Gauge Protectors | Features and Benefits

B.01.230-E-190430 www.tempco.be

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.

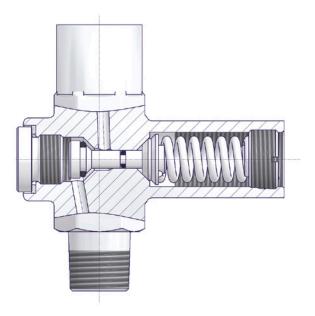
Components	Brass	Stainless Steel		Duplex	Alloy 400	Alloy C-276	Alloy 625	
	Material / Material No.							
Body	Brass	1.4571						
Bonnet			316*	Duplex	Alloy 400	Alloy C-276	Alloy 625	
Piston	1.4404*							
Piston Seals	FKM (FPM by ISO)							
Screw Plug	1.4404*			Duplex	Alloy 400	Alloy C-276	Alloy 625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

^{* 316 / 316}L / 1.4401 / 1.4404

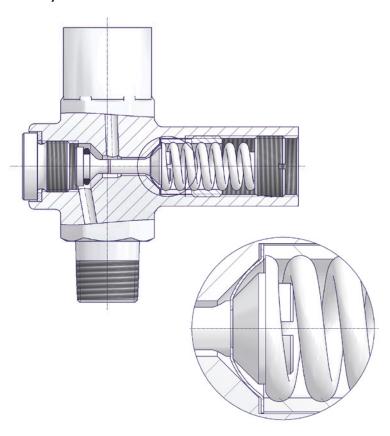
Gauge Protectors

Gauge Protector Type \$005.50

Gauge Protector Design For System Pressures 2 - 600 bar

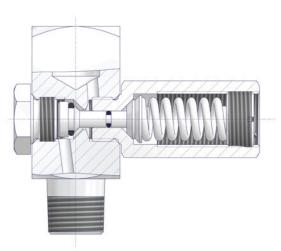


Gauge Protector Design For System Pressures 0.4 - 2.5 bar



Gauge Protector Type N005.50

Screwed Bonnet Design



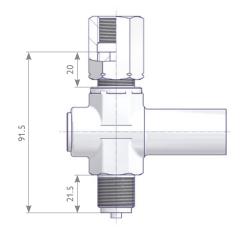
20 Gauge Protectors AS-Schneider

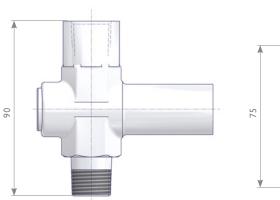
Gauge Protector Type S005.50

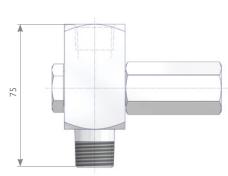
Gauge Protector Type N005.50

Outlet Adjusting Nut

Outlet Female NPT







Parallel Threads

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

NPT Threads

Inlet	Outlet	Material	Adjusting range in bar							
			0.4 - 2.5	2 - 6	5 - 25	20 - 60	50 - 250	240 - 400	400 - 600	
1/2 NPT Male	1/2 NPT Female	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	
		Duplex	N005.50.821.0001	822.0001	823.0001	824.0001	825.0001	826.0001	827.0001	
		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 Male	1/4 NPT Female	Brass	S005.50.041.01	042.01	043.01	044.01	045.01	046.01		
		1.4571	S005.50.241.01	242.01	243.01	244.01	245.01	246.01	247.01	

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