

AIR FILTER / REGULATOR

SB37 (G1/4, G 3/8)

Features

- Shavo's Filter/Regulator combination model SB37 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.
- CE, EAC[CU TR10(equivalent to GOST R&K)] approved
- SIL3 capable as per IEC 61508
- 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"
Pipe Thread	NPT - Standard BSPT, BSP - Optional
Max. Inlet Pressure	with Metal bowl Manual drain - 435 psig (30 bar) with Metal bowl Automatic drain - 150 psig (10.5 bar)
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 without PTFE
Elastomers	Low Temp. Nitrile (LNBR) -60°C to +80°C EPDM -35°C to +120°C Fluorocarbon (Viton-FKM) -20°C to +180°C Nitrile (NBR) -20°C to +80°C
Bowl Capacity	100 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" - 156 scfm (74 dm ³ /sec)
CV Value	1/4" - (1.40) 3/8" - (2.94)
Drain	Manual - Standard Automatic - Optional
Type	Relieving - Standard Non-Relieving - Optional
Pressure Adjustment	Hex Head Adjusting screw - Standard. 'T' Handle - Optional
Gauge Port (2 nos.)	1/4" BSPT (Fe) - Standard 1/4" NPT (Fe) - Optional
Gauge size (dial size)	50 mm (Nominal)
Mounting	P.M. NUT - Standard Wall Mounting Bracket - Optional
Weight	1.80 Kgs.

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

Note :

- 1) Pressure gauge will not have CE, EAC, SIL3 and NACE MR 0175 approval.
- 2) PM nut, mounting bracket, grub screw will not have NACE MR 0175 approval.
- 3) Automatic drain available with Nitrile elastomer only.

Size	Flow (scfm)	Element (um)	Drain	Bowl	Range (psi)	Operation	Model
G1/4"	74 scfm (35 dm ³ /sec)	25 SS	Manual	Metal	12 - 125 psi	Relieving	SB37-200-M7LA-NHE
G3/8"	156 scfm (74 dm ³ /sec)	25 SS	Manual	Metal	12 - 125 psi	Relieving	SB37-300-M7LA-NHE

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



SB37 (G1/4, G 3/8)

Option Selector

Sample Model Number → **S B 3 7 - 2 0 0 - M 7 L A - N T - 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 37 = All SS 316L unit (casted)

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

5 6 OPTIONS

	Low Temp. Nitrile ELASTOMER		EPDM ELASTOMER		VITON ELASTOMER		NITRILE ELASTOMER	
	REL	NON REL	REL	NON REL	REL	NON REL	REL	NON REL
No Gauge	80	90	[20]	[30]	[40]	[50]	[00]	[10]
With Gauge(SS316) without any approvals	81	91	[21]	[31]	[41]	[51]	[01]	[11]

7 Drain
M = Manual
A = Automatic (available with Nitrile elastomers only)

8 Filter Element


	Sintered Bronze	S.S.316
5 micron	4	7
25 micron	5	8
40 micron	6	9

9 Sec.Pr.Range
C = 0.21 to 2.10 bar (3.0 - 30 psi)
F = 0.40 to 4.00 bar (6.0 - 60 psi)
L = 0.86 to 8.60 bar (12.5 - 125 psi)
M = 1.00 to 10.0 bar (15.0 - 150 psi)
*[S] = 1.70 to 17.5 bar (25.0 - 250 psi)

10 Port Thread

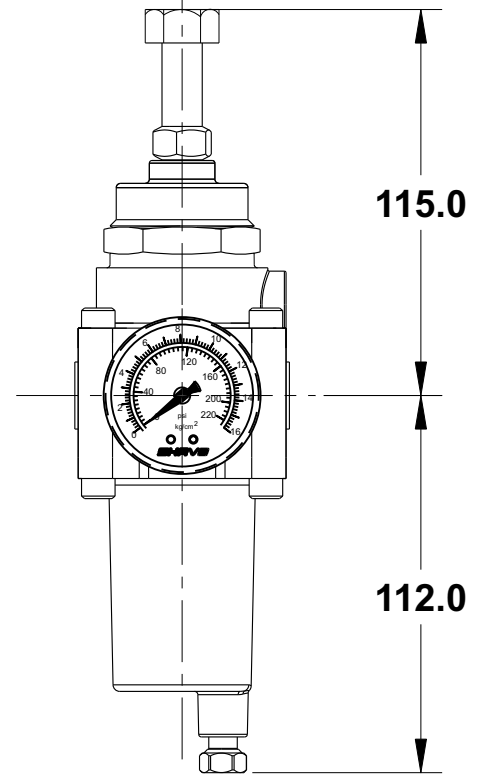
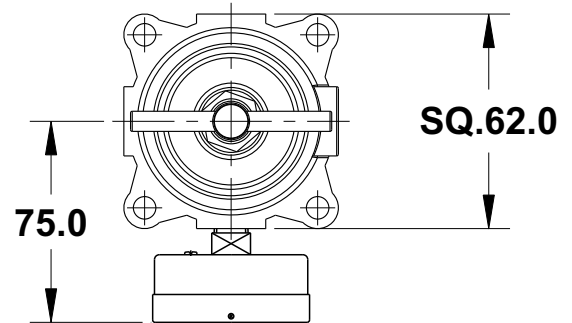
	Main Port	Gauge Port
A	NPT	BSPT
B	BSPT	BSPT
G	BSP	BSPT
N	NPT	NPT

11 Mounting
N No Mounting Bracket
B Wall Mounting Bracket Fitted (SS316)
[P] 2" Pipe Mounting Bracket Fitted(SS316)



STANDARD

12 Pr.Adjustment
H = Hex Headed Screw (SS 316L)
T = T handle (SS316L)



SB37 (G1/4, G 3/8)

13 14 15 Test / Approval

C	0	0	CE
C	0	1	UKCA
C	0	2	CE,UKCA
E	0	0	EAC
E	0	1	EAC, UKCA
S	0	0	SIL3
S	0	1	SIL3, UKCA
G	0	0	CE, EAC
G	0	1	CE, EAC, UKCA
H	0	0	CE, SIL3
H	0	1	CE, SIL3, UKCA
K	0	0	CE, EAC, SIL3
K	0	1	CE, EAC, SIL3, UKCA
X	X	X	Standard Units Without Any Certificatio / Approval
[O]	[0]	[0]	Other Customer Special Requirement if Any

16 17 18 Compliance

X	X	X	Standard Unit Without any Compliance
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.