

Call us today 201.444.7800 or visit www.stauff.com



STAUFF Corperation















CLAMPS

TEST

FILTRATION

DIAGTRONICS

VALVES

FLANGES

ACCUMULATORS



Indicators - Level/Temp

Tank Filler Breathers

Giant Air Breathers

Desiccant Air Breathers

Breather Adaptors

Accessories

Pipe & Tube Cleaning

Accessories















The STAUFF Hydraulic Accessories programme has been carefully designed to offer a complete range of sophisticated components suited to the demands of building hydraulic reservoirs and power units in most industrial and mobile applications.

Whether you require a solution for a most precise visual or electrical fluid level and temperature indication, a reliable tank filling and breathing product that can even absorb moisture from your hydraulic system, or equipment to connect the suction and return line of your hydraulic circuit with the reservoir: The STAUFF Hydraulic Accessories programme will provide you with the choice you need.

At STAUFF, we are aware of the ongoing development and innovation within the hydraulic industry. We continually strive to keep up with and further develop the latest technology and to bring the benefit of any such improvements directly to our customers.

By the way: We are always prepared to consider custom designed products and product modifications according to your ideas or based on STAUFF developments.

Please do not hesitate to contact STAUFF for further details.



STAUFF Corperation

Call us today 201.444.7800 or visit www.stauff.com





TEST



FILTRATION















Tank Filler Breathers

Giant Air Breathers

Desiccant Air Breathers

Breather Adaptors

Accessories

Pipe & Tube Cleaning

Fluid Level / Temperature Indicators

Level Gauge SNA

Level Gauge (Special Options) SNA

Level Gauge SNK

Level Gauge (Compact Design) SNKK

Thermo Switch for use with Level Gauge TS-SNA/SNK

<u>Dial Thermometer with Probe for use with Level Gauge</u> T1 / T2

Temperature Sensor for use with Level Gauge TS-SNA/ SNK-PT100

Temperature Sensor with Direct Installation Set TS-SNA/ SNK-PT100-T

<u>Display / Evaluation Unit for use with Temperature Sensor TS-SNA/SNK-PT100-D</u>

Signal Convertor for use with Temperature Sensor TS-SNA/SNK-PT100-C

Metal Sight Glasses SLW

Plastic Sight Glasses OLG





STAUFF Corperation

Call us today 201.444.7800 or visit www.stauff.com















CLAMPS

TEST

FILTRATION

DIAGTRONICS

VALVES

FLANGES

ACCUMULATORS



Indicators - Level/Temp

Tank Filler Breathers

Giant Air Breathers

Desiccant Air Breathers

Breather Adaptors

Accessories

Pipe & Tube Cleaning

Tank Filler Breathers

Plastic Filler Breather (Screw-In Version) SPB 1 / SPB 2 / SPB 3

Plastic Filler Breather (Flange Version) SPB 4 / SPB 5

<u>Accessories / Options (Dipsticks / Baskets / Pressurization) Pressure Drop Flow Curves</u>

<u>Plastic Filler Breather (Compact Design; Screw-In</u> Version) SPBN

<u>Plastic Filler Breather (Compact Design; Bayonet Version) SPBN</u>

Accessories / Options (Dipsticks / Baskets / Pressurization) Pressure Drop Flow Curves

Metal Filler Breather (Screw-In Version) SMBT-47

Metal Filler Breather (Bayonet Version) SMBB-47

Metal Filler Breather (Screw-In Version) SMBT-80

Metal Filler Breather (Bayonet Version) SMBB-80

Metal Breather (Push-On Version) SMBP-80

<u>Lockable Metal Filler Breather (Clamping, Threaded and Push-On Version) SMBL</u>

<u>Side Mount Bracket (Polyamide) for use with Filler</u> <u>Breather ASMB-1</u>

Side Mount Bracket (Aluminium) for use with Filler Breather ASMB-2

Extended Bayonet Flange for use with Filler Breather

EBF-1

Extended Bayonet Flange for use with Filler Breather EBF-2

Weld Riser for use with Filler Breather WR

Plastic Filler Breather (Screw-In Version) SES-1

Plastic Filler Breather (Welded Version) SES-2



stauff.com



Call us today 201.444.7800 or visit www.stauff.com





TEST



FILTRATION















Tank Filler Breathers

Giant Air Breathers

Desiccant Air Breathers

Breather Adaptors

Accessories

Pipe & Tube Cleaning

Desiccant Air Breathers

Desiccant Air Breather SDB

Desiccant Air Breather (Economy Version) SVDB

Desiccant Air Breather with Check Valves SDB-CV

Adaptor Plate for use with Desiccant Air Breather AP

<u>Visual Contamination Indicator for use with Adaptor Plate FM</u>







Call us today 201.444.7800 or visit www.stauff.com



STAUFF Corperation













CLAMPS

TEST

FILTRATION

DIAGTRONICS

VALVES

FLANGES

ACCUMULATORS



Indicators - Level/Temp

Tank Filler Breathers

Giant Air Breathers

Desiccant Air Breathers

Breather Adaptors

Accessories

Pipe & Tube Cleaning

Breather Adaptors

Breather Adaptors (Steel Version) TBA

Threaded Breather Adaptor (Polyamide Version) BA-5

Breather Adaptor with Fillter Port BA-6

Threaded Breather Adaptor (Aluminium Version) DBA-75

Bayonet Breather Adaptor (Aluminium Version) BA-1

Bayonet Breather Adaptor (Aluminium Version) BA-2

Bayonet Breather Adaptor (Aluminium Version) BA-3

SAE Half Coupling Weld Adaptor SWF





STAUFF Corperation

Call us today 201.444.7800 or visit www.stauff.com













CLAMPS

TEST

FILTRATION

DIAGTRONICS

VALVES

FLANGES

ACCUMULATORS



Indicators - Level/Temp

Tank Filler Breathers

Giant Air Breathers

Desiccant Air Breathers

Breather Adaptors

Accessories

Pipe & Tube Cleaning

Accessories

Suction Line

Suction Strainer (Polyamide End Cap) SUS

Suction Strainer (Aluminium End Cap) SUS

Suction Strainer (NPT Tank Mounted) TMF

Suction Strainer (SAE O-Ring Tank Mounted) TMF

Suction Strainer (Hose Barb Tank Mounted) TMF

Weld Flange WC

Suction Flanges SF

Return Line

Diffuser SRV

Return Line Bushing SRF

Reservoir End Cover

Motor Pump Adaptors

Foot Mount Brackets for Hydraulic Pumps FM





















The STAUFF Hydraulic Accessories programme has been carefully designed to offer a complete range of sophisticated components suited to the demands of building hydraulic reservoirs and power units in most industrial and mobile applications.

Whether you require a solution for a most precise visual or electrical fluid level and temperature indication, a reliable tank filling and breathing product that can even absorb moisture from your hydraulic system, or equipment to connect the suction and return line of your hydraulic circuit with the reservoir: The STAUFF Hydraulic Accessories programme will provide you with the choice you need.

At STAUFF, we are aware of the ongoing development and innovation within the hydraulic industry. We continually strive to keep up with and further develop the latest technology and to bring the benefit of any such improvements directly to our customers.

By the way: We are always prepared to consider customdesigned products and product modifications according to your ideas or based on STAUFF developments.

Please do not hesitate to contact STAUFF for further details.

www.stauff.com

Hydraulic Accessories

inuex	
Fluid Level / Temperature Indicators	Е
Tank Filler Breathers	E1:
Giant Air Breathers	E2
Desiccant Air Breathers	E3
Breather Adaptors	E3-
Suction Line Accessories	E3
Return Line Accessories	E4
Other Reservoir Accessories	E4
Pipe, Tube and Hose Cleaning	F5

ESTAUFF ®

Fluid Level / Temperature Indicators

Fluid Level / Temperature Indicators				
	Level Gauge	SNA	E4	
	Level Gauge (Special Options)	SNA	E 5	
	Level Gauge	SNK	E 6	
	Level Gauge (Compact Design)	SNKK	E7	
7	Thermo Switch for use with Level Gauge	TS-SNA/SNK	E8	
0	Dial Thermometer with Probe for use with Level Gauge	T1/T2	E8	
China China	Temperature Sensor for use with Level Gauge	TS-SNA/SNK-PT100	E9	
a)	Temperature Sensor with Direct Installation Set	TS-SNA/SNK-PT100-T	E 9	
	Display / Evaluation Unit for use with Temperature Sensor	TS-SNA/SNK-PT100-D	E10	
	Signal Convertor for use with Temperature Sensor	TS-SNA/SNK-PT100-C	E10	
90	Metal Sight Glasses	OLG	E11	
0	Plastic Sight Glasses	SLW	E11	

		Tank Filler Breath	ers
	District Fills Describes	SPB 1	
THE STATE OF	Plastic Filler Breather	SPB 2	E12
	(Screw-In Version)	SPB 3	
THE R	Disstic Filler Breether	CDD 4	
4	Plastic Filler Breather (Flange Version)	SPB 4 SPB 5	E13
U	(Fidings version)	31 0 3	
	Accessories / Options (Dipsticks / Baske Pressure Drop Flow Curves	ets / Pressurisation)	E14
	Plastic Filler Breather (Compact Design; Screw-In Version)	SPBN	E16
	Plastic Filler Breather (Compact Design; Bayonet Version)	SPBN	E16
	Accessories / Options (Dipsticks / Baske Pressure Drop Flow Curves	ets / Pressurisation)	E17
	Metal Filler Breather (Screw-In Version)	SMBT-47	E18
	Metal Filler Breather (Bayonet Version)	SMBB-47	E19
	Metal Filler Breather (Screw-In Version)	SMBT-80	E20
III	Metal Filler Breather (Bayonet Version)	SMBB-80	E21
	Metal Breather (Push-On Version)	SMBP-80	E22
T	Lockable Metal Filler Breather (Clamping, Threaded and Push-On Version)	SMBL	E23
0	Side Mount Bracket (Polyamide) for use with Filler Breather	ASMB-1	E24
10	Side Mount Bracket (Aluminium) for use with Filler Breather	ASMB-2	E24
1	Extended Bayonet Flange for use with Filler Breather	EBF-1	E25
	Extended Bayonet Flange for use with Filler Breather	EBF-2	E25
0	Weld Riser for use with Filler Breather	WR	E25
9	Plastic Filler Breather (Screw-In Version)	SES-1	E26
•	Plastic Filler Breather (Welded Version)	SES-2	E26



Giant	Air Breathers					Suction Line Accesso	ries
- Sharts	Giant Air Breather (3 μm Synthetic Fibre)	SGB	E28		Suction Strainer (Polyamide End Cap)	SUS	E38
San S	Giant Air Breather (10 µm Cellulose)	SGB	E29	Î	Suction Strainer (Aluminium End Cap)	SUS	E39
Desic	cant Air Breathers			Ī	Suction Strainer (NPT Tank Mounted)	TMF	E40
	Desiccant Air Breather	SDB	E30	1	Suction Strainer (SAE O-Ring Tank Mounted)	TMF	E41
	Desiccant Air Breather (Economy Version)	SVDB	E31		Suction Strainer (Hose Barb Tank Mounted)	TMF	E42
	Desiccant Air Breather with Check Valves	SDB-CV	E32	0	Weld Flange	WC	E43
	Adaptor Plate for use with Desiccant Air Breather	АР	E33	0	Suction Flanges	SF	E44
	Visual Contamination Indicator for use with Adaptor Plate	FM	E33			Return Line Accesso	ries
Breatl	ner Adaptors				Diffuser	SRV	E46
	Threaded Breather Adaptor (Steel Version)	ТВА	E34	4	Return Line Bushing	SRF	E47
	Threaded Breather Adaptor (Polyamide Version)	BA-5	E34		Ot	her Reservoir Accesso	ries
C	Breather Adaptor with Fillter Port	BA-6	E35		Reservoir End Cover	EC	E48
	Threaded Breather Adaptor (Aluminium Version)	DBA-75	E35	ıĄ.	Motor Pump Adaptors for Elec	tric Motors	E50
-	Bayonet Breather Adaptor (Aluminium Version)	BA-1	E36		Foot Mount Brackets for Hydra	aulic Pumps	E53



Bayonet Breather Adaptor BA-2 (Aluminium Version)



Bayonet Breather Adaptor BA-3 E36 (Aluminium Version)



SAE Half Coupling Weld Adaptor SWF E37



E36

Pipe, Tube and Hose Cleaning System



Nozzles / Nozzle Sets E54



Projectiles E55

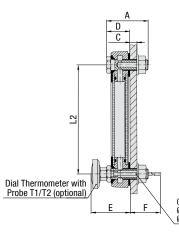
STAUFF Clean

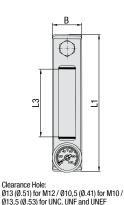
E54

E54

Level Gauge - Type SNA







YOUR LOGO

Design of Scale Plates

Thermometer Options

Capillary Tube Thermometer with a dual Celsius / Fahrenheit scale up to $+80 \,^{\circ}\text{C} \,/ \, +180 \,^{\circ}\text{F}$



Characteristics

Visual fluid level indication in hydraulic reservoirs with maximum tank pressures not exceeding 2bar / 29PSI

Nominal Sizes and Designs

- 6 nominal sizes from 76 mm / 2.99 in to 305 mm / 12.00 in
- Display either undivided (SNA 076 ... 176) or subdivided by strut(s) into 2 (SNA 254) or 3 sections (SNA 305)

Please see page E5 for alternative nominal sizes and designs.

Media Compatibility

 Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Materials

- · Housing made of Steel St 12, black epoxy-coated
- Sight tube and plugs made of Polyamide (PA)
- Sealings made of NBR (Buna-N®)
- Scale plate made of PVC

Special sight tube materials for improved UV or chemical resistance and use with special media (such as bio-degradable fluids, diesel oils, gasolines, etc.) as well as special sealing materials, e.g. FPM (Viton®), and scale plate materials, e.g. Aluminium, are available on request.

Please see page E5 for alternative housing materials.

Technical Data

- IP 65 protection rating: Dust tight and protected against water jets (IP 67 on request)
- Operating temperature range: -30 °C ... +80 °C / -22 °F ... +176 °F
- Recommended tightening torque: 8 N·m / 5.9 ft·lb

Accessories / Options

- Red / blue capillary tube thermometers with a dual Celsius / Fahrenheit scale and a temperature display range of up to $+80 \,^{\circ}\text{C} / +180 \,^{\circ}\text{F}$
- Dial thermometers with probe and a Celsius or a dual Celsius / Fahrenheit scale with a temperature display range of up to +100 °C / +212 °F
- Thermo Switches
- Temperature Sensors

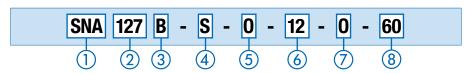
Please see pages E8 and E9 for details.

Dimensions

Maximum admissible tolerance for the bolt center spacing (dimension L2) according to DIN ISO 2768-f; ±0,20 mm / .008 in for all nominal sizes

Nominal Size	Dimensions (mm/in)									
	Α	В	C (Max.)	D	E	F (with T1)	F (with T2)	L1	L2	L3
SNA 076	45	34,5	8	27	43,5	165,5	265,5	108	76	31
SNA 076	1.77	1.36	.32	1.06	1.71	6.52	10.45	4.25	2.99	1.22
SNA 127	45	34,5	8	27	43,5	165,5	265,5	159	127	76
SNA 12/	1.77	1.36	.32	1.06	1.71	6.52	10.45	6.26	5.00	2.99
CNA 1EO	45	34,5	8	27	43,5	165,5	265,5	182	150	99
SNA 150	1.77	1.36	.32	1.06	1.71	6.52	10.45	7.17	5.91	3.90
SNA 176	45	34,5	8	27	43,5	165,5	265,5	208	176	124
SNA 1/0	1.77	1.36	.32	1.06	1.71	6.52	10.45	8.19	6.93	4.88
CNA OF 4	45	34,5	8	27	43,5	165,5	265,5	285	254	192
SNA 254	1.77	1.36	.32	1.06	1.71	6.52	10.45	11.22	10.00	7.56
CNA 20E	45	34,5	8	27	43,5	165,5	265,5	336	305	244
SNA 305	1.77	1.36	.32	1.06	1.71	6.52	10.45	13.23	12.00	9.61

Order Codes



(1) Type

Level Gauge with visual fluid level indication

(2) Nominal Size

SNA 076 (nominal size of 76 mm / 2.99 in)	076
SNA 127 (nominal size of 127 mm / 5.00 in)	127
SNA 150 (nominal size of 150 mm / 5.91 in)	150
SNA 176 (nominal size of 176 mm / 6.93 in)	176
SNA 254 (nominal size of 254 mm / 10.00 in)	254
SNA 305 (nominal size of 305 mm / 12.00 in)	305

Please see page E5 for alternative nominal sizes.

(3) Sealing Material

NBR (Buna-N®) (standard option)	В
FPM (Viton®)	۷

(4) Design of Scale Plate

With STAUFF logo (standard option)	S
Neutral design without any logo	N
Custom-designed scale plate (please specify)	X

(5) Thermometer Option

mornionotor option	
Supplied without thermometer	0
Red Capillary Tube thermometer on scale plate	T
Blue Capillary Tube thermometer on scale plate	TB
Dial thermometer with probe (200 mm / 7.87 in) and a Celsius scale up to 100 $^{\circ}\text{C}$	T1C
Dial thermometer with probe (300 mm / 11.81 in) and a Celsius scale up to 100 $^{\circ}\text{C}$	T2C
Dial thermometer with probe (200 mm / 7.87 in) and a dual scale up to 100 $^{\circ}\text{C}$ / 212 $^{\circ}\text{F}$	T1CF
Dial thermometer with probe (300 mm / 11.81 in) and a dual scale up to 100 $^{\circ}\text{C}$ / 212 $^{\circ}\text{F}$	T2CF

(6) Banjo Bolt Size

Metric ISO thread M12 (standard option)	12
Metric ISO thread M10	10
Unified coarse thread 1/2-13 UNC	U1
Unified fine thread 1/2-20 UNF (special option)	U2
Unified extra-fine thread 1/2-28 UNEF (special option)	U3

(7) Thermo Switch / Temperature Sensor Option

/	mornio owiton / remperature occisor opti	UII
	Supplied without Thermo Switch / Temperature Senso	r -
	Thermo Switch TS-SNA/SNK; Break contact	^
	(normally closed); Equipped with standard connector	0
	Thermo Switch TS-SNA/SNK; Break contact	۵.
	(normally closed); Equipped with connector M12	OD
	Thermo Switch TS-SNA/SNK; Make contact	_
	(normally open); Equipped with standard connector	C
	Thermo Switch TS-SNA/SNK; Make contact	۵.
	(normally open); Equipped with connector M12	CD
	Temperature Sensor TS-SNA/SNK-PT100;	
	Equipped with connector M12	IUU

Thermo Switches / Temperature Sensors only available for banjo bolt size M12. Please see pages E8 and E9 for details.

(8) Switching Temperature

Contact switches at +60 °C / +140 °F	60
Contact switches at +70 °C / +158 °F	70
Contact switches at +80 °C / +176 °F	80
Contact switches at +90 °C / +194 °F	90

Only to be indicated when using a Thermo Switch.

Options T1C/T1CF and T2C/T2 CF are not available for banjo bolt size M10 and not be used in conjunction with Thermo Switches or Temperature Sensors. Please see page E8 for details.

Level Gauge (Special Options) - Type SNA



Characteristics

Visual fluid level indication in hydraulic reservoirs with maximum tank pressures not exceeding 2bar / 29PSI; ideal for custom applications in terms of reservoir capacities and dimensions

Nominal Sizes

- Special sizes beyond the normal of 305 mm / 12 in up to a maximum nominal size of 950 mm / 37.4 in – even for small and medium quantities
- High-precision manufacturing within 1 mm tolerance to customer requirements

Design

- Robust design thanks to one or more struts that subdivide the display into 2 or more sections
- Positioning of the strut(s) based on engineering considerations and/or according to particular customer requirements
- Precise visual indication of the fluid level by use of scale plates (only available for nominal sizes smaller than 670 mm / 26.4in) or by use of a coloured floating element (recommended option for nominal sizes larger than 670 mm / 26.4in)
- Plastic dampening clips to reduce vibration of the sight tube are used for nominal sizes larger than 450 mm / 17.7 in

Materials

- Housing made of Steel, Aluminium or Stainless Steel
- Sight tube and plugs made of Polyamide (PA)
- Sealings made of NBR (Buna-N®)
- Scale plate made of PVC
- Floating element made of Polyamide (PA)

Special sight tube materials for improved UV or chemical resistance and use with special media (such as bio-degradable fluids, diesel oils, gasolines, etc.) as well as special sealing materials, e.g. FPM (Viton®), and scale plate materials, e.g. Aluminium, are available on request.

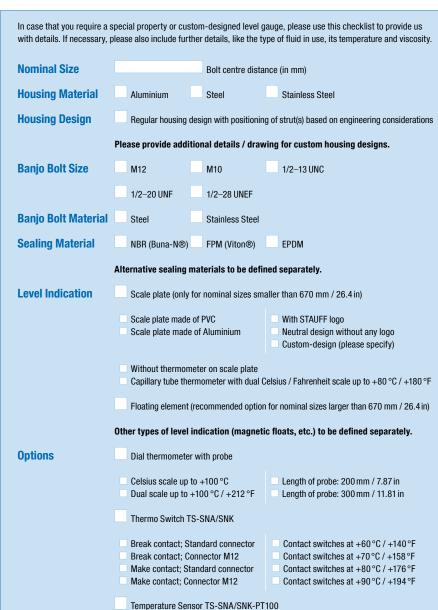
Please also ask for our special low-temperature versions, suitable for extreme temperatures up to -40 $^{\circ}\text{C}$ / -40 $^{\circ}\text{F}.$

Accessories / Options

- Capillary tube thermometers with a dual Celsius / Fahrenheit scale and a temperature display range of up to +80 °C / +180 °F
- Dial thermometers with probe and a Celsius or a dual Celsius / Fahrenheit scale with a temperature display range of up to +100 °C / +212 °F
- Thermo switches
- Temperature sensors

Please see pages E8 and E9 for details.

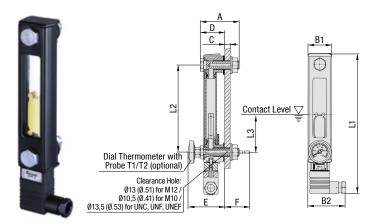
Inquiry Checklist





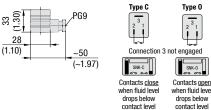
STAUFF

Level Gauge • Type SNK

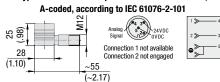


Connection Details and Electrical Functions

Types C and O: Industrial standard connector (contact gap: 11 mm / .43 in), similar to DIN EN 175301-803-B / ISO 6952



Types CD and OD: Five-pin circular connector M12,



Characteristics

Visual / electrical fluid level indication in hydraulic reservoirs with maximum tank pressures not exceeding 1 bar / 14.5PSI

Nominal Sizes and Designs

- 5 nominal sizes from 127 mm / 5.00 in to 305 mm / 12.00 in
- Display either undivided (SNK 127 ... 176) or subdivided by strut(s) into 2 (SNK 254) or 3 sections (SNK 305)

Media Compatibility

 Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Materials

- · Housing made of Aluminium, plastic coated
- Sight tube and plugs made of Polyamide (PA)
- Float made of Polyamide (PA)
- Sealings made of FPM (Viton®)

Special sight tube materials for improved UV or chemical resistance and use with special media (such as bio-degradable fluids, diesel oils, gasolines, etc.) as well as special sealing materials are available on request.

Electrical Specifications

- Magnetic float activates switch when fluid level drops below contact level within 60 mm / 2.36 in of lower banjo bolt
- Available as a break contact (normally closed) or make contact (normally open)
- Either equipped with industrial standard connector (types C / 0) or five-pin circular connector M12 (types CD / 0D)
- Direction of the electrical contact box (right / left) can be chosen when assembling the electrical contacts (types C / D) or is right by default (types CD / OD)
- Contact ratings: max. 10 W (types C / CD) or 5 W (types 0 / 0D)
- Switching voltage: max. 50 VAC/DC
- Switching current: max. 0,25 A

Technical Data

- IP 65 protection rating: Dust tight and protected against water jets (IP 67 on request)
- Operating temperature range: -30 °C ... +80 °C / -22 °F ... +176 °F
- Recommended tightening torque: 8 N·m / 5.9 ft·lb
- Minimum lateral distance to other magnetic components and cables: 10 mm / .39 in

Accessories / Options

- Dial thermometers with probe and a Celsius or a dual Celsius / Fahrenheit scale with a temperature display range of up to +100 °C / +212 °F
- Thermo Switches
- Temperature Sensors

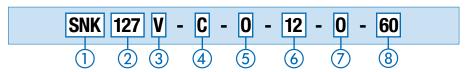
Please see pages E8 and E9 for details.

Dimensions

Table shows dimension L1 for the version with industrial standard connector (types C and 0) only. Maximum admissible tolerance for the bolt center spacing (dimension L2) according to DIN ISO 2768-f: ±0,20mm / .008 in for all nominal sizes.

Nominal Size	Dimens	Dimensions (mm/in)									
	Α	B1	B2	C (Max.)	D	E	F (with T1)	F (with T2)	L1	L2	L3
SNK 127	56	34,5	~50	8	35,1	51,5	157,5	257,5	205	127	~60
SINK 121	2.20	1.36	~1.97	.32	1.26	2.03	6.20	10.14	8.07	5.00	~2.36
SNK 150	56	34,5	~50	8	35,1	51,5	157,5	257,5	228	150	~60
SINK 130	2.20	1.36	~1.97	.32	1.26	2.03	6.20	10.14	8.98	5.91	~2.36
SNK 176	56	34,5	~50	8	35,1	51,5	157,5	257,5	254	176	~60
SINK 170	2.20	1.36	~1.97	.32	1.26	2.03	6.20	10.14	10.00	6.93	~2.36
SNK 254	56	34,5	~50	8	35,1	51,5	157,5	257,5	332	254	~60
SINK 234	2.20	1.36	~1.97	.32	1.26	2.03	6.20	10.14	13.07	10.00	~2.36
SNK 305	56	34,5	~50	8	35,1	51,5	157,5	257,5	383	305	~60
SINK 305	2.20	1.36	~1.97	.32	1.26	2.03	6.20	10.14	15.08	12.00	~2.36

Order Codes



1) Type

Level Gauge with visual / electrical	CNIV
fluid level indication	SNK

2 Nominal Size

SNK 127 (nominal size of 127 mm / 5.00 in)	127
SNK 150 (nominal size of 150 mm / 5.91 in)	150
SNK 176 (nominal size of 176 mm / 6.93 in)	176
SNK 254 (nominal size of 254 mm / 10.00 in)	254
SNK 305 (nominal size of 305 mm / 12.00 in)	305

Consult STAUFF for alternative nominal sizes and designs.

(3) Sealing Material

FPM (Viton®)	V

(4) Electrical Function

,	Licetion i dilettori	
	Break contact, opens at contact level	0
	(normally closed); Equipped with standard connector	U
	Break contact, opens at contact level	0 D
	(normally closed); Equipped with connector M12	OD
	Make contact, closes at contact level	_
	(normally open); Equipped with standard connector	C
	Make contact, closes at contact level	۵.
	(normally open); Equipped with connector M12	CD

5 Thermometer Option

Supplied without thermometer	0
Dial thermometer with probe (200 mm / 7.87 in) and a Celsius scale up to 100 $^{\circ}\text{C}$	T1C
Dial thermometer with probe (300 mm / 11.81 in and a Celsius scale up to 100°C) T2C
Dial thermometer with probe (200 mm / 7.87 in) and a dual scale up to 100 $^{\circ}\text{C}$ / 212 $^{\circ}\text{F}$	T1CF
Dial thermometer with probe (300 mm / 11.81 in and a dual scale up to 100 $^{\circ}\text{C}$ / 212 $^{\circ}\text{F}$) T2CF

(6) Banjo Bolt Size

Metric ISO thread M12 (standard option)	12
Metric ISO thread M10	10
Unified coarse thread 1/2-13 UNC	U1
Unified fine thread 1/2-20 UNF (special option)	U2
Unified extra-fine thread 1/2-28 UNEF (special option)	U3

(7) Thermo Switch / Temperature Sensor Option

come contains temperature contain aparen
oplied without Thermo Switch / Temperature Sensor -
ermo Switch TS-SNA/SNK; Break contact
rmally closed); Equipped with standard connector
ermo Switch TS-SNA/SNK; Break contact
rmally closed); Equipped with connector M12
ermo Switch TS-SNA/SNK; Make contact
rmally open); Equipped with standard connector
ermo Switch TS-SNA/SNK; Make contact
rmally open); Equipped with connector M12
mperature Sensor TS-SNA/SNK-PT100;
uipped with connector M12

Thermo Switches / Temperature Sensors only available for banjo bolt size M12. Please see pages E8 and E9 for details.

(8) Switching Temperature

Contact switches at +60 °C / +140 °F	60
Contact switches at +70 °C / +158 °F	70
Contact switches at +80 °C / +176 °F	80
Contact switches at +90 °C / +194 °F	90

Only to be indicated when using a Thermo Switch.

Options T1C/CF and T2C/CF are not available for banjo bolt size M10 and not be used in conjunction with Thermo Switches or Temperature Sensors.

Please see page E8 for details.

Level Gauge (Compact Design) - Type SNKK



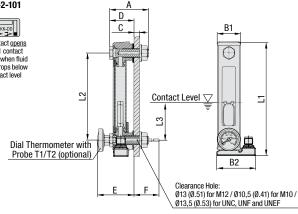
Connection Details and Electrical Functions

Type DD: Five-pin circular connector M12, A-coded, according to IEC 61076-2-101











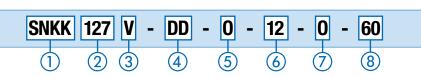
-40mm / -1.57in in comparison with Level Gauges SNK

Dimensions

 $Maximum\ admissible\ tolerance\ for\ the\ bolt\ center\ spacing\ (dimension\ L2)\ according\ to\ DIN\ ISO\ 2768-f:\ \pm0,20\ mm\ /\ .008\ in\ for\ all\ nominal\ sizes.$

Nominal Size	Dimens	Dimensions (mm/ _{in})									
	Α	B1	B2	C (Max.)	D	E	F (with T1)	F (with T2)	L1	L2	L3
SNKK 127	56	34,5	~55	8	35,1	51,5	157,5	257,5	165	127	~60
SINKK 127	2.20	1.36	~2.17	.32	1.26	2.03	6.20	10.14	6.50	5.00	~2.36
SNKK 150	56	34,5	~50	8	35,1	51,5	157,5	257,5	188	150	~60
SINKN 130	2.20	1.36	~1.97	.32	1.26	2.03	6.20	10.14	8.98	5.91	~2.36
SNKK 176	56	34,5	~55	8	35,1	51,5	157,5	257,5	214	176	~60
SINKK 170	2.20	1.36	~2.17	.32	1.26	2.03	6.20	10.14	8.43	6.93	~2.36
SNKK 254	56	34,5	~55	8	35,1	51,5	157,5	257,5	292	254	~60
3NKK 234	2.20	1.36	~2.17	.32	1.26	2.03	6.20	10.14	11.50	10.00	~2.36
SNKK 305	56	34,5	~55	8	35,1	51,5	157,5	257,5	343	305	~60
SUC AANG	2.20	1.36	~2.17	.32	1.26	2.03	6.20	10.14	13.50	12.00	~2.36

Order Codes



(1) Type

Level Gauge with visual / electrical SNKK fluid level indication (compact design)

2 Nominal Size

SNKK 127 (nominal size of 127 mm / 5.00 in)	127
SNKK 150 (nominal size of 150 mm / 5.91 in)	150
SNKK 176 (nominal size of 176 mm / 6.93 in)	176
SNKK 254 (nominal size of 254 mm / 10.00 in)	254
SNKK 305 (nominal size of 305 mm / 12.00 in)	305

Consult STAUFF for alternative nominal sizes and designs.

(3) Sealing Material

FPM (Viton®)

(4) Electrical Function

SPDT (Single Pole Double Throw) contacts, 1 contact opens and 1 contact closes at DD contact level; Equipped with connector M12

(5) Thermometer Option

,	mormonicioi option	
	Supplied without thermometer	0
	Dial thermometer with probe (200 mm / 7.87 in) and a Celsius scale up to 100 $^{\circ}\text{C}$	T1C
	Dial thermometer with probe (300 mm / 11.81 in) and a Celsius scale up to 100 $^{\circ}\text{C}$	T2C
	Dial thermometer with probe (200 mm / 7.87 in) and a dual scale up to 100 $^{\circ}\text{C}$ / 212 $^{\circ}\text{F}$	T1CF
	Dial thermometer with probe (300 mm / 11.81 in) and a dual scale up to 100 $^{\circ}$ C / 212 $^{\circ}$ F	T2CF

(6) Banio Bolt Size

\sim	The state of the s	
	Metric ISO thread M12 (standard option)	12
	Metric ISO thread M10	10
	Unified coarse thread 1/2-13 UNC	U1
	Unified fine thread 1/2-20 UNF (special option)	U2
	Unified extra-fine thread 1/2-28 UNEF (special option)	U3

(7) Thermo Switch / Temperature Sensor Option

_	The state of the s	
	Supplied without Thermo Switch / Temperature Sens	or -
	Break Contact, opens at contact level	
	(normally closed); Equipped with standard connector	0
	Break Contact, opens at contact level	٥.
	(normally closed); Equipped with connector M12	OD
	Make Contact, closes at contact level	
	(normally open); Equipped with standard connector	C
	Make Contact, closes at contact level	۵.
	(normally open); Equipped with connector M12	CD
	Temperature Sensor TS-SNA/SNK-PT100;	
	Equipped with connector M12	Γ100

Thermo Switches / Temperature Sensors only available for banjo bolt size M12. Please see pages E8 and E9 for details.

(8) Switching Temperature

Contact switches at +60 °C / +140 °F	60
Contact switches at +70 °C / +158 °F	70
Contact switches at +80 °C / +176 °F	80
Contact switches at +90 °C / +194 °F	90

Only to be indicated when using a Thermo Switch.

Options T1C/CF and T2C/CF are not available for banjo bolt size M10 and not be used in conjunction with Thermo Switches or Temperature Sensors. Please see page E8 for details.

Characteristics

Visual / electrical fluid level indication in hydraulic reservoirs with maximum tank pressures not exceeding 1 bar / 14.5 PSI; ideal for applications in which space is limited

Nominal Sizes and Designs

- 5 nominal sizes from 127 mm / 5.00 in to 305 mm / 12.00 in
- · Compact design allows space-saving installation: Always 40 mm / 1.57 in shorter than Level Gauges SNK of the comparable nominal size
- Display either undivided (SNKK 127 ... 176) or subdivided by strut(s) into 2 (SNKK 254) or 3 sections (SNKK 305)

Media Compatibility

• Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Materials

- Housing made of Aluminium, plastic coated
- Sight tube and plugs made of Polyamide (PA)
- Float made of Polyamide (PA)
- Sealings made of FPM (Viton®)

Special sight tube materials for improved UV or chemical resistance and use with special media (such as bio-degradable fluids, diesel oils, gasolines, etc.) as well as special sealing materials are available on request.

Electrical Specifications

- Magnetic float activates switch when fluid level drops below contact level within 60 mm / 2.36 in of lower banjo bolt
- Available as a SPDT (Single Pole Double Throw) contact
- Equipped with five-pin circular connector M12
- . Direction of the electrical contact box is right to top by default

Technical Data

- IP 67 protection rating: Dust tight and protected against powerful water jets; even immersion (up to 1 m / 3.28 ft) in water is possible under defined conditions of pressure and time (IP 69K on request)
- Operating temperature range: -30°C ... +80°C / -22°F ... +176°F
- Recommended tightening torque: 8 N·m / 5.9 ft·lb
- Minimum lateral distance to other magnetic components and cables: 10 mm / .39 in

Accessories / Options

- Dial thermometers with probe and a Celsius or a dual Celsius / Fahrenheit scale with a temperature display range of up to +100 °C / +212 °F
- Thermo Switches
- Temperature Sensors

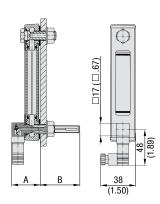
Please see pages E8 and E9 for details.



Thermo Switch - Type TS

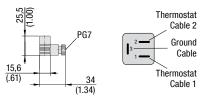




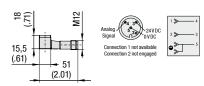


Connection Details and Electrical Functions

Types C and O: Industrial standard connector (contact gap: 9,4 mm / .37 in), similar to DIN EN 175301-803-C / ISO 6952



Types CD and OD: Five-pin circular connector M12, A-coded, according to IEC 61076-2-101



Characteristics

Fluid temperature measurement in conjunction with STAUFF Level Gauges SNA, SNK and SNKK

Installation

- Replaces the lower banjo bolt of the Level Gauge
- · Available for bolt size M12 only
- Clearance hole: Ø13 mm / Ø.51 in

Materials

- Metal parts made of Steel (1.0718)
- Plastic parts made of glass-fibre reinforced Polyamide (PA)

Electrical Specifications (General)

- Thermo switch is activated when the fluid temperature reaches the respective switching temperature
- Available with switching temperatures of +60 °C / +140 °F, +70 °C / +158 °F, +80 °C / +176 °F or +90 °C / +194 °F (with a switching tolerance of ±5 °C / ±9 °F and a hysteresis of 35 °C / 63 °F)
- Available as a break contact (normally closed) or make contact (normally open)
- Either equipped with industrial standard connector (types C / 0) or five-pin circular connector M12 (types CD / 0D)
- \blacksquare Thermo switch can be rotated by 360° to its final direction

Dimensions

	Dimensions (mm/in)		
	Α	В	
In conjunction with Level Gauge SNA	39	76	
	1.54	2.99	
In conjugation with Lavel Cauge CNIV	47	68	
In conjunction with Level Gauge SNK	1.85	2.68	
In conjugation with Lavel Cauge CNKK	47	68	
In conjunction with Level Gauge SNKK	1.85	2.68	

Electrical Specifications (Alternating Current)

- Maximum voltage: 250 V, 2,5 (1,6) A, 50 Hz
- Maximum current at 2000 operations:
 4,0 A at cos φ = 4,45 / 250 V, 135 °C
- Maximum current at 10000 operations:
 2,5 A at cos φ = 1,00 / 250 V, 150 °C
- Minimum current: 20 mA

Electrical Specifications (Direct Current)

Maximum voltage: 42 V

Order Codes



① Type	
Thermo Switch TS for use with Level Gauges SNA, SNK and SNKK	TS-SNA/SNK

2 Electrical Function

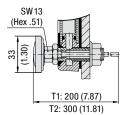
ens at switching temperature Equipped with standard connector	
ens at switching temperature Equipped with connector M12	,
ses at switching temperature quipped with standard connector	
ses at switching temperature	

(3) Switching Temperature

Contact switches at +60 °C / +140 °F	60
Contact switches at +70 °C / +158 °F	70
Contact switches at +80 °C / +176 °F	80
Contact switches at +90 °C / +194 °F	90

Dial Thermometer with Probe • Types T1/T2





Characteristics

Visual fluid temperature measurement in conjunction with STAUFF Level Gauges SNA, SNK and SNKK

Nominal Sizes and Designs

- Probe lengths of 200 mm / 7.87 in or 300 mm / 11.81 in
- Scale diameter of 33 mm / 1.30 in

Please consult STAUFF for special versions.

Scale Options

- Celsius scale of 0°C ... +100 °C (types T1C / T2C)
- Dual Celsius / Fahrenheit scale of up to +100 °C / +212 °F (types T1CF / T2CF)

Materials

■ Probe made of Stainless Steel V4A (1.4571)

Technical Data

 IP 65 protection rating: Dust tight and protected against water jets

Installation

- Requires a special banjo bolt (with internal M8 port for the dial thermometer with probe) to replace the lower standard banjo bolt of the Level Gauge
- Use suitable wrench (SW13 / Hex .51) to fasten;
 turning on the body itself may damage the product

Please note that Dial Thermometers with Probe can only be ordered in conjunction with Level Gauges SNA, SNK and SNKK. Please see page E4 to E7 for details.

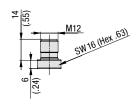
Temperature Sensor • Type TS-SNA/SNK-PT100

Hydraulic Accessories



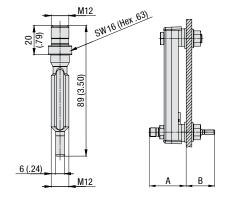
Connection Details and Electrical Functions

Four-pin circular connector M12, A-coded, according to IEC 61076-2-101



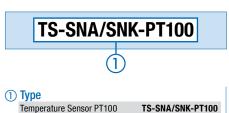
Pin Assignment







Order Codes



Dimensions

	Dimensions (mm/in)		
	Α	В	
In conjunction with Level Gauge SNA	43,5	45,5	
in conjunction with Level dauge SNA	1.71	1.79	
In conjugation with Lavel Course CNIV	51	38	
n conjunction with Level Gauge SNK	2.01	1.50	
In conjugation with Lavel Course CNKK	51	38	
In conjunction with Level Gauge SNKK	2.01	1.50	

Technical Data

- Operating temperature range (for the connector area): -25 °C ... +80 °C / -13 °F ... +176 °F
- IP 68 protection rating: Dust tight and protected against powerful water jets; even immersion (beyond 1 m / 3.28 ft) in water is possible under defined conditions of pressure and time

Characteristics

Fluid temperature measurement in conjunction with STAUFF Level Gauges SNA, SNK and SNKK; Analysis of signals with TS-SNA/SNK-PT100-D Display / Evaluation Unit, TS-SNA/SNK-PT100-C Signal Converter or system-sided amplifier or transducer

Installation

- Replaces the lower banjo bolt of the Level Gauge
- Available for bolt size M12 only
- Clearance hole: Ø13 mm / Ø.51 in

Materials

 Metal parts (including all fluid-affected parts) made of Stainless Steel V2A (1.4305)

Electrical Specifications

- Measuring temperature range: -40 °C ... +150 °C / -40 °F ... +302 °F
- Platinum mesuring element PT100 according to DIN EN 60751, class A
- Accuracy: ±(0,15 K + 0,002 x |t|)
- Max. contact current: 2,0 mA
- Equipped with four-pin circular connector M12 with gold-plated contacts

Order Codes



② Direct Adaptor

Temperature Sensor PT100

Direct installation set including M12 screw nut, gasket, front ring and 0-ring

TS-SNA/SNK-PT100

③ Sealing Material

 NBR (Buna-N®) (standard option)
 B

 FPM (Viton®)
 V

 EPDM
 E

The direct installation set can also be used in conjunction with Thermo Switches TS (see page E8). Please consult STAUFF for further information.

max. 8 (.31) SW18 (Nex .11) 28 61 (1.10) (2.40)

Materials

- Fluid-affected parts made of Stainless Steel V2A (1.4305)
- M12 screw nut made of Steel, zinc-plated
- Front ring made of Stainless Steel V2A (1.4305)
- 0-ring and gasket made of NBR (Buna-N®) (standard option), FPM (Viton®) or EPDM

Please see top of this page for Technical Details and Electrical Specifications for the Temperature Sensor.

Temperature Sensor with Direct Installation Set Type TS-SNA/SNK-PT100-T



Characteristics

Direct fluid temperature measurement without STAUFF Level Gauges SNA, SNK and SNKK; Analysis of signals with TS-SNA/SNK-PT100-D Display / Evaluation Unit, TS-SNA/SNK-PT100-C Signal Converter or system-sided amplifier or transducer

Installation

- Installation to the outer wall of the reservoir or gearbox
- Compact design and easy installation
- Clearance hole: Ø13 mm / Ø.51 in

Display / Evaluation Unit • Type TS-SNA/SNK-PT100-D



Programming button (1.89)(Ø1.34) oid Display 93 G1/2 SW30 Connector M12 x 1 for temperature sensor PT100; (Hex 1.18) cable (0,6 m / 1.97 ft) included in set

Characteristics

Mobile or stationary fluid temperature indication and evaluation in conjunction with STAUFF Temperature Sensor TS-SNA/SNK-PT100

Features

- · Connection of temperature sensor as 4-wire sensor
- Display of the current system temperature in °C or °F with 4-digit alpha-numeric display
- Measuring temperature range: -40°C ... +300°C / -40°F ... +572°F (may be limited by connected sensor)
- · Generation of 2 output signals according to parameter setting: Switching output - normally open / closed (programmable)
- Analog output 4 ... 20 mA or 0 ... 10 V (scaleable)
- Provision of process data via IO-Link 1.0 (38.4 kBaud)
- Designed for bi-directional connection

Electrical Specifications

- Operating voltage: 18 ... 32 V DC
- Current rating: 250 mA
- Voltage drop: <2 mA
- Response time of switching output: 130 ms
- Analog output: 4 ... 20 mA or 0 ... 10 V (scaleable)
- Accuracy of switching output: ±0,3 °C / ±.54 °F
- Accuracy of analog output: ±0,3 °C / ±.54 °F
- Accuracy of display: ±0,3 °C / ±.54 °F
- Resolution of switching output: 0,1 °C / .18 °F
- Resolution of analog output: 0,1 °C / .18 °F
- Resolution of display: 0,1 °C / .18 °F ■ Temperature coefficient (of the span per 10 K): 0,1 %
- · Short-circuit protection (pulsed)
- Protection against reverse polarity and overload
- Equipped with four-pin circular connector M12 with gold-plated contacts

Technical Data

- IP 67 protection rating: Dust tight and protected against powerful water jets; even immersion (up to 1 m / 3.28 ft) in water is possible under defined conditions of pressure and time
- Operating temperature range: -25°C ... +70°C / -13°F ... +158°F

Electrical Specifications

■ Maximum load: 300 Ω

· Accuracy of analog output:

Resolution: ≤0,1 °C / ≤.18 °F

· Short-circuit protection (pulsed)

• Operating voltage: 20 ... 32 V DC

• Rise time analog output: 400 ms

Analog output: 4 ... 20 mA (scaleable)

 $\pm 0.3 \,^{\circ}\text{C} \, / \, \pm .54 \,^{\circ}\text{F} + (\pm 0.1 \,\% \,\text{of measuring span})$

• Temperature coefficient (of the span per 10 K): 0,1 %

Protection against reverse polarity and overload

Order Codes

SET-TS-SNA/SNK-PT100-D

(1) Type

Complete set of Display / Evaluation Unit for use with Temperature Sensor

TS-SNA/SNK-PT100

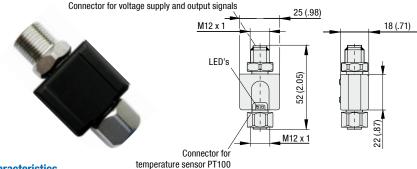
SET-TS-SNA/SNK-PT100-D

Complete sets include the following components:

- Display / Evaluation Unit TS-SNA/SNK-PT100-D
- Cable with M12 plug / M12 socket (0,6 m / 1.97 ft)
- External power supply unit 100 ... 240 V AC (50 ... 60 Hz) / 200 mA
- User manual (CD-ROM)

All components included in the complete set are also available as single parts. Consult STAUFF for further information.

Signal Convertor • Type TS-SNA/SNK-PT100-C



Characteristics

Signal convertor for use with STAUFF Temperature Sensor TS-SNA/SNK-PT100

Features

- · Converts the measured signal into a proportional analog signal: Analog output - 4 ... 20 mA (scaleable)
- · Measuring temperature range (factory setting): -50°C ... +150°C / -58°F ... +302°F
- Provision of process data via IO-Link 1.0 (38.4 kBaud)
- Designed for bi-directional connection

Order Codes



(1) Type

Signal Convertor for use with Temperature Sensor TS-SNA/SNK-PT100

TS-SNA/SNK-PT100-C

Electrical Specifications (Continuation)

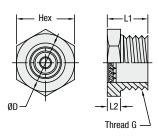
 Equipped with four-pin circular connector M12 with gold-plated contacts

Technical Data

- IP 67 protection rating: Dust tight and protected against powerful water jets; even immersion (up to 1 m / 3.28 ft) in water is possible under defined conditions of pressure and time
- Operating temp. range: -25°C ... +70°C / -13°F ... +158°F



Metal Sight Glasses ■ Type SLW





Dimensions

Order Code	Thread G	Dimensions (mm/in)			Max. Operating	
		ØD	L1	L2	Hex	Pressure (bar/PSI)
SLW - 04	1/4-18 NPT	8,6	16,0	4,8	16,0	275
OLW 04	174 101411	.34	.63	.19	.63	4000
SLW - 06	3/8-18 NPT	11,2	18,3	5,6	19,1	250
SLW - 00	3/0-10 NF 1	.44	.72	.32	.75	3700
SLW - 08	1/2-14 NPT	14,2	19,8	5,6	23,9	240
SLW - 00	1/2-14 NP1	.56	.78	.32	.94	3500
SLW - 12	3/4-14 NPT	19,1	23,9	8,1	26,9	200
3LW - 12	3/4-14 INF I	.75	.94	.32	1.06	3000
CIW 16	LW - 16 1–11-1/2 NPT	23,9	31,8	8,1	35,1	170
3LW - 10		.94	1.25	.32	1.38	2500
SLW - 20	1-1/4-11-1/2 NPT	30,5	31,0	10,4	44,5	138
3LW - 20	1-1/4-11-1/2 NF1	.120	1.22	.41	1.75	2000
SLW - 24	1-1/2-11-1/2 NPT	36,6	31,0	10,4	50,8	100
3LW - 24	1-1/2-11-1/2 NF1	1.44	1.22	.41	2.00	1500
SLW - 32	2-11-1/2 NPT	47,8	32,5	10,4	63,5	70
SLW - SZ	Z-11-1/2 NP1	1.88	1.28	.41	2.50	1000

Characteristics

Visual fluid level indication in hydraulic reservoirs

Nominal Sizes and Designs

- Thread sizes from 1/4–18 NPT to 2–11-1/2 NPT
- SAE thread available on request

Materials

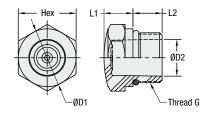
- Housings made of Steel, electroless nickel plated
- Hermetically sealed prism lenses made of Glass

Consult STAUFF for alternative materials.

Technical Data

■ Max. operating temperature: +260 °C / +500 °F

Plastic Sight Glasses • Type OLG





Dimensions

Order Code	Thread G	Dimensions (mm/in)				
		ØD1	ØD2	L1	L2	Hex
0LG - U08 - P - P	3/4-16 UNF	22	14	8	11	22,0
0Lu - 000 - F - F		.90	.55	.31	.43	.90
OLG - U12 - P - P	1-1/16–12 UNF	32	20	11,9	15,1	32
ULG - U12 - P - P		1.26	.79	.47	.59	1.26
OLG - U16 - P - P	1-5/16–12 UNF	41	25	12,9	15,1	41
ULG - U16 - P - P		1.61	.98	.51	.59	1.61
0LG - U20 - P - P	1-5/8–12 UNF	50	30	15,9	15,1	50
ULG - U2U - P - P		1.97	1.18	.63	.59	1.97

Characteristics

Visual fluid level indication in hydraulic reservoirs

Nominal Sizes and Designs

- Thread sizes from 3/4-16 UNF to 1-5/8-12 UNF
- SAE thread available on request

Materials

- Housings made of Polyamide (TR-90-UV)
- Sealings made of NBR (Buna-N®)

Consult STAUFF for alternative materials.

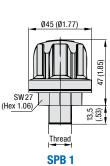
Technical Data

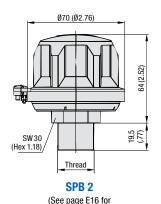
■ Operating temp. range: -30 °C ... +90 °C / -22 °F ... +194 °F



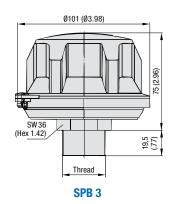
Plastic Filler Breather • Types SPB 1 / 2 / 3 (Screw-In Version)







compact version SPBN)



Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features

- · Available with 3 different cap diameters
- Screw-in version, equipped with male NPT thread (ANSI B1.20.1) or male BSP thread (ISO 228)
- Operating temperature range:-40 °C ... +120 °C / -40 °F ... +248 °F

Materials

- Made of non-corrosive materials
- Body and cap made of glass-fibre reinforced Polyamide (PA)
- Sealings made of NBR (Buna-N®)

Consult STAUFF for alternative materials.

Accessories / Options

- Pressurisation up to 0,7 bar / 10 PSI (not available for SPB 1)
- Air filter element
- Anti-splash feature
- Plastic dipstick with integrated anti-splash feature

Please see page E14 for details.

Maximum Air Flow Rate

- 0,15 m³/min / 5.30 cfm for SPB 1
- 0,40 m³/min / 14.13 cfm for SPB 2
- 1,00 m³/min / 35.31 cfm for SPB 3

Please see page E15 for detailed air flow curves.

Oil Displacement

- 150 l/min / 40 US GPM for SPB 1
- \blacksquare 400 l/min / 106 US GPM for SPB 2
- 1000 I/min / 264 US GPM for SPB 3

Installation

 Recommended mounting spaces: Ø48 mm / Ø1.89 in for SPB 1, Ø90 mm / Ø3.54 in for SPB 2, and Ø122 mm / Ø4.80 in for SPB 3

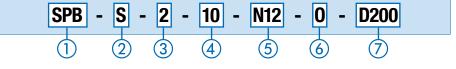
Thread Options

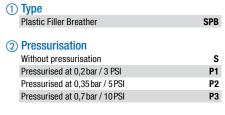
Thread		SPB 1	SPB 2	SPB 3	Code
ad 1)	1/4	•	0	0	N04
Thread .20.1)	3/8	•	0	0	N06
	1/2	•	0	0	N08
le N	3/4	•	•	•	N12
Male NPT (ANSI B1	1	0	0	•	N16

	Thread		SPB 1	SPB 2	SPB 3	Code
Г	ad	G1/4	•	0	0	B04
١,	SP Thread	G3/8	•	•	0	B06
-18		G1/2	•	•	•	B08
1	Male B (IS(G3/4	0	•	•	B12
Ŀ	⊠	G1	0	0	•	B16

Standard Option

Order Codes





Type SPB 1 is only available without pressurisation. Please see page E14 for details.

3 Version

(4) Air Filter Element (Material / Micron Rating)

00
10
40
E03
L10

Options E03 and L10 are only available for type SPB 3. Consult STAUFF for alternative materials / micron ratings.

(5) Connection Thread (Male)

1/4 NPT (for SPB 1 only)	N04
3/8 NPT (for SPB 1 only)	N06
1/2 NPT (for SPB 1 only)	N08
3/4 NPT (for SPB 1, 2 and 3)	N12
1 NPT (for SPB 3 only)	N16
G1/4 (for SPB 1 only)	B04
G3/8 (for SPB 1 and 2 only)	B06
G1/2 (for SPB 1, 2 and 3)	B08
G3/4 (for SPB 2 and 3 only)	B12
G1 (for SPB 3 only)	B16

6 Anti-Splash Feature

With anti-splash feature (standard option)	Α
Without anti-splash feature	0

The anti-splash feature for the SPB 1, can only be achieved in conjunction with a dipstick, but is not available for the SPB 1 with connection sizes B04 and N04. Please see page E14 for details.

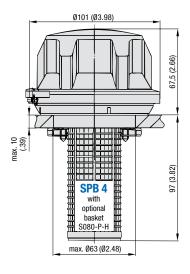
(7) Dipstick

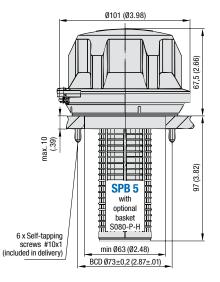
ノ	2.00.000	
	Plastic dipstick (200 mm / 7.88 in)	D200
	with integrated anti-splash feature	D200
	Plastic dipstick (300 mm / 11.81 in)	D300
	with integrated anti-splash feature	טטטע
	Without dipstick	-

A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements. Please see page E14 for details.



Plastic Filler Breather - Types SPB 4 / 5 (Flange Version)





Clamping jaw installation to a single mounting hole

Installation to a six-hole bolt pattern with flange interface similar to DIN 24557, Part 2

Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features

- Cap diameter of Ø101 mm / Ø3.98 in
- Either for clamping jaw installation to a single mounting hole or with a six-hole bolt pattern
- Operating temperature range: -40°C ... +120°C / -40°F ... +248°F

Materials

- · Made of non-corrosive materials
- Body and cap made of glass-fibre reinforced Polyamide (PA)
- Sealings made of NBR (Buna-N®)

Consult STAUFF for alternative materials.

Accessories / Options

- Plastic basket (800 µm)
- Pressurisation up to 0,7 bar / 10 PSI
- Air filter element
- Anti-splash feature
- · Plastic dipstick with integrated anti-splash feature

Please see page E14 for details.

Maximum Air Flow Rate

■ 1,00 m³/min / 35.31 cfm for SPB 4+5

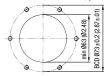
Please see page E15 for detailed air flow curves.

Oil Displacement

■ 1000 l/min / 264 US GPM for SPB 4+5

Installation

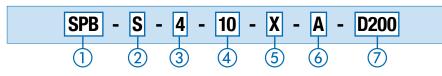
- Recommended mounting space: Ø122 mm / Ø4.80 in
- Six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2 (type SPB 5):



www.stauff.com

- 6 self-tapping screws #10x1 are included in delivery (type SPB 5); can be replaced by regular M5 socket cap screws (ISO 4762), if required
- · Recommended diameters of the screw holes, depending on the sheet thickness of the reservoir (type SPB 5): \emptyset 4,0 mm / \emptyset .16 in at a thickness of 1,20 mm / .05 in, \emptyset 4,1 mm / \emptyset .16 in at a thickness of 2,00 mm / .08 in, Ø4,3 mm / Ø.17 in at a thickness of 4,00 mm / .16 in, and Ø4,4 mm / Ø.17 in at a thickness of 5,00 mm / .20 in

Order Codes





② Pressurisation

Without pressurisation	S
Pressurised at 0,2 bar / 3 PSI	P1
Pressurised at 0,35 bar / 5 PSI	P2
Pressurised at 0,7 bar / 10 PSI	P3

Please see page E14 for details.

(3) Version

•		
	Bayonet version for clamping jaw	
	installation to a single mounting hole;	4
	Cap diameter Ø101 mm (Ø3.98 in)	
	Bayonet Version with six-hole bolt pattern for	
	flange interfaces similar to DIN 24557, part 2;	5
	Cap diameter Ø101 mm (Ø3.98 in)	

(4) Air Filter Element (Material / Micron Rating)

/	/ III	
	Without air filter element (special option)	00
	10 µm Foam / PUR (standard option)	10
	40 μm Foam / PUR	40
	3 μm Inorganic Glass-Fibre, pleated (special option)	E03
	10 µm Filter Paper, pleated (special option)	L10

Consult STAUFF for alternative materials / micron ratings.

(5) Basket Option

Plastic basket S080-P-H (105 mm / 4.13 in)	S080
Telescopic plastic basket S200-P-H-T (max. 205 mm / max. 8.07 in)	S200
Plastic basket S095-P with flange interface similar to DIN 24557, part 2 (95 mm / 3.74 in)	S095P
Without basket	Х

Option S095P is only available for type SPB 5.

Please see page E14 for details and order codes for spare parts.

Anti-Salach Feature

ソ	Altu-opiasii reature	
	With anti-splash feature (standard option)	A
	Without anti-splash feature	0

(7) Dinstick

DIPSHUK		
Plastic dips	tick (200 mm / 7.88 in)	D200
with integra	ted anti-splash feature	D200
Plastic dips	tick (300 mm / 11.81 in)	D300
with integra	ted anti-splash feature	D300
Without dips	stick	-

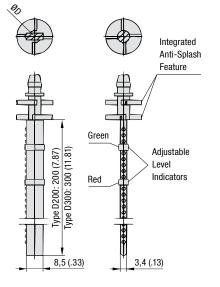
A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements. When choosing a combination of a basket and a dipstick, the dipstick has to be at least 15 mm / .59 in shorter than the basket.

Please see page E14 for details and order codes for spare parts.

ESTAUFF

Plastic Dipstick • Types DS 1 / 2 / 3 Anti-Splash Feature





Connection | Code | For Type | Suitable Dipstick* | ØD (mm/in) Dipstick Option Not Available 1/4 N04 SPB 1 3/8 N06 SPB 1+2 DS-1 **Thread** .20.1) 10 / .39 1/2 NO8 SPR 1-3 DS-2 14 / 55 SPB 1+2 N E DS-3 3/4 N12 18 / .71 Male N. (ANSI SPRN SPB 3 N16 DS-3 18 / .71 SPRN B04 Dipstick Option Not Available G1/4 SPB 1 BSP Thread (ISO 228) 10 / 39 G3/8 B06 SPR 1 DS-1 G1/2 B08 SPB 1 DS-2 14 / .55 SPB 1-3 DS-3 G3/4 B12 18 / .71 SPBN Male SPB 3 G1 B16 DS-3 18 / .71 **SPBN** S080 SPB 4+5 DS-3 18 / .71 S095-F SPB 5 DS-3 18 / .71 S200 SPB 4+5 DS-3 18 / .71 w/o Basket SPB 4+5 DS-3 18 / .71 When ordered seperately, please add the length of the

When ordered seperately, please add the length of the dipstick (in mm) to the ordering code (e.g. DS-2-300).

Please note: When choosing a combination of a dipstick and a basket (see below), the dipstick has to be at least 15 mm / .59 in shorter than the basket.

Special designs and alternative materials available on request. Please consult STAUFF for further details.

For all Plastic Filler Breathers (except type SPB 1 with connection sizes B04 and N04), dipsticks made of Polyamide are available as an option. These dipsticks are available in 2 standard lengths of 200 mm / 7.87 in and 300 mm / 11.81 in and equipped with 2 adjustable level indicators in green and red colour.

A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements.

All dipsticks have an integrated anti-splash feature protecting the SPB from backspilling fluid and avoiding an early breakdown of the air filter element.

For Plastic Filler Breathers without dipstick, the anti-splash function can be achieved by an integrated concave baffle. The anti-splash feature for the SPB 1 (except the type SPB 1 with connection sizes B04 and N04), can only be achieved in conjunction with a dipstick.

Plastic Basket - Types S080-P-H / S095-P / S200-P-H-T

For the Plastic Filler Breathers SPB 4 and SPB 5, different types of baskets are available as an option. All baskets have a reinforced $0.8 \times 3.5 \, \text{mm} / .03 \times .14 \, \text{in}$ mesh $(800 \, \mu \text{m})$, so that rough dirt particles are filtered out of the medium and a smooth flow into the tank is being ensured.

The Plastic Basket S080-P-H (length of 105 mm / 4.13 in) snaps into the breather housing and suitable for the SPB 4 and SPB 5.

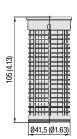
The **Plastic Basket S095-P** (length of 95 mm / 3.74 in) is equipped with a six-hole bolt pattern with flange interface similar to DIN 24557, part 2. It is suitable for the SPB 5 only and is installed between the breather housing of the SPB 5 and the reservoir.

The **Telescopic Plastic Basket S200-P-H-T** (maximum length of 205 mm / 8.07 in) is ideal to further improve the straining ability and oil flow-through and allowing longer dipstick lengths, where reservoir depth allows. It also snaps into the breather housing and is suitable for the SPB 4 and SPB 5.

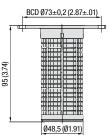
Please note: When choosing a combination of a dipstick (see above) and a basket, the dipstick has to be at least $15\,\mathrm{mm}$ / .59 in shorter than the basket.

Special designs and alternative materials available on request. Please consult STAUFF for further details.

Plastic Basket \$080-P-H (for SPB 4+5) Material: Polypropylene (PP)

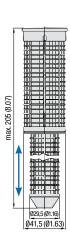


Plastic Basket \$095-P (only for SPB 5) Material: Polyamide (PA)



Six-hole bolt pattern with flange interface according to DIN 24557, part 2

Telescopic Plastic Basket S200-P-H-T (for SPB 4+5) Material: Polypropylene (PP)



Pressurisation

All Plastic Filler Breathers (except the type SPB 1) are also available as pressurised versions with pressure settings of 0,7 bar / 10 PSI, 0,35 bar / 5 PSI or 0,2 bar / 3 PSI. In order to achieve an air flow, the actual tank pressure has to exceed the chosen pressure setting of the Plastic Filler Breather.

When the fluid level inside the reservoir rises, no air is expelled from the reservoir until the pressurisation level is reached.

When the fluid level inside the reservoir falls, the tank pressure drops and air is drawn into the reservoir.

Due to less breathing, the service life of a filler breather and the oil can be increased by using the pressurisation feature. It also minimizes foaming and cavitation, and provides additional protection from moisture entering the reservoir which causes erosion and oil degradation.

Further Accessories / Options



Weld Riser • Type WR Suitable for SPB 5 (See page E25 for details)



Side Mount Bracket (Polyamide) = Type ASMB-1 Suitable for SPB 5 (See page E24 for details)



Side Mount Bracket (Aluminium) = Type ASMB-2 Suitable for SPB 5 (See page E24 for details)



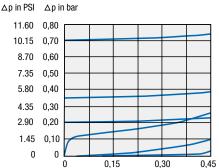
0

Type SPB 1 (into / out of the tank) ∆p in PSI ∆p in bar 1.02 0,07 .87 0,06 B04 and N04 (into / out of the tank) .73 0.05 B06 and N06 (into / out of the tank) .58 0,04 B08 and N08 (into / out of the tank) B12 and N12 (into / out of the tank) .44 0,03 .29 0,02 .15 0,01 O 0,12 0,15 0,18 Q in m3/min 0,03 0,06 0,09

1.06 2.12 3.18 4.24 5.30 6.35 Q in cfm

10.60

Pressure Drop Flow Curves Plastic Filler Breathers



5.30

Type SPB 2 (into / out of the tank)

B12 and N12 (out of the tank; pressurised at 0,7 bar / 10 PSI)

B12 and N12 (out of the tank; pressurised at 0,35 bar / 5 PSI) B12 and N12 (into the tank; pressurised at 0,7 bar / 10 PSI, 0,35 bar / 5 PSI or 0,2 bar / 3 PSI) B12 and N12 (out of the tank; pressurised at 0,2 bar / 3 PSI)

B12 and N12 (out of the tank; without pressurisation) B12 and N12 (into the tank; without pressurisation)

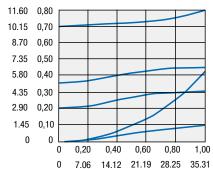
Q in m3/min 15.89 Q in cfm



0

Type SPB 3 (into / out of the tank)

B12 and N12 (out of the tank; pressurised at 0,7 bar / 10 PSI)



B12 and N12 (out of the tank; pressurised at 0,35 bar / 5 PSI) B12 and N12 (into the tank; pressurised at 0,7 bar / 10 PSI, 0,35 bar / 5 PSI or 0,2 bar / 3 PSI)

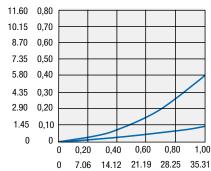
B12 and N12 (out of the tank; pressurised at 0,2 bar / 3 PSI)

B12 and N12 (into / out of the tank; without pressurisation)

1.00 Q in m3/min Q in cfm

△p in PSI △p in bar

Type SPB 4+5 (into the tank)



0,60

14.12 21.19 28.25

(into the tank; pressurised at 0,7 bar / 10 PSI, 0,35 bar / 5 PSI or 0,2 bar / 3 PSI)

(into the tank; without pressurisation)

Q in m3/min Q in cfm

 Δp in PSI Δp in bar 11.60 0,80

10.15 0,70 8.70 0.60

7.35 0,50

5.80 0,40

4.35 0,30

2.90 0,20

1.45 0,10 0

> 0 7.06

Type SPB 4+5 (out of the tank)

(out of the tank; pressurised at 0,7 bar / 10 PSI)

(out of the tank; pressurised at 0,35 bar / 5 PSI)

(out of the tank; pressurised at 0,2 bar / 3 PSI)

(out of the tank; without pressurisation)

Q in m³/min

35.31 Q in cfm

www.stauff.com

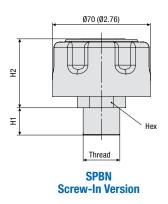
E15

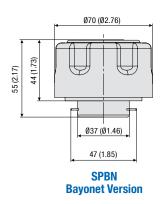




Plastic Filler Breather • Type SPBN (Compact Design; Screw-In or Bayonet Version)







Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments; ideal for applications in which space is limited

Features

- Cap diameter of Ø70 mm / Ø2.76 in
- Screw-in version, equipped with male NPT thread (ANSI B1.20.1) or male BSP thread (ISO 228)
- Bayonet version with a six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2
- Operating temperature range:-40 °C ... +120 °C / -40 °F ... +248 °F

Materials

- Body and cap made of glass-fibre reinforced Polyamide (PA)
- · Socket made of Steel, zinc-plated
- Bayonet flange made of Steel, zinc-plated
- Basket made of Steel, zinc-plated or Polyamide (PA)
- Sealings made of NBR (Buna-N®)

Consult STAUFF for alternative materials.

Accessories / Options

- Mounting set including bayonet flange, steel or plastic basket (800 µm), gaskets and bolts
- Pressurisation up to 0,7 bar / 10 PSI
- Air filter element
- Anti-splash feature (for screw-in version only)
- Plastic dipstick with integrated anti-splash feature

Please see page E17 for details.

Maximum Air Flow Rate

■ 0,40 m³/min / 14.13 cfm

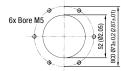
Please see page E17 for detailed air flow curves.

Oil Displacement

■ 4001/min / 106USGPM

Installation

 Six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2 (bayonet version with mounting set):



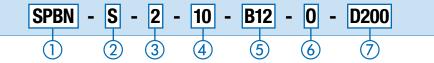
 6 slotted pan head screws (ISO 1580 M5 x 12-5.8) are included in delivery of the bayonet version with mounting set

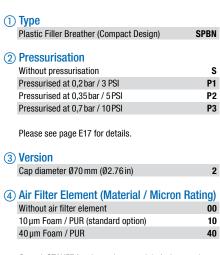
Dimensions (Screw-In Version)

Thread	Dimensions (mm/in)		
	H1	H2	Hex
Male 3/4 NPT	19,5	49,5	30
(ANSI B1.20.1)	.77	1.95	1.18
Male 1 NPT	24	49,5	36
(ANSI B1.20.1)	.95	1.95	1.42

Thread	Dimensi	Dimensions (mm/in)		
	H1	H2	Hex	
Male G3/4 BSP	19,5	49,5	30	
(ISO 228)	.77	1.95	1.18	
Male G1 BSP	24	49,5	36	
(ISO 228)	.95	1.95	1.42	

Order Codes





Consult STAUFF for alternative materials / micron ratings.

⑤ Connection

Screw-in version; Male 3/4 NPT thread	N12
Screw-in version; Male 1 NPT thread	N16
Screw-in version; Male G3/4 thread	B12
Screw-in version; Male G1 thread	B16
Bayonet version; Breather only	BS
Bayonet version; Breather including mounting set (with bayonet flange, gaskets and bolts)	ВМ
Bayonet version; Breather incl. mounting set and plastic basket with flange interface (95 mm / 3.74 in)	095P
Bayonet version; Breather incl. mounting set and metal basket with flange interface (80 mm / 3.15 in)	S080
Bayonet version; Breather incl. mounting set and metal basket with flange interface (100 mm / 3.94in)	S100
Bayonet version; Breather incl. mounting set and metal basket with flange interface (150 mm / 5.91 in)	S150
Bayonet version; Breather incl. mounting set and metal basket with flange interface (200 mm / 7.87 in)	S200

6 Anti-Splash Feature

With anti-splash feature (standard option)	Α
Without anti-splash feature	0

Please see page E17 for details.

(7) Dipstick

Dipotion	
Plastic dipstick DS-3-200 (200 mm / 7.88 in) with integrated anti-splash feature	D200
Plastic dipstick DS-3-300 (300 mm / 11.81 in) with integrated anti-splash feature	D300
Without dipstick	-

A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements. Please see pages E14 and E17 for details.

Order codes for spare parts: DS-3-200 / DS-3-300.



Plastic Dipstick Anti-Splash Feature

For all Plastic Filler Breathers SPBN, dipsticks made of Polyamide are available as an option. These dipsticks are available in 2 standard lengths of 200 mm / 7.87 in and 300 mm / 11.81 in and equipped with 2 adjustable level indicators in green and red colour. A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements.

All dipsticks have an integrated anti-splash feature protecting the SPBN from backspilling fluid and avoiding an early breakdown of the air filter element. For Plastic Filler Breathers without dipstick, the anti-splash function can be achieved by an integrated concave baffle.

Please note: When choosing a combination of a dipstick and a basket, the dipstick has to be at least $15\,\mathrm{mm}$ / $.59\,\mathrm{in}$ shorter than the basket.

Special designs and alternative materials available on request. Please consult STAUFF for further details.

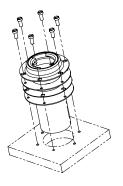
Pressurisation

All Plastic Filler Breathers are also available as pressurised versions with pressure settings of 0,7 bar / 10 PSI, 0,35 bar / 5 PSI or 0,2 bar / 3 PSI. In order to achieve an air flow, the actual tank pressure has to exceed the chosen pressure setting of the Plastic Filler Breather

When the fluid level inside the reservoir rises, no air is expelled from the reservoir until the pressurisation level is reached. When the fluid level inside the reservoir falls, the tank pressure drops and air is drawn into the reservoir.

Due to less breathing, the service life of a filler breather and the oil can be increased by using the pressurisation feature. It also minimizes foaming and cavitation, and provides additional protection from moisture entering the reservoir and which causes erosion and oil degradation.

Mounting Set for Baskets (including Bayonet Flange, Gaskets and Bolts)





Scope of Delivery / Order Codes

Mounting sets for baskets include the following components:

- 6 slotted pan head screws made of steel, zinc-plated (ISO 1580 M5 x 12-5.8)
- Bayonet flange made of steel, zinc-plated, with six-hole bolt pattern acc. to DIN 24557, part 2
- 2 gaskets made of NBR (Buna-N®) one for underneath and one for on top of the basket
- Plastic or metal basket (only if required):

 Plastic basket (95 mm / 3.74in):
 S-095-P-F-SPBN-BS-NBR

 Metal basket (80 mm / 3.15 in):
 S-080-M-F-SPBN-BS-NBR

 Metal basket (100 mm / 3.94in):
 S-100-M-F-SPBN-BS-NBR

 Metal basket (150 mm / 5.91 in):
 S-150-M-F-SPBN-BS-NBR

 Metal basket (200 mm / 7.87 in):
 S-200-M-F-SPBN-BS-NBR

 Without basket:
 Adapter-SPBN-BM-NBR

Mounting sets can also be ordered as part of a complete breather assembly. Please see page E16 for details.

Further Accessories / Options



Extended Bayonet Flange • Type EBF Suitable for SPBN; Bayonet Version (See page E25 for details)



Side Mount Bracket (Polyamide) * Type ASMB-1 Suitable for SPBN; Bayonet Version (See page E24 for details)

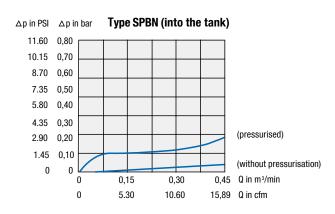


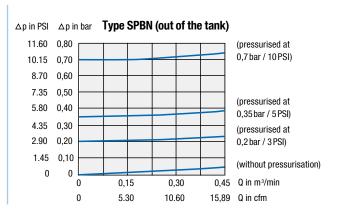
Weld Riser • Type WR
Suitable for SPBN; Bayonet Version
(See page E25 for details)



Side Mount Bracket (Aluminium) = Type ASMB-2 Suitable for SPBN; Bayonet Version (See page E24 for details)

Pressure Drop Flow Curves Plastic Filler Breathers

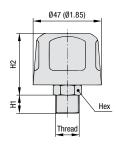






Metal Filler Breather • Type SMBT-47 (Screw-In Version)





Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features

- Cap diameter of Ø47 mm / Ø1.85 in
- Screw-in version, equipped with male NPT thread (ANSI B1.20.1) or male BSP thread (ISO 228)

Materials

- Breather cap made of Steel, chrome-plated (standard option); zinc/nickel-plated (Fe/Zn Ni 6; free of hexavalent chromium CrVI) and epoxy-coated versions available
- . Threaded socket made of Steel, zinc-plated

Consult STAUFF for alternative materials.

Accessories / Options

Air filter element

Maximum Air Flow Rate

■ 0.40 m³/min / 14.13 cfm

Consult STAUFF for detailed air flow curves.

Oil Displacement

■ 400 l/min / 106 US GPM

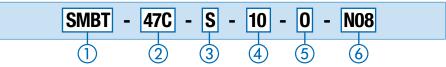
Dimensions

Thread	Dimensions (mm/in)			
	H1	H2	Hex	
Male 1/4 NPT	13	41	17	
(ANSI B1.20.1)	.51	2.38	.67	
Male 3/8 NPT	15	41	19	
(ANSI B1.20.1)	.59	2.38	.74	

Consult STAUFF for alternative threads.

Thread Dimensions (mm/in) Hex Male G1/4 BSP 10 41 17 (ISO 228) .39 .67 2.38 Male G3/8 BSP 13 41 19 (ISO 228) .51 2.38 .74 Male G1/2 BSP 14 41 22 (ISO 228) .55 2.38 .88

Order Codes





SMBT

(2) Cap Diameter / Material / Surface Finishing

Metal Filler Breather; Screw-in version

Cap diameter Ø47 mm (Ø1.85 in); Breather cap 47C made of Steel, chrome-plated (standard option) Cap diameter Ø47 mm (Ø1.85 in); Breather cap 47 made of Steel, zinc/nickel-plated Cap diameter Ø47 mm (Ø1.85 in); Breather cap 47E made of Steel, expoxy-coated

(3) Label

With STAUFF logo (standard option) Neutral design without any logo N No pressurisation available for this cap diameter.

G1/2

6 Connection Thread (Male) 1/4 NPT 3/8 NPT G1/4 G3/8

Without pressurisation (standard option)

0

N04

N06

B04

B06

B08

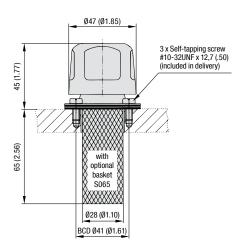
Consult STAUFF for alternative threads.

(4) Air Filter Element (Material / Micron Rating)

Without air filter element (special option) 00 10 µm Foam / PUR (standard option) 10 $40\,\mu m$ Foam / PUR

Consult STAUFF for alternative materials / micron ratings.





Metal Filler Breather • Type SMBB-47 (Bayonet Version)



Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features

- Cap diameter of Ø47 mm / Ø1.85 in
- · Bayonet version with a three-hole bolt pattern

Materials

- Breather cap made of Steel, chrome-plated (standard option);
 zinc/nickel-plated (Fe/Zn Ni 6; free of hexavalent chromium
 CrVI) and epoxy-coated versions available
- Bayonet flange made of Steel, zinc-plated
- Basket made of Steel, zinc-plated
- Sealings made of Cork

Consult STAUFF for alternative materials.

Accessories / Options

- Metal basket (800 µm)
- Air filter element

0

C

Maximum Air Flow Rate

■ 0,40 m³/min / 14.13 cfm

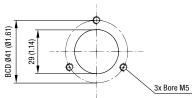
 $\label{thm:consult} \textbf{Consult STAUFF for detailed air flow curves}.$

Oil Displacement

■ 400 l/min / 106 US GPM

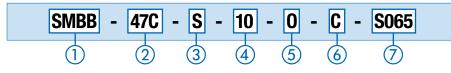
Installation

Three-hole bolt pattern for flange interfaces:



 3 self-tapping screws #10-32UNF x 12,7 (.50) are included in delivery; can be replaced by regular M5 bolts, if required

Order Codes



1 Type / Version

Metal Filler Breather; Bayonet version SMBB

2 Cap Diameter / Material / Surface Finishing

Cap diameter Ø47 mm (Ø1.85 in); Breather cap made of Steel, chrome-plated (standard option)
Cap diameter Ø47 mm (Ø1.85 in); Breather cap made of Steel, zinc/nickel-plated
Cap diameter Ø47 mm (Ø1.85 in); Breather cap made of Steel, expoxy-coated

47E

(3) Label

With STAUFF logo (standard option) S
Neutral design without any logo N

4 Air Filter Element (Material / Micron Rating)

Without air filter element (special option) 00 $10\,\mu m$ Foam / PUR (standard option) 10 $40\,\mu m$ Foam / PUR 40

Consult STAUFF for alternative materials / micron ratings.

(5) Pressurisation
Without pressurisation (standard option)

No pressurisation available for this cap diameter.

6 Sealing Material

Cork (standard option)

Basket Option

Metal basket (65 mm / 2.56 in) S065
Without basket 0



Metal Filler Breather ■ Type SMBT-80 (Screw-In Version)



Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features

- Cap diameter of Ø80 mm / Ø3.15 in
- Screw-in version, equipped with male NPT thread
- (ANSI B1.20.1) or male BSP thread (ISO 228)

Materials

- Breather cap made of Steel, chrome-plated (standard option); zinc/nickel-plated (Fe/Zn Ni 6; free of hexavalent chromium CrVI) and epoxy-coated versions available
- . Threaded socket made of Steel, zinc-plated
- Dipstick adaptor made of Polyamide (PA)

Consult STAUFF for alternative materials.

Accessories / Options

- Pressurisation up to 0,7 bar / 10 PSI
- Air filter element
- Dipstick adaptor suitable for plastic dipstick DS-1 (not for connection threads G1/2 and 1/2 NPT)
- Plastic dipstick DS-1 with integrated anti-splash feature (not for connection threads G1/2 and 1/2 NPT)

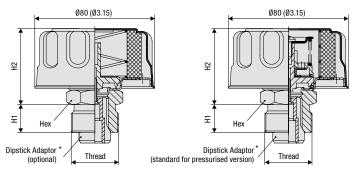
Maximum Air Flow Rate

■ 0,45 m3/min / 15.89 cfm

Consult STAUFF for detailed air flow curves.

Oil Displacement

■ 450 l/min / 119 US GPM



Without Pressurisation

Pressurised

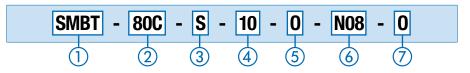
* Please note: The disptick adaptor is not available for connection threads 1/2 NPT and G1/2.

Dimensions

Thread	Dimensions (mm/in)		
	H1	H2	Hex
Male 1/2 NPT	14	52,5	24
(ANSI B1.20.1)	.51	2.07	.94
Male 3/4 NPT	16	52,5	30
(ANSI B1.20.1)	.59	2.07	1.18
Male G1 NPT	19	52,5	36
(ANSI B1.20.1)	.75	2.07	1.42

Thread	Dimensions (mm/in)		
	H1	H2	Hex
Male G1/2 BSP	14	54	24
(ISO 228)	.55	2.13	.94
Male G3/4 BSP	16	54	30
(ISO 228)	.63	2.13	1.18
Male G1 BSP	19	54	36
(ISO 228)	.75	2.13	1.42

Order Codes





(2) Cap Diameter / Material / Surface Finishing

Cap diameter Ø80 mm (Ø3.15 in); Breather cap 80C made of Steel, chrome-plated (standard option) Cap diameter Ø80 mm (Ø3.15 in); Breather cap 80 made of Steel, zinc/nickel-plated Cap diameter Ø80 mm (Ø3.15 in); Breather cap 80E made of Steel, expoxy-coated

(3) Label

With STAUFF logo (standard option) Neutral design without any logo N

(4) Air Filter Element (Material / Micron Rating) Without air filter element 00 3µm Filter Paper 03 10 µm Foam / PUR (standard option) 10 40 µm Foam / PUR 40

Consult STAUFF for alternative materials / micron ratings.

(5) Pressurisation

Without pressurisation (standard option)	0
Pressurised at 0,35 bar / 5 PSI	P2
Pressurised at 0,7 bar / 10 PSI	P3

(6) Connection Thread (Male)

9	Commodition Timoda (maio)	
	1/2NPT	N08
	3/4 NPT	N12
	1 NPT	N16
	G1/2	B08
	G3/4	B12
	G1	B16

Consult STAUFF for alternative threads.

7 Dipstick

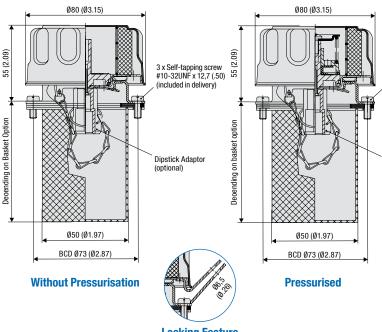
Without dipstick (standard option)	0
With dipstick adaptor suitable for dipstick DS-1	Δ
(not for connection threads G1/2 and 1/2 NPT)	A
With dipstick adaptor and plastic dipstick DS-1	
(300 mm / 11.81 in) with integrated anti-splash	D300
feature (not for connection threads G1/2 and 1/2 NPT)	

A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements.

Please note: The dipstick adaptor is required for the subsequent installation of plastic dipsticks DS-1 (see page E14 for details), and is included in delivery when ordering a pressurised version. The dipstick adaptor is not available for connection threads G1/2 and 1/2 NPT.

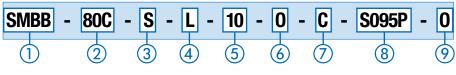


Metal Filler Breather • Type SMBB-80 (Bayonet Version)



Locking Feature (Recommended mounting space: Ø126 mm / Ø4.96 in)

Order Codes



1) Type / Version

Metal Filler Breather; Bayonet version SMBB

(2) Cap Diameter / Material / Surface Finishing Cap diameter Ø80 mm (Ø3.15 in); Breather cap

made of Steel, chrome-plated (standard option)
Cap diameter Ø80 mm (Ø3.15 in); Breather cap
made of Steel, zinc/nickel-plated
Cap diameter Ø80 mm (Ø3.15 in); Breather cap
made of Steel, expoxy-coated

80C

3 Label

With STAUFF logo (standard option) S
Neutral design without any logo N

4 Locking Feature

Without locking feature (standard option) 0
With locking feature (see drawing above) L

(5) Air Filter Element (Material / Micron Rating)

,	All Tillor Elolifolit (Material / Miloroli	naung,
	Without air filter element	00
	3μm Filter Paper	03
	10 µm Foam / PUR (standard option)	10
	40 μm Foam / PUR	40

Consult STAUFF for alternative materials / micron ratings.

6 Pressurisation

Without pressurisation (standard option)	0
Pressurised at 0,35 bar / 5 PSI	P2
Pressurised at 0,7 bar / 10 PSI	Р3

(7) Sealing Material

Cork (for filler breathers without pressurisation)
NBR (Buna-N®) (for pressurised filler breathers)

(8) Basket Option

0
S095P
S080
S100
S150
S200
S200HD

9 Dipstick

Without dipstick (standard option)	0
Dipstick adaptor (suitable for dipstick DS-1)	Α
With dipstick adaptor and plastic dipstick DS-1	
(300 mm / 11.81 in) with integrated anti-splash	D300
feature	

A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements.

Please note: The dipstick adaptor is required for the subsequent installation of plastic dipsticks DS-1 (see page E14 for details), and is content of delivery when ordering a pressurised version.

Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features

3 x Self-tapping screw #10-32UNF x 12,7 (.50) (included in delivery)

Dipstick Adaptor (standard for pressurised version)

- Cap diameter of Ø80 mm / Ø3.15 in
- Bayonet version with a six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2

Materials

- Breather cap made of Steel, chrome-plated (standard option);
 zinc/nickel-plated (Fe/Zn Ni 6; free of hexavalent chromium
 CrVI) and epoxy-coated versions available
- Bayonet flange made of Steel, zinc-plated
- Basket made of Steel, zinc-plated or Polyamide (PA)
- Dipstick adaptor made of Polyamide (PA)
- Sealings made of Cork (for filler breathers without pressurisation) or NBR (Buna-N®) (for pressurised filler breathers)

Consult STAUFF for alternative materials.

Accessories / Options

- Metal or plastic basket (800 µm)
- Pressurisation up to 0,7 bar / 10 PSI
- · Air filter element
- Locking feature

C

- Dipstick adaptor (suitable for plastic dipstick DS-1)
- Plastic dipstick with integrated anti-splash feature

Maximum Air Flow Rate

■ 0,45 m³/min / 15.89 cfm

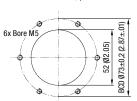
Consult STAUFF for detailed air flow curves.

Oil Displacement

450I/min / 119US GPM

Installation

 Six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2:

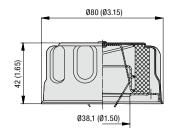


 6 self-tapping screws #10-32UNF x 12,7 (.50) are included in delivery; can be replaced by regular M5 bolts, if required



Metal Breather • Type SMBP-80 (Push-On Version)





Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features

- Cap diameter of Ø80 mm / Ø3.15 in
- Push-on version, suitable for pipe diameters up to 38 mm/ 1.50 in

Materials

Breather cap made of Steel, chrome-plated (standard option);
 zinc/nickel-plated (Fe/Zn Ni 6; free of hexavalent chromium
 CrVI) and epoxy-coated versions available

Consult STAUFF for alternative materials.

Accessories / Options

■ Air filter element

Maximum Air Flow Rate

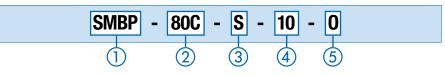
■ 0,45 m³/min / 15.89 cfm

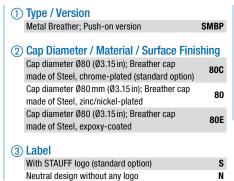
Consult STAUFF for detailed air flow curves.

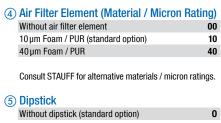
Oil Displacement

■ 450 l/min / 119 US GPM

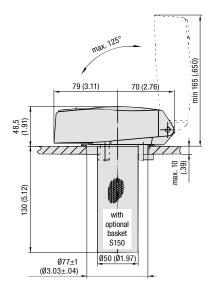
Order Codes











Clamping Version

13,5

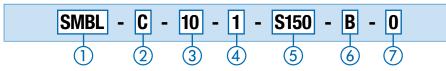
Threaded Version

Recommended mounting space: Ø162 mm / Ø6.38 in 2 locking screws M6 x 6 (DIN 916) at positions A and B

Push-On Version

3 locking screws M6 x 6 (DIN 916) at positions A, B and C

Order Codes



SMBL

① Type

Lockable Metal Filler Breather

② Version

Clamping version with 3 clamping jaws; Installation to a tank mounting hole of C $077\pm1 \, mm \, / \, 03.03\pm.04 \, in$ Threaded version with female G2 BSP thread B32 Threaded version with female G2-1/2 BSP thread B40 Push-on version for stand pipe mounting

(3) Air Filter Element (Material / Micron Rating)

Without air filter element 10 µm Foam / PUR (standard option) 10 40 µm Foam / PUR 40

Consult STAUFF for alternative materials / micron ratings.

(4) Air Flow

Air flow in both directions (standard option) 1 No air flow 2 Air flow only into the tank 3

(5) Basket Option

Without basket	0
Metal basket (150 mm / 5.91 in)	S150
Plastic basket (80 mm / 3.15 in)	S080
Telescopic plastic basket	cana
(max. 205 mm / max. 8.07 in)	S200

The baskets of the SMBB 47/80 series cannot be used in conjunction with the SMBL series.

6 Sealing Material

NBR (Buna-N®) (standard option) В FPM (Viton®) ٧

(7) Cap Design

Breather cap made of Aluminium, 0 lacquered (light-grey, RAL 9022)

Lockable Metal Filler Breather • Type SMBL (Clamping, Threaded and Push-On Version)



Characteristics

Designed to be used as lockable filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

- Available as clamping version (with 3 clamping jaws), as threaded version (with female BSP thread) or push-on version, suitable for stand pipe mounting with pipe diameters up to 77,5 mm/ 3.05 in (secured by 3 locking screws)
- Key-lockable cap (2 keys included)
- · Lock protected by rotating flap
- Operating temperature range: -30 °C ... +100 °C / -22 °F ... +212 °F
- · Air flow in both directions, one direction only or no direction

Materials

- Breather cap made of Aluminium, lacquered (light-grey, RAL 9022)
- Breather body made of Aluminium, zinc-plated
- Basket made of Steel, zinc-plated or Polypropylene (PP)
- Sealings made of NBR (Buna-N®) (standard option); FPM (Viton®) sealed version available

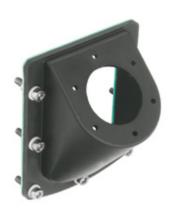
Consult STAUFF for alternative materials.

Accessories / Options

- Metal or (telescopic) plastic basket (800 μm)
- Air filter element

STAUFF ®

Side Mount Bracket • Type ASMB-1 (Polyamide Version)



Characteristics

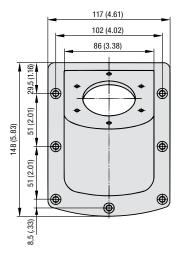
Lateral fastening of filler breathers with a six-hole flange connection similar to DIN 24557, part 2 to vertical or sloped walls of hydraulic reservoirs; ideal for applications in which space is limited

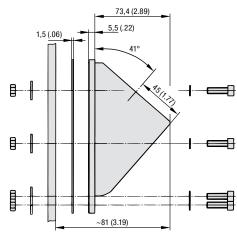
Suitability

 Suitable for Plastic Filler Breathers SPB 5 and SPBN (bayonet version) and Metal Filler Breathers SMBB 80

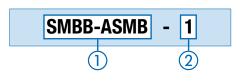
Materials

- Mounting bracket made of Polyamide (PA)
- Seal plate made of Klingerit
- Screws and hex nuts made of Steel, zinc-plated
- Washers made of Steel, zinc-plated
- Plastic spacers made of Polyamide (PA)





Order Codes



(1) Type	
Side Mount Bracket	SMBB-ASMB
② Housing Material	
Polyamide (PA)	1

Scope of Delivery

- 1 mounting bracket
- 1 seal plate
- 7 socket cap screws M6 x 25 (ISO 4762)
- 7 plastic spacers 6,4 (DIN 125)
- 7 hex nuts M6 (ISO 4032)
- 7 washers 6,4 (DIN 9021)
- 6 sheet metal screws 4,8x13 (ISO 7049)

Installation

Scope of Delivery

1 seal plate

Installation

1 mounting bracket

• 6 socket cap screws M6 x 20 (ISO 4762)

Bayonet flange of filler breather is placed on top

· Flange interface similar to DIN 24557, part 2 with 6 equally

spaced bores M5 (BCD Ø73±0,2 mm / Ø2.87±.01 in)

• 6 plastic spacers 6,4 (DIN 125)

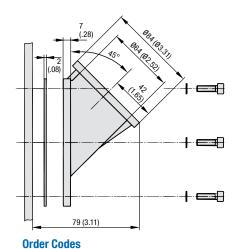
Bolted to the side of the reservoir

- Bolted to the side of the reservoir
- Bayonet flange of filler breather is placed on top
- Flange interface similar to DIN 24557, part 2 with 6 equally spaced mounting bores Ø4,5 mm / Ø.18 in (BCD Ø71±0,2 mm / Ø2.80±.01 in)

Side Mount Bracket • Type ASMB-2 (Aluminium Version)



95 (3.74) 96 (3.74) 80 (3.15) (88.5



Orde

SMBB-ASMB - 2

① Type	
Side Mount Bracket	SMBB-ASMB
② Housing Material	
Aluminium	2
	2

Characteristics

Lateral fastening of filler breathers with a six-hole flange connection similar to DIN 24557, part 2 to vertical or sloped walls of hydraulic reservoirs; ideal for applications in which space is limited

Suitability

 Suitable for Plastic Filler Breathers SPB 5 and SPBN (bayonet version) and Metal Filler Breathers SMBB 80

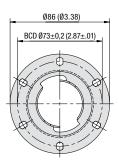
Materials

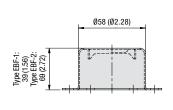
E24

- Mounting bracket made of Aluminium
- Seal plate made of Flexoid
- · Screws made of Steel, zinc-plated
- · Plastic spacers made of Klingerit



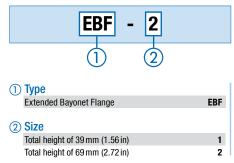
Extended Bayonet Flange • Type EBF





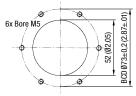
Accessories / Options

Order Codes



Installation

• Six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2:



Supplied without gaskets and bolts

Characteristics

Designed to raise filler breathers either 39 mm / 1.56 in or 69 mm / 2.72 in above the actual mounting surface of the reservoir to prevent contamination from blocking the filter element

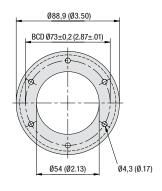
Suitability

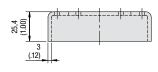
- Suitable for Metal Filler Breathers SMBB 80 and Plastic Filler Breathers SPBN (bayonet version)
- Replaces the existing bayonet flanges of these breathers

Materials

Bayonet flange made of Steel, zinc-plated

Weld Riser • Type WR





Order Codes

② Size



• Weld riser made of Steel, untreated

Installation

- Welded to the top of the reservoir
- · No requirement to drill and tap on the reservoir
- Bayonet flange of filler breather is placed on top

Characteristics

Designed to raise filler breathers 25,4 mm / 1.00 in above the actual mounting surface of the reservoir to prevent contamination from blocking the filter element whilst eliminating the requirement to drill and tap on the reservoir

Suitability

• Suitable for Metal Filler Breathers SMBB 80 as well as Plastic Filler Breathers SPB 5 and SPBN (bayonet version) and all components with a six-hole flange connection similar to DIN 24557, part 2

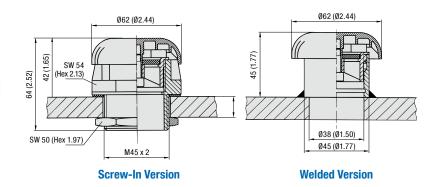
Total height of 25,4 mm (1.00 in)



Plastic Filler Breather • Type SES (Screw-In or Welded Versions)







Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features

- Cap diameter of Ø62 mm / Ø2.44 in
- Screw-in version, equipped with male Metric ISO thread M45 x 2 and lock nut, or welded version with welding socket made of Steel (1.0718), untreated
- Supplied with 45 µm air filter element

Materials

- Breather cap made of Polyamide (PA)
- Breather body / stud made of Polyamide (PA)
- Nut (type SES 1) made of Steel (1.0718);
 Polyamide (PA) available on request
- Welding socket (type SES 2) made of Steel (1.0718), untreated; Stainless Steel (V2A) available on request
- Air filter element made of Sintered Bronze
- Basket made of Polyamide (PA)
- Dipstick made of Steel (1.0718)
- Sealings made of NBR (Buna-N®)

Consult STAUFF for alternative materials.

Accessories / Options

- Plastic basket (300 µm)
- Metal dipstick

Maximum Air Flow Rate

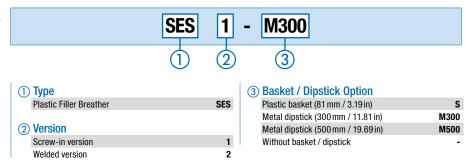
■ 0,30 m³/min / 10.60 cfm

Consult STAUFF for detailed air flow curves.

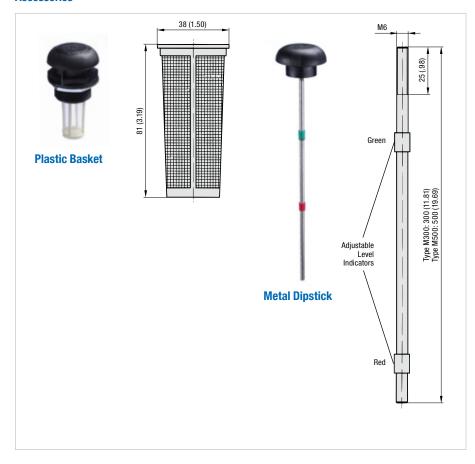
Oil Displacement

■ 300 l/min / 79 US GPM

Order Codes



Accessories

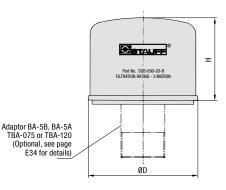


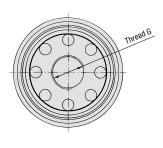




Giant Air Breather Type SGB (Synthetic Fibre Media)







Characteristics

Originally designed to be used as replaceable air filter elements for STAUFF Desiccant Breathers, they can also be used as seperate air filters for hydraulic reservoirs

Features

- Diameter of Ø68 mm / Ø2.68 in (SGB-060),
 Ø100 mm / Ø3.94 in (SGB-090) or
 Ø130 mm / Ø5.12 in (SGB-120)
- Equipped with female BSP thread (ISO 228)
- Including sealing made of NBR (Buna-N®)

Accessories / Options

 Adaptors (for direct installation on top of hydraulic reservoirs)

Please see page E34 for a selection of adaptors available, and consult STAUFF for further information.

Air Flow

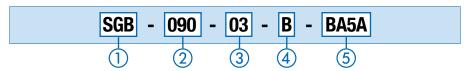
Maximum air flow rates:
 0,05 m³/min / 1.77 cfm for SGB-060,
 0,70 m³/min / 24.71 cfm for SGB-090, and
 1,50 m³/min / 52.97 cfm for SGB-120

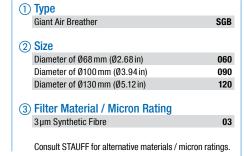
Dimensions and Filter Specifications

Туре	Thread G*	Dimensions (mm/in)		Filter	Micron	Filter	Max. Air	
		ØD	Н	Material	Rating	Surface	Flow Rate	
SGB-060-03-B	Female G3/8 BSP	68	60	Synthetic Fibre	3um	415 cm ²	0,05 m³/min	
30D-000-03-D	(ISO 228)	2.68	2.36	Synthetic Fibre	3 μιτι	63 in ²	1.77 cfm	
CCD 000 02 D	Female G3/4 BSP	100	64	Synthetic Fibre	O.um	752 cm ²	0,70 m³/min	
SGB-090-03-B	(ISO 228)	3.94	2.52		3µm	115 in ²	24.71 cfm	
SGB-120-03-B	Female G1-1/4 BSP	130	100	Cunthatia Fibra	Oum	2095 cm ²	1,50 m³/min	
SGB-120-03-B	(ISO 228)	5.12	3.94	Synthetic Fibre	3μm	320 in ²	52.97 cfm	

^{*} Use adaptors TBA (Steel) or BA-5A and BA-5B (Polyamide) to change female BSP thread into male BSP or male NPT thread. Please see page E34 for details.

Order Codes





(4) Connection Thread

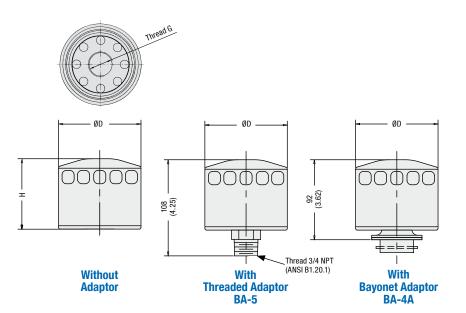
Female BSP thread (according to dimension table)

(5) Adaptor Option

-	Without adaptor
DA ED	BA-5B Polyamide adapter
BA-5B	(for use with SGB-060-03-B)
DA EA	BA-5A Polyamide adapter
BA-5A	(for use with SGB-090-03-B)
TDA 075	TBA-075 Steel adapter
TBA-075	(for use with SGB-090-03-B)
TDA 100	TBA-120 Steel adapter
TBA-120	(for use with SGB-120-03-B)

Please see page E34 for details.





Giant Air Breather • Type SGB (Cellulose Media)



Characteristics

Designed to be used as seperate air filters for hydraulic reservoirs

Features

- Diameter of Ø94 mm / Ø3.70 in
- Equipped with female UN thread (ANSI B1.1)
- Including sealing made of NBR (Buna-N®)

Accessories / Options

- Threaded adaptor BA-5
- Bayonet adaptor BA-4A
- Standard and extended bayonet flanges
- Metal or plastic basket (800 µm)

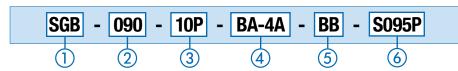
Air Flow

Maximum air flow rates:
 1,13 m³/min / 39.90 cfm

Dimensions and Filter Specifications

Туре	Thread G	Dimensions (mm/in)		Dimensions (mm/in) Filter		Filter	Micron	Filter	Max. Air
		ØD	Н	Material	Rating	Surface	Flow Rate		
SGB-90-10P	1-1/8–16 UN	94	80	Cellulose	10 µm	700 cm ²	1,13 m³/min		
30D-90-10F	1-1/0-10 UN	3.70	3.15	Cellulose	ΙΟμΙΙΙ	109 in ²	39.90 cfm		

Order Codes





(5) Bayonet Flange Option Without bayonet flange

Standard bayonet flange BB
Extended bayonet flange EBF-1: 39 mm (1.56 in)
Extended bayonet flange EBF-2: 69 mm (2.72 in)
B2

6 Basket Option

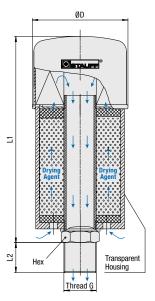
Without basket	-
Plastic basket (95 mm / 3.74 in)	S095P
Metal basket (80 mm / 3.15 in)	\$080
Metal basket (100 mm / 3.94 in)	S100
Metal basket (150 mm / 5.91 in)	S150
Metal basket (200 mm / 7.87 in)	S200

Assembly with basket including gaskets and screws.

STAUFF

Desiccant Air Breather • Type SDB





Drying Agent

Capable in changing colours with increasing moisture



This product does not contain any dangerous substances according to EC Council directives 99/45/EC and 2001/60/EC.

Dimensions and Technical Data

Туре	Thread G Dimensions (mm/in) Weight (g/lbs) Volume Max. Water Air Fi		Air Filter Elemer	nts											
								(cm ³ /in ³)	Absorption		Filter	Micron	Filter	Max. Air	
		ØD	L1	L2	Hex	Complete Unit	Drying Agent	Drying Agent	(g/lbs)	Туре	Material	Rating	Surface	Flow Rate	
SDB-093	Male G3/4 BSP	100	160	20	32	1200	225	300	86	SGB-090-03-B	Synthetic	Oum.	752 cm ²	0,70 m³/min	
200-093	(ISO 228)	3.94	6.30	.79	1.26	2.65	.50	18.3	.19	30B-090-03-B		115 in ²	24.71 cfm		
SDB-096	Male G3/4 BSP	100	220	20	32	1500	450	600	172	SGB-090-03-B	Synthetic	2.um	752 cm ² 0,70 m ³ /min	0,70 m³/min	
200-090	(ISO 228)	3.94	8.66	.79	1.26	3.31	.99	36.6	.38	30B-090-03-B	Fibre	3µm	115 in ²	24.71 cfm	
SDB-121	Male G1-1/4 BSP	130	256	>25	50	2700	750	1000	288	SGB-120-03-B	Synthetic	2.um	2095 cm ²	1,50 m³/min	
20B-121	(ISO 228)	5.12	10.08	>.98	1.98	5.92	1.65	61.0	.63	SGB-120-03-B	Fibre	3µm	320 in ²	52.97 cfm	
CDD 400	Male G1-1/4 BSP	130	366	>25	50	4000	1500	2000	576	000 100 00 0	SGB-120-03-B Synthetic Fibre	0	2095 cm ²	1,50 m³/min	
SDB-122	(ISO 228)	5.12	14.41	>.98	1.98	8.82	3.31	122.0	1.27	Sub-120-03-B		GB-120-03-B Fibre	-U3-B Fibre	3µm	320 in ²

Characteristics

Combination of air breather and water removal filter

When a reservoir or gearbox breathes, air containing water vapor is ingested into the system. Temperature fluctuations will cause this water vapor to condense which can speed up the oxidation of the fluid and lead to damage in the system.

While inhaling, Desiccant Air Breathers SDB first dry the air as it passes through the drying agent. The air then passes through a $3\,\mu m$ air filter element to remove any solid contamination particles.

As moisture is absorbed, the drying agent will gradually change from red to orange. When it is orange, replace the drying agent. If required, an optional visual indicator gives an indication of the status of the air breather. With the moisture absorbed, the oxidation process can be decreased and the lifetime of the oil and the entire machinery will be extended.

Desiccant Air Breathers SDB can also be re-fitted with a layer of active carbon (1/3) and a layer of regular drying agent (2/3) for vapor filtration.

eatures

- Available in 4 different sizes
- Diameter of Ø100 mm / Ø3.94 in or Ø130 mm / Ø5.12 in
- Refillable with drying agent (non-toxic ZR gel grain) or a mix of drying agent and active carbon
- Replaceable air filter element SGB
- Connection: Male BSP thread (ISO 228) on Stainless Steel tube
- Available with adaptor plate to simplify installation and to enable the use of a visual contamination indicator

Accessories / Spare Parts

Connection adaptor (see page E34 for details)

 for SDB-093 and SDB-096 to be used with visual contamination indicator FM
 DBA-75 without adaptor plate AP-1:

Adaptor plate (see page E33 for details)

■ for SDB-093 and SDB-096: AP-1 ■ for SDB-121 and SDB-122: AP-2

Visual contamination indicator (see page E33 for details)
■ for all sizes (in conjunction with adaptor plate only):
FM

Drying agent refilling material (supplied in air tight container)

 • for SDB-093 (300 cm³ / 18.3 in³):
 RD-093

 • for SDB-096 (600 cm³ / 26.6 in³):
 RD-096

 • for SDB-121 (1000 cm³ / 61.0 in³):
 RD-121

 • for SDB-122 (2000 cm³ / 122.0 in³):
 RD-122

Active carbon refilling material (supplied in air tight container)

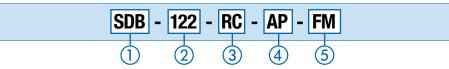
for SDB-093, SDB-096/2 and SDB-121 (300 cm³ / 18.3 in³):
 for SDB-122 (600 cm³ / 18.3 in³):
 RC-093/096/121
 RC-093/096/121

Please note: Use one layer of active carbon (1/3) and one layer of regular drying agent (2/3).

Replacement air filter element (sealing included)

■ for SDB-093 and SDB-096: **SGB-090-03-B**
■ for SDB-121 and SDB-122: **SGB-120-03-B**

Order Codes



1 Type
Desiccant Air Breather SDB

② Max. Water Absorption and Size

86 g / .19 lbs at Ø100 mm / Ø3.94 in	093
172 g / .38 lbs at Ø100 mm / Ø3.94 in	096
288 g / .63 lbs at Ø130mm / Ø5.12 in	121
576 g / 1.27 lbs at Ø130mm / Ø5.12 in	122

Please see table above for further technical details.

3 Drying Agent Material

Regular drying agent (standard option)

One layer of active carbon (1/3) and one layer of regular drying agent (2/3) for vapor filtration

4 Adaptor Plate

Without adaptor plate - With adaptor plate AP

(5) Contamination Indicator

out contamination indicator	-
visual contamination indicator FM	FM
onjunction with adaptor plate AP only)	LIAI

Please see page E33 for details.



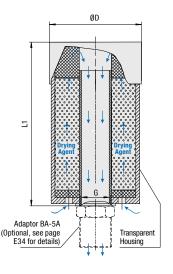
Desiccant Air Breather (Economy Version) - Type SVDB

Drying Agent

Capable in changing colours with increasing moisture



This product does not contain any dangerous substances according to EC Council directives 99/45/EC and 2001/60/EC.





Dimensions and Technical Data

Туре	Thread G	Dimensions (mm/ _{in})			Weight (g/lbs)		Volume (cm³/in³)	Max. Water Absorption	
		ØD	L1	L2	Complete Unit	Drying Agent	Drying Agent	(g/lbs)	
SVDB-093	Female G3/4 BSP (ISO 228)	94	109	18	400	225	300	86	0,70 m³/min
3400-093		3.70	4.68	.71	.88	.50	18.3	.19	24.71 cfm
SVDB-096	Female G3/4 BSP (ISO 228)	94	179	18	700	450	600	172	0,70 m³/min
- 1960 - סעיס		3.70	7.05	.71	1.54	.99	36.9	.38	24.71 cfm

Characteristics

Combination of air breather and water removal filter

When a reservoir or gearbox breathes, air containing water vapor is ingested into the system. Temperature fluctuations will cause this water vapor to condense which can speed up the oxidation of the fluid and lead to damage in the system.

Desiccant Air Breathers SVDB are the light-weight alternative to the proven SDB series, offering an almost identical filtration and absorption performance.

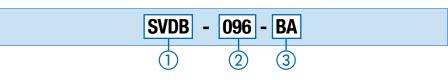
While inhaling, Desiccant Air Breathers SVDB also first dry the air as it passes through the drying agent. The air then passes through a 10 µm coarse filter to remove any solid contamination particles.

As moisture is absorbed, the drying agent will gradually change from red to orange. When it is orange, replace the entire unit. If required, an optional visual indicator gives an indication of the status of the air breather. With the moisture absorbed, the oxidation process can be decreased and the lifetime of the oil and the entire machinery will be extended.

- · Light-weight alternative to the SDB series
- Available in 2 different sizes
- Diameter of Ø94 mm / Ø3.70 in
- Filled with drying agent (non-toxic ZR gel grain)
- Connection: Female BSP thread (ISO 228) in Plastic housing

Please note that neither the air filter element nor the drying agent can be replaced when saturated.

Order Codes



093

Desiccant Air Breather (Economy Version) SVDB

2 Max. Water Absorption and Size 86 g / .19 lbs at Ø94 mm / Ø3.70

172g / .38 lbs at Ø94 mm / Ø3.70

Please see table above for further technical details.

(3) Connection Adaptor

Without connection adaptor With connection adaptor BA-5A BA

Please see page E34 for details. Consult STAUFF for alternative adaptors.

Accessories / Spare Parts

Connection adaptor (see page E34 for details)

• for all sizes:

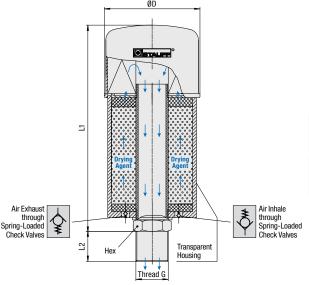
BA-5A

E31



Desiccant Air Breather with Check Valves • Type SDB-CV





Drying Agent

Capable in changing colours with increasing moisture



This product does not contain any dangerous substances according to EC Council directives 99/45/EC and 2001/60/EC.

Dimensions and Technical Data

Туре	Thread G	Dimer	nsions ((mm/ _{in})		Weight (g/lbs	eight (g/lbs) V		Max. Water	Air Filter Elements				
							(0		Absorption		Filter	Micron	Filter	Max. Air
		ØD	L1	L2	Hex	Complete Unit	Drying Agent	Drying Agent	(g/lbs)	Туре	67	Rating	Surface	Flow Rate
SDB-061-CV	Female G3/8	68	143	14	22	350	75	100	29	SGB-060-03-B	Synthetic	3µm	415 cm ²	0,05 m³/min
3DD-001-0V	BSP (ISO 228)	2.68	5.63	.55	.87	.77	.17	6.1	.06		Fibre	Эріп	63 in ²	1.77 cfm
SDB-096-CV	Male G3/4	100	220	20	32	1500	450	600	172	SGB-090-03-B	Synthetic	3µm	752 cm ²	0,70 m ³ /min
3DD-090-CV	BSP (ISO 228)	3.94	8.66	.79	1.26	3.31	.99	36.6	.38	300-090-03-6	Fibre	ομιιι	115 in ²	24.71 cfm
SDB-121-CV	Male G1-1/4	130	256	>25	50	2700	750	1000	288	SGB-120-03-B	Synthetic	3µm	2095 cm ²	1,50 m³/min
3DD-121-6V	BSP (ISO 228)	5.12	10.08	>.98	1.98	5.92	1.65	61.0	.63	30D-120-03-B	Fibre	ομιιι	320 in ²	52.97 cfm
CDD 122 CV	Male G1-1/4	130	366	>25	50	4000	1500	2000	576	SGB-120-03-B	Synthetic	3µт	2095 cm ²	1,50 m³/min
SDB-122-CV	BSP (ISO 228)	5.12	14.41	>.98	1.98	8.82	3.31	122.0	1.27	30D-120-03-B	Fibre		320 in ²	52.97 cfm

Characteristics

Combination of air breather and water removal filter with integrated check valves to increase the lifetime of the desiccant material; particularly suited for gearbox applications

is ingested into the system. Temperature fluctuations will cause this water vapor to condense which can speed up the oxidation of the fluid and lead to damage in the system.

While inhaling, Desiccant Air Breathers SDB-CV first dry the air as it passes through the drying agent. The air then passes through a 3 µm air filter element to remove any solid contamination particles.

Accessories / Spare Parts

Connection adaptor (see page E34 for details)

• for SDB-061-CV: BA-5B

Adaptor plate (see page E33 for details)

■ for SDB-096-CV: AP-1

■ for SDR-121-CV and SDR-122-CV: AP-2

Visual contamination indicator (see page E33 for details)

for SDB-096-CV, SDB-121-CV and SDB-122-CV FΜ (in conjunction with adaptor plate only):

Drying agent refilling material (supplied in air tight container)

• for SDB-061-CV (100 cm3 / 6.1 in3): RD-061 RD-096 • for SDB-096-CV (600 cm3 / 26.6 in3):

■ for SDB-121-CV (1000 cm3 / 61.0in3): RD-121 for SDB-122-CV (2000 cm³ / 122.0 in³): **RD-122**

Active carbon refilling material (supplied in air tight container) • for SDB-096-CV and SDB-121-CV

RC-093/096/121 (300 cm3 / 18.3 in3):

• for SDB-122-CV (600 cm3 / 18.3 in3): RC-122 Please note: Use one layer of active carbon (1/3)

and one layer of regular drying agent (2/3). Replacement air filter element (sealing included)

SGB-060-03-B ■ for SDB-061-CV: ■ for SDB-096-CV: SGB-090-03-B • for SDB-121-CV and SDB-122-CV: SGB-120-03-B

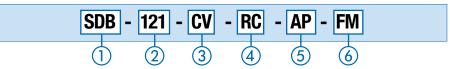
Thanks to the spring-loaded check valves with an opening pressure of 0,01 bar / .15 PSI, the drying agent will be isolated from the atmosphere unless inhaling or exhaling, which increases the lifetime of the Desiccant Air Breather SDB-CV as well

When a reservoir or gearbox breathes, air containing water vapor As moisture is absorbed, the drying agent will gradually change from red to orange. When it is orange, replace the drying agent. If required, an optional visual indicator (not for the SDB-061-CV) gives an indication of the status of the air breather. With the moisture absorbed, the oxidation process can be decreased and the lifetime of the oil and the entire machinery will be extended. Desiccant Air Breathers SDB-CV can also be re-fitted with a layer of active carbon (1/3) and a layer of regular drying agent (2/3) for vapor filtration.

- Available in 4 different sizes with diameter of Ø68 mm / Ø2.68 in, Ø100 mm / Ø3.94 in or Ø130 mm / Ø5.12 in
- Equipped with spring-loaded check valves in opposing directions with an opening pressure of 0,01 bar / .15 PSI
- Refillable with drying agent (non-toxic ZR gel grain) or a mix of drying agent and active carbon
- Replaceable air filter element SGB
- Connection: Male / Female BSP thread (ISO 228)

Please note: Using an Desiccant Air Breather with integrated spring-loaded check valves may cause an under or over pressure of 0,01 bar / .15 PSI inside the system, which does not cause any problems for the majority of gearboxes and reservoirs. In case of doubt, please consult your equipment supplier.

Order Codes



1) Type **Desiccant Air Breather** SDB

(2) Max. Water Absorption and Size

29y / .00 105 at \$000 111111 / \$2.00 111	001
172 g / .38 lbs at Ø100 mm / Ø3.94 in	096
288 g / .63 lbs at Ø130mm / Ø5.12 in	121
576 g / 1.27 lbs at Ø130mm / Ø5.12 in	122

Please see table above for further technical details.

3 Check Valves

With integrated spring-loaded CV check valves (0,01 bar / .15 PSI)

4 Drying Agent Material

Regular drying agent (standard option) One layer of active carbon (1/3) and one layer RC of regular drying agent (2/3) for vapor filtration

(5) Connection Adaptor

Without connection adaptor With connection adaptor BA-5B (only for SDB-061-CV)

Please see page E34 for details. Consult STAUFF for alternative adaptors.

(6) Adaptor Plate

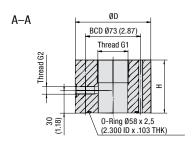
Without adaptor With adaptor plate (not for SDB-061-CV) ΑP

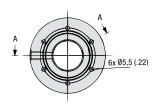
(7) Contamination Indicator

Without contamination indicator With visual contamination indicator FM FΜ (in conjunction with adaptor plate AP only)

Please see page E33 for details.

Adaptor Plate • Type AP





Accessories / Options



Order Code and Dimensions

Order Code	Thread G1	Thread G2	Dimensi	ons (mm/ _{in})	Socket Cap	For Use with
	(Breather Port)	(Indicator Port)	Н	ØD	Screws included	Desiccant Air Breathers
AP-1	50 88 Female G3/4 BSP Female 1/8 NPT		M5 x 60 - 8.8	SDB-093		
AP-I	(ISO 228)	(ANSI B1.20.1)	1.98	3.46	(Steel, zinc-plated)	SDB-096
AP-2	Female G1-1/4 BSP (ISO 228)	Female 1/8 NPT (ANSI B1.20.1)	70	100	M5 x 80 - 8.8	SDB-121 SDB-122
AP-Z			2.76	3.94	(Steel, zinc-plated)	SDB-121-CV SDB-122-CV

Characteristics

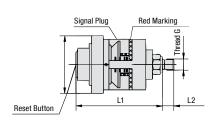
Designed to simplify the installation of Desiccant Air Breathers and enable the use of a visual contamination indicator

With Adaptor Plates AP, desiccant air breathers can be directly mounted to existing connections with a six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2.

They are also equipped with a female 1/8 NPT thread (ANSI B1.20.1) to connect with the Visual Contamination Indicator FM.

Adaptor Plates AP are made of Polyamide (PA). A blind plug, O-ring made of NBR (Buna-N®) and 6 socket cap screws (ISO 4762) are supplied with AP as a standard.

Visual Contamination Indicator • Type FM



Order Code and Dimensions

Order Code	Thread G	Dimensions (mm/in)			
		L1	L2		
FM	Male 1/8 NPT	75	10		
	(ANSI B1.20.1)	2.54	.39		

Housing made of Polycarbonate

Technical Data

- Operating temperature range: -40 °C ... +121 °F (-40 °F ... +250 °F)
- Accuracy: ±10% at red marking



Characteristics

Designed to indicate the status of air filter elements

Visual Contamination Indicators FM - the so-called Filter Minders® - are connected to the female 1/8 NPT thread (ANSI B1.20.1) of the Adaptor Plate AP and give a visual indiation of the contamination level of the air filter element SGB. A red marking indicates when the air filter element has to be replaced.

Visual Contamination Indicators FM can be reset afterwards.

Consult STAUFF for alternative types of monitoring devices (such as Graduated Switch Indicators FME, etc.).

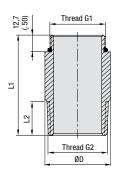


Threaded Breather Adaptor Type TBA (Steel)



Hex Thread G2

TBA-038-B TBA-075-B TBA-125-B



TBA-075 TBA-120 TBA-125

Characteristics

Adopts from female threaded Giant Air Breather or Spin-On Filter Element to female threads, and thus allows for direct installation on top of hydraulic reservoirs

Features

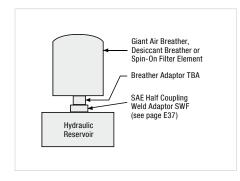
- Several thread combinations available to suit most common Spin-On filter elements
- Versions with male BSP threads on both ends are equipped with hex to simplify installation
- Sealings included in delivery

Materials

- · Adaptor made of Steel, zinc-plated
- Sealings made of NBR (Buna-N®)

Consult STAUFF for alternative materials.

Application Example



Order Codes and Dimensions

	Order Code	Thread G1	Thread G2	Dimensions (mm/in)				For Use with*	
-				L1	L2	ØD	Hex		
	TBA-038-B	Male G3/8 BSP	Male G3/8 BSP	43	11	21,9	22	Giant Air Breathers SGB-060	
	127, 000 2	(ISO 228)	(ISO 228)	1.69	.43	.86	.86	a.a	
	TBA-075	Male 1–12 UNF	Male 3/4 NPT	51	20	27		Spin-On Series SF 6500	
	1BA-073	(ANSI B1.1)	(ANSI B1.20.1)	2.00	.79	1.05		Spin-on series Si 6300	
	TBA-075-B	Male G3/4 BSP	Male G3/4 BSP	57	16	32	32	Giant Air Breathers SGB-090 Desiccant Air Breathers SVDB-093 Desiccant Air Breathers SVDB-096	
	1BA-075-B	(ISO 228)	(ISO 228)	2.24	.63	1.26	1.26	Spin-On Series SF 35 Spin-On Series SF 36	
	TBA-120	Male G1-1/4 BSP	Male 1-1/4 NPT (ANSI B1.20.1)	76	22	42		Giant Air Breathers SGB-120 Spin-On Series SF 57	
	15A 120	(ISO 228)		3.00	.88	1.65		Spin-On Series SF 57	
	TBA-125	Male 1-1/2–16 UN	Male 1-1/4 NPT	76	26	45		Spin-On Series SF 6600	
	1BA-125	(ANSI B1.1)	(ANSI B1.20.1)	3.00	1.01	1.77		Spin-On Series SF 6700	
	TDA 105 D	Male G1-1/4 BSP	Male G1-1/4 BSP	76	20	50	50	Giant Air Breathers SGB-120	
	TBA-125-B	(ISO 228)	(ISO 228)	3.00	.79	1.97	1.97	Spin-On Series SF 57 Spin-On Series SF 58	

 $^{^{\}star}$ Please see Filtration Technology section for technical details on Spin-On filter elements.

Threaded Breather Adaptor Type BA-5 (Polyamide)

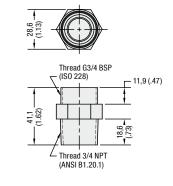
Characteristics

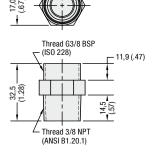
Features

- BA-5B suitable for SGB-060-03-B and SDB-061-CV
- BA-5A suitable for SGB-090-03-B, SVDB-093 and SVDB-096
- Equipped with hex to simplify installation

Materials

· Adaptor made of Polyamide



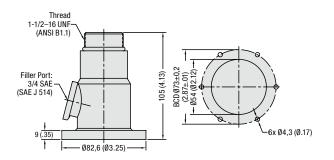


Order Code: BA-5A

Order Code: BA-5B



Breather Adaptor with Filler Port Type BA-6 (Aluminium)



Order Code: BA-6

Characteristics

Features

- For use with Spin-On Series SF6600 and SF6700
- Equipped with female 3/4 SAE 0-Ring Fluid Filler Port
- Can be used with baskets S080, S150, S200 and S095P

Materials

Adaptor made of Aluminium

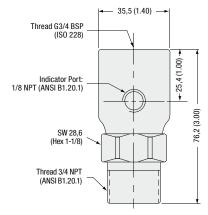
Installation

- Six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2
- · Supplied with 0-ring, gasket and mounting hardware



Application Example





Order Code: DBA-75

Threaded Breather Adaptor Type DBA-75 (Aluminium)

Characteristics

Features

- For use with Desiccant Air Breathers SDB-093, SDB-096 and SDB-096-CV
- Equipped with female 1/8 NPT (ANSI B1.20.1) port for Visual Contamination Indicators FM (Filter Minder®)
- Equipped with hex to simplify installation

Materials

Adaptor made of Aluminium (Black Anodized)



Application Example



ESTAUFF®

Bayonet Breather Adaptor Type BA-1 (Aluminium)

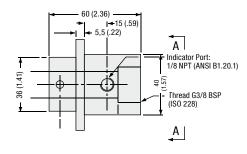
Characteristics

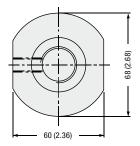
Features

- For use with Desiccant Air Breathers SDB-093, SDB-096 and SDB-096-CV
- Equipped with female 1/8 NPT (ANSI B1.20.1) port for Visual Contamination Indicators FM (Filter Minder®)



- Adaptor made of Aluminium (black-anodized)
- Sealings made of NBR (Buna-N®)





Order Code: BA-1

Bayonet Breather Adaptor Type BA-2 (Aluminium)

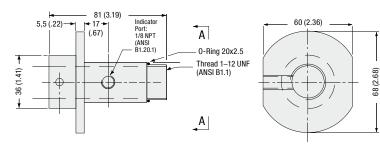
Characteristics

Features

- For use with Spin-On Filter Elements, series SF-6500
- Equipped with female 1/8 NPT (ANSI B1.20.1) port for Visual Contamination Indicators FM (Filter Minder®)

Materials

- Adaptor made of Aluminium (Black Anodized)
- Sealings made of NBR (Buna-N®)



Order Code: BA-2

Bayonet Breather Adaptor Type BA-3 (Aluminium)

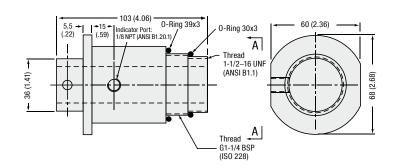
Characteristics

Features

- For use with Giant Air Breathers SGB-120 and Spin-On Filter Elements, series SF-6600 and SF-6700
- Equipped with female 1/8 NPT (ANSI B1.20.1) port for Visual Contamination Indicators FM (Filter Minder®)

Material

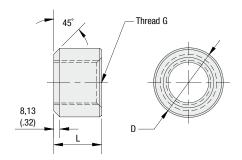
- Adaptor made of Aluminium (Black Anodized)
- Sealings made of NBR (Buna-N®)



Order Code: BA-3



SAE Half Coupling Weld Adaptor Type SWF





Order Code and Dimensions

Order Code	Thread G	Dimensions (mm/in)	
		ØD	L
SWF - 06	9/16–18 UNF	22	17,7
3WI - 00	3/10-10 UNI	.87	.70
SWF - 08	3/4-16 UNF	28,5	21,6
3WI - 00	3/4-10 UNI	1.12	.85
SWF - 10	7/8-14 UNF	34,9	24,1
3WF - 10	7/0-14 UNF	1.37	.95
SWF - 12	1-1/16–12 UNF	37,9	24,1
3WF - 12	1-1/10-12 UNF	1.49	.95
SWF - 16	1-5/16-12 UNF	41,2	27,9
3WF - 10	1-3/10-12 UNF	1.62	1.10
SWF - 20	1-5/8-12 UNF	62,9	27,9
3WI - 20	1-3/0-12 0101	2.48	1.10
SWF - 24	1-7/8-12 UNF	63,5	27,9
3WI - 24	1-7/0-12 UNI	2.50	1.10
SWF - 32	2-1/2-12 UNF	76,2	30,4
3WF - 32	2-1/2-12 UNF	3.00	1.20

Characteristics

Used for a leak-free weld installation of breathers and breather adaptors with SAE O-ring thread

Features

- Equipped with female SAE 0-ring thread as per SAE J514
- Designed for minimum weld distorsion
- Pilot minimised installation setup
- Labor and time saving

Consult STAUFF for custom adaptors.

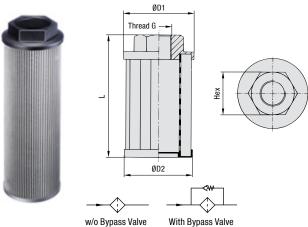
Materials

• Weld Flange made of Forged Steel

Consult STAUFF for alternative materials.



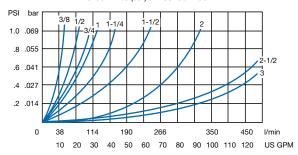
Suction Strainer • Type SUS (Polyamide End Cap)



Flow Characteristics

Nominal Flow Rate vs. Pressure Drop ΔP

The following characteristics are valid for Mineral oils with a mass density of 0,85 kg/dm³ and a kinematic viscosity of 30 mm²/s (cSt) at +38 °C / +100 °F.



Characteristics

Designed as in-tank suction strainer elements for direct installation into suction lines of pumps; should always be installed below the minimum fluid level of the reservoir

Features

- Available with female NPT thread (ANSI B1.20.1) or female BSP thread (ISO 228)
- Operating temperature range:-20 °C ... +100 °C / -4 °F ... +212 °F

Media Compatibility

 Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Materials

- Threaded end cap made of glass-fibre reinforced Polyamide (PA); see page E39 for version with Aluminium end cap
- Lower end cap and support tube made of Steel, zinc-plated
- Standard filter material is Stainless Steel Mesh (125 $\mu m);$ alternative micron ratings of 60 μm and 250 μm on request

Options

 Integrated bypass valve with an opening pressure of 0,2 bar (3PSI) to reduce the risks of high-pressure drops that can be caused by contaminated strainer elements or high-viscosity fluids

Special sizes, designs, materials and configurations are available on request. Consult STAUFF for details.

Consult STAUFF for alternative materials.

Dimensions and Technical Data (Female NPT Threaded Version)

Group Size	Thread G	Dimensions (mm/in)		Filter	Max.		
		ØD1	ØD2	L	Hex	Surface	Flow Rate
050 - N06F - 067	3/8 NPT	50	49	67	26	296 cm ²	12 I/min
030 - 14001 - 007	3/0 INF I	1.97	1.93	2.64	1.02	46 in ²	3.1 US GPM
050 - N06F - 090	3/8 NPT	50	49	90	26	430 cm ²	12 l/min
	3/0 INF I	1.97	1.93	3.54	1.02	67 in ²	3.1 US GPM
050 - N08F - 105	1/2 NPT	50	49	105	26	518 cm ²	15 l/min
030 - NOOF - 103	1/2 INF1	1.97	1.93	4.13	1.02	80 in ²	3.9 US GPM
068 - N12F - 105	3/4 NPT	68	66	105	34	676 cm ²	25 l/min
000 - N12F - 103	3/4 NPT	2.68	2.60	4.13	1.34	105 in ²	6.5US GPM
068 - N16F - 140	1 NPT	68	66	140	42	930 cm ²	50 l/min
		2.68	2.60	5.51	1.65	144 in ²	13.0 US GPM
088 - N20F - 140	1-1/4 NPT	88	85	140	50	1172 cm ²	65 l/min
000 - 14201 - 140		3.46	3.35	5.51	1.97	182 in ²	16.9USGPM
088 - N24F - 140	1-1/2 NPT	88	85	140	60	1172 cm ²	140 l/min
000 - 14241 - 140	1-1/2 111 1	3.46	3.35	5.51	2.36	182 in ²	36.4 US GPM
102 - N24F - 200	1-1/2 NPT	102	100	200	72	2427 cm ²	140 l/min
102 - 14241 - 200	1-1/2 141 1	4.02	3.94	7.87	2.83	376 in ²	36.4 US GPM
102 - N32F - 260	2 NPT	102	100	260	72	3249 cm ²	230 l/min
102 - 14321 - 200	Z 1VI 1	4.02	3.94	10.24	2.83	504 in ²	59.8 US GPM
131 - N40F - 212	2-1/2 NPT	131	128	212	86	2748 cm ²	340 l/min
101 - 11401 - 212	∠ 1/∠ IVI I	5.16	5.04	8.35	3.39	426 in ²	88.4 US GPM
131 - N48F - 272	3 NPT	131	128	272	96	3626 cm ²	400 l/min
101 - 14401 - 272	O INF I	5.16	5.04	10.71	3.78	562 in ²	104USGPM

See page E39 for version with Polyamide (PA) end cap.

Dimensions and Technical Data (Female BSP Threaded Version)

Group Size Thread (sions (^m	m/ _{in})	Filter	Max.	
		ØD1	ØD2	L	Hex	Surface	Flow Rate
040 - B06F - 075	G3/8 BSP	39,5	38,5	75	22	279 cm ²	12 l/min
040 - 0001 - 073	GO/O DOF	1.56	1.53	2.93	.87	43 in ²	3.1 US GPM
050 - B06F - 067	G3/8 BSP	50	49	67	26	296 cm ²	12 l/min
030 - BUOF - 007	G3/6 B3P	1.97	1.93	2.64	1.02	46 in ²	3.1 US GPM
050 - B08F - 105	G1/2 BSP	50	49	105	26	518 cm ²	15 l/min
050 - B08F - 105	01/2 DOF	1.97	1.93	4.13	1.02	80 in ²	3.9 US GPM
068 - B12F - 105	G3/4 BSP	68	66	105	34	676 cm ²	25 l/min
000 - B12F - 103	U3/4 D3F	2.68	2.60	4.13	1.34	105 in ²	6.5 US GPM
068 - B16F - 140	C1 DCD	68	66	140	42	930 cm ²	50 l/min
000 - D10F - 140	G1 BSP	2.68	2.60	5.51	1.65	144 in ²	13.0 US GPM
000 P20E 140	G1-1/4 BSP	88	85	140	50	1172 cm ²	65 l/min
088 - B20F - 140	G1-1/4 DOF	3.46	3.35	5.51	1.97	182 in ²	16.9 US GPM
088 - B24F - 140	G1-1/2 BSP	88	85	140	60	1172 cm ²	140 l/min
000 - 0241 - 140		3.46	3.35	5.51	2.36	182 in ²	36.4 US GPM
102 - B24F - 200	G1-1/2 BSP	102	100	200	72	2427 cm ²	140 l/min
		4.02	3.94	7.87	2.83	376 in ²	36.4 US GPM
102 - B32F - 200	G2 BSP	102	100	200	72	2427 cm ²	230 l/min
102 - B32F - 200		4.02	3.94	7.87	2.83	376 in ²	59.8 US GPM
102 - B32F - 225	OO DOD	102	100	225	72	2811 cm ²	230 l/min
102 - 032F - 223	G2 BSP	4.02	3.94	8.86	2.83	436 in ²	59.8 US GPM
102 - B32F - 260	G2 BSP	102	100	260	72	3249 cm ²	230 l/min
102 - B32F - 200	G2 B5P	4.02	3.94	10.24	2.83	504 in ²	59.8 US GPM
102 - B32F - 300	G2 BSP	102	100	300	72	3798 cm ²	230 l/min
102 - B32F - 300	G2 B5P	4.02	3.94	11.81	2.83	589 in ²	59.8 US GPM
131 - B40F - 191	G2-1/2 BSP	131	128	191	86	2430 cm ²	340 l/min
131 - 040F - 191	UZ-1/2 DOF	5.16	5.04	10.24	3.39	377 in ²	88.4 US GPM
131 - B40F - 212	G2-1/2 BSP	131	128	212	86	2748 cm ²	340 l/min
131 - 13401 - 212	UZ-1/Z DOF	5.16	5.04	8.35	3.39	426 in ²	88.4 US GPM
131 - B48F - 272	G3 BSP	131	128	272	96	3626 cm ²	400 l/min
131 - D40F - 2/2	us dor	5.16	5.04	10.71	3.78	562 in ²	104USGPM
150 - B32F - 151	CO RCD	150	145	151	70	1812 cm ²	400 l/min
130 - 0327 - 131	G2 BSP	5.91	5.71	5.94	2.76	281 in ²	104US GPM

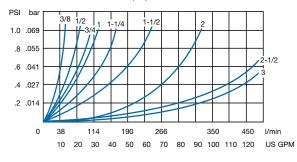
Suction Strainers - Type SUS

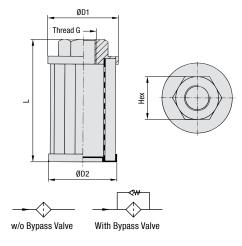


Flow Characteristics

Nominal Flow Rate vs. Pressure Drop ΔP

The following characteristics are valid for Mineral oils with a mass density of $0.85\,\mathrm{kg/dm^3}$ and a kinematic viscosity of $30\,\mathrm{mm^2/s}$ (cSt) at $+38\,^\circ\mathrm{C}$ / $+100\,^\circ\mathrm{F}$.







Characteristics

Designed as in-tank suction strainer elements for direct installation into suction lines of pumps; should always be installed below the minimum fluid level of the reservoir

Features

- Available with female NPT thread (ANSI B1.20.1)
- Operating temperature range:-20 °C ... +100 °C / -4 °F ... +212 °F

Media Compatibility

 Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Materials

- Threaded end cap made of Aluminium; see page E38 for version with Polyamide (PA) end cap
- Lower end cap and support tube made of Steel, zinc-plated
- Filter material made of Stainless Steel Mesh (125 μm);
 alternative micron ratings of 60 μm and 250 μm on request

Consult STAUFF for alternative materials.

Options

 Integrated bypass valve with an opening pressure of 0,2 bar (3 PSI) to reduce the risks of high-pressure drops that can be caused by contaminated strainer elements or high-viscosity fluids

Special sizes, designs, materials and configurations are available on request. Consult STAUFF for details.

Dimensions and Technical Data (Female NPT Threaded Version)

Group Size	Thread G	Dimensions (mm/in)				Filter	Max.
		ØD1	ØD2	L	Hex	Surface	Flow Rate
050 - N06F - 067	3/8 NPT	50	49	67	26	296 cm ²	12 I/min
030 - NUOF - 007		1.97	1.93	2.64	1.02	46 in ²	3.1 US GPM
050 - N06F - 090	3/8 NPT	50	49	90	26	430 cm ²	12 l/min
050 - NOOF - 090	3/0 NP1	1.97	1.93	3.54	1.02	67 in ²	3.1 US GPM
050 - N08F - 105	1/2 NPT	50	49	105	26	518 cm ²	15 l/min
050 - NUOF - 105	1/2 NP1	1.97	1.93	4.13	1.02	80 in ²	3.9 US GPM
000 N10F 10F	O/4 NDT	68	66	105	34	676 cm ²	25 I/min
068 - N12F - 105	3/4 NPT	2.68	2.60	4.13	1.34	105 in ²	6.5 US GPM
068 - N16F - 140	1 NPT	68	66	140	42	930 cm ²	50 l/min
		2.68	2.60	5.51	1.65	144 in ²	13.0 US GPM
088 - N20F - 195	1-1/4 NPT	88	85	195	60	1709 cm ²	65 l/min
000 - 14201 - 193		3.46	3.35	7.68	2.36	265 in ²	16.9 US GPM
088 - N24F - 226	1-1/2 NPT	88	85	226	60	2012 cm ²	140 l/min
000 - 14241 - 220	1-1/2 111 1	3.46	3.35	8.90	2.36	312 in ²	36.4 US GPM
088 - N24F - 260	1-1/2 NPT	88	85	260	60	2344 cm ²	140 l/min
000 - 11241 - 200	1-1/2 NF1	3.46	3.35	10.24	2.36	363 in ²	36.4 US GPM
088 - N32F - 260	2 NPT	88	85	260	70	2344 cm ²	230 l/min
000 - 14321 - 200	∠ (NF I	3.46	3.35	10.24	2.76	363 in ²	59.8 US GPM
150 - N40F - 213	2-1/2 NPT	150	145	213	90	2741 cm ²	340 l/min
130 - 1140F - 213	Z-1/Z INF1	5.91	5.71	8.39	3.54	425 in ²	88.4 US GPM
150 - N48F - 272	3 NPT	150	145	272	100	3625 cm ²	400 l/min
130 - 1140F - 272	JINPI	5.91	5.71	10.71	3.94	562 in ²	104US GPM

See page E38 for version with Aluminium end cap.

Order Codes



(1) **Type**

Suction Strainer for direct installation into suction lines of pumps

nps SUS

② Material of Threaded End Cap

Glass-fibre reinforced Polyamide
Aluminium (for female NPT threaded version only)

(3) Group Size

Select 'Group Size' from corresponding column in dimensional tables

The group size is defined by the diameter $\emptyset D1$ of the threaded end cap, the thread code (type and size) and the total length of the suction strainer element (e.g. 088-N24F-226).

(4) Filter Material / Micron Rating

ッ・		
S	Stainless Steel Mesh, 125 µm (standard option)	125
5	Stainless Steel Mesh, 60 µm	060
5	Stainless Steel Mesh, 250 µm	250

Consult STAUFF for alternative materials / micron ratings.

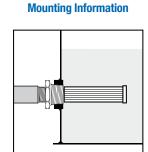
(5) Bypass Option

Without bypass valve (standard option)	0
Integrated bypass valve with opening pressure of 0.2 bar (3PSI)	3



Suction Strainer • Type TMF (NPT Tank Mounted)







Characteristics

Designed as in-tank suction strainer elements for direct installation into suction lines of pumps; should always be installed below the minimum fluid level of the reservoir

Features

- Equipped with female and male NPT thread (ANSI B1.20.1)
- Operating temperature up to +120 °C / +250 °F

Consult STAUFF for custom adaptors.

Media Compatibility

 Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Materials

- Threaded end cap made of Cast Iron
- \blacksquare Standard filter material is Stainless Steel Mesh (125 $\mu\text{m});$ alternative micron ratings on request

Consult STAUFF for alternative materials.

Options

 Integrated bypass valve with an opening pressure of 0,35 bar (5 PSI) to reduce the risks of high-pressure drops that can be caused by contaminated strainer elements or high-viscosity fluids

Special sizes, designs, materials and configurations are available on request. Consult STAUFF for details.

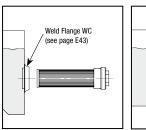
Order Codes, Dimensions and Technical Data

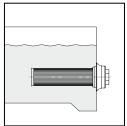
Order Codes		Thread A	Thread B	Dimen	sions (m	n/ _{in})		Filter	Max.
w/o Bypass	Bypass 0,35 bar / 5 PSI			С	D	E	Hex F	Surface	Flow Rate
TMF - 03 - 0	TMF - 03 - 5	3/4 NPT	1/2 NPT	102	25	22	27	258 cm ²	19 l/min
TWF - 03 - 0	1 WIF - 03 - 3	3/4 INF I	1/2 NF1	4.02	0.98	0.87	1.06	40 in ²	5 US GPM
TMF - 05 - 0	TMF - 05 - 5	1 NPT	1/2 NPT	135	27	29	41	258 cm ²	19 l/min
1WI - 03 - 0	TIMI - 03 - 3	1 141 1	1/2 101 1	5.31	1.06	1.14	1.61	40 in ²	5 US GPM
TMF - 10 - 0	TMF - 10 - 5	1-1/4 NPT	3/4 NPT	207	30	34	46	432 cm ²	38 l/min
TIMIF - 10 - 0	11111 10 0	1-1/4 NF 1	3/4 INF I	8.15	1.18	1.34	1.81	67 in ²	10 US GPM
TMF 45 0	TMF - 15 - 5	1-1/2 NPT	1 NPT	208	31	42	55	554 cm ²	57 l/min
TMF - 15 - 0	IMIF - 10 - 0	1-1/2 NP1	I IVI I	8.19	1.22	1.65	2.17	86 in ²	15 US GPM
TMF - 25 - 0	TMF - 25 - 5	2 NPT	1-1/4 NPT	230	35	54	65	1025 cm ²	95 l/min
TWF - 25 - 0	1 WIF - 25 - 5	ZINFI	1-1/4 INF1	9.06	1.38	2.13	2.56	159 in²	25 US GPM
TMF - 50 - 0	TMF - 50 - 5	3 NPT	2 NPT	246	44	76	84	1625 cm ²	189 I/min
TIMIF - 50 - 0	I WIF - 50 - 5	3 111	ZNPI	9.69	1.73	2.99	3.31	252 in ²	50 US GPM
TMF 100 0	TMF 100 F	4 NDT	2 NDT	287	46	101	120	2032 cm ²	378 l/min
TMF - 100 - 0	TMF - 100 - 5	4 NPT	3 NPT	11.30	1.81	3.98	4.72	315 in ²	100 US GPM

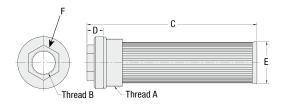


Suction Strainers • Type TMF (SAE 0-Ring Tank Mounted)

Mounting Information







1. Weld Flange to Tank.

2. Screw Strainer into Tank.



Order Codes, Dimensions and Technical Data

Order Codes		Thread A	Thread B	Dimen	sions (m	n/ _{in})		Filter	Max.
w/o Bypass	Bypass 0,35 bar / 5 PSI			C	D	E	Hex F	Surface	Flow Rate
TMF - 1625 - 0 - 0	TMF - 1625 - 0 - 5	2-1/2-12	1-5/16–12	229	19	58	54	580 cm ²	34 l/min
TIMIF - 1025 - 0 - 0	1WI - 1023 - 0 - 3	UNF	UNF	9.02	.75	2.28	2.13	90 in²	9 US GPM
TMF - 2025 - 0 - 0	TMF - 2025 - 0 - 5	2-1/2-12	1-5/8-12	229	19	58	54	580 cm ²	53 l/min
IMF - 2025 - 0 - 0	11W11 - 2023 - 0 - 3	UNF	UNF	9.02	.75	2.28	2.13	90 in ²	14 US GPM
TMF - 1834 - 0 - 0	TMF - 1834 - 0 - 5	3-3/8-12	1-7/8–12	224	23	80	64	1484 cm ²	80 l/min
TIMIF - 1034 - 0 - 0	1WIF - 1034 - 0 - 3	UNF	UNF	8.82	.91	3.15	2.52	230 in ²	21 US GPM
TMF - 2534 - 0 - 0	TMF - 2534 - 0 - 5	3-3/8-12	2-1/2-12	234	25	80	76	1484 cm ²	148 l/min
TIVIF - 2534 - U - U	TIVIF - 2034 - U - 0	UNF	UNF	9.29	.98	3.15	2.99	230 in ²	39 US GPM

Characteristics

Designed as in-tank suction strainer elements for direct installation into suction lines of pumps; should always be installed below the minimum fluid level of the reservoir

Features

- Equipped with female and male SAE 0-ring thread as per SAE J514 for leak-free installation (0-ring included)
- Weld Flange WC supplied separately (see page E41)
- Operating temperature up to +100 °C / +212 °F

Consult STAUFF for custom adaptors.

Media Compatibility

 Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Materials

- Threaded end cap made of Cast Iron
- 0-ring made of NBR (Buna-N®)
- \blacksquare Standard filter material is Stainless Steel Mesh (125 $\mu\text{m});$ alternative micron ratings on request

Consult STAUFF for alternative materials.

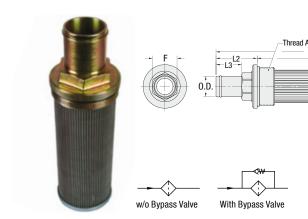
Options

 Integrated bypass valve with an opening pressure of 0,35 bar (5 PSI) to reduce the risks of high-pressure drops that can be caused by contaminated strainer elements or high-viscosity fluids

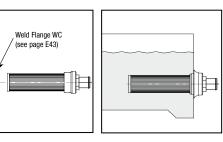
Special sizes, designs, materials and configurations are available on request. Consult STAUFF for details.



Suction Strainer • Type TMF (Hose Barb Tank Mounted)



Mounting Information



1. Weld Flange to Tank.

Ė

2. Screw Strainer into Tank.

Characteristics

Designed as in-tank suction strainer elements for direct installation into suction lines of pumps; should always be installed below the minimum fluid level of the reservoir

Features

- Equipped with male SAE 0-ring thread as per SAE J514 for leak-free installation (0-ring included)
- Hose barb connection up to 2 in
- Weld Flange WC supplied separately (see page E41)
- Operating temperature up to +100 °C / +212 °F

Consult STAUFF for custom adaptors.

Media Compatibility

 Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Materials

- Threaded end cap made of Steel, zinc plated
- 0-ring made of NBR (Buna-N®)
- \blacksquare Standard filter material is Stainless Steel Mesh (125 $\mu m);$ alternative micron ratings on request

Consult STAUFF for alternative materials.

Options

 Integrated bypass valve with an opening pressure of 0,35 bar (5PSI) to reduce the risks of high-pressure drops that can be caused by contaminated strainer elements or high-viscosity fluids

Special sizes, designs, materials and configurations are available on request. Consult STAUFF for details.

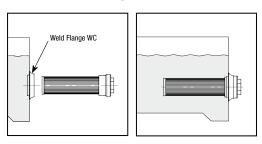
Order Codes, Dimensions and Technical Data

Order Codes		Thread A	Dimensio	ons (mm/ _{in})					
w/o Bypass	Bypass 0,35 bar / 5 PSI		0.D.	L ` ´	L1	L2	L3	E	Hex F
TMF - 1017HB - 0 - 0	TMF - 1017HB - 0 - 5	1-7/8–12	25,4	236	182	51	32	42	32
1WIF - 1017 HB - 0 - 0	1MF - 1017HB - 0 - 3	UNF	1.00	9.29	7.17	2.01	1.26	1.65	1.26
TMF - 1225HB - 0 - 0	TMF - 1225HB - 0 - 5	2-1/2-12	31,8	254	203	51	32	54	38
11WIF - 1223HB - 0 - 0	11811 - 1223110 - 0 - 3	UNF	1.25	10.00	7.99	2.01	1.26	2.13	1.50
T115 400 411D 0 0	TMF - 1234HB - 0 - 5	3-3/8-12	31,8	261	198	64	38	82	51
1WIF - 1234NB - 0 - 0	1WF - 1234FB - U - 3	UNF	1.25	10.28	7.80	2.52	1.50	3.23	2.01
TMF 1524UD 0 0	TMF 1524UD 0 5	3-3/8-12	38,1	261	198	64	38	82	51
1WF - 1334FB - U - U	TMF - 1534HB - 0 - 5	UNF	1.50	10.28	7.80	2.52	1.50	3.23	2.01
TMF - 2034HB - 0 - 0	TME 2024UD O E	3-3/8-12	50,8	274	199	76	51	82	63
	TMF - 2034HB - 0 - 5	UNF	2.00	10.79	7.83	2.99	2.01	3.23	2.48



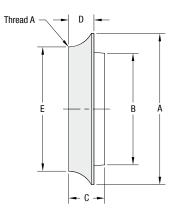
Weld Flange • Type WC

Mounting Information



1. Weld Flange to Tank.

2. Screw Strainer into Tank.



Order Codes, Dimensions and Technical Data

Order Codes	Thread A	Dimensions (mm	¹/ _{in})			
w/o Bypass		Α	В	С	D	E
WC - 1017	1-7/8–12 UNF	76	57	19	13	60
WG - 1017	1-7/0-12 UNI	2.99	2.24	.75	.51	2.36
WC - 1225	2-1/2-12 UNF	89	52	21	15	73
WG - 1223	2-1/2-12 UNF	3.50	2.05	.83	.59	2.87
WS - 1634	0.0/0.4011NF	118	93	25	21	100
W3 - 1034	3-3/8–12 UNF	4.65	3.66	.98	.83	3.94

Characteristics

Used for a leak-free weld installation of tank mounted suction strainers with SAE O-ring thread

Features

- Equipped with female SAE 0-ring thread as per SAE J514
- Designed for minimum weld distorsion
- Pilot minimised installation setup
- Labor and time saving

Consult STAUFF for custom adaptors.

Materials

• Weld Flange made of Forged Steel

Consult STAUFF for alternative materials.



Suction Flanges • Type SF

Characteristics

Designed to seal suction lines passing through the top plate of the hydraulic reservoir and thus allowing access for easy inspection, cleaning and removal of suction elements

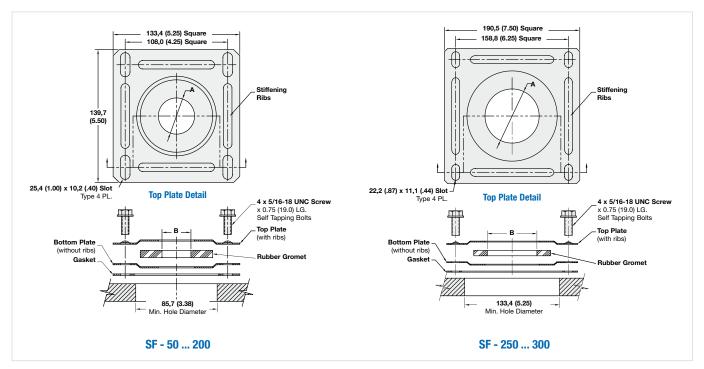
Scope of Delivery / Materials

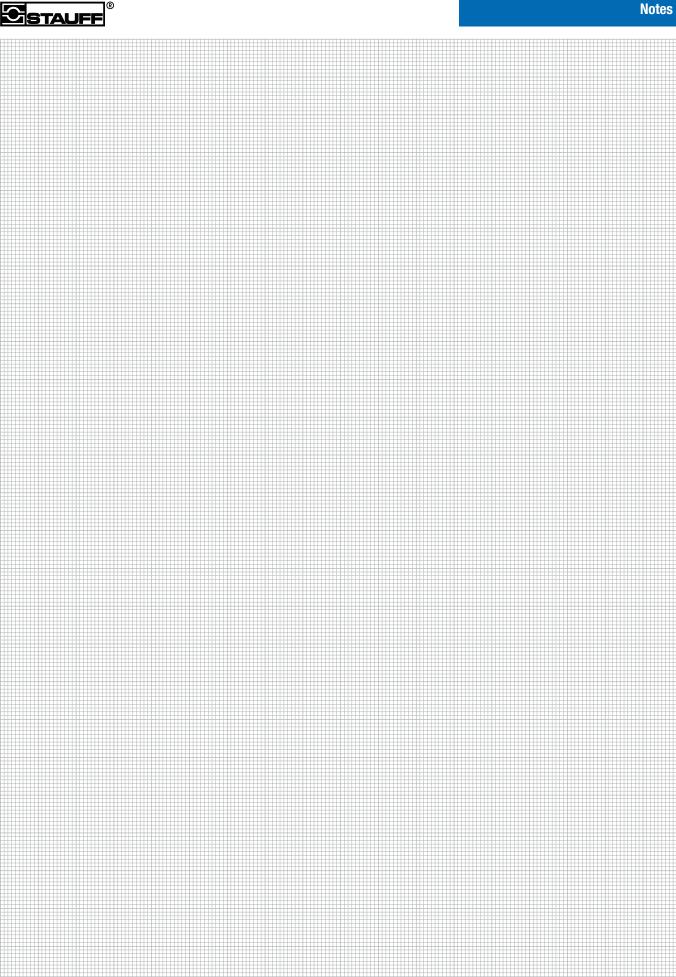
- 1 top plate made of Steel
- 1 bottom plate made of Steel
- 1 seal plate / gasket made of treated paper
- 1 rubber grommet made of NBR (Buna-N®)
- 4 thread forming screws (UNC 5/16-18)

Order Codes

Order Code	Nominal Bore	Dimensio	ons (mm/ _{in})
	(in)	Α	B
SF - 050	1/2	38,1	20
31 - 030	1/2	1.50	.79
SF - 075	3/4	38,1	25
31 - 073	3/4	1.50	.98
SF - 100	1	38,1	30
31 - 100	1	1.50	1.18
SF - 125	1-1/4	50,8	41
31 - 123	1-1/4	2.00	1.61
SF - 150	1-1/2	50,8	46
31 - 130	1-1/2	2.00	1.81
SF - 200	2	50,8	58
31 - 200	2	2.50	2.28
SF - 250	2-1/2	76,2	70
31 - 230	2-1/2	3.00	2.76
SF - 300	3	95,3	89
31 - 300	3	3.75	3.50

Dimensions

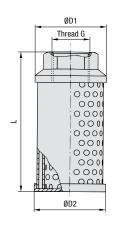


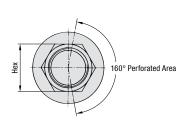




Diffuser • Type SRV

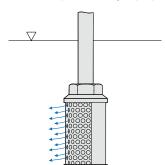






Installation

Installation below the minimum fluid level of the reservoir with the plain area facing the pump inlet



Characteristics

Designed for direct installation into return lines to reduce fluid aeration, foaming and noise; should always be installed below the minimum fluid level

Features

- Available with female BSP thread (ISO 228) or female NPT thread (ANSI B1.20.1)
- Operating temperature range: -20 °C ... +100 °C / -4 °F ... +212 °F
- Max. working pressure: 20 bar / 290 PSI

Media Compatibility

 Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Construction and Materials

- 2 concentric tubes with inner spaced holes
- Threaded end cap made of Aluminium
- Other components made of Steel, zinc-plated

Special sizes, designs, materials and configurations are available on request. Consult STAUFF for details.



Diffusers SRV are ideally suited for use with STAUFF Return Line Filters of the RF series with threaded connection.

For details, please see **Filtration Technology** section of this catalogue.

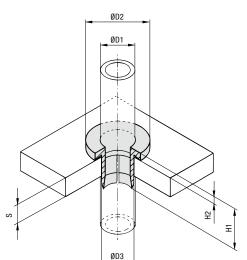
Dimensions and Order Codes (Female NPT Threaded Version)

Order Code	Thread G	Dimensions	(^{mm} / _{in})			Max.
		ØD1	ØD2	L	Hex	Flow Rate
SRV - 050 - N12	3/4 NPT	64	60	109	36	50 l/min
3NV - 030 - N12	3/4 NF I	2.52	2.36	4.29	1.42	13 US GPM
SRV - 114 - N16	1 NPT	64	60	139	46	114 l/min
3NV - 114 - N10	INFI	2.52	2.36	5.47	1.81	30 US GPM
SRV - 200 - N20	1-1/4 NPT	86	82	139	60	200 l/min
3NV - 200 - N20	1-1/4 INF 1	3.39 3.23 5.47		5.47	2.36	52 US GPM
SRV - 227 - N24	1-1/2 NPT	86	82	200	60	227 l/min
3NV - 221 - N24	1-1/2 NP1	3.39	3.23	7.87	2.36	59 US GPM
SRV - 454 - N32	2 NPT	86	82	260	70	454 l/min
3NV - 434 - N32	ZINFI	3.39	3.23	10.24	2.76	118 US GPM
SRV - 650 - N40	2-1/2 NPT	150	145	211	90	650 l/min
3NV - 030 - N40	Z-1/Z INF I	5.91	5.71 8.31		3.54	169 US GPM
SRV - 950 - N48	3 NPT	150	145	272	100	950 l/min
3NV - 93U - N40	SINFI	5.91	5.71	10.71	3.94	247 US GPM

Dimensions and Order Codes (Female BSP Threaded Version)

Order Code	Thread G	Dimensions	(^{mm} / _{in})			Max.
		ØD1	ØD2	L	Hex	Flow Rate
SRV - 050 - B12	G3/4	64	60	109	36	50 l/min
3NV - 030 - D12	03/4	2.52	2.36	4.29	1.42	13 US GPM
SRV - 114 - B16	G1	64	60	139	46	114 l/min
3NV - 114 - D10	di	2.52	2.36	5.47	1.81	30 US GPM
SRV - 200 - B20	G1-1/4	86	82	139	60	200 l/min
SRV - 200 - B20	01-1/4	3.39	3.23	5.47	2.36	52 US GPM
SRV - 227 - B24	01.1/0	86	82	200	60	227 l/min
SRV - 221 - D24	G1-1/2	3.39	3.23	7.87	2.36	59 US GPM
SRV - 454 - B32	G2	86	82	260	70	454 I/min
3NV - 434 - B32	uz	3.39	3.23	10.24	2.76	118 US GPM
SRV - 650 - B40	G2-1/2	150	145	211	90	650 l/min
3NV - 030 - D40	02-1/2	5.91	5.71	8.31	3.54	169 US GPM
SRV - 950 - B48	G3	150	145	272	100	950 l/min
3NV - 93U - D40	us us	5.91	5.71	10.71	3.94	247 US GPM





Return Line Bushing • Type SRF



Dimensions

Outside I	Diameter ØD1	Nominal Bore	Dimen	sions (^{nm} / _{in})	Wall Thickness (mm/in)	Mounting Bore (mm/in)
(mm)	(in)	(in)	ØD2	H1	H2	S	ØD3
<u> </u>	1/4		18	22	4	4 12	10
6	1/4		.71	.87	.16	.1647	.39
0	E/40		20	22	4	4 12	12
8	5/16		.79	.87	.16	.1647	.47
10	3/8	1/8 Pipe	22	22	4	4 12	14
10	3/0	1/4 Copper Tube	.87	.87	.16	.1647	.55
12	1/2	0/0 O Tube	24	22	4	4 12	16
12	1/2	3/8 Copper Tube	.94	.87	.16	.1647	.63
14		1/4 Pipe	26	22	4	4 12	18
14		1/4 Pipe	1.02	.87	.16	.1647	.71
15			28	22	4	4 12	20
13			1.10	.87	.16	.1647	.79
16	5/8	1/0 Copper Tube	28	22	4	4 12	20
16	5/8	1/2 Copper Tube	1.10	.87	.16	.1647	.79
17		0 /0 Di	30	22	4	4 12	22
17		3/8 Pipe	1.18	.87	.16	.1647	.87
20	3/4		32	22	4	4 12	24
20	3/4		1.26	.87	.16	.1647	.94
22	7/8	2/4 Copper Tube	34	22	4	4 12	26
22	1/0	3/4 Copper Tube	1.34	.87	.16	.1647	1.02
25	1		38	22	4	4 12	30
25	'		1.50	.87	.16	.1647	1.18
28		1 Copper Tube	41	22	4	4 12	33
20		1 Copper Tube	1.61	.87	.16	.1647	1.30
30			43	22	4	4 12	34
30			1.69	.87	.16	.1647	1.39
35		1-1/4 Copper Tube	48	22	4	4 12	40
30		1-1/4 Copper Tube	1.89	.87	.16	.1647	1.57
38	1-1/2		51	22	4	4 12	43
30	1-1/2		2.01	.87	.16	.1647	1.70
42		1-1/4 Pipe	55	22	4	4 12	47
42		1-1/2 Copper Tube	2.17	.87	.16	.1647	1.85

Characteristics

Designed as tubular support, vibration and noise absorber and protection element for rigid return lines entering the hydraulic reservoir

Features

- For all commonly available Metric and imperial pipe and tube diameters from 6 ... 42 mm and 1/4 ... 1-1/2 in
- Oil-tight and dust-proof sealing
- Simple assembly: Insert the bushing in to the bore hole and the install the lubricated pipe into the bushing
- Chemically resistant against oil and solvents

Media Compatibility

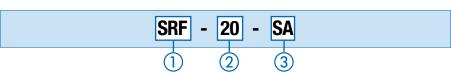
 Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Materials

 Bushing made of Polypropylene (PP) or Thermoplastic Elastomer (TPE) with a hardness degree of 87 Shore-A

Consult STAUFF for alternative materials.

Order Codes



SRF

20

① Type

Return Line Bushing

② Pipe / Tube Diameter

Outside diameter pipe / tube ØD1 in mm (according to dimension table)

3 Material

Polypropylene (PP) in natural colour PP
Thermoplastic Elastomer (TPE) in black colour SA

Consult STAUFF for alternative materials.

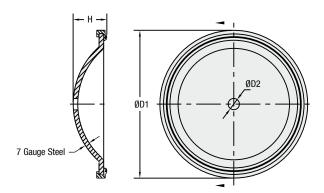
www.stauff.com

E47





Reservoir End Covers • Type EC



Characteristics

Materials

- End cover made of 7 Grade Steel (pickled and oiled);
 Stainless Steel available on request
- Double lip gasket (one-piece, molded) made of NBR (Buna-N®)
- Crush washer made of Polyamide (PA)

Options

- 3/4" drain hole (not for EC-6 and EC-16)
- Back mounting brackets (included for EC-6)
- Baffle adaptors
- Seal kits (double lip gasket and crush washer)

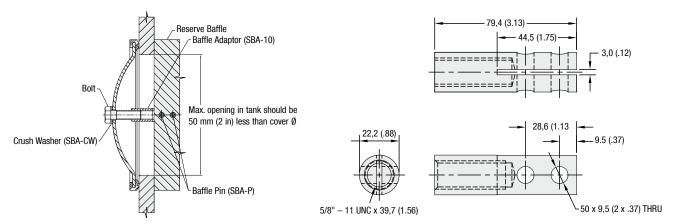
Special sizes, designs, materials and configurations are available on request. Consult STAUFF for details.

Dimensions and Order Codes

Order Code w/o Drain Hole	with Drain Hole	Seal Kit	Dimensions (mo	Н	Weight (kg/lbs)	
			146	11,1	33	1,2
EC - 6			5.75	.44	1.31	2.5
EC - 10	EC - 10D	EC - 10 - SK	254	17,4	44,5	2,1
EG-10	EG - 10D	EU - 10 - 3K	10.00	.69	1.75	4.5
EC - 12	EC - 12D	EC - 12 - SK	308	17,4	44,5	3,0
EU - 12	EG - 12D	EU - 12 - 3K	12.13	.69	1.75	6.5
EC - 14	EC - 14D	EC - 14 - SK	359	17,4	44,5	3,9
20-14	L0 - 140	LU - 14 - 3K	14.13	.69	1.75	8.5
EC - 16		EC - 16 - SK	410	17,4	44,5	4,8
20-10		L0 - 10 - 3K	16.15	.69	1.75	10.5
EC - 18	EC - 18D	EC - 18 - SK	460	17,4	51	6,2
20 10	LO - 10D	LO IO-OK	18.11	.69	1.75	13.5

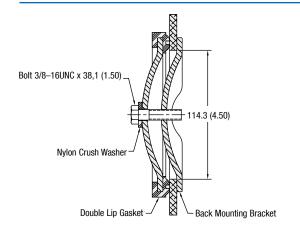


Baffle Adaptors for Reservoir End Covers



Dimensions and Order Codes

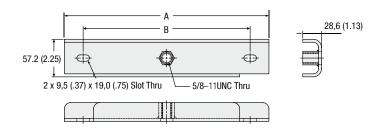
Order Code	Description
SBAB - 10	Mounting Bolt for EC-10 / EC-12: 5/8–11UNC x 38,1 (1.50)
SBAB - 14	Mounting Bolt for EC-14: 5/8–11UNC x 50,8 (2.00)
SBAB - 18	Mounting Bolt for EC-18: 5/8–11UNC x 63,5 (2.50)
SBA - 10	Baffle Adaptor
SBA - P	Baffle Pin
SBA - CW	Crush Washer



Back Mounting Bracket for EC - 6

EC-6 supplied with back mounting bracket

Back Mounting Brackets for Reservoir End Covers



Back Mounting Bracket for EC - 10 ... 18

Required when baffle adaptor is not used; includes bracket and 2 weld on clips

Dimensions and Order Codes

Order Code	Dimensions (mm/in)	Dimensions (mm/in)										
	End Cover Ø	Access Hole Ø	Α	В								
CDD 10	254	203,2	305	254	1,2							
SBR - 10	10.00	8.00	12.00	10.00	2.5							
CDD 10	308	254,0	356	305	1,4							
SBR - 12	12.13	10.00	14.02	12.00	3.0							
SBR - 14	359	304,8	413	362	1,4							
3DR - 14	14.13	12.00	16.26	14.25	3.0							
SBR - 16	410	355,6	464	413	1,8							
3DN - 10	16.15	14.00	18.27	16.26	4.0							
SBR - 18	460	406,6	514	464	1,8							
3DN - 10	18.11	16.00	20.24	18.27	4.0							



Motor-Pump Adaptors for Electric Motors



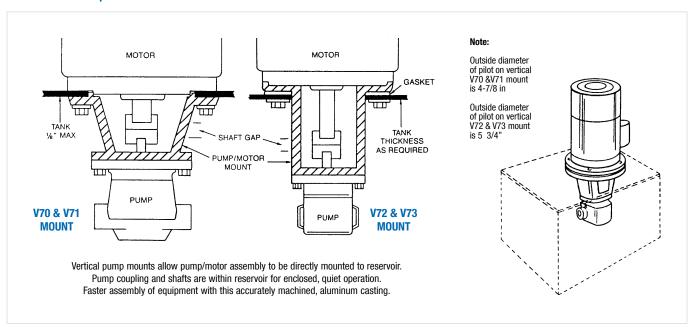
Characteristics

Product Features

- Vertical and horizontal mounts
- Easy assembly of pumps to electric motors
- For accurate alignment between pump and motor
- Light-weight, high-strength Aluminum casting
- One snap-in cover for access hole (standard)
- Suitable for electric motors to 74 kW / 100 hp

Consult STAUFF for options on Gas Engine Adaptors.

Vertical Mount Adaptors for Electric Motos



Frame Number	Pump Mount Part Number	Motor Frame Size	SAE Pump Flange	Ī	ice o	Dimensions of NEMA-C Face Mount End (inches) A B C		Face Mount End (inches)		Dimensions of Pump Face Mount End (inches) D Pump Nominal Bolt Circle		Face Mount End (inches) D Pump				
			90	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
	V70-A4	56C	4F17									45	1.78	72	2.828	-1 c
E70	V70-AA	143-145 TC	AA-2 BOLT	89	3.50"	114	4.50	168	6.625	149	5.875	51	2.00	83	3.25	
	V70-A2	143-143 10	A-2 BOLT									83	3.25	106	4.188	
	V71-A4	56C	4F17									45	1.78	72	2.828	FACE TO SECOND
E71	V71-AA	143-145 TC	AA-2 BOLT	112	4.40"	114	4.50	168	6.625	149	5.875	51	2.00	83	3.25	
	V71-A2	140 140 10	A-2 BOLT									83	3.25	106	4.188	FACE
	V72-A4	182-184 TC	4F17									45	1.78	72	2.828	г.
E72	V72-AA	213-215 TC	AA-2 BOLT	130	5.12"	216	8.50	222	8.75	184	7.25	51	2.00	83	3.25	
	V72-A2	254-256 TC	A-2 BOLT									83	3.25	106	4.188	
	V73-A4	182-184 TC	4F17									45	1.78	72	2.828	
E73	V73-AA	213-215 TC	AA-2 BOLT	163	6.40"	216	8.50	222	8.75	184	7.25	51	2.00	83	3.25	FACE B
	V73-A2	254-256 TC	A-2 BOLT									83	3.25	106	4.188	FACE



Motor-Pump Adaptors for Electric Motors

Vertical Mount Adaptors for Electric Motos

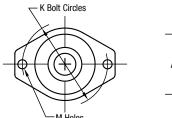
	Pump												mension					
Frame	Mount Part	Motor Frame	SAE Pump	1	ace to				s of NEMA End (Incl			Face	Mount	•	nches) mp		mum pling	
Number	Number	Size	Flange	Fa	ace		A		В	(C	Nom	inal	Bolt	Circle	Dian	neter	
	F40.44		4547	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
F40	E49-A4	56C	4F17	00	0.50	114	4.50	100	0.005	140	F 075	45	1.78	72	2.828	70	0.00	
E49	E49-AA	143-145 TC	AA-2 BOLT	89	3.50	114	4.50	168	6.625	149	5.875	\vdash	2.00	83	3.25	76	3.00	
	E49-A2		A-2 BOLT									83	3.25	106	4.188			
E50	E50-A4 E501-AA	56C	4F17 AA-2 BOLT	110	4 40	114	4.50	100	6 605	140	5.875	45 51	1.78 2.00	72 83	2.828	76	3.00	
E30	E501-AA	143-145 TC	A-2 BOLT	112	4.40	114	4.50	168	6.625	149	3.073	$\overline{}$	3.25	106	3.25	76	3.00	FACE ATO A B
	E501-A2/4	56C-145TC	A-2 BULI A 2/4									83	3.25	106	4.188 4.188			FACE
	E51-A4	300-14310	4F17										1.78	72	2.828			
E51	E51-AA	182-184 TC	AA-2 BOLT	130	5.12							51	2.00	83	3.25	89	3.50	₽ □ ()
LUI	E51-A2	102-104-10	A-2 BOLT	130	3.12							\vdash	3.25	106	4.188	03	3.30	
	E52-A4	213-215 TC	4F17			216	8.50	222	8.75	184	7.25	45	1.78	72	2.828			
E52	E52-AA	254-256 TC	AA-2 BOLT	163	6.40							\vdash	2.00	83	3.25	89	3.50	FACE
LUZ	E52-A2	254 250 10	A-2 BOLT	100	0.40							83	3.25	106	4.188	00	0.00	TO FACE
E53	E53-A2		A-2 BOLT									83	3.25	106	4.188	89	3.50	
E54	E54-B2	182-184 TC	B-2 BOLT	147	5.81							\longrightarrow	4.00	146	5.75	102	4.00	•
E55	E55-A2	102 104 10	A-2 BOLT									83	3.25	106	4.188	89	3.50	T ['%
E56	E56-B2	213-215 TC	B-2 BOLT	172	6.81	216	8.50	222	8.75	184	7.25	102	4.00	146	5.75	102	4.00	
200	E57-A2S	254-256 TC	A-2 BOLT	129	5.06							83	3.25	106	4.188	.02	1.00	
E57	E57-A2L	201 200 10	A-2 BOLT	130	5.12							\vdash	3.25	106	4.188	89	3.50	FACE B B
207	E502-A2/4	182-256TC	A 2/4	133	5.25							-	3.25	106	4.188			FACE
	E58-A2	182-182 TC	A-2 BOLT	100	0.20							83	3.25	106	4.188			
E58	E58-B2	213-215TC	B-2 BOLT	147	5.81	216	8.50	222	8.75	184	7.25	102	4.00	146	5.75			
200	E58-C2	254-256 TC	C-2 BOLT	'''	0.01		0.00		0.70	101	7.20	\vdash	5.00	181	7.125			
	E59-A2	182-184 TC	A-2 BOLT									83	3.25	106	4.188	102	4.00	
E59	E59-B2	213-215 TC	B-2 BOLT	172	6.81	216	8.50	222	8.75	184	7.25	102	4.00	146	5.75			FACE
200	E59-C2	254-256 TC	C-2 BOLT		0.01		0.00		0.70	101	7.20	\vdash	5.00	181	7.125			I← TO →I I← B → →I FACE
	E62-A2	201 200 10	A-2 BOLT									83	3.25	106	4.188			INVE
E62	E62-B2	284-286 TC	B-2 BOLT	174	6.87	267	10.50	279	11.00	228	9.00	102	4.00	146	5.75			F Company
	E62-C2	284-286 TSC	C-2 BOLT									127	5.00	181	7.125			
	E63-A2		A-2 BOLT									83	3.25	106	4.188	102	4.50	
E63	E63-B2	284-286 TC	B-2 BOLT	200	7.87	267	10.50	279	11.00	228	9.00	102	4.00	146	5.75			FACE
	E63-C2	284-286 TSC	C-2 BOLT									127	5.00	181	7.125			FACE **SEE NOTE BELOW
		004 000 TCO	A-2 BOLT									83	3.25	106	4.188			
	E64-A2	324-326 TSC	B-2 BOLT									102	4.00	146	5.75			
E64	E64-B2/4	364-365 TSC	B-4 BOLT	168	6.62	318	12.50	330	13.00	279	11.00	102	4.00	127	5.00	133	5.25	
			C-2 BOLT									127	5.00	181	7.125			
	E64-C2/4	404-405 TSC	C-4 BOLT	-								127	5.00	162	6.375			
	F0F 40	004 000 T00	A-2 BOLT									83	3.25	106	4.188			
	E65-A2	324-326 TSC	B-2 BOLT									102	4.00	146	5.75			
E65	E65-B2/4	364-326 TSC	B-4 BOLT	179	7.06	318	12.50	330	13.00	279	11.00	102	4.00	127	5.00	133	5.25	
			C-2 BOLT									127	5.00	181	7.125			FACE
	E65-C2/4	404-405 TSC	C-4 BOLT									127	5.00	162	6.375			I← TO → I← B → I
	E66-A2	324-326 TSC	A-2 BOLT									83	3.25	106	4.188			··· ··
	LUU-AZ	324-320 136	B-2 BOLT									102	4.00	146	5.75			
E66	E66-B2/4	369-365 TSC	B-4 BOLT	222	8.75	318	12.50	330	13.00	279	11.00	102	4.00	127	5.00	133	5.25	
			C-2 BOLT									127	5.00	181	7.125			
	E66-C2/4	404-405 TSC	C-4 BOLT									127	5.00	162	6.375			
F	For 5-11	324-326 TSC	D-2 BOLT	4==			40	055	40.55			152	6.00	229	9.00			FI n v
E67	E67-D2/4	264-365 TSC	D-4 BOLT	179	7.06	318	12.50	330	13.00	279	11.00	-	6.00	229	9.00			
		404-405 TSC 324-326 TSC	D 7 DULI								-	102	0.00	223	5.00	152	6.00	
E68	E68-D2/4	269-365 TSC	D2 BOLT	222	8.75	318	12.50	330	13.00	279	11.00	152	6.00	229	9.00			FACE
		404-405 TSC	D4 BOLT									152	6.00	229	9.00			I← TO → I I← B → I
				ADA	PTOR F	OR E51	E59 TO	CONVER	T TO 28	4-286 T	SC MOT	ORS						r∏n °∖
E69	E69					267	10.50	279	11.00	228	9.00							
																		~~

^{**}Note: Use the E69 adaptor ring with E58 and E59 mounts for all E62 and E63 mounts.

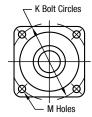


Motor-Pump Adaptors for Electric Motors

Mounting Dimensions for SAE-2 and SAE-4 Bolt NEMA Electric Motors









SAE-2 Bolt Mount

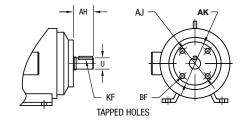
Dimensions in inch.

SAE-4 Bolt Mount

Dimensions in inch.

MOUNTING FLANGE	PILOT DIMENSIONS	FLANGE DIMENSIONS				
SAE	A	K	М			
AA	2.000/1.998	3.255 3.245	0.406			
A	3.250/3.248	4.192 4.182 0.438				
В	4.000/3.998	5.755 5.745	0.562			
С	5.000/4.998	7.130 7.120	0.687			
D	6.000/5.998	9.005 8.995	0.812			
E	6.500/6.498	12.503 12.495	1.062			
F	7.000/6.998	13.786 13.776	1.062			

MOUNTING FLANGE	PILOT DIMENSIONS	FLANGE DIMENSIONS				
SAE	A	K	М			
USA 4F17	1.781/1.779	2.843 2.833	0.375			
A	3.250/3.248	4.130 4.120	0.438			
В	4.000/3.998	5.005 4.995	0.562			
С	5.000/4.998	6.380 6.370	0.562			
D	6.000/5.998	9.005 8.995	0.812			
E	6.500/6.498	12.505 12.495	0.812			
F	7.000/6.998	13.786 13.776	1.062			



NEMA Electric Motor Shaft and C-Face Dimension

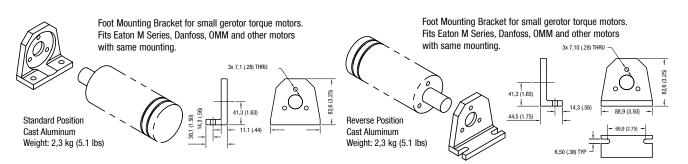
NE	NEMA Frame	Bolt Circle AJ		Register AK	Shaft Diameter U		Shaft Length AH		Key Sq.		Key Length		BP Tapped Holes	
Motor													Size	No. Req'd.
		mm	in		mm	in	mm	in	mm	in	mm	in		
	56C	149	5-7/8	4-1/2	16	5/8	52	2-1/16	5	3/16	25	1	3/8-16	4
	143TC	149	5-7/8	4-1/2	22	7/8	54	2-1/8	5	3/16	35	1-3/8	3/8-16	4
	145TC	149	5-7/8	4-1/2	22	7/8	54	2-1/8	5	3/16	35	1-3/8	3/8-16	4
	182TC	184	7-1/4	8-1/2	29	1-1/8	67	2-5/8	6	1/4	44	1-3/4	1/2-13	4
	184TC	184	7-1/4	8-1/2	29	1-1/8	67	2-5/8	6	1/4	44	1-3/4	1/2-13	4
	213TC	184	7-1/4	8-1/2	35	1-3/8	79	3-1/8	8	5/16	60	2-3/8	1/2-13	4
	215TC	184	7-1/4	8-1/2	35	1-3/8	79	3-1/8	8	5/16	60	2-3/8	1/2-13	4
	254TC	184	7-1/4	8-1/2	41	1-5/8	95	3-3/4	10	3/8	73	2-7/8	1/2-13	4
	256TC	184	7-1/4	8-1/2	41	1-5/8	95	3-3/4	10	3/8	73	2-7/8	1/2-13	4
	284TC	229	9	10-1/2	48	1-7/8	111	4-3/8	13	1/2	83	3-1/4	1/2-13	4
284TSC		229	9	10-1/2	41	1-5/8	76	3	10	3/8	48	1-7/8	1/2-13	4
	286TC	229	9	10-1/2	48	1-7/8	111	4-3/8	13	1/2	83	3-1/4	1/2-13	4
286TSC		229	9	10-1/2	41	1-5/8	76	3	10	3/8	48	1-7/8	1/2-13	4
	324TC	279	11	12-1/2	54	2-1/8	127	5	13	1/2	98	3-7/8	5/8-11	4
324TSC		279	11	12-1/2	48	1-7/8	89	3-1/2	13	1/2	51	2	5/8-11	4
	326TC	279	11	12-1/2	54	2-1/8	127	5	13	1/2	98	3-7/8	5/8-11	4
326TSC		279	11	12-1/2	48	1-7/8	89	3-1/2	13	1/2	51	2	5/8-11	4
	364TC	279	11	12-1/2	60	2-3/8	143	5-5/8	16	5/8	108	4-1/4	5/8-11	8
364TSC		279	11	12-1/2	48	1-7/8	89	3-1/2	13	1/2	51	2	5/8-11	8
	365TC	279	11	12-1/2	60	2-3/8	143	5-5/8	16	5/8	108	4-1/4	5/8-11	8
365TSC		279	11	12-1/2	48	1-7/8	89	3-1/2	13	1/2	51	2	5/8-11	8
	404TC	279	11	12-1/2	60	2-7/8	178	7	19	3/4	143	5-5/8	5/8-11	8
404TSC		279	11	12-1/2	54	2-1/8	102	4	13	1/2	70	2-3/4	5/8-11	8
	405TC	279	11	12-1/2	60	2-7/8	178	7	19	3/4	143	5-5/8	5/8-11	8
405TSC		279	11	12-1/2	54	2-1/8	102	4	13	1/2	70	2-3/4	5/8-11	8
	444TC	356	14	16	92	3-3/8	210	8-1/4	22	7/8	175	6-7/8	5/8-11	8
444TSC		356	14	16	60	2-3/8	114	4-1/2	16	5/8	76	3	5/8-11	8
	445TC	356	14	16	92	3-3/8	210	8-1/4	22	7/8	175	6-7/8	5/8-11	8
445TSC		356	14	16	60	2-3/8	114	4-1/2	16	5/8	76	3	5/8-11	8



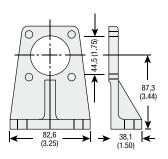
Foot Mount Brackets for Hydraulic Pumps • Type FM

FM-37-M3R

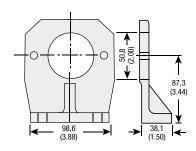
FM-36-M3



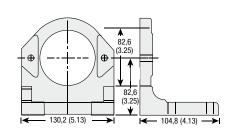
FM-38-4F

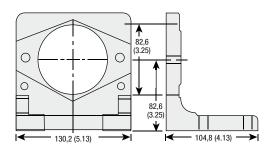


FM-39-AA2

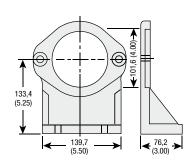


FM-40-A2





FM-41-A2C



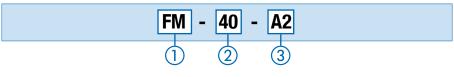
FM-42-B2

Characteristics

- Lightweight Aluminum casting
- Sizes available: SAEAA - 4 Bolt SAEAA - 2 Bolt SAEA - 2 Bolt

SAEB - 2 Bolt

Order Codes



1) Type

2 Frame Number

3 Pump Flange



Pipe, Tube and Hose Cleaning System



Characteristics

Simple and low cost solution for the removal of unwanted contaminant from the inside surfaces of pipes, tubes and hoses

The STAUFF Clean system comprises of a pneumatic launcher and a range of specially designed nozzles. The launcher uses standard industrial compressed air in pressure between 6 and 8 bar / 87 and 116 PSI to propel a foam projectile through the nozzle and into the hose, tube or pipe to be cleaned. This provides a safe and environmentally friendly tool that requires little formal expertise to operate and apply.

The launcher is the part of the system that controls the air supply to propel the projectile from start to finish of the cleaning job.

The nozzles are specially designed to affect an airtight seal on any pipe, tube or hose with or without end fittings. It main purpose is to compress the foam projectile allowing it to enter the internal diameter of the pipe, tube or hose to be cleaned.

The projectile is the part of the system that does the cleaning: The foam projectile is sized to be approximately 15 % larger than the internal diameter of the pipe, tube or hose to be cleaned. The compression of the projectile against the internal wall cleans the internal surface and expels any loose contaminants from the end of the pipe, tube or hose.

The STAUFF Clean System is available as separate components or in a variety of kit forms comprising various nozzle types, adaptor and launcher, all contained in a heavy duty carrying case.

Launchers / Launcher Kits



Characteristics

Features

- Pneumatic pistol-grip launcher
- Light-weight and ergonomic design
- Easy to operate and apply
- · Connection to air suppy with quick release coupling
- Suitable for any type of nozzle
- Delivered separately or in a variety of kit forms including carrying case, adaptor ring and nozzles (if required)

Technical Data

- Air compressor requirement: 6 ... 8 bar / 87 ... 116 PSI
- Effective air volume: 250 ... 400 l/min / 66 ... 106 US GPM

Order Codes

Adaptor ring

Launcher only
 Launcher kit without nozzles
 Launcher kit with set of 10 Universal nozzles
 Launcher kit with set of 18 Metric Tube nozzles
 Launcher kit with set of 10 JIC nozzles
 Launcher kit with set of 7 BSP nozzles
 Launcher kit with set of 7 NPT nozzles
 Launcher kit with set of 7 NPT nozzles

SC-UV-AR

Consult STAUFF for special connection adaptors and couplings.

Nozzles / Nozzle Sets





If required, nozzles can also be supplied separately. Consult STAUFF for availability and order codes.

Universal Nozzle Set (Order Code: SC-10UV-S)

The Universal Nozzle is designed with a tapered seat that will allow it to suit for 90% of applications, including Hose, Tube and Pipe, with or without fittings, in hydraulic and pneumatic pipe systems, condenser tubes, boiler tubes and food lines.

The Universal Nozzle kit fits all and will accommodate applications with JIC, SAE and BSP end fittings.

The set of 10 nozzles consists of the following sizes: 6 mm, 8 mm, 10 mm, 13 mm, 16 mm, 19 mm, 25 mm, 32 mm, 38 mm and 50 mm.

Metric Tube Nozzle Set (Order Code: SC-18MT-S)

The Metric Tube Nozzle is intended for use specifically with Metric sized tube and is designed to fit over the outside of the tube or pipe being cleaned.

The inside diameter of the nozzle is reduced to match the inside diameter of the tube. The nozzles are machined from solid bar stock and designed for superior strength.

The set of 18 nozzles consist of the following Metric OD sizes: $6\,\mathrm{mm}$, $8\,\mathrm{mm}$, $10\,\mathrm{mm}$, $12\,\mathrm{mm}$, $14\,\mathrm{mm}$, $15\,\mathrm{mm}$, $16\,\mathrm{mm}$, $18\,\mathrm{mm}$, $20\,\mathrm{mm}$, $22\,\mathrm{mm}$, $25\,\mathrm{mm}$, $28\,\mathrm{mm}$, $30\,\mathrm{mm}$, $35\,\mathrm{mm}$, $38\,\mathrm{mm}$, $42\,\mathrm{mm}$, $50\,\mathrm{mm}$ and $60\,\mathrm{mm}$.

JIC Nozzle Set (Order Code: SC-10J-S)

The JIC Nozzle is designed specifically for use with JIC and SAE type fittings. The nozzles are machined to accommodate both male and female configuration, ensuring a perfect airtight seal every time.

The set of 10 nozzles consist of the following sizes: 6 mm, 8 mm, 10 mm, 13 mm, 16 mm, 19 mm, 25 mm, 32 mm, 38 mm and 50 mm.

BSP Nozzle Set (Order Code: SC-7B-S)

The BSP Nozzle is designed specifically for BSP configuration fittings. The nozzles are machined to accommodate both male and female configurations, ensuring a perfect airtight seal every time.

The set of 7 nozzles consist of the following sizes: $6\,\text{mm},\,10\,\text{mm},\,13\,\text{mm},\,16\,\text{mm},\,19\,\text{mm},\,25\,\text{mm}$ and $32\,\text{mm}.$

NPT Nozzle Set (Order Code: SC-7N-S)

The NPT Nozzle is designed specifically for NPT configuration fittings. The nozzles are machined to accommodate both male and female configurations, ensuring a perfect airtight seal every time.

The set of 7 nozzles consist of the following sizes: 1/4 in, 3/8 in, 1/2 in, 5/8 in, 3/4 in, 1 in and 1-1/4 in.

Projectiles







Technical Data / Order Codes



Standard Series (S)

Coupling Series (C)

Abrasive Series (A)

Grinding Series (G)

Not available in North America Standard in North America

Standard Series Projectiles are intended for the cleaning of hose, tube or pipe without end fittings or restrictions.

Coupling Series Projectiles are intended for the cleaning of hose assemblies (hose with $end\ fittings, adjustments,$ etc.) or the removal of loose particles from pipe or tube.

Abrasive Series Projectiles are intended for the cleaning of metal pipe and tube to remove light rust and scale. They are recognised by the abrasive pad fixed to one end internal surface. They are of the projectile.

Grinding Series Projectiles are intended for the cleaning of metal pipe and tube to remove medium and heavy rust and build up from the coated in Silicon Carbide.

Pipe 0.D. (mm)	Pipe/Hose I.D. (mm/in)	Order Codes Standard Series (S)	Order Codes Coupling Series (C)	Order Codes Abrasive Series (A)	Order Codes Grinding Series (G)	Packaging Units (Projectiles / Order Unit)
07	4,8 3/16	SC-S-07	SC-C-07	SC-A-07	SC-G-07	100
09	6,35 1/4	SC-S-09	SC-C-09	SC-A-09	SC-G-09	100
10	6,35 1/4	SC-S-10	SC-C-10	SC-A-10	SC-G-10	100
12	7,9 5/16	SC-S-12	SC-C-12	SC-A-12	SC-G-12	100
14	9,5 3/8	SC-S-14	SC-C-14	SC-A-14	SC-G-14	100
16	11,1 7/16	SC-S-16	SC-C-16	SC-A-16	SC-G-16	100
18	12,7 1/2	SC-S-18	SC-C-18	SC-A-18	SC-G-18	100
20	14,28 9/16	SC-S-20	SC-C-20	SC-A-20	SC-G-20	100
22	15,88 5/8	SC-S-22	SC-C-22	SC-A-22	SC-G-22	100
26	19,05 3/4	SC-S-26	SC-C-26	SC-A-26	SC-G-26	50
28	20,64 13/16	SC-S-28	SC-C-28	SC-A-28	SC-G-28	50
30	22,23 7/8	SC-S-30	SC-C-30	SC-A-30	SC-G-30	40
33	25,4 1	SC-S-33	SC-C-33	SC-A-33	SC-G-33	40
36	26 / 27 1-1/16	SC-S-36	SC-C-36	SC-A-36	SC-G-36	30
38	28,58 1-1/8	SC-S-38	SC-C-38	SC-A-38	SC-G-38	30
40	31,75 1-1/4	SC-S-40	SC-C-40	SC-A-40	SC-G-40	30
45	34,93 1-3/8	SC-S-45	SC-C-45	SC-A-45	SC-G-45	20
50	38,1 1-1/2	SC-S-50	SC-C-50	SC-A-50	SC-G-50	20
55	44,45 1-3/4	SC-S-55	SC-C-55	SC-A-55	SC-G-55	15
60	50,8	SC-S-60	SC-C-60	SC-A-60	SC-G-60	10

Please note: For optimum cleaning, it is recommended that projectiles are used once and then discarded.

Safety note: A mesh collection bag should be secured to the pipe, tube or hose exit to avoid possible injury to personnel by the projectile exiting at high velocity.

Always wear protective safety glasses, ear protection and a dust mask when operating this device.

