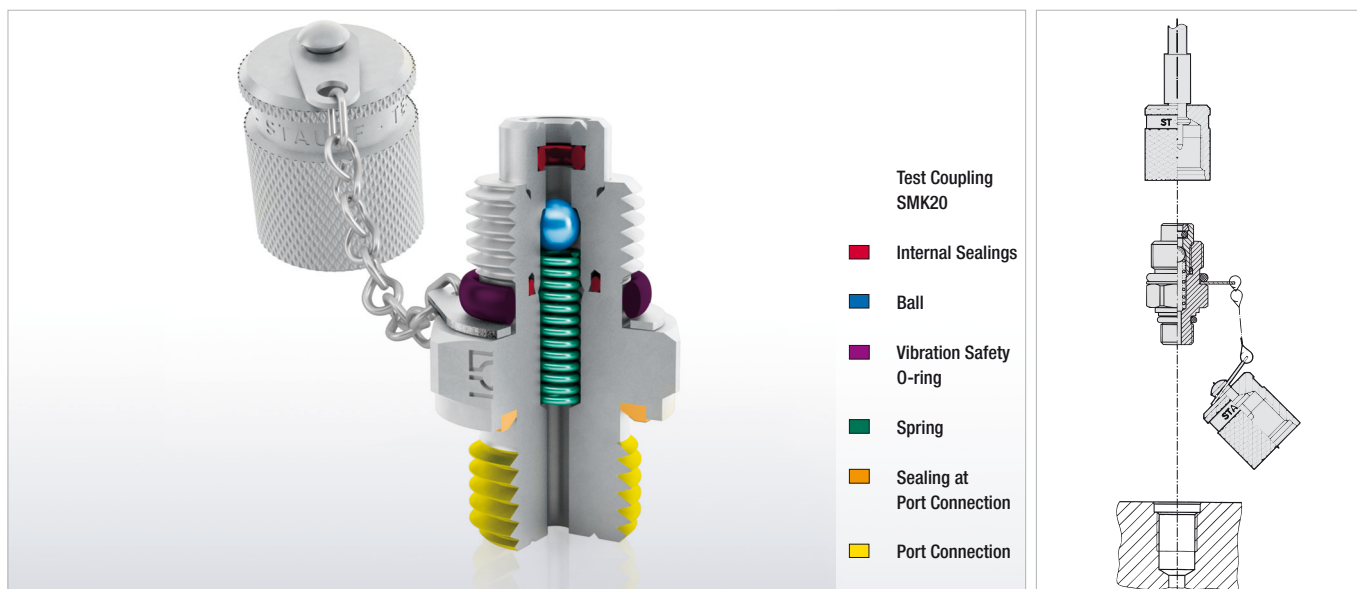


Test Coupling with Ball Check



Fast Coupling for

- Monitoring and control of pressure
- Venting
- Sampling in high- and low-pressure systems

Advantages

- Test system at working pressure
- Leak proof connection before **ball check** is open
- Simple connection to measurement, control and switching devices
- Self locking metal protective cap

Working Pressure

- Max. working pressure 630 bar / 9137 PSI
For SMK Type G and K the recommended working pressure of fitting manufacturer should be noted.
- Connection under pressure up to 400 bar / 5801 PSI max.

Materials

- Metal Parts:**
Standard material: Steel, zinc/nickel-plated = **C6F (CrVI-free)**
Optional:
Stainless Steel **V2A** (1.4305 / AISI 303) on request
Stainless Steel **V4A** (1.4571 / AISI 316Ti) on request

For ordering "V2A" or "V4A" please replace "C6F" with "V2A" or "V4A".

- Ball:** Stainless Steel

Sealings:

P = NBR (Buna-N®)

(Temperature range -20 °C ... +100 °C / -4 °F ... +212 °F)

Note: Internal sealings made of FPM, even for standard NBR-type.

V = FPM (Viton®)*

(Temperature range -20 °C ... +200 °C / -4 °F ... +392 °F)

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

E = EPDM Ethylene Propylene Diene Monomer Rubber

(for Brake fluid,

Temperature range -40 °C ... +150 °C / -40 °F ... +302 °F)

For ordering NBR or EPDM sealings please replace "V" with "P" or "E".

Vibration safety O-ring made of NBR (Buna-N®) (standard).

Media

- Suitable for hydraulic oils and other Mineral oil based fluids
(Check compatibility of sealing material)
- For use with other liquid media please consult STAUFF

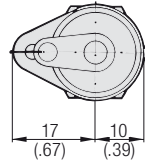
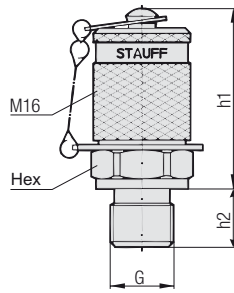
Protection Cap

- The complete STAUFF-Test-20-type-SMK range is also available with a hexagonal protection cap made of steel or plastic protection cap.

For ordering the hexagonal protection cap version please add "-SK" to the order code.
(e.g. SMK20-M10x1-VA-SK-C6F)

For ordering the plastic protection cap version please add "-KK" to the order code.
(e.g. SMK20-M10x1-VA-KK-C6F)

SMK20 Test Coupling with Port Connection	SMK20 Type G Test Coupling complete with Straight Fitting	SMK20 Type K Test Coupling for 24° Cone Fittings	SMK20-JIC Test Coupling SMK-JIC Connection (to SAE J514)	SSK20 Bulkhead



Test Coupling with Port Connection SMK20



Thread	Sealing	Working Pressure (bar/psi)	Dimensions (mm/in)	Order Codes	
G			h1 h2 Hex	NBR	FPM* (Standard Option-North America)
M8 x 1	Type A	250	38 8.5 17	SMK20-M8x1-PA-C6F	SMK20-M8x1-VA-C6F
		3625	1.50 .33 .67		
M10 x 1		630	38 9.8 17	SMK20-M10x1-PA-C6F	SMK20-M10x1-VA-C6F
		9137	1.50 .39 .67		
M10 x 1	Type B	400	37 8 17	SMK20-M10x1-PB-C6F	SMK20-M10x1-VB-C6F
		5801	1.46 .31 .67		
M12 x 1,5		630	37 12 17	SMK20-M12x1,5-PB-C6F	SMK20-M12x1,5-VB-C6F
		9137	1.46 .47 .67		
M14 x 1,5	Type B	630	37 12 19	SMK20-M14x1,5-PB-C6F	SMK20-M14x1,5-VB-C6F
		9137	1.46 .47 .75		
M16 x 1,5		630	37 12 22	SMK20-M16x1,5-PB-C6F	SMK20-M16x1,5-VB-C6F
		9137	1.46 .47 .87		
G1/8	Type B	400	39 8 17	SMK20-G1/8-PB-C6F	SMK20-G1/8-VB-C6F
		5801	1.54 .31 .67		
G1/4		630	37 12 19	SMK20-G1/4-PB-C6F	SMK20-G1/4-VB-C6F
		9137	1.46 .47 .75		
G3/8	Type B	630	37 12 22	SMK20-G3/8-PB-C6F	SMK20-G3/8-VB-C6F
		9137	1.46 .47 .87		
M10 x 1	Type C	400	39 8 17	SMK20-M10x1-PC-C6F	SMK20-M10x1-VC-C6F
		5801	1.54 .31 .67		
M12 x 1,5		630	37 12 17	SMK20-M12x1,5-PC-C6F	SMK20-M12x1,5-VC-C6F
		9137	1.46 .47 .67		
M14 x 1,5	Type C	630	37 12 19	SMK20-M14x1,5-PC-C6F	SMK20-M14x1,5-VC-C6F
		9137	1.46 .47 .75		
M16 x 1,5		630	37 12 22	SMK20-M16x1,5-PC-C6F	SMK20-M16x1,5-VC-C6F
		9137	1.46 .47 .87		
G1/8	Type C	400	39 8 17	SMK20-G1/8-PC-C6F	SMK20-G1/8-VC-C6F
		5801	1.54 .31 .67		
G1/4		630	37 12 19	SMK20-G1/4-PC-C6F	SMK20-G1/4-VC-C6F
		9137	1.46 .47 .75		
G3/8	Type C	630	37 12 22	SMK20-G3/8-PC-C6F	SMK20-G3/8-VC-C6F
		9137	1.46 .47 .87		
G1/2		630	39 14 27	SMK20-G1/2-PC-C6F	SMK20-G1/2-VC-C6F
		9137	1.54 .55 1.06		
R1/8 K	Type D	400	37 8 17	SMK20-R1/8K-PD-C6F	SMK20-R1/8K-VD-C6F
		5801	1.46 .31 .67		
R1/4 K		630	35 12 17	SMK20-R1/4K-PD-C6F	SMK20-R1/4K-VD-C6F
		9137	1.38 .47 .67		
1/8 NPT	Type D	400	36 10 17	SMK20-1/8NPT-PD-C6F	SMK20-1/8NPT-VD-C6F
		5801	1.42 .39 .67		
1/4 NPT		630	35 15 17	SMK20-1/4NPT-PD-C6F	SMK20-1/4NPT-VD-C6F
		9137	1.38 .59 .67		
5/16-24 UNF	Type E	400	38 7.5 17	SMK20-5/16UNF-PE-C6F	SMK20-5/16UNF-VE-C6F
		5.801	1.50 .30 .67		
7/16-20 UNF		630	38 9.1 17	SMK20-7/16UNF-PE-C6F	SMK20-7/16UNF-VE-C6F
		9137	1.50 .36 .67		
1/2-20 UNF	Type E	630	38 9.2 17	SMK20-1/2UNF-PE-C6F	SMK20-1/2UNF-VE-C6F
		9137	1.50 .36 .67		
9/16-18 UNF		630	37 10 19	SMK20-9/16UNF-PE-C6F	SMK20-9/16UNF-VE-C6F
		9137	1.46 .39 .75		
3/4-16 UNF	Type E	630	37 11.1 19	SMK20-3/4UNF-PE-C6F	SMK20-3/4UNF-VE-C6F
		9137	1.46 .44 .75		
M10 x 1		630	38 9.5 17	SMK20-M10x1-PE-C6F	SMK20-M10x1-VE-C6F
		9137	1.50 .37 .67		
M12 x 1,5	Type E	630	37 11 17	SMK20-M12x1,5-PE-C6F	SMK20-M12x1,5-VE-C6F
		9137	1.46 .43 .67		
M14 x 1,5		630	38 11 19	SMK20-M14x1,5-PE-C6F	SMK20-M14x1,5-VE-C6F
		9137	1.50 .43 .75		

Metal Parts

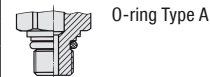
Standard material: Steel, zinc/nickel-plated = **C6F (CrVI-free)**
For ordering V2A (1.4305 / AISI 303) replace "C6F" with "V2A".
For ordering V4A (1.4571 / AISI 316Ti) replace "C6F" with "V4A".

Sealings

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

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

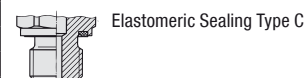
Sealing Details



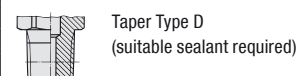
O-ring Type A



Metal Joint Type B



Elastomeric Sealing Type C



Taper Type D
(suitable sealant required)



O-ring Type E

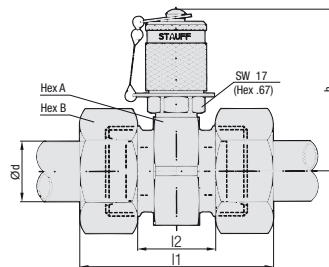
Protection Cap

Standard material: Steel
For ordering the hexagonal protection cap version please add "-SK" to the order code. (e.g. SMK20-M10x1-VA-SK-C6F)
For ordering the plastic protection cap version please add "-KK" to the order code. (e.g. SMK20-M10x1-VA-KK-C6F)

For further information on materials, sealings or protection caps, please see page B4.

Other port connections and sealings on request.
Please consult STAUFF for further information.

Test Coupling complete with Straight Fitting SMK20 Type G



- Compression ring fittings acc. to ISO 8434-1 / DIN 2353

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

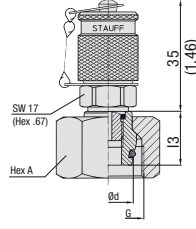
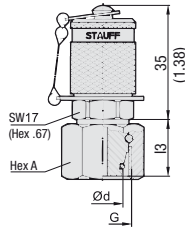
* Standard option for North America is FPM (Viton®).

Protection Cap

Standard material: Steel
For ordering the hexagonal protection cap version please add "-SK" to the order code. (e.g. SMK20-08L-VG-SK-C6F)
For ordering the plastic protection cap version please add "-KK" to the order code. (e.g. SMK20-08L-VG-KK-C6F)

For further information on materials, sealings or protection caps, please see page B4.

Series	PN (^{bar} /PS)	Pipe Ø d	Dimensions (mm/in)						Order Codes	
			~I1	I2	h	Hex A	Hex B		NBR	FPM* (Standard Option-North America)
L	315 4568	6	51 2.01	21 .83	49 1.93	24 .94	14 .55		SMK20-06L-PG-C6F	SMK20-06L-VG-C6F
		8	51 2.01	21 .83	49 1.93	24 .94	17 .67		SMK20-08L-PG-C6F	SMK20-08L-VG-C6F
		10	53 2.09	23 .91	49 1.93	24 .94	19 .75		SMK20-10L-PG-C6F	SMK20-10L-VG-C6F
		12	53 2.09	23 .91	50,5 1.99	27 1.06	22 .87		SMK20-12L-PG-C6F	SMK20-12L-VG-C6F
		15	55 2.17	25 .98	52 2.05	30 1.18	27 1.06		SMK20-15L-PG-C6F	SMK20-15L-VG-C6F
		18	57 2.24	24 .94	53 2.09	32 1.26	32 1.26		SMK20-18L-PG-C6F	SMK20-18L-VG-C6F
	160 2320	22	61 2.40	28 1.10	55 2.17	36 1.42	36 1.42		SMK20-22L-PG-C6F	SMK20-22L-VG-C6F
		28	61 2.40	28 1.10	57,5 2.26	41 1.61	41 1.61		SMK20-28L-PG-C6F	SMK20-28L-VG-C6F
		35	69 2.72	26 1.02	60 2.36	46 1.81	50 1.97		SMK20-35L-PG-C6F	SMK20-35L-VG-C6F
		42	71 2.80	25 .98	64,5 2.54	55 2.17	60 2.36		SMK20-42L-PG-C6F	SMK20-42L-VG-C6F
	S	6	55 2.17	25 .98	49 1.93	24 .94	17 .67		SMK20-06S-PG-C6F	SMK20-06S-VG-C6F
		8	55 2.17	25 .98	49 1.93	24 .94	19 .75		SMK20-08S-PG-C6F	SMK20-08S-VG-C6F
		10	57 2.24	24 .94	49 1.93	24 .94	22 .87		SMK20-10S-PG-C6F	SMK20-10S-VG-C6F
		12	57 2.24	24 .94	49 1.93	24 .94	24 .94		SMK20-12S-PG-C6F	SMK20-12S-VG-C6F
		14	63 2.50	27 1.06	50,5 1.99	27 1.06	27 1.06		SMK20-14S-PG-C6F	SMK20-14S-VG-C6F
		16	63 2.50	26 1.02	52 2.05	30 1.18	30 1.18		SMK20-16S-PG-C6F	SMK20-16S-VG-C6F
		20	69 2.72	26 1.02	55 2.17	36 1.42	36 1.42		SMK20-20S-PG-C6F	SMK20-20S-VG-C6F
		25	75 2.95	27 1.06	57,5 2.26	41 1.61	46 1.81		SMK20-25S-PG-C6F	SMK20-25S-VG-C6F
		30	81 3.19	28 1.10	60 2.36	46 1.81	50 1.97		SMK20-30S-PG-C6F	SMK20-30S-VG-C6F
		315 4568	91 3.58	29 1.14	64,5 2.54	55 2.17	60 2.36		SMK20-38S-PG-C6F	SMK20-38S-VG-C6F



Test Coupling for 24° Cone Fittings SMK20 Type K



Version A

Version B

Series	PN (bar/psi)	Pipe Ø d	Dimensions (mm/in)			Thread	Version	Order Codes	
			I3	Hex A	G			NBR	FPM* (Standard Option-North America)
L	315 4568	6	15,5 .61	14 .55	M12 x 1,5	A		SMK20-06L-PK-C6F	SMK20-06L-VK-C6F
			15,5 .61	17 .67	M14 x 1,5	A		SMK20-08L-PK-C6F	SMK20-08L-VK-C6F
		10	16,5 .65	19 .75	M16 x 1,5	A		SMK20-10L-PK-C6F	SMK20-10L-VK-C6F
			17,5 .69	22 .87	M18 x 1,5	A		SMK20-12L-PK-C6F	SMK20-12L-VK-C6F
		15	21 .83	27 1.06	M22 x 1,5	B		SMK20-15L-PK-GS-C6F	SMK20-15L-VK-GS-C6F
		18	19,5 .77	32 1.26	M26 x 1,5	B		SMK20-18L-PK-GS-C6F	SMK20-18L-VK-GS-C6F
	160 2320	22	20,5 .81	36 1.42	M30 x 2	B		SMK20-22L-PK-GS-C6F	SMK20-22L-VK-GS-C6F
		28	25 .98	41 1.61	M36 x 2	B		SMK20-28L-PK-GS-C6F	SMK20-28L-VK-GS-C6F
		35	30 1.18	50 1.97	M45 x 2	B		SMK20-35L-PK-GS-C6F	SMK20-35L-VK-GS-C6F
		42	31 1.22	60 2.36	M52 x 2	B		SMK20-42L-PK-GS-C6F	SMK20-42L-VK-GS-C6F
S	630 9137	6	14,5 .57	17 .67	M14 x 1,5	A		SMK20-06S-PK-C6F	SMK20-06S-VK-C6F
			16,5 .65	19 .75	M16 x 1,5	A		SMK20-08S-PK-C6F	SMK20-08S-VK-C6F
		10	16,5 .65	22 .87	M18 x 1,5	A		SMK20-10S-PK-C6F	SMK20-10S-VK-C6F
			17,5 .69	24 .94	M20 x 1,5	A		SMK20-12S-PK-C6F	SMK20-12S-VK-C6F
		14	19,5 .77	27 1.06	M22 x 1,5	B		SMK20-14S-PK-GS-C6F	SMK20-14S-VK-GS-C6F
	400 5801	16	18 .71	30 1.18	M24 x 1,5	B		SMK20-16S-PK-GS-C6F	SMK20-16S-VK-GS-C6F
			24 .94	36 1.42	M30 x 2	B		SMK20-20S-PK-GS-C6F	SMK20-20S-VK-GS-C6F
		25	26 1.02	46 1.81	M36 x 2	B		SMK20-25S-PK-GS-C6F	SMK20-25S-VK-GS-C6F
			30 1.18	50 1.97	M42 x 2	B		SMK20-30S-PK-GS-C6F	SMK20-30S-VK-GS-C6F
		38	34 1.34	60 2.36	M52 x 2	B		SMK20-38S-PK-GS-C6F	SMK20-38S-VK-GS-C6F

- For DKO connection
- According to ISO 8434-1 / DIN 2353
- Version A: one-piece design
- Version B: screwed design

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

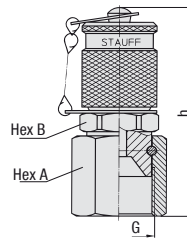
* Standard option for North America is FPM (Viton®).

Protection Cap

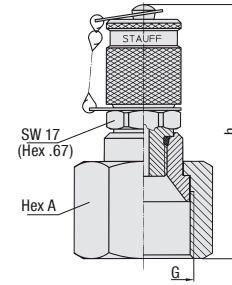
Standard material: Steel
For ordering the hexagonal protection cap version please add "-SK" to the order code. (e.g. SMK20-08L-VK-SK-C6F)
For ordering the plastic protection cap version please add "-KK" to the order code. (e.g. SMK20-08L-VK-KK-C6F)

For further information on materials, sealings or protection caps, please see page B4.

Test Coupling SMK-JIC Connection (to SAE-J514) SMK20-JIC Type K



Version A



Version B

- 37° JIC fittings acc. to SAE J514
- Version A: one-piece design
- Version B: screwed design

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

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

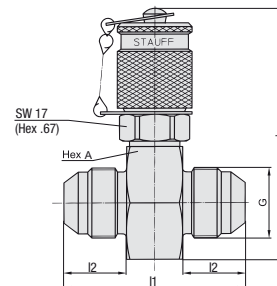
Protection Cap

Standard material: Steel
For ordering the hexagonal protection cap version please add "-SK" to the order code. (e.g. SMK20-JIC5/16-VK-SK-C6F)
For ordering the plastic protection cap version please add "-KK" to the order code. (e.g. SMK20-JIC5/16-VK-KK-C6F)

Pipe Ø d inch	JIC Size	Dimensions (mm/in)	Thread G	Version	Order Codes NBR	FPM* (Standard Option-North America)
		h Hex A Hex B				
1/4	-4	53 17 17 2.09 .67 .67	7/16-20 UNF	A	SMK20-JIC1/4-PK-C6F	SMK20-JIC1/4-VK-C6F
5/16	-5	53,5 17 17 2.11 .67 .67	1/2-20 UNF	A	SMK20-JIC5/16-PK-C6F	SMK20-JIC5/16-VK-C6F
3/8	-6	55,5 19 17 2.19 .75 .67	9/16-18 UNF	A	SMK20-JIC3/8-PK-C6F	SMK20-JIC3/8-VK-C6F
1/2	-8	56,5 22 19 2.22 .87 .75	3/4-16 UNF	A	SMK20-JIC1/2-PK-C6F	SMK20-JIC1/2-VK-C6F
5/8	-10	60 27 22 2.36 1.06 .87	7/8-14 UNF	A	SMK20-JIC5/8-PK-C6F	SMK20-JIC5/8-VK-C6F
3/4	-12	70,5 32 - 2.78 1.26 -	1-1/16-12 UN	B	SMK20-JIC3/4-PK-GS-C6F	SMK20-JIC3/4-VK-GS-C6F
1	-16	69 38 - 2.72 1.50 -	1-5/16-12 UN	B	SMK20-JIC1-PK-GS-C6F	SMK20-JIC1-VK-GS-C6F
1-1/4	-20	73,5 50 - 2.89 1.97 -	1-5/8-12 UN	B	SMK20-JIC1-1/4-PK-GS-C6F	SMK20-JIC1-1/4-VK-GS-C6F
1-1/2	-24	76 60 - 2.99 2.36 -	1-7/8-12 UN	B	SMK20-JIC1-1/2-PK-GS-C6F	SMK20-JIC1-1/2-VK-GS-C6F

For further information on materials, sealings or protection caps, please see page B4.

Test Coupling SMK-JIC Connection (to SAE-J514) SMK20-JIC Type G



- 37° JIC fittings acc. to SAE J514

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

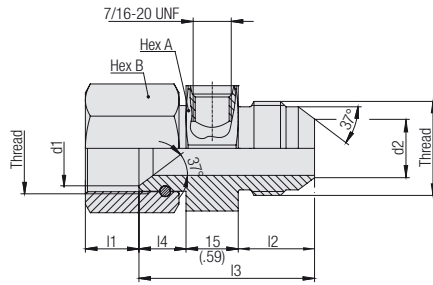
* Standard option for North America is **FPM (Viton®)**.

Protection Cap

Standard material: Steel
For ordering the hexagonal protection cap version please add "-SK" to the order code. (e.g. SMK20-JIC5/16-VG-SK-C6F)
For ordering the plastic protection cap version please add "-KK" to the order code. (e.g. SMK20-JIC5/16-VG-KK-C6F)

Pipe Ø d inch	JIC Size	Dimensions (mm/in)	Thread G	Order Codes NBR	FPM* (Standard Option-North America)
		I1 I2 h Hex A			
1/4	-4	43 14 61 24 1.69 .55 2.40 .94	7/16-20 UNF	SMK20-JIC1/4-PG-C6F	SMK20-JIC1/4-VG-C6F
5/16	-5	43 14 61 24 1.69 .55 2.40 .94	1/2-20 UNF	SMK20-JIC5/16-PG-C6F	SMK20-JIC5/16-VG-C6F
3/8	-6	43 14 61 24 1.69 .55 2.40 .94	9/16-18 UNF	SMK20-JIC3/8-PG-C6F	SMK20-JIC3/8-VG-C6F
1/2	-8	48,5 16,5 67 30 1.91 .65 2.64 1.18	3/4-16 UNF	SMK20-JIC1/2-PG-C6F	SMK20-JIC1/2-VG-C6F
5/8	-10	53,5 19,5 67 30 2.11 .77 2.64 1.18	7/8-14 UNF	SMK20-JIC5/8-PG-C6F	SMK20-JIC5/8-VG-C6F
3/4	-12	59 22 73 36 2.32 .87 2.87 1.42	1-1/16-12 UN	SMK20-JIC3/4-PG-C6F	SMK20-JIC3/4-VG-C6F
1	-16	61 23 78 41 2.40 .91 3.07 1.61	1-5/16-12 UN	SMK20-JIC1-PG-C6F	SMK20-JIC1-VG-C6F
1-1/4	-20	65,5 24,5 83 46 2.58 .96 3.26 1.81	1-5/8-12 UN	SMK20-JIC1-1/4-PG-C6F	SMK20-JIC1-1/4-VG-C6F
1-1/2	-24	72 27,5 92 55 2.83 1.08 3.62 2.17	1-7/8-12 UN	SMK20-JIC1-1/2-PG-C6F	SMK20-JIC1-1/2-VG-C6F

For further information on materials, sealings or protection caps, please see page B4.



Swivel Run Tee with JIC Connection SGV-JIC Type F/M

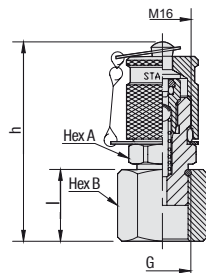


Thread	Dimensions (^{mm} / _{in})								Order Codes
inch	Ø d1	Ø d2	l1	l2	l3	l4	Hex A	Hex B	
7/16–20 UNF	7,49	4,9	9	14	37	8	27	17	SGV-7/16UNF-04-JIC1/4-F/M-C6F
	.29	.19	.35	.55	1.46	.31	1.06	.67	
9/16–18 UNF	11,05	8,1	10,5	14	37,5	8,5	27	19	SGV-7/16UNF-06-JIC3/8-F/M-C6F
	.44	.32	.41	.55	1.48	.33	1.06	.75	
3/4–16 UNF	15,9	10,8	10,5	16,7	43,7	12	30	22	SGV-7/16UNF-08-JIC1/2-F/M-C6F
	.63	.43	.41	.66	1.72	.47	1.18	.87	
1-1/16–12 UNF	21,6	16,9	15,4	21,9	50,4	13,5	36	32	SGV-7/16UNF-12-JIC3/4-F/M-C6F
	.85	.66	.61	.86	1.98	.53	1.42	1.26	
1-5/16–12 UNF	27,9	23,2	17,3	23,1	53,1	15	41	41	SGV-7/16UNF-16-JIC1-F/M-C6F
	1.10	.91	.68	.91	2.09	.59	1.61	1.61	

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".

For further information please consult STAUFF.



Test Coupling with ORFS Connection SMK20 Type ORFS



Thread	Dimensions (mm/μm)				Order Codes NBR	FPM* (Standard Option-North America)
G	h	l	Hex A	Hex B		
9/16-18 UNF	54	19	17	17	SMK20-04-ORFS-P-C6F	SMK20-04-ORFS-V-C6F
	2.1	.75	.67	.67		
11/16-16 UNF	54	19	19	21	SMK20-06-ORFS-P-C6F	SMK20-06-ORFS-V-C6F
	2.1	.75	.75	.80		
13/16-16 UNF	54	19	22	24	SMK20-08-ORFS-P-C6F	SMK20-08-ORFS-V-C6F
	2.1	.75	.87	.87		

For further information on materials, sealings or protection caps, please see page B4.

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

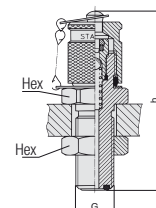
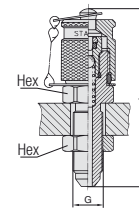
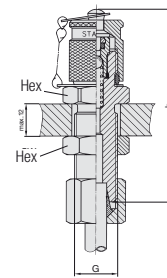
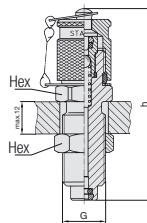
For ordering NBR sealings replace "V" with "P".
For ordering EPDM sealings replace "V" with "E".

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

Protection Cap

Standard material: Steel
For ordering the hexagonal protection cap version please add
"-SK" to the order code. (e.g. SMK20-04-ORFS-V-SK-C6F)
For ordering the plastic protection cap version please add
"-KK" to the order code. (e.g. SMK20-04-ORFS-V-KK-C6F)

Bulkhead SSK20



Version A

Version B

Version C

Version D

- Also available for gaseous media Type SSKK

Threads

*1 Compression ring assembly 08L/ 08S/ 12L according to ISO 8434-1 / DIN 2353

*2 JIC cone fitting according to SAE J514

*3 O-ring face sealing according to SAE J1453

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 NBR sealings replace "V" with "P".

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

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

Protection Cap

Standard material: Steel

For ordering the hexagonal protection cap version please add

"-SK" to the order code. (e.g. SSK20-V-SK-C6F)

For ordering the plastic protection cap version please add

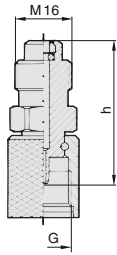
"-KK" to the order code. (e.g. SSK20-V-KK-C6F)

For further information on materials, sealings or protection caps, please see page B4.

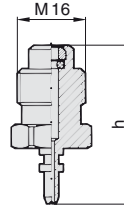
Note: Standard option version B without compression ring and nut.

Thread	Dimensions (mm/in)		Version	Order Codes	
	G	Hex		NBR	FPM* (Standard Option-North America)
M16	72 2.83	19 .75	A	SSK20-P-C6F	SSK20-V-C6F
M14 x 1,5*1	72 2.83	19 .75	B	SSK20/08L-P-C6F	SSK20/08L-V-C6F
M16 x 1,5*1	72 2.83	22 .87	B	SSK20/08S-P-C6F	SSK20/08S-V-C6F
M18 x 1,5*1	72 2.83	22 .87	B	SSK20/12L-P-C6F	SSK20/12L-V-C6F
7/16-20 UNF*2	66 2.60	17 .67	C	SSK20/J7/16UNF-MV-P-C6F	SSK20/J7/16UNF-MV-V-C6F
9/16-18 UNF*3	67 2.64	22 .87	D	SSK20-04-ORFS-P-C6F	SSK20-04-ORFS-V-C6F
11/16-16 UNF*3	72 2.83	27 1.06	D	SSK20-06-ORFS-P-C6F	SSK20-06-ORFS-V-C6F
13/16-16 UNF*3	75 2.95	30 1.18	D	SSK20-08-ORFS-P-C6F	SSK20-08-ORFS-V-C6F

Adaptor SAD20



Version A



Version B



Thread	Dimensions (mm/in)	Version	Order Codes NBR	FPM* (Standard Option-North America)
G	h			
M16 x 1,5	39 1.54	A	SAD20/15-P-C6F	SAD20/15-V-C6F
S12* ¹	39 1.54	A	SAD20/12-P-C6F	SAD20/12-V-C6F
Plug in	37 1.46	B	SAD20/10-P-C6F	SAD20/10-V-C6F

Threads

^{*1} Special thread: buttress thread S12,65 x1,5

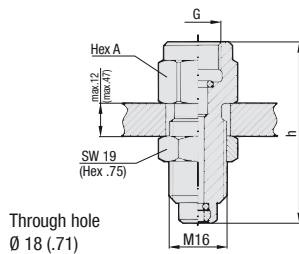
Metal Parts

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".

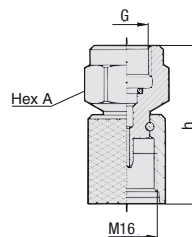
Sealings

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

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



Gauge Adaptor SMA20



Direct Gauge Adaptor SMD20

Gauge Adaptor SMA20 Direct Gauge Adaptor SMD20



Thread	Dimensions (mm/in)	Hex A	Order Codes NBR	FPM* (Standard Option-North America)
G	h			
G1/4	54 2.13	19 .75	SMA20-G1/4-P-OR-C6F	SMA20-G1/4-V-OR-C6F
G1/2	64 2.52	27 1.06	SMA20-G1/2-P-OR-C6F	SMA20-G1/2-V-OR-C6F
1/4 NPT	54 2.13	19 .75	SMA20-1/4NPT-P-C6F	SMA20-1/4NPT-V-C6F
1/2 NPT	64 2.52	27 1.06	SMA20-1/2NPT-P-C6F	SMA20-1/2NPT-V-C6F
9/16-18 UNF	57 2.24	19 .75	SMA20-9/16UNF-P-C6F	SMA20-9/16UNF-V-C6F
G1/4	41 1.61	19 .75	SMD20-G1/4-P-OR-C6F	SMD20-G1/4-V-OR-C6F
G1/2	51 2.01	27 1.06	SMD20-G1/2-P-OR-C6F	SMD20-G1/2-V-OR-C6F
1/4 NPT	41 1.61	19 .75	SMD20-1/4NPT-P-C6F	SMD20-1/4NPT-V-C6F
1/2 NPT	51 2.01	27 1.06	SMD20-1/2NPT-P-C6F	SMD20-1/2NPT-V-C6F
7/16-20 UNF	41 1.61	19 .75	SMD20-7/16UNF-P-C6F	SMD20-7/16UNF-V-C6F

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".

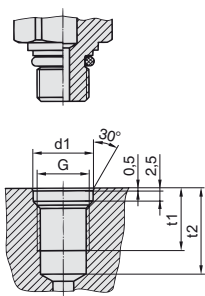
Sealings

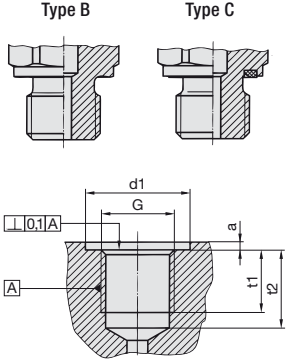
For ordering NBR sealings replace "V" with "P".
For ordering EPDM sealings replace "V" with "E".

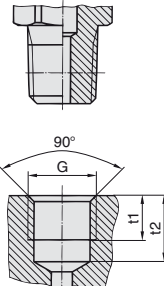
* Standard option for North America is FPM (Viton®).

Snubber on request.

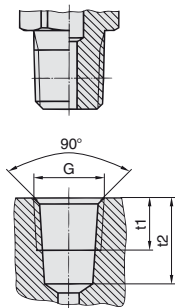
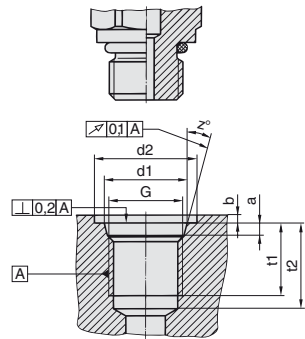
Port Connections and Sealing Details

Type A	Type A - Threaded port according to factory standard Sealing: O-ring Type A				
	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	

Type B and C	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				
	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

Type D	Type D - Parallel threaded port type Z according to DIN 3852 Part 2 (inch) Sealing: Taper Type D suitable sealant required		
	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																																																																																																								
	<table><tr><th>Thread</th><th colspan="2">Dimensions (^{mm}/_{in})</th></tr><tr><th>G</th><th>t1 min.</th><th>t2 min.</th></tr><tr><td>1/8–27 NPT</td><td>6,9 .27</td><td>11,6 .46</td></tr><tr><td>1/4–18 NPT</td><td>10 .39</td><td>16,4 .65</td></tr><tr><td>1/2–14 NPT</td><td>13,6 .54</td><td>22,6 .89</td></tr></table>	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																																																																																									
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																																																																																																								
	<table><tr><th>Thread</th><th colspan="7">Dimensions (^{mm}/_{in})</th></tr><tr><th>G</th><th>d1 +0,1</th><th>d2 min.</th><th>t1 min.</th><th>t2 min.</th><th>a +0,4</th><th>b max.</th><th>z° ±1°</th></tr><tr><td>M10 x 1</td><td>11,1 .44</td><td>16 .63</td><td>10 .39</td><td>11,5 .45</td><td>1,6 .06</td><td>1 .04</td><td>12°</td></tr><tr><td>M12 x 1,5</td><td>13,8 .54</td><td>19 .75</td><td>11,5 .45</td><td>14 .55</td><td>2,4 .09</td><td>1,5 .06</td><td>15°</td></tr><tr><td>M14 x 1,5</td><td>15,8 .62</td><td>21 .83</td><td>11,5 .45</td><td>14 .55</td><td>2,4 .09</td><td>1,5 .06</td><td>15°</td></tr><tr><td>M16 x 1,5</td><td>17,8 .70</td><td>24 .94</td><td>13 .51</td><td>15,5 .61</td><td>2,4 .09</td><td>1,5 .06</td><td>15°</td></tr><tr><td>M22 x 1,5</td><td>23,8 .94</td><td>29 1.14</td><td>15,5 .61</td><td>18 .71</td><td>2,4 .09</td><td>2 .08</td><td>15°</td></tr><tr><td>M27 x 2</td><td>29,4 1.16</td><td>34 1.34</td><td>19 .75</td><td>22 .87</td><td>3,1 .91</td><td>2 .08</td><td>15°</td></tr><tr><td>5/16–24 UNF</td><td>9,1 .36</td><td>17 .67</td><td>10 .39</td><td>12 .47</td><td>1,9 .07</td><td>1,6 .06</td><td>12°</td></tr><tr><td>7/16–24 UNF</td><td>12,4 .49</td><td>21 .83</td><td>11,5 .45</td><td>14 .55</td><td>2,4 .09</td><td>1,6 .06</td><td>12°</td></tr><tr><td>1/2–20 UNF</td><td>14 .55</td><td>23 .91</td><td>11,5 .45</td><td>14 .55</td><td>2,4 .09</td><td>1,6 .06</td><td>12°</td></tr><tr><td>9/16–18 UNF</td><td>15,65 .62</td><td>25 .98</td><td>12,7 .50</td><td>15,5 .61</td><td>2,5 .10</td><td>1,6 .06</td><td>12°</td></tr><tr><td>7/8–14 UNF</td><td>23,95 .94</td><td>34 1.34</td><td>16,7 .66</td><td>20 .79</td><td>2,5 .10</td><td>2,4 .09</td><td>15°</td></tr></table>	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°
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°																																																																																																		
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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°																																																																																																		