

# Watts® Jumbo Cartridge Filters

*With optional activated carbon cartridge to remove Chlorine, bad tastes, foul odors and sediment.*

## Rugged Construction

Filter housings are made of rugged, glass-reinforced polypropylene so they will not chip, rust or dent. And because all wetted surfaces are non-metallic, they are ideal when chemical compatibility is an issue and for sea water applications.

## Low Cost

Filters are an economical replacement for stainless steel filtration equipment because of their non-metallic construction and today's high cost of stainless steel!

## Applications

Jumbo Cartridge Filters are ideal for a wide range of applications, including:

- Whole house filtration
- Commercial filtration
- Industrial filtration
- Pre-filtration for reverse osmosis equipment
- Community water systems
- Sea water applications due to their non-corrosive construction
- Replacement for bag filters more filter area
- Replacement for multiple cartridge filters for greater convenience
- Water for livestock and poultry



Model: BBH-150

## Proprietary Cartridges

The replacement cartridge for the Watts whole house filter is totally proprietary, so you may enjoy the replacement cartridge business over the life of the equipment

## Conserves Water!

Watts whole house filters with our proprietary pleated activated carbon cartridge conserves water because backwashing is not required, making them 100% efficient.

## Double O-Rings

For superior sealing.

## E-Z Change-Out

Cartridge replacement is easy as 1-2-3:

1. Remove swing bolts.
2. Remove lid.
3. Rotate cartridge 1/4 turn and pull-up.

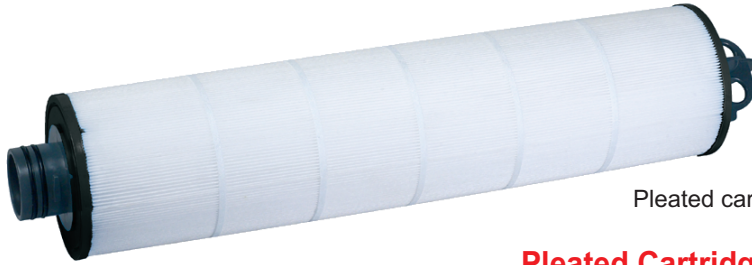
Filter inlet.

## Three Cartridge Types!

- Pleated, for flow rates up to 150 GPM using 100% cellulose free media (cleanable 5 micron up).
- Low cost Melt Blown for depth filtration, deal for slimy water.
- Activated carbon to remove chlorine, tastes, odors and sediment. Ideal for whole house treatment to 15 GPM offering 140,000 gallon capacity.

Filter outlet.

# Three Cartridge Types



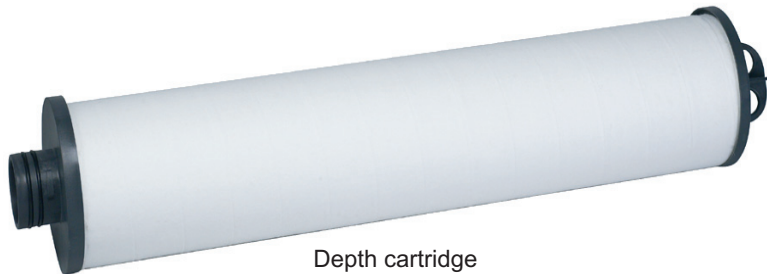
Pleated cartridge

## Pleated Cartridges

Ideal for more critical applications, offering greater efficiency, more surface area for greater throughput and reduced cost.

Product code	Media Type	Micron Rating	Per case
BBC-150-P1A	PP	1 Absolute	1
BBC-150-P1	PP	1	1
BBC-150-P5	PP	5	1
BBC-150-P20	PE	20	1
BBC-150-P50	PE	50	1
BBC-150-PM150	Mesh	150	1

Note: 5, 20, 50 and 150 micron cartridges are cleanable and reusable to reduce costs.

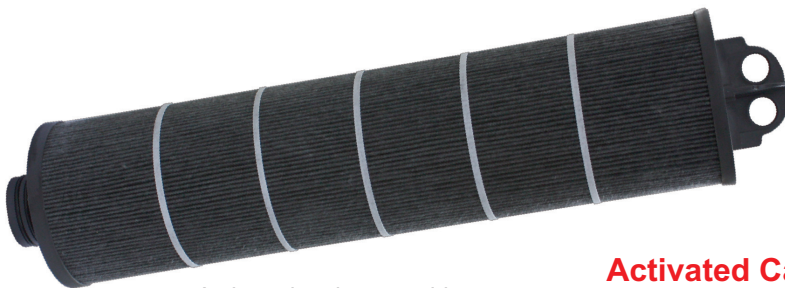


Depth cartridge

## Depth Cartridges

Melt blown Polypropylene cartridges are recommended when depth filtration is necessary for gelatinous substances and when chemical resistance may be a requirement.

Product code	Media Type	Micron Rating	Per case
BBC-150-D1	PP	1	1
BBC-150-D5	PP	5	1
BBC-150-D20	PP	20	1
BBC-150-D50	PP	50	1



Activated carbon cartridge

## Activated Carbon Cartridges

Ideal for whole house filtration to reduce chlorine, taste, odors and sediment.

Product Code	Max. Flow	Capacity	Chlorine Reduction
BBC-150-ACP	15 GPM	140,000 Gals.	90%

Note: We build filtration systems, or they may be installed on site. For more information please inquire!

# Specifications

## Jumbo Cartridge Housing (P/N: BBH-150)

Specifications	Data
Body (all wetted surfaces)	Glass reinforced PP
Cartridge end caps	Glass reinforced PP
Swing bolts	304 stainless steel
O-rings (cartridges)	EPDM (Viton optional)
O-ring (lid)	EPDM (Viton optional)
Pipe fittings	2" slip
Overall height	40"
Width (vessel OD)	12"

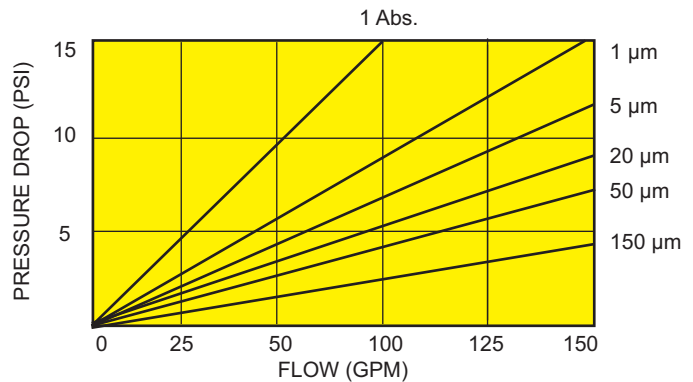
## Jumbo Cartridges

Specifications	Data
Maximum flow rate	150 GPM* (36 M <sup>3</sup> /hr.)
Maximum flow (carbon)	15 GPM
Maximum flow (1 Absolute)	50 GPM
Maximum temperature	125°F (52°C) @ 80 psi
Maximum working pressure	125 psi (8.75 bar)
Burst test	300 psi
Cycle test	100,000

\* Highly dependent on micron rating, solids content and other factors. Please see pressure drop chart below.

### Low Pressure Drop

Jumbo Cartridge Filters housings are designed to minimize pressure drop, by using 2" pipe fittings and large diameter center tubes. (See chart at right for pressure drop data using pleated cartridges.)



## Jumbo Cartridge Filter Specifications

	Pleated	Depth	Activated Carbon
Media	PP	PP	Activated carbon
End caps	PP + FG	PP + FG	PP
Center tubes	PP	PP	PP
Maximum flow rate (GPM)	150	100	15
Maximum temperature	125°F (52°C)	125°F (52°C)	125°F (52°C)
Maximum ΔP (psi)	30	40	30
Chemical resistance	Excellent	Excellent	Not a factor (for water)
Length (media)	26-1/4"	26-1/4"	26-1/4"
O-rings (dual)	EPDM	EPDM	EPDM
Shipping weight (lbs.)	5	5	7
Carton dimensions	7" x 7" x 31"	7" x 7" x 31"	7" x 7" x 31"
Micron ratings	1A, 1, 5, 20, 50, 150	1, 5, 20, 50	10

Note: Flow rates are based on each specific application, micron rating, solids content and a number of other factors. End user should consider these factors when selecting the filter housing (or number of filter housings) needed for their particular requirement.

## Spare Parts

Part Numbers	Description
BB-LID	Lid
BB-PR	Pressure release button
PG15L25	Pressure gauge
BB-EYEBOLT	Eye bolt
BB-POST	Post for eye bolt
BB-WASHER	Washer for eye bolt
DRAINPLUGOR	Drain plug with o-ring

Part Numbers	Description
BB-ORING-E	O-ring for lid (EPDM)
BB-ORING-V	O-ring for lid (Viton)
BC-ORING-E	O-ring for cartridge (EPDM)
BC-ORING-V	O-ring for cartridge (Viton)
BB-COUPLER	Pipe fitting coupler (two pieces)
BB-COUPLER-OR	O-ring for coupler
BB-PLUG	Plug for second outlet

# Flow-Max<sup>®</sup> Commercial Quality Filter Housings

## Check Out These Many Features And Benefits:

- 100% stainless steel for durability.
- 304 and 316 stainless steel available.
- Convenient band clamp lid closure is standard for easy cartridge replacement.
- Pipe fittings are readily accessible for easy installation.
- Adjustable top plate accepts variable length cartridges for more options.
- Two drains provided for clean and dirty fluids.
- Legs and mounting tabs are available.



- Knife edge seals are provided at both ends of all DOE cartridges for superior performance.
- Rated for temperatures to 250° F. (No plastic holding rods.)
- Pressure rating to 150 psi.
- Housings for pressures to 300 psi are available.
- Optional sanitary connections.
- Models to accept DOE, 222 and cartridges with 226 end caps.
- Protective poly-coat over stainless steel standard finish.
- Electro-polishing is available.
- Standard, Premium Series and Jumbo models are in stock for immediate shipment.

## Specifications

Material:	304 and 316 stainless steel are available.
Pressure rating:	Housings are rated for pressures to 150 psi (10 bar).
Temperature:	Filters are rated for temperatures to 250° F (121° C). Please consider cartridges to be used.
Gaskets & seals:	Buna-N is standard. Viton, EDPM and Teflon are available.
Finish:	Protective poly-coat over stainless is standard finish. Electro-polishing available.
Pressure drop:	Initial pressure drop is <1 psi at designed flow rates for housings only.
Cartridge types:	Housings are designed to accept DOE cartridges. Adapters for 222 & 226 cartridges available.

## Models



# Flow-Max® Jumbo Cartridge Filter Housings

Single cartridge models for the most “user friendly” filtration possible!

**Best Selling Product. Try it today!**



Model "90"

Model "170"

Model "40"

## Flow-Max® Commercial Quality Jumbo Cartridge Filter Housings In 316SS

Model Number	Material	Max. Flow (GPM)	Cartridge Style	Number Of Cartridges	Pipe Size	Lid Closure
FMJCH40	316SS	50	"40"	1	2" NPT	V-Band
FMJCH90	316SS	100	"90"	1	2" NPT	V-Band
FMJCH170	316SS	150	"170"	1	2" NPT	V-Band

Note: Commercial quality jumbo cartridge housings are rated for pressures to 150 PSI (10 bar) and temperatures to 140°F with standard jumbo cartridges and 250°F using high temp cartridges. Pressure gauges included and installed on inlets and outlet.



User friendly Flow-Max jumbo cartridges are easy to install, easy to service and easy to replace!



Adjustable compression cap provides superior sealing for both ends of the jumbo cartridge.



Model FMJCH170

# Flow-Max<sup>®</sup> Commercial Filters

*Stainless steel filter housings with easy, safe and secure band-clamp lid closure.*



4 & 5 Round Models



12 Round



22 Round



Premium Series

## Flow-Max<sup>®</sup> Commercial Quality Multi-Cartridge Stainless Steel Filter Housings (316SS and 304SS)

Model Number (316SS)	Model Number (304SS)	Round	Max. Flow Rate (GPM) Pleated	Max. Flow Rate (GPM) Depth	Pipe Size	Drain Size (NPT)	No. Of Standard Cartridges	Cartridge Options (Lengths)
N/A	FM4X1-1-304	4	25	25	1" NPT	1/2"	4	9-3/4" - 10"
FM5X1	FM5X1-304	5	30	25	2" NPT	1/2"	5	9-3/4" - 10"
FM4X2	FM4X2-304	4	60	40	2" NPT	1/2"	4	20"
FM4X3	FM4X3-304	4	90	60	2" NPT	1/2"	4	29-1/4" or 30"
FM4X4	FM4X4-304	4	120	80	2" NPT	1/2"	4	40"
FM5X4	FM5X4-304	5	150	100	2" NPT	1/2"	5	40"
FM12X3	FM12X3-304	12	250	180	3" flange	1/2"	12	29-1/4" or 30"
FM12X4	FM12X4-304	12	300	240	3" flange	1/2"	12	40"
FM22X3	FM22X3-304	22	500	330	4" flange	1/2"	22	29-1/4" or 30"
FM22X4	FM22X4-304	22	600	440	4" flange	1/2"	22	40"

## Flow-Max<sup>®</sup> Premium Series Housings With Mounting Legs And Pressure Gauges (316SS)

Model Number	Round	Max. Flow Rate (GPM) Pleated	Max. Flow Rate (GPM) Depth	Pipe Size	Drain Size (NPT)	No. Of Standard Cartridges	Cartridge Options (Lengths)
FMPS4X2	4	60	40	2" NPT	1/2"	4	20"
FMPS5X3	5	120	75	2" NPT	1/2"	5	29-1/4" or 30"
FMPS5X4	5	150	100	2" NPT	1/2"	5	40"
FMPS7X4	7	200	140	2" NPT	1/2"	7	40"

Note: Flow rates shown above are for guidelines only. Actual flow rates are based on cartridge type, micron rating, solids content and a number of other factors.

# Flow-Max® Jumbo Filter Cartridges

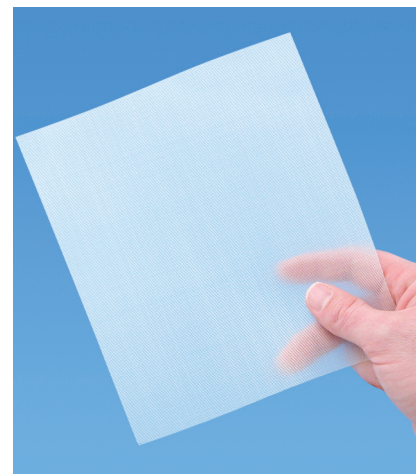
With cellulose-free synthetic and mesh media in a wide range of micron ratings.



Standard Synthetic Media



Flow-Max jumbo filter cartridge



PP Mesh Media

## Model 40

Filter Housing Model Number	Micron Rating	Product Code with Synthetic Media	Product Code with Mesh Media	Number Per Case
40	1 Absolute	FMHC-40-1A	N. A.	1
	0.35	FMHC-40-0.35EZ	N. A.	1
	1	FMHC-40-1EZ	N. A.	1
	5	FMHC-40-5EZ	N. A.	1
	20	FMHC-40-20EZ	N. A.	1
	50	FMHC-40-50	N. A.	1
	100	FMHC-40-100EZ	N. A.	1
	150	N. A.	FMHC-40-150M	1

## Model 90

Filter Housing Model Number	Micron Rating	Product Code with Synthetic Media	Product Code with Mesh Media	Number Per Case
90	1 Absolute	FMHC-90-1A	N. A.	1
	0.35	FMHC-90-0.35	N. A.	1
	1	FMHC-90-1EZ	N. A.	1
	5	FMHC-90-5EZ	N. A.	1
	20	FMHC-90-20EZ	N. A.	1
	50	FMHC-90-50EZ	N. A.	1
	100	FMHC-90-100EZ	N. A.	1
	150	N. A.	FMHC-90-150M	1

## Model 170

Filter Housing Model Number	Micron Rating	Product Code with Synthetic Media	Product Code with Mesh Media	Number Per Case
170	1 Absolute	FMHC-170-1A	N. A.	1
	0.35	FMHC-170-0.35EZ	N. A.	1
	1	FMHC-170-1EZ	N. A.	1
	5	FMHC-170-5EZ	N. A.	1
	20	FMHC-170-20EZ	N. A.	1
	50	FMHC-170-50EZ	N. A.	1
	100	FMHC-170-100EZ	N. A.	1
	150	N. A.	FMHC-170-150M	1

# Flow-Max<sup>®</sup> In-Line Filters

Single cartridge, metal filter housings for in-line installations.

## Applications

- High temperatures
- High pressures
- Aggressive chemicals
- Water
- Oils
- Coolants
- Plating solutions
- Solvents
- Lubricants
- Hydraulic fluids

## Models

- Nickel plated brass heads with 304 stainless sumps and T-Handles for easy sump removal
- 304 stainless steel for DOE cartridges
- 316 stainless steel for 222 o-ring end caps
- Carbon steel

## Specifications

- Rated for pressures to 250 PSI (17.5 bar)
- Rated for temperatures to 250°F (121°C)
- Buna-N seals are standard. Optional seals available



## Models With Nickel Plated Brass Heads, 304 Stainless Steel Sumps And T-Handles

Model Number	Cartridge Length	Pipe Size	No. Of Cartridges	Sump	Head	Shipping Weight (lbs.)
FM10-BN-304-34T	10" *	3/4"	1	304 SS	Nickel / Brass	7
FM20-BN-304-34T	20"	3/4"	1	304 SS	Nickel / Brass	10

\*Accepts 10" and 9-7/8" wound or 9-3/4" cartridges with rigid end caps (pleated). Rated for pressures to 250 psi and temperatures to 250°F

## With 304 Stainless Steel Heads And 304 Sumps

Model Number	Cartridge Length	Pipe Size	No. Of Cartridges	Sump	Head	Shipping Weight (lbs.)
FM10-304-34	10" *	3/4"	1	304 SS	304 SS	7
FM20-304-34	20"	3/4"	1	304 SS	304 SS	10

\*Accepts 10" and 9-7/8" wound or 9-3/4" cartridges with rigid end caps (pleated). Rated for pressures to 250 psi and temperatures to 250°F

## Models With 316 Stainless Steel Construction For Cartridges With 222 O-Ring End Caps

Model Number	Cartridge Length	Pipe Size	No. Of Cartridges	Sump	Head	Shipping Weight (lbs.)
FM10-316-34-222	10"*	3/4"	1	316 SS	316 SS	7
FM20-316-1-222	20"	1"	1	316 SS	316 SS	10

Note: Filter housings listed directly above are rated for pressures to 250 psi and temperatures to 250°F.

## Models With Carbon Steel Sumps And Cast Iron Heads

Model Number	Cartridge Length	Pipe Size	No. Of Cartridges	Sump	Head	Shipping Weight (lbs.)
FM10-CS-34	10"*	3/4"	1	Carbon	Cast iron	7
FM30-CS-34	30"	3/4"	1	Carbon	Cast iron	12

\*Accepts 10" and 9-7/8" wound or 9-3/4" cartridges with rigid end caps (pleated). Rated for pressures to 250 psi and temperatures to 250°F



# Flow-Max<sup>®</sup> Bag Filters & Filter Bags

*Bag housings with heavy-duty construction and swing-bolt lid closure.*



## Features & Benefits

- Heavy-duty construction
- Swing bolt lid closure with eye nuts
- Rated for pressures to 150 PSI
- 2" NPT pipe with vent and drain
- 304 stainless steel baskets
- Adjustable legs
- Ports for pressure gauges
- Bottom outlet for easy installation
- Stainless legs on stainless models

## Bag Filter Housing Models

Model No.	No.	Description	Housing Material	Adjustable Legs	Bag Size	Pipe Size
FMBH1-CS	#1	Swing-bolt bag filter	Carbon Steel	Carbon Steel	#1	2" NPT
FMBH2-CS	#2	Swing-bolt bag filter	Carbon Steel	Carbon Steel	#2	2" NPT
FMBH2-304	#2	Swing-bolt bag filter	304SS	Stainless	#2	2" NPT

## #2 Filter Bags

Part Number	Number	Size	Material	Micron Rating	No./ Case
FMPPFB2-1	#2	7" x 32"	PP	1	20
FMPPFB2-5	#2	7" x 32"	PP	5	20
FMPPFB2-10	#2	7" x 32"	PP	10	20
FMPPFB2-25	#2	7" x 32"	PP	25	20
FMPPFB2-50	#2	7" x 32"	PP	50	20
FMPPFB2-100	#2	7" x 32"	PP	100	20

Filter bags made with glazed polypropylene felt with galvanized carbon steel rings.

## #1 Felt Bags

Part Number	Number	Size	Material	Micron Rating	No./ Case
FMPPFB1-1	#1	7" x 16"	PP	1	20
FMPPFB1-5	#1	7" x 16"	PP	5	20
FMPPFB1-25	#1	7" x 16"	PP	25	20
FMPPFB1-50	#1	7" x 16"	PP	50	20
FMPPFB1-100	#1	7" x 16"	PP	100	20

Filter bags made with glazed polypropylene felt with galvanized carbon steel rings.

# Chemical Feed Pumps

Self-priming, peristaltic type feed pumps for chlorine and pH adjustment chemicals.



## Peristaltic Type Feed Pumps

Stenner® peristaltic feed pumps will not loose prime because they are self priming. Pumps may operate at pressures up to 100 psi, and may be mounted vertically or horizontally. Tube lubrication is not required.

## Models

Part Number	Type	Model	GPD	PSI	Voltage	Injection Check	Tubing (Suction & Discharge)	Ship Wt.
T55-45MHP2	Single	45	3	100	120v/60hz	TT55-UCDBINJ	1/4"	8
T55-45MHP10	Single	45	10	100	120v/60hz	TT55-UCDBINJ	1/4"	8
T55-45MHP10-220	Single	45	10	100	220v/60hz	TT55-UCDBINJ	1/4"	8
T55-45MHP17	Single	85	17	100	120v/60hz	TT55-UCDBINJ	1/4"	8
T55-45MHP40	Single	85	40	100	120v/60hz	TT55-UCDBINJ	1/4"	8
T55-100DMHP20	Double	100	20	100	120v/60hz	TT55-UCDBINJ	1/4"	9
T55-100DMHP34	Double	170	34	100	120v/60hz	TT55-UCDBINJ	1/4"	9

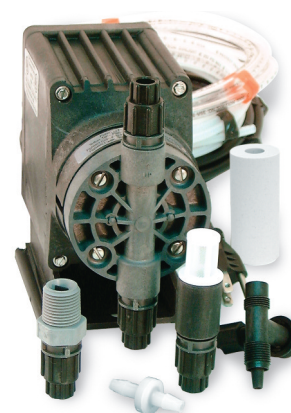
## Parts

Part Number	Description	Number Per Package
T55-UCCP201	Replacement tube #1	2
T55-UCCP202	Replacement tube #1	2
T55-UCDBINJ	Injection check valve for 1/4" tubing	1
T55-UC3ASYD	Roller assembly	1
T55-VCTH2D	Tube housing complete 45-2	1

## Flow-Pro® Chemical Feed Pumps

### Features & Benefits

- Dual output control for easy & accurate adjustment.
- Turn-down ratio (500:1) provides excellent flexibility.
- 6 - 30 GPD maximum output at 80 psi.
- Quiet operation for residential or commercial use.
- Totally enclosed construction for chemical resistance and suitability for outdoor installation.



### Standard Models

Model No	GPD		GPH		Liters Per Hour		ml / cc Per Min.		Electrical (w / plug)	Amps	Ship Wt.
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.			
FP-DCP-12	0.04	12	0.002	0.5	0.006	1.9	0.11	32	120 VAC	1.4	8 lbs.
FP-DCP-30	0.06	30	0.003	1.25	0.01	4.7	0.16	79	120 VAC	1.4	8 lbs.

\*Plug not suitable for export. Maximum injection pressure is 80 psi (5.5 bar) for all models.

**Note:** Replacement repair kit #T40SP-281.

# Pressure Gauges

Full line of stainless steel pressure gauges with brass fittings.



## Side Mount Models (2-1/2" diameter)

Part Number	Type	PSI	KG	Fitting	Material (Body)	Material (Fittings)	Number Per Case
PG05L25	Glycerin Filled	0-75	0-5	1/4" MNPT	304 SS	Brass	1
PG07L25	Glycerin Filled	0-100	0-7	1/4" MNPT	304 SS	Brass	1
PG15L25	Glycerin Filled	0-200	0-15	1/4" MNPT	304 SS	Brass	1
PG20L25	Glycerin Filled	0-300	0-20	1/4" MNPT	304 SS	Brass	1

## Back Mount Models (2-1/2" diameter)

Part Number	Type	PSI	KG	Fitting	Material (Body)	Material (Fittings)	Number Per Case
PG05B25	Glycerin Filled	0-75	0-5	1/4" MNPT	304 SS	Brass	1
PG07B25	Glycerin Filled	0-100	0-7	1/4" MNPT	304 SS	Brass	1
PG15B25	Glycerin Filled	0-200	0-15	1/4" MNPT	304 SS	Brass	1
PG20B25	Glycerin Filled	0-300	0-20	1/4" MNPT	304 SS	Brass	1