

Pressure Gauge SPG



Area of Application

- Mechanical pressure measurement

Characteristics

- Suitable for hydraulic oil and gaseous media that do not corrode any copper base alloy
- Available in nominal sizes 63 and 100
- Thread form: BSP (G1/4 and G1/2), NPT (1/4NPT and 1/2NPT)
- Housing made of Stainless Steel (1.4301)
- Sight glass made of Acrylic
- Glycerine filled
- Standard dual scales with pressure indication in bar and PSI
- U-bolt or flange mounting kit on request

Consult STAUFF before you use SPG with other media.

Technical Data

Pressure gauge according to EN 837-1
 Protection rating: IP 65 (EN 60 529 / IEC 529)
 Accuracy class SPG-063: 1.6 (± 1.6 % FS as per EN 837-1)
 Accuracy class SPG-100: 1.0 (± 1.0 % FS as per EN 837-1)
 Environmental temp. range: - 20 °C ... + 60 °C / - 4 °F ... + 140 °F
 Temperature range medium: max. + 60 °C / max. + 140 °F
 Subject to technical modifications

Options (on request)

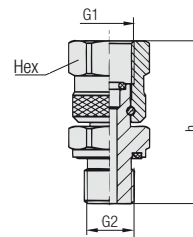
- Protective rubber cap
- Additional scale readings including personalisation
- U-bolt and flange mounting kits are available separately as spare parts
- Additional pressure ranges up to 1000 bar / 14503 PSI max.

Further information and order codes on pressure gauges please see pages D6 - D7, Diagtronics section.

Further information and order codes on gauge isolator valves please see the Valves section.

Standard Pressure Range Options (bar/PSI)
-1 ... +3
-14 ... +42
10
145
16
230
25
360
40
580
60
850
100
1450
160
2300
250
3600
400
5800
600
8500

Adjustable Gauge Fitting EMV



Metal Parts

Standard material: Steel, zinc/nickel-plated = **C6F (CrVI-free)**
 For ordering V2A (1.4305 / AISI 303) replace "C6F" with "V2A".
 For ordering V4A (1.4571 / AISI 316Ti) replace "C6F" with "V4A".

Sealings

For ordering FPM sealings replace "P" with "V".
 For ordering EPDM sealings replace "P" with "E".

* Standard option for North America is FPM (Viton®).

Dimensions (mm/in)				Order Codes NBR	FPM* (Standard Option-North America)
G1	G2	h	Hex		
G1/4	G1/4	42	19	EMV-G1/4-P-OR-PC-C6F	EMV-G1/4-V-OR-VC-C6F
		1.65	.75		
G1/4	G1/2	47	19	EMV-G1/4G1/2-P-OR-PC-C6F	EMV-G1/4G1/2-V-OR-VC-C6F
		1.85	.75		
G1/2	G1/4	51	27	EMV-G1/2G1/4-P-OR-PC-C6F	EMV-G1/2G1/4-V-OR-VC-C6F
		2.01	1.06		
G1/2	G1/2	55,5	27	EMV-G1/2-P-OR-PC-C6F	EMV-G1/2-V-OR-VC-C6F
		2.19	1.06		

Pressure Test Kit
SMB

SMB-20-1-xxx-C6F		SMB-15-1-xxx-C6F	
Component Parts	Order Codes	Component Parts	Order Codes
1 Test hose (2000 mm length)	SMS-20-2000-A-C6F	1 Test hose (2000 mm length)	SMS-15-2000-A-C6F
1 Pressure gauge Ø 63 mm	SPG 063-xxx ..	1 Pressure gauge Ø 63 mm	SPG 063-xxx ..
1 Gauge adaptor G1/4	SMA20-G1/4-P-OR-C6F	1 Gauge adaptor G1/4	SMA15-G1/4-P-OR-C6F
1 Direct gauge adaptor G1/4	SMD20-G1/4-P-OR-C6F	1 Direct gauge adaptor G1/4	SMD15-G1/4-P-OR-C6F
1 Test coupling G1/4	SMK20-G1/4-PC-C6F	1 Test coupling G1/4	SMK15-G1/4-PB-C6F
1 Test coupling M10 x 1	SMK20-M10x1-PA-C6F	1 Test coupling M14 x 1,5	SMK15-M14x1,5-PB-C6F
1 Thread adaptor G3/8	SRS20-G3/8-B-C6F	1 Thread adaptor G3/8	SRS20-G3/8-B-C6F
1 Thread adaptor G1/2	SRS20-G1/2-B-C6F	1 Thread adaptor G1/2	SRS20-G1/2-B-C6F

xxx = pressure range please see page B34
 Please indicate pressure range in bar.

Custom kits available upon request. Please consult STAUFF.



SMB-20-2-xxx/xxx-C6F		SMB-15-2-xxx/xxx-C6F	
Component Parts	Order Codes	Component Parts	Order Codes
1 Test hose (2000 mm length)	SMS-20-2000-A-C6F	1 Test hose (2000 mm length)	SMS-15-2000-A-C6F
2 Pressure gauges Ø 63 mm	SPG 063-xxx ..	2 Pressure gauges Ø 63 mm	SPG 063-xxx ..
1 Gauge adaptor G1/4	SMA20-G1/4-P-OR-C6F	1 Gauge adaptor G1/4	SMA15-G1/4-P-OR-C6F
1 Direct gauge adaptor G1/4	SMD20-G1/4-P-OR-C6F	1 Direct gauge adaptor G1/4	SMD15-G1/4-P-OR-C6F
1 Test coupling G1/4	SMK20-G1/4-PB-C6F	1 Test coupling G1/4	SMK15-G1/4-PB-C6F
1 Test coupling M10 x 1	SMK20-M10x1-PA-C6F	1 Test coupling M14 x 1,5	SMK15-M14x1,5-PB-C6F
1 Thread adaptor G3/8	SRS20-G3/8-B-C6F	1 Thread adaptor G3/8	SRS20-G3/8-B-C6F
1 Thread adaptor G1/2	SRS20-G1/2-B-C6F	1 Thread adaptor G1/2	SRS20-G1/2-B-C6F

xxx = pressure range see page B34
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Custom kits available upon request. Please consult STAUFF.



SMB-20-3-xxx/xxx/xxx-C6F		SMB-15-3-xxx/xxx/xxx-C6F	
Component Parts	Order Codes	Component Parts	Order Codes
2 Test hoses (2000 mm length)	SMS-20-2000-A-C6F	2 Test hoses (2000 mm length)	SMS-15-2000-A-C6F
3 Pressure gauge Ø 63 mm	SPG 063-xxx ..	3 Pressure gauge Ø 63 mm	SPG 063-xxx ..
1 Gauge adaptor G1/4	SMA20-G1/4-P-OR-C6F	1 Gauge adaptor G1/4	SMA15-G1/4-P-OR-C6F
2 Direct gauge adaptors G1/4	SMD20-G1/4-P-OR-C6F	2 Direct gauge adaptors G1/4	SMD15-G1/4-P-OR-C6F
3 Test couplings G1/4	SMK20-G1/4-PC-C6F	3 Test couplings G1/4	SMK15-G1/4-PB-C6F
3 Test couplings M10 x 1	SMK20-M10x1-PA-C6F	3 Test couplings M14 x 1,5	SMK15-M14x1,5-PB-C6F
1 Thread adaptor G3/8	SRS20-G3/8-B-C6F	1 Thread adaptor G3/8	SRS20-G3/8-B-C6F
1 Thread adaptor G1/2	SRS20-G1/2-B-C6F	1 Thread adaptor G1/2	SRS20-G1/2-B-C6F

xxx = pressure range please see page B34
 Please indicate pressure range in bar.

Custom kits available upon request. Please consult STAUFF.



SMB-20/100-1-xxx-C6F		SMB-15/100-1-xxx-C6F	
Component Parts	Order Codes	Component Parts	Order Codes
1 Test hose (2000 mm length)	SMS-20-2000-A-C6F	1 Test hose (2000 mm length)	SMS-15-2000-A-C6F
1 Pressure gauge Ø 100 mm	SPG 100-xxx ..	1 Pressure gauge Ø 100 mm	SPG 100-xxx ..
1 Gauge adaptor G1/2	SMA20-G1/2-P-OR-C6F	1 Gauge adaptor G1/2	SMA15-G1/2-P-OR-C6F
1 Direct gauge adaptor G1/2	SMD20-G1/2-P-OR-C6F	1 Direct gauge adaptor G1/2	SMD15-G1/2-P-OR-C6F
1 Test coupling G1/4	SMK20-G1/4-PC-C6F	1 Test coupling G1/4	SMK15-G1/4-PB-C6F
1 Test coupling M10 x 1	SMK20-M10x1-PA-C6F	1 Test coupling M14 x 1,5	SMK15-M14x1,5-PB-C6F
1 Thread adaptor G3/8	SRS20-G3/8-B-C6F	1 Thread adaptor G3/8	SRS20-G3/8-B-C6F
1 Thread adaptor G1/2	SRS20-G1/2-B-C6F	1 Thread adaptor G1/2	SRS20-G1/2-B-C6F

xxx = pressure range please see page B34
 Please indicate pressure range in bar.

Custom kits available upon request. Please consult STAUFF.



For further information please see page D10, Diagtronics section.

Port Connections and Sealing Details

<p>Type A</p>	<p>Type A - Threaded port according to factory standard Sealing: O-ring Type A</p>			
	Thread	Dimensions (mm/in)		
G	d1 +0,1	t1 min.	t2 min	
M8 x 1	9,5 .37	11 .43	15,5 .61	
M10 x 1	11,5 .45	12 .47	16,5 .64	

<p>Type B and C</p>	<p>Type B and C - Threaded port type X acc. to DIN 3852 Part 1 and 2; ISO 9974-1 (metric); ISO 1179-1 (inch) Sealing: Metal joint Type B / Elastomeric sealing Type C</p>				
	Thread	Dimensions (mm/in)			
G	d1 min.	t1 min.	t2 min.	a max.	
M10 x 1	15 .59	8 .31	10 .39	1 .04	
M12 x 1,5	18 .71	12 .47	15 .59	1,5 .06	
M14 x 1,5	20 .79	12 .47	15 .59	1,5 .06	
M16 x 1,5	23 .91	12 .47	15 .59	1,5 .06	
M18 x 1,5	25 .98	12 .47	15 .59	2 .08	
M20 x 1,5	27 1.06	14 .55	17 .67	2 .08	
M22 x 1,5	28 1.10	14 .55	17 .67	2,5 .10	
G1/8	15 .59	8,5 .33	10,5 .41	1 .04	
G1/4	20 .79	12,5 .49	15,5 .61	1,5 .06	
G3/8	23 .91	12,5 .49	15,5 .61	2 .08	
G1/2	28 1.10	14,5 .57	18,5 .73	2,5 .10	

<p>Type D</p>	<p>Type D - Parallel threaded port type Z according to DIN 3852 Part 2 (inch) Sealing: Taper Type D suitable sealant required</p>		
	Thread	Dimensions (mm/in)	
G	t1 min.	t2 min.	
Rp1/8	5,5 .22	9,5 .37	
Rp1/4	8,5 .33	13,5 .53	
Rp3/8	8,5 .33	13,5 .53	
Rp1/2	10,5 .41	16,5 .65	

Port Connections and Sealing Details

Type D	Type D - Taper threaded port according to ANSI/ASME B1.20.1-1983 (NPT) Sealing: Taper Type D suitable sealant required		
	Thread	Dimensions (mm/in)	
	G	t1 min.	t2 min.
	1/8-27 NPT	6,9 .27	11,6 .46
	1/4-18 NPT	10 .39	16,4 .65
	1/2-14 NPT	13,6 .54	22,6 .89

Type E	Type E - Threaded port according to ISO 6149-1 (metric); ISO 11926-1 (UNF) Sealing: O-ring Type E							
	Thread	Dimensions (mm/in)						
	G	d1 +0,1	d2 min.	t1 min.	t2 min.	a +0,4	b max.	z° ±1°
	M10 x 1	11,1 .44	16 .63	10 .39	11,5 .45	1,6 .06	1 .04	12°
	M12 x 1,5	13,8 .54	19 .75	11,5 .45	14 .55	2,4 .09	1,5 .06	15°
	M14 x 1,5	15,8 .62	21 .83	11,5 .45	14 .55	2,4 .09	1,5 .06	15°
	M16 x 1,5	17,8 .70	24 .94	13 .51	15,5 .61	2,4 .09	1,5 .06	15°
	M22 x 1,5	23,8 .94	29 1.14	15,5 .61	18 .71	2,4 .09	2 .08	15°
	M27 x 2	29,4 1.16	34 1.34	19 .75	22 .87	3,1 .91	2 .08	15°
	5/16-24 UNF	9,1 .36	17 .67	10 .39	12 .47	1,9 .07	1,6 .06	12°
	7/16-24 UNF	12,4 .49	21 .83	11,5 .45	14 .55	2,4 .09	1,6 .06	12°
	1/2-20 UNF	14 .55	23 .91	11,5 .45	14 .55	2,4 .09	1,6 .06	12°
	9/16-18 UNF	15,65 .62	25 .98	12,7 .50	15,5 .61	2,5 .10	1,6 .06	12°
	7/8-14 UNF	23,95 .94	34 1.34	16,7 .66	20 .79	2,5 .10	2,4 .09	15°