3550 Series air service units – ¼" to ¾" Filter Regulators

A 316L stainless steel combined unit for filtration and regulation of compressed air and gases for the actuation industries.

Features and Benefits

- Specifically designed for severe environments
- Non or self-relieving
- 40 micron element stainless steel 316 as standard, 5 micron option available
- 316L stainless steel construction
- Regulated pressure range from 0.50 to 12.0 bar depending on model selection
- Large flow characteristics
- NACE: standard temperature and manual drain only

Media & Ambient Temperature Range

- Standard temperature
  -20 to + 80 °C (-4 to +176 °F)
- Low temperature version
  -50 to +80 °C (-58 to +176 °F)

Note: When product is ordered as /ATEX ambient temperature is limited to +40 °C (104 °F) Ex II 2G c T6.

Maximum Relief Flow

- At 2 bar (29 psi) secondary pressure
  0.5 cc/sec (0.03 cu in/sec)

Flow

At 10 bar (145 psi) supply pressure, 6 bar (87 psi) secondary pressure, 1 bar (14.5 psi) pressure drop.

- ¼" - 3,720 l/min (130 SCFM)
- ½" and ¾" - 6,000 l/min (212 SCFM)

Maximum Inlet Pressure

- Manual drain - 20 bar (290 psi)
- Automatic drain - 17 bar (247 psi)

Ports NPT
(BSP option available - consult factory for part codes)

- ¼", ½", ¾"

Gauge Ports

- ⅛" NPT
- ¼" NPT (option available - suffix product code with 'X')

Certification Options Available

CE ATEX EAC

Relief Vent Port

- ⅛" NPT (fitted with breather)
  Note: Not fitted on low temperature option

Bowl Capacity

- 21 cc (1.28 cu ins)

Accessories Available

- Mounting brackets
- Stainless steel pressure gauge
- Hand wheel

See page 13-14 for ordering details

Operating Media

- Air, inert gas and sweet (natural) gas
- Sour gas (NACE) standard temperature and manual drain only
- Suitable for water and other compatible liquids - manual drain only, consult Rotork Midland for details

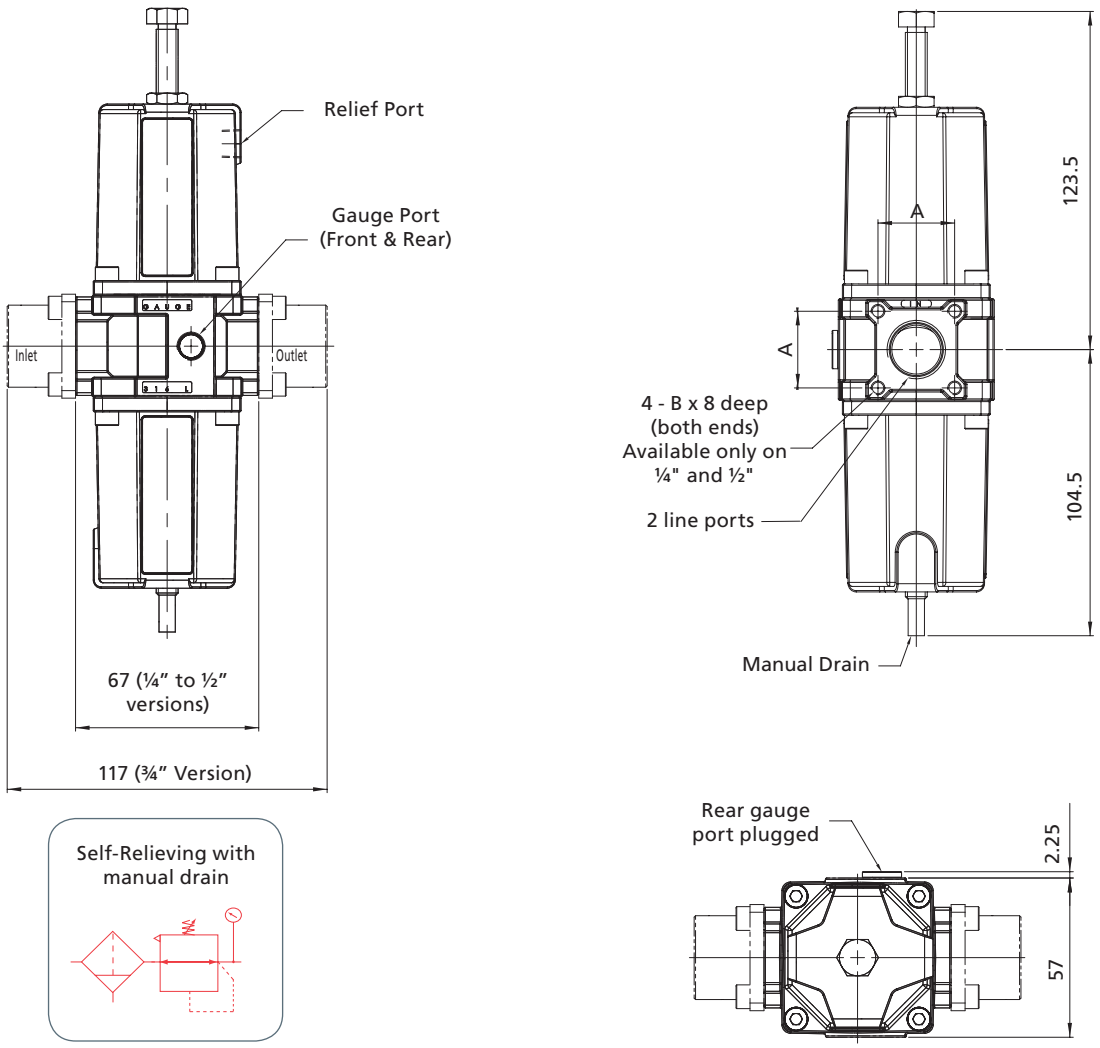
Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10 °C below the lowest ambient temperature the product will be exposed to.

Construction Materials

- Body/bonnet/bowl: 316L stainless steel
- Internals: 316L stainless steel and Ryton R-4
  Note: on auto-drain version float is nylon, polyoxymethylene and rubber.
- Element: 40 micron 316 stainless steel
  (5 micron option available - suffix product code with '05')
- Seals: Standard option - Fluoroelastomer
  Low temperature option - EPDM[1] and Fluorosilicone

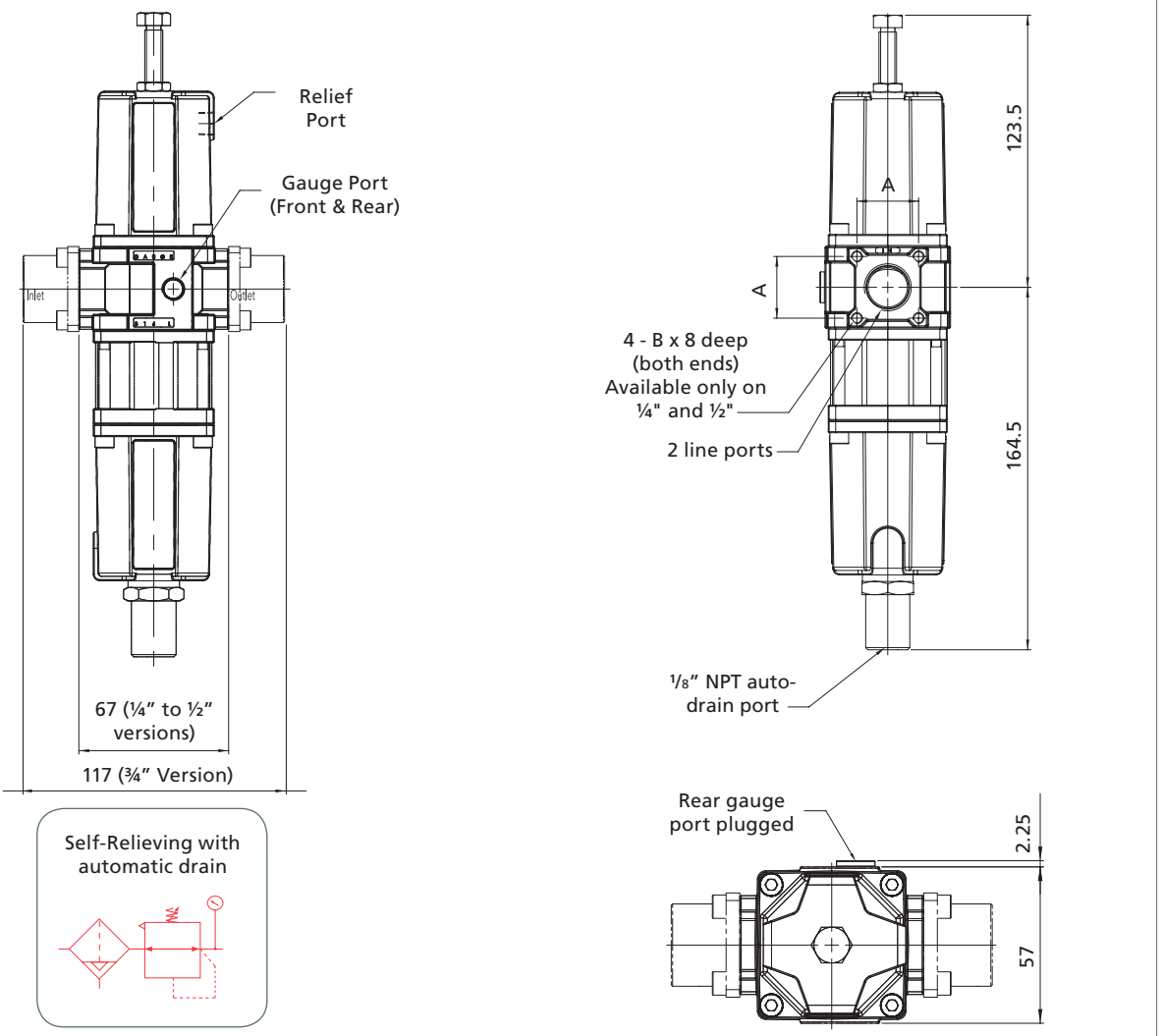
[1] The use of lubrication upstream of the product is not recommended for low temperature applications

3550 Series air service units – ¼" to ¾" Filter Regulators - Engineering drawings (manual drain)



Size	Filter	Regulated Pressure bar (psi)	Max Inlet Pressure bar	A	B	Weight kg	Cv
¼"	Manual Drain	0.50 to 2.0 (7.2 to 29)	20	24	M4	1.75	2.4
½"				28	M5	1.75	4.4
¾"				-	-	1.95	5.0
¼"	Manual Drain	0.50 to 4.0 (7.2 to 58)	20	24	M4	1.75	2.4
½"				28	M5	1.75	4.4
¾"				-	-	1.95	5.0
¼"	Manual Drain	0.50 to 8.0 (7.2 to 116)	20	24	M4	1.75	2.4
½"				28	M5	1.75	4.4
¾"				-	-	1.95	5.0
¼"	Manual Drain	0.50 to 12.0 (7.2 to 174)	20	24	M4	1.75	2.4
½"				28	M5	1.75	4.4
¾"				-	-	1.95	5.0

3550 Series air service units – ¼" to ¾" Filter Regulators - Engineering Drawings (auto drain)



Size	Filter	Regulated Pressure bar (psi)	Max Inlet Pressure bar	A	B	Weight kg	Cv
¼"	Auto Drain	0.50 to 2.0 (7.2 to 29)	17	24	M4	2.05	2.4
½"				28	M5	2.05	4.4
¾"				-	-	2.25	5.0
¼"	Auto Drain	0.50 to 4.0 (7.2 to 58)	17	24	M4	2.05	2.4
½"				28	M5	2.05	4.4
¾"				-	-	2.25	5.0
¼"	Auto Drain	0.50 to 8.0 (7.2 to 116)	17	24	M4	2.05	2.4
½"				28	M5	2.05	4.4
¾"				-	-	2.25	5.0
¼"	Auto Drain	0.50 to 12.0 (7.2 to 174)	17	24	M4	2.05	2.4
½"				28	M5	2.05	4.4
¾"				-	-	-	-

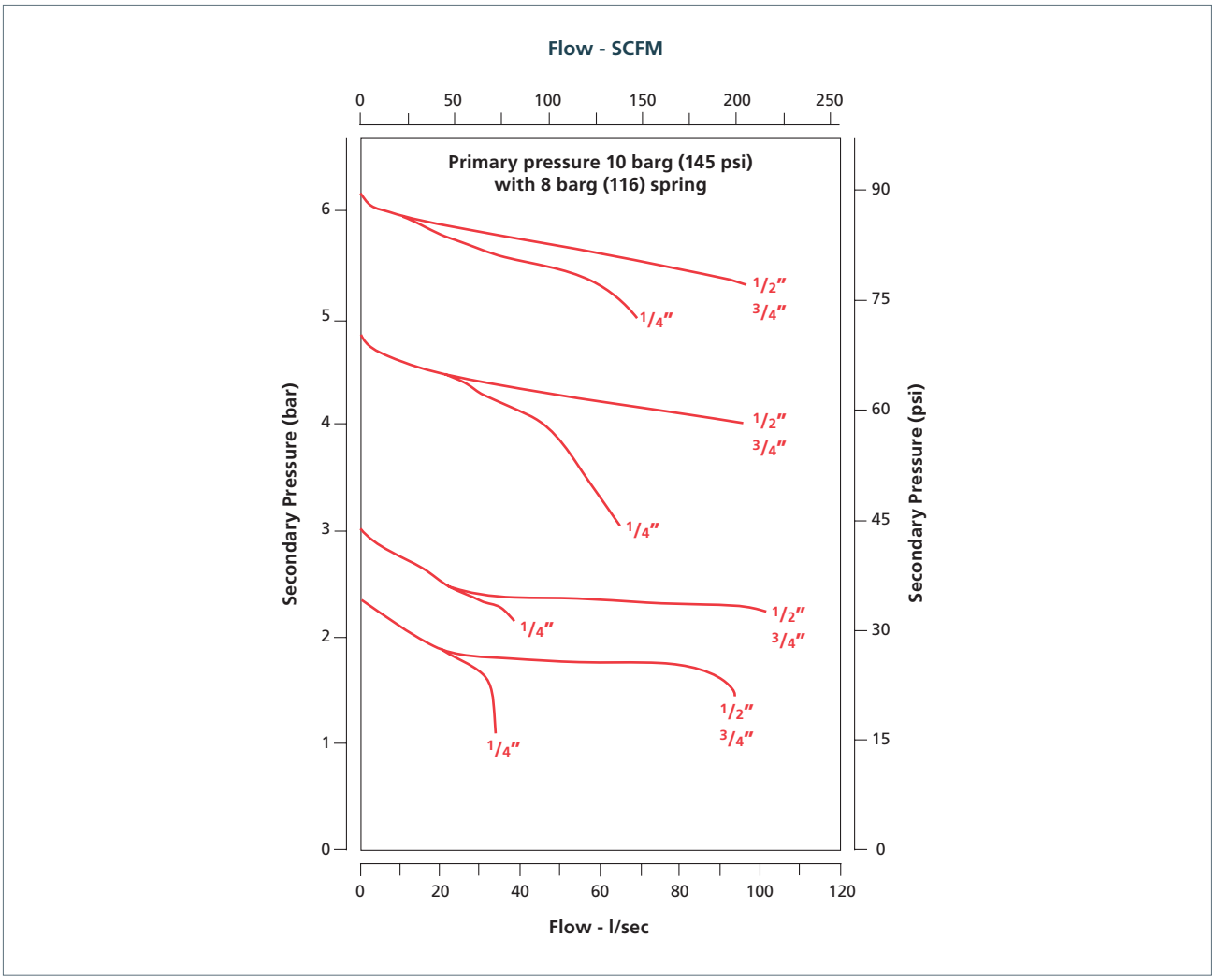
3550 Series air service units – ¼" to ¾" Filter Regulator - Flow Characteristics

3550 Series Coding Chart - Filter Regulators

Additional Options

Size		Type[1]		Material		Seals °C (°F)		Regulated Pressure bar (psi)		Port Style		Revision	Filter Element (40 micron standard)		Gauge Port		Approval	
2	¼"	FRM	Manual Drain	S	Stainless	V	Standard -20 (-4)	02	2 (29)	1	BSP	A	05	5 micron	X	¼" NPT Gauge Port	/ATEX	Ⓔx II 2G c T6
4	½"	FRA[1]	Auto Drain			F[2]	Low Temp -50 (-58)	04	4 (58)	2	NPT			w/o option		w/o option		w/o option
6	¾"	FRN	Manual Drain Non Relieving					08	8 (116)									
		FRB[1]	Auto Drain Non Relieving					12	12 (174)									
●		●		S		●		●		●		A	●		●		●	

[1] NACE not available in auto-drain or low temperature options
[2] Low temperature option not available in auto-drain



3550 Series air service units – ¼" to ¾" Filters

A 316L stainless steel unit for filtration of compressed air and gases for the actuation industries.

Features and Benefits

- Specifically designed for severe environments
- 40 micron element stainless steel 316 as standard, 5 micron option available
- 316L stainless steel construction
- Large flow characteristics
- NACE: standard temperature and manual drain only

Media & Ambient Temperature Range

- Standard temperature
  -20 to + 80 °C (-4 to +176 °F)
- Low temperature version
  -50 to +80 °C (-58 to +176 °F)

Note: When product is ordered as /ATEX ambient temperature is limited to +40 °C (104 °F) Ex II 2G c T6.

Maximum Inlet Pressure

- Manual drain - 20 bar (290 psi)
- Automatic drain - 17 bar (247 psi)

Flow

At 7 bar (102 psi) supply pressure, 0.35 bar (5 psi) pressure drop.

- ¼" - 1,380 l/min (49 SCFM)
- ½" and ¾" - 2,940 l/min (104 SCFM)

Ports NPT
(BSP option available - consult factory for part codes)

- ¼", ½", ¾"

Automatic Drain Port

- ⅛" NPT

Bowl Capacity

- 21 cc (1.28 cu ins)

Accessories Available

- Mounting brackets

See page 13 for ordering details

Certification Options Available

CE ATEX EAC

Operating Media

- Air, inert gas and sweet (natural) gas
- Sour gas (NACE) standard temperature and manual drain only
- Suitable for water and other compatible liquids - manual drain only, consult Rotork Midland for details

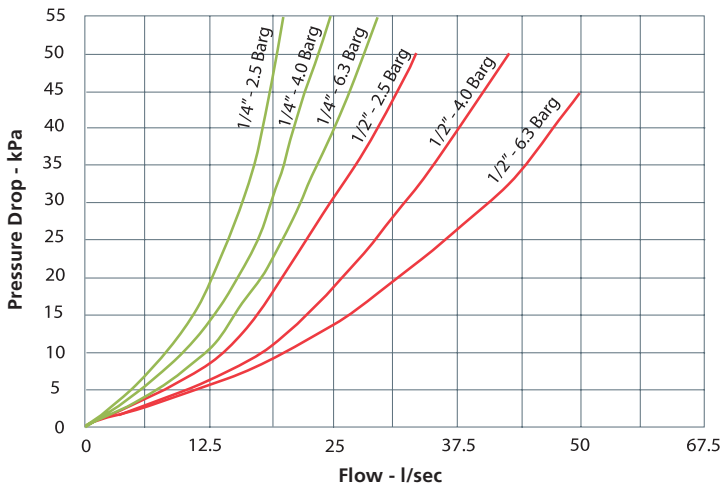
Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10°C below the lowest ambient temperature the product will be exposed to.

Construction Materials

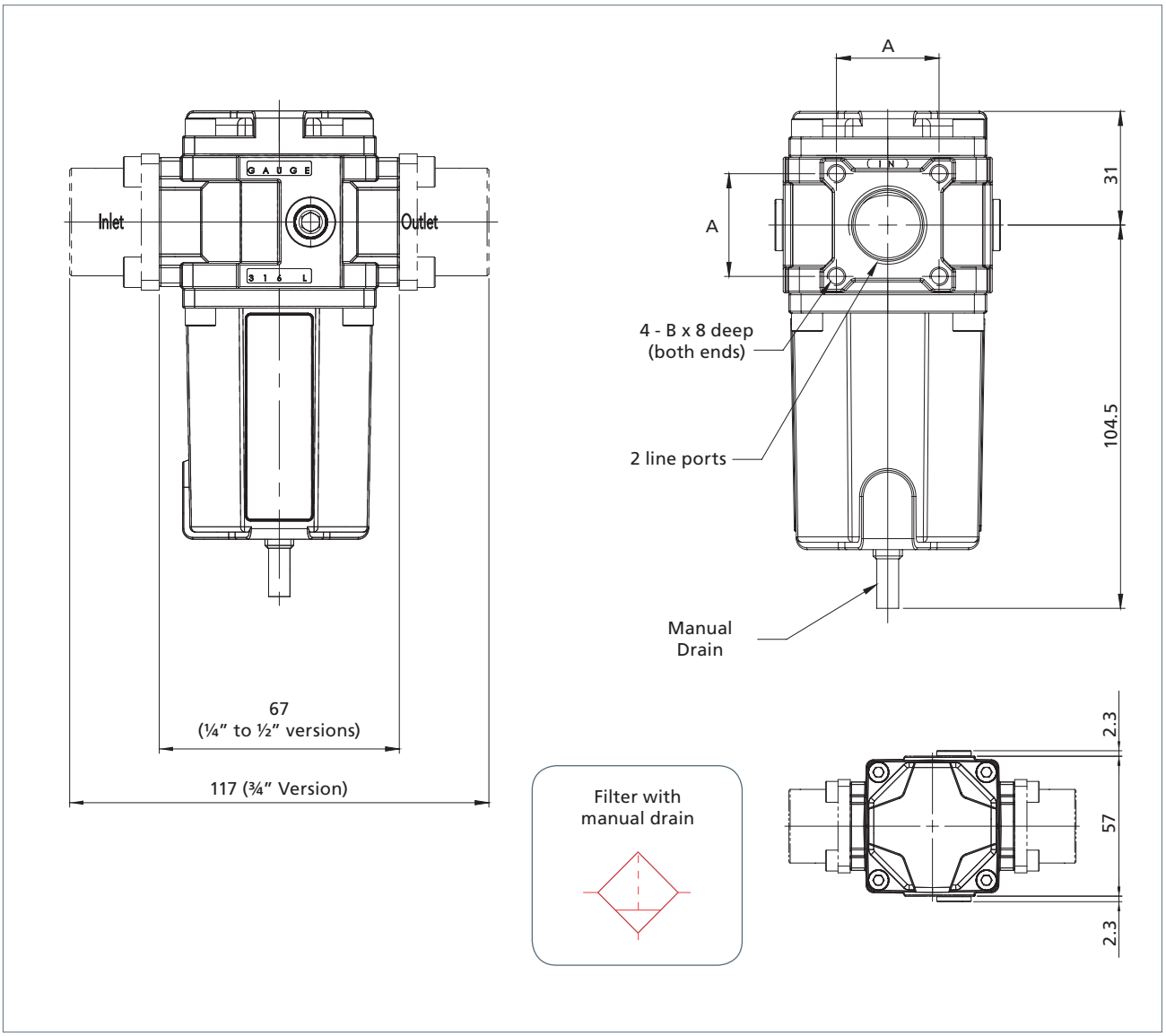
- Body/bonnet/bowl and internals:
  316L stainless steel and Ryton R-4
  Note: on auto-drain version float is nylon, polyoxymethylene and rubber.
- Element: 40 micron 316 stainless steel
  (5 micron option available - suffix product code with '05')
- Seals: Standard option - Fluoroelastomer
  Low temperature option - EPDM and Fluorosilicone[1]

[1] The use of lubrication upstream of the product is not recommended for low temperature applications.

Air Flow for ¼" and ½" Filter

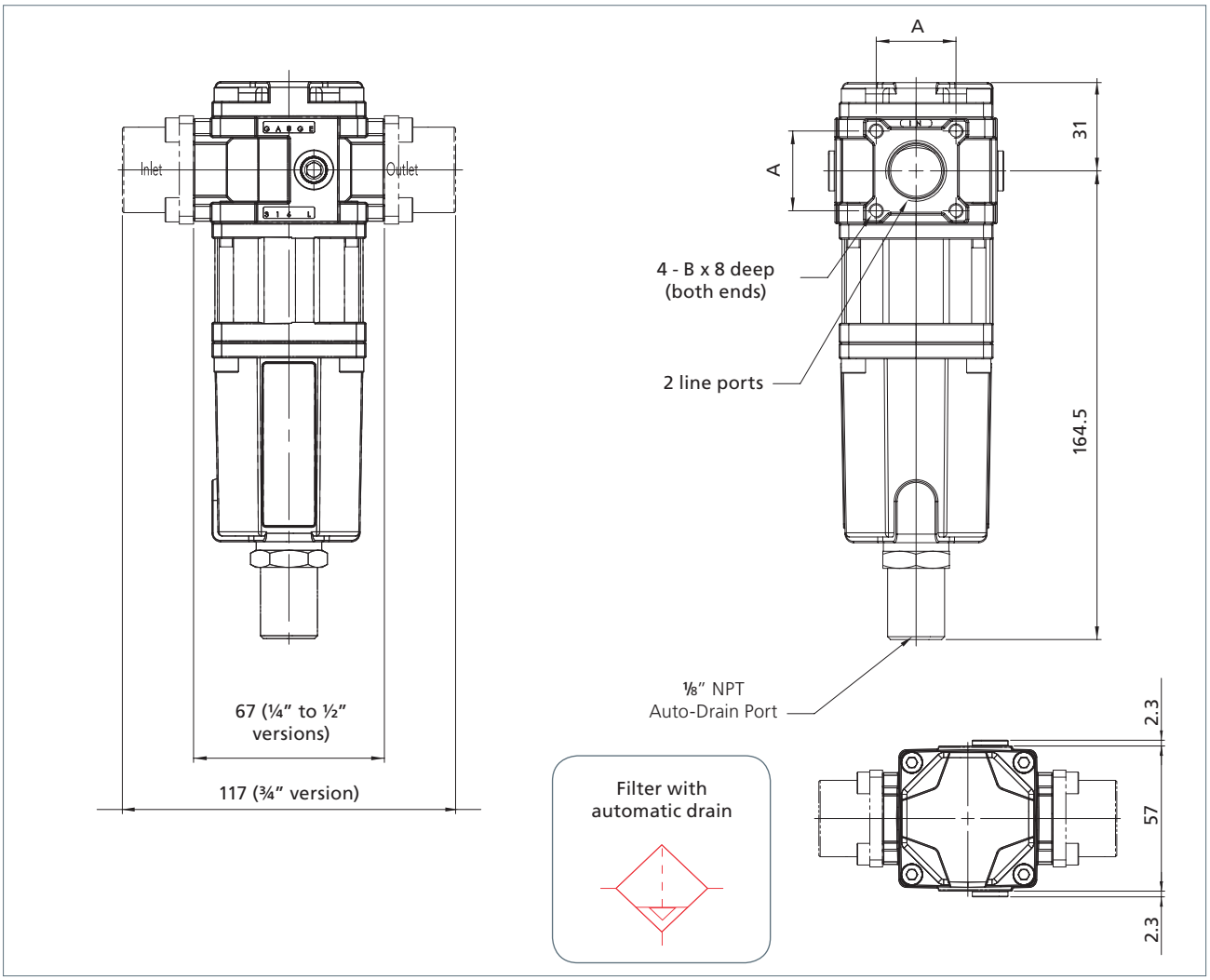


3550 Series air service units – ¼" to ¾" Filters - Engineering Drawings (manual drain)



Size	Filter	Max Inlet Pressure bar	A	B	Weight kg	Cv
¼"	Manual Drain	20	24	M4	1.3	2.4
½"			28	M5	1.3	4.4
¾"			-	-	1.5	5.0

3550 Series air service units – ¼" to ¾" Filters - Engineering Drawings (auto drain)



Size	Filter	Max Inlet Pressure bar	A	B	Weight kg	Cv
¼"	Auto Drain	17	24	M4	1.6	2.4
½"			28	M5	1.6	4.4
¾"			-	-	1.8	5.0

3550 Series Coding Chart - Filters

Additional Options

Size		Type[1]		Material		Seals °C (°F)		Max Inlet Pressure bar (psi)		Port Style		Revision	Filter Element (40 micron standard)		Approval	
2	¼"	FLM	Manual Drain	S	Stainless	V	Standard -20 (-4)	17	17 (247) (FLA only)	1	BSP	A	05	5 micron	/ATEX	Ⓔx II 2G c T6
4	½"	FLA[1]	Auto Drain			F[2]	Low Temp -50 (-58)	20	20 (290) (FLM only)	2	NPT			w/o option		w/o option
6	¾"															
●		●		S		●		●		●		A	●		●	

[1] NACE not available in auto-drain or low temperature options
[2] Low temperature option not available in auto-drain

3550 Series air service units – ¼" to ¾" Pressure Regulators

A 316L stainless steel unit for the pressure regulation of compressed air and gases for the actuation industries.

Features and Benefits

- Specifically designed for severe environments
- Non or self-relieving
- 316L stainless steel construction
- Large flow charateristics
- NACE: standard temperature only

Media & Ambient Temperature Range

- Standard temperature
  -20 to + 80 °C (-4 to +176 °F)
- Low temperature version
  -50 to +80 °C (-58 to +176 °F)

Note: When product is ordered as /ATEX ambient temperature is limited to +40 °C (104 °F) Ex II 2G c T6.

Maximum Relief Flow

- At 2 bar (29 psi) secondary pressure
  0.5 cc/sec (0.03 cu in/sec)

Flow

At 10 bar (145 psi) inlet pressure, 6 bar (87 psi) secondary pressure with 1 bar (14.5 psi) pressure drop.

- ¼" - 3,780 l/min (133 SCFM)
- ½" and ¾" - 6,180 l/min (218 SCFM)

Ports NPT
(BSP option available - consult factory for part codes)

- ¼", ½", ¾"

Gauge Ports

- ⅛" NPT
- ¼" NPT (option available - suffix product code with 'X')

Relief Vent Port

- ⅛" NPT (fitted with breather)
  Note: Not fitted on low temperature option

Accessories Available

- Mounting brackets
- Stainless steel pressure gauge
- Hand wheel

See page 13-14 for ordering details

Certification Options Available

CE ATEX EAC

Operating Media

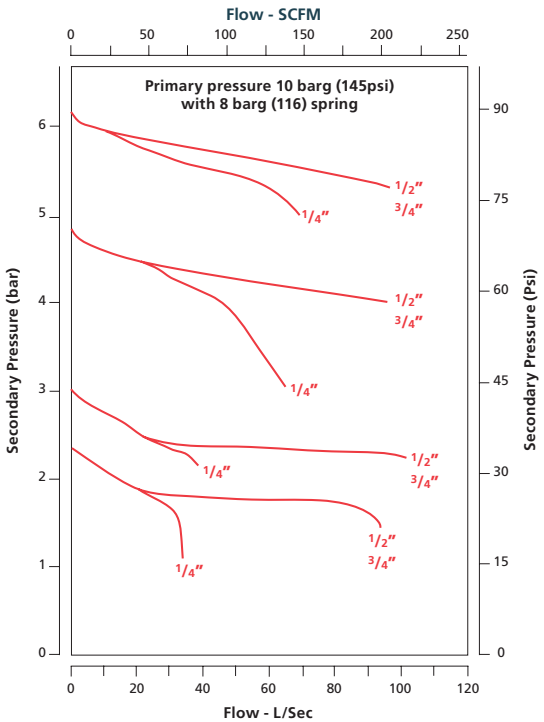
- Air, inert gas and sweet (natural) gas
- Sour gas (NACE) standard temperature only
- Suitable for water and other compatible liquids, consult Rotork Midland for detail

Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10 °C below the lowest ambient temperature the product will be exposed to.

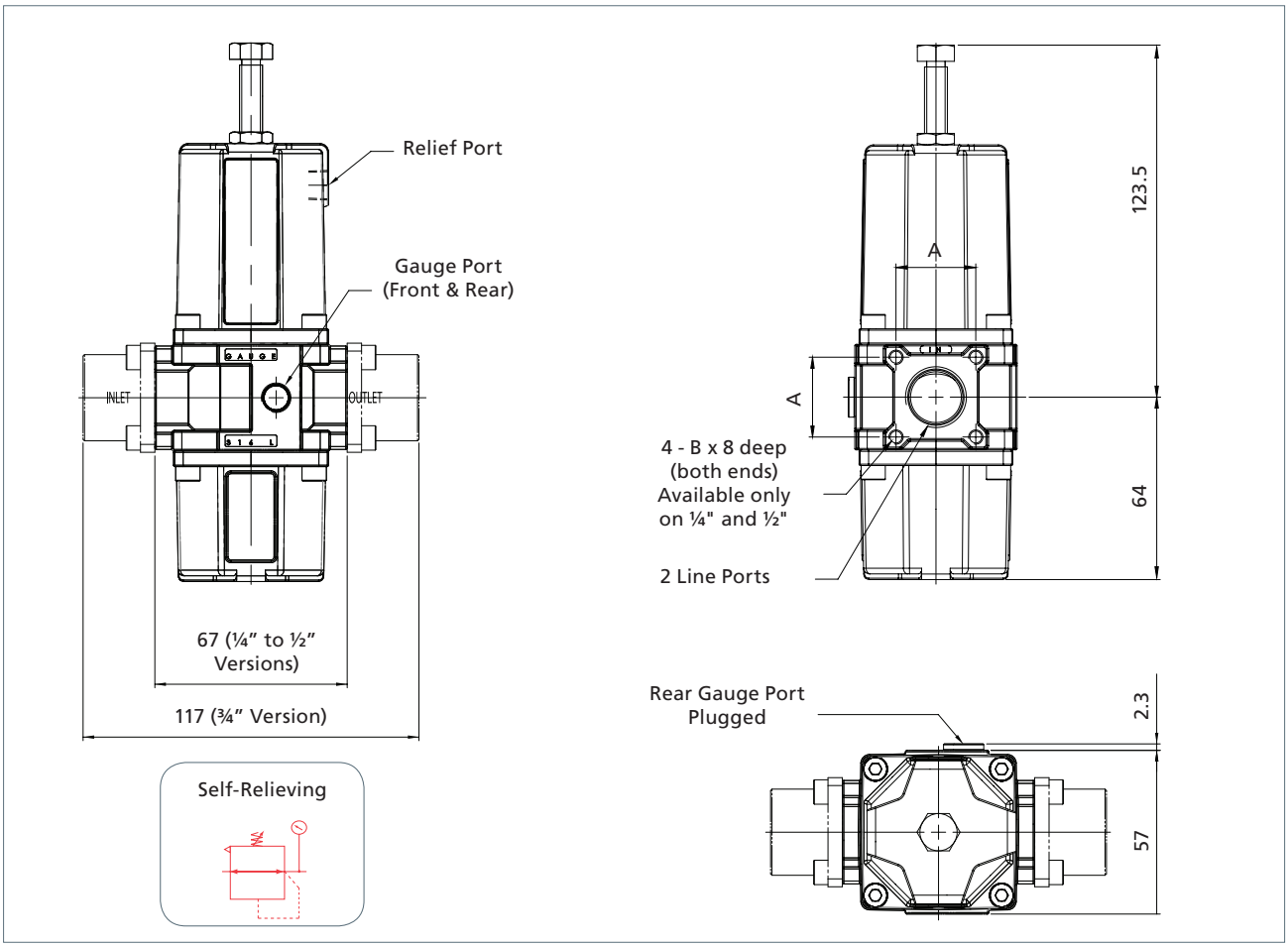
Construction Materials

- Body/bonnet/bowl and internals:
  316L stainless steel and Ryton R-4
- Seals: Standard option - Fluoroelastomer
  Low temperature option - EPDM and Fluorosilicone[1]

[1] The use of lubrication upstream of the product is not recommended for low temperature applications.



3550 Series air service units – ¼" to ¾" Pressure Regulators - Engineering Drawings



Size	Regulated Pressure bar (psi)	Max Inlet Pressure bar	A	B	Weight kg	Cv
¼"	0.50 to 2.0 (7.2 to 29)	20	24	M4	1.6	2.4
½"			28	M5	1.6	4.4
¾"			---	---	1.8	5.0
¼"	0.50 to 4.0 (7.2 to 58)	20	24	M4	1.6	2.4
½"			28	M5	1.6	4.4
¾"			---	---	1.8	5.0
¼"	0.50 to 8.0 (7.2 to 116)	20	24	M4	1.6	2.4
½"			28	M5	1.6	4.4
¾"			---	---	1.8	5.0
¼"	0.50 to 12.0 (7.2 to 174)	20	24	M4	1.6	2.4
½"			28	M5	1.6	4.4
¾"			---	---	1.8	5.0

3550 Series Coding Chart - Pressure Regulators

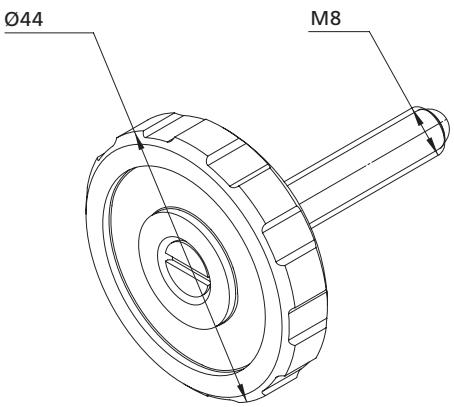
Additional Options

Size		Type		Material		Seals °C (°F)		Regulated Pressure bar (psi)		Port Style		Revision	Gauge Port		Approval	
2	¼"	PRV	Self Relieving	S	Stainless	V	Standard -20 (-4)	02	2 (29)	1	BSP	A	X	¼" NPT Gauge Port	/ATEX	Ⓔx II 2G c T6
4	½"	PRN	Non Relieving			F[1]	Low Temp -50 (-58)	04	4 (58)	2	NPT			w/o option		w/o option
6	¾"							08	8 (116)							
								12	12 (174)							
●		●		S		●		●		●		A	●		●	

[1] NACE not available in low-temperature options

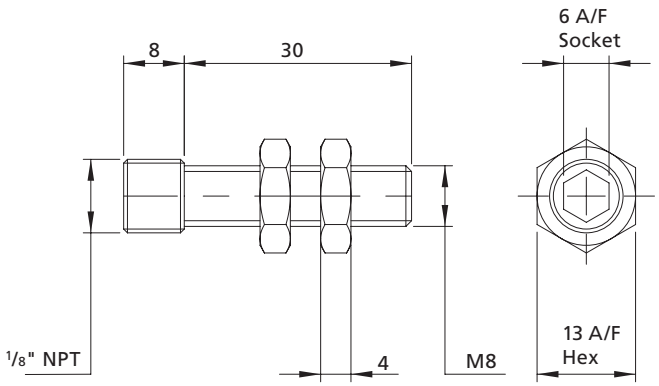
3550 Series air service units – Accessories for ¼" to ¾" units - supplied separately

Plastic handwheel kit



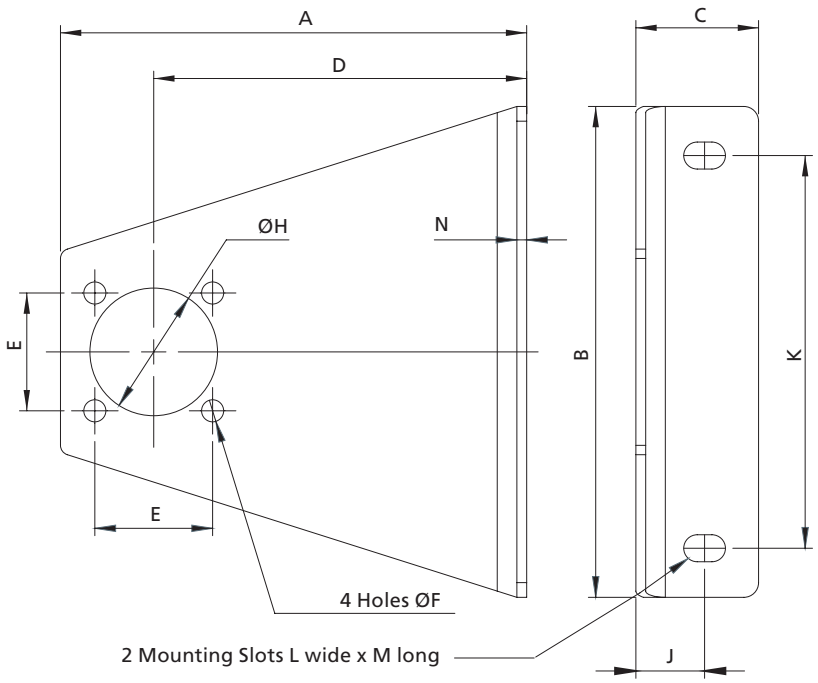
Product Code	Description
SSAF238/23	Kit comprises of 1 plastic handwheel, 1 pressure adjusting screw (316 stainless steel) and 1 hand-wheel retaining screw (316 stainless steel)

Stud mounting kit



Product Code	Description
SSBF238/21	Kit comprises of 1 stud complete with 2 locknuts and is designed to screw into un-used gauge port. All components 316 stainless steel.

Mounting bracket

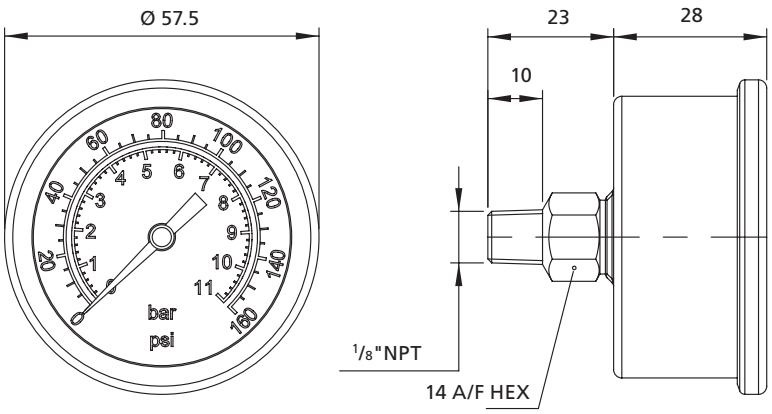


Product Code	Suitable for	A	B	C	D	E	F	H	J	K	L	M	N
SSF2110-7S	¼" units (Short)	79	100	25	60	24	4.5	26	14	80	5.5	8.5	2
SSF2110-7	¼" units (Long)	95	100	25	76	24	4.5	26	14	80	5.5	8.5	2
SSF4110-7	½",¾" units	95	100	25	76	28	4.5	26	14	80	5.5	8.5	2

Component material 316 stainless steel. Brackets are supplied complete with fasteners.
Note: Part numbers above are for single items

3550 Series air service units – Accessories for ¼" to ¾" units - supplied separately

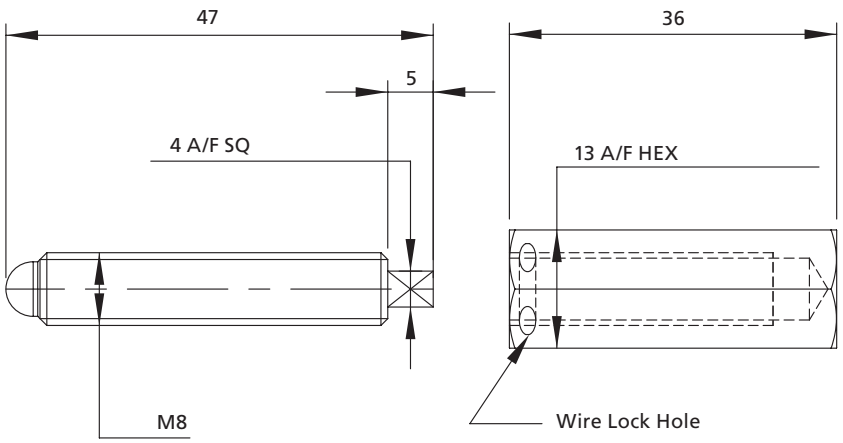
Pressure gauge SS-316L - Glycerine filled



Product Code	Size mm	Regulated Pressure bar
SSF153N/2GLY	50	0 to 2
SSF153N/4GLY	50	0 to 4
SSF153N/11GLY	50	0 to 11

Please consult factory for low temperature version if required.

Tamperproof cap kit



Product Code	Description
SSAF238/22	Kit comprises of 1 pressure adjusting screw and 1 tamperproof cap. All material 316 stainless steel