



# **Ancillaries** Catalogue



**Redefining** Flow Control

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Rotork is the global market leader in valve automation and flow control. Our products and services are helping organisations around the world to improve efficiency, assure safety and protect the environment.

We strive always for technical excellence, innovation and the highest quality standards in everything we do. As a result, our people and products remain at the forefront of flow control technology.

Uncompromising reliability is a feature of our entire product range, from our flagship electric actuator range through to our pneumatic, hydraulic and electro-hydraulic actuators, as well as instruments, gear boxes and valve accessories.

Rotork is committed to providing first class support to each client throughout the whole life of their plant, from initial site surveys to installation, maintenance, audits and repair. From our network of national and international offices, our engineers work around the clock to maintain our position of trust.

Rotork. Redefining flow control.



### Introduction

Rotork Midland manufactures a full range of ancillary products in 316L stainless steel to compliment our full range of products. Suitable for use in industrial and severe environments, we have a range of solutions for all your control valve requirements.









**Certification Options Available** 

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### 4500 Series Ancillary Products - Air Pressure Switch

A compact fully adjustable pneumatically operated 316L stainless steel pressure switch with operating pressures up to 16 bar (232) psi. For use on fail-safe systems.

### **Features and Benefits**

- Specifically designed for severe environments
- Compact and lightweight
- Up to 5 Pressure Ratings
- Tagging Facility
- Fluoroelastomer seals
- 3/2 and 5/2 Versions
- Ambient temperature range -20 °C to +80° C
- Low temperature option available
- NACE standard on application
- PED Certified ¹/4" only

### **Working Temperature Range**

- Valve only version
  -20 to +80 °C (-4 to +176 °F)
- Low temperature version
  -50 to +90 °C (-58 to +194 °F optional)

### Working Pressure (for main directional valve)

• 12 bar (174 psi) maximum

### **Maximum Pilot Pressure Inlet**

• 16 bar (232 psi)

### **Pressure setting hysteresis**

• 0.25 bar (3.63 psi)

### Ports NPT (BSP option available)

- 1/4" 1/2" NPT line port
- ¹/8" NPT pilot port



### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available

### **Construction Materials**

- Body: 316L Stainless Steel
- Spool: 316L Stainless Steel
- Spring: 316 Stainless Steel
- Seals: Fluoroelastomer
- Diaphragm: Fluoroelastomer

### **Maximum Flow**

At 6 bar, 1 bar differential:

<sup>1</sup>/<sub>4</sub>" 3/2 Valves - 1000 L/Min (35.3 SCFM)

<sup>1</sup>/<sub>4</sub>" 5/2 Valves - 1200 L/Min (42.4 SCFM)

<sup>1</sup>/<sub>2</sub>" 3/2 Valves - 3500 L/Min (123 SCFM)

<sup>1</sup>/<sub>2</sub>" 5/2 Valves - 3500 L/Min (123 SCFM)

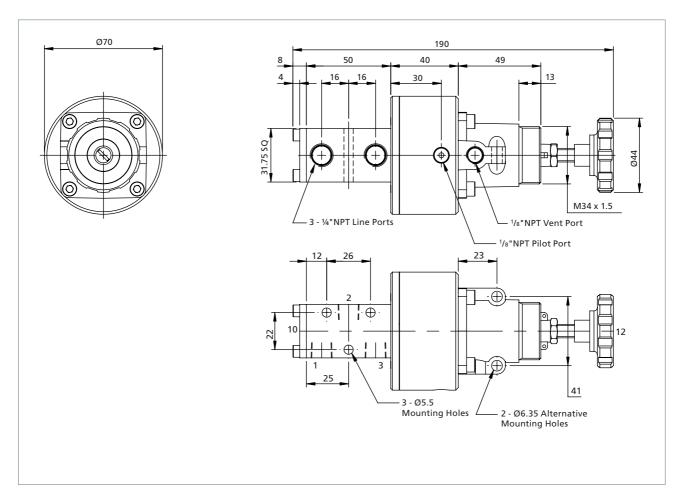
### **Certification Options Available**

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# 4500 Series Ancillary Products - 1/4" NPT 3/2 Air Pressure switch



### **Ordering Information**

Product Code	Low Temperature Version	cv	Weight Regulated Pressure (Adjustal (kg) for Main Directional Valve	
2PS3SV022	2PS3SL022		1.0 to 2.0 bar (14.5 to 29 psi)	
2PS3SV042	2PS3SL042			
2PS3SV072	2PS3SL072	1.0	1.60	1.0 to 7 bar (14.5 to 102 psi)
2PS3SV102	2PS3SL102			1.0 to 10 bar (14.5 to 145 psi)
2PS3SV162	2PS3SL162			1.0 to 16 bar (14.5 to 232 psi)



NOTE: 16 bar regulated pressure must be fed from independent supply to main directional valve.

### Function

### Application for spring return actuators 3/2

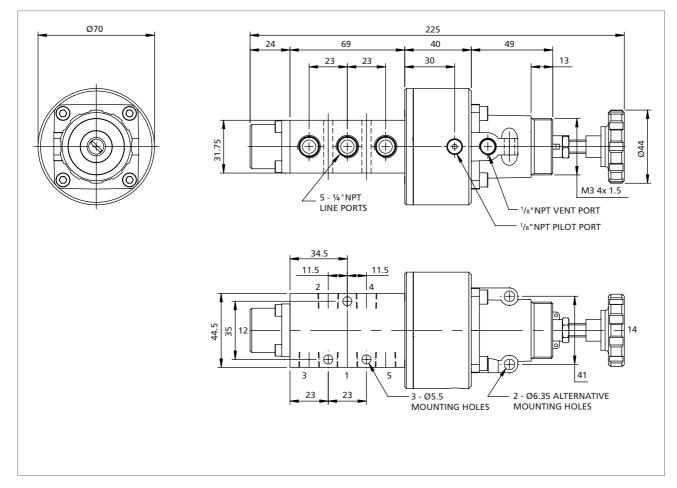
### 1. Airfail stay put

For this application port 3 is plugged. When pilot air is applied to port 1 or 2 in the Normally Closed mode and pilot air is greater than set pressure, air can flow in either direction. When pilot pressure falls below set pressure the integral spool valve closes and therefore blocks port 1 to 2 and the output from 2 remains blocked, leaving the actuator or downstream signal in the last controlled position.

#### 2. Venting

By not plugging port 3 the valve can be used in the Normally Open, Closed, Diverter or Changeover mode and the actuator will vent to atmosphere.

### 4500 Series Ancillary Products - 1/4" NPT 5/2 Air Pressure switch



### **Ordering Information**

Product Code	Low Temperature Version	cv	Weight (kg)	Regulated Pressure (Adjustable) for Main Directional Valve
2PS5SV022	2PS5SL022			1.0 to 2.0 bar (14.5 to 29 psi)
2PS5SV042	2PS5SL042			1.0 to 4 bar (14.5 to 58 psi)
2PS5SV072	2PS5SL072	1.2	2.05	1.0 to 7 bar (14.5 to 102 psi)
2PS5SV102	2PS5SL102			1.0 to 10 bar (14.5 to 145 psi)
2PS5SV162	2PS5SL162			1.0 to 16 bar (14.5 to 232 psi)



NOTE: 16 bar regulated pressure must be fed from independent supply to main directional valve.

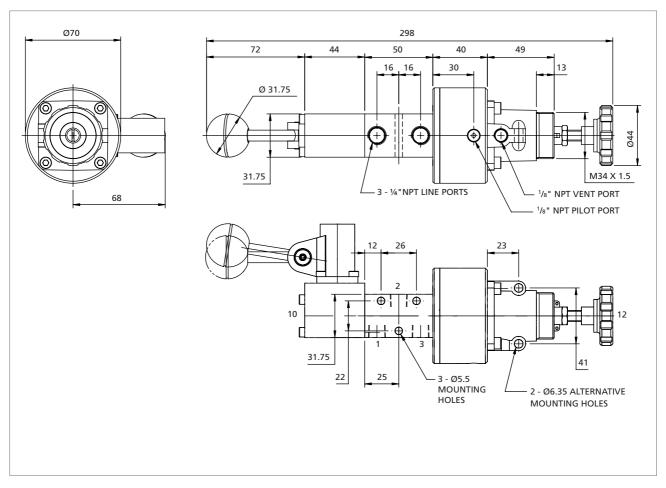
### Function

Application for double acting actuators 5/2





### 4500 Series Ancillary Products - 1/4" NPT 3/2 Air Pressure switch with latch-lock manual reset



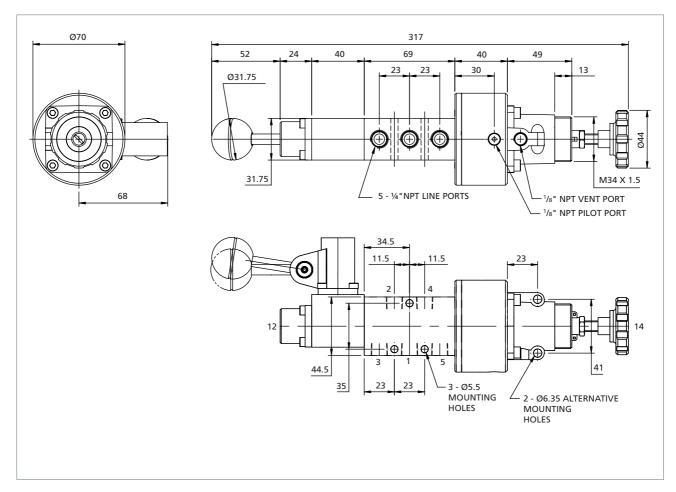
### **Ordering Information**

Product Code	Low Temperature Version	cv	Weight Regulated Pressure (Adjustable (kg) for Main Directional Valve		
2PS3SV022LL	2PS3SL022LL			1.0 to 2.0 bar (14.5 to 29 psi)	
2PS3SV042LL	2PS3SL042LL				1.0 to 4 bar (14.5 to 58 psi)
2PS3SL072LL	2PS3SL072LL	1.0 2.30		1.0 to 7 bar (14.5 to 102 psi)	
2PS3SV102LL	2PS3SL102LL			1.0 to 10 bar (14.5 to 145 psi)	
2PS3SV162LL	2PS3SL162LL			1.0 to 16 bar (14.5 to 232 psi)	



NOTE: 16 bar regulated pressure must be fed from independent supply to main directional valve.

### 4500 Series Ancillary Products - 1/4" NPT 5/2 Air Pressure switch with latch-lock manual reset



### **Ordering Information**

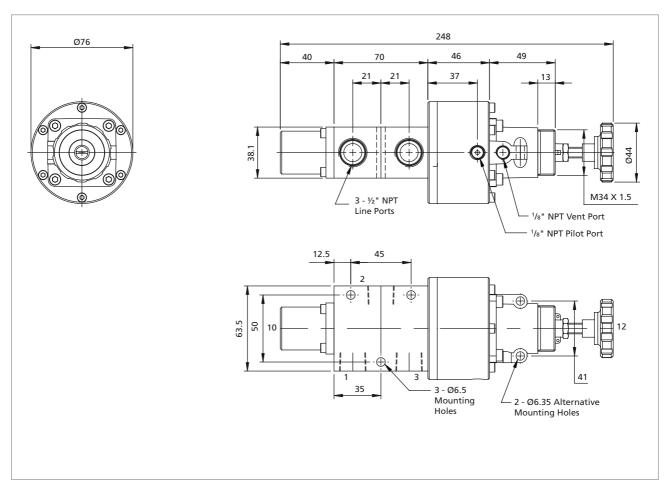
Product Code	Low Temperature Version	cv	Weight Regulated Pressure (Adjustab (kg) for Main Directional Valve		
2PS5SV022LL	2PS5SL022LL			1.0 to 2.0 bar (14.5 to 29 psi)	
2PS5SV042LL	2PS5SL042LL				1.0 to 4 bar (14.5 to 58 psi)
2PS5SL072LL	2PS5SL072LL	1.2 2.75		1.0 to 7 bar (14.5 to 102 psi)	
2PS5SV102LL	2PS5SL102LL			1.0 to 10 bar (14.5 to 145 psi)	
2PS5SV162LL	2PS5SL162LL			1.0 to 16 bar (14.5 to 232 psi)	



NOTE: 16 bar regulated pressure must be fed from independent supply to main directional valve.



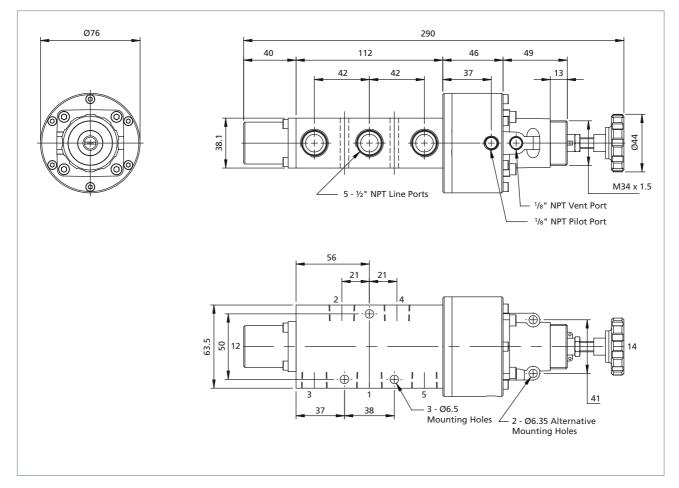
# 4500 Series Ancillary Products - 1/2" NPT 3/2 Air Pressure switch



Product Code	Low Temperature Version	cv	Weight (kg)	Regulated Pressure (Adjustable) for Main Directional Valve	
4PS3SV022	4PS3SL022	3.5			1.0 to 2.0 bar (14.5 to 29 psi)
4PS3SV042	4PS3SL042		3.0	1.0 to 4.0 bar (14.5 to 58 psi)	
4PS3SV072	4PS3SL072		3.0	1.0 to 7.0 bar (14.5 to 102 psi)	
4PS3SV102	4PS3SL102			1.0 to 10 bar (14.5 to 145 psi)	



# 4500 Series Ancillary Products - 1/2" NPT 5/2 Air Pressure switch



Product Code	Low Temperature Version	cv	Weight (kg)	Regulated Pressure (Adjustable) for Main Directional Valve
4PS5SV022	4PS5SL022	3.5		1.0 to 2.0 bar (14.5 to 29 psi)
4PS5SV042	4PS5SL042		3.6	1.0 to 4 bar (14.5 to 58 psi)
4PS5SV072	4PS5SL072		3.0	1.0 to 7 bar (14.5 to 102 psi)
4PS5SV102	4PS5SL102			1.0 to 10 bar (14.5 to 145 psi)

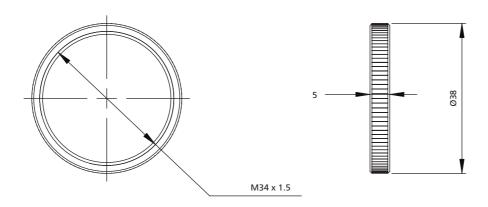






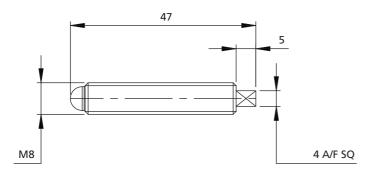
# 4500 Series Ancillary Products - Pressure switch optional accessories

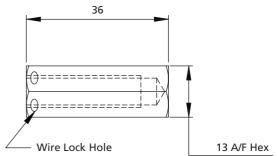
### **Panel Mounting Ring**



Product Code	Description
SSAF238/20	Panel mounting ring

### Tamper-proof cap kit

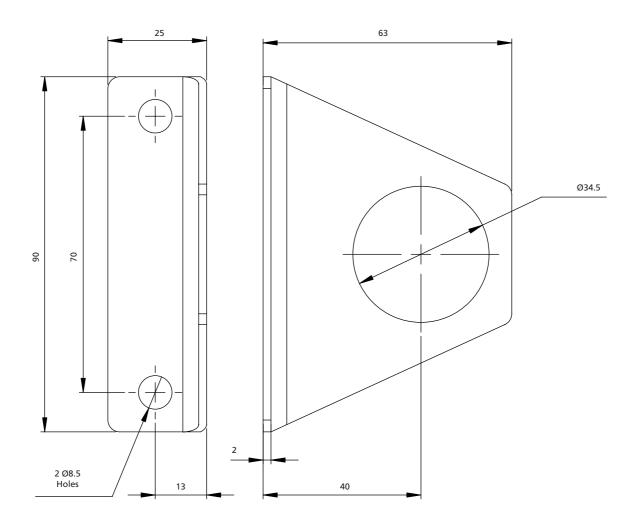




Product Code	Description
SSAF238/22	Kit comprises of 1 Pressure adjusting screw and 1 Tamperproof Cap. All material 316 Stainless Steel

# 4500 Series Ancillary Products - Pressure switch optional accessories

### **Mounting Bracket Kit**



Product Code	Description
SSAF238/26	Kit comprises of 1 Bracket and 1 Panel Mounting Ring





### 4500 Series Ancillary Products - 1/4" to 1" Flow Regulators

### **Uni-directional flow regulators:**

316L Stainless Steel in-line flow regulators for uni-directional operation (free flow return).

### **Bi-directional flow regulators:**

316 Stainless Steel in-line flow regulators for bi-directional operation (separate flow control in each direction).

#### **Features and Benefits**

- Specifically designed for severe environments
- For use on fail-safe systems
- In-line flow
- Ambient Temperature Range -20 °C to +70 °C
- Low temperature option available

### **Working Temperature Range**

- -20 to +70 °C (-4 to +158 °F)
- Low temperature version
  -50 to +90 °C (-58 to +194 °F optional)

### **Working Pressure**

• 12 bar (174 psi) maximum

### Ports NPT (BSP option available)

### **Operating Media**

- Gases Filtered lubricated or non-lubricated air, inert gas, sweet (natural) gases
- Sour gas option available
- Liquids Low pressure hydraulic, mineral oil or water.

### **Construction Materials**

- Body: 316L Stainless Steel
- Spring: 316 Stainless Steel
- Seals: Nitrile (EPDM on low temperature option)
- Internals: 316L Stainless Steel



### **Maximum Flow**

At 6 bar, 1 bar differential:

### **Uni-Directional**

- ¹/4" 1000 L/Min (35 SCFM)
- <sup>3</sup>/<sub>8</sub>" 1680 L/Min (59 SCFM)
- ¹/₂" 2520 L/Min (89 SCFM)
- <sup>3</sup>/<sub>4</sub>" 5428 L/Min (192 SCFM)
- 1" 9820 L/Min (347) SCFM)

### Bi-Directional

- 1/4" 620 L/Min (22 SCFM)
- <sup>3</sup>/<sub>8</sub>" 1290 L/Min (45 SCFM)
- ¹/2" 2000 L/Min (71 SCFM)

### **Uni-directional flow regulators**

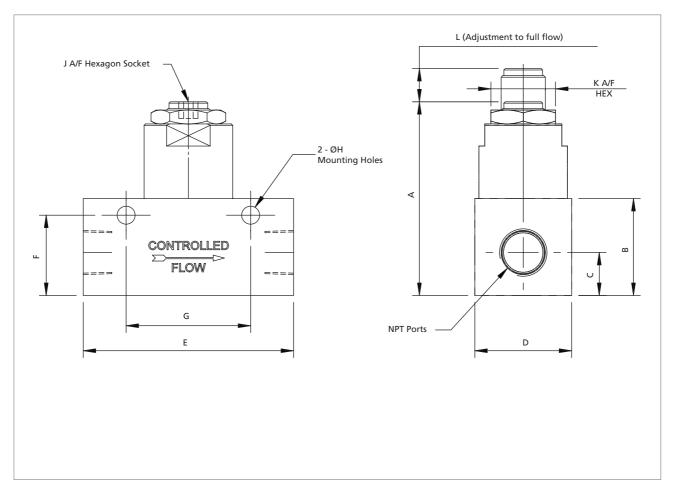
Product Code	Low Temperature Version	Size	cv	Weight (kg)
2REGSN122	2REGSE122	1/4"	1.0	0.26
3REGSN122	3REGSE122	3/8"	1.7	1.7
4REGSN122	4REGSE122	1/2"	2.5	2.5
6REGSN122	6REGSE122	3/4"	5.4	1.75
8REGSN122	8REGSE122	1"	9.8	3.1

### **Bi-directional flow regulators**

Product Code	Low Temperature Version	Size	cv	Weight (kg)
2BIDSN122	2BIDSE122	1/4"	0.6	0.26
3BIDSN122	3BIDSE122	3/8"	1.3	1.7
4BIDSN122	4BIDSE122	1/2"	2.0	2.5



# 4500 Series Ancillary Products - 1/4" to 1/2" Uni-Directional Flow Regulators



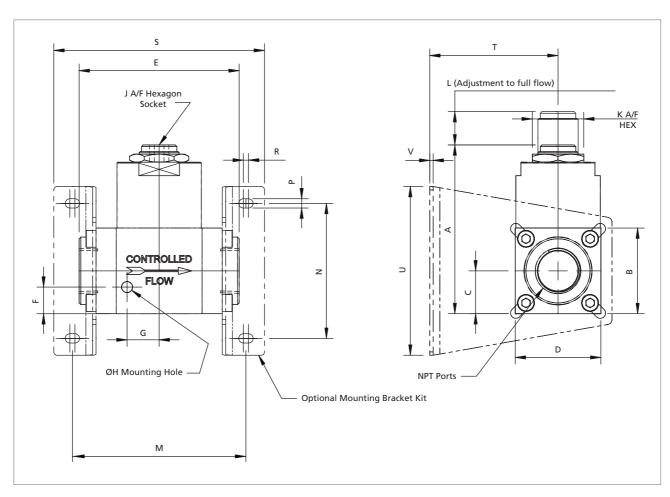
Product Code	Low Temperature Version	Size	A	В	С	D	E	F	G	н	J	К	L
2REGSN122	2REGSE122	1/4″	48	25.4	9	25.4	54	20	40	6.35	5	18	6
3REGSN122	3REGSE122	3/8"	70	35	15.5	35	76	29	45	6.35	6	23.4	12
4REGSN122	4REGSE122	1/2"	70	35	13.5	35	76	29	45	6.35	6	23.4	12







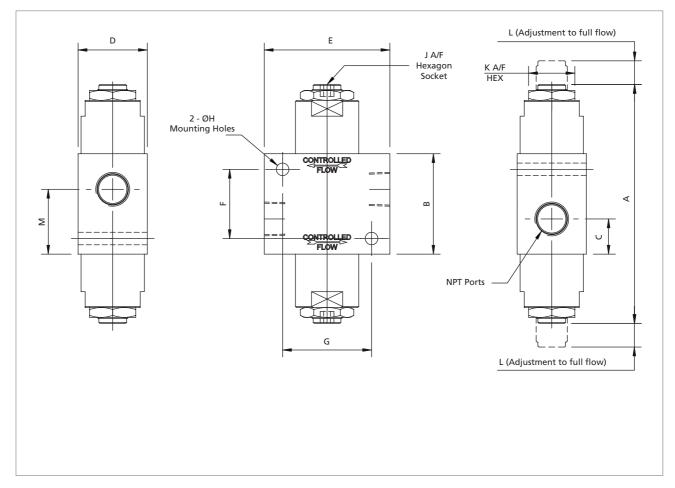
# 4500 Series Ancillary Products - 3/4" to 1" Uni-Directional Flow Regulators



Product Code	Low Temperature Version	Size	А	В	С	D	E	F	G	н	J	к	L	М	N	Р	R	S	Т	U	V
6REGSN122	6REGSE122	3/4"	100	50.8	25.4	50.8	95	16	19	6.35	10	30.5	20	103	80	5.5	3	125	76	100	2
8REGSN122	8REGSE122	1"	125	63.5	31.75	63.5	107.5	19	24	6.35	12	36	25	115.5	80	5.5	3	137.5	76	100	2



# 4500 Series Ancillary Products - 1/4" to 1/2" Bi-Directional Flow Regulators



Product Code	Low Temperature Version	Size	A	В	С	D	E	F	G	н	J	К	L	М
2BIDSN122	2BIDSE122	1/4"	85	40	15.5	25.4	44.5	28	32	6.35	5	18	6	24.5
3BIDSN122	3BIDSE122	3/8"	121	51	18	35	63.5	35	45	6.35	6	23.4	12	33
4BIDSN122	4BIDSE122	1/2"	121	51	21	35	63.5	35	45	6.35	6	23.4	12	-







### 4500 Series Ancillary Products - 1/4" to 1/2" Needle Valves

Needle valve: 316L stainless steel needle valve with 3mm, 6mm or 12mm orifice.

#### **Features and Benefits**

- Specifically designed for severe environments
- Ambient Temperature Range -20 °C to +70 °C
- Low temperature option available
- 316L Stainless Steel

### **Working Temperature Range**

- -20 to +70 °C (-4 to +158 °F)
- Low temperature version
  -50 to +90 °C (-58 to +194 °F optional)

### **Working Pressure**

• 12 bar (174 psi)

### Ports NPT (BSP option available)

### **Operating Media**

- · Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available
- Liquids Low pressure hydraulic, mineral oil or water

### **Construction Materials**

- Body: 316L Stainless Steel
- Spring: 316 Stainless Steel
- Seals: Nitrile (EPDM on Low Temperature option)
- Internals: 316L Stainless Steel

### **Maximum Flow**

At 6 bar, 1 bar differential:

Needle Valve (3mm orifice)

• ¹/4" - 290 L/Min (10.5 SCFM)

Needle Valve (6mm orifice)

• ¹/4" - 640 L/Min (23 SCFM)

Needle Vave (12mm orifice)

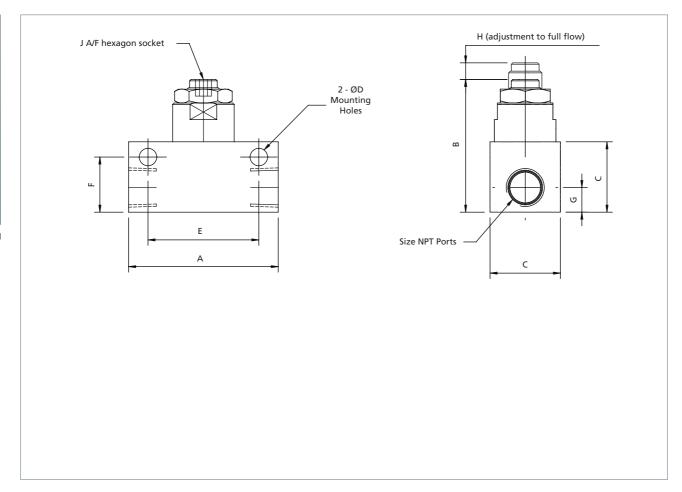
• 1/2" - 2240 L/Min (79 SCFM)



Product Code	Low Temperature Version	Size	Orifice (mm)	cv	Weight (kg)
2NDVSN12203	2NDVSE12203	1/4"	3	0.3	0.27
2NDVSN12206	2NDVSE12206	1/4"	6	0.7	0.27
4NDVSN12206	4NDVSE12206	1/2"	6	1.1	0.71
4NDVSN12212	4NDVSE12212	1/2"	12	2.8	0.71



# 4500 Series Ancillary Products - 1/4" to 1/2" Needle Valves



Product Code	Low Temperature Version	Size	A	В	С	D	E	F	G	н	J
2NDVSN12203	2NDVSE12203	1/4"	54	48	25.4	6.35	40	20	9	6	5
2NDVSN12206	2NDVSE12206	1/4"	54	48	25.4	6.35	40	20	9	6	5
4NDVSN12206	4NDVSE12206	1/2"	76	70	35	6.35	45	29	13.5	12	6
4NDVSN12212	4NDVSE12212	1/2"	76	70	35	6.35	45	29	13.5	12	6







### 4500 Series Ancillary Products - 1/4" to 1/2" Exhaust port flow regulators

Exhaust port flow regulators: 316L stainless steel exhaust flow regulator/breather supplied complete with tamper proof cap.

#### **Features and Benefits**

- Specifically designed for severe environments
- Ambient Temperature Range -20 °C to +70 °C
- Low temperature option available
- 316L Stainless Steel

### **Working Temperature Range**

- -20 to +70 °C (-4 to +158 °F)
- Low temperature version
  -50 to +90 °C (-58 to +194 °F optional)

### **Working Pressure**

• 12 bar (174 psi)

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available
- Liquids Low pressure hydraulic, mineral oil or water

### **Construction Materials**

- Body: 316L Stainless Steel
- Spring: 316 Stainless Steel
- Seals: Nitrile (EPDM on Low Temperature option)
- Internals: 316L Stainless Steel

### **Maximum Flow**

At 6 bar, 1 bar differential:

Exhaust Port Flow Regulators

- 1/4" 646 L/Min (23 SCFM)
- <sup>3</sup>/<sub>8</sub>" 1100 L/Min (39 SCFM)
- 1/2" 1800 L/Min (64 SCFM)

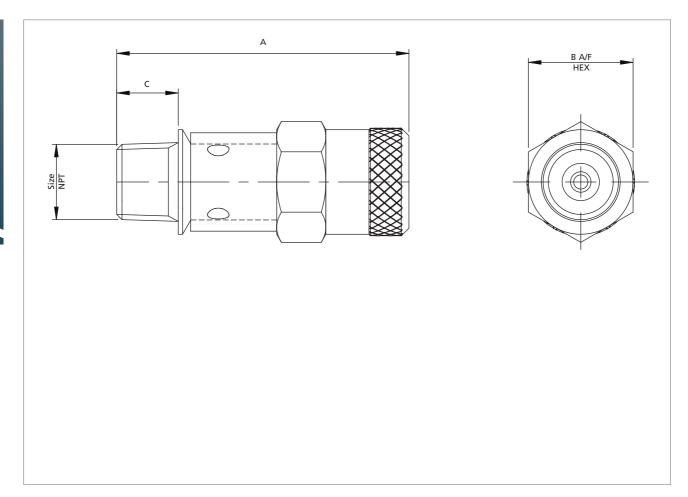


Product Code	Low Temperature Version	Size	cv	Weight (kg)
2EFRSN102	2EFRSE122	1/4"	0.65	0.06
3EFRSN102	3EFRSE122	3/8"	1.1	0.15
4EFRSN102	4EFRSE122	1/2"	1.8	0.22

**Certification Options Available** 

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# 4500 Series Ancillary Products - 1/4" to 1/2" Exhaust port flow regulators



Product Code	Low Temperature Version	Size	А	В	С
2EFRSN102	2EFRSE102	1/4"	47.5	17	10
3EFRSN102	3EFRSE102	3/8"	66	23.4	12.5
4EFRSN102	4EFRSE102	1/2"	87	23.4	17



### 4500 Series Ancillary Products - 1/4" to 2" NPT non-return valve

316L Stainless Steel non-return valves for pressures up of 12 bar (174 psi) and 27 bar (391 psi).

#### **Features and Benefits**

- Specifically designed for severe environments
- Ambient Temperature Range -20 °C to +70 °C
- Low temperature option available
- 316L Stainless Steel

### **Working Temperature Range**

- -20 to +70 °C (-4 to +158 °F)
- Low temperature version
  -50 to +90 °C (-58 to +194 °F optional)

### **Working Pressure**

- 12 bar (174 psi)
- 27 bar (391 psi)

### Ports NPT (BSP option available)

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available
- Liquids Low pressure hydraulic, mineral oil or water

### **Construction Materials**

- Body: 316L Stainless Steel
- Spring: 316 Stainless Steel
- Seals: Nitrile (EPDM on low temperature option)
- Internals: 316L Stainless Steel



### **Maximum Flow**

At 6 bar, 1 bar differential:

Non Return Valves (12 bar)

- 1/4" 1600 L/Min (57 SCFM)
- <sup>3</sup>/<sub>8</sub>" 2200 L/Min (80 SCFM)
- ¹/₂" 3800 L/Min (137 SCFM)
- 3/4" 5800 L/Min (205 SCFM)
- 1" 7700 L/Min (274 SCFM)

### Non-Return Valves (27 bar)

- 1/4" 736 L/Min (26 SCFM)
- <sup>3</sup>/<sub>8</sub>" 1840 L/Min (65 SCFM)
- 1/2" 2600 L/Min (91 SCFM)

### Non-return valves 12 Bar

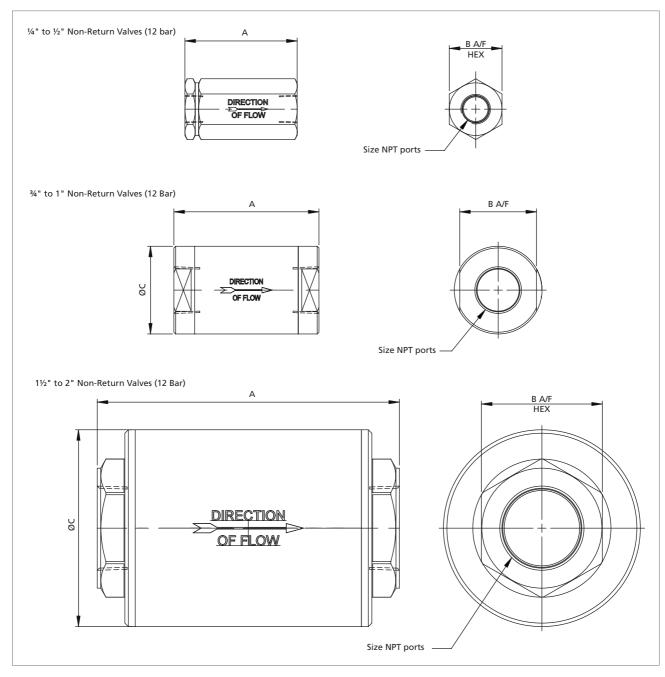
Product Code	Low Temperature Version	Size	cv	Weight (kg)
2NRVSN122	2NRVSE122	1/4"	1.6	0.10
3NRVSN122	3NRVSE122	3/8"	2.3	0.26
4NRVSN122	4NRVSE122	1/2"	3.9	0.24
6NRVSN122	6NRVSE122	3/4"	14	0.74
8NRVSN122	8NRVSE122	1"	15.7	0.66
7NRVSN122	7NRVSE122	1 <sup>1</sup> /2"	49	6.65
9NRVSN122	9NRVSE122	2"	51	6.25

### Non-return valves 27 Bar

Product Code	Low Temperature Version	Size	cv	Weight (kg)
2NRVSN272	2NRVSE272	1/4"	1.6	0.10
3NRVSN272	3NRVSE272	3/8"	1.9	0.53
4NRVSN272	4NRVSE272	1/2"	3.3	0.58



# 4500 Series Ancillary Products - 1/4" to 2" NPT non-return valves (12 Bar)



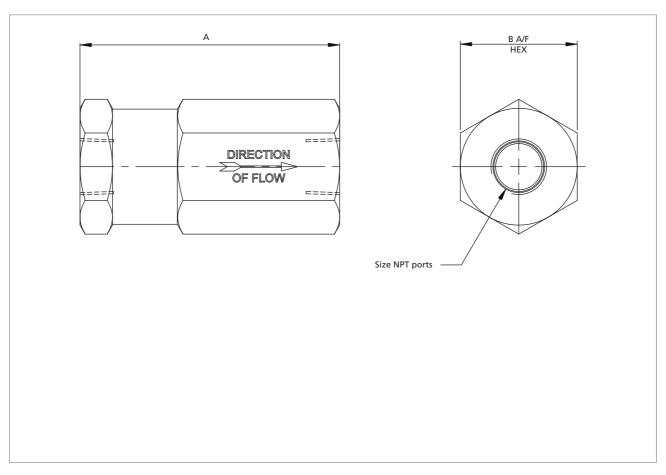
Product Code	Low Temperature Version	Size	A	В	С
2NRVSN122	2NRVSE122	1/4"	50	22.2	-
3NRVSN122	3NRVSE122	3/8"	65	30.5	-
4NRVSN122	4NRVSE122	1/2"	68	30.5	-
6NRVSN122	6NRVSE122	3/4"	84	44.5	51
8NRVSN122	8NRVSE122	1"	84	44.5	51
7NRVSN122	7NRVSE122	1 <sup>1</sup> / <sub>2</sub> "	175	70	114
9NRVSN122	9NRVSE122	2"	175	70	114



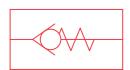




# 4500 Series Ancillary Products - 1/4" to 1/2" NPT Non-return valves (27 Bar)



Product Code	Low Temperature Version	Size	A	В
2NRVSN272	2NRVSE272	1/4"	50	22.2
3NRVSN272	3NRVSE272	3/8"	80	36
4NRVSN272	4NRVSE272	1/2"	90	36



### 4500 Series Ancillary Products - 1/4" to 2" NPT Quick exhaust valve

316L Stainless Steel quick exhaust valves.

#### **Features and Benefits**

- Specifically designed for severe environments
- Ambient Temperature Range -20 °C to +70 °C
- Low temperature option available

### **Working Temperature Range**

- -20 to +70 °C (-4 to +158 °F)
- Low temperature version
  -50 to +90 °C (-58 to +194 °F optional)

### **Working Pressure**

• 12 bar (174 psi)

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available
- Liquids Low pressure hydraulic, mineral oil or water

#### **Maximum Flow**

At 6 bar, 1 bar differential:

### Supply to outlet

- 1/4" 1290 L/Min (46 SCFM)
- <sup>3</sup>/<sub>8</sub>" 1810 L/Min (64 SCFM)
- 1/2" 3810 L/Min (135 SCFM)
- 3/4" 4520 L/Min (160 SCFM)
- 1" 7700 L/Min (274 SCFM)
- 1<sup>1</sup>/<sub>2</sub>" 22000 L/Min (777 SCFM)
- 2" 32000 L/Min (1130 SCFM)

### Outlet to Exhaust

- ¹/4" 2780 L/Min (98 SCFM)
- <sup>3</sup>/<sub>8</sub>" 3810 L/Min (135 SCFM)
- <sup>1</sup>/<sub>2</sub>" 5490 L/Min (194 SCFM)
- ³/4" 6460 L/Min (228 SCFM)
- 1" 11000 L/Min (388 SCFM)
- 1<sup>1</sup>/<sub>2</sub>" 32000 L/Min (1130 SCFM)
- 2" 45000 L/Min (1589 SCFM)



### **Construction Materials**

- Body: 316L Stainless Steel
- Internal Parts: 316L Stainless Steel
- Springs: 316 Stainless Steel
- Seals: Nitrile (EPDM on low temperature option)

Product Code	Low Temperature Version	Size	CV Supply to Outlet	CV Outlet to Exhaust
2QEVSN122	2QEVSE122	1/4"	1.3	2.8
3QEVSN122	3QEVSE122	<sup>3</sup> /8"	1.8	3.8
4QEVSN122	4QEVSE122	1/2"	3.8	5.5
6QEVSN122	6QEVSE122	3/4"	4.5	6.5
8QEVSN122	8QEVSE122	1"	7.8	11.0
7QEVSN122	7QEVSE122	11/2"	22.0	32.0
9QEVSN122	9QEVSE122	2"	32.0	45.0

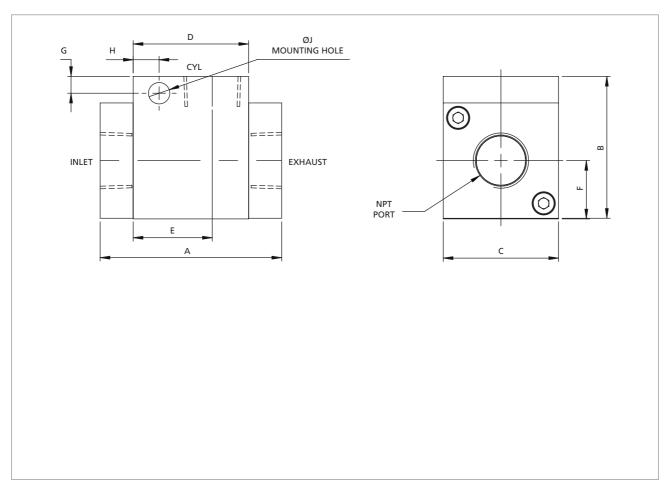
### **Certification Options Available**

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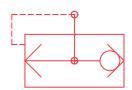




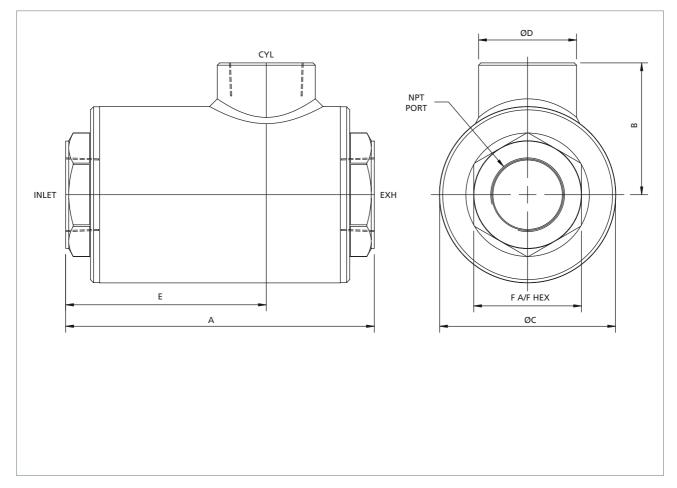
# 4500 Series Ancillary Products - 1/4" to 1" NPT Quick exhaust valve



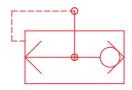
Product Code	Low Temperature Version	Size	A	В	С	D	E	F	G	н	J
2QEVSN122	2QEVSE122	1/4"	52	38	31.75	31.75	22	16	-	-	-
3QEVSN122	3QEVSE122	3/8"	60	42	35	35	23	17.5	-	-	-
4QEVSN122	4QEVSE122	1/2"	70	55	44.5	44.5	30.5	22.5	6.5	10	8.25
6QEVSN122	6QEVSE122	3/4"	80	60	50.8	50.8	33.5	25.4	7.5	10	8.5
8QEVSN122	8QEVSE122	1"	106.2	91	76.2	76.2	52.2	38.1	10	16	11



# 4500 Series Ancillary Products - 11/2" to 2" NPT Quick exhaust valve



Product Code	Low Temperature Version	Size	A	В	С	D	E	F
7QEVSN122	7QEVSE122	11/2"	200	85.5	114	63.5	130	70
9QEVSN122	9QEVSE122	2"	200	85.5	114	76	130	70







### 4500 Series Ancillary Products - 1/4" to 2" NPT Quick exhaust valve c/w exhaust flow regulator

316L Stainless Steel quick exhaust valves complete with flow regulators to control the speed of exhaust.

#### **Features and Benefits**

- Specifically designed for severe environments
- Ambient Temperature Range -20 °C to +70 °C
- Low temperature option available

### **Working Temperature Range**

- -20 to +70 °C (-4 to +158 °F)
- Low temperature version
  -50 to +90 °C (-58 to +194 °F optional)

#### **Working Pressure**

 Quick exhaust valve c/w flow regulator 12 bar (174 psi)

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available
- Liquids Low pressure hydraulic, mineral oil or water

#### **Maximum Flow**

At 6 bar, 1 bar pressure drop:

Quick exhaust valve c/w flow regulator Supply to outlet

- 1/4" 1290 L/Min (46 SCFM)
- 3/8" 1810 L/Min (64 SCFM)
- 1/2" 3810 L/Min (135 SCFM)
- 3/4" 4520 L/Min (160 SCFM)
- 1" 7700 L/Min (274 SCFM)
- 1<sup>1</sup>/<sub>2</sub>" 22000 L/Min (777 SCFM)
- 2" 32000 L/Min (1130 SCFM)

Quick exhaust valve c/w Flow Regulator

### Outlet to exhaust

- 1/4" 2780 L/Min (98 SCFM)
- <sup>3</sup>/<sub>8</sub>" 3810 L/Min (135 SCFM)
- 1/2" 5490 L/Min (194 SCFM)
- ³/4" 6460 L/Min (228 SCFM)
- 1" 11000 L/Min (388 SCFM)
- 1<sup>1</sup>/<sub>2</sub>" 32000 L/Min (1130 SCFM)
- 2" 45000 L/Min (1589 SCFM)

### **Construction Materials**

- Body: 316L Stainless Steel
- Internal Parts: 316L Stainless Steel
- Springs: 316 Stainless Steel
- Seals: Nitrile (EPDM on Low temperature option)

### 1/4" to 1" Quick Exhaust Valve with Exhaust Flow Regulator

Standard Product Code	Standard Product Code with by-pass	Low Temperature Version	Low Temperature Version with by-pass	Size	CV Supply to Outlet	CV Outlet to Exhaust	Weight (kg)
2QERSN122	2QEBSN122	2QERSE122	2QEBSE122	1/4"	1.3	2.8	0.5
3QERSN122	3QEBSN122	3QERSE122	3QEBSE122	<sup>3</sup> /8"	1.8	3.8	0.7
4QERSN122	4QEBSN122	4QERSE122	4QEBSE122	1/2"	3.8	5.5	1.7
6QERSN122	6QEBSN122	6QERSE122	6QEBSE122	3/4"	4.5	6.5	2.4
8QERSN122	8QEBSN122	8QERSE122	8QEBSE122	1"	7.8	11	6

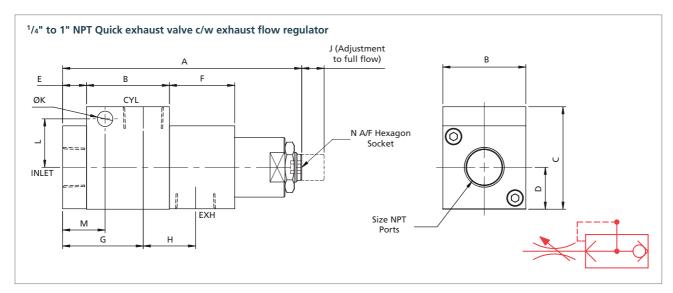
### 11/2" to 2" Quick Exhaust Valve with Exhaust Flow Regulator and By-pass

Standard Product Code	Low Temperature Version	Size	CV Supply to Outlet	CV Outlet to Exhaust	Weight (kg)
7QEBSN122	7QEBSE122	1 <sup>1</sup> /2"	22	32	13.4
9QEBSN122	9QEBSE122	2"	32	46	13.4

**Certification Options Available** 

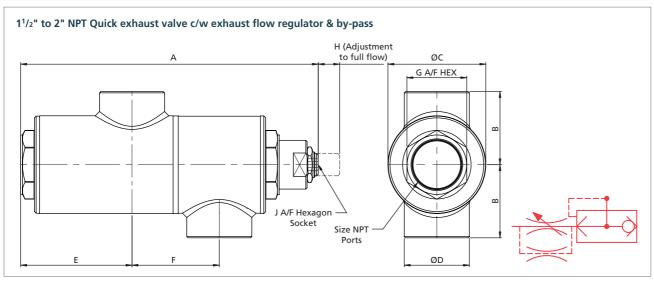
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# **4500 Series Ancillary Products**



### **Ordering Information**

Standard Product Code	Standard Product Code with by-pass	Low Temperature Version	Low Temperature Version with by-pass	Size	A	В	С	D	E	F	G	н	J	К	L	М	N
2QERSN122	2QEBSN122	2QERSE122	2QEBSE122	1/4"	90	31.75	38	16	10	26	32	19.75	6	-	-	-	5
3QERSN122	3QEBSN122	3QERSE122	3QEBSE122	3/8"	101	35	42	17.5	12.5	31	35.5	25	6	-	-	-	5
4QERSN122	4QEBSN122	4QERSE122	4QEBSE122	1/2"	128	44.5	55	22.5	12.75	35	43.3	28	12	8.25	26	22.75	6
6QERSN122	6QEBSN122	6QERSE122	6QEBSE122	3/4"	145	50.8	60	25.4	14.5	41.5	48	35.3	10	8.5	27	24.5	6
8QERSN122	8QEBSN122	8QERSE122	8QEBSE122	1"	210	76.2	91	38.1	15	57	67.2	47	25	11	43	41	12



Standard Product Code	Low Temperature Version	Size	A	В	С	D	E	F	G	н	J
7QEBSN122	7QEBSE122	1 <sup>1</sup> /2"	347.5	85.5	114	76	130	102	70	25	12
9QEBSN122	9QEBSE122	2"	347.5	85.5	114	76	130	102	70	25	12



### 4500 Series Ancillary Products - 1/4" to 1" NPT shuttle valve

316L Stainless Steel shuttle valves for three way "OR" function.

#### **Features and Benefits**

- Specifically designed for severe environments
- Ambient Temperature Range -20 °C to +70 °C
- Low temperature option available
- 316L Stainless Steel
- 5 sizes available

### **Working Temperature Range**

- -20 to +70 °C (-4 to +158 °F)
- Low temperature version
  -50 to +90 °C (-58 to +194 °F optional)

### **Working Pressure**

• 12 bar (174 psi)

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available
- Liquids Low pressure hydraulic, mineral oil or water



### **Construction Materials**

• Body: 316L Stainless Steel

Internal Parts: 316L Stainless Steel

Springs: 316 Stainless Steel

Seals: Nitrile (EPDM on low temperature option)

### **Maximum Flow**

At 6 bar, 1 bar pressure drop:

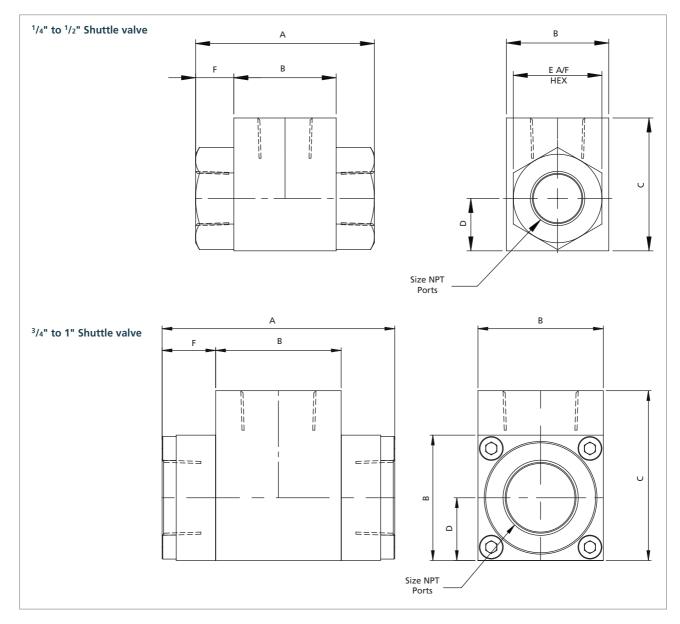
### Shuttle Valve

- ¹/4" 1350 L/Min (45 SCFM)
- 3/8" 1830 L/Min (65 SCFM)
- 1/2" 3550 L/Min (126 SCFM)
- <sup>3</sup>/<sub>4</sub>" 5500 L/Min (194 SCFM)
- 1" 9000 L/Min (319 SCFM)

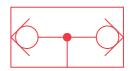
Standard Product Code	Low Temperature Version	Size	cv	Weight (kg)
2SHVSN122	2SHVSE122	1/4"	1.3	0.16
3SHVSN122	3SHVSE122	3/8"	1.9	0.19
4SHVSN122A	4SHVSE122A	1/2"	3.7	0.34
6SHVSN122	6SHVSE122	3/4"	9.0	0.94
8SHVSN122	8SHVSE122	1"	15	1.41



# **4500 Series Ancillary Products**



Product Code	Low Temperature Version	Size	A	В	С	D	E	F
2SHVSN122	2SHVSE122	1/4"	44.5	25.4	33	13	22	9.5
3SHVSN122	3SHVSE122	3/8″	54	25.4	38	13	22	14.3
4SHVSN122A	4SHVSE122A	1/2"	63.8	31.8	48	16	28	16
6SHVSN122	6SHVSE122	3/4"	82.5	44.5	60	22.2	-	19
8SHVSN122	8SHVSE122	1"	100	50.8	70	25.4	-	24.6







### 4500 Series Ancillary Products - 1/2" NPT Thermal Fuses

316L Stainless Steel thermal fuses for fire release. Available in a range of temperature settings.

#### **Features and Benefits**

- Specifically designed for severe environments
- 316L Stainless Steel
- For fire release

### **Working Temperature Range**

- -20 °C to +70 °C (-4 °F to +158 °F)
- -20 °C to +96 °C (-4 °F to +205 °F)
- -20 °C to +102 °C (-4 °F to +216 °F)
- -20 °C to +124 °C (-4 °F to +255 °F)
- -20 °C to +137 °C (-4 °F to +279 °F)
- -20 °C to +200 °C (-4 °F to +392 °F)

### **Working Pressure**

• 12 bar (174 psi)

#### **Ports NPT**

• 1/2"

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases

### **Maximum Flow**

At 6 bar, 1 bar differential:

### Supply to outlet

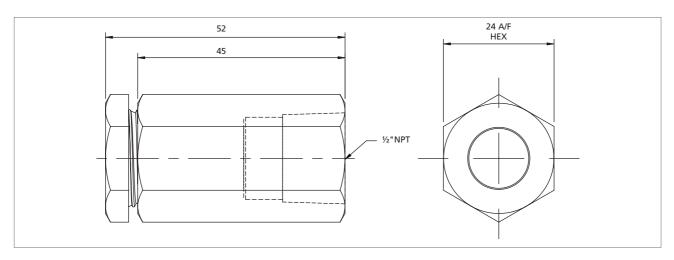
• 1/2" - 5800 L/Min (205 SCFM)



### **Construction Materials**

- Body: 316L Stainless Steel
- Thermal plug: Low melting point alloy (bismuth-based)

Product Code	Temperature (°C)	Size	cv	Weight (kg)
4THFSN102070	70			
4THFSN102096	96			
4THFSN102102	102	1/2"	5.8	0.15
4THFSN102124	124	.//2	5.0	0.15
4THFSN102137	137			
4THFSN102200	200			







### 4500 Series Ancillary Products - Visual Indicator

Compact 316L Stainless Steel panel mounted visual red/green indicator.

#### **Features and Benefits**

- Specifically designed for severe environments
- 316L Stainless Steel
- Can be panel mounted

### **Working Temperature Range**

• -20 °C to +65 °C (-4 °F to +149 °F)

### **Working Pressure**

• 1 to 12 bar (14.5 to 174 psi)

### Ports NPT (BSP option available)

• 1/8" NPT

### **Operating Media**

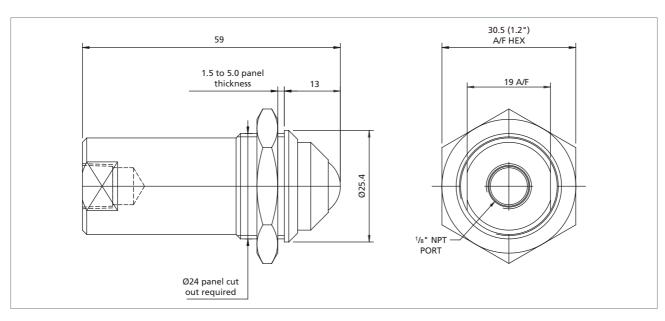
- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases

### **Construction Materials**

- Body: 316L Stainless Steel
- Springs: 316 Stainless Steel
- Seals: Nitrile
- Visual indicator piston: acetal
- Visual indicator assembly: acetal with acrylic lens.

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Product Code	Ports	Weight (kg)
1VISSN122G	<sup>1</sup> /8" NPT	0.1
1VISSN121G	1/8" BSP	0.1











# 4500 Series Ancillary Products - 1/4" to 1/2" Non-return valve breather

316L Stainless Steel non-return breather to prevent ingress into exhaust and vent ports.

#### **Features and Benefits**

- Specifically designed for severe environments
- Ambient Temperature Range -20 °C to +70° C
- 316L Stainless Steel

### **Working Temperature Range**

• -20 °C to +70 °C (-4 °F to +158 °F)

### **Working Pressure**

• 12 bar (174 psi)

### Ports NPT (BSP option available)

• 1/4" to 1/2"

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases

#### **Maximum Flow**

At 6 bar, 1 bar differential:

- ¹/4" 646 L/Min (23 SCFM)
- 3/8" 1300 L/Min (45 SCFM)
- 1/2" 1550 L/Min (54 SCFM)

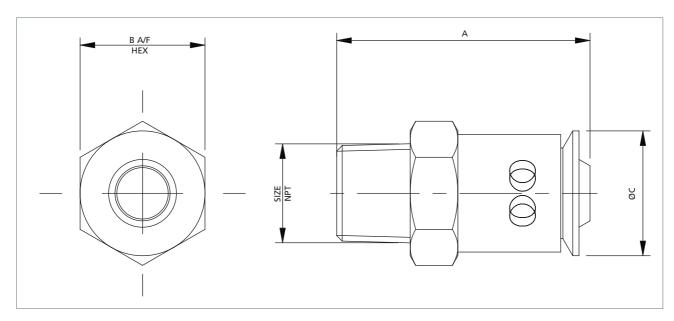


### **Construction Materials**

- 316L Stainless Steel
- Non-return sleeve: silicon

Product Code	Size	cv	Weight (kg)
2NRBSN102	1/4"	0.65	0.02
3NRBSN102	3/8"	1.3	0.06
4NRBSN102	1/2"	1.6	0.063

Product Code	Size	A	В	С
2NRBSN102	1/4"	34	17	17
3NRBSN102	3/8"	40	23.4	21
4NRBSN102	1/2"	45	23.4	21



**Certification Options Available** 





### 4500 Series Ancillary Products - 1/8" to 1" Breathers (Silencers)

316L Stainless Steel sintered element silencers used to protect ports open to the atmosphere.

### **Features and Benefits**

- Specifically designed for severe environments
- Ambient Temperature Range -20 °C to +70 °C
- 316L Stainless Steel

### **Working Temperature Range**

• -20 °C to +70 °C (-4 °F to +158 °F)

### **Working Pressure**

• 12 bar (174 psi)

### Ports NPT (BSP option available)

• 1/8" to 1"

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases

#### **Maximum Flow**

At 6 bar, 1 bar differential:

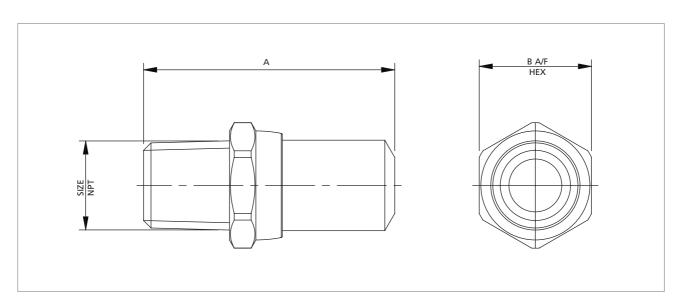
- 1/8" 1200 L/Min (42 SCFM)
- 1/4" 1550 L/Min (55 SCFM)
- 3/8" 1940 L/Min (68 SCFM)
- ¹/₂" 3410 L/Min (123 SCFM)
  ³/₄" 5500 L/Min (194 SCFM)
- 1" 5700 L/Min (201 SCFM)



### **Construction Materials**

- Body: 316L Stainless Steel
- Porous element: 316 Stainless Steel

Product Code	Size	CV	A	В	Weight (kg)
1BRESN102	1/8"	1.3	31	14	0.015
2BRESN102	1/4"	1.7	38	17	0.02
3BRESN102	3/8"	2.0	44	22	0.032
4BRESN102	1/2"	3.7	55	24	0.05
6BRESN102	3/4"	5.8	70	32	0.12
8BRESN102	1″	6.0	75	36	0.15











# 4500 Series Ancillary Products - 1/8" to 1/4" 'Bug Screen' port vents

316L Stainless Steel sintered elements used to protect vent ports open to the atmosphere.

### **Features and Benefits**

- Specifically designed for severe environments
- Ambient Temperature Range -20 °C to +70° C
- 316L Stainless Steel

### **Working Temperature Range**

• -20 °C to +70 °C (-4 °F to +158 °F)

### **Working Pressure**

• 12 bar (174 psi)

### **Ports NPT**

• 1/8" to 1/4"

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases

### **Construction Materials**

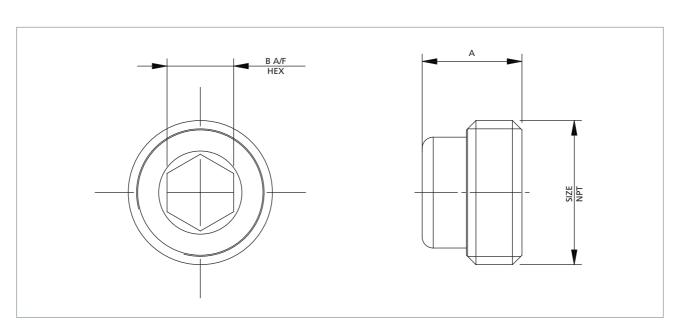
• Body: 316L Stainless Steel



Product Code	Size	cv	Weight (kg)
1VPBSN122	<sup>1</sup> /8"	1.3	0.015
2VPBSN122	1/4"	1.7	0.02

### **Ordering Information**

Product Code	Size	A	В
1VPBSN122	1/8"	6	5
2VPBSN122	1/4″	9	6







### **Service and Support**

# **rotork**Site Services

Rotork staff are dedicated to providing client support across all Rotork divisions with the aim of maximising the client production cycle. These teams are based out of service centres around the world and are complemented by factory-trained agents.

Our expert technicians support Rotork customers, allowing us to deliver on our promise of global solutions backed by local service.

We provide a full range of flow control services:

- Emergency and planned service
- Actuator overhauls
- Health checks
- Preventative maintenance
- Retrofitting actuators to existing valves
- Shutdown outages
- Certified inspection and safety checks
- Factory fitting of actuators to new valves
- Plant optimisation
- Repairs and upgrades
- Loan actuator service
- System Integration projects
- Automation projects

Visit www.rotork.com to identify your nearest Rotork Site Services centre.

#### **Client Support Programme**

Rotork offers a premium level of product reliability and availability through the flexible Client Support Programme (CSP). Designed to facilitate the highest production demands while providing a tiered approach to maintenance, the CSP is committed to reducing maintenance downtime and costs.



Through consultation, the CSP is tuned to deliver the optimum level of maintenance through predictive maintenance algorithms.

#### Features of the CSP are:

- Fixed term prices for Rotork products and services
- Customisable cover based on equipment criticality to production
- Equipment performance related targets for reliability and availability
- Priority support with customisable response times
- Fully parts and labour inclusive, no additional costs or discounted labour and parts
- Fix or replace options
- Periodic equipment performance and status reports
- · Built-in regular health checks on all equipment

### Benefits of the CSP include but are not limited to:

- Year-on-year reduced maintenance costs
- · Easy budget management
- Maximised production resulting in reduced downtime
- · Year-on-year improved reliability and availability
- Optimised resource usage to accelerate in-house projects
- Reduced lifecycle costs







### **Service and Support**

#### **Preventative maintenance**

To maximise plant up-time and minimise operating costs we offer clients a range of preventative maintenance programmes. We tailor the service in every case to reflect the type of actuators in service, the availability of asset information and the criticality of the plant.

#### **Automation projects**

This is a growing requirement and some of our service teams have the wide range of skills necessary to offer a "one-stop-shop" to automate part or all of a customer's process. Our capabilities cover all of the installation phases (scoping, design, procurement, manufacturing, installation, commissioning) on the broad scopes that typically surround actuation projects.

#### **Emergency and planned service**

We provide a full range of actuator services, covering any type of actuator in any location, including hazardous environments. Our services include installation, commissioning and upgrading as well as connection and installation of bus communication systems. We are also skilled at troubleshooting and repairing damaged or deteriorating assets. Depending on your requirements, we can offer guaranteed emergency response times or planned response.

### **Shutdown outages**

For those customers who run tightly-scheduled shutdowns, we engage closely in the project to help meet demanding deadlines. A typical example might involve our staff removing large numbers of actuators, overhauling them in our workshops and re-commissioning them as part of the maintenance of a larger unit.

### Factory fitting of actuators to new valves

The careful assembly of valve and actuator is critical to ensure that an automated valve performs correctly and reliably. Whilst this service is often carried out by valve manufacturers, if there is a need we can provide this service.



#### **Health checks**

To help customers understand the state of their plant and assets, to better inform maintenance and replacement decisions, we offer full inspection and reporting. In addition to a detailed and intrusive inspection of the actuators, we offer extra insights from our original factory build data.

### Retrofitting actuators to existing valves

We have extensive experience in fitting actuators to valves, penstocks and dampers that are already installed as part of existing plant. Whether customers are replacing obsolete actuators, changing power sources or motorising manual valves, we offer a tailor made solution to meet customers' specific requirements.

#### **Actuator overhauls**

After a long service life it is sometimes preferable to overhaul rather than replacing actuators. In our workshops we completely strip and rebuild actuators, returning them to their original state.









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