

# STAUFF



## Hydraulic Accessories

Local solutions for  
individual customers  
worldwide



- Comprehensive choice
- Immediate delivery
- High quality standard

The STAUFF hydraulic accessories programme has been carefully designed to offer a range of components suited to the demands of building hydraulic systems in most industrial and mobile applications.

Whether you require simple filler breathers or precise electrical level switches, flow control valves or complete filter units; the STAUFF accessories range should provide you with the choice you need.

At STAUFF we are aware of the ongoing development and innovation within the hydraulic industry.

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We strive to keep up with and further develop the latest technology and to bring the benefit of any such improvements directly to the customer.

Additionally we are always prepared to consider custom built products, if you have a special need.

We ensure that your most urgent requirements are met by keeping a large and comprehensive stockholding both in Germany and in our overseas locations.

These products are subject at all times to our EN ISO 9001:2000 Quality Management Systems.

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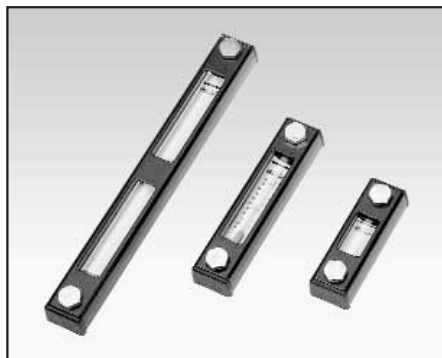
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**Distributors and warehouses  
in all industrial countries.**

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In the past you found information about our Spin-on-filters product range here.  
This information now has been summarized in our new catalogue "Spin-on-filters", please contact STAUFF or your local distributor for your personal copy.



## Area of Application:

Visual fluid level indication in hydraulic reservoirs

## Characteristics:

- suitable for hydraulic oil HL and HLP
- option available with dial thermometer with probe or thermo switch (Page 6)
- UV-resistant

Please consult our office before using SNA with fluids such as biological oils, diesel fluids or gasoline. Special requirements (specific chemical resistance, particular UV-stability or special sizes) on request.

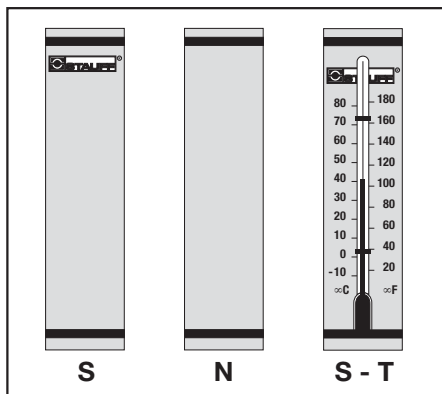
## Technical Data:

Temperature range:  $-30^{\circ}\text{C} \dots +80^{\circ}\text{C}$   
 Calibration of capillary tube thermometer:  
 SNA 076  $+20^{\circ}\text{C} \dots +80^{\circ}\text{C}$   
 SNA 127/176/254/305  $-10^{\circ}\text{C} \dots +80^{\circ}\text{C}$   
 Calibration of dial thermometer with probe:  
 $0^{\circ}\text{C} \dots +100^{\circ}\text{C}$   
 Tank pressure: 1 bar max  
 Recommended tightening torque: 8 Nm

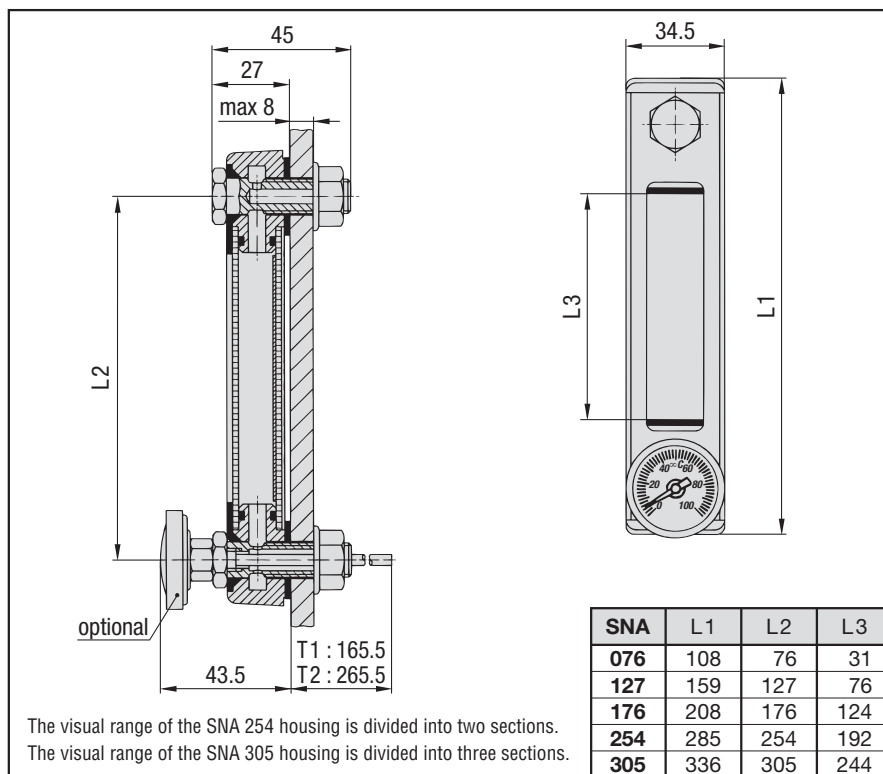
## Materials:

Housing: St 12 (black epoxy)  
 Plugs, Sight tube: PA  
 Scale Plates: PVC

## Design of scale plates



## Dimensions



## Ordering Code

**SNA 127 B - S - O - 12 - O - 60**

Type	
SNA	

Series	
076	SNA 076
127	SNA 127
176	SNA 176
254	SNA 254
305	SNA 305

Seal material	
B	NBR (standard)
V	FPM

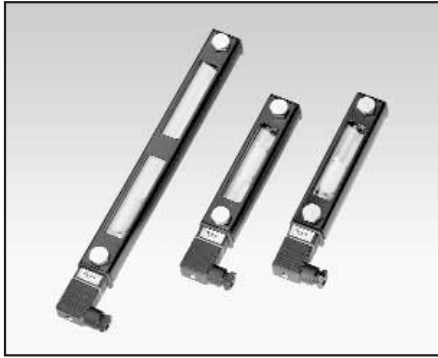
Design of scale plate	
S	with STAUFF-Logo
N	neutral
X	Special executions

Switching Temperature	
60	60°C/140°F
70	70°C/150°C
80	80°C/176°F

Thermo Switch TS-SNA/SNK	
for size M12 only not in conjunction with thermometer T1 and T2	
(none)	without thermo switch
O	Break Contact (n/c), standard plug
OD	Break Contact (n/c), desina plug

Banjo bolt	
12	M12 (standard)
10	M10

Thermometer	
Dial thermometer with probe T1/T2 for size M12 only	
O	without thermometer
T	Capillary tube thermometer on scale plate
T1	Dial thermometer with 200 mm probe
T2	Dial thermometer with 300 mm probe



## Area of Application:

Visual / electrical fluid level indication in hydraulic reservoirs

## Characteristics:

- suitable for hydraulic oil HL and HLP
- option available with dial thermometer with probe or thermo switch (Page 6)
- UV-resistant
- available either as a break contact or make contact
- with plug according to DIN EN 175301-803-B/ISO6952 (industry standard) or with plug according to IEC 61076-2-101 M12 (type CD and OD)

**Please consult our office before using SNA with fluids such as biological oils, diesel fluids or gasoline. Special requirements (specific chemical resistance, particular UV-stability or special sizes) on request.**

## Technical Data:

Temperature range:  $-30^{\circ}\text{C} \dots +80^{\circ}\text{C}$   
 Calibration of dial thermometer with probe:  
 $0^{\circ}\text{C} \dots +100^{\circ}\text{C}$   
 Tank pressure: 1 bar max  
 Recommended tightening torque: 8 Nm  
 Please allow a minimum spacing of 10 mm between other components.

## Materials:

Housing: AL (plastic coated)  
 Plugs, Sight tube: PA  
 Float: PA

## Electrical Connections and Functions

Contact load:  
 max 10 W (Type C)  
 max 5 W (Type O)

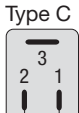
Bias-reducing Potential:  
 50 V AC/DC

Current contact:  
 max 0.25 A (both types)

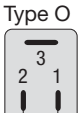
Type C and O:  
 connection 3  
 not engaged

Type CD and OD:  
 connection 2  
 not engaged


Type C



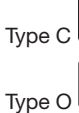
Type O




Type CD and OD




View A



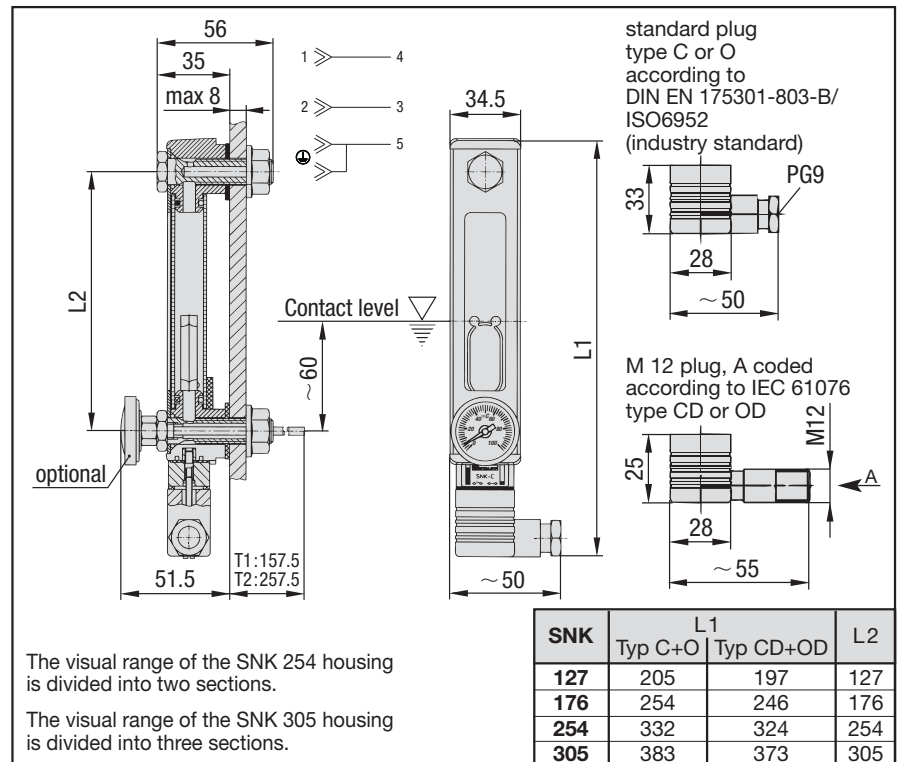
Type C



Type O



## Dimensions



## Ordering Code

When assembling the electrical contacts the orientation of the electrical switch (right or left hand side) for type C and O can be chosen according to the requirements. For type CD and OD the orientation is set to right hand side. Other requirements on request.

**SNK 127 V - C - O - 12 - O - 60**

**Type**

SNK

**Series**

127	SNK 127
176	SNK 176
254	SNK 254
305	SNK 305

**Seal material**

V FPM (standard)

**Electrical function**

C	Make contact, closes at minimum level (n/o), standard plug
O	Break contact, opens at minimum level (c/o), standard plug
CD	Make contact, closes at minimum level (n/o), M12 plug
OD	Break contact, opens at minimum level (c/o), M12 plug

**Switching Temperature**

60	60°C/140°F
70	70°C/150°C
80	80°C/176°F

**Thermo Switch TS-SNA/SNK**  
 for size M12 only  
 not in conjunction with thermometer T1 and T2

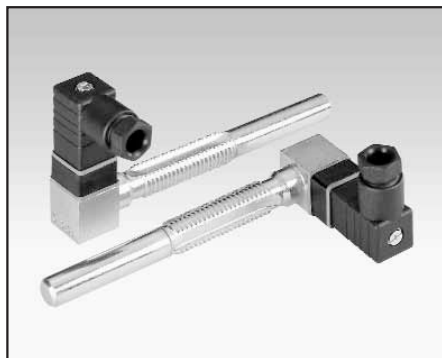
(none)	without thermo switch
O	Break Contact (n/c), standard plug
OD	Break Contact (n/c), M12 plug

**Banjo bolt**

12	M12 (standard)
10	M10

**Thermometer**  
 Dial thermometer with probe T1/T2  
 for size M12 only

O	without thermometer
T1	Dial thermometer with 200 mm probe
T2	Dial thermometer with 300 mm probe



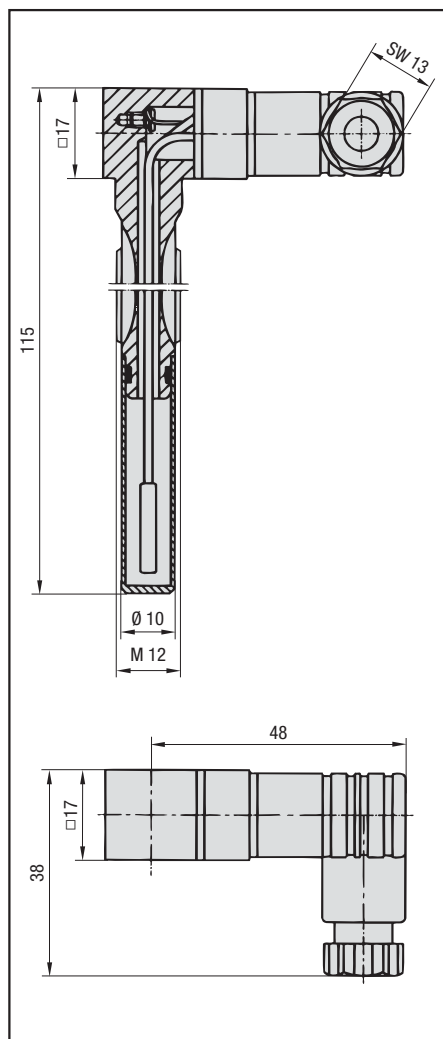
**Area of Application:** Oil temperature indication in conjunction with STAUFF level gauges SNA and SNK

## Characteristics/Materials:

- available with 60°C, 70°C or 80°C switching temperature
- Activation takes place when the respective switching temperature is exceeded.
- Electrical function: break contact
- With plug according to DIN EN 175301-803-B/ISO6952 (industry standard) or with plug according to IEC 61076 - 2-101 M12 (type OD)
- Steel parts made out of steel (1.0718)
- Plastic parts made out of glass fibre reinforced Polyamide

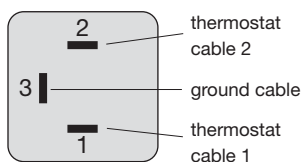
**Thermo switches are available for the standard mounting size M 12 only.**

## Dimensions



## Technical Data

Switching temperature: see ordering code  
Hysteresis: 20° C  
Switching temperature tolerance:  $\pm 5^\circ\text{C}$ .



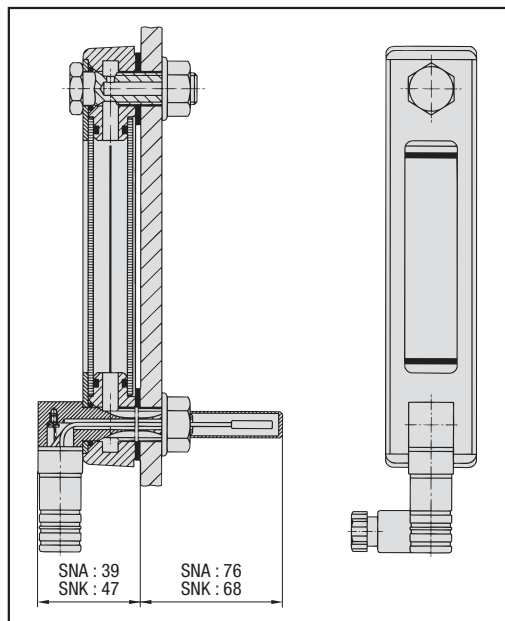
### Alternating current

- max voltage 250 V
- max current at 10.000 operations  
2.5 A at  $\cos \varphi = 1.0$   
1.6 A at  $\cos \varphi = 0.6$
- max current at 100.000 operations  
0.5 A at  $\cos \varphi = 1.0$   
 $\approx 0.25$  A at  $\cos \varphi = 0.6$
- min voltage 50 mA

### Direct current

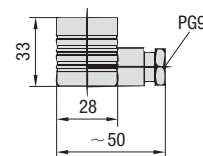
- max voltage 42 V
- max current at 10.000 circuits 1 A

## Example of application

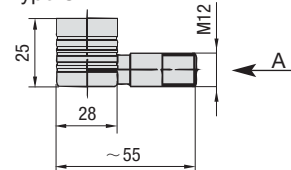


## Option plug

standard plug type O according to DIN EN 175301-803-B/ISO6952 (industry standard)



M 12 plug, A coded according to IEC 61076 type OD



see page 5 for electrical connections and functions

## Ordering Code and Switching temperatures

**TS - SNA / SNK - O - 60**

### Type

**TS** Thermo Switch

### Series

**SNA / SNK**

### Switching temperature

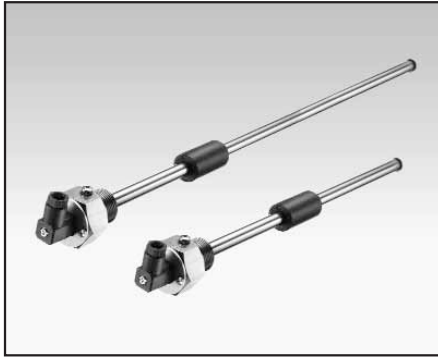
<b>60</b>	60°C / 140°F
<b>70</b>	70°C / 158°F
<b>80</b>	80°C / 176°F

### Electrical function

<b>O</b>	Break Contact (n/c), standard plug
<b>OD</b>	Break Contact (n/c), M12 plug

Thermo switches can be ordered both as a single component and in combination with STAUFF level gauges SNA and SNK. See pages 4 and 5.





## Area of Application:

Electrical level and temperature indication

## Characteristics:

- suitable for mineral oil and HFC fluids, other fluids on request
- either 1 or 2 level contacts available
- 1 integrated temperature sensor
- standard electrical function:  
Level contacts: normally closed, opens with falling level  
Temperature contact: normally closed, opens with rising temperature

**STAUFF Level-Temperature switches SLTS are available with other electrical functions on request.**

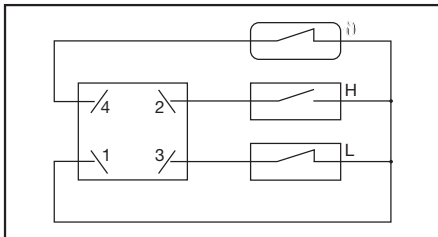
## Technical Data

Stem:	Brass
Float/Seal:	NBR
max operating temperature:	80°C
max operating voltage:	see ordering code
max current (level contact):	0.5 A
max current (temperature contact):	2.0 A
contact load level contact:	10 VA
system of protection:	IP65
Hysteresis:	12°C

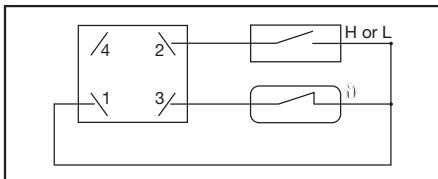
**Level contact positions (L, H) are set as given in the chart. They can be adjusted individually later on.**

**Please consider a minimum distance of 40 mm between the switching points.**

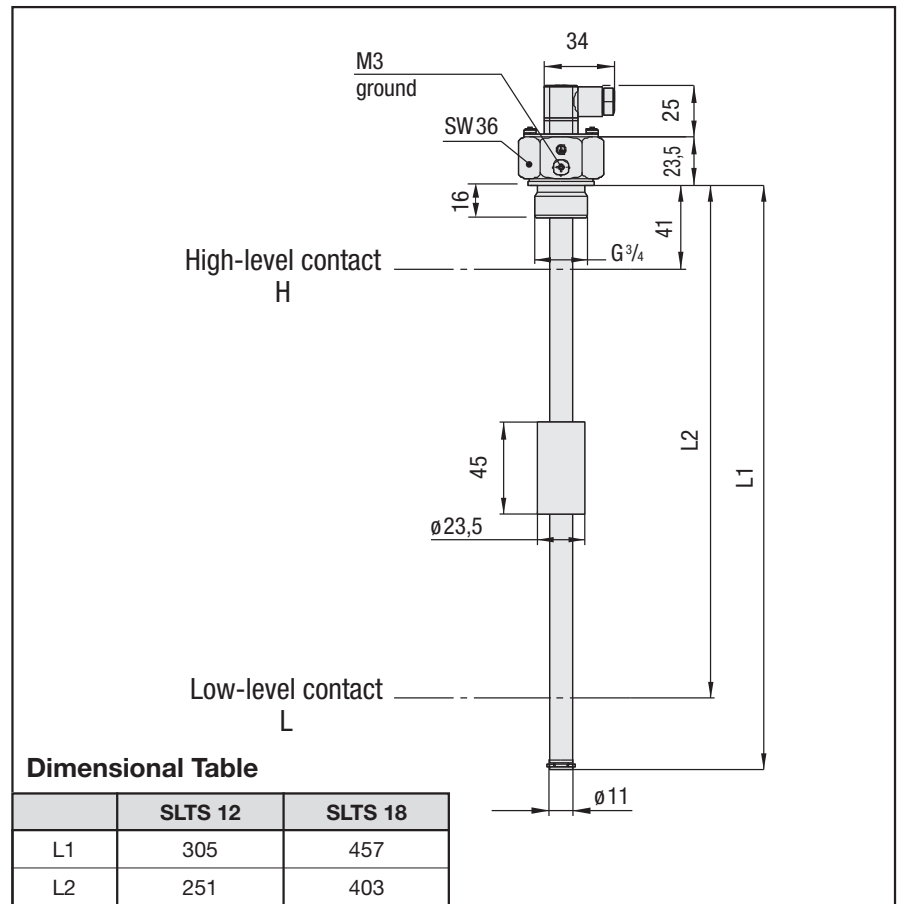
## Wiring Scheme for type 2LH



## Wiring Scheme for type 1L or 1H



## Dimensions



**Dimensional Table**

	SLTS 12	SLTS 18
L1	305	457
L2	251	403

## Ordering Code

SLTS 12 - 140 - 2LH - B12 - G048	
<b>Type</b> SLTS Level-temperature switch	<b>Voltage (Volt AC/DC)</b> G048 48 Volt max (standard) G115 115 Volt max (for thread N16 only)
<b>Stem Length</b> 12 305 mm 18 457 mm	<b>Thread</b> B12 G <sup>3</sup> / <sub>4</sub> (standard) N16 1 NPT (only on request)
<b>Switching temperature</b> 140 60°C / 140°F 158 70°C / 158°F O without temperature switch	<b>Number of level switches</b> 1 1 level switch (L, H)* 2 2 level switch (LH) * please indicate level position(s): L = low, H = high



## Area of Application: Fluid control and flow shut-off

- DV: in both directions
- DRV: in direction A-B (free flow in reverse direction)

## Characteristics/Materials:

- designed for in-line mounting
- suitable for mineral oil
- Nuts for panel-mounting are available on request
- Housing: Steel (1.0715), zinc-plated (Fe/Zn 8 C)
- Turning knob: Polyamide

**Please consult our office before using with other fluids, or for special stainless steel material.**

## Technical Data:

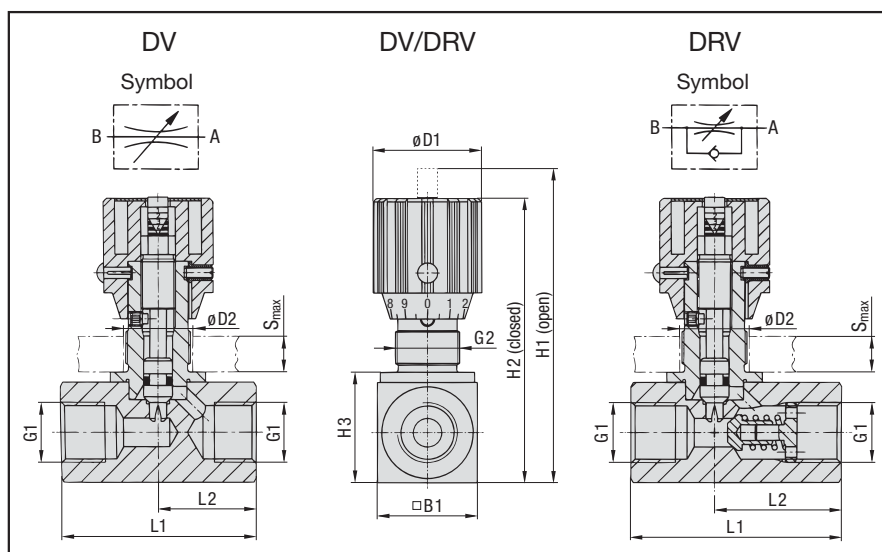
max Working Pressure  $p_N$ : 350 bar

Temperature  $t_{max}$ : 100°C

Opening Pressure DRV:

0.5 bar (4.5 bar on request)

## Dimensions



## Dimensional Table

Nominal Size DN	G1		DV/DRV								DV			DRV		
	BSP	NPT	G2	H1	H2	H3	B1	D1	D2	S <sub>max</sub>	L1	L2	wt. (kg)	L1	L2	wt. (kg)
06	G 1/8	1/8 NPT	PG 7	68	63	18	16	24	13	3	38	19	0.12	45	26	0.13
08	G 1/4	1/4 NPT	PG 11	83.5	77.5	27	25	29	19	7	48	24	0.25	55	33.5	0.3
10	G 3/8	3/8 NPT	PG 11	90	83	32	30	29	19	7	58	29	0.4	65	41	0.45
12	G 1/2	1/2 NPT	PG 16	109.5	99.5	38.5	35	38	23	7	68	34	0.7	73	44	0.8
16	G 3/4	3/4 NPT	PG 16	128.5	118.5	48.5	45	38	23	7	78	39	1.2	88	57	1.3
20	G 1	1 NPT	PG 29	174	157	55	50	55	38	11	108	54	2.1	127	77	2.4
25	G 1 1/4	1 1/4 NPT	PG 29	184	167	65	60	55	38	11	108	54	2.8	143	93	3.5
30	G 1 1/2	1 1/2 NPT	PG 29	194	177	75	70	55	38	11	108	54	3.5	143	91	4.6
40	G 2	2 NPT	PG 29	214	197	95	90	55	38	11	—	—	—	165	111	7.7

## Ordering Code

**DV - 25 - P - B - SS**

**Type (in-line mounting)**

<b>DV</b>	Throttle and shut-off valve
<b>DRV</b>	Flow control valve

**Nominal size DN**

06	08	10	12	16	20	25	30	40 (only DRV)
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**Seal material**

<b>P</b>	NBR (standard)
<b>V</b>	FPM
<b>E</b>	EPDM

**Housing / spindle material**

(none)	Steel (standard)
<b>SS</b>	Stainless steel (1.4571)

**Thread form**

<b>B</b>	BSP (standard)
<b>N</b>	NPT (only on request)





## Area of Application: Fluid control and flow shut-off

- DVP: in both directions
- DRVP: in direction A-B (free flow in reverse direction)

## Characteristics/Materials:

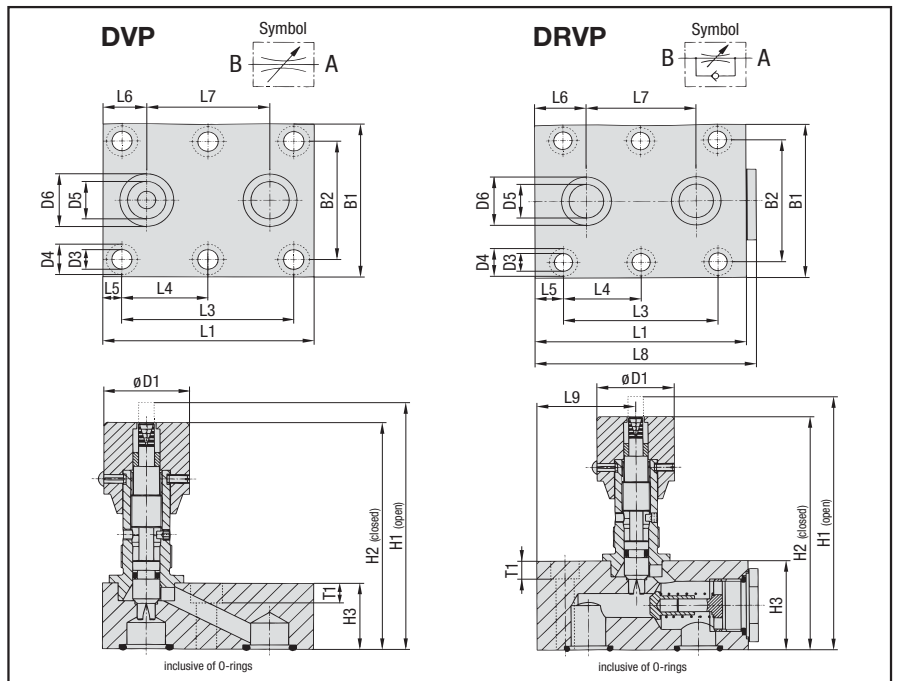
- designed for manifold mounting
- suitable for mineral oils
- Housing: Steel (1.0715), zinc-plated (Fe/Zn 8 C)
- Turning knob: Polyamide

**Please consult our office before using with other fluids, or for special stainless steel material.**

## Technical Data:

max Working Pressure  $p_N$ : 350 bar  
Temperature  $t_{max}$ : 100°C  
Opening Pressure DRVP:  
0.5 bar (4.5 bar on request)

## Dimensions



G2, D2 und  $S_{max}$   
see Dimensional Table DV/DRV (page 8)

## Dimensional Table

Nom. Size DN	DVP and DRVP													DVP										DRVP										wt. (kg)
	D1	D3	D4	D5	D6	L3	L4	L7	B1	B2	T1	O-Ring	L1	L5	L6	H1	H2	H3						L1	L5	L6	L8	L9	H1	H2	H3			
06	24	6.6	11	5	9.8	19	—	16	41.5	28.5	7	6.75x1.78	35	8	9.5	68	63	16	0.2				41.5	6.4	8	43	13.5	68	63	16	0.26			
08	29	6.6	11	7	12.4	35	—	25.5	46	33.5	7	8.5x2	47.5	6.5	11	79	72	20	0.4				63.5	14.2	16.7	65	31	79	72	20	0.5			
10	29	6.6	11	10	15.7	33.5	—	25.5	51	38	7	12x2	51	8.5	12.7	84	78	25	0.6				70	18	22	73	29.5	84	78	25	0.8			
12	38	6.6	11	13	18.7	38	—	30	57.5	44.5	7	15x2	75	18.5	22.5	100	89	25	1.0				80	21	25	84	36.5	107	96	32	1.2			
16	38	8.5	13.5	17	23.9	76	38	54	70	54	9	19x2.5	93.5	8.5	19.5	113	103	30	1.5				104	14	25.4	108	49	128	118	45	2.5			
20	55	8.5	13.5	22	30.5	95	47.5	57	76.5	60	9	25x3	111	8	27	169	152	45	3.4				127	16	35	131	49	174	157	50	3.9			
25	55	11	18	28.5	37.5	120	60	79.5	100	76	11	32x3	143	11	32	169	152	45	5.15				165	15	35.6	169	77	179	162	55	6.7			
30	55	14	20	35	43.5	143	71.5	95	115	92	13	38x3	171	15	39	174	157	50	7.5				186	15	38.8	190	85	199	182	75	11.0			
40	55	14	20	47.5	57.5	133.5	67	89	140	111	13	52x3	—	—	—	—	—	—	—				192	15	40.5	196	64	224	207	100	18.8			

## Ordering Code

<b>DVP - 25 - P - SS</b>																																												
<b>Type (manifold mounting)</b> <table border="1"> <tr> <td><b>DVP</b></td> <td>Throttle and shut-off valve</td> </tr> <tr> <td><b>DRVP</b></td> <td>Flow control valve</td> </tr> </table>															<b>DVP</b>	Throttle and shut-off valve	<b>DRVP</b>	Flow control valve	<b>Housing/spindle material</b> <table border="1"> <tr> <td>(none)</td> <td>Steel (standard)</td> </tr> <tr> <td><b>SS</b></td> <td>Stainless steel (1.4571)</td> </tr> </table>															(none)	Steel (standard)	<b>SS</b>	Stainless steel (1.4571)							
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<b>V</b>	FPM																																											
<b>E</b>	EPDM																																											



## Area of Application:

Fluid control and flow shut-off

## Characteristics/Materials:

- designed for direct installation into hydraulic control blocks
- suitable for mineral oils
- Housing: Steel (1.0715), zinc-plated (Fe/Zn 8 C)
- Standard thread form: BSP; NPT on request
- Turning knob: Polyamide

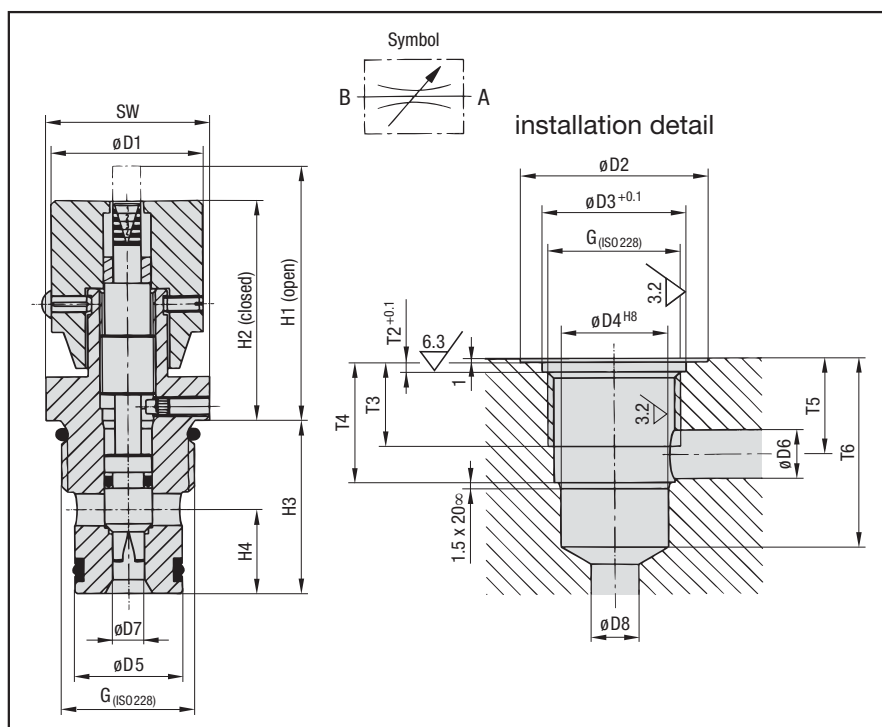
**Please consult our office before using with other fluids, or for special stainless steel material and other thread forms.**

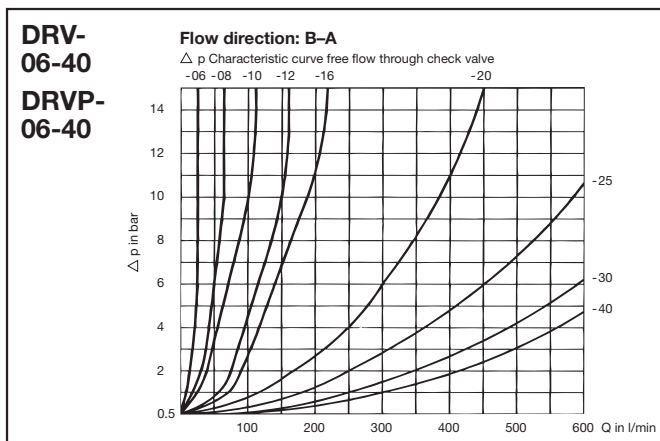
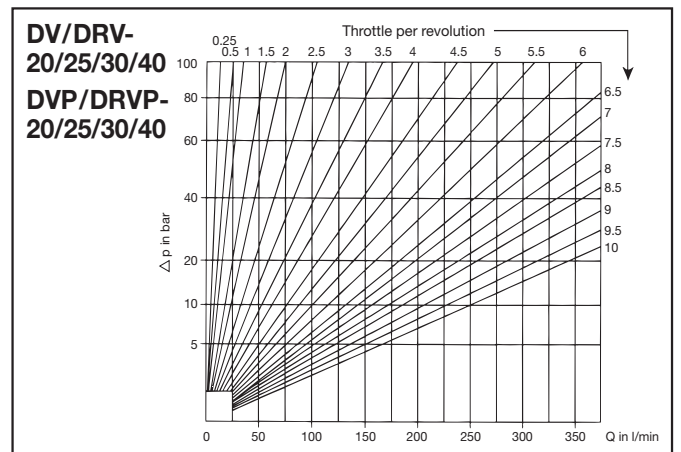
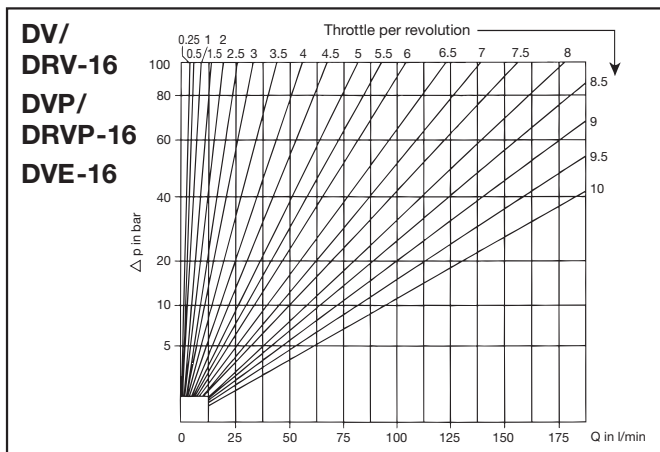
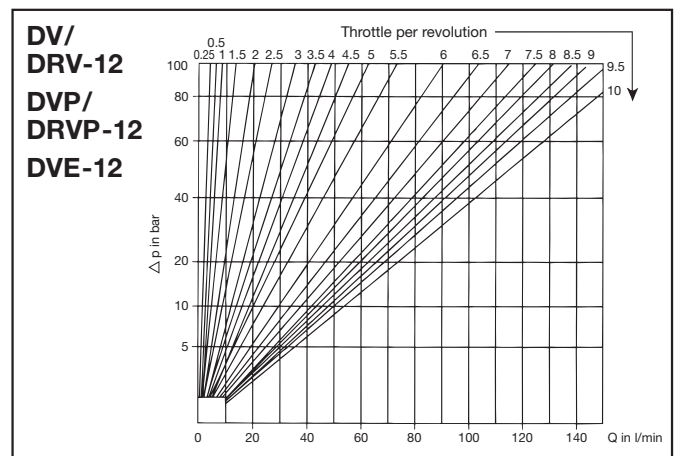
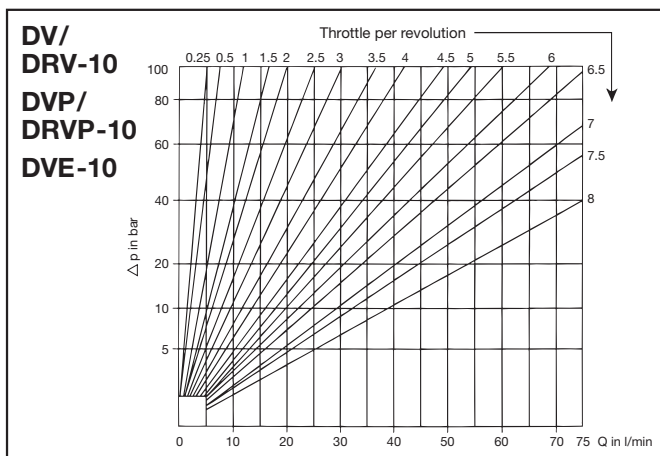
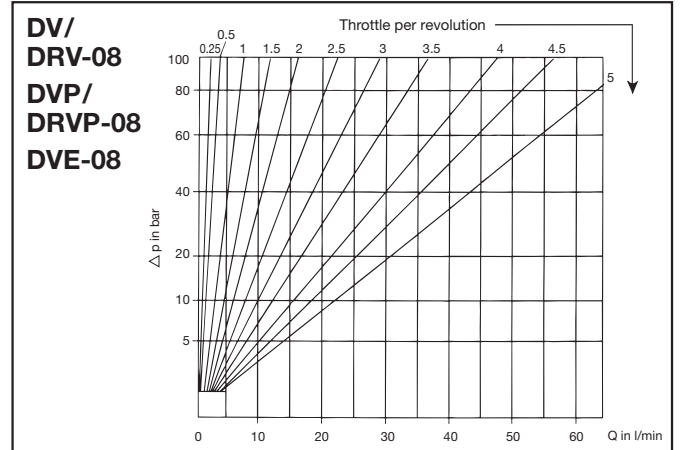
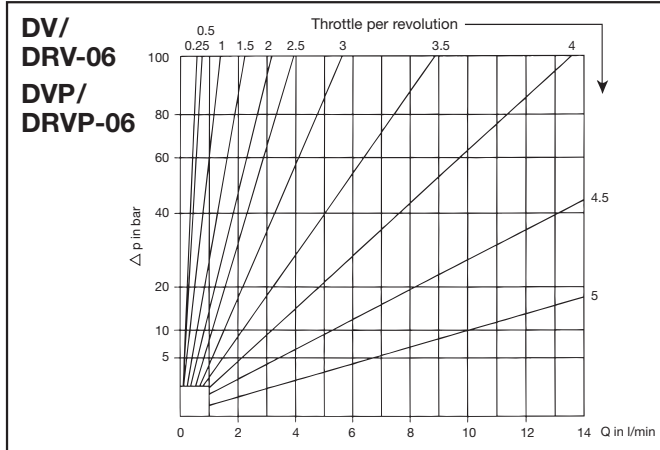
## Technical Data:

max Working Pressure  $p_N$ : 350 bar

Temperature  $t_{max}$ : 100°C

## Dimensions





STAUFF throttle and flow control valves are designed to shut off and control the flow of liquid media. The flow rate is regulated on a direct reading device by turning the handle from completely closed to fully open and is set by screws.

The increase in flow is also indicated by a colour and number scale. This is revealed on a central spindle emerging from the turning during operation.

The values given refer to a viscosity of 35 cSt.



## Area of Application:

Check valves allow a single-directional flow only.

## Characteristics/Materials:

- designed for in-line mounting
- suitable for mineral oil
- Housing: Steel (1.0715), zinc-plated (Fe/Zn 8 C)
- Standard thread form: BSP; NPT on request
- metal-to-metal seals

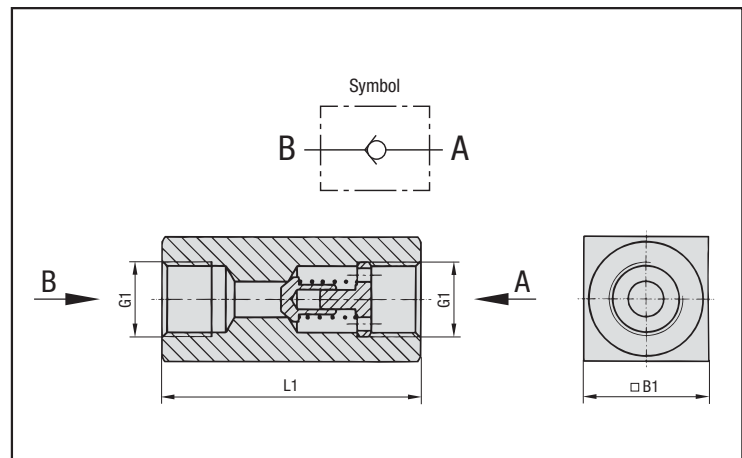
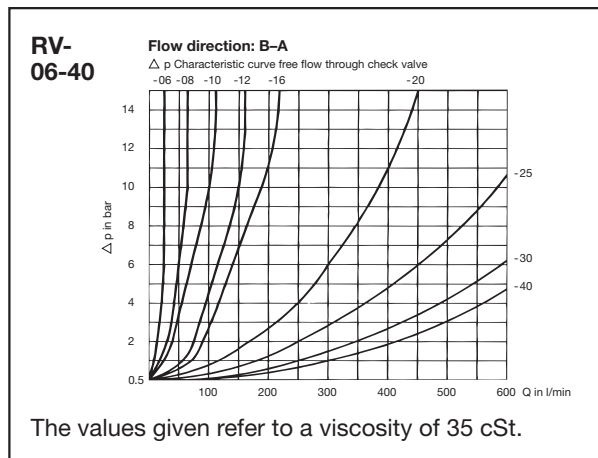
**Please consult our office before using with other fluids, or for special material and thread sizes.**

## Technical Data:

Temperature  $t_{max}$ : 100°C

Opening Pressure RV: 0.5 bar (4.5 bar on request)

## Dimensions



## Dimensional Table

Nominal Size DN	$p_N$ (bar)	BSP	G1	NPT	L1	B1	Weight (kg)
06	500	G 1/8		1/8 NPT	45	16	0.1
08	500	G 1/4		1/4 NPT	55	25	0.2
10	500	G 3/8		3/8 NPT	65	30	0.4
12	500	G 1/2		1/2 NPT	73	35	0.7
16	500	G 3/4		3/4 NPT	88	45	1.2
20	500	G 1		1 NPT	127	50	2.0
25	400	G 1 1/4		1 1/4 NPT	143	60	3.3
30	315	G 1 1/2		1 1/2 NPT	143	70	4.2
40	315	G 2		2 NPT	165	90	7.2

## Ordering Code

**RV - 25 - 07 - B - SS**

**Type**

RV	Check valve
----	-------------

**Nominal size DN**

06	08	10	12	16	20	25	30	40
----	----	----	----	----	----	----	----	----

**Opening pressure**

07	0.5 bar (7 PSI) (standard)
65	4.5 bar (65 PSI)

**Material**

(none)	Steel (standard)
SS	Stainless steel (1.4571)

**Thread size**

B	BSP (standard)
N	NPT (only on request)



## Area of Application:

Ventilation and tank filling

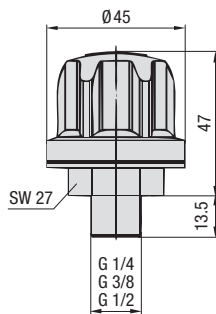
## Characteristics/Materials:

- available as screw-in or bayonet version
- non-corrosive
- Temperature range:  $-40^{\circ}\text{C} \dots +120^{\circ}\text{C}$
- Materials: glassfibre reinforced PA, basket PP
- Seals: NBR, others on request
- Air filter insert: see order table page 15

**Custom built combinations and special requirements available on request.**

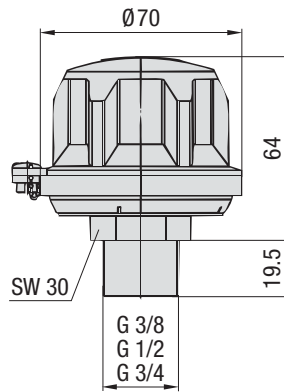
## Dimensions and Styles – Screw-in versions (Breathers)

**SPB 1**



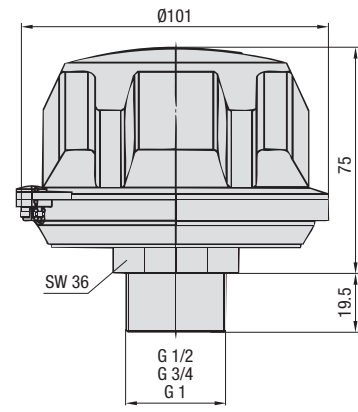
max Rate of Air flow: 0,15 m³/min

**SPB 2**



max Rate of Air flow: 0,4 m³/min

**SPB 3**

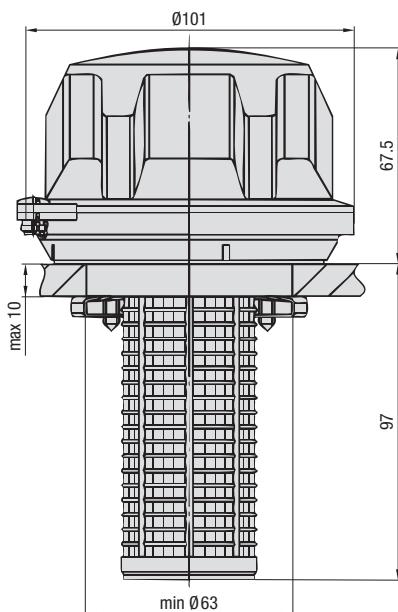


max Rate of Air flow: 1,0 m³/min

## Dimensions and Styles – Bayonet version (Filler Breathers)

**SPB 4**

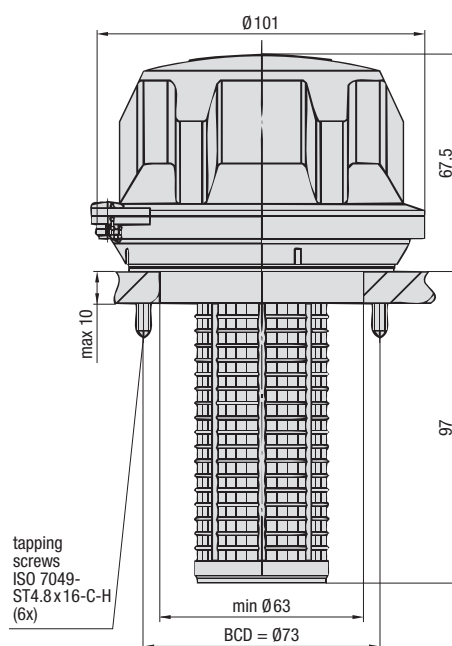
clamping jaw installation



max Rate of Air flow: 1,0 m³/min

**SPB 5**

six hole reservoir installation  
Interface similar to DIN 24557, part 2



max Rate of Air flow: 1,0 m³/min

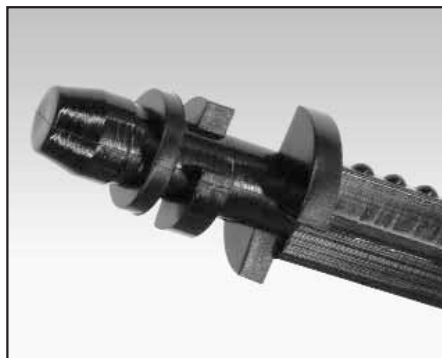
## Note: Installation of the SPB 5

In order to install the SPB 5, 6 holes on a 73 mm bolt circle diameter are necessary. Depending on the material thickness, we recommend the following dimensions for the mounting holes (see chart):

### recommended values

sheet thickness (mm)	hole size (mm)
1.2	4.0
2.0	4.1
3.15	4.3
4.0	4.3
5.0	4.4

Bolt delivery standard: Tapping screws (can optionally be replaced with normal M5 bolts by the customer).



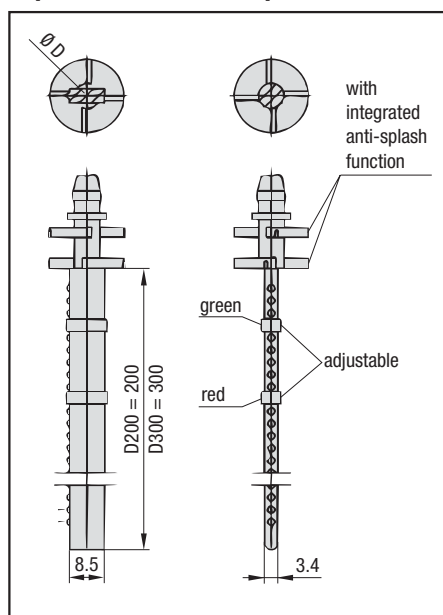
## Breather options:

- Dipsticks (material PA)
- Pressurised versions (for SPB 2 up to SPB 5)
- Baskets (for SPB 4 and SPB 5)
- Thread form NPT (for SPB 1 up to SPB 3)

**Special executions available on request.**

Photo: integrated anti-splash feature

## Dipsticks and Anti-splash feature



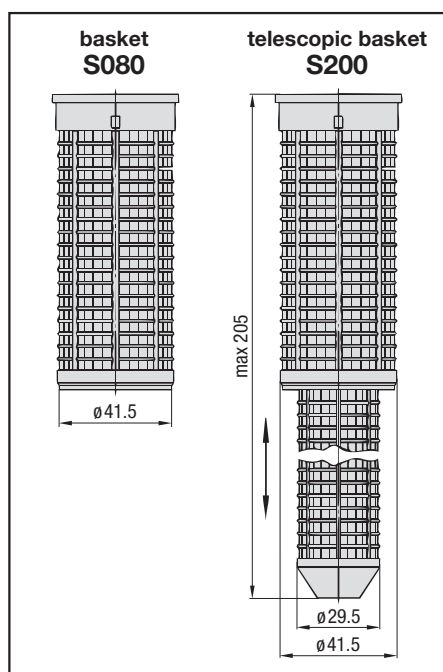
Adaptation form	for type	suitable dipstick	Dimension Ø D
<b>B04</b>	SPB 1	n/a	–
<b>B06</b>	SPB 1 + 2	DS-1	10
<b>B08</b>	SPB 1 – 3	DS-2	14
<b>B12</b>	SPB 2 + 3	DS-3	18
<b>B16</b>	SPB 3	DS-3	18
<b>S080</b>	SPB 4 + 5	DS-3	18
<b>S200</b>	SPB 4 + 5	DS-3	18
<b>X</b>	SPB 4 + 5	DS-3	18

For all filler breathers SPB 1 up to SPB 5, dipsticks (material Polyamide) are available as an option. All these dipsticks have an integrated anti-splash function. This anti-splash feature protects the SPB from backspilling fluid and avoids an early air filter breakdown. For filler breathers without dipstick the anti-splash function is achieved by an integrated concave baffle. Because of its small size the anti-splash function for the size 1 can only be achieved in conjunction with a dipstick. Depending on the chosen filler breather (see table above), dipsticks are available in two standard lengths (200 mm and 300 mm). Smaller dipstick sizes can be achieved by simply cutting down its length on site, according to individual requirements.

## Pressurised versions:

Optionally all filler breathers, except size 1, are available as pressurised breathers. In order to achieve an air flow, the tank pressure has to exceed the chosen pressure setting. This feature minimizes foaming and cavitation. Available pressure settings: 0.2 bar, 0.35 bar and 0.7 bar.

## Baskets for SPB 4 and 5



For the filler breathers SPB 4 and SPB 5, 80 mm and 200 mm baskets (material Polypropylene) are available as an option. All baskets have a reinforced 0.8 x 3.5 mm mesh. With the basket S080 and the telescopic basket S200, rough dirt particles are filtered out of the medium and a smooth flow into the tank is being ensured.



## Ordering Code

**SPB - S - 2 - 10 - B12 - A - D300**

Typ	
<b>SPB</b>	Plastic filler breather

Version	
(Pressurisation not available for SPB 1)	
<b>S</b>	without pressurisation (standard)
<b>P1</b>	pressurised at 0.20 bar
<b>P2</b>	pressurised at 0.35 bar
<b>P3</b>	pressurised at 0.70 bar

Group size			
size	version	cap diameter	max rate of air flow (m³/min)
<b>1</b>	screw-in version	45	0.15
<b>2</b>	screw-in version	70	0.4
<b>3</b>	screw-in version	101	1.0
<b>4</b>	single hole reservoir installation	101	1.0
<b>5</b>	six hole reservoir installation	101	1.0

Dipstick option	
(none)	without dipstick
<b>D200</b>	dipstick 200 mm
<b>D300</b>	dipstick 300 mm

Anti-splash option	
<b>A</b>	with anti-splash option (standard)
<b>O</b>	without anti-splash option

Connection	
<b>B04</b>	G <sup>1</sup> / <sub>4</sub> (for SPB 1)
<b>B06</b>	G <sup>3</sup> / <sub>8</sub> (for SPB 1 + 2)
<b>B08</b>	G <sup>1</sup> / <sub>2</sub> (for SPB 1 – 3)
<b>B12</b>	G <sup>3</sup> / <sub>4</sub> (for SPB 2 + 3)
<b>B16</b>	G1 (for SPB 3)
<b>S080</b>	basket (for SPB 4 + 5)
<b>S200</b>	telescopic basket (for SPB 4 + 5)
<b>X</b>	without basket (for SPB 4 + 5)

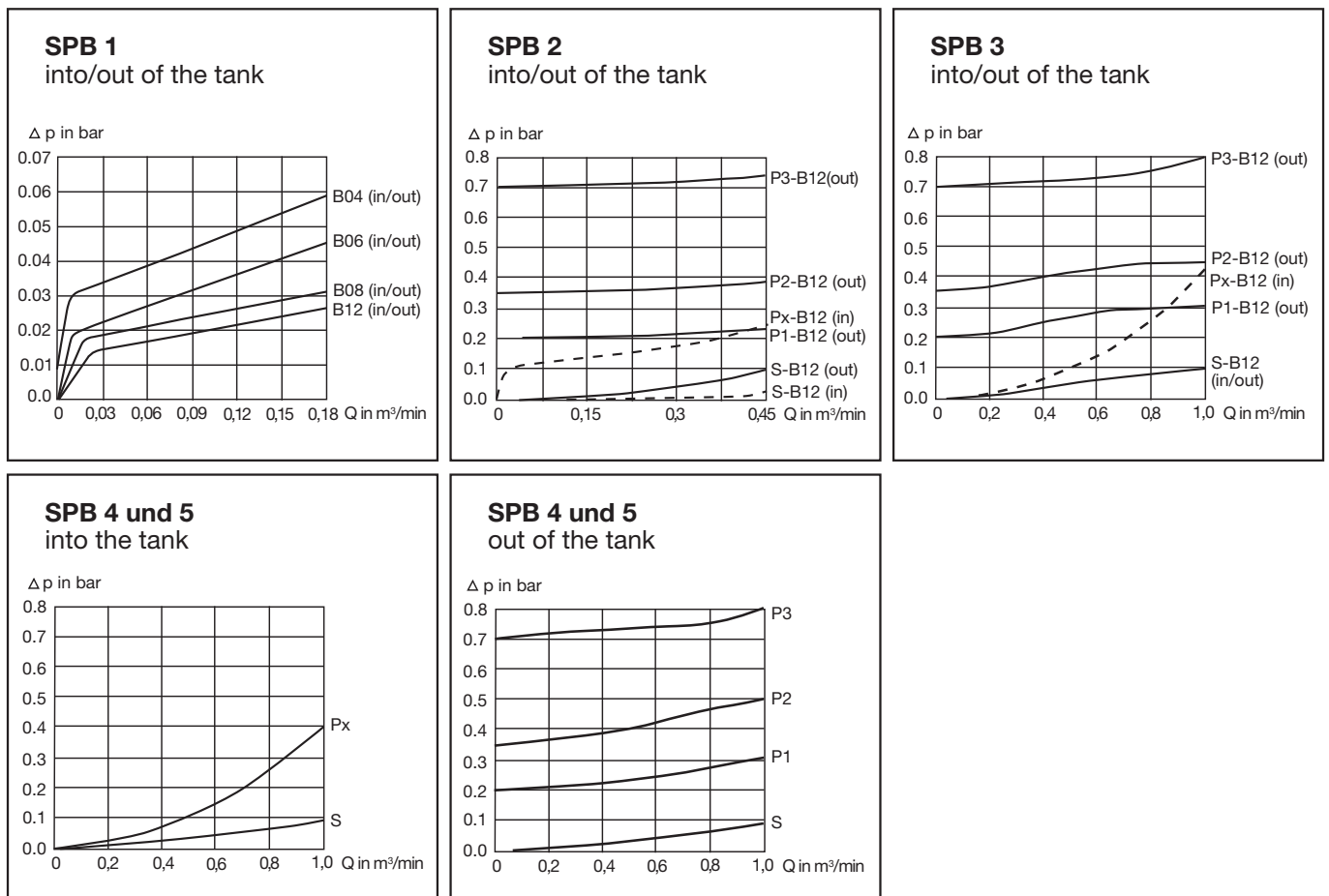
  

Micron rating and Filter material			
code	foam (PUR)	code	Inorganic glassfiber (only SPB 3,4 and 5)
<b>10</b>	10 µm PUR (standard)	<b>E03</b>	3 µm inorganic glass fiber (pleated)
<b>40</b>	40 µm PUR (on request)		

code	filter paper (only SPB 3,4 and 5)
<b>L10</b>	10 µm filterpaper (pleated)

other micron ratings or filtermaterial on request

## Airflow plastic filler breathers SPB 1 – 5





## Area of Application:

Ventilation and tank filling

## Characteristics/Materials:

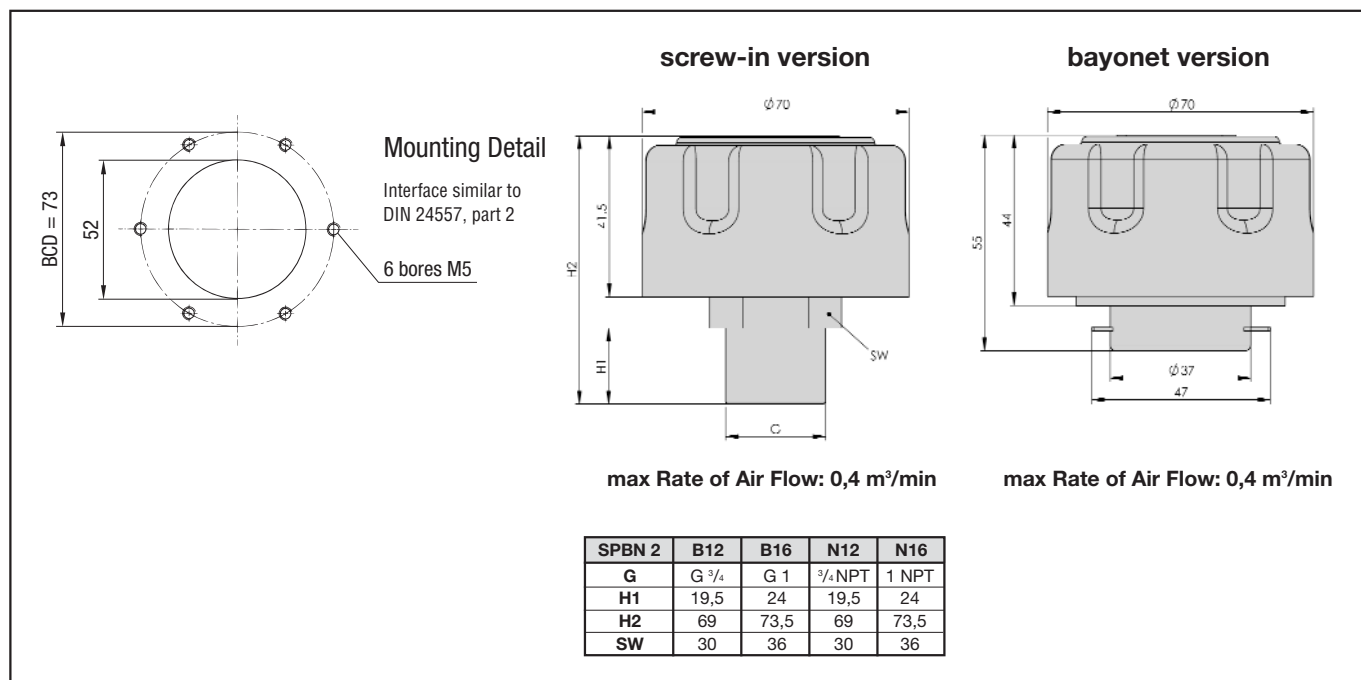
- available as screw-in or bayonet version
- non-corrosive
- Temperature range:  $-40^{\circ}\text{C} \dots +120^{\circ}\text{C}$
- Materials: glassfibre reinforced PA
- Seals: NBR, others on request
- Air filter insert: see order table page 17

## Options:

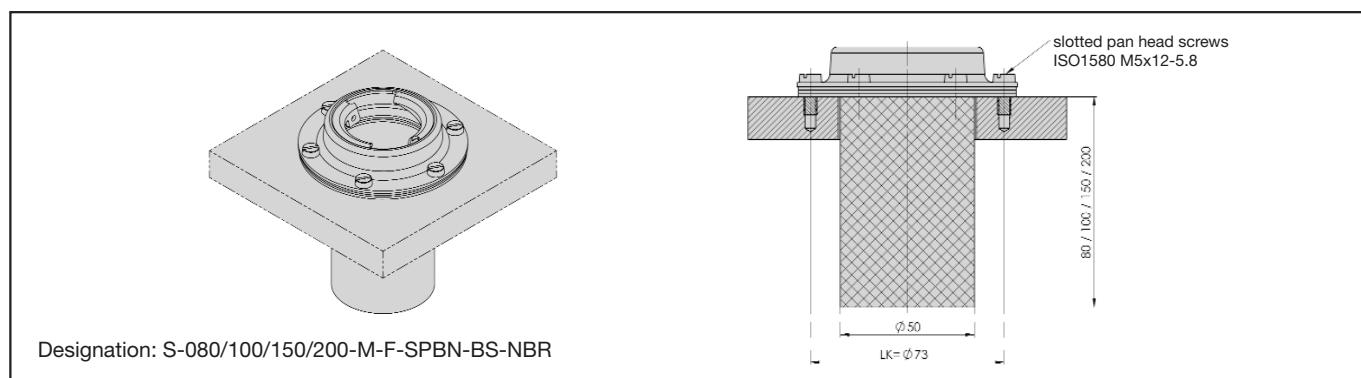
- Plastic dipsticks with integrated anti-splash function
- Metal basket (micron rating  $800\ \mu\text{m}$ )
- Thread style BSP and NPT available
- Pressurised at 0,20, 0,35 or 0,70 bar

**Custom built combinations and special requirements available on request.**

## Dimensions and Styles



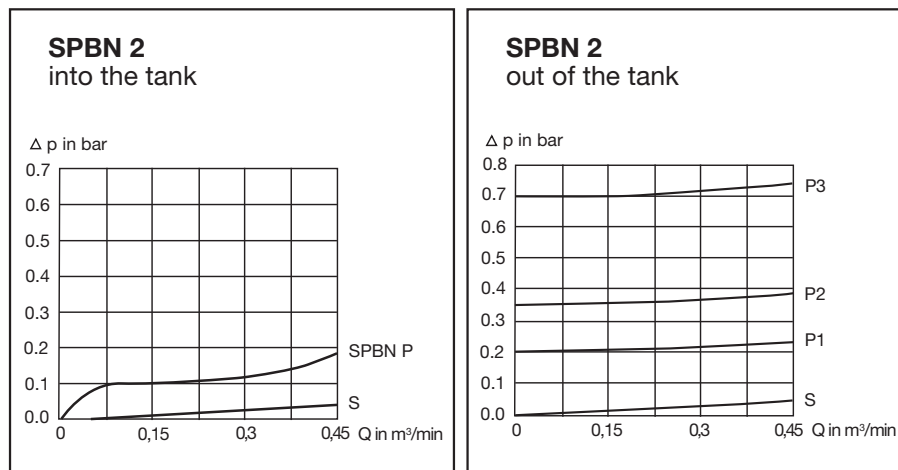
## Accessories: Mounting Adapter for Metal Basket



## Ordering Code

SPBN - S - 2 - 10 - B12 - A - D300																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left;">Type</th> </tr> <tr> <td style="width: 10%; background-color: #f2f2f2;"><b>SPBN</b></td> <td>Plastic Filler Breather - Narrow Version</td> </tr> </table>			Type		<b>SPBN</b>	Plastic Filler Breather - Narrow Version																		
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<b>A</b>	with anti-splash option (only for screw-in version)																							
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left;">Connection</th> </tr> <tr> <td style="width: 10%; background-color: #f2f2f2;"><b>B12</b></td> <td>G 3/4 BSP</td> </tr> <tr> <td style="background-color: #f2f2f2;"><b>B16</b></td> <td>G1 BSP</td> </tr> <tr> <td style="background-color: #f2f2f2;"><b>N12</b></td> <td>3/4 NPT (on request)</td> </tr> <tr> <td style="background-color: #f2f2f2;"><b>N16</b></td> <td>1 NPT (on request)</td> </tr> <tr> <td style="background-color: #f2f2f2;"><b>BS</b></td> <td>Bayonet version (without accessories)</td> </tr> <tr> <td style="background-color: #f2f2f2;"><b>BM</b></td> <td>Bayonet version (including mounting adaptor, gaskets and bolts)</td> </tr> <tr> <td style="background-color: #f2f2f2;"><b>S080</b></td> <td>BM + 80 mm metal basket</td> </tr> <tr> <td style="background-color: #f2f2f2;"><b>S100</b></td> <td>BM + 100 mm metal basket</td> </tr> <tr> <td style="background-color: #f2f2f2;"><b>S150</b></td> <td>BM + 150 mm metal basket</td> </tr> <tr> <td style="background-color: #f2f2f2;"><b>S200</b></td> <td>BM + 200 mm metal basket</td> </tr> </table>			Connection		<b>B12</b>	G 3/4 BSP	<b>B16</b>	G1 BSP	<b>N12</b>	3/4 NPT (on request)	<b>N16</b>	1 NPT (on request)	<b>BS</b>	Bayonet version (without accessories)	<b>BM</b>	Bayonet version (including mounting adaptor, gaskets and bolts)	<b>S080</b>	BM + 80 mm metal basket	<b>S100</b>	BM + 100 mm metal basket	<b>S150</b>	BM + 150 mm metal basket	<b>S200</b>	BM + 200 mm metal basket
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<b>S150</b>	BM + 150 mm metal basket																							
<b>S200</b>	BM + 200 mm metal basket																							

## Airflow plastic filler breathers SPBN 2





## Area of Application:

Ventilation and tank filling

## Available Versions:

Screw-in, bayonet and push-on style

## Materials:

- Breather cap: steel, chrome-plated (epoxy on request)
- Socket: steel, chrome-plated
- Air filter insert: see order table on page 17
- Basket: steel, zinc-plated
- Seals: Cork, Buna-N (NBR)

## Options:

- Metal basket (micron rating 800 µm)
- Thread style BSP and NPT available
- Pressurised at 0,35 or 0,70 bar
- Lockable
- Plastic dipsticks

**Custom built combinations and specials are available on request.**

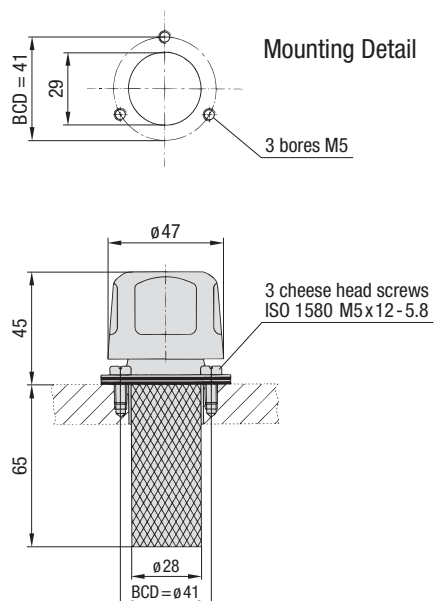
## Group size 47 – Breather cap diameter 47 mm

### SMBB-47

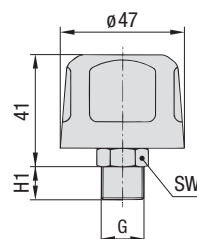
Metal Filler Breather  
Bayonet style  
Seal material: cork  
Options:  
• Metall basket

### SMBT-47

Metal Breather  
Screw-in style  
Options:  
• BSP- or NPT-thread



**max Rate of Air Flow: 0.4 m³/min**



**max Rate of Air Flow:  
0.4 m³/min**

Typ SMBT-47	B04	B06	B08
G	G 1/4	G 3/8	G 1/2
H1	10	13	14
SW	17	15	22

Metal Filler breathers SMBB-47 and SMBT-47 are not lockable, have no pressurisation option and are not available with a dipstick. For more details see order table on page 19.

## Ordering Code (bayonet style, cap ø47)

SMBB - 47 - S - 10 - O - C - S065 - O	
<b>Typ</b>	<b>SMBB</b> Metal Filler Breather (bayonet style)
<b>Cap size</b>	<b>47</b> ø47, steel cap, chrome-plated (standard) <b>47E</b> ø47, steel cap, black epoxy Note: other versions on request
<b>Version</b>	<b>S</b> with STAUFF-logo (standard) <b>N</b> neutral (without logo)
<b>Filter material and micron rating</b>	<b>00</b> without filter insert <b>03</b> 3 µm filterpaper <b>10</b> 10 µm foam (PUR, standard) <b>40</b> 40 µm foam (PUR)
<b>Dipstick</b>	<b>O</b> without dipstick (standard)
<b>Baskets</b>	<b>O</b> without baskets <b>S065</b> 65 mm metal basket (standard)
<b>Seal material</b>	<b>C</b> cork
<b>Pressurisation (Opening pressure)</b>	<b>O</b> without pressurisation (standard) Note: No pressurisation available for this cap diameter.

Note: Screws are supplied with the SMBB as standard

## Ordering Code (screw-in style, cap ø47)

SMBT - 47 - S - 10 - O - B08 - O	
<b>Typ</b>	<b>SMBT</b> Metal Filler Breather (screw-in style)
<b>Cap size</b>	<b>47</b> ø47, steel cap, chrome-plated (standard) <b>47E</b> ø47, steel cap, black epoxy Note: other versions on request
<b>Version</b>	<b>S</b> with STAUFF-logo (standard) <b>N</b> neutral (without logo)
<b>Filter material and micron rating</b>	<b>00</b> without filter insert <b>03</b> 3 µm filterpaper <b>10</b> 10 µm foam (PUR, standard) <b>40</b> 40 µm foam (PUR)
<b>Dipstick</b>	<b>O</b> without dipstick (standard)
<b>Connection thread</b>	<b>B04</b> G 1/4 BSP <b>B06</b> G 3/8 BSP <b>B08</b> G 1/2 BSP <b>N04</b> 1/4 NPT (on request) <b>N06</b> 3/8 NPT (on request) <b>N08</b> 1/2 NPT (on request)
<b>Pressurisation (Opening pressure)</b>	<b>O</b> without pressurisation (standard) Note: No pressurisation available for this cap diameter.

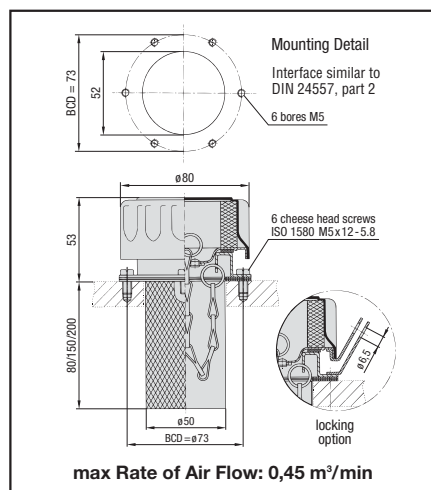
## Group size 80 – Breather cap diameter 80 mm

### SMBB-80

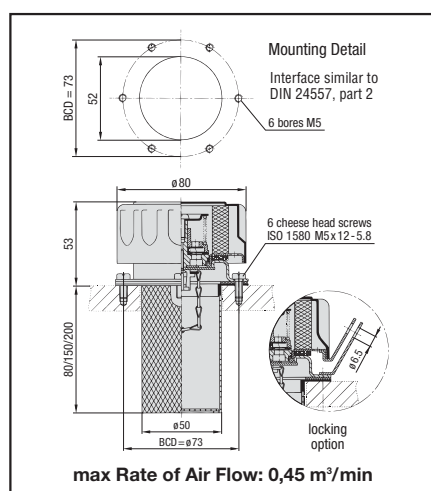
Metal Filler Breather  
Bayonet style

Options:

- Plastic dipstick
- Metal basket
- Lockable
- Pressurised, opening pressure (0,35 or 0,7 bar)
- Seal material: cork or NBR



without pressurisation



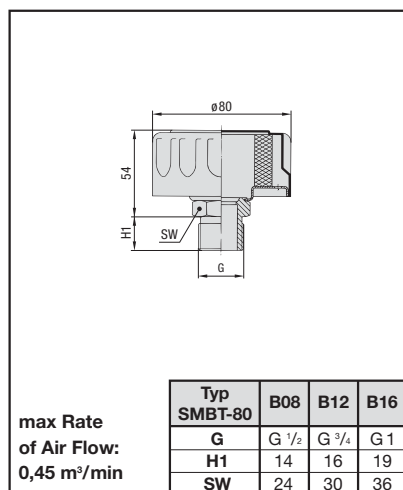
with pressurisation

### SMBT-80

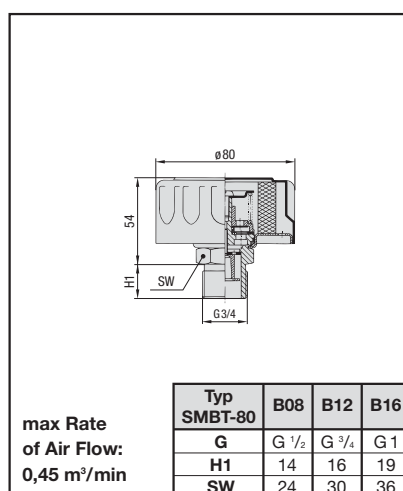
Metal Breather  
Screw-in style

Options:

- Plastic dipstick
- BSP or NPT thread
- Pressurised, opening pressure (0,35 or 0,7 bar)



without pressurisation



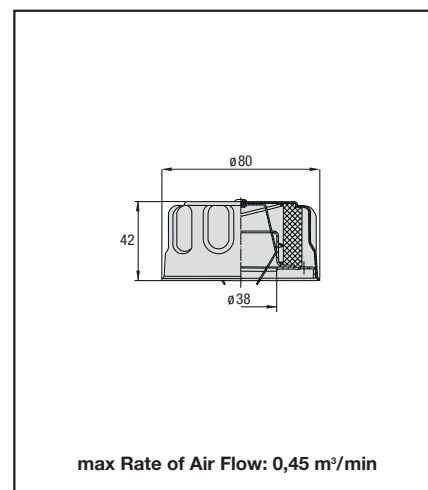
with pressurisation

### SMBP-80

Metal Breather  
Push-on style

Options:

- Plastic dipstick



The SMBP is only available without pressurisation

Alternative filter material and micron ratings are available on request for all sizes and versions.

For more details see order table on page 21.



## Ordering Code (bayonet style, cap ø80)

SMBB - 80 - S - L - 10 - 05 - B - S080 - O																					
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Note: Screws are supplied with the SMBB as standard

## Ordering Code (screw-in style, cap ø80)

SMBT - 80 - S - 10 - 05 - B08 - O																							
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## Ordering Code (push-on style, cap ø80)

SMBP - 80 - S - 10 - D300																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left;">Typ</th> </tr> <tr> <td style="width: 10%; background-color: #f2f2f2;"><b>SMBP</b></td> <td>Metal Filler Breather (push-on style)</td> </tr> </table>	Typ		<b>SMBP</b>	Metal Filler Breather (push-on style)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left;">Dipstick</th> </tr> <tr> <td style="width: 10%; background-color: #f2f2f2;"><b>O</b></td> <td>without dipstick (standard)</td> </tr> <tr> <td style="background-color: #f2f2f2;"><b>D300</b></td> <td>plastic dipstick 300 mm</td> </tr> <tr> <td colspan="2" style="font-size: small;">Note: The plastic dipstick can be shortened by the customer to requested lengths.</td> </tr> </table>	Dipstick		<b>O</b>	without dipstick (standard)	<b>D300</b>	plastic dipstick 300 mm	Note: The plastic dipstick can be shortened by the customer to requested lengths.					
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Version																	
<b>S</b>	with STAUFF-logo (standard)																
<b>N</b>	neutral (without logo)																



## Area of Application:

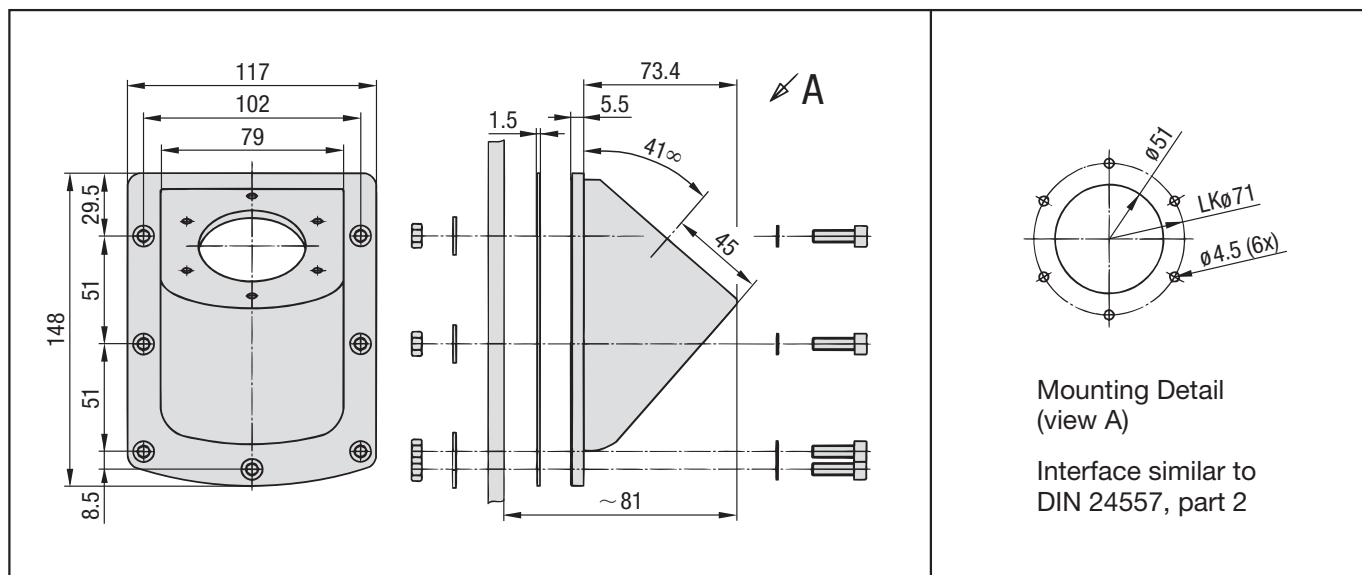
Lateral fastening of filler breathers with flange connection  
(suitable for SMBB-80, SPB 5 and SPBN 2)

## Materials:

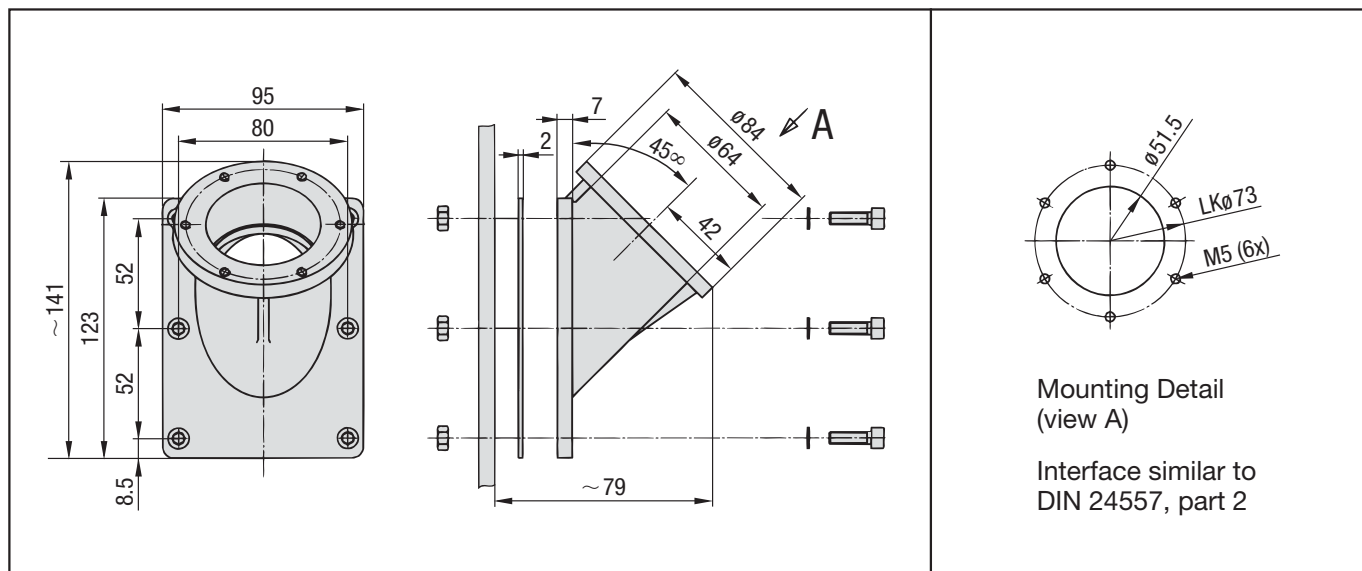
	<b>SMBB-ASMB-1</b>	<b>SMBB-ASMB-2</b>
• Housing:	Polyamide	Aluminium
• Seals:	Klingerit	Klingerit
• Screws:	Steel, zinc-plated M6 x 25 ISO 4762	Steel, zinc-plated M6 x 25 ISO 4762
• Nuts:	Steel, zinc-plated M6 ISO 4032	Steel, zinc-plated M6 ISO 4032
• Washers:	Steel, zinc-plated	Steel, zinc-plated
• Mounting screws:	Steel, zinc-plated 4.8x13 ISO 7049	

Seals, screws, washers and nuts are supplied with the **SES-ASMB** as standard

## Dimensions SMBB-ASMB-1

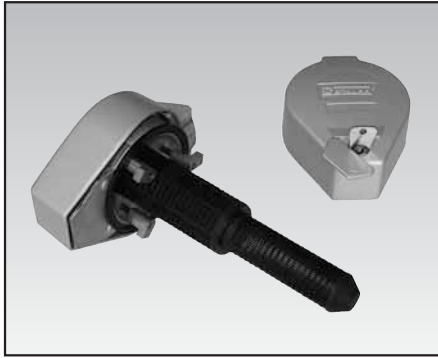


## Dimensions SMBB-ASMB-2



## Ordering Code

<b>SMBB-ASMB-1</b>		
Type		Version
<b>SMBB-ASMB</b>	Angled side Mounting Bracket for SMBB-80 and SPB 5	1 Housing Polyamide
		2 Housing Aluminium



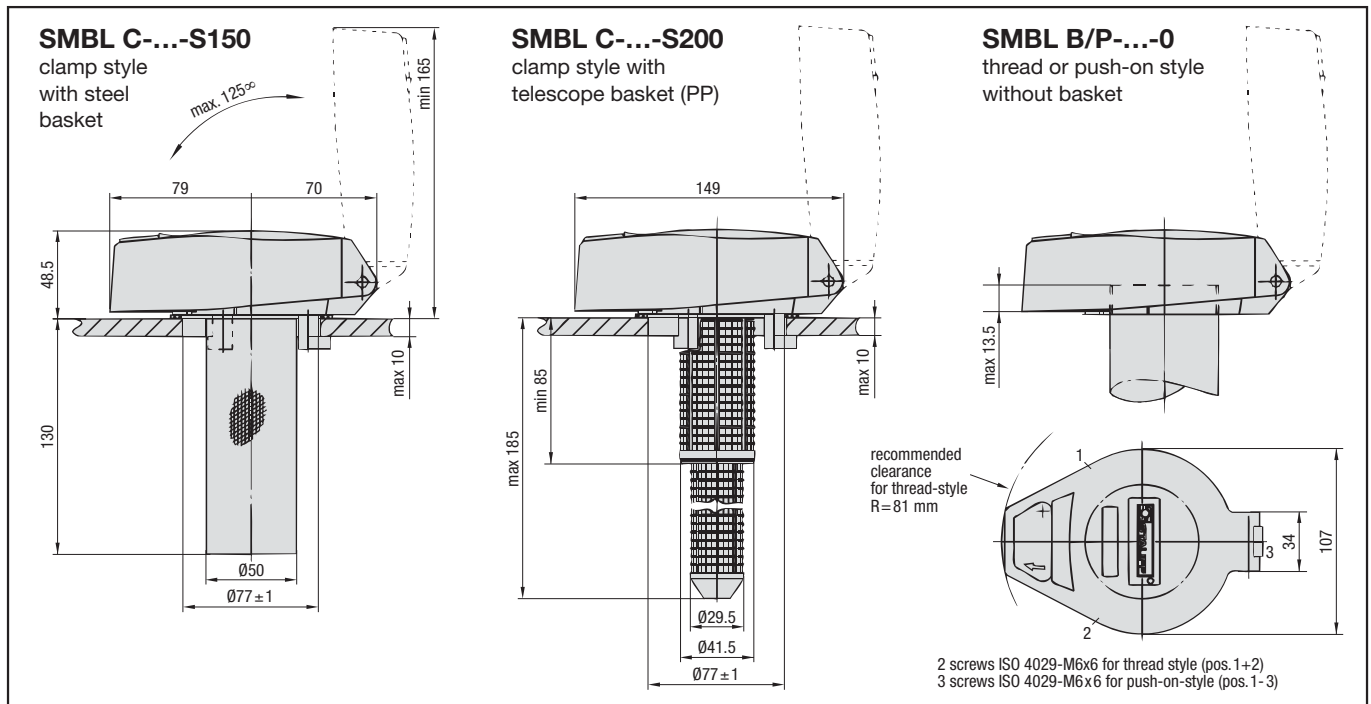
## Area of Application:

Ventilation and tank filling

## Characteristics/Materials:

- available as thread-style, clamping style and push-on-style
- key-lockable
- Temperature range: – 30°C ... + 100°C
- Materials:
  - Body: die casted Aluminium
  - Baskets: zinc-plated steel or Polypropylene (see ordering code)
  - Seals: NBR, others on request
  - Air filter insert: 10 µm (standard) and 40 µm foam (PUR), others on request
- Including two keys

## Dimension



## Ordering Code

SMBL C - 10 - 1 - S150 - B - O	
<b>Type</b> SMBL Filler Breather (lockable)	<b>Metal cap design</b> O lacquered (light grey) RAL 9022 (standard)
<b>Connection</b> B32 G2 (thread style) B40 G2 1/2 (thread style) C clamping style P push-on-style	<b>Seal material</b> B NBR (standard) V FPM
<b>Micron rating</b> 00 without air filter 10 10 micron PUR (standard) air filter 40 40 micron PUR air filter	<b>Baskets</b> O no basket S080 plastic basket 80 mm (see page 14) S150 steel basket 150 mm (standard) S200 plastic basket 200 mm (see page 14) <small>Note: baskets from the SMBB-series cannot be used in conjunction with the SMBL breather type</small>
<b>Style (Air flow)</b> 1 air flow in both directions (standard) 2 no air flow 3 air flow only into the tank	



## Area of Application:

Ventilation and tank filling

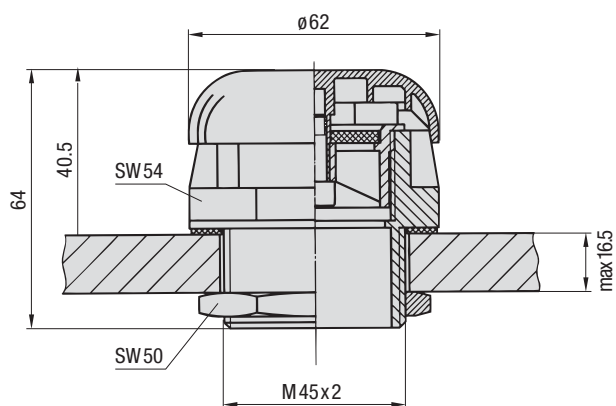
## Materials:

- Breather cap: PA
- Plastic stud: PA
- Socket: Steel (1.0718)
- Nut: Steel (1.0718); PA available on request
- Air filter insert: Sintered bronze; Rating 45 µm
- Basket: PA; micron rating 300 µm
- Dipstick: Steel (1.0718)
- Seals: NBR

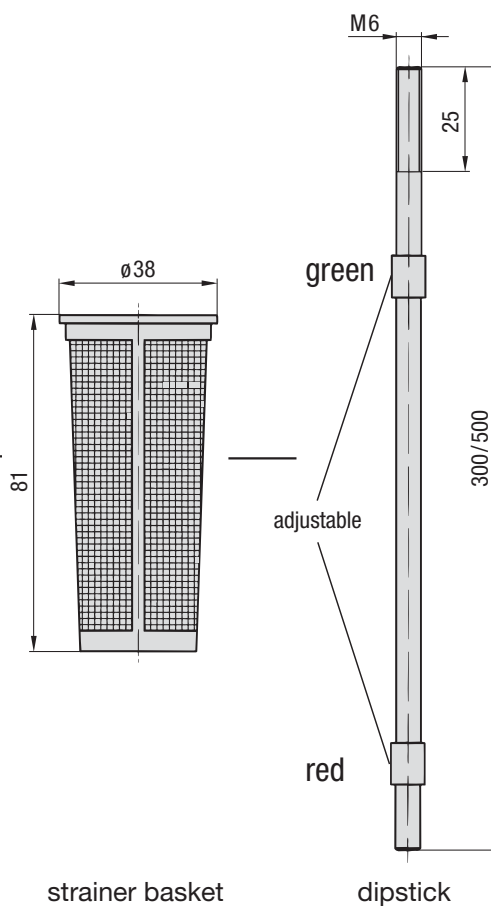
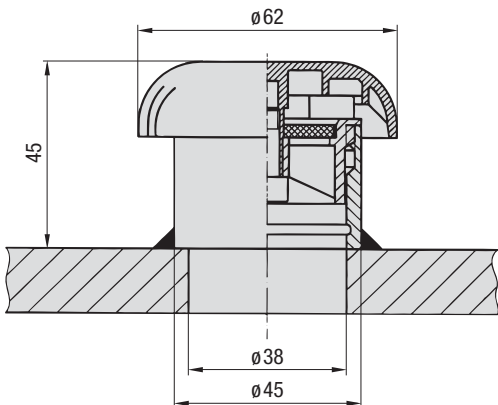
**Combinations with basket or dipstick.**

## Dimensions

### SES 1 – screw-in version



### SES 2 – welded version



**max Rate of Air flow: 0.3 m³/min**

## Ordering Code

### SES 1 - M300

Type	
SES	Filler Breather

Execution	
1	screw-in version
2	welded version

Accessories	
(none)	no accessory
S	Basket, 81 mm
M300	Dipstick, 300 mm
M500	Dipstick, 500 mm



## Area of Application:

Tank ventilation

## Characteristics:

- Standard micron rating: 3 µm glass fibre
- Rate of air flow  
SGB-090: 0.7 m³/min.  
SGB-120: 1.5 m³/min.

- Adaptors\*

TBA-075-B for SGB-090

TBA-125-B for SGB-120

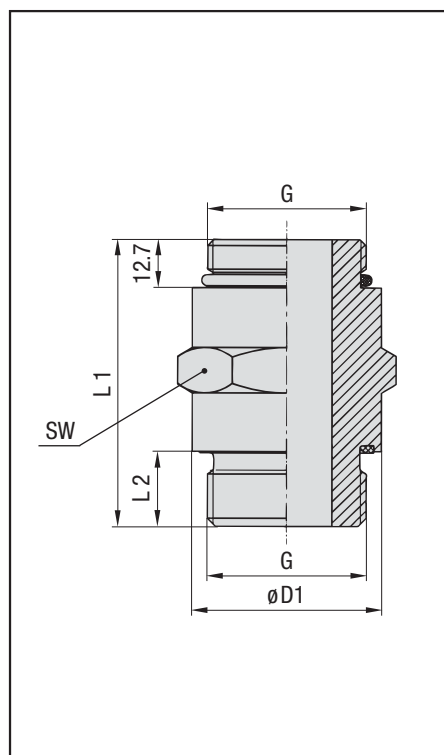
Also, SGB are designed to be used as air filters for STAUFF desiccant breathers (see pages 26 and 27).

## Dimensions SGB

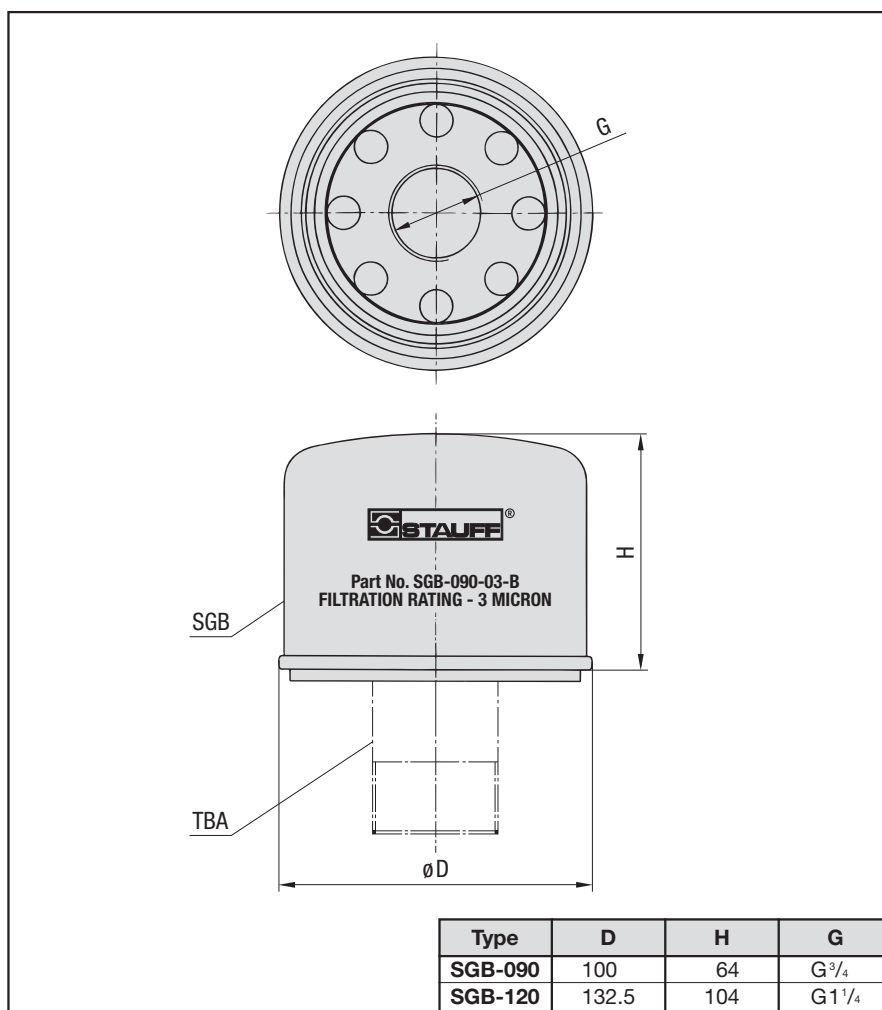
### \* Adaptors

On request, screw-in adaptors for giant breathers SGB-090 and SGB-120 are available in combination with giant air breathers.

### Dimensions TBA



Type	L1	L2	G	D1	SW	O-Ring
TBA-075-B	57	16	G <sup>3</sup> / <sub>4</sub>	32	32	ø23.5x3
TBA-125-B	76	20	G1 <sup>1</sup> / <sub>4</sub>	50	50	ø38.5x3



Type	D	H	G
SGB-090	100	64	G <sup>3</sup> / <sub>4</sub>
SGB-120	132.5	104	G1 <sup>1</sup> / <sub>4</sub>

## Ordering Code

<b>SGB - 090 - 03 - B - A</b>			
<b>Type</b> SGB Giant air breather		<b>Adaptor option</b> (none) without adaptor A with adaptor TBA	
<b>Version</b> 090 SGB-090 120 SGB-120		<b>Thread form</b> B BSP	
		<b>Micron rating</b> 03 3 µm (standard)	



## Area of Application:

Ventilation of the tank with moisture absorption and air filtration.

## Characteristics:

- available in 4 executions
- temperature range: max 70°C
- refillable with drying agent (available separately)
- can be delivered complete with adaptor plates and contamination indicator
- replacement air filter insert SGB separately available (see page 25)

**Easy hygroscopic indication is possible with the drying agent's capability to change colours with increasing moisture.**

## Functions:

First, the moisture in the incoming air is absorbed when passing through the drying agent. After passing through the drying agent the dirt particles are caught in the air filter element. With the moisture absorbed, the oxidation process in the hydraulic system will be decreased and the life of the oil and the machine will be extended.

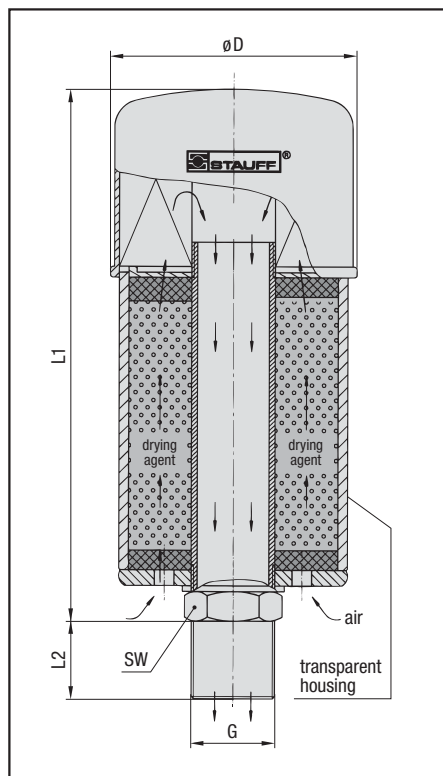
## Hygroscopic indication:

As moisture is absorbed, the drying agent granules will gradually change colour from red to orange. An optional indicator also shows the remaining capacity of the air filter element. When the granules change colour to orange, change them.

## Note:

At the bottom, desiccant air breathers are sealed with a folio or plastic plugs. These have to be removed before installation!

**Desiccant air breathers SDB do not contain any dangerous substances according to EC Council directive 88/379/EEC.**

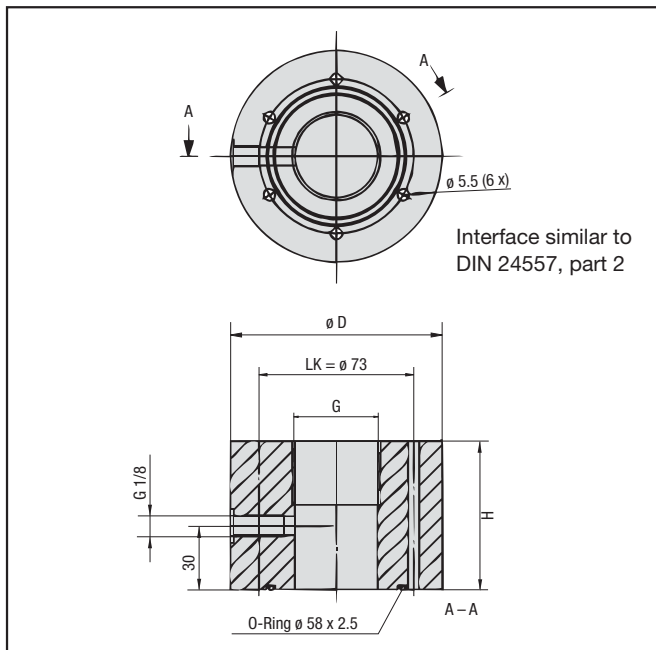


## Dimensions and Technical Data

	SDB-093	SDB-096	SDB-121	SDB-122
D	100	100	123,5	123,5
L1	160	220	256	366
L2	20	20	min 25	min 25
G	G <sup>3/4</sup>	G <sup>3/4</sup>	G 1 <sup>1/4</sup>	G 1 <sup>1/4</sup>
SW	32	32	50	50
max. Rate of air flow (m <sup>3</sup> /min)	0,7	0,7	1,5	1,5
Air filter micron rating (µm)	3	3	3	3
Weight of complete breather (g)	1200	1500	2700	4000
Volume drying agent (cm <sup>3</sup> )	300	600	1000	2000
Drying agent filling weight (g)	225	450	750	1500
max hygroscopicity (g)	86	172	288	576



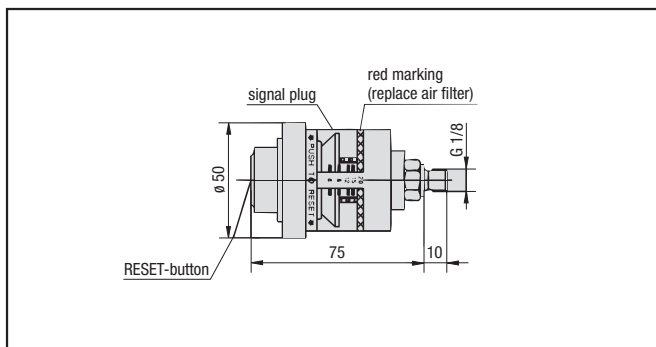
## Adaptor Plates AP (only SDB)



**Adaptor Plates AP:** With AP plastic adaptor plates desiccant air breathers type SDB can directly be mounted to existing connections. Adaptor plates AP are provided with a thread connection for the optical contamination indicator FM. Plug, O-ring and socket cap screws (ISO 4762) are supplied with AP as a standard.

	AP-1	AP-2
<b>D</b>	88	100
<b>H</b>	50	70
<b>G</b>	G 3/4	G 1 1/4

## Contamination Indicator FM



**Contamination Indicator FM:** The FM indicates the contamination level of the air breathers SGB. You can restore the indicator by pressing the RESET knob for re-use.

## Ordering Code

SDB - 122 - AP - FM	
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## Area of Application:

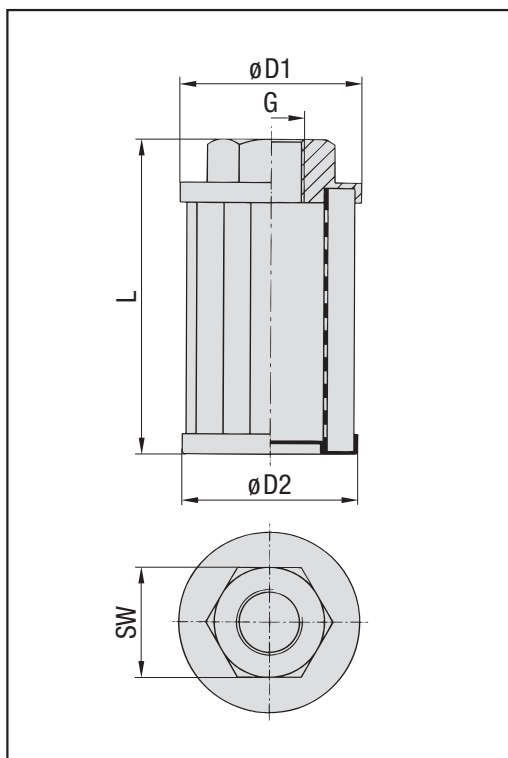
Reservoir installation for direct suction line connection

## Characteristics:

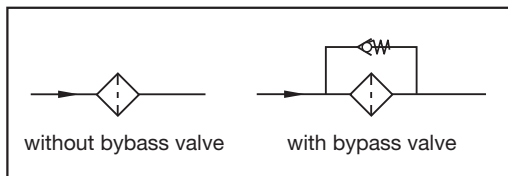
- Suitable for mineral oil
- Threads forms BSP and NPT
- Filter material 60, 125 or 250 micron stainless steel
- Temperature range -20°C ... +100°C
- Optional bypass valve, opening pressure 0,2 bar (3 PSI)
- Threaded end caps made out of glass fiber reinforced Polyamide (P) or Aluminium (A) (see table below), other components steel zinc-plated

**STAUFF-Suction Strainers SUS are available with an integrated bypass valve. Other special configurations on request.**

## Dimensions



## Hydraulic Symbol



Group size			Dimensions					Q max l/min	available end cap material		
ø upper endcap	thread- code	element- length	D1	D2	G	SW	L				
040 - B06F - 075			39,5	38,5	<sup>3</sup> / <sub>8</sub> BSP	22	75	8	P		
050 - B06F - 067			50	49	<sup>3</sup> / <sub>8</sub> BSP	26	67	10	P		
050 - N06F - 067					<sup>3</sup> / <sub>8</sub> NPT		90	11	A,P		
050 - N06F - 090					<sup>1</sup> / <sub>2</sub> BSP		105	15	P		
050 - B08F - 105					<sup>1</sup> / <sub>2</sub> NPT				A,P		
050 - N08F - 105											
068 - B12F - 105					68	66	<sup>3</sup> / <sub>4</sub> BSP	34	105	25	P
068 - N12F - 105			<sup>3</sup> / <sub>4</sub> NPT	A,P							
068 - B16F - 140			1 BSP	42			140	50	P		
068 - N16F - 140			1 NPT						A,P		
088 - B20F - 140			88	85			1 <sup>1</sup> / <sub>4</sub> BSP	50	140	65	P
088 - N20F - 140							1 <sup>1</sup> / <sub>4</sub> NPT				A,P
088 - N20F - 195					1 <sup>1</sup> / <sub>2</sub> BSP	60	195	88	A,P		
088 - B24F - 140					1 <sup>1</sup> / <sub>2</sub> NPT		140	95	P		
088 - N24F - 140							226	120	A,P		
088 - N24F - 226							260	198	A,P		
088 - N24F - 260					2 NPT	70		A			
088 - N32F - 260					102	100	1 <sup>1</sup> / <sub>2</sub> BSP	72	200	200	P
102 - B24F - 200							1 <sup>1</sup> / <sub>2</sub> NPT				P
102 - N24F - 200							2 BSP				225
102 - B32F - 200			260	260							P
102 - B32F - 225			300	300				P			
102 - B32F - 260			2 NPT	260			260	P			
102 - B32F - 300			131	128			2 <sup>1</sup> / <sub>2</sub> BSP	86	191	290	P
102 - N32F - 260							2 <sup>1</sup> / <sub>2</sub> NPT		212	300	P
131 - B40F - 191					3 BSP	96	272	380	P		
131 - B40F - 212					3 NPT				P		
131 - N40F - 212											
131 - B48F - 272											
131 - N48F - 272			150	145	2 BSP	70	151	260	P		
150 - B32F - 151					2 <sup>1</sup> / <sub>2</sub> NPT	90	213	283	A		
150 - N40F - 213					3 NPT	100	272	380	A		
150 - N48F - 272											

## Ordering Code

**SUS - P - 088 - B24F - 140 - 125 - 0**

**Typ**  
**SUS** Suction Strainer

**Material Threaded End Cap**  
**P** glass fiber reinforced Polyamide (standard)  
**A** Aluminium (only for NPT thread, see table)

**Group Size**  
 see table above, column group size

**Bypass Option**  
**0** without bypass (standard)  
**3** integrated bypass valve (0,2 bar / 3 PSI)

**Micron Rating**  
**060** 60 µm (on request)  
**125** 125 µm (standard)  
**250** 250 µm (on request)



## Area of Application:

Foaming and noise reduction in tanks

## Characteristics:

- suitable for mineral oil
- reduce fluid aeration
- silencing
- standard thread form: BSP
- consist of two concentric tubes with discharge holes

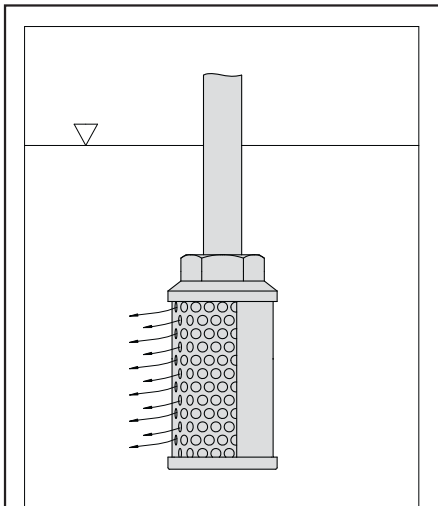
**STAUFF-Diffusers SRV are available with NPT threads on request.**

## Technical Data

Temperature range:  $-20^{\circ}\text{C} \dots +100^{\circ}\text{C}$   
 Flow range: 950 l/min max  
 Connection thread sizes:  $G\frac{3}{4}$  – G3  
 End cap material: Aluminium  
 Body material: Steel, zinc-plated

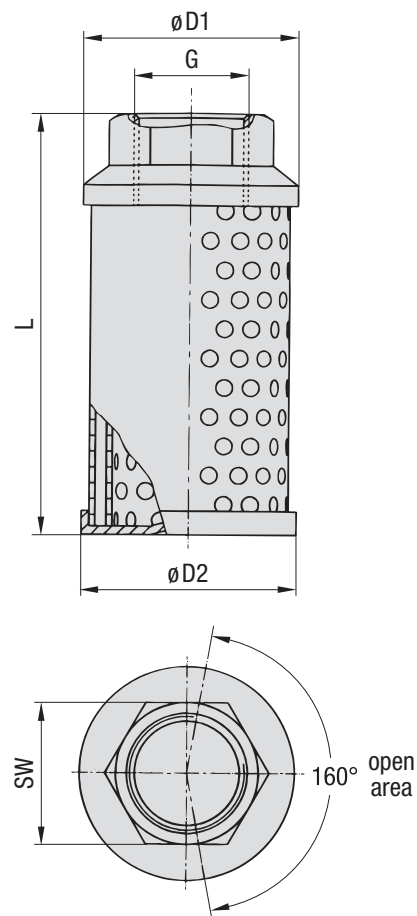
## Dimensions

## Example of Application SRV



### Note

SRV must be completely installed below the liquid level. Its plain area on the outside must be facing the pump inlet.



## Ordering Code and Dimensional Table

Type	Q max	G	L	D1	D2	SW
SRV-050-B12	50 l/min	$G\frac{3}{4}$	109	64	60	36
SRV-114-B16	114 l/min	G1	139	64	60	46
SRV-200-B20	200 l/min	$G1\frac{1}{4}$	139	86	82	60
SRV-227-B24	227 l/min	$G1\frac{1}{2}$	200	86	82	60
SRV-454-B32	454 l/min	G2	260	86	82	70
SRV-650-B40	650 l/min	$G2\frac{1}{2}$	211	150	145	90
SRV-950-B48	950 l/min	G3	272	150	145	100



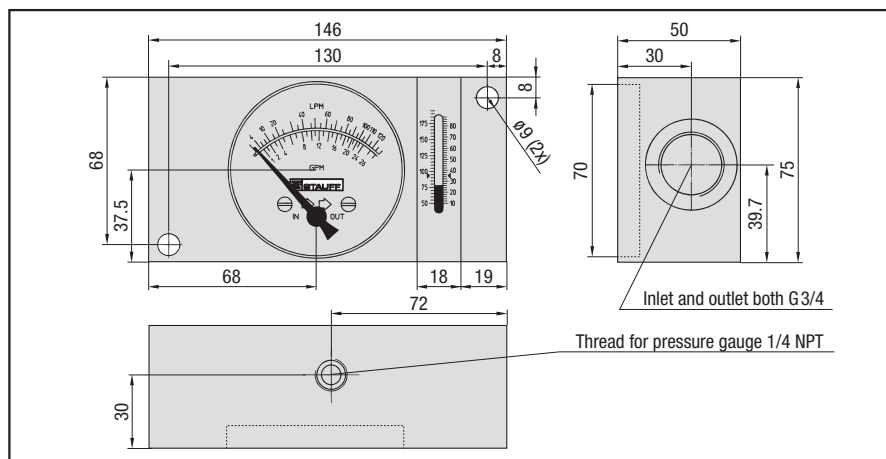
## Area of Application:

Flow, pressure and temperature measuring of fluids (mobile and industrial hydraulics), also controlling of working pressure (only SDMK)

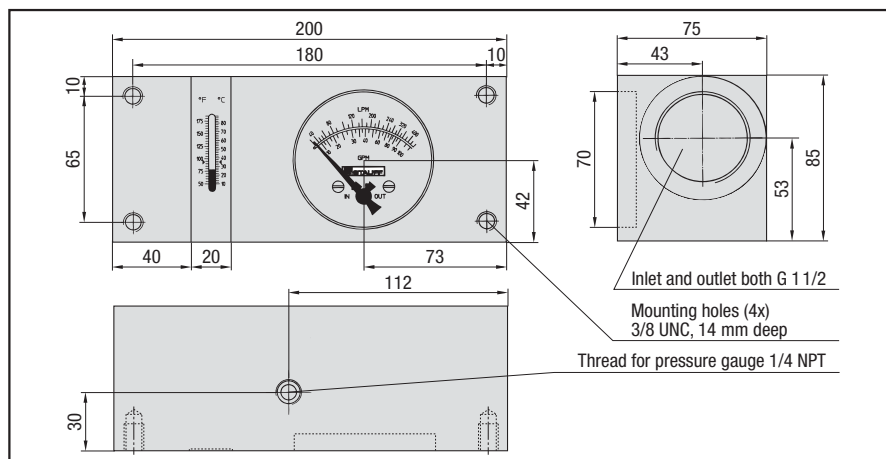
## Characteristics:

- suitable for mineral oil (Aluminium), HFC fluids and water (Bronze)
- designed for in-line installation
- mechanical process (off the line)
- controlling working pressure with a pressure control valve (only SDMK)
- flow indication in l/min and GPM
- thread to connect with pressure gauge (only SDM)

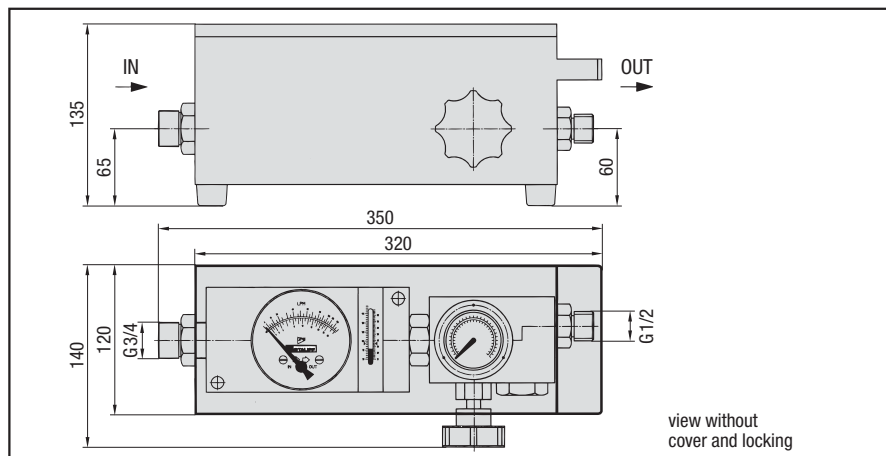
## Dimensions SDM-750



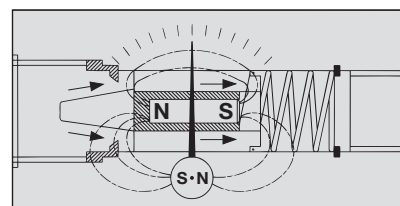
## Dimensions SDM-1500



## Dimensions SDM-750



## Functional principal flow measuring



The flow indicators SDM and SDMK have a sharp-edged orifice and a tapered metering piston, which moves in proportion to changes of flow against a spring. In no flow condition the piston closes the opening and the pointer indicates zero. With increasing flow and differential pressure the piston moves against the calibrated spring. The piston movement is directly proportional to the flow rate and is magnetically coupled to the rotary pointer. During this function the sharp-edged orifice minimises the effects of viscosity. The flow is shown on a calibrated scale in l/min and gal/min.

## Controlling working pressure with SDMK

The pressure control valve of the SDMK is directly connected to a flow-block and together with the integrated pressure gauge it allows an exact control of the working pressure in the maximum range. For protection the SDMK has two rupture disks. At a pressure of 440 bar the disks burst and the fluid is by-passed around the valve. The rupture disks (other pressure ranges on request) can be replaced easily.

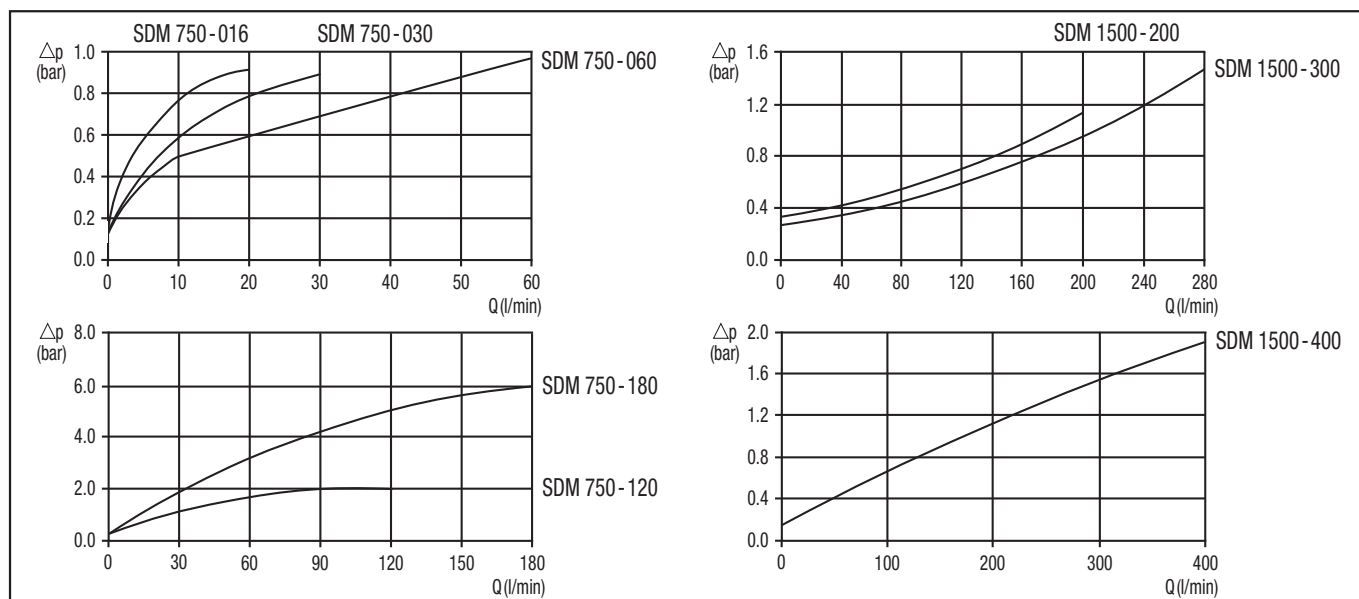
## Technical Data

Accuracy:	
Flow:	± 4 % FSD
Temperature:	± 2 °C
Pressure (only SDMK):	± 1.6 % of max pressure
Temperature measuring range:	10 °C ... 80 °C

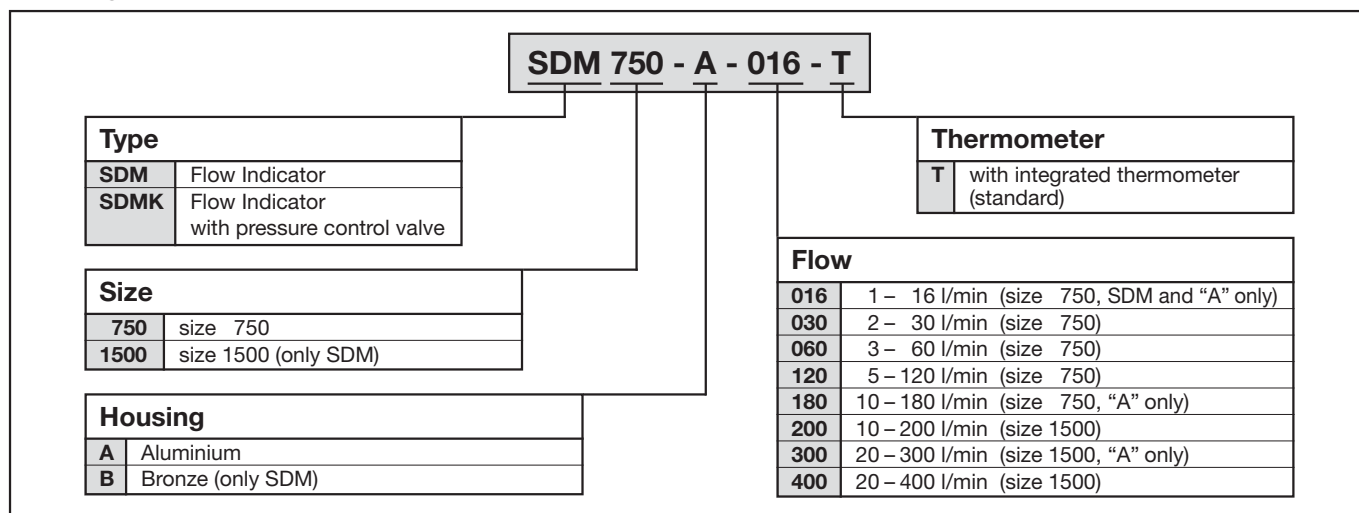
## Technical Data

Part Number	max Working press.	Flow range	Weight	Connection	Dimensions (mm)
SDM-750-A-016-T	420 bar	1 – 16 l/min	1.360 kg	G <sup>3</sup> / <sub>4</sub>	146 x 75 x 50
SDM-750-A-030-T	420 bar	2 – 30 l/min	1.360 kg	G <sup>3</sup> / <sub>4</sub>	146 x 75 x 50
SDM-750-A-060-T	420 bar	3 – 60 l/min	1.360 kg	G <sup>3</sup> / <sub>4</sub>	146 x 75 x 50
SDM-750-A-120-T	420 bar	5 – 120 l/min	1.360 kg	G <sup>3</sup> / <sub>4</sub>	146 x 75 x 50
SDM-750-A-180-T	420 bar	10 – 180 l/min	1.360 kg	G <sup>3</sup> / <sub>4</sub>	146 x 75 x 50
SDM-750-B-030-T	420 bar	2 – 35 l/min	4.250 kg	G <sup>3</sup> / <sub>4</sub>	146 x 75 x 50
SDM-750-B-060-T	420 bar	3 – 70 l/min	4.250 kg	G <sup>3</sup> / <sub>4</sub>	146 x 75 x 50
SDM-750-B-120-T	420 bar	5 – 140 l/min	4.250 kg	G <sup>3</sup> / <sub>4</sub>	146 x 75 x 50
SDM-1500-A-200-T	280 bar	10 – 200 l/min	3.000 kg	G1 <sup>1</sup> / <sub>2</sub>	200 x 85 x 75
SDM-1500-A-300-T	280 bar	20 – 300 l/min	3.000 kg	G1 <sup>1</sup> / <sub>2</sub>	200 x 85 x 75
SDM-1500-A-400-T	280 bar	30 – 400 l/min	3.000 kg	G1 <sup>1</sup> / <sub>2</sub>	200 x 85 x 75
SDM-1500-B-200-T	280 bar	10 – 200 l/min	8.000 kg	G1 <sup>1</sup> / <sub>2</sub>	200 x 85 x 75
SDM-1500-B-400-T	280 bar	30 – 400 l/min	8.000 kg	G1 <sup>1</sup> / <sub>2</sub>	200 x 85 x 75
SDMK-750-A-030-T	420 bar	2 – 30 l/min	4.500 kg	G <sup>3</sup> / <sub>4</sub> + G <sup>1</sup> / <sub>2</sub>	350 x 135 x 140
SDMK-750-A-060-T	420 bar	3 – 60 l/min	4.500 kg	G <sup>3</sup> / <sub>4</sub> + G <sup>1</sup> / <sub>2</sub>	350 x 135 x 140
SDMK-750-A-120-T	420 bar	5 – 120 l/min	4.500 kg	G <sup>3</sup> / <sub>4</sub> + G <sup>1</sup> / <sub>2</sub>	350 x 135 x 140
SDMK-750-A-180-T	420 bar	10 – 180 l/min	4.500 kg	G <sup>3</sup> / <sub>4</sub> + G <sup>1</sup> / <sub>2</sub>	350 x 135 x 140

## Flow Curves



## Ordering Code





**Area of Application:** mechanical pressure measurement

**Characteristics:**

- suitable for hydraulic oil and gaseous media that do not attack any copper base alloy
- available in nominal sizes 63 and 100
- standard thread form: BSP
- housing made out of stainless steel (1.4301)
- sight glass made out of acrylic
- glycerine filled
- standard dual scales with pressure indication in bar and PSI
- U-bolt or flange mounting kit on request

**Please consult our office before you use SPG with other media.**

**Technical Data:**

pressure gauge according to EN 837-1

system of protection: IP 65 (EN 60 529 / IEC 529)

accuracy class SPG-063: 1.6 ( $\pm 1.6\%$  FS as per EN 837-1)

accuracy class SPG-100: 1.0 ( $\pm 1.0\%$  FS as per EN 837-1)

environmental temp. range:  $-20^{\circ}\text{C} \dots +60^{\circ}\text{C}$

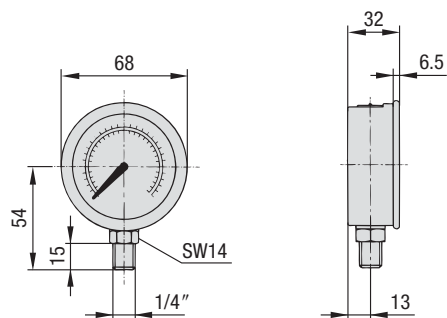
temperature range medium: max  $+60^{\circ}\text{C}$

subject to technical modifications

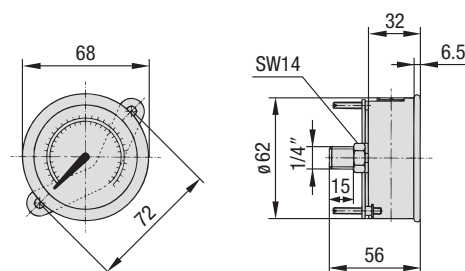
**Options (on request):**

- additional scale readings including personilisation
- thread form NPT
- U-bolt and flange mounting kits are available separately as spare parts
- additional pressure ranges up to 1000 bar max

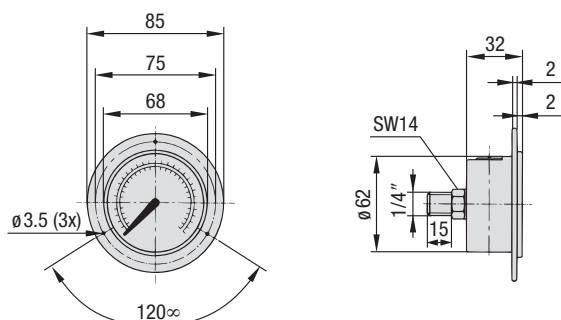
**Dimensions SPG 063**



**SPG 063**



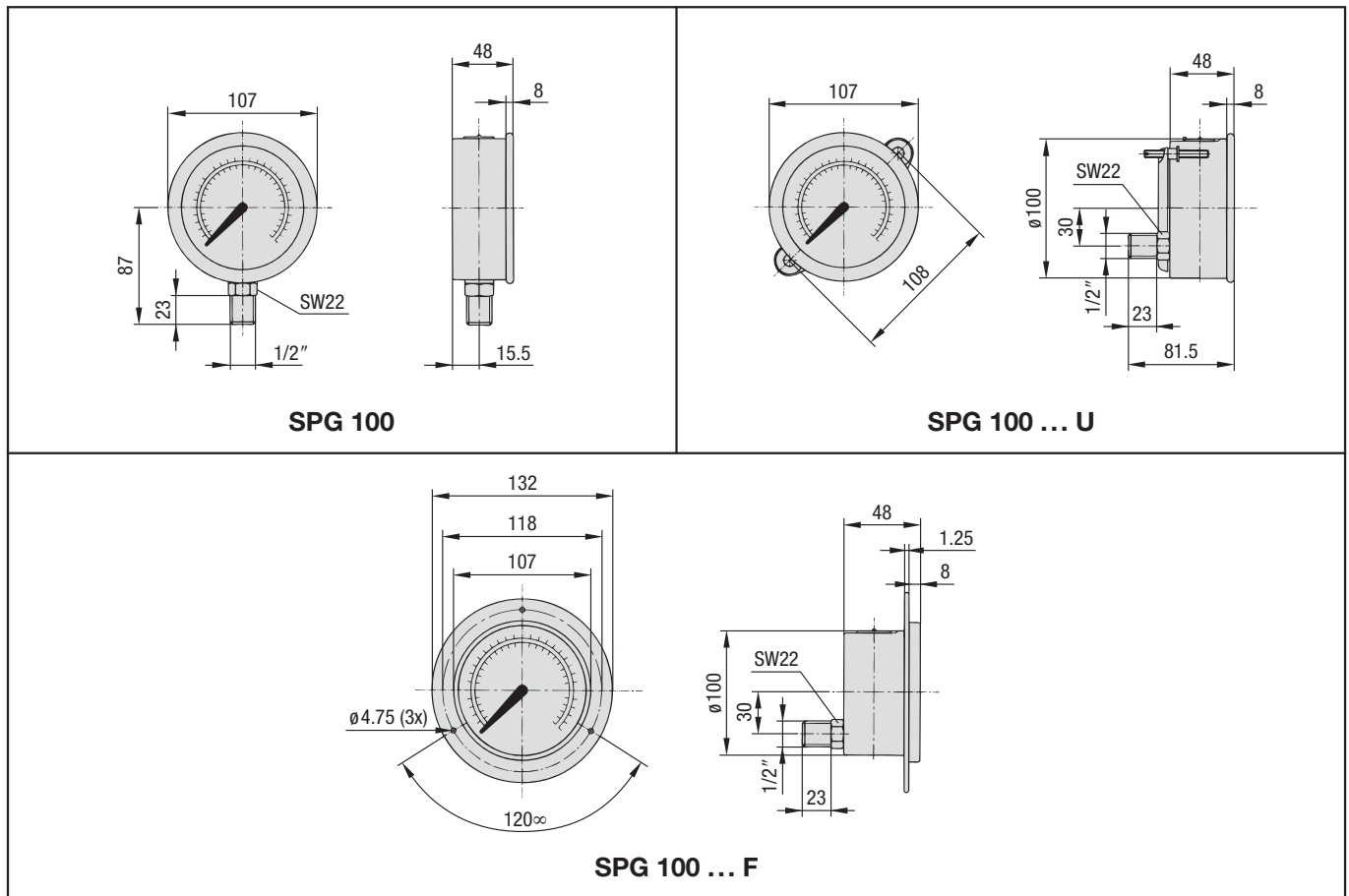
**SPG 063 ... U**



**SPG 063 ... F**



## Dimensions SPG 100



## Ordering Code

**SPG 063 - 00160 - 01 - P - B04 - U**

### Type

**SPG** Stainless steel pressure gauge

### Size

**063** 63 mm  
with G 1/4 or 1/4 NPT connection  
**100** 100 mm  
with G 1/2 or 1/2 NPT connection

### Pressure range

Code	Pressure range
(-1)00001	(-1) - 1,5 bar / 21 PSI
(-1)00003	(-1) - 3 bar / 42 PSI
00010	0 - 10 bar / 145 PSI
00016	0 - 16 bar / 230 PSI
00025	0 - 25 bar / 360 PSI
00040	0 - 40 bar / 580 PSI
00060	0 - 60 bar / 850 PSI
00100	0 - 100 bar / 1450 PSI
00160	0 - 160 bar / 2300 PSI
00250	0 - 250 bar / 3600 PSI
00400	0 - 400 bar / 5800 PSI
00600	0 - 600 bar / 8500 PSI
00680	0 - 680 bar / 10000 PSI
00700	0 - 700 bar / 10000 PSI
01000	0 - 1000 bar / 14500 PSI

Note: Other pressure ranges on request  
Information always refers to the pressure setting of the outside scale.

### Accessories

(for panel mount only)

(none)	no accessory
<b>U</b>	U-bolt assembly
<b>F</b>	front flange assembly
<b>R</b>	rear flange assembly
<b>UF</b>	U-bolt and front flange assembly

### Thread size

<b>B04</b>	1/4" BSPP (only SPG 063)
<b>B08</b>	1/2" BSPP (only SPG 100)
<b>N04</b>	1/4" NPT (only SPG 063)
<b>N08</b>	1/2" NPT (only SPG 100)

Note: Other thread types on request

### Adaption

<b>S</b>	Stem mounting
<b>P</b>	Panel mounting

### Style of scales

<b>01</b>	<b>BAR / PSI</b> (BAR outside / PSI inside - <b>Standard</b> )
<b>02</b>	BAR
<b>03</b>	PSI
<b>05</b>	PSI / BAR (PSI outside / BAR inside)
<b>10</b>	KPa / PSI (KPa outside / PSI inside)

Note: Other scale types on request



**Area of Application:**

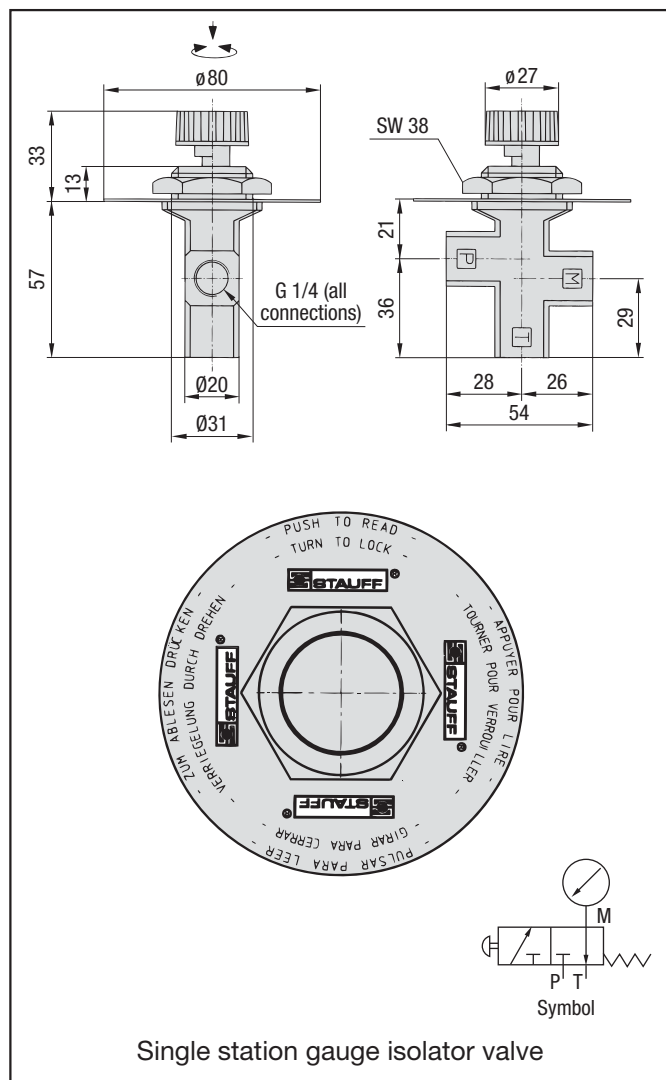
protection against pressure gauge overload (single station) or  
6 position pressure measurement (multi station)

### Characteristics:

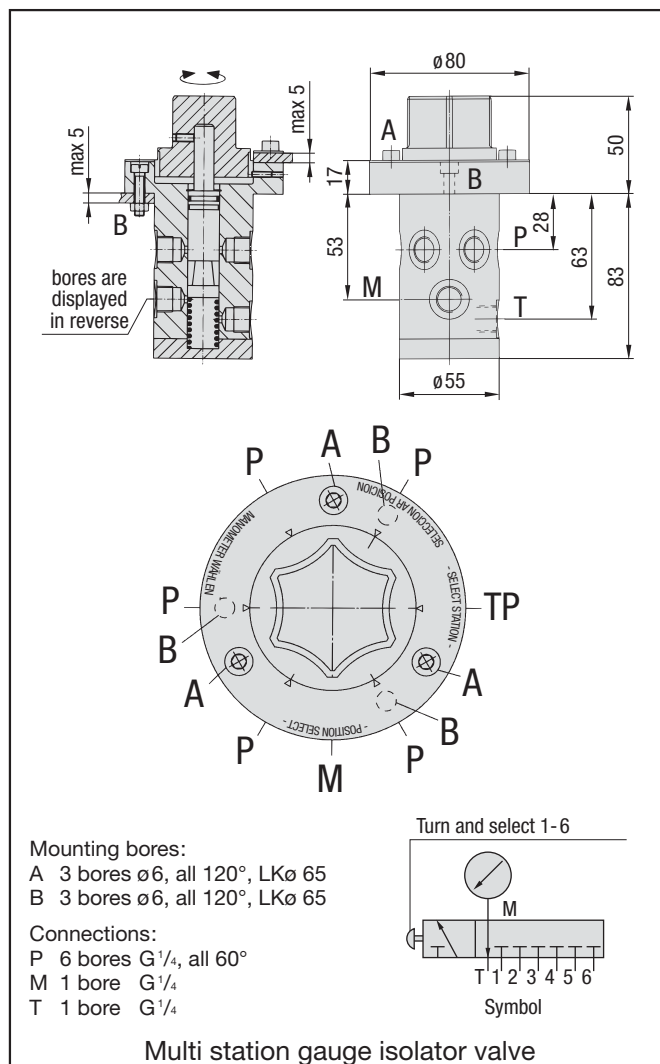
- suitable for hydraulic fluids
- max operating pressure: 400 bar
- connection thread size: G 1/4; 1/4 NPT for single station valves on request
- temperature range: 100°C max
- complete with operation manual (plate mounted to the product)

**Please consult our office before you use SWS with other fluids.**

### Dimensions SWS-B04-S1



### Dimensions SWS-B04-M



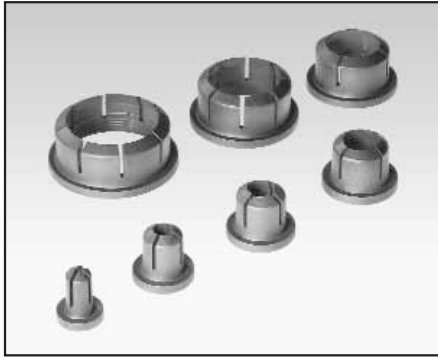
### Ordering Code

**SWS - B04 - S1**

Type	
<b>SWS</b>	Gauge isolator valve

Style	
<b>S1</b>	Single station gauge isolator valve
<b>M</b>	multi station gauge isolator valve

Adaption thread	
<b>B04</b>	G 1/4 (standard)
<b>N04</b>	1/4 NPT (for style "S1" only)



## Area of Application:

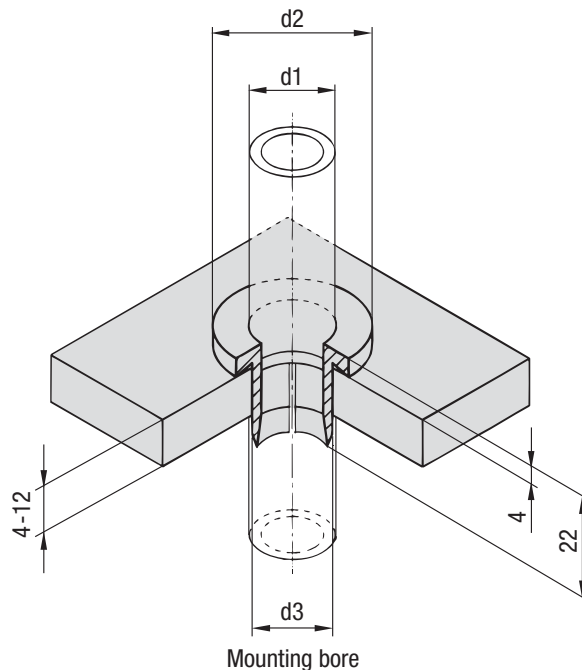
Tubular support and seal for tank entry return lines  
(ODs from 6 mm up to 42 mm)

## Characteristics:

- vibration damping and sound absorbing
- resistant against oil and solvents
- available in Santoprene or Polypropylene
- A positive bulkhead installation is ensured by a special lip seal.

**A remarkable feature of return line bushes is easy installation and they offer assembly costs compared to fittings.**

## Dimensions



## Dimensional Table

Pipe Ø d1	06	08	10	12	14	15	16	18	20	22	25	28	30	35	38	42
d2	18	20	22	24	26	28	28	30	32	34	38	41	43	48	51	55
d3	10	12	14	16	18	20	20	22	24	26	30	33	35	40	43	47

## Ordering Code

**SRF - xx - xx**

**Pipe Ø d1**

see dimensional table

**Material**

**PP** Polypropylene  
**SA** Santoprene



#### **STAUFF CLAMPS**

Clamping systems for pipes, hoses, cables and components; custom-made special clamps



#### **STAUFF TEST**

Measuring systems for pressure monitoring of fluid and gaseous media; venting and sampling of fluid and gaseous pressure systems



#### **STAUFF FILTRATION TECHNOLOGY**

Filter systems for the basic equipment of mobile and industrial hydraulic applications; wide range of replacement filter elements



#### **STAUFF DIAGTRONICS**

Components and services for the monitoring and analysis of hydraulic fluids for the mobile and industrial hydraulic sectors



#### **STAUFF HYDRAULIC ACCESSORIES**

Components for the construction of hydraulic reservoirs and power units for the mobile and industrial hydraulic sectors



#### **STAUFF FLANGES**

Split flange clamps, one-piece flange clamps and flange adaptors acc. to ISO 6162-1/2 and SAE J518; square flanges and flange adaptors acc. to ISO 6164 and CETOP RP 63 H; pump flanges



#### **STAUFF MACHINED PARTS**

Precision parts machined from stainless steel, carbon steel, non-ferrous metals and thermoplastics for all fields of industry

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