

## SB60 (G 1/4, G 3/8, G1/2, G 3/4, G 1)

### Features

- Shavo's Filter/Regulator combination unit for process control is an efficient space saving design for general applications in compressed air systems where effective contamination filtration, liquid water removal and controlled pressure is required.
- CE, ATEX, EAC Ex (CUTR 12), EAC(CUTR 10) approved.
- SIL3 capable as per IEC 61508.

| PARAMETERS   | SPECIFICATIONS  |
|--|---|
| Fluid  | Compressed Air  |
| Pipe Sizes   | 1/4", 3/8", 1/2", 3/4", 1"  |
| Pipe Threads   | BSP - Standard<br>BSPT, NPT - Optional  |
| Maximum inlet Pressure   | 17.5 bar (250 psig)   |
| Max. Operating Temp. (Ambient)   | 80° C   |
| Filter Element Size  | 25 micron - Std.      5,40 micron - Optional  |
| Filter Element Material  | Sintered Bronze - Standard<br>Porous Plastic - Optional   |
| Material of Construction   | Aluminium Alloy die-cast.   |
| Body, Bonnet, Bowl   | Aluminium, SS304, SS316L, Acetal resin, Nylon, Brass etc  |
| Internal parts   | SS 316L   |
| External parts   | SS 316L   |
| Diaphragm Assembly   | Synthetic Rubber without PTFE - Standard  |
| Elastomers   | Low Temp. Nitrile (NBR) -40°C to +80°C (Std)<br>EPDM -35°C to +120°C<br>Fluorocarbon (Viton-FKM) -20°C to +180°C  |
| Bowl Capacity  | 270 ml.   |
| Regulated secondary pressure ranges  | 1.0 to 10.0 bar (15.0 - 150 psi) - Standard<br>0.4 to 4.0 bar ( 6.0 - 60 psi ) - Optional<br>0.87 to 8.75 bar (12.5 - 125 psi) - Optional<br>0.21 to 2.10 bar (3 - 30 psi) - Optional<br>1.70 to 17.5 bar (25 - 250 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" - 104 scfm (50 dm <sup>3</sup> /sec)<br>3/8" - 177 scfm (84 dm <sup>3</sup> /sec)<br>1/2" - 272 scfm (130 dm <sup>3</sup> /sec)<br>3/4", 1" - 383 scfm (182 dm <sup>3</sup> /sec)  |
| CV Value   | 1/4" - (1.96)<br>3/8" - (3.43)<br>1/2" - (7.02)<br>3/4", 1" - (7.24)  |
| Drain  | Manual - Standard   |
| Regulator Type   | Relieving - Standard    Non - Relieving - Optional  |
| Pressure Adjustment  | Hex headed screw - Std      T handle - Optional   |
| Gauge Port   | 1/8" BSPT (Fe) - Standard<br>1/8" NPT (Fe) - Optional   |
| Gauge size (dial size)   | 50 mm (Nominal) - Std.  |
| Mounting   | Panel Mounting - Standard<br>Mounting Bracket - Optional  |
| Weight   | 1.40 Kgs.   |

Pressure Gauge (scale) : Kg/cm<sup>2</sup> (PSI) - Standard (For Domestic Market)  
Bar (PSI) - Standard (Export)

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

Note: Pressure gauge will have the ATEX approval.

Pressure gauge will not have CE, EAC, SIL3 and NACE MR0175 approval.

| Size  | Flow (scfm)                            | Element (um) | Drain  | Bowl  | Range (psi)  | Operation | Model               |
|-------|--|--------------|--------|-------|--------------|-----------|---------------------|
| G 1/4 | 104 scfm<br>(50 dm <sup>3</sup> /sec)  | 25           | Manual | Metal | 12 - 125 psi | Relieving | SB60N-2G-M7D/RNLN-A |
| G 3/8 | 177 scfm<br>(84 dm <sup>3</sup> /sec)  | 25           | Manual | Metal | 12 - 125 psi | Relieving | SB60N-3G-M7D/RNLN-A |
| G 1/2 | 272 scfm<br>(130 dm <sup>3</sup> /sec) | 25           | Manual | Metal | 12 - 125 psi | Relieving | SB60N-4G-M7D/RNLN-A |
| G 3/4 | 383 scfm<br>(182 dm <sup>3</sup> /sec) | 25           | Manual | Metal | 12 - 125 psi | Relieving | SB60N-6G-M7D/RNLN-A |
| G 1   | 383 scfm<br>(182 dm <sup>3</sup> /sec) | 25           | Manual | Metal | 12 - 125 psi | Relieving | SB60N-8G-M7D/RNLN-A |



## SB60 (G 1/4, G 3/8, G1/2, G 3/4, G 1)

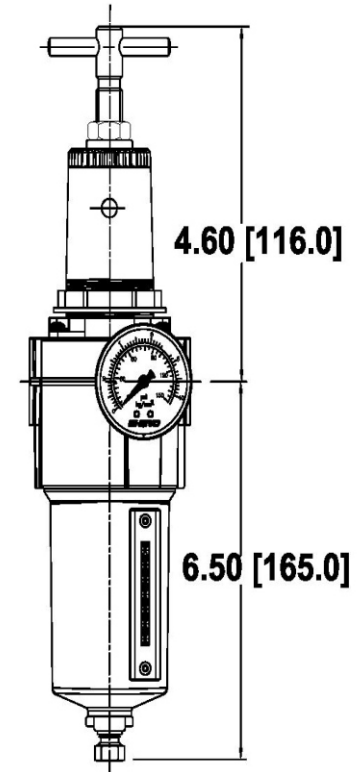
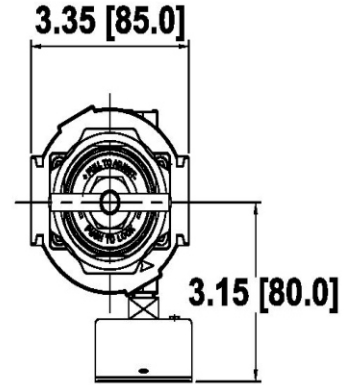
### Option Selector

Sample Model Number → **S B 6 0 T - 4 B - M 7 D / R G M N - 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 19**

- 0** Position: **S** = Shavo
- 1** Product: **B** = Filter Cum Regulator Combination Unit
- 2 3** Series: **60** = "Vayu" - 1/2" Basic
- 4** Type:
  - L** = Low Temp.Nitrile Elastomers - T handle (SS316L)
  - [F]** = EPDM Elastomers- T handle (SS316L)
  - [W]** = Fluorocarbon (Viton)Elastomers- T handle (SS316L)
  - [H]** = Low Temp.Nitrile Elastomers -Hex headed screw (SS316L)
  - [Q]** = EPDM Elastomers-Hex headed screw (SS316L)
  - [U]** = Fluorocarbon (Viton)Elastomers-Hex headed screw (SS316L)
- 5** Size:
  - 2** = 1/4"
  - 3** = 3/8"
  - 4** = 1/2"
  - 6** = 3/4"
  - [8]** = 1" (with external Aluminium adaptor)
- 6** Port Thread:
 

|          | Main Port | Gauge Port |
|----------|-----------|------------|
| <b>A</b> | NPT       | BSPT       |
| <b>B</b> | BSPT      | BSPT       |
| <b>G</b> | BSP       | BSPT       |
| <b>N</b> | NPT       | NPT        |
- 7** Drain: **M** = Manual
- 8** Filter Element:
  - 1** = 05 M Porous Plastic
  - 2** = 25 M Porous Plastic
  - 3** = 40 M Porous Plastic
  - 6** = 05 M Sintered Bronze
  - 7** = 25 M Sintered Bronze
  - 8** = 40 M Sintered Bronze
- 9** Bowl:
  - D** = Metal Bowl with Sight Glass
  - [M]** = Metal Bowl without Sight Glass
- 10** Relief:
  - R** = Relieving
  - N** = Non - Relieving
- 11** Gauge:
  - N** = No Pr. Gauge
  - G** = With Pr. Gauge(SS316)(50mm (with ATEX approved))
- 12** Sec. Pr. Range:
  - C** = 0.21 to 2.10 bar ( 3.0 - 30 psi )
  - F** = 0.4 to 4.0 bar ( 6.0 - 60 psi )
  - L** = 0.86 to 8.6 bar (12.5 - 125 psi)
  - M** = 1.0 to 10.0 bar (15.0 - 150 psi)
  - \*[S]** = 1.70 to 17.5 bar (25 - 250 psi)
- 13** Mounting & Accessories:
  - N** = No MTG. bracket
  - B** = Wall bracket Fitted(S.S.316)
  - L** = With 'L' type bracket (S.S.316)



## SB60 (G 1/4, G 3/8, G1/2, G 3/4, G 1)

14 | 15 | 16 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                  |

## SB60 (G 1/4, G 3/8, G1/2, G 3/4, G 1)

|     |     |     |   |
|-----|-----|-----|---|
| 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                            |

## SB60 (G 1/4, G 3/8, G1/2, G 3/4, G 1)

17 18 19 Compliance

|   |   |   |   |
|---|---|---|---|
| X | X | X | Standard Unit Without any Complinance                             |
| 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.