

SB27 (G 1/4, G 3/8)

Features

- Shavo's Filter/Regulator combination model SB27 unit for process control is designed as a high-performance product for instrument air use in corrosive atmosphere.
- Applications include marine environments, oil and gas production, chemicals and food processing, medical analysis etc.
- SIL3 capable as per IEC 61508.
- CE, ATEX, EAC Ex (CUTR 12), EAC(CUTR 10) approved.
- All External parts are NACE MR 0175* approved.

(*National Association of Corrosion Engineers MR-0175 defines requirements for sulphide stress cracking resistant materials used in oilwells and corrosive environments).

PARAMETERS	SPECIFICATIONS
Fluid	Compressed Air
Pipe size	1/4", 3/8"
Port Thread	NPT - Standard BSPT, BSP - Optional
Max. Inlet Pressure	30 bar (435 psi)
Max. Operating Temp. (Ambient)	80° C
Filter Element Size	25 micron - Standard 5, 40 micron - Optional
Filter Element Material	SS 316 - Std. Sintered Bronze - Optional
Material of Construction	Stainless Steel as per AISI 316L
Body, Bonnet, Bowl	SS 316L with NACE compliance (MR 0175)
Internal parts	SS 316L
External parts	SS 316L with NACE compliance (MR 0175)
Diaphragm Assembly	Synthetic Rubber with PTFE - Standard
Elastomers	Low Temp. Nitrile (LNBR) -60°C to +80°C (Std) EPDM -35°C to +120°C Fluorocarbon (Viton-FKM) -20°C to +180°C
Bowl Capacity	160 ml.
Regulated secondary pressure ranges	1.0 to 10.0 bar (15.0 - 150 psi) - Standard 0.4 to 4.0 bar (6.0 - 60 psi) - Optional 0.86 to 8.6 bar (12.5 - 125 psi) - Optional 1.70 to 17.5 bar (25 - 250 psi) - Optional 0.21 to 2.10 bar (3 - 30 psi) - Optional
Standard Nominal Flow Rate at 10 bar (150psi)inlet pressure 6 bar (87 psi) set pr. and a drop of 1 bar(14.5 psi)from set	1/4" - 74 scfm (35 dm ³ /sec) 3/8" - 173 scfm (82 dm ³ /sec)
CV Value	1/4" - (1.39) 3/8" - (3.26)
Drain	Manual - Standard
Type	Relieving - Standard Non-Relieving - Optional
Pressure Adjustment	Hex Head adjusting screw - Standard 'T' Handle - Optional
Gauge Port (2 nos.)	1/4" NPT (Fe) - Standard 1/4" BSPT (Fe) - Optional
Gauge size (dial size)	50 mm (Nominal)
Mounting	P.M. NUT - Standard Wall Mounting Bracket - Optional
Weight	2.0 Kgs.

Pressure Gauge (scale) : Kg/cm² (PSI) - Standard (For Domestic Market)
Bar (PSI) - Standard (Export)

Pressure Gauge MOC : Bourdon Tube and Socket Back Connection are SS316, Rest other components are SS304

Size	Flow (scfm)	Element (um)	Drain	Bowl	Range (psi)	Operation	Model
G1/4"	74 scfm (35 dm ³ /sec)	25 SS	Manual	Metal	15 - 150 psi	Relieving	SB27-201-M8MA-NHA
G3/8"	173 scfm (82 dm ³ /sec)	25 SS	Manual	Metal	15 - 150 psi	Relieving	SB27-301-M8MA-NHA

+ Values indicated are with 40 micron elements, with finer elements these values will be lower.

Note:

- Pressure gauge will not have CE, EAC, SIL3 and NACE MR 0175 approval.
- Pressure gauge will have ATEX approval.
- PM nut, mounting bracket, grub screw will not have NACE MR 0175 approval.



SB27 (G 1/4, G 3/8)

Option Selector

Sample Model Number → **S B 2 7 - 2 0 0 - M G L A - N H - X X X - X X X**

Position → **0 1 2 3 - 4 5 6 - 7 8 9 10 - 11 12 - 13 14 15 - 16 17 18**

0 S = Shavo

1 Product B = Filter Cum Regulator Combination Unit

2 3 Series Midi Series - All SS 316L unit

4 Port Size 2 = 1/4"
3 = 3/8"

5 6 Size

	Low Temp. Nitrile ELASTOMER		EPDM ELASTOMER		VITON ELASTOMER	
	REL	NON REL	REL	NON REL	REL	NON REL
No Gauge	04	14	[01]	[11]	[02]	[12]
With Gauge (SS) (with ATEX approval)	25	35	[22]	[32]	[23]	[33]

7 Drain M = Manual

8 Filter Element

	Porous Plastic	Sintered Bronze	S.S. 316
5 micron	1	4	7
25 micron	2	5	8
40 micron	3	6	9



9 Sec.Pr.Range

C	0.21 to 2.10 bar (3 - 30 psi)
F	0.40 to 4.0 bar (6 - 60 psi)
L	0.86 to 8.6 bar (12.5 - 125 psi)
M	1.0 to 10.0 bar (15 - 150 psi)
*[S]	1.70 to 17.5 bar (25 - 250 psi)

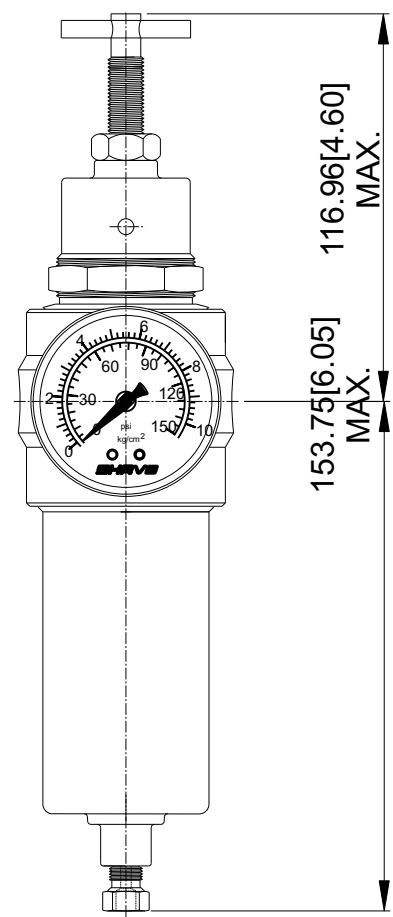
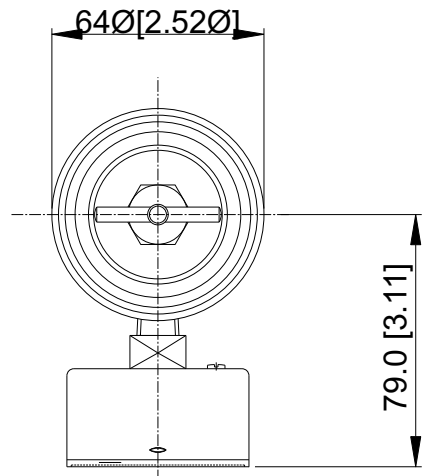
10 Port Thread

	Main Port	Gauge Port
A	NPT	BSPT
B	BSPT	BSPT
G	BSP	BSPT
N	NPT	NPT

11 Mounting & Accessories

N	No Mounting Bracket	 STANDARD	 2" PIPE
B	Wall Mounting Bracket Fitted (SS316L)		
[P]	2" Pipe Mounting Bracket Fitted(SS316L)		

12 Pr.Adjustment
T = T handle (SS316L)
H = Hex headed screw (SS316L)



SB27 (G 1/4, G 3/8)

13 | 14 | 15 Test / Approval

A	0	0	ATEX
A	0	1	UKEX
A	0	2	UKCA
A	0	3	ATEX, UKEX, EAC Ex, UKCA
A	0	4	ATEX, UKEX, EAC Ex
A	0	5	ATEX, UKEX, UKCA
A	0	6	ATEX, UKEX, EAC Ex
B	0	0	ATEX, CE
B	0	1	ATEX, CE, UKEX, EAC Ex, UKCA
B	0	2	ATEX, CE, UKEX, EAC Ex
B	0	3	ATEX, CE, UKEX, UKCA
B	0	4	ATEX, CE, UKCA, EAC Ex
B	0	5	ATEX, CE, EAC Ex
C	0	0	CE
C	0	1	CE, UKEX, EAC Ex, UKCA
C	0	2	CE, UKEX, EAC Ex
C	0	3	CE, UKEX, UKCA
C	0	4	CE, EAC Ex, UKCA
C	0	5	CE, EAC Ex
D	0	0	ATEX, EAC
D	0	1	ATEX, EAC, UKEX, EAC Ex, UKCA
D	0	2	ATEX, EAC, UKEX, EAC Ex
D	0	3	ATEX, EAC, UKEX, UKCA
D	0	4	ATEX, EAC, EAC Ex, UKCA
E	0	0	EAC
E	0	1	EAC, UKEX, EAC Ex, UKCA
E	0	2	EAC, UKEX, EAC Ex
E	0	3	EAC, UKEX, UKCA
E	0	4	EAC, EAC Ex, UKCA
F	0	0	ATEX, SIL3
F	0	1	ATEX, SIL3, UKEX, EAC Ex, UKCA
F	0	2	ATEX, SIL3, UKEX, EAC Ex
F	0	3	ATEX, SIL3, UKEX, UKCA
F	0	4	ATEX, SIL3, EAC Ex, UKCA
F	0	5	ATEX, SIL3, EAC Ex
G	0	0	CE, EAC
G	0	1	CE, EAC, UKEX, EAC Ex, UKCA
G	0	2	CE, EAC, UKEX, EAC Ex
G	0	3	CE, EAC, UKEX, UKCA
G	0	4	CE, EAC, EAC Ex, UKCA
H	0	0	CE, SIL3
H	0	1	CE, SIL3, UKEX, EAC Ex, UKCA
H	0	2	CE, SIL3, UKEX, EAC Ex
H	0	3	CE, SIL3, UKEX, UKCA
H	0	4	CE, SIL3, EAC Ex, UKCA
H	0	5	CE, SIL3, EAC Ex
J	0	0	EAC, SIL3
J	0	1	EAC, SIL3, UKEX, EAC Ex, UKCA
J	0	2	EAC, SIL3, UKEX, EAC Ex
J	0	3	EAC, SIL3, UKEX, UKCA
J	0	4	EAC, SIL3, EAC Ex, UKCA
K	0	0	CE, EAC, SIL3

SB27 (G 1/4, G 3/8)

K	0	1	CE, EAC, SIL3, UKEX, EAC Ex, UKCA
K	0	2	CE, EAC, SIL3, UKEX, UKCA
K	0	3	CE, EAC, SIL3, UKEX, EAC Ex
K	0	4	CE, EAC, SIL3, EAC Ex, UKCA
L	0	0	ATEX, EAC, SIL3
L	0	1	ATEX, EAC, SIL3, UKEX, EAC Ex, UKCA
L	0	2	ATEX, EAC, SIL3, UKEX, EAC Ex
L	0	3	ATEX, EAC, SIL3, UKEX, UKCA
L	0	4	ATEX, EAC, SIL3, EAC Ex, UKCA
M	0	0	ATEX, CE, SIL3
M	0	1	ATEX, CE, SIL3, UKEX, EAC Ex, UKCA
M	0	2	ATEX, CE, SIL3, UKEX, EAC Ex
M	0	3	ATEX, CE, SIL3, UKEX, UKCA
M	0	4	ATEX, CE, SIL3, EAC Ex, UKCA
N	0	0	ATEX, CE, EAC
N	0	1	ATEX, CE, EAC, UKEX, EAC Ex, UKCA
N	0	2	ATEX, CE, EAC, UKEX, EAC Ex
N	0	3	ATEX, CE, EAC, UKEX, UKCA
N	0	4	ATEX, CE, EAC, EAC Ex, UKCA
[O]	[0]	[0]	Other customer special requirement if Any
P	0	0	ATEX, CE, EAC, SIL3
P	0	1	ATEX, CE, EAC, SIL3, UKEX, EAC Ex, UKCA
P	0	2	ATEX, CE, EAC, SIL3, UKEX, EAC Ex
P	0	3	ATEX, CE, EAC, SIL3, UKEX, UKCA
P	0	4	ATEX, CE, EAC, SIL3, EAC Ex, UKCA
Q	0	0	ATEX, EAC Ex
R	0	0	EAC Ex
R	0	1	EAC Ex, UKEX, UKCA
R	0	2	EAC Ex, UKCA
S	0	0	SIL3
S	0	1	SIL3, UKEX, EAC Ex, UKCA
S	0	2	SIL3, UKEX, EAC Ex
S	0	3	SIL3, UKEX, UKCA
S	0	4	SIL3, EAC Ex, UKCA
V	0	0	ATEX, CE, SIL3, EAC Ex
V	0	1	ATEX, CE, SIL3, EAC Ex, UKEX, UKCA
V	0	2	ATEX, CE, SIL3, EAC Ex, UKEX
V	0	3	ATEX, CE, SIL3, EAC Ex, UKCA
X	X	X	STANDARD UNITS WITHOUT ANY CERTIFICATE / APPROVAL
Y	0	0	ATEX, SIL3, EACEx
y	0	1	ATEX, SIL3, EACEx, UKEX, UKCA
Y	0	2	ATEX, SIL3, EAC Ex, UKEX
Y	0	3	ATEX, SIL3, EACEx, UKCA
Z	0	1	CE, SIL3, EAC Ex, UKEX, UKCA
Z	0	2	CE, SIL3, EAC Ex, UKEX
Z	0	3	CE, SIL3, EAC Ex, UKCA

SB27 (G 1/4, G 3/8)

[16] [17] [18] Compliance

X	X	X	Standard Unit Without any Complince
A	0	1	RoHS 3 Compliance
A	0	2	REACH Compliance
A	0	3	Copper Free (Only Applicable Aluminium Version)
A	0	4	RoHS3, REACH Compliance
A	0	5	RoHS3, REACH, Copper Free (Only Applicable for Aluminium Version)
A	0	6	RoHS3, Copper Free (Only Applicable for Aluminium Version)
A	0	7	REACH, Copper Free (Only Applicable for Aluminium Version)

Note : Options shown in [] bracket are special, please contact manufacturing.

* [S] option available with Hex headed pressure adjustment only.