

# **Instrumentation Products**

Gauge Valves and Pressure Gauge Accessories



### Introduction

#### Introduction

The AS-Schneider Group with its headquarters in Germany is one of the World's Leading Manufacturers of Instrumentation Valves and Manifolds. AS-Schneider offers a large variety of Gauge Valves, Gauge Cocks, Syphons and Supports as well as Gauge Protectors, Gauge Snubbers and Accessories needed for the instrumentation installations globally.

Selection can be made from a comprehensive range of bodies with a variety of connections and material options, optimising installation and access opportunities. Many of the valves shown in this catalogue are available from stock or within a short period of time. The dimensions shown in this catalogue apply to standard types. If you need the dimensions for your individual type please contact the factory.

Continuous product development may from time to time necessitate changes in the details contained in this catalogue. AS-Schneider reserves the right to make such changes at their discretion and without prior notice.

All dimensions shown in this catalogue are approximate and subject to change.



Introduction AS-Schneider

### **C**ontents

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### **General Features**

### **Body Material Options**

Material Group	AS Material Designation	Material No.	Short Name	Equivalent UNS-No.	Material Grade acc. to ASTM	Gauge Valves	Gauge Cocks	Gauge Protectors	Gauge Snubbers	Syphons
Copper	Brass*	CW614N	CuZn39Pb3			S	S	S	S	
Alloys	Brass.	CW617N	CuZn40Pb2			S	S	S	S	
Heat Resistant		1.0038	S235JRG2						S	
Unalloyed Steel	Carbon Steel	1.0460	P250GH			S				
		1.0345	P235GH							S
Austenitic	Stainless Steel	1.4571	X6CrNiMoTi17-12-2	S31635	316Ti	S	S	S	S	S
Stainless Steel	316 quadruple	1.4401	X5CrNiMo17-12-2	S31600	316	Α		S	S	0
	certified**	1.4404	X2CrNiMo17-12-2	S31603	316L	Α		S	S	0
	6Mo	1.4547	X1CrNiMoCuN20-18-7	S31254		Α		0	0	
Austenitic-	Duplex	1.4462	X2CrNiMoN22-5-3	S31803	F51	Α		S	S	
Ferritic Stainless Steel	C	1.4410	X2CrNiMoN25-7-4	S32750	F53	Α		0	0	
	Superduplex	1.4501	X2CrNiMoCuWN25-7-4	S32760	F55	Α		0	0	
	Alloy 400	2.4360	NiCu30Fe	N04400		Α		S	S	0
Nickel Based Alloys	Alloy C-276	2.4819	NiMo 16 Cr 15 W	N10276		Α		S	S	0
	Alloy 625	2.4856	NiCr22Mo9Nb	N06625		Α		S	S	0
Titanium	Titanium Grade 2	3.7035	Ti-II	R50400		Α		0	0	

<sup>\*</sup> Brass: Body made of either CW 614N or CW 617N

### **Standard Features**

Every standard valve is factory tested hydrostatically to a requirement of no visible leakage.

Brass, carbon steel or stainless steel valve bodies are forged, except gauge snubbers in carbon steel and stainless steel. All other components are made from barstock material – syphons also made from pipe.

Certification acc. to EN 10204 2.1, 2.2, 3.1 and 3.2!

Valves for sour gas service are available in accordance with NACE MR0175/MR0103 and ISO 15156. To order, contact the factory. Some of our valves are supplied according to NACE as standard.

Surface treatment of carbon steel valves and accessories: Phosphatized, Galvanized surface optional.

### **Optional Features**

- Valves and Accessories cleaned and lubricated for Oxygen Service Suffix used F0 and F5.
- · Valves according to DVGW.
- Valves for Fugitive Emission Applications.

If you don't find your options in this catalogue, please contact the factory.

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General Features AS-Schneider

<sup>\*\*</sup> Quadruple certified means 316 / 316L / 1.4401 / 1.4404

 $S = Standard \mid O = Optional \mid A = Alternative (see Catalogue AS-2601)$ 

### **Connections**

AS-Schneider is manufacturing a lot of different connections and connection combinations. In this catalogue we are showing the most popular types. On this page you will find the standard connections in detail.

### **Parallel Pipe Threads**

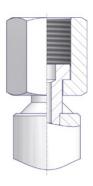
BSP Parallel Male Threads acc. to EN 837-1 (e.g. G 1/2)



Adjusting Nut acc. to DIN 16283 (LH  $\times$  RH)



Swivel Nut (Welded Nipple Design) acc. to DIN 16284



### **Tube Fittings**

Single Ferrule Tube Fittings acc. to EN ISO 8434-1 Size S



### **Tapered Pipe Threads**

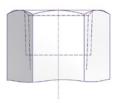
NPT Male Threads acc. to ASME B 1.20.1

BSP Tapered Thread acc. to ISO 7/1 (e.g. R 1/2)



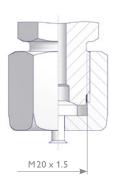
NPT Female Threads acc. to ASME B 1.20.1

BSP Tapered Thread acc. to ISO 7/1 (e.g. Rc 1/2)

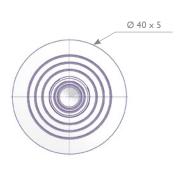


### **Test Connections**

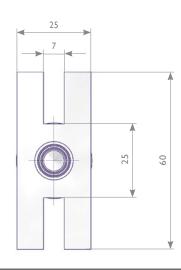
 $M\,20\,x\,1.5$  Male Thread with sealing cap acc. to DIN 16271 or with protective cap acc. to DIN 16272 and DIN 16263 (protective cap not shown)



Test Flange Ø 40 x 5



Test Flange 60 x 25 x 10



### **Gauge Valves | Features and Benefits**

### **Product Description**

AS-Schneider Gauge Valves are designed, manufactured and tested according to DIN 16270, DIN 16271 and DIN 16272. According to these standards the valves are applicable for a max. allowable (Working) Pressure (PS) of 250 bar (brass) respectively 400 bar (carbon steel and stainless steel) and a max. allowable Temperature (TS) of 120°C for liquids, gas or vapors.

The max. allowable Temperature (TS) of 120°C is considering the requirement that valves and measuring instruments need to be protected against heating by hot media. This can be achieved by syphons or by instrument impulse lines with sufficient length. However the AS-Schneider valves can be used for temperatures up to 300°C - PTFE up to 232°C, Graphite up to 300°C, except the brass types (limited to 200°C).

#### Standard Features

- Forged Body
- Internal Stem Thread
- Stem with cold rolled surface and Non-Rotating Needle Tip
- PTFE Standard Packing

#### Pressure Test:

A shell test and a seat test are performed at 1.5 times the max. allowable (working) pressure acc. to EN 12266-1 – P10, P11 and P12.

### **Optional Features**

#### DVGW approved Valves:

AS-Schneider is offering different valve types which have been tested and approved by DVGW. The test basis is DVGW VP 308. The valves are applicable for all gases in accordance with DVGW G 260.

Pressure-Temperature Rating:

- Max. 100 bar @ -5°C up to +60°C
- DVGW-Approval-No.: DG-4315BQ0226

#### Fugitive Emission Applications:

For Fugitive Emission Applications AS-Schneider is providing bellows sealed valves. Choice of Pressure class PN 100 or PN 250. Valve head unit in stainless steel, wetted parts 1.4571, needle tip Stellite. Optional available are TA-Luft and ISO 15848 solutions. For more details please contact the factory.

### Certification:

Inspection certificate 3.1 acc. to EN 10 204 for valve body material and pressure test available on request.

### Oxygen Service:

AS-Schneider offers an option with Reinforced PTFE Packing cleaned and lubricated for Oxygen Service – Suffix F5:

Pressure-Temperature Rating:

Max. 420 bar @ 60°C Max. 200°C @ 90 bar

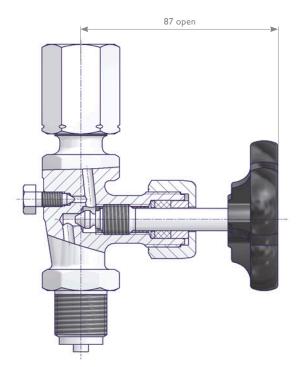
Sealing Washers according to EN 837-1, see Page 34.



Packing adjustment may be required during the service life of the valves.



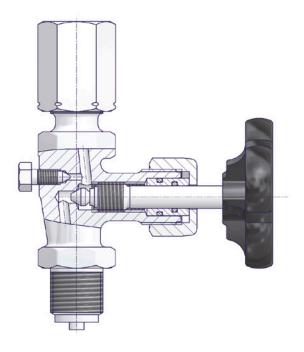
Valves that have not been cycled for a period of time may have a higher initial actuation torque.



Components	Brass	Stainless Steel				
Material / Material No.						
Body	Brass	1.0460				
Valve Stem	4.4	104	1.4571			
Needle Tip	1.4	1.4104				
Packing	PTFE (Optional Graphite)					
Union Nut	Llasllav	ad Casal	Casimlass Casal			
Adjusting Nut	Unalloy	ed Steel	Stainless Steel			
Swivel Nut	Brass	Unalloyed Steel	1.4571			
Bleed Screw		A4 (316)				
Test Flange	Brass	Unalloyed Steel	1.4571			
Sealing Cap	Unalloy	Stainless Steel				
Handwheel	Plastic					

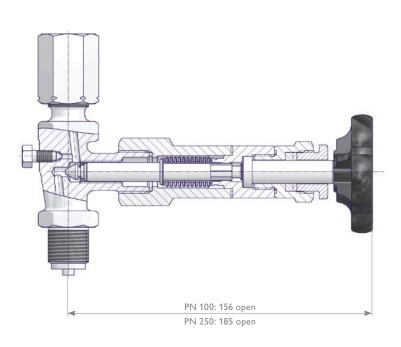
# **Gauge Valves | Features and Benefits**

### **DVGW** approved Gauge Valve



Components	Brass Carbon Steel		Stainless Steel	
Body	Brass	1.0460		
Valve Stem	4.4	104	1.4571	
Needle Tip	1.4	104		
O-Rings				
O-Ring Retainer	Br	1.4571		
Union Nut	Unalloyed Ste	eel, galvanized	Contribute Contri	
Adjusting Nut	D	Haallanad Coad	Stainless Steel	
Swivel Nut	Brass	Unalloyed Steel	1.4571	
Bleed Screw		A4 (316)		
Test Flange	Brass Unalloyed Steel		1.4571	
Sealing Cap	Unalloyed Ste	Stainless Steel		
Handwheel	Plastic			

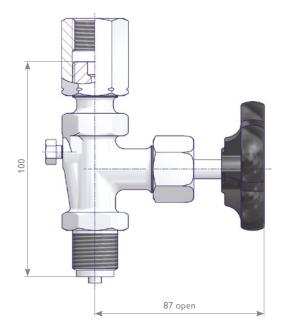
### **Bellows Sealed Gauge Valve**



Components	Carbon Steel Stainless Steel			
M	aterial / Material N	No.		
Body	1.0460	1.4571		
Bonnet				
Bellow	1.4571			
Valve Stem				
Needle Tip	Stellite	1.4571		
Packing	Graphite			
Stem Nut	1.	4122		
Adjusting Nut	Linellayed Charl	Stainless Steel		
Swivel Nut	Unalloyed Steel	1.4571		
Bleed Screw	A4 (	316)		
Test Flange	Linellayed Cheel	1.4571		
Sealing Cap	Unalloyed Steel	Stainless Steel		
Handwheel	Plastic			

# **Gauge Valves without Test Connection**

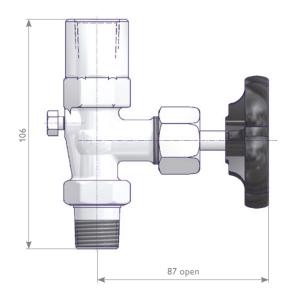
### **Instrument Connection - Adjusting Nut**



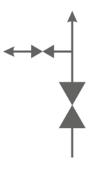
Inlet	Outlet	Material	References	Part Number
			DIN 16270 Type A	S004.16.000
		Brass	DVGW approved	S004.26.000
	G 1/2	Brass (AP)*	DIN 16270 Type A	S004.16.000.32
G 1/2 Male	Adjusting Nut	1.0460	DIN 16270 Type A	S004.16.100
			DVGW approved	S004.26.100
		1.4571	DIN 16270 Type A	S004.16.200
			DVGW approved	S004.26.200
		Brass		S004.16.050
M 20 x 1.5 Male	M 20 x 1.5 Adjusting Nut	1.0460		S004.16.150
		1.4571		S004.16.250

<sup>\*</sup> Brass (AP) = Body, Adjusting Nut and Union Nut in Brass

### **Instrument Connection - 1/2 NPT Female**

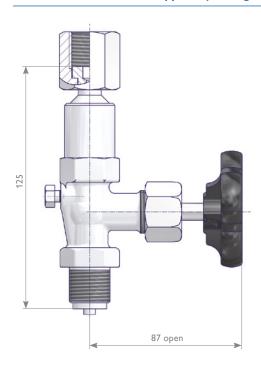


Inlet	Outlet	Material	References	Part Number
		Brass		S004.16.083
1/2 NPT Male	1/2 NPT Female	1.0460		S004.16.183
		1.4571		S004.16.283

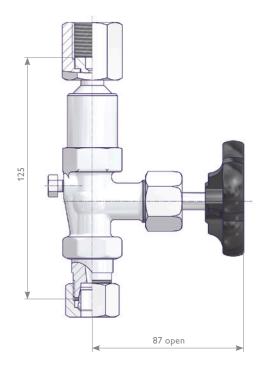


# **Gauge Valves without Test Connection**

## Instrument Connection Swivel Nut and Shaft for Supports (see Page 24)



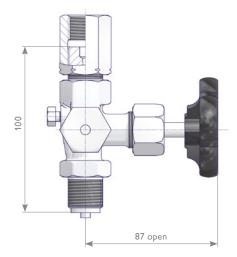
Inlet	Outlet	Material	References	Part Number
G 1/2 Male G 1/2 Swivel I		D	DIN 16270 Type B	S004.16.020
		Brass	DVGW approved	S004.26.020
	G 1/2 Swivel Nut	1.0460	DIN 16270 Type B	S004.16.120
			DVGW approved	S004.26.120
		1.4571	DIN 16270 Type B	S004.16.220
			DVGW approved	S004.26.220



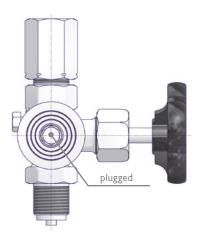
Inlet	Outlet	Material	References	Part Number
		Brass	DIN 16270 Type B	S004.16.020.13
		1.0460	DIN 16270 Type B	S004.16.120.13
Tube Fitting Size 12S	G 1/2 Swivel Nut		DVGW approved	S004.26.120.13
		1.4571	DIN 16270 Type B	S004.16.220.13
			DVGW approved	S004.26.220.13

# **Gauge Valves with Test Connection**

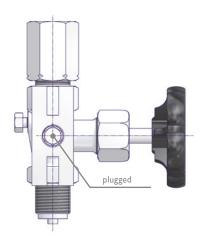
### **Instrument Connection - Adjusting Nut**



Valve with Test Connection  $M20 \times 1.5$ 



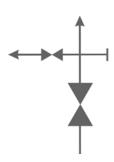
Valve with Test Flange Ø 40 x 5



Valve with Test Flange  $60 \times 25 \times 10$ 

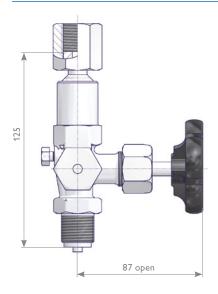
Inlet	Outlet	Test Connection	Material	References	Part Number
				DIN 16271 Type A	S004.17.000
		M 20 × 1.5 c/w Sealing Cap	Brass	DVGW approved	\$004.27.000
			Brass (AP)*	DIN 16271 Type A	S004.17.000.32
		Test Flange Ø 40 x 5	Brass		S004.17.060
		Test Flange 60 x 25 x 10	DI dSS		S004.17.070
		M 20 × 1.5		DIN 16271 Type A	S004.17.100
G 1/2 Male	G 1/2 Adjusting Nut	c/w Sealing Cap	1.0460	DVGW approved	S004.27.100
		Test Flange Ø 40 x 5			S004.17.160
		Test Flange 60 x 25 x 10			S004.17.170
		M 20 × 1.5		DIN 16271 Type A	S004.17.200
		c/w Sealing Cap		DVGW approved	S004.27.200
		Test Flange Ø 40 x 5	1.4571		S004.17.260
		Test Flange 60 x 25 x 10			S004.17.270
	M 20 × 1.5		Brass		S004.17.050
M 20 x 1.5 Male	Adjusting	M 20 x 1.5 c/w Sealing Cap	1.0460		S004.17.150
	Nut		1.4571		S004.17.250

<sup>\*</sup> Brass (AP) = Body, Adjusting Nut, Sealing Cap and Union Nut in Brass

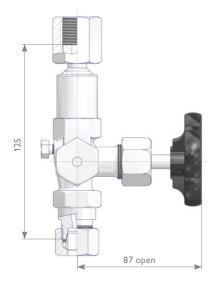


# **Gauge Valves with Test Connection**

### **Instrument Connection -**Swivel Nut and Shaft for Supports (see Page 24)

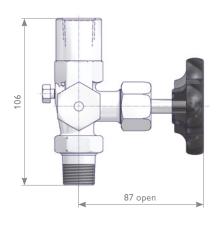


Inlet	Outlet	Test Connection	Material	References	Part Number
G 1/2 Male G 1/2 Swivel Nut			D	DIN 16271 Type B	S004.17.020
		M 20 × 1.5	Brass	DVGW approved	S004.27.020
	G 1/2		1.0460	DIN 16271 Type B	S004.17.120
	Swivel Nut	c/w Sealing Cap		DVGW approved	S004.27.120
			1.4571	DIN 16271 Type B	S004.17.220
				DVGW approved	S004.27.220



Inlet	Outlet	Test Connection	Material	References	Part Number
Tube Fitting Size 12S G 1/2 Swivel Nut		Brass	DIN 16271 Type B	S004.17.020.13	
			1.0460	DIN 16271 Type B	S004.17.120.13
		M 20 x 1.5 c/w Sealing Cap		DVGW approved	S004.27.120.13
	5WIVEL LAGE	c/w scaming Cap	1.4571	DIN 16271 Type B	S004.17.220.13
				DVGW approved	S004.27.220.13

### **Instrument Connection - 1/2 NPT Female**



Inlet	Outlet	Test Connection	Material	References	Part Number
1/2 NPT	1/2 NPT	M 20 x 1.5	1.0460		S004.17.135.02
Male	Female	c/w Sealing Cap	1.4571		S004.17.235.02

## Gauge Valves | Special Type G 1/4

### **Product Description**

The size of the AS-Schneider Gauge Valves G 1/4 is smaller compared to the standard gauge valves, especially the brass type. Carbon steel and stainless steel components are identical to the standard gauge valves. The components of the brass type are smaller and the valve stem is a one-piece design. Pressure-Temperature Rating: Max. allowable (Working) Pressure PS of 125 bar (brass) respectively 250 bar (carbon steel and stainless steel) and a max. allowable Temperature (TS) of 200°C (brass type) respectively 232°C (carbon Steel and stainless steel type) for liquids, gas or vapors.

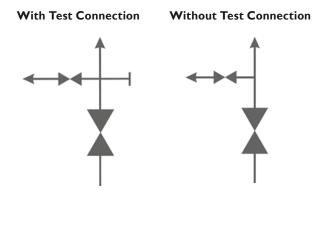
### **Brass Design**

### Carbon Steel and Stainless Steel Design



Inlet	Outlet	Test Connection	Material	Part Number
G 1/4 Male				S004.12.000
	G 1/4 Adjusting Nut	Test Flange Ø 40 x 5	Brass	S004.12.065
	rajusting race		1.0460	S004.13.130
			1.4571	S004.13.230

Components	Brass	Carbon Steel	Stainless Steel					
	Material / Material No.							
Body		1.0460						
Valve Stem	Brass	1.4104	1.4571					
Needle Tip		1.101						
Packing	PTFE							
Union Nut	Brass	Unalloyed Steel	1.4571					
Adjusting Nut	DI dSS	Onanoyed Steel	1.45/1					
Bleed Screw		A4 (316)						
Test Flange	Brass							
Handwheel	Handwheel Plastic							



### **Gauge Protectors | Features and Benefits**

### **Product Description**

AS-Schneider Gauge Protectors are used to protect pressure-sensing instruments against damage, loss of accuracy, and/or rupture in the event of excessive system pressure. The piston assembly works against an adjustable spring. The piston assembly contains a sealing mechanism to isolate system pressure from the instrument.

The Inlet to Outlet seal is an O-Ring, the sealing to atmosphere is realized by either another O-Ring (system pressures of more than 2 bar) or a diaphragm (for system pressures 0.4 up to 2.5 bar). As system pressure overcomes the force of the spring, the piston moves, causing the sealing system to close. The outlet side is now isolated from increasing system pressure and the instrument is protected. As system pressure drops to the reopening pressure (25% below the closing pressure), the valve opens again.

#### Standard Features

- Forged Body
- · Piston Seals:
- FKM (FPM by ISO)
- Diaphragm in NBR for the DVGW approved type
- Max. allowable (Working) Pessure (PS): 600 bar
- Max. Inlet Pressure: 1,000 bar (except Brass Type: 600 bar)
- Max. allowable Temperature (TS) 80°C, resp. 60°C for our DVGW approved types S005.50.001.00DV / 201.00DV

The Gauge Protectors are as a standard available for sour gas service in accordance with NACE MR0175/MR0103 and ISO 15156 except the Brass Type.

#### Pressure Test:

A shell test and a seat test are performed at 1.5 times the max. allowable (working) pressure acc. to EN 12266-1 - P10, P11 and P12. The closing pressure is normally adjusted to the average value of the relevant adjusting range – For example adjusting range 2-6 bar = 4 bar closing pressure.

### **Optional Features**

#### DVGW approved Gauge Protectors:

AS-Schneider is offering Gauge Protectors which have been tested and approved by DVGW. The test basis is DVGW VP 308. The valves are applicable for all kinds of gas in accordance with DVGW-list number G 260.

Pressure-Temperature Rating:

- Max. 400 bar @ -20°C up to +60 / +80°C
- DVGW-Approval-No.: DG-4515BP0208
- Part No. Suffix ...00DV for DVGW types

### Oxygen Service:

AS-Schneider offers an option cleaned and lubricated for Oxygen Service – Suffix F0:

- Max. allowable (Working) Pressure (PS): 400 bar
- Max. allowable (Working) Temperature (TS): 60°C
- A choice of O-Ring materials is available.

#### Certification:

Inspection certificate 3.1 acc. to EN 10 204 for valve body material and pressure test available on request.

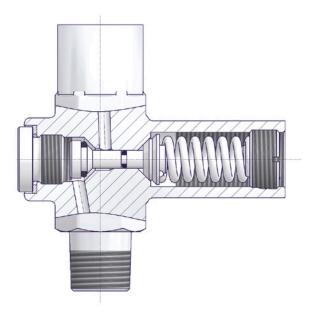
Components	Brass	Stainless Steel		Duplex	Alloy 400	Alloy C-276	Alloy 625		
Components		Material / Material No.							
Body	Brass	1.4571							
Bonnet			316*	Duplex	Alloy 400	Alloy C-276	Alloy 625		
Piston	1.4404*								
Piston Seals				FKM (FPM by	ISO)				
Screw Plug	1.4	ł404*		Duplex	Alloy 400	Alloy C-276	Alloy 625		
Adjusting Screw	1.4404*								
Spring	Stainless Steel								
Adjusting Nut	Unalloyed Steel	Unalloyed Steel Stainless Steel							

<sup>\* 316 / 316</sup>L / 1.4401 / 1.4404

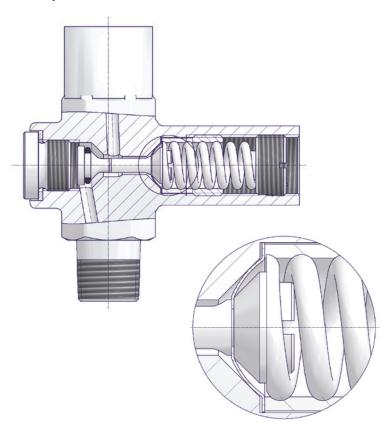
## **Gauge Protectors**

### **Gauge Protector Type \$005.50**

Gauge Protector Design For System Pressures 2 - 600 bar

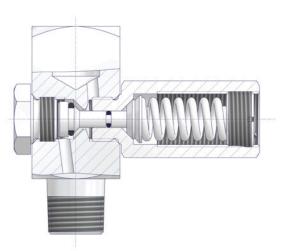


Gauge Protector Design For System Pressures 0.4 - 2.5 bar



### **Gauge Protector Type N005.50**

### **Screwed Bonnet Design**

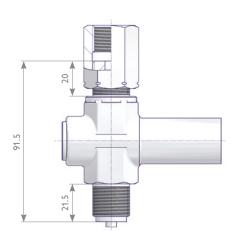


20 Gauge Protectors AS-Schneider

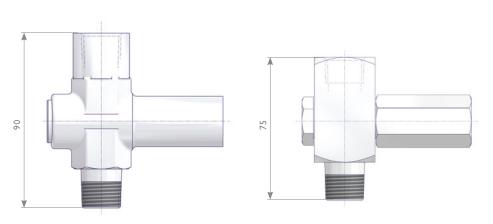
### **Gauge Protector Type S005.50**

### **Gauge Protector Type N005.50**

### **Outlet Adjusting Nut**



### **Outlet Female NPT**



### **Parallel Threads**

Inlet Outlet		Material	Adjusting range in bar						
illet	Outlet	Taceriai	0.4 - 2.5	2 - 6	5 - 25	20 - 60	50 - 250	240 - 400	400 - 600
	Brass G 1/2 Adjusting	D	S005.50.001	002	003	004	005	006	007
C4/2 M I		Brass	S005.50.001.00DV	002.00DV	003.00DV	004.00DV	005.00DV	006.00DV	
G 1/2 Male	Nut		S005.50.201	202	203	204	205	206	207
	1.4571	S005.50.201.00DV	202.00DV	203.00DV	204.00DV	205.00DV	206.00DV		
M 20 x 1.5 Male	M 20 x 1.5 Adjusting Nut	1.73/1	\$005.50.251	252	253	254	255	256	257

### **NPT Threads**

Inlet	Outlet	Material	Adjusting range in bar							
illet	miet Outlet	Material	0.4 - 2.5	2 - 6	5 - 25	20 - 60	50 - 250	240 - 400	400 - 600	
	Brass	S005.50.021	022	023	024	025				
	1.4571	S005.50.221	222	223	224	225	226			
	316	N005.50.421	422	423	424	425	426	427		
1/2 NPT Male	1/2 NPT Female	Duplex	N005.50.821.0001	822.0001	823.0001	824.0001	825.0001	826.0001	827.0001	
	Temate	Alloy 625	N005.50.821.0009	822.0009	823.0009	824.0009	825.0009	826.0009	827.0009	
		Alloy 400	N005.50.921.0001	922.0001	923.0001	924.0001	925.0001	926.0001	927.0001	
		Alloy C-276	N005.50.921.0005	922.0005	923.0005	924.0005	925.0005	926.0005	927.0005	
1/4 NPT	1/4 NPT	Brass	S005.50.041.01	042.01	043.01	044.01	045.01	046.01		
Male	Female	1.4571	S005.50.241.01	242.01	243.01	244.01	245.01	246.01	247.01	

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### **Gauge Snubbers | Features and Benefits**

### **Product Description**

AS-Schneider Gauge Snubbers are used to improve the output or readability of the instrument, and to reduce the effect of pressure surges on the instrument.

They also limit the external discharge of the pressure medium, in the event a discontinuity should occur on the instrument side of the snubber. Closing the valve increases the dampening action.

#### **Standard Features**

- Forged Body in Brass, all other materials in Barstock Material
- Max. allowable (Working) Pressure (PS): 400 bar
- Max. allowable Temperature (TS): 120°C
- The Gauge Snubbers are available for sour gas service in accordance with NACE MR0175/MR0103 and ISO 15156, see table on Page 23.

### **Optional Features**

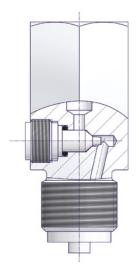
### Oxygen Service:

AS-Schneider offers an option with for Oxygen Service – Suffix F0 (PN 250) or F5 (PN400):

- Max. allowable (Working) Pessure (PS): 400 bar
- Max. allowable (Working) Pessure (TS): 60°C
- A choice of O-Ring materials is available.

### Certification:

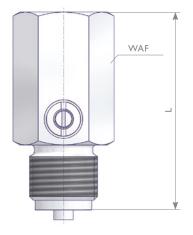
Inspection certificate 3.1 acc. to EN 10 204 for valve body material and pressure test available on request.



Components	Brass	Carbon Steel	Stainle	ss Steel	Duplex	Alloy 400	Alloy C-276	Alloy 625
Components	Material / Material No.							
Body	Brass	Carbon Steel	1.4571	316*	Dunlay	Alley 400	Allow C 276	Allow (25
Valve Stem		1.4404*		316* Duplex		Alloy 400	Alloy C-276	Alloy 625
O-Ring		NBR			FKM (FPM by ISO)			
Screw Plug	Brass	Unalloyed Steel				1.4571		

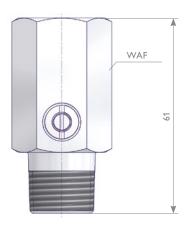
<sup>\* 316 / 316</sup>L / 1.4401 / 1.4404

### **Parallel Threads**



Inlet	Outlet	Material	PN	L	WAF	Special Features	Part Number
		Brass	250	62.5			S005.10.030.01
G 1/4 Male	G 1/4 Female	Carbon Steel	400	61			S005.10.130.01
T fulc	remaie	1.4571	400	61		NACE	S005.10.230.01
G 3/8	G 3/8	Brass	250	62.5			S005.10.020.01
Male	Male Female	1.4571	400	61	27	NACE	S005.10.220.01
		Brass	400	62.5			\$005.10.000
G 1/2 Male	G 1/2 Female	Carbon Steel	400	61			S005.10.100
		1.4571	400	61		NACE	\$005.10.200
		Brass	400	62.5			\$005.10.050
M 20 x 1.5 Male	M 20 x 1.5 Female	Carbon Steel	400	61			S005.10.150
		1.4571	400	61		NACE	\$005.10.250

### **NPT Threads**





Gauge Snubber Type made from 32 mm square barstock material.

Inlet	Outlet	Material	PN	L	WAF	Special Features	Part Number
1/4 NPT	1/4 NPT	Brass	250				S005.10.031.01
Male	Female	1.4571	600		27	NACE	S005.10.231.01
		Brass	250	27			S005.10.010
		Carbon Steel					S005.10.110
		1.4571		61		NACE	S005.10.210
1/2 NPT	1/2 NPT	316				NACE	S005.10.410
Male	Female	Duplex	400		32	NACE	S005.10.810.0001
	А	Alloy 625			32	NACE	S005.10.810.0009
		Alloy 400			27	NACE	S005.10.910.0001
		Alloy C-276			32	NACE	\$005.10.910.0005

WAF = Width Across Flats | 27 = Hex, 32 = Square

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### **Supports for Valves and Measuring Instruments**

AS-Schneider is providing a range of supports for wall, rack or 2" pipe mounting to mount Gauge Valves according to DIN 16270-16272 Type B or Adapters relating to DIN 16281 (see Page 33).

Standard extension L = 100 mm. Type H also available with 60 and 160 mm extension

The below mentioned part numbers for 2" pipe mounting are supplied as mounting kits including 'U' bolt, washers and hexagon nuts.

Bolts for wall mounting are not included in the scope of supply.



### Supports DIN 16281 Type H For wall mounting



L (mm)	Design	Material	Installation Method	Part Number
60	DIN 16281 Type H			S006.12.105
100	DIN 16281 Type H	Aluminium, coated	For wall mounting	S006.12.115
160	DIN 16281 Type H			S006.12.125
L (mm)	Design	Material	Installation Method	Part Number
100	DIN 16281 Type H	Stainless Steel	For wall mounting	S006.12.215

Stainless Steel type not illustrated.

### Supports DIN 16281 Type A For wall mounting or 2" pipe mounting



L (mm)	Design	Material	Installation Method	Part Number
400	400 DINI 4/204 T	Malleable cast iron	For wall mounting	N006.12.110
100	DIN 16281 Type A	galvanized and coated	For 2" pipe mounting	S006.39.100.11

Mounting Kit for 2" pipe mounting in carbon steel with galvanized surface.

### **Stainless Steel Supports** For wall mounting or 2" pipe mounting



L (mm)	Design	Material	Installation Method	Part Number
400	ACCI II DI	S I S. I	For wall mounting	S006.12.216.54
100	AS-Schneider Design	Stainless Steel	For 2" pipe mounting	S006.12.217.54

Mounting Kit for 2" pipe mounting in stainless steel.

### Syphons, Elbows and Straight Pipes

### **Product Description**

AS-Schneider Gauge Syphons are used to protect the pressure gauge from the effect of hot pressure media such as steam and also to reduce the effect of rapid pressure surges. The syphon allows condensate to form and be collected inside the syphon, preventing the hot media (hot vapors, not just steam) from coming in direct contact with the pressure instrument. Also used as freeze protector when used with proper fill fluids.

AS-Schneider is providing 3 different syphon designs. The Coil Syphon is normally used for vertical installations and the U Type Syphon for horizontal installations. The third design is a compact Gauge Syphon which can be used instead of the Coil Syphon. In addition, AS-Schneider is providing pipe connectors where a syphon is not required, such as Elbows and Straight Pipes.

The standard syphons are designed, manufactured and tested according to DIN 16282. The standard pipe dimension is Ø 20 x 2.6 mm. 1/2" pipe (Ø 21.3 mm) dimensions are also available. AS-Schneider is also providing so-called Commercial Style Syphons. These types have a standard pipe dimension of Ø 21.3 x 3.2 mm – using threaded pipe connections instead of weld fittings. The Compact Gauge Syphon is available as standard type and also as integral snubber type.

#### Standard Features

- The standard DIN 16282 U Type Syphon is bended to the left side, optional also to the right side (see also Page 27).
- Commercial Style U Type Syphons are bended in a single-plane
- Range of application: For liquids, gas, steam and vapors

### Surface treatment of Carbon Steel Types:

- DIN 16282 Style: Phosphatized
- · Commercial Style: Oiled, optional phosphatized

#### Certification:

Inspection certificate 3.1 acc. to EN 10 204 for pipe material available on request.

### **Optional Features**

The standard AS-Schneider circular shaped syphons are Coil Syphons. Should you require Pigtail Syphons please contact the factory.

### Coil Syphon



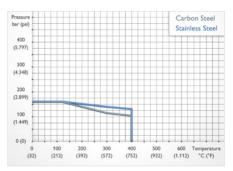
### **Pigtail Syphon**



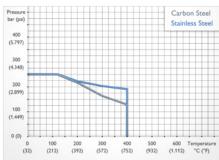
Other Materials, Pressure-Temperature Ratings and Connections on request.

### **Pressure-Temperature Ratings**

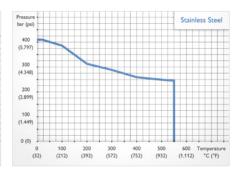
### Coil and U Type Syphons and Elbows



### **Straight Pipes**



### **Compact Gauge Syphon**



Components	Carbon Steel	Stainless Steel			
Components	Material / Material No.				
Pipe	1.0345	4 4574			
Pipe Connector	1.1141	1.4571			
Adjusting Nut	Carbon Steel	Stainless Steel			

Components	Stainless Steel		
Components	Material / Material No.		
Body			
Tubes	1.4571		
Swivel Nut			

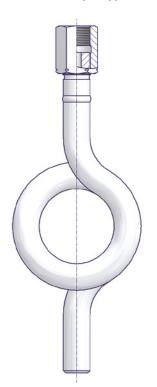
### **Syphon Features**

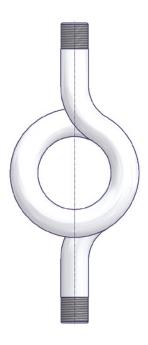
### **Syphon Details**

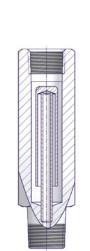
### **DIN 16282 Style Syphons**

### **Commercial Style Syphons**

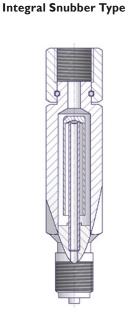
### **Compact Gauge Syphons**



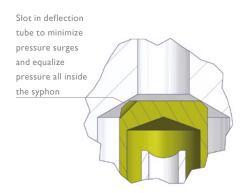




**Standard Syphon** 

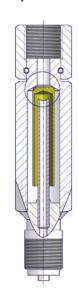


### **Integral Snubber Type**

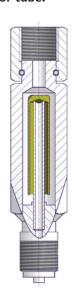


The Integral Snubber Type Syphon eliminates damage due to pressure surges. A slot is providing an auto reset of the deflector tube.

Position of the deflector tube in case of a pressure surge.



Normal operating position of deflector tube.



26 Syphon Features AS-Schneider

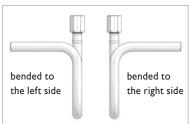
### **Applications**

### Horizontal Installation (horizontal tap)

U Type Syphon orientations

## Bended to the left side (standard)





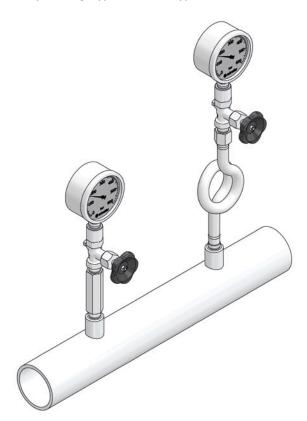
Bended to the right side



Single-plane bend



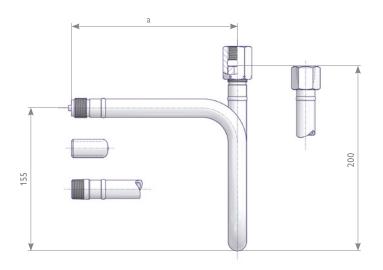
**Vertical Installation (vertical tap)**Compact Gauge Syphon and Coil Syphon



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# **U** Type Syphons

### **Standard Syphons**



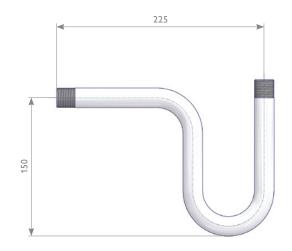


Inlet	Outlet	Dimension a (mm)	Material	References	Part Number
		145		DIN 16282 Type B	S006.07.110
		218	1.0345	Single-plane bend	S006.07.110.05
Butt Weld End Ø 20×2.6		145		Bended to the right side	S006.07.110.20
2 20 X 2.0		145	1.4571	DIN 16282 Type B	S006.07.210
	G 1/2 Adjusting Nut	218	1.45/1	Single-plane bend	S006.07.210.05
		180	1.0345	DIN 16282 Type A, Rev. 11/1988	S006.07.100
G 1/2 Male		253	1.0343	Single-plane bend	S006.07.100.05
G 1/2 Male		180	1.4571	DIN 16282 Type A, Rev. 11/1988	S006.07.200
		253	1.45/1	Single-plane bend	S006.07.200.05
Butt Weld End	1/2 NPT	145	1.0345		S006.07.110.18
Ø 20×2.6	Female	145	1.4571		S006.07.210.18
1/2 NIPT Mala	1/2 NPT	180	1.0345		S006.07.100.16
1/2 NPT Male	Female	160	1.4571		S006.07.200.16

28 U Type Syphons AS-Schneider

# **U** Type Syphons

### **Commercial Style Syphons**



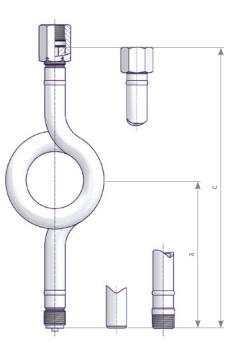


Inlet	Outlet	Material	References	Part Number
		1.4571		S006.07.205.01
	G 1/2 Male	1.0345		S006.07.105.01
G 1/2 Male			Surface Treatment: Phosphatized	S006.07.105.12
	G 1/2 Adjusting Nut		Surface Treatment: Phosphatized	S006.07.105.02

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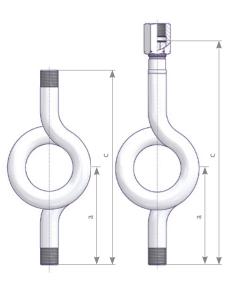
# **Coil Syphons**

### **Standard Syphons**



Inlet Outlet		Outlet	Dimension (mm)		Material	References	Part Number	
	mec	Outlet	a	С	i iacei iai	References	Tai C I Vallibel	
	Butt Weld End		110	240	1.0345	DIN 16282 Type D	S006.08.110	
	Ø 20×2.6	.0×2.6	110	110 240	1.4571	DIN 16282 Type D	S006.08.210	
	G 1/2 Male	G 1/2 Adjusting Nut		275	1.0345	DIN 16282 Type C Rev. 11/1988	S006.08.100	
	G 1/2 Male		145		1.4571	DIN 16282 Type C Rev. 11/1988	S006.08.200	
					1.0345		S006.08.100.18	
	1/2 NPT Male				1.4571		S006.08.200.18	
	1/2 INI I I Iaic				1.0345		S006.08.100.16	
		1/2 NPT			1.4571		S006.08.200.16	
	Butt Weld End	Female	110	240	1.0345		S006.08.110.18	
	Ø 20×2.6		110	240			S006.08.210.18	
	M 20 x 1.5 Male	M 20 x 1.5 Adjusting Nut	145	275	1.4571		S006.08.250	

### **Commercial Style Syphons**



Inlet	Outlet	Dimension (mm)		Material	Special	Part Number
illet	Outlet	a	С	riaceriai	Features	I al t indilibel
						S006.08.105.01
G 1/2 Male	G 1/2 Male	115	115 230		Surface Treatment: Phosphatized	S006.08.105.12
				1.4571		S006.08.205.01
						S006.08.105.31
G 1/4 Male	G 1/4 Male G 1/4 Male 1		250	1.0345	Surface Treatment: Phosphatized	S006.08.105.15
				1.4571		S006.08.205.31
G 1/2 Male	G 1/2 Adjusting Nut	115	263	1.0345		S006.08.105.02

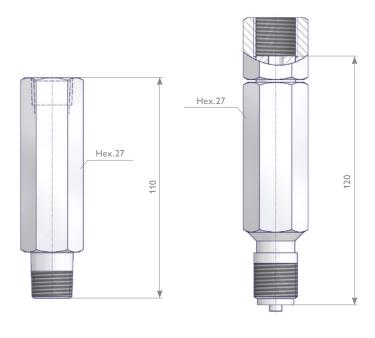
30 Coil Syphons AS-Schneider

# **Compact Gauge Syphons I Straight Pipes and Elbows**

### **Compact Gauge Syphons for Vertical Installations**

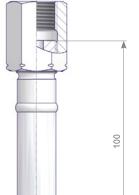
### **Standard Syphon** 1/2 NPT Connection

### **Integral Snubber Type** G 1/2 Connection



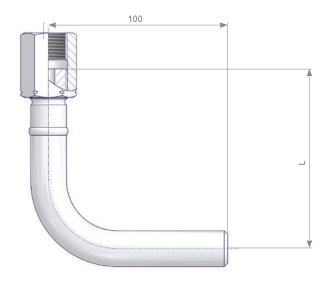
Inlet	Outlet	Material	Part Number
1/2 NPT Male	1/2 NPT Female	4 4574	S006.47.203.05
G 1/2 Male	G 1/2 Swivel Nut	1.4571	S006.47.201.05

### Straight Pipe



Inlet	Outlet	Material	Part Number
Butt Weld End Ø 20 x 2.6	G 1/2	1.0345	S006.17.101.02
	Adjusting Nut	1.4571	S006.17.201.02
	1/2 NPT	1.0345	S006.17.101.28
	Female	1.4571	S006.17.201.28

### Elbow 90°



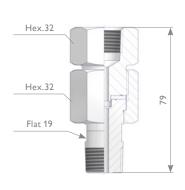
Inlet	Outlet	Material	L	Part Number
Butt Weld End Ø 20 x 2.6		4 02 45	100	S006.17.100.02
	G 1/2 Adjusting Nut	1.0345	80	S006.17.102.15
		1.4571	100	S006.17.200.02
			80	S006.17.202.15

### **Swivel Gauge Adapters**

The Swivel Gauge Adapters enable the easy positioning of the gauge in any direction through 360°.

Type 1

Screwed Design with either a PTFE seal ring or a metallic seal ring (see table)



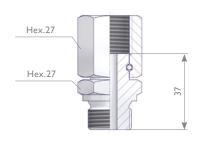
Hex.32

Flat 19

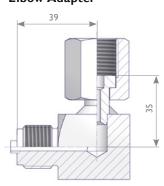
Type 2
Welded Nipple Design

Hex.27

Type 3
Wire Design



Type 4
Elbow Adapter

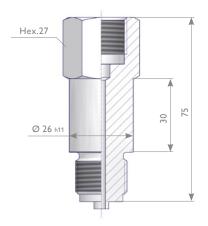


Max. allowable (Working) Pessure (PS): Type 1 10,000 psi / 689 bar Type 2, 3, 4 6,092 psi / 420 bar

Type	Connection 1	Connection 2	Mate	Part Number		
Туре	Connection 1	Connection 2	Components	Seal Ring	i ai c i vuilibei	
			316*		GS-MFSP-N4N4	
			Duplex	DTFF	GS-MFFP-N4N4	
			Alloy 400	PTFE	GS-MFMP-N4N4	
		4/2 NIDT 5	Alloy C-276		GS-MFHP-N4N4	
1	1/2 NPT Male	1/2 NPT Female	316*	316*	GS-MFSS-N4N4	
			Duplex	Duplex	GS-MFFS-N4N4	
			Alloy 400	Alloy 400	GS-MFMS-N4N4	
			Alloy C 276	Alloy C 276	GS-MFHS-N4N4	
		1/2 NPT Male	316*	PTFE	GS-MMSP-N4N4	
2		C 1/2 Control Nive	1.4404*/1.4571		GW-MSSA-N4G4	
3	1/2 NPT Male	G 1/2 Swivel Nut	1.4404*		GD-MSSA-N4G4	
2		M 20 x 1.5 Swivel Nut	1.4404*/1.4571		GW-MSSA-N4M4	
3	G 1/2 Male DIN 3852-2	C 1/2 Control Nive	1.4404*		GD-MSSA-H4G4	
4	G 1/2 Male EN 837-1	G 1/2 Swivel Nut	1.4404*/1.4571		GE-MSSA-G4G4	

<sup>\* 316 / 316</sup>L / 1.4401 / 1.4404

### Gauge Adapter DIN 16281



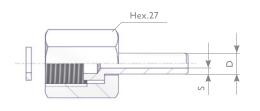
Connection 1	Connection 2	Material	Part Number
		Brass	\$006.06.000
G 1/2 Male	G 1/2 Female	Carbon Steel	S006.06.100
		1.4571	S006.06.200
1/2 NPT Male	1/2 NPT Female	1.43/1	S006.06.215

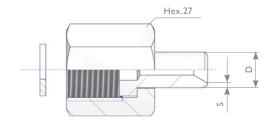
### Nipples, Union Nuts, Sealing Washers and Complete Kits

The components can be ordered separately or as Complete Kit (Part Number see table). The nipples dia. 6 and 12 mm as well as the union nuts G 1/4 and G 1/2 are according to DIN 16284. The max. allowable (Working) Pressure (PS) is 250 bar (brass) respectively 400 bar (carbon steel and stainless steel).

### Thread Connection G 1/4

### Thread Connection G 1/2 / M $20 \times 1.5$



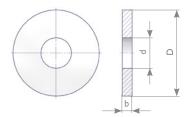


Union Nut			Nipple			Gasket		Complete Kit	
Thread	Material	Part Number	D	S	Material	Part Number	Material	Part Number	Part Number
G 1/4	1.4571	S006.01.210*	6	1.75	1.4571	S006.02.210*	1.4571	S006.03.007.50	S007.45.202.21
Brass S006.0	\$006.01.000*			Brass	S006.02.000*	Copper	S006.03.003	S007.45.002.01	
	Carbon	S006.01.100*	12	1.5	1.0038	S006.02.100*	Soft Iron	\$006.03.004	S007.45.102.01
	Steel	3006.01.100			1.5415	S006.02.500*			S007.45.502.01
G 1/2	1.4571	S006.01.200*	12	1.5	1.4571	S006.02.200*	1.4571	S006.03.007	S007.45.202.01
	1.1181	S006.01.107		2.5	1.5415	S006.02.117	Soft Iron	S006.03.004	S007.45.102.02
		S006.01.207	14			S006.02.217			S007.45.202.02
M 20 × 1.5	1.4571	S006.01.250	12	1.5	1.4571	S006.02.200	1.4571	S006.03.007	S007.45.214.01
		S006.01.257	14	2.5		S006.02.217			S007.45.214.02

<sup>\*</sup> According to DIN 16284.

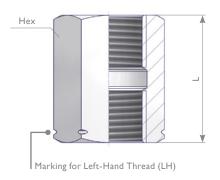
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### Sealing Washer EN 837-1



For Thread	Dimensions in mm			Material	Remarks	Part Number	
ror inread	D	d b		Materiai	Kemarks	Part Number	
				Copper		S006.03.003.50	
G 1/4	9.5	5.2	1.5	1.4571		S006.03.007.50	
				PTFE		S006.03.008.50	
G 3/8	13	5.7	2	Copper		S006.03.053	
G 1/2 and M 20 x 1.5	17.5	6.2	2	Aluminium		S006.03.002	
				Copper		S006.03.003	
				Soft Iron		S006.03.004	
				Vulcanized Fiber		S006.03.005	
				1.4571		S006.03.007	
				1.4571	Grooved Gasket	S006.03.007.05	
				PTFE		\$006.03.008	
				1.4401	Corrugated Gasket	S006.03.013.02	

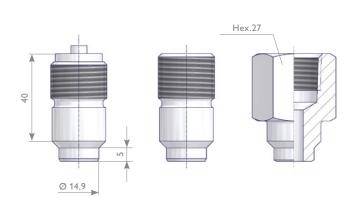
### Adjusting Nut DIN 16283



Connection 1	Connection 2	Material	L (mm)	Hex (mm)	Part Number
G 1/2-LH Female	G1/2 Female	Brass	36	27	\$006.00.000
		Carbon Steel	36	27	S006.00.100
		1.1181	36	27	S006.00.400
		1.4571	36	27	S006.00.200
G 1/4-LH Female	G 1/4 Female	Brass	23	17	S006.00.010
		Carbon Steel	23	17	S006.00.110
M 20 x 1.5-LH Female	M 20 x 1.5 Female	Brass	36	27	S006.00.050
		Carbon Steel	36	27	S006.00.150
		1.4571	36	27	S006.00.250

34 Pressure Gauge Accessories AS-Schneider

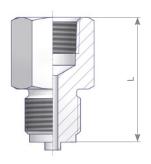
### **Pipe Connector**



Thread Connection	Material	References	Part Number
	1.1141		S006.07.102
G 1/2 Male	1.5415		S006.07.602
	1.4571		S006.07.202
	1.1141	DIN 16282 Type 6	S006.07.103
G 1/2-LH Male	1.5415		S006.07.603
	1.4571		S006.07.203
M 20 x 1.5-LH Male	1.1141		S006.07.153
M 20 X 1.3-Lm Male	1.4571		S006.07.253
1/2 NPT Male	1.1141		S006.07.102.01
1/2 INFT Male	1.4571		S006.07.202.01
1/2 NPT Female	1.0038		S006.07.104.02
1/2 INFT remaie	1.4571		S006.07.204.02

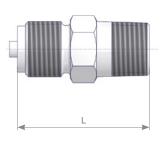
Detailed information regarding dimensions of the connections see Page 5.

### Female to Male Adapter



Connection 1	Connection 2	Dimension L (mm)	Material	Part Number
G 1/2 Female	1/2 NPT Male	45	1.4404	FMS-G4N4
G 1/4 Female	C 1/2 Mala	31		FMS-G2G4
1/2 NPT Female	G 1/2 Male	50		FMS-N4G4
G 1/2 Female	G 1/4 Male	43		FMS-G4G2

### **Hex Nipple**



Connection 1	Connection 2	Dimension L (mm)	Material	Part Number
1/2 NPT Male		50	1.4404	HNS-N4N4
M 20 x 1.5 Male	1/2 NPT Male	50		HNS-M4N4
		50		HNS-G4N4
C 1/2 Mala	1/4 NPT Male	45		HNS-G4N2
G 1/2 Male	G 1/4 Male	45		HNS-G2G4
	G 1/2 Male	50		HNS-G4G4

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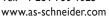


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