

GATE VALVES



**Conduit Gate Valve
Type ASR**



**Conduit Gate Valve
Type ASR
PN4 - PN 100**

Description

1. General characteristics

The RMA gate valve type "ASR" is an extremely robust welded-steel, dust resistant shut-off valve for installation in gas pipelines (coking plants, fission- and natural gas).

2. Construction - function

The main features of this metal-sealing, single-plate-parallel gate valve are the precision machined lipped surfaces of the close and guide plates, which, by preapplication with spring washers, are floating-mounted.

This system ensures a gapless movement of close plate over entire stroke with internal spindle thread.

The totally gapless metal seal prevents penetration of dirt during opening and closing of close-plate. That keeps the seal-area undamaged and guarantees at the same time a consistent lasting operation life.

In the open position the non reduced models offer a full piggable passage. (With PE-connection only upon request).

Flow direction is arbitrary and a durable sealing is made either on one side of the pressurisation or on both sides. To ensure permanent lubrication and conservation of moving parts, the interior of housing is filled with a special oil.

This Gate Valve ensures a permanent and easy operation, with a nearly unchanged torque.

The drain plug on housing lid serves for oil filling, level checking, to pump off water after a hydraulic pressure test on the construction site and for destressing of housing.

3. Corrosion prevention

The outer shell has as standard a PUR (polyurethane) coating.

4. Bleed pipe

See ROTARY GATE VALVE type DSR.

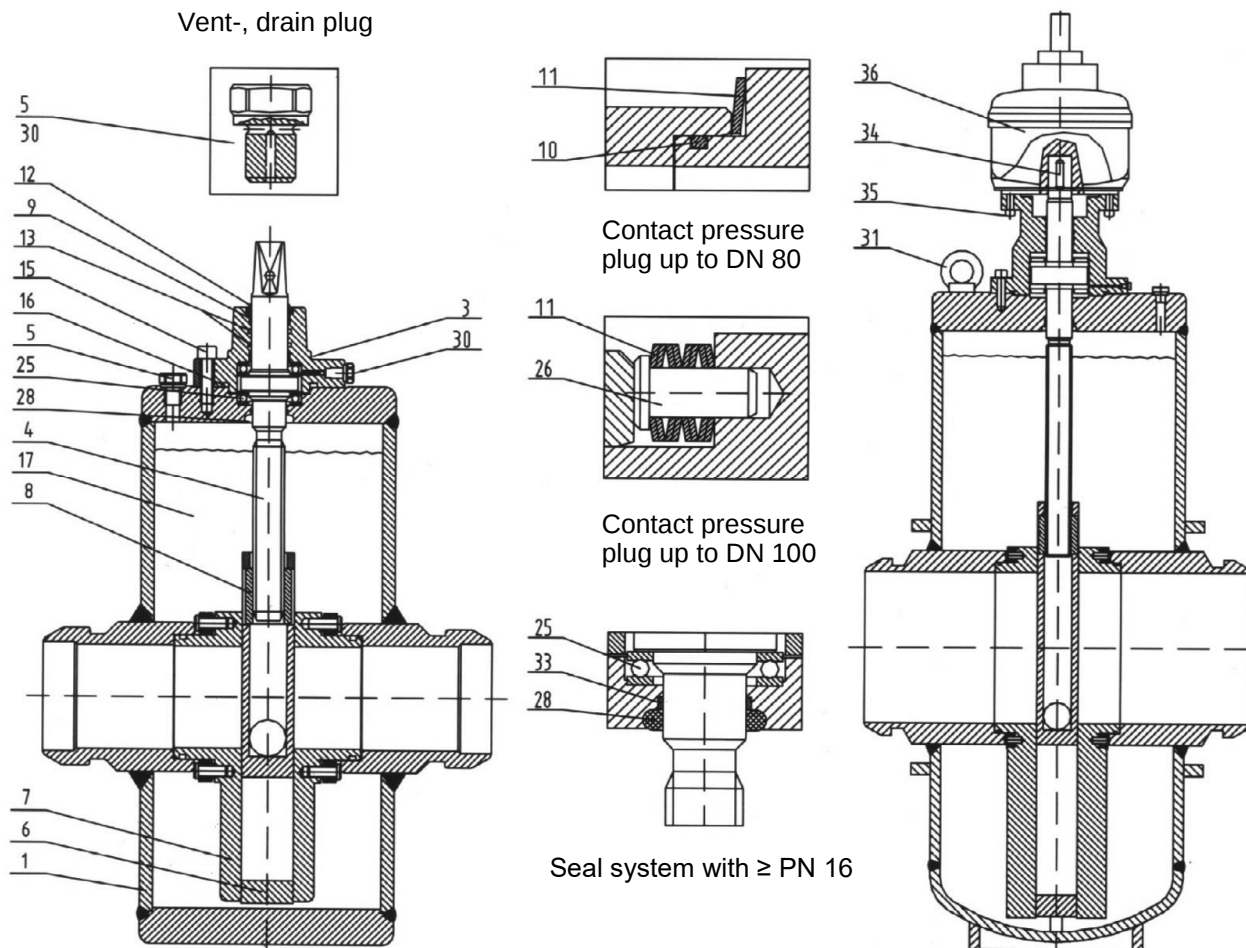
5. Reception test

DIN 3230 part 5 test group PG 3.

6. Additional document

Operating-, maintenance-, and repair instructions.

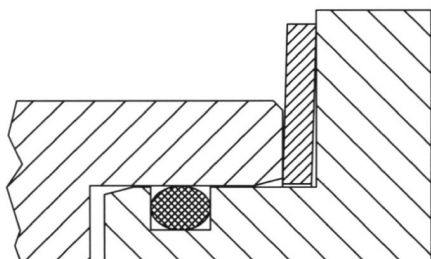
Conduit Gate Valve Type ASR



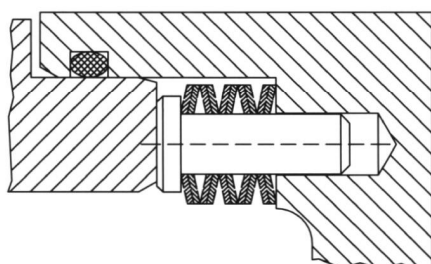
Position	Description	Position	Description
1	Housing	15	Hex. socket cap screw
3	Flange	16	O-ring
4	Spindle	17	Oil filling
5	Drain plug	25	Ball bearing
6	Close plate	26	Guide pin
7	Sealing plate	28	O-ring
8	Spindle nut	30	Vent plug
9	DU-bearing	31	Eye-bolt
10	O-ring	33	Stem-bearing
11	Single Belleville spring	34	Feather (key)
12	Wiper ring	35	Hex. socket cap
13	O-ring	36	Gear

Conduit Gate Valve Type ASR

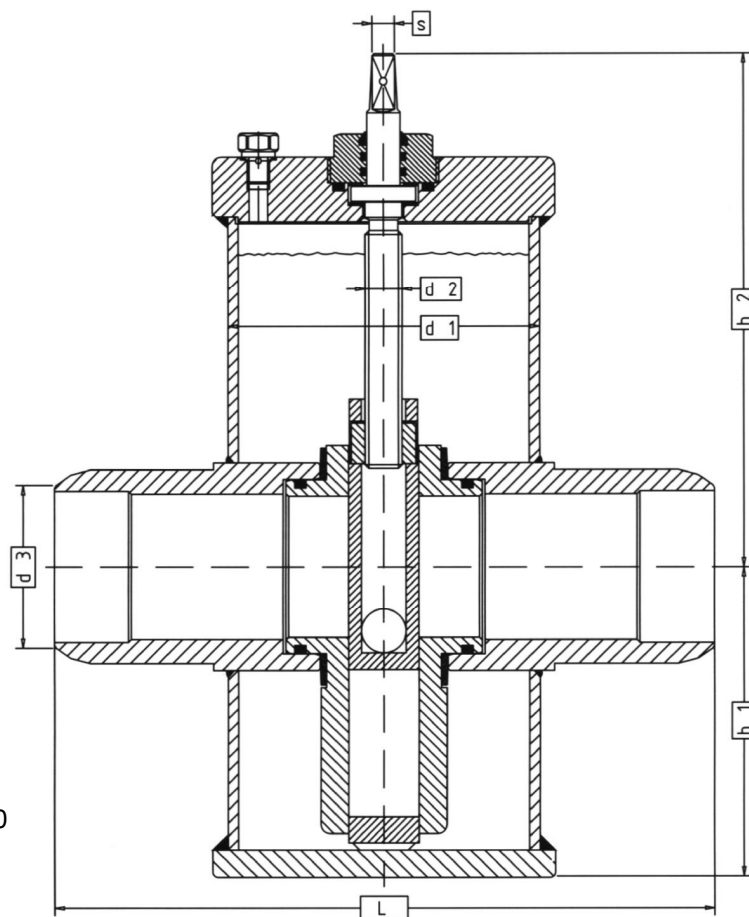
with steel weld-on ends



Contact pressure system up to DN 80



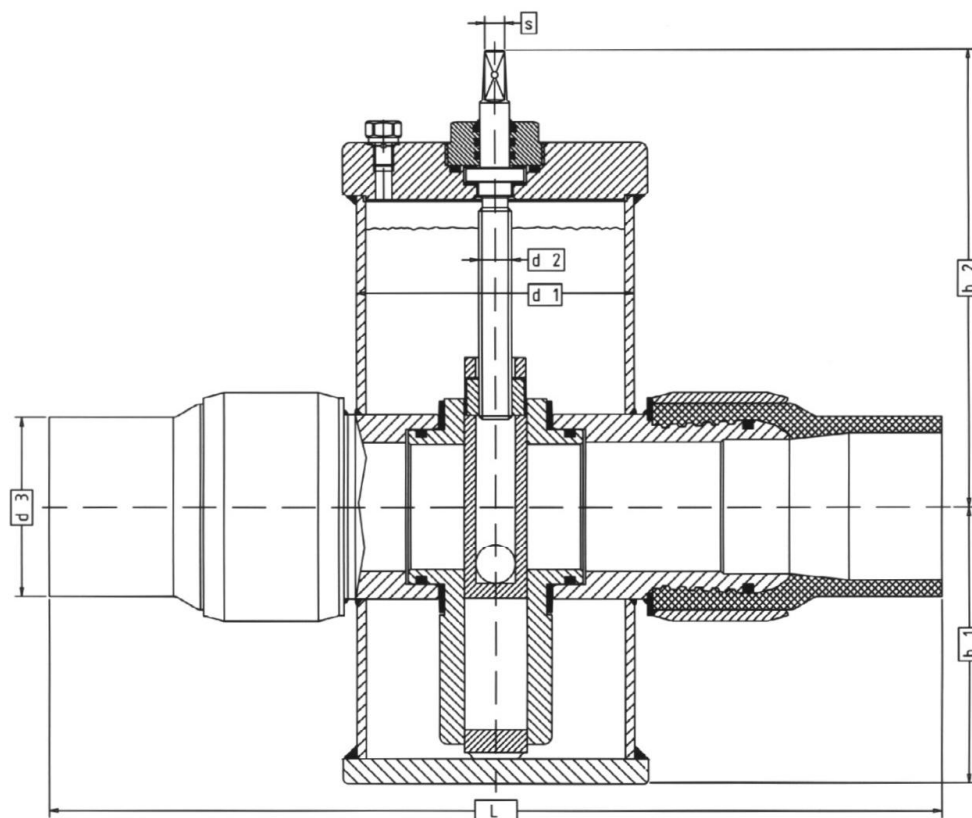
Contact pressure system up to DN 100
and above



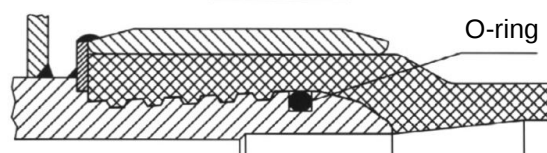
ASR PN 4/6	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100	DN 150	DN 200	DN 300
s	12	12	12	12	12	12	12	19	In preparation
d 1	114	121	152	152	169	203	267	324	
d 2	18	18	18	18	20	22	24	26	
d 3	33,7	48,3	60,3	76,1	88,9	114,3	168,3	219,1	
h 1	75	107	130	138	169	203	298	375	
h 2	165	212	230	250	278	332	420	540	
Length DIN 3230 T2 S12	216	241	292	330	356	432	559	660	
Turn / Stroke	8,5	14	17	20	25	23,5	34,50	44,5	
Weight in kgs	10	16	26	31	41	70	147	236	

Conduit Gate Valve Type ASR

with PE-HD connection



PE-Detail



With PE-connections the inner diameter of conduit gate valve is usually reduced

The full bore size version has to be requested by customer

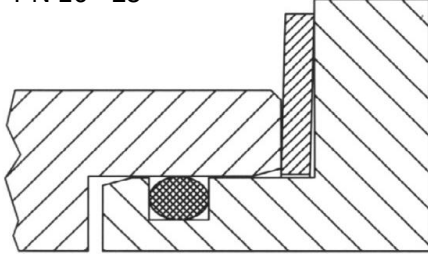
The standard connection is for the PE-pipe series 5

ASR	DA 32/40	DA 50/63	DA 75	DA 90	DA 100/125	DA 160/180	DA 200/225	DA 250/280
s	12	12	12	12	12	12	12	19
d 1	114	121	152	152	168	203	267	324
d 2	18	18	18	18	20	22	24	26
d 3	32/40	50/63	75	90	110/125	160/180	200/225	250/280
h 1	75	107	130	138	169	203	298	375
h 2	165	212	230	250	278	332	420	540
Length	500	600	650	700	750	930	1140	1140
Turn / Stroke	8,5	14	17	20	25	23,5	34,50	44,5
Weight in kgs	12	18	29	35	47	80	160	250

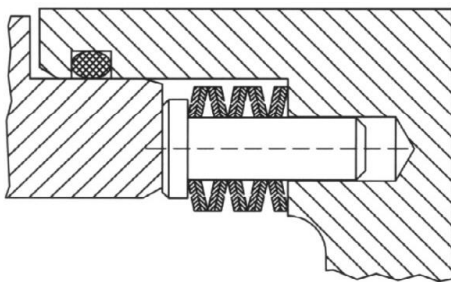
**Conduit Gate Valve
Type ASR**

model example without gear

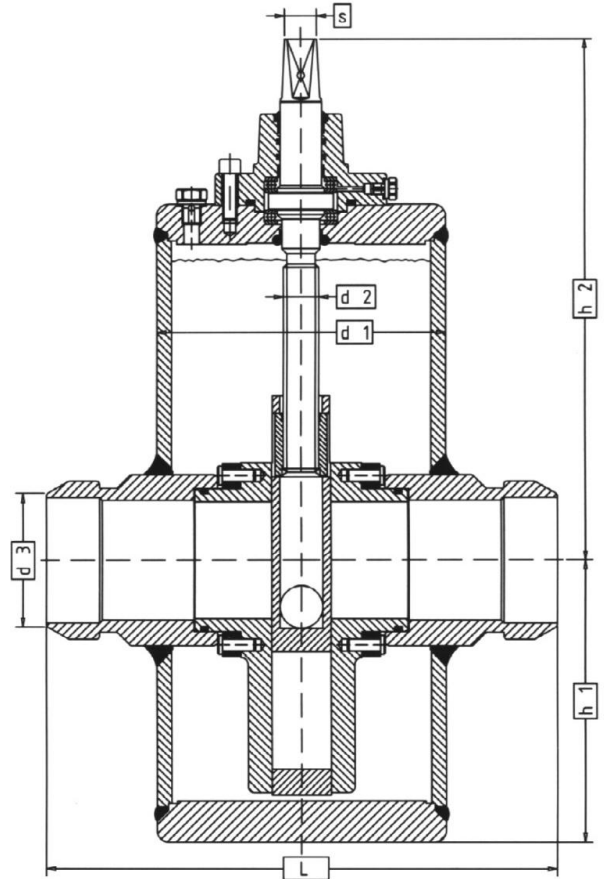
PN 16 - 25



Contact pressure system up to DN 80



Contact pressure system up to DN 100
and above



+ Note ASR DN 400. Dimensions for PN 25. PN 16 standard without gear. Dimensions for PN 16-s=27, h2=1158, weight=1540 kg

ASR PN 16/25	DN 25	DN 40	DN 50	DN 80	DN 100	DN 150	DN 200	DN 250	DN 300	DN 400+	DN 500
s	12	12	12	19	27	27	27	27	27	Ø30*	Ø30*
d 1	114	133	159	194	245	273	356	419	508	610	720
d 2	18	20	20	26	30	30	36	40	40	55	55
d 3	33,7	48,3	60,3	88,9	114,3	168,3	219,1	273	323,9	406,4	508
h 1	75	117	140	199	240	310	398	480	607	780	925
h 2	166	236	267	369	443	511	600	755	832	1388**	1537**
Length DIN 3230 T2 S12	216	241	292	356	432	559	660	787	838	991	1194
Turn / Stroke	14	14	17	20	25	30	40	40	48	48***	60***
Gear	-	-	-	-	-	-	-	-	-	1:4	1:4
Weight in kgs	10	16	23	60	115	180	320	500	750	1580	2200

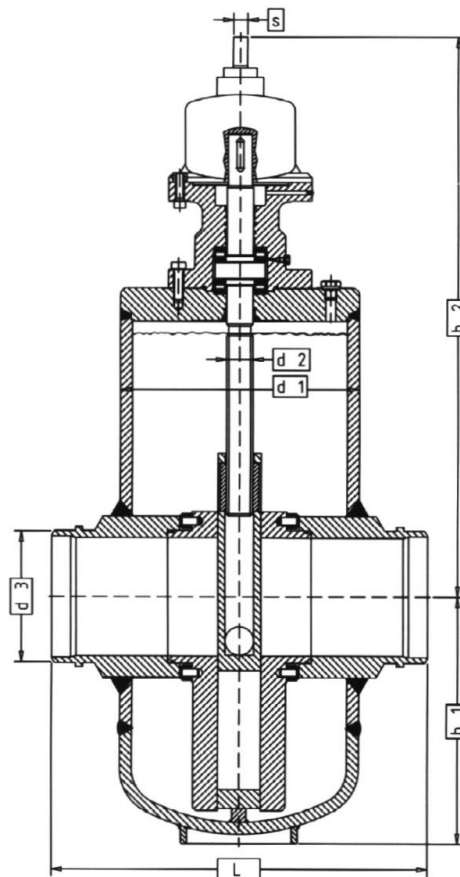
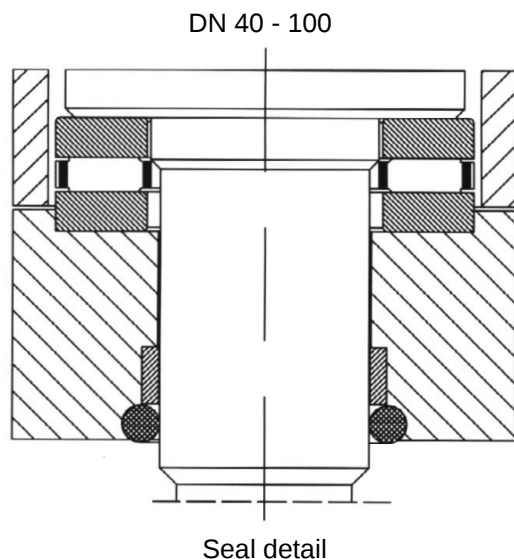
* Gear connection

** Dimension incl. gear

*** Turn of the spindle

Conduit Gate Valve Type ASR

model example with gear



+ Note ASR DN 200. Dimensions for PN 70-100. PN 40 standard without gear. Dimensions for PN 40-s=27, h2=755, weight=565 kg

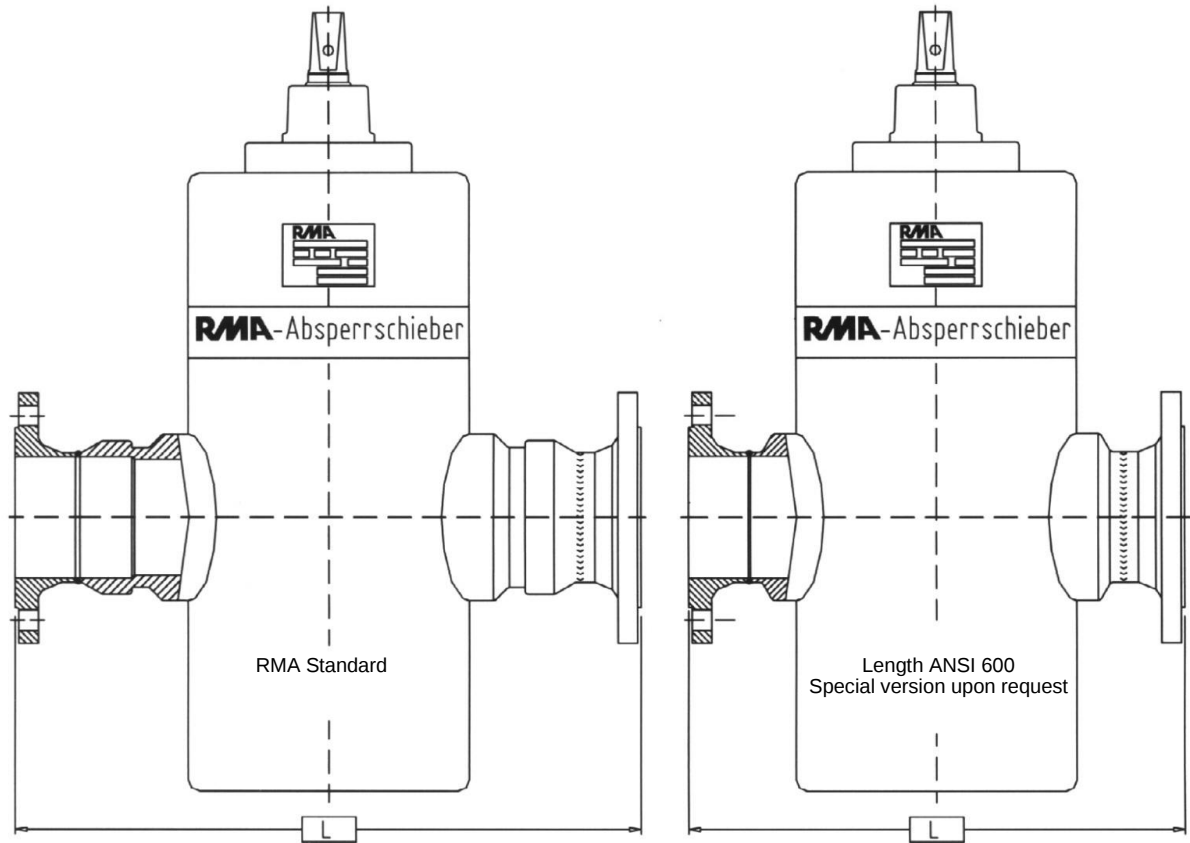
ASR PN 40/100	DN 40	DN 50	DN 80	DN 100	DN 150	DN 200+	DN 250	DN 300	DN 400
s	12	12	19	27	27	Ø30*	Ø30*	Ø30*	Ø30*
d 1	133	159	193,7	245	322	419	500	572	650
d 2	20	20	26	30	36	44	55	65	65
d 3	48,3	60,3	88,9	114,3	168,3	219,1	273	323,9	406,4
h 1	117	140	199	240	320	440	520	620	780
h 2	236	267	370	443	584	1018**	1180**	1285**	1476**
Length DIN 3230 T2 S12	241	292	356	432	559	660	787	838	991
Turn / Stroke	14	17	20	25	29	32***	32***	33***	45***
Gear	-	-	-	-	-	1:4	1:8	1:8	1:8
Weight in kgs	16	23	60	115	280	600	980	1530	2240

* Gear connection

** Dimension incl. gear

*** Turn of the spindle

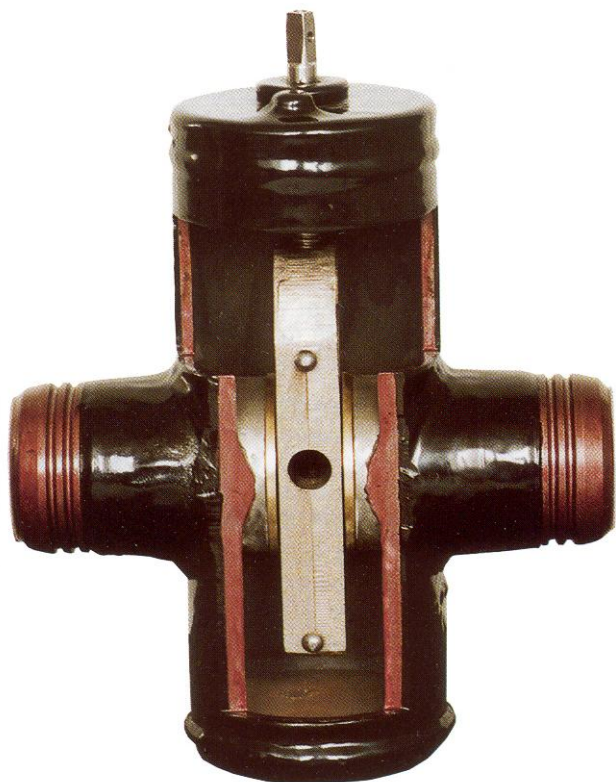
**Length with flange connection
Type ASR, ASRW, KSR**



Length RMA Standard weld-on version + flange												
ASR, ASRW, KSR	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100	DN 150	DN 200	DN 250	DN 300	DN 400	DN 500
PN 6 DIN 2631	289	320	371	409	443	525	658	773	910	965	1124	1333
PN 10 DIN 2632	295	328	385	-	459	539	672	787	926	977	1138	1347
PN 16 DIN 2633	295	328	385	-	459	539	672	787	930	997	1164	1377
PN 25 DIN 2634	299	334	391	-	475	565	712	823	966	1025	1214	1447
PN 40 DIN 2635	-	334	391	-	475	565	712	839	1000	1071	1264	-
PN 64 DIN 2636	-	368	419	-	503	591	752	883	1040	1121	1314	-
PN 100 DIN 2637	-	368	431	-	515	615	792	923	1104	1181	-	-

Length RMA Standard weld-on version + flange												
	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100	DN 150	DN 200	DN 250	DN 300	DN 400	DN 500
L	216	241	292	330	356	432	559	660	787	838	991	1194

**Conduit Gate Valve
Type ASRW**



**Conduit Gate Valve
Type ASRW
PN 4 - PN 16**

Description

1. General characteristics

The RMA gate valve type "ASRW" is an extremely robust welded-steel, dust resistant shut-off valve, which requires virtually no maintenance and is used for installation in gas pipelines (coking plants, fission- and natural gas).

2. Construction - function

This gate valve has a plane-parallel machined and floating mounted nickel plated close-plate with a borehole, so that in the open position a smooth flowing product and full piggable passage without swirl is obtained. For PE-connection on demand.

A special combination seal with inserted steel core and vulcanised wiper ring on both sides of plate, guarantees together with the precision-machined sealing surface of close plate, a lasting seal, in case of pressurisation on one or two sides.

The wiper ring vulcanised into sealing facility prevents dirt accumulation on sealing surface as well as passage of dirt in both, open and closed position. To avoid penetration of dirt in half open position during opening and closing operations, we can supply, on special request, a PE-dirt housing.

In this way, dirt present in the valve, can only accumulate in the area around the close-plate passage and is transported away with the pipeline flow, when open position. Deposit accumulation in housing is therefore impossible.

Flow direction is arbitrary.

This Gate Valve ensures a permanent and easy operation.

3. Corrosion prevention

The outer shell has as standard a PUR (polyurethane) coating.

4. Bleed pipe

See ROTARY GATE VALVE type DSR.

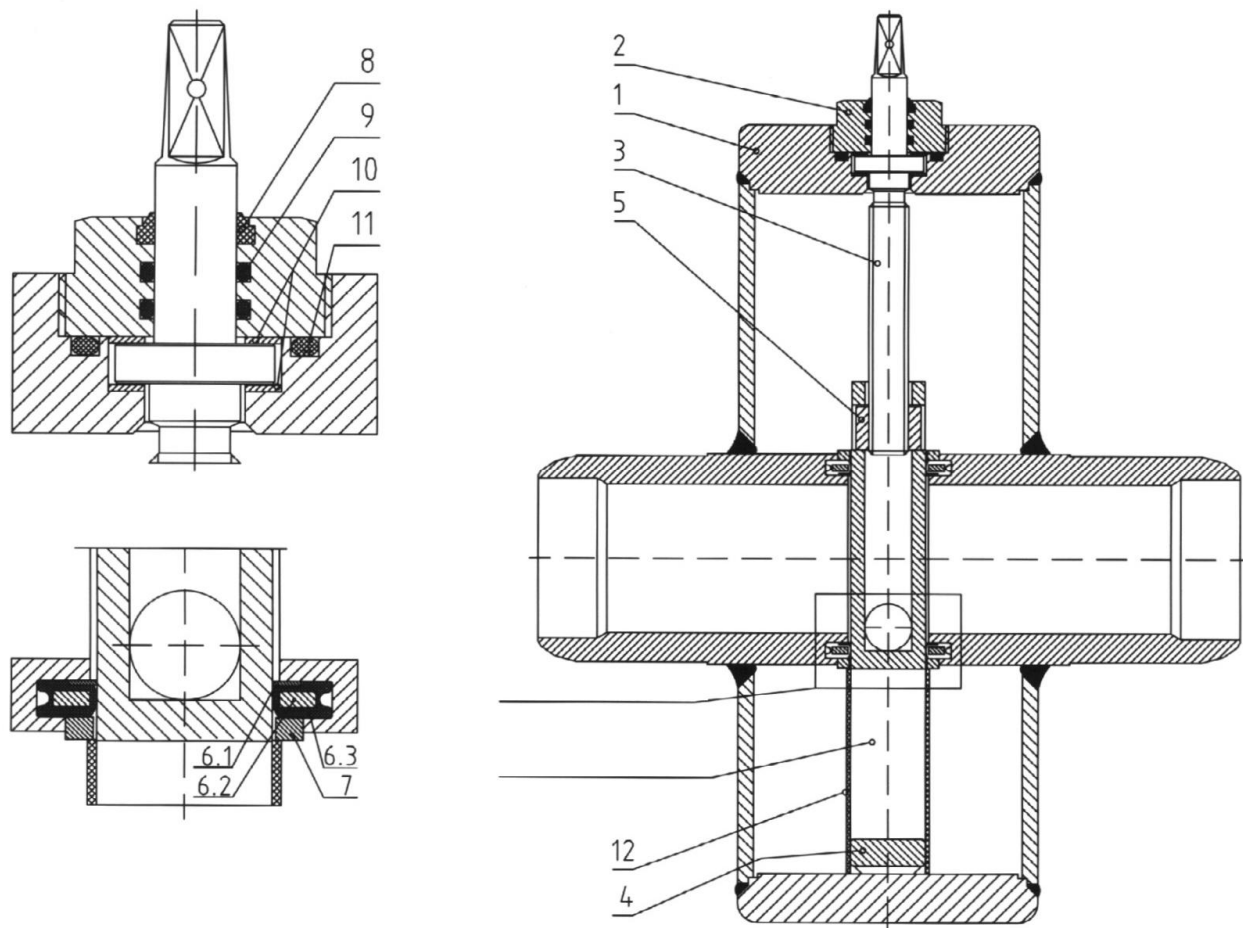
5. Reception test

DIN 3230 part 5 test group PG 3.

6. Additional document

Operating-, maintenance-, and repair instructions.

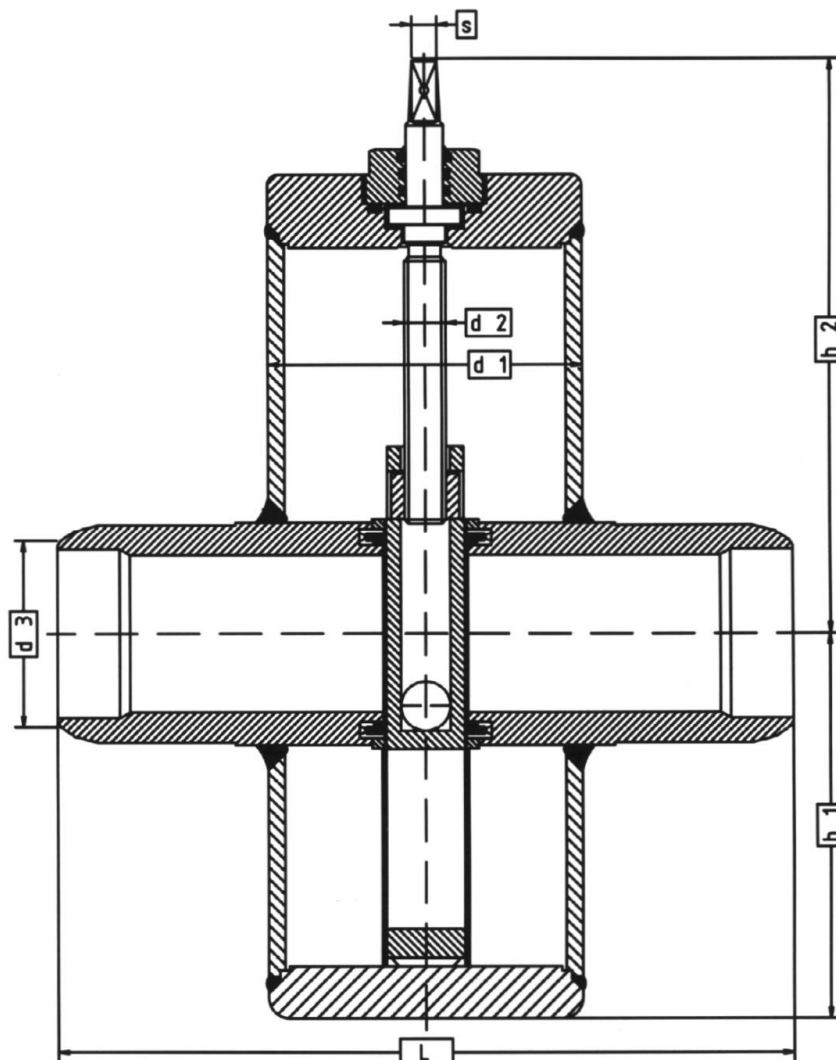
**Conduit Gate Valve
Type ASRW**



Position	Description	Position	Description
1	Housing	6.3	Perbunan
2	Packing nut	7	Guide-ring
3	Spindle	8	Wiper-ring
4	Close plate	9	O-ring
5	Spindle nut	10	Wearing-washer
6.1	Stee-ring	11	O-ring
6.2	Wiper-ring	12	Dirt house (only on request)

**Conduit Gate Valve
Type ASRW**

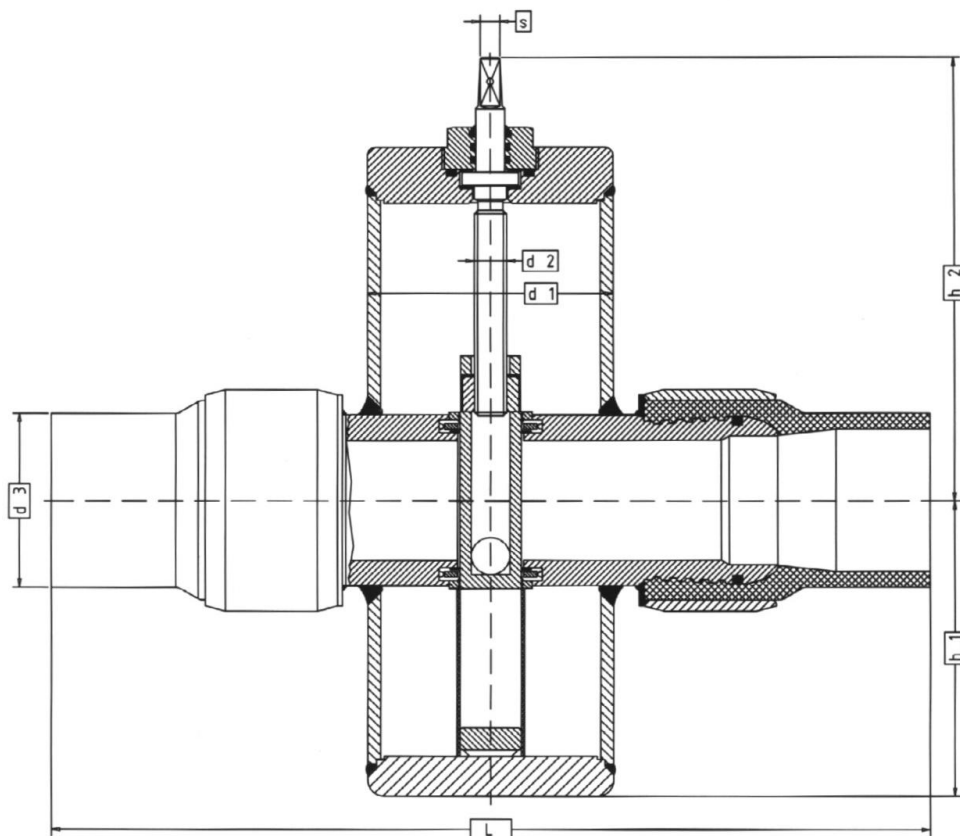
with steel weld-on ends



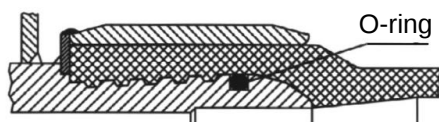
ASRW PN 4/16	DN 40	DN 50	DN 80	DN 100	DN 150	DN 200	DN 300
s	12	12	12	12	12	19	19
d 1	121	121	152	191	241	324	419
d 2	18	18	20	22	24	26	26
d 3	48,3	60,3	88,9	114,3	168,3	219,1	323,9
h 1	129	129	179	215	312	385	554
h 2	229	229	279	332	425	540	763
Length DIN 3230 T2 S12	241	292	356	432	559	660	838
Turn / Stroke	17	17	24	24	35	45	67
Weight in kgs	20	20	33	63	110	200	330

Conduit Gate Valve Type ASRW

with PE-HD connection



PE-Detail



With PE-connections the inner diameter of conduit gate valve is usually reduced

The full bore size version has to be requested by customer

The standard connection is for the PE-pipe series 5

ASRW	DA 50/63	DA 75/90	DA110/125	DA160/180	DA200/225	DA250/280
s	12	12	12	12	12	19
d 1	121	121	152	191	241	324
d 2	18	18	20	22	24	26
d 3	50/63	75/90	110/125	160/180	200/225	250/280
h 1	129	129	179	215	312	385
h 2	229	229	279	332	425	540
Length	600	650	740	930	1140	1140
Turn / Stroke	17	17	24	24	35	45
Weight in kgs	22	24	39	73	123	214

**Rotary Gate Valve
Type DSR**



**Rotary Gate Valve
Type DSR
PN 4 - PN 100**

Description

1. General characteristics

The RMA rotary gate valve type "DSR" is an extremely robust welded-steel, dust resistant shut-off valve for installation in gas pipelines (coking plants, fission- and natural gas).

2. Construction - function

The main features of this metal-sealing, single-plate-parallel valve are the precision machined-lipped surfaces of gate and sealing plates, which are floating-mounted, by preapplication with spring-washers. This system ensures a movement of close-plate over entire swivelling range without gaps.

The totally gapless metal seal prevents penetration of dirt during opening and closing of close-plate. At the same time a consistent and undamaged sealing surface is preserved which guarantees lasting operation life.

In the open position, a full passage is ensured. The flow direction is from weld-on and to vent-plug.

To ensure permanent lubrication of moving parts, interior housing is filled with a special oil.

The drain-plug in top of housing serves for oil-filling and level checking.

3. Corrosion prevention

The outer shell has as standard a PUR (polyurethane) coating.

4. Bleed pipe

See page 19 and 20.

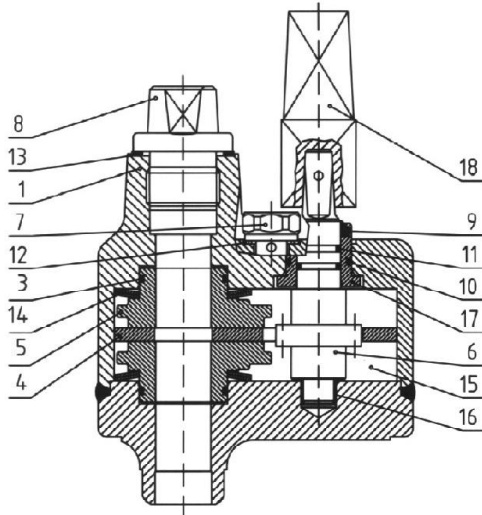
5. Reception test

DIN 3230 part 5 test group PG 3.

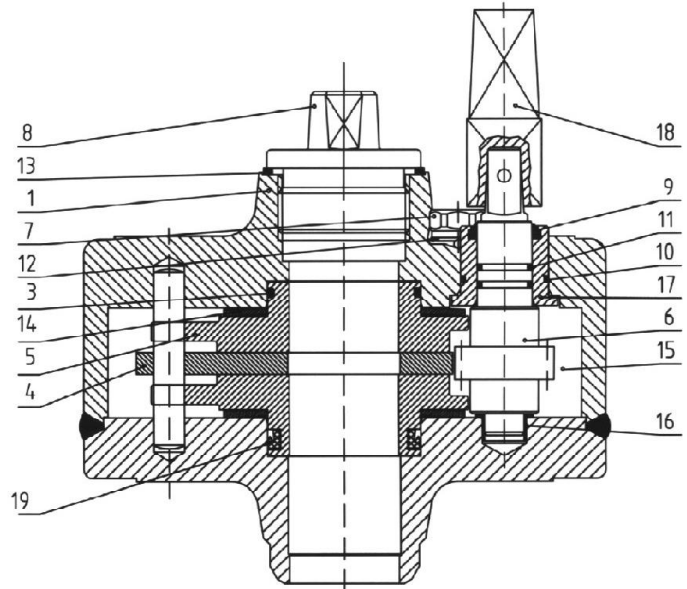
6. Additional document

Operating-, maintenance-, and repair instructions.

Rotary Gate Valve Type DSR



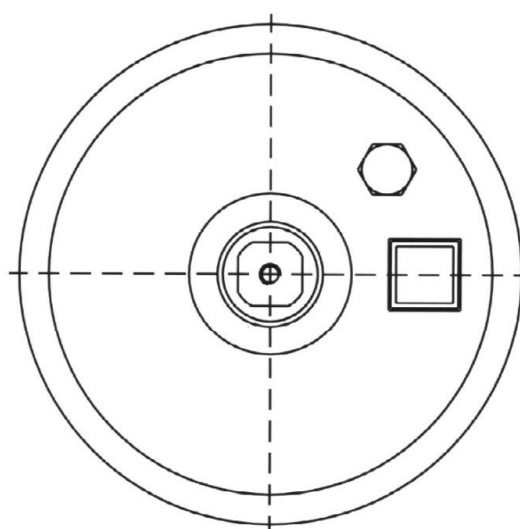
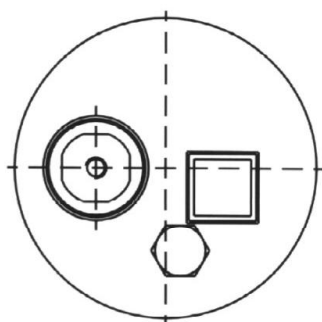
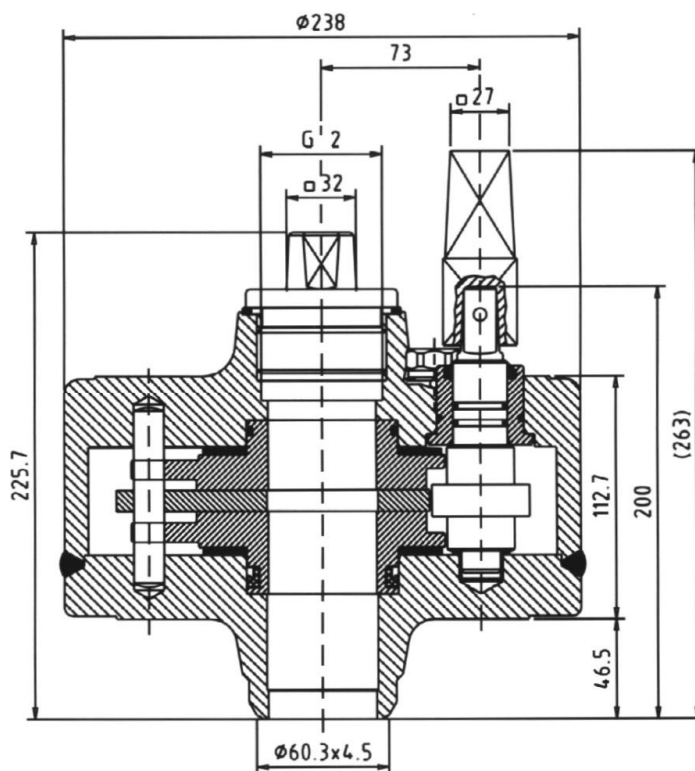
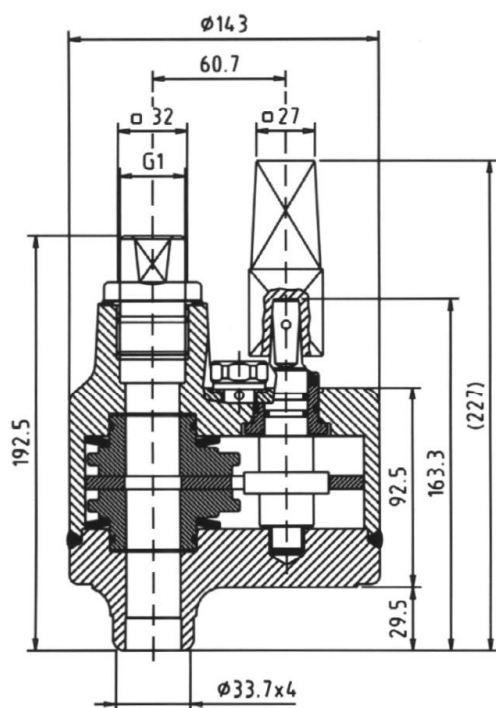
Rotary Gate Valve DSR DN 25



Rotary Gate Valve DSR DN 50

Position	Description	Position	Description
1	Housing	11	O-ring
3	O-ring	12	O-ring
4	Gate	13	Seal ring
5	Sealing plate	14	Seal ring
6	Pinion shaft	15	Single Belleville spring
7	Drain plug	16	Oil filling
8	Vent plug	17	Bearing bush
9	Lip seal	18	Stem-square-cap
10	O-ring	19	Seal ring

**Rotary Gate Valve
Type DSR**

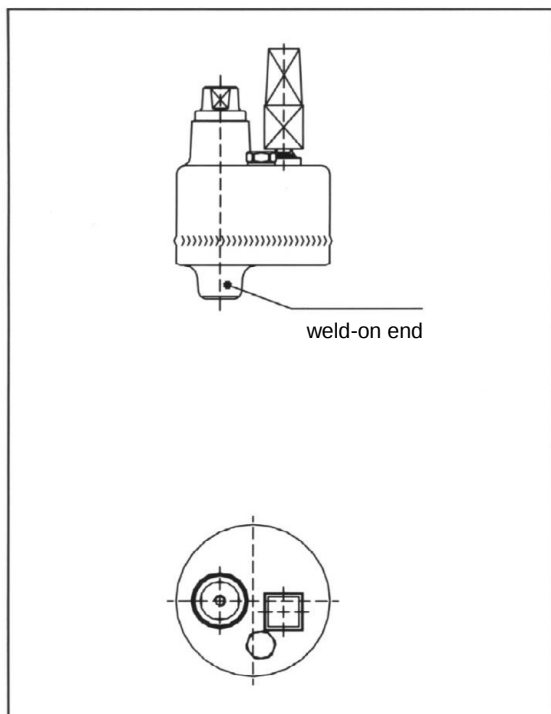


Weight DSR DN 50 - 30 kg

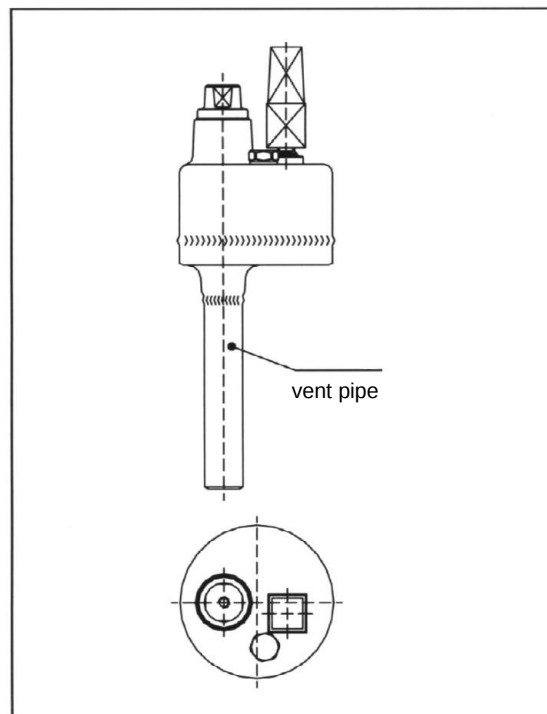
The dimensions are valid for
pressure ratings PN 4 up to PN 100

Rotary Gate Valve Type DSR

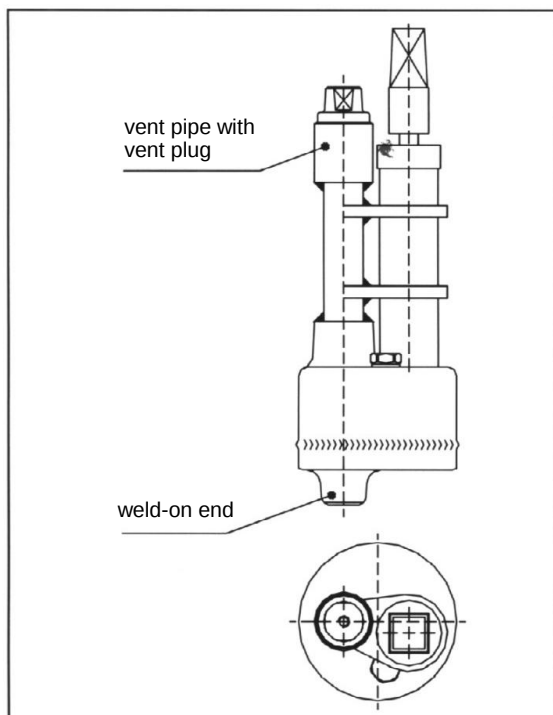
1. Standard model



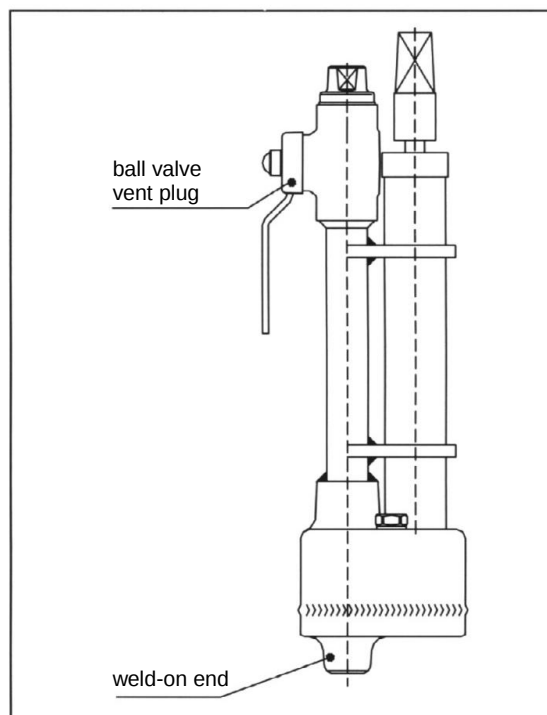
2. With bottom arranged vent pipe



3. With top arranged vent pipe

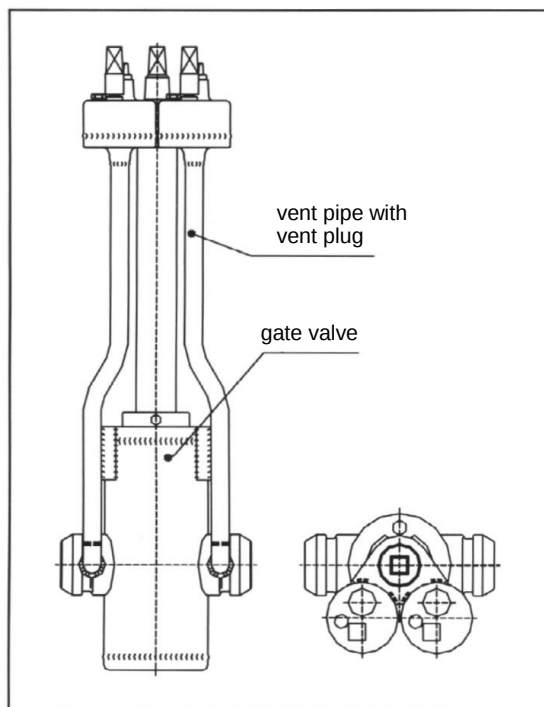


4. With top arranged vent pipe and ball valve

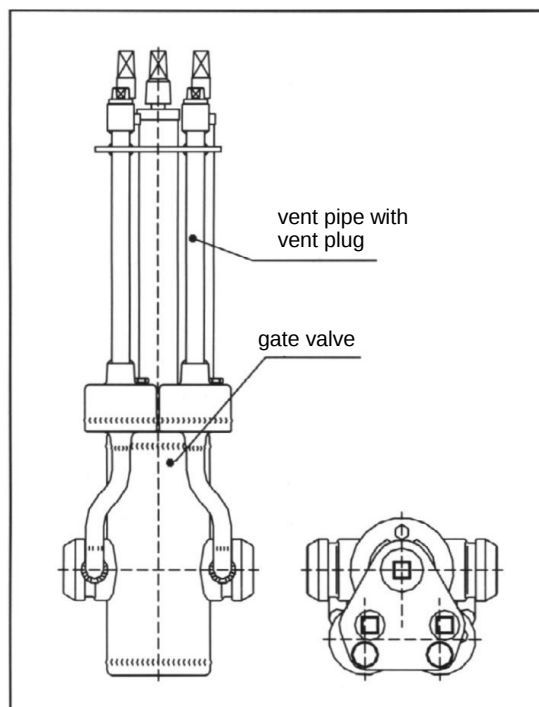


Rotary Gate Valve Type DSR

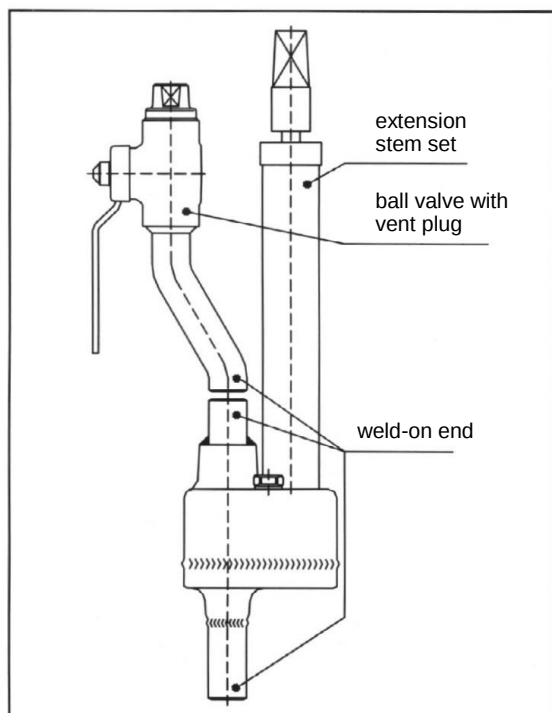
5. ASR with top arranged Rotary gate valve



6. ASR with bottom arranged Rotary gate valve



7. ASR with top arranged vent pipe and ball valve



**Wedge Gate Valve
Type KSR**



**Wedge Gate Valve
Type KSR
PN 16 - PN 100**

Description

1. General characteristics

This rugged, welded-steel wedge gate valve is designed for blow-off purposes for use in gas pipelines.

2. Construction - function

This valve type is used to take the stresses resulting from a blow-out of pipelines in order to protect the gate valves in the transport line system this ensures a longer operation life for the latter.

The sealing surfaces of both body and wedge are reinforced and polished. In this way a metal-to-metal seal is attained.

The spindle thread is internal and the spindle does not rise.

Flow direction is arbitrary.

3. Corrosion prevention

The outer shell has as standard a PUR (polyurethane) coating.

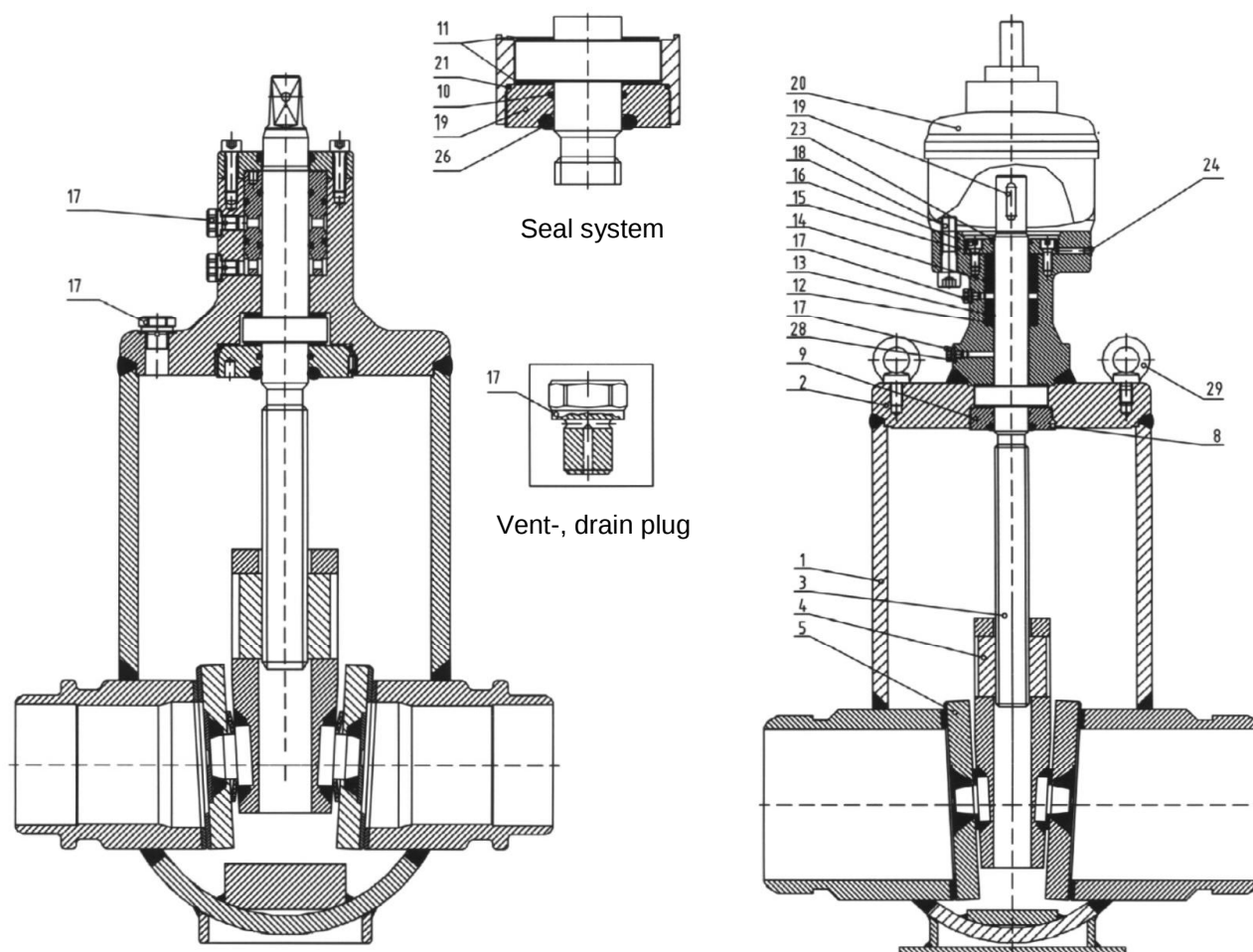
4. Reception test

DIN 3230 part 5 test group PG 3.

5. Additional document

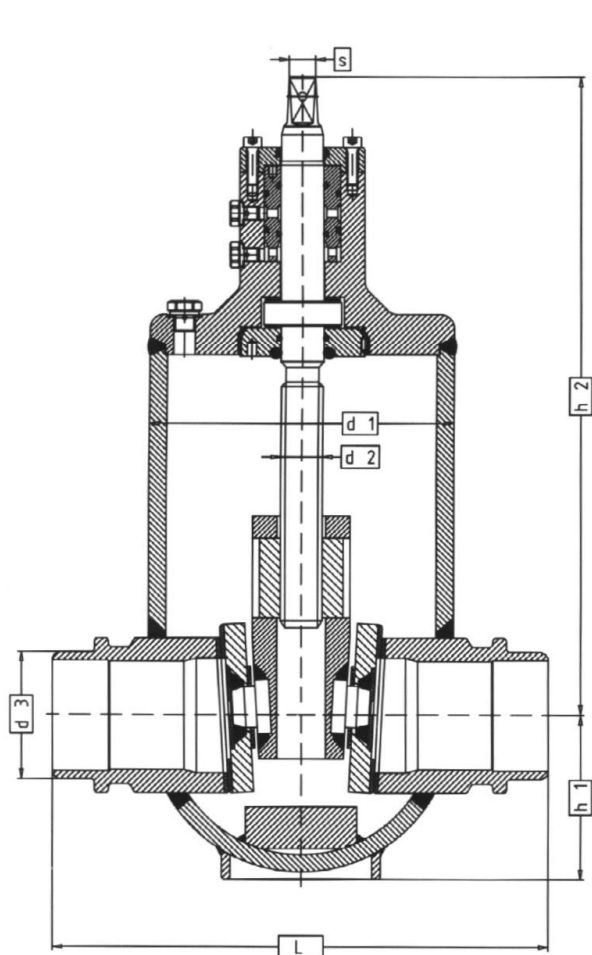
Operating-, maintenance-, and repair instructions.

**Wedge Gate Valve
Type KSR**

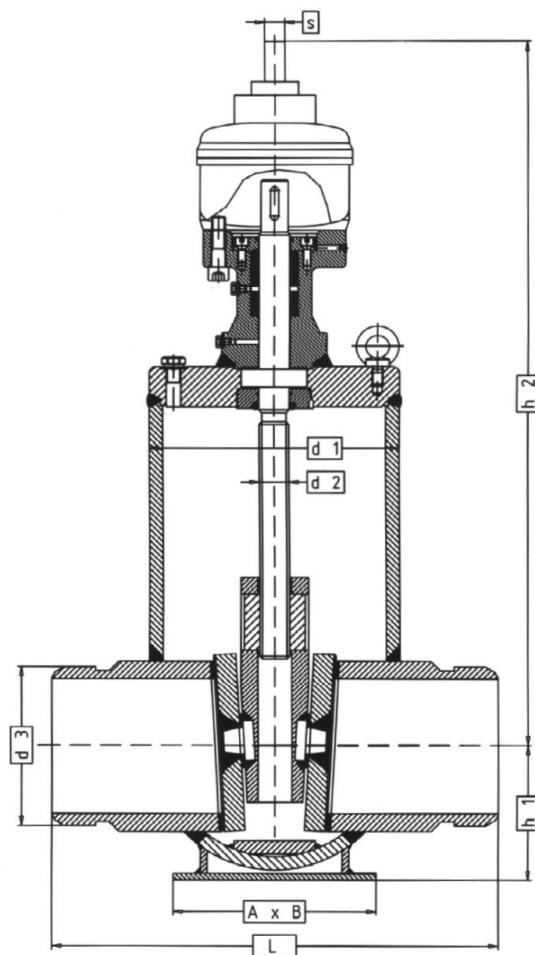


Position	Description	Position	Description
1	Housing	15	Fastening ring
2	Lid	16	Hex. socket cap screw
3	Spindle	17	Vent plug
4	Nut	18	Hex. socket cap screw
5	Wedge	19	Feather (key)
8	Thread plug	20	Gear
9	Safety nut	21	O-ring
10	O-ring	23	Wiper ring
11	Wearing washer	24	Protection plug
12	Guide-bearing	26	O-ring
13	O-ring	28	U-seal
14	O-ring	29	Eye-bolt

**Wedge Gate Valve
Type KSR
PN 16 - PN 100**



≤ DN 150



≥ DN 200

KSR PN 16/100	DN 80	DN 100	DN 150	DN 200	DN 250	DN 300	DN 400
s	19	19	27	Ø30*	Ø30*	Ø30*	Ø30*
d 1	219,1	219,1	273	370	420	468	588
d 2	30	30	36	44	55	55	65
d 3	88,9	114,3	168,3	219,1	273	323,9	406,4
h 1	119	125	150	200	230	280	345
h 2	464	495	613	1055**	1123**	1225**	1454**
A x B	-	220x220	300x300	300x300	300x300	350x350	450x450
Length DIN 3230 T2 S12	356	432	559	660	787	838	991
Turn / Stroke	19	22	31	36***	34***	40***	45***
Gear	-	-	-	1:4	1:8	1:8	1:8
* Gear connection		** Dimension incl. gear			*** Turn of the spindle		

Minimum cover depth

As standard, all ASR, ASRW and KSR type valves are supplied with a stiff extension stem (under-ground installation) for a cover depth of 1.00 m.

ATTENTION - In case of higher rated sizes, the cover depth of 1 meter is exceeded (see chart).

Standard ratings for extension stems are 1.00 m, 1.25 m and 1.50 m.

Of course, a hand-wheel is also supplied for operation of valve.

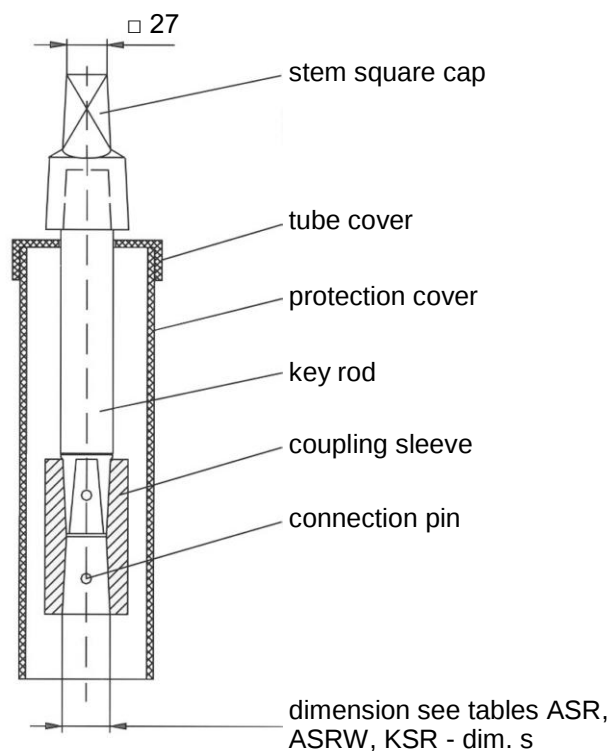
Minimum cover depth. Conduit Gate Valve ASR with stem square cap												
	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100	DN 150	DN 200	DN 250	DN 300	DN 400	DN 500
PN 4	250	290	300	310	340	370	440	530				
PN 16	250	300	330		410	480	520	580	720	780	1050	1380
PN 25	250	300	330		410	480	520	580	720	780	1280	1380
PN 70		300	330		410	480	600	1010	1140	1230	1380	
PN 100		300	330		410	480	600	1010	1140	1230	1380	
	Without gear							With gear				

Minimum cover depth. Conduit Gate Valve ASRW with stem square cap												
		DN 40	DN 50		DN 80	DN 100	DN 150	DN 200		DN 300		
PN 4/16		300	300		340	370	440	530		700		

Minimum cover depth. Conduit Gate Valve KSR with stem square cap												
					DN 80	DN 100	DN 150	DN 200	DN 250	DN 300	DN 400	
PN 16/100					520	540	630	1050	1090	1170	1350	
	Without gear							With gear				

Extension stem standard

Standard version



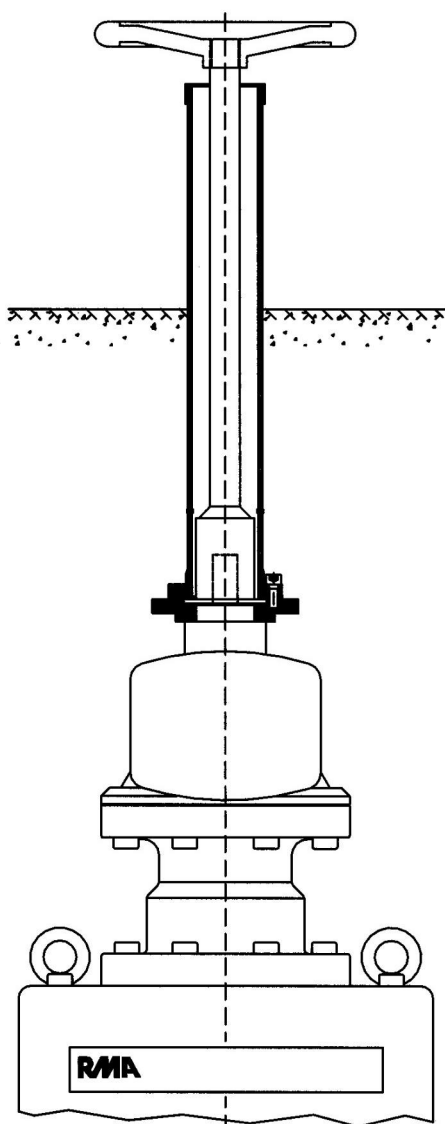
Attention

The square stem measurements "s" in table ASR, ASRW and KSR is measured at top end of spindle. As connection square is conical, the connection measurement "s" for extension stems is as followed.

Din. s in tables ASR, ASRW and KSR	Dim. s for extension stem set
12	14,7
19	22,3
27	32,3

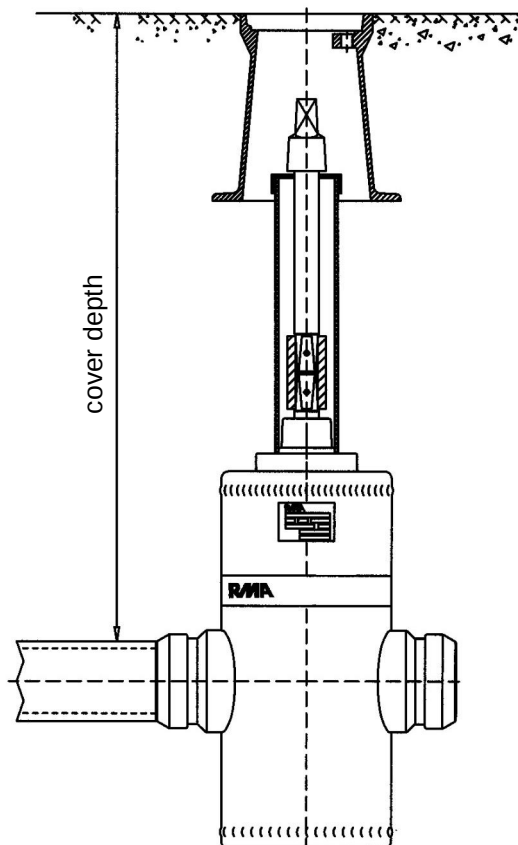
Extension stem examples

extension stem
above-ground
installation



handwheel operation

extension stem
under-ground
installation



key operation

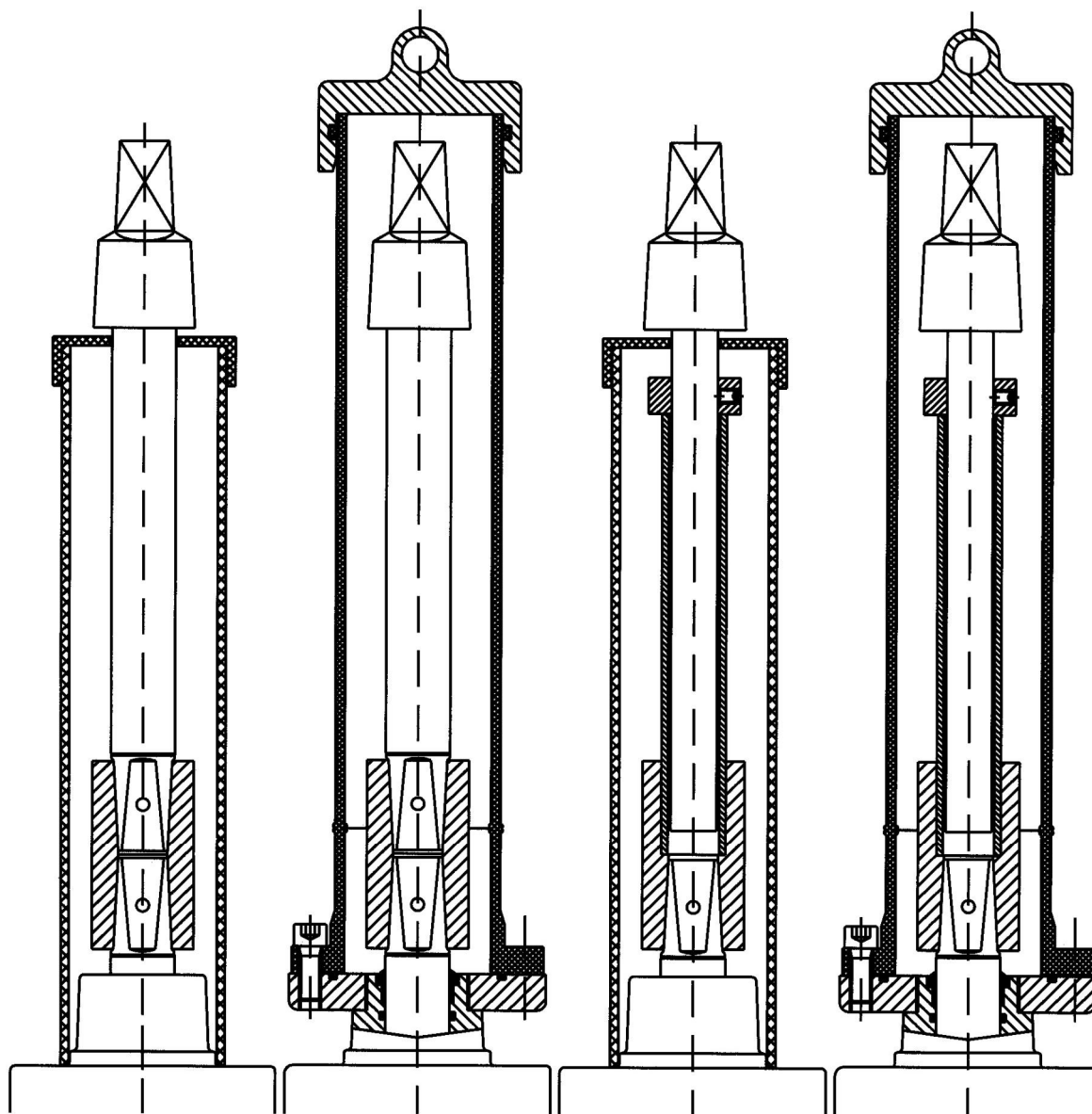
Extension stem version

Standard version
with stiff rod

Waterproof version
with stiff rod

Version with
telescopic rod

Waterproof version
with telescopic rod



General Informations

Accessories for RMA valves

Easy-to-operate gears are described or illustrated in this brochure.

Motor-drives are, of course, also available as well as other accessories. For specific information concerning installation and positioning, please contact us.

When connection dimensions differ from our standard ratings, corresponding reducers may be provided by us.

Technical variations to RMA valves

No brochure is complete. We strive to accommodate your specific requirements or deviations from our standard ratings.

RMA Quality

Products manufactured in the RMA works are knowned for their high quality.

We have DIN ISO 9001 approval, as well as many other customer and official approvals in compliance with German and International Standards.

Of course, all fittings illustrated in this brochure conform to National as well as International Standards, e.g. in Germany to DVGW and TÜV Standards as applicable.

RMA Manufacture program

We have specialised in a wide range of high quality products for the transport of fluids in pipelines. For further details or specific brochures please contact COBALCH.

In addition to our own RMA products, we also manufacture special components to customer specifications.