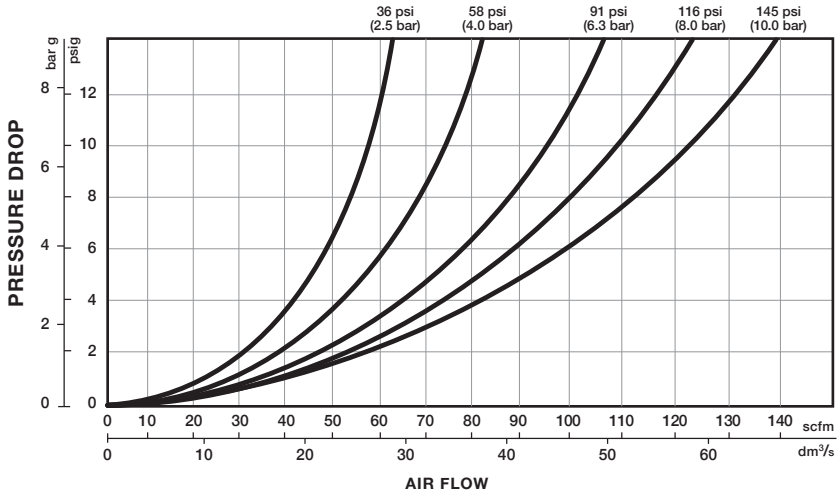
Symbol	Port Size	Function	Valve Type	Exhaust Port Forms	Weight lbs (kg)	Model
	3/8	3/2	Ball valve	Exhaust port threaded 1/4	1.0 (0.48)	PGZ400-10-T
	1/2	3/2	Ball valve	Exhaust port threaded 1/4	1.0 (0.48)	PGZ400-15-T
	3/4	3/2	Ball valve	Exhaust port threaded 1/4	1.0 (0.48)	PGZ400-20-T

PGZ200 Flow Characteristics

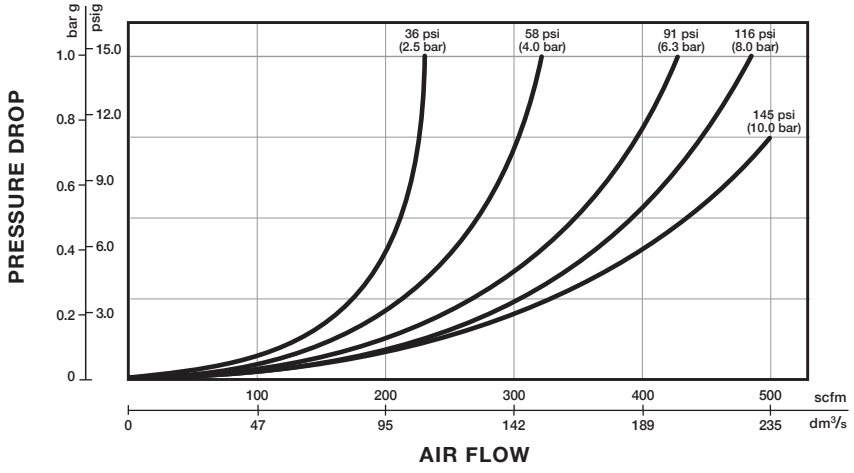
Port size: 1/4”



Port size: 3/8”



PGZ400 Flow Characteristics



PGZ series shut-off valves can be configured using basic alphanumeric clusters. To create a PGZ series part number, choose port size and thread form. Sample PGZ series part numbers and available options are featured below.

PGZ 200 - 08 - T

Port Size	
08	1/4 NPT
10	3/8 NPT

Thread Form	
T	NPT
G	ISO G parallel (standard)

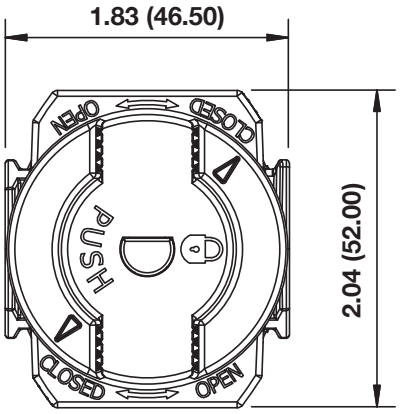
PGZ 400 - 15 - T

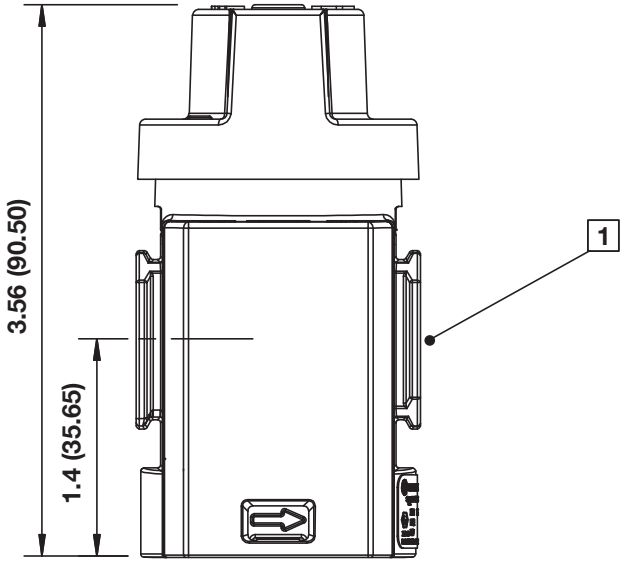
Port Size	
10	3/8 NPT
15	1/2 NPT
20	3/4 NPT

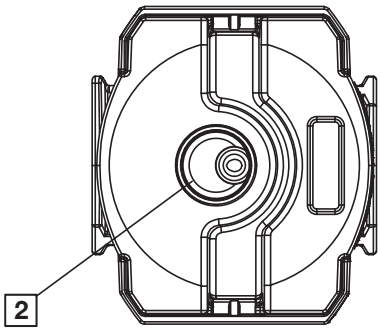
Thread Form	
T	NPT
G	ISO G parallel (standard)

Dimensions (200 Series)

Dimensions in inches (mm)
Projection/Third angle



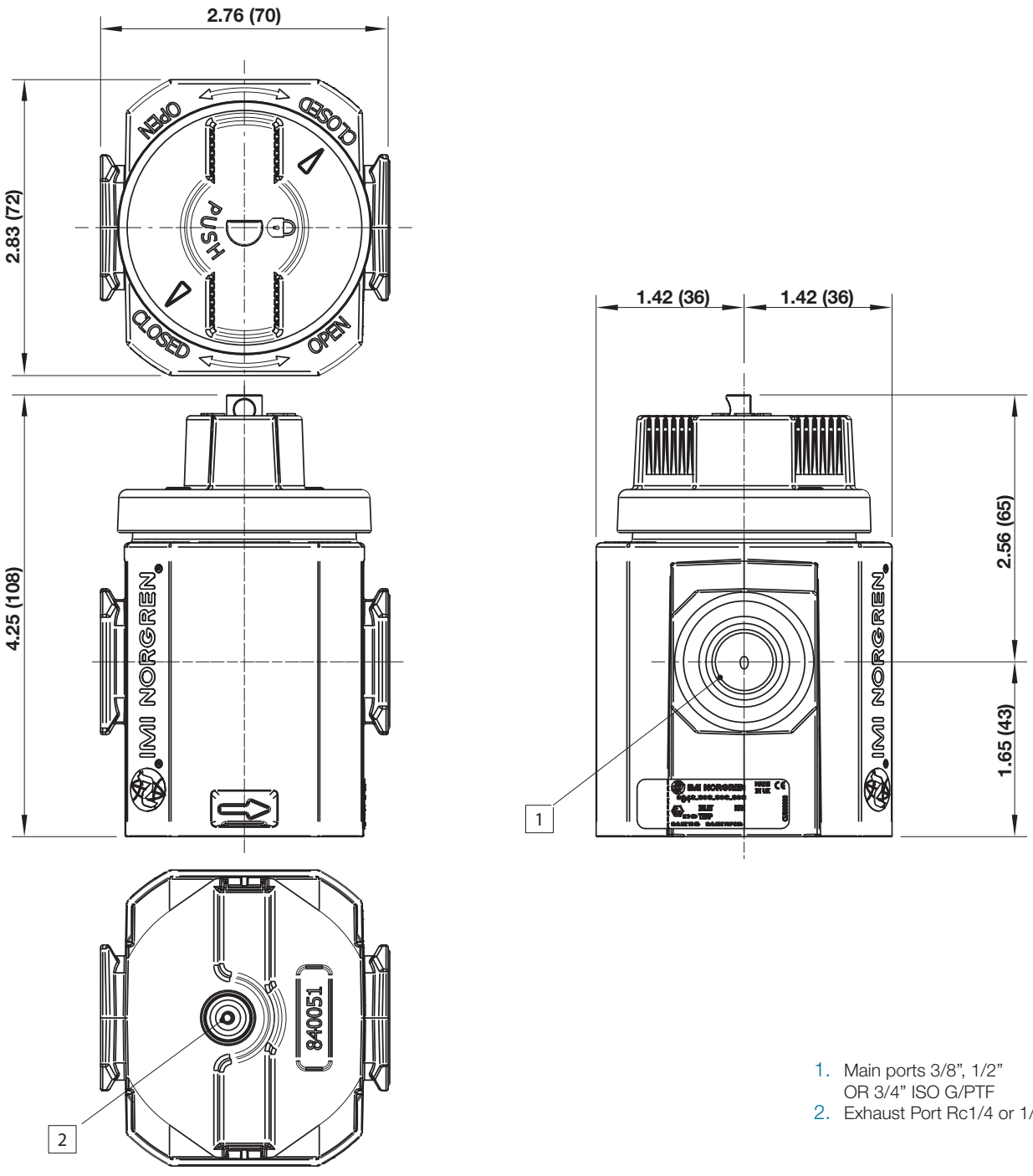




1. Main ports 1/4”or 3/8” ISO G/PTF
2. Exhaust Port Rc1/4 or 1/4 PTF

Dimensions (400 Series)

Dimensions in mm
Projection/Third angle



1. Main ports 3/8", 1/2"
   OR 3/4" ISO G/PTF
2. Exhaust Port Rc1/4 or 1/4 PTF)

How to Specify

PGFC Series Combination Filter/Regulator-Lubricator Specifications

- > PGFC 200 port size: 1/4“ and 3/8” (ISO G/NPT)
- > PGFC 400 port size: 3/8”, 1/2”, 3/4” (ISO G/NPT)
- > Unique Quikclamp connection system offers full modularity
- > 40 micron particle and high efficiency water removal (> 95%)
- > Double safety lock on bowl
- > Integrated gauge
- > Shut off valve and filter regulator with tamper resistance feature
- > Metal bowl with prismatic liquid level indicator
- > Lightweight polycarbonate bowl
- > Easy to read flush mounted integrated pressure gauge as standard
- > All round (360°) visibility of sightdome for ease of drip rate setting

Technical Features

Medium:
Compressed air only

Maximum supply pressure:
Polycarbonate bowl: 145 psi (10 bar)
PGFC200 metal bowl: 246 psi (17 bar)
PGFC400 metal bowl: 290 psi (20 bar)

Outlet pressure ranges:
4 - 145 psi (0.3 - 10 bar)

Filter element:
40 µm

PGFC 200 port size:
G1/4, G3/8, 1/4 PTF, 3/8 PTF

PGFC 400 port size:
G3/8, G1/2, G3/4, 3/8 PTF, 1/2 PTF, 3/4 PTF

Diaphragm Type:
Relieving

Drain:
Manual or automatic

Automatic drain operating conditions (float operated):
Bowl pressure required to close drain: > 5 psi (0.35 bar)

Bowl pressure required to open drain: ≤ 2.9 psi (0.2 bar)

Minimum air flow required to close drain: 2 scfm (1 dm^3/s)

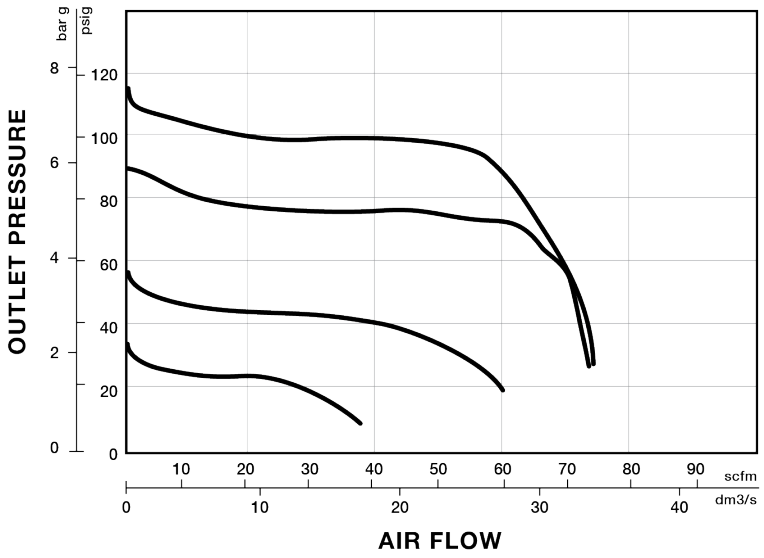
Ambient/Media temperature:
14 to 140° F (-10 to 60° C)
Metal bowl: -4 to 149° F (-20 to 65° C)

Air supply must be dry enough to avoid ice formation at temperatures below 35° F (2° C).

Gauge:
Integrated as standard

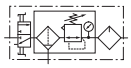
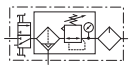
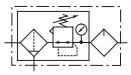
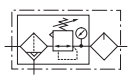
Materials:
Body: Die cast aluminum
Body covers: ABS
Bonnet: Acetal
Valve: PP
Bowl: Transparent PC with PP guard or die cast zinc (PGFC200) / aluminum (PGFC400)
Liquid level indicator lens (metal bowl): PA
Filter element: sintered PP
Bowl ‘o’- ring: Chloroprene
Elastomers: NBR

PGFC200 Flow Characteristics



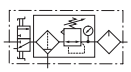
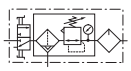
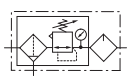
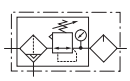
PGFC Series Combination Filter/Regulator-Lubricator Specifications

Technical Data PGFC 200

Symbol	Port Size	Shutoff Valve	Drain	Lubricator Type	Bowl	Weight lbs (kg)	Model*
	1/4	With	Manual	Micro fog	Guarded polycarbonate	4.2 (1.92)	PGFC200-08M-MP1-T
	3/8	With	Manual	Micro fog	Guarded polycarbonate	4.2 (1.92)	PGFC200-10M-MP1-T
	1/4	With	Auto	Micro fog	Metal with level indicator	4.2 (1.92)	PGFC200-08A-MD1-T
	3/8	With	Auto	Micro fog	Metal with level indicator	4.2 (1.92)	PGFC200-10A-MD1-T
	1/4	Without	Manual	Micro fog	Guarded polycarbonate	3.6 (1.65)	PGFC200-08M-MP5-T
	3/8	Without	Manual	Micro fog	Guarded polycarbonate	3.6 (1.65)	PGFC200-10M-MP5-T
	1/4	Without	Auto	Micro fog	Metal with level indicator	3.6 (1.65)	PGFC200-08A-MD5-T
	3/8	Without	Auto	Micro fog	Metal with level indicator	3.6 (1.65)	PGFC200-10A-MD5-T

*All models shown here are supplied with integrated gauge applicable for flow direction left to right.

Technical Data PGFC 400

Symbol	Port Size	Shutoff Valve	Drain	Lubricator Type	Bowl	Weight lbs (kg)	Model*
	3/8	With	Manual	Micro fog	Guarded polycarbonate	3.6 (1.65)	PGFC400-10M-MP1-T
	1/2	With	Manual	Micro fog	Guarded polycarbonate	3.6 (1.65)	PGFC400-15M-MP1-T
	3/4	With	Manual	Micro fog	Guarded polycarbonate	3.6 (1.65)	PGFC400-20M-MP1-T
	3/8	With	Auto	Micro fog	Metal with level indicator	3.6 (1.65)	PGFC400-10A-MD1-T
	1/2	With	Auto	Micro fog	Metal with level indicator	3.6 (1.65)	PGFC400-15A-MD1-T
	3/4	With	Auto	Micro fog	Metal with level indicator	3.6 (1.65)	PGFC400-20A-MD1-T
	3/8	Without	Manual	Micro fog	Guarded polycarbonate	2.5 (1.15)	PGFC400-10M-MP5-T
	1/2	Without	Manual	Micro fog	Guarded polycarbonate	2.5 (1.15)	PGFC400-15M-MP5-T
	3/4	Without	Manual	Micro fog	Guarded polycarbonate	2.5 (1.15)	PGFC400-20M-MP5-T
	3/8	Without	Auto	Micro fog	Metal with level indicator	2.5 (1.15)	PGFC400-10A-MD5-T
	1/2	Without	Auto	Micro fog	Metal with level indicator	2.5 (1.15)	PGFC400-15A-MD5-T
	3/4	Without	Auto	Micro fog	Metal with level indicator	2.5 (1.15)	PGFC400-20A-MD5-T

*All models shown here are supplied with integrated gauge applicable for flow direction left to right.

How to Order

PGFC filter/regulator-lubricator models can be configured using basic alphanumeric clusters. To create a PGFC series part number, choose port size, drain, lubrication, bowl type, accessories, and thread form. Sample PGFC series part numbers and available options are featured below.

PGFC 200 - 08 A - F P 1 - T

Port Size	
08	1/4 NPT
10	3/8 NPT

Drain	
A	Auto Drain
M	Manual

Bowl Type	
P	Transparent with guard
D	Metal with liquid indicator

Thread Form	
T	NPT
G	ISO G parallel

Lubrication	
F	Oil fog
M	Micro fog

Accessories	
1	Shut-off valve and Gauge and brackets
5	Gauge and bracket

*All models shown here are applicable for flow direction left to right. With flow direction right to left please use the online configurator

PGFC 400 - 15 A - F P 1 - T

Port Size	
10	3/8“
15	1/2“
20	3/4“

Drain	
A	Auto Drain
M	Manual

Bowl Type	
P	Transparent with guard
D	Metal with liquid indicator

Thread Form	
T	NPT
G	ISO G parallel

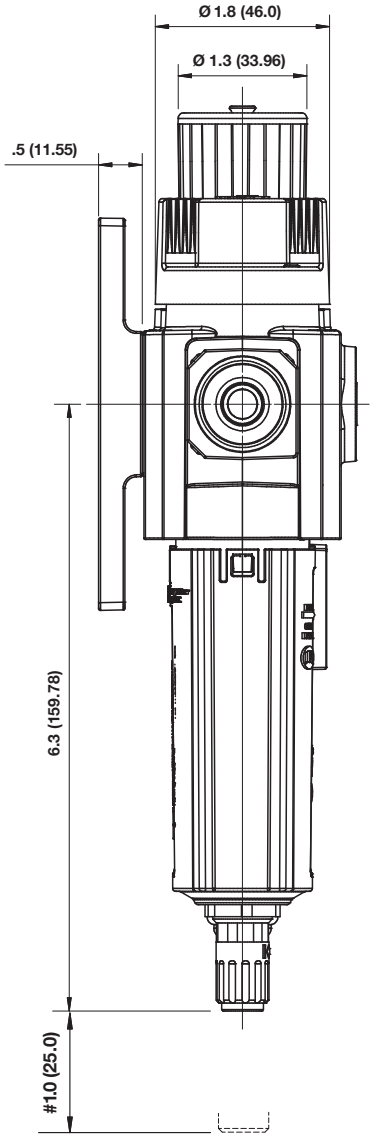
Lubrication	
F	Oil fog
M	Micro fog

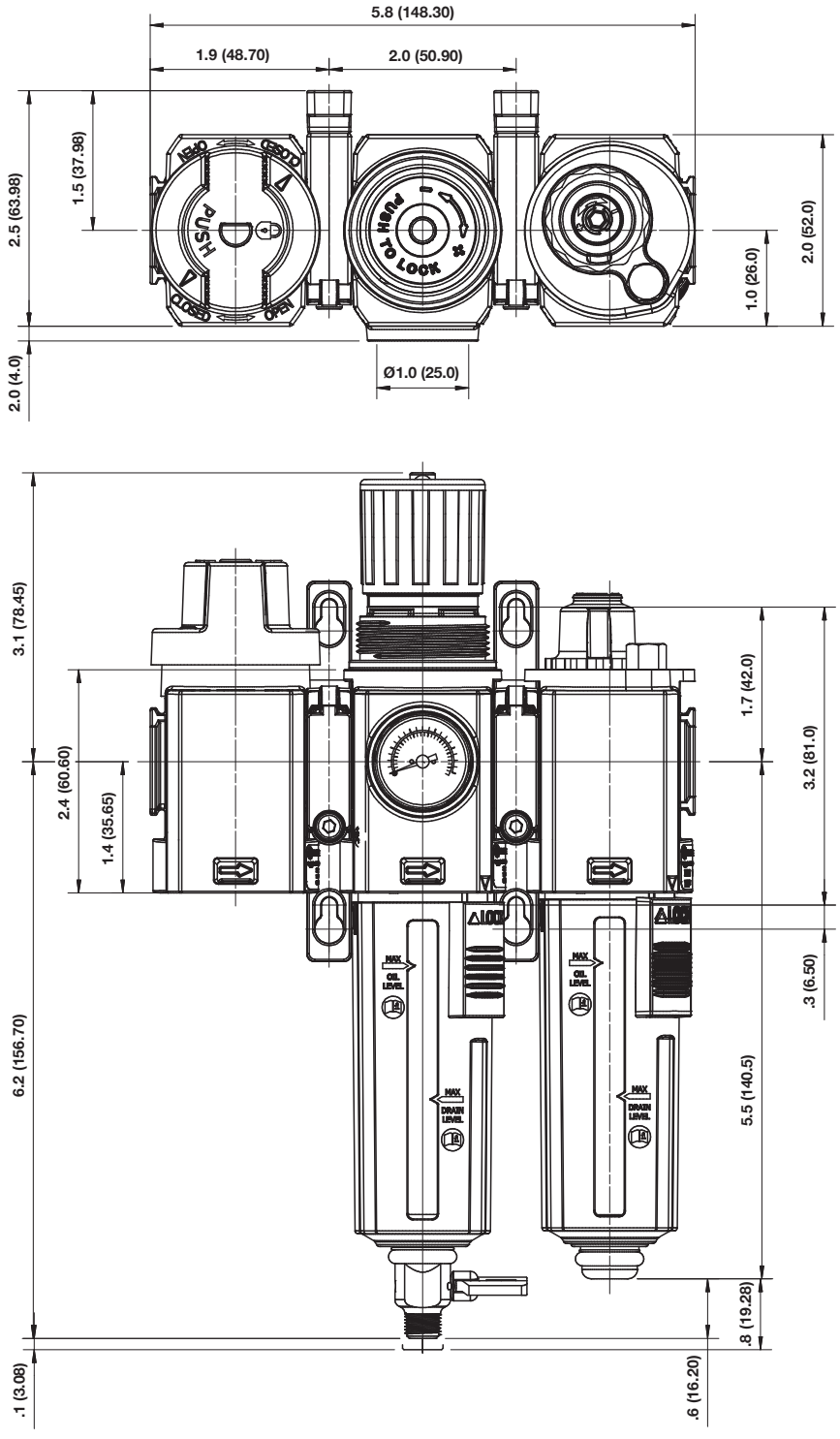
Accessories	
1	Shut-off valve and Gauge and brackets
5	Gauge and bracket

All models shown here are applicable for flow direction left to right. With flow direction right to left please use the online configurator

Dimensions (200 Series)

Dimensions in inches (mm)
Projection/Third angle

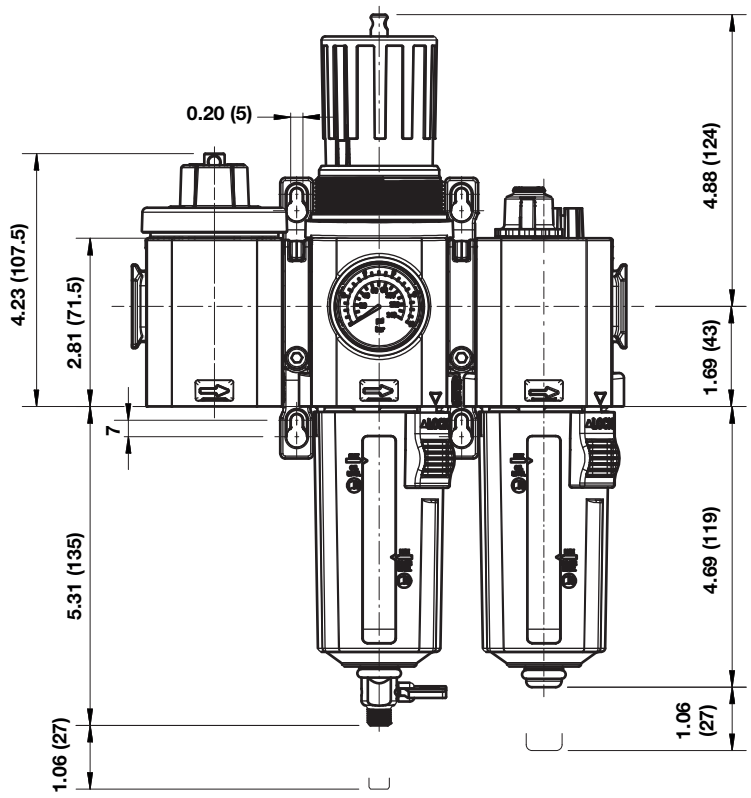


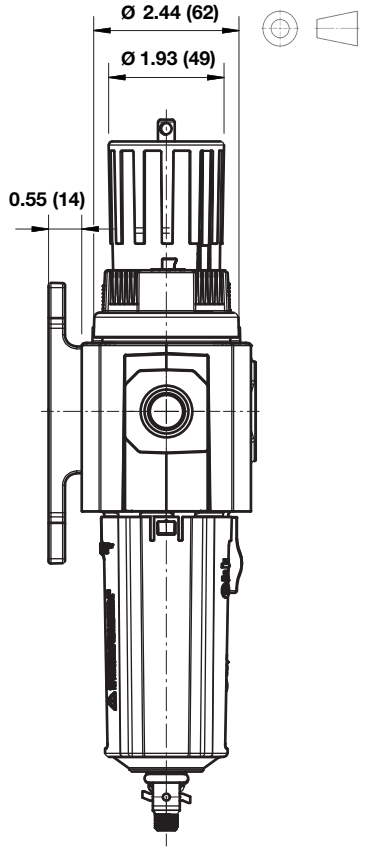


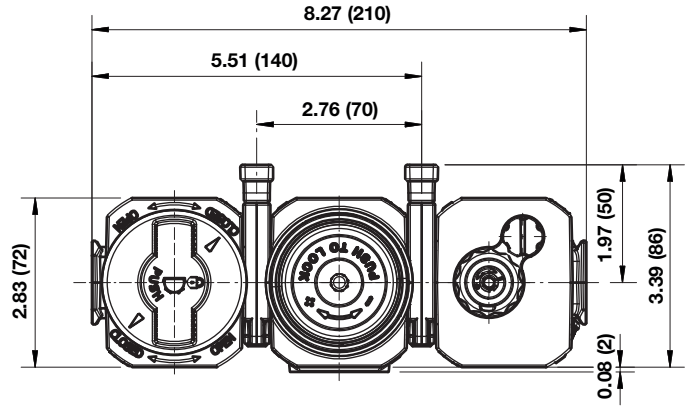
Minimum clearance for bowl removal

Dimensions (400 Series)

Dimensions in inches (mm)
Projection/Third angle







PGV Series Control and Soft Start Valve Specifications

- > PGFC 200 port size: 1/4“ and 3/8” (ISO G/NPT)
- > PGFC 400 port size: 3/8”, 1/2”, 3/4” (ISO G/NPT)
- > Unique Quikclamp connection system offers full modularity
- > 40 micron particle and high efficiency water removal (> 95%)
- > Double safety lock on bowl
- > Integrated gauge
- > Shut off valve and filter regulator with tamper resistance feature
- > Metal bowl with prismatic liquid level indicator
- > Lightweight polycarbonate bowl
- > Easy to read flush mounted integrated pressure gauge as standard
- > All round (360°) visibility of sightdome for ease of drip rate setting

Technical Features

Medium:
Compressed air only

Maximum supply pressure:
Polycarbonate bowl: 145 psi (10 bar)
PGFC200 metal bowl: 246 psi (17 bar)
PGFC400 metal bowl: 290 psi (20 bar)

Outlet pressure ranges:
4 - 145 psi (0.3 - 10 bar)

Filter element:
40 µm

PGFC 200 port size:
G1/4, G3/8, 1/4 PTF, 3/8 PTF

PGFC 400 port size:
G3/8, G1/2, G3/4, 3/8 PTF,
1/2 PTF, 3/4 PTF

Diaphragm Type:
Relieving

Drain:
Manual or automatic

Automatic drain operating conditions (float operated):
Bowl pressure required to close drain: > 5 psi (0.35 bar)

Bowl pressure required to open drain: ≤ 2.9 psi (0.2 bar)

Minimum air flow required to close drain: 2 scfm (1 dm^3/s)

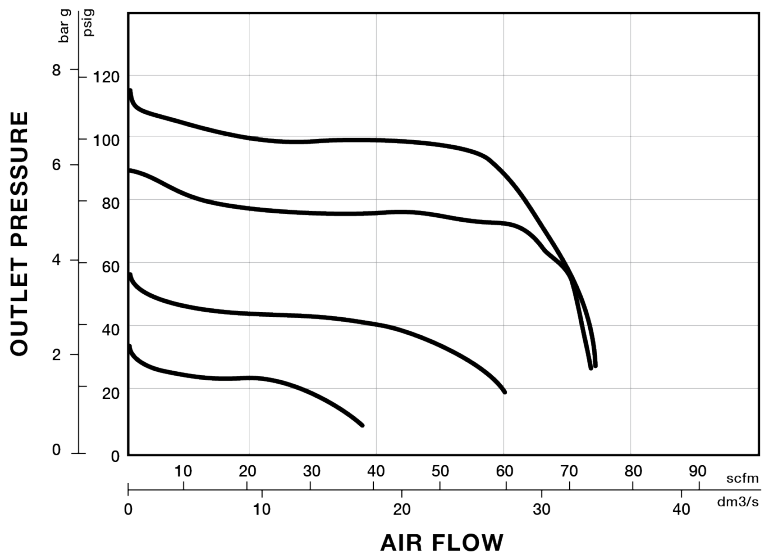
Ambient/Media temperature:
14 to 140° F (-10 to 60° C)
Metal bowl: -4 to 149° F (-20 to 65° C)

Air supply must be dry enough to avoid ice formation at temperatures below 35° F (2° C).

Gauge:
Integrated as standard

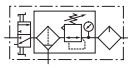
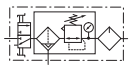
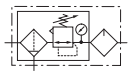
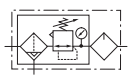
Materials:
Body: Die cast aluminum
Body covers: ABS
Bonnet: Acetal
Valve: PP
Bowl: Transparent PC with PP guard or die cast zinc (PGFC200) / aluminum (PGFC400)
Liquid level indicator lens (metal bowl): PA
Filter element: sintered PP

PGFC200 Flow Characteristics



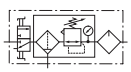
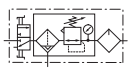
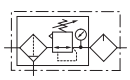
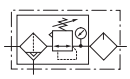
PGFC Series Combination Filter/Regulator-Lubricator Specifications

Technical Data PGFC 200

Symbol	Port Size	Shutoff Valve	Drain	Lubricator Type	Bowl	Weight lbs (kg)	Model*
	1/4	With	Manual	Micro fog	Guarded polycarbonate	4.2 (1.92)	PGFC200-08M-MP1-T
	3/8	With	Manual	Micro fog	Guarded polycarbonate	4.2 (1.92)	PGFC200-10M-MP1-T
	1/4	With	Auto	Micro fog	Metal with level indicator	4.2 (1.92)	PGFC200-08A-MD1-T
	3/8	With	Auto	Micro fog	Metal with level indicator	4.2 (1.92)	PGFC200-10A-MD1-T
	1/4	Without	Manual	Micro fog	Guarded polycarbonate	3.6 (1.65)	PGFC200-08M-MP5-T
	3/8	Without	Manual	Micro fog	Guarded polycarbonate	3.6 (1.65)	PGFC200-10M-MP5-T
	1/4	Without	Auto	Micro fog	Metal with level indicator	3.6 (1.65)	PGFC200-08A-MD5-T
	3/8	Without	Auto	Micro fog	Metal with level indicator	3.6 (1.65)	PGFC200-10A-MD5-T

*All models shown here are supplied with integrated gauge applicable for flow direction left to right.

Technical Data PGFC 400

Symbol	Port Size	Shutoff Valve	Drain	Lubricator Type	Bowl	Weight lbs (kg)	Model*
	3/8	With	Manual	Micro fog	Guarded polycarbonate	3.6 (1.65)	PGFC400-10M-MP1-T
	1/2	With	Manual	Micro fog	Guarded polycarbonate	3.6 (1.65)	PGFC400-15M-MP1-T
	3/4	With	Manual	Micro fog	Guarded polycarbonate	3.6 (1.65)	PGFC400-20M-MP1-T
	3/8	With	Auto	Micro fog	Metal with level indicator	3.6 (1.65)	PGFC400-10A-MD1-T
	1/2	With	Auto	Micro fog	Metal with level indicator	3.6 (1.65)	PGFC400-15A-MD1-T
	3/4	With	Auto	Micro fog	Metal with level indicator	3.6 (1.65)	PGFC400-20A-MD1-T
	3/8	Without	Manual	Micro fog	Guarded polycarbonate	2.5 (1.15)	PGFC400-10M-MP5-T
	1/2	Without	Manual	Micro fog	Guarded polycarbonate	2.5 (1.15)	PGFC400-15M-MP5-T
	3/4	Without	Manual	Micro fog	Guarded polycarbonate	2.5 (1.15)	PGFC400-20M-MP5-T
	3/8	Without	Auto	Micro fog	Metal with level indicator	2.5 (1.15)	PGFC400-10A-MD5-T
	1/2	Without	Auto	Micro fog	Metal with level indicator	2.5 (1.15)	PGFC400-15A-MD5-T
	3/4	Without	Auto	Micro fog	Metal with level indicator	2.5 (1.15)	PGFC400-20A-MD5-T

*All models shown here are supplied with integrated gauge applicable for flow direction left to right.

PGFC filter/regulator-lubricator models can be configured using basic alphanumeric clusters. To create a PGFC series part number, choose port size, drain, lubrication, bowl type, accessories, and thread form. Sample PGFC series part numbers and available options are featured below.

PGFC 200 - 08 A - F P 1 - T

Port Size	
08	1/4 NPT
10	3/8 NPT

Drain	
A	Auto Drain
M	Manual

Bowl Type	
P	Transparent with guard
D	Metal with liquid indicator

Thread Form	
T	NPT
G	ISO G parallel

Lubrication	
F	Oil fog
M	Micro fog

Accessories	
1	Shut-off valve and Gauge and brackets
5	Gauge and bracket

*All models shown here are applicable for flow direction left to right. With flow direction right to left please use the online configurator

PGFC 400 - 15 A - F P 1 - T

Port Size	
10	3/8“
15	1/2“
20	3/4“

Drain	
A	Auto Drain
M	Manual

Bowl Type	
P	Transparent with guard
D	Metal with liquid indicator

Thread Form	
T	NPT
G	ISO G parallel

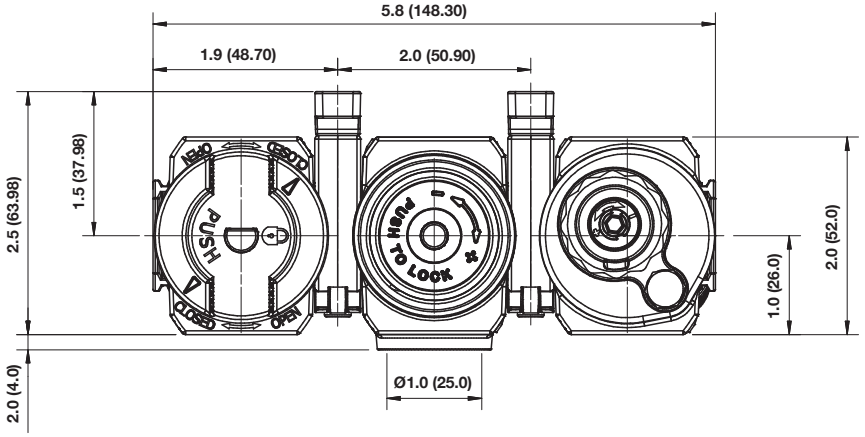
Lubrication	
F	Oil fog
M	Micro fog

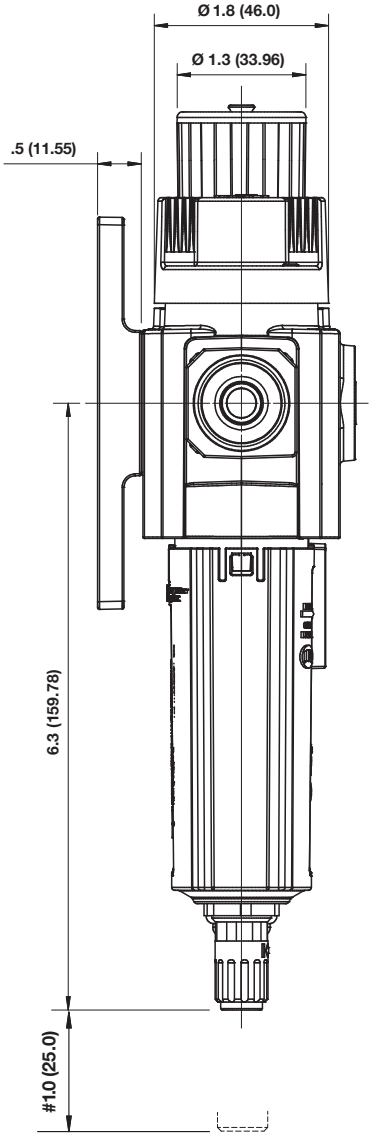
Accessories	
1	Shut-off valve and Gauge and brackets
5	Gauge and bracket

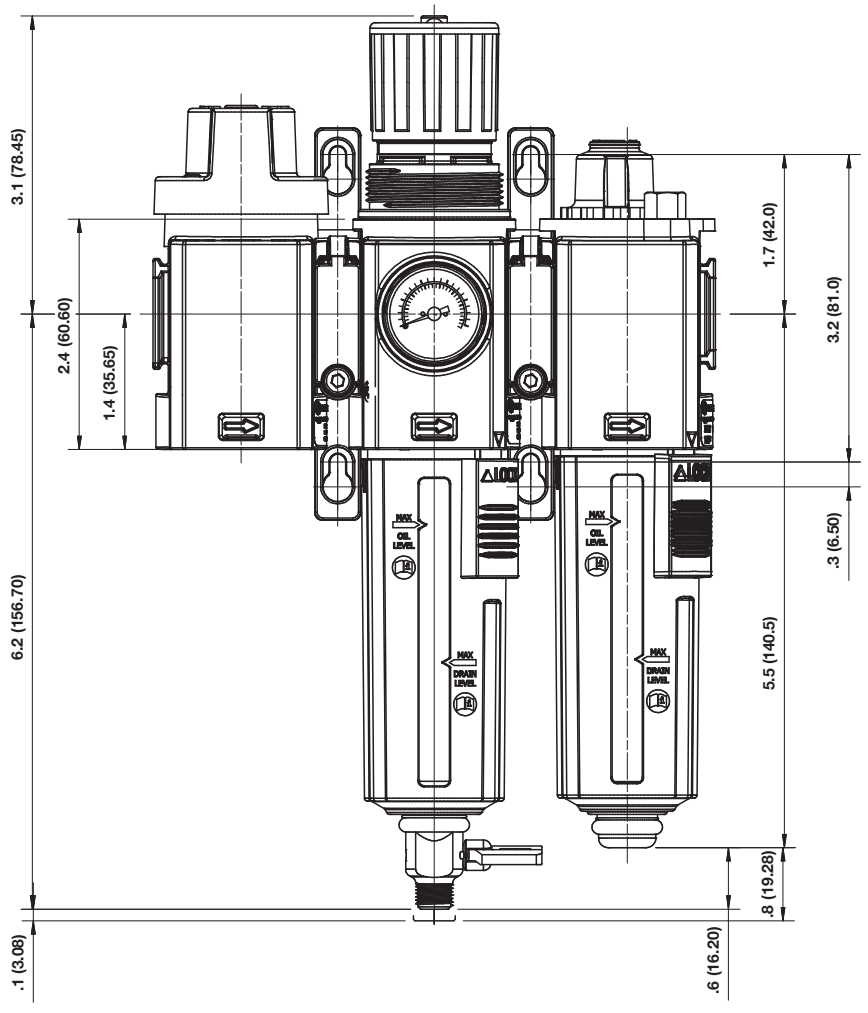
All models shown here are applicable for flow direction left to right. With flow direction right to left please use the online configurator

Dimensions (200 Series)

Dimensions in inches (mm)
Projection/Third angle







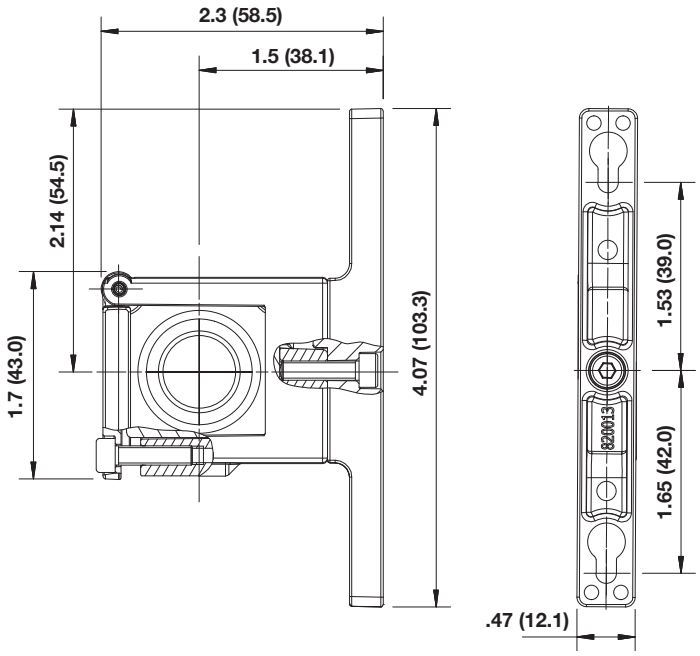
Minimum clearance for bowl removal

Dimensions (400 Series)

Dimensions in inches (mm)
Projection/Third angle

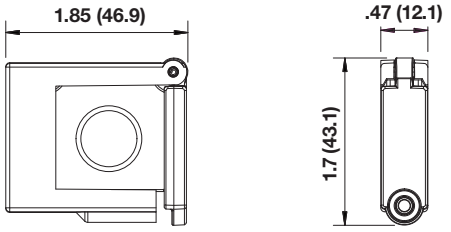
Accessories

Quikclamp® with wall bracket



Dimensions in inches (mm)
Projection/Third angle

Quikclamp®



How to Accessorize

PG200/400 Accessories

Wall mounting bracket

PGB202-P2 (200 series)
PGB402-P2 (400 series)

Quikclamp

PGA203-P1 (200 series)
PGA403-P1 (400 series)

Quikclamp with bracket assembled

PGA201-P1 (200 series)
PGA401-P1 (400 series)

Pressure sensing block, 1/4 PTF

PGA214-08 (200 series)
PGA414-08 (400 series)

Pressure sensing block, G1/4

PGA214-08-G (200 series)
PGA414-08-G (400 series)

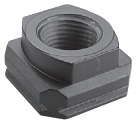
Full flow porting block, 3/8 PTF

PGA214-10

Full flow porting block, G3/8

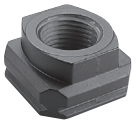
PGA214-10-G

Port Adaptors, 1/4 PTF



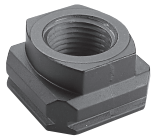
PGP200-08

Port Adaptors, 3/8 PTF



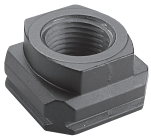
PGP200-10 (200 series)
PGP400-10 (400 series)

Port Adaptors, 1/2 PTF



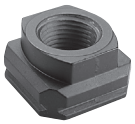
PGP400-15

Port Adaptors, 3/4 PTF



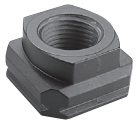
PGP400-20

Port Adaptors, G1/4



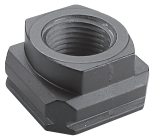
PGP200-08-G

Port Adaptors, G3/8



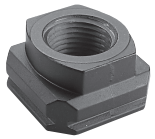
PGP200-10-G (200 series)
PGP400-10-G (400 series)

Port Adaptors, G1/2



PGP400-15-G

Port Adaptors, G3/4



PGP400-20-G

Full flow porting block, 3/4 PTF

PGA414-20-V

Full flow porting block, G3/4

PGA414-20-V-G

Full flow porting block, 3/4 PTF

PGA414-20

Full flow porting block, G3/4

PGA414-20-G

PG200/400 Accessories

Neck mounting bracket and panel nut

PGB201-P2 (200 series)
PGB401-P2 (400 series)

Panel mounting nut

PGB201-NT (200 series)
PGB401-NT (400 series)

Padlock

PG-LOCK

Lockout device

PG-HASP

Quick fill nipple

PGL400-QF

Integrated gauge, 10 bar gauge

PGG-200 (200 series)
PGG-400 (400 series)

Integrated gauge, 20 bar gauge

PGG-200-H (200 series)
PGG-400-H (400 series)

Integrated gauge, 6 bar gauge

PGG-200-L

Gauge adaptor kit, 1/8 PTF

PGP-20 (200 series)
PGP-40 (400 series)

Gauge adaptor kit, R 1/8

PGP-20-G (200 series)
PGP-40-G (400 series)

Porous plastic silencer[3], G1/4

PGZ-EX-2-G

Porous plastic silencer[3], 1/4 PTF

PGZ-EX-2

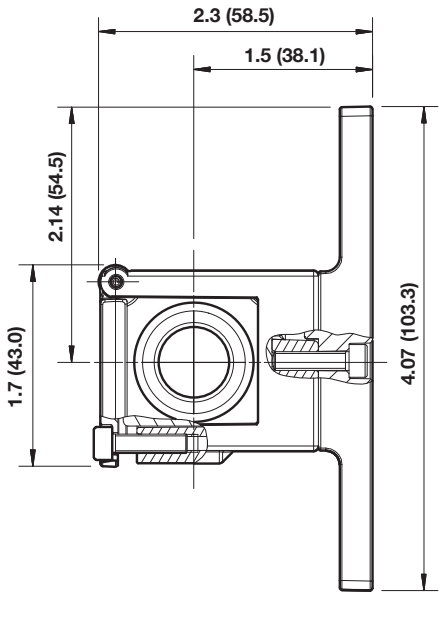
Sintered bronze silencer, 1/4 PTF

PGZ-EX-1

[3] Maximum pressure of silencers listed in this data sheet : 145 psi (10 bar).
For pressure higher than 145 psi please contact Bimba.

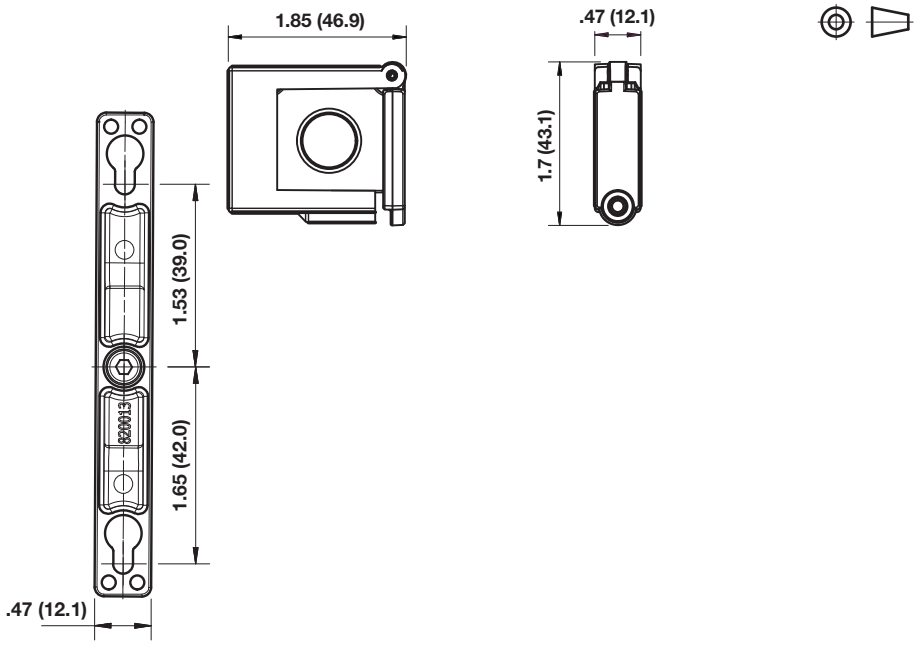
PG200 Accessory Dimensions

Quikclamp with wall bracket

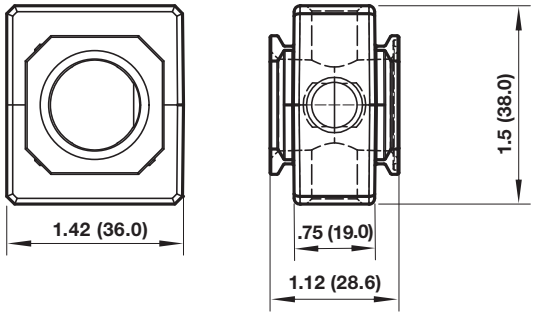


Quikclamp

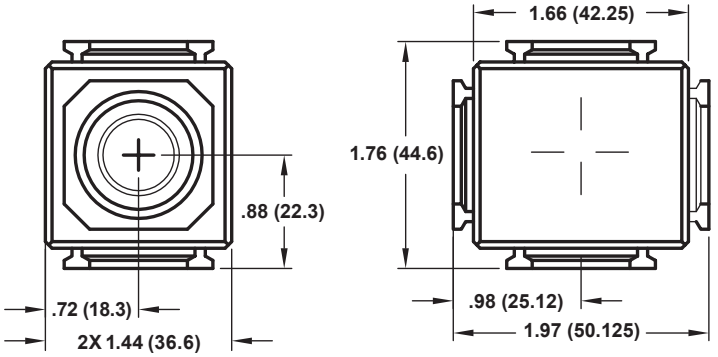
Dimensions in inches (mm)
Projection/Third angle



Pressure sensing block



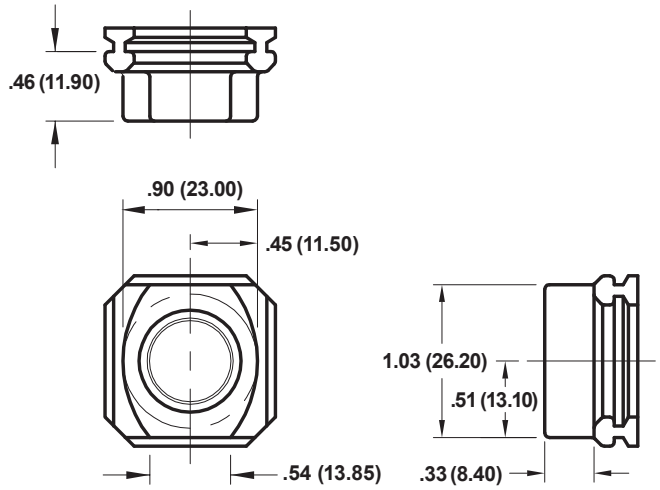
Full flow porting block



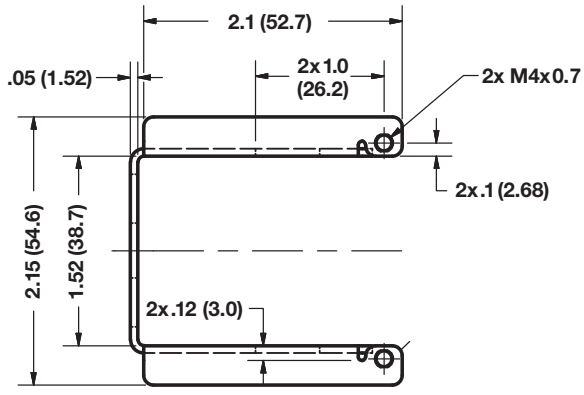
PG200 Accessory Dimensions

Pipe adaptor

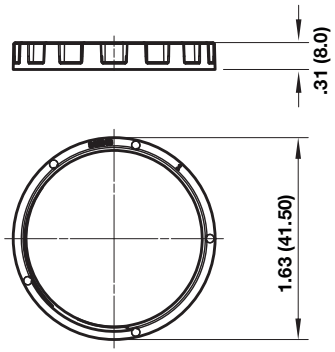
Dimensions in inches (mm)
Projection/Third angle

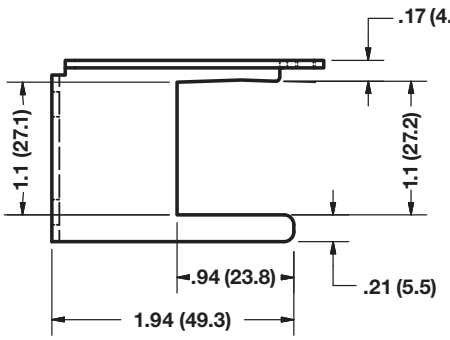


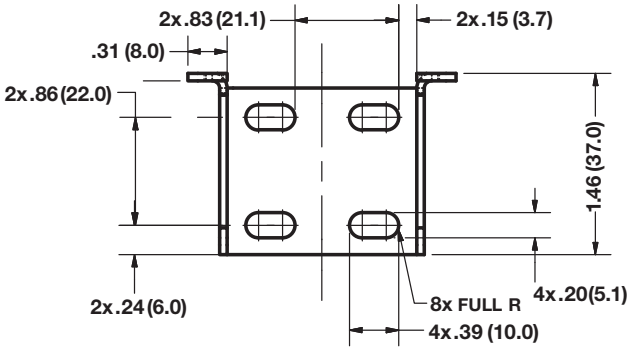
Mounting bracket



Panel mounting nut

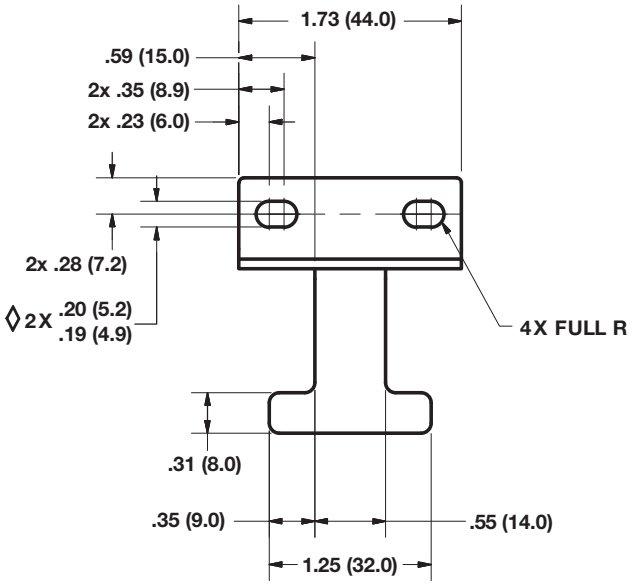


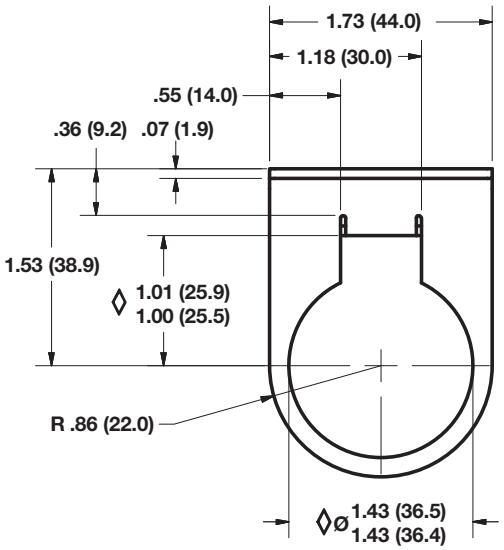




PG200 Accessory Dimensions

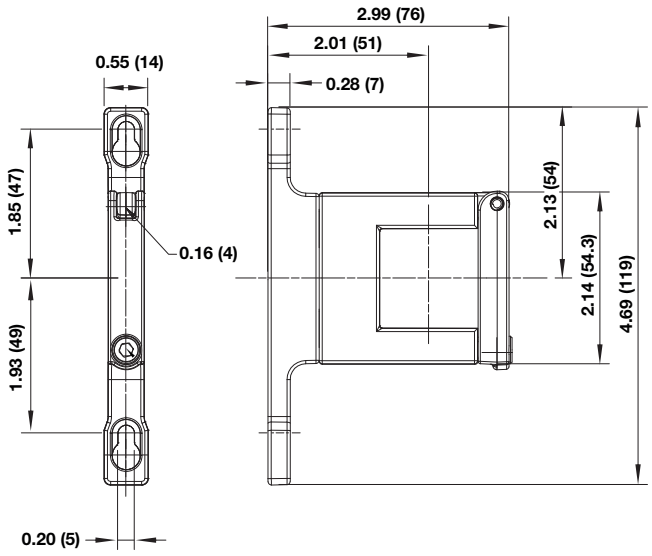
Neck mounting bracket





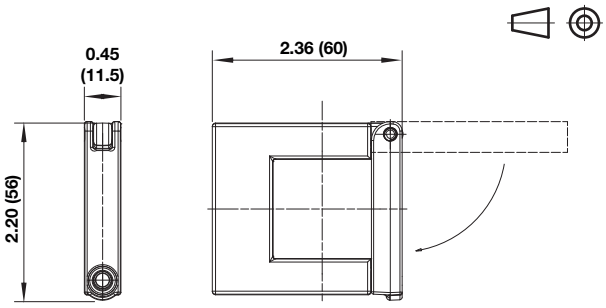
PG400 Accessory Dimensions

Quikclamp with wall bracket

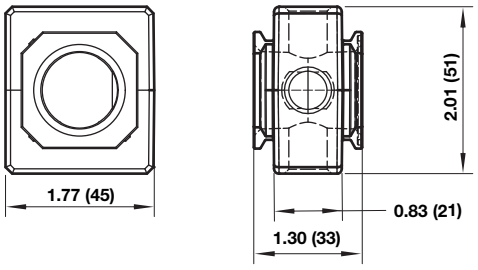


Quikclamp

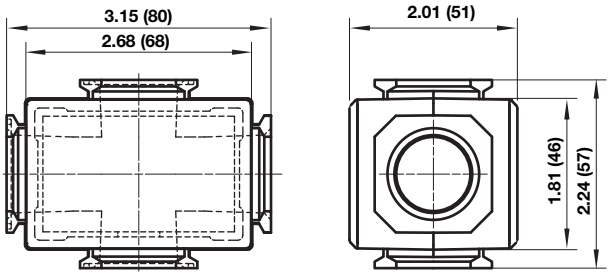
Dimensions in inches (mm)
Projection/Third angle



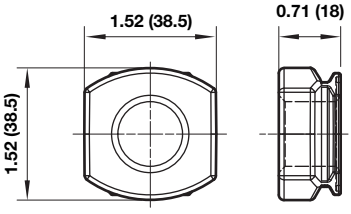
Pressure sensing block



Full flow porting block

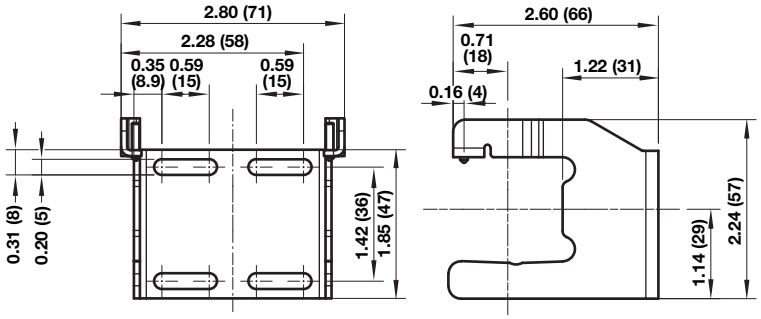


Pipe adaptor

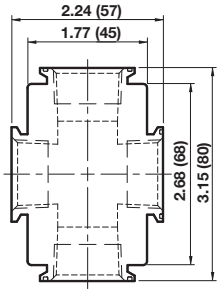


PG400 Accessory Dimensions

Mounting bracket

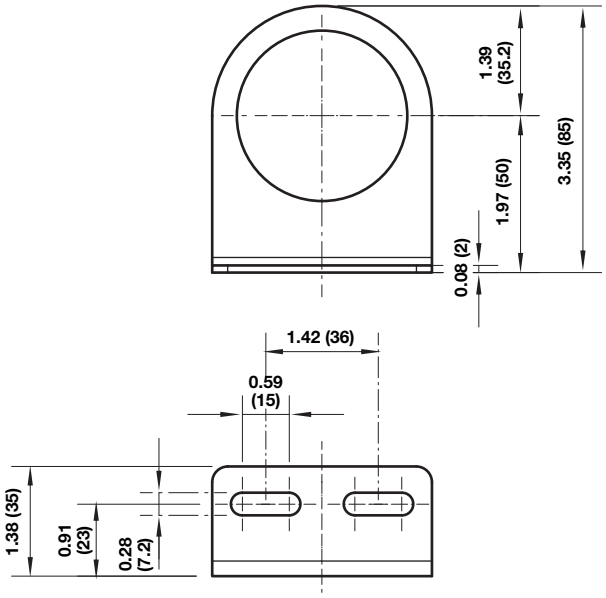


Full flow vertical porting block

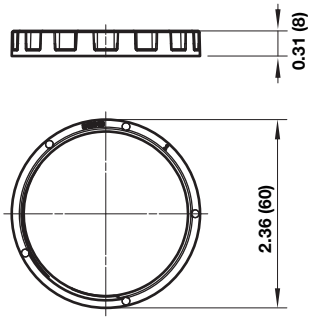


Dimensions in mm
Projection/Third angle

Neck mounting bracket



Panel mounting nut



PG200/400 Spare Parts

Filter cartridge 5 micron

PGF200-004-2 (200 series)
PGF400-004-2 (400 series)

Filter cartridge 40 micron

PGF200-004-1 (200 series)
PGF400-004-1 (400 series)

Coalescing filter element

PGF200-004-3 (200 series)
PGF400-004-3 (400 series)

Vapor Removal filter element

PGF200-004-4 (200 series)
PGF400-004-4 (400 series)

Elastomer Kit

PGR200-KIT (200 series)
PGR400-KIT (400 series)

Filter Bowl (Guarded Poly bowl with auto drain 6 mm PIF)

PGF200-A-G (200 series)
PGF400-A-G (400 series)

Filter Bowl (Guarded Poly bowl with manual drain)

PGF200-M (200 series)
PGF400-M (400 series)

Filter Bowl (Metal with S/Glass & auto drain, 6 mm PIF)

PGF200-M-A-G (200 series)
PGF400-M-A-G (400 series)

Filter Bowl (Metal with S/Glass & manual drain)

PGF200-M-M (200 series)
PGF400-M-M (400 series)

Filter Bowl (Guarded Poly bowl with auto drain, 1/4 PIF)

PGF200-A (200 series)
PGF400-A (400 series)

Filter Bowl (Metal with S/Glass & auto drain, 1/4 PIF)

PGF200-M-A (200 series)
PGF400-M-A (400 series)

Lubricator bowl Guarded Poly

PGL200-BWL (200 series)
PGL400-BWL (400 series)

Lubricator bowl Metal with sight glass

PGL200-M-BWL (200 series)
PGL400-M-BWL (400 series)

Lubricator sight dome kit (200 & 400 series)

Micro fog (red)
PGL400-DM
Oil fog (green)
PGL400-DM-F

Auto drain kit with metal Nut - Imperial

PGF-ADRN

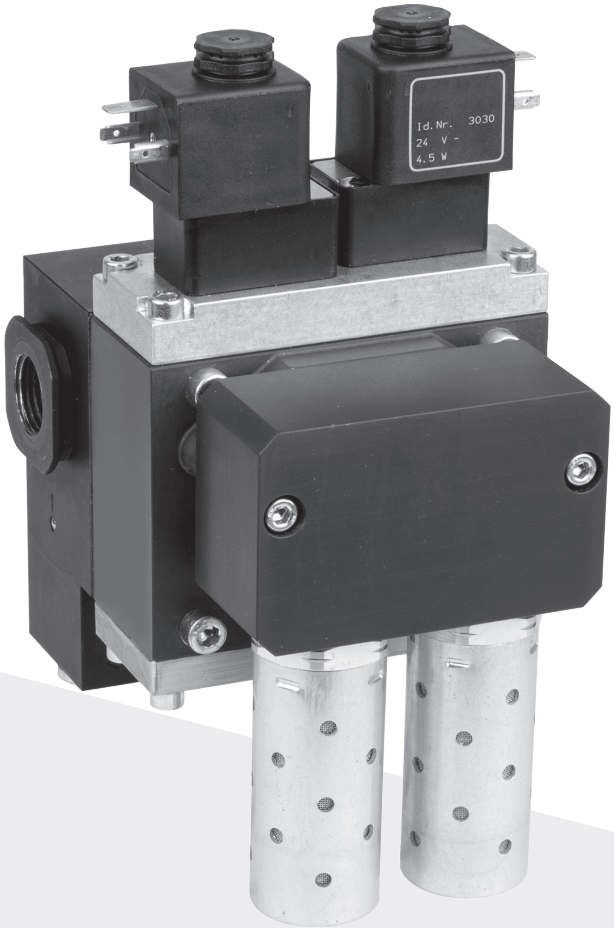
Auto drain kit with metal Nut - Metric

PGF-ADRN-G

Notes

Safety Valves

Bimba's AIROS line includes a variety of valves designed to enhance the performance of our air preparation products. Safety and smooth start valves pair perfectly with PG400 products, allowing for slower starts and reduced risk. Isolation valves provide a critical lockout-tagout option for pneumatic systems.



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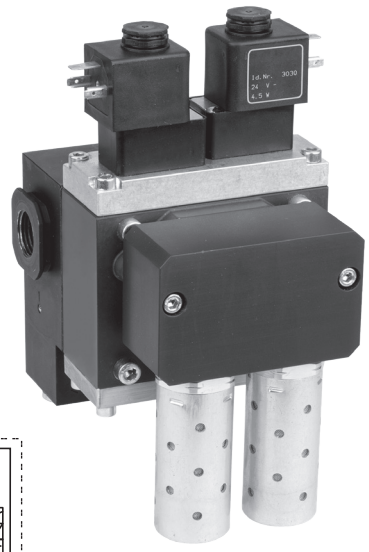
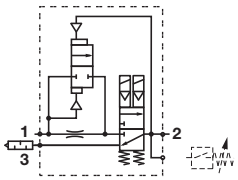
SCSQ10 Series Safety Valve Specifications

- > Port size: 1/2 NPT or 1/2 ISO G
- > Redundant valve assembly, pneumatic self monitoring with integrated safety muffler
- > Requires no cyclical monitoring or evaluation system
- > Integrated soft start function
- > With the appropriate application, performance level “e” (cat. 4) of EN ISO 13849-1 is achieved for the safety function “ Pressure building up from ‘1’ to ‘2’ and pressure dropping from ‘2’ to ‘3’- DGUV approval
- > Compatible with AIROS PG400 series air preparation products





Technical Features

Medium:
Compressed air, filtered ≤ 50 µm, lubricated or non-lubricated

Operating Pressure:
see table below

B10 (median) characteristic service live value on basis ISO 19973:
10 x 10^6 cycles

Mounting position:
Preferably upright with solenoids on top

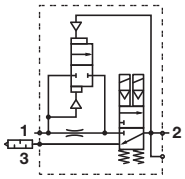
Press control:
Valves are not approved for press clutch and brake applications

Ambient/Media temperature:
14 to 140° F (-10 to 60° C)

Air supply must be dry enough to avoid ice formation at temperatures below 35° F (2° C).

Materials:
Housing: aluminium
Seals: PUR, NBR

Technical Data

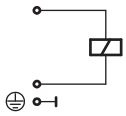
Symbol	Thread Form	Orifice (mm)	Power at 24VDC (W)	Pressure Range (bar)	Flow 1 - 2 (l/min)	Flow 2 - 3 (l/min)	Port Sizes			Weight (kg)	Model
							1	2	3		
	ISO G	10	4.5	3.5 - 10	3000	5700	1/2	1/2	3/4	2.7	SCSQ101D01D02400
	NPT	10	4.5	3.5 - 10	3000	5700	1/2 NPT	1/2 NPT	3/4 NPT	2.7	SCSQ101T01D02400

Technical Data - Solenoids

Standard Voltages	24 VDC
Duty Cycle	100% ED
Protection Class	IP65

Other voltages on request.

Circuit Diagram



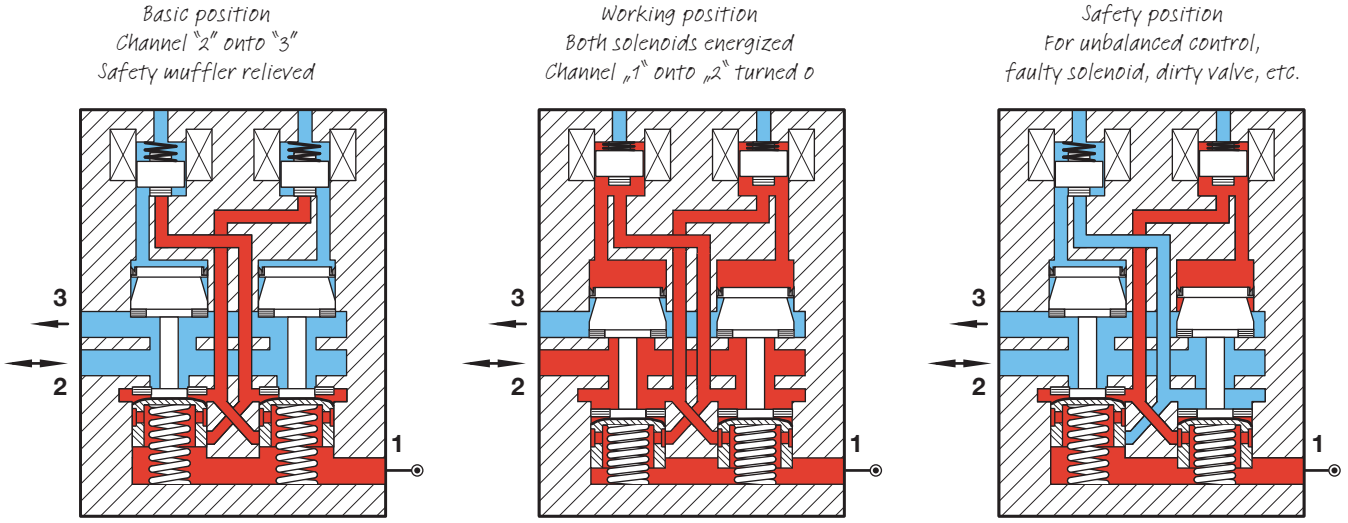
Accessories

Connector Form (A) DIN EN 175301-803	Quikclamp with wall bracket*	Quikmount pipe adaptor
0570275000000000	PGA401-P1	PGP400-15-G (1/2 ISO G) PGP400-15 (1/2 NPT)

*Quikmount pipe adaptor please order separately.
**The pressure switch is not required as part of the safe functioning system within the valve, its is offered as a means of indicating that the valve taken up a safe condition ie. no pressure at the output port 2.

SCSQ10 Series Safety Valve Specifications

Functional Diagram
(shown without soft start function)



Soft Start Function

The safety valve with soft start function provides for a controlled build-up of pressure at the valve output in two stages.

Stage 1: The pressure builds up slowly depending on the setting of the throttle valve and the volume of the system to be filled.

Stage 2: At a certain pressure level (ps) an internal pilot valve operates bypassing the throttle allowing full operating pressure at the valve outlet.

This pressure level (ps) will be dependant on the operating pressure (po) of the system and can be estimated to be greater than 60 % of the operating pressure (ps > = 0.6 x po)

Filling Time (depending on throttle position of soft start valve)

From switching signal ON to pressure build-up 90% of rated pressure

Operating pressure psi (bar)	Volume ft³ (dm³)	Filling time approx. (ms) Numbers of needle turn		
		4	6	12
72.5 (5)	0.11 (3)	3200	2600	1700
	0.28 (8)	8300	7000	4300
87.0 (6)	0.11 (3)	3000	2400	1500
	0.28 (8)	7800	6500	3900
116.0 (8)	0.11 (3)	2700	2200	1400
	0.28 (8)	7300	5700	3700

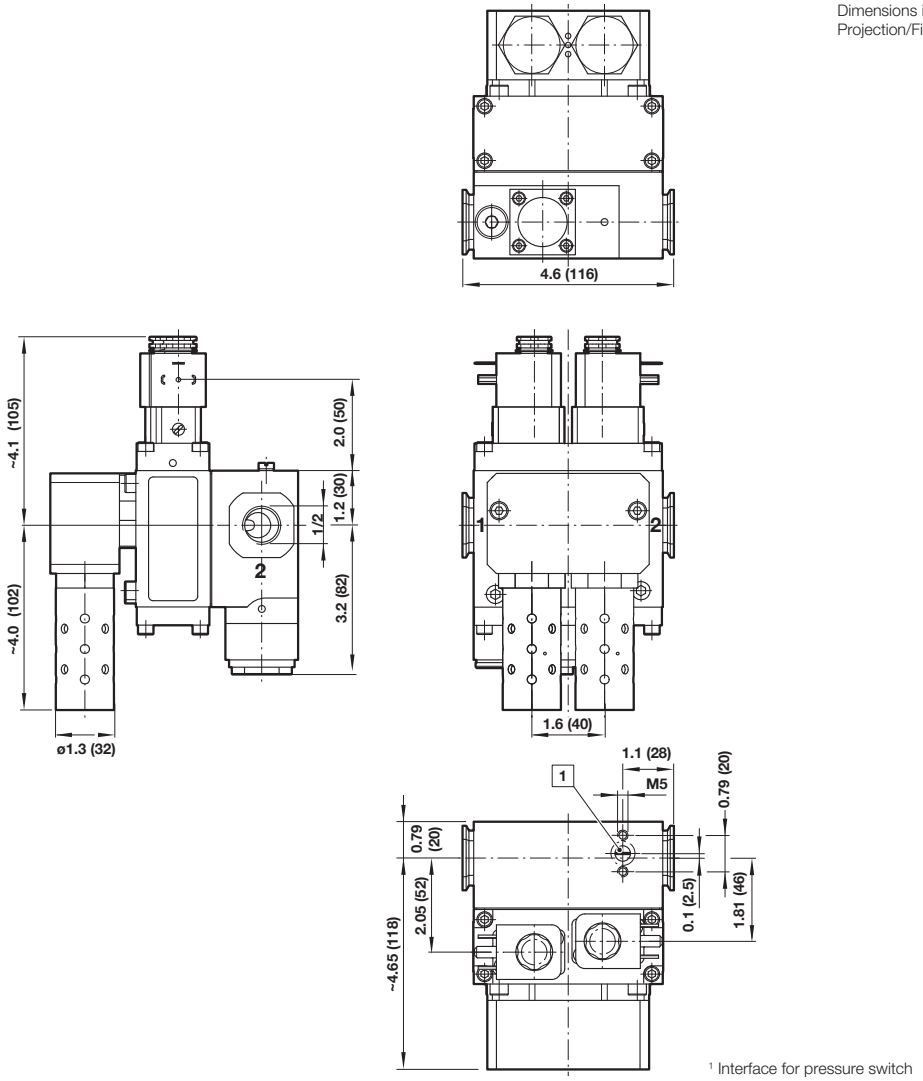
Exhausting Time

From switching signal OFF to pressure reduction to 10% of rated pressure

Operating pressure psi (bar)	Volume ft³ (dm³)	Exhaust time (ms)
72.5 (5)	0.11 (3)	190
	0.28 (8)	440
87.0 (6)	0.11 (3)	200
	0.28 (8)	460
116.0 (8)	0.11 (3)	210
	0.28 (8)	480

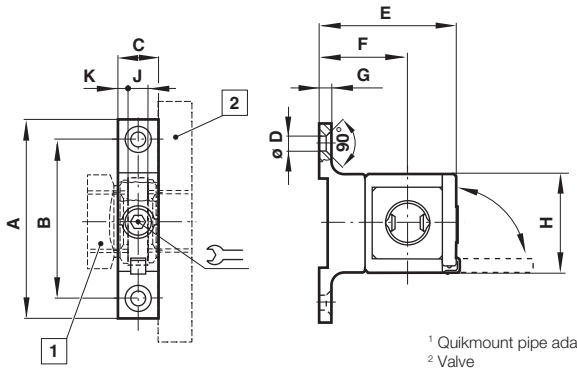
SCSQ10 Dimensions

Dimensions in inches (mm)
Projection/First angle



[1] Interface for pressure switch

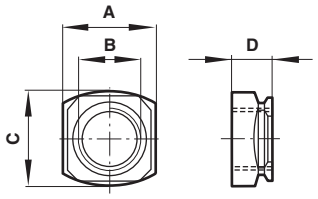
Quikclamp with Wall Bracket



[1] Quikmount pipe adaptor
[2] Valve

A	B	C	ØD	E	F	G	H	J	K	⊃
4.02	3.27	0.96	0.26	2.91	2.01	0.26	2.01	0.53	0.22	4mm
(102)	(83)	(24.5)	(6.5)	(74)	(51)	(6.5)	(51)	(13.5)	(5.5)	4mm

Quikmount Pipe Adaptor



A	B	C	D
1.52	1/2"	1.52	0.71
(38.5)	1/2"	(38.5)	(18)

How to Specify

V200/V400 Smooth Start/Exhaust Valves

- > Inline or modular installation
- > Control increase of downstream pressure on start up, reducing the possibility of equipment damage and risk to the user
- > Block inlet air and exhausts downstream air when pilot signal is removed or when the optional manual lockout slide is closed
- > Optional manual slide can be padlocked in closed position
- > Solenoid pilot operation
- > Designed for use in start-up and shutdown of equipment

V200F V400F V400F-AD

Technical Features

Fluid:
Compressed air, neutral gases
NOTE: Contact technical support for use with other media.

Maximum pressure, solenoid operated:
Dependent on solenoid rating [must not exceed 150 psig (10 bar)]

Maximum pressure, pilot operated:
150 psig (10 bar) max.

Minimum operating pressure:
44 psig (3 bar)

Operating temperature solenoid operated:
Dependent on solenoid rating

V200: 0°* to 150°F (-20°* to 65°C)

V400: 0°* to 175°F (-20°* to 80°C)

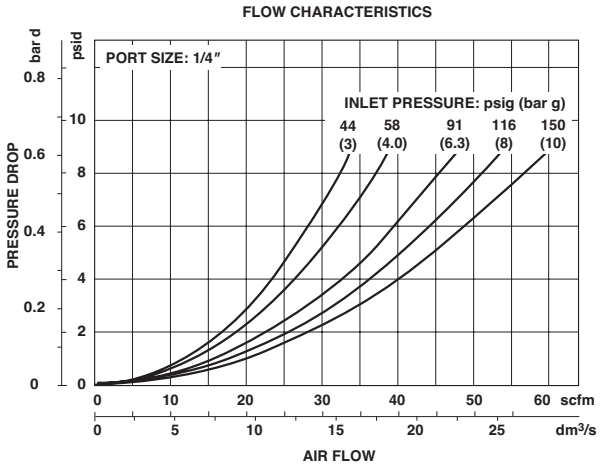
Materials:
Body: zinc alloy (V200) aluminum (V400)
Elastomers: synthetic materials
Filter discs: sintered plastic
Internal components: brass/steel

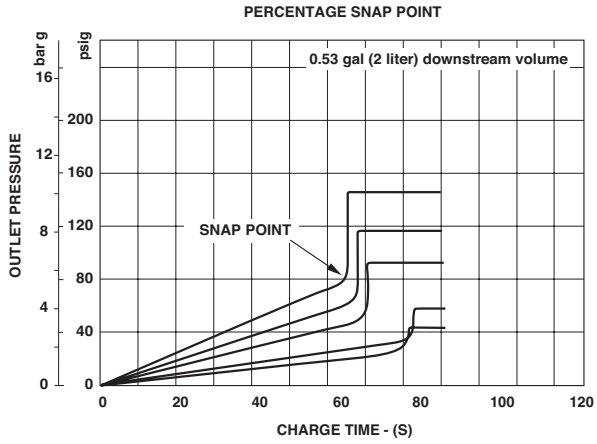
Accessories

	Quikmount pipe adapters (quantity of 1)	Quikclamp (quantity of 1)	Quikclamp and wall bracket (quantity of 1)
V200F	PGP200-08 (1/4)	PGA203-P1	PGA201-P1
	PGP200-10 (3/8)		
V400F	PGP400-10 (3/8)	PGA403-P1	PGA401-P1
	PGP400-15 (1/2)		
	PGP400-20 (3/4)		

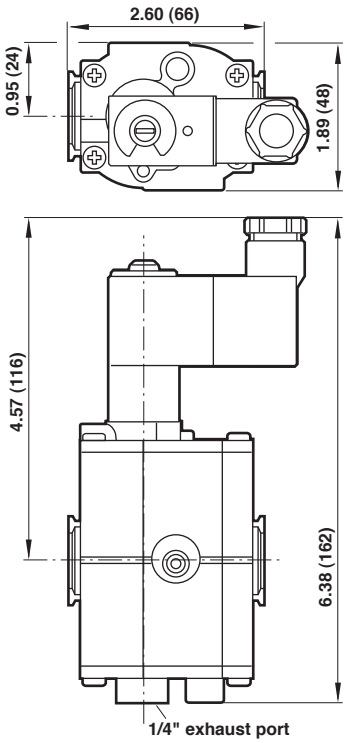
V200F Model Specifications

Typical performance characteristics





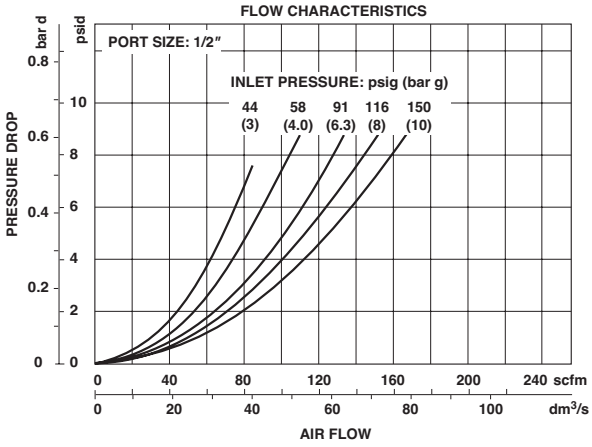
Solenoid operated

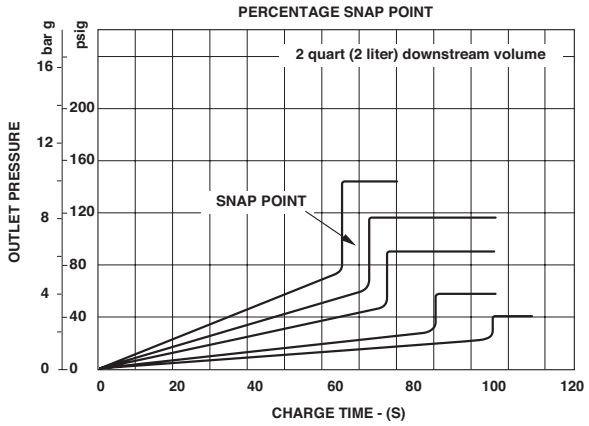


Dimensions in inches (mm)

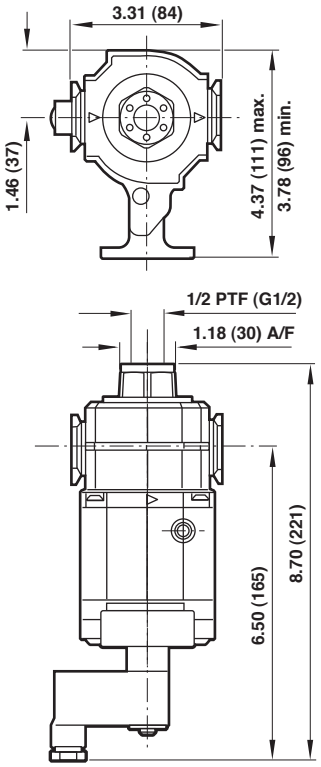
V400F Model Specifications

Typical performance characteristics

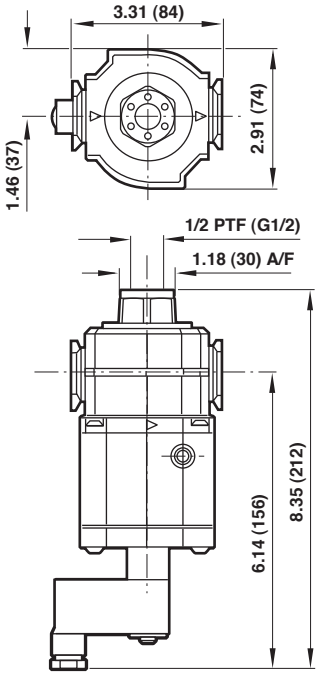




Solenoid operated plus manual shut-off with lockout

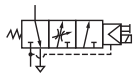


Solenoid operated



Dimensions in inches (mm)

Models listed include PTF threads. Solenoid operated models include 24 VDC coil and plug without indicator.

ISO Symbols	Port size	Solenoid operated*	lb (kg)
 Solenoid operated	1/4"	V200-08-S-24VDC-T	2.0 (0.91)
	3/8"	V200-10-S-24VDC-T	2.4 (1.08)
	1/2"	V400-15-S-24VDC-T	2.3 (1.05)
	3/4"	V400-20-S-24VDC-T	3.1 (1.41)

* Solenoid operated models are supplied with 22 mm 24 VDC 2 W coil and connector plug.

V200 - 08 - S - 24VDC - A

Series
V200
V400

Port Size	
08	1/4" (V200)
10	3/8" (V200/400)
15	1/2" (V400)
20	3/4" (V400)

Operator	
S	22mm miniature solenoid
M	22mm miniature solenoid with manual lockout slide (V400)

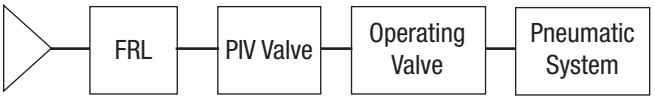
Coil Voltage	
24VDC	24 VDC
110/120V	110/120 V

Threads	
A	PTF
G	ISO G Parallel

Product Features

Pneumatic Isolation Valves (PIV)

Pneumatic Isolation Valves are typically the first valve following the FRL components in the line supplying compressed air to pneumatic equipment.



Pneumatic Isolation Valves are the critical component in any safety lockout, tagout system. Available sizes range from 1/4" inlet/outlet ports with 3/8" exhaust ports up to 1-1/2" inlet/outlet ports with 2" exhaust ports.

Available accessories include air mufflers, pressure switches, and air pressure “visual” indicators, and connecting hex nipples.

The Bimba PIV Advantage

Features

> Teflon Seals Standard
> Integral Pressure Sensing Port
> Highest Flow Rates
> Push/Pull Activation
> Valve can only be locked in the “Off” position
> Full or oversized exhaust ports

Benefits

> Competitor’s nitrile seals can extrude into the bore and stick; Teflon insures easy motion even after long periods of non-use.
> ANSI/PMMI compliance; competitors need to “T” the line and add additional components.
> Quicker exhaust means more machine “up time.”
> Easy operation (ANSI/PMMI)
> ANSI/PMMI compliance; competitive rotary models can be locked in the partially “on” position which is a safety hazard and not in compliance with existing standards.
> ANSI/PMMI compliance requires the exhaust port size to be greater than or equal to the supply port size. Many competitors have exhaust ports smaller than their supply ports.

Referenced Standards:

All standards are subject to revision. Parties are encouraged to investigate and apply the most recent editions of the standards indicated below.

> OSHA 29 CFR 1910.147
> CSA Z142-02
> CSA Z460-05
> ISO 13849-1
> ISO 14118:2000
> EN 1037
> ANSI/ASSE Z244.1-2003
> ANSI/PMMI B155.1-2006

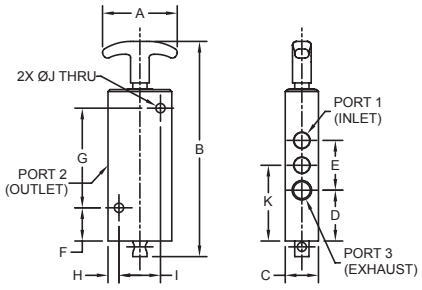
Accessories

Part Number	Description	Port Size	Average C_v
PIV-SIL-013	Air Muffler	1/8 NPT	2.0
PIV-SIL-025	Air Muffler	1/4 NPT	2.7
PIV-SIL-038	Air Muffler	3/8 NPT	3.2
PIV-SIL-038-HF	Air Muffler (High Flow)	3/8 NPT	4.9
PIV-SIL-050	Air Muffler	1/2 NPT	5.9
PIV-SIL-075	Air Muffler	3/4 NPT	5.9
PIV-SIL-075-HF	Air Muffler (High Flow)	3/4 NPT	13.5
PIV-SIL-100	Air Muffler	1 NPT	16.7
PIV-SIL-125	Air Muffler	1-1/4 NPT	17.4
*PIV-SIL-200	Air Muffler	2 NPT	54.0

Caution Note: Mufflers only rated to 150 psi.
*Note: This size contains female threads. All other sizes are male threaded.

Dimensions

PIV Valves

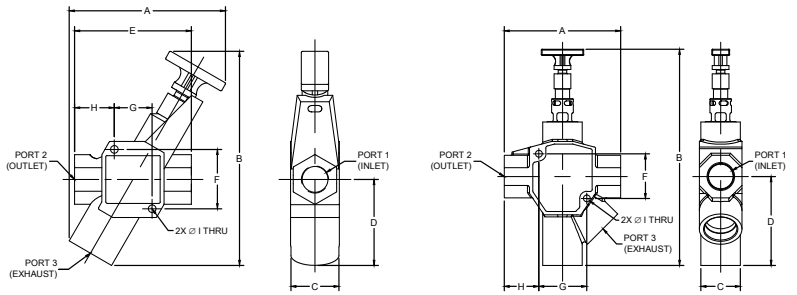


Part Number	In-Out Port Size	Exhaust Port Size	A	B	C	D	E	F	G	H	I	J	K
PIV-20-025/038	1/4	3/8	2.3	6.9	1.0	1.3	1.0	1.0	3.0	0.3	1.3	0.3	1.9
PIV-20-038/038	3/8	3/8	2.3	6.9	1.0	1.3	1.0	1.0	3.0	0.3	1.3	0.3	1.9

All dimensions are inches.

Dimensions

PIV Valves

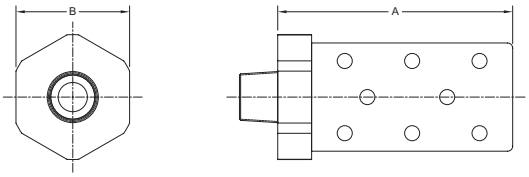


PIV-70-150/200 Only

Part Number	In-Out Port Size	Exhaust Port Size	A (open)	B (open)	C	D	E	F	G	H	I
PIV-20-038/075	3/8	3/4	6.6	9.0	2.0	3.0	4.4	2.3	1.3	1.6	0.34
PIV-60-050/075	1/2	3/4	6.6	9.0	2.0	3.0	4.4	2.3	1.3	1.6	0.34
PIV-60-075/075	3/4	3/4	6.6	9.0	2.0	3.0	4.4	2.3	1.3	1.6	0.34
PIV-60-075/125	3/4	1-1/4	7.7	10.8	2.3	3.8	5.5	2.8	1.8	1.9	0.34
PIV-70-100/125	1	1-1/4	7.7	10.8	2.3	3.8	5.5	2.8	1.8	1.9	0.34
PIV-70-125/125	1-1/4	1-1/4	7.7	10.8	2.3	3.8	5.5	2.8	1.8	1.9	0.34
PIV-70-150/200	1-1/2	2	8.2	14.8	3.0	5.0	8.2	3.2	3.4	2.4	0.47

All dimensions are inches.

Air Mufflers



Part Number	Port Size	A	B
PIV-SIL-013	1/8	1.6	0.8
PIV-SIL-025	1/4	1.6	0.8
PIV-SIL-038	3/8	1.6	0.8
PIV-SIL-038-HF	3/8	2.9	1.3
PIV-SIL-050	1/2	2.9	1.3
PIV-SIL-075	3/4	2.9	1.3
PIV-SIL-075-HF	3/4	4.5	2.0
PIV-SIL-100	1	4.5	2.0
PIV-SIL-125	1-1/4	4.5	2.0
*PIV-SIL-200	2	6.6	3.0

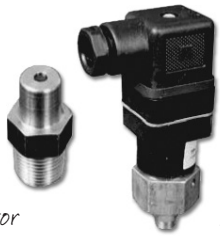
All dimensions are inches.
Note: The PIV-SIL-200 contains female threads.
All other sizes are male threaded.

Pneumatic Energy Release Verification Options

Visual Pop-Up Indicator or Pressure Switch (electrical)

The Bimba Pop-Up Indicator is constructed for the industrial environment with a brass body and 1/8" NPT connection. It offers 360° visibility and a redundant verification feature. By pushing on the red plunger, the operator can “feel” the presence of pressure and verify that the indicator is performing its sensing function.

The Bimba Pressure Switch offers an electronic pressure sensing option that can be integrated into a safety monitoring system, which confirms energy isolation throughout the circuit.

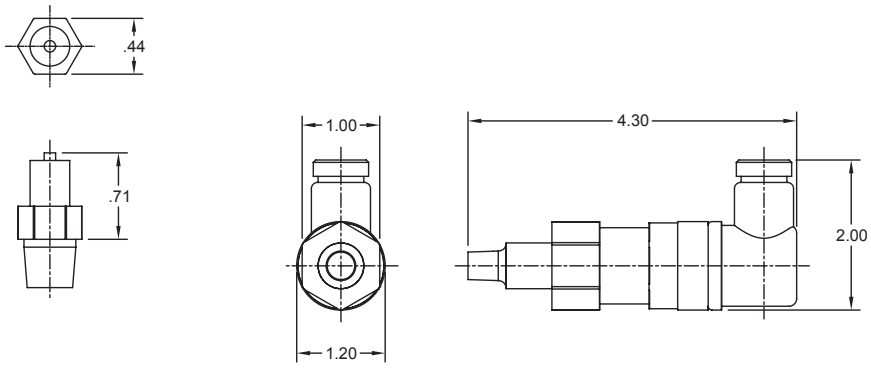


Pop-Up Indicator Pressure Switch

- > May be installed on all PIV valves with pressure sensing port
- > Provides a means to verify the release of downstream pressure to next obstruction.

Verification Option	Model Number	Inlet Port Size*
Pop-Up Indicator	PIV-POI	1/8
Pressure Switch	PIV-PS	1/8

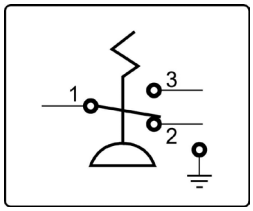
* NPT port threads.



Pressure Switch Specifications

Parameters	Specifications
Maximum Operating Pressure	600 psig (41 bar)
Set Point Tolerance	±1 psi or 5% (.07 bar)
Diaphragm Material	Buna N
Proof Pressure	1800 psi (124 bar)
Differential	8-16%
Current Rating	5 A @ 250 VAC 5 A @ 30 VDC (Resistive)
Media Connection (2)	1/8" NPT Male
Circuit Form (C)	DT (Single Pole - Double Throw)
Electrical Connection (HR)	DIN43650A

Wiring Diagram

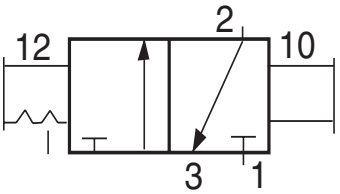


PIV Sensing Port

PIV Sensing Port - Bimba Pneumatic Isolation Valves are provided with 1/8 NPT sensing ports, enabling installation of a pressure sensing device such as the Pop-Up Indicator or Pressure Switch shown above. Standards suggest that machine design should include a method for verifying the release of energy after lockout.

How it Works

Pneumatic Isolation Valves



Manual PIV valve shown in the closed position. The valve can only be locked in the closed position.

Push/pull operation - Push the handle inward to exhaust downstream air (lockable in this position). Pull the handle outward to supply air downstream.

Following any FRL components, an energy isolation valve is usually the first valve in the line supplying compressed air to equipment. The energy isolation valve should provide a quick means of shutting off the supply of air and exhausting the downstream lines.

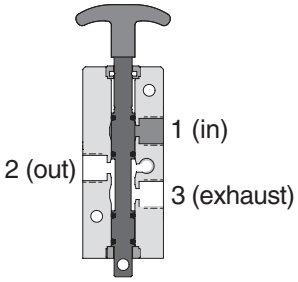
The Bimba PIV valve has a large red operating handle for high visibility. When the handle is pulled out, there is full line pressure. A short, full inward push of the handle closes off the flow of air, and quickly exhausts the pressure in the downstream line. This action is swift and doesn't require a difficult, slow, or confusing twisting action.

Valve Operation

PIV-20 Series

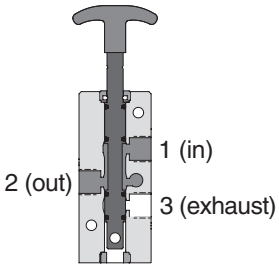
Valve Closed

When the red handle is pushed inward, the flow of supply air is blocked and downstream air is exhausted via the exhaust port. While servicing or maintaining machinery, the PIV valve should be padlocked in this position to prevent the handle from being pulled outward inadvertently where potential for human injury exists.



Valve Open

When the red handle is pulled outward supply air flows freely from inlet to outlet and flow to exhaust is blocked. A detent keeps the handle in the open position.



Standard Specifications:

Ambient/Media Temperature:	40° to 175°F (4° to 80°C).
Flow Media:	Filtered air; 5 micron recommended.
Inlet Pressure:	15 to 145 psig (1 to 10 bar).
Port Threads:	NPT standard.
Lock Hole Diameter:	0.27 inch (7.06 mm).
Length of Hole:	0.43 inch (10.92 mm).

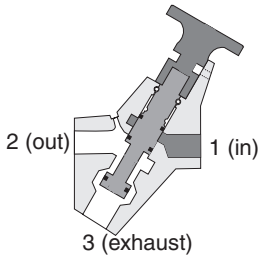
Note: Per specifications and regulations, these products are defined as energy isolation devices, NOT AS EMERGENCY STOP DEVICES.

Valve Operation

PIV-60 Series

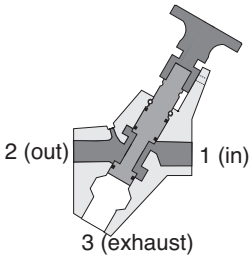
Valve Closed

With a short push of the red handle inward, the flow of supply air is blocked and downstream air is exhausted via the exhaust port at the bottom of the valve. The PIV valve should be padlocked in this position to prevent the handle from being pulled outward inadvertently where potential for human injury exists or while servicing machinery.



Valve Open

When the red handle is pulled out, supply air flows freely from inlet to outlet and flow to exhaust is blocked. A detent keeps the handle in the open position. The handle is not designed to be locked in this position, thereby providing for ready shut-off when necessary.



Standard Specifications:

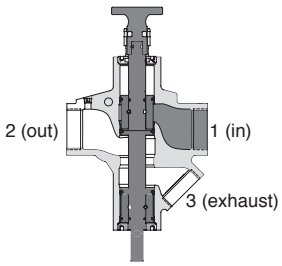
Ambient/Media Temperature:	40° to 175° F (4° to 80° C).
Flow Media:	Filtered air; 5 micron filter recommended.
Inlet Pressure:	15 to 300 psig (1 to 20 bar).
Port Threads:	NPT standard.

Note: Per specifications and regulations, these products are defined as energy isolation devices, NOT AS EMERGENCY STOP DEVICES.

PIV-70 Series

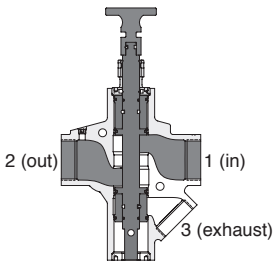
Valve Closed

With a short push of the red handle inward, the flow of supply air is blocked and downstream air is exhausted via the exhaust port while servicing or maintaining machinery. Padlock the PIV valve in this position to prevent the handle from being pulled outward inadvertently to avoid potential for human injury while servicing machinery.



Valve Open

When the red handle is pulled out, supply air flows freely from inlet to outlet and flow to exhaust is blocked. A detent keeps the handle in the open position. The handle is not designed to be locked in this position, thereby providing for ready shut-off when necessary.



Standard Specifications:

Ambient/Media Temperature:	40° to 175°F (4° to 80°C).
Flow Media:	Filtered air; 5 micron recommended.
Inlet Pressure:	15 to 300 psig (1 to 20 bar).
Port Threads:	NPT standard.
Lock Hole Diameter:	0.38 inch (9.6 mm).
Length of Hole:	0.75 inch (19.1 mm).

Note: Per specifications and regulations, these products are defined as energy isolation devices, NOT AS EMERGENCY STOP DEVICES.

Guidelines for a Safe Workplace

Referenced Standards:

All standards are subject to revision. Parties are encouraged to investigate and apply the most recent editions of the standards indicated below.

- OSHA 29 CFR 1910.147
- CSA Z142-02
- CSA Z460-05
- ISO 13849-1
- ISO 14118:2000
- EN 1037
- ANSI/ASSE Z244.1-2003
- ANSI/PMMI B155.1-2006

What does this regulation cover?

In general terms, the rule requires that energy sources (pneumatic, electric, hydraulic, etc) be shut off or disconnected while equipment is being serviced. Furthermore, the disconnected valve or switch must be locked to prevent reactivation while anyone is working on the equipment.

In the case of air-operated equipment, a lockout valve must be used to cut off the air supply to the equipment and exhaust any stored or residual downstream air. (OSHA Regulation 29 CFR 1910.147 lists a number of requirements for the control of hazardous energy sources.) In addition, Bimba PIV products assist manufacturers in complying with European regulation EN 1037 (Safety of Machinery). For complete information, please read the entire regulations.

Does this regulation apply to you?

An estimated 631,000 businesses are affected by this OSHA regulation. The majority of those affected are in the manufacturing and servicing industries. Among individual workers, equipment operators and those performing service on equipment are at the greatest risk of injury. Workers involved with packaging equipment, presses, and conveyor systems are also said to be at high risk.

Who benefits?

The Secretary of Labor says the procedures were developed to protect 39 million American workers from injury, and more than six percent of all workplace deaths can be eliminated in the affected industries. Statistics indicate that implementation of the regulation could prevent 120 deaths and 60,000 injuries annually.

How can this regulation be addressed?

The rule requires equipment to have “energy isolation devices” (to isolate the equipment from its energy sources), and that such devices be capable of being locked in the “off” position. Formal procedures must be established to de-energize the equipment, isolate it, and ensure that any stored energy (for example, air pressure trapped downstream in a system) has been dissipated. Employee training in these procedures is mandatory.

If your company uses pneumatically-controlled equipment, or if you are a manufacturer of pneumatically operated equipment, OSHA rules can have a substantial effect on your business. As an employer, compliance may involve modifications to the air control systems for equipment in your plant. As a manufacturer, the new machines or equipment you deliver should include lockout-and-exhaust devices as a part of your standard package.

Key points regarding the control of pneumatic energy:

- Shut-off valve required
  - Each piece of equipment must have a shut-off valve to isolate the equipment from its air supply and so render the equipment inoperative.
- Shut-off valve should be lockable
  - The valve is lockable if it is designed to allow the use of a padlock to keep the valve in the closed position.
- Pressurized downstream air must be relieved
  - In addition to locking out the air supply, all downstream air must be depressurized by providing an exhaust to atmosphere. Workers must also verify isolation and de-energizing, while being certain there is no reaccumulation of pressurized air during service or maintenance activities.
- “Tagout” may replace “lockout” only under certain circumstances
  - (1) If energy isolation device cannot be locked out;
  - (2) If employer shows that tagout provides safety equivalent to lockout. Whenever major replacement, repair, renovation, or modification of equipment is performed, or when new equipment is installed, energy isolating devices for such equipment must be designed to accept a lockout device.

How to Order

PIV series pneumatic isolation come in predetermined configurations. Reference the chart below to find a part number suitable for your application. For custom applications, please contact Bimba directly at cs@bimba.com.

Part Number	Inlet/Outlet Port Size	Exhaust Port Size	C_v	
			In/Out	Exhaust
PIV-20-025/038	1/4 NPT	3/8 NPT	1.8	1.7
PIV-20-038/038	3/8 NPT	3/8 NPT	2.6	2.6
PIV-20-038/075	3/8 NPT	3/4 NPT	4.7	3.5
PIV-60-050/075	1/2 NPT	3/4 NPT	7.1	4.0
PIV-60-075/075	3/4 NPT	3/4 NPT	8.2	4.1
PIV-60-075/125	3/4 NPT	1-1/4 NPT	13.1	8.9
PIV-70-100/125	1 NPT	1-1/4 NPT	16.5	9.5
PIV-70-125/125	1-1/4 NPT	1-1/4 NPT	19.2	9.7
PIV-70-150/200	1-1/2 NPT	2 NPT	35.5	50.9

Note: The part numbers have been configured to provide information on applicable FRL series and port sizes. There is some overlap in the applicable FRL series. For example: PIV (Pneumatic Isolation Valve) - 60 (60 series FRL) - 050 (Inlet/Outlet Port Size) - 075 (Exhaust Port Size)

IMI Precision Engineering operates four global centres of technical excellence and a sales and service network in 75 countries, as well as manufacturing capability in the USA, Germany, China, UK, Switzerland, Czech Republic, Mexico and Brazil.

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Due to our policy of continuous development, Bimba reserve the right to change specifications without prior notice.

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