

VOSS

Conspicuously superior – VOSS*Point*^{DC} Measuring Couplings



www.voss-fluid.net

Functionality and design for the highest demands

Coupling and measuring under high pressure

Pressure testing in hydraulic systems is extremely important for smooth, reliable plant operation. Measuring couplings are now standard in hydraulic systems and are widely used. They facilitate nearly completely leak-proof coupling and uncoupling of measuring and test equipment during plant operation or the connection of appliances for filling or venting.

VOSS measuring couplings redefine security and handling. To accomplish this, we revamped the best design concept on the market, providing it with the superior VOSS coat zinc-nickel coating. The ingenious twist: To improve handling in practice, the end cap is connected to the coupler body by a colored plastic element.

Innovative and high-quality – our product design

A revolutionary design with impressive details. Corroded and torn chains are passé. Our integrated plastic element imparts measuring couplings a high-quality look, ensures a permanently secure attachment, and prevents the end cap from loosening due to vibrations.

- Color differentiation between different hydraulic circuits
- Clearly visible diagnosis access
- Individual color design possible
- Integrated vibration protection



Security is our design principle

All leakage paths secured with additional soft seal

To achieve 100% secure sealing, we use a combination of metallic and elastomer seals on the primary seal. To increase the leakage security even further and minimize wear, the seal point is designed in such a way that any unnecessary flexing of the O-ring seal is prevented when the coupling is opened and closed.

In the secondary seal, an additional stabilization of the O-ring increases the long-term sealing effect of the VOSS measuring couplings by up to ten times. The compact construction of the VOSS *Point^{DC}* couplings is accomplished by using a one-piece housing. This prevents the formation of additional leakage paths.



Measuring couplings in the closed position



Measuring couplings in the opened position

High leakage protection

- Elastomer seal for 100% secure sealing
- Up to ten times greater long-term sealing of the secondary seal through additional support ring
- One-piece housing design prevents the formation of unnecessary leakage paths
- Structural minimization of O-ring wear

Convincing point by point

The VOSS*Point*^{DC} measuring coupling in detail:



Tested for reliable, superior performance

Nothing is left to coincidence

Starting right with development, we put our new measuring couplings through comprehensive trials to achieve an especially application-oriented product design. VOSS*Point*^{DC} has been put to the test many times to ensure its superior durability, functionality, and simple handling. Our most important test criteria were:

- Static leak tightness for 160 hours
- Burst pressure greater than 4 times the nominal pressure
- Impulse test to determine the service life (more than 2 million impulses)
- Coupling test under pressure
- Flow volume in both directions at 250 bar
- Resistance to environmental influences (UV resistance, salt spray test, tensile test)
- IPX9K = Protection against water under high pressure and steam cleaning, specifically for road vehicles

Every measuring coupling is checked for functional reliability and leak-tightness, even during series production.

Colorful variety

Clear orientation thanks to individual color scheme

In delivery standard, the plastic cylinder is dyed blue, which makes the connection facilities clearly recognizable for the user in complex hydraulics systems.

- Additional basic colors for visual differentiation of multiple hydraulic circuits
- Individual coloration to match your own branding and product design also possible on request



Blue (standard)



Yellow



Green



Red



Black



Individual

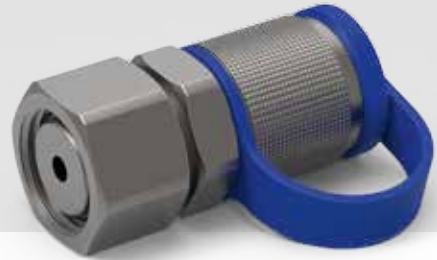


The VOSSPoint^{DC} range

Male threads in metric and inch dimensions



Easy-to-assemble and process-reliable conical seal connections



Large range of adapters and special couplings



Manometer connections with additional soft seal



High-pressure-proof measuring equipment hoses



24° connecting couplings with measuring coupling already integrated



Tube connecting parts and individual parts/accessories



Content

Type/Page

The VOSS product name
for measuring couplings
and measuring equipment
hoses

P.10

Male thread

SDS



P.12

24° tube connections

S



P.13

24° taper connections
(DKO)

SWOS

SWOL



P.14

P.15

Bulkhead couplings

BHSLN

PGBHSLN



P.16

P.18

Gauge connections

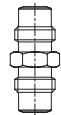
PGS



P.19

Adapters

S



P.20

Measuring equipment hoses

TH



P.21

Content

Accessories

Type/Page

SDS

WDS



P.22

P.23

The VOSS product name for measuring couplings and measuring equipment hoses



This brochure contains a alphanumeric product designation, which is modeled strongly on ISO 8434-1. This makes the designation speak for itself and the product is easy to identify.

Due to the English structure this can be understood internationally. Also through the product designation customerspecific solutions can be generated from variations of existing

Examples:

DC/24-TC-L8-TPC1-L8-SCV
DC-TH6-A1-A1-LG1000

5680271107
5681005100va

DC/24 - TH6 - T - C - L8
DC - A1

System		
Diagnostic couplings	DC	DC/24 DC
Diagnostic couplings/24° DIN	DC/24	
Diagnostic couplings/90° ORFS	DC/90	
Diagnostic couplings/further connections	DC/...	
Function/Component		
Stud couplings	SD	TH6
Swivel with O-ring	SWO	
Bulkhead couplings	BH	
Pressure gauges	PG	
Weld-on couplings	WD	
Test hose	TH6	
Further more see DIN-program	...	
Form		
Elbows	E	T
45° Elbows	E45	
Cross	K	
L-types	L	
T-types	T	
Straights	S	
Completion		
Complete connections	C	C
Not pre-assembled	X	
With locknut	LN	
Series		
Light series	L	L8 A1
Heavy series	S	
Tube diameter	6, 8, 10, 12, 14, 15, 16, 18, 20, 22, 25, 28, 30, 35, 38, 42	
Standard test point cap M16 x 2	A1	

Measuring coupling as T-screw joint; size L 8; measuring connection with taper seal; version M16 x 2; metal cap; VOSSRing^M and union nut completed.

Use/
Allocation

Size 2/
Connection:

Seal material

Material/
Werkstoff

Design
Cap

Special part

VOSS product ranges automatically.

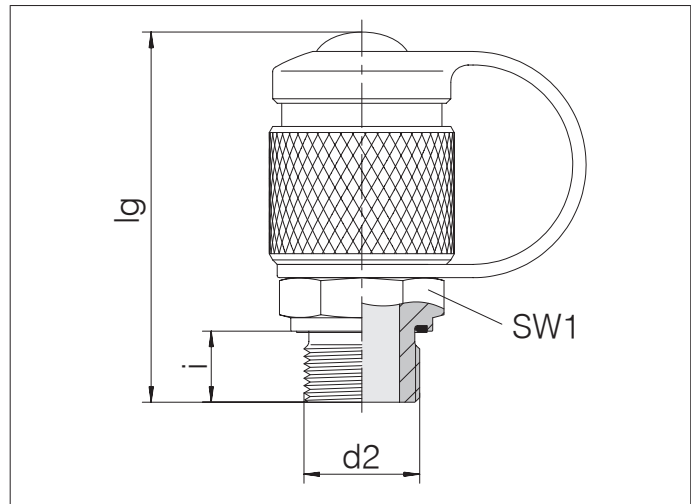
Order example, further explanations and variation options are found in the respective chapters or following pages of the individual product groups.

- TPC1	- L8	- A1	- LG1000	- SCV	CP	Special parts	
						Customer product	
					SCV	Execution cap	
					PC	Steel cap	
						Plastic cap	
						Material	
					ST	Steel ZnNi – standard	
					SST	Stainless steel	
						Length	
					LG1000	Length test hose 1.000 mm	
						Sealing type	
					NBR	NBR – standard is not mentioned	
					FKM	FKM – Viton	
					EPDM	EPDM – on request	
						Series 2/Connection	
					L8...	Series	
					PM	Push in male	
					FM	Female	
					U	UNF	
					N	NPT	
G/R	Whitworth						
M	metric						
B	Seal edge						
E	PEFLEX profile seal ring						
F	Sealing with O-ring						
A1	Standard test point						
...	cap M16 x 2						
	Further more see DIN-program						
	Application/Classification						
	Measurement system						
TP	Test point						
C	Test point with cone						
B	Test point with ball						
1	Style M16 x 2						
2	Style M16 x 1,5						
3	Style M12,65 x 1,5						
4	Style push in system						

Measuring couplings with male threads

The type of sealing is determined by the sealing form

Standard material of the seals is NBR



d2	Pressure	lg ca.	SW1	i	Form	Nm	Order-No.	Designation
M 8 x 1	PN 250	49.5	17	8.5	CS	6	5680202000	DC-SDS-TPC1-M8CS-SCV
M 10 x 1	PN 630	46	17	8.5	CS	15	5680210000	DC-SDS-TPC1-M10CS-SCV
M 12 x 1.5	PN 630	46	17	10	E	30	5680211000	DC-SDS-TPC1-M12E-SCV
M 14 x 1.5	PN 630	46	19	10	E	40	5680218000	DC-SDS-TPC1-M14E-SCV
M 14 x 1.5	PN 630	46.5	19	11	F	45	5680204100	DC-SDS-TPC1-M14F-SCV
M 16 x 1.5	PN 630	46	22	10	E	60	5680219000	DC-SDS-TPC1-M16E-SCV
G 1/8	PN 400	46	17	8	E	18	5680220000	DC-SDS-TPC1-G1/8E-SCV
G 1/4	PN 630	46	19	10	E	40	5680221000	DC-SDS-TPC1-G1/4E-SCV
G 3/8	PN 630	46	22	10	E	60	5680223000	DC-SDS-TPC1-G3/8E-SCV
R 1/8	PN 400	46	17	13	T		5680227000	DC-SDS-TPC1-R1/8T-SCV
1/8 NPTF	PN 400	42.5	17	9.5	T		5680224000	DC-SDS-TPC1-NF1/8T-SCV
1/4 NPTF	PN 630	49.5	17	16.5	T		5680225000	DC-SDS-TPC1-NF1/4T-SCV
7/16-20 UNF-2A	PN 630	46	17	9	F	20	5680213100	DC-SDS-TPC1-U7/16-20F-SCV
9/16-18 UNF-2A	PN 630	46	19	10	F	35	5680217100	DC-SDS-TPC1-U9/16-18F-SCV

Metal cap with vibration protection.

Other materials, additional versions, seals and male threads on request.

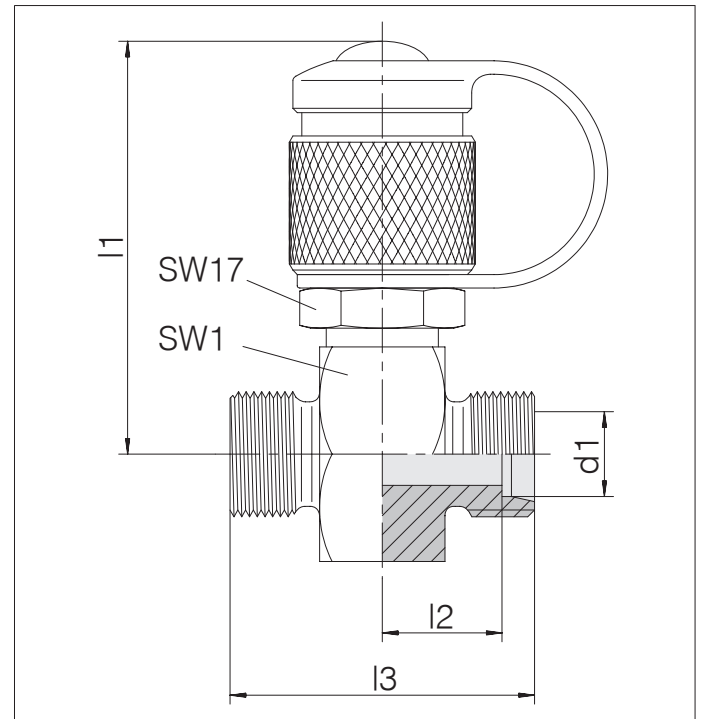
Form CS (O-ring)
Form E (PEFLEX)

Form T (NPT)
Form F (O-ring)

Measuring couplings as T couplings

For tube to tube connection according to ISO 8434-1

Standard material of the seals is NBR



Series Tube OD d1	Pressure	l1 ca.	l2	l3	SW1	Order-No.	Designation
L 6	PN 315	49.5	10.25	34.5	24	5680270181	DC/24-T-L6-TPC1-L6-SCV
L 8	PN 315	49.5	10.25	34.5	24	5680271181	DC/24-T-L8-TPC1-L8-SCV
L 10	PN 315	49.5	11.25	36.5	24	5680272181	DC/24-T-L10-TPC1-L10-SCV
L 12	PN 315	49.5	11.25	36.5	24	5680273181	DC/24-T-L12-TPC1-L12-SCV
L 15	PN 315	52.5	12.25	38.5	30	5680274181	DC/24-T-L15-TPC1-L15-SCV
L 18	PN 315	53.5	11.75	38.5	32	5680275181	DC/24-T-L18-TPC1-L18-SCV
L 22	PN 160	55.5	13.75	42.5	36	5680276181	DC/24-T-L22-TPC1-L22-SCV
L 28	PN 160	58	13.75	42.5	41	5680277181	DC/24-T-L28-TPC1-L28-SCV
L 35	PN 160	60.5	12.75	46.5	46	5680278181	DC/24-T-L35-TPC1-L35-SCV
L 42	PN 160	65	12.25	46.5	55	5680279181	DC/24-T-L42-TPC1-L42-SCV
S 6	PN 630	49.5	12.25	38.5	24	5680280181	DC/24-T-S6-TPC1-S6-SCV
S 8	PN 630	49.5	12.25	38.5	24	5680281181	DC/24-T-S8-TPC1-S8-SCV
S 10	PN 630	49.5	11.75	38.5	24	5680282181	DC/24-T-S10-TPC1-S10-SCV
S 12	PN 630	49.5	11.75	38.5	24	5680283181	DC/24-T-S12-TPC1-S12-SCV
S 14	PN 630	51	13.25	42.5	27	5680284181	DC/24-T-S14-TPC1-S14-SCV
S 16	PN 400	52.5	12.75	42.5	30	5680285181	DC/24-T-S16-TPC1-S16-SCV
S 20	PN 400	55.5	12.75	46.5	36	5680286181	DC/24-T-S20-TPC1-S20-SCV
S 25	PN 400	58	13.25	50.5	41	5680287181	DC/24-T-S25-TPC1-S25-SCV
S 30	PN 400	60.5	13.75	54.5	46	5680288181	DC/24-T-S30-TPC1-S30-SCV
S 38	PN 315	65	14.5	61.0	55	5680289181	DC/24-T-S38-TPC1-S38-SCV

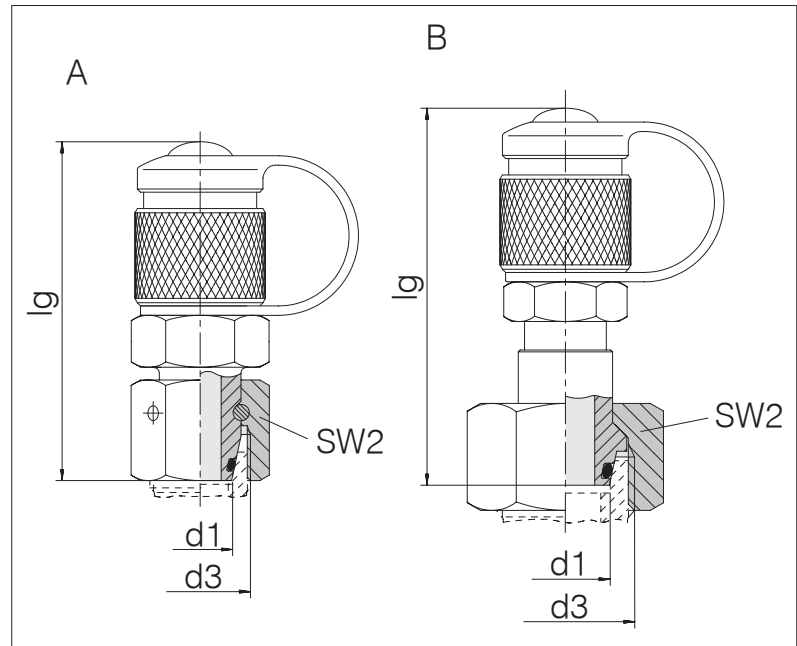
Other materials,
additional versions
and seals on request.

Measuring couplings M16x2 with 24° taper couplings

With taper and O-ring
fit in port form
W DIN 3861 / ISO 8434-1

Standard material of the seals is NBR

Standard material of the DKO O-Rings is
FPM/FKM



Series	Pressure	d3	lg ca.	SW2	Form	Order-No.	Designation
L 6	PN 315	M 12 x 1,5	52	14	A	5680244000	DC/24-SWOS-L6-TPC1-SCV
L 8	PN 315	M 14 x 1,5	52	17	A	5680245000	DC/24-SWOS-L8-TPC1-SCV
L 10	PN 315	M 16 x 1,5	52	19	A	5680246000	DC/24-SWOS-L10-TPC1-SCV
L 12	PN 315	M 18 x 1,5	52	22	A	5680247000	DC/24-SWOS-L12-TPC1-SCV
L 15	PN 315	M 22 x 1,5	60	27	B	5680248000	DC/24-SWOS-L15-TPC1-SCV
L 18	PN 315	M 26 x 1,5	60	32	B	5680249000	DC/24-SWOS-L18-TPC1-SCV
L 22	PN 160	M 30 x 2	60	36	B	5680233100	DC/24-SWOS-L22-TPC1-SCV
L 28	PN 160	M 36 x 2	61	41	B	5680250000	DC/24-SWOS-L28-TPC1-SCV
L 35	PN 160	M 45 x 2	63	50	B	5680251000	DC/24-SWOS-L35-TPC1-SCV
L 42	PN 160	M 52 x 2	63	60	B	5680252000	DC/24-SWOS-L42-TPC1-SCV
S 6	PN 630	M 14 x 1,5	52	17	A	5680253000	DC/24-SWOS-S6-TPC1-SCV
S 8	PN 630	M 16 x 1,5	52	19	A	5680254000	DC/24-SWOS-S8-TPC1-SCV
S 10	PN 630	M 18 x 1,5	52	22	A	5680255000	DC/24-SWOS-S10-TPC1-SCV
S 12	PN 630	M 20 x 1,5	52	24	A	5680256000	DC/24-SWOS-S12-TPC1-SCV
S 14	PN 630	M 22 x 1,5	63	27	B	5680257000	DC/24-SWOS-S14-TPC1-SCV
S 16	PN 400	M 24 x 1,5	63	30	B	5680258000	DC/24-SWOS-S16-TPC1-SCV
S 20	PN 400	M 30 x 2	63	36	B	5680259000	DC/24-SWOS-S20-TPC1-SCV
S 25	PN 400	M 36 x 2	64.5	46	B	5680260000	DC/24-SWOS-S25-TPC1-SCV
S 30	PN 400	M 42 x 2	66	50	B	5680261000	DC/24-SWOS-S30-TPC1-SCV
S 38	PN 315	M 52 x 2	69	60	B	5680262000	DC/24-SWOS-S38-TPC1-SCV

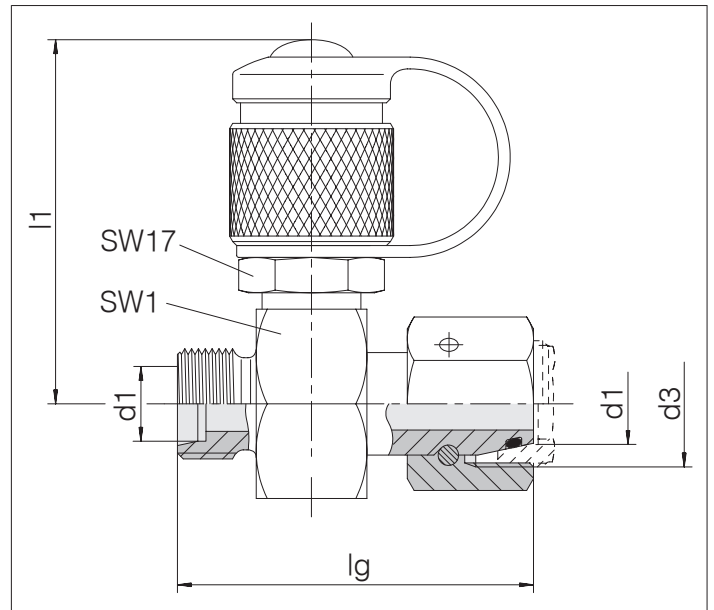
Other materials,
additional versions
and seals on request.

Measuring couplings with 24° taper couplings in combination with 24° tube connections

With taper and O-ring
fit in port form
W DIN 3861 / ISO 8434-1

Tube connection according to ISO 8434-1

Standard material of the seals is NBR



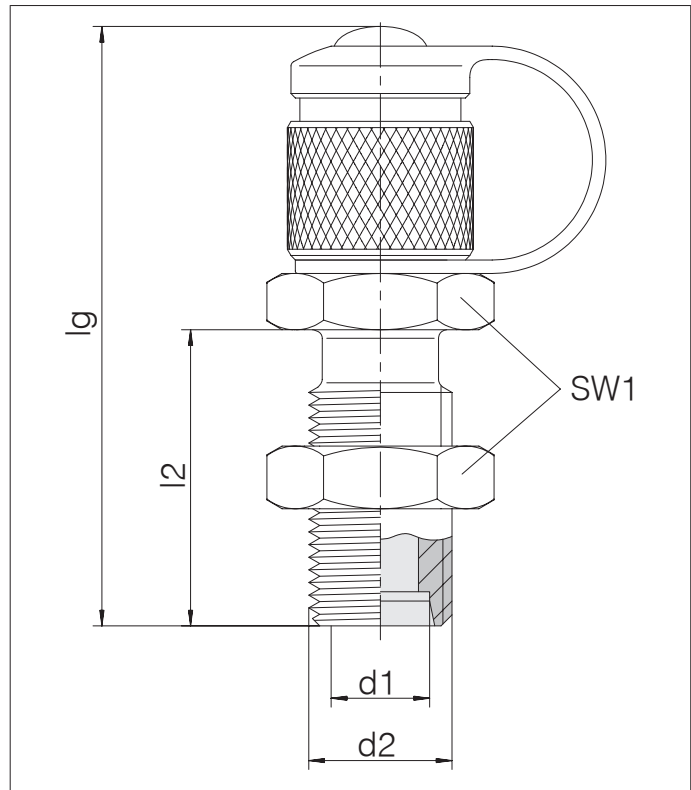
Series	d3	Pressure	l1	lg	SW1	Order-No.	Designation
Tube OD			ca.	ca.			
d1							
L 6	M 12 x 1,5	PN 315	49,5	44,5	24	5680360081	DC/24-SWOL-L6-TPC1-L6-SCV
L 8	M 14 x 1,5	PN 315	49,5	44,5	24	5680361081	DC/24-SWOL-L8-TPC1-L8-SCV
L 10	M 16 x 1,5	PN 315	49,5	47,5	24	5680362081	DC/24-SWOL-L10-TPC1-L10-SCV
L 12	M 18 x 1,5	PN 315	49,5	48,5	24	5680363081	DC/24-SWOL-L12-TPC1-L12-SCV
L 15	M 22 x 1,5	PN 315	52,5	51,5	30	5680364081	DC/24-SWOL-L15-TPC1-L15-SCV
L 18	M 26 x 1,5	PN 315	53,5	55,5	32	5680365081	DC/24-SWOL-L18-TPC1-L18-SCV
L 22	M 30 x 2	PN 160	55,5	58,5	36	5680366081	DC/24-SWOL-L22-TPC1-L22-SCV
L 28	M 36 x 2	PN 160	58	59	41	5680367081	DC/24-SWOL-L28-TPC1-L28-SCV
L 35	M 45 x 2	PN 160	60,5	68	46	5680368081	DC/24-SWOL-L35-TPC1-L35-SCV
L 42	M 52 x 2	PN 160	65	68	55	5680369081	DC/24-SWOL-L42-TPC1-L42-SCV
S 6	M 14 x 1,5	PN 630	49,5	46,5	24	5680370081	DC/24-SWOL-S6-TPC1-S6-SCV
S 8	M 16 x 1,5	PN 630	49,5	48,5	24	5680371081	DC/24-SWOL-S8-TPC1-S8-SCV
S 10	M 18 x 1,5	PN 630	49,5	49,5	24	5680372081	DC/24-SWOL-S10-TPC1-S10-SCV
S 12	M 20 x 1,5	PN 630	49,5	50	24	5680373081	DC/24-SWOL-S12-TPC1-S12-SCV
S 14	M 22 x 1,5	PN 630	51	53,5	27	5680374081	DC/24-SWOL-S14-TPC1-S14-SCV
S 16	M 24 x 1,5	PN 400	52,5	56,5	30	5680375081	DC/24-SWOL-S16-TPC1-S16-SCV
S 20	M 30 x 2	PN 400	55,5	64,5	36	5680376081	DC/24-SWOL-S20-TPC1-S20-SCV
S 25	M 36 x 2	PN 400	58	66	41	5680377081	DC/24-SWOL-S25-TPC1-S25-SCV

Other materials,
additional versions
and seals on request.

Measuring couplings Bulkhead version

Tube connection according to ISO 8434-1

Standard material of the seals is NBR



Series	d2	Pressure	l2	lg ca.	SW1	Order-No.	Designation
L 6	M 12 x 1.5	PN 315	34	67	17	5680315300	DC/24-BHSLN-L6-TPC1-SCV
L 8	M 14 x 1.5	PN 315	34	67	19	5680315400	DC/24-BHSLN-L8-TPC1-SCV
L 10	M 16 x 1.5	PN 315	33.5	66.5	22	5680315500	DC/24-BHSLN-L10-TPC1-SCV
S 6	M 14 x 1.5	PN 630	36	69	19	5680315600	DC/24-BHSLN-S6-TPC1-SCV
S 8	M 16 x 1.5	PN 630	33.5	66.5	22	5680305800	DC/24-BHSLN-S8-TPC1-SCV
S 10	M 18 x 1.5	PN 630	37	70	24	5680315700	DC/24-BHSLN-S10-TPC1-SCV

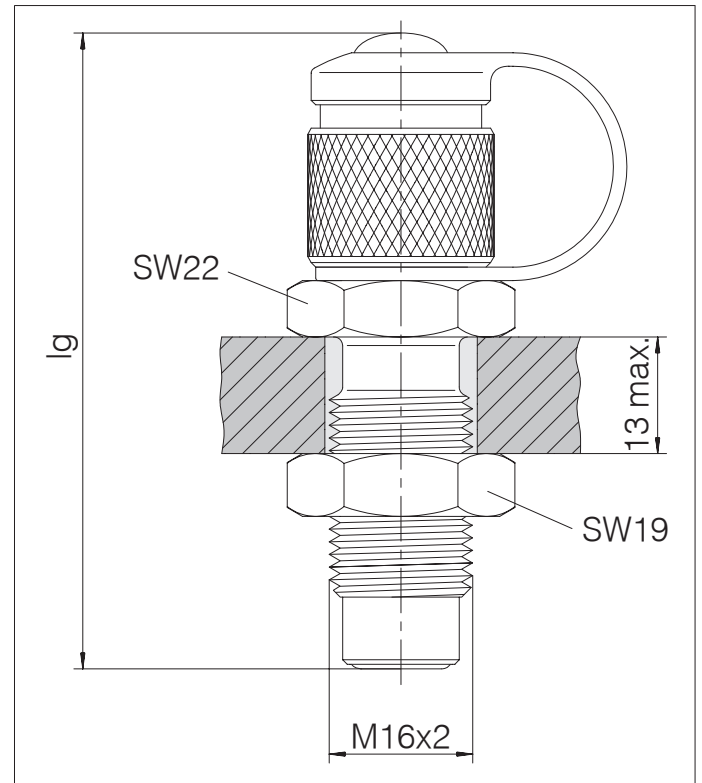
Other materials,
additional versions
and seals on request.

Measuring couplings Bulkhead version

Measuring tube

Measuring couplings on both sides (M 16 x 2)

Standard material of the seals is NBR

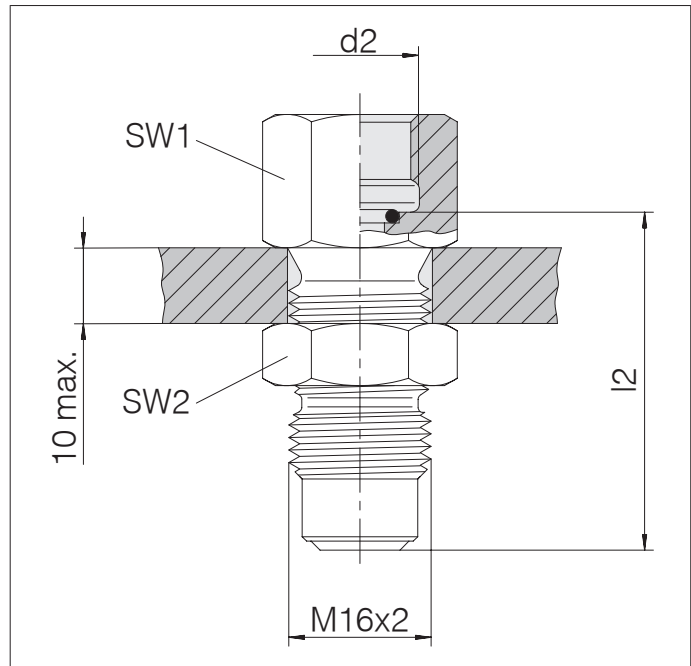


Pressure	lg ca.	Order-No.	Designation
PN 630	70	5680305900	DC-BHSLN-TPC1-FM1-SCV

Other materials,
additional versions
and seals on request.

Manometer connections for bulkheadwalls and measurement equipment hoses

Standard material of the seals is NBR



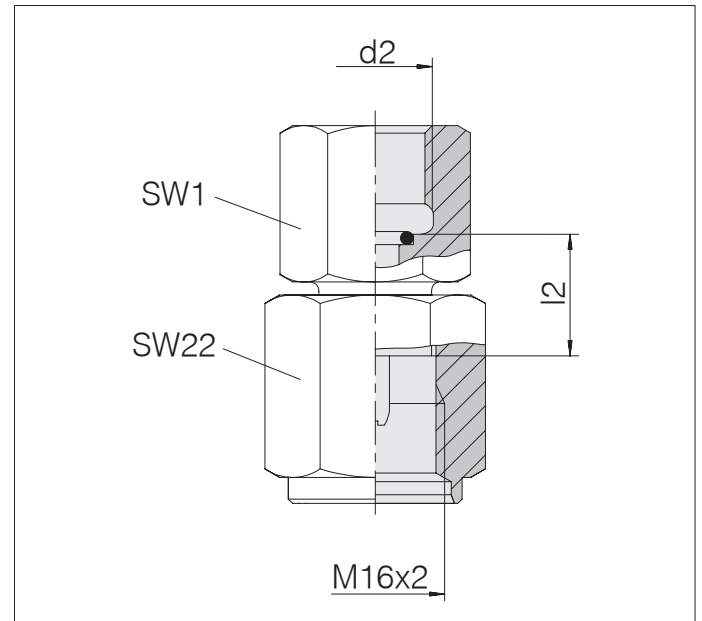
d2	Pressure	l2	SW1	SW2	Order-No.	Designation
G 1/4	PN 630	38	19	19	5680306100	DC-PGBHSLN-FM1-IG1/4F
G 1/2	PN 630	42.5	27	19	5680307100	DC-PGBHSLN-FM1-IG1/2F

Other materials,
additional versions,
seals and male threads
on request.

Gauge couplings

Direct connection

Standard material of the seals is NBR

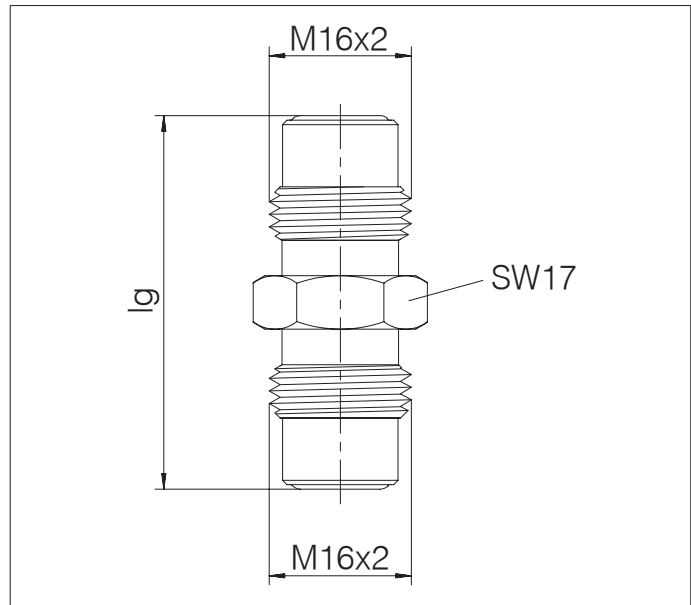


d2	Pressure	l2	SW1	Order-No.	Designation
G 1/4	PN 630	14.5	19	5680308000	DC-PGS-PM1-IG1/4F
G 1/2	PN 630	17	27	5680309100	DC-PGS-PM1-IG1/2F

Other materials,
additional versions,
seals and male threads
on request.

Hose connectors

Standard material of the seals is NBR



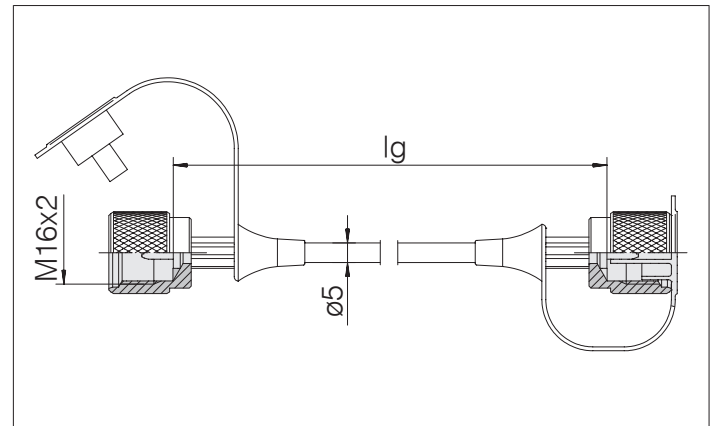
Pressure	lg	Order-No.	Designation
PN 630	42	5680800000	DC-S-TPC1

Other materials,
additional versions,
seals and male threads
on request.

Measuring equipment hoses DN 2 with measuring couplings

For screw and plug series

- For hydraulic and other mineral-based oils
- Fittings same on both ends



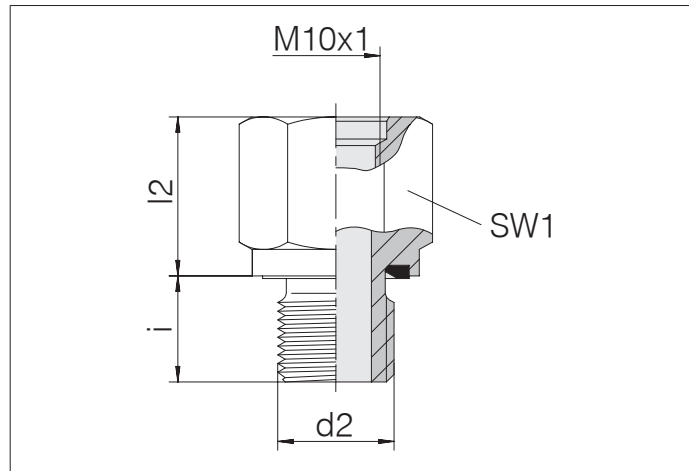
Pressure	lg	Order-No.	Designation
PN 630	200	5681004500	DC-TH6-A1-A1-LG200
PN 630	300	5681004600	DC-TH6-A1-A1-LG300
PN 630	400	5681004700	DC-TH6-A1-A1-LG400
PN 630	500	5681004800	DC-TH6-A1-A1-LG500
PN 630	630	5681004900	DC-TH6-A1-A1-LG630
PN 630	800	5681005000	DC-TH6-A1-A1-LG800
PN 630	1,000	5681005100	DC-TH6-A1-A1-LG1000
PN 630	1,250	5681005200	DC-TH6-A1-A1-LG1250
PN 630	1,500	5681005300	DC-TH6-A1-A1-LG1500
PN 630	2,000	5681005800	DC-TH6-A1-A1-LG2000
PN 630	2,500	5681005400	DC-TH6-A1-A1-LG2500
PN 630	3,200	5681005500	DC-TH6-A1-A1-LG3200
PN 630	4,000	5681005600	DC-TH6-A1-A1-LG4000
PN 630	5,000	5681005700	DC-TH6-A1-A1-LG5000

Threaded studs for measuring couplings

Sealing with PEFLEX profile seal ring

Standard material of the profile seal rings is NBR

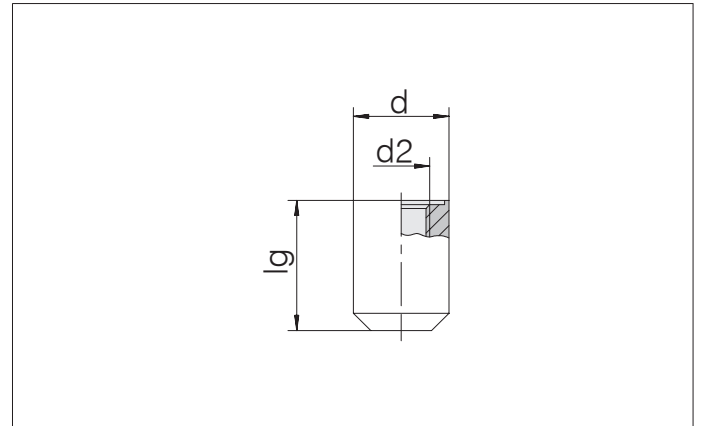
Threaded studs, Form CS



d2	Pressure	l2	SW1	i	Form	Order-No.	Designation
M 12 x 1.5	PN 630	19	17	10	E	5680900800	DC-SDS-M12E-IM10CS
G 1/8	PN 630	19	17	8	E	5680901200	DC-SDS-G1/8E-IM10CS
G 1/2	PN 630	10	27	14	E	5680901600	DC-SDS-G1/2E-IM10CS
G 3/4	PN 630	13	32	12	E	5680901400	DC-SDS-G3/4E-IM10CS
1/2 NPTF	PN 630	10	24	18	T	5680901000	DC-SDS-N1/2T-IM10CS

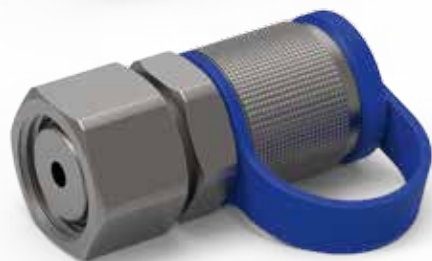
Other materials,
additional versions,
seals and male threads
on request.

Welding couplings



d2	Pressure	d	lg	Form	Order-No.	Designation
M 10 x 1	PN 630	20	25	CS	5680902000	DC-WDS-IM10CS-D20-C19
G 1/4	PN 630	22	30	E	5680902400	DC-WDS-IG1/4-D22-C19

Other materials,
additional versions
and seals on request.



General technical notes

- Technical notes
- Seal types and threaded bores

Content	Type/Page
---------	-----------

Technical notes	P.27
-----------------	------

Seal types and threaded bores	P.28
-------------------------------	------

Technical notes

Specifications

- Design as per DIN ISO 15171-2
- Approved for up to 630 bar maximum operating pressure
- High number of variants
- With integrated vibration protection
- Primary and secondary sealing
- Secondary sealing with additional Teflon support ring

Main body material

- steel

Cap fastening material

- TPE-E

Soft seal components

- NBR (optional FKM)

Media and temperature resistance

- Commercially available mineral oil based hydraulic oil up to +100 °C

Corrosion protection

- Zinc-Nickel based corrosion protection according to VOSS specifications
- Corrosion resistance > 1000 hours, test as per DIN 50021-SS

Coupling body color

- metallic, gray-matte

Mounting lug cap designs color

- blue (standard color) – other colors on request

IP-protection type testing IPX9K

- Acc. to ISO 20653:2013-02. Protection class IPX9K



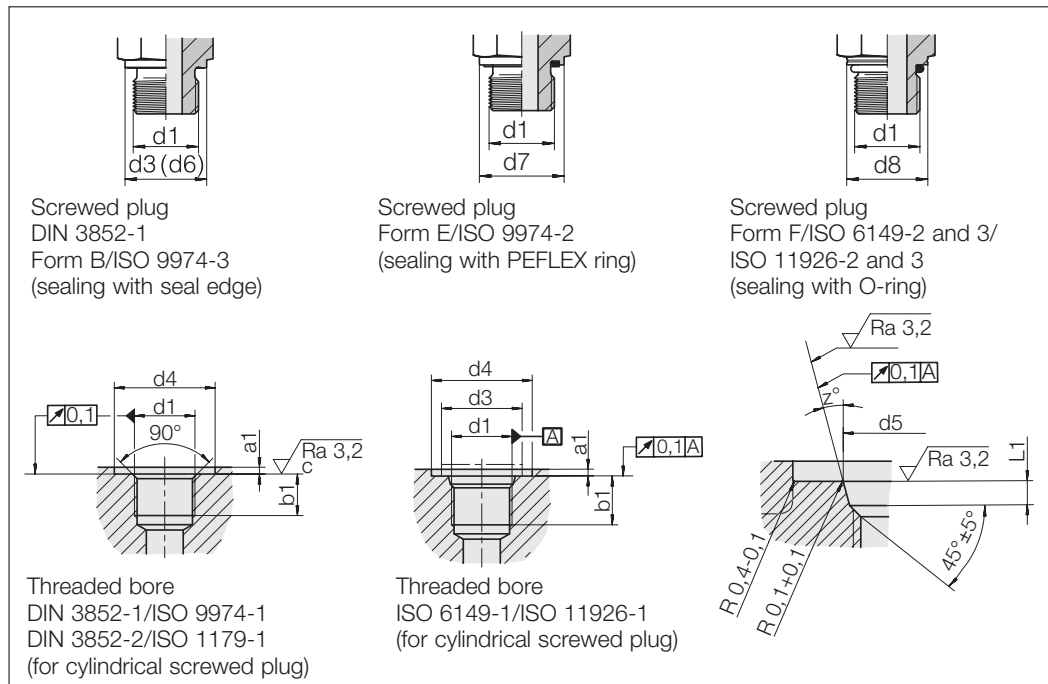
Seal types and threaded bores

for VOSS Messtechnik

Male thread:
Metric fine thread, cylindrical

PEFLEX and O-ring seals
made standard of NBR
-35 °C to +200 °C

made of FPM/FKM
-25 °C to +200 °C



d1	d3 (d6)	d4 +0.4	d4 min.	d5 +0.1	d7	d8 ±0.2	a1 max.	b1 min.	L1 +0.4	Z° ±0.1°
----	---------	---------	---------	---------	----	---------	---------	---------	---------	----------

DIN 3852

M 10 x 1	14		15		13.9		1	8		
M 12 x 1.5	17		18		16.9		1.5	12		
M 14 x 1.5	19		20		18.9		1.5	12		
M 16 x 1.5	21		23		21.9		1.5	12		
M 18 x 1.5	23		25		23.9		2	12		
M 20 x 1.5	25		27		25.9		2	14		
M 22 x 1.5	27		28		26.9		2.5	14		

G 1/8 A	14		15		13.9		1	8		
G 1/4 A	18		20		18.9		1.5	12		
G 3/8 A	22		23		21.9		2	12		
G 1/2 A	26		28		26.9		2.5	14		

ISO 6149

M 10 x 1	14.5	16		11.1		13.8	1	10	1.6	12
M 12 x 1.5	17.5	19		13.8		16.8	1.5	11.5	2.4	15
M 14 x 1.5	19.5	21		15.8		18.8	1.5	11.5	2.4	15
M 16 x 1.5	22.5	24		17.8		21.8	1.5	13	2.4	15
M 22 x 1.5	27.5	29		23.8		26.8	2	15.5	2.4	15
M 27 x 2	32.5	34		29.4		31.8	2	19	3.1	15

ISO 11926

7/16-20 UNF-2A	15	21		12.45		14.4	1.6	11.5	2.4	12
9/16-18 UNF-2A	18	25		15.7		17.6	1.6	12.7	2.5	12

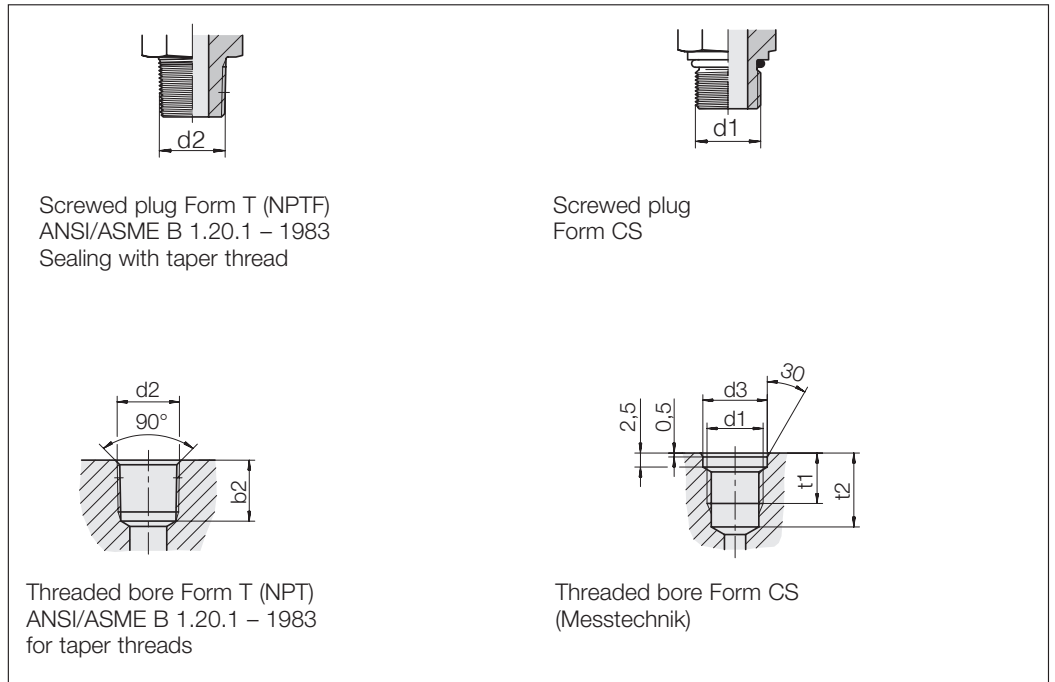
Seal types and threaded bores

for VOSS Messtechnik

Male thread:
Metric fine thread, cylindrical

Whitworth pipe threads
tapered

NPT threads



d1	d2	d3 +0.1	t1 min.	t2 min.	b2 min.
M 8 x 1	1/8 NPTF	9.5	11	15.5	11.6
M 10 x 1	1/4 NPTF	11.5	12	16.5	16.4
	1/2 NPTF				22.6



VOSS Fluid GmbH sales organisation

Germany

VOSS Fluid GmbH
P.O. Box 1540
51679 Wipperfürth
Lüdenscheider Straße 52–54
51688 Wipperfürth
Tel. +49 2267 63-0
Fax +49 2267 63-5621
+49 2267 63-5622
+49 2267 63-5623
fluid@voss.net
www.voss-fluid.net

Brazil

VOSS Automotive Ltda
Av. Alvares Cabral, 1087
CEP 09980-160
Diadema – São Paulo
Tel. +55 11 40539500
Fax +55 11 40539524
fluid.br@voss.net
www.voss.com.br

China

Tel. +86 510 66902370
fluidchina@voss.net

France

VOSS Distribution S.a.r.l.
57 Route de Crécy
28500 Vernouillet
Tel. +33 237 380190
Fax +33 237 468914
info@fr.voss.net
www.fr.voss.net

Italy

VOSS S.r.l.
Via de Gasperi 31
20020 Lainate (MI)
Tel. +39 02 93796352
Fax +39 02 9373577
info@it.voss.net

Poland

Tel. +48 515 312750
fluid.pl@voss.net

Sweden

Tel. +46 703826800
fluid.se@voss.net

Spain

VOSS S.A.
Paseo del Comercio, 90
Apartado Correos, 1014
08203 Sabadell
Tel. +34 93 7106262
Fax +34 93 7116357
info@es.voss.net
www.es.voss.net

USA

VOSS Automotive, Inc.
4640 Hillegas Road
Fort Wayne, IN 46818
Tel. +1 260 3732277
Fax +1 260 3732299
info@us.voss.net
www.vossusa.com

Dealers world-wide

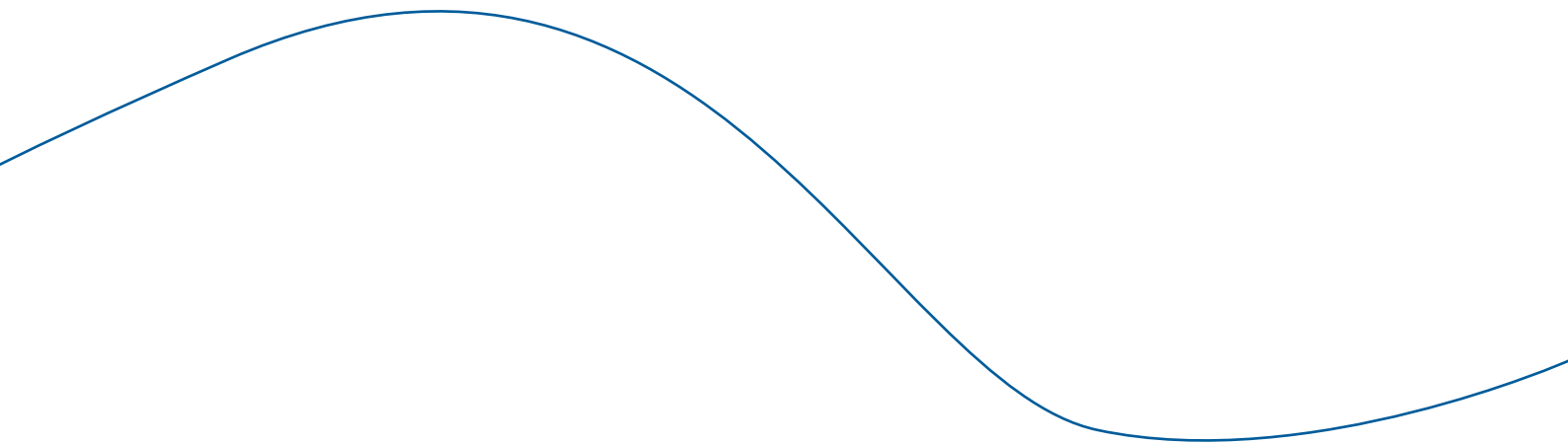
Please request the latest
list of dealers from our
Wipperfürth sales office.

To ensure that VOSS products perform reliably, it is essential to follow the relevant operating and assembly instructions and to adhere to the latest standards and regulations for general mechanical engineering. Make sure to use up-to-date versions at all times.

Subject to errors, including printing errors, and technical modifications.

© Copyright 2016, VOSS Fluid GmbH

VOSS



VOSS Fluid GmbH
P.O. Box 1540
51679 Wipperfürth

Lüdenscheider Straße 52–54
51688 Wipperfürth
Germany

Tel.: +49 2267 63-0
Fax: +49 2267 63-5621
+49 2267 63-5622
+49 2267 63-5623
fluid@voss.net
www.voss-fluid.net