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- worldwide!



HYDRAULICS - Measuring Systems



Hydraulics

Content

Page



Test coupling with adaptation thread M16x2
Internal sealing by ball

Page f. 3



Test coupling with adaptation thread M16x2
Internal sealing by piston with o-ring
Made of stainless steel Page f. 10
For inert gases Page f. 13

Page f. 8



Test coupling with adaptation thread M16x1,5
Internal sealing by ball or by piston with o-ring

Page f. 18



Test coupling with adaptation thread S12x1,5
Internal sealing by piston with o-ring

Page f. 21



Test coupling with plug-in system
Internal sealing by ball

Page f. 24



Spradow Test Box with 2 and more pressure gauges
Standard equipment or according to your specifications

Page f. 27



Pressure gauge
NG63, G1/4 A bottom, different pressure stages
NG63, 1/4 NPT bottom, different pressure stages

Page f. 29



Single parts for hose connectors
Test hoses DN2

Page f. 30

M16x2-ball design

Application:

Spradow test couplings are applied for the monitoring and control of 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:

Spradow test couplings have been developed for hydraulic oils and mineral oil 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); reinforcement: synthetic fibre

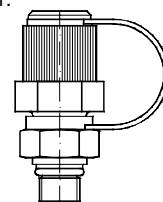
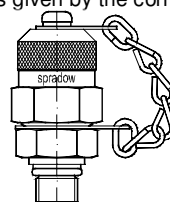
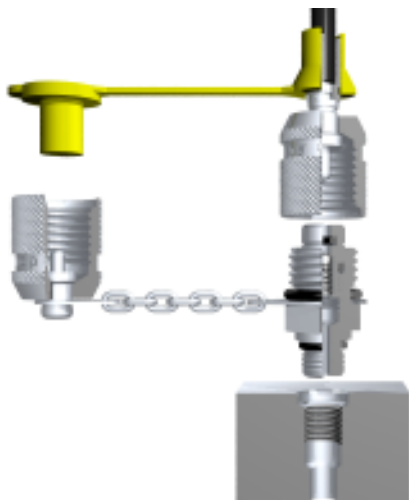
Surface:

CrVI-free.

Pressure:

Max. working pressure of the test couplings - 630 bar, at 3-fold security.

For the union pieces (type DKO, BE and GE) please observe the instructions given by the corresponding producer.



The complete Spradow hydraulic series M16x2 is also available with universal cap (type A) made of steel or plastic.

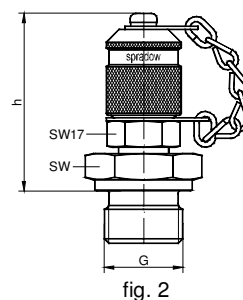
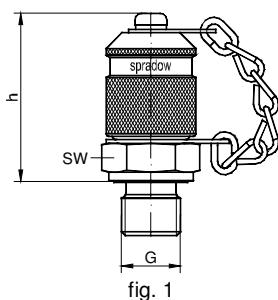
port connection and seals

type 1					type 2					type 3					type 4				type 5						
G	øD	t1	t2		G	øD	a	t1	t2	G	øD	a	t1	t2	G	t1	t2		G	øD1	øD	a	t1	t2	
M 8x1	9,5	11	14		M 8x1	13	1	8	10	M 10 x 1	15	1	8	10	1/8 NPT	6,9	11,6		5/16-24 UNF	17	9,1	1,9	10	12	
M 10x1	11,5	11	14		M 10 x 1	15	1	8	10	M 10x1,25	18	1,5	10	15	1/4 NPT	10	16,4		7/16-20 UNF	21	12,4	2,4	11,5	14	
					M 12 x 1,5	18	1,5	12	15	M 12 x 1,5	18	1,5	12	15	3/8 NPT	10,3	17,6		9/16-18 UNF	25	15,7	2,5	12,7	15,5	
					M 14 x 1,5	20	1,5	12	15	M 14 x 1,5	20	1,5	12	15											
					M 16 x 1,5	23	1,5	12	15	M 16 x 1,5	23	1,5	12	15	R 1/8 taper	5,5	9,5								
					M 18 x 1,5	25	2	12	15	M 18 x 1,5	25	2	12	15	R 1/4 taper	8,5	13,5								
					M 20 x 1,5	27	2	14	17	M 20 x 1,5	27	2	14	17											
					M 22 x 1,5	28	2,5	14	17	M 22 x 1,5	28	2,5	14	17											
					M 26 x 1,5	32	2,5	16	19	M 26 x 1,5	32	2,5	16	19											
					M 27 x 2	33	2,5	16	20	M 27 x 2	33	2,5	16	20											
					M 33 x 2	40	2,5	18	22	M 33 x 2	40	2,5	18	22											
					M 42 x 2	50	2,5	20	24	M 42 x 2	50	2,5	20	24											
					M 48 x 2	56	2,5	22	26	M 48 x 2	56	2,5	22	26											
					G 1/8	15	1	8	10,5	G 1/8	15	1	8	10,5											
					G 1/4	20	1,5	12	15,5	G 1/4	20	1,5	12	15,5											
					G 3/8	23	2	12	15,5	G 3/8	23	2	12	15,5											
					G 1/2	28	2,5	14	18,5	G 1/2	28	2,5	14	18,5											
					G 3/4	33	2,5	16	20	G 3/4	33	2,5	16	20											
					G 1	40	2,5	18	23	G 1	40	2,5	18	23											
					G 1 1/4	50	2,5	20	25	G 1 1/4	50	2,5	20	25											
					G 1 1/2	56	2,5	22	27	G 1 1/2	56	2,5	22	27											

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

M16x2-ball design

test coupling
series: M16x2 – ball design



G	SW	h	fig.	sealing	part number (NBR)	part number (FKM)	VA
M8x1	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	17	37	1	o-ring type 1	1-906-22-21-600-CF	1-906-22-22-600-CF	☺
M10x1	17	37	1	metallic sealing type 2	1-906-22-30-600-CF	1-906-22-32-600-CF	
M10x1	17	37	1	soft sealing type 3	1-906-22-11-600-CF	1-906-22-12-600-CF	
M10x1,25	17	37	1	soft sealing type 3	1-906-49-11-600-CF	1-906-49-12-600-CF	
M12x1,5	17	37	1	metallic sealing type 2	1-906-23-30-600-CF	1-906-23-32-600-CF	
M12x1,5	17	37	1	soft sealing type 3	1-906-23-11-600-CF	1-906-23-12-600-CF	☺
M14x1,5	19	37	1	metallic sealing type 2	1-906-24-30-600-CF	1-906-24-32-600-CF	
M14x1,5	19	37	1	soft sealing type 3	1-906-24-11-600-CF	1-906-24-12-600-CF	☺
M16x1,5	22	37	1	metallic sealing type 2	1-906-25-30-600-CF	1-906-25-32-600-CF	
M16x1,5	22	37	1	soft sealing type 3	1-906-25-11-600-CF	1-906-25-12-600-CF	
M18x1,5	27	48	2	metallic sealing type 2	1-911-26-30-600-CF	1-911-26-32-600-CF	
M20x1,5	27	48	2	metallic sealing type 2	1-911-51-30-600-CF	1-911-51-32-600-CF	
M22x1,5	27	48	2	metallic sealing type 2	1-911-27-30-600-CF	1-911-27-32-600-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	17	37	1	metallic sealing type 2	1-906-28-30-600-CF	1-906-28-32-600-CF	
G 1/8	17	39	1	soft sealing type 3	1-906-28-11-600-CF	1-906-28-12-600-CF	☺
G 1/4	19	37	1	metallic sealing type 2	1-906-29-30-600-CF	1-906-29-32-600-CF	☺
G 1/4	19	37	1	soft sealing type 3	1-906-29-11-600-CF	1-906-29-12-600-CF	☺
G 3/8	22	37	1	soft sealing type 3	1-906-30-11-600-CF	1-906-30-12-600-CF	
G 1/2	27	48	2	metallic sealing type 2	1-911-31-30-600-CF	1-911-31-32-600-CF	
G 3/4	36	49	2	metallic sealing type 2	1-911-32-30-600-CF	1-911-32-32-600-CF	
G 1	41	49	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	
R 1/8 taper	17	35	1	thread type 4	1-906-33-00-600-CF	1-906-33-02-600-CF	☺
R 1/4 taper	17	35	1	thread type 4	1-906-34-00-600-CF	1-906-34-02-600-CF	☺
5/16-24 UNF	17	38	1	o-ring type 5	1-906-38-30-600-CF	1-906-38-32-600-CF	
7/16-20 UNF	17	38	1	o-ring type 5	1-906-39-30-600-CF	1-906-39-32-600-CF	
9/16-18 UNF	19	38	1	o-ring type 5	1-906-40-30-600-CF	1-906-40-32-600-CF	
1/8 NPT	17	36	1	thread type 4	1-906-43-00-600-CF	1-906-43-02-600-CF	☺
1/4 NPT	19	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	2	thread type 4	1-911-46-00-600-CF	1-911-46-02-600-CF	
metal cap type A (universal) with vibration security					1-9xx-xx-xx-590-CF	1-9xx-xx-x2-590-CF	
metal cap type B (round) without vibration security					1-9xx-xx-xx-020-CF	1-9xx-xx-x2-020-CF	
metal cap type A (universal) without vibration security					1-9xx-xx-xx-010-CF	1-9xx-xx-x2-010-CF	
plastic cap type A (universal) yellow without vibration security					1-9xx-xx-xx-100-CF	1-9xx-xx-x2-100-CF	

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

M16x2-ball design

fitting with test coupling
series: M16x2 – ball design

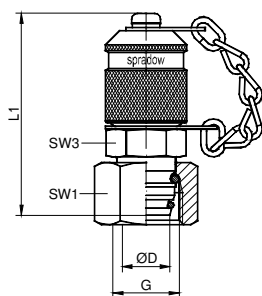


fig. 1

type DKO

test coupling with 24° taper adapter

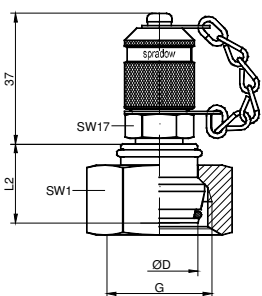


fig. 2

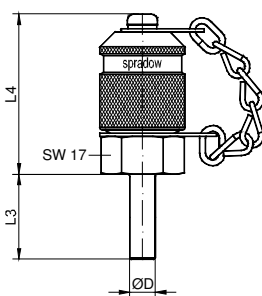


fig. 3

type BE

test coupling for compression ring fittings

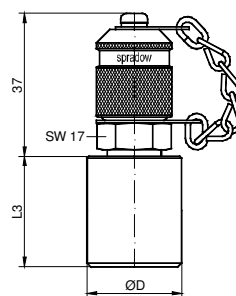
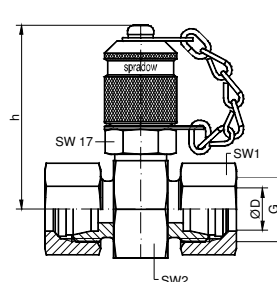


fig. 4

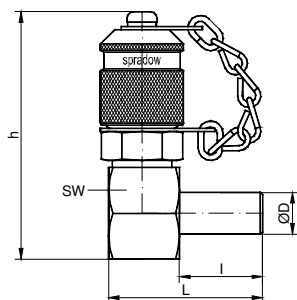


type GE

test coupling
with straight coupling

type	PN	pipe øD	L1	L2	L3	L4	SW1	SW2	SW3	h	G	type DKO part number	fig.	type BE part number	Fig.	type GE part number
L	315	6	53		20	38	14	22	17	48	M12x1,5	1-908-00-20-600-CF	1	1-909-00-00-601-CF	3	1-910-00-00-600-CF
		8	53		20	38	17	24	17	49	M14x1,5	1-908-02-20-600-CF	1	1-909-02-00-601-CF	3	1-910-02-00-600-CF
		10	50		22	40	19	24	17	49	M16x1,5	1-908-04-20-600-CF	1	1-909-04-00-601-CF	3	1-910-04-00-600-CF
		12	50		22	37	22	27	17	50,5	M18x1,5	1-908-06-20-600-CF	1	1-909-06-00-601-CF	3	1-910-06-00-600-CF
	160	15	51		22	37	27	30	19	52	M22x1,5	1-908-09-20-600-CF	1	1-909-09-00-601-CF	3	1-910-09-00-600-CF
		18		22	28	37	32	32		53	M26x1,5	1-908-11-00-600-CF	2	1-909-11-00-601-CF	4	1-910-11-00-600-CF
		22		22	30	37	36	36		55	M30x2	1-908-13-00-600-CF	2	1-909-13-00-601-CF	4	1-910-13-00-600-CF
		28		24	32	37	41	41		57,5	M36x2	1-908-15-00-600-CF	2	1-909-15-00-601-CF	4	1-910-15-00-600-CF
		35		27	42	37	50	46		60	M45x2	1-908-17-00-600-CF	2	1-909-17-00-601-CF	4	1-910-17-00-600-CF
42		28	45	37	60	55		64,5	M52x2	1-908-19-00-600-CF	2	1-909-19-00-601-CF	4	1-910-19-00-600-CF		
S	630	6	54		20	38	17	24	17	49	M14x1,5	1-908-01-20-600-CF	1	1-909-00-00-601-CF	3	1-910-01-00-600-CF
		8	51		20	38	19	24	17	49	M16x1,5	1-908-03-20-600-CF	1	1-909-02-00-601-CF	3	1-910-03-00-600-CF
		10	51		22	40	22	24	17	49	M18x1,5	1-908-05-20-600-CF	1	1-909-04-00-601-CF	3	1-910-05-00-600-CF
		12	51		22	37	24	24	17	49	M20x1,5	1-908-07-20-600-CF	1	1-909-06-00-601-CF	3	1-910-07-00-600-CF
	400	14		24	22	37	27	27		50,5	M22x1,5	1-908-08-00-600-CF	2	1-909-08-00-601-CF	3	1-910-08-00-600-CF
		16		20	28	37	30	30		52	M24x1,5	1-908-10-00-600-CF	2	1-909-10-00-601-CF	3	1-910-10-00-600-CF
		20		25	30	37	36	32		53	M30x2	1-908-12-00-600-CF	2	1-909-12-00-601-CF	4	1-910-12-00-600-CF
		25		27	36	37	46	41		57,5	M36x2	1-908-14-00-600-CF	2	1-909-14-00-601-CF	4	1-910-14-00-600-CF
		30		29	41	37	50	46		60	M42x2	1-908-16-00-600-CF	2	1-909-16-00-601-CF	4	1-910-16-00-600-CF
315	38		32	48	37	60	55		64,5	M52x2	1-908-18-00-600-CF	2	1-909-18-00-601-CF	4	1-910-18-00-600-CF	
metal cap type A (universal) with vibration security												1-908-xx-x0-590-CF		1-909-xx-00-591-CF		1-910-xx-00-590-CF
metal cap type B (round) without vibration security												1-908-xx-x0-020-CF		1-909-xx-00-021-CF		1-910-xx-00-020-CF
metal cap type A (universal) without vibration security												1-908-xx-x0-010-CF		1-909-xx-00-011-CF		1-910-xx-00-010-CF
plastic cap type A (universal) yellow without vibration security												1-908-xx-x0-100-CF		1-909-xx-00-101-CF		1-910-xx-00-100-CF
design with sealings made of FKM												1-908-xx-x2-xxx-CF		1-909-xx-02-xxx-CF		1-910-xx-02-xxx-CF

90° fitting type BE with test coupling
series: M16x2 – ball design



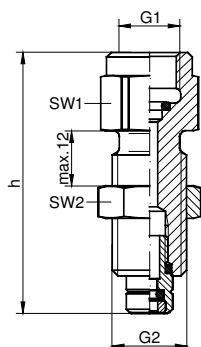
pipe øD	l	L	SW	h	part number (NBR)	part number (FKM)
8	20	37	22	59	1-980-03-60-080-CF	1-980-03-60-081-CF
10	20	37	22	59	1-980-05-60-120-CF	1-980-05-60-121-CF

metal cap type A (universal) with vibration security	1-980-xx-59-xxx-CF	1-980-xx-59-xxx-CF
metal cap type B (round) without vibration security	1-980-xx-02-xxx-CF	1-980-xx-02-xxx-CF
metal cap type A (universal) without vibration security	1-980-xx-01-xxx-CF	1-980-xx-01-xxx-CF
plastic cap type A (universal) yellow without vibration security	1-980-xx-10-xxx-CF	1-980-xx-10-xxx-CF

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

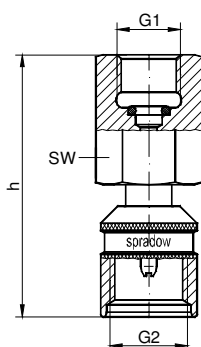
M16x2-ball design

pressure gauge connector series: M16x2



G1	SW1	SW2	h	G2	sealing	part number (NBR)	part number (FKM)
G 1/4	19	19	57	M16x2	o-ring	1-918-29-01-240-CF	1-918-29-21-240-CF
G 1/2	27	24	67	M16x2	o-ring	1-918-31-01-240-CF	1-918-31-21-240-CF
¼ NPT	19	19	58	M16x2	thread	1-918-44-00-240-CF	1-918-44-20-240-CF
½ NPT	27	24	67	M16x2	thread	1-918-46-00-240-CF	1-918-46-20-240-CF

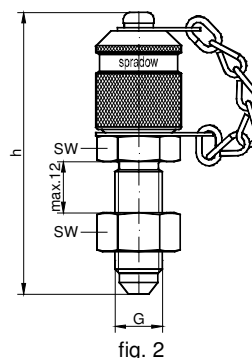
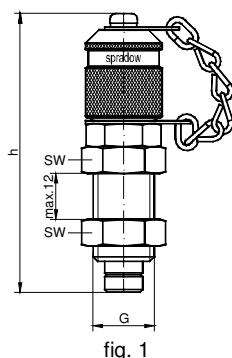
direct pressure gauge connector series: M16x2



G1	SW	h	G2	sealing	part number (NBR)	part number (FKM)
G 1/4	19	54	M16x2	o-ring	1-927-29-01-020-CF	1-927-29-21-020-CF
G 1/2	27	58	M16x2	o-ring	1-927-31-01-020-CF	1-927-31-21-020-CF
¼ NPT	19	53	M16x2	thread	1-927-44-00-020-CF	1-927-44-20-020-CF
½ NPT	27	56	M16x2	thread	1-927-46-00-020-CF	1-927-46-20-020-CF

design with cap type A (universal)	1-927-xx-0x-010-CF	1-927-xx-2x-010-CF
design with cap type C (hexagon)	1-927-xx-0x-030-CF	1-927-xx-2x-030-CF

bulkhead coupling series: M16x2 – ball design



G	SW	h	fig.	part number (NBR)	part number (FKM)
M16x2	19	75	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
metal cap type A (universal) with vibration security				1-980-xx-59-xxx-CF	1-980-xx-59-xxx-CF
metal cap type B (round) without vibration security				1-980-xx-02-xxx-CF	1-980-xx-02-xxx-CF
metal cap type A (universal) without vibration security				1-980-xx-01-xxx-CF	1-980-xx-01-xxx-CF
plastic cap type A (universal) yellow without vibration security				1-980-xx-10-xxx-CF	1-980-xx-10-xxx-CF

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

M16x2-ball design

high pressure hose
series: M16x2

Max. working pressure:
630 bar

series: M16x2

series: M16x2

series: M16x2

series: M16x2

series: M16x2

Test hose:
Nominal bore 2 mm
Min. bend radius:
20 mm

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

Hose construction

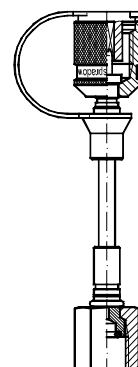
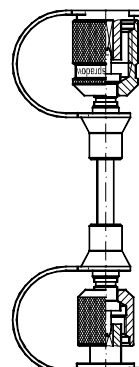
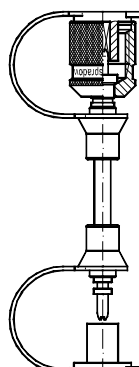
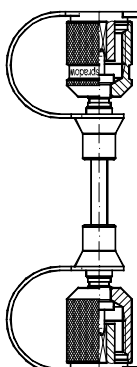
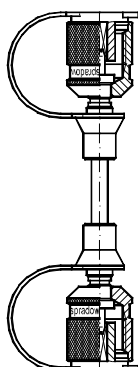
Hose core and cover:

PA

Reinforcement:

synthetic fibre

bursting pressure:
1900 bar



series: M16x2

series: M16x1,5

series: plug-in

series: S12x1,5

pressure gauge
connector G 1/4 ²⁾

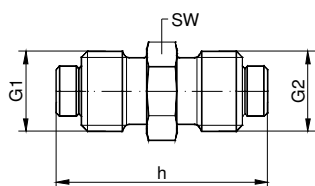
length L ¹⁾ acc. DIN 20066	part number				
200	1-971-04-04-010-CF	1-971-04-10-010-CF	1-971-01-04-010-CF	1-971-04-12-010-CF	1-971-02-04-010-CF
400	1-971-04-04-040-CF	1-971-04-10-040-CF	1-971-01-04-040-CF	1-971-04-12-040-CF	1-971-02-04-040-CF
630	1-971-04-04-060-CF	1-971-04-10-060-CF	1-971-01-04-060-CF	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 on inquiry

Further connectors on page 31 f.

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

hose connector
series: 16x2



without valve function (check valve)

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

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

M16x2-piston design

Application:

Spradow test couplings are applied for the monitoring and control of 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:

Spradow test couplings have been developed for hydraulic oils and mineral oil 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); reinforcement: synthetic fibre

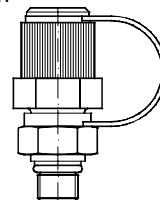
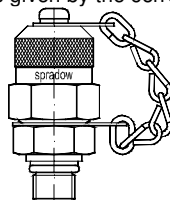
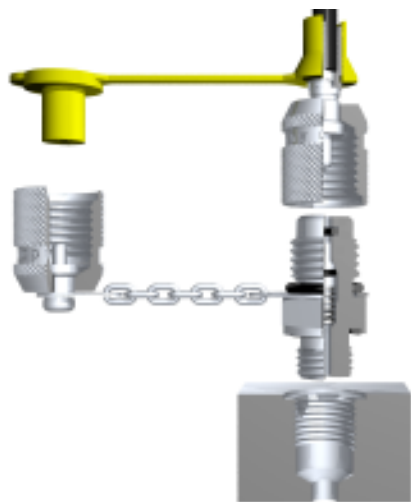
Surface:

CrVI-free.

Pressure:

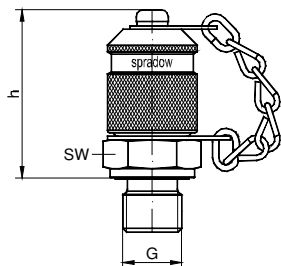
Max. working pressure of the test couplings - 630 bar, at 4-fold security.

For the union pieces (type DKO, BE and GE) please observe the instructions given by the corresponding producer.



The complete Spradow hydraulic series M16x2 is also available with universal cap (type A) made of steel or plastic.

test coupling series: M16x2 – piston design



G	SW	h	sealing	part number (NBR)	part number (FKM)
M10x1	17	37	o-ring type 1	1-Z06-22-21-600-CF	1-Z06-22-22-600-CF
G 1/8	17	39	soft sealing type 3	1-Z06-28-11-600-CF	1-Z06-28-12-600-CF
G 1/4	19	38	metallic sealing type 2	1-Z06-29-30-600-CF	1-Z06-29-32-600-CF
G 1/4	19	37	soft sealing type 3	1-Z06-29-11-600-CF	1-Z06-29-12-600-CF
R 1/4 taper	17	35	thread type 4	1-Z06-34-00-600-CF	1-Z06-34-02-600-CF
7/16-20 UNF	17	38	o-ring type 5	1-Z06-39-30-600-CF	1-Z06-39-32-600-CF
1/4 NPT	19	35	thread type 4	1-Z06-44-00-600-CF	1-Z06-44-02-600-CF

metal cap type A (universal) with vibration security	1-Z06-xx-xx-590-CF	1-Z06-xx-x2-590-CF
metal cap type B (round) without vibration security	1-Z06-xx-xx-020-CF	1-Z06-xx-x2-020-CF
metal cap type A (universal) without vibration security	1-Z06-xx-xx-010-CF	1-Z06-xx-x2-010-CF
plastic cap type A (universal) yellow without vibration security	1-Z06-xx-xx-100-CF	1-Z06-xx-x2-100-CF

port connection and seals

type 1	type 2	type 3	type 4	type 5
G	G	G	G	G
M 10x1	G 1/4	G 1/8	1/4 NPT	7/16-20 UNF
11,5	20	15	10	21
11	1,5	1	8,2	12,4
14	12	8	13,5	2,4
	15,5	10,5		11,5
				14

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

M16x2-piston design

fitting with test coupling
series: M16x2 – piston design

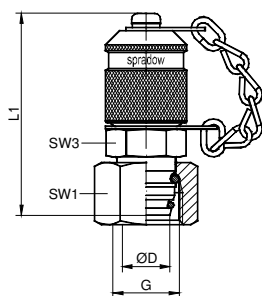


fig. 1

type DKO

test coupling with 24° taper adapter

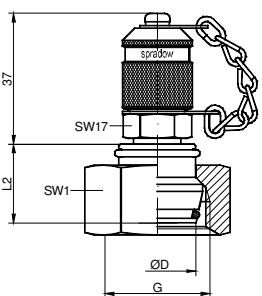


fig. 2

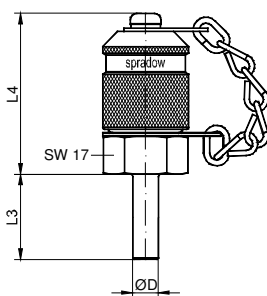


fig. 3

type BE

test coupling for compression ring fittings

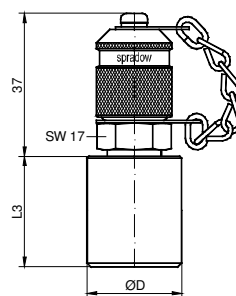
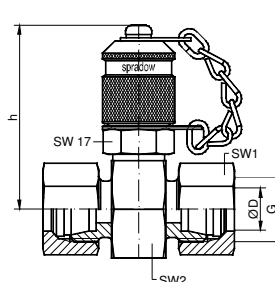


fig. 3

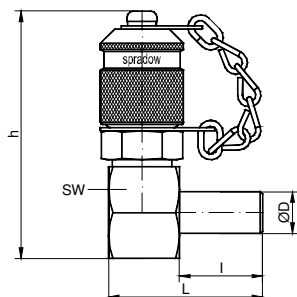


type GE

test coupling
with straight coupling

type	PN	tube øD	L1	L2	L3	L4	SW1	SW2	SW3	h	G	type DKO part number	fig.	type BE part number	fig.	type GE part number
L	315	6	53		20	38	14	22	17	48	M12x1,5	1-Z08-00-10-600-CF	1	1-Z09-00-00-601-CF	3	1-Z10-00-00-600-CF
		8	53		20	38	17	24	17	49	M14x1,5	1-Z08-02-10-600-CF	1	1-Z09-02-00-601-CF	3	1-Z10-02-00-600-CF
		10	50		22	40	19	24	17	49	M16x1,5	1-Z08-04-10-600-CF	1	1-Z09-04-00-601-CF	3	1-Z10-04-00-600-CF
		12	50		22	37	22	27	17	50,5	M18x1,5	1-Z08-06-10-600-CF	1	1-Z09-06-00-601-CF	3	1-Z10-06-00-600-CF
		15	51		22	37	27	30	19	52	M22x1,5	1-Z08-09-00-600-CF	1	1-Z09-09-00-601-CF	3	1-Z10-09-00-600-CF
		18		22	28	37	32	32		53	M26x1,5	1-Z08-11-00-600-CF	2	1-Z09-11-00-601-CF	4	1-Z10-11-00-600-CF
	160	22		22	30	37	36	36		55	M30x2	1-Z08-13-00-600-CF	2	1-Z09-13-00-601-CF	4	1-Z10-13-00-600-CF
		28		24	32	37	41	41		57,5	M36x2	1-Z08-15-00-600-CF	2	1-Z09-15-00-601-CF	4	1-Z10-15-00-600-CF
		35		27	42	37	50	46		60	M45x2	1-Z08-17-00-600-CF	2	1-Z09-17-00-601-CF	4	1-Z10-17-00-600-CF
	42		28	45	37	60	55		64,5	M52x2	1-Z08-19-00-600-CF	2	1-Z09-19-00-601-CF	4	1-Z10-19-00-600-CF	
S	630	6	54		20	38	17	24	17	49	M14x1,5	1-Z08-01-10-600-CF	1	1-Z09-00-00-601-CF	3	1-Z10-01-00-600-CF
		8	51		20	38	19	24	17	49	M16x1,5	1-Z08-03-10-600-CF	1	1-Z09-02-00-601-CF	3	1-Z10-03-00-600-CF
		10	51		22	40	22	24	17	49	M18x1,5	1-Z08-05-10-600-CF	1	1-Z09-04-00-601-CF	3	1-Z10-05-00-600-CF
		12	51		22	37	24	24	17	49	M20x1,5	1-Z08-07-10-600-CF	1	1-Z09-06-00-601-CF	3	1-Z10-07-00-600-CF
		14		24	22	37	27	27		50,5	M22x1,5	1-Z08-08-00-600-CF	2	1-Z09-08-00-601-CF	3	1-Z10-08-00-600-CF
	400	16		20	28	37	30	30		52	M24x1,5	1-Z08-10-00-600-CF	2	1-Z09-10-00-601-CF	3	1-Z10-10-00-600-CF
		20		25	30	37	36	32		53	M30x2	1-Z08-12-00-600-CF	2	1-Z09-12-00-601-CF	4	1-Z10-12-00-600-CF
		25		27	36	37	46	41		57,5	M36x2	1-Z08-14-00-600-CF	2	1-Z09-14-00-601-CF	4	1-Z10-14-00-600-CF
		30		29	41	37	50	46		60	M42x2	1-Z08-16-00-600-CF	2	1-Z09-16-00-601-CF	4	1-Z10-16-00-600-CF
	315	38		32	48	37	60	55		64,5	M52x2	1-Z08-18-00-600-CF	2	1-Z09-18-00-601-CF	4	1-Z10-18-00-600-CF
	metal cap type A (universal) with vibration security												1-Z08-xx-x0-590-CF		1-Z09-xx-00-591-CF	
metal cap type B (round) without vibration security												1-Z08-xx-x0-020-CF		1-Z09-xx-00-021-CF		1-Z10-xx-00-020-CF
metal cap type A (universal) without vibration security												1-Z08-xx-x0-010-CF		1-Z09-xx-00-011-CF		1-Z10-xx-00-010-CF
plastic cap type A (universal) yellow without vibration security												1-Z08-xx-x0-100-CF		1-Z09-xx-00-101-CF		1-Z10-xx-00-100-CF
design with sealings made of FKM												1-Z08-xx-x2-xxx-CF		1-Z09-xx-02-xxx-CF		1-Z10-xx-02-xxx-CF

90° fitting type BE with test coupling
series: M16x2 – piston design



tube øD	I	L	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

metal cap type A (universal) with vibration security	1-Z80-xx-59-xxx-CF	1-Z80-xx-59-xxx-CF
metal cap type B (round) without vibration security	1-Z80-xx-02-xxx-CF	1-Z80-xx-02-xxx-CF
metal cap type A (universal) without vibration security	1-Z80-xx-01-xxx-CF	1-Z80-xx-01-xxx-CF
plastic cap type A (universal) yellow without vibration security	1-Z80-xx-10-xxx-CF	1-Z80-xx-10-xxx-CF

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

stainless steel M16x2-piston design

test coupling - stainless steel
series: M16x2 - piston design
sealings: FKM

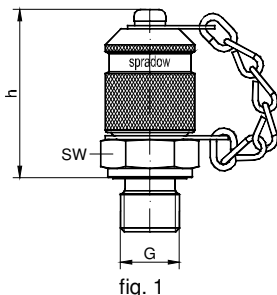


fig. 1

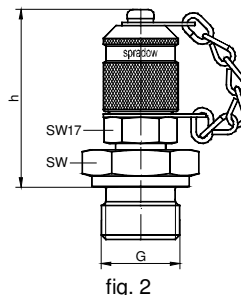


fig. 2

G	SW	h	fig.	sealing	part number
M10x1	17	37	1	o-ring type 1	1-912-22-22-660
M12x1,5	17	37	1	soft sealing type 3	1-912-23-12-660
M14x1,5	19	37	1	soft sealing type 3	1-912-24-12-660
G 1/8	17	39	1	soft sealing type 3	1-912-28-12-660
G 1/4	19	37	1	metallic sealing type 2	1-912-29-32-660
G 1/4	19	37	1	soft sealing type 3	1-912-29-12-660
G 3/8	22	37	1	soft sealing type 3	1-912-30-12-660
G 1/2	27	47	2	metallic sealing type 2	1-917-31-32-660
G 1/2	27	47	2	soft sealing type 3	1-917-31-12-660
R 1/8 taper	17	35	1	thread type 4	1-912-33-02-660
R 1/4 taper	19	35	1	thread type 4	1-912-34-02-660
9/16-18 UNF	19	38	1	o-ring type 5	1-912-40-32-660
1/8 NPT	17	36	1	thread type 4	1-912-43-02-660
1/4 NPT	19	35	1	thread type 4	1-912-44-02-660
metal cap type A (universal) with vibration security					1-912-xx-x2-650
metal cap type B (round) without vibration security					1-912-xx-x2-080
metal cap type A (universal) without vibration security					1-912-xx-x2-070
plastic cap type A (universal) yellow without vibration security					1-912-xx-x2-100

pressure gauge connector / direct pressure gauge connector
series: M16x2

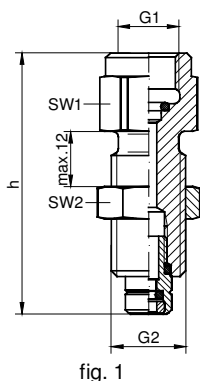


fig. 1

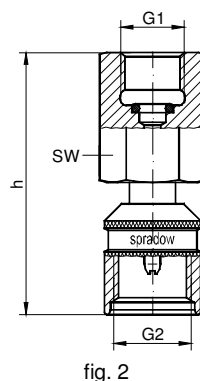


fig. 2

G1	SW	h	Abb.	G2	sealing	part number
G 1/4	19	57	1	M16x2	o-ring	1-939-29-22-240
G 1/2	27	67	1	M16x2	o-ring	1-939-31-22-240
G 1/4	19	54	2	M16x2	o-ring	1-940-29-22-080
G 1/2	27	58	2	M16x2	o-ring	1-940-31-22-080

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

stainless steel M16x2-piston design

fitting with test coupling - stainless steel

series: M16x2 - piston design

sealings: FKM

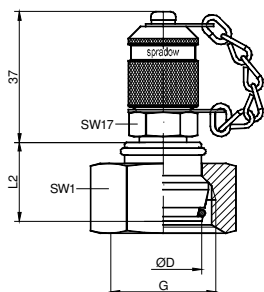


fig. 1
type DKO
test coupling
with 24° taper adapter

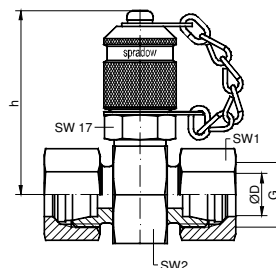


fig. 2
type GE
test coupling
with straight coupling

type	PN	tube Ø	G	type DKO part number	fig.	type GE part number	fig.	
L	315	6	M12x1,5	1-914-00-00-660	1	1-916-00-00-660	2	
		8	M14x1,5	1-914-02-00-660	1	1-916-02-00-660	2	
		10	M16x1,5	1-914-04-00-660	1	1-916-04-00-660	2	
		12	M18x1,5	1-914-06-00-660	1	1-916-06-00-660	2	
		15	M22x1,5	1-914-09-00-660	1	1-916-09-00-660	2	
		18	M26x1,5	1-914-11-00-660	1	1-916-11-00-660	2	
	160	22	M30x2	1-914-13-00-660	1	1-916-13-00-660	2	
		28	M36x2	1-914-15-00-660	1	1-916-15-00-660	2	
		35	M45x2	1-914-17-00-660	1	1-916-17-00-660	2	
		42	M52x2	1-914-19-00-660	1	1-916-19-00-660	2	
S	630	6	M14x1,5	1-914-01-00-660	1	1-916-01-00-660	2	
		8	M16x1,5	1-914-03-00-660	1	1-916-03-00-660	2	
		10	M18x1,5	1-914-05-00-660	1	1-916-05-00-660	2	
		12	M20x1,5	1-914-07-00-660	1	1-916-07-00-660	2	
		14	M22x1,5	1-914-08-00-660	1	1-916-08-00-660	2	
		16	M24x1,5	1-914-10-00-660	1	1-916-10-00-660	2	
	400	20	M30x2	1-914-12-00-660	1	1-916-12-00-660	2	
		25	M36x2	1-914-14-00-660	1	1-916-14-00-660	2	
		30	M42x2	1-914-16-00-660	1	1-916-16-00-660	2	
		315	38	M52x2	1-914-18-00-660	1	1-916-18-00-660	2
	metal cap type A (universal) with vibration security				1-914-xx-00-650		1-916-xx-00-650	
	metal cap type B (round) without vibration security				1-914-xx-00-080		1-916-xx-00-080	
metal cap type A (universal) without vibration security				1-914-xx-00-070		1-916-xx-00-070		
plastic cap type A (universal) yellow without vibration security				1-914-xx-00-100		1-916-xx-00-100		

stainless steel M16x2-piston design

high pressure hose - stainless steel

series: M16x2

sealings: FKM

Max. working pressure
630 bar

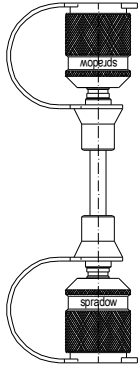
Test hose:
Nominal bore 2mm
Min. bend radius:
20 mm

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

Hose construction

Hose core and cover:
PA

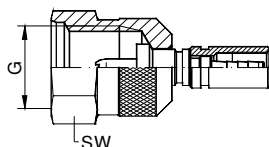
Reinforcement:
synthetic fibre
bursting pressure:
1900 bar

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

series: M16x2

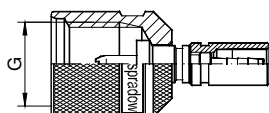
single parts for hoses

view	No.	G	SW	DN	part number	description
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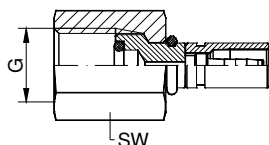
06 M16x2 19 2 2-970-06-00-001

connector for test coupling
metal cap type A (universal)
incl. ferrule



07 M16x2 2 2-970-07-00-001

connector for test coupling
metal cap type B (round)
incl. ferrule



52 G 1/4 17 2 2-970-52-00-001

pressure gauge connector with Whitworth -
thread
sealing to pressure gauge by o-ring
incl. ferrule

hose

No.	pressure	note	DN	part number	
-----	----------	------	----	-------------	--

71 630 bar 2 9-946-02-00-020

75 630 bar pricked 2 9-946-02-01-020 hose

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

M16x2-GAS*

***Media:**

This Spradow test couplings have been developed for nitrogen and other inert gases.

Application:

Spradow nitrogen test couplings are applied for the monitoring and control of pressure as well as the ventilation and filling. 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:

Materials:
Metal parts: Steel, Stainless steel upon request

Seals: material 1 (-20 °C to +100 °C) - standard

material 2 (-40 °C to +150 °C)

Hose: Polyamide (-35 °C to +100 °C); reinforcement: synthetic fibre

Surface:

CrVI-free.

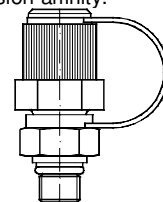
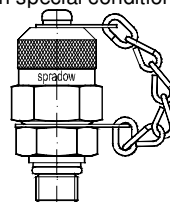
Pressure:

Max. working pressure of the test couplings - 630 bar, at 4-fold security.

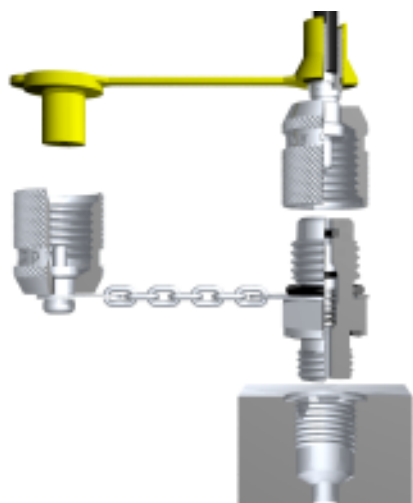
For the union pieces (type DKO) please observe the instructions given by the corresponding producer.

Extended Version:

Extended Version:
For use in special conditions with higher corrosion affinity.



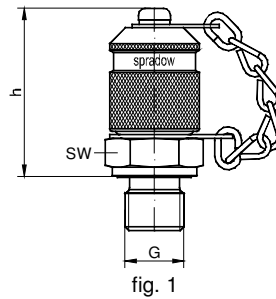
The complete Spradow hydraulic series M16x2 is also available with universal cap type A made of steel or plastic.



port connection and seals

o-ring type 1				metallic sealing type 2					soft sealing type 3					o-ring type 5					
G	øD	t1	t2	G	øD	a	t1	t2	G	øD	a	t1	t2	G	øD1	øD	a	t1	t2
M 8x1	9,5	11	14	M 8x1	13	1	8	10	M 10 x 1	15	1	8	10	5/16-24 UNF	17	9,1	1,9	10	12
M 10x1	11,5	11	14	M 10 x 1	15	1	8	10	M 10x1,25	18	1,5	10	15	7/16-20 UNF	21	12,4	2,4	11,5	14
				M 12 x 1,5	18	1,5	12	15	M 12 x 1,5	18	1,5	12	15	9/16-18 UNF	25	15,7	2,5	12,7	15,5
				M 14 x 1,5	20	1,5	12	15	M 14 x 1,5	20	1,5	12	15						
				M 16 x 1,5	23	1,5	12	15	M 16 x 1,5	23	1,5	12	15						
				M 18 x 1,5	25	2	12	15	M 18 x 1,5	25	2	12	15						
				M 20 x 1,5	27	2	14	17	M 20 x 1,5	27	2	14	17						
				M 22 x 1,5	28	2,5	14	17	M 22 x 1,5	28	2,5	14	17						
				M 26 x 1,5	32	2,5	16	19	M 26 x 1,5	32	2,5	16	19						
				M 27 x 2	33	2,5	16	20	M 27 x 2	33	2,5	16	20						
				M 33 x 2	40	2,5	18	22	M 33 x 2	40	2,5	18	22						
				M 42 x 2	50	2,5	20	24	M 42 x 2	50	2,5	20	24						
				M 48 x 2	56	2,5	22	26	M 48 x 2	56	2,5	22	26						
				G 1/8	15	1	8	10,5	G 1/8	15	1	8	10,5						
				G 1/4	20	1,5	12	15,5	G 1/4	20	1,5	12	15,5						
				G 3/8	23	2	12	15,5	G 3/8	23	2	12	15,5						
				G 1/2	28	2,5	14	18,5	G 1/2	28	2,5	14	18,5						
				G 3/4	33	2,5	16	20	G 3/4	33	2,5	16	20						
				G 1	40	2,5	18	23	G 1	40	2,5	18	23						
				G 1 1/4	50	2,5	20	25	G 1 1/4	50	2,5	20	25						
				G 1 1/2	56	2,5	22	27	G 1 1/2	56	2,5	22	27						

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



G	SW	h	fig.	sealing	part number	part no. extended version
M8x1	17	37	1	o-ring type 1	1-G44-20-21-600-CF	1-G35-20-21-600-CF
M10x1	17	37	1	o-ring type 1	upon request	upon request
M10x1	17	37	1	soft sealing type 3	upon request	upon request
M10x1,25	17	37	1	soft sealing type 3	upon request	upon request
M12x1,5	17	37	1	soft sealing type 3	upon request	upon request
M14x1,5	19	37	1	soft sealing type 3	upon request	upon request
M16x1,5	22	37	1	soft sealing type 3	upon request	upon request
G 1/8	17	39	1	soft sealing type 3	upon request	upon request
G 1/4	19	37	1	soft sealing type 3	1-G44-29-11-600-CF	1-G35-29-11-600-CF
G 3/8	22	37	1	soft sealing type 3	upon request	upon request
G 1/2	27	39	1	soft sealing type 3	upon request	upon request
5/16-24 UNF	17	38	1	o-ring type 5	upon request	upon request
7/16-20 UNF	17	38	1	o-ring type 5	upon request	upon request
9/16-18 UNF	19	38	1	o-ring type 5	upon request	upon request

G	SW	h	fig.	sealing	part number	part no. extended version
<i>for low temperature use (sealings material 2)</i>						
M8x1	17	37	1	o-ring type 1	1-G44-20-26-600-CF	1-G35-20-26-600-CF
M10x1	17	37	1	o-ring type 1	upon request	upon request
M10x1	17	37	1	soft sealing type 3	upon request	upon request
M10x1,25	17	37	1	soft sealing type 3	upon request	upon request
M12x1,5	17	37	1	soft sealing type 3	upon request	upon request
M14x1,5	19	37	1	soft sealing type 3	upon request	upon request
M16x1,5	22	37	1	soft sealing type 3	upon request	upon request
G 1/8	17	39	1	soft sealing type 3	upon request	upon request
G 1/4	19	37	1	soft sealing type 3	1-G44-29-16-600-CF ¹⁾	1-G35-29-16-600-CF ¹⁾
G 3/8	22	37	1	soft sealing type 3	upon request	upon request
G 1/2	27	39	1	soft sealing type 3	upon request	upon request
5/16-24 UNF	17	38	1	o-ring type 5	upon request	upon request
7/16-20 UNF	17	38	1	o-ring type 5	upon request	upon request
9/16-18 UNF	19	38	1	o-ring type 5	upon request	upon request

¹⁾ Sealing element is an o-ring.

metal cap type A (universal) with vibration security	1-Gxx-xx-xx-590-CF	1-Gxx-xx-xx-590-CF
metal cap type B (round) without vibration security	1-Gxx-xx-xx-020-CF	1-Gxx-xx-xx-020-CF
metal cap type A (universal) without vibration security	1-Gxx-xx-xx-010-CF	1-Gxx-xx-xx-010-CF
plastic cap type A (universal) yellow without vibration security	1-Gxx-xx-xx-100-CF	1-Gxx-xx-xx-100-CF

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

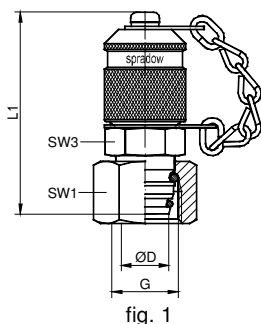


fig. 1

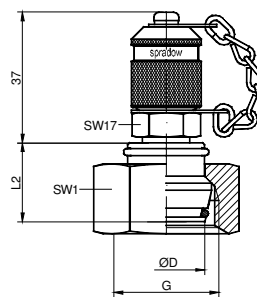


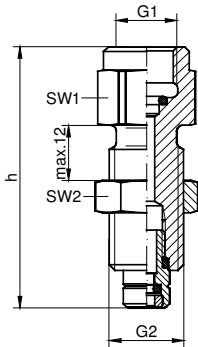
fig. 2

type DKO
test coupling with 24° taper adapter

type	PN	pipe øD	L1	L2	SW1	SW3	h	G	type DKO part number	type DKO part no. extended version	fig.
L	315	6	53		14	17	48	M12x1,5	upon request	upon request	1
		8	53		17	17	49	M14x1,5	upon request	upon request	1
		10	50		19	17	49	M16x1,5	upon request	upon request	1
		12	50		22	17	50,5	M18x1,5	upon request	upon request	1
		15	51		27	19	52	M22x1,5	upon request	upon request	1
		18		22	32		53	M26x1,5	upon request	upon request	2
	160	22		22	36		55	M30x2	upon request	upon request	2
		28		24	41		57,5	M36x2	upon request	upon request	2
		35		27	50		60	M45x2	upon request	upon request	2
		42		28	60		64,5	M52x2	upon request	upon request	2
S	630	6	54		17	17	49	M14x1,5	upon request	upon request	1
		8	51		19	17	49	M16x1,5	upon request	upon request	1
		10	51		22	17	49	M18x1,5	upon request	upon request	1
		12	51		24	17	49	M20x1,5	upon request	upon request	1
		14		24	27		50,5	M22x1,5	upon request	upon request	2
	400	16		20	30		52	M24x1,5	upon request	upon request	2
		20		25	36		53	M30x2	upon request	upon request	2
		25		27	46		57,5	M36x2	upon request	upon request	2
		30		29	50		60	M42x2	upon request	upon request	2
	315	38		32	60		64,5	M52x2	upon request	upon request	2
metal cap type A (universal) with vibration security									upon request	upon request	
metal cap type B (round) without vibration security									upon request	upon request	
metal cap type A (universal) without vibration security									upon request	upon request	
plastic cap type A (universal) yellow without vibration security									upon request	upon request	

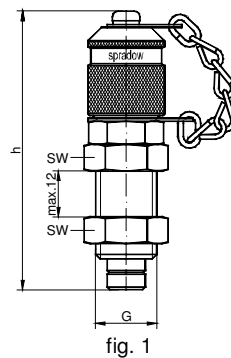
M16x2-GAS*

pressure gauge connector
series: M16x2 - GAS



G1	SW1	SW2	h	G2	sealing	part number
G 1/4	19	19	57	M16x2	o-ring	upon request
G 1/2	27	24	67	M16x2	o-ring	upon request

bulkhead coupling
series: M16x2 - GAS



G	SW	h	fig.	part number	part no. extended version
M16x2	19	75	1	upon request	upon request
metal cap type A (universal) with vibration security				upon request	upon request
metal cap type B (round) without vibration security				upon request	upon request
metal cap type A (universal) without vibration security				upon request	upon request
plastic cap type A (universal) yellow without vibration security				upon request	upon request

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

high pressure hose series: M16x2-GAS

Max. working pressure:
630 bar

Test hose:
Nominal bore 2mm
Min. bend radius:
20 mm

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

Hose construction

Hose core and cover:

PA

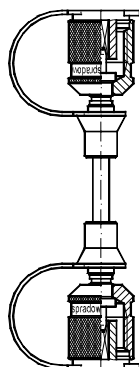
Reinforcement:

synthetic fibre

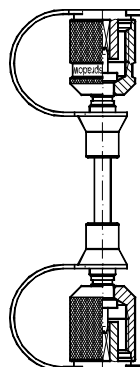
bursting pressure:

>1900 bar

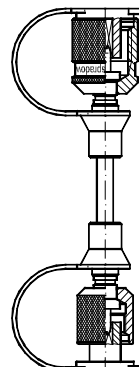
series: M16x2



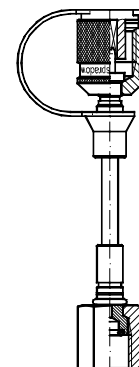
series: M16x2



series: M16x2



series: M16x2



series: M16x2

series: M16x1,5

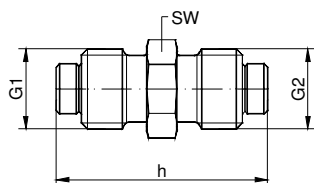
series: S12x1,5

pressure gauge connec-
tor G 1/4

length L ¹⁾ acc. DIN 20066	part number			
200	1-975-04-04-010-CF	1-975-04-10-010-CF	1-975-04-12-010-CF	1-975-02-04-010-CF
400	1-975-04-04-040-CF	1-975-04-10-040-CF	1-975-04-12-040-CF	1-975-02-04-040-CF
630	1-975-04-04-060-CF	1-975-04-10-060-CF	1-975-04-12-060-CF	1-975-02-04-060-CF
800	1-975-04-04-080-CF	1-975-04-10-080-CF	1-975-04-12-080-CF	1-975-02-04-080-CF
1000	1-975-04-04-090-CF	1-975-04-10-090-CF	1-975-04-12-090-CF	1-975-02-04-090-CF
1500	1-975-04-04-100-CF	1-975-04-10-100-CF	1-975-04-12-100-CF	1-975-02-04-100-CF
2000	1-975-04-04-110-CF	1-975-04-10-110-CF	1-975-04-12-110-CF	1-975-02-04-110-CF
2500	1-975-04-04-120-CF	1-975-04-10-120-CF	1-975-04-12-120-CF	1-975-02-04-120-CF
3200	1-975-04-04-130-CF	1-975-04-10-130-CF	1-975-04-12-130-CF	1-975-02-04-130-CF
4000	1-975-04-04-140-CF	1-975-04-10-140-CF	1-975-04-12-140-CF	1-975-02-04-140-CF

¹⁾ Other length upon request.

hose connector series: M16x2 - GAS

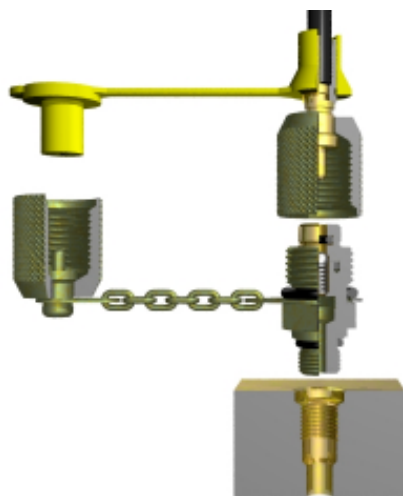


without valve function

G1	SW	h	G2	part number
M16x2	17	42	M16x2	upon request
M16x2	17	42	M16x1,5	upon request

For suitable pressure gauges please see our catalogue.

M16x1,5-ball or piston design



for piston design
see picture on page 8

partnumber available on request

Application:

Spradow test couplings are applied for the monitoring and control of 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:

Spradow test couplings have been developed for hydraulic oils and mineral oil 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); reinforcement: synthetic fibre

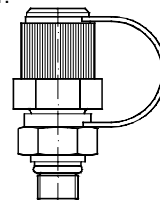
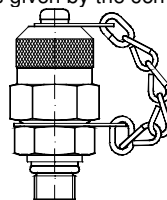
Surface:

A3D in accordance to DIN ISO 4042.

Pressure:

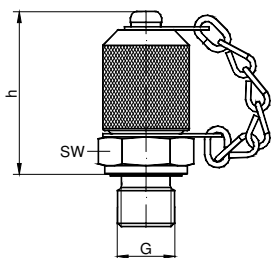
Max. working pressure of the test couplings - 630 bar, at 3-fold security.

For the union pieces (type DKO, BE and GE) please observe the instructions given by the corresponding producer.



The complete Spradow hydraulic series M16x1,5 is also available with universal cap (type A) made of steel or plastic.

test coupling series: M16x1,5 – ball design



G	SW	h	sealing	part number (NBR)	part number (FKM)
M10x1	17	37	o-ring type 1	1-906-22-21-630	1-906-22-22-630
G 1/8	17	37	soft sealing type 3	1-906-28-11-630	1-906-28-12-630
G 1/4	19	37	metallic sealing type 2	1-906-29-30-630	1-906-29-32-630
G 1/4	19	38	soft sealing type 3	1-906-29-11-630	1-906-29-12-630
R 1/4 taper	17	35	thread type 4	1-906-34-00-630	1-906-34-02-630
7/16-20 UNF	17	38	o-ring type 5	1-906-39-30-630	1-906-39-32-630
1/4 NPT	19	35	thread type 4	1-906-44-00-630	1-906-44-02-630

metal cap type A (universal) with vibration security	1-906-xx-xx-620	1-906-xx-xx-620
metal cap type B (round) without vibration security	1-906-xx-xx-050	1-906-xx-xx-050
metal cap type A (universal) without vibration security	1-906-xx-xx-040	1-906-xx-xx-040
plastic cap type A (universal) yellow without vibration security	1-906-xx-xx-110	1-906-xx-xx-110

port connection and seals

type 1					type 2					type 3					type 4				type 5					
G	ØD	t1	t2		G	ØD	a	t1	t2	G	ØD	a	t1	t2	G	t1	t2	G	ØD1	ØD	a	t1	t2	
M 10x1	11,5	11	14		G 1/4	20	1,5	12	15,5	G 1/8	15	1	8	10,5	1/4 NPT	10	16,4	7/16-20 UNF	21	12,4	2,4	11,5	14	
										G 1/4	20	1,5	12	15,5	R 1/4 taper	8,5	13,5							

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

M16x1,5-ball or piston design

fitting with test coupling
series: M16x1,5 – ball design

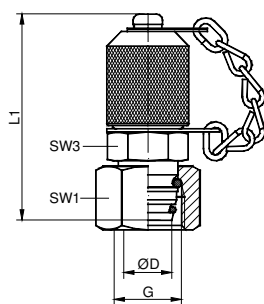


fig. 1

type DKO

test coupling with 24° taper adapter

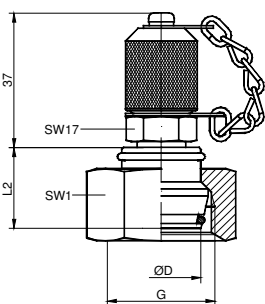


fig. 2

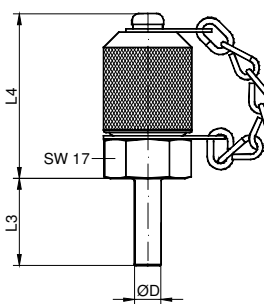


fig. 3

type BE

test coupling for compression ring fittings

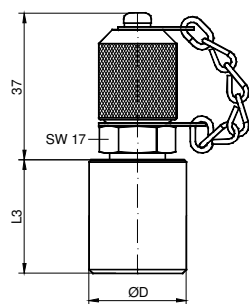


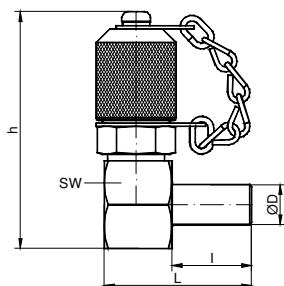
fig. 4

type GE

test coupling
with straight coupling

type	PN	tube øD	L1	L2	L3	L4	SW1	SW2	SW3	h	G	type DKO part number	fig.	type BE part number	Fig.	type GE part number	
L	315	6	53		20	38	14	22	17	48	M12x1,5	1-908-00-10-630	1	1-909-00-00-631	3	1-910-00-00-630	
		8	53		20	38	17	24	17	49	M14x1,5	1-908-02-10-630	1	1-909-02-00-631	3	1-910-02-00-630	
		10	50		22	37	19	24	17	49	M16x1,5	1-908-04-10-630	1	1-909-04-00-631	3	1-910-04-00-630	
		12	50		22	37	22	27	17	50,5	M18x1,5	1-908-06-10-630	1	1-909-06-00-631	3	1-910-06-00-630	
		15	51		22	37	27	30	19	52	M22x1,5	1-908-09-00-630	1	1-909-09-00-631	3	1-910-09-00-630	
		18		22	28	37	32	32		53	M26x1,5	1-908-11-00-630	2	1-909-11-00-631	4	1-910-11-00-630	
	160	22		22	30	37	36	36		55	M30x2	1-908-13-00-630	2	1-909-13-00-631	4	1-910-13-00-630	
		28		24	32	37	41	41		57,5	M36x2	1-908-15-00-630	2	1-909-15-00-631	4	1-910-15-00-630	
		35		27	42	37	50	46		60	M45x2	1-908-17-00-630	2	1-909-17-00-631	4	1-910-17-00-630	
		42		28	45	37	60	55		64,5	M52x2	1-908-19-00-630	2	1-909-19-00-631	4	1-910-19-00-630	
S	630	6	54		20	38	17	24	17	49	M14x1,5	1-908-01-10-630	1	1-909-00-00-631	3	1-910-01-00-630	
		8	51		20	38	19	24	17	49	M16x1,5	1-908-03-10-630	1	1-909-02-00-631	3	1-910-03-00-630	
		10	51		22	37	22	24	17	49	M18x1,5	1-908-05-10-630	1	1-909-04-00-631	3	1-910-05-00-630	
		12	51		22	37	24	24	17	49	M20x1,5	1-908-07-10-630	1	1-909-06-00-631	3	1-910-07-00-630	
		14		24	22	37	27	27		50,5	M22x1,5	1-908-08-00-630	2	1-909-08-00-631	3	1-910-08-00-630	
	400	16		20	28	37	30	30		52	M24x1,5	1-908-10-00-630	2	1-909-10-00-631	3	1-910-10-00-630	
		20		25	30	37	36	32		53	M30x2	1-908-12-00-630	2	1-909-12-00-631	4	1-910-12-00-630	
		25		27	36	37	46	41		57,5	M36x2	1-908-14-00-630	2	1-909-14-00-631	4	1-910-14-00-630	
		30		29	41	37	50	46		60	M42x2	1-908-16-00-630	2	1-909-16-00-631	4	1-910-16-00-630	
		315		32	48	37	60	55		64,5	M52x2	1-908-18-00-630	2	1-909-18-00-631	4	1-910-18-00-630	
metal cap type A (universal) with vibration security												1-908-xx-x0-620		1-909-xx-00-621		1-910-xx-00-620	
metal cap type B (round) without vibration security												1-908-xx-x0-050		1-909-xx-00-051		1-910-xx-00-050	
metal cap type A (universal) without vibration security												1-908-xx-x0-040		1-909-xx-00-041		1-910-xx-00-040	
plastic cap type A (universal) yellow without vibration security												1-908-xx-x0-110		1-909-xx-00-111		1-910-xx-00-110	
design with sealings made of FKM												1-908-xx-x2-xxx		1-909-xx-02-xxx		1-910-xx-02-xxx	

90° fitting type BE with test coupling
series: M16x1,5 – ball design



tube øD	l	L	SW	h	part number (NBR)	part number (FKM)
8	20	37	22	59	1-980-03-63-080	1-980-03-63-081
10	20	37	22	59	1-980-05-63-120	1-980-05-63-121

metal cap type A (universal) with vibration security	1-980-xx-62-xxx	1-980-xx-62-xxx
metal cap type B (round) without vibration security	1-980-xx-05-xxx	1-980-xx-05-xxx
metal cap type A (universal) without vibration security	1-980-xx-04-xxx	1-980-xx-04-xxx
plastic cap type A (universal) yellow without vibration security	1-980-xx-11-xxx	1-980-xx-11-xxx

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

Max. working pressure:
630 bar

Test hose:
Nominal bore 2 mm
Min. bend radius:
20 mm

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

Hose construction

Hose core and cover:

PA

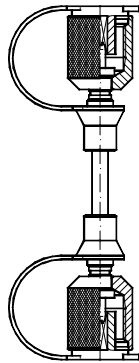
Reinforcement:

synthetic fibre

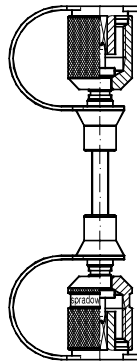
bursting pressure:

1900 bar

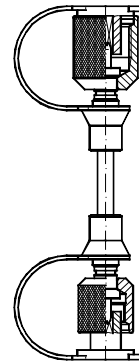
series: M16x1,5



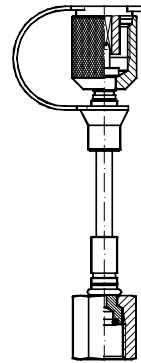
series: M16x1,5



series: M16x1,5



series: M16x1,5



series: M16x1,5

series: M16x2

series: S12x1,5

pressure gauge
connector G 1/4 ²⁾

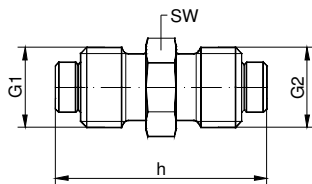
length L ¹⁾ acc. DIN 20066	part number			
200	1-971-10-10-010	1-971-04-10-010	1-971-10-12-010	1-971-02-10-010
400	1-971-10-10-040	1-971-04-10-040	1-971-10-12-040	1-971-02-10-040
630	1-971-10-10-060	1-971-04-10-060	1-971-10-12-060	1-971-02-10-060
800	1-971-10-10-080	1-971-04-10-080	1-971-10-12-080	1-971-02-10-080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

¹⁾ Other lengths on inquiry

Further connectors on page 31 f.

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

hose connector



without valve function (check valve)

G1	SW	h	G2	part number (NBR)	part number (FKM)
M16x2	17	42	M16x1,5	1-980-48-00-030	-
M16x1,5	17	42	M16x1,5	1-980-25-00-030	-

pressure gauge connector / direct pressure gauge connector

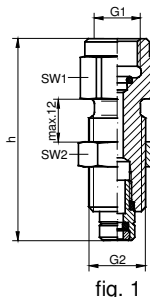


fig. 1

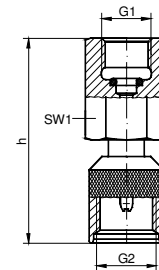


fig. 2

G1	SW1	SW2	h	fig.	G2	sealing	part number (NBR)	part number (FKM)
G 1/4	19	19	57	1	M16x1,5	o-ring	1-918-29-01-250	1-918-29-21-250
G 1/2	27	24	67	1	M16x1,5	o-ring	1-918-31-01-250	1-918-31-21-250
G 1/4	19		54	2	M16x1,5	o-ring	1-927-29-01-050	1-927-29-21-050
G 1/2	27		58	2	M16x1,5	o-ring	1-927-31-01-050	1-927-31-21-050

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

S12x1,5-piston design

Application:

Spradow test couplings are applied for the monitoring and control of 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:

Spradow test couplings have been developed for hydraulic oils and mineral oil 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); reinforcement: synthetic fibre

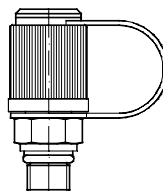
Surface:

CrVI-free.

Pressure:

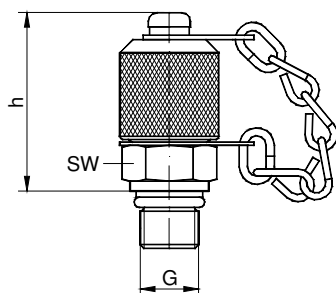
Max. working pressure of the test couplings - 630 bar, at 3-fold security.

For the union pieces (type DKO, BE and GE) please observe the instructions given by the corresponding producer.



The complete Spradow hydraulic series S12x1,5 is also available with plastic cap.

test coupling series: S12x1,5



G	SW	h	sealing	part number (NBR)	part number (FKM)
M10x1	14	30	o-ring type 1	1-S06-22-21-680-CF	1-S06-22-22-680-CF
M12x1,5	17	33	soft sealing type 3	1-S06-23-11-680-CF	1-S06-23-12-680-CF
G 1/8	17	39	soft sealing type 3	1-S06-28-11-680-CF	1-S06-28-12-680-CF
G 1/4	19	33	soft sealing type 3	1-S06-29-11-680-CF	1-S06-29-12-680-CF
7/16-20 UNF	17	34	o-ring type 5	1-S06-39-30-680-CF	1-S06-39-32-680-CF
1/4 NPT	14	29	thread type 4	1-S06-44-00-680-CF	1-S06-44-02-680-CF

plastic cap yellow	1-S06-xx-xx-260-CF	1-S06-xx-x2-260-CF
metal cap without vibration security	1-S06-xx-xx-290-CF	1-S06-xx-x2-290-CF

port connection and seals

type 1				type 2				type 3				type 4			type 5							
G	øD	t1	t2	G	øD	a	t1	t2	G	øD	a	t1	t2	G	t1	t2	G	øD1	øD	a	t1	t2
M 10x1	11,5	11	14	G 1/4	20	1,5	12	15,5	M12x1,5	18	1,5	12	15	1/4 NPT	10	16,4	7/16-20 UNF	21	12,4	2,4	11,5	14
									G 1/8	15	1	8	10,5	R 1/4 taper	8,5	13,5						
									G 1/4	20	1,5	12	15,5									

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

S12x1,5-piston design

fitting with test coupling
series: S12x1,5 – piston design

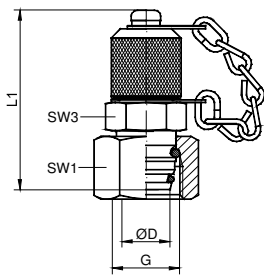


fig. 1

type DKO

test coupling with 24° taper adapter

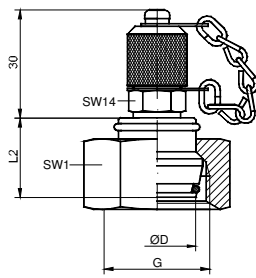


fig. 2

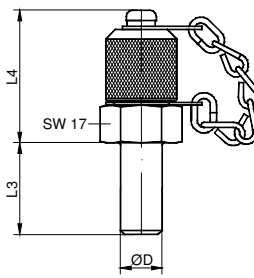


fig. 3

type BE

test coupling for compression ring fittings

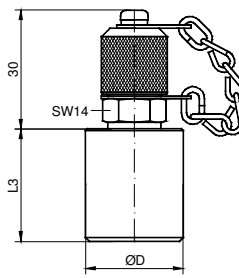
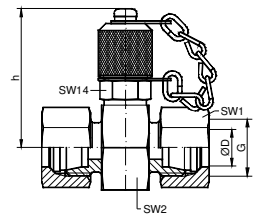


fig. 4



type GE

test coupling
with straight coupling

type	PN	tube øD	L1	L2	L3	L4	SW1	SW2	SW3	h	G	type DKO part number	fig.	type BE part number	Fig.	type GE part number
L	315	6	47		20	37	14	22	17	41	M12x1,5	1-S08-00-10-680-CF	1	1-S09-00-00-681-CF	3	1-S10-00-00-680-CF
		8	47		20	37	17	24	17	42	M14x1,5	1-S08-02-10-680-CF	1	1-S09-02-00-681-CF	3	1-S10-02-00-680-CF
		10	44		22	32	19	24	17	42	M16x1,5	1-S08-04-10-680-CF	1	1-S09-04-00-681-CF	3	1-S10-04-00-680-CF
		12	44		22	30	22	27	17	43,5	M18x1,5	1-S08-06-10-680-CF	1	1-S09-06-00-681-CF	3	1-S10-06-00-680-CF
		15	45		22	30	27	30	19	45	M22x1,5	1-S08-09-00-680-CF	1	1-S09-09-00-681-CF	3	1-S10-09-00-680-CF
	160	18		22	28	30	32	32		46	M26x1,5	1-S08-11-00-680-CF	2	1-S09-11-00-681-CF	4	1-S10-11-00-680-CF
		22		22	30	30	36	36		48	M30x2	1-S08-13-00-680-CF	2	1-S09-13-00-681-CF	4	1-S10-13-00-680-CF
		28		24	32	30	41	41		50,5	M36x2	1-S08-15-00-680-CF	2	1-S09-15-00-681-CF	4	1-S10-15-00-680-CF
		35		27	42	30	50	46		53	M45x2	1-S08-17-00-680-CF	2	1-S09-17-00-681-CF	4	1-S10-17-00-680-CF
		42		28	45	30	60	55		57,5	M52x2	1-S08-19-00-680-CF	2	1-S09-19-00-681-CF	4	1-S10-19-00-680-CF
S	630	6	48		20	37	17	24		42	M14x1,5	1-S08-01-10-680-CF	1	1-S09-00-00-681-CF	3	1-S10-01-00-680-CF
		8	45		20	37	19	24	17	42	M16x1,5	1-S08-03-10-680-CF	1	1-S09-02-00-681-CF	3	1-S10-03-00-680-CF
		10	45		22	32	22	24	17	42	M18x1,5	1-S08-05-10-680-CF	1	1-S09-04-00-681-CF	3	1-S10-05-00-680-CF
		12	45		22	30	24	24	17	42	M20x1,5	1-S08-07-10-680-CF	1	1-S09-06-00-681-CF	3	1-S10-07-00-680-CF
		14		24	22	30	27	27		43,5	M22x1,5	1-S08-08-00-680-CF	2	1-S09-08-00-681-CF	3	1-S10-08-00-680-CF
	400	16		20	28	30	30	30		45	M24x1,5	1-S08-10-00-680-CF	2	1-S09-10-00-681-CF	3	1-S10-10-00-680-CF
		20		25	30	30	36	32		46	M30x2	1-S08-12-00-680-CF	2	1-S09-12-00-681-CF	4	1-S10-12-00-680-CF
		25		27	36	30	46	41		50,5	M36x2	1-S08-14-00-680-CF	2	1-S09-14-00-681-CF	4	1-S10-14-00-680-CF
		30		29	41	30	50	46		53	M42x2	1-S08-16-00-680-CF	2	1-S09-16-00-681-CF	4	1-S10-16-00-680-CF
		315	38		32	48	30	60	55		57,5	M52x2	1-S08-18-00-680-CF	2	1-S09-18-00-681-CF	4
plastic cap yellow												1-S08-xx-x0-260-CF		1-S09-xx-00-261-CF		1-S10-xx-00-260-CF
metal cap without vibration security												1-S08-xx-x0-290-CF		1-S09-xx-00-291-CF		1-S10-xx-00-290-CF
design with sealings made of FKM												1-S08-xx-x2-xxx-CF		1-S09-xx-02-xxx-CF		1-S10-xx-02-xxx-CF

pressure gauge connector / direct pressure gauge connector
series: S12x1,5

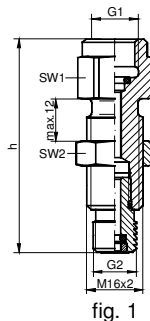


fig. 1

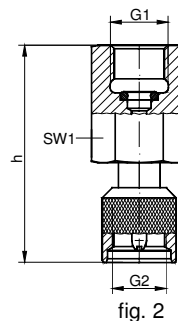


fig. 2

G1	SW1	SW2	h	G2	sealing	fig.	part number (NBR)	part number (FKM)
G 1/4	19	19	58	S12x1,5	o-ring	1	1-918-29-01-430-CF	1-918-29-21-430-CF
G 1/2	27	24	68	S12x1,5	o-ring	1	1-918-31-01-430-CF	1-918-31-21-430-CF
G 1/4	19		48	S12x1,5	o-ring	2	1-927-29-01-290-CF	1-927-29-21-290-CF
G 1/2	27		52	S12x1,5	o-ring	2	1-927-31-01-290-CF	1-927-31-21-290-CF

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

Max. working pressure:
630 bar

series: S12x1,5

series: S12x1,5

series: S12x1,5

series: S12x1,5

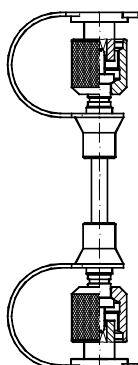
series: S12x1,5

Test hose:
Nominal bore 2 mm
Min. bend radius:
20 mm

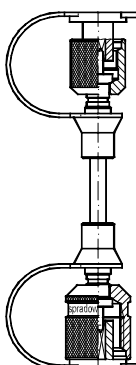
Pressure / t° factor:
at 20°C 100%
at 40°C 95%
at 60°C 90%
at 80°C 80%
at 100°C 70%

Hose construction

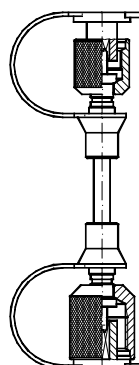
Hose core and cover:
PA
Reinforcement:
synthetic fibre
bursting pressure:
1900 bar



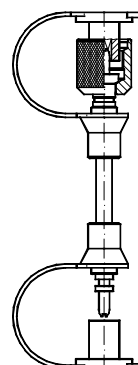
series: S12x1,5



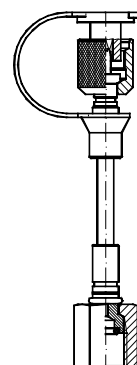
series: M16x2



series: M16x1,5



series: plug-in



pressure gauge
connector G 1/4 ²⁾

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

¹⁾ Other lengths on inquiry

Further connectors on page 31 f.

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

Your notes:

plug-in-ball design

Application:

Spradow test couplings are applied for the monitoring and control of 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 and the leakproof connection.

Media:

Spradow test couplings have been developed for hydraulic oils and mineral oil 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)

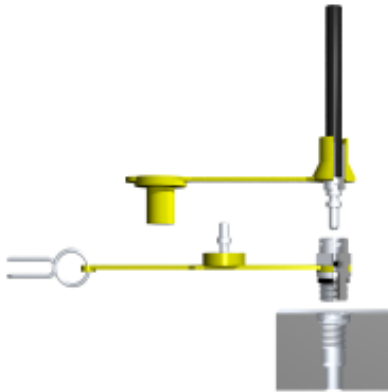
Hose: Polyamide (-35 °C to +100 °C); reinforcement: synthetic fibre

Surface:

CrVI-free.

Pressure:

Max. working pressure of the test couplings - 400 bar, at 3-fold security.
For the union pieces (type DKO, BE and GE) please observe the instructions given by the corresponding producer.



test coupling series: plug-in

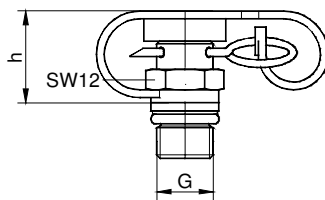


fig. 1

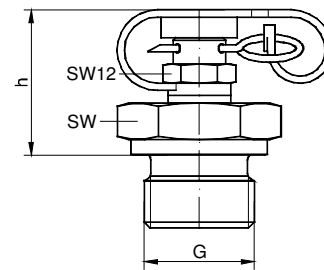


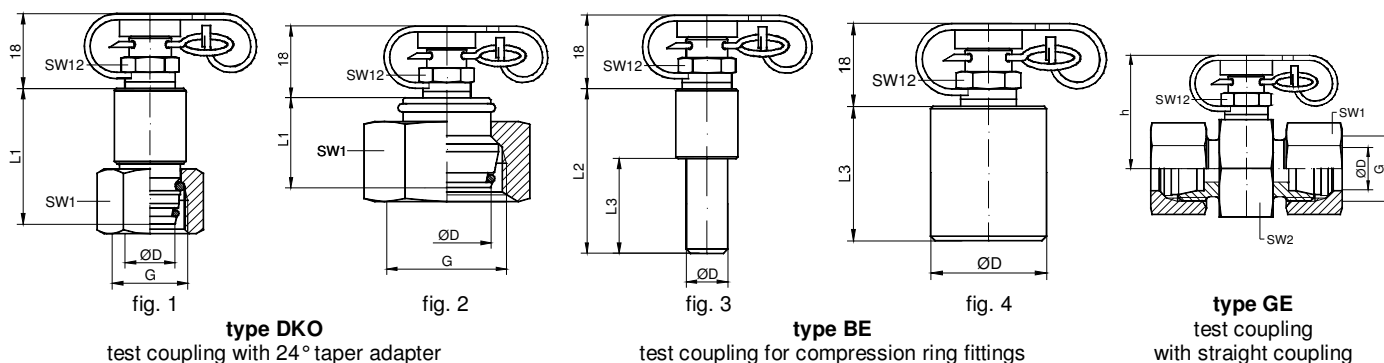
fig. 2

G	SW	h	fig.	sealing	part number (NBR)	part number (FKM)
M8x1	-	18	1	o-ring type 1	1-900-20-21-180-CF	1-900-20-22-180-CF
M10x1	-	18	1	o-ring type 1	1-900-22-21-180-CF	1-900-22-22-180-CF
R 1/8 taper	-	18	1	thread type 4	1-900-33-00-180-CF	1-900-33-02-180-CF
1/8 NPT	-	18	1	thread type 4	1-900-43-00-180-CF	1-900-43-02-180-CF
M10x1	17	37	2	metallic sealing type 2	1-905-22-30-180-CF	1-905-22-32-180-CF
G 1/4	19	27	2	soft sealing type 3	1-905-29-11-180-CF	1-905-29-12-180-CF

port connection and seals

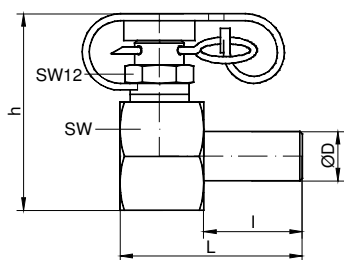
type 1					type 2					type 3					type 4		
G	ØD	t1	t2		G	ØD	a	t1	t2	G	ØD	a	t1	t2	G	t1	t2
M 8x1	9,5	11	14		M 10x1	15	1	8	10	G 1/4	20	1,5	12	15,5	1/8 NPT	6,9	11,6
M 10x1	11,5	11	14												R 1/8 taper	5,5	9,5

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



type	PN	tube øD	L1	L2	L3	SW1	SW2	h	G	type DKO part number	fig.	type BE part number	fig.	type GE part number
L	315	6	32,5	38	20	14	22	29	M12x1,5	1-902-00-10-180-CF	1	1-903-00-00-181-CF	3	1-904-00-00-180-CF
		8	32,5	38	20	17	24	30	M14x1,5	1-902-02-10-180-CF	1	1-903-02-00-181-CF	3	1-904-02-00-180-CF
		10	32,5	40	22	19	24	30	M16x1,5	1-902-04-10-180-CF	1	1-903-04-00-181-CF	3	1-904-04-00-180-CF
		12	32,5	40	22	22	27	31,5	M18x1,5	1-902-06-10-180-CF	1	1-903-06-00-181-CF	3	1-904-06-00-180-CF
		15	20		28	27	30	33	M22x1,5	1-902-09-00-180-CF	2	1-903-09-00-181-CF	4	1-904-09-00-180-CF
		18	22		28	32	32	34	M26x1,5	1-902-11-00-180-CF	2	1-903-11-00-181-CF	4	1-904-11-00-180-CF
	160	22	22		30	36	36	36	M30x2	1-902-13-00-180-CF	2	1-903-13-00-181-CF	4	1-904-13-00-180-CF
		28	24		32	41	41	38,5	M36x2	1-902-15-00-180-CF	2	1-903-15-00-181-CF	4	1-904-15-00-180-CF
		35	27		42	50	46	41	M45x2	1-902-17-00-180-CF	2	1-903-17-00-181-CF	4	1-904-17-00-180-CF
		42	28		45	60	55	45,5	M52x2	1-902-19-00-180-CF	2	1-903-19-00-181-CF	4	1-904-19-00-180-CF
S	400	6	33,5	38	20	17	24	30	M14x1,5	1-902-01-10-180-CF	1	1-903-00-00-181-CF	3	1-904-01-00-180-CF
		8	33,5	38	20	19	24	30	M16x1,5	1-902-03-10-180-CF	1	1-903-02-00-181-CF	3	1-904-03-00-180-CF
		10	33,5	40	22	22	24	30	M18x1,5	1-902-05-10-180-CF	1	1-903-04-00-181-CF	3	1-904-05-00-180-CF
		12	33,5	40	22	24	24	30	M20x1,5	1-902-07-10-180-CF	1	1-903-06-00-181-CF	3	1-904-07-00-180-CF
		14	24	40	22	27	27	31,5	M22x1,5	1-902-08-00-180-CF	2	1-903-08-00-181-CF	3	1-904-08-00-180-CF
		16	20		28	30	30	33	M24x1,5	1-902-10-00-180-CF	2	1-903-10-00-181-CF	4	1-904-10-00-180-CF
	400	20	25		30	36	32	34	M30x2	1-902-12-00-180-CF	2	1-903-12-00-181-CF	4	1-904-12-00-180-CF
		25	27		36	46	41	38,5	M36x2	1-902-14-00-180-CF	2	1-903-14-00-181-CF	4	1-904-14-00-180-CF
		30	29		41	50	46	41	M42x2	1-902-16-00-180-CF	2	1-903-16-00-181-CF	4	1-904-16-00-180-CF
	315	38	32		48	60	55	45,5	M52x2	1-902-18-00-180-CF	2	1-903-18-00-181-CF	4	1-904-18-00-180-CF
design with sealings made of FKM										1-902-xx-x2-xxx-CF		1-903-xx-02-xxx-CF		1-904-xx-02-xxx-CF

90° fitting type BE with test coupling series: plug-in



tube øD	I	L	SW	h	part number (NBR)	part number (FKM)
8	20	37	22	40	1-980-03-20-080-CF	1-980-03-20-081-CF
10	20	37	22	40	1-980-05-20-120-CF	1-980-05-20-121-CF

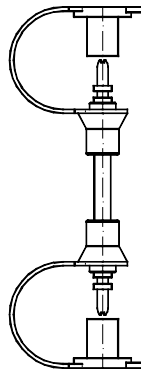
Max. working pressure:
630 bar

Test hose:
Nominal bore 2 mm
Min. bend radius:
20 mm

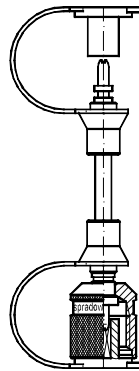
Pressure / t° factor:
at 20 °C 100%
at 40 °C 95%
at 60 °C 90%
at 80 °C 80%
at 100 °C 70%

Hose construction
Hose core and cover:
PA
Reinforcement:
synthetic fibre
bursting pressure:
1900 bar

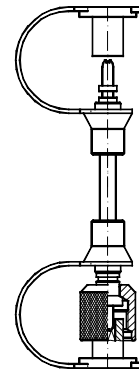
series: plug-in



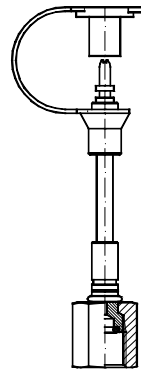
series: plug-in



series: plug-in



series: plug-in



series: plug-in

series: M16x2

series: S12x1,5

pressure gauge
connector G 1/4²⁾

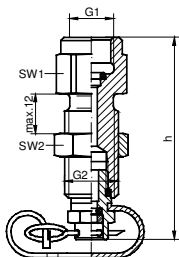
length L ¹⁾ acc. DIN 20066	part number			
200	1-971-01-01-010-CF	1-971-01-04-010-CF	1-971-01-12-010-CF	1-971-01-02-010-CF
400	1-971-01-01-040-CF	1-971-01-04-040-CF	1-971-01-12-040-CF	1-971-01-02-040-CF
630	1-971-01-01-060-CF	1-971-01-04-060-CF	1-971-01-12-060-CF	1-971-01-02-060-CF
800	1-971-01-01-080-CF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

¹⁾ Other lengths on inquiry

Further connectors on page 31 f.

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

pressure gauge connector



G1	SW1	SW2	h	G2	sealing	part number (NBR)	part number (FKM)
G 1/4	19	19	61	M16x2	o-ring	1-918-29-01-210-CF	1-918-29-21-210-CF
G 1/2	27	24	71	M16x2	o-ring	1-918-31-01-210-CF	1-918-31-21-210-CF
1/4 NPT	19	19	63	M16x2	thread	1-918-44-00-210-CF	1-918-44-20-210-CF
1/2 NPT	27	24	71	M16x2	thread	1-918-46-00-210-CF	1-918-46-20-210-CF

bulkhead coupling

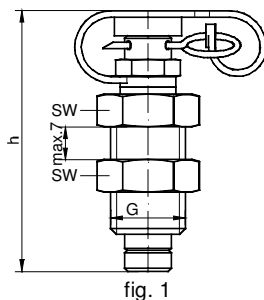


fig. 1

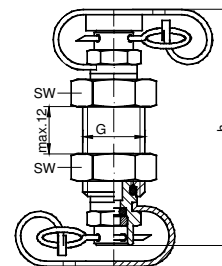


fig. 2

G	SW	h	fig.	part number (NBR)	part number (FKM)
M16x2	19	56	1	1-980-48-20-040-CF	1-980-48-20-041-CF
M16x2	19	66	2	1-980-48-20-050-CF	1-980-48-20-051-CF

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



The **SPRADOW TEST BOX** is a solid, oil resistant plastic box. It is available either pre-assembled with an assortment of our most popular components or equipped to your specific needs. The pressure gauges, the gauge adapters and the hose are safely nestled in a Plastazote® cushion. Plastazote® is an oil-repellent cross-linked polyethylene foam, which has been especially chosen for this range of application.

The test couplings and reducers of the instant pressure checking equipment are safely and clearly arranged in separate arrays beneath the transparent cover, which can be securely locked. Further arrays are available for your individual requirements.

standard equipment:		STB20-E2-xxx/xxx-CF
pcs.	description	
1	Test hose 2000 mm length, M16x2 / M16x2	1-971-03-03-110-CF
1	Pressure gauge Ø 63 mm / G 1/4	1-982-01-01- xxx
1	Pressure gauge Ø 63 mm / G 1/4	1-982-01-01- xxx
1	Pressure gauge connector G 1/4	1-918-29-01-240-CF
1	Direct pressure gauge connector G 1/4	1-927-29-01-010-CF
1	Test coupling G 1/4	1-906-29-11-010-CF
1	Test coupling M 10 x 1	1-906-22-21-010-CF
1	Reducer G 3/8	4-924-03-01-260-CF
1	Reducer G 1/2	4-924-03-01-760-CF

pressure gauge	
order no.	bar
-040	6
-050	10
-060	16
-070	25
-080	40
-090	60
-100	100
-110	160
-120	250
-130	400
-140	600

The content of the **SPADOW TEST BOX** are adaptable to your specifications.

ORDER EXAMPLE: SPRADOW TEST BOX with 1 pressure gauge 100 bar and
1 pressure gauge 400 bar: **STB20-E2-100/130-CF**



The **SPRADOW TEST BOX** is a solid, oil resistant plastic box. It is available either pre-assembled with an assortment of our most popular components or equipped to your specific needs. The pressure gauges, the gauge adapters and the hose are safely nestled in a Plastazote® cushion. Plastazote® is an oil-repellent cross-linked polyethylene foam, which has been especially chosen for this range of application.

The test couplings and reducers of the instant pressure checking equipment are safely and clearly arranged in separate arrays beneath the transparent cover, which can be securely locked. Further arrays are available for your individual requirements.

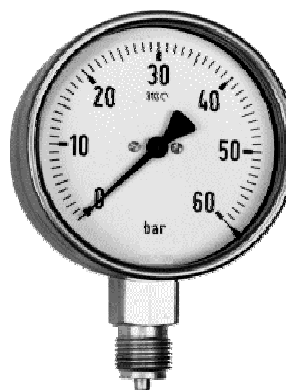
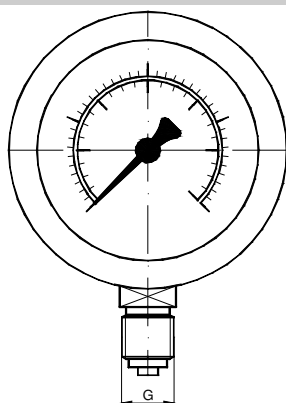
standard equipment:		STB20-S6-001-CF (without pressure gauge)
pcs.	description	
1	Test hose 2000 mm length, M16x2 / M16x2	1-971-03-03-110-CF
1	Pressure gauge connector G 1/4	1-918-29-01-240-CF
1	Direct pressure gauge connector G 1/4	1-927-29-01-010-CF
1	Test coupling G 1/4	1-906-29-11-010-CF
1	Test coupling M 10 x 1	1-906-22-21-010-CF
1	Reducer G 3/8	4-924-03-01-260-CF
1	Reducer G 1/2	4-924-03-01-760-CF
up to 6	Pressure gauges to your specifications	1-982-01-01-xxx

pressure gauge	
order no.	bar
-040	6
-050	10
-060	16
-070	25
-080	40
-090	60
-100	100
-110	160
-120	250
-130	400
-140	600

The content of the SPADOW TEST BOX are adaptable to your specifications.

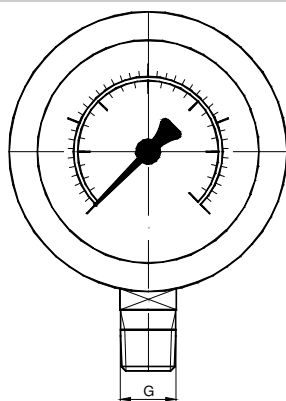
pressure gauge

pressure gauge, glycerine filled, bottom connection, chrome-nickel steel body, scale in bar



G	pressure stage	nominal size	part number
G 1/4 A	10 bar	63	1-982-01-01-050
G 1/4 A	16 bar	63	1-982-01-01-060
G 1/4 A	25 bar	63	1-982-01-01-070
G 1/4 A	40 bar	63	1-982-01-01-080
G 1/4 A	60 bar	63	1-982-01-01-090
G 1/4 A	100 bar	63	1-982-01-01-100
G 1/4 A	160 bar	63	1-982-01-01-110
G 1/4 A	250 bar	63	1-982-01-01-120
G 1/4 A	400 bar	63	1-982-01-01-130
G 1/4 A	600 bar	63	1-982-01-01-140

pressure gauge, glycerine filled, bottom connection, chrome-nickel steel body, scale in bar/psi



G	pressure stage	nominal size	pressure stage	part number
1/4 NPT	10 bar	63	145 psi	1-982-01-21-050
1/4 NPT	16 bar	63	230 psi	1-982-01-21-060
1/4 NPT	25 bar	63	360 psi	1-982-01-21-070
1/4 NPT	40 bar	63	580 psi	1-982-01-21-080
1/4 NPT	60 bar	63	870 psi	1-982-01-21-090
1/4 NPT	100 bar	63	1450 psi	1-982-01-21-100
1/4 NPT	160 bar	63	2300 psi	1-982-01-21-110
1/4 NPT	250 bar	63	3600 psi	1-982-01-21-120
1/4 NPT	400 bar	63	5800 psi	1-982-01-21-130
1/4 NPT	600 bar	63	8700 psi	1-982-01-21-140

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

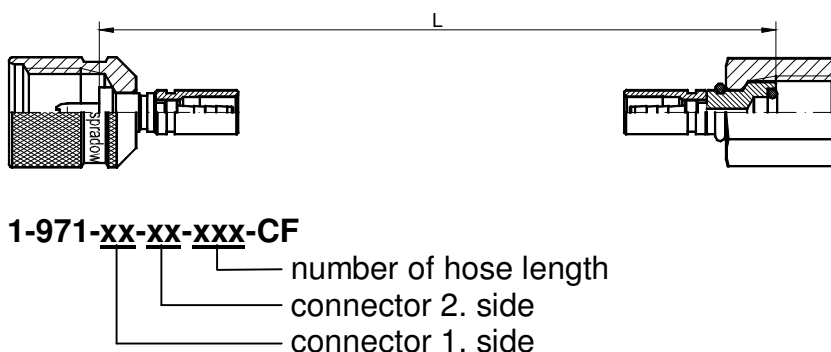
technical data of the hose

nominal diameter	DN 2
nominal pressure	630 bar
inner material	PA
reinforcement material	synthetic fibre
cover material	PA
max. working pressure	630 bar
min. bursting pressure	1900 bar
min. bending radius at working pressure	20 mm
inner diameter	2 mm
outer diameter	5 mm
weight / meter	16 g
temperature strength	-35 °C to +100 °C

technical data of the connectors

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

construction of the SPRADOW order number for test hoses



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

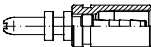
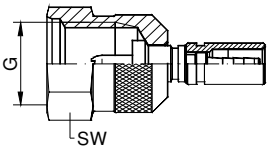
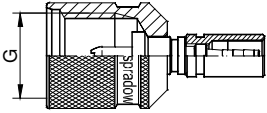
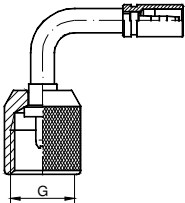
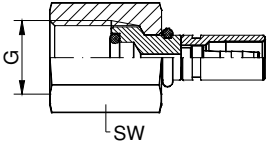
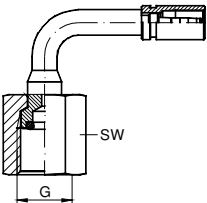
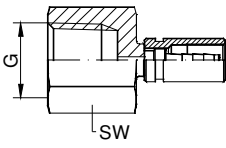
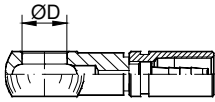
number of hose length

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

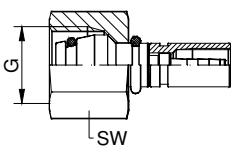
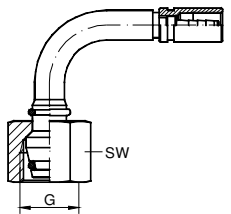
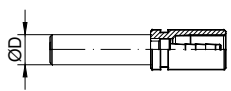
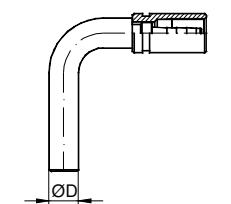
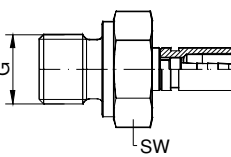
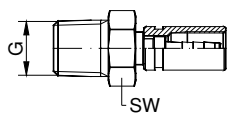
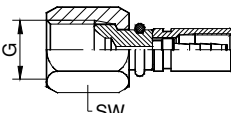
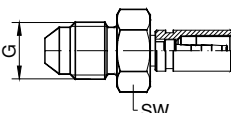
Should you need other length, please use «xxx» as a code on your purchase order or inquiry , putting the desired mm length in brackets. (Example: 1-971-02-04-xxx-CF (5000).)

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

connectors for test hose

View	no.	G	SW / øD	DN	Part number	description
	01			2	2-970-01-00-001-CF	Connector for test coupling series: plug-in incl. ferrule
	03	M16x2	19	2	2-970-03-00-001-CF	Connector for test coupling
	09	M16x1,5	19	2	2-970-09-00-001	Metal cap type A (universal) incl. ferrule
	04	M16x2		2	2-970-04-00-001-CF	Connector for test coupling
	10	M16x1,5		2	2-970-10-00-001	Metal cap type B (round)
	12	S12x1,5		2	2-970-12-00-001-CF	incl. ferrule
	50	M16x2		2	2-970-50-00-001-CF	Connector for test coupling
	61	M16x1,5		2	2-970-61-00-001	Metal cap type B (round)
	57	S12x1,5		2	2-970-57-00-001-CF	90° elbow incl. ferrule
	02	G 1/4	17	2	2-970-02-00-004-CF	Pressure gauge connector with Whitworth – thread.
	25	G 1/2	27	2	2-970-25-00-001-CF	Sealing to pressure gauge by copper ring (25 and 68) or o-ring (02)
	68	G 1/4	17	2	2-970-02-00-005-CF	incl. ferrule
	58	G 1/4	17	2	2-970-58-00-001-CF	Pressure gauge connector with Whitworth – thread. Sealing to pressure gauge by o-ring 90° elbow incl. ferrule
	26	1/4 NPT	17	2	2-970-26-00-001-CF	Pressure gauge connector with NPT-thread
	27	1/2 NPT	27	2	2-970-27-00-001-CF	incl. ferrule
	75		8	2	2-970-75-00-001-CF	Ring connection for hollow screw (RGN) incl. ferrule

connectors for test hose

View	no.	G	SW / øD	DN	part number	description
	19	M12x1,5	6L	2	2-970-19-00-001-CF	Seal cone with o-ring and swivel nut for 24° cone fitting (DKO) incl. ferrule
	20	M14x1,5	6S	2	2-970-20-00-001-CF	
	21	M14x1,5	8L	2	2-970-21-00-001-CF	
	22	M16x1,5	8S	2	2-970-22-00-001-CF	
	23	M16x1,5	10L	2	2-970-23-00-001-CF	
	24	M18x1,5	10S	2	2-970-24-00-001-CF	
	44	M12x1,5	6L	2	2-970-44-00-001-CF	Seal cone with o-ring and swivel nut for 24° cone fitting 90° elbow (DKO) incl. ferrule
	45	M14x1,5	6S	2	2-970-45-00-001-CF	
	46	M14x1,5	8L	2	2-970-46-00-001-CF	
	47	M16x1,5	8S	2	2-970-47-00-001-CF	
	48	M16x1,5	10L	2	2-970-48-00-001-CF	
	49	M18x1,5	10S	2	2-970-49-00-001-CF	
	13		6	2	2-970-13-00-001-CF	Standpipe for use with nut and ring acc. to DIN 2353 (BE) incl. ferrule
	15		8	2	2-970-15-00-001-CF	
	28		6	2	2-970-28-00-001-CF	Standpipe for use with nut and ring acc. to DIN 2353 90° elbow (BE) incl. ferrule
	32	M12x1,5	17	2	2-970-32-00-001-CF	Connector with male thread acc. to DIN 3852 incl. ferrule
	33	G 1/8 A	14	2	2-970-33-00-001-CF	
	34	G 1/4 A	19	2	2-970-34-00-001-CF	
	35	1/8 NPT	12	2	2-970-35-00-001-CF	Connector with male thread acc. to ANSI-Norm incl. ferrule
	36	1/4 NPT	17	2	2-970-36-00-001-CF	
	41	7/16 UNF	14	2	2-970-41-00-001-CF	Connector to fit male connection acc. to SAE J514 (DKJ) incl. ferrule
	42	1/2 UNF	17	2	2-970-42-00-001-CF	
	43	9/16 UNF	19	2	2-970-43-00-001-CF	
	37	7/16 UNF	14	2	2-970-37-00-001-CF	Connector with male thread acc. to SAE J514 (AGJ) incl. ferrule
	38	1/2 UNF	17	2	2-970-38-00-001-CF	
	39	9/16 UNF	19	2	2-970-39-00-001-CF	

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

We offer more - further articles on request!

SPRADOW offers more than just test couplings! Our comprehensive product range includes clamps, fittings, test connectors and injection molding parts made from plastics.

Our customers therefore can satisfy their demand of “measuring systems and appropriate accessories” with just one partner - with us you will save time and money!



Clamps according to DIN 3015

Firm control - our fastening technology ensures a firm halt. A wide range of clamps in various sizes and specifications are supplied directly ex warehouse.

Of course we can supply you with special sizes on request!



Fittings

Highest precision production, exact adaptation of material quality and an ideal design guarantee a lasting functional safety of all CONEXA fittings.

The CONEXA coupling can be assembled and disassembled several times without tightening problems.



Test connectors according to DIN / ISO 3583

Safety through quality – you can expect this from every one of our test connectors. Whether steel or brass – we always offer the “best value for money”.

Be convinced by innovative ideas and a proven competence.



Plastics

Screw-threads and protection caps, hose bonds and sealing cones – on our internal injection moulding machines, we manufacture various parts from plastics.

Of course, we also produce your parts with your moulds.

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