

QUBE Modular FRL System

Catalog 0304



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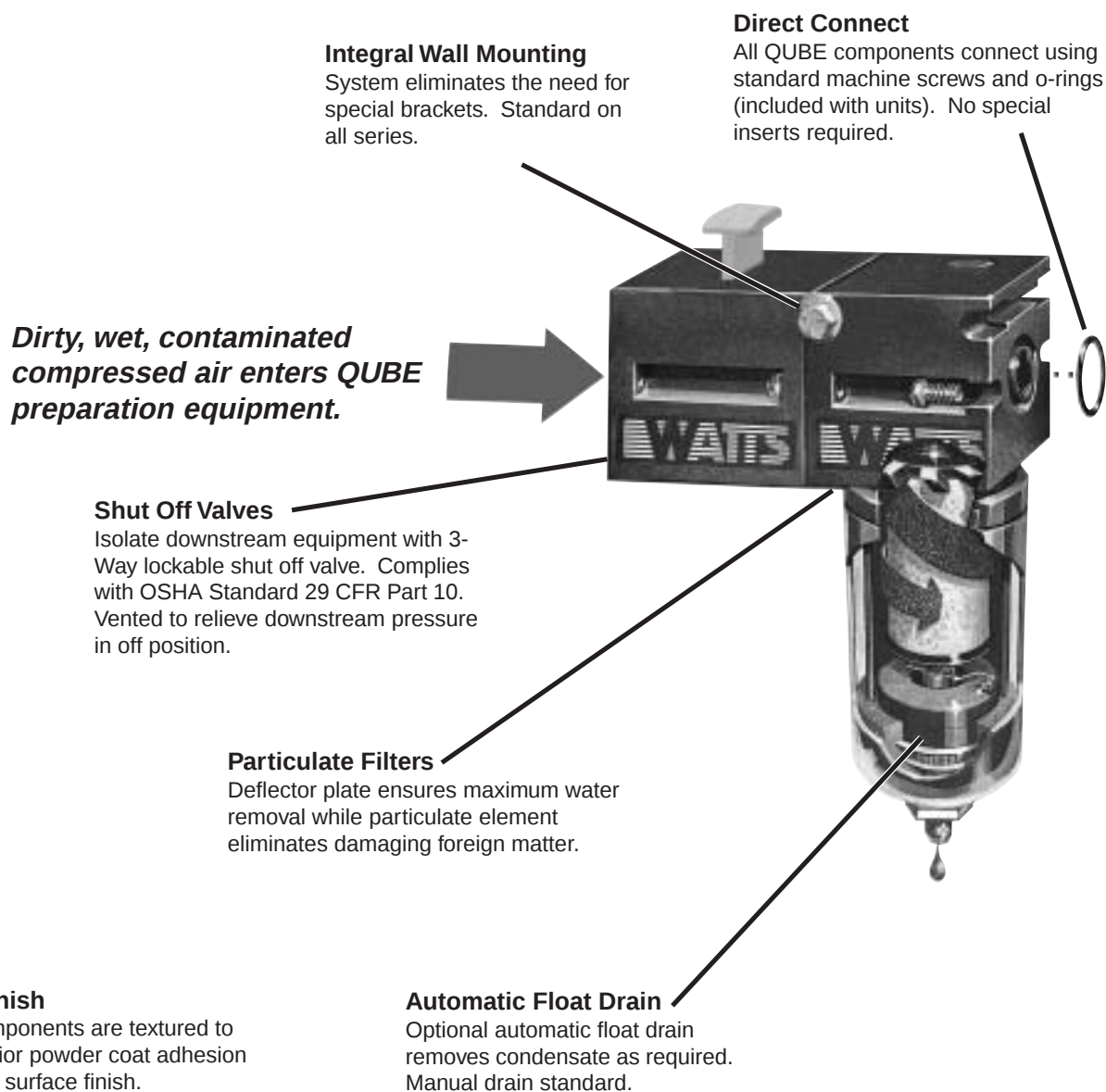
Pneumatic Division
Richland, Michigan
www.wattsfluidair.com

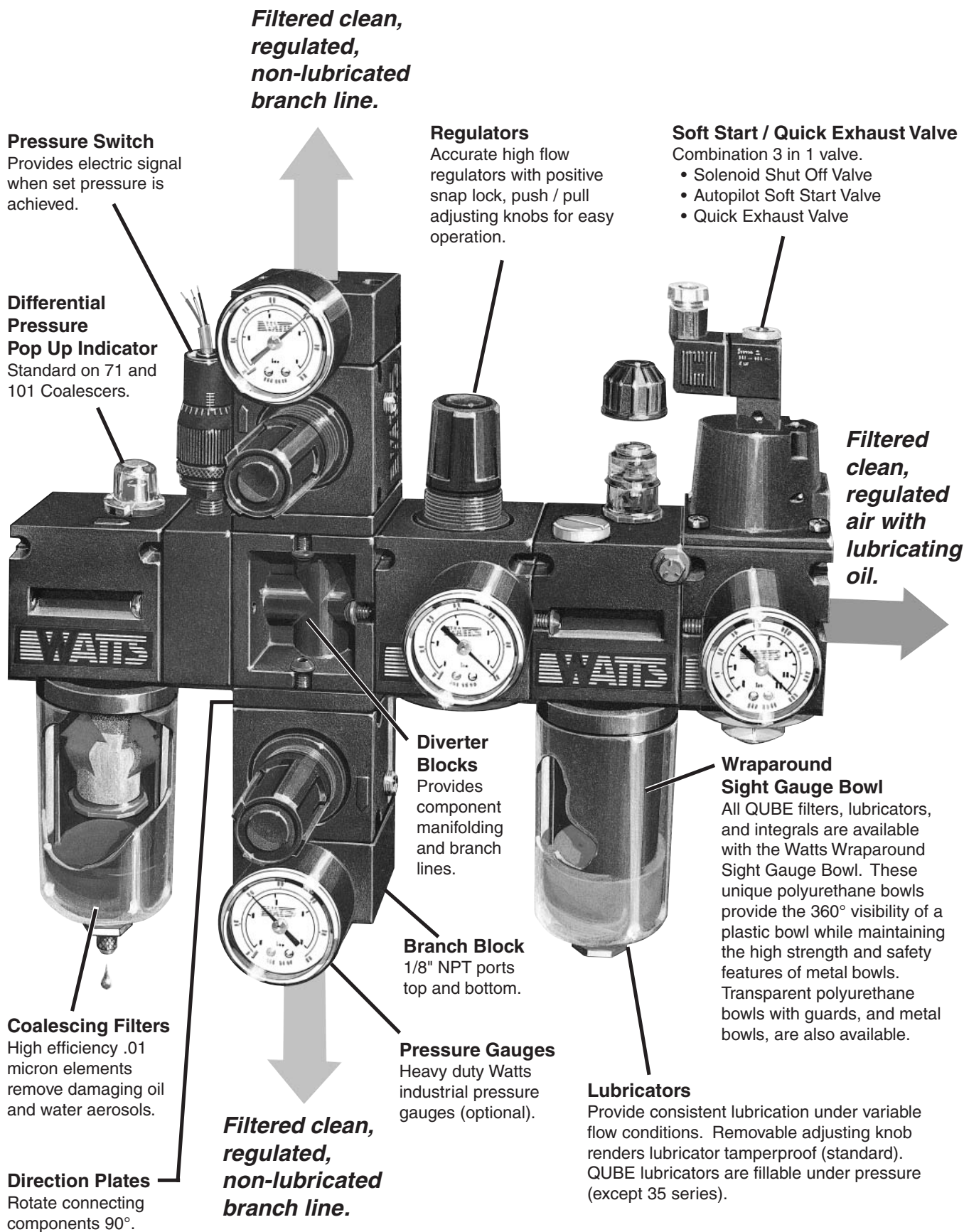
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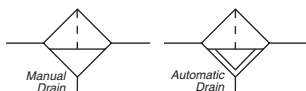
QUBE Connects you to the Most Advanced Modular Air Preparation Equipment. Designed for Total Flexibility, High Performance and Unlimited Expandability.

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatability.





F35 Filter

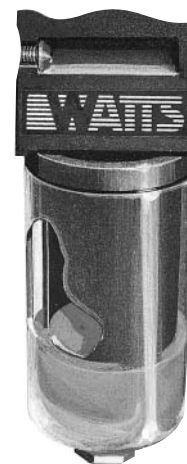


Features

- Compact Size Allows Greater Design Flexibility
- Nearly Double the Flow Capacity of Standard Miniature Filters; Reduces Costly Pressure Drop
- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Excellent Water Removal Efficiency
- Unique Deflector Plate that Creates Swirling of the Air Stream Ensuring Maximum Water and Dirt Separation
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- 20 Micron Filter Element Standard, 5 Micron Available
- Transparent Polyurethane Bowl Standard
- Metal Bowl with Wraparound Sight Gauge Optional
- Manual Drain as Standard, Optional Auto Pulse Drain
- Large Bowl Capacity
- High Flow: 1/8" - 32 SCFM[§], 1/4" - 38 SCFM[§]

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, and 5 PSIG Pressure Drop with 20 Micron Element.

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatibility.



Wraparound Sight Gauge Bowl

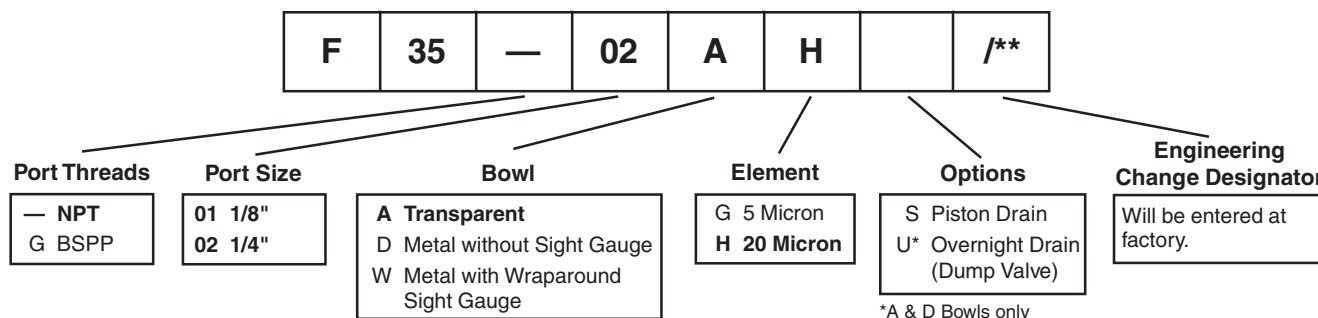
All QUBE filters, lubricators, and integrals are available with the Watts Wraparound Polyurethane Sight Gauge Bowl. These unique bowls provide the 360° visibility of a plastic bowl while maintaining the high strength and safety features of metal bowls. Polyurethane bowls with guards, and metal bowls, are also available.

Port Size	NPT		BSPP	
	Manual Twist Drain	Piston Drain	Manual Twist Drain	Piston Drain
Polyurethane Bowl				
1/8"	F35-01AH	F35-01AHS	F35G01AH	F35G01AHS
1/4"	F35-02AH	F35-02AHS	F35G02AH	F35G02AHS
Zinc Bowl / Sight Gauge				
1/8"	F35-01WH	F35-01WHS	F35G01WH	F35G01WHS
1/4"	F35-02WH	F35-02WHS	F35G02WH	F35G02WHS

Standard part numbers shown bold.

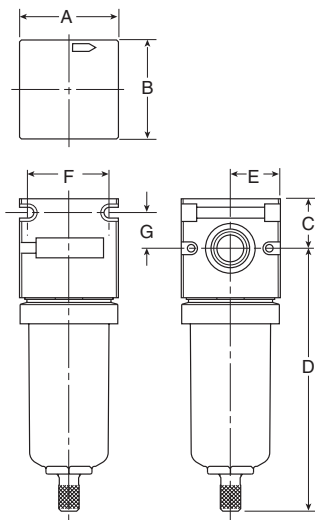
For other models refer to ordering information below.

Ordering Information



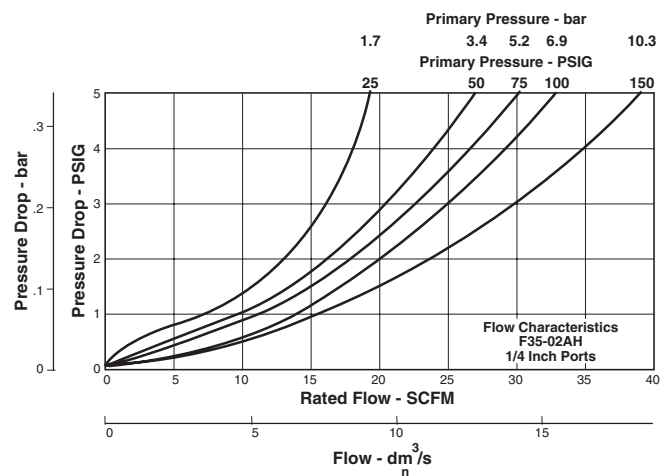
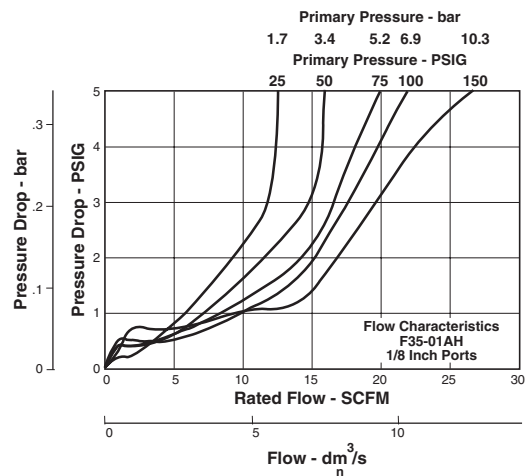
NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



F35 Filter Dimensions						
A	B	C	D	E	F	G
F35-AH, F35-DH						
1.59 (40,5)	1.59 (40,5)	0.81 (20,6)	4.25 (107,9)	0.80 (20,2)	1.31 (33,3)	0.58 (14,7)
F35-WH						
1.59 (40,5)	1.59 (40,5)	0.81 (20,6)	4.27 (108,3)	0.80 (20,2)	1.31 (33,3)	0.58 (14,7)

Inches
(mm)



F35 Filter Kits & Accessories

Bowl Kits –

Polyurethane (A) BKF35A
Zinc (D) BKF35D
Zinc (W) Wraparound Sight Gauge BKF35W

Drain Kits –

Manual Twist Drain SA600Y7-1
Piston (Max. Pressure: 175 PSIG) PKF35
Semi-Automatic “Overnight” Drain SA602A7
(Drains automatically under zero pressure)

Filter Element Kits –

5 Micron (All) EK504VY
20 Micron (All) EK504Y

Repair Kit –

Deflector, Retainer (All) RFK30

Specifications

Bowl Capacity 1.5 Ounce

Port Threads 1/8, 1/4 Inch

Pressure & Temperature Ratings –

Polyurethane Bowl 0 to 150 PSIG (0 to 10.2 bar)
40°F to 125°F (4.4°C to 52°C)

Zinc Bowl 0 to 300 PSIG (0 to 20.4 bar)
40°F to 180°F (4.4°C to 82.2°C)

With Piston Drain 175 PSIG Max. Press. (11.9 bar)
40°F to 150°F (4.4°C to 65.6°C)

Zinc Bowl w/ Sight Gauge 0 to 250 PSIG (0 to 17.2 bar)
With Piston Drain 175 PSIG Max. Press. (11.9 bar)
40°F to 150°F (4.4°C to 65.6°C)

Weight –

Polyurethane Bowl 0.7 lb. (0.3 kg) / Unit
18.9 lb. (8.6 kg) / 24-Unit Master Pack

Zinc Bowl 0.9 lb. (0.4 kg) / Unit
23.9 lb. (10.8 kg) / 24-Unit Master Pack

Zinc Bowl W/ Sight Gauge 0.96 lb. (0.4 kg) / Unit
25.1 lb. (11.4 kg) / 24-Unit Master Pack

Materials of Construction

Body Zinc

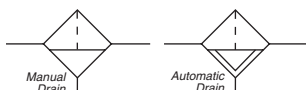
Bowls Polyurethane
Metal (Zinc)

Drains Brass

Filter Elements Polypropylene

Seals Nitrile

F75 Filter



Features

- Compact Size Allows Greater Design Flexibility
- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Excellent Water Removal Efficiency
- For Applications Requiring Minimum Pressure Drop
- Unique Deflector Plate that Creates Swirling of the Air Stream Ensuring Maximum Water and Dirt Separation
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- 40 Micron Filter Element Standard, 5 Micron Available
- Transparent Polyurethane Bowl with Bowl Guard as Standard
- Metal Bowl with Wraparound Sight Gauge Optional
- Manual Drain as Standard, Optional Auto Float Drain
- Large Bowl Capacity
- High Flow: 1/4" - 43 SCFM[§], 3/8" - 1/2" - 73 SCFM[§]

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, and 5 PSIG Pressure Drop with 40 Micron Element.

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatibility.

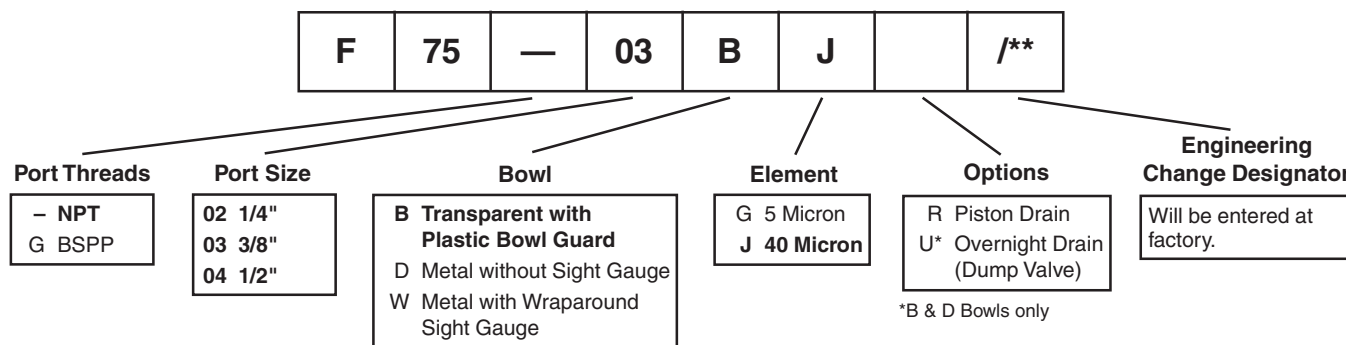


Port Size	NPT		BSPP	
	Manual Twist Drain	Automatic Float Drain	Manual Twist Drain	Automatic Float Drain
Polyurethane Bowl / Plastic Guard				
1/4"	F75-02BJ	F75-02BJR	F75G02BJ	F75G02BJR
3/8"	F75-03BJ	F75-03BJR	F75G03BJ	F75G03BJR
1/2"	F75-04BJ	F75-04BJR	F75G04BJ	F75G04BJR
Zinc Bowl / Sight Gauge				
1/4"	F75-02WJ	F75-02WJR	F75G02WJ	F75G02WJR
3/8"	F75-03WJ	F75-03WJR	F75G03WJ	F75G03WJR
1/2"	F75-04WJ	F75-04WJR	F75G04WJ	F75G04WJR

Standard part numbers shown bold.
 For other models refer to ordering information below.

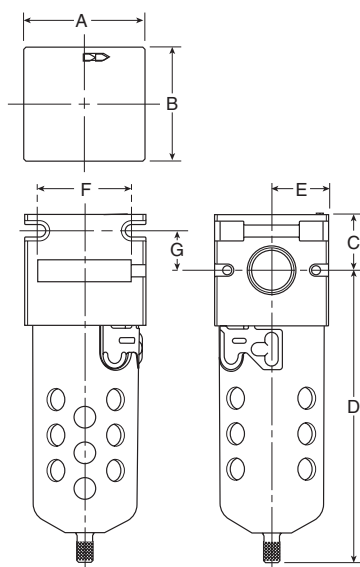
Wraparound Sight Gauge Bowl
 All QUBE filters, lubricators, and integrals are available with the Watts Wraparound Polyurethane Sight Gauge Bowl. These unique bowls provide the 360° visibility of a plastic bowl while maintaining the high strength and safety features of metal bowls. Polyurethane bowls with guards, and metal bowls, are also available.

Ordering Information



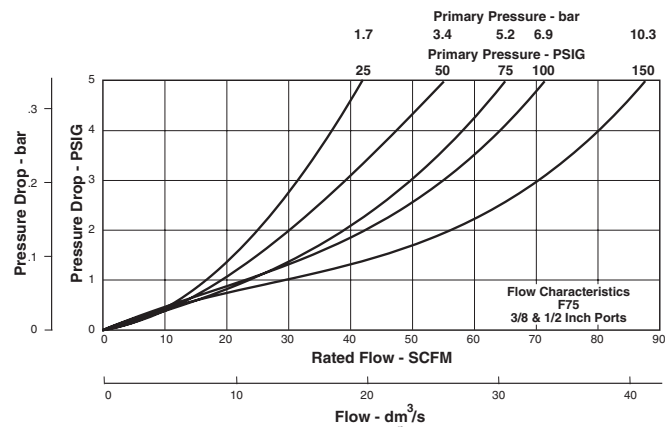
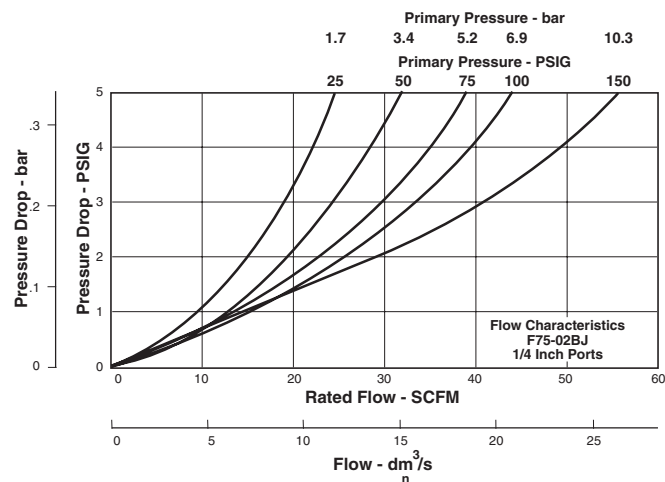
NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



F75 Filter Dimensions						
A	B	C	D	E	F	G
F75-BJ, F75-DJ						
2.19 (55,6)	2.19 (55,6)	1.01 (25,4)	5.19 (131,8)	1.09 (27,8)	1.66 (42,1)	0.70 (17,9)
F75-WJ						
2.19 (55,6)	2.19 (55,6)	1.01 (25,4)	5.31 (134,9)	1.09 (27,8)	1.66 (42,1)	0.70 (17,9)

Inches
(mm)



F75 Filter Kits & Accessories

Bowl Kits –

Polyurethane (B) BKF55B
Metal (D) BKF55D
Metal (W) Wraparound Sight Gauge BKF55W

Drain Kits –

Internal Auto (Max. Pressure: 175 PSIG) (B & D) SA602MD
Internal Auto (Max. Pressure: 175 PSIG) (W) SAF105MD
Manual Twist Drain SA600Y7-1
Semi-Automatic “Overnight” Drain SA602A7
(Drains automatically under zero pressure)

Filter Element Kits –

5 Micron (All) EK55G
40 Micron (All) EK55J

Repair Kits –

Deflector, Retainer RFK55
Internal Float Drain RK602MD

Specifications

Bowl Capacity 3.8 Ounce

Port Threads 1/4, 3/8, 1/2 Inch

Pressure & Temperature Ratings –

Polyurethane Bowl 0 to 150 PSIG (0 to 10.2 bar)
40°F to 125°F (4.4°C to 52 °C)

Zinc Bowl 0 to 300 PSIG (0 to 20.4 bar)
40°F to 180°F (4.4°C to 82.2°C)

With Automatic Float Drain 175 PSIG Max. Press. (11.9 bar)
40°F to 125°F (4.4°C to 52°C)

Zinc Bowl w/ Sight Gauge 0 to 250 PSIG (0 to 17.2 bar)
40°F to 150°F (4.4°C to 65.6°C)

With Automatic Float Drain 175 PSIG Max. Press. (11.9 bar)
40°F to 125°F (4.4°C to 52°C)

Weight –

Polyurethane Bowl 1.25 lb. (0.57kg) / Unit
25 lb. (11.3 kg) / 20-Unit Master Pack

Zinc Bowl 1.50 lb. (0.68 kg) / Unit
30 lb. (13.6 kg) / 20-Unit Master Pack

Zinc Bowl W/ Sight Gauge 1.60 lb. (0.73 kg) / Unit
32 lb. (14.5 kg) / 20-Unit Master Pack

Materials of Construction

Body Zinc

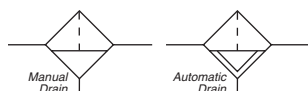
Bowls Polyurethane
Metal (Zinc)

Drains Brass

Filter Elements Polyethylene

Seals Nitrile

F105 Filter



Features

- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Excellent Water Removal Efficiency
- For Applications Requiring Minimum Pressure Drop
- Unique Deflector Plate that Creates Swirling of the Air Stream Ensuring Maximum Water and Dirt Separation
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- 40 Micron Filter Element Standard, 5 Micron Available
- Transparent Polyurethane Bowl with Bowl Guard as Standard
- Metal Bowl with Wraparound Sight Gauge Optional
- Manual Drain as Standard, Optional Auto Float Drain
- Large Bowl Capacity
- High Flow: 3/8" - 110 SCFM[§], 1/2" - 120 SCFM[§], 3/4" - 160 SCFM[§]

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, and 5 PSIG Pressure Drop with 40 Micron Element.

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatibility.



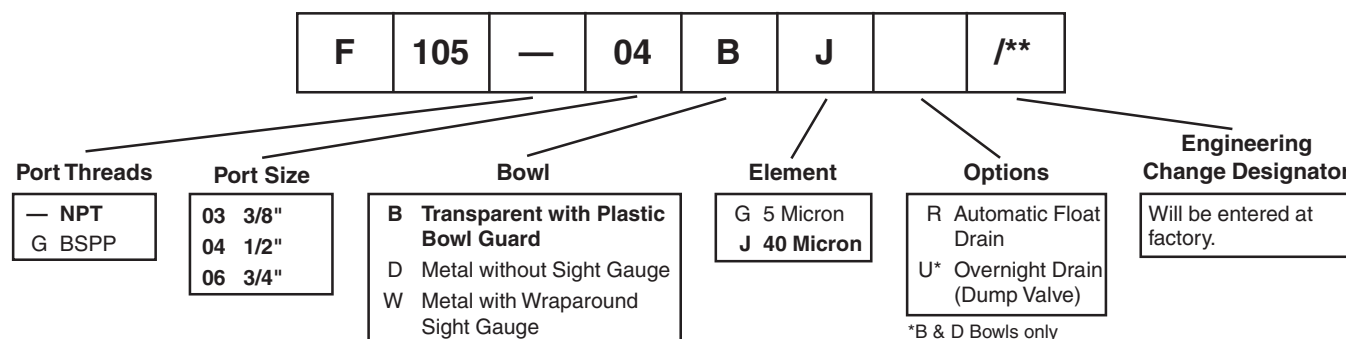
Port Size	NPT		BSPP	
	Manual Twist Drain	Automatic Float Drain	Manual Twist Drain	Automatic Float Drain
Polyurethane Bowl / Plastic Guard				
3/8"	F105-03BJ	F105-03BJR	F105G03BJ	F105G03BJR
1/2"	F105-04BJ	F105-04BJR	F105G04BJ	F105G04BJR
3/4"	F105-06BJ	F105-06BJR	F105G06BJ	F105G06BJR
Metal Bowl / Sight Gauge				
3/8"	F105-03WJ	F105-03WJR	F105G03WJ	F105G03WJR
1/2"	F105-04WJ	F105-04WJR	F105G04WJ	F105G04WJR
3/4"	F105-06WJ	F105-06WJR	F105-G06WJ	F105G06BWR

Standard part numbers shown bold.

For other models refer to ordering information below.

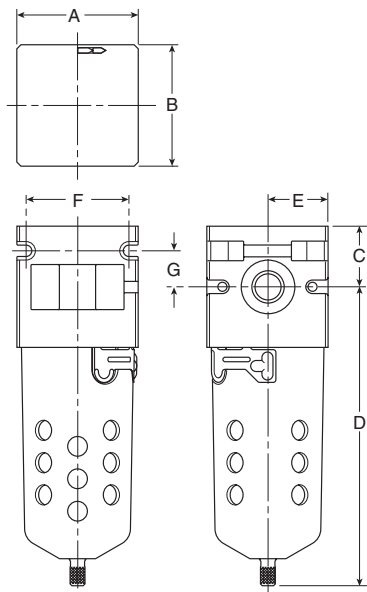
Wraparound Sight Gauge Bowl
 All QUBE filters, lubricators, and integrals are available with the Watts Wraparound Polyurethane Sight Gauge Bowl. These unique bowls provide the 360° visibility of a plastic bowl while maintaining the high strength and safety features of metal bowls. Polyurethane bowls with guards, and metal bowls, are also available.

Ordering Information



NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



F105 Filter Dimensions								
A*	A†	B	C	D	E	F*	F†	G
F105-BJ and F105-DJ								
2.69 (68,3)	3.03 (77,0)	2.69 (68,3)	1.34 (34,1)	6.66 (169,1)	1.35 (34,3)	2.27 (57,6)	2.55 (64,8)	0.88 (22,2)
F105-WJ								
2.69 (68,3)	3.03 (77,0)	2.69 (68,3)	1.34 (34,1)	6.66 (169,1)	1.35 (34,3)	2.27 (57,6)	2.55 (64,8)	0.88 (22,2)

Inches (mm)

* 3/8 and 1/2 Inch Ports

† 3/4 Inch Ports

F105 Filter Kits & Accessories

Bowl Kits –

Polyurethane (B)	BKF105B
Metal (D)	BKF105D
Metal (W) Wraparound Sight Gauge	BKF105W

Drain Kits –

Manual Twist Drain	SA600Y7-1
Internal Auto (Max. Pressure: 175 PSIG) (B & D)	SA602MD
Internal Auto (Max. Pressure: 175 PSIG) (W)	SAF105MD
Semi-Automatic "Overnight" Drain	SA602A7
(Drains automatically under zero pressure)	

Filter Element Kits –

5 Micron (All)	EKF100G
40 Micron (All)	EKF100J

Repair Kits –

Deflector, Retainer	RFK100
Internal Float Drain	RK602MD

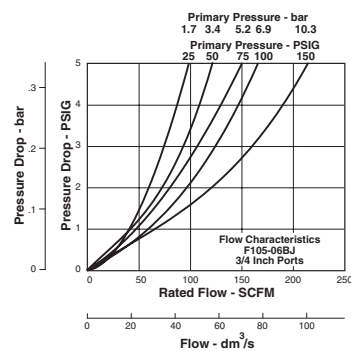
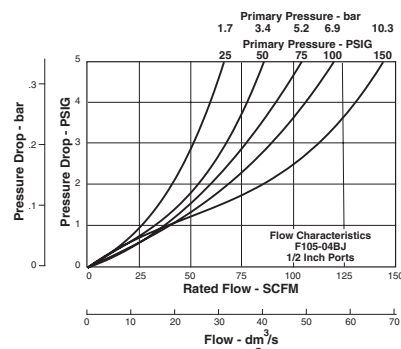
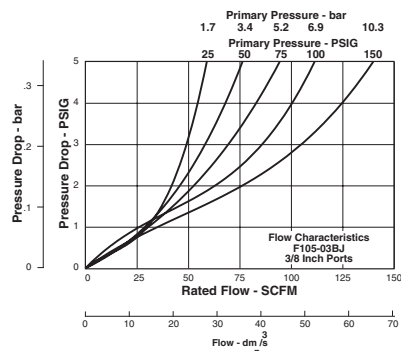
Specifications

Bowl Capacity 8.5 Ounce

Port Threads 3/8, 1/2, 3/4 Inch

Pressure & Temperature Ratings –

Polyurethane Bowl	0 to 150 PSIG (0 to 10.2 bar)
	40°F to 125°F (4.4°C to 52°C)



Zinc Bowl 0 to 300 PSIG (0 to 20.4 bar)
40°F to 180°F (4.4°C to 82.2°C)

With Automatic Float Drain 175 PSIG Max. Press. (11.9 bar)
40°F to 125°F (4.4°C to 52°C)

Zinc Bowl w/ Sight Gauge 0 to 250 PSIG (0 to 17.2 bar)
40°F to 150°F (4.4°C to 65.6°C)

With Automatic Float Drain 175 PSIG Max. Press. (11.9 bar)
40°F to 125°F (4.4°C to 52°C)

Weight –

Polyurethane Bowl	1.10 lb. (0.50 kg) / Unit
	10.8 lb. (4.9 kg) / 8-Unit Master Pack
Zinc Bowl	1.54 lb. (0.70 kg) / Unit
	14.3 lb. (6.5 kg) / 8-Unit Master Pack
Zinc Bowl W/ Sight Gauge	1.74 lb. (0.79 kg) / Unit
	15.9 lb. (7.2 kg) / 8-Unit Master Pack

Materials of Construction

Body Aluminum

Bowls Polyurethane
Metal (Zinc)

Drains Brass

Filter Elements Polypropylene

Seals Nitrile

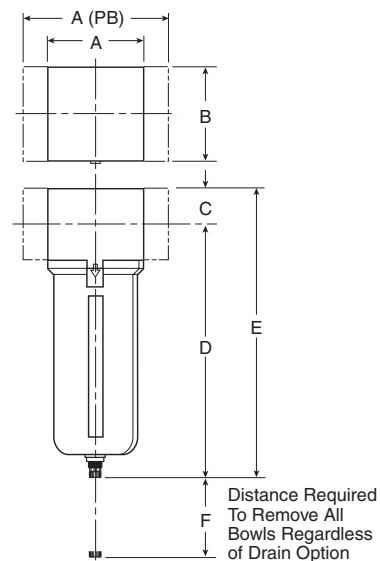
F255 Filters – Hi-Flow



Features

- Port Blocks (PB) Available to Provide 1-1/2" Port Extension to 1" Ported Bodies
- Excellent Water Removal Efficiency
- Metal Bowl with Sight Gauge
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- Manual Drain as Standard, Optional Internal Auto Drain
- All Hardware Necessary for Modular Connection to Other QUBE 255 Series is Included
- High Flow: 3/4" - 270 SCFM[§], 1" - 300 SCFM[§]

[§] SCFM = Standard Cubic Feet Per Minute at 90 PSIG Inlet and 5 PSIG Pressure Drop, with 40 Micron Element.



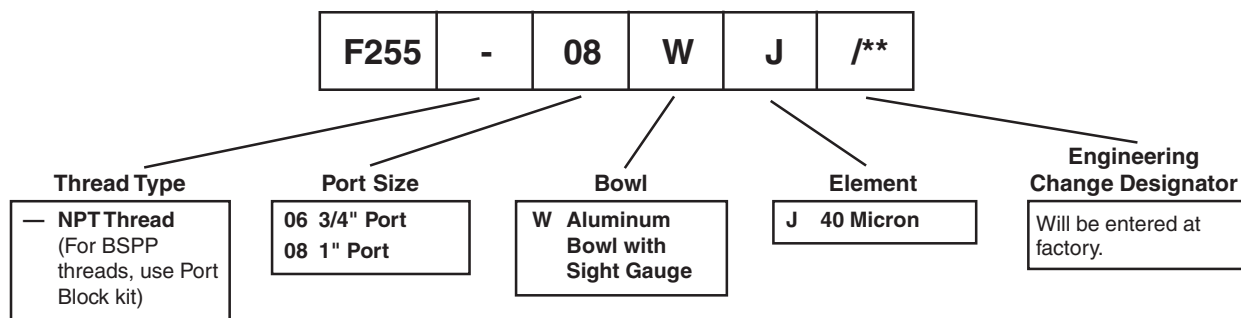
Port Size	NPT
	Metal Bowl / Sight Gauge / Manual Drain
3/4"	F255-06WJ
1"	F255-08WJ

Standard part numbers shown bold.
 For other models refer to ordering information below.

F255 Filter Dimensions				
A	A (PB)	B	C	D [†]
3.62 (92)	5.91 (150)	3.62 (92)	1.38 (35)	9.57 (243)
E [†]	F			
10.95 (278)	4.92 (125)			

[†] With Manual Drain or Internal Auto Drain
 Inches
 (mm)

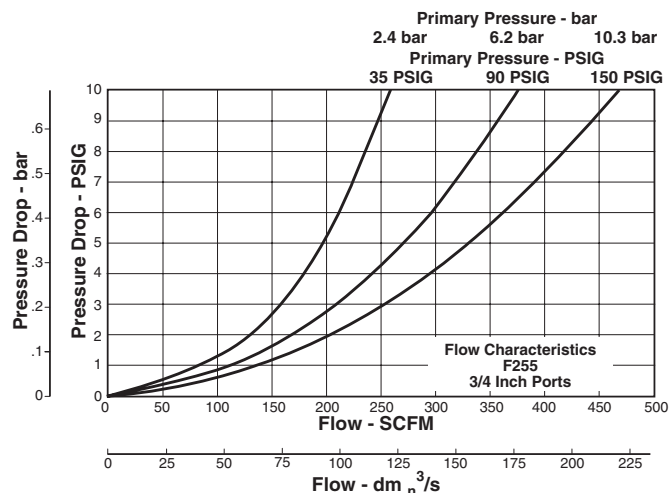
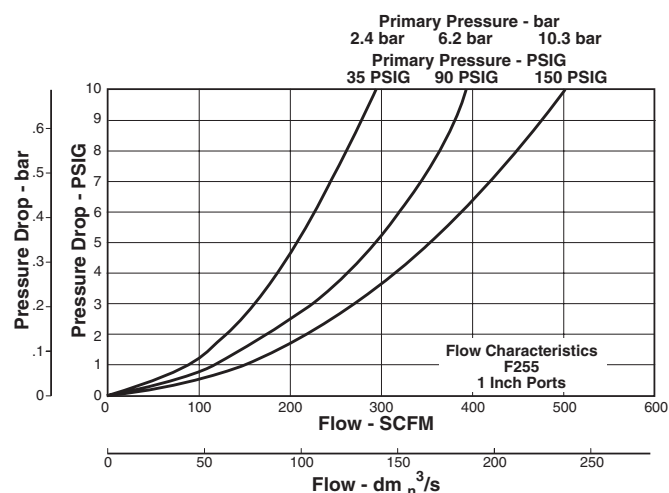
Ordering Information



NOTE: BOLD OPTIONS ARE STANDARD.

Internal Automatic Drains must be purchased separately as PS506.

Technical Information



F255 Filter Kits & Accessories

Bowl Kits –

Metal Bowl –

Sight Gauge / Internal Auto Drain P3NKA00BSA

Sight Gauge / Manual Drain P3NKA00BSM

Drain Kit –

Internal Auto Drain PS506

Manual Drain PS512

Filter Elements –

40 Micron P3NKA00ESG

5 Micron P3NKA00ESE

Adsorber P3NKA00ESA

Sight Gauge Kit P3NKA00PE

Mounting Bracket Kit P3NKA00MW

Port Block Kit (1-1/2" NPT Ports) P3NKB9BCL

Specifications

Bowl Capacity 18.0 Ounces

Sump Capacity 6.8 Ounces

Pressure & Temperature Rating 0 to 250 PSIG (0 to 17 bar)

32°F to 175°F (0°C to 80°C)

Internal Auto Drain – 10 to 250 PSIG (0.7 to 17 bar)
at 125°F (52°C) or less

Weight –

3/4 Inch 3.5 lb. (1.6 kg)

1 Inch 3.5 lb. (1.6 kg)

Materials of Construction

Body Aluminum

Deflector Plastic

Drain Plastic

Filter Elements –

40 Micron (Standard) Plastic

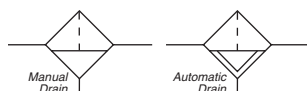
5 Micron (Optional) Plastic

Adsorber (Optional) Activated Charcoal

Seals Nitrile

Sight Gauge Polyamide (Nylon)

F31 Coalescing Filter

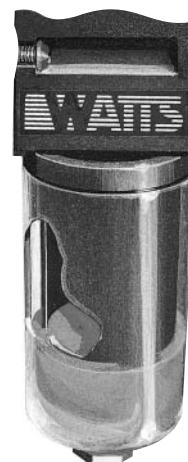


Features

- Compact Size Allows Greater Design Flexibility
- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Removes Oil and Water Aerosols, as Well as Particulate Matter Down To 0.01 Micron.
- Pleated Element for Longer Life and Lower Pressure Drop
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- Activated Carbon Elements Available for Oil Vapor Removal
- Transparent Polyurethane Bowl Standard
- Metal Bowl with Wraparound Sight Gauge Optional
- Manual Drain as Standard, Optional Auto Pulse Drain
- Large Bowl Capacity
- High Flow: 1/8" & 1/4" - 20 SCFM§

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, and 5 PSIG Pressure Drop

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatibility.



Port Size	NPT		BSPP	
	Manual Twist Drain	Piston Drain	Manual Twist Drain	Piston Drain
Polyurethane Bowl				
1/8"	F31-01AH	F31-01AHS	F31G01AH	F31G01AHS
1/4"	F31-02AH	F31-02AHS	F31G02AH	F31G02AHS
Zinc Bowl / Sight Gauge				
1/8"	F31-01WH	F31-01WHS	F31G01WH	F31G01WHS
1/4"	F31-02WH	F31-02WHS	F31G02WH	F31G02WHS

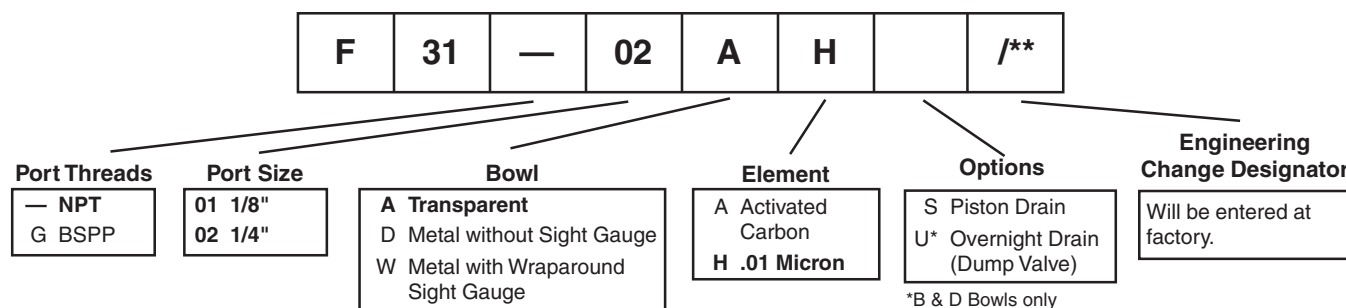
Standard part numbers shown bold.

For other models refer to ordering information below.

Wraparound Sight Gauge Bowl

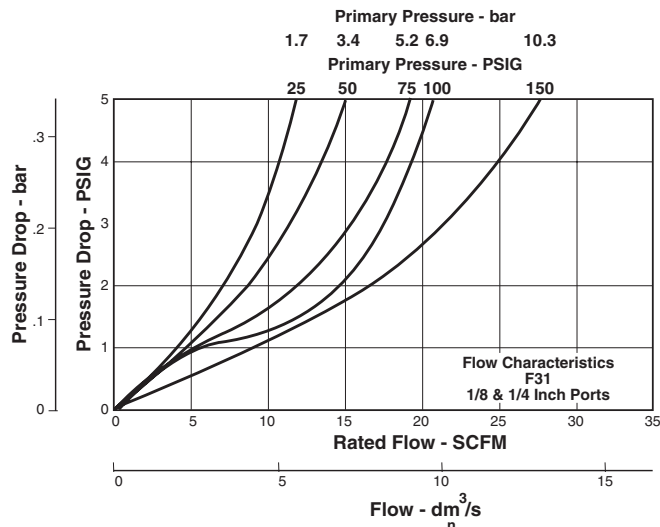
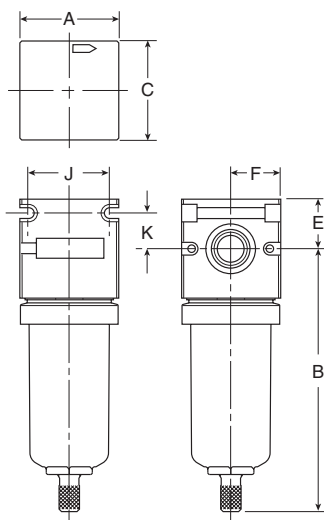
All QUBE filters, lubricators, and integrals are available with the Watts Wraparound Polyurethane Sight Gauge Bowl. These unique bowls provide the 360° visibility of a plastic bowl while maintaining the high strength and safety features of metal bowls. Polyurethane bowls with guards, and metal bowls, are also available.

Ordering Information



NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



F31 Coalescing Filter Dimensions						
A	B	C	D	E	F	G
F31-AH, F31-DH						
1.59 (40,5)	1.59 (40,5)	0.81 (20,6)	4.25 (107,9)	0.79 (20,2)	1.31 (38,3)	0.58 (14,7)
F31-WH						
1.59 (40,5)	1.59 (40,5)	0.81 (20,6)	4.27 (108,3)	0.79 (20,2)	1.31 (38,3)	0.58 (14,7)

Inches
(mm)

F31 Coalescing Filter Kits & Accessories

Bowl Kits –

- Polyurethane (A) BKF35A
- Zinc (D) BKF35D
- Zinc (W) Wraparound Sight Gauge BKF35W

Drain Kits –

- Manual Twist Drain SA600Y7-1
- Piston (Max. Pressure: 175 PSIG) RK504SY
- Semi-Automatic “Overnight” Drain SA602A7
(Drains automatically under zero pressure)

Filter Element Kits –

- Activated Carbon EKF31A
- Coalescing EKF31H

Specifications

Bowl Capacity 1.5 Ounce

Port Threads 1/4, 3/8 Inch

Pressure & Temperature Ratings –

- Polyurethane Bowl 0 to 150 PSIG (0 to 10.2 bar)
40°F to 125°F (4.4°C to 52°C)

Zinc Bowl 0 to 300 PSIG (0 to 20.4 bar)
40°F to 180°F (4.4°C to 82.2°C)

With Piston Drain 175 PSIG Max. Press. (11.9 bar)
40°F to 150°F (4.4°C to 65.6°C)

Zinc Bowl w/ Sight Gauge 0 to 250 PSIG (0 to 17.2 bar)
With Piston Drain 175 PSIG Max. Press. (11.9 bar)
40°F to 150°F (4.4°C to 65.6°C)

Weight –

- Polyurethane Bowl 0.7 lb. (0.31 kg) / Unit
7 lb. (3.18 kg) / 24-Unit Master Pack
- Zinc Bowl 0.9 lb. (0.41 kg) / Unit
23.9 lb. (10.8 kg) / 24-Unit Master Pack
- Zinc Bowl W/ Sight Gauge 0.96 lb. (0.44 kg) / Unit
25.1 lb. (11.4 kg) / 24-Unit Master Pack

Materials of Construction

- Body** Zinc
- Bowls** Polyurethane
Metal (Zinc)

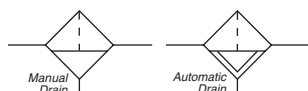
Coalescing Element Borosilicate Fiber & Polyamide Foam

Carbon Element Acetal 30% Glass Filled Activated Carbon

Drain Brass

Seals Buna-N

F71 Coalescing Filter



Features

- Compact Size Allows Greater Design Flexibility
- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Removes Oil and Water Aerosols, as Well as Particulate Matter Down To 0.01 Micron.
- Pleated Element for Longer Life and Lower Pressure Drop
- Integral Pop-up Style Element Service Life Indicator
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- Activated Carbon Elements Available for Oil Vapor Removal
- Transparent Polyurethane Bowl with Bowl Guard as Standard
- Metal Bowl with Wraparound Sight Gauge Optional
- Manual Drain as Standard, Optional Auto Float Drain
- Large Bowl Capacity
- High Flow: 1/4", 3/8", 1/2" - 43 SCFM§

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, and 5 PSIG Pressure Drop

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatibility.

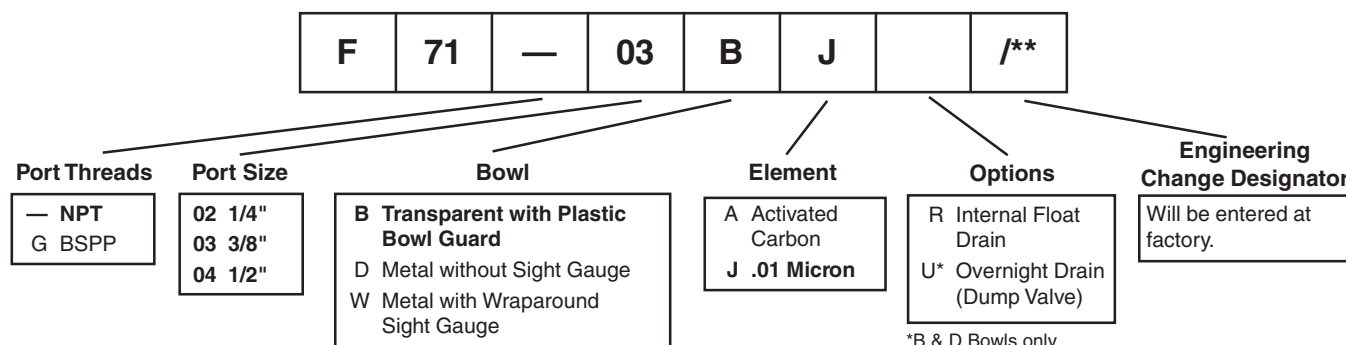


Port Size	NPT		BSPP	
	Manual Twist Drain	Internal Float Drain	Manual Twist Drain	Internal Float Drain
Polyurethane Bowl / Plastic Guard				
1/4"	F71-02BJ	F71-02BJR	F71G02BJ	F71G02BJR
3/8"	F71-03BJ	F71-03BJR	F71G03BJ	F71G03BJR
1/2"	F71-04BJ	F71-04BJR	F71G04BJ	F71G04BJR
Zinc Bowl / Sight Gauge				
1/4"	F71-02WJ	F71-02WJR	F71G02WJ	F71G02WJR
3/8"	F71-03WJ	F71-03WJR	F71G03WJ	F71G03WJR
1/2"	F71-04WJ	F71-04WJR	F71G04WJ	F71G04WJR

Standard part numbers shown bold.
 For other models refer to ordering information below.

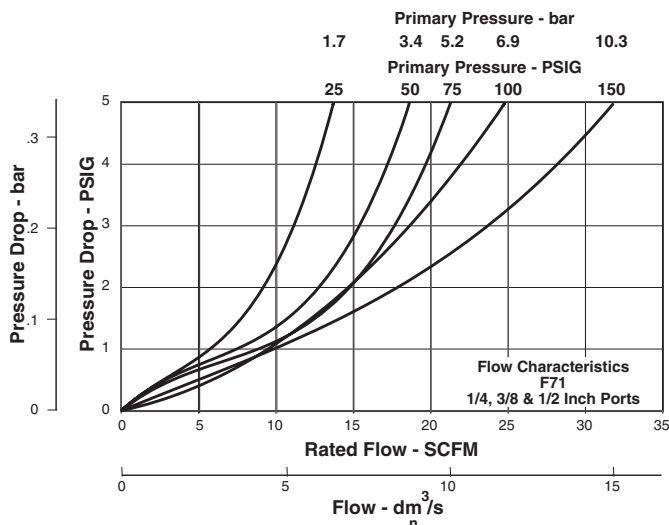
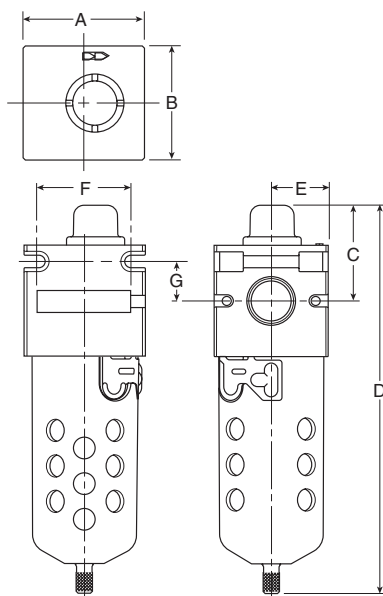
Wraparound Sight Gauge Bowl
 All QUBE filters, lubricators, and integrals are available with the Watts Wraparound Polyurethane Sight Gauge Bowl. These unique bowls provide the 360° visibility of a plastic bowl while maintaining the high strength and safety features of metal bowls. Polyurethane bowls with guards, and metal bowls, are also available.

Ordering Information



NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



F71 Coalescing Filter Dimensions						
A	B	C	D	E	F	G
F71-BJ, F71-DJ						
2.19 (55,6)	2.06 (52,4)	1.72 (43,7)	6.91 (175,4)	1.03 (26,2)	1.66 (42,1)	0.71 (17,9)
F71-WJ						
2.19 (55,6)	2.06 (52,4)	1.72 (43,7)	7.16 (181,8)	1.03 (26,2)	1.63 (41,3)	0.71 (17,9)

Inches
(mm)

F71 Coalescing Filter Kits & Accessories

Bowl Kits –

Polyurethane (B) BKF55B
 Metal (D) BKF55D
 Metal (W) Wraparound Sight Gauge BKF55W

Drain Kits –

Manual Twist Drain SA600Y7-1
 Internal Auto (Max. Pressure: 175 PSIG) (B & D) SA602MD
 Internal Auto (Max. Pressure: 175 PSIG) (W) SAF105MD
 Semi-Automatic “Overnight” Drain SA602A7
 (Drains automatically under zero pressure)

Filter Element Kits –

Activated Carbon EKF71A
 Coalescing EKF71H

Repair Kits –

Internal Float Drain RK602MD

Specifications

Bowl Capacity 3.8 Ounce

Port Threads 1/4, 3/8, 1/2 Inch

Pressure & Temperature Ratings –

Polyurethane Bowl 0 to 150 PSIG (0 to 10.2 bar)
 40°F to 125°F (4.4°C to 52°C)
 Zinc Bowl 0 to 300 PSIG (0 to 20.4 bar)
 40°F to 180°F (4.4°C to 82.2°C)

With Automatic Float Drain 175 PSIG Max. Press. (11.9 bar)
 40°F to 125°F (4.4°C to 52°C)
 Zinc Bowl w/ Sight Gauge 0 to 250 PSIG (0 to 17.2 bar)
 40°F to 150°F (4.4°C to 65.6°C)
 With Automatic Float Drain 175 PSIG Max. Press. (11.9 bar)
 40°F to 125°F (4.4°C to 52°C)

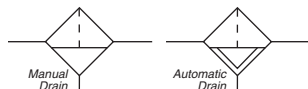
Weight –

Polyurethane Bowl 1.25 lb. (0.57kg) / Unit
 25 lb. (11.3 kg) / 20-Unit Master Pack
 Zinc Bowl 1.50 lb. (0.68 kg) / Unit
 30 lb. (13.6 kg) / 20-Unit Master Pack
 Zinc Bowl W/ Sight Gauge 1.60 lb. (0.73 kg) / Unit
 32 lb. (14.5 kg) / 20-Unit Master Pack

Materials of Construction

Body Zinc
Bowls Polyurethane
 Metal (Zinc)
Coalescing Element Borosilicate Fiber & Polyamide Foam
Carbon Element Acetal 30% Glass Filled Activated Carbon
Drain Brass
Seals Buna-N

F101 Coalescing Filter



Features

- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Removes Oil and Water Aerosols, as Well as Particulate Matter Down To 0.01 Micron.
- Pleated Element for Longer Life and Lower Pressure Drop
- Integral Pop-up Style Element Service Life Indicator
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- Activated Carbon Elements Available for Oil Vapor Removal
- Transparent Polyurethane Bowl with Bowl Guard as Standard
- Metal Bowl with Wraparound Sight Gauge Optional
- Manual Drain as Standard, Optional Auto Float Drain
- Large Bowl Capacity
- High Flow: 3/8", 1/2", 3/4" - 85 SCFM[§]

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, and 5 PSIG Pressure Drop

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatibility.



Port Size	NPT		BSPP	
	Manual Twist Drain	Automatic Float Drain	Manual Twist Drain	Automatic Float Drain
Polyurethane Bowl / Plastic Guard				
3/8"	F101-03BJ	F101-03BJR	F101G03BJ	F101G03BJR
1/2"	F101-04BJ	F101-04BJR	F101G04BJ	F101G04BJR
3/4"	F101-06BJ	F101-06BJR	F101G06BJ	F101G06BJR
Metal Bowl / Sight Gauge				
3/8"	F101-03WJ	F101-03WJR	F101G03WJ	F101G03WJR
1/2"	F101-04WJ	F101-04WJR	F101G04WJ	F101G04WJR
3/4"	F101-06WJ	F101-06WJR	F101G06WJ	F101G06WJR

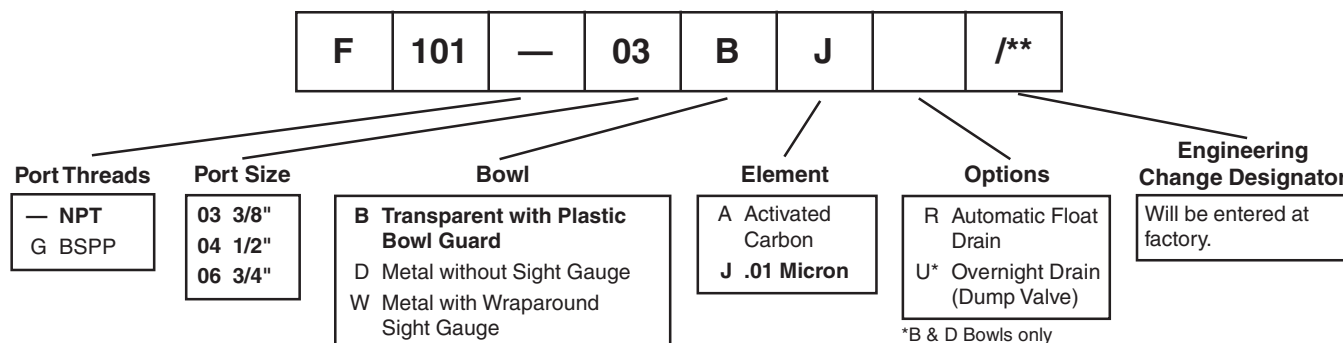
Standard part numbers shown bold.

For other models refer to ordering information below.

Wraparound Sight Gauge Bowl

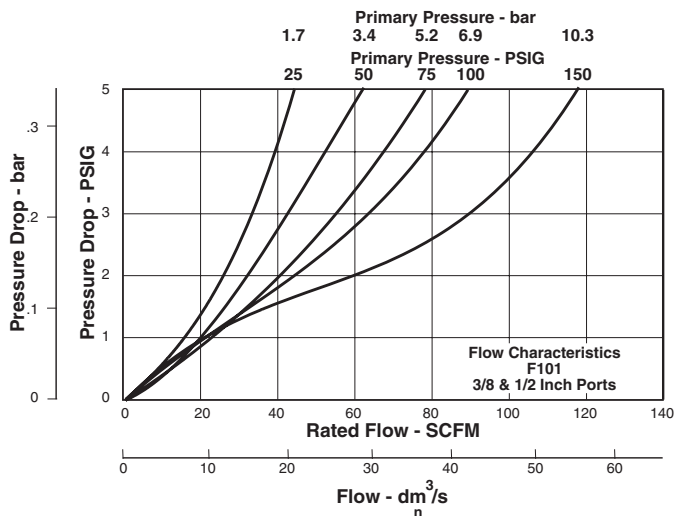
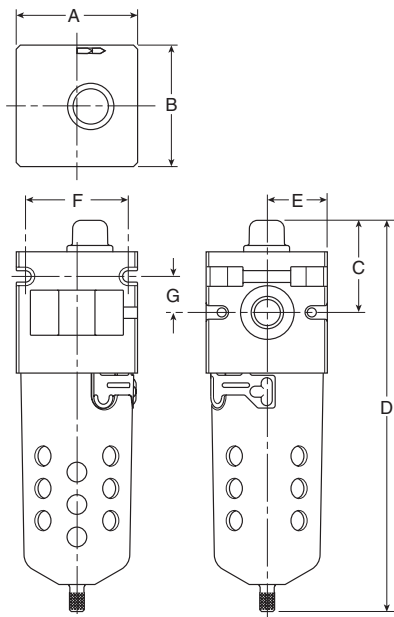
All QUBE filters, lubricators, and integrals are available with the Watts Wraparound Polyurethane Sight Gauge Bowl. These unique bowls provide the 360° visibility of a plastic bowl while maintaining the high strength and safety features of metal bowls. Polyurethane bowls with guards, and metal bowls, are also available.

Ordering Information



NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



F101 Coalescing Filter Dimensions								
A*	A†	B	C	D	E	F*	F†	G
F101-BJ, F101-DJ								
2.69 (68,4)	3.03 (77,0)	2.69 (68,4)	2.06 (52,2)	8.59 (218,3)	1.35 (34,3)	2.18 (56,4)	2.55 (64,8)	0.81 (20,6)
F101-WJ								
2.69 (68,4)	3.03 (77,0)	2.69 (68,4)	2.06 (52,2)	8.75 (222,6)	1.35 (34,3)	2.18 (56,4)	2.55 (64,8)	0.81 (20,6)

Inches (mm)

* 3/8 and 1/2 Inch Ports

† 3/4 Inch Ports

F101 Coalescing Filter Kits & Accessories

Bowl Kits –

Polyurethane (B)	BKF105B
Metal (D)	BKF105D
Metal (W) Wraparound Sight Gauge	BKF105W

Drain Kits –

Manual Twist Drain	SA600Y7-1
Internal Auto (Max. Pressure: 175 PSIG) (B & D)	SA602MD
Internal Auto (Max. Pressure: 175 PSIG) (W)	SAF105MD
Semi-Automatic "Overnight" Drain	SA602A7
(Drains automatically under zero pressure)	

Filter Element Kits –

Activated Carbon	EKF101A
Coalescing	EKF101

Repair Kits –

Deflector, Element, Retainer	RFK100
Internal Auto Drain	RK602MD

Specifications

Bowl Capacity 8.5 Ounce

Port Threads 3/8, 1/2, 3/4 Inch

Pressure & Temperature Ratings –

Polyurethane Bowl	0 to 150 PSIG (0 to 10.2 bar)
	40°F to 125°F (4.4°C to 52°C)

Zinc Bowl 0 to 300 PSIG (0 to 20.4 bar)
 40°F to 180°F (4.4°C to 82.2°C)

With Automatic Float Drain 175 PSIG Max. Press. (11.9 bar)
 40°F to 125°F (4.4°C to 52°C)

Zinc Bowl w/ Sight Gauge 0 to 250 PSIG (0 to 17.2 bar)
 With Automatic Float Drain 175 PSIG Max. Press. (11.9 bar)
 40°F to 125°F (4.4°C to 52°C)

Weight –

Polyurethane Bowl	1.10 lb. (0.50kg) / Unit
	10.8 lb. (4.9 kg) / 8-Unit Master Pack
Zinc Bowl	1.54 lb. (0.70 kg) / Unit
	14.3 lb. (6.5 kg) / 8-Unit Master Pack
Zinc Bowl W/ Sight Gauge	1.74 lb. (0.79 kg) / Unit
	15.9 lb. (7.2 kg) / 8-Unit Master Pack

Materials of Construction

Body	Zinc
Bowls	Polyurethane
	Metal (Zinc)

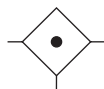
Coalescing Element Borosilicate Fiber & Polyamide Foam

Carbon Element Acetal 30% Glass Filled Activated Carbon

Drains Brass

Seals Buna-N

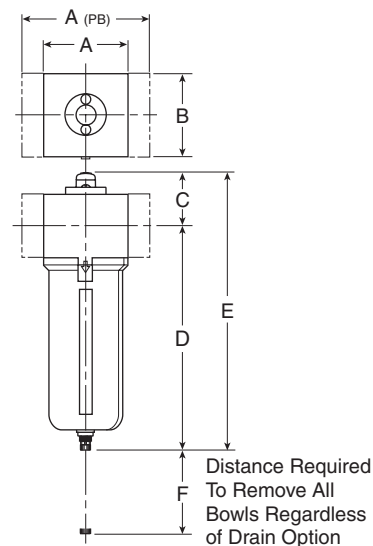
F251 Coalescing Filters – Hi-Flow



Features

- Port Blocks (PB) Available to Provide 1-1/2" Port Extension to 1" Ported Bodies
- Metal Bowl with Sight Gauge
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- Manual Drain as Standard, Optional Internal Auto Drain
- Grade 6 Element Removes Oil and Water Aerosols within ISO 8573-1 Class 1 Standards. Particulate Removal Down to 0.01 Micron, with Maximum Remaining Oil Aerosol Content: 0.008 PPM @ 70°F.
- High Flow:
Flow – Dry Element* 120 SCFM[§]
Flow – Saturated Element* 100 SCFM[§]

§ SCFM = Standard Cubic Feet Per Minute at 90 PSIG Inlet, and 3 PSIG Pressure Drop



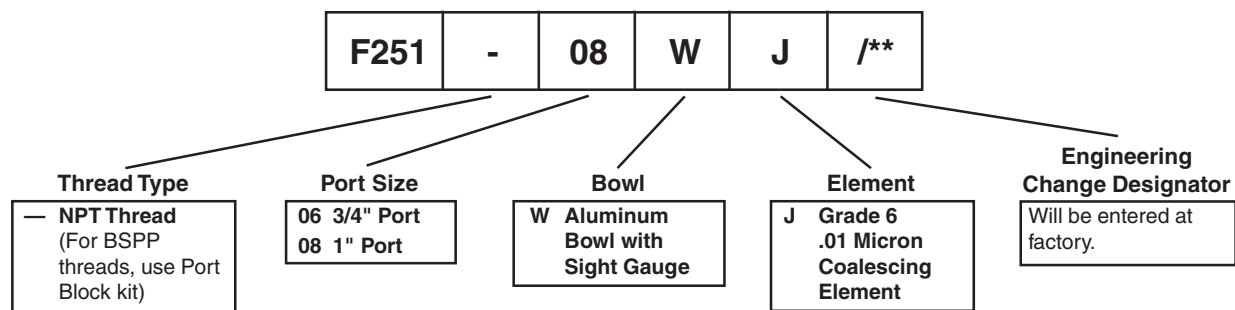
Port Size	NPT
	Metal Bowl / Sight Gauge / Manual Drain
3/4"	F251-06WJ
1"	F251-08WJ

Standard part numbers shown with Grade 6 Elements.
For other models refer to ordering information below.

F251 Coalescing Filter Dimensions				
A	A (PB)	B	C	D [†]
3.62 (92)	5.91 (150)	3.62 (92)	2.30 (58.5)	9.57 (243)
E [†]	F			
11.90 (302)	4.92 (125)			

† With Manual Drain or Internal Auto Drain
Inches
(mm)

Ordering Information

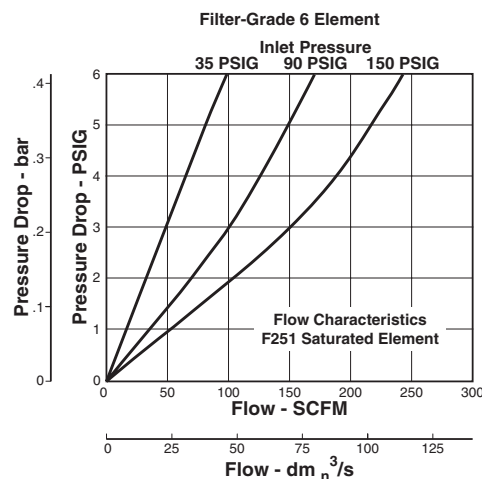
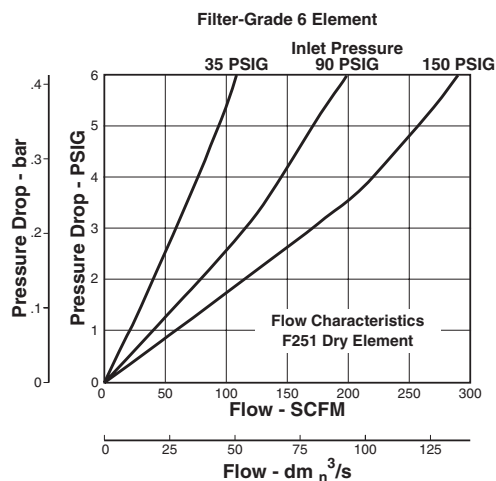


NOTE: BOLD OPTIONS ARE STANDARD.

Internal Automatic Drains must be purchased separately as PS506.

Technical Information

Grade 6



Filter Element Specifications

Grade	D.O.P. Coalescing Efficiency .3 to .6 Micron Particles	Maximum Oil Carryover ¹ PPM w/w	Pressure Drop (PSID) ² @ Rated Flow		Particulate Micron Rating
			Media Dry	Media Wet With 10-20 wt. oil	
6	99.97%	.008	1.0	2-3	.01
10	95%	.85	.5	.5	.7

¹ Tested per BCAS 860900 at 40 ppm inlet.
² Add dry + wet for total pressure drop.

D.O.P. = Dioctylphthalate

F251 Coalescing Filter Kits & Accessories

Bowl Kits –

Metal Bowl –

Sight Gauge / Internal Auto Drain P3NKA00BSA

Sight Gauge / Manual Drain P3NKA00BSM

DPI Replacement Kit PS781

Drain Kit –

Internal Auto Drain PS506

Manual Drain PS512

Filter Elements –

Grade 6 (Standard) P3NKA00ESC

Grade 10 (Optional) P3NKA00ES9

Sight Gauge Kit P3NKA00PE

Mounting Bracket Kit P3NKA00MW

Port Block Kit (1-1/2" NPT Ports) P3NKB9BCL

Specifications

Bowl Capacity 18.0 Ounces

Sump Capacity 6.8 Ounces

Pressure & Temperature Rating 0 to 250 PSIG (0 to 17 bar)

Internal Auto Drain – 10 to 250 PSIG (0.7 to 17 bar)
at 125°F (52°C) or less

Weight –

3/4 Inch 3.5 lb. (1.6 kg)

1 Inch 3.5 lb. (1.6 kg)

Materials of Construction

Body & Bowl Aluminum

Deflector Plastic

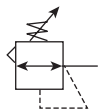
Drain Plastic

Filter Elements Borosilicate & Felt Glass Fibers

Seals Nitrile

Sight Gauge Polyamide (Nylon)

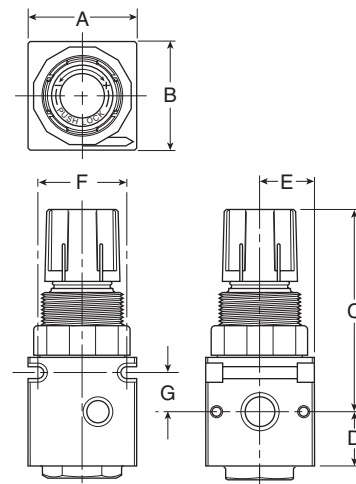
R35 Regulator



Features

- Compact Size Allows Greater Design Flexibility
- Nearly Double the Flow Capacity of Standard Miniature Regulators; Reduces Costly Pressure Drop
- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Piston Operated for High Flow and Low Pressure Drop
- Panel Mountable
- High Flow: 1/8" - 30 SCFM[§], 1/4" - 40 SCFM[§]

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, 75 PSIG No Flow Secondary Setting, and 20 PSIG Pressure Drop.



Port Size	NPT	BSPP
	Relieving	Relieving
Without Gauge 0-125 PSIG Reduced Pressure		
1/8"	R35-01C	R35G01C
1/4"	R35-02C	R35G02C
With Gauge 0-125 PSIG Reduced Pressure		
1/8"	R35-01CG	—
1/4"	R35-02CG	—

Standard part numbers shown bold.
 For other models refer to ordering information below.

R35 Regulator Dimensions						
A	B	C	D	E	F	G
1.59 (40,6)	1.59 (40,6)	2.98 (75,7)	1.11 (28,2)	0.80 (20,3)	1.31 (33,3)	0.58 (14,6)

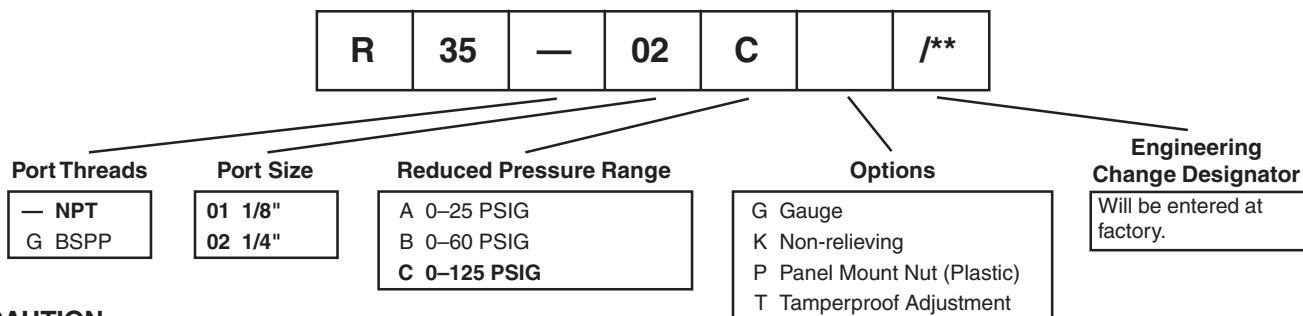
Inches
(mm)

NOTE: 1.25 Dia. (32mm) hole required for panel mounting.

⚠ WARNING

**Product rupture can cause serious injury.
 Do not connect regulator to bottled gas.
 Do not exceed maximum primary
 pressure rating.**

Ordering Information

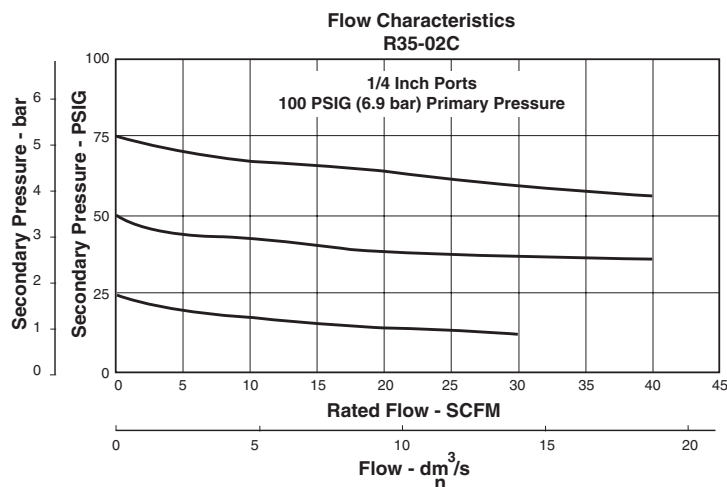
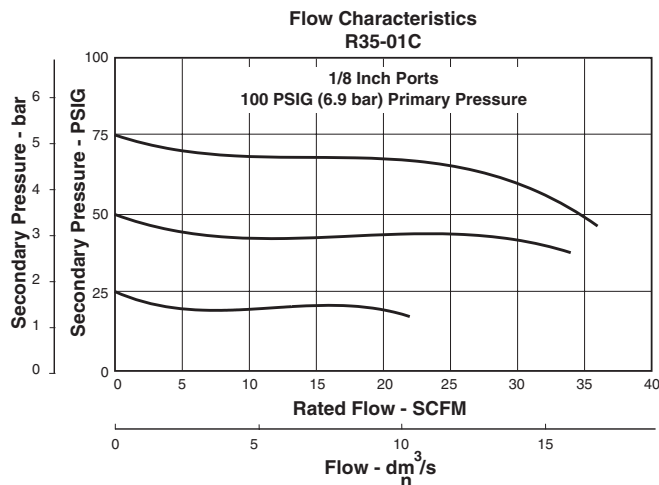


CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



R35 Regulator Kits & Accessories

Cage Kits –

A Range CKR35A
B & C Range CKR35BC

Control Knob R35-0545P

Gauges –

1-1/2" Dial Size, 1/8" Back Connection
0 to 60 PSIG (0 to 4 bar) 274Z60S
1-1/2" Dial Size, 1/8" Back Connection
0 to 160 PSIG (0 to 11 bar) 274Z160S

Mounting Bracket Kit SA161X57

Panel Mount Nut –

Plastic R05X51-P
Aluminum R05X51-A

Repair Kits –

Non-Relieving Diaphragm,
Valve Assembly RKR30K
Relieving Diaphragm,
Valve Assembly RKR30

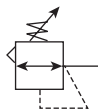
Specifications

Gauge Ports (2) 1/8 Inch
Port Threads 1/8 & 1/4 Inch
Supply Pressure 300 PSIG Max. (20,4 bar)
Temperature Rating 40°F to 125°F (4.4°C to 52°C)
Weight 0.82 lbs. (.37 kg) / Unit
19.8 lbs. (8.98 kg) / 24-Unit Master Pack

Materials of Construction

Adjusting Knob Acetal
Body Zinc
Bottom Plug Glass-Filled Acetal
Cage Plastic
Elastomers Buna N

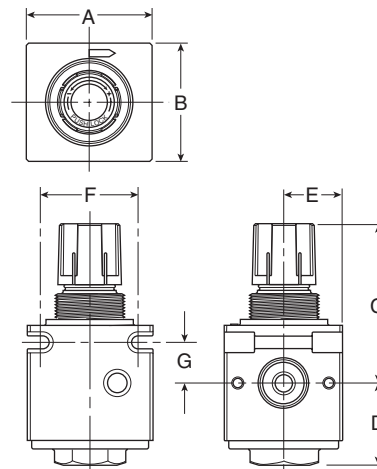
R75 Regulator



Features

- Compact Size Allows Greater Design Flexibility
- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Diaphragm Operated Design with Balanced Poppet Design for Quick and Accurate Regulation
- Panel Mountable
- High Flow: 1/4" - 25 SCFM[§], 3/8" - 45 SCFM[§], 1/2" - 60 SCFM[§]

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, 75 PSIG No Flow Secondary Setting, and 20 PSIG Pressure Drop.



Port Size	NPT	BSPP
	Relieving	Relieving
Without Gauge 0-125 PSIG Reduced Pressure		
1/4"	R75-02C	R75G02C
3/8"	R75-03C	R75G03C
1/2"	R75-04C	R75G04C
With Gauge 0-125 PSIG Reduced Pressure		
1/4"	R75-02CG	—
3/8"	R75-03CG	—
1/2"	R75-04CG	—

Standard part numbers shown bold.

For other models refer to ordering information below.

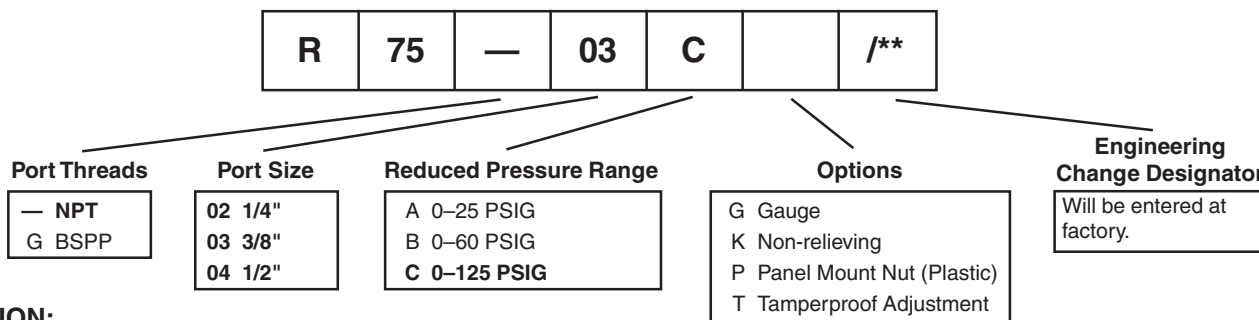
R75 Regulator Dimensions						
A	B	C	D	E	F	G
2.19 (55,6)	2.06 (52,4)	2.75 (75,7)	1.38 (34,9)	1.09 (27,8)	1.66 (42,1)	0.69 (17,5)

Inches
(mm)

NOTE: 1.25 Dia. (32mm) hole required for panel mounting.

⚠ WARNING
Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Ordering Information

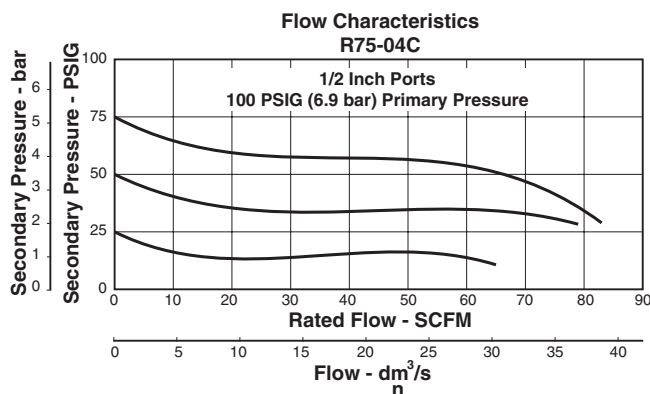
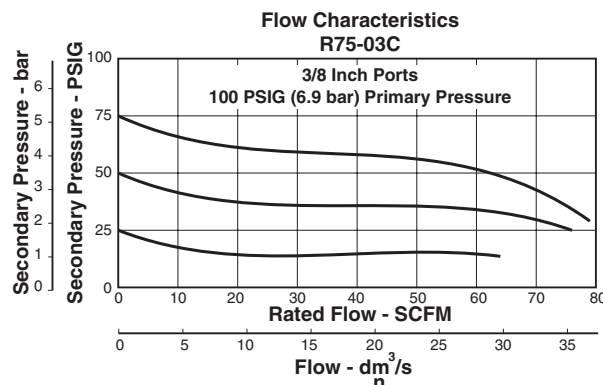
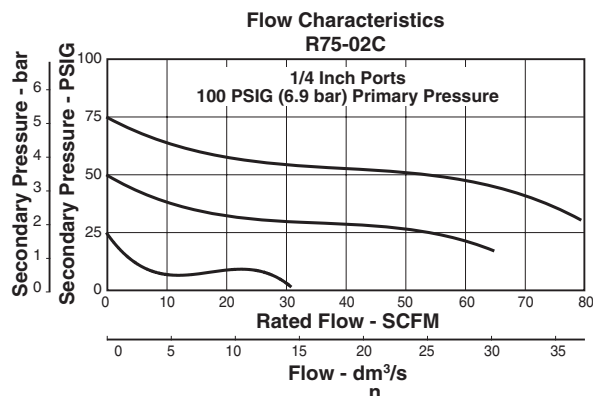


CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



R75 Regulator Kits & Accessories

Cage Kits—

Standard CKR75
Tamperproof CKR75T

Control Knob R35-0545P

Gauges –

1-1/2" Dial Size, 1/8" Back Connection
0 to 60 PSIG (0 to 4 bar) 274Z60S
1-1/2" Dial Size, 1/8" Back Connection
0 to 160 PSIG (0 to 11 bar) 274Z160S

Mounting Bracket Kit SA161X57

Panel Mount Nut –

Plastic R05X51-P
Aluminum R05X51-A

Repair Kits –

Non-Relieving Diaphragm,
Valve Assembly RKR75K
Relieving Diaphragm,
Valve Assembly RKR75

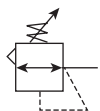
Specifications

Gauge Ports (2) 1/8 Inch
Port Threads 1/4, 3/8 & 1/2 Inch
Supply Pressure 300 PSIG Max. (20,4 bar)
Temperature Rating 40°F to 125°F (4.4°C to 52°C)
Weight 1.35 lbs. (.61 kg) / unit
27 lbs. (12.24 kg) / 20-Unit Master Pack

Materials of Construction

Adjusting Knob Acetal
Body Zinc
Bottom Plug Glass-Filled Acetal
Cage Glass-Filled Acetal
Elastomers Buna N

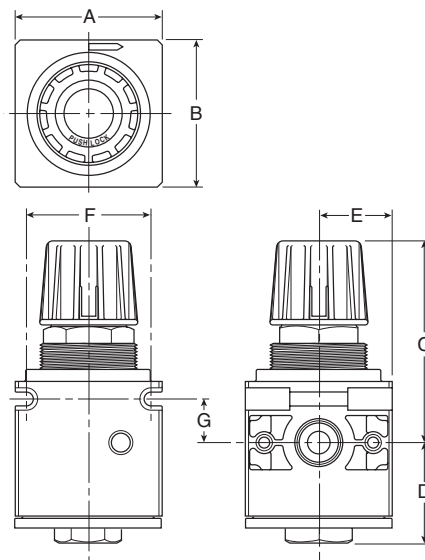
R105 Regulator



Features

- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Diaphragm Operated Design with Balanced Poppet Design for Quick and Accurate Regulation
- Panel Mountable
- High Flow: 3/8" - 125 SCFM[§], 1/2" - 150 SCFM[§], 3/4" - 150 SCFM[§]

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, 75 PSIG No Flow Secondary Setting, and 20 PSIG Pressure Drop.



Port Size	NPT	BSPP
	Relieving	Relieving
Without Gauge 0-125 PSIG Reduced Pressure		
3/8"	R105-03C	R105G03C
1/2"	R105-04C	R105G04C
3/4"	R105-06C	R105G06C
With Gauge 0-125 PSIG Reduced Pressure		
3/8"	R105-03CG	—
1/2"	R105-04CG	—
3/4"	R105-06CG	—

Standard part numbers shown bold.
 For other models refer to ordering information below.

R105 Regulator Dimensions								
A*	A†	B	C	D	E	F*	F†	G
2.69 (68,3)	3.03 (77,0)	2.69 (68,3)	3.75 (95,4)	1.81 (46,1)	1.35 (34,1)	2.30 (58,3)	2.55 (64,8)	0.81 (20,6)

Inches (mm)

* 3/8 and 1/2 inch ports

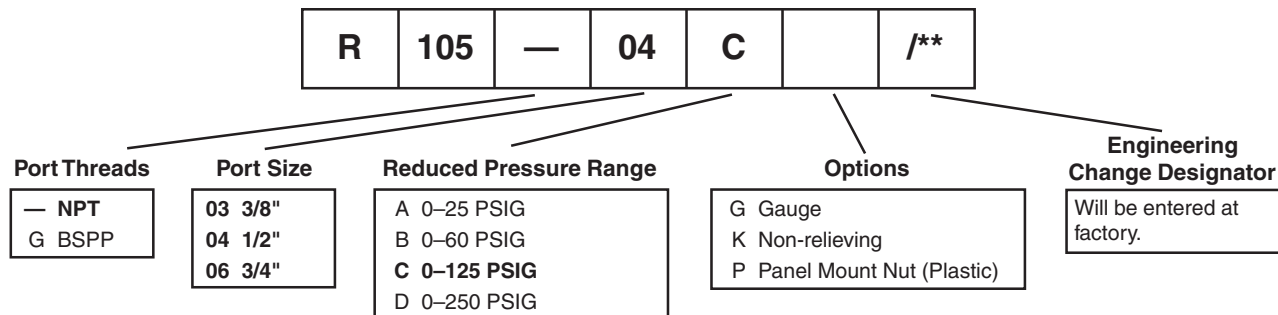
† 3/4 inch ports

NOTE: 1.75 Dia. (44mm) hole required for panel mounting.

⚠ WARNING

**Product rupture can cause serious injury.
 Do not connect regulator to bottled gas.
 Do not exceed maximum primary pressure rating.**

Ordering Information

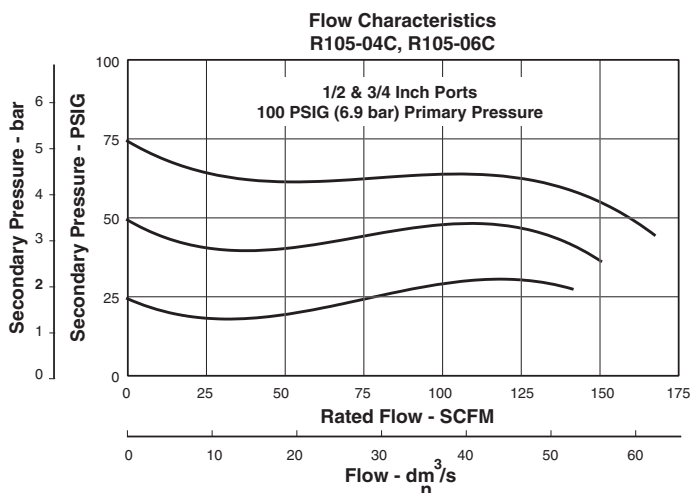
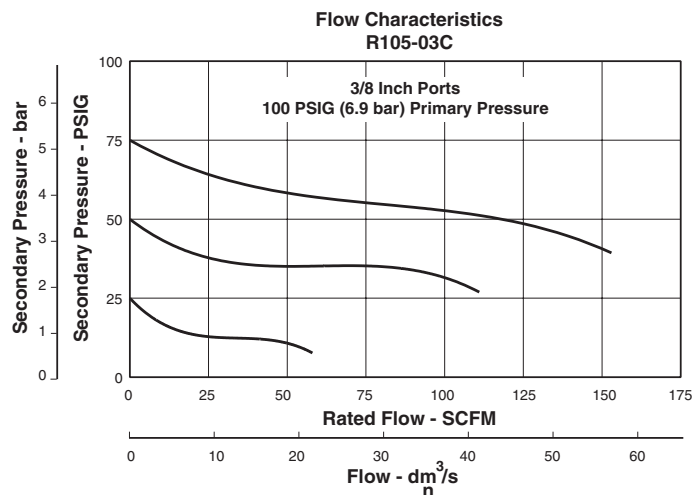


CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



R105 Regulator Kits & Accessories

Cage Kit –

Cage Assembly with Knob CKR105

Control Knob R105-0542P

Gauges –

2" Dial Size, 1/4" Back Connection
0 to 60 PSIG (0 to 4 bar) 275Y60S

2" Dial Size, 1/4" Back Connection
0 to 160 PSIG (0 to 11 bar) 275Y160S

2" Dial Size, 1/4" Back Connection
0 to 300 PSIG (0 to 20,7 bar) 275Y300WS

Mounting Bracket Kit SAR105Y57

Panel Mount Nut –

Plastic R10X51-P

Aluminum R10X51-A

Repair Kits –

Non-Relieving Diaphragm,
Valve Assembly RKR105K

Relieving Diaphragm,
Valve Assembly RKR105

Specifications

Gauge Ports (2) 1/4 Inch

Port Threads 3/8, 1/2 & 3/4 Inch

Supply Pressure 300 PSIG Max. (20,4 bar)

Temperature Rating 40°F to 125°F (4.4°C to 52°C)

Weight 1.64 lbs. (.74 kg) / unit

Materials of Construction

Adjusting Knob Acetal

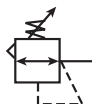
Body Aluminum

Bottom Plug Zinc

Cage Glass-Filled Acetal Plastic

Elastomers Buna N

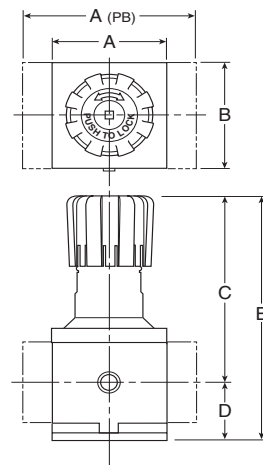
R255 Regulators – Hi-Flow



Features

- Port Blocks (PB) Available to Provide 1-1/2" Port Extension to 1" Ported Bodies
- Self Relieving Feature Plus Balanced Poppet Provides Quick Response and Accurate Pressure Regulation
- Solid Control Piston for Extended Life
- High Flow: 3/4" - 200 SCFM[§], 1" - 300 SCFM[§]

[§] SCFM = Standard Cubic Feet Per Minute at 100 PSIG inlet, 90 PSIG No Flow Secondary Setting and 10 PSIG Pressure Drop.



Port Size	NPT
	Without Gauge
3/4"	R255-06C
1"	R255-08C

Standard part numbers shown bold.
For other models refer to ordering information below.

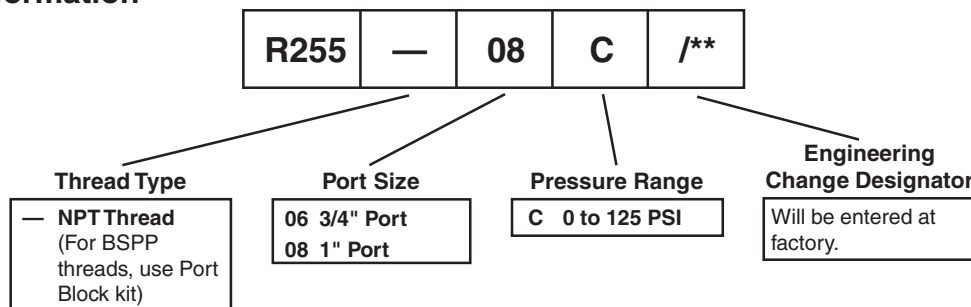
R255 Regulator Dimensions		
A	A (PB)	B
3.62 (92)	5.91 (150)	3.62 (92)
C	D	E
6.38 (162)	2.08 (53)	8.46 (215)

Inches
(mm)

⚠ WARNING

Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Ordering Information

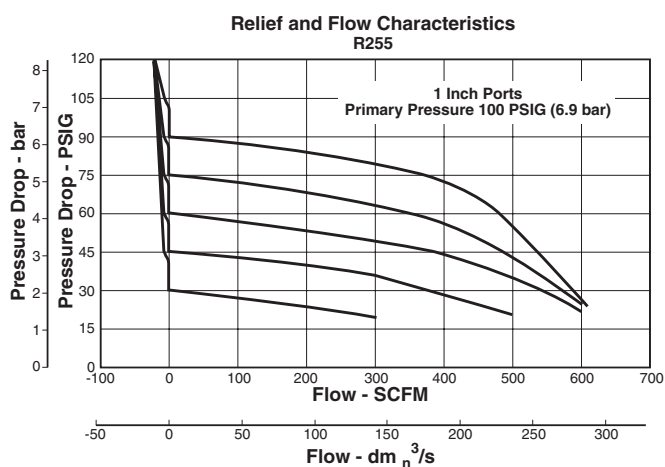
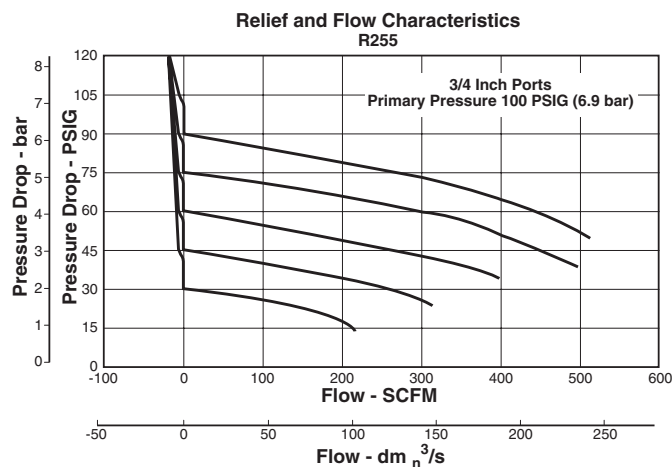


CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



R255 Regulator Kits & Accessories

Gauges –

60 PSIG (0 to 4.1 bar)	P781641
160 PSIG (0 to 11.0 bar)	P781642
300 PSIG (0 to 20.7 bar)	P781643

Service Kit –

Relieving	P3NKA00RR
Non-Relieving	P3NKA00RN

Springs –

1 to 60 PSIG Range	C10A1304
2 to 125 PSIG Range	C10A1308
5 to 250 PSIG Range	C10A1317

Mounting Bracket Kit P3NKA00MW

Port Block Kit (1-1/2" NPT Ports) P3NKB9BCL

Specifications

Gauge Ports Two Ports 1/4"
(Can be used as additional High Flow 1/4 Inch Outlet Ports)

Port Threads 3/4", 1"

Primary Pressure Rating –

Maximum Primary Pressure 250 PSIG (17.2 bar)

Temperature Rating 32°F to 175°F (0°C to 80°C)

Weight –

3/4 Inch	4.2 lb. (1.9 kg)
1 Inch	4.2 lb. (1.9 kg)

Materials of Construction

Adjusting Stem Steel

Body Aluminum

Bonnet Aluminum

Knob Plastic

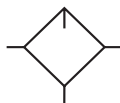
Piston Plastic

Poppet Assembly Brass

Seals Nitrile

Springs: Poppet & Control Steel

L35 Lubricator



Features

- Compact Size Allows Greater Design Flexibility
- Nearly Double the Flow Capacity of Standard Miniature Filters; Reduces Costly Pressure Drop
- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- For Applications Requiring Minimum Pressure Drop
- Transparent Polyurethane Bowl Standard
- Metal Bowl with Wraparound Sight Gauge Optional
- Precision Needle Valve Assures Repeatable Oil Delivery and Provides Simple Adjustment of Delivery Rate.
- Large Capacity Bowl
- High Flow: 1/8" - 23 SCFM[§], 1/4" - 45 SCFM[§]

[§] SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, and 5 PSIG Pressure Drop

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatibility.



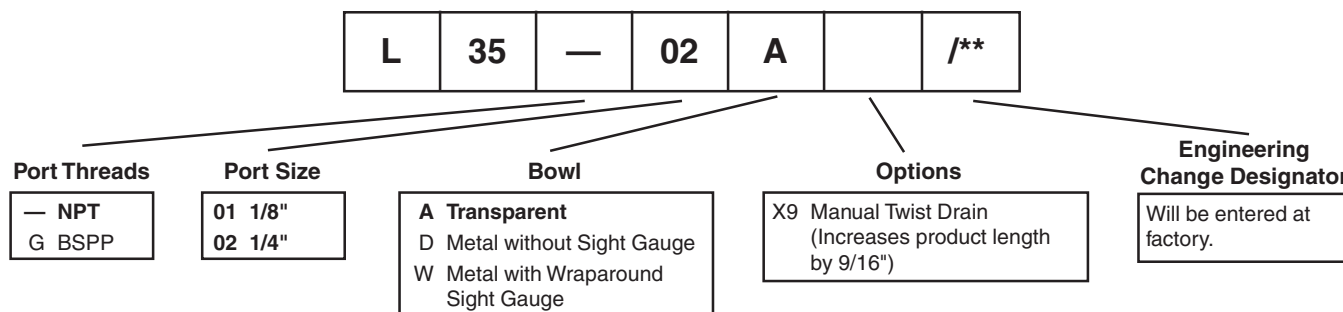
Port Size	NPT		BSPP	
	No Drain	Manual Twist Drain	No Drain	Manual Twist Drain
Polyurethane Bowl				
1/8"	L35-01A	L35-01AX9	L35G01A	L35G01AX9
1/4"	L35-02A	L35-02AX9	L35G02A	L35G02AX9
Zinc Bowl / Sight Gauge				
1/8"	L35-01W	L35-01WX9	L35G01W	L35G01WX9
1/4"	L35-02W	L35-02WX9	L35G02W	L35G02WX9

Standard part numbers shown bold.

For other models refer to ordering information below.

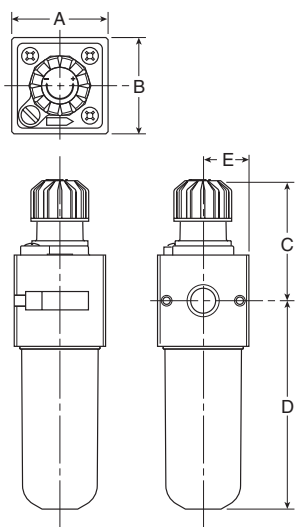
Wraparound Sight Gauge Bowl
 All QUBE filters, lubricators, and integrals are available with the Watts Wraparound Polyurethane Sight Gauge Bowl. These unique bowls provide the 360° visibility of a plastic bowl while maintaining the high strength and safety features of metal bowls. Polyurethane bowls with guards, and metal bowls, are also available.

Ordering Information



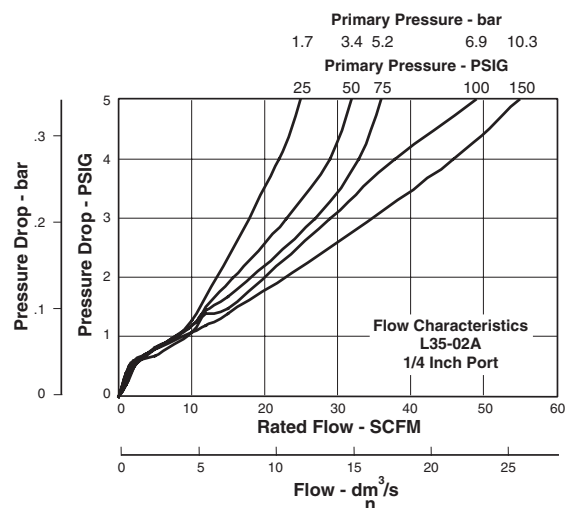
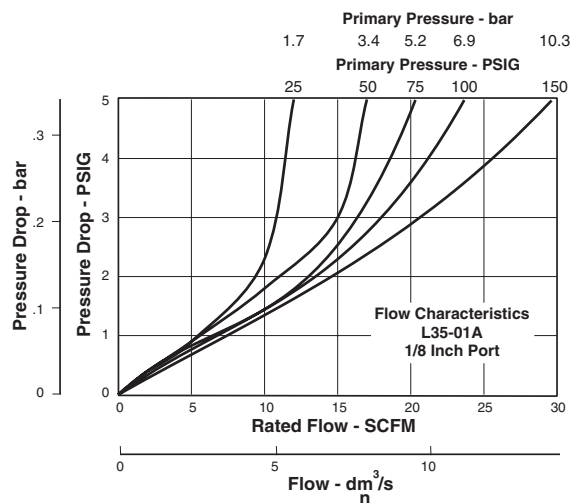
NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



L35 Lubricator Dimensions				
A	B	C	D	E
L35-A,				
1.59 (40,6)	1.59 (40,6)	2.09 (53,5)	3.66 (92,8)	0.80 (20,3)
L35-D				
1.59 (40,6)	1.59 (40,6)	2.09 (53,5)	3.63 (92,3)	0.80 (20,3)
L35-W				
1.59 (40,6)	1.59 (40,6)	2.09 (53,5)	3.84 (97,6)	0.80 (20,3)

Inches
(mm)



L35 Lubricator Kits & Accessories

Bowl Kits –

Polyurethane (A)	BKL35A
Zinc (D)	BKL35D
Zinc (W) Wraparound Sight Gauge	BKL35W

Oil –

1 Gal.	F442002
12 Quart Case	F442003
4 Gallon Case	F442005

Repair Kit –

Tamper-resistant Sight Dome (All)	RKL100
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Specifications

Bowl Capacity 1.5 Ounce

Port Threads 1/8, 1/4 Inch

Pressure & Temperature Ratings –

Polyurethane Bowl	0 to 150 PSIG (0 to 10.2 bar) 40°F to 125°F (4.4°C to 52°C)
Zinc Bowl	0 to 300 PSIG (0 to 20.4 bar) 40°F to 150°F (4.4°C to 65.6°C)
Zinc Bowl w/ Sight Gauge	0 to 250 PSIG (0 to 17.2 40°F to 150°F (4.4°C to 65.6°C)

Suggested Lubricant F442 Oil
 Petroleum-based oil of 100 to 200 SUS viscosity at 100°F and an aniline point greater than 200°F

(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)

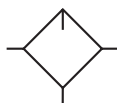
Weight –

Polyurethane Bowl	0.7 lb. (0.3 kg) / Unit 18.9 lb. (8.6 kg) / 24-Unit Master Pack
Zinc Bowl	0.94 lb. (0.4 kg) / Unit 24.7 lb. (11.2 kg) / 24-Unit Master Pack
Zinc Bowl W/ Sight Gauge	1.00 lb. (0.5 kg) / Unit 26.1 lb. (11.8 kg) / 24-Unit Master Pack

Materials of Construction

Body	Zinc
Bowls	Polyurethane Metal (Zinc)
Drains	Brass
Seals	Nitrile

L75 Lubricator



Features

- Compact Size Allows Greater Design Flexibility
- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- For Applications Requiring Minimum Pressure Drop
- Transparent Polyurethane Bowl with Bowl Guard as Standard
- Metal Bowl with Wraparound Sight Gauge Optional
- Can be Filled While Unit is Under Pressure
- Precision Needle Valve Assures Repeatable Oil Delivery and Provides Simple Adjustment of Delivery Rate.
- Large Capacity Bowl
- High Flow: 1/4" - 15 SCFM[§], 3/8" - 80 SCFM[§], 1/2" - 80 SCFM[§]

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, and 5 PSIG Pressure Drop

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatibility.



Port Size	NPT		BSPP	
	No Drain	Manual Twist Drain	No Drain	Manual Twist Drain
Polyurethane Bowl / Plastic Guard				
1/4"	L75-02B	L75-02BX9	L75G02B	L75G02BX9
3/8"	L75-03B	L75-03BX9	L75G03B	L75G03BX9
1/2"	L75-04B	L75-04BX9	L75G04B	L75G04BX9
Zinc Bowl / Sight Gauge				
1/4"	L75-02W	L75-02WX9	L75G02W	L75G02WX9
3/8"	L75-03W	L75-03WX9	L75G03W	L75G03WX9
1/2"	L75-04W	L75-04WX9	L75G04W	L75G04WX9

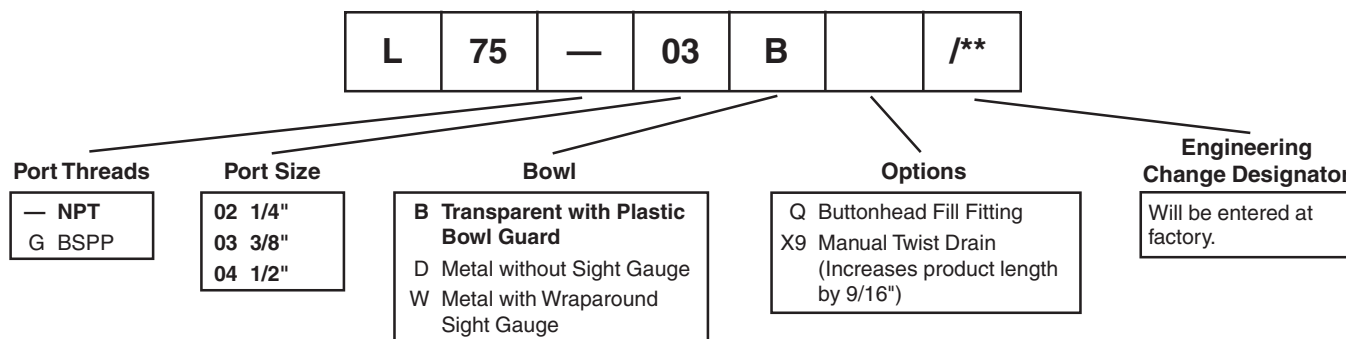
Standard part numbers shown bold.

For other models refer to ordering information below.

Wraparound Sight Gauge Bowl

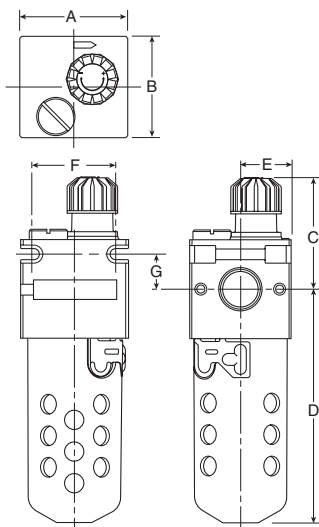
All QUBE filters, lubricators, and integrals are available with the Watts Wraparound Polyurethane Sight Gauge Bowl. These unique bowls provide the 360° visibility of a plastic bowl while maintaining the high strength and safety features of metal bowls. Polyurethane bowls with guards, and metal bowls, are also available.

Ordering Information



NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



L75 Lubricator Dimensions						
A	B	C	D	E	F	G
L75-B						
2.19 (55,6)	2.00 (52,1)	2.44 (56,3)	4.72 (119,8)	1.00 (25,4)	1.66 (42,1)	0.72 (17,9)
L75-D						
2.19 (55,6)	2.00 (52,1)	2.44 (56,3)	4.59 (116,4)	1.00 (25,4)	1.66 (42,1)	0.70 (17,9)
L75-W						
2.19 (55,6)	2.00 (52,1)	2.44 (56,3)	4.81 (122,5)	1.00 (25,4)	1.66 (42,1)	0.70 (17,9)

Inches
(mm)

L75 Lubricator Kits & Accessories

Bowl Kits –

Polyurethane (B) BKL55B
Zinc (D) BKL55D
Zinc (W) Wraparound Sight Gauge BKL55W

Button Head Fill Fitting (All) – SAA606C109-1

Drain Kits –

Manual Twist Drain SA600Y7-1

Oil –

1 Gal. F442002
12 Quart Case F442003
4 Gallon Case F442005

Repair Kit –

Tamper-resistant Sight Dome (All) RFL100

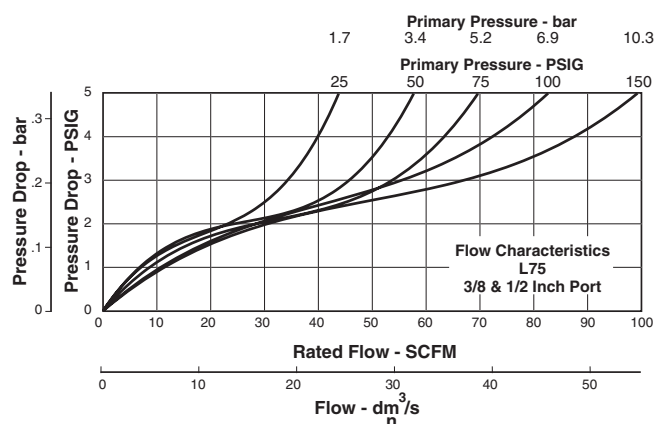
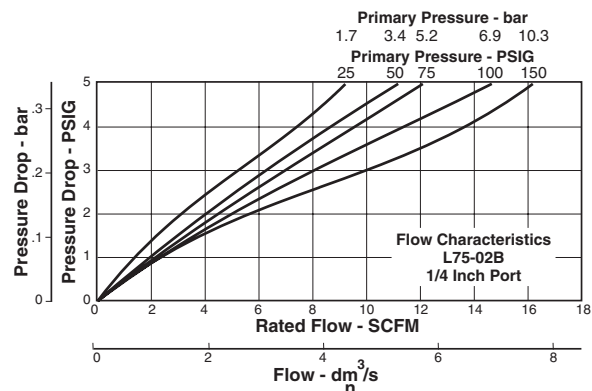
Specifications

Bowl Capacity 3.8 Ounce

Port Threads 1/4, 3/8 & 1/2 Inch

Pressure & Temperature Ratings –

Polyurethane Bowl 0 to 150 PSIG (0 to 10.2 bar)
40°F to 125°F (4.4°C to 52°C)
Zinc Bowl 0 to 300 PSIG (0 to 20.4 bar)
40°F to 150°F (4.4°C to 65.6°C)



Zinc Bowl w/ Sight Gauge 0 to 250 PSIG (0 to 17.2 bar)
40°F to 150°F (4.4°C to 65.6°C)

Suggested Lubricant F442 Oil
Petroleum-based oil of 100 to 200 SUS viscosity at 100°F and an aniline point greater than 200°F

(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)

Weight –

Polyurethane Bowl 1.25 lb. (0.6 kg) / Unit
25 lb. (11.3 kg) / 20-Unit Master Pack
Zinc Bowl 1.50 lb. (0.7 kg) / Unit
30 lb. (13.6 kg) / 20-Unit Master Pack
Zinc Bowl W/ Sight Gauge 1.60 lb. (0.7 kg) / Unit
32 lb. (14.5 kg) / 20-Unit Master Pack

Materials of Construction

Body Zinc

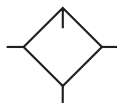
Bowls Polyurethane
Metal (Zinc)

Drains Brass

Fill Fitting Brass

Seals Nitrile

L105 Lubricator



Features

- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- For Applications Requiring Minimum Pressure Drop
- Transparent Polyurethane Bowl with Bowl Guard as Standard
- Metal Bowl with Wraparound Sight Gauge Optional
- Can be Filled While Unit is Under Pressure
- Precision Needle Valve Assures Repeatable Oil Delivery and Provides Simple Adjustment of Delivery Rate.
- Large Capacity Bowl
- High Flow: 3/8" - 75 SCFM[§], 1/2" - 110 SCFM[§], 3/4" - 125 SCFM[§]

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, and 5 PSIG Pressure Drop

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatibility.

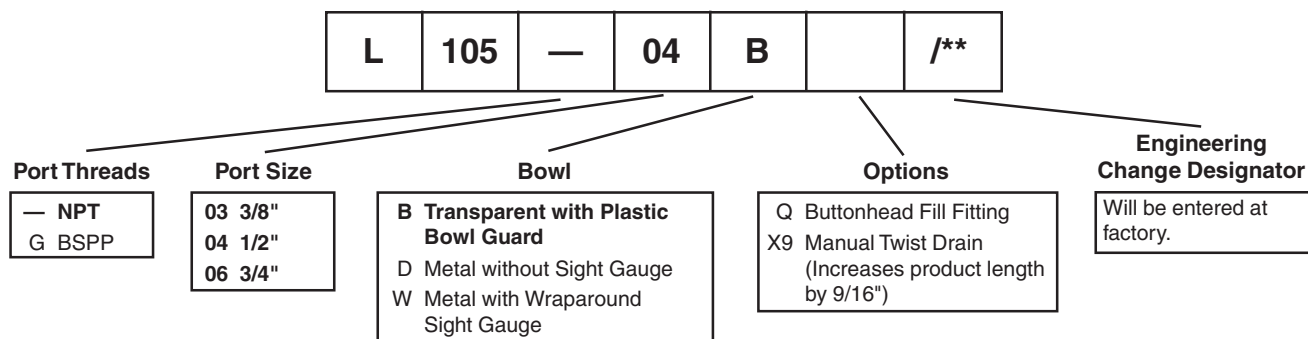


Port Size	NPT		BSPP	
	No Drain	Manual Twist Drain	No Drain	Manual Twist Drain
Polyurethane Bowl / Plastic Guard				
3/8"	L105-03B	L105-03BX9	L105G03B	L105G03BX9
1/2"	L105-04B	L105-04BX9	L105G04B	L105G04BX9
3/4"	L105-06B	L105-06BX9	L105G06B	L105G06BX9
Zinc Bowl / Sight Gauge				
3/8"	L105-03W	L105-03WX9	L105G03W	L105G03WX9
1/2"	L105-04W	L105-04WX9	L105G04W	L105G04WX9
3/4"	L105-06W	L105-06WX9	L105G06W	L105G06WX9

Standard part numbers shown bold.
For other models refer to ordering information below.

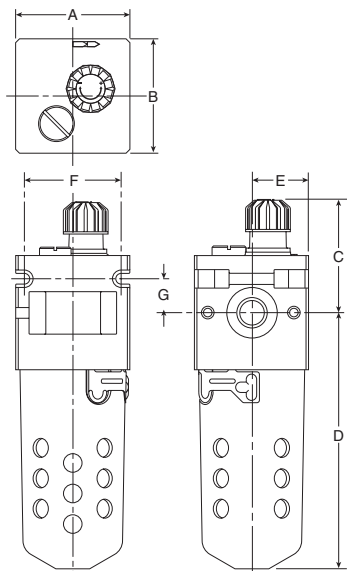
Wraparound Sight Gauge Bowl
All QUBE filters, lubricators, and integrals are available with the Watts Wraparound Polyurethane Sight Gauge Bowl. These unique bowls provide the 360° visibility of a plastic bowl while maintaining the high strength and safety features of metal bowls. Polyurethane bowls with guards, and metal bowls, are also available.

Ordering Information



NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



L105 Lubricator Dimensions								
A*	A†	B	C	D	E	F*	F†	G
L105-B								
2.69 (68,4)	3.03 (77,0)	2.69 (68,4)	3.00 (64,3)	6.03 (153,4)	1.34 (34,1)	2.25 (56,1)	2.55 (64,8)	0.81 (20,3)
L105-D								
2.69 (68,4)	3.03 (77,0)	2.69 (68,4)	3.00 (64,3)	6.06 (153,7)	1.34 (34,1)	2.25 (56,1)	2.55 (64,8)	0.81 (20,3)
LF105-W								
2.69 (68,4)	3.03 (77,0)	2.69 (68,4)	3.00 (64,3)	6.34 (161,1)	1.34 (34,1)	2.25 (56,1)	2.55 (64,8)	0.81 (20,3)

Inches (mm)

* 3/8 and 1/2 inch ports

† 3/4 inch ports

L105 Lubricator Kits & Accessories

Bowl Kits –

Polyurethane (B) BKL105B
Zinc (D) BKL105D
Zinc (W) Wraparound Sight Gauge BKL105W

Button Head Fill Fitting (All) SAA606C109-1

Drain Kits –

Manual Twist Drain SA600Y7-1

Oil –

1 Gal. F442002
12 Quart Case F442003
4 Gallon Case F442005

Repair Kit –

Tamper-resistant Sight Dome (All) RKL100

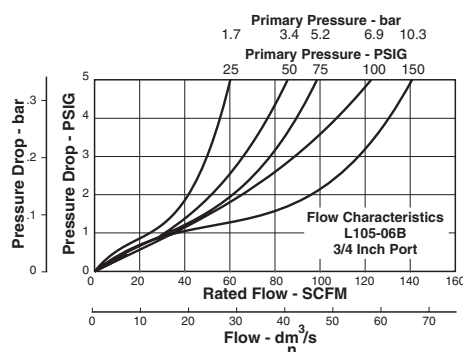
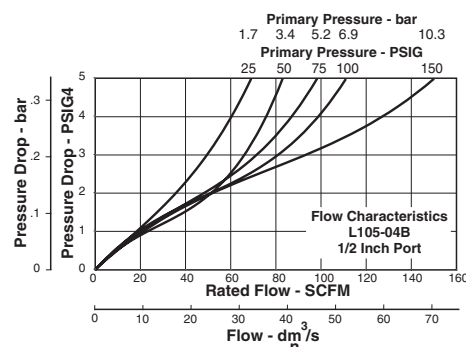
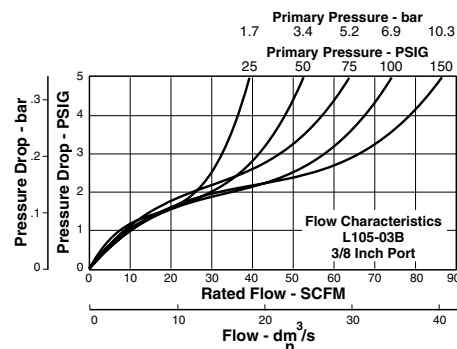
Specifications

Bowl Capacity 8.5 Ounce

Port Threads 3/8, 1/2 & 3/4 Inch

Pressure & Temperature Ratings –

Polyurethane Bowl 0 to 150 PSIG (0 to 10.2 bar)
40°F to 125°F (4.4°C to 52°C)
Zinc Bowl 0 to 300 PSIG (0 to 20.4 bar)
40°F to 150°F (4.4°C to 65.6°C)



Zinc Bowl w/ Sight Gauge 0 to 250 PSIG (0 to 17.2 bar)
40°F to 150°F (4.4°C to 65.6°C)

Suggested Lubricant F442 Oil

Petroleum-based oil of 100 to 200 SUS viscosity at 100°F and an aniline point greater than 200°F

(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)

Weight –

Polyurethane Bowl 1.09 lb. (0.5 kg) / Unit
10.7 lb. (4.9 kg) / 8-Unit Master Pack
Zinc Bowl 1.53 lb. (0.7 kg) / Unit
14.2 lb. (6.4 kg) / 8-Unit Master Pack
Zinc Bowl W/ Sight Gauge 1.71 lb. (0.8 kg) / Unit
15.7 lb. (7.1 kg) / 8-Unit Master Pack

Materials of Construction

Body Aluminum

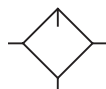
Bowls Polyurethane
Metal (Zinc)

Drains Brass

Fill Fitting Brass

Seals Nitrile

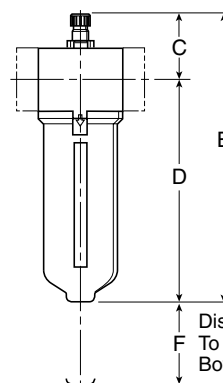
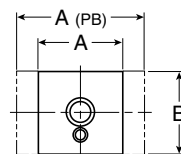
L255 Mist Lubricators – Hi-Flow



Features

- Port Blocks (PB) Available to Provide 1-1/2" Port Extension to 1" Ported Bodies
- Proportional Oil Delivery Over a Wide Range of Air Flows
- Bowl Can be Filled While Air Line is Under Pressure
- Transparent Sight Dome for 360° Visibility
- All Hardware Necessary for Modular Connection to Other QUBE 255 Series is Included
- High Flow: 3/4" - 230 SCFM[§], 1" - 250 SCFM[§]

[§] SCFM = Standard Cubic Feet Per Minute at 90 PSIG Inlet and 5 PSIG Pressure Drop.



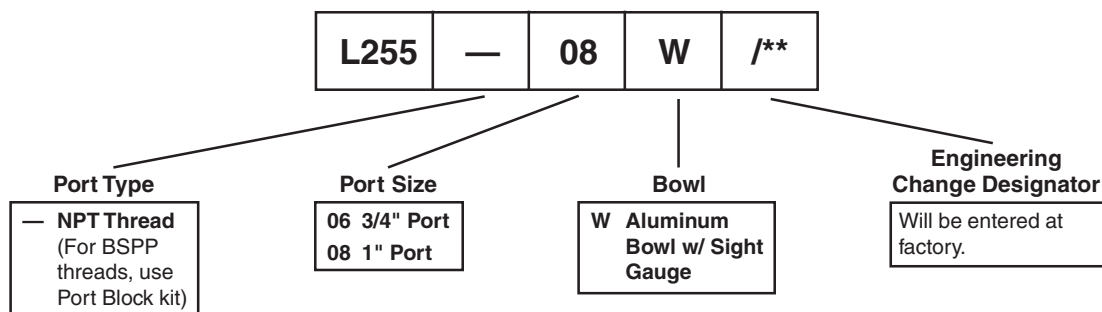
Port Size	NPT
	Metal Bowl / Sight Gauge / Manual Drain
3/4"	L255-06W
1"	L255-08W

Standard part numbers shown bold.
For other models refer to ordering information below.

L255 Lubricator Dimensions			
A	A (PB)	B	C
3.62 (92)	5.91 (150)	3.62 (92)	2.81 (71)
D	E	F	
9.00 (229)	11.81 (300)	4.92 (125)	

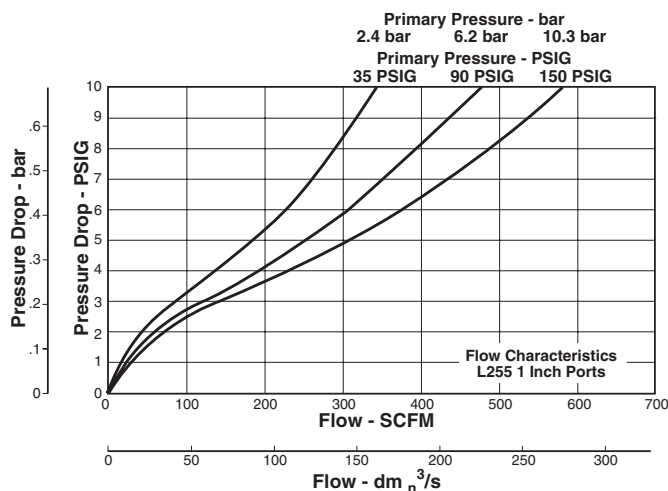
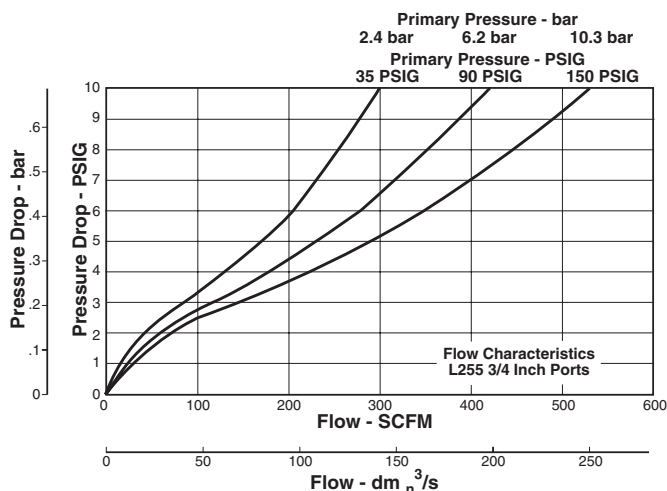
Inches
(mm)

Ordering Information



NOTE: BOLD ITEMS ARE STANDARD.

Technical Information



L255 Lubricator Kits & Accessories

Adjustment Knob	P04121
Bowl Kits –	
Metal Bowl – Sight Gauge / Manual Drain	P3NKA00BSM
Drain Kit –	
Manual Drain	PS512
Fill Cap Kit	P3NKA00PL
Sight Dome Kit –	
Polycarbonate	PS740
Nylon	PS740N
Sight Gauge Kit	P3NKA00PE
Oil –	
1 Gal.	F442002
12 Quart Case	F442003
4 Gallon Case	F442005
Pressure Fill Adapter Kit	P3NKA00PK
Service Kit	P3NKA00RL
Mounting Bracket Kit	P3NKA00MW
Port Block Kit (1-1/2" NPT Ports)	P3NKB9BCL

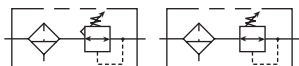
Specifications

Bowl Capacity	18.0 Ounces
Minimum Flow for Lubrication	6.6 SCFM At 100 PSIG
Pressure & Temperature Rating	0 to 250 PSIG (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)
Suggested Lubricant	F442 Oil
Petroleum-based oil of 100 to 200 SUS viscosity at 100°F and an aniline point greater than 200°F	
(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)	
Weight –	
3/4"	3.5 lb. (1.6 kg)
1"	3.5 lb. (1.6 kg)

Materials of Construction

Body, Bowl	Aluminum
Drains: Manual Drain	Plastic
Injector Meter Block & Base Assembly	Plastic
Seals	Nitrile
Sight Dome	Polycarbonate
Sight Gauge	Polyamide (Nylon)

B35 Integral Filter / Regulator

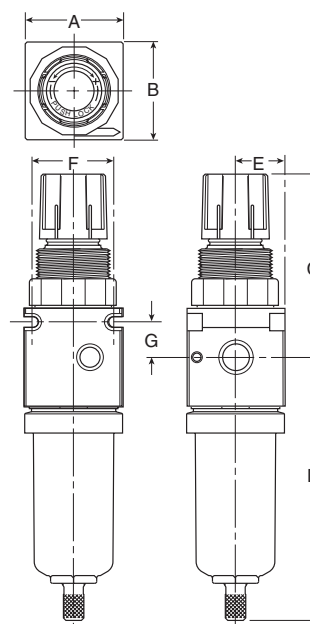


Features

- Compact Size Allows Greater Design Flexibility
- Nearly Double the Flow Capacity of Standard Miniature Filters; Reduces Costly Pressure Drop
- Connects to Other QUBE Units Using Just Screws and O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Piston Operated Regulator for High Flow and Low Pressure Drop
- Panel Mountable
- Excellent Water Removal Efficiency
- Unique Deflector Plate that Creates Swirling of the Air Stream Ensuring Maximum Water and Dirt Separation
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- 20 Micron Filter Element Standard, 5 Micron Available
- Transparent Polyurethane Bowl Standard
- Metal Bowl with Wraparound Sight Gauge Optional
- Manual Drain as Standard, Optional Auto Pulse Drain
- Large Bowl Capacity
- High Flow: 1/8" & 1/4" - 35 SCFM§

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, 75 PSIG No Flow Secondary Setting, and 20 PSIG Pressure Drop with 20 Micron Element.

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatability.



Port Size	NPT		BSPP	
	Manual Twist Drain	Piston Drain	Manual Twist Drain	Piston Drain
Polyurethane Bowl				
1/8"	B35-01AHC	B35-01AHCS	B35G01AHC	B35G01AHCS
1/4"	B35-02AHC	B35-02AHCS	B35G02AHC	B35G02AHCS
Zinc Bowl / Sight Gauge				
1/8"	B35-01WHC	B35-01WHCS	B35G01WHC	B35G01WHCS
1/4"	B35-02WHC	B35-02WHCS	B35G02WHC	B35G02WHCS

Standard part numbers shown bold.

For other models refer to ordering information below.

B35 Integral Filter / Regulator Dimensions						
A	B	C	D	E	F	G
B35-A						
1.59 (40,6)	1.59 (40,6)	2.98 (75,7)	4.23 (107,5)	0.80 (20,3)	1.31 (33,3)	0.58 (14,6)
B35-D						
1.59 (40,6)	1.59 (40,6)	2.98 (75,7)	4.25 (107,9)	0.80 (20,3)	1.31 (33,3)	0.58 (14,6)
B35-W						
1.59 (40,6)	1.59 (52,6)	2.98 (75,7)	4.45 (113,2)	0.80 (20,3)	1.31 (33,3)	0.58 (14,6)

Inches
(mm)

NOTE: 1.25 Dia. (32mm) hole required for panel mounting.

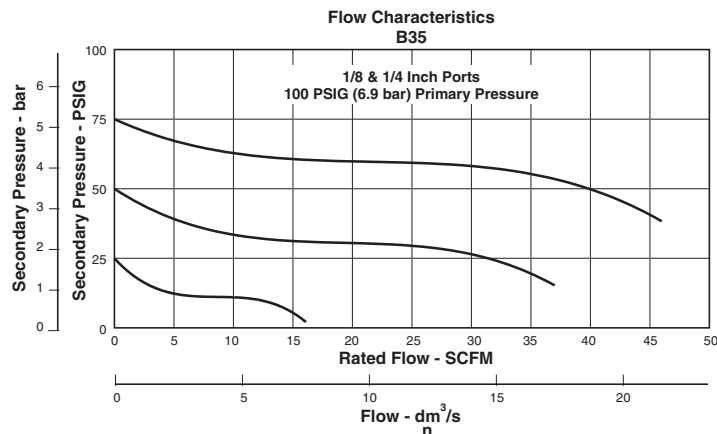
Ordering Information

B 35 — 02 A H C /**							Engineering Change Designator
Port Threads	Port Size	Bowl		Element	Reduced Pressure Range	Options	
— NPT G BSPP	01 1/8" 02 1/4"	A Transparent D Metal without Sight Gauge W Metal with Wraparound Sight Gauge		G 5 Micron H 20 Micron	A 0-25 PSIG B 0-60 PSIG C 0-125 PSIG	G Gauge K Non-relieving P Panel Mount Nut S Piston Drain T Tamperproof Adjustment U* Overnight Drain (Dump Valve)	Will be entered at factory.

NOTE: BOLD OPTIONS ARE STANDARD.

*A & D Bowls only

Technical Information



⚠ WARNING

**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.**

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

B35 Integral Filter / Regulator Kits & Accessories

Bowl Kits –

Polyurethane (A) BKF35A
Zinc (D) BKF35D
Zinc (W) Wraparound Sight Gauge BKF35W

Cage Kits –

Push / Pull Adjusting Knob Kit (A Range) CKR35A
Push / Pull Adjusting Knob Kit (B & C Range) CKR35BC

Control Knob R35-0545P

Drain Kits –

Manual Twist Drain SA600Y7-1
Piston Drain (Maximum Pressure - 175 PSIG) PKF35
Semi-Automatic “Overnight” Drain SA602A7
(Drains automatically under zero pressure)

Filter Element Kits –

5 Micron (All) EK504VY
20 Micron (All) EK504Y

Gauges –

1-1/2" Dial Size, 1/8" Back Connection
0 to 60 PSIG (0 to 4 bar) 274Z60S
1-1/2" Dial Size, 1/8" Back Connection
0 to 160 PSIG (0 to 11 bar) 274Z160S

Mounting Bracket Kit SA161X57

Panel Mount Nut –

Plastic R05X51-P
Aluminum R05X51-A

Repair Kits –

Deflector, Element Retainer (All) RKF30
Non-Relieving Diaphragm,
Valve Assembly RKR30K
Relieving Diaphragm,
Valve Assembly RKR30

Specifications

Bowl Capacity 1.5 Ounce

Gauge Ports (2) 1/8 Inch

Port Threads 1/8, 1/4 Inch

Pressure & Temperature Ratings –

Polyurethane Bowl 0 to 150 PSIG (0 to 10.2 bar)
40°F to 125°F (4.4°C to 52°C)

Zinc Bowl 0 to 300 PSIG (0 to 20.4 bar)
With Piston Drain 175 PSIG Max. Press. (11.9 bar)
40°F to 150°F (4.4°C to 65.6°C)

Zinc Bowl w/ Sight Gauge 0 to 250 PSIG (0 to 17.2 bar)
With Piston Drain 175 PSIG Max. Press. (11.9 bar)
40°F to 150°F (4.4°C to 65.6°C)

Weight –

Polyurethane Bowl 0.78 lb. (0.4 kg) / Unit
20.8 lb. (9.4 kg) / 24-Unit Master Pack

Zinc Bowl 0.98 lb. (0.4 kg) / Unit
25.6 lb. (11.6 kg) / 24-Unit Master Pack

Zinc Bowl W/ Sight Gauge 1.03 lb. (0.5 kg) / Unit
26.8 lb. (12.2 kg) / 24-Unit Master Pack

Materials of Construction

Body Zinc

Bowls Polyurethane
Metal (Zinc)

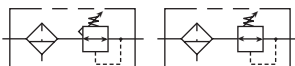
Cage Acetal Plastic

Drains Brass

Filter Elements Polyethylene

Seals Nitrile

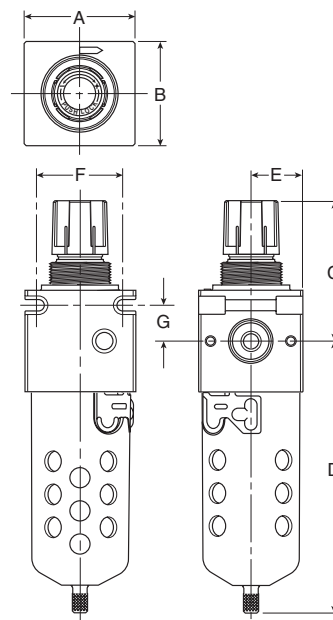
B75 Integral Filter / Regulator



Features

- Compact Size Allows Greater Design Flexibility
- Connects to Other QUBE Units Using Just Screws & O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Diaphragm Operated Design with Balanced Poppet Design for Quick And Accurate Regulation
- Panel Mountable
- For Applications Requiring Minimum Pressure Drop
- Excellent Water Removal Efficiency
- Unique Deflector Plate that Creates Swirling of the Air Stream Ensuring Maximum Water and Dirt Separation
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- 40 Micron Filter Element Standard, 5 Micron Available
- Transparent Polyurethane Bowl with Bowl Guard as Standard
- Metal Bowl with Wraparound Sight Gauge Optional
- Manual Drain as Standard, Optional Auto Float Drain
- Large Bowl Capacity
- High Flow: 1/4" - 40 SCFM[§], 3/8" - 60 SCFM[§], 1/2" - 80 SCFM[§],

§ SCFM = Standard Cubic Feet per Minute at 100 PSIG Inlet, 75 PSIG No Flow Secondary Setting, and 20 PSIG Pressure Drop with 20 Micron Element.



Port Size	NPT		BSPP	
	Manual Twist Drain	Automatic Float Drain	Manual Twist Drain	Automatic Float Drain
Polyurethane Bowl / Plastic Guard				
1/4"	B75-02BJC	B75-02BJCR	B75G02BJC	B75G02BJCR
3/8"	B75-03BJC	B75-03BJCR	B75G03BJC	B75G03BJCR
1/2"	B75-04BJC	B75-04BJCR	B75G04BJC	B75G04BJCR
Zinc Bowl / Sight Gauge				
1/4"	B75-02WJC	B75-02WJCR	B75G02WJC	B75G02WJCR
3/8"	B75-03WJC	B75-03WJCR	B75G03WJC	B75G03WJCR
1/2"	B75-04WJC	B75-04WJCR	B75G04WJC	B75G04WJCR

Standard part numbers shown bold.
 For other models refer to ordering information below.

B75 Integral Filter / Regulator Dimensions						
A	B	C	D	E	F	G
B75-B, B75-D						
2.00 (50,8)	2.00 (50,8)	2.78 (70,6)	5.19 (131,8)	1.00 (25,4)	1.64 (41,7)	0.70 (17,9)
B75-W						
2.00 (50,8)	2.00 (50,8)	2.78 (70,6)	5.44 (138,2)	1.00 (25,4)	1.64 (41,7)	0.70 (17,9)

Inches
(mm)

NOTE: 1.25 Dia. (32mm) hole required for panel mounting.

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatibility.

Ordering Information

B	75	—	02	B	J	C	/**
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Port Threads

— NPT
G BSPP

Port Size

02 1/4"
03 3/8"
04 1/2"

Bowl

B Transparent with Plastic Bowl Guard
D Metal without Sight Gauge
W Metal with Wraparound Sight Gauge

Element

G 5 Micron
J 40 Micron

Reduced Pressure Range

A 0-25 PSIG
B 0-60 PSIG
C 0-125 PSIG

Options

G Gauge
K Non-relieving
P Panel Mount Nut
S Piston Drain
T Tamperproof Adjustment
U* Overnight Drain (Dump Valve)

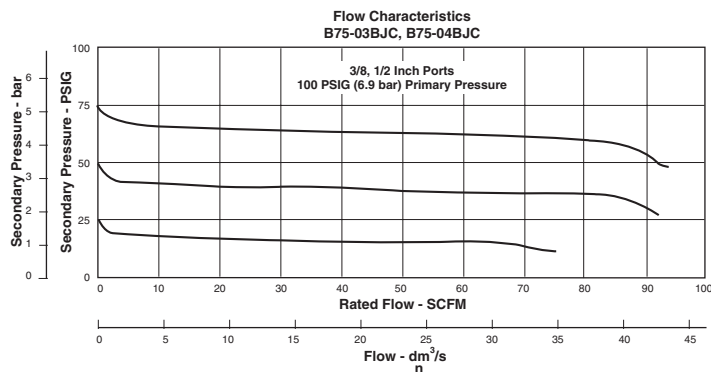
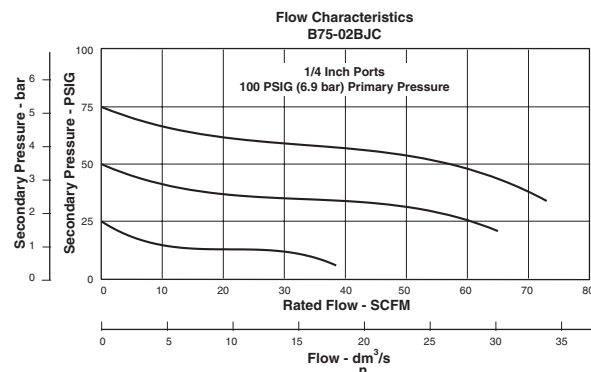
Engineering Change Designator

Will be entered at factory.

*B & D Bowls only

NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



⚠ WARNING

Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

B75 Integral Filter / Regulator Kits & Accessories

Bowl Kits –

Polyurethane (B) BKF55B
 Zinc (D) BKF55D
 Zinc (W) Wraparound Sight Gauge BKF55W

Cage Kits –

Glass-Filled Acetal Plastic CKR75
 Tamperproof CKR75T

Control Knob R35-0545P

Drain Kits –

Manual Twist Drain SA600Y7-1
 Internal Auto (Max. Pressure: 175 PSIG) (B & D) SA602MD
 Internal Auto (Max. Pressure: 175 PSIG) (W) SAF105MD
 Semi-Automatic "Overnight" Drain SA602A7
 (Drains automatically under zero pressure)

Filter Element Kits –

5 Micron (All) EK55G
 20 Micron (All) EK55J

Gauges –

1-1/2" Dial Size, 1/8" Back Connection
 0 to 60 PSIG (0 to 4 bar) 274Z60S
 1-1/2" Dial Size, 1/8" Back Connection
 0 to 160 PSIG (0 to 11 bar) 274Z160S

Mounting Bracket Kit SAR55Y57

Panel Mount Nut –

Plastic R05X51-P
 Aluminum R05X51-A

Repair Kits –

Automatic Float Drain (Maximum Pressure - 175 PSIG) ... RK602MD
 Deflector, Element Retainer (All) RKF55
 Non-Relieving Diaphragm,
 Valve Assembly RKR75K
 Relieving Diaphragm,
 Valve Assembly RKR75

Specifications

Bowl Capacity 3.8 Ounce

Gauge Ports (2) 1/8 Inch

Port Threads 1/4, 3/8 & 1/2 Inch

Pressure & Temperature Ratings –

Polyurethane Bowl 0 to 150 PSIG (0 to 10.2 bar)
 40°F to 125°F (4.4°C to 52°C)

Zinc Bowl 0 to 300 PSIG (0 to 20.4 bar)
 40°F to 150°F (4.4°C to 65.6°C)

With Automatic Float Drain 175 PSIG Max. Press. (11.9 bar)
 40°F to 125°F (4.4°C to 52°C)

Zinc Bowl w/ Sight Gauge 0 to 250 PSIG (0 to 17.2 bar)
 40°F to 150°F (4.4°C to 65.6°C)

With Automatic Float Drain 175 PSIG Max. Press. (11.9 bar)
 40°F to 125°F (4.4°C to 52°C)

Weight –

Polyurethane Bowl 1.50 lb. (0.7 kg) / Unit
 18 lb. (8.2 kg) / 12-Unit Master Pack

Zinc Bowl 1.75 lb. (0.8 kg) / Unit
 21 lb. (9.5 kg) / 12-Unit Master Pack

Zinc Bowl W/ Sight Gauge 1.85 lb. (0.8 kg) / Unit
 22 lb. (10 kg) / 12-Unit Master Pack

Materials of Construction

Body Zinc

Bowls Polyurethane
 Metal (Zinc)

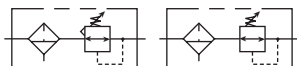
Cage Glass-Filled Acetal Plastic

Drains Brass

Filter Elements Polyethylene

Seals Nitrile

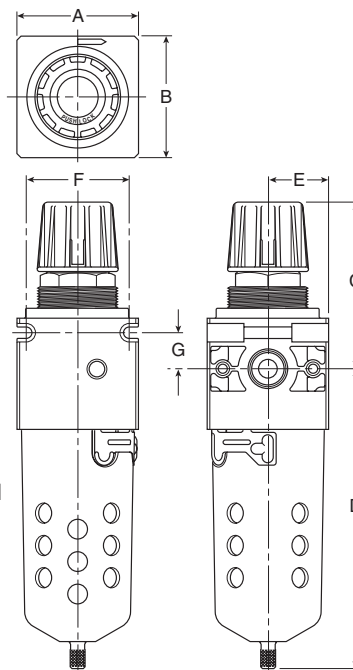
B105 Integral Filter / Regulator



Features

- Connects to Other QUBE Units Using Just Screws & O-rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Diaphragm Operated Design with Balanced Poppet Design for Quick And Accurate Regulation
- Panel Mountable
- For Applications Requiring Minimum Pressure Drop
- Excellent Water Removal Efficiency
- Unique Deflector Plate that Creates Swirling of the Air Stream Ensuring Maximum Water and Dirt Separation
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- 40 Micron Filter Element Standard, 5 Micron Available
- Transparent Polyurethane Bowl with Bowl Guard as Standard
- Metal Bowl with Wraparound Sight Gauge Optional
- Manual Drain as Standard, Optional Auto Float Drain
- Large Bowl Capacity
- High Flow: 3/8" - 125 SCFM[§], 1/2" - 150 SCFM[§], 3/4" - 150 SCFM[§],

§ SCFM = Standard Cubic Feet per Minute at 100 PSIG Inlet, 75 PSIG No Flow Secondary Setting, and 20 PSIG Pressure Drop with 20 Micron Element.



Port Size	NPT		BSPP	
	Manual Twist Drain	Automatic Float Drain	Manual Twist Drain	Automatic Float Drain
Polyurethane Bowl / Plastic Guard				
3/8"	B105-03BJC	B105-03BJCR	B105G03BJC	B105G03BJCR
1/2"	B105-04BJC	B105-04BJCR	B105G04BJC	B105G04BJCR
3/4"	B105-06BJC	B105-06BJCR	B105G06BJC	B105G06BJCR
Zinc Bowl / Sight Gauge				
3/8"	B105-03WJC	B105-03WJCR	B105G03WJC	B105G03WJCR
1/2"	B105-04WJC	B105-04WJCR	B105G04WJC	B105G04WJCR
3/4"	B105-06WJC	B105-06WJCR	B105G06WJC	B105G06WJCR

Standard part numbers shown bold.

For other models refer to ordering information below.

B105 Integral Filter / Regulator Dimensions								
A*	A†	B	C	D	E	F*	F†	G
B105-B, B105-D								
2.69 (68,2)	3.03 (77,0)	2.69 (68,2)	3.66 (92,8)	6.66 (169)	1.34 (34,1)	2.27 (57,5)	2.55 (64,8)	0.70 (17,9)
B105-W								
2.69 (68,2)	3.03 (77,0)	2.69 (68,2)	3.66 (92,8)	6.78 (172,2)	1.34 (34,1)	2.27 (57,5)	2.55 (64,8)	0.70 (17,9)

Inches (mm)

* 3/8 and 1/2 inch ports

† 3/4 inch ports

NOTE: 1.75 Dia. (44mm) hole required for panel mounting.

Polyurethane Bowls and Sight Gauges Offer Improved Chemical Compatibility.

Ordering Information

<table><tr><td>B</td><td>105</td><td>—</td><td>04</td><td>B</td><td>J</td><td>C</td><td></td><td>/**</td></tr></table>								B	105	—	04	B	J	C		/**	Engineering Change Designator											
B	105	—	04	B	J	C		/**																				
Port Threads	Port Size	Bowl		Element	Reduced Pressure Range	Options																						
<table><tr><td>— NPT</td></tr><tr><td>G BSPP</td></tr></table>	— NPT	G BSPP	<table><tr><td>03 3/8"</td></tr><tr><td>04 1/2"</td></tr><tr><td>06 3/4"</td></tr></table>	03 3/8"	04 1/2"	06 3/4"	<table><tr><td>B Transparent with Plastic Bowl Guard</td></tr><tr><td>D Metal without Sight Gauge</td></tr><tr><td>W Metal with Wraparound Sight Gauge</td></tr></table>		B Transparent with Plastic Bowl Guard	D Metal without Sight Gauge	W Metal with Wraparound Sight Gauge	<table><tr><td>G 5 Micron</td></tr><tr><td>J 40 Micron</td></tr></table>	G 5 Micron	J 40 Micron	<table><tr><td>A 0-25 PSIG</td></tr><tr><td>B 0-60 PSIG</td></tr><tr><td>C 0-125 PSIG</td></tr><tr><td>D 0-250 PSIG</td></tr></table>	A 0-25 PSIG	B 0-60 PSIG	C 0-125 PSIG	D 0-250 PSIG	<table><tr><td>G Gauge</td></tr><tr><td>K Non-relieving</td></tr><tr><td>P Panel Mount Nut</td></tr><tr><td>R Automatic Float Drain</td></tr><tr><td>U* Overnight Drain (Dump Valve)</td></tr></table>		G Gauge	K Non-relieving	P Panel Mount Nut	R Automatic Float Drain	U* Overnight Drain (Dump Valve)	<table><tr><td>Will be entered at factory.</td></tr></table>	Will be entered at factory.
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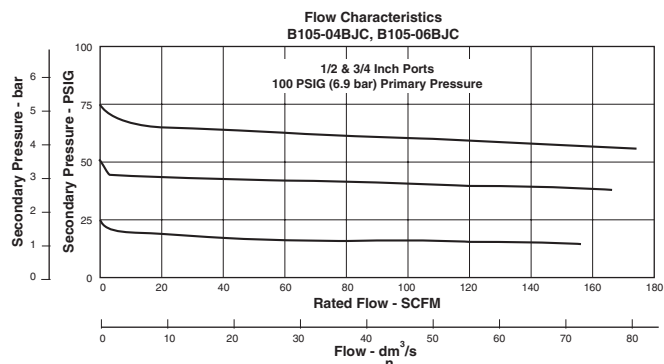
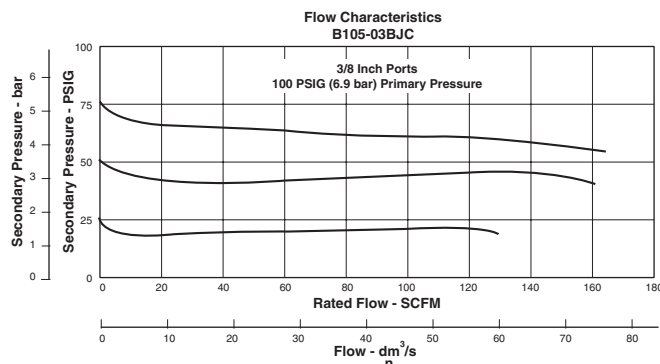
NOTE: BOLD OPTIONS ARE STANDARD.

*B & D Bowls only

NOTE: BOLD OPTIONS ARE STANDARD.

*B & D Bowls only

Technical Information



⚠ WARNING

Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

B105 Integral Filter / Regulator Kits & Accessories

Bowl Kits –

Polyurethane (B) BKF105B
 Zinc (D) BKF105D
 Zinc (W) Wraparound Sight Gauge BKF105W

Cage Kit –

Spring Cage Assembly with Knob CKR105

Control Knob R105-0542P

Drain Kits –

Manual Twist Drain SA600Y7-1
 Internal Auto (Max. Pressure: 175 PSIG) (B & D) SA602MD
 Internal Auto (Max. Pressure: 175 PSIG) (W) SAF105MD
 Semi-Automatic “Overnight” Drain SA602A7
 (Drains automatically under zero pressure)

Filter Element Kits –

5 Micron (All) EK100G
 20 Micron (All) EK100J

Gauges –

2" Dial Size, 1/4" Back Connection
 0 to 60 PSIG (0 to 4 bar) 275Y60S
 2" Dial Size, 1/4" Back Connection
 0 to 160 PSIG (0 to 11 bar) 275Y160S
 2" Dial Size, 1/4" Back Connection
 0 to 300 PSIG (0 to 11 bar) 275Y300S

Mounting Bracket Kit SAR10Y55

Panel Mount Nut –

Plastic R10X51-P
 Aluminum R10X51-A

Repair Kits –

Auto Float Drain (Maximum Pressure - 175 PSIG) RK602MD
 Deflector, Element Retainer (All) RKF100
 Non-Relieving Diaphragm,
 Valve Assembly RKR105K
 Relieving Diaphragm,
 Valve Assembly RKR105

Specifications

Bowl Capacity 8.5 Ounce

Gauge Ports (2) 1/4 Inch

Port Threads 3/8, 1/2 & 3/4 Inch

Pressure & Temperature Ratings –

Polyurethane Bowl 0 to 150 PSIG (0 to 10.2 bar)
 40°F to 125°F (4.4°C to 52°C)
 Zinc Bowl 0 to 300 PSIG (0 to 20.4 bar)
 40°F to 150°F (4.4°C to 65.6°C)
 With Automatic Float Drain 175 PSIG Max. Press. (11.9 bar)
 40°F to 125°F (4.4°C to 52°C)
 Zinc Bowl w/ Sight Gauge 0 to 250 PSIG (0 to 17.2 bar)
 40°F to 150°F (4.4°C to 65.6°C)
 With Automatic Float Drain 175 PSIG Max. Press. (11.9 bar)
 40°F to 125°F (4.4°C to 52°C)

Weight –

Polyurethane Bowl 2.21 lb. (1.0 kg) / Unit
 19.7 lb. (8.9 kg) / 8-Unit Master Pack
 Zinc Bowl 2.66 lb. (1.2 kg) / Unit
 23.3 lb. (10.6 kg) / 8-Unit Master Pack
 Zinc Bowl W/ Sight Gauge 2.86 lb. (1.3 kg) / Unit
 24.9 lb. (11.3 kg) / 8-Unit Master Pack

Materials of Construction

Body Aluminum

Bowls Polyurethane
 Metal (Zinc)

Cage Glass Filled Acetal

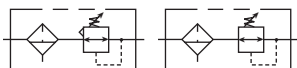
Drains Brass

Filter Elements Polyethylene

Knob Plastic

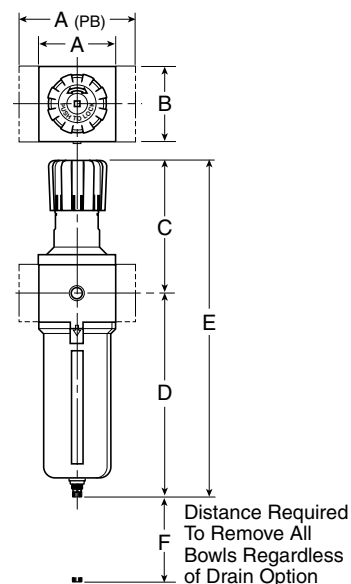
Seals Nitrile

B255 Integral Filter / Regulator – Hi-Flow



Features

- Port Blocks (PB) Available to Provide 1-1/2" Port Extension to 1" Ported Bodies
 - Excellent Water Removal Efficiency
 - Metal Bowl with Sight Gauge
 - Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
 - Manual Drain as Standard, Optional Auto Drain
 - Self Relieving Feature Plus Balanced Poppet Provides Quick Response and Accurate Pressure Regulation
 - Solid Control Piston for Extended Life
 - High Flow: 3/4" - 270 SCFM[§], 1" - 270 SCFM[§]
- [§] SCFM = Standard Cubic Feet Per Minute at 90 PSIG Inlet and 10 PSIG Pressure Drop, with 40 Micron Element.



Port Size	NPT
	Metal Bowl / Sight Gauge / Manual Drain
3/4"	B255-06WJC
1"	B255-08WJC

Standard part numbers shown bold.
For other models refer to ordering information below.

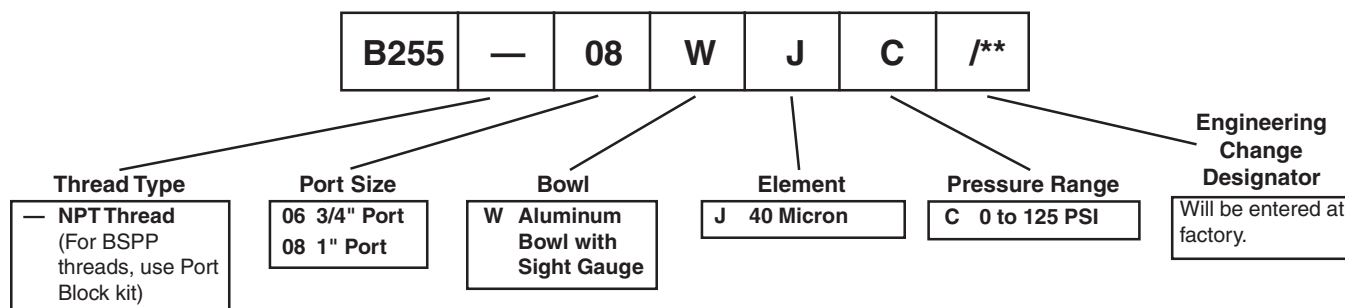
B255 Filter / Regulator Dimensions			
A	A (PB)	B	C
3.62 (92)	5.91 (150)	3.62 (92)	6.38 (162)
D [†]	E [†]	F	
9.57 (243)	15.95 (405)	4.92 (125)	

[†] With Manual Drain or Internal Auto Drain
Inches
(mm)

⚠ WARNING

Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Ordering Information



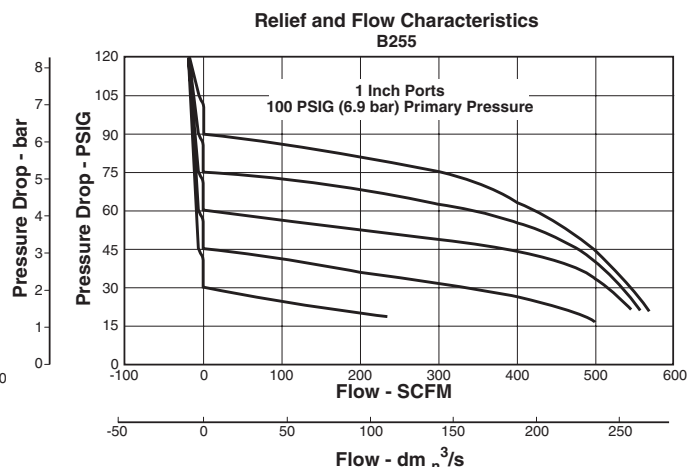
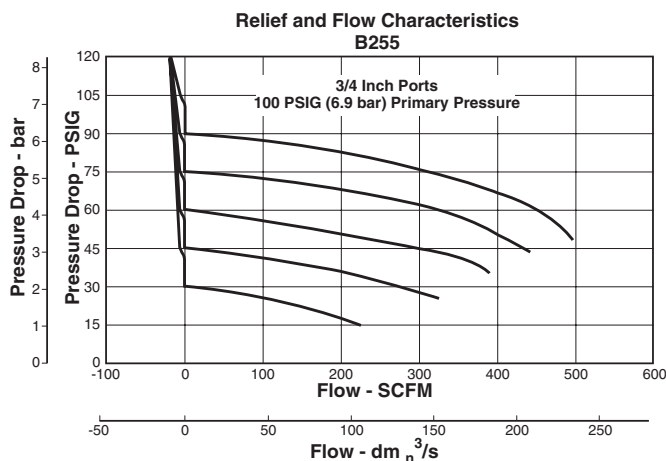
Internal automatic drains must be purchased separately as PS506.

NOTE: BOLD ITEMS ARE STANDARD.

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

Technical Information



B255 Integral Filter / Regulator Kits & Accessories

Bowl Kits:

Metal Bowl –	
Sight Gauge / Internal Auto Drain	P3NKA00BSA
Sight Gauge / Manual Drain	P3NKA00BSM

Drain Kit –

Internal Auto Drain	PS506
Manual Drain	PS512

Filter Element Kits –

40 Micron	P3NKA00ESG
5 Micron	P3NKA00ESE
Adsorber	P3NKA00ESA

Gauges –

60 PSIG (0 to 4.1 bar)	P781641
160 PSIG (0 to 11.0 bar)	P781642
300 PSIG (0 to 20.7 bar)	P781643

Service Kit –

Relieving	P3NKA00RR
Non-Relieving	P3NKA00RN

Sight Gauge Kit P3NKA00PE

Springs –

1 to 60 PSIG Range	C10A1304
2 to 125 PSIG Range	C10A1308
5 to 250 PSIG Range	C10A1317

Mounting Bracket Kit P3NKA00MW

Port Block Kit (1-1/2" NPT Ports) P3NKB9BCL

Specifications

Bowl Capacity 18.0 Ounces

Port Threads 3/4", 1"

Pressure & Temperature Rating 0 to 250 PSIG (0 to 17 bar)
32°F to 175°F (0°C to 80°C)

Internal Auto Drain – 10 to 250 PSIG (0.7 to 17 bar)
at 125°F (52°C) or less

For Secondary Pressure Ranges, see above charts.

Sump Capacity 6.8 Ounces

Weight –

3/4"	5.3 lb. (2.4 kg)
1"	5.3 lb. (2.4 kg)

Materials of Construction

Adjusting Stem Steel

Body, Bonnet, Bowl Aluminum

Drain Plastic

Filter Elements –

40 Micron (Standard)	Plastic
5 Micron (Optional)	Plastic
Adsorber (Optional)	Activated Charcoal

Knob Plastic

Piston Plastic

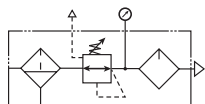
Seals Nitrile

Sight Gauge Polyamide (Nylon)

Springs – Poppet & Control Steel

C35 Combination Units

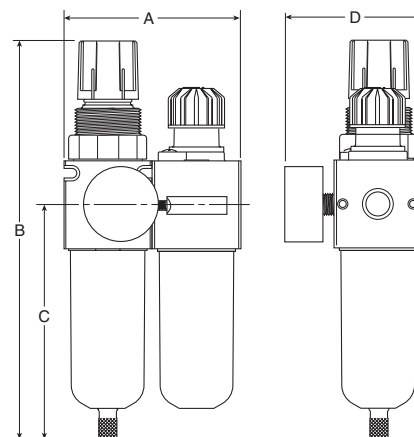
Two Unit Combo



- 20 Micron Filter Element
- Manual Twist Drain
- Relieving Regulator
- 125 PSI (8.6 bar)
- Gauge Included

Port Size	Model Numbers
1/8"	C35-01BLAHCA
1/4"	C35-02BLAHCA

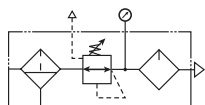
For other models refer to ordering information on next page.



A	B	C	D
3.19 (80,9)	7.00 (177,8)	4.25 (107,9)	2.88 (73)

Inches
(mm)

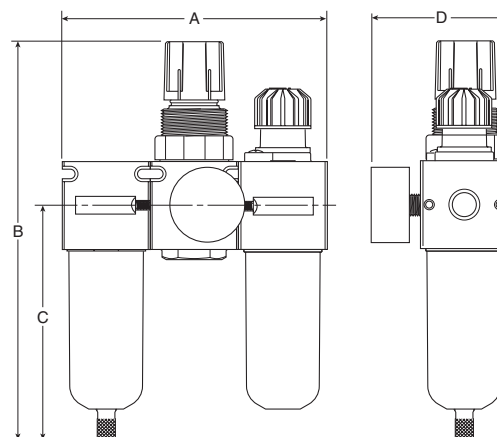
Three Unit Combo



- 20 Micron Filter Element
- Manual Twist Drain
- Relieving Regulator
- 125 PSI (8.6 bar)
- Gauge Included

Port Size	Model Numbers
1/8"	C35-01FRLAHCA
1/4"	C35-02FRLAHCA

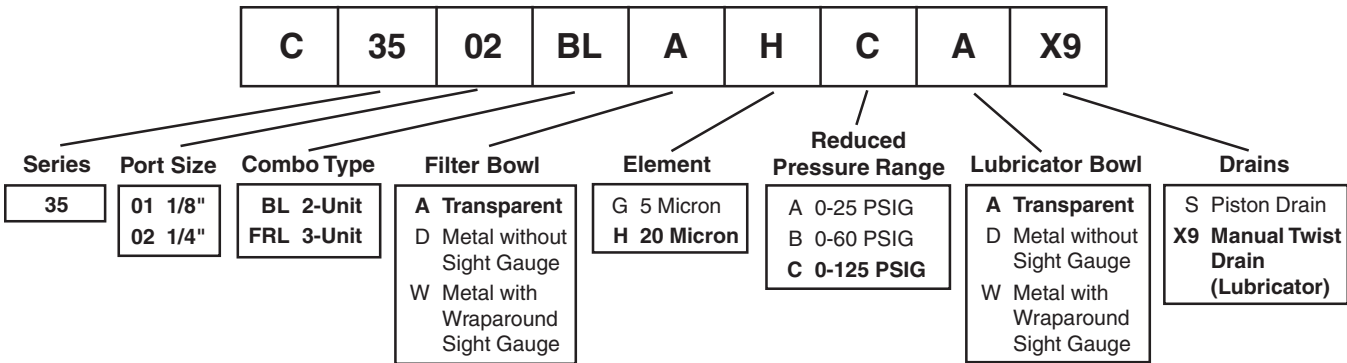
For other models refer to ordering information on next page.



A	B	C	D
4.78 (121,4)	7.00 (177,8)	4.25 (107,9)	2.88 (73)

Inches
(mm)

Ordering Information



NOTE: BOLD OPTIONS ARE STANDARD.

WARNING

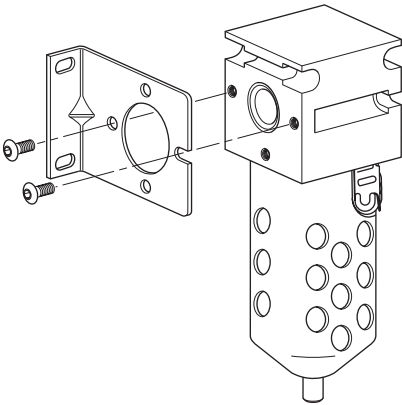
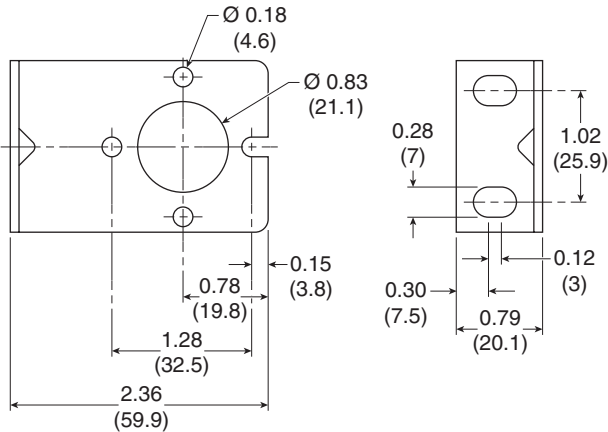
Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

*Polyurethane Bowls and Sight Gauges
Offer Improved Chemical Compatability.*

**C35 Combination Units
Kits & Accessories**

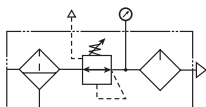
Mounting Bracket Kit (2 Required)..... SAR35Y57
See individual component sections for other kits and accessories.

Bracket Installation



C75 Combination Units

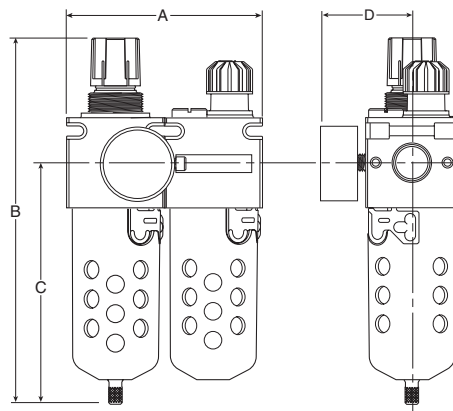
Two Unit Combo



- 40 Micron Filter Element
- Manual Twist Drain
- Relieving Regulator
- 125 PSI (8.6 bar)
- Gauge Included

Port Size	Model Numbers
1/4"	C75-02BLBJCB
3/8"	C75-03BLBJCB
1/2"	C75-04BLBJCB

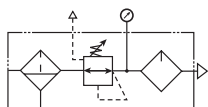
For other models refer to ordering information on next page.



C75-BL - B & D Bowls			
A	B	C	D
4.19 106,4	7.97 (202,4)	5.19 (131,8)	3.44 (81,7)
C75-BL - W Bowls			
A	B	C	D
4.19 106,4	8.23 (208,9)	5.44 (138,2)	3.44 (87,3)

Inches
(mm)

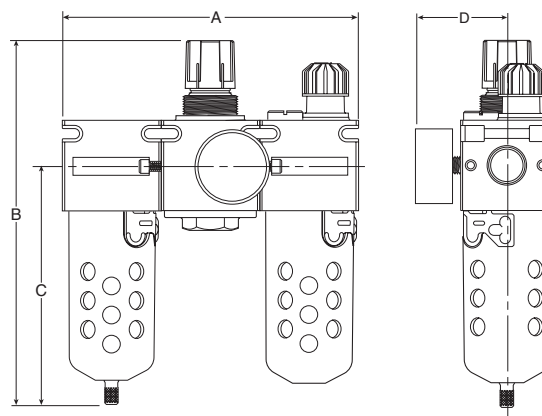
Three Unit Combo



- 40 Micron Filter Element
- Manual Twist Drain
- Relieving Regulator
- 125 PSI (8.6 bar)
- Gauge Included

Port Size	Model Numbers
1/4"	C75-02FRLBJCB
3/8"	C75-03FRLBJCB
1/2"	C75-04FRLBJCB

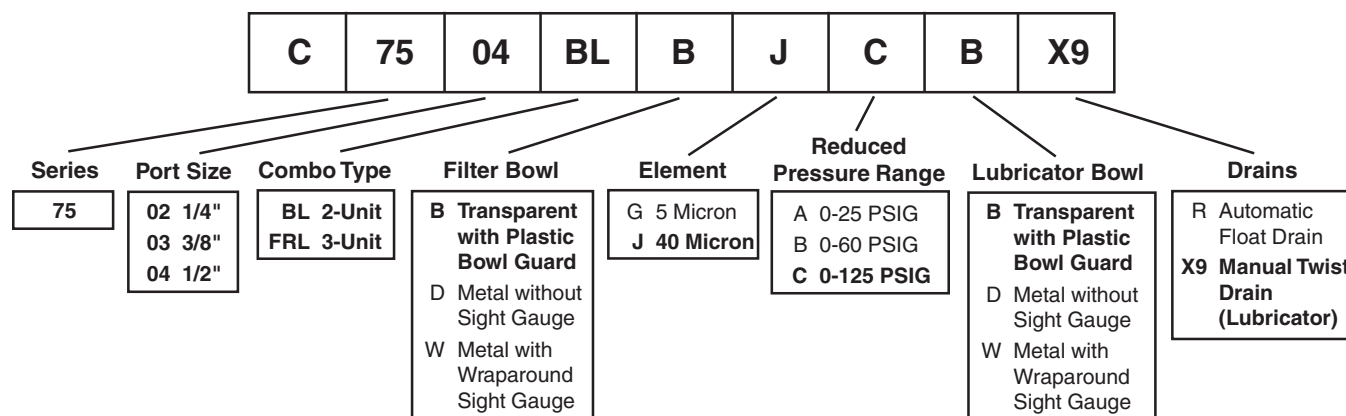
For other models refer to ordering information on next page.



C75-FRL - B & D Bowls			
A	B	C	D
6.57 166,9	7.94 (201,7)	5.19 (131,8)	3.44 (87,3)
C75-FRL - W Bowls			
A	B	C	D
6.57 166,9	8.06 (204,7)	5.31 (134,9)	3.44 (87,3)

Inches (mm)

Ordering Information



NOTE: BOLD OPTIONS ARE STANDARD.

⚠ WARNING
Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

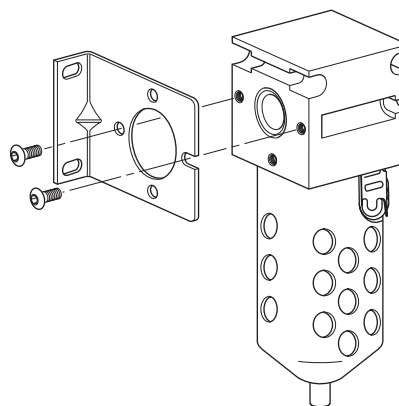
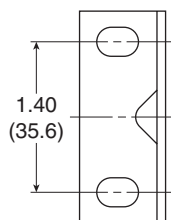
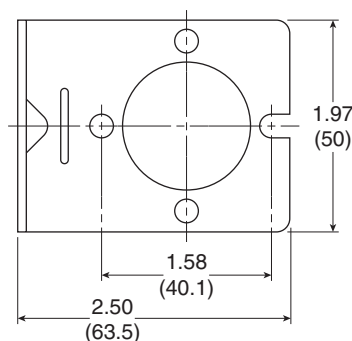
***Polyurethane Bowls and Sight Gauges
Offer Improved Chemical Compatability.***

C75 Combination Units Kits & Accessories

Mounting Bracket Kit (2 Required) SAR75Y57

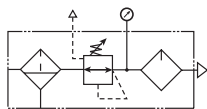
See individual component sections for other kits and accessories.

Bracket Installation



C105 Combination Units

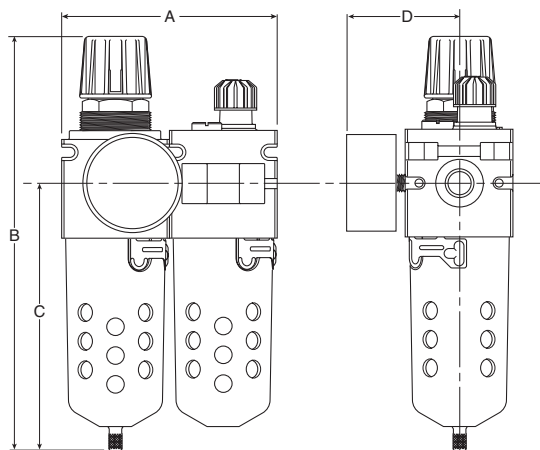
Two Unit Combo



- 40 Micron Filter Element
- Manual Twist Drain
- Relieving Regulator
- 125 PSI (8.6 bar)
- Gauge Included

Port Size	Model Numbers
3/8"	C105-03BLBJCB
1/2"	C105-04BLBJCB
3/4"	C105-06BLBJCB

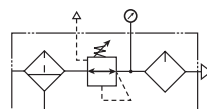
For other models refer to ordering information on next page.



C105-BL - B & D Bowls				
A*	A†	B	C	D
5.38 (136,6)	6.06 (153,9)	10.32 (262,1)	6.66 (169,2)	4.20 (106,7)
C105-BL - W Bowls				
A*	A†	B	C	D
5.38 (136,6)	6.06 (153,9)	10.44 (265,2)	6.78 (172,2)	4.20 (106,7)

Inches (mm)
 * 3/8 and 1/2 inch ports
 † 3/4 inch ports

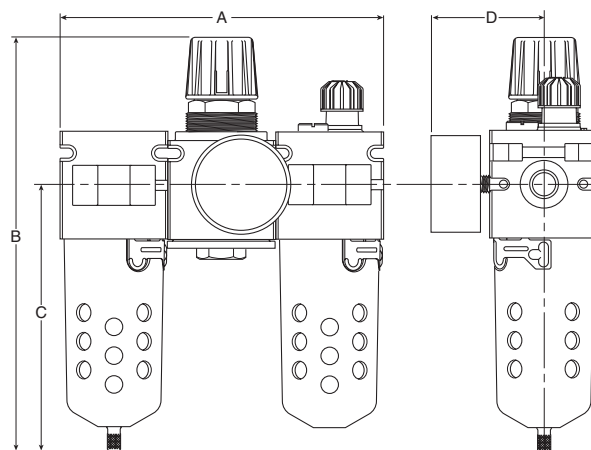
Three Unit Combo



- 40 Micron Filter Element
- Manual Twist Drain
- Relieving Regulator
- 125 PSI (8.6 bar)
- Gauge Included

Port Size	Model Numbers
3/8"	C105-03FRLBJCB
1/2"	C105-04FRLBJCB
3/4"	C105-06FRLBJCB

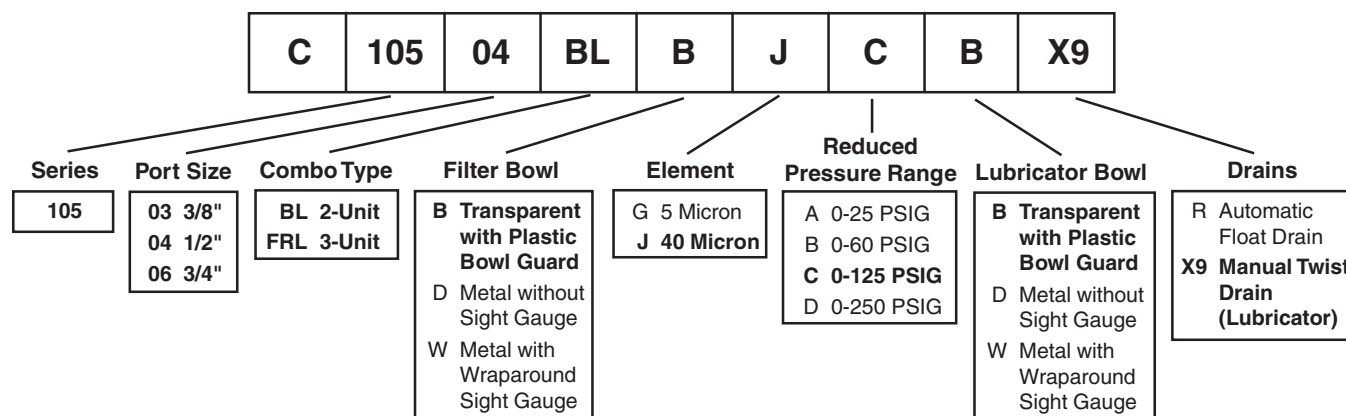
For other models refer to ordering information on next page.



C105-FRL - B Bowls				
A*	A†	B	C	D
8.07 (204,9)	9.09 (230,9)	10.31 (261,8)	6.56 (167)	4.20 (106,7)
C105-FRL - D & W Bowls				
A*	A†	B	C	D
8.07 (204,9)	9.09 (230,9)	10.41 (264,4)	6.66 (169,2)	4.20 (106,7)

Inches (mm)
 * 3/8 and 1/2 inch ports
 † 3/4 inch ports

Ordering Information



NOTE: BOLD OPTIONS ARE STANDARD.

⚠ WARNING
Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

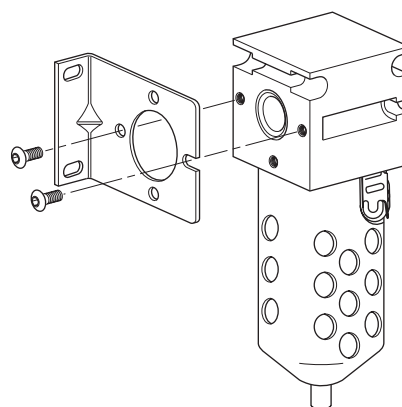
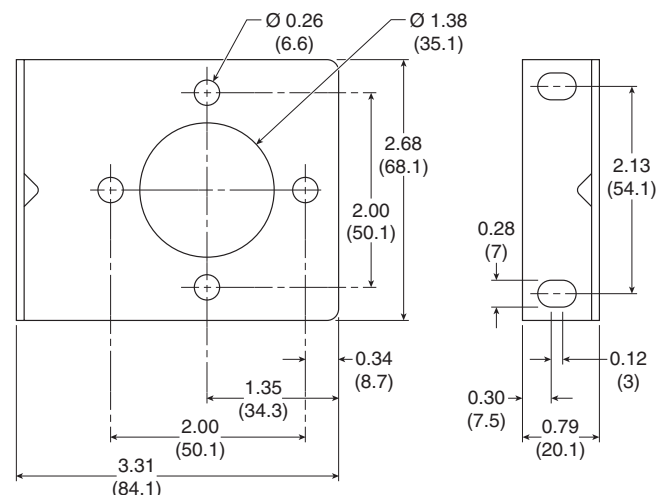
*Polyurethane Bowls and Sight Gauges
Offer Improved Chemical Compatibility.*

C105 Combination Units Kits & Accessories

Mounting Bracket Kit (2 Required) SAR105Y57

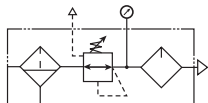
See individual component sections for other kits and accessories.

Bracket Installation



C255 Combination Units

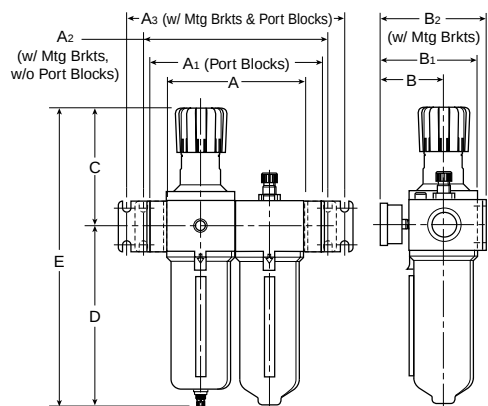
Two-Unit Combo



- 40 Micron Filter Element
- Manual Twist Drain
- Relieving Regulator
- 125 PSI (8.6 bar)
- Gauge Included

Series	Port	Model Numbers
C255	3/4"	C255-06BLWJCW
	1"	C255-08BLWJCW

For other models, refer to Ordering Information on next page.

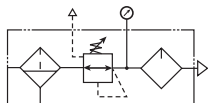


A	A ₁	A ₂	A ₃	B	B ₁	B ₂
7.24 (184)	9.53 (242)	9.84 (250)	12.13 (308)	3.62 (92)	5.20 (132)	5.74 (146)
C	D	E				
6.38 (162)	9.57 (243)	15.95 (405)				

Inches (mm)

Mounting Brackets Not Included.

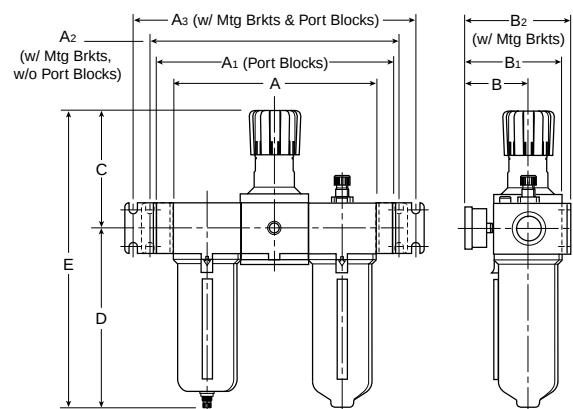
Three Unit Combo



- 40 Micron Filter Element
- Manual Twist Drain
- Relieving Regulator
- 125 PSI (8.6 bar)
- Gauge Included

Series	Port	Model Numbers
C255	3/4"	C255-06FRLWJCW
	1"	C255-08FRLWJCW

For other models, refer to Ordering Information on next page.

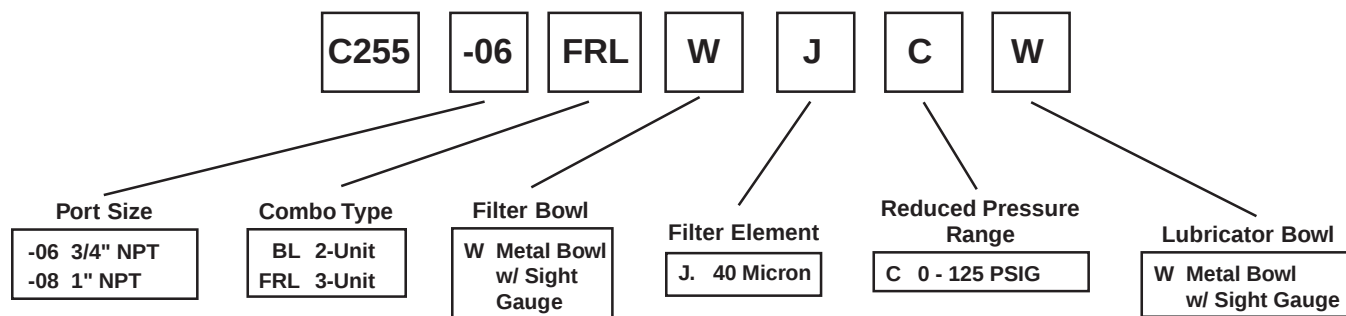


A	A ₁	A ₂	A ₃	B	B ₁	B ₂
10.87 (276)	13.15 (334)	13.46 (342)	15.75 (400)	3.62 (92)	5.20 (132)	5.74 (146)
C	D	E				
6.38 (162)	9.57 (243)	15.95 (405)				

Inches (mm)

Mounting Brackets Not Included.

Ordering Information



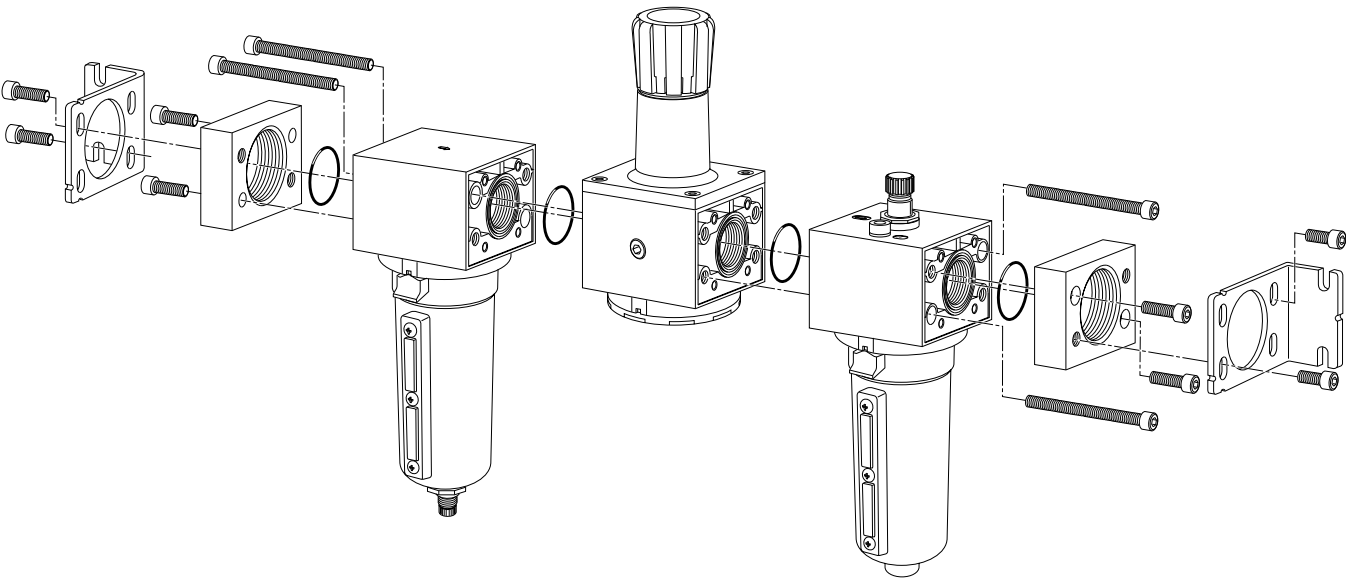
NOTE: BOLD OPTIONS ARE STANDARD.

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

C255 Combination Accessories

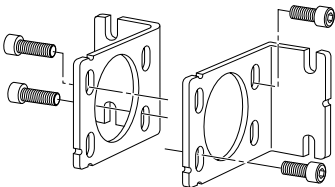
(See individual component sections for other kits and accessories.)



Mounting Brackets

P3NKA00MW

For 1-1/2" BSPP Port Block with E02 Fitting Application, use Mounting Bracket Kit P3NKA00MW



For modular combinations, one side has groove and the mating side is flat. Use the o-ring seal provided in the groove. For some modular combinations, both surfaces may have grooves. In those applications, use o-ring in one groove and square seal provided in the other.

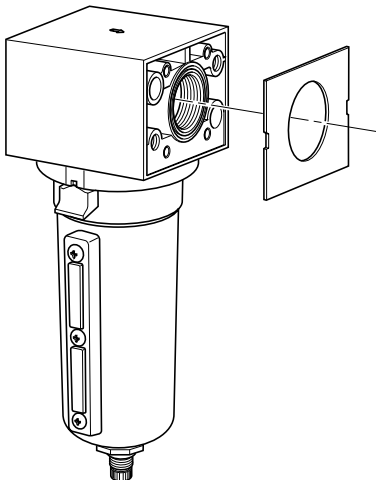
Port Block Kits

	3/4"	1"	1-1/2"
Individual Units:			
NPT	P3NKB96CP	P3NKB98CP	P3NKB9BCP
BSPP	P3NKB16CP	P3NKB18CP	P3NKB1BCP
Modular Combinations:			
NPT	P3NKB96CL	P3NKB98CL	P3NKB9BCL
BSPP	P3NKB16CL	P3NKB18CL	P3NKB1BCL

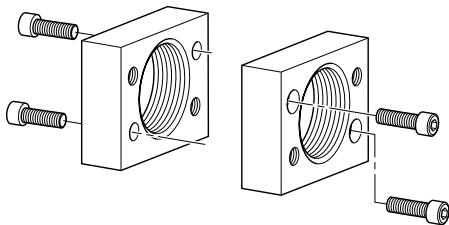
Replacement Body Covers

P3NKA00PM

Each Kit contains two covers.
All units are shipped with body covers.



Port Block Kits allow units to be installed or removed as modular components.
Each Kit includes all the necessary pieces to make two port connections.



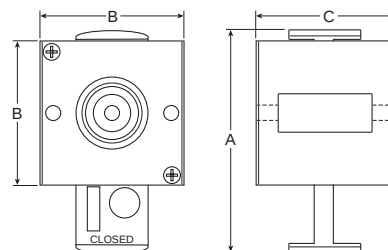
SV Shut-off Valve



SV75 Shown

Features

- Threaded Ports Allows Use In-line or with Other QUBE Modular FRL Components
- Accepts Customer Supplied Standard Single Padlock or Safety Lock for Multiple Lockout
- Conforms to OSHA Standard 29 CFR Part 10
- 3-Port, 2-Position Shutoff Valve Relieves Downstream Pressure when Closed
- SV Valves Can be Locked in the Closed Position Only
- Maximum Pressure: 300 PSIG



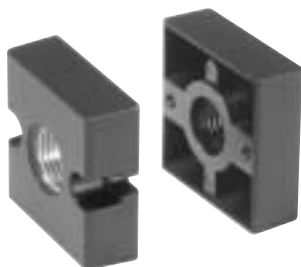
Port Size	SV35 Part Number	SV75 Part Number	SV105 Part Number
1/8	SV35-01	—	—
1/4	SV35-02	SV75-02	—
3/8	—	SV75-03	SV105-03
1/2	—	SV75-04	SV105-04
3/4	—	—	SV105-06

Kit Includes: (2) Machine Screws & (2) O-rings for mounting.

Series	A	B	C	Weight
SV35	2.50 (63,5)	1.63 (41,3)	1.56 (39,7)	.78 lb .35 kg
SV75	3.06 (77,8)	2.00 (50,8)	1.75 (44,5)	.95 lb .43 kg
SV105	4.19 (106,3)	2.69 (68,2)	2.13 (53,9)	1.7 lb .77 kg

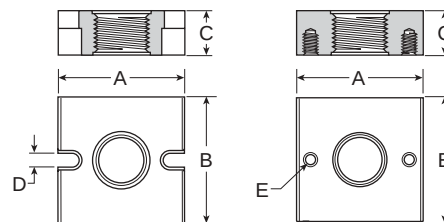
Inches
(mm)

End Plates



Features

- Design Allows Removal or Installation of Basic Components without Direct Pipe Connections to the Components
- Each Series has End Plates One Port Size Larger than the Basic Units



Type 731

Type 732

Part Number	Type 0731	Type 0732	Contains Screws	O-Rings	Application
PK3500-**	0	1	0	0	Shut-Off
PK3510-**	1	1	2	1	Filter or Lubricator
PK3520-**	1	—	2	1	R, B, FRL, BL with Shut-off
PK3530-**	2	—	4	2	R, B, FRL, BL
PK7500-**	0	1	0	0	Shut-Off
PK7510-**	1	1	2	1	Filter or Lubricator
PK7520-**	1	—	2	1	R, B, FRL, BL with Shut-off
PK7530-**	2	—	4	2	R, B, FRL, BL
PK1050-**	0	1	0	0	Shut-Off
PK1051-**	1	1	2	1	Filter or Lubricator
PK1052-**	1	—	2	1	R, B, FRL, BL with Shut-off
PK1053-**	2	—	4	2	R, B, FRL, BL

** 01 (1/8"); 02 (1/4"); 03 (3/8"); 04 (1/2"); 06 (3/4")

Series	Type	A	B	C	D	E
35	0731	1.59 (40,5)	1.59 (40,5)	0.90 (22,9)	0.17 (4,4)	—
35	0732	1.59 (40,5)	1.59 (40,5)	0.90 (22,9)	—	#8-32UNC-2B
75	0731	2.00 (50,8)	2.00 (50,8)	0.70 (17,9)	0.22 (5,6)	—
75	0732	2.00 (50,8)	2.00 (50,8)	0.70 (17,9)	—	#10-32UNF-2B
105	0731	2.69 (68,3)	2.69 (68,3)	1.00 (25,49)	0.27 (6,8)	—
105	0732	2.00 (50,8)	2.00 (50,8)	1.00 (25,4)	—	1/4-20UNC-2B

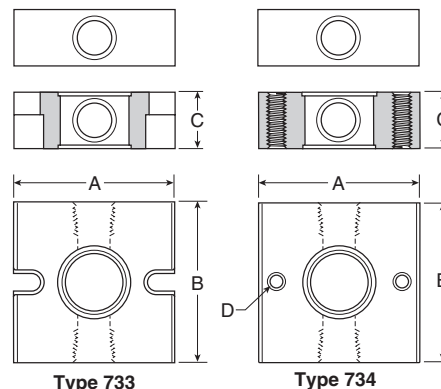
Inches
(mm)

105 Series Porting Blocks



Features

- Designed to Fit within Any 105 Series Combination, Providing Two 3/8" Branch Ports



Part Number	Type 0733	Type 0734	Contains Screws	O-Rings	Application
PK1054	1	—	2 (Long)	1	Between Filter & Reg.; Reg. & Lub.; End Plate & Filter; Lub. & End Plate
PK1055	—	1	4 (Short)	2	Between Filter & Coalescer; Filter & Lubricator

Type	A	B	C	D
0733	2.69 (68,4)	2.69 (68,3)	1.00 (25,4)	N/A
0734	2.69 (68,4)	2.69 (68,3)	1.00 (25,4)	1/4-20-UNC-2B

Inches
(mm)

35 & 75 Series Branch Blocks



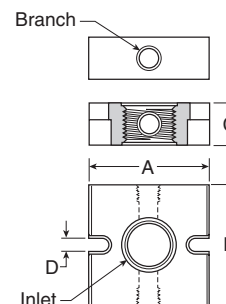
BB35



BB75

Features

- Blocks Function as End Plates with 1/8" NPT Branch Lines Available Top and Bottom
- Also Used in Conjunction with Direction Plates and Regulators to Provide Outlets for Gauges

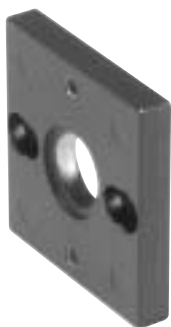


Part Number	Inlet Port	Branch Port
BB35-1-1	1/8"	1/8"
BB35-2-1	1/4"	1/8"
BB75-2-1	1/4"	1/8"
BB75-3-1	3/8"	1/8"
BB75-3-2	3/8"	1/4"

Part Number	A	B	C
BB35-1-1	1.61 (40,9)	1.61 (40,9)	0.90 (22,9)
BB35-2-1	1.61 (40,9)	1.61 (40,9)	0.90 (22,9)
BB75-2-1	2.00 (50,8)	2.00 (50,8)	0.94 (23,9)
BB75-3-1	2.00 (50,8)	2.00 (50,8)	0.94 (23,9)
BB75-3-2	2.00 (50,8)	2.00 (50,8)	0.94 (23,9)

Inches
(mm)

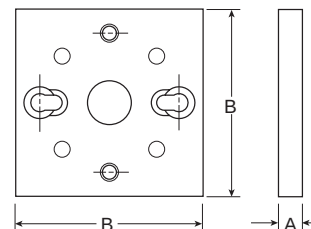
Direction Plates



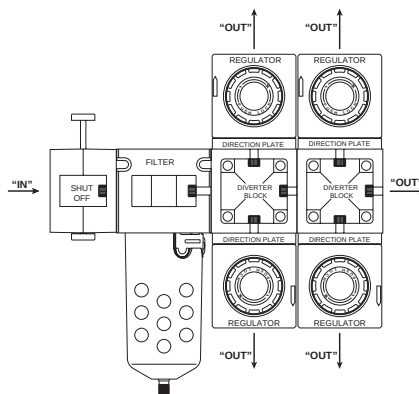
DP75

Features

- Designed to Allow 90° Rotation of QUBE Components Allowing Manifolding of Units and Resulting in Great Space and Cost Savings
- Also Used to Mount Units from Different Series to One Another



Application



Part Number	A	B
DP35	0.20 (5,1)	1.59 (40,5)
DP75	0.30 (7,6)	2.00 (50,8)
DP105	0.34 (8,6)	2.69 (68,3)

Inches
(mm)

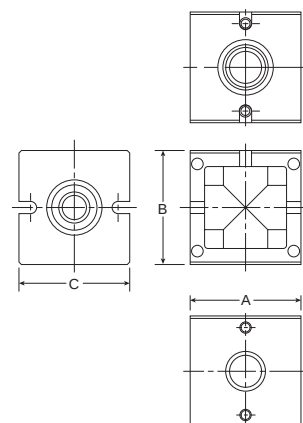
Diverter Blocks



DK7510-3-2

Features

- Designed to Mount in a Variety of Configurations with the Capability of having Branch Line Components Mounted Directly, Giving Multiple Air Lines with Minimal Pressure Drop
- Use Untapped Blocks within Components, Either at the Beginning or End of System

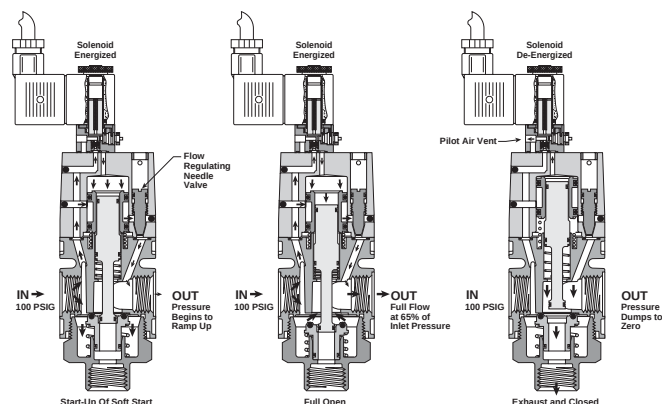
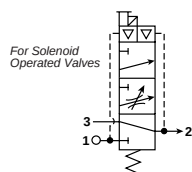


Part Number	Application
DK3510-3-2	Tapped 3/8" In & Out, Two 1/4" Branches
DK7510	In & Out Not Tapped, Two 1/4" Branches
DK7510-3-2	Tapped 3/8" In & Out, Two 1/4" Branches
DK7510-3-3	Tapped 3/8" In & Out, Two 3/8" Branches
DK1051-6-4	Tapped 3/4" In & Out, Two 1/2" Branches

Part Number	A	B	C	D	E
DK3510-3-2	1.93 (49)	1.69 (42,9)	1.69 (42,9)	3/8" NPT	1/4" NPT
DK3510	2.00 (50,8)	2.00 (50,8)	2.00 (50,8)	N/A	1/4" NPT
DK7510-3-2	2.00 (50,8)	2.00 (50,8)	2.00 (50,8)	3/8" NPT	1/4" NPT
DK7510-3-3	2.00 (50,8)	2.00 (50,8)	2.00 (50,8)	3/8" NPT	3/8" NPT
DK1051-6-4	2.75 (69,9)	2.69 (68,3)	2.69 (68,3)	3/4" NPT	1/2" NPT

Inches
(mm)

QUBE SC75 & SC105 Series Solenoid Soft Start / Quick Dump Valves



Features

- Connects to Other QUBE Units Using Just Screws and O-Rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Combines Soft Start and Quick Dump Valve in the Same Body
- Unit is Installed Downstream of Lubricator (If Used)
- Large Flow Capacities up to 4.2 Cv
- Inline or Modular Mounting
- Soft Start Flow Easily Adjusted



CAUTION

Do not use synthetic, reconstituted, or oils with an alcohol content or detergent additive.

Operation

When the valve is installed into the pneumatic system, and pilot operator receives no signal, the air is blocked at Port 1. When a pilot signal is received at pilot operator, the valve shifts, closing the connection between Ports 2 and 3. At the same time, air flow begins between Ports 1 and 2 at a slow rate controlled by the needle valve, located on the top of the valve. When the downstream pressure reaches approximately 60% of the supply pressure, the main valve spool opens allowing full flow through the valve into the system. If pilot signal or system pressure is lost, the valve returns to its initial state, venting the downstream pressure through Port 3.

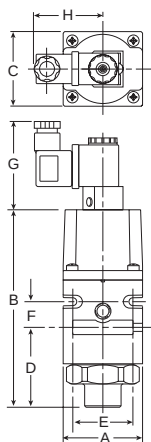


CAUTION

Do not restrict the inlet of valves having an internal pilot supply. Pressure supply piping must be the same size as the inlet port or larger to insure that the pilot valve receives sufficient pressure supply during high flow conditions.

Ordering Information / Dimensions

75 Series		
Model Number	Port (NPT)	Flow* Cv
24VDC / 48VAC		
SC75-02M	1/4"	3.6
SC75-03M	3/8"	4.1
SC75-04M	1/2"	4.2
12VDC / 24VAC		
SC75-02Z	1/4"	3.6
SC75-03Z	3/8"	4.1
SC75-04Z	1/2"	4.2
120VAC		
SC75-02K	1/4"	3.6
SC75-03K	3/8"	4.1
SC75-04K	1/2"	4.2

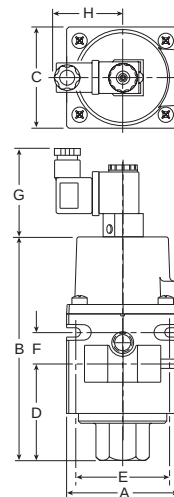


*Exhaust Flow

Model	A	B	C	D	E	F	G	H
SC75	2.19 (56)	5.43 (138)	2.06 (52)	1.50 (38)	1.66 (42)	.72 (18)	2.56 (65)	1.91 (48)

Inches (mm)

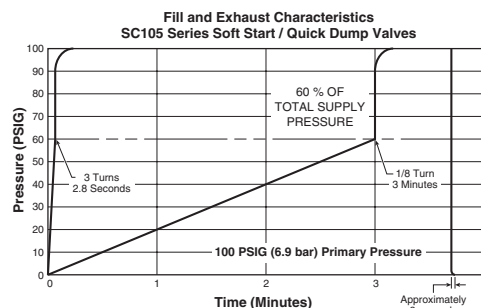
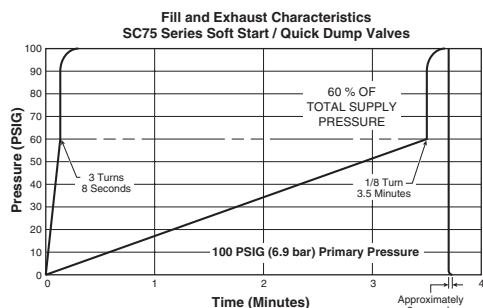
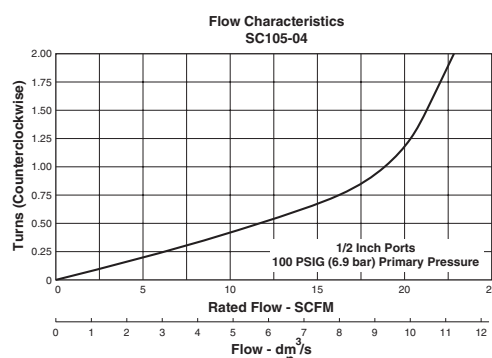
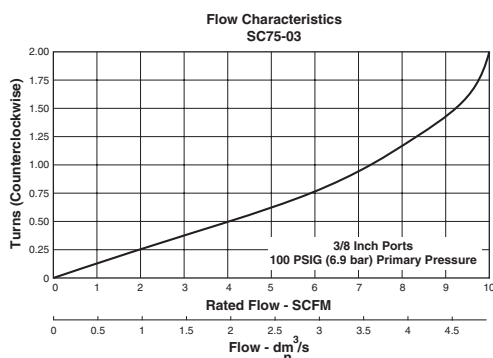
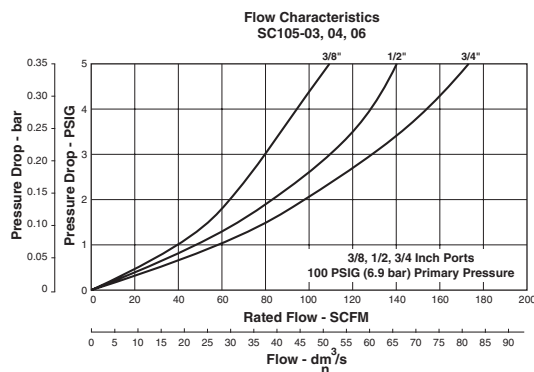
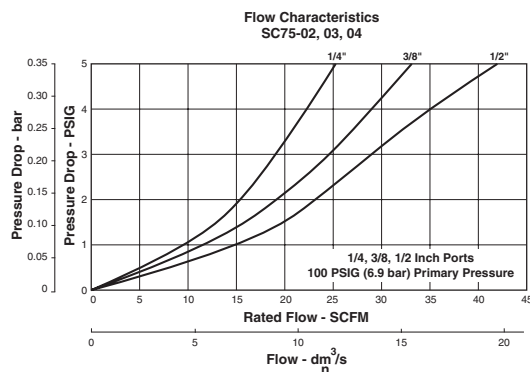
105 Series		
Model Number	Port (NPT)	Flow* Cv
24VDC / 48VAC		
SC105-03M	3/8"	5.2
SC105-04M	1/2"	5.3
SC105-06M	3/4"	5.7
12VDC / 24VAC		
SC105-03Z	3/8"	5.2
SC105-04Z	1/2"	5.3
SC105-06Z	3/4"	5.7
120VAC		
SC105-03K	3/8"	5.2
SC105-04K	1/2"	5.3
SC105-06K	3/4"	5.7



*Exhaust Flow

Model	A	B	C	D	E	F	G	H
SC105	3.03 (77)	6.03 (153)	2.75 (70)	1.84 (47)	2.53 (64)	.84 (21)	2.56 (65)	1.90 (48)

Inches (mm)

Technical Information**QUBE SC75 & SC105 Series Kits & Accessories****Coil Kits –**

24VDC / 48VAC Coil	2EV103
12VDC / 24VAC Coil	2EV102
120 VAC Coil	2EV105

Seal Repair Kits –

SC75 Series	RKSC75
SC105 Series	RKSC105

Exhaust Mufflers

SC75 (1/2" Exhaust)	M60-04
SC105 (3/4" Exhaust)	M60-06

Specifications**Exhaust Ports –**

SC75	1/2 Inch NPT
SC105	3/4 Inch NPT

Gauge Ports –

SC75 (2)	1/8 Inch NPT
SC105 (2)	1/4 Inch NPT

Inlet & Outlet Port Threads –

SC75	3/8 Inch NPTF
SC105	1/2 Inch NPTF

(BSPF and BSPT port threads are available through the use of Modular Port Block Kits)

Pressure & Temperature Ratings –

Solenoid	60 to 145 PSIG (4.1 to 10.0 bar) 32°F to 140°F (0°C to 60°C)
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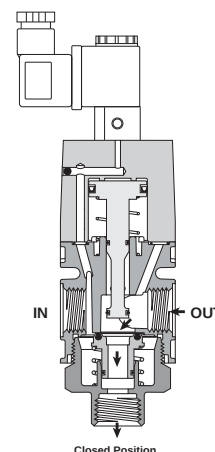
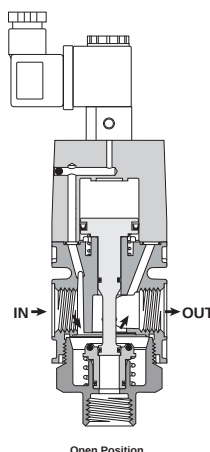
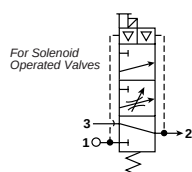
Weight –

SC75	3.25 lb. (1.47 kg)
SC105	5.5 lb. (2.49 kg)

Materials of Construction

Body	Zinc
Bottom Plug	Brass
Seals	Nitrile
Springs	Stainless Steel
Internal Components	Brass / Aluminum
Top Cover	Aluminum

QUBE S75 & S105 Solenoid Quick Dump Valves



Features

- Connects to Other QUBE Units Using Just Screws & O-Rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Shuts Off Incoming Pressure While Rapidly Exhausting Downstream Pressure
- Unit is Installed Downstream of Lubricator (If Used)
- Large Exhaust Flow Capacities Up to 5.7 Cv
- Solenoid Operation
- Non-locking Manual Override
- Inline or Modular Mounting



CAUTION

Do not use synthetic, reconstituted, or oils with an alcohol content or detergent additive.

Operation

The solenoid quick dump valves are high flow, normally closed, 3-Port, 2-Position directional control valves. Upon energizing the solenoid, inlet air is applied to the top of the piston. The piston pushes against the spring and opens the main valve providing full flow air to the downstream. When the solenoid is de-energized, the main valve closes allowing downstream air to exhaust rapidly through the bottom plug. The bottom plug is tapped so that exhaust may be piped away or fitted with a muffler.



CAUTION

Do not restrict the inlet of valves having an internal pilot supply. Pressure supply piping must be the same size as the inlet port or larger to insure that the pilot valve receives sufficient pressure supply during high flow conditions.

Ordering Information / Dimensions

S75 Series		
Model Number	Port (NPT)	Flow* Cv
24VDC / 48VAC		
S75-02M	1/4"	3.6
S75-03M	3/8"	4.1
S75-04M	1/2"	4.2
12VDC / 24VAC		
S75-02Z	1/4"	3.6
S75-03Z	3/8"	4.1
S75-04Z	1/2"	4.2
120VAC		
S75-02K	1/4"	3.6
S75-03K	3/8"	4.1
S75-04K	1/2"	4.2

*Exhaust Flow

Model	A	B	C	D	E	F	G	H
S75	2.19 (56)	5.43 (138)	2.06 (52)	1.50 (38)	1.66 (42)	.72 (18)	2.56 (65)	1.91 (48)

Inches (mm)

S105 Series		
Model Number	Port (NPT)	Flow* Cv
24VDC / 48VAC		
S105-03M	3/8"	5.2
S105-04M	1/2"	5.3
S105-06M	3/4"	5.7
12VDC / 24VAC		
S105-03Z	3/8"	5.2
S105-04Z	1/2"	5.3
S105-06Z	3/4"	5.7
120VAC		
S105-03K	3/8"	5.2
S105-04K	1/2"	5.3
S105-06K	3/4"	5.7

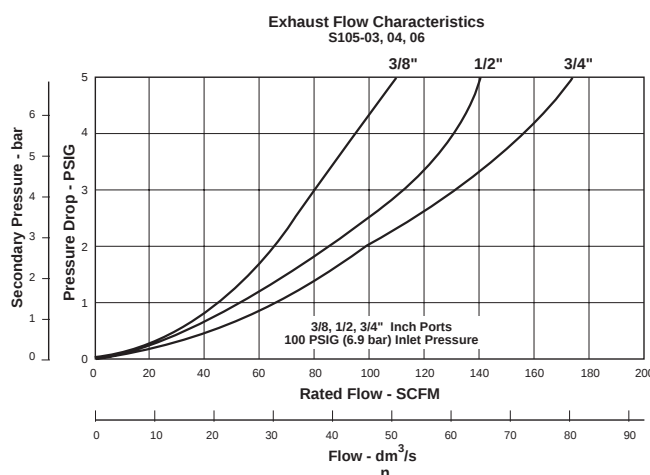
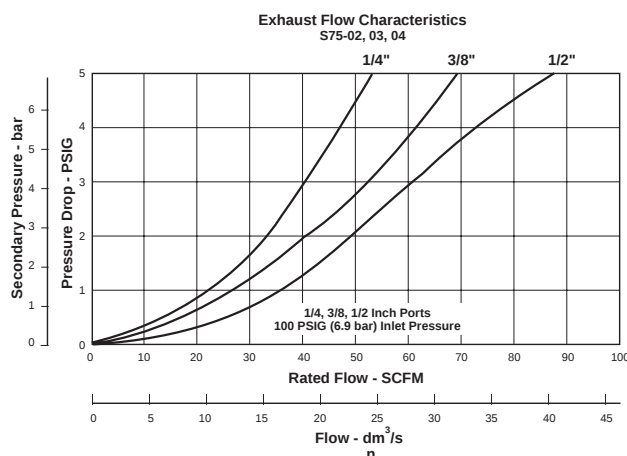
Technical drawing of the S105 Series valve. The top view shows a circular body with four ports (two on the left, two on the right) and a central actuator. Dimensions H (width) and C (height) are indicated. The side view shows the valve body with dimensions G (total height), F (height to the top of the actuator), D (height to the bottom of the actuator), E (width of the actuator), and A (width of the valve body).

*Exhaust Flow

Model	A	B	C	D	E	F	G	H
S105	3.03 (77)	6.03 (153)	2.75 (70)	1.84 (47)	2.53 (64)	.84 (21)	2.56 (65)	1.90 (48)

Inches (mm)

Technical Information

QUBE S75 & S105 Series Kits
& Accessories

Coil Kits –

24VDC / 48VAC Coil	2EV103
12VDC / 24VAC Coil	2EV102
120 VAC Coil	2EV105

Seal Repair Kits –

S75 Series	RKS75
S105 Series	RKS105

Exhaust Mufflers

S75 (1/2" Exhaust)	M60-04
S105 (3/4" Exhaust)	M60-06

Specifications

Exhaust Ports

S75	1/2 Inch
S105	3/4 Inch

Gauge Ports (Downstream pressure)

S75 (2)	1/8 Inch
S105 (2)	1/4 Inch

Maximum Pressure 145 PSIG (9.9 bar)

Minimum Operating Pressure 30 PSIG (2.1 bar)

Temperature Ratings 40°F to 120°F (4°C to 49°C)

Weight –

S75	3.25 lb. (1.47 kg)
S105	5.50 lb. (2.49 kg)

Materials of Construction

Body Zinc

Bottom Plug Brass

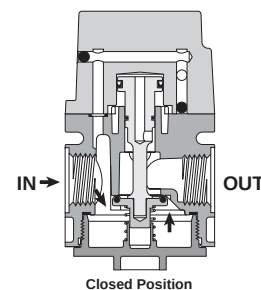
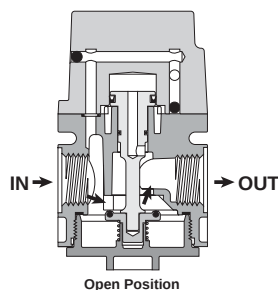
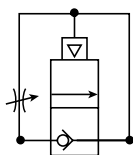
Internal Components Brass

Seals Nitrile

Springs Stainless Steel

Top Cover Aluminum

SSA75 & SSA105 Auto Pilot Soft Start Valve



Features

- Connects to Other QUBE Units Using Just Screws & O-Rings (Included)
- Integral Mounting Slots Eliminate Need for Mounting Brackets
- Smooth Start-up of Pneumatic System
- Unit is Installed Downstream of Lubricator (If Used)
- Air Pilot Operation
- Large Flow Capacities Up to 5.5 Cv
- Inline or Modular Mounting

Operation

When pressure is supplied to the inlet port, gradual filling of the downstream system occurs through the adjustable needle valve. The piston opens the main valve when the downstream side of the valve reaches approximately 60% of the supply pressure. The ramp up time to reach the switch over pressure is adjustable via the needle valve in the cover.

The Auto pilot soft start valve is not intended to be used as a shut off valve and should always be placed after a shut off valve.

⚠ CAUTION

Do not use synthetic, reconstituted, or oils with an alcohol content or detergent additive.

⚠ CAUTION

Do not restrict the inlet of valves having an internal pilot supply. Pressure supply piping must be the same size as the inlet port or larger to insure that the pilot valve receives sufficient pressure supply during high flow conditions.

Ordering Information / Dimensions

SSA75 Series		
Model Number	Port (NPT)	Flow Cv
SSA75-02	1/4"	2.2
SSA75-03	3/8"	3.4
SSA75-04	1/2"	3.8

Model	A	B	C	D	E	F
SSA75	2.19 (56)	4.72 (120)	2.06 (52)	1.50 (38)	1.66 (42)	.72 (18)

Inches (mm)

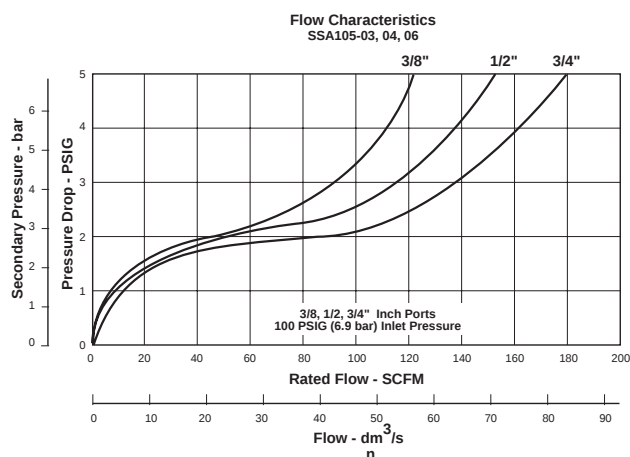
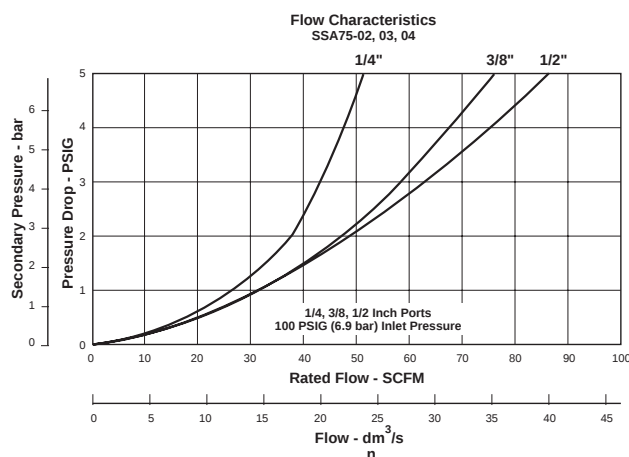
SSA105 Series		
Model Number	Port (NPT)	Flow Cv
SSA105-03	3/8"	5.1
SSA105-04	1/2"	6.8
SSA105-06	3/4"	8.1

Model	A	B	C	D	E	F
SSA105	3.03 (77)	5.25 (133)	2.75 (70)	1.50 (38)	2.53 (64)	.84 (21)

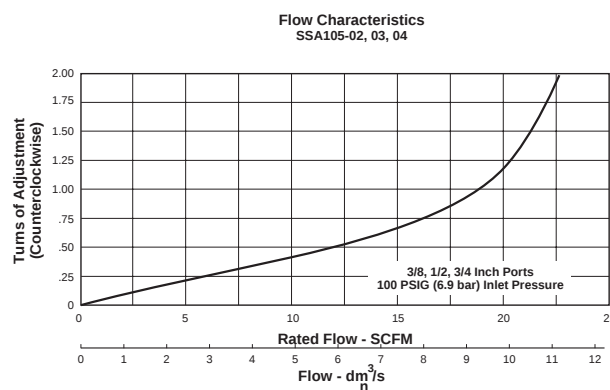
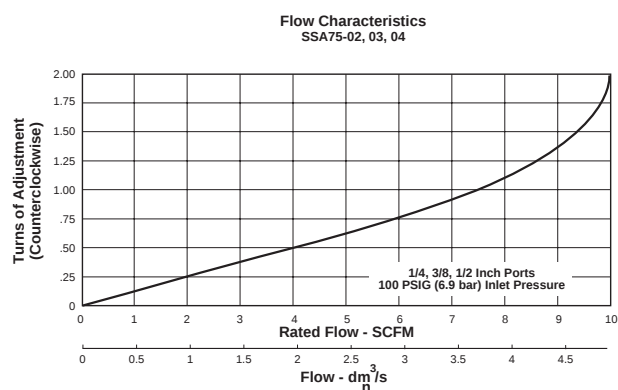
Inches (mm)

Technical Information

Flow Characteristics



Soft Start Adjustment



QUBE SSA75 & SSA105 Series Kits & Accessories

Repair Kits

SSA75 Series	RKSS75
SSA105 Series	RKSS105

Specifications

Gauge Ports (Downstream Pressure)

SSA75 (2)	1/8 Inch
SSA105 (2)	1/4 Inch

Maximum Pressure 300 PSIG (20.7 bar)

Minimum Operating Pressure 30 PSIG (2.1 bar)

Temperature Ratings 40°F to 120°F (4°C to 49°C)

Opens to Full Flow 60% Supply Pressure

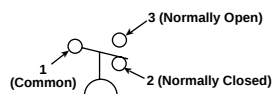
Weight –

SSA75	2.75 lb. (1.25 kg)
SSA105	4.50 lb. (2.04 kg)

Materials of Construction

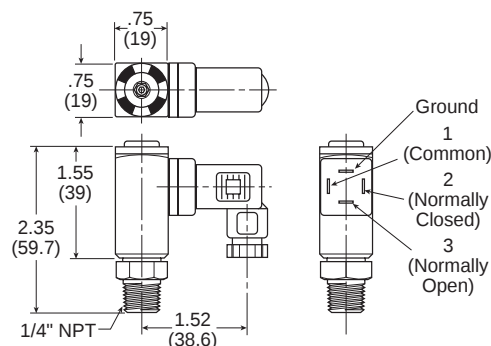
Body	Zinc
Bottom Plug –	
SSA75	Brass
SSA105	Zinc
Internal Components	Brass
Seals	Nitrile
Springs	Stainless Steel
Top Cover	Aluminum

Pressure Switch – P01909



Features:

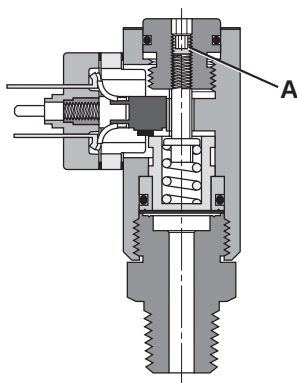
- Inline Mounting
- Dial Indicator for Easy Pressure Setting
- 5 amp Rated Snap Action Micro Switch
- Heavy Duty Aluminum Components
- Compact Size
- DIN 43650HCM Connector
- IP65 Rated
- Field Adjustable 30-150 PSIG
- +/- 2% Repeatability
- Single Pole / Double Throw Switch



Operation

The pressure switch monitors the air pressure in your pneumatic system. When the pressure in your system either drops below or exceeds the set point pressure, an electrical output is given.

Using a 0.125" (3mm) hex wrench, turn the adjusting screw (A) clockwise to increase the pressure set point and counterclockwise to decrease the pressure setting. One complete revolution of the adjusting screw covers the complete adjustment range of 30 to 150 PSIG (2 to 10 bar).



Definitions and Terminology

Repeatability — Accuracy is the maximum allowable set point deviation of a single pressure or temperature switch under one given set of environmental and operational conditions.

Single Pole / Double Throw (SPDT) Switching Element — A SPDT switching element has one normally open, one normally closed and one common terminal. Three terminals mean that the switch can be wired with the circuit either normally open (NO), or normally closed (NC), or both.

Dead Band — The dead band, sometimes referred to as "differential" or "hysteresis", is the change in pressure between actuation and deactuation set points.

Kits and Accessories

Bushing 1/4" to 3/8"	209P-6-4
Bushing 1/4" to 1/2"	209P-8-4

Specifications

Electrical	5 AMP, 12/24VDC, 125/250VAC
Maximum Inlet Pressure	300 PSIG (20 bar)
Mechanical Life	10 ⁶ at standard operating conditions
Electrical Connection	DIN 43650HCM
Electrical Protection	IP65
Pressure Differential "Dead Band" ..	15 to 20 PSIG (1.03 to 1.39 bar)
Repeatability	±2% at 70°F (20°C) Ambient
Temperature Range	-40°F to 180°F (-40°C to 80°C)
Weight	0.13 lb. (0.06 Kg)

Materials of Construction

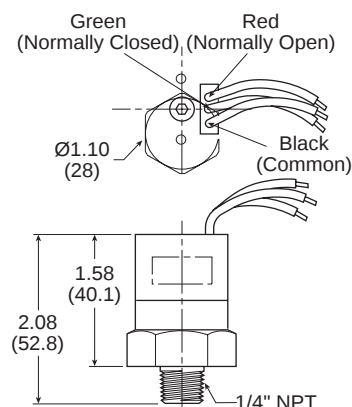
Diaphragm	Nitrile
Housing	Anodized Aluminum

Pressure Switch – P01908



Features:

- Inline Mounting
- 5 amp Rated Snap Action Micro Switch
- Brass Body
- Compact Size
- Flying Leads Electrical Connection
- IP65 Rated
- Field Adjustable 25-100 PSIG
- +/- 2% Repeatability
- Single Pole / Double Throw Switch



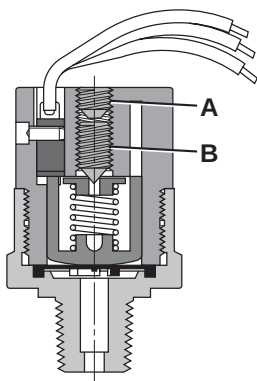
Operation

The pressure switch monitors the air pressure in your pneumatic system. When the pressure in your system either drops below or exceeds the set point pressure, an electrical output is given.

Remove screw **(A)** from the top of the switch. Using a 0.125" (3mm) hex wrench, turn the adjusting screw **(B)** clockwise to increase the pressure set point and counterclockwise to decrease the pressure setting, replace screw **(A)**. Adjustment range of 25 to 100 PSIG (1.7 to 7.5 bar).

Standard Electrical Circuit

Black Common
Green Normally Closed
Red Normally Open



Definitions and Terminology

Repeatability — Accuracy is the maximum allowable set point deviation of a single pressure or temperature switch under one given set of environmental and operational conditions.

Single Pole / Double Throw (SPDT) Switching Element — A SPDT switching element has one normally open, one normally closed and one common terminal. Three terminals mean that the switch can be wired with the circuit either normally open (NO), or normally closed (NC), or both.

Dead Band — The dead band, sometimes referred to as “differential” or “hysteresis”, is the change in pressure between actuation and deactuation set points.

Kits and Accessories

Bushing 1/4" to 3/8" 209P-6-4
Bushing 1/4" to 1/2" 209P-8-4

Specifications

Electrical 5 AMP, 12/24VDC, 125/250VAC
Maximum Inlet Pressure 300 PSIG (20 bar)
Mechanical Life 2x10⁶ at 75 PSIG (5 bar)
Electrical Connection 18" Flying Leads
Electrical Protection IP65
Pressure Differential “Dead Band” .. 15 to 20 PSIG (1.03 to 1.39 bar)
Repeatability ±2% at 70°F (20°C) Ambient
Temperature Range -40°F to 180°F (-40°C to 80°C)
Weight 0.23 lb. (0.11 Kg)

Materials of Construction

Diaphragm Nitrile
Housing Brass

WMPS31 Digital Pressure Gauge / Sensor



Model Numbers

Model Number	Output	Pressure Range
WMPS31NPCI	4 to 20mA	0 to 145 PSI
WMPS31NNC	NPN	0 to 145 PSI
WMPS31NPC	PNP	0 to 145 PSI

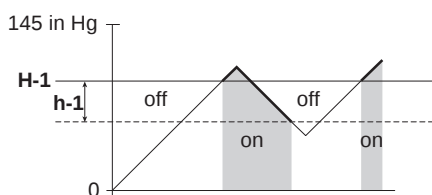
Note: Included with Sensor: 2 Meter, M8 Cable; Regulator Port Mounting Adaptors (1/4 Male to 1/8 Male, 1/8 Male to 1/8 Male); 1/8 Male Plug; Standard Mounting Bracket.

Output Modes

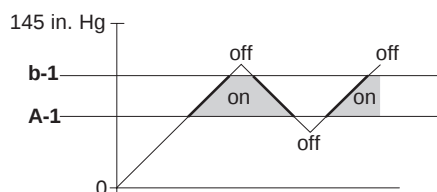
The WMPS31 Series Sensor has one independent NPN or PNP open collector output signal. The WMPS-31 Series Sensor has one independent NPN or PNP open collector signal, with optional 4-20ma output. The Switch Output Mode has a switch point programmed by the user at a specific pressure. The Hysteresis Range (**h**) adjustment controls the output signal 0 to 100% below the Switch Point (**H**).

The Window Comparator Mode provides two Switchpoint Settings (**A**) and (**b**) that control the output signals (NPN / PNP) between two pressures. This is referred to as the "High / Low" setting.

Switch Output



Window Comparator Output



⚠ Cautions

The WMPS31 Pressure Sensor is designed to monitor pressure and is not a safety measure to prevent accidents.

The compatibility of the sensor is the responsibility of the designer of the system and specifications.

Features

- **Sensor Output:**
1 NPN or PNP Open Collector Transistor Output, 30VDC, 125mA
Optional Analog Output, 4 to 20mA
- **Output Field Adjustable from Passing to Non-Passing**
- **Switch Point and High-low Programming**
- **4 Selectable Units of Measure**
(kgf/cm², PSI, bar, kPa)
- **Output Response Time Less Than 2.0 Milliseconds**
- **Air and Non-Corrosive Gases**
- **Error Message**

Operating Environment

- Parker / Convum Sensors have not been investigated for explosion-proof construction in hazardous environments.
- Do not use with flammable gases, liquids, or in hazardous environments.
- Avoid installing the sensor in locations where excessive voltage surges could damage or affect the performance of the sensor.

Operations

- Dedicate a power supply of 10.8 to 30VDC to the sensor and set the ripple to Vp-p10% or less. Avoid excessive voltage. Avoid voltage surges.
- A small amount of internal voltage drop is possible. Ensure the power supply minus any internal voltage drop exceeds the operating load.
- Verify the operating media is compatible with the specified sensor. Check the chemical make-up, operating temperatures, and maximum pressure ranges of the system before installing.
- Installation of air dryer system is recommended to remove moisture.

Installation

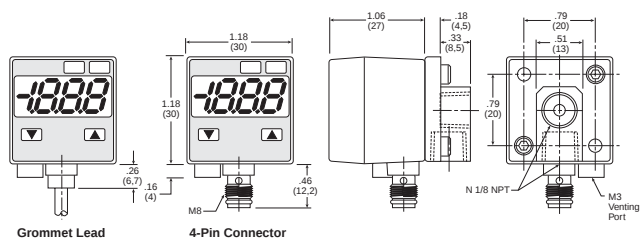
- Never insert an object into the pressure port other than an appropriate fluid connector.
- Avoid short-circuiting the sensor. Connect the brown lead to V+ and blue lead to 0V.
- Do not connect the output lead wires (black / white) to the power supply.
- Outputs not being used should be trimmed and insulated.
- Install as shown using the metal mounting bracket.



Error Messages

Display	Description	Solutions
Err	Zero Reset Error	Reset Zero Below 3% of F.S.
Er1	System Error (Internal)	Contact Factory
CE1	Over current of Output 1	Load current exceeds
FFF -FF	Applied pressure exceeds pressure range	Apply pressures with the rating of the sensor

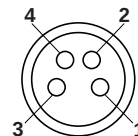
Dimensions



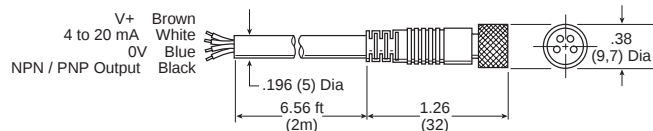
Sensor Pin Out with Analog Output

Pin

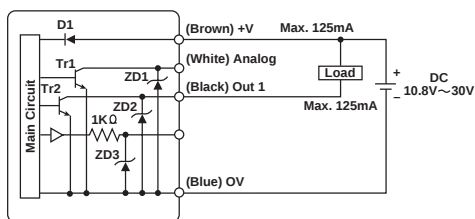
- 1 Brown: 24VDC
- 2 White: 4 to 20mA
- 3 Blue: 0VDC
- 4 Black: NPN / PNP Open Collector Output



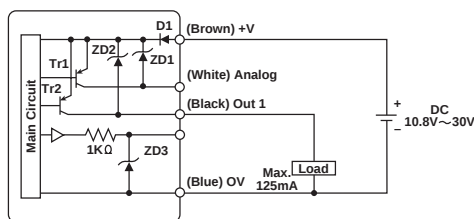
CB-M8-4P-2M, Female to Open Lead



Internal Circuit for Open Collector and Analog Output Wiring



NPN



PNP

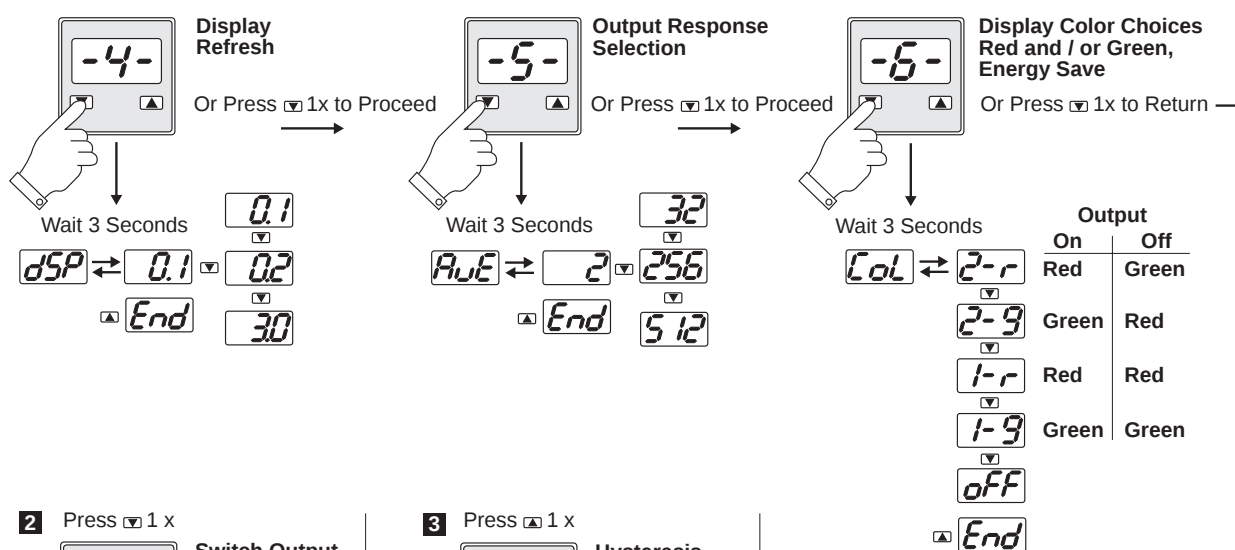
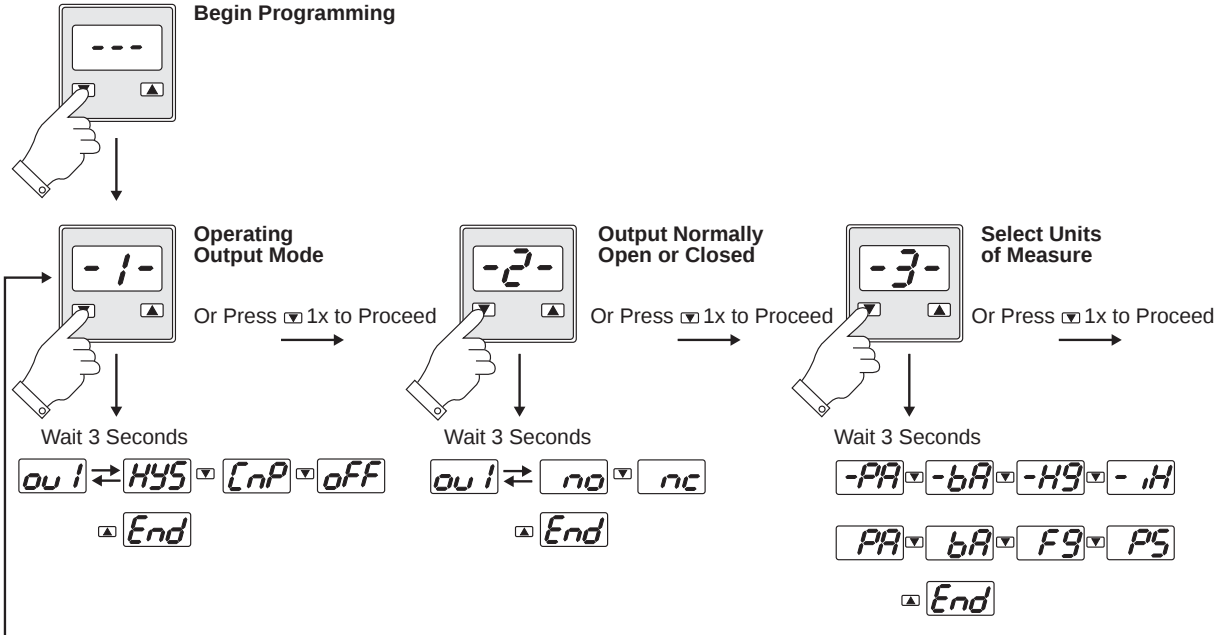
Specifications

Pressure Range		Positive (P)
Units of Measure Display Resolution	bar:	0.01
	MPa:	0.001
	kgf/cm ² :	0.01
	PSI:	1
Media		Air and Non-Corrosive Gases
Pressure Port		N: 1/8" NPSF
Proof Pressure		P: 217.5 PSI
Operating Temperature		32 to 122°F (0 to 50°C)
Storage Temperature		14 to 140°F (-10 to 60°C)
Humidity		35 to 85% RH
Electrical Connection		4-Pin, M8 Connector, with 2 meter Cable
Power Supply		10.8 to 26.4VDC, Ripple Vp-p 10% Max., Reverse Voltage Protection
Display		3-Digit, 7-Segment LED
Display Refresh		.1 to 3.0 sec. (Factory set at 0.1)
Output Circuit		NPN (Sinking), PNP (Sourcing) Open Collector Transistor, 30VDC, 125mA
Switch Output		Output Signal, NPN or PNP, Normally Open or Closed, LED Indicator
Output Modes		Hysteresis or Window Comparator
Output Response Time		< 2ms, 32, 256, 512ms Programmable (Factory set 2ms)
Repeatability		± 0.2% F.S.
Analog Output	Current Output	Output Current: 4 to 20mA Linearity: ±0.5% F.S. or less Maximum Load Impedance: 300Ω with power supply voltage of 12V; 600Ω with power supply voltage of 12V; Minimum Load Impedance: 50Ω
Thermal Error		1% over ±25°C (77°C) Temperature Change: Range 32 to 122°F (0 to 50°C)
General Protection		IP40, CE Marked, EMC-EN55011 Class B, EN 50082-2
Current Consumption		< 70mA
Vibration Resistance		10 to 55Hz, 1.5mm, XYZ, 2 hrs.
Shock Resistance		10 G, XYZ
Material		Housing: Polycarbonate, Pressure Port: Zinc Die-cast, Diaphragm: Silicon
Mass		1.7 oz. (45g)

WMPS31 Programming

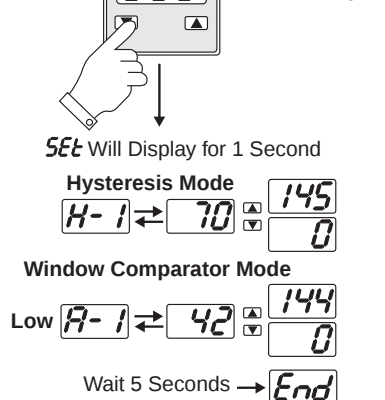
1 Press for 3 Seconds

Begin Programming



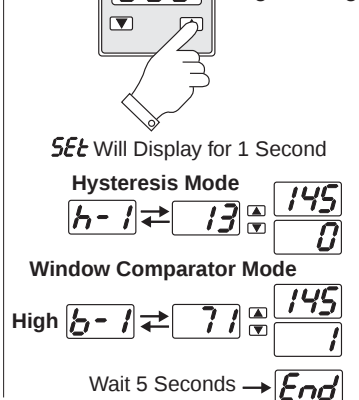
2 Press 1 x

Switch Output Setting and Low Setting

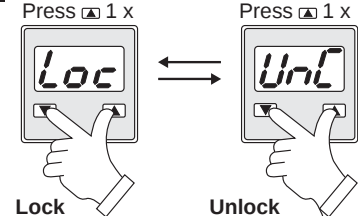


3 Press 1 x

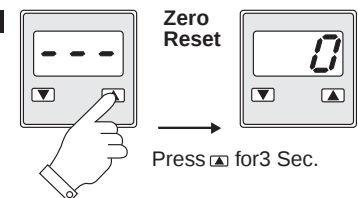
Hysteresis Setting and High Setting



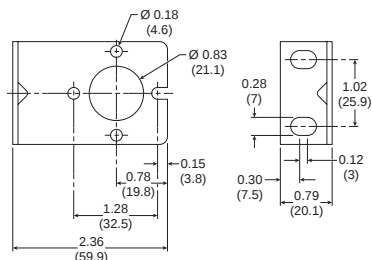
4 Hold Press 1 x



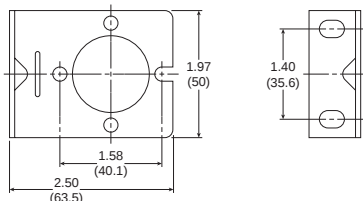
5



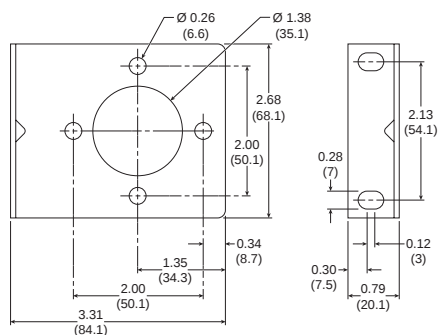
QUBE Series End / Wall Mount Brackets



35 Series Bracket - SAR35Y57



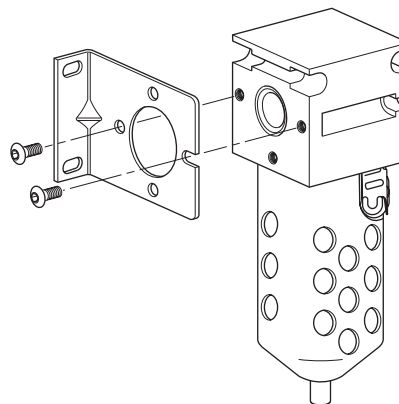
75 Series Bracket - SAR75Y57



105 Series Bracket - SAR105Y57

QUBE FRL components have integral mounting slots that usually eliminate the need for mounting brackets. However, some applications may require the use of mounting brackets:

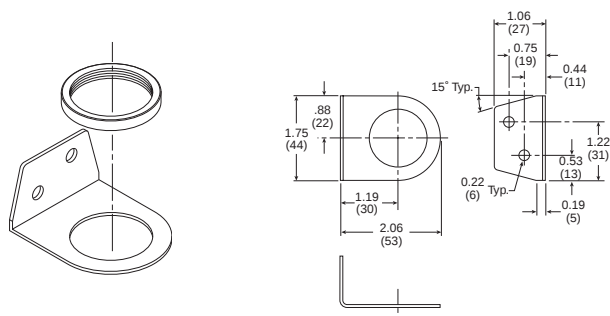
- Assemblies incorporating components from multiple series.
- Applications where the FRL needs to be spaced away from the machine.



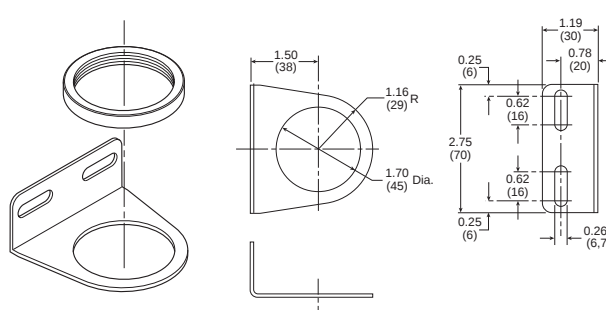
Bracket Installation

QUBE Series Panel Mount Brackets

These brackets are designed to mount regulators and integral filter / regulators using panel mount threads on spring cage.



35 & 75 Series QUBE



105 Series QUBE

Part Number: **SA161X57**

(Comes complete with R05X51-P Plastic Panel Nut)

Part Number: **SAR10Y57**

(Comes complete with R10X51-P Plastic Panel Nut)

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1. Terms and Conditions of Sale: All descriptions, quotations, proposals, offers, acknowledgments, acceptances and sales of Seller's products are subject to and shall be governed exclusively by the terms and conditions stated herein. Buyer's acceptance of any offer to sell is limited to these terms and conditions. Any terms or conditions in addition to, or inconsistent with those stated herein, proposed by Buyer in any acceptance of an offer by Seller, are hereby objected to. No such additional, different or inconsistent terms and conditions shall become part of the contract between Buyer and Seller unless expressly accepted in writing by Seller. Seller's acceptance of any offer to purchase by Buyer is expressly conditional upon Buyer's assent to all the terms and conditions stated herein, including any terms in addition to, or inconsistent with those contained in Buyer's offer. Acceptance of Seller's products shall in all events constitute such assent.

2. Payment: Payment shall be made by Buyer net 30 days from the date of delivery of the items purchased hereunder. Amounts not timely paid shall bear interest at the maximum rate permitted by law for each month or portion thereof that the Buyer is late in making payment. Any claims by Buyer for omissions or shortages in a shipment shall be waived unless Seller receives notice thereof within 30 days after Buyer's receipt of the shipment.

3. Delivery: Unless otherwise provided on the face hereof, delivery shall be made F.O.B. Seller's plant. Regardless of the method of delivery, however, risk of loss shall pass to Buyer upon Seller's delivery to a carrier. Any delivery dates shown are approximate only and Seller shall have no liability for any delays in delivery.

4. Warranty: Seller warrants that the items sold hereunder shall be free from defects in material or workmanship for a period of 18 months from date of shipment from Parker Hannifin Corporation. THIS WARRANTY COMPRISES THE SOLE AND ENTIRE WARRANTY PERTAINING TO ITEMS PROVIDED HEREUNDER. SELLER MAKES NO OTHER WARRANTY, GUARANTEE, OR REPRESENTATION OF ANY KIND WHATSOEVER. ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO, MERCHANTABILITY AND FITNESS FOR PURPOSE, WHETHER EXPRESS, IMPLIED, OR ARISING BY OPERATION OF LAW, TRADE USAGE, OR COURSE OF DEALING ARE HEREBY DISCLAIMED. NOTWITHSTANDING THE FOREGOING, THERE ARE NO WARRANTIES WHATSOEVER ON ITEMS BUILT OR ACQUIRED WHOLLY OR PARTIALLY, TO BUYER'S DESIGN OR SPECIFICATIONS.

5. Limitation of Remedy: SELLER'S LIABILITY ARISING FROM OR IN ANY WAY CONNECTED WITH THE ITEMS SOLD OR THIS CONTRACT SHALL BE LIMITED EXCLUSIVELY TO REPAIR OR REPLACEMENT OF THE ITEMS SOLD OR REFUND OF THE PURCHASE PRICE PAID BY BUYER, AT SELLER'S SOLE OPTION. IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND OR NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS ARISING FROM OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR ITEMS SOLD HEREUNDER, WHETHER ALLEGED TO ARISE FROM BREACH OF CONTRACT, EXPRESS OR IMPLIED WARRANTY, OR IN TORT, INCLUDING WITHOUT LIMITATION, NEGLIGENCE, FAILURE TO WARN OR STRICT LIABILITY.

6. Changes, Reschedules and Cancellations: Buyer may request to modify the designs or specifications for the items sold hereunder as well as the quantities and delivery dates thereof, or may request to cancel all or part of this order, however, no such requested modification or cancellation shall become part of the contract between Buyer and Seller unless accepted by Seller in a written amendment to this Agreement. Acceptance of any such requested modification or cancellation shall be at Seller's discretion, and shall be upon such terms and conditions as Seller may require.

7. Special Tooling: A tooling charge may be imposed for any special tooling, including without limitations, dies, fixtures, molds and patterns, acquired to manufacture items sold pursuant to this contract. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the items sold hereunder, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed,

Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

8. Buyer's Property: Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer, or any other items which become Buyer's property, may be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer placing an order for the items which are manufactured using such property. Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.

9. Taxes: Unless otherwise indicated on the face hereof, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the items sold hereunder. If any such taxes must be paid by Seller or if Seller is liable for the collection of such tax, the amount thereof shall be in addition to the amounts for the items sold. Buyer agrees to pay all such taxes or to reimburse Seller therefore upon receipt of its invoice. If Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, Buyer shall save Seller harmless from and against any such tax, together with any interest or penalties thereon which may be assessed if the items are held to be taxable.

10. Indemnity For Infringement of Intellectual Property Rights: Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Part 10. Seller will defend and indemnify Buyer against allegations of infringement of U.S. patents, U.S. trademarks, copyrights, trade dress and trade secrets (hereinafter "Intellectual Property Rights"). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that an item sold pursuant to this contract infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If an item sold hereunder is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using said item, replace or modify said item so as to make it noninfringing, or offer to accept return of said item and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to items delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any item sold hereunder. The foregoing provisions of this Part 10 shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.

If a claim is based on information provided by Buyer or if the design for an item delivered hereunder is specified in whole or in part by Buyer, Buyer shall defend and indemnify Seller for all costs, expenses or judgements resulting from any claim that such item infringes any patent, trademark, copyright, trade dress, trade secret or any similar right.

11. Force Majeure: Seller does not assume the risk of and shall not be liable for delay or failure to perform any of Seller's obligations by reason of circumstances beyond the reasonable control of Seller (hereinafter "Events of Force Majeure"). Events of Force Majeure shall include without limitation, accidents, acts of God, strikes or labor disputes, acts, laws, rules or regulations of any government or government agency, fires, floods, delays or failures in delivery of carriers or suppliers, shortages of materials and any other cause beyond Seller's control.

12. Entire Agreement/Governing Law: The terms and conditions set forth herein, together with any amendments, modifications and any different terms or conditions expressly accepted by Seller in writing, shall constitute the entire Agreement concerning the items sold, and there are no oral or other representations or agreements which pertain thereto. This Agreement shall be governed in all respects by the law of the State of Ohio. No actions arising out of sale of the items sold hereunder or this Agreement may be brought by either party more than two (2) years after the cause of action accrues.



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