



### 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 4-fold security. Connection under pressure up to 400 bar. For the union pieces please observe the instructions given by the corresponding producer.

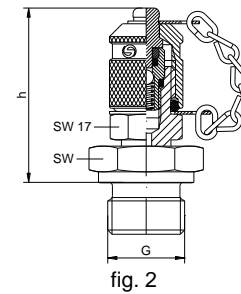
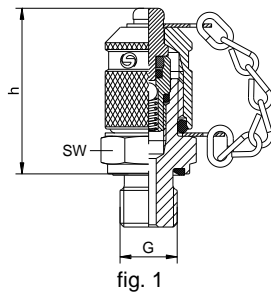
## design types of caps

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



G	PN	SW	h	fig.	sealing	part number (NBR)	part number (FKM)
M8x1	250	17	38	1	o-ring type 1	1-906-20-21-600-CF	1-906-20-22-600-CF
M8x1		17	38	1	metallic sealing type 2	1-906-20-30-600-CF	1-906-20-32-600-CF
M10x1	630	17	38	1	o-ring type 1	1-906-22-21-600-CF	1-906-22-22-600-CF
M10x1	400	17	38	1	metallic sealing type 2	1-906-22-30-600-CF	1-906-22-32-600-CF
M10x1	400	17	39	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	38	1	soft sealing type 3	1-906-49-11-600-CF	1-906-49-12-600-CF
M12x1,5	630	17	38	1	metallic sealing type 2	1-906-23-30-600-CF	1-906-23-32-600-CF
M12x1,5	630	17	39	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	metallic sealing type 2	1-906-26-30-600-CF	1-906-26-32-600-CF
M18x1,5		24	39	1	soft sealing type 3	1-906-26-11-600-CF	1-906-26-12-600-CF
M20x1,5		27	39	1	metallic sealing type 2	1-906-51-30-600-CF	1-906-51-32-600-CF
M20x1,5		27	39	1	soft sealing type 3	1-906-51-11-600-CF	1-906-51-12-600-CF
M22x1,5		27	39	1	metallic sealing type 2	1-906-27-30-600-CF	1-906-27-32-600-CF
M22x1,5		27	39	1	soft sealing type 3	1-906-27-11-600-CF	1-906-27-12-600-CF
M26x1,5		32	49	2	metallic sealing type 2	1-911-52-30-600-CF	1-911-52-32-600-CF
M27x2		36	49	2	metallic sealing type 2	1-911-53-30-600-CF	1-911-53-32-600-CF
M33x2		41	49	2	metallic sealing type 2	1-911-54-30-600-CF	1-911-54-32-600-CF
M42x2		50	50	2	metallic sealing type 2	1-911-55-30-600-CF	1-911-55-32-600-CF
M48x2		60	50	2	metallic sealing type 2	1-911-56-30-600-CF	1-911-56-32-600-CF
G 1/8	400	17	38	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	39	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	36	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		22	37	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

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. 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

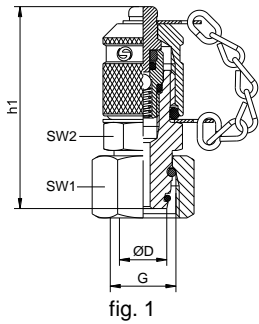


fig. 1

### type DKO

test coupling with 24° taper adapter (DIN3865 / ISO8434-1)

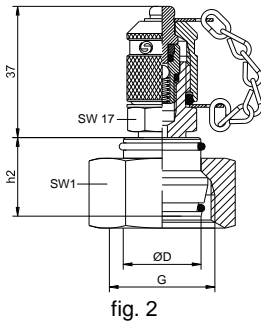


fig. 2

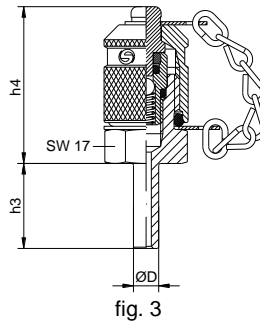


fig. 3

### typ BE

test coupling for compression ring fittings

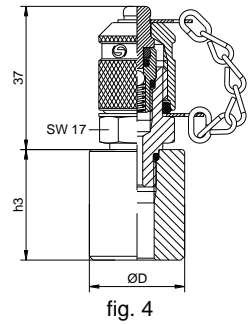


fig. 4

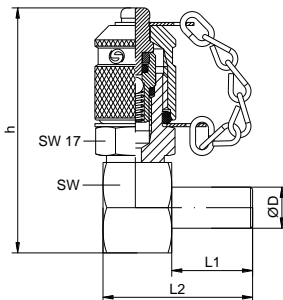
type	PN	tube ØD	h1	h2	h3	h4	SW1	SW2	G	type DKO part number	fig.	type BE part number	fig.
L	315	6	53	-	20	39	14	17	M12x1,5	1-908-00-20-600-CF	1	1-909-00-00-601-CF	3
		8	53	-	20	39	17	17	M14x1,5	1-908-02-20-600-CF	1	1-909-02-00-601-CF	3
		10	50	-	22	37	19	17	M16x1,5	1-908-04-20-600-CF	1	1-909-04-00-601-CF	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	39	17	17	M14x1,5	1-908-01-20-600-CF	1	1-909-00-00-601-CF	3
	400	8	51	-	20	39	19	17	M16x1,5	1-908-03-20-600-CF	1	1-909-02-00-601-CF	3
		10	51	-	22	37	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
315	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	
	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

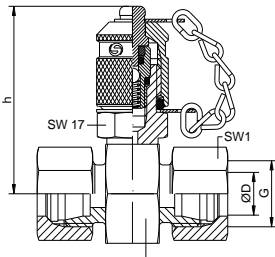


tube ØD	L1	L2	SW	h	part number (NBR)	part number (FKM)
8	20	37	22	59	1-980-03-60-080-CF	1-980-03-60-081-CF
10	20	37	22	59	1-980-05-60-120-CF	1-980-05-60-121-CF

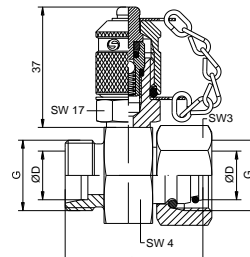
For metal cap type A (universal) with vibration security replace 60 by 59  
 For metal cap type B (round) **without vibration security** replace 60 by 02  
 For metal cap type A (universal) **without vibration security** replace 60 by 01  
 For yellow plastic cap type A (universal) **without vibration 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 GE**  
(DIN2353 / ISO8434-1 and -4)

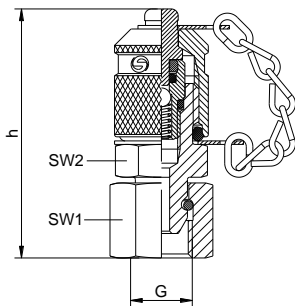


**type DKOGE**  
(DIN2353 / ISO8434-1 and -4)

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	51	41	22	27	1-910-06-00-600-CF	1-910-26-00-601-CF
		15	M22x1,5	27	30	53	43	27	30	1-910-09-00-600-CF	1-910-29-00-601-CF
	160	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
		28	M36x2	41	41	58		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	65		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
		14	M22x1,5	27	27	51	50	27	27	1-910-08-00-600-CF	1-910-28-00-601-CF
	400	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
		25	M36x2	46	41	58	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	65		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) <b>without vibration security</b>	replace 600 by 020	replace 601 by 021
For metal cap type A (universal) <b>without vibration security</b>	replace 600 by 010	replace 601 by 011
For yellow plastic cap type A (universal) <b>without vibration security</b>	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

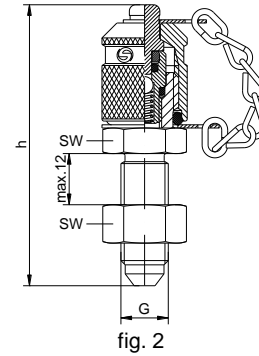
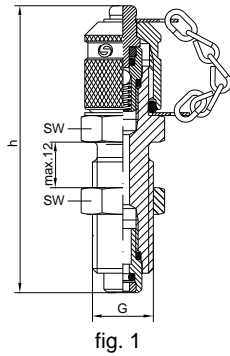


G	h	SW1	SW2	part number (NBR)	part number (FKM)
G 1/4	54	19	17	1-908-76-00-600-CF	1-908-76-02-600-CF

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

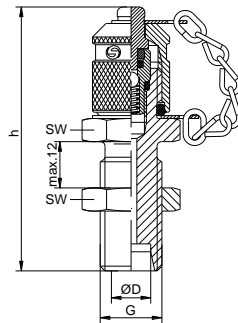
Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

## bulkhead coupling series M16x2 – valve function by ball



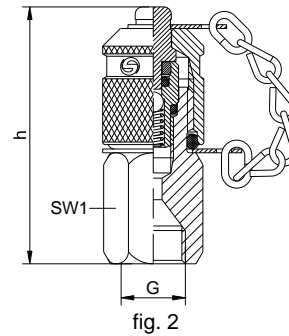
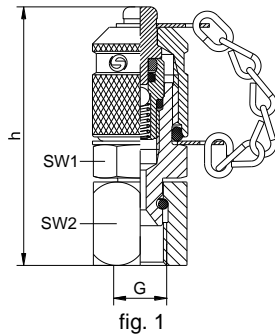
G	SW	h	fig.	part number (NBR)	part number (FKM)
M16x2	19	72	1	1-980-48-60-040-CF	1-980-48-60-041-CF
7/16-20 UNF	17	67	2	1-980-39-60-090-CF	1-980-39-60-091-CF
For metal cap type A (universal) with vibration security replace 60 by				59	59
For metal cap type B (round) <b>without vibration security</b>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

## bulkhead coupling series M16x2 – valve function by ball



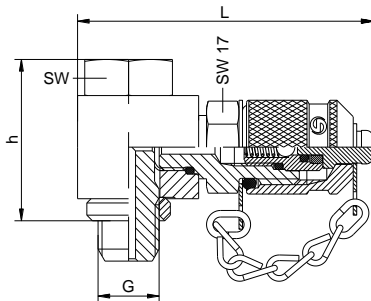
type	PN	tube ØD	G	SW1	SW2	h	part number (NBR)	part number (FKM)
L	315	6	M12x1,5	17	17	69	1-922-00-00-601-CF	1-922-00-02-601-CF
		8	M14x1,5	19	19	72	1-922-02-00-601-CF	1-922-02-02-601-CF
		10	M16x1,5	22	22	68	1-922-04-00-601-CF	1-922-04-02-601-CF
		12	M18x1,5	22	24	72	1-922-06-00-601-CF	1-922-06-02-601-CF
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) <b>without vibration security</b> replace 601 by							021	021
For metal cap type A (universal) <b>without vibration security</b> replace 601 by							011	011
For yellow plastic cap type A (universal) <b>without vibration security</b> replace 601 by							101	101

## 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) <b>without vibration security</b> replace 600 by					020	020
For metal cap type A (universal) <b>without vibration security</b> replace 600 by					010	010
For yellow plastic cap type A (universal) <b>without vibration security</b> 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) <b>without vibration security</b> replace 600 by				020	020
For metal cap type A (universal) <b>without vibration security</b> replace 600 by				010	010
For yellow plastic cap type A (universal) <b>without vibration security</b> replace 600 by				100	100

## 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. Connection under pressure up to 400 bar. 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 piston

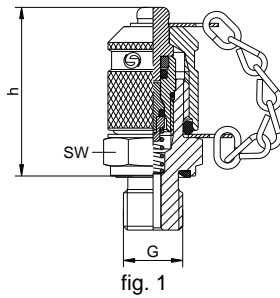


fig. 1

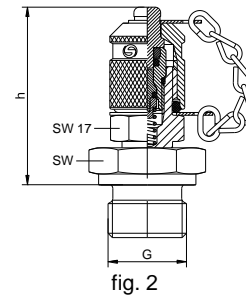


fig. 2

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
For metal cap type B (round) <b>without vibration security</b> replace 600 by						020	020
For metal cap type A (universal) <b>without vibration security</b> replace 600 by						010	010
For yellow plastic cap type A (universal) <b>without vibration security</b> replace 600 by						100	100

\*acc. DIN 3858

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 piston

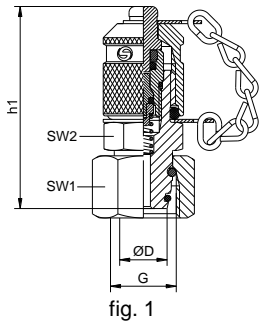


fig. 1

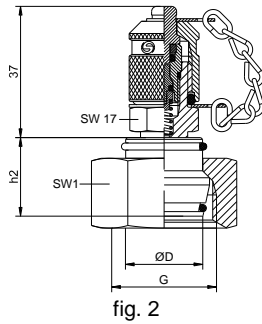


fig. 2

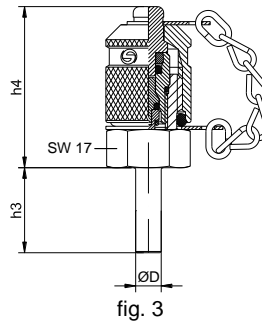


fig. 3

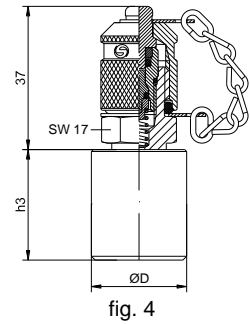


fig. 4

### type DKO

test coupling with 24° taper adapter (DIN3865 / ISO8434-1)

### type BE

test coupling for compression ring fittings

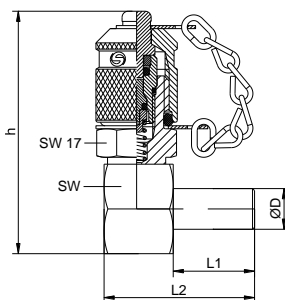
type	PN	tube ØD	h1	h2	h3	h4	SW1	SW2	G	type DKO part number	fig.	type BE part number	fig.
L	315	6	53	-	20	39	14	17	M12x1,5	1-Z08-00-10-600-CF	1	1-Z09-00-00-601-CF	3
		8	53	-	20	39	17	17	M14x1,5	1-Z08-02-10-600-CF	1	1-Z09-02-00-601-CF	3
		10	50	-	22	37	19	17	M16x1,5	1-Z08-04-10-600-CF	1	1-Z09-04-00-601-CF	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
		18	-	22	28	-	32	-	M26x1,5	1-Z08-11-00-600-CF	2	1-Z09-11-00-601-CF	4
	160	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	39	17	17	M14x1,5	1-Z08-01-10-600-CF	1	1-Z09-00-00-601-CF	3
		8	51	-	20	39	19	17	M16x1,5	1-Z08-03-10-600-CF	1	1-Z09-02-00-601-CF	3
		10	51	-	22	37	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
		16	-	20	28	37	30	-	M24x1,5	1-Z08-10-00-600-CF	2	1-Z09-10-00-601-CF	3
	400	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



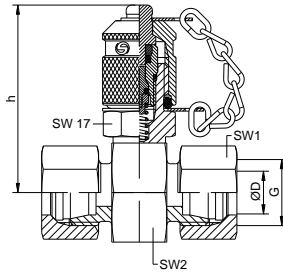
tube ØD	L1	L2	SW	h	part number (NBR)	part number (FKM)
8	20	37	22	59	1-Z80-03-60-080-CF	1-Z80-03-60-081-CF
10	20	37	22	59	1-Z80-05-60-120-CF	1-Z80-05-60-121-CF

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

59  
02  
01  
10

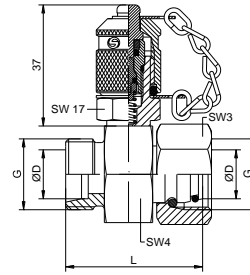
Other dimensions on request. We reserve the right to change the technical performance. All dimensions in mm.

## fitting with test coupling series M16x2 – valve function by piston



**type GE**

(DIN2353 / ISO8434-1 and -4)



**type DKOGE**

(DIN2353 / ISO8434-1 and -4)

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	51	41	22	27	1-Z10-06-00-600-CF	1-Z10-26-00-601-CF
		15	M22x1,5	27	30	53	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
	160	22	M30x2	36	36	55	57	36	36	1-Z10-13-00-600-CF	1-Z10-33-00-601-CF
		28	M36x2	41	41	58		upon request		1-Z10-15-00-600-CF	1-Z10-35-00-601-CF
		35	M45x2	50	46	60		upon request		1-Z10-17-00-600-CF	1-Z10-37-00-601-CF
	42	M52x2	60	55	65		upon request		1-Z10-19-00-600-CF	1-Z10-39-00-601-CF	
S	630	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
		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	51	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
	400	20	M30x2	36	32	53	62	36	36	1-Z10-12-00-600-CF	1-Z10-32-00-601-CF
		25	M36x2	46	41	58	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
		315	38	M52x2	60	55	65		upon request		1-Z10-18-00-600-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

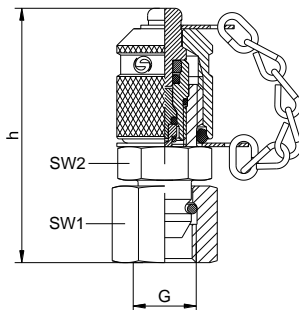
replace 601 by 101

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

590

590

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

020

020

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

010

010

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

100

100

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

## bulkhead coupling series M16x2 – valve function by piston

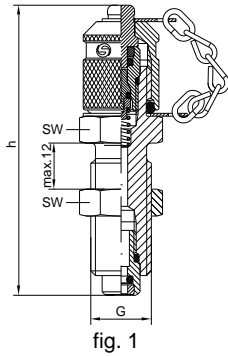


fig. 1

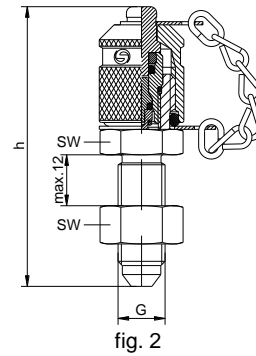
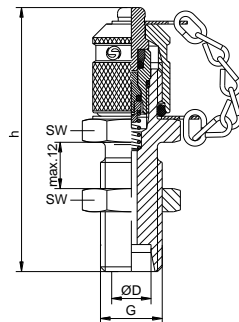


fig. 2

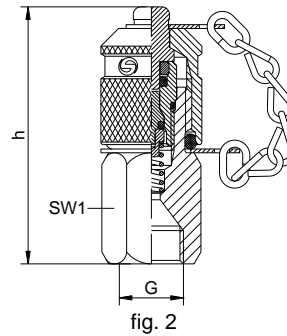
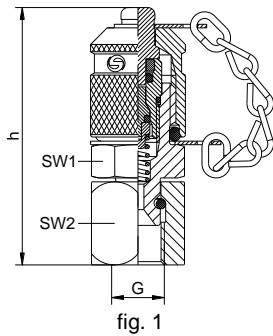
G	SW	h	fig.	part number (NBR)	part number (FKM)
M16x2	19	72	1	1-Z80-48-60-040-CF	1-Z80-48-60-041-CF
7/16-20 UNF	17	68	2	upon request	upon request
For metal cap type A (universal) with vibration security replace 60 by				59	59
For metal cap type B (round) <b>without vibration security</b> replace 60 by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

## bulkhead coupling series M16x2 – valve function by piston



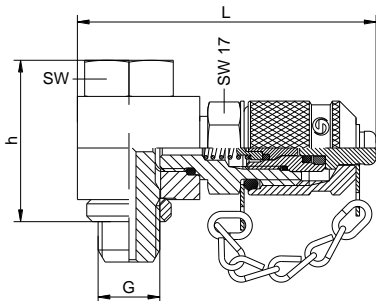
type	PN	tube ØD	G	SW1	SW2	h	part number (NBR)	part number (FKM)
L	315	6	M12x1,5	17	17	69	1-Z22-00-00-601-CF	1-Z22-00-02-601-CF
		8	M14x1,5	19	19	72	1-Z22-02-00-601-CF	1-Z22-02-02-601-CF
		10	M16x1,5	22	22	68	1-Z22-04-00-601-CF	1-Z22-04-02-601-CF
		12	M18x1,5	22	24	72	1-Z22-06-00-601-CF	1-Z22-06-02-601-CF
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) <b>without vibration security</b> replace 601 by							021	021
For metal cap type A (universal) <b>without vibration security</b> replace 601 by							011	011
For yellow plastic cap type A (universal) <b>without vibration security</b> replace 601 by							101	101

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



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) <b>without vibration security</b> replace 600 by					020	020
For metal cap type A (universal) <b>without vibration security</b> replace 600 by					010	010
For yellow plastic cap type A (universal) <b>without vibration security</b> 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) <b>without vibration security</b> replace 600 by					020	020
For metal cap type A (universal) <b>without vibration security</b> replace 600 by					010	010
For yellow plastic cap type A (universal) <b>without vibration security</b> 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.

**Usage as filling valve:**

Initial pressure 3 bar; increase slowly up to the maximum filling pressure of 320 bar.

**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:**

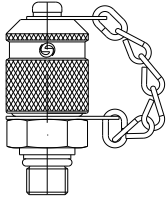
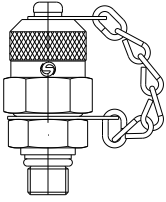
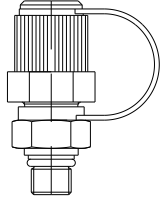
CrVI-free.

**Pressure:**

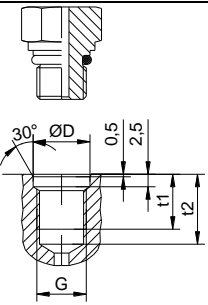
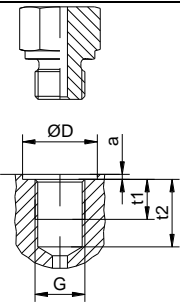
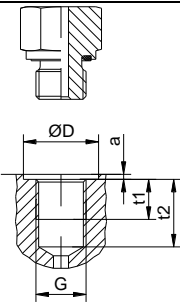
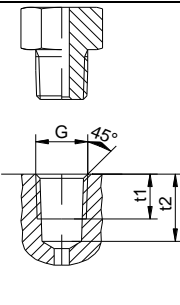
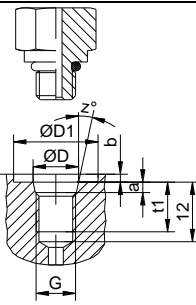
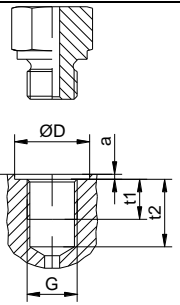
Maximum working pressure (PN) of the test couplings - 630 bar at 4-fold security. Connection under pressure up to 400 bar. For the union pieces please observe the instructions given by the corresponding producer.



**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.

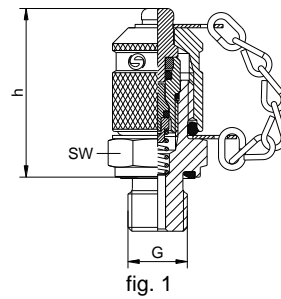


fig. 1

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

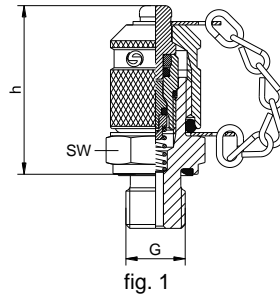
For metal cap type A (universal) **without vibration security** replace 600 by

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
<b>for arctic temperature use (sealings material 2; metal parts stainless steel 1.4305)</b>						
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 <sup>1</sup>
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

<sup>1</sup>Sealing element is an o-ring

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

## fitting with test coupling series M16x2 - GAS

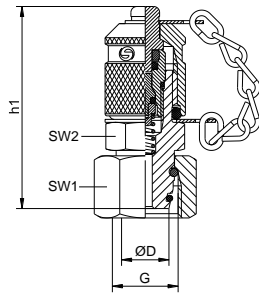


fig. 1

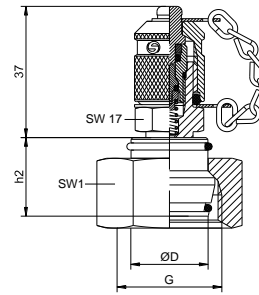


fig. 2

### type DKO

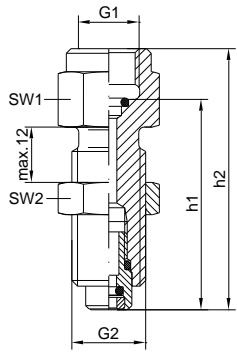
test coupling with 24° taper adapter (DIN3865 / ISO8434-1)

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
		15	51	-	27	19	M22x1,5	upon request	1
	160	18	-	22	32	-	M26x1,5	upon request	2
		22	-	22	36	-	M30x2	upon request	2
		28	-	24	41	-	M36x2	upon request	2
		35	-	27	50	-	M45x2	upon request	2
		42	-	28	60	-	M52x2	upon request	2
S	630	6	54	-	17	17	M14x1,5	upon request	1
		8	51	-	19	17	M16x1,5	upon request	1
		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
	400	16	-	20	30	-	M24x1,5	upon request	2
		20	-	25	36	-	M30x2	upon request	2
		25	-	27	46	-	M36x2	upon request	2
		30	-	29	50	-	M42x2	upon request	2
		315	38	-	32	60	-	M52x2	upon request
For metal cap type A (universal) with vibration security								upon request	
For metal cap type B (round) <b>without vibration security</b>								upon request	
For metal cap type A (universal) <b>without vibration security</b>								upon request	
For yellow plastic cap type A (universal) <b>without vibration security</b>								upon request	

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

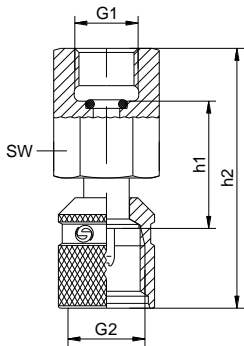


## bulkhead pressure gauge connector series M16x2 – GAS – without valve function



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

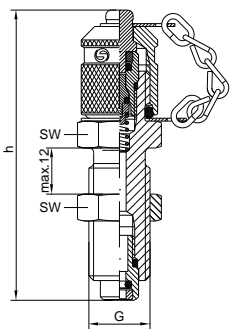


G1	SW	h1	h2	G2	sealing	part number
G 1/4	19	27	54	M16x2	o-ring	1-927-29-01-020-CF
G 1/2	27	25	58	M16x2	o-ring	1-927-31-01-020-CF

For metal cap type A (universal) replace 020 by

010

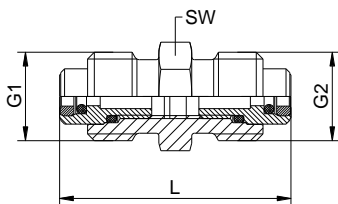
## bulkhead coupling series M16x2 - GAS



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) <b>without vibration security</b>	upon request
For metal cap type A (universal) <b>without vibration security</b>	upon request
For yellow plastic cap type A (universal) <b>without vibration security</b>	upon request

## hose connector series M16x2 – GAS – without valve function

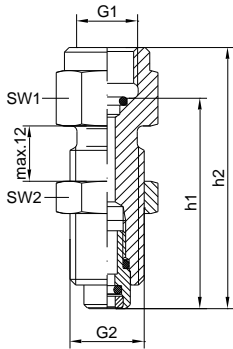


				arctic temperature	
G1	SW	L	G2	part number	part number
M16x2	17	42	M16x2	1-T80-48-00-020-CF	1-980-48-00-020-CF
M16x2	17	42	M16x1,5	1-T80-48-00-030	1-980-48-00-030

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



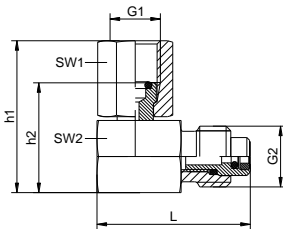
G1	SW1	SW2	h1	h2	G2	sealing	part number (NBR)	part number (FKM)
G 1/4	19	19	46	57	M16x2	o-ring	1-918-29-01-240-CF	1-918-29-21-240-CF
G 1/2	27	24	49	66	M16x2	o-ring	1-918-31-01-240-CF	1-918-31-21-240-CF
1/4 NPT	19	19	-	58	M16x2	thread	1-918-44-00-240-CF	1-918-44-20-240-CF
1/2 NPT	27	24	-	66	M16x2	thread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

For design with damping element replace 918 by

930

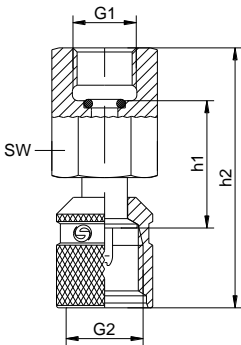
930

## 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	25	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

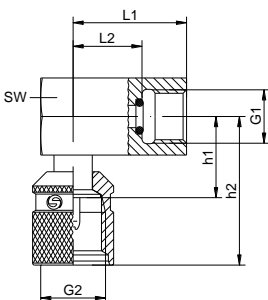
010

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	1-928-31-21-020-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

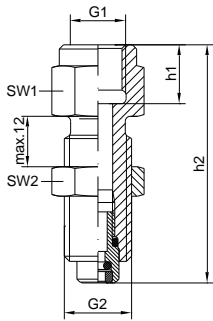
010

010

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

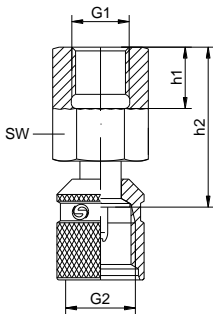
# M16x2 – connectors and adaptors

## 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

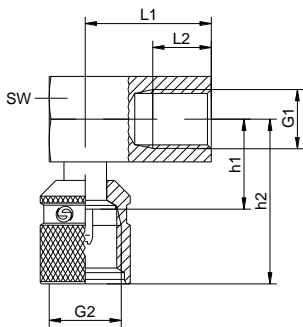
## direct sensor connector series M16x2 – without valve function



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

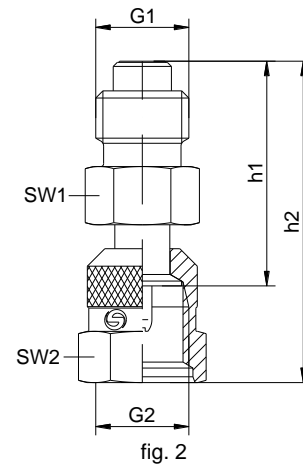
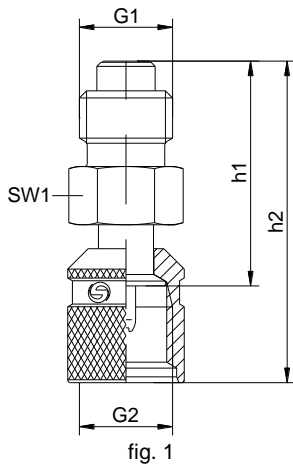


G1	SW	L1	L2	h1	h2	G2	part number (NBR)	part number (FKM)
G 1/4	19	28	13	20	37	M16x2	1-728-29-00-021-CF	upon request

For metal cap type A (universal) replace 021 by 011

# M16x2 - connectors and adaptors

## adaptor for test coupling series M16x2 – without valve function

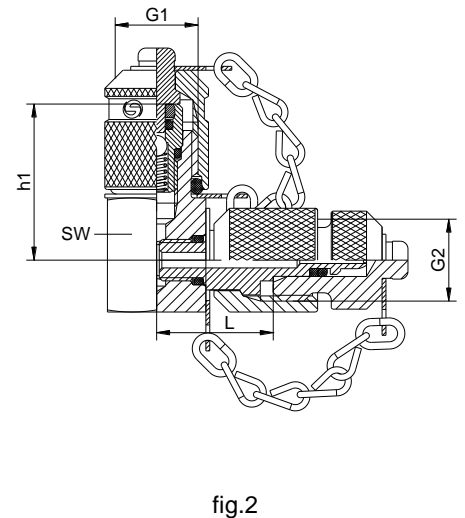
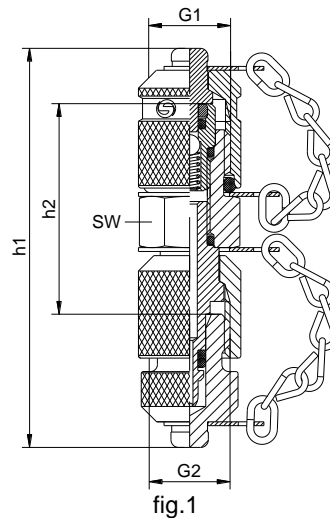


G1	G2	h1	h2	SW1	SW2	fig.	part number (NBR)	part number (FKM)
M16x2	M16x1,5	39	56	17	-	1	1-980-25-00-050	upon request
M16x2	S12x1,5	39	50	17	-	1	1-980-49-00-100-CF	upon request
M16x1,5	M16x2	39	56	17	19	2	1-980-48-00-120	upon request
S12x1,5	M16x2	36	47	17	19	2	1-980-48-00-110-CF	upon request

## 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)



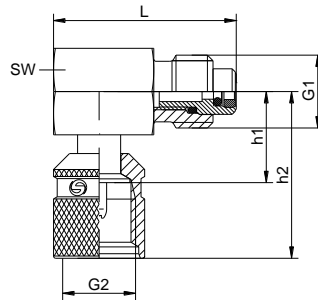
G1	G2	h1	h2	L	SW	fig.	part number (NBR)	part number (FKM)
M16x2	5/8"-14 BSF	78	41	-	17	1	1-880-67-60-001-CF	upon request
M16x2	5/8"-14 BSF	30	-	23	19	2	1-880-67-60-002-CF	upon request

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

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

# M16x2 - connectors and adaptors

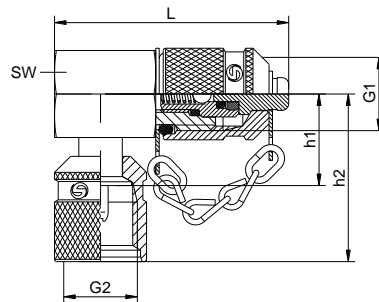
## adaptor for test coupling 90° series M16x2 – without valve function



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

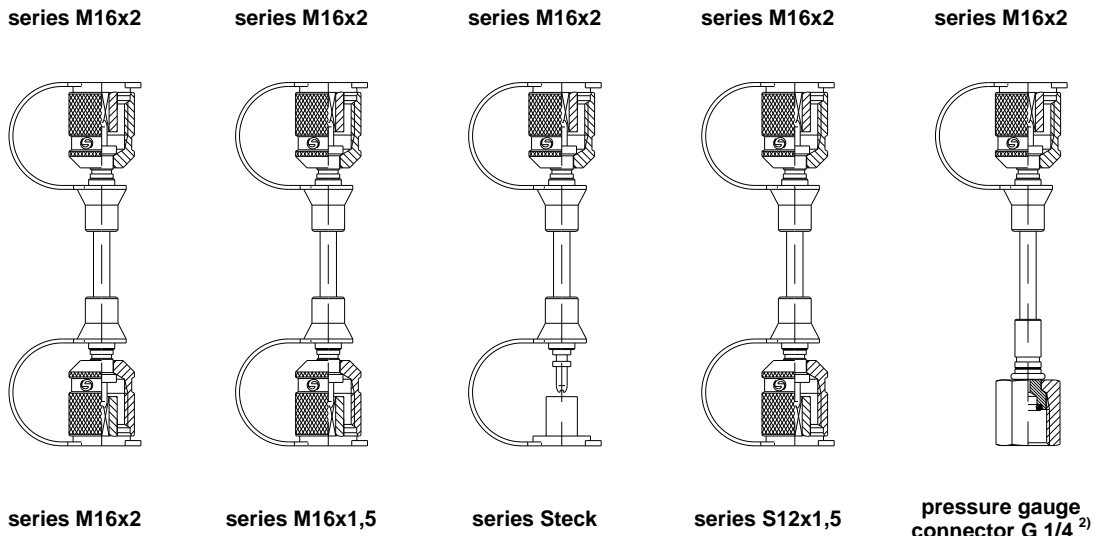
G1	G2	L	h1	h2	SW	part number (NBR)	part number (FKM)
M16x2	M16x2	51	20	37	19	1-924-02-00-600-CF	1-924-02-02-600-CF
metal cap type A (universal) with vibration security						1-924-01-00-590-CF	1-924-01-02-590-CF
metal cap type B (round) <b>without vibration security</b>						1-924-02-00-020-CF	1-924-02-02-020-CF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

## 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



length L <sup>1)</sup> acc. DIN 20066	series M16x2	series M16x1,5	series Steck	series S12x1,5	pressure gauge connector G 1/4 <sup>2)</sup>
	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

<sup>1)</sup> Other lengths upon request

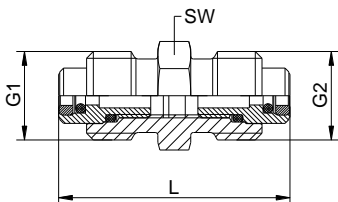
Further connectors please see chapter  
hoses and connectors

<sup>2)</sup> Connection thread G<sup>1</sup>/<sub>2</sub>,  
<sup>1</sup>/<sub>4</sub> NPT and <sup>1</sup>/<sub>2</sub> 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:

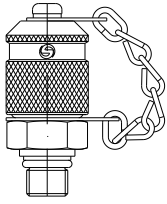
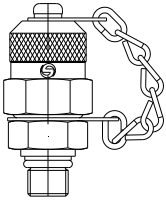
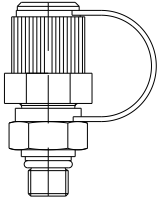
Metal parts: stainless steel  
Seals: NBR (-20 °C bis +100 °C)  
FKM (-20 °C bis +200 °C)(**standard**)  
EPDM (-40°C bis +150 °C)  
Hose: polyamide (-35 °C bis +100 °C);

## Pressure:

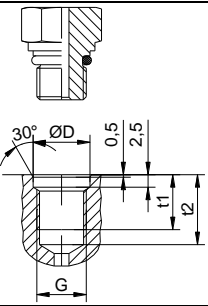
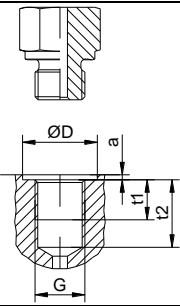
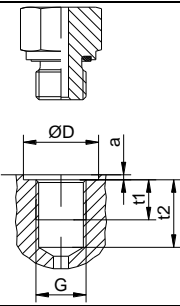
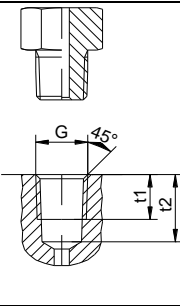
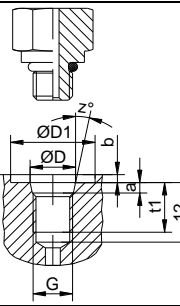
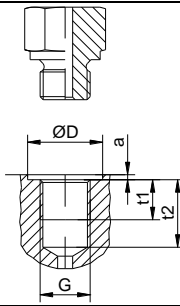
Maximum working pressure (PN) of the test couplings - 630 bar at 4-fold security. Connection under pressure up to 400 bar. For the union pieces please observe the instructions given by the corresponding producer.



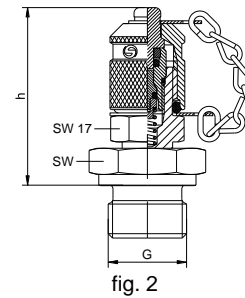
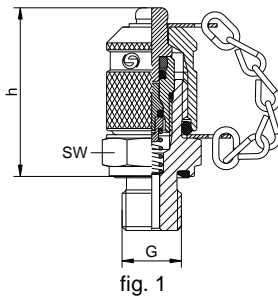
## design types of caps

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



G	PN	SW	h	fig.	sealing	main parts	part number
M10x1	630	17	38	1	o-ring type 1	1.4571	1-912-22-22-660
M12x1,5	630	17	39	1	soft sealing type 3	1.4571	1-912-23-12-660
M14x1,5	630	19	37	1	soft sealing type 3	1.4571	1-912-24-12-660
G 1/8	400	17	39	1	soft sealing type 3	1.4571	1-912-28-12-660
G 1/4	630	19	37	1	metallic sealing type 2	1.4571	1-912-29-32-660
G 1/4	630	19	37	1	soft sealing type 3	1.4571	1-912-29-12-660 <sup>1)</sup>
G 3/8	630	22	37	1	metallic sealing type 2	1.4571	1-912-30-32-660
G 3/8	630	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	630	27	39	1	soft sealing type 3	1.4571	1-912-31-12-660
Rk 1/8*	400	17	36	1	thread type 4	1.4571	1-912-33-02-660
Rk 1/4*	630	19	35	1	thread type 4	1.4571	1-912-34-02-660
7/16-20 UNF	630	17	38	1	o-ring type 5	1.4571	1-912-39-32-660
9/16-18 UNF	630	19	38	1	o-ring type 5	1.4571	1-912-40-32-660
1/8 NPT	400	17	36	1	thread type 4	1.4571	1-912-43-02-660
1/4 NPT	630	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  
<sup>1)</sup> 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**

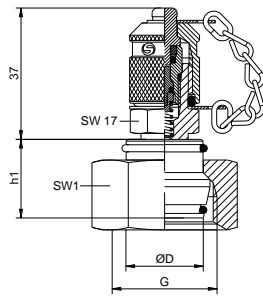


fig. 1

**type DKO**

test coupling with 24° taper adapter (DIN3865 / ISO8434-1)

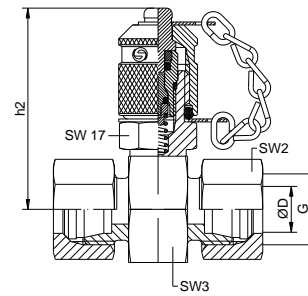


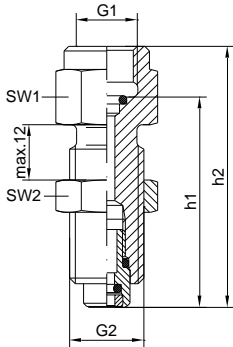
fig. 2

**type GE**

test coupling with straight fitting (DIN2353 / ISO8434-1 and -4)

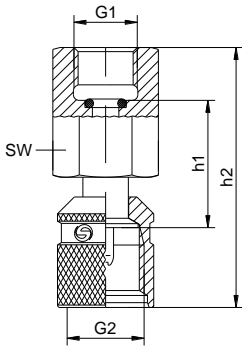
type	PN	tube ØD	G	h1	h2	SW1	SW2	SW3	material main parts	type DKO part number	fig.	type GE part number	fig.
L	315	6	M12x1,5			14			1.4571	1-914-00-00-660	1	1-916-00-00-660	2
		8	M14x1,5			17			1.4571	1-914-02-00-660	1	1-916-02-00-660	2
		10	M16x1,5			19			1.4571	1-914-04-00-660	1	1-916-04-00-660	2
	160	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
		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
	400	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
		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
315	30	M42x2			50			1.4571	1-914-16-00-660	1	1-916-16-00-660	2	
	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) <b>without vibration security</b> replace 660 by										080		080	
For metal cap type A (universal) <b>without vibration security</b> replace 660 by										070		070	
For yellow plastic cap type A (universal) <b>without vibration security</b> 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	25	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

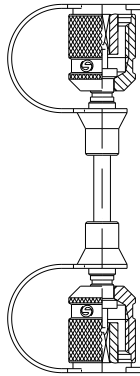
070

## 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



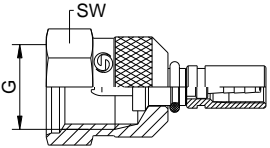
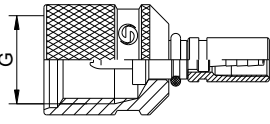
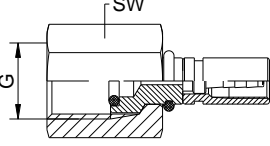
series M16x2

series M16x2	length L <sup>1)</sup> 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

<sup>1)</sup> 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.