

M16x2 – ball



Application:

Spradow test couplings are applied for the monitoring and control pressure as well as the ventilation. The advantages of this system are - among other - connection at system pressure level, the easy connection to measurement control and switching devices, the leakproof connection and the integrated vibration security of the metal cap.

Media:

Hydraulic oils and mineral based fluids.
(Please check compatibility of seal material.)

Materials:

Metal parts: Steel, Stainless steel upon request
Seals: NBR (-20 °C to +100 °C)
FKM (-20 °C to +200 °C)
EPDM (-40 °C to +150 °C)
Hose: Polyamide (-35 °C to +100 °C)

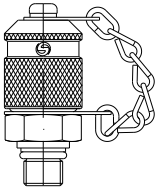
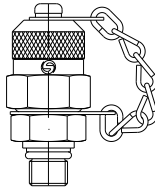
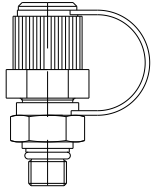
Surface:

Zinc nickel, transparent, CrVI-free.

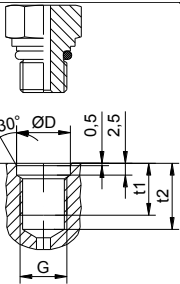
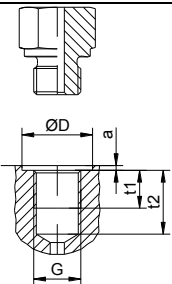
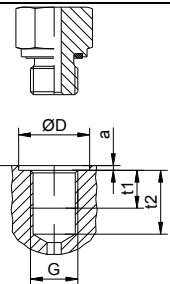
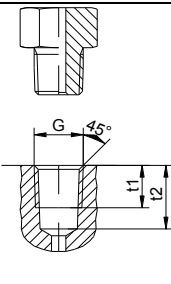
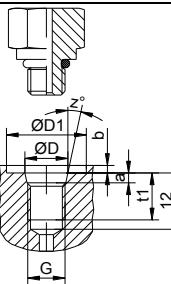
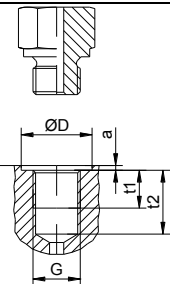
Pressure:

Maximum working pressure (PN) of the test couplings - 630 bar, at 3-fold security. For the union pieces please observe the instructions given by the corresponding producer.

design types of caps

type B (round)	type A (universal)	type A (universal) plastic
		
standard: incl. vibration security		(temperature range -20°C to +100°C)

port connection and seals

type 1	type 2	type 3	type 4	type 5	type 6
					
Design types of port connection and seals please see annex.					

test coupling series M16x2 – valve function by ball

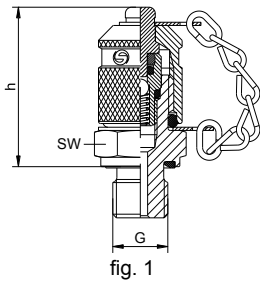


fig. 1

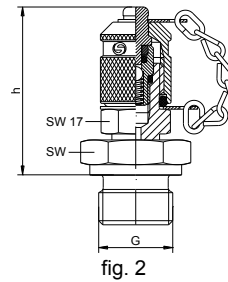


fig. 2

G	PN	SW	h	fig.	sealing	part number (NBR)	part number (FKM)
M8x1	250	17	37	1	o-ring type 1	1-906-20-21-600-CF	1-906-20-22-600-CF
M8x1		17	37	1	metallic sealing type 2	1-906-20-30-600-CF	1-906-20-32-600-CF
M10x1	630	17	37	1	o-ring type 1	1-906-22-21-600-CF	1-906-22-22-600-CF
M10x1	400	17	37	1	metallic sealing type 2	1-906-22-30-600-CF	1-906-22-32-600-CF
M10x1	400	17	37	1	soft sealing type 3	1-906-22-11-600-CF	1-906-22-12-600-CF
M10x1		17	38	1	metallic sealing type 6	1-906-22-40-600-CF	1-906-22-42-600-CF
M10x1,25		17	38	1	o-ring type 1	1-906-49-21-600-CF	1-906-49-22-600-CF
M10x1,25		17	37	1	soft sealing type 3	1-906-49-11-600-CF	1-906-49-12-600-CF
M12x1,5	630	17	37	1	metallic sealing type 2	1-906-23-30-600-CF	1-906-23-32-600-CF
M12x1,5	630	17	37	1	soft sealing type 3	1-906-23-11-600-CF	1-906-23-12-600-CF
M14x1,5	630	19	37	1	metallic sealing type 2	1-906-24-30-600-CF	1-906-24-32-600-CF
M14x1,5	630	19	37	1	soft sealing type 3	1-906-24-11-600-CF	1-906-24-12-600-CF
M14x1,5	630	19	38	1	o-ring type 5	1-906-24-61-600-CF	1-906-24-62-600-CF
M16x1,5	630	22	37	1	metallic sealing type 2	1-906-25-30-600-CF	1-906-25-32-600-CF
M16x1,5	630	22	37	1	soft sealing type 3	1-906-25-11-600-CF	1-906-25-12-600-CF
M18x1,5	24	39	1	1	metallic sealing type 2	1-906-26-30-600-CF	1-906-26-32-600-CF
M18x1,5	24	39	1	1	soft sealing type 3	1-906-26-11-600-CF	1-906-26-12-600-CF
M20x1,5	27	39	1	1	metallic sealing type 2	1-906-51-30-600-CF	1-906-51-32-600-CF
M20x1,5	27	39	1	1	soft sealing type 3	1-906-51-11-600-CF	1-906-51-12-600-CF
M22x1,5	27	39	1	1	metallic sealing type 2	1-906-27-30-600-CF	1-906-27-32-600-CF
M22x1,5	27	39	1	1	soft sealing type 3	1-906-27-11-600-CF	1-906-27-12-600-CF
M26x1,5	32	49	2	2	metallic sealing type 2	1-911-52-30-600-CF	1-911-52-32-600-CF
M27x2	36	49	2	2	metallic sealing type 2	1-911-53-30-600-CF	1-911-53-32-600-CF
M33x2	41	49	2	2	metallic sealing type 2	1-911-54-30-600-CF	1-911-54-32-600-CF
M42x2	50	50	2	2	metallic sealing type 2	1-911-55-30-600-CF	1-911-55-32-600-CF
M48x2	60	50	2	2	metallic sealing type 2	1-911-56-30-600-CF	1-911-56-32-600-CF
G 1/8	400	17	37	1	metallic sealing type 2	1-906-28-30-600-CF	1-906-28-32-600-CF
G 1/8	400	17	39	1	soft sealing type 3	1-906-28-11-600-CF	1-906-28-12-600-CF
G 1/4	630	19	37	1	metallic sealing type 2	1-906-29-30-600-CF	1-906-29-32-600-CF
G 1/4	630	19	37	1	soft sealing type 3	1-906-29-11-600-CF	1-906-29-12-600-CF
G 1/4		19	37	1	metallic sealing type 6	1-906-29-40-600-CF	1-906-29-42-600-CF
G 3/8	630	22	37	1	metallic sealing type 2	1-906-30-30-600-CF	1-906-30-32-600-CF
G 3/8	630	22	37	1	soft sealing type 3	1-906-30-11-600-CF	1-906-30-12-600-CF
G 1/2		27	48	1	metallic sealing type 2	1-906-31-30-600-CF	1-906-31-32-600-CF
G 1/2	630	27	39	1	soft sealing type 3	1-906-31-11-600-CF	1-906-31-12-600-CF
G 3/4		32	40	1	metallic sealing type 2	1-906-32-30-600-CF	1-906-32-32-600-CF
G 1		41	48	2	metallic sealing type 2	1-911-57-30-600-CF	1-911-57-32-600-CF
G 1 1/4		50	50	2	metallic sealing type 2	1-911-58-30-600-CF	1-911-58-32-600-CF
G 1 1/2		60	50	2	metallic sealing type 2	1-911-59-30-600-CF	1-911-59-32-600-CF
Rk 1/8*	400	17	35	1	thread type 4	1-906-33-00-600-CF	1-906-33-02-600-CF
Rk 1/4*	630	17	35	1	thread type 4	1-906-34-00-600-CF	1-906-34-02-600-CF
Rk 3/8*		19	35	1	thread type 4	1-906-35-00-600-CF	1-906-35-02-600-CF
5/16-24 UNF	400	17	38	1	o-ring type 5	1-906-38-30-600-CF	1-906-38-32-600-CF
7/16-20 UNF	630	17	38	1	o-ring type 5	1-906-39-30-600-CF	1-906-39-32-600-CF
1/2-20 UNF	630	17	38	1	o-ring type 5	1-906-61-30-600-CF	1-906-61-32-600-CF
9/16-18 UNF	630	19	38	1	o-ring type 5	1-906-40-30-600-CF	1-906-40-32-600-CF
3/4-16 UNF	630	27	40	1	o-ring type 5	1-906-41-30-600-CF	1-906-41-32-600-CF
1/8 NPT	400	17	36	1	thread type 4	1-906-43-00-600-CF	1-906-43-02-600-CF
1/4 NPT	630	17	35	1	thread type 4	1-906-44-00-600-CF	1-906-44-02-600-CF
3/8 NPT		19	36	1	thread type 4	1-906-45-00-600-CF	1-906-45-02-600-CF
1/2 NPT		24	48	1	thread type 4	1-906-46-00-600-CF	1-906-46-02-600-CF

For metal cap type A (universal) with vibration security, replace 600 by

590

590

For metal cap type B (round) **without vibration security**, replace 600 by

020

020

For metal cap type A (universal) **without vibration security**, replace 600 by

010

010

For yellow plastic cap type A (universal) **without vibration security**, replace 600 by

100

100

*acc. DIN3858

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

fitting with test coupling series M16x2 – valve function by ball

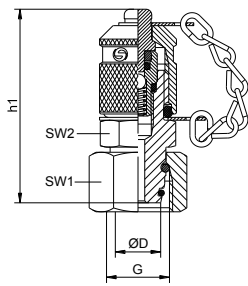


fig. 1

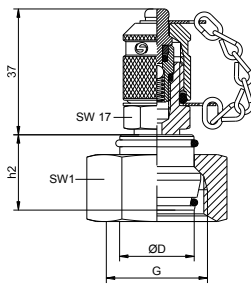


fig. 2

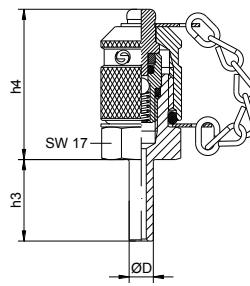


fig. 3

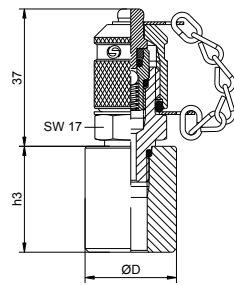


fig. 4

type DKO
test coupling with 24° taper adapter

typ BE
test coupling for compression ring fittings

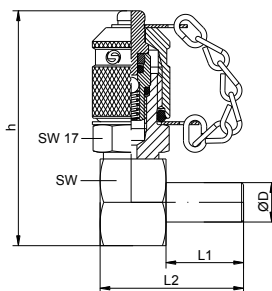
type	PN	tube ØD	h1	h2	h3	h4	SW1	SW2	G	type DKO part number	fig.	type BE part number	fig.
L	315	6	53	-	20	38	14	17	M12x1,5	1-908-00-20-600-CF	1	1-909-00-00-601-CF	3
		8	53	-	20	38	17	17	M14x1,5	1-908-02-20-600-CF	1	1-909-02-00-601-CF	3
		10	50	-	22	40	19	17	M16x1,5	1-908-04-20-600-CF	1	1-909-04-00-601-CF	3
		12	50	-	22	37	22	17	M18x1,5	1-908-06-20-600-CF	1	1-909-06-00-601-CF	3
	160	15	51	-	22	37	27	19	M22x1,5	1-908-09-20-600-CF	1	1-909-09-00-601-CF	3
		18	-	22	28	-	32	-	M26x1,5	1-908-11-00-600-CF	2	1-909-11-00-601-CF	4
		22	-	22	30	-	36	-	M30x2	1-908-13-00-600-CF	2	1-909-13-00-601-CF	4
		28	-	24	32	-	41	-	M36x2	1-908-15-00-600-CF	2	1-909-15-00-601-CF	4
S	630	35	-	27	42	-	50	-	M45x2	1-908-17-00-600-CF	2	1-909-17-00-601-CF	4
		42	-	28	45	-	60	-	M52x2	1-908-19-00-600-CF	2	1-909-19-00-601-CF	4
		6	54	-	20	38	17	17	M14x1,5	1-908-01-20-600-CF	1	1-909-00-00-601-CF	3
		8	51	-	20	38	19	17	M16x1,5	1-908-03-20-600-CF	1	1-909-02-00-601-CF	3
	400	10	51	-	22	40	22	17	M18x1,5	1-908-05-20-600-CF	1	1-909-04-00-601-CF	3
		12	51	-	22	37	24	17	M20x1,5	1-908-07-20-600-CF	1	1-909-06-00-601-CF	3
		14	53	-	22	37	27	19	M22x1,5	1-908-08-00-600-CF	1	1-909-08-00-601-CF	3
		16	-	20	28	37	30	-	M24x1,5	1-908-10-00-600-CF	2	1-909-10-00-601-CF	3
315	20	-	25	30	-	36	-	M30x2	1-908-12-00-600-CF	2	1-909-12-00-601-CF	4	
	25	-	27	36	-	46	-	M36x2	1-908-14-00-600-CF	2	1-909-14-00-601-CF	4	
	30	-	29	41	-	50	-	M42x2	1-908-16-00-600-CF	2	1-909-16-00-601-CF	4	
	38	-	32	48	-	60	-	M52x2	1-908-18-00-600-CF	2	1-909-18-00-601-CF	4	

For metal cap type A (universal) with vibration security
 For metal cap type B (round) **without vibration security**
 For metal cap type A (universal) **without vibration security**
 For yellow plastic cap type A (universal) **without vibration security**
 Design with sealings made of FKM

replace 600 by 590
 replace 600 by 020
 replace 600 by 010
 replace 600 by 100
 replace 20 by 22
 or replace 00 by 02

replace 601 by 591
 replace 601 by 021
 replace 601 by 011
 replace 601 by 101
 replace 00-601 by 02-601

90° fitting type BE with test coupling Series M16x2 – valve function by ball

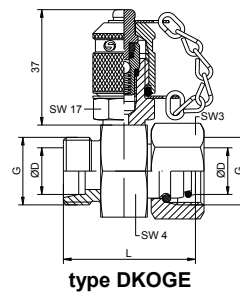
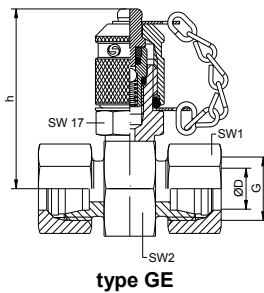


tube ØD	L1	L2	SW	h	part number (NBR)	part number (FKM)
8	20	37	22	59	1-980-03-60-080-CF	1-980-03-60-081-CF
10	20	37	22	59	1-980-05-60-120-CF	1-980-05-60-121-CF

For metal cap type A (universal) with vibration security replace 60 by 59
 For metal cap type B (round) **without vibration security** replace 60 by 02
 For metal cap type A (universal) **without vibration security** replace 60 by 01
 For yellow plastic cap type A (universal) **without vibration security** replace 60 by 10

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

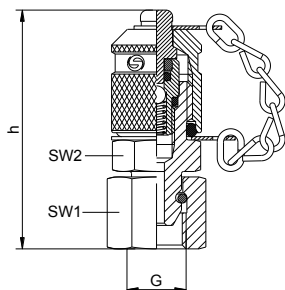
fitting with test coupling series M16x2 – valve function by ball



type	PN tube ØD	G	SW1	SW2	h	L	SW3	SW4	type GE part number	type DKOGE part number	
L	315	6	M12x1,5	14	22	48	43	14	24	1-910-00-00-600-CF	1-910-20-00-601-CF
		8	M14x1,5	17	24	49	43	17	24	1-910-02-00-600-CF	1-910-22-00-601-CF
		10	M16x1,5	19	24	49	45	19	24	1-910-04-00-600-CF	1-910-24-00-601-CF
		12	M18x1,5	22	27	50,5	41	22	27	1-910-06-00-600-CF	1-910-26-00-601-CF
		15	M22x1,5	27	30	52	43	27	30	1-910-09-00-600-CF	1-910-29-00-601-CF
		18	M26x1,5	32	32	53	54	32	32	1-910-11-00-600-CF	1-910-31-00-601-CF
		22	M30x2	36	36	55	57	36	36	1-910-13-00-600-CF	1-910-33-00-601-CF
160	28	M36x2	41	41	57,5		upon request		1-910-15-00-600-CF	1-910-35-00-601-CF	
	35	M45x2	50	46	60		upon request		1-910-17-00-600-CF	1-910-37-00-601-CF	
	42	M52x2	60	55	64,5		upon request		1-910-19-00-600-CF	1-910-39-00-601-CF	
S	630	6	M14x1,5	17	24	49	46	17	24	1-910-01-00-600-CF	1-910-21-00-601-CF
		8	M16x1,5	19	24	49	47	19	24	1-910-03-00-600-CF	1-910-23-00-601-CF
		10	M18x1,5	22	24	49	48	22	24	1-910-05-00-600-CF	1-910-25-00-601-CF
		12	M20x1,5	24	24	49	47	24	24	1-910-07-00-600-CF	1-910-27-00-601-CF
	400	14	M22x1,5	27	27	50,5	50	27	27	1-910-08-00-600-CF	1-910-28-00-601-CF
		16	M24x1,5	30	30	52	55	30	30	1-910-10-00-600-CF	1-910-30-00-601-CF
		20	M30x2	36	32	53	62	36	36	1-910-12-00-600-CF	1-910-32-00-601-CF
315	25	M36x2	46	41	57,5	62	46	41	1-910-14-00-600-CF	1-910-34-00-601-CF	
	30	M42x2	50	46	60		upon request		1-910-16-00-600-CF	1-910-36-00-601-CF	
	38	M52x2	60	55	64,5		upon request		1-910-18-00-600-CF	1-910-38-00-601-CF	

For metal cap type A (universal) with vibration security	replace 600 by 590	replace 601 by 591
For metal cap type B (round) without vibration security	replace 600 by 020	replace 601 by 021
For metal cap type A (universal) without vibration security	replace 600 by 010	replace 601 by 011
For yellow plastic cap type A (universal) without vibration security	replace 600 by 100	replace 601 by 101
Design with sealings made of FKM	replace 00-600 by 02-600	replace 00-601 by 02-601

test coupling with 60° sealing cone (DKR) series M16x2 – valve function by ball



G	h	SW1	SW2	part number (NBR)	part number (FKM)
G 1/4	54	19	17	1-908-76-00-600-CF	1-908-76-02-600-CF

For metal cap type A (universal) with vibration security	replace 600 by 590	590	590
For metal cap type B (round) without vibration security	replace 600 by 020	020	020
For metal cap type A (universal) without vibration security	replace 600 by 010	010	010
For yellow plastic cap type A (universal) without vibration security	replace 600 by 100	100	100

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

M16x2 - ball

bulkhead coupling series M16x2 – valve function by ball

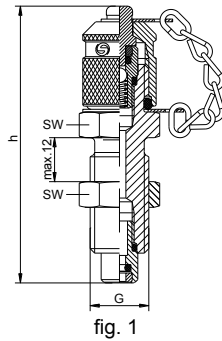


fig. 1

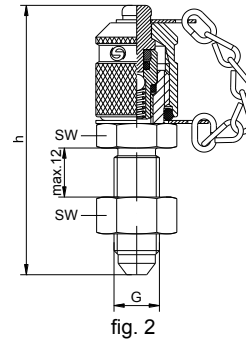
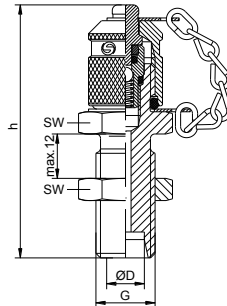


fig. 2

G	SW	h	fig.	part number (NBR)	part number (FKM)
M16x2	19	72	1	1-980-48-60-040-CF	1-980-48-60-041-CF
7/16-20 UNF	17	67	2	1-980-39-60-090-CF	1-980-39-60-091-CF
For metal cap type A (universal) with vibration security replace 60 by				59	59
For metal cap type B (round) without vibration security replace 60 by				02	02
For metal cap type A (universal) without vibration security replace 60 by				01	01
For yellow plastic cap type A (universal) without vibration security replace 60 by				10	10

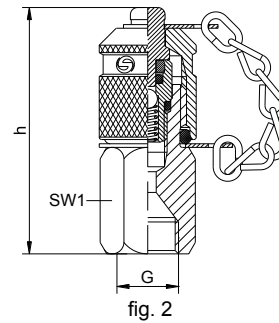
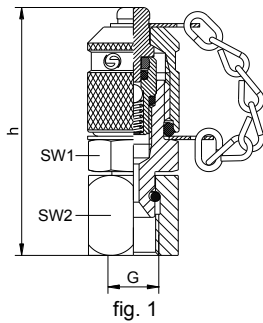
bulkhead coupling series M16x2 – valve function by ball



type	PN	tube ØD	G	SW1	SW2	h	part number (NBR)	part number (FKM)
L	315	6	M12x1,5	17	17	69	1-922-00-00-601-CF	1-922-00-02-601-CF
		8	M14x1,5	19	19	72	1-922-02-00-601-CF	1-922-02-02-601-CF
		10	M16x1,5	22	22	68	1-922-04-00-601-CF	1-922-04-02-601-CF
		12	M18x1,5	22	24	72	1-922-06-00-601-CF	1-922-06-02-601-CF
S	630	6	M14x1,5	19	19	71	1-922-01-00-601-CF	1-922-01-02-601-CF
		8	M16x1,5	22	22	72	1-922-03-00-601-CF	1-922-03-02-601-CF
		10	M18x1,5	24	24	72	1-922-05-00-601-CF	1-922-05-02-601-CF
		12	M20x1,5	upon request			1-922-07-00-601-CF	1-922-07-02-601-CF
For metal cap type A (universal) with vibration security replace 601 by							591	591
For metal cap type B (round) without vibration security replace 601 by							021	021
For metal cap type A (universal) without vibration security replace 601 by							011	011
For yellow plastic cap type A (universal) without vibration security replace 601 by							101	101

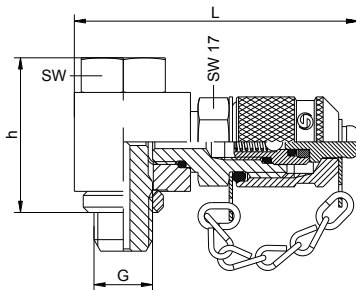
Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

test coupling with 37° JIC female thread (DKJ) series M16x2 – valve function by ball



G	h	SW1	SW2	fig.	part number (NBR)	part number (FKM)
7/16 UNF	54	17	17	1	1-920-39-20-600-CF	1-920-39-22-600-CF
1/2 UNF	51	17	-	2	1-920-61-00-600-CF	1-920-61-02-600-CF
9/16 UNF	57	17	19	1	1-920-40-20-600-CF	1-920-40-22-600-CF
3/4 UNF	56	22	-	2	1-920-41-00-600-CF	1-920-41-02-600-CF
7/8 UNF	61	27	-	2	1-920-42-00-600-CF	1-920-42-02-600-CF
For metal cap type A (universal) with vibration security replace 600 by					590	590
For metal cap type B (round) without vibration security replace 600 by					020	020
For metal cap type A (universal) without vibration security replace 600 by					010	010
For yellow plastic cap type A (universal) without vibration security replace 600 by					100	100

90° swivel adaptor series M16x2 – valve function by ball



G	h	L	SW	part number (NBR)	part number (FKM)
G1/4	34	64	19	1-926-29-05-600-CF	upon request

For metal cap type A (universal) with vibration security replace 600 by				590	590
For metal cap type B (round) without vibration security replace 600 by				020	020
For metal cap type A (universal) without vibration security replace 600 by				010	010
For yellow plastic cap type A (universal) without vibration security replace 600 by				100	100

M16x2 - piston



Application:

Spradow test couplings are applied for monitoring and control pressure as well as the ventilation. The advantages of this system are - among other - connection at system pressure level, the easy connection to measurement control and switching devices, the leakproof connection and the integrated vibration security of the metal cap.

Media:

Hydraulic oils and mineral based fluids.
(Please check compatibility of seal material.)

Materials:

Metal parts: Steel, Stainless steel upon request
Seals: NBR (-20 °C to +100 °C)
FKM (-20 °C to +200 °C)
EPDM (-40°C to +150 °C)
Hose: Polyamide (-35 °C to +100 °C)

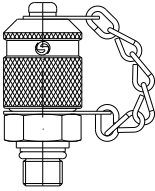
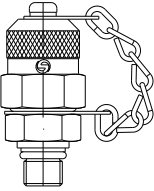
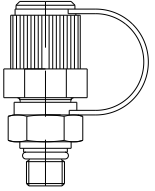
Surface:

Zinc nickel, transparent, CrVI-free.

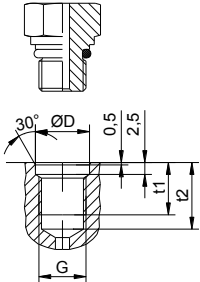
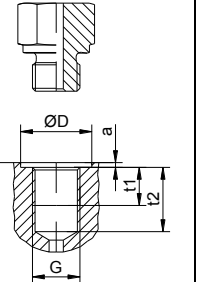
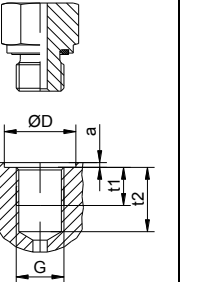
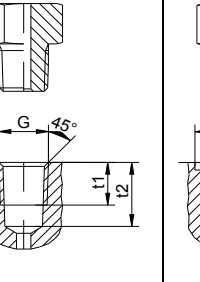
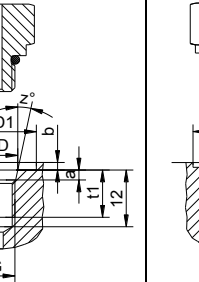
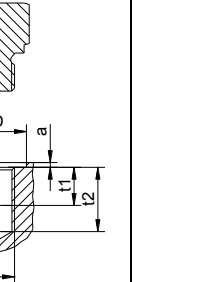
Pressure:

Maximum working pressure (PN) of the test couplings - 630 bar, at 4-fold security. For the union pieces please observe the instructions given by the corresponding producer.

design types of caps

type B (round)	type A (universal)	type A (universal) plastic
		
standard: incl. vibration security		(temperature range -20°C to +100°C)

port connection and seals

type 1	type 2	type 3	type 4	type 5	type 6
					
Design types of port connection and seals please see annex.					

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

test coupling series M16x2 – valve function by piston

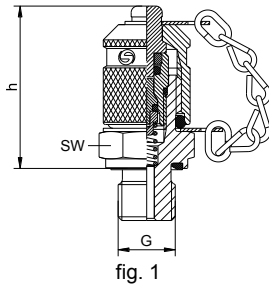


fig. 1

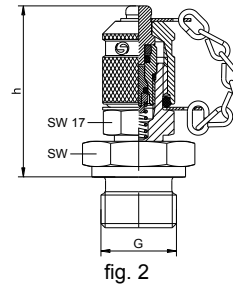


fig. 2

G	PN	SW	h	fig.	sealing	part number (NBR)	part number (FKM)
M8x1	250	17	38	1	o-ring type 1	1-Z06-20-21-600-CF	1-Z06-20-22-600-CF
M8x1		17	38	1	metal sealing type 2	1-Z06-20-30-600-CF	1-Z06-20-32-600-CF
M10x1	630	17	38	1	o-ring type 1	1-Z06-22-21-600-CF	1-Z06-22-22-600-CF
M10x1	400	17	38	1	metal sealing type 2	1-Z06-22-30-600-CF	1-Z06-22-32-600-CF
M10x1	400	17	39	1	soft sealing type 3	1-Z06-22-11-600-CF	1-Z06-22-12-600-CF
M10x1		17	38	1	metal sealing type 6	1-Z06-22-40-600-CF	1-Z06-22-42-600-CF
M10x1,25		17	38	1	o-ring type 1	1-Z06-49-21-600-CF	1-Z06-49-22-600-CF
M10x1,25		17	38	1	soft sealing type 3	1-Z06-49-11-600-CF	1-Z06-49-12-600-CF
M12x1,5	630	17	38	1	metal sealing type 2	1-Z06-23-30-600-CF	1-Z06-23-32-600-CF
M12x1,5	630	17	39	1	soft sealing type 3	1-Z06-23-11-600-CF	1-Z06-23-12-600-CF
M14x1,5	630	19	37	1	metal sealing type 2	1-Z06-24-30-600-CF	1-Z06-24-32-600-CF
M14x1,5	630	19	37	1	soft sealing type 3	1-Z06-24-11-600-CF	1-Z06-24-12-600-CF
M14x1,5	630	19	38	1	o-ring type 5	1-Z06-24-61-600-CF	1-Z06-24-62-600-CF
M16x1,5	630	22	37	1	metal sealing type 2	1-Z06-25-30-600-CF	1-Z06-25-32-600-CF
M16x1,5	630	22	37	1	soft sealing type 3	1-Z06-25-11-600-CF	1-Z06-25-12-600-CF
M18x1,5		24	39	1	metal sealing type 2	1-Z06-26-30-600-CF	1-Z06-26-32-600-CF
M18x1,5		24	39	1	soft sealing type 3	1-Z06-26-11-600-CF	1-Z06-26-12-600-CF
M20x1,5		27	39	1	metal sealing type 2	1-Z06-51-30-600-CF	1-Z06-51-32-600-CF
M20x1,5		27	39	1	soft sealing type 3	1-Z06-51-11-600-CF	1-Z06-51-12-600-CF
M22x1,5		27	39	1	metal sealing type 2	1-Z06-27-30-600-CF	1-Z06-27-32-600-CF
M22x1,5		27	39	1	soft sealing type 3	1-Z06-27-11-600-CF	1-Z06-27-12-600-CF
M26x1,5		32	49	2	metal sealing type 2	1-Z11-52-30-600-CF	1-Z11-52-32-600-CF
M27x2		36	49	2	metal sealing type 2	1-Z11-53-30-600-CF	1-Z11-53-32-600-CF
M33x2		41	49	2	metal sealing type 2	1-Z11-54-30-600-CF	1-Z11-54-32-600-CF
M42x2		50	50	2	metal sealing type 2	1-Z11-55-30-600-CF	1-Z11-55-32-600-CF
M48x2		60	50	2	metal sealing type 2	1-Z11-56-30-600-CF	1-Z11-56-32-600-CF
G 1/8	400	17	38	1	metal sealing type 2	1-Z06-28-30-600-CF	1-Z06-28-32-600-CF
G 1/8	400	17	39	1	soft sealing type 3	1-Z06-28-11-600-CF	1-Z06-28-12-600-CF
G 1/4	630	19	37	1	metal sealing type 2	1-Z06-29-30-600-CF	1-Z06-29-32-600-CF
G 1/4	630	19	37	1	soft sealing type 3	1-Z06-29-11-600-CF	1-Z06-29-12-600-CF
G 1/4		19	37	1	metal sealing type 6	1-Z06-29-40-600-CF	1-Z06-29-42-600-CF
G 3/8	630	22	37	1	metal sealing type 2	1-Z06-30-30-600-CF	1-Z06-30-32-600-CF
G 3/8	630	22	37	1	soft sealing type 3	1-Z06-30-11-600-CF	1-Z06-30-12-600-CF
G 1/2		27	39	1	metal sealing type 2	1-Z06-31-30-600-CF	1-Z06-31-32-600-CF
G 1/2	630	27	39	1	soft sealing type 3	1-Z06-31-11-600-CF	1-Z06-31-12-600-CF
G 3/4		32	40	1	metal sealing type 2	1-Z06-32-30-600-CF	1-Z06-32-32-600-CF
G 1		41	48	2	metal sealing type 2	1-Z11-57-30-600-CF	1-Z11-57-32-600-CF
G 1 1/4		50	50	2	metal sealing type 2	1-Z11-58-30-600-CF	1-Z11-58-32-600-CF
G 1 1/2		60	50	2	metal sealing type 2	1-Z11-59-30-600-CF	1-Z11-59-32-600-CF
Rk 1/8*	400	17	36	1	thread type 4	1-Z06-33-00-600-CF	1-Z06-33-02-600-CF
Rk 1/4*	630	17	35	1	thread type 4	1-Z06-34-00-600-CF	1-Z06-34-02-600-CF
Rk 3/8*		19	35	1	thread type 4	1-Z06-35-00-600-CF	1-Z06-35-02-600-CF
5/16-24 UNF	400	17	38	1	o-ring type 5	1-Z06-38-30-600-CF	1-Z06-38-32-600-CF
7/16-20 UNF	630	17	38	1	o-ring type 5	1-Z06-39-30-600-CF	1-Z06-39-32-600-CF
1/2-20 UNF	630	17	38	1	o-ring type 5	1-Z06-61-30-600-CF	1-Z06-61-32-600-CF
9/16-18 UNF	630	19	38	1	o-ring type 5	1-Z06-40-30-600-CF	1-Z06-40-32-600-CF
3/4-16 UNF	630	27	40	1	o-ring type 5	1-Z06-41-30-600-CF	1-Z06-41-32-600-CF
1/8 NPT	400	17	36	1	thread type 4	1-Z06-43-00-600-CF	1-Z06-43-02-600-CF
1/4 NPT	630	17	35	1	thread type 4	1-Z06-44-00-600-CF	1-Z06-44-02-600-CF
3/8 NPT		19	36	1	thread type 4	1-Z06-45-00-600-CF	1-Z06-45-02-600-CF
1/2 NPT		22	37	1	thread type 4	1-Z06-46-00-600-CF	1-Z06-46-02-600-CF

For metal cap type A (universal) with vibration security replace 600 by 590

590

590

 For metal cap type B (round) **without vibration security** replace 600 by 020

020

020

 For metal cap type A (universal) **without vibration security** replace 600 by 010

010

010

 For yellow plastic cap type A (universal) **without vibration security** replace 600 by 100

100

100

*acc. DIN 3858

M16x2 - piston

fitting with test coupling series M16x2 – valve function by piston

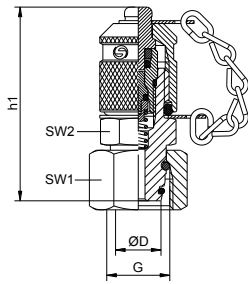


fig. 1

type DKO

test coupling with 24° taper adapter

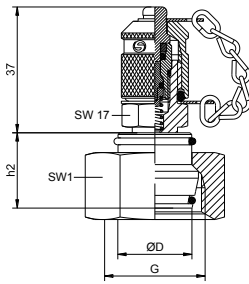


fig. 2

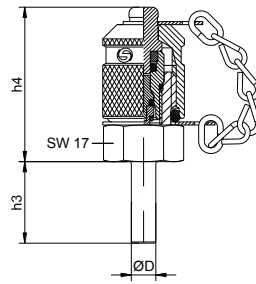


fig. 3

type BE

test coupling for compression ring fittings

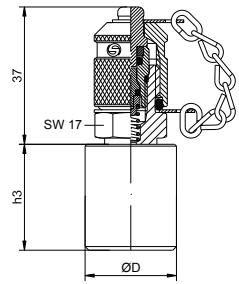


fig. 4

type	PN	tube ØD	h1	h2	h3	h4	SW1	SW2	G	type DKO part number	fig.	type BE part number	fig.
L	315	6	53	-	20	38	14	17	M12x1,5	1-Z08-00-10-600-CF	1	1-Z09-00-00-601-CF	3
		8	53	-	20	38	17	17	M14x1,5	1-Z08-02-10-600-CF	1	1-Z09-02-00-601-CF	3
		10	50	-	22	40	19	17	M16x1,5	1-Z08-04-10-600-CF	1	1-Z09-04-00-601-CF	3
		12	50	-	22	37	22	17	M18x1,5	1-Z08-06-10-600-CF	1	1-Z09-06-00-601-CF	3
		15	51	-	22	37	27	19	M22x1,5	1-Z08-09-00-600-CF	1	1-Z09-09-00-601-CF	3
	160	18	-	22	28	-	32	-	M26x1,5	1-Z08-11-00-600-CF	2	1-Z09-11-00-601-CF	4
		22	-	22	30	-	36	-	M30x2	1-Z08-13-00-600-CF	2	1-Z09-13-00-601-CF	4
		28	-	24	32	-	41	-	M36x2	1-Z08-15-00-600-CF	2	1-Z09-15-00-601-CF	4
		35	-	27	42	-	50	-	M45x2	1-Z08-17-00-600-CF	2	1-Z09-17-00-601-CF	4
		42	-	28	45	-	60	-	M52x2	1-Z08-19-00-600-CF	2	1-Z09-19-00-601-CF	4
S	630	6	54	-	20	38	17	17	M14x1,5	1-Z08-01-10-600-CF	1	1-Z09-00-00-601-CF	3
		8	51	-	20	38	19	17	M16x1,5	1-Z08-03-10-600-CF	1	1-Z09-02-00-601-CF	3
		10	51	-	22	40	22	17	M18x1,5	1-Z08-05-10-600-CF	1	1-Z09-04-00-601-CF	3
		12	51	-	22	37	24	17	M20x1,5	1-Z08-07-10-600-CF	1	1-Z09-06-00-601-CF	3
		14	-	24	22	37	27	-	M22x1,5	1-Z08-08-00-600-CF	1	1-Z09-08-00-601-CF	3
	400	16	-	20	28	37	30	-	M24x1,5	1-Z08-10-00-600-CF	2	1-Z09-10-00-601-CF	3
		20	-	25	30	-	36	-	M30x2	1-Z08-12-00-600-CF	2	1-Z09-12-00-601-CF	4
		25	-	27	36	-	46	-	M36x2	1-Z08-14-00-600-CF	2	1-Z09-14-00-601-CF	4
		30	-	29	41	-	50	-	M42x2	1-Z08-16-00-600-CF	2	1-Z09-16-00-601-CF	4
		315	38	-	32	48	-	60	-	M52x2	1-Z08-18-00-600-CF	2	1-Z09-18-00-601-CF

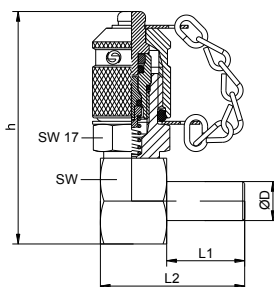
For metal cap type A (universal) with vibration security
 For metal cap type B (round) **without vibration security**
 For metal cap type A (universal) **without vibration security**
 For yellow plastic cap type A (universal) **without vibration security**

Design with sealings made of FKM

replace 600 by 590
 replace 600 by 020
 replace 600 by 010
 replace 600 by 100
 replace 10 by 12
 or replace 00 by 02

replace 601 by 591
 replace 601 by 021
 replace 601 by 011
 replace 601 by 101
 replace 00-601 by 02-601

90° fitting type BE with test coupling series M16x2 – valve function by piston



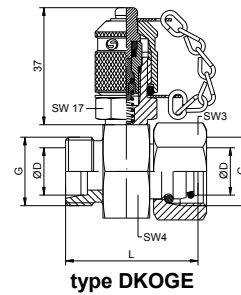
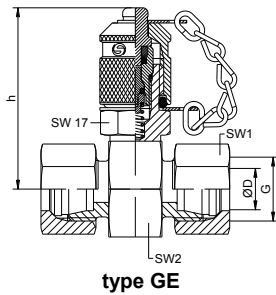
tube ØD	L1	L2	SW	h	part number (NBR)	part number (FKM)
8	20	37	22	59	1-Z80-03-60-080-CF	1-Z80-03-60-081-CF
10	20	37	22	59	1-Z80-05-60-120-CF	1-Z80-05-60-121-CF

For metal cap type A (universal) with vibration security replace 60 by 59
 For metal cap type B (round) **without vibration security** replace 60 by 02
 For metal cap type A (universal) **without vibration security** replace 60 by 01
 For yellow plastic cap type A (universal) **without vibration security** replace 60 by 10

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

M16x2 - piston

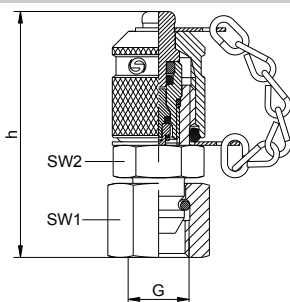
fitting with test coupling series M16x2 – valve function by piston



type	PN	tube ØD	G	SW1	SW2	h	L	SW3	SW4	type GE part number	type DKOGE part number
L	315	6	M12x1,5	14	22	48	43	14	24	1-Z10-00-00-600-CF	1-Z10-20-00-601-CF
		8	M14x1,5	17	24	49	43	17	24	1-Z10-02-00-600-CF	1-Z10-22-00-601-CF
		10	M16x1,5	19	24	49	45	19	24	1-Z10-04-00-600-CF	1-Z10-24-00-601-CF
		12	M18x1,5	22	27	50,5	41	22	27	1-Z10-06-00-600-CF	1-Z10-26-00-601-CF
	160	15	M22x1,5	27	30	52	43	27	30	1-Z10-09-00-600-CF	1-Z10-29-00-601-CF
		18	M26x1,5	32	32	53	54	32	32	1-Z10-11-00-600-CF	1-Z10-31-00-601-CF
		22	M30x2	36	36	55	57	36	36	1-Z10-13-00-600-CF	1-Z10-33-00-601-CF
		28	M36x2	41	41	57,5		upon request		1-Z10-15-00-600-CF	1-Z10-35-00-601-CF
S	630	35	M45x2	50	46	60		upon request		1-Z10-17-00-600-CF	1-Z10-37-00-601-CF
		42	M52x2	60	55	64,5		upon request		1-Z10-19-00-600-CF	1-Z10-39-00-601-CF
		6	M14x1,5	17	24	49	46	17	24	1-Z10-01-00-600-CF	1-Z10-21-00-601-CF
		8	M16x1,5	19	24	49	47	19	24	1-Z10-03-00-600-CF	1-Z10-23-00-601-CF
	400	10	M18x1,5	22	24	49	48	22	24	1-Z10-05-00-600-CF	1-Z10-25-00-601-CF
		12	M20x1,5	24	24	49	47	24	24	1-Z10-07-00-600-CF	1-Z10-27-00-601-CF
		14	M22x1,5	27	27	50,5	50	27	27	1-Z10-08-00-600-CF	1-Z10-28-00-601-CF
		16	M24x1,5	30	30	52	55	30	30	1-Z10-10-00-600-CF	1-Z10-30-00-601-CF
	315	20	M30x2	36	32	53	62	36	36	1-Z10-12-00-600-CF	1-Z10-32-00-601-CF
		25	M36x2	46	41	57,5	62	46	41	1-Z10-14-00-600-CF	1-Z10-34-00-601-CF
	30	M42x2	50	46	60		upon request		1-Z10-16-00-600-CF	1-Z10-36-00-601-CF	
	38	M52x2	60	55	64,5		upon request		1-Z10-18-00-600-CF	1-Z10-38-00-601-CF	

For metal cap type A (universal) with vibration security	replace 600 by 590	replace 601 by 591
For metal cap type B (round) without vibration security	replace 600 by 020	replace 601 by 021
For metal cap type A (universal) without vibration security	replace 600 by 010	replace 601 by 011
For yellow plastic cap type A (universal) without vibration security	replace 600 by 100	replace 601 by 101
Design with sealings made of FKM	replace 00-600 by 02-600	replace 00-601 by 02-601

test coupling with 60° sealing cone (DKR) series M16x2 – valve function by piston



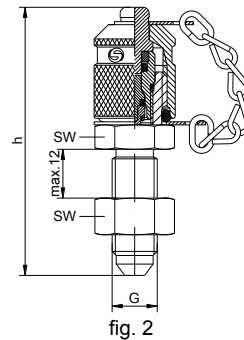
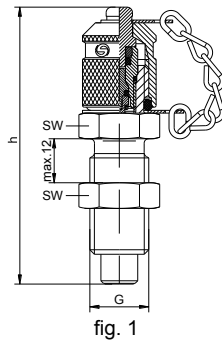
G	h	SW1	SW2	part number (NBR)	part number (FKM)
G 1/4	54	19	17	1-Z08-76-00-600-CF	1-Z08-76-02-600-CF

For metal cap type A (universal) with vibration security	replace 600 by 590	590	590
For metal cap type B (round) without vibration security	replace 600 by 020	020	020
For metal cap type A (universal) without vibration security	replace 600 by 010	010	010
For yellow plastic cap type A (universal) without vibration security	replace 600 by 100	100	100

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

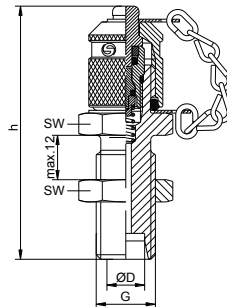
M16x2 - piston

bulkhead coupling series M16x2 – valve function by piston



G	SW	h	fig.	part number (NBR)	part number (FKM)
M16x2	19	72	1	1-Z80-48-60-040-CF	1-Z80-48-60-041-CF
7/16-20 UNF	17	68	2	upon request	upon request
For metal cap type A (universal) with vibration security replace 60 by				59	59
For metal cap type B (round) without vibration security replace 60 by				02	02
For metal cap type A (universal) without vibration security replace 60 by				01	01
For yellow plastic cap type A (universal) without vibration security replace 60 by				10	10

bulkhead coupling series M16x2 – valve function by piston



type	PN	tube ØD	G	SW1	SW2	h	part number (NBR)	part number (FKM)
L	315	6	M12x1,5	17	17	69	1-Z22-00-00-601-CF	1-Z22-00-02-601-CF
		8	M14x1,5	19	19	72	1-Z22-02-00-601-CF	1-Z22-02-02-601-CF
		10	M16x1,5	22	22	68	1-Z22-04-00-601-CF	1-Z22-04-02-601-CF
		12	M18x1,5	22	24	72	1-Z22-06-00-601-CF	1-Z22-06-02-601-CF
S	630	6	M14x1,5	19	19	71	1-Z22-01-00-601-CF	1-Z22-01-02-601-CF
		8	M16x1,5	22	22	72	1-Z22-03-00-601-CF	1-Z22-03-02-601-CF
		10	M18x1,5	24	24	72	1-Z22-05-00-601-CF	1-Z22-05-02-601-CF
		12	M20x1,5	upon request			1-Z22-07-00-601-CF	1-Z22-07-02-601-CF
For metal cap type A (universal) with vibration security replace 601 by							591	591
For metal cap type B (round) without vibration security replace 601 by							021	021
For metal cap type A (universal) without vibration security replace 601 by							011	011
For yellow plastic cap type A (universal) without vibration security replace 601 by							101	101

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

M16x2 - piston

test coupling with 37° JIC female thread (DKJ)
series M16x2 – valve function by piston

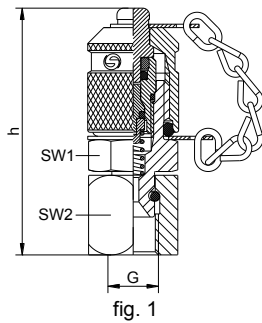


fig. 1

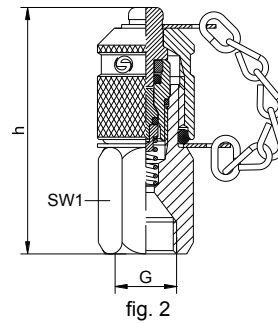
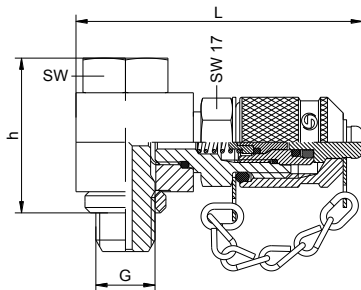


fig. 2

G	h	SW1	SW2	fig.	part number (NBR)	part number (FKM)
7/16 UNF	54	17	17	1	1-Z20-39-20-600-CF	1-Z20-39-22-600-CF
1/2 UNF	51	17	-	2	1-Z20-61-00-600-CF	1-Z20-61-02-600-CF
9/16 UNF	57	17	19	1	1-Z20-40-20-600-CF	1-Z20-40-22-600-CF
3/4 UNF	56	22	-	2	1-Z20-41-00-600-CF	1-Z20-41-02-600-CF
7/8 UNF	61	27	-	2	1-Z20-42-00-600-CF	1-Z20-42-02-600-CF
For metal cap type A (universal) with vibration security replace 600 by					590	590
For metal cap type B (round) without vibration security replace 600 by					020	020
For metal cap type A (universal) without vibration security replace 600 by					010	010
For yellow plastic cap type A (universal) without vibration security replace 600 by					100	100

90° swivel adaptor series M16x2 – valve function by piston



G	h	L	SW	part number (NBR)	part number (FKM)
G1/4	34	64	17	1-Z26-29-05-600-CF	upon request

For metal cap type A (universal) with vibration security replace 600 by				590	590
For metal cap type B (round) without vibration security replace 600 by				020	020
For metal cap type A (universal) without vibration security replace 600 by				010	010
For yellow plastic cap type A (universal) without vibration security replace 600 by				100	100

***Media:**

These spradow test couplings are designed for nitrogen and other inert gases.

Application:

Spradow nitrogen test couplings are applied for the monitoring and control pressure as well as the ventilation. The advantages of this system are – among other – connection at system pressure level, the easy connection to measurement control and switching devices, the leakproof connection and the integrated vibration security of the metal cap.

Materials:

Metal parts: Steel, Stainless steel upon request
Seals: material 1 (-20 °C to +100 °C) - standard
material 2 (-47 °C to +100 °C)
Hose: Polyamide (-35 °C to +100 °C)

Surface:

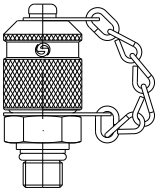
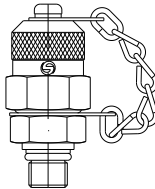
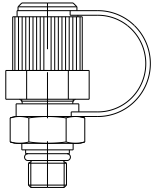
CrVI-free.

Pressure:

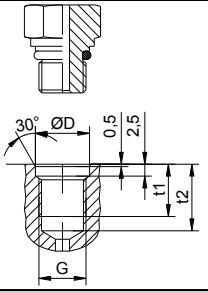
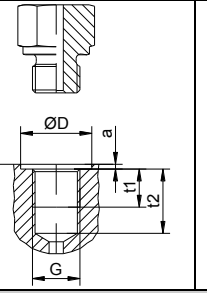
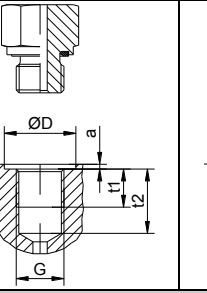
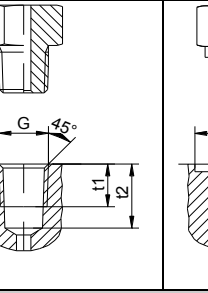
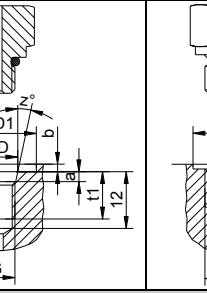
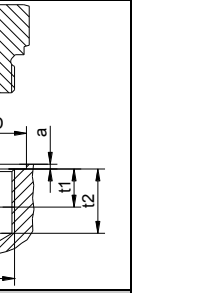
Maximum working pressure (PN) of the test couplings - 630 bar at 4-fold security. For the union pieces please observe the instructions given by the corresponding producer.



design types of caps

type B (round)	type A (universal)	type A (universal) plastic
		
standard: incl. vibration security		(temperature range -20°C to +100°C)

port connection and seals

type 1	type 2	type 3	type 4	type 5	type 6
					
Design types of port connection and seals please see annex.					

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

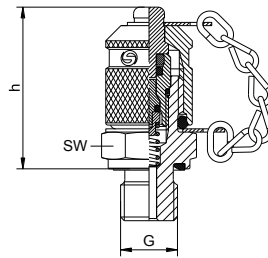
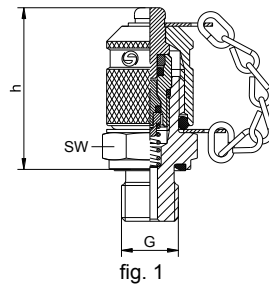


fig. 1

G	PN	SW	h	fig.	sealing	part number (NBR)
M8x1	250	17	38	1	o-ring type 1	1-G06-20-21-600-CF
M10x1	630	17	38	1	o-ring type 1	1-G06-22-21-600-CF
M10x1	400	17	39	1	soft sealing type 3	1-G06-22-11-600-CF
M10x1,25		17	38	1	o-ring type 1	1-G06-49-21-600-CF
M10x1,25		17	38	1	soft sealing type 3	1-G06-49-11-600-CF
M12x1,5	630	17	39	1	soft sealing type 3	1-G06-23-11-600-CF
M14x1,5	630	19	37	1	soft sealing type 3	1-G06-24-11-600-CF
M14x1,5	630	19	38	1	o-ring type 5	1-G06-24-61-600-CF
M16x1,5	630	22	37	1	soft sealing type 3	1-G06-25-11-600-CF
M18x1,5		24	39	1	soft sealing type 3	1-G06-26-11-600-CF
M20x1,5		27	39	1	soft sealing type 3	1-G06-51-11-600-CF
M22x1,5		27	39	1	soft sealing type 3	1-G06-27-11-600-CF
G 1/8	400	17	39	1	soft sealing type 3	1-G06-28-11-600-CF
G 1/4	630	19	37	1	soft sealing type 3	1-G06-29-11-600-CF
G 3/8	630	22	37	1	soft sealing type 3	1-G06-30-11-600-CF
G 1/2	630	27	39	1	soft sealing type 3	1-G06-31-11-600-CF
5/16-24 UNF	400	17	38	1	o-ring type 5	1-G06-38-30-600-CF
7/16-20 UNF	630	17	38	1	o-ring type 5	1-G06-39-30-600-CF
1/2-20 UNF	630	17	38	1	o-ring type 5	1-G06-61-30-600-CF
9/16-18 UNF	630	19	38	1	o-ring type 5	1-G06-40-30-600-CF
3/4-16 UNF	630	27	40	1	o-ring type 5	1-G06-41-30-600-CF
For metal cap type A (universal) with vibration security replace 600 by						590
For metal cap type B (round) without vibration security replace 600 by						020
For metal cap type A (universal) without vibration security replace 600 by						010
For yellow plastic cap type A (universal) without vibration security replace 600 by						100

test coupling
series M16x2 – GAS for arctic temperature



G	PN	SW	h	fig.	sealing	part number
for arctic temperature use (sealings material 2; metal parts stainless steel 1.4305)						
M8x1	250	17	38	1	o-ring type 1	upon request
M10x1	630	17	38	1	o-ring type 1	upon request
M10x1	400	17	39	1	soft sealing type 3	upon request
M10x1,25		17	38	1	o-ring type 1	upon request
M10x1,25		17	38	1	soft sealing type 3	upon request
M12x1,5	630	17	39	1	soft sealing type 3	upon request
M14x1,5	630	19	37	1	soft sealing type 3	upon request
M14x1,5	630	19	38	1	o-ring type 5	upon request
M16x1,5	630	22	37	1	soft sealing type 3	1-T12-29-23-660-05 ¹
M18x1,5		24	39	1	soft sealing type 3	upon request
M20x1,5		27	39	1	soft sealing type 3	upon request
M22x1,5		27	39	1	soft sealing type 3	upon request
G 1/8	400	17	39	1	soft sealing type 3	upon request
G 1/4	630	19	37	1	soft sealing type 3	upon request
G 3/8	630	22	37	1	soft sealing type 3	upon request
G 1/2	630	27	39	1	soft sealing type 3	upon request
5/16-24 UNF	400	17	38	1	o-ring type 5	upon request
7/16-20 UNF	630	17	38	1	o-ring type 5	upon request
1/2-20 UNF	630	17	38	1	o-ring type 5	upon request
9/16-18 UNF	630	19	38	1	o-ring type 5	upon request
3/4-16 UNF	630	27	40	1	o-ring type 5	upon request

¹Sealing element is an o-ring

For metal cap type A (universal) with vibration security	replace 600 by	650
For metal cap type B (round) without vibration security	replace 600 by	080
For metal cap type A (universal) without vibration security	replace 600 by	070
For yellow plastic cap type A (universal) without vibration security	replace 600 by	100

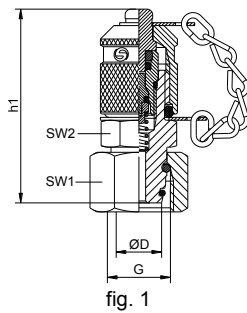


fig. 1

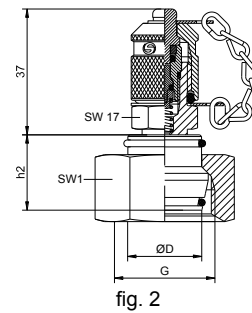


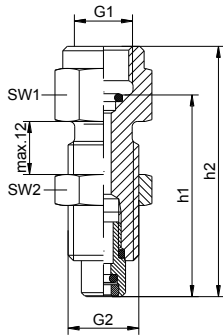
fig. 2

type DKO
test coupling with 24° taper adapter

type	PN	tube ØD	h1	h2	SW1	SW2	G	type DKO part number	fig.
L	315	6	53	-	14	17	M12x1,5	upon request	1
		8	53	-	17	17	M14x1,5	upon request	1
		10	50	-	19	17	M16x1,5	upon request	1
		12	50	-	22	17	M18x1,5	upon request	1
	160	15	51	-	27	19	M22x1,5	upon request	1
		18	-	22	32	-	M26x1,5	upon request	2
		22	-	22	36	-	M30x2	upon request	2
		28	-	24	41	-	M36x2	upon request	2
S	630	35	-	27	50	-	M45x2	upon request	2
		42	-	28	60	-	M52x2	upon request	2
		6	54	-	17	17	M14x1,5	upon request	1
		8	51	-	19	17	M16x1,5	upon request	1
	400	10	51	-	22	17	M18x1,5	upon request	1
		12	51	-	24	17	M20x1,5	upon request	1
		14	53	-	27	19	M22x1,5	upon request	1
		16	-	20	30	-	M24x1,5	upon request	2
	315	20	-	25	36	-	M30x2	upon request	2
		25	-	27	46	-	M36x2	upon request	2
	30	-	29	50	-	M42x2	upon request	2	
	38	-	32	60	-	M52x2	upon request	2	
							For metal cap type A (universal) with vibration security	upon request	
							For metal cap type B (round) without vibration security	upon request	
							For metal cap type A (universal) without vibration security	upon request	
							For yellow plastic cap type A (universal) without vibration security	upon request	

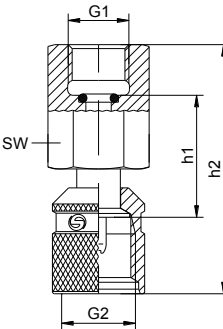
M16x2 - GAS*

bulkhead pressure gauge connector series M16x2 – GAS – without valve function



G1	SW1	SW2	h1	h2	G2	sealing	part number
G 1/4	19	19	46	57	M16x2	o-ring	1-918-29-01-240-CF
G 1/2	27	24	49	66	M16x2	o-ring	1-918-31-01-240-CF

direct pressure gauge connector Series M16x2 - GAS – without valve function

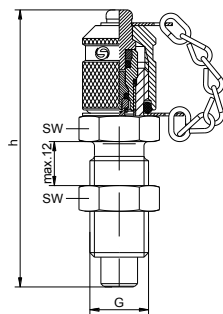


G1	SW	h1	h2	G2	sealing	part number
G 1/4	19	27	54	M16x2	o-ring	1-927-29-01-020-CF
G 1/2	27	41	58	M16x2	o-ring	1-927-31-01-020-CF

For metal cap type A (universal) replace 020 by

010

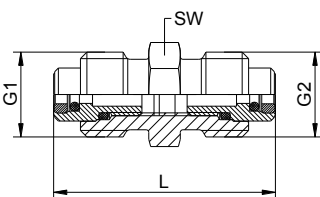
bulkhead coupling series M16x2 - GAS



G	SW	h	part number
M16x2	19	72	upon request

For metal cap type A (universal) with vibration security upon request
 For metal cap type B (round) **without vibration security** upon request
 For metal cap type A (universal) **without vibration security** upon request
 For yellow plastic cap type A (universal) **without vibration security** upon request

hose connector series M16x2 – GAS – without valve function

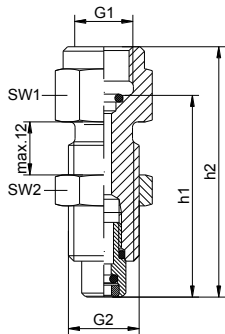


				arctic temperature	
G1	SW	L	G2	part number	part number
M16x2	17	42	M16x2	1-T80-48-00-020-CF	1-980-48-00-020-CF
M16x2	17	42	M16x1,5	1-T80-48-00-030	1-980-48-00-030

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

M16x2 – connectors and adaptors

bulkhead pressure gauge connector series M16x2 – without valve function



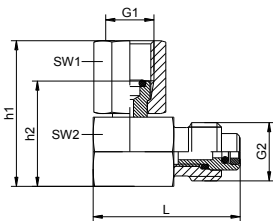
G1	SW1	SW2	h1	h2	G2	sealing	part number (NBR)	part number (FKM)
G 1/4	19	19	46	57	M16x2	o-ring	1-918-29-01-240-CF	1-918-29-21-240-CF
G 1/2	27	24	49	66	M16x2	o-ring	1-918-31-01-240-CF	1-918-31-21-240-CF
1/4 NPT	19	19	-	58	M16x2	thread	1-918-44-00-240-CF	1-918-44-20-240-CF
1/2 NPT	27	24	-	66	M16x2	thread	1-918-46-00-240-CF	1-918-46-20-240-CF

For design with damping element replace 918 by

930

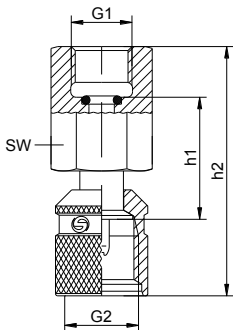
930

pressure gauge connector 90° series M16x2 – without valve function



G1	SW1	SW2	L	h1	h2	G2	part number (NBR)	part number (FKM)
G 1/4	17	19	40	40	29	M16x2	1-928-29-01-240-CF	1-928-29-21-240-CF
G 1/2			upon request			M16x2	1-928-31-01-240-CF	1-928-31-21-240-CF

direct pressure gauge connector series M16x2 – without valve function



G1	SW	h1	h2	G2	sealing	part number (NBR)	part number (FKM)
G 1/4	19	27	54	M16x2	o-ring	1-927-29-01-020-CF	1-927-29-21-020-CF
G 1/2	27	41	58	M16x2	o-ring	1-927-31-01-020-CF	1-927-31-21-020-CF
1/4 NPT	19	-	53	M16x2	thread	1-927-44-00-020-CF	1-927-44-20-020-CF
1/2 NPT	27	-	59	M16x2	thread	1-927-46-00-020-CF	1-927-46-20-020-CF

For metal cap type A (universal) replace 020 by

010

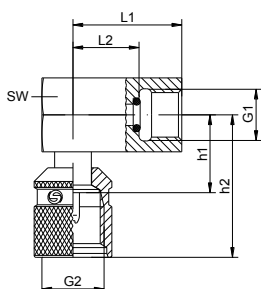
010

For design with damping element replace 927 by

929

929

direct pressure gauge connector 90° series M16x2 – without valve function



G1	SW	L1	L2	h1	h2	G2	part number (NBR)	part number (FKM)
G 1/4	19	28	17	20	37	M16x2	1-928-29-01-020-CF	1-928-29-21-020-CF
G 1/2	27	28	11	24	41	M16x2	1-928-31-01-020-CF	1-928-29-21-020-CF
1/4 NPT	19	22	-	20	37	M16x2	1-928-44-00-020-CF	1-928-44-20-020-CF
1/2 NPT	27	28	-	24	41	M16x2	1-928-46-00-020-CF	1-928-46-20-020-CF

For metal cap type A (universal) replace 020 by

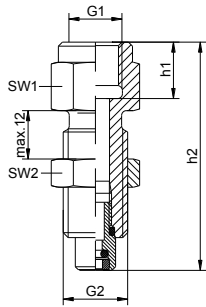
010

010

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

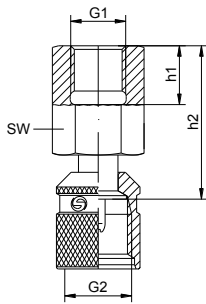
M16x2 – connectors and adaptors

bulkhead sensor connector series M16x2 – without valve function



G1	SW1	SW2	h1	h2	G2	part number (NBR)	part number (FKM)
G 1/4	19	19	14	57	M16x2	1-718-29-00-240-CF	upon request

direct sensor connector series M16x2 – without valve function

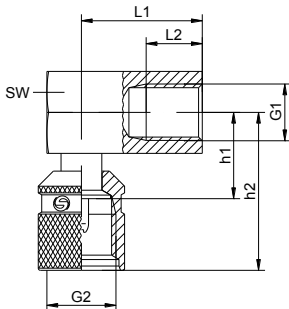


G1	SW	h1	h2	G2	part number (NBR)	part number (FKM)
G 1/4	19	14	37	M16x2	1-727-29-00-021-CF	upon request
G 1/2	27	15	38	M16x2	1-727-31-00-020-CF	upon request

For metal cap type A (universal)

replace 020 by 010
respectively
replace 021 by 011

direct sensor connector 90° series M16x2 – without valve function



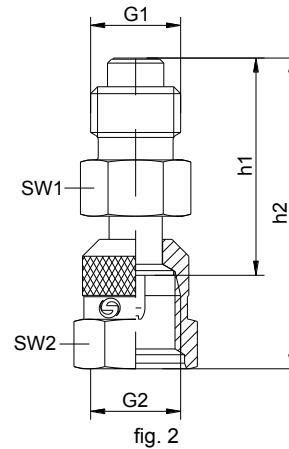
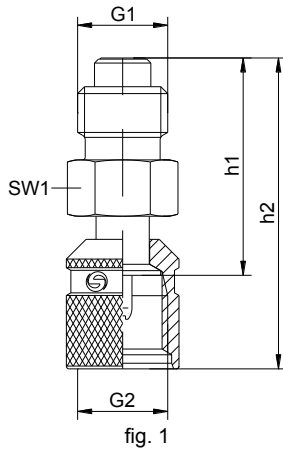
G1	SW	L1	L2	h1	h2	G2	part number (NBR)	part number (FKM)
G 1/4	19	28	13	20	37	M16x2	1-728-29-00-021-CF	upon request

For metal cap type A (universal)

replace 021 by 011

M16x2 - connectors and adaptors

adaptor for test coupling series M16x2 – without valve function

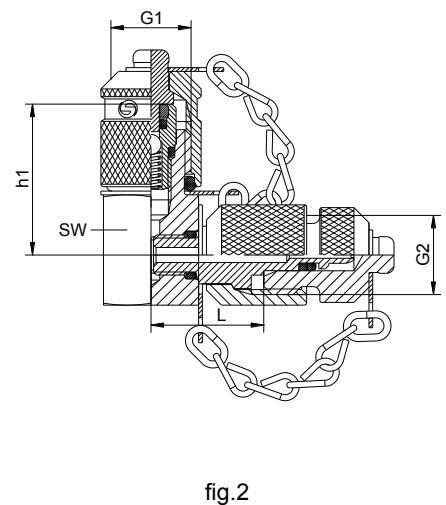
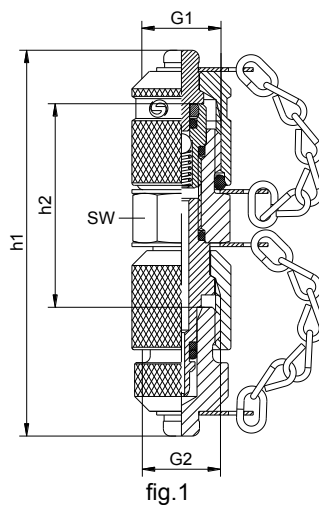


G1	G2	h1	h2	SW1	SW2	fig.	part number (NBR)	part number (FKM)
M16x2	M16x1,5	39	56	17	-	1	1-980-25-00-050	upon request
M16x2	S12x1,5	39	50	17	-	1	1-980-49-00-100-CF	upon request
M16x1,5	M16x2	39	56	17	19	2	1-980-48-00-120	upon request
S12x1,5	M16x2	36	47	17	19	2	1-980-48-00-110-CF	upon request

adaptor for series 5/8"-14 BSF (HSP) series M16x2 – valve function by ball

This adapter has been constructed to enable an adaptation between the 5/8"-14 BSF system (HSP) to the world wide used M16x2 system. Just screw our adapter onto the HSP - test coupling. The result is a regular M16x2 system connection. Now you can use your hoses and fittings from the M16x2 system.

with valve function (ball)

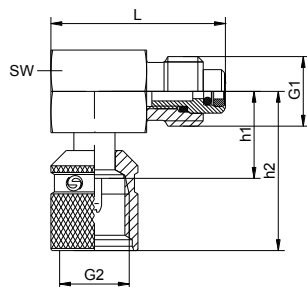


G1	G2	h1	h2	L	SW	fig.	part number (NBR)	part number (FKM)
M16x2	5/8"-14 BSF	78	41	-	17	1	1-880-67-60-001-CF	upon request
M16x2	5/8"-14 BSF	30	-	23	19	2	1-880-67-60-002-CF	upon request

For metal cap type A (universal) with vibration security replace 60 by	59	upon request
For metal cap type B (round) without vibration security replace 60 by	02	upon request
For metal cap type A (universal) without vibration security replace 60 by	01	upon request
For yellow plastic cap type A (universal) without vibration security replace 60 by	10	upon request

M16x2 - connectors and adaptors

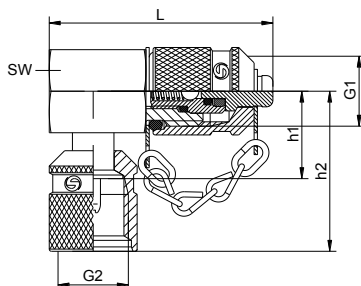
adaptor for test coupling 90° series M16x2 – without valve function



without valve function

G1	G2	L	h1	h2	SW	part number (NBR)	part number (FKM)
M16x2	M16x2	40	20	37	19	1-924-02-00-241-CF	1-924-02-02-241-CF
metal cap type A (universal)						1-924-01-00-241-CF	1-924-01-02-241-CF

adaptor for test coupling 90° series M16x2 – valve function by ball



with valve function

G1	G2	L	h1	h2	SW	part number (NBR)	part number (FKM)
M16x2	M16x2	51	20	37	19	1-924-02-00-600-CF	1-924-02-02-600-CF
metal cap type A (universal) with vibration security						1-924-01-00-590-CF	1-924-01-02-590-CF
metal cap type B (round) without vibration security						1-924-02-00-020-CF	1-924-02-02-020-CF
metal cap type A (universal) without vibration security						1-924-01-00-010-CF	1-924-01-02-010-CF
plastic cap type A (universal) yellow without vibration security						1-924-01-00-100-CF	1-924-01-02-100-CF

M16x2 – test hose

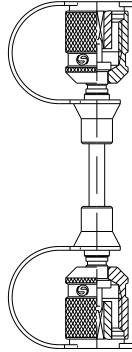
high pressure hose series M16x2

Max. working pressure:
up to 630 bar

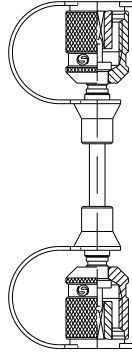
Pressure / t° factor:
at 20°C 100%
at 40°C 95%
at 60°C 90%
at 80°C 80%
at 100°C 70%

Further details please
see section hoses and
connectors

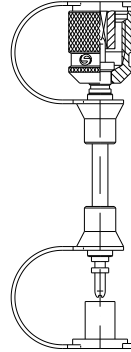
series M16x2



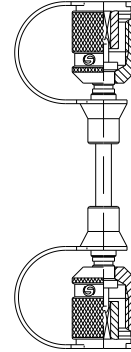
series M16x2



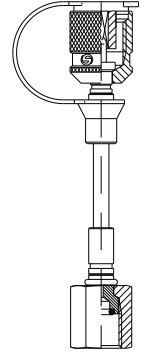
series M16x2



series M16x2



series M16x2



series M16x2

series M16x1,5

series Steck

series S12x1,5

pressure gauge
connector G 1/4 ²⁾

length L ¹⁾ acc. DIN 20066	part number				
200	1-971-04-04-010-CF	1-971-04-10-010-CF	1-971-01-04-010-CF	1-971-04-12-010-CF	1-971-02-04-010-CF
400	1-971-04-04-040-CF	1-971-04-10-040-CF	1-971-01-04-040-CF	1-971-04-12-040-CF	1-971-02-04-040-CF
630	1-971-04-04-060-CF	1-971-04-10-060-CF	1-971-01-04-060-CF	1-971-04-12-060-CF	1-971-02-04-060-CF
800	1-971-04-04-080-CF	1-971-04-10-080-CF	1-971-01-04-080-CF	1-971-04-12-080-CF	1-971-02-04-080-CF
1000	1-971-04-04-090-CF	1-971-04-10-090-CF	1-971-01-04-090-CF	1-971-04-12-090-CF	1-971-02-04-090-CF
1500	1-971-04-04-100-CF	1-971-04-10-100-CF	1-971-01-04-100-CF	1-971-04-12-100-CF	1-971-02-04-100-CF
2000	1-971-04-04-110-CF	1-971-04-10-110-CF	1-971-01-04-110-CF	1-971-04-12-110-CF	1-971-02-04-110-CF
2500	1-971-04-04-120-CF	1-971-04-10-120-CF	1-971-01-04-120-CF	1-971-04-12-120-CF	1-971-02-04-120-CF
3200	1-971-04-04-130-CF	1-971-04-10-130-CF	1-971-01-04-130-CF	1-971-04-12-130-CF	1-971-02-04-130-CF
4000	1-971-04-04-140-CF	1-971-04-10-140-CF	1-971-01-04-140-CF	1-971-04-12-140-CF	1-971-02-04-140-CF

¹⁾ Other lengths upon request

Further connectors please see chapter
hoses and connectors

²⁾ Connection thread G¹/₂,
¹/₄ NPT and ¹/₂ NPT upon request.

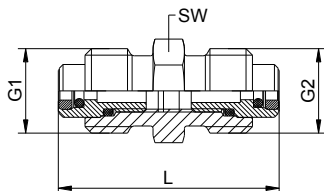
For pricked hose (use with gases) replace 971 by 975

For metal cap M16x2 type A (universal) replace 04 by 03

For metal cap M16x1,5 type A (universal) replace 10 by 09

The information on the definition of the hose assembly lengths, please see the annex.

hose connector series M16x2 – without valve function



G1	SW	L	G2	part number (NBR)	part number (FKM)
M16x2	17	42	M16x2	1-980-48-00-020-CF	upon request
M16x2	17	42	M16x1,5	1-980-48-00-030-CF	upon request

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

stainless steel M16x2 - piston



Application:

Spradow test couplings are applied for the monitoring and control pressure as well as the ventilation. The advantages of this system are – among other – connection at system pressure level, the easy connection to measurement control and switching devices, the leakproof connection and the integrated vibration security of the metal cap.

Media:

Hydraulic oils and mineral based fluids.
(Please check compatibility of seal material.)
For nitrogen and other inert gases upon request.

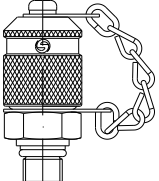
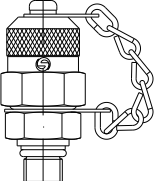
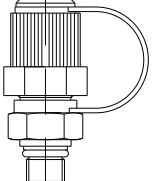
Materials:

Metal parts: stainless steel
Seals: NBR (-20 °C bis +100 °C)
FKM (-20 °C bis +200 °C)(standard)
EPDM (-40°C bis +150 °C)
Hose: polyamide (-35 °C bis +100 °C);

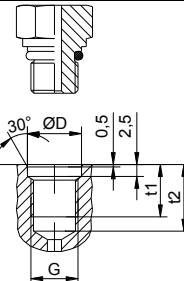
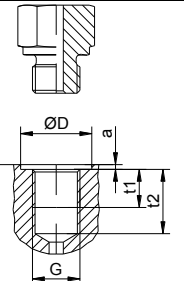
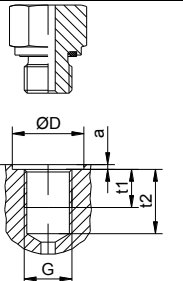
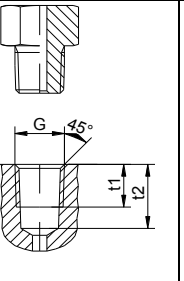
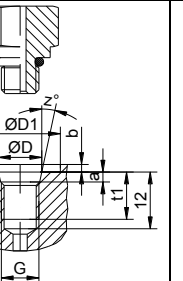
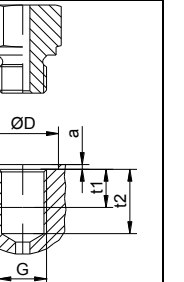
Pressure:

Maximum working pressure (PN) of the test couplings - 630 bar at 4-fold security. For the union pieces please observe the instructions given by the corresponding producer.

design types of caps

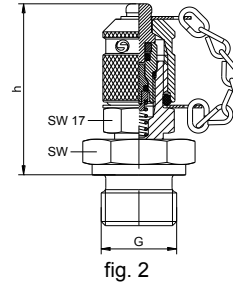
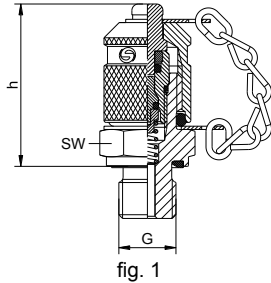
type B (round)	type A (universal)	type A (universal) plastic
		
standard: incl. vibration security		(temperature range -20°C to +100°C)

port connection and seals

type 1	type 2	type 3	type 4	type 5	type 6
					
Design types of port connection and seals please see annex.					

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

test coupling – stainless steel
series M16x2 – valve function by piston
seals made of FKM



G	PN	SW	h	fig.	sealing	main parts	part number
M10x1		17	38	1	o-ring type 1	1.4571	1-912-22-22-660
M12x1,5		17	39	1	soft sealing type 3	1.4571	1-912-23-12-660
M14x1,5		19	37	1	soft sealing type 3	1.4571	1-912-24-12-660
G 1/8		17	39	1	soft sealing type 3	1.4571	1-912-28-12-660
G 1/4		19	37	1	metallic sealing type 2	1.4571	1-912-29-32-660
G 1/4		19	37	1	soft sealing type 3	1.4571	1-912-29-12-660 ¹⁾
G 3/8		22	37	1	metallic sealing type 2	1.4571	1-912-30-32-660
G 3/8		22	37	1	soft sealing type 3	1.4571	1-912-30-12-660
G 1/2		27	39	1	metallic sealing type 2	1.4571	1-912-31-32-660
G 1/2		27	39	1	soft sealing type 3	1.4571	1-912-31-12-660
Rk 1/8*		17	36	1	thread type 4	1.4571	1-912-33-02-660
Rk 1/4*		19	35	1	thread type 4	1.4571	1-912-34-02-660
7/16-20 UNF		17	38	1	o-ring type 5	1.4571	1-912-39-32-660
9/16-18 UNF		19	38	1	o-ring type 5	1.4571	1-912-40-32-660
1/8 NPT		17	36	1	thread type 4	1.4571	1-912-43-02-660
1/4 NPT		17	35	1	thread type 4	1.4571	1-912-44-02-660

For metal cap type A (universal) with vibration security replace 660 by

650

For metal cap type B (round) **without vibration security** replace 660 by

080

For metal cap type A (universal) **without vibration security** replace 660 by

070

For yellow plastic cap type A (universal) **without vibration security** replace 660 by

100

¹⁾ For body made from stainless steel 1.4305 add -05 at the end

*acc. DIN 3858

**fitting with test coupling – stainless steel
series M16x2 – valve function by piston
seals made from FKM**

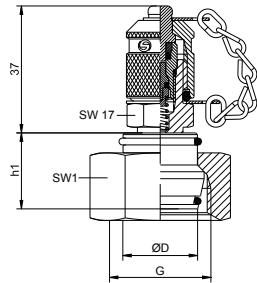


fig. 1

type DKO

test coupling with 24° taper adapter

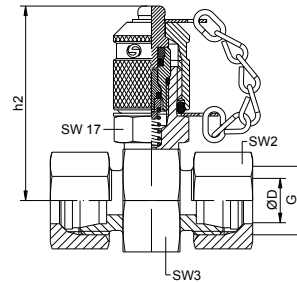


fig. 2

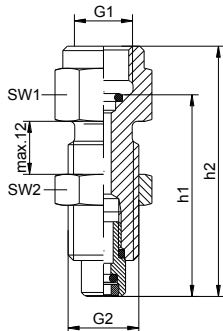
type GE

test coupling with straight fitting

type	PN	tube ØD	G	h1	h2	SW1	SW2	SW3	material main parts	type DKO part number	fig.	type GE part number	fig.
L	315	6	M12x1,5			14			1.4571	1-914-00-00-660	1	1-916-00-00-660	2
		8	M14x1,5			17			1.4571	1-914-02-00-660	1	1-916-02-00-660	2
		10	M16x1,5			19			1.4571	1-914-04-00-660	1	1-916-04-00-660	2
		12	M18x1,5			22			1.4571	1-914-06-00-660	1	1-916-06-00-660	2
		15	M22x1,5			27			1.4571	1-914-09-00-660	1	1-916-09-00-660	2
	160	18	M26x1,5			32			1.4571	1-914-11-00-660	1	1-916-11-00-660	2
		22	M30x2			36			1.4571	1-914-13-00-660	1	1-916-13-00-660	2
		28	M36x2			41			1.4571	1-914-15-00-660	1	1-916-15-00-660	2
		35	M45x2			50			1.4571	1-914-17-00-660	1	1-916-17-00-660	2
S	630	42	M52x2			60			1.4571	1-914-19-00-660	1	1-916-19-00-660	2
		6	M14x1,5			17			1.4571	1-914-01-00-660	1	1-916-01-00-660	2
		8	M16x1,5			19			1.4571	1-914-03-00-660	1	1-916-03-00-660	2
		10	M18x1,5			22			1.4571	1-914-05-00-660	1	1-916-05-00-660	2
		12	M20x1,5			24			1.4571	1-914-07-00-660	1	1-916-07-00-660	2
		14	M22x1,5			27			1.4571	1-914-08-00-660	1	1-916-08-00-660	2
	400	16	M24x1,5			30			1.4571	1-914-10-00-660	1	1-916-10-00-660	2
		20	M30x2			36			1.4571	1-914-12-00-660	1	1-916-12-00-660	2
		25	M36x2			46			1.4571	1-914-14-00-660	1	1-916-14-00-660	2
		30	M42x2			50			1.4571	1-914-16-00-660	1	1-916-16-00-660	2
315	38	M52x2			60			1.4571	1-914-18-00-660	1	1-916-18-00-660	2	

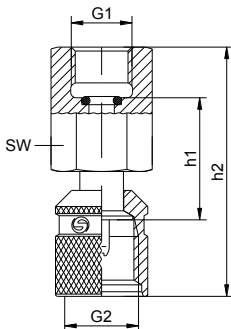
For metal cap type A (universal) with vibration security replace 660 by	650	650
For metal cap type B (round) without vibration security replace 660 by	080	080
For metal cap type A (universal) without vibration security replace 660 by	070	070
For yellow plastic cap type A (universal) without vibration security replace 660 by	100	100

bulkhead pressure gauge connector – stainless steel series M16x2 – without valve function



G1	SW1	SW2	h1	h2	G2	sealing	main parts	part number
G 1/4	19	19	46	57	M16x2	o-ring	1.4571	1-939-29-22-240
G 1/2	27	24	49	66	M16x2	o-ring	1.4571	1-939-31-22-240
1/4 NPT	19	19	-	58	M16x2	thread	1.4571	1-939-44-02-240
1/2 NPT	19	24	-	66	M16x2	thread	1.4571	1-939-46-02-240

direct pressure gauge connector – stainless steel series M16x2 – without valve function



G1	SW	h1	h2	G2	sealing	main parts	part number
G 1/4	19	27	54	M16x2	o-ring	1.4305	1-940-29-22-080
G 1/2	27	41	58	M16x2	o-ring	1.4305	1-940-31-22-080
1/4 NPT	19	-	53	M16x2	thread	1.4305	1-940-44-02-080
1/2 NPT	27	-	59	M16x2	thread	1.4305	1-940-46-02-080

For design with cap type A (universal) replace 080 by

070

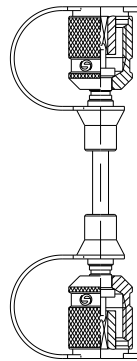
high pressure hose – stainless steel series M16x2 seals made from FKM

Max. working pressure:
630 bar

Pressure / t° factor:

at 20°C 100%
at 40°C 95%
at 60°C 90%
at 80°C 80%
at 100°C 70%

Further details please
see section hoses and
connectors



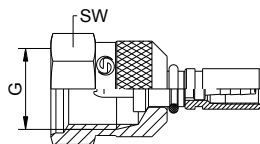
series M16x2

series M16x2	length L ¹⁾ acc. DIN 20066	with cap type B	with cap type A	material connector
	200 mm	1-971-07-07-010	1-971-06-06-010	1.4305
	400 mm	1-971-07-07-040	1-971-06-06-040	1.4305
	630 mm	1-971-07-07-060	1-971-06-06-060	1.4305
	800 mm	1-971-07-07-080	1-971-06-06-080	1.4305
	1000 mm	1-971-07-07-090	1-971-06-06-090	1.4305
	1500 mm	1-971-07-07-100	1-971-06-06-100	1.4305
	2000 mm	1-971-07-07-110	1-971-06-06-110	1.4305
	2500 mm	1-971-07-07-120	1-971-06-06-120	1.4305
	3200 mm	1-971-07-07-130	1-971-06-06-130	1.4305
	4000 mm	1-971-07-07-140	1-971-06-06-140	1.4305

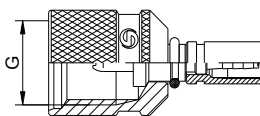
¹⁾ other length upon
request

For hose end connectors made from 1.4571 07-07 change to 0H-0H 06-06 change to 87-87

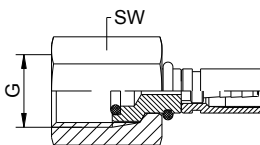
single parts for test hoses



view	no.	G	SW	DN	part number	material	description
	06	M16x2	19	2	2-970-06-02-001	1.4305	connector for test coupling metal cap type A (universal)
	87	M16x2	19	2	2-970-87-02-001	1.4571	inclusive ferrule*



	07	M16x2	-	2	2-970-07-02-001	1.4305	connector for test coupling metal cap type B (round)
	0H	M16x2	-	2	2-970-0H-02-001	1.4571	inclusive ferrule*



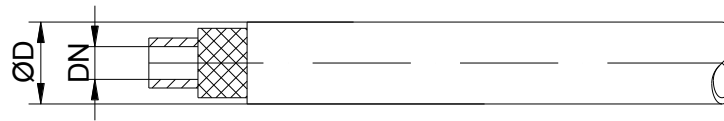
	52	G 1/4	17	2	2-970-52-02-004	1.4305	pressure gauge connector with Whitworth - thread
	88	G 1/4	17	2	2-970-88-02-001	1.4571	sealing to pressure gauge by o-ring inclusive ferrule

For connector without ferrule replace 970 by 971

* incl. strap

For hose material please see chapter hoses and connectors.
The information on the definition of the hose assembly lengths, please see the annex.

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.



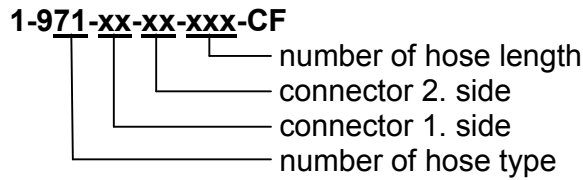
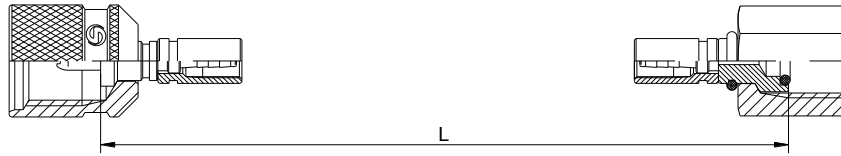
DN	PN	pricked	øD	part no.
2	400 bar	-	5	9-946-02-00-012
2	630 bar	-	5	9-946-02-00-020
2	630 bar	yes	5	9-946-02-01-020

technical data of the hose

nominal diameter	DN 2	DN 2	DN 2
nominal pressure	400 bar	630 bar	630 bar
inner material	Hytrel®	Hytrel®	Hytrel®
reinforcement material	polyester fibre	aramid fibre	aramid fibre
cover material	PA	PA	PA - pricked
max. working pressure	400 bar	630 bar	630 bar
min. bursting pressure	1200 bar	1890 bar	1890 bar
min. bending radius at working pressure	20 mm	20 mm	20 mm
inner diameter	2,1 mm	2,1 mm	2,1 mm
outer diameter	5 mm	5 mm	5 mm
weight / meter	16 g	16 g	16 g
temperature strength	-40 °C to +100 °C*	-40 °C to +100 °C*	-40 °C to +100 °C
number for the type of hose	970	971	975
crimping diameter	7,0 ^{+0,1}	7,0 ^{+0,1}	7,0 ^{+0,1}

*for water and hydrous media up to +70 °C

construction of the SPRADOW order number for hose assemblies



Please take the number for the first and second connector on the following pages.
The lower number of both should be used first.

number of hose length			
hose length	number for length	hose length	number for length
200 mm	010	800 mm	080
250 mm	020	1000 mm	090
300 mm	030	1500 mm	100
400 mm	040	2000 mm	110
500 mm	050	2500 mm	120
630 mm	060	3200 mm	130
750 mm	070	4000 mm	140

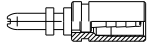
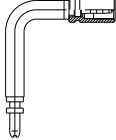
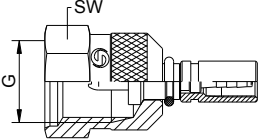
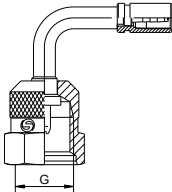
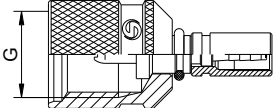
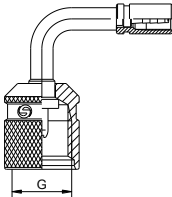
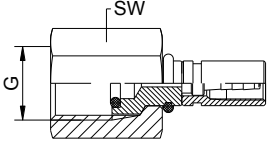
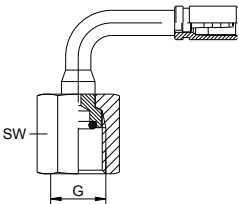
Should you need other length, please use «xxx» as a code on your purchase order or inquiry, putting the desired mm length in brackets. (Example: 1-971-02-04-xxx-CF (5000).)

The information on the definition of the hose assembly lengths, please see the annex.

technical data of the hose fittings

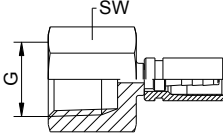
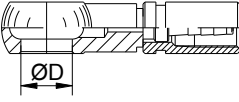
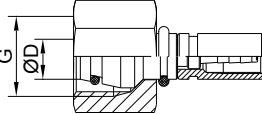
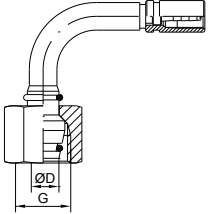
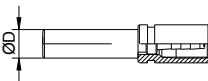
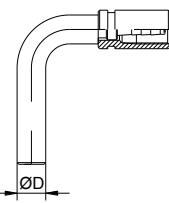
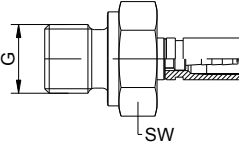
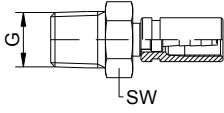
material	steel, 1.0718 (stainless steel upon request)
sealings	NBR (other material upon request)

connectors for hose

view	Nr.	G	SW / øD	DN	with ferrule	without ferrule	description
	01			2	2-970-01-00-001-CF	2-971-01-00-001-CF	connector for test coupling series: Steck incl. strap
	16			2	2-970-16-00-001-CF	2-971-16-00-001-CF	connector for test coupling series: Steck 90° elbow incl. strap
	03 09	M16x2 M16x1,5	19 19	2 2	2-970-03-02-001-CF 2-970-09-02-001	2-971-03-02-001-CF 2-971-09-02-001	connector for test coupling metal cap type A (universal) incl. strap
	0J 0Z	M16x2 M16x1,5	19 19	2 2	2-970-0J-02-001-CF 2-970-0Z-02-001	2-971-0J-02-001-CF 2-971-0Z-02-001	connector for test coupling metal cap type A (universal) 90° elbow incl. strap
	04 10 12	M16x2 M16x1,5 S12x1,5		2 2 2	2-970-04-02-001-CF 2-970-10-02-001 2-970-12-02-001-CF	2-971-04-02-001-CF 2-971-10-02-001 2-971-12-02-001-CF	connector for test coupling metal cap type B (round) incl. strap
	50 61 57	M16x2 M16x1,5 S12x1,5		2 2 2	2-970-50-02-001-CF 2-970-61-02-001 2-970-57-02-001-CF	2-971-50-02-001-CF 2-971-61-02-001 2-971-57-02-001-CF	connector for test coupling metal cap type B (round) 90° elbow incl. strap
	02 25	G 1/4 G 1/2	17 27	2 2	2-970-02-02-004-CF 2-970-25-02-001-CF	2-971-02-02-004-CF 2-971-25-02-001-CF	pressure gauge connector with Whitworth - thread sealing to pressure gauge by o-ring
	58 54	G 1/4 G 1/2	17 27	2 2	2-970-58-02-001-CF 2-970-54-02-001-CF	2-971-58-02-001-CF 2-971-54-02-001-CF	pressure gauge connector with Whitworth - thread sealing to pressure gauge by o-ring 90° elbow

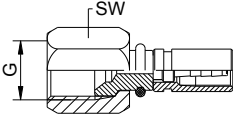
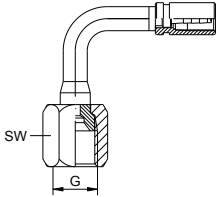
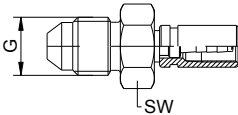
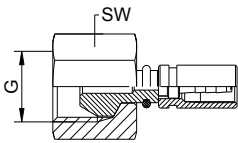
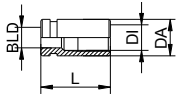
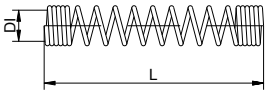

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

connectors for hose

view	no.	G	SW / \varnothing D	DN	with ferrule	without ferrule	description
	26	1/4 NPT	17	2	2-970-26-00-001-CF	2-971-26-00-001-CF	pressure gauge connector with NPT-thread
	27	1/2 NPT	27	2	2-970-27-00-001-CF	2-971-27-00-001-CF	
	75		8	2	2-970-75-00-001-CF	2-971-75-00-001-CF	ring connection to hollow screw (RGN)
	19	M12x1,5	6L	2	2-970-19-02-001-CF	2-971-19-02-001-CF	seal cone with o-ring and swivel nut for 24° cone fitting (DKO)
20	M14x1,5	6S	2	2-970-20-02-001-CF	2-971-20-02-001-CF		
	21	M14x1,5	8L	2	2-970-21-02-001-CF	2-971-21-02-001-CF	
	22	M16x1,5	8S	2	2-970-22-02-001-CF	2-971-22-02-001-CF	
	23	M16x1,5	10L	2	2-970-23-02-001-CF	2-971-23-02-001-CF	
	24	M18x1,5	10S	2	2-970-24-02-001-CF	2-971-24-02-001-CF	
	44	M12x1,5	6L	2	2-970-44-02-001-CF	2-971-44-02-001-CF	seal cone with o-ring and swivel nut for 24° cone fitting (DKO) 90° elbow
	45	M14x1,5	6S	2	2-970-45-02-001-CF	2-971-45-02-001-CF	
	46	M14x1,5	8L	2	2-970-46-02-001-CF	2-971-46-02-001-CF	
	47	M16x1,5	8S	2	2-970-47-02-001-CF	2-971-47-02-001-CF	
	48	M16x1,5	10L	2	2-970-48-02-001-CF	2-971-48-02-001-CF	
	64		4	2	2-970-64-00-001-CF	2-971-64-00-001-CF	standpipe for use with nut and ring (BE) acc. to DIN 2353
	13		6	2	2-970-13-00-001-CF	2-971-13-00-001-CF	
	15		8	2	2-970-15-00-001-CF	2-971-15-00-001-CF	
	28		6	2	2-970-28-00-001-CF	2-971-28-00-001-CF	standpipe for use with nut and ring (BE) acc. to DIN 2353 90° elbow
	94		8	2	2-970-94-00-001-CF	2-971-94-00-001-CF	
	32	M12x1,5	17	2	2-970-32-00-001-CF	2-971-32-00-001-CF	connector with male thread (AGM/AGR) acc. to DIN 3852
	33	G 1/8 A	14	2	2-970-33-00-001-CF	2-971-33-00-001-CF	
	34	G 1/4 A	19	2	2-970-34-00-001-CF	2-971-34-00-001-CF	
	35	1/8 NPT	12	2	2-970-35-00-001-CF	2-971-35-00-001-CF	connector with male thread (AGN) acc. to ANSI-Norm
	36	1/4 NPT	17	2	2-970-36-00-001-CF	2-971-36-00-001-CF	

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

connectors for hose

view	no.	G	SW / øD	DN	with ferrule	without ferrule	description	
	41	7/16 UNF	14	2	2-970-41-02-001-CF	2-971-41-02-001-CF	connector to fit male connection acc. to SAE J514 (DKJ)	
	42	1/2 UNF	17	2	2-970-42-02-001-CF	2-971-42-02-001-CF		
	43	9/16 UNF	19	2	2-970-43-02-001-CF	2-971-43-02-001-CF		
	0K	7/16 UNF	14	2	2-970-0K-02-001-CF	2-971-0K-02-001-CF	connector to fit male connection acc. to SAE J514 (DKJ) 90° elbow	
	1E	9/16 UNF	19	2	2-970-1E-02-001-CF	2-971-1E-02-001-CF		
	37	7/16 UNF	14	2	2-970-37-00-001-CF	2-971-37-00-001-CF	connector with male thread acc. to SAE J514 (AGJ)	
	38	1/2 UNF	17	2	2-970-38-00-001-CF	2-971-38-00-001-CF		
	39	9/16 UNF	19	2	2-970-39-00-001-CF	2-971-39-00-001-CF		
	60	G1/8	14	2	2-970-60-02-001-CF	2-971-60-02-001-CF	connector with 60° cone (DKR) acc. BS5200	
	40	G1/4	17	2	2-970-40-02-001-CF	2-971-40-02-001-CF		
	L	DA	DI	BLD	PM	DN	part no.	ferrule
	15	8	5,6	4,5	7 ^{+0,1}	2	4-999-03-01-160-CF	
	L	DI	DN	part no.	bend protection			
	50	7	2	4-946-00-05-020				
	DN	part no.	strap					
	2	4-934-00-08-170						

Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.