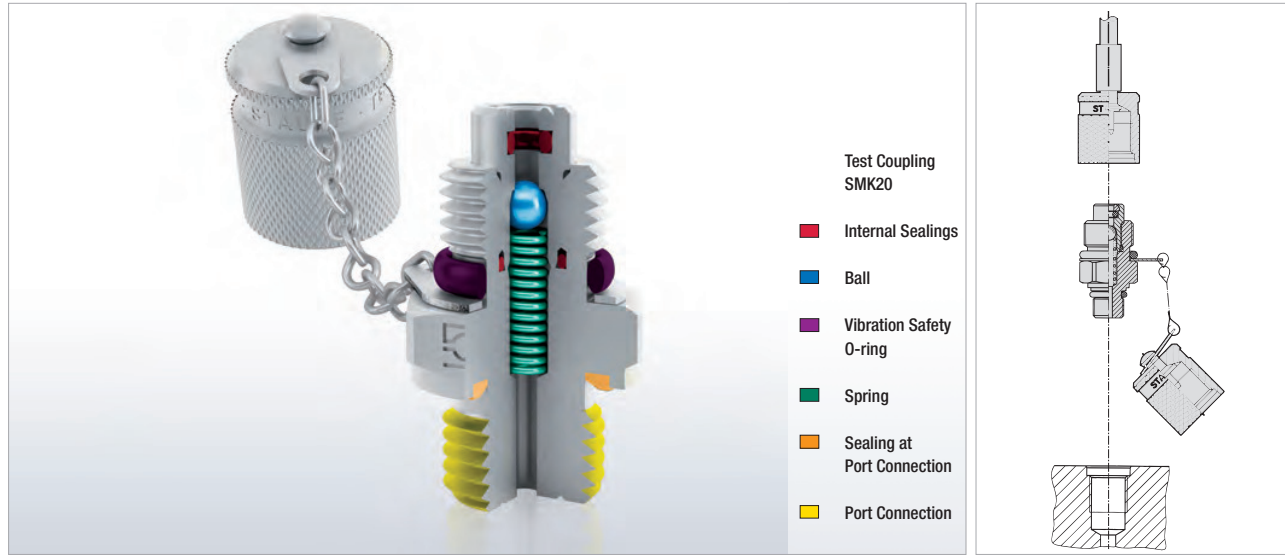


Test Coupling with Ball Check



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 FPM or EPDM sealings please replace "P" with "V" 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

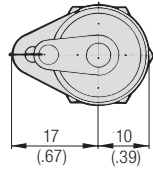
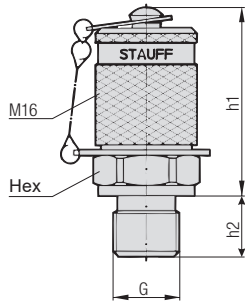
Protection Cap

- 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-PA-SK-C6F)

For ordering the plastic protection cap version please add "-KK" to the order code. (e.g. SMK20-M10x1-PA-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 G	Sealing	Working Pressure (bar / psi)	Dimensions (mm / in)			Order Codes			
			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				
		630	38	9,8	17				
M10 x 1		9137	1.50	.39	.67	SMK20-M10x1-PA-C6F	SMK20-M10x1-VA-C6F		
		400	37	8	17			SMK20-M10x1-PB-C6F	SMK20-M10x1-VB-C6F
		5801	1.46	.31	.67				
630	37	12	17						
M12 x 1,5	9137	1.46	.47	.67	SMK20-M12x1,5-PB-C6F	SMK20-M12x1,5-VB-C6F			
	630	37	12	19			SMK20-M12x1,5-PC-C6F	SMK20-M12x1,5-VC-C6F	
	9137	1.46	.47	.75					
M14 x 1,5	630	37	12	22	SMK20-M14x1,5-PB-C6F	SMK20-M14x1,5-VB-C6F			
	9137	1.46	.47	.87			SMK20-M14x1,5-PC-C6F	SMK20-M14x1,5-VC-C6F	
	630	37	12	19					
M16 x 1,5	9137	1.46	.47	.75	SMK20-M16x1,5-PB-C6F	SMK20-M16x1,5-VB-C6F			
	400	39	8	17			SMK20-M16x1,5-PC-C6F	SMK20-M16x1,5-VC-C6F	
	5801	1.54	.31	.67					
G1/8	630	37	12	17	SMK20-M12x1,5-PC-C6F	SMK20-M12x1,5-VC-C6F			
	9137	1.46	.47	.67					
	630	37	12	19					
G1/4	9137	1.46	.47	.75	SMK20-M14x1,5-PC-C6F	SMK20-M14x1,5-VC-C6F			
	630	37	12	19			SMK20-M16x1,5-PC-C6F	SMK20-M16x1,5-VC-C6F	
	9137	1.46	.47	.87					
G3/8	630	37	12	22	SMK20-M16x1,5-PC-C6F	SMK20-M16x1,5-VC-C6F			
	9137	1.46	.47	.87					
	630	37	12	19					
M10 x 1	9137	1.46	.47	.75	SMK20-G1/8-PC-C6F	SMK20-G1/8-VC-C6F			
	400	39	8	17			SMK20-G1/4-PC-C6F	SMK20-G1/4-VC-C6F	
	5801	1.54	.31	.67					
M12 x 1,5	630	37	12	19	SMK20-G1/4-PC-C6F	SMK20-G1/4-VC-C6F			
	9137	1.46	.47	.75					
	630	37	12	19					
M14 x 1,5	9137	1.46	.47	.75	SMK20-G3/8-PC-C6F	SMK20-G3/8-VC-C6F			
	400	39	8	17			SMK20-G1/2-PC-C6F	SMK20-G1/2-VC-C6F	
	5801	1.54	.31	.67					
M16 x 1,5	630	37	12	19	SMK20-G1/2-PC-C6F	SMK20-G1/2-VC-C6F			
	9137	1.46	.47	.75					
	630	37	12	19					
G1/8	9137	1.46	.47	.75	SMK20-R1/8K-PD-C6F	SMK20-R1/8K-VD-C6F			
	400	37	8	17			SMK20-R1/4K-PD-C6F	SMK20-R1/4K-VD-C6F	
	5801	1.54	.31	.67					
G1/4	630	35	12	17	SMK20-R1/4K-PD-C6F	SMK20-R1/4K-VD-C6F			
	9137	1.38	.47	.67					
	400	36	10	17					
G3/8	5801	1.42	.39	.67	SMK20-1/8NPT-PD-C6F	SMK20-1/8NPT-VD-C6F			
	630	35	15	17			SMK20-1/4NPT-PD-C6F	SMK20-1/4NPT-VD-C6F	
	9137	1.38	.59	.67					
G1/2	400	38	7,5	17	SMK20-1/4NPT-PD-C6F	SMK20-1/4NPT-VD-C6F			
	5.801	1.50	.30	.67					
	630	38	9,1	17					
R1/8 K	9137	1.50	.36	.67	SMK20-5/16UNF-PE-C6F	SMK20-5/16UNF-VE-C6F			
	630	38	9,1	17			SMK20-7/16UNF-PE-C6F	SMK20-7/16UNF-VE-C6F	
	9137	1.50	.36	.67					
R1/4 K	630	38	9,2	17	SMK20-7/16UNF-PE-C6F	SMK20-7/16UNF-VE-C6F			
	9137	1.50	.36	.67					
	630	38	9,2	17					
1/8 NPT	9137	1.50	.36	.67	SMK20-1/2UNF-PE-C6F	SMK20-1/2UNF-VE-C6F			
	630	37	10	19			SMK20-1/2UNF-PE-C6F	SMK20-1/2UNF-VE-C6F	
	9137	1.46	.39	.75					
1/4 NPT	630	37	11,1	19	SMK20-9/16UNF-PE-C6F	SMK20-9/16UNF-VE-C6F			
	9137	1.46	.44	.75					
	630	37	11,1	19					
5/16-24 UNF	9137	1.46	.44	.75	SMK20-3/4UNF-PE-C6F	SMK20-3/4UNF-VE-C6F			
	630	38	9,5	17			SMK20-3/4UNF-PE-C6F	SMK20-3/4UNF-VE-C6F	
	9137	1.50	.37	.67					
7/16-20 UNF	630	37	11	17	SMK20-M10x1-PE-C6F	SMK20-M10x1-VE-C6F			
	9137	1.46	.43	.67					
	630	37	11	17					
1/2-20 UNF	9137	1.46	.43	.67	SMK20-M12x1,5-PE-C6F	SMK20-M12x1,5-VE-C6F			
	630	38	11	19			SMK20-M12x1,5-PE-C6F	SMK20-M12x1,5-VE-C6F	
	9137	1.50	.36	.67					
9/16-18 UNF	630	38	11	19	SMK20-M14x1,5-PE-C6F	SMK20-M14x1,5-VE-C6F			
	9137	1.50	.36	.67					
	630	38	11	19					
3/4-16 UNF	9137	1.50	.36	.67					
	630	37	10	19					
	9137	1.46	.39	.75					
M10 x 1	630	37	11,1	19					
	9137	1.46	.44	.75					
	630	38	9,5	17					
M12 x 1,5	9137	1.50	.37	.67					
	630	37	11	17					
	9137	1.46	.43	.67					
M14 x 1,5	630	38	11	19					
	9137	1.50	.37	.67					
	630	37	11	17					
M14 x 1,5	9137	1.46	.43	.67					
	630	38	11	19					
	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 FPM sealings replace "P" with "V".
For ordering EPDM sealings replace "P" 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

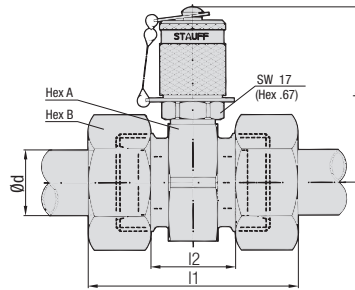
Protection Cap

Standard material: Steel
For ordering the hexagonal protection cap version please add "-SK" to the order code. (e.g. SMK20-M10x1-PA-SK-C6F)
For ordering the plastic protection cap version please add "-KK" to the order code. (e.g. SMK20-M10x1-PA-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 FPM sealings replace "P" with "V".
 For ordering EPDM sealings replace "P" with "E".

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

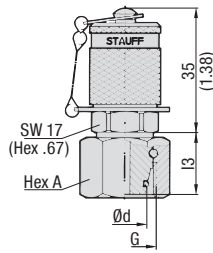
Protection Cap

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

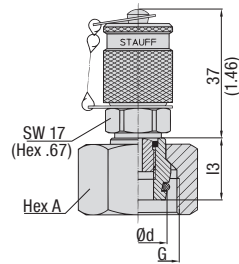
For further information on materials, sealings or protection caps, please see page B4.

Series	PN ([°] /rs)	Pipe Ø d	Dimensions (mm /in)						Order Codes NBR	FPM* (Standard Option-North America)
			~I1	I2	h	Hex A	Hex B			
L	315 4568	6	51	21	49	24	14	SMK20-06L-PG-C6F	SMK20-06L-VG-C6F	
			2.01	.83	1.93	.94	.55			
		8	51	21	49	24	17	SMK20-08L-PG-C6F	SMK20-08L-VG-C6F	
			2.01	.83	1.93	.94	.67			
		10	53	23	49	24	19	SMK20-10L-PG-C6F	SMK20-10L-VG-C6F	
			2.09	.91	1.93	.94	.75			
		12	53	23	50,5	27	22	SMK20-12L-PG-C6F	SMK20-12L-VG-C6F	
			2.09	.91	1.99	1.06	.87			
		15	55	25	52	30	27	SMK20-15L-PG-C6F	SMK20-15L-VG-C6F	
			2.17	.98	2.05	1.18	1.06			
18	57	24	53	32	32	SMK20-18L-PG-C6F	SMK20-18L-VG-C6F			
	2.24	.94	2.09	1.26	1.26					
L	160 2320	22	61	28	55	36	36	SMK20-22L-PG-C6F	SMK20-22L-VG-C6F	
			2.40	1.10	2.17	1.42	1.42			
		28	61	28	57,5	41	41	SMK20-28L-PG-C6F	SMK20-28L-VG-C6F	
			2.40	1.10	2.26	1.61	1.61			
		35	69	26	60	46	50	SMK20-35L-PG-C6F	SMK20-35L-VG-C6F	
			2.72	1.02	2.36	1.81	1.97			
42	71	25	64,5	55	60	SMK20-42L-PG-C6F	SMK20-42L-VG-C6F			
	2.80	.98	2.54	2.17	2.36					
S	630 9137	6	55	25	49	24	17	SMK20-06S-PG-C6F	SMK20-06S-VG-C6F	
			2.17	.98	1.93	.94	.67			
		8	55	25	49	24	19	SMK20-08S-PG-C6F	SMK20-08S-VG-C6F	
			2.17	.98	1.93	.94	.75			
		10	57	24	49	24	22	SMK20-10S-PG-C6F	SMK20-10S-VG-C6F	
			2.24	.94	1.93	.94	.87			
		12	57	24	49	24	24	SMK20-12S-PG-C6F	SMK20-12S-VG-C6F	
			2.24	.94	1.93	.94	.94			
	14	63	27	50,5	27	27	SMK20-14S-PG-C6F	SMK20-14S-VG-C6F		
		2.50	1.06	1.99	1.06	1.06				
	S	400 5801	16	63	26	52	30	30	SMK20-16S-PG-C6F	SMK20-16S-VG-C6F
				2.50	1.02	2.05	1.18	1.18		
			20	69	26	55	36	36	SMK20-20S-PG-C6F	SMK20-20S-VG-C6F
				2.72	1.02	2.17	1.42	1.42		
			25	75	27	57,5	41	46	SMK20-25S-PG-C6F	SMK20-25S-VG-C6F
				2.95	1.06	2.26	1.61	1.81		
30	81	28	60	46	50	SMK20-30S-PG-C6F	SMK20-30S-VG-C6F			
	3.19	1.10	2.36	1.81	1.97					
315 4568	38	91	29	64,5	55	60	SMK20-38S-PG-C6F	SMK20-38S-VG-C6F		
3.58		1.14	2.54	2.17	2.36					

Test Coupling for 24° Cone Fittings SMK20 Type K



Version A



Version B



Series	PN (bat./Pcs)	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	14	M12 x 1,5	A	SMK20-06L-PK-C6F	SMK20-06L-VK-C6F	
			.61	.55					
		8	15,5	17	M14 x 1,5	A	SMK20-08L-PK-C6F	SMK20-08L-VK-C6F	
			.61	.67					
		10	16,5	19	M16 x 1,5	A	SMK20-10L-PK-C6F	SMK20-10L-VK-C6F	
			.65	.75					
	12	17,5	22	M18 x 1,5	A	SMK20-12L-PK-C6F	SMK20-12L-VK-C6F		
		.69	.87						
	15	21	27	M22 x 1,5	B	SMK20-15L-PK-GS-C6F	SMK20-15L-VK-GS-C6F		
		.83	1.06						
	18	19,5	32	M26 x 1,5	B	SMK20-18L-PK-GS-C6F	SMK20-18L-VK-GS-C6F		
		.77	1.26						
160 2320	22	20,5	36	M30 x 2	B	SMK20-22L-PK-GS-C6F	SMK20-22L-VK-GS-C6F		
		.81	1.42						
	28	25	41	M36 x 2	B	SMK20-28L-PK-GS-C6F	SMK20-28L-VK-GS-C6F		
		.98	1.61						
35	30	50	M45 x 2	B	SMK20-35L-PK-GS-C6F	SMK20-35L-VK-GS-C6F			
	1.18	1.97							
42	31	60	M52 x 2	B	SMK20-42L-PK-GS-C6F	SMK20-42L-VK-GS-C6F			
	1.22	2.36							
S	630 9137	6	14,5	17	M14 x 1,5	A	SMK20-06S-PK-C6F	SMK20-06S-VK-C6F	
			.57	.67					
		8	16,5	19	M16 x 1,5	A	SMK20-08S-PK-C6F	SMK20-08S-VK-C6F	
			.65	.75					
		10	16,5	22	M18 x 1,5	A	SMK20-10S-PK-C6F	SMK20-10S-VK-C6F	
			.65	.87					
	12	17,5	24	M20 x 1,5	A	SMK20-12S-PK-C6F	SMK20-12S-VK-C6F		
		.69	.94						
	14	19,5	27	M22 x 1,5	B	SMK20-14S-PK-GS-C6F	SMK20-14S-VK-GS-C6F		
		.77	1.06						
	400 5801	16	18	30	M24 x 1,5	B	SMK20-16S-PK-GS-C6F	SMK20-16S-VK-GS-C6F	
			.71	1.18					
20		24	36	M30 x 2	B	SMK20-20S-PK-GS-C6F	SMK20-20S-VK-GS-C6F		
		.94	1.42						
25	26	46	M36 x 2	B	SMK20-25S-PK-GS-C6F	SMK20-25S-VK-GS-C6F			
	1.02	1.81							
30	30	50	M42 x 2	B	SMK20-30S-PK-GS-C6F	SMK20-30S-VK-GS-C6F			
	1.18	1.97							
315 4568	38	34	60	M52 x 2	B	SMK20-38S-PK-GS-C6F	SMK20-38S-VK-GS-C6F		
		1.34	2.36						

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

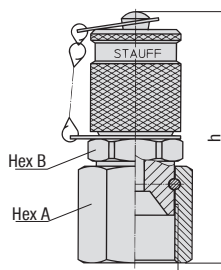
* Standard option for North America is FPM (Viton®).

Protection Cap

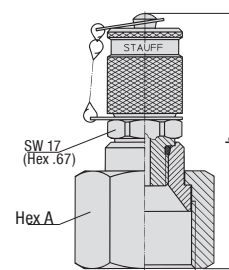
Standard material: Steel
 For ordering the hexagonal protection cap version please add "-SK" to the order code. (e.g. SMK20-08L-PK-SK-C6F)
 For ordering the plastic protection cap version please add "-KK" to the order code. (e.g. SMK20-08L-PK-KK-C6F)

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

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

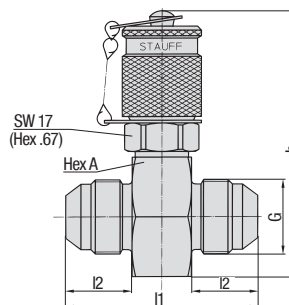
Protection Cap

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

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

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

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

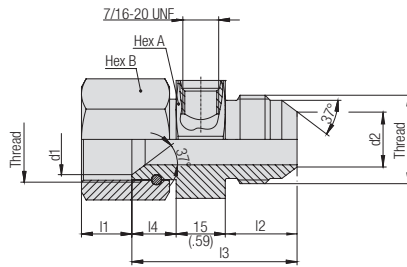
Protection Cap

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

Pipe Ø d inch	JIC Size	Dimensions (mm/in)				Thread	Order Codes NBR	FPM* (Standard Option-North America)
		l1	l2	h	Hex A			
1/4	-4	43	14	61	24	7/16-20 UNF	SMK20-JIC1/4-PG-C6F	SMK20-JIC1/4-VG-C6F
		1.69	.55	2.40	.94			
5/16	-5	43	14	61	24	1/2-20 UNF	SMK20-JIC5/16-PG-C6F	SMK20-JIC5/16-VG-C6F
		1.69	.55	2.40	.94			
3/8	-6	43	14	61	24	9/16-18 UNF	SMK20-JIC3/8-PG-C6F	SMK20-JIC3/8-VG-C6F
		1.69	.55	2.40	.94			
1/2	-8	48,5	16,5	67	30	3/4-16 UNF	SMK20-JIC1/2-PG-C6F	SMK20-JIC1/2-VG-C6F
		1.91	.65	2.64	1.18			
5/8	-10	53,5	19,5	67	30	7/8-14 UNF	SMK20-JIC5/8-PG-C6F	SMK20-JIC5/8-VG-C6F
		2.11	.77	2.64	1.18			
3/4	-12	59	22	73	36	1-1/16-12 UN	SMK20-JIC3/4-PG-C6F	SMK20-JIC3/4-VG-C6F
		2.32	.87	2.87	1.42			
1	-16	61	23	78	41	1-5/16-12 UN	SMK20-JIC1-PG-C6F	SMK20-JIC1-VG-C6F
		2.40	.91	3.07	1.61			
1-1/4	-20	65,5	24,5	83	46	1-5/8-12 UN	SMK20-JIC1-1/4-PG-C6F	SMK20-JIC1-1/4-VG-C6F
		2.58	.96	3.26	1.81			
1-1/2	-24	72	27,5	92	55	1-7/8-12 UN	SMK20-JIC1-1/2-PG-C6F	SMK20-JIC1-1/2-VG-C6F
		2.83	1.08	3.62	2.17			

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
	Ø d1	Ø d2	l1	l2	l3	l4	Hex A	Hex B	
7/16-20 UNF	7.49 .29	4.9 .19	9 .35	14 .55	17 1.46	8 .31	27 1.06	17 .67	SGV-7/16UNF-04-JIC1/4-F/M-C6F
9/16-18 UNF	11.05 .44	8.1 .32	10.5 .41	14 .55	17 1.48	8.5 .33	27 1.06	19 .75	SGV-7/16UNF-06-JIC3/8-F/M-C6F
3/4-16 UNF	15.9 .63	10.8 .43	10.5 .41	16.7 .66	17.2 1.72	12 .47	30 1.18	22 .87	SGV-7/16UNF-08-JIC1/2-F/M-C6F
1-1/16-12 UN	21.6 .85	16.9 .66	15.4 .61	21.9 .86	50.4 1.98	13.5 .53	36 1.42	32 1.26	SGV-7/16UNF-12-JIC3/4-F/M-C6F
1-5/16-12 UN	27.9 1.10	23.2 .91	17.3 .68	23.1 .91	53.1 2.09	15 .59	41 1.61	41 1.61	SGV-7/16UNF-16-JIC1-F/M-C6F

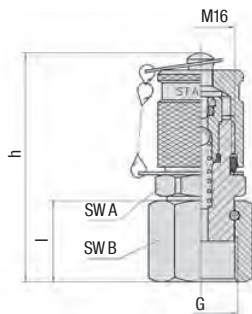
Metal Parts

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".

For further information please consult STAUFF.

B STAUFF
Test

Test Coupling with ORFS Connection SMK20 Type ORFS



Thread	Dimensions (mm/in)				Order Codes	
	h	l	Hex A	Hex B	NBR	FPM* (Standard Option-North America)
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 UN	54	19	19	21	SMK20-06-ORFS-P-C6F	SMK20-06-ORFS-V-C6F
	2.1	.75	.75	.80		
13/16-16 UN	54	19	22	24	SMK20-08-ORFS-P-C6F	SMK20-08-ORFS-V-C6F
	2.1	.75	.87	.87		

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".

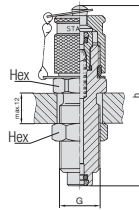
* Standard option for North America is FPM (Viton®).

Protection Cap

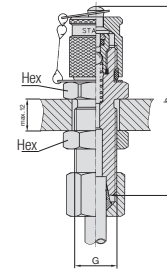
Standard material: Steel
 For ordering the hexagonal protection cap version please add "-SK" to the order code. (e.g. SMK20-04-ORFS-P-SK-C6F)
 For ordering the plastic protection cap version please add "-KK" to the order code. (e.g. SMK20-04-ORFS-P-KK-C6F)

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

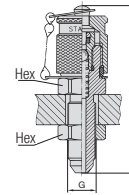
**Bulkhead
SSK20**



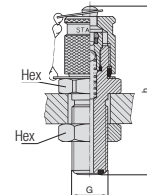
Version A



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

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

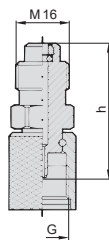
Protection Cap

Standard material: Steel
 For ordering the hexagonal protection cap version please add "-SK" to the order code. (e.g. SKK20-P-SK-C6F)
 For ordering the plastic protection cap version please add "-KK" to the order code. (e.g. SKK20-P-KK-C6F)

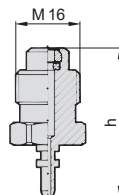
For further information on materials, sealings or protection caps, please see page B4.

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

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

**Adaptor
SAD20**


Version A



Version B



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

Threads

*1 Special thread: buttress thread S12,65 x1,5

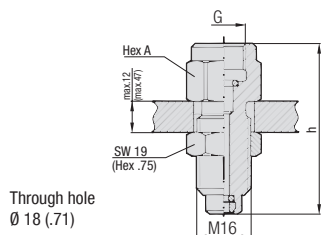
Metal Parts

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

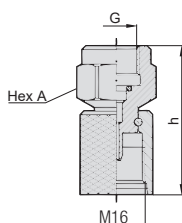
For ordering FPM sealings replace "P" with "V".
 For ordering EPDM sealings replace "P" with "E".

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

B STAUFF Test


Through hole
 Ø 18 (.71)

Gauge Adaptor SMA20



Direct Gauge Adaptor SMD20

Gauge Adaptor SMA20 Direct Gauge Adaptor SMD20


Thread	Dimensions (mm/in)			Order Codes	
	G	h	Hex A	NBR	FPM* (Standard Option-North America)
G1/4	54	19		SMA20-G1/4-P-OR-C6F	SMA20-G1/4-V-OR-C6F
	2.13		.75		
G1/2	64	27		SMA20-G1/2-P-OR-C6F	SMA20-G1/2-V-OR-C6F
	2.52		1.06		
1/4 NPT	54	19		SMA20-1/4NPT-P-C6F	SMA20-1/4NPT-V-C6F
	2.13		.75		
1/2 NPT	64	27		SMA20-1/2NPT-P-C6F	SMA20-1/2NPT-V-C6F
	2.52		1.06		
7/16-20 UNF	54	19		SMA20-7/16UNF-PC6F	SMA20-7/16UNF-V-C6F
	2.16		.75		
9/16-18 UNF	57	19		SMA20-9/16UNF-P-C6F	SMA20-9/16UNF-V-C6F
	2.24		.75		
G1/4	41	19		SMD20-G1/4-P-OR-C6F	SMD20-G1/4-V-OR-C6F
	1.61		.75		
G1/2	51	27		SMD20-G1/2-P-OR-C6F	SMD20-G1/2-V-OR-C6F
	2.01		1.06		
1/4 NPT	41	19		SMD20-1/4NPT-C6F	
	1.61		.75		
1/2 NPT	51	27		SMD20-1/2NPT-C6F	
	2.01		1.06		
7/16-20 UNF	41	19		SMD20-7/16UNF-C6F	
	1.61		.75		
9/16-18 UNF	43	19		SMD20-9/16UNF-C6F	
	1.69		.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 FPM sealings replace "P" with "V".
 For ordering EPDM sealings replace "P" with "E".

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

Snubber on request.

Port Connections and Sealing Details

<p>Type A</p>	<p>Type A - Threaded port according to factory standard Sealing: O-ring Type A</p> <table border="1"> <thead> <tr> <th>Thread</th> <th colspan="3">Dimensions (mm/in)</th> </tr> <tr> <th>G</th> <th>d1 +0,1</th> <th>t1 min.</th> <th>t2 min</th> </tr> </thead> <tbody> <tr> <td rowspan="2">M8 x 1</td> <td>9,5</td> <td>11</td> <td>15,5</td> </tr> <tr> <td>.37</td> <td>.43</td> <td>.61</td> </tr> <tr> <td rowspan="2">M10 x 1</td> <td>11,5</td> <td>12</td> <td>16,5</td> </tr> <tr> <td>.45</td> <td>.47</td> <td>.64</td> </tr> </tbody> </table>	Thread	Dimensions (mm/in)			G	d1 +0,1	t1 min.	t2 min	M8 x 1	9,5	11	15,5	.37	.43	.61	M10 x 1	11,5	12	16,5	.45	.47	.64																																																																																							
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	.45	.47	.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> <table border="1"> <thead> <tr> <th>Thread</th> <th colspan="4">Dimensions (mm/in)</th> </tr> <tr> <th>G</th> <th>d1 min.</th> <th>t1 min.</th> <th>t2 min.</th> <th>a max.</th> </tr> </thead> <tbody> <tr> <td rowspan="2">M10 x 1</td> <td>15</td> <td>8</td> <td>10</td> <td>1</td> </tr> <tr> <td>.59</td> <td>.31</td> <td>.39</td> <td>.04</td> </tr> <tr> <td rowspan="2">M12 x 1,5</td> <td>18</td> <td>12</td> <td>15</td> <td>1,5</td> </tr> <tr> <td>.71</td> <td>.47</td> <td>.59</td> <td>.06</td> </tr> <tr> <td rowspan="2">M14 x 1,5</td> <td>20</td> <td>12</td> <td>15</td> <td>1,5</td> </tr> <tr> <td>.79</td> <td>.47</td> <td>.59</td> <td>.06</td> </tr> <tr> <td rowspan="2">M16 x 1,5</td> <td>23</td> <td>12</td> <td>15</td> <td>1,5</td> </tr> <tr> <td>.91</td> <td>.47</td> <td>.59</td> <td>.06</td> </tr> <tr> <td rowspan="2">M18 x 1,5</td> <td>25</td> <td>12</td> <td>15</td> <td>2</td> </tr> <tr> <td>.98</td> <td>.47</td> <td>.59</td> <td>.08</td> </tr> <tr> <td rowspan="2">M20 x 1,5</td> <td>27</td> <td>14</td> <td>17</td> <td>2</td> </tr> <tr> <td>1.06</td> <td>.55</td> <td>.67</td> <td>.08</td> </tr> <tr> <td rowspan="2">M22 x 1,5</td> <td>28</td> <td>14</td> <td>17</td> <td>2,5</td> </tr> <tr> <td>1.10</td> <td>.55</td> <td>.67</td> <td>.10</td> </tr> <tr> <td rowspan="2">G1/8</td> <td>15</td> <td>8,5</td> <td>10,5</td> <td>1</td> </tr> <tr> <td>.59</td> <td>.33</td> <td>.41</td> <td>.04</td> </tr> <tr> <td rowspan="2">G1/4</td> <td>20</td> <td>12,5</td> <td>15,5</td> <td>1,5</td> </tr> <tr> <td>.79</td> <td>.49</td> <td>.61</td> <td>.06</td> </tr> <tr> <td rowspan="2">G3/8</td> <td>23</td> <td>12,5</td> <td>15,5</td> <td>2</td> </tr> <tr> <td>.91</td> <td>.49</td> <td>.61</td> <td>.08</td> </tr> <tr> <td rowspan="2">G1/2</td> <td>28</td> <td>14,5</td> <td>18,5</td> <td>2,5</td> </tr> <tr> <td>1.10</td> <td>.57</td> <td>.73</td> <td>.10</td> </tr> </tbody> </table>	Thread	Dimensions (mm/in)				G	d1 min.	t1 min.	t2 min.	a max.	M10 x 1	15	8	10	1	.59	.31	.39	.04	M12 x 1,5	18	12	15	1,5	.71	.47	.59	.06	M14 x 1,5	20	12	15	1,5	.79	.47	.59	.06	M16 x 1,5	23	12	15	1,5	.91	.47	.59	.06	M18 x 1,5	25	12	15	2	.98	.47	.59	.08	M20 x 1,5	27	14	17	2	1.06	.55	.67	.08	M22 x 1,5	28	14	17	2,5	1.10	.55	.67	.10	G1/8	15	8,5	10,5	1	.59	.33	.41	.04	G1/4	20	12,5	15,5	1,5	.79	.49	.61	.06	G3/8	23	12,5	15,5	2	.91	.49	.61	.08	G1/2	28	14,5	18,5	2,5	1.10	.57	.73	.10
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	1.06	.55	.67	.08																																																																																																										
M22 x 1,5	28	14	17	2,5																																																																																																										
	1.10	.55	.67	.10																																																																																																										
G1/8	15	8,5	10,5	1																																																																																																										
	.59	.33	.41	.04																																																																																																										
G1/4	20	12,5	15,5	1,5																																																																																																										
	.79	.49	.61	.06																																																																																																										
G3/8	23	12,5	15,5	2																																																																																																										
	.91	.49	.61	.08																																																																																																										
G1/2	28	14,5	18,5	2,5																																																																																																										
	1.10	.57	.73	.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> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td rowspan="2">Rp1/8</td> <td>5,5</td> <td>9,5</td> </tr> <tr> <td>.22</td> <td>.37</td> </tr> <tr> <td rowspan="2">Rp1/4</td> <td>8,5</td> <td>13,5</td> </tr> <tr> <td>.33</td> <td>.53</td> </tr> <tr> <td rowspan="2">Rp3/8</td> <td>8,5</td> <td>13,5</td> </tr> <tr> <td>.33</td> <td>.53</td> </tr> <tr> <td rowspan="2">Rp1/2</td> <td>10,5</td> <td>16,5</td> </tr> <tr> <td>.41</td> <td>.65</td> </tr> </tbody> </table>	Thread	Dimensions (mm/in)		G	t1 min.	t2 min.	Rp1/8	5,5	9,5	.22	.37	Rp1/4	8,5	13,5	.33	.53	Rp3/8	8,5	13,5	.33	.53	Rp1/2	10,5	16,5	.41	.65																																																																																			
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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 11,6 .27 .46
		1/4-18 NPT	10 16,4 .39 .65
		1/2-14 NPT	13,6 22,6 .54 .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°