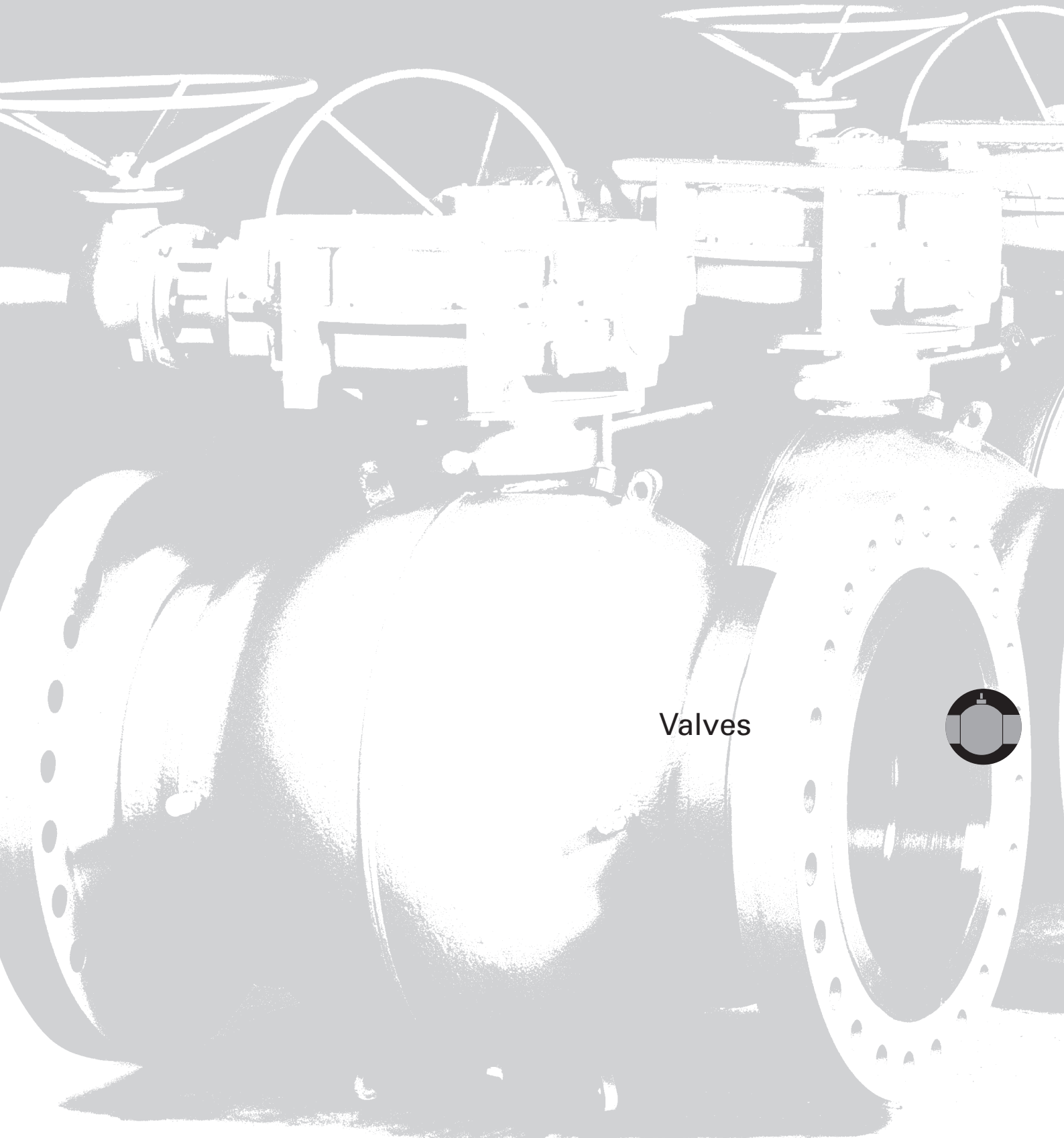
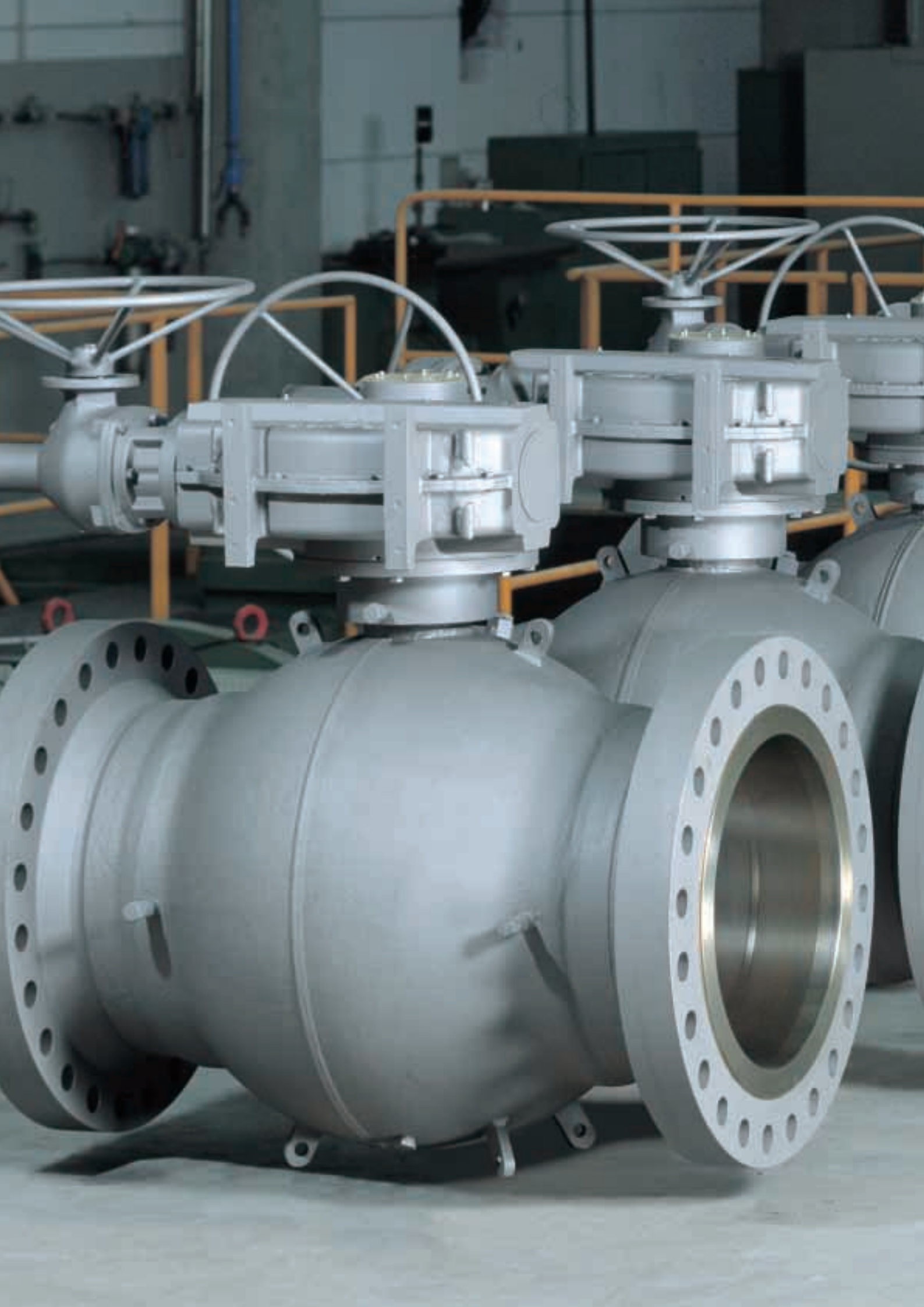
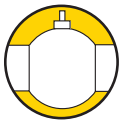
SCHUCK
ARMATUREN



Valves



Contents



Valves

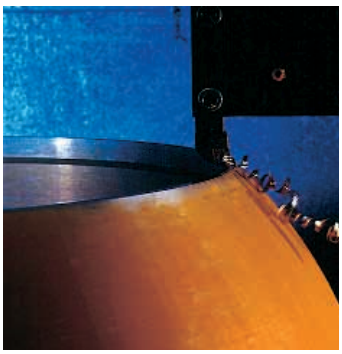
Intelligent solutions
Our innovative products are the result of intelligent engineering. Especially in the sensitive area of supplying natural gas even the minutest details are of decisive importance.
Consequently our design team is constantly searching for new improvements to its ball valves.
The extensive patents that they have already acquired and the award of the "German Industry Prize for Innovation" are proof of the value of these intelligent solutions.

Tested and approved
The outstanding quality of SCHUCK valves can stand any comparison. The company carries out its own destructive and non-destructive testing.
Our quality management system has been certificated by leading institutions such as TÜV and API. Auditing in conformity with DIN ISO 9001 and API 6D enables us to supply valves and pipeline equipment all over the world.

Quality
DIN ISO 9001

- DIN ISO 9001
- API 6D
- TÜV
- DVGW, ÖVGW, SVGW

Flexibility
Economic independence and a wide manufacturing scope are features of our company. The Steinheim plant has steadily expanded over the past 30 years and now covers more than 35,000 square metres. The forming and plastic department as well tool and die production are in close proximity to one another. The short distances and lack of hierarchical constraints enable us to meet our customers' requirements quickly and easily.



Features

- fully welded construction
- designed in conformity with API Spec. 6D
- floating mounted, self-centering seating ring systems with pre-tensioned spring elements
- trunnion-mounted ball plugs
- low torques
- maintenance-free sealing and mounting systems
- strength of seal determined by the pressure in the line
- double block and bleed
- single piston design (SPE) with self-relieving seating rings
- optional double piston design (DPE) with seating rings providing a seal at both the inflow and outflow sides, not self-relieving
- optional sealing system PMSS: primary metallic/secondary soft seated M: metal to metal
- dual and single adjustable trunnion seal
- secondary injection of sealant
- blow-out protection at trunnions
- drain and vent connections
- no build-up of electrostatic charge
- fireproofed in conformity with 6FA and BS 6755
- optional economical short length for welded end version

Robust, flexible, of proven effectiveness
The Type G ball valve is virtually indestructible. These valves, with their wide range of applications, have been manufactured with great success over the past three decades.

Design
The housing of the G valve is of all-welded construction, enabling it to withstand high internal and external stresses. The combination of many different materials ensures that the valve also operates reliably when exposed to aggressive substances such as acidic gases.

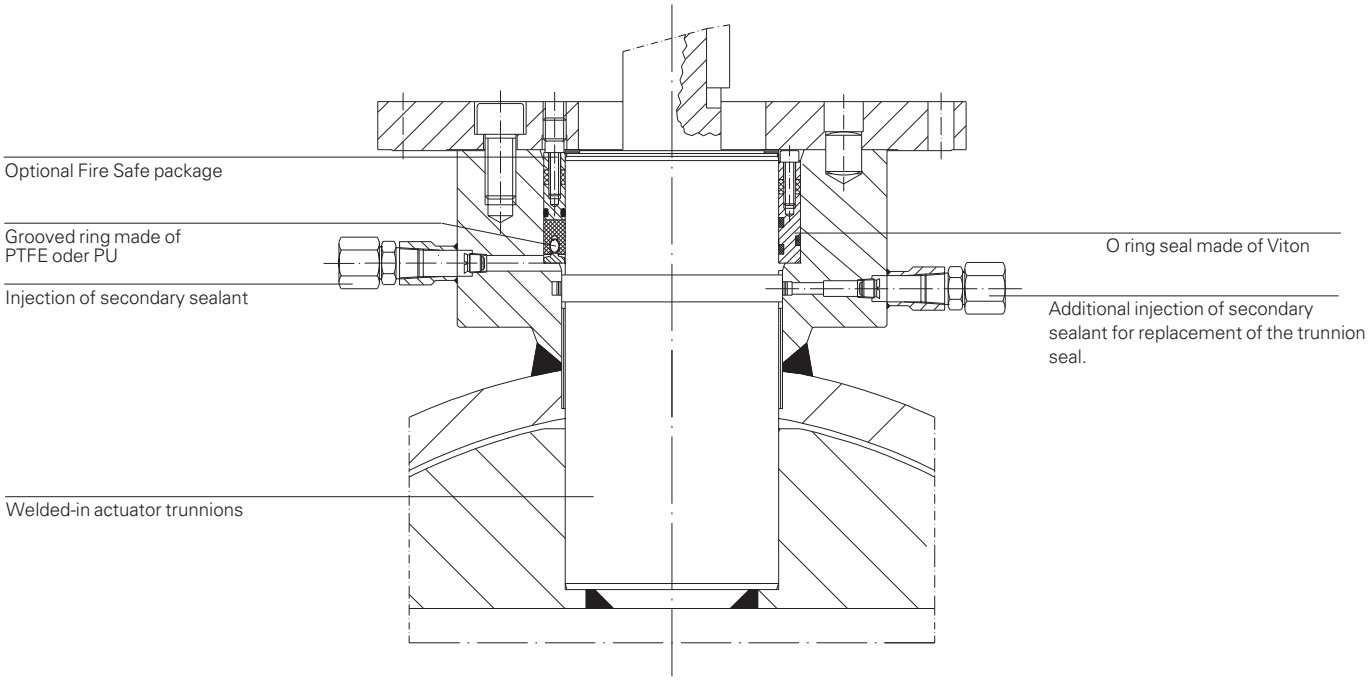
Applications
The Type G ball valve is used in long distance pipelines, substations and on platforms, as a shut-off device for oil, water, gas and product pipelines.

Low weight and ideal shape
The housing is shaped to match the contours of the ball plug. This keeps the dead weight to a minimum and ensures an ideal shape for the pressurised container, which can cope with very high pressures and maximum bending moments.

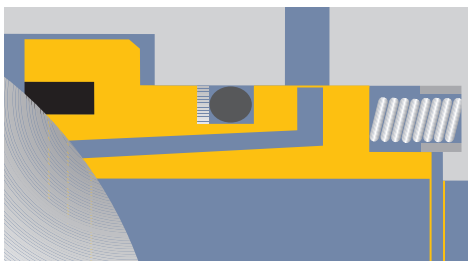
Replaceable trunnion seal

The trunnion seals on our Type G ball valve can be replaced even when the pipeline is under maximum pressure.

The modular design enables us to provide various trunnion seal systems to meet your specific requirements.

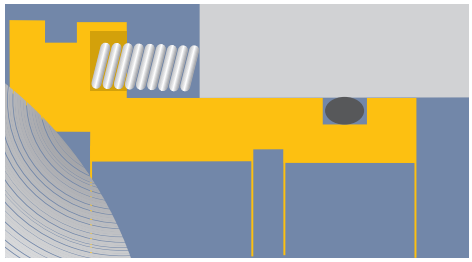


Sealing system: soft-seated



Sealing system: PMSS, primary metallic/ secondary soft-seated

Sealing system: metal to metal



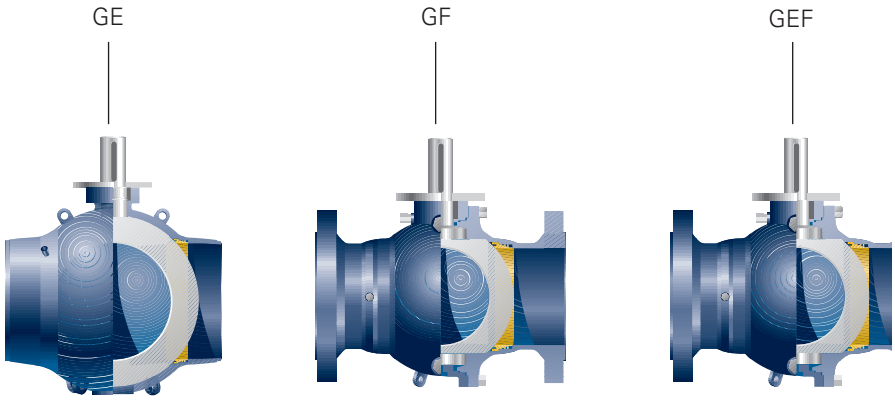
SCHUCK ARMATUREN

GE ball valves with welded ends
GF ball valves with flanged ends
GEF ball valves with welded ends flange ends

Weights and overall lengths of the GEF version are calculated using the formula:

weight $G_{GEF} = \frac{G_{GF} + G_{GE}}{2}$

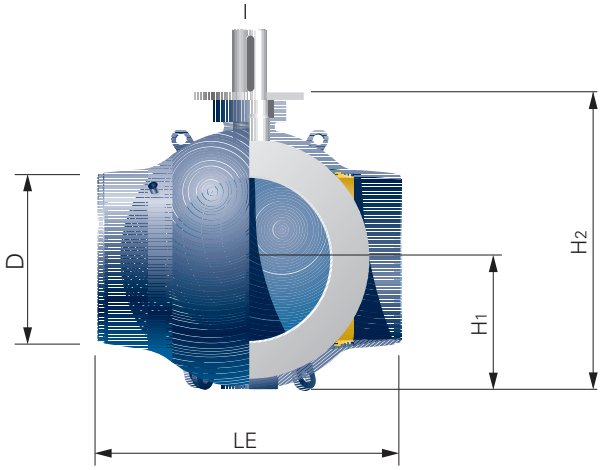
overall length $L_{GEF} = \frac{L_{GF} + L_{GE}}{2}$



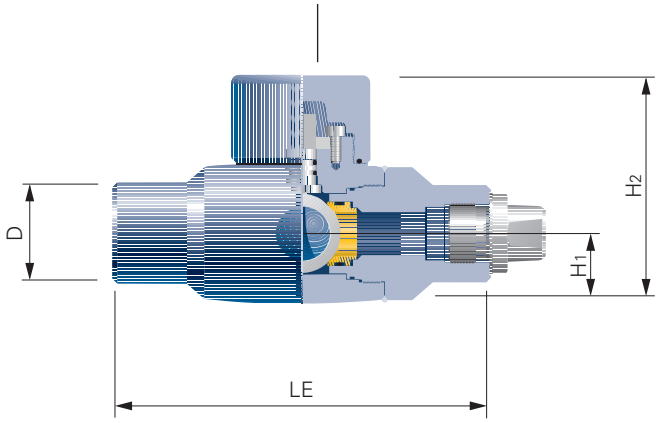
DN inch	DN mm	D	LE	LF_{RF}	LF_{RTJ}	H_1	H_2	weight LE	weight LF_{RF}/LF_{RTJ}
1/2	15	13	165	165	165	25	86	3	4
1	25	25	216	216	216	43	120	6	8
2	50	50	216	216	216	60	180	10	12
3	80	74	283	203	216	86	226	22	31
4	100	100	305	229	241	110	261	34	37
6	150	150	457	394	406	165	365	75	88
8	200	201	521	457	470	234	509	200	219
10	250	252	559	533	546	285	608	326	366
12	300	303	635	610	622	330	701	490	555
14	350	334	762	686	699	320	760	411	485
16	400	385	838	762	775	355	836	569	668
18	450	436	914	864	876	390	912	761	880
20	500	487	991	914	927	420	984	999	1141
22	550	538	1092	1016	–	455	1060	1282	1455
24	600	589	1143	1067	1080	485	1126	1609	1809
26	650	633	1245	1143	–	525	1203	1984	2256
28	700	684	1346	1245	–	550	1271	2448	2766
30	750	735	1397	1295	–	585	1362	3006	3380
32	800	779	1524	1372	–	620	1430	3563	4032
34	850	830	1626	1473	–	665	1518	4263	4762
36	900	874	1727	1524	–	695	1586	4921	5526
40	1000	976	1780	1727	–	770	1759	6776	7522
42	1050	1020	1830	1829	–	805	1834	7709	8594
44	1100	1066	1621	1905	–	840	1907	8791	9772
48	1200	1166	2020	2057	–	920	2085	11437	12556
56	1400	1384	2048	2362	–	1085	2413	18773	20301

LF_{RF} = flange with smooth sealing (RF)
LF_{RTJ} = flange with groove ring sealing (RTJ)

DN 3-60“



DN 1-2“



DN inch	DN mm	D	LE	LF_{RF}	LF_{RTJ}	H_1	H_2	weight LE	weight LF_{RF}/LF_{RTJ}
$^1/_2$	15	13	165	165	165	25	86	3	4
1	25	25	216	216	216	43	120	6	8
2	50	50	216	216	232	60	180	10	12
3	80	74	283	283	298	86	226	22	31
4	100	100	305	305	321	110	261	34	48
6	150	150	403	403	419	165	365	75	109
8	200	201	521	502	518	234	509	200	245
10	250	252	559	568	584	285	608	326	402
12	300	303	635	648	664	330	701	490	609
14	350	334	762	762	778	320	760	414	571
16	400	385	838	838	854	355	836	570	771
18	450	436	914	914	930	390	912	765	1012
20	500	487	991	991	1010	420	984	1006	1308
22	550	538	1092	1092	1114	455	1060	1285	1653
24	600	589	1143	1143	1165	485	1126	1614	2056
26	650	633	1245	1245	1270	525	1203	1989	2519
28	700	684	1346	1346	1372	550	1271	2459	3114
30	750	735	1397	1397	1422	585	1362	3033	3775
32	800	779	1524	1524	1553	620	1430	3580	4466
34	850	830	1626	1626	1654	665	1518	4279	5272
36	900	874	1727	1727	1756	695	1586	4937	6079
40	1000	976	1780	1803	–	770	1759	6795	7584
42	1050	1020	1830	1880	–	805	1834	7748	8619
44	1100	1066	1621	1956	–	840	1907	8830	9802
48	1200	1166	2020	2134	–	920	2085	11457	12692
56	1400	1384	2048	2489	–	1085	2413	18856	20905

dimensions in mm / weight in kg
Reduced and venturi bores available on request

LFRF = flange with smooth sealing (RF)
LFRTJ = flange with groove ring sealing (RTJ)

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GE ball valves with welded ends
GF ball valves with flanged ends
GEF ball valves with welded ends flange ends

Weights and overall lengths of the GEF version are calculated using the formula:

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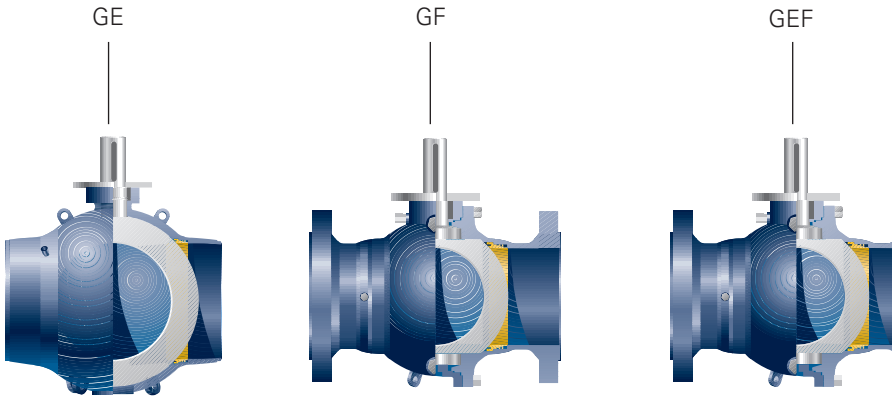
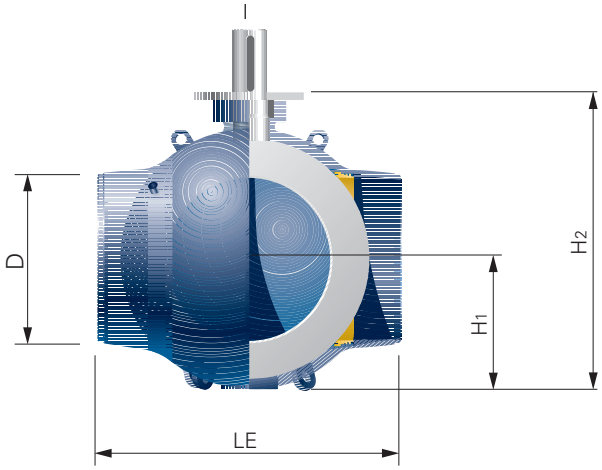
overall length $L_{GEF} = \frac{L_{GF} + L_{GE}}{2}$



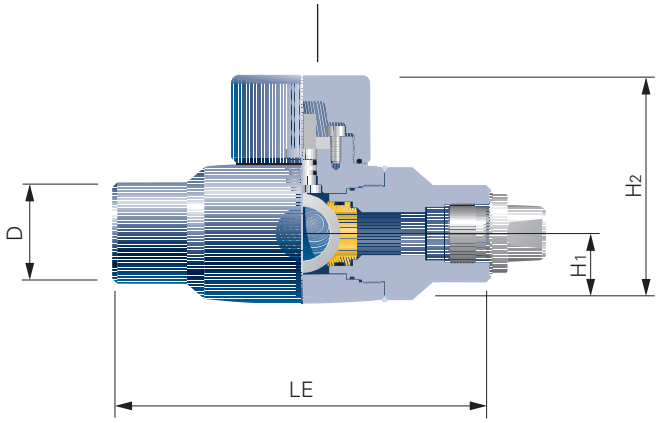
DN inch	DN mm	D	LE	LF_{RF}	LF_{RTJ}	H_1	H_2	weight LE	weight LF_{RF}/LF_{RTJ}
1/2	15	13	165	165	165	25	86	3	4
1	25	25	216	216	216	43	120	6	8
2	50	50	292	292	295	60	180	16	22
3	80	74	356	356	359	86	226	22	34
4	100	100	432	432	435	110	261	34	63
6	150	150	559	559	562	165	365	75	136
8	200	201	660	660	664	234	509	201	294
10	250	252	787	787	791	285	608	327	490
12	300	303	838	838	841	330	701	492	689
14	350	334	889	889	892	320	760	415	642
16	400	385	991	991	994	355	836	574	894
18	450	436	1092	1092	1095	385	912	768	1181
20	500	487	1194	1194	1200	420	984	1010	1542
22	550	538	1295	1295	1305	450	1060	1301	1942
24	600	589	1397	1397	1407	485	1126	1625	2420
26	650	633	1448	1448	1461	520	1203	1999	2927
28	700	684	1549	1549	1562	550	1271	2459	3539
30	750	735	1651	1651	1664	585	1362	3033	4285
32	800	779	1778	1778	1794	620	1430	3580	5055
34	850	830	1930	1930	1946	660	1518	4231	5960
36	900	874	2083	2083	2099	695	1586	4950	7021
40	1000	976	2100	2159	–	780	1759	7317	9532
42	1050	1020	2200	2235	–	820	1834	8352	10972
44	1100	1066	2200	2311	–	850	1907	9623	12436
48	1200	1166	2300	2489	–	930	2085	12488	16111
56	1400	1384	2500	2921	–	1100	2413	20122	25848

LFRF = flange with smooth sealing (RF)
LFRTJ = flange with groove ring sealing (RTJ)

DN 3-60“



DN 1-2“



DN inch	DN mm	D	LE	LF_{RF}	LF_{RTJ}	H_1	H_2	weight LE	weight LF_{RF}/LF_{RTJ}
1/2	15	13	165	216	216	25	86	3	4
1	25	25	216	254	254	43	120	7	14
2	50	50	292	368	371	60	180	17	38
3	80	74	381	381	384	86	226	24	50
4	100	100	457	457	460	110	261	37	73
6	150	150	610	610	613	165	365	80	170
8	200	201	737	737	740	234	509	201	351
10	250	252	838	838	841	285	608	327	555
12	300	303	965	965	968	330	701	492	804
14	350	322	1029	1029	1038	295	729	559	904
16	400	373	1130	1130	1140	335	814	765	1213
18	450	423	1219	1219	1232	370	890	1004	1616
20	500	471	1321	1321	1334	410	972	1312	2094
22	550	522	1429	1429	1448	450	1072	1684	2758
24	600	570	1549	1549	1568	490	1153	2111	3585
26	650	617	1600	1600	1622	520	1220	2544	4065
28	700	665	1702	1702	1724	560	1303	3134	4990
30	750	712	1778	1778	1802	600	1385	3827	5962
32	800	760	1880	1880	1902	635	1458	4477	7061
34	850	808	1981	1981	2010	675	1541	5343	8386
36	900	855	2134	2134	2162	710	1623	6132	9763
40	1000	952	2100	2283	2311	795	1793	8560	12581
42	1050	998	2200	2438	2461	830	1871	9744	14360
44	1100	1046	2200	2540	2568	865	1944	11005	16338
48	1200	1141	2300	2769	2797	945	2115	14307	21145

dimensions in mm / weight in kg
Reduced and venturi bore available on request

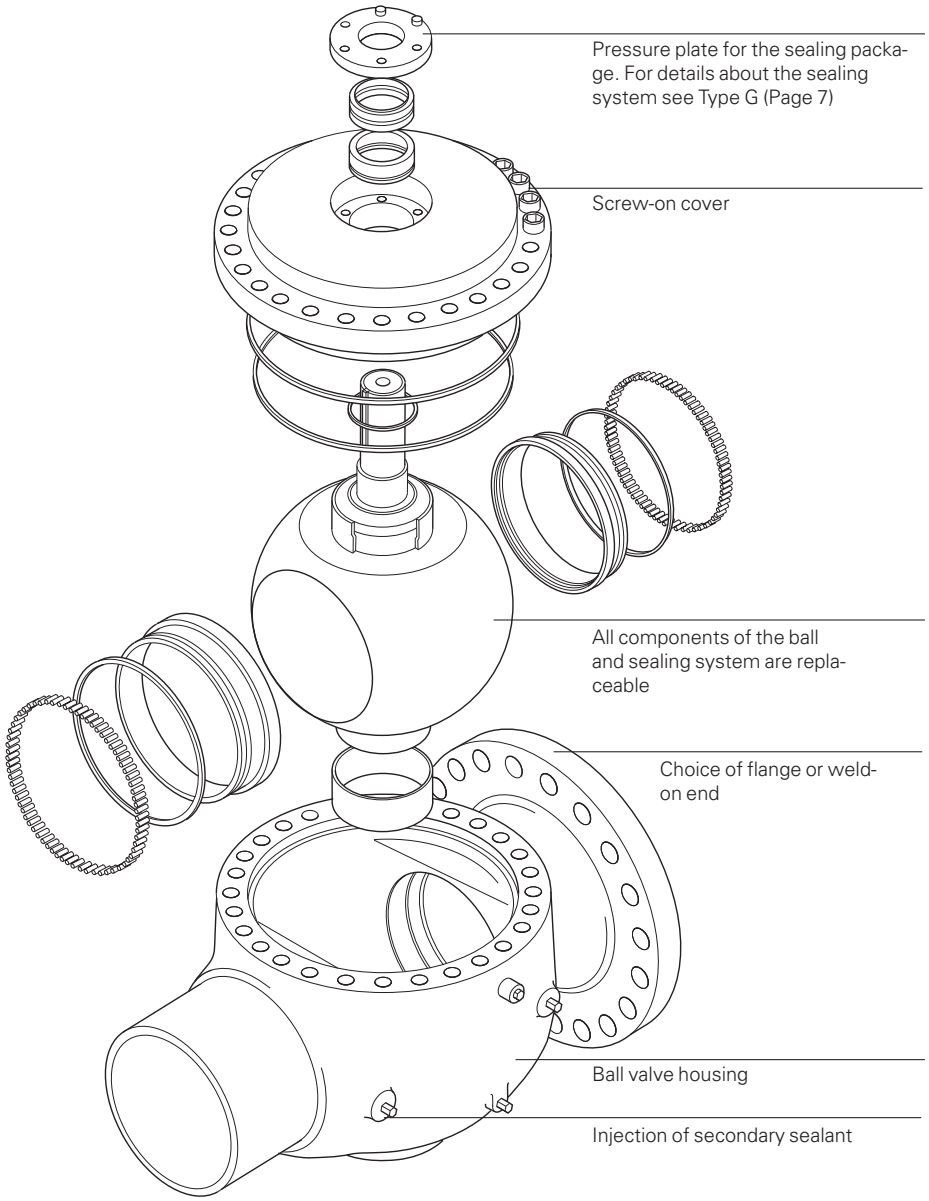
LFRF = flange with smooth sealing (RF)
LFRTJ = flange with groove ring sealing (RTJ)

Design: Borsig superbloc®

Easy to service.
The Type U ball valve presents no problems if work needs to be carried out on it, and can be easily repaired even when installed in pipelines. Without exaggeration it can be said that this is the easiest ball valve in the world to maintain.

Features:

- top entry construction
- designed in accordance with API Spec. 6D
- floating mounted, self-centering seat ring systems with pre-tensioned spring elements
- trunnion-mounted ball plugs
- low torques
- maintenance-free sealing and mounting systems
- strength of seal determined by the pressure in the line
- double block and bleed
- single piston design (SPE) with self-relieving seating rings
- optional double piston design (DPE) with seating rings providing a seal at both the inflow and outflow sides, not self-relieving
- optional sealing system soft: soft-seated PMSS: primary metallic/secondary soft seated M: metal to metal
- dual and single adjustable trunnion seal
- trunnion seal can be replaced even when the pipeline is under maximum pressure
- optional secondary injection of sealant
- blow-out protection at trunnions
- drain and vent connections
- no build-up of electrostatic charge
- fireproofed in accordance with API 6FA and BS 6755
- repairs can be carried out when installed in pipeline



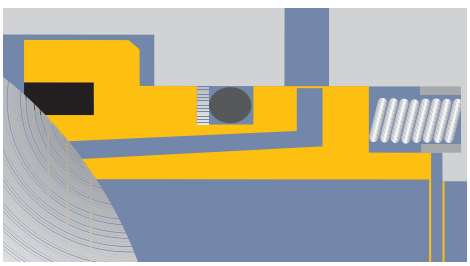
Design

The Type U ball valve is easy to maintain and is a popular choice on platforms. In addition to its simple assembly, one of the main advantages of the top entry design is the ease of spare parts delivery. The heaviest item to be transported to the site only accounts for a quarter of the overall weight.

Applications

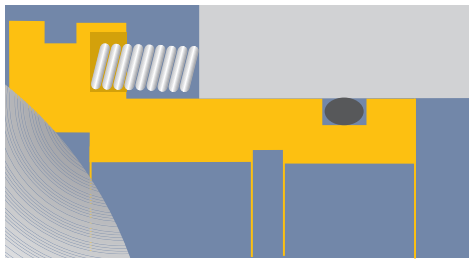
The Type U ball valve is mainly used in pipeline stations and on offshore platforms as a shut-off device for gas, oil, water and other aggressive products. On platforms in particular its resistance to aggressive media such as salt water or acidic gases is invaluable. The undivided pot shape is also known internationally as the top entry design. This type of construction enables any worn parts to be easily removed without having to remove the ball valve from the pipeline system. The housing is available in forged or cast steel and has a screw-on top. The flanges and/or welded ends are welded on.

sealing system: soft seated



sealing system: PMSS, primary metallic / secondary soft-seated

sealing system: metal-to-metal



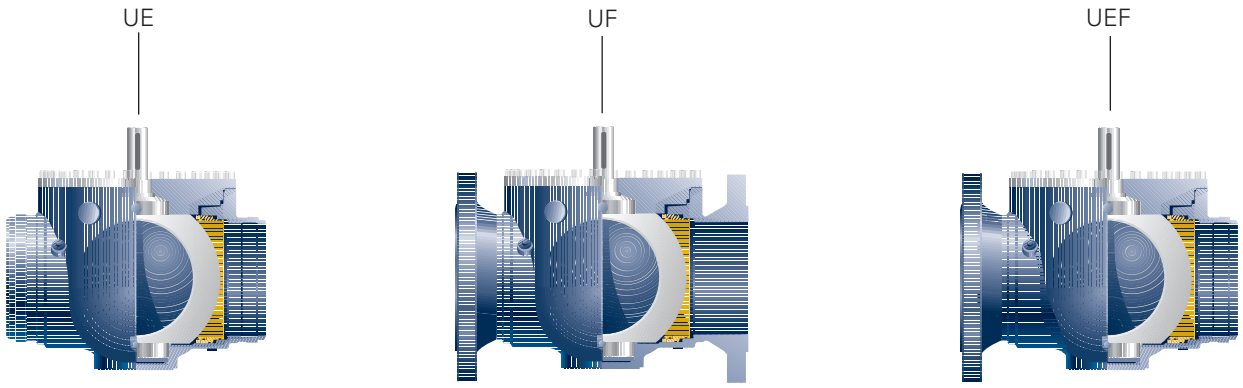
UE ball valves with welded ends
UF ball valves with flanged ends
UEF ball valves with welded ends flange ends

Weights and overall lengths of the UEF version are calculated using the formula:

weight $G_{UEF} = \frac{G_{UF} + G_{UE}}{2}$

overall length $L_{UEF} = \frac{L_{UF} + L_{UE}}{2}$

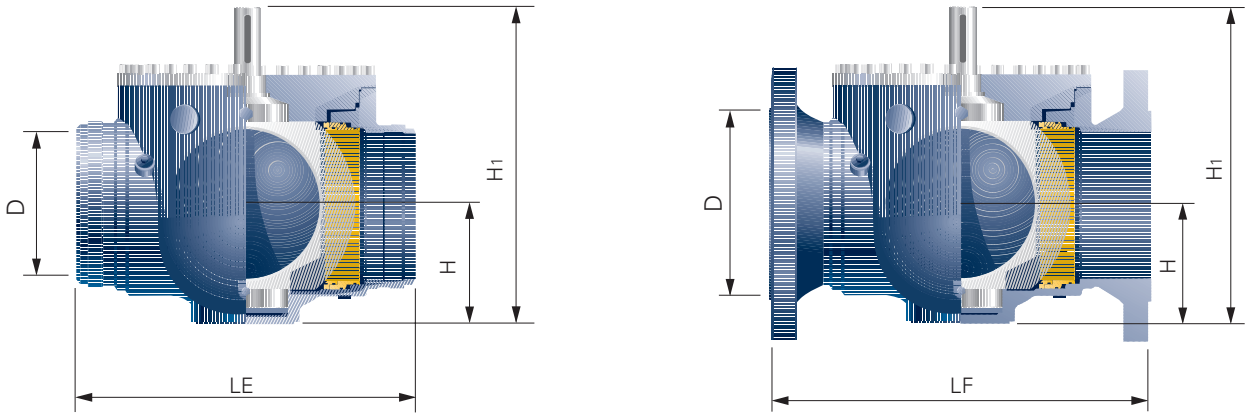
NW 24" and smaller,
ANSI 600 and 900 without seat adjusters



DN inch	DN mm	D	LE	LF_{RF}	LF_{RTJ}	H	H_1	weight LE	weight LF_{RF}/LF_{RTJ}
6	150	150	559	559	562	130	451	160	220
8	200	201	660	660	664	166	523	270	350
10	250	252	787	787	791	209	675	450	600
12	300	303	838	838	841	240	744	530	800
14	350	334	889	889	892	280	781	860	1100
16	400	385	991	991	994	317	959	1400	1750
18	450	436	1092	1092	1095	357	1029	1700	2100
20	500	487	1194	1194	1200	395	1142	2100	2500
24	600	589	1397	1397	1407	471	1285	3150	3900
28	700	684	1549	1549	1562	554	1475	4850	5600
30	750	735	1651	1651	1664	586	1590	6700	7500
32	800	779	1778	1778	1794	622	1640	9300	10100
36	900	874	2083	2083	2099	694	1790	12350	13500
40	1000	976	2333	2333	2352	596	1683	16300	18000
42	1050	1020	2467	2467	2496	808	2041	20150	22000
48	1200	1166	2867	2867	–	922	2261	28400	30700

Important: shortest possible overall length = ANSI 600

LFRF = flange with smooth sealing (RF)
LFRTJ = flange with groove ring sealing (RTJ)



DN inch	DN mm	D	LE	LF_{RF}	LF_{RTJ}	H	H_1	weight LE	weight LF_{RF}/LF_{RTJ}
6	150	150	610	610	613	130	451	195	170
8	200	201	737	737	740	166	523	340	475
10	250	252	838	838	841	209	675	575	770
12	300	303	965	965	968	240	744	875	1150
14	350	322	1029	1029	1038	284	857	1300	1710
16	400	373	1130	1130	1140	321	961	1800	2300
18	450	423	1219	1219	1232	293	1029	2300	3010
20	500	471	1321	1321	1334	400	1147	3010	3850
24	600	570	1549	1549	1568	478	1359	4900	6470
30	750	712	1926	1926	1948	594	1626	9200	10700
36	900	760	2323	2323	2352	705	1845	16700	19100
40	1000	952	2589	2589	2617	830	2218	22000	24300
42	1050	998	2721	2721	2809	859	2275	27100	29500

dimensions in mm / weight in kg
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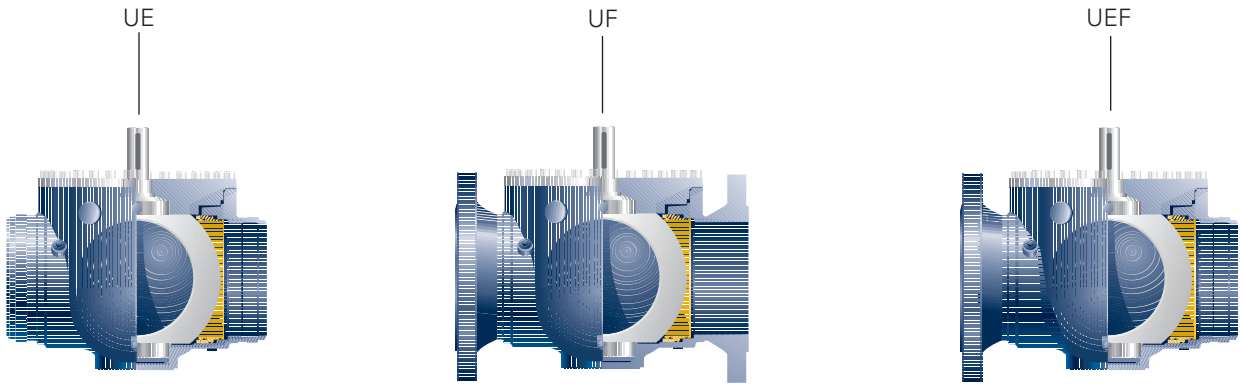
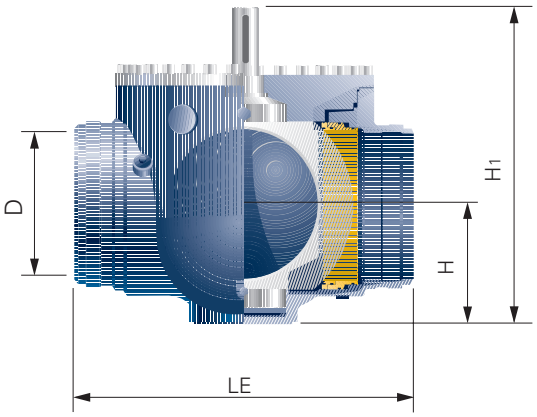
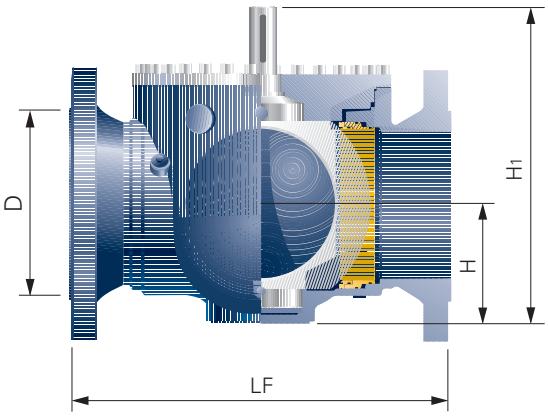
NW 24" and smaller,
ANSI 600 and 900 without seat adjusters.



DN inch	DN mm	D	LE	LF_{RF}	LF_{RTJ}	H	H_1	weight LE	weight LF_{RF}/LF_{RTJ}
6	150	144	705	705	711	200	629	510	630
8	200	192	832	832	841	254	881	850	1050
10	250	239	991	991	1000	300	910	1660	2000
12	300	287	1130	1130	1146	335	1028	2060	2550
14	350	315	1257	1257	1276	370	1043	2470	2920
16	400	360	1384	1384	1407	445	1196	2850	3800
20	500	460	1664	1664	1686	570	1365	6000	7500
24	600	550	1943	1943	1972	530	1517	8150	10600
30	750	670	2366	2366	2388	–	–	–	–
36	900	800	2789	2789	2811	–	–	–	–

LFRF = flange with smooth sealing (RF)
LFRTJ = flange with groove ring sealing (RTJ)





DN inch	DN mm	D	LE	LF_{RF}	LF_{RTJ}	H	H_1	weight LE	weight LF_{RF}/LF_{RTJ}
6	150	131	914	914	927	200	652	561	870
8	200	179	1022	1022	1038	260	772	935	1200
10	250	223	1270	1270	1292	290	926	1826	2200
12	300	265	1422	1422	1445	335	1076	2266	2775
16	400	340	1714	1714	1737	–	–	–	–
18	450	385	1857	1857	1800	–	–	–	–
20	500	429	1999	1999	2022	–	–	–	–
24	600	516	2288	2288	2311	–	–	–	–

dimensions in mm / weight in kg
Reduced and Venturi passage available on request.

LFRF = flange with smooth sealing (RF)
LFRTJ = flange with groove ring sealing (RTJ)

SCHUCK ARMATUREN

Design
For welding on to convex surfaces.
For use on drilling clamps with threaded connection with external and internal thread. Options of integral non return valve or hex head plug.
Plug with and without O-ring soal. Prokuction range of outlat neck of DN 25 (DA 32) to DN 50.
(DA 63) with steel weld end or PE outlet.
Housing body DN 1 1/2"
Thread D_i = 1 1/2", D_S = 2".
Housing body DN 2".
Thread D_i = 2", D_S = 2 1/2".
Special version:
with thread or saddle surface.

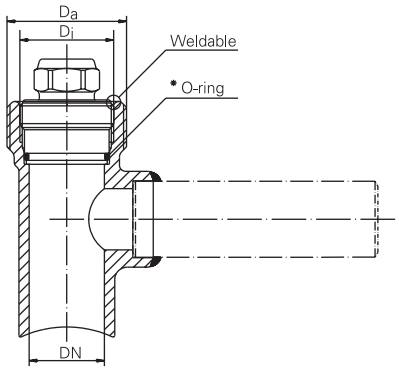
Application Ranges
For initial drilling of main pipeline under pressure without gas escaping. As a non-return assembly by installing a non-return valve or a plug.
Plug and valve can be welded to the forged housing.

Version, Type AT-V, suitable for use with non-return valve..
Version, Type AT, suitable for use with plug.

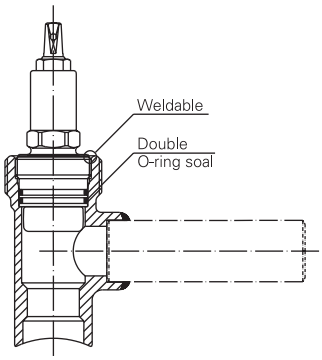
When the valve is in open position, the valve plate provides an automotic return flow seal.

Production and Inspection
Requirement and inspection in acc. with DVGW-VP300 Type inspection.
Housing and plug made of forged steel S355J2G4.
Valve spindle made of stainlesss steel
Bronze valve plate with rubber sheath.
Rubber gasket made of agoing-resistant. Perbunan in acc. with DIN 3535, Part 3.
Technical description for PE steel connectors, Type PESV, and PE steel clamp connector.
Type PESK; refer to seperate brochure.

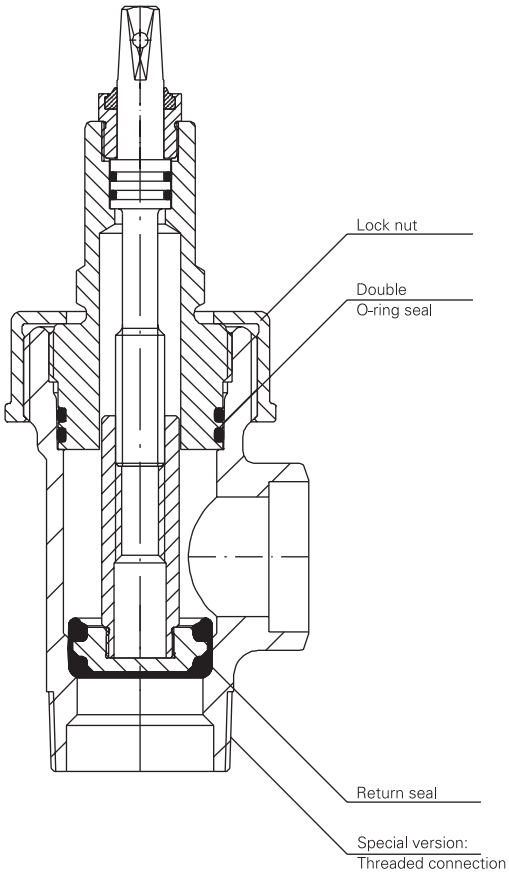
AT-S
with plug and steel welding connection



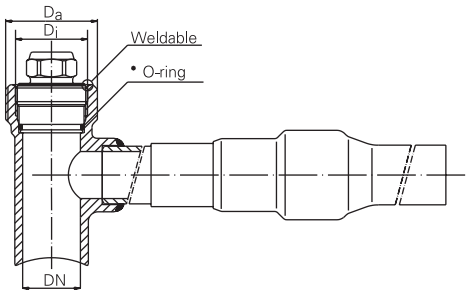
AT.V-S
With non-return and steel welding connection



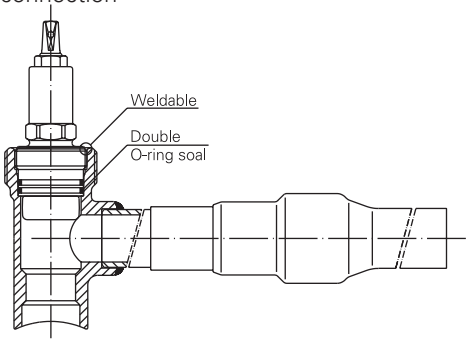
Design variants with lock nut and thread or steel connection.



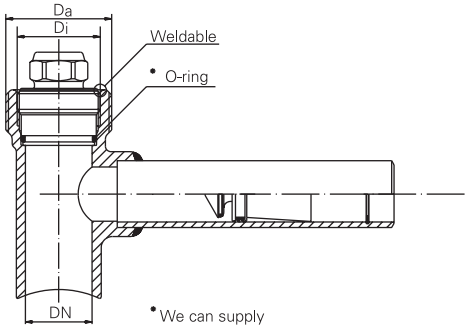
AT-PE
With plug and PE connection



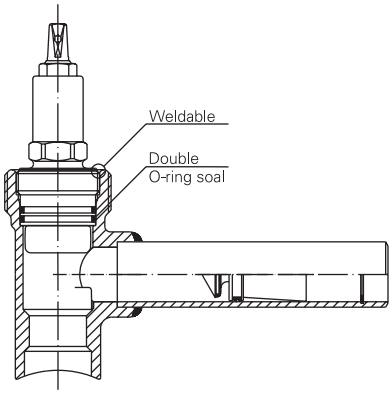
AT.V-PE
With non return valve and steel welding connection



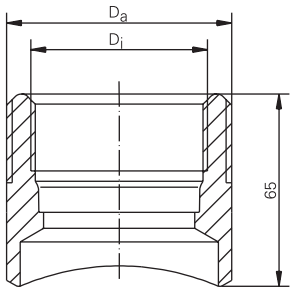
AT-GS
With plug and integrated
Gas flow safety device



AT.V-GS
With non-return valve and integrated
Gas flow safety device



AS
Weld-on neck



PN 4/16, purging ball valve

SCHUCK ARMATUREN

Features

SCHUCK-SA... ball valves are designed to comply with DIN 3547-1/DIN EN 13774. In order to extend the purging line the basic design can be supplied with internal threads and plugs or flanges.
SA... ball valves provide a thoroughly effective seal and excellent resistance to deformation, and even after long periods of inactivity they are guaranteed to operate smoothly and leak-free.
SCHUCK-SA... ball valves are completely maintenance-free.

Sealing system

Seals made of age-resistant Perbunan quality DIN 3535 T3/DIN EN 682.
This compensates for any thermal or mechanical changes.

Operating lever in the form of a handle

To enable the ball valve to be operated where space is limited, the operating lever is in the form of a handle.

Design

SCHUCK-SA… ball valves
Series:
Outlet with internal thread connection with threaded plug and threaded cover or with flange connection (standard design). Inlet side with steel or PE-HD weld-on end such as

- gas pipe made of P235TR2 in accordance with DIN 1626/DIN 1629
- plastic connecting pipe in accordance with DIN 8074/8075
- PE 80 (MRS 8) or PE 100 (MRS 10)
- SDR 11
- MFI Group 010 or 003
- polyurethane outer coating DIN 30677
- temperature range–10° to 70°C

Tests

- in conformity with DIN 3230 Part 5
- quality certification with DIN-DVGW registration

Advantages

- forged and welded construction
- maintenance-free seals and mountings
- parts cannot seize-up
- actuating bolts with dual O ring seal

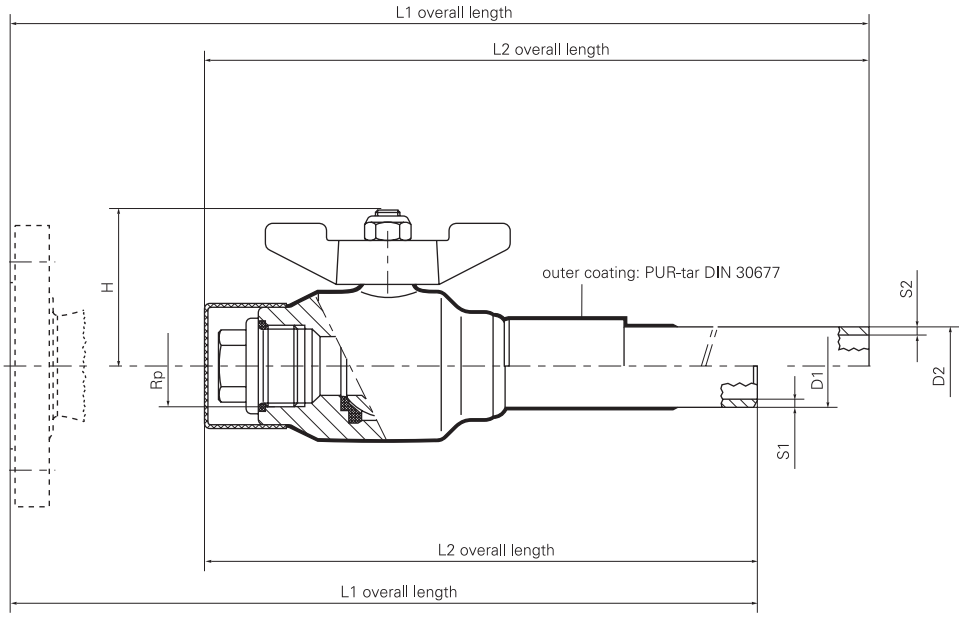
Applications

In gas supply lines for gas quality in accordance with DVGW Worksheet G 260.

Applications

As a purging valve in valve boxes for welding into the pipeline network.
The connection for continuing the purging line can be made with either a flange or thread.
Apart from the welded-on end, the ball valves are coated on all sides with polyurethane and no further insulation is required if they are to be installed underground.
Max. operating pressure 16 bar
with: PE 80 connection 4 bar;
PE 100 connection 10 bar.

Type
requirements in accordance with
DIN 3547 T1/DIN EN 13774,
DVGW-VP 600.
housing made of steel, welded.
brass ball, polished.
brass actuating bolts,
sealed with two O rings.
seals made of age-resistant Perbunan quality DIN 3535 T3/DIN EN 682.
On inlet side option of steel or PE-HD welded-on ends, on outlet side option of threaded plugs and threaded cover or flange closure PN 16 DIN 2633.
outer coating: polyurethane DIN 30677.



Materials

housing	steel S355J2G4
actuator shaft	brass
ball	brass, polished
seals	Perbunan (DIN 3535 T3/ DIN EN 682)

Typical order
SCHUCK SAPEV ball valve
Example: inlet with PE-HD welded-on end, outlet with thread, nominal width, medium, operating pressure, temperature, and quantity to be indicated. Other materials and versions possible on request (customer specification).

To follow

SA	=	Schuck Ausbläser
S	=	Stahl-Anschweißende
PH	=	PE-Anschweißende
M	=	mit Gewinde
K	=	Kurze Baulänge
V	=	Verschlußstopfen

DN	PN 1)	Rp	D_1	D_2	H	S_1 steel	S_2 PE-HD	SASF SAPEF L_1 length	SASV SAPEV L_2 length	SASKF L_3 length	SASKV L_4 length
25	4/10/16	1“	33,7	32	64	4,0	3,0	1130	1110	330	310
40	4/10/16	11/2“	48,3	50	76	4,0	4,6	1160	1140	350	330
50	4/10/16	2“	60,3	63	83	4,0	5,8	1180	1160	380	360

1) max. PN 4 for all types in which plastic pipe is used. At PE80 – PN4, at PE100 – PN10.
Details conform to the latest technical developments. We reserve the right to make alterations.

PN 5, ball valves made of steel

Features
SCHUCK-SK...GTN ball valves are designed in conformity with DIN EN 331 and DIN 3389 and are certified in conformity with DIN-DVGW. The basic model can be provided either with an internal thread or flanges on both sides.
SK...GTN ball valves provide a thoroughly effective seal and excellent resistance to deformation and are guaranteed to operate smoothly and leak-free even after long periods of inactivity.
SCHUCK-SA...GTN ball valves are completely maintenance-free.

Sealing system
Seals made of age-resistant Perbunan quality DIN 3535 T1/DIN EN 549.
This easily compensates for any thermal or mechanical changes.

Operation by means of operating lever
If required SK...GTN ball valves up to DN 50 can be fitted with a self-closing, thermally activated lever. Retrofit conversion is also possible.

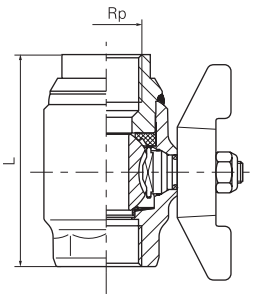
Firesafe
SCHUCK-SK...GTN ball valves up to DN 50 can be fitted with a self-closing, thermally activated SCHUCK FIRE SAFE lever. Retrofit conversion is also possible at any time without depressurising the line.

Design
SCHUCK-SK…GTN ball valves
Product lines:
internal thread connection or flange connection (basic design)
- gas pipe made of P235TR2 in conformity with DIN 1626/DIN 1629
- outer coating of yellow synthetic resin varnish RAL 1021
- temperature range –10 ° to 70°C

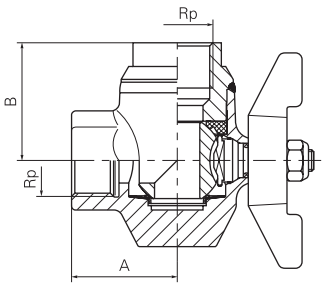
Tests
- in conformity with DIN 3230 Part 5 and DIN 3389
- proof of quality with DIN-DVGW registration

Advantages
- forged and welded construction or with recessed insulating joint
- floating ball
- brass ball, polished on DN 65 and upwards hard chromium plated
- low torques
- maintenance-free sealing and mounting systems
- parts cannot seize-up
- actuating bolts with dual O ring seal
- device to prevent blow out
- no special installation measures required

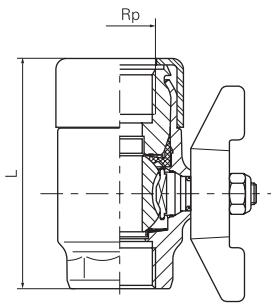
Applications
In gas supply lines for gas quality in accordance with DVGW Worksheet G 260.
When SCHUCK-SK…GT ball valves are installed upstream on non- HTB tested gas meters and pressure regulators the high load capacity required for this equipment in conformity with TRGI can be subsequently attained.



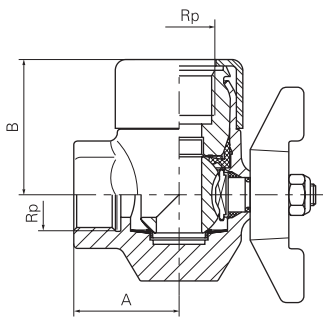
SKMGTN



SKEMGTN



SKIGTN



SKIEMGTN

To follow

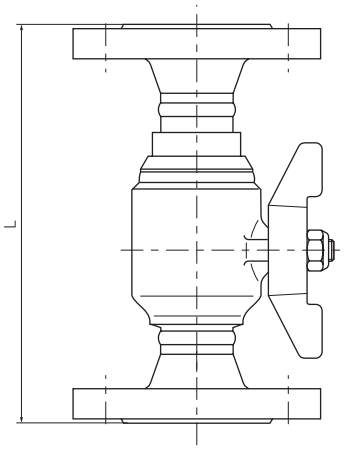
SK	=	Schuck Kugelhahn
E	=	Eckausführung
I	=	integrierte Trennstelle
M	=	mit Gewinde
F	=	Flansch
GTN	=	Gasthermisch belastbar Niederdruckdicht

Type
Option of integrated insulating joint to DN 50 and thermally self-closing Fire-Safe operating lever. Retrofit conversion is also possible.

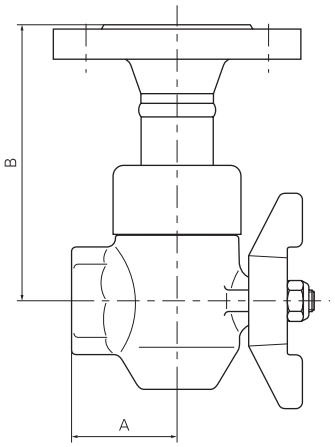
Materials

housing	steel S355J2G4
operating lever	brass
ball	polished brass
or	hard chromium-plated steel
seals	Perbunan (DIN 3535 T1/ DIN EN 549)

Typical order
SCHUCK-SKIEMGTN ball valve Corner type, connection with thread and insulating piece.
When ordering or making enquiries please state nominal width, medium, operating pressure and quantity. Other materials and versions available on request (customer specification).



SKFGTN



SKIEMFGTN

		SKEMGTN/SKMGTN without separation, with thread connection				**SKIEMGTN/SKIGTN** with separation, with thread connection				**SKEMFGTN/SKFGTN** without separation, with flange connection			**SKIEMFGTN/SKIFGTN** with separation with flange connection		
DN	**PN**	**Rp**	**A**	**B**	**L**	**Rp**	**A**	**B**	**L**	**A**	**B**	**L**	**A**	**B**	**L**
25	5	1“	48	55	100	1“	48	60	110	48	80	160	48	128	160
32	5	1 1/4“	65	65	125	1 1/4“	65	75	135	65	125	180	65	145	180
40	5	1 1/2“	65	65	125	1 1/2“	65	75	135	65	105	200	65	147	200
50	5	2“	69	70	140	2“	69	80	150	69	118	230	69	158	230

dimensions in mm
Details conform to the latest technical developments. We reserve the right to make alterations.

PN 4/PN10, steel with PE weld-on ends

Features

SCHUCK-SKPE-E underground ball valves are designed in conformity with DIN 3547 T1/ DIN EN 13774, DVGW-VP 600.
The welded-on ends on both sides on the basic model are suitable for double welding and can be provided with other connection combinations.
SKPE-E ball valves provide a thoroughly effective seal and excellent resistance to deformation and are guaranteed to operate smoothly and leak-free even after long periods of inactivity.
SCHUCK-SKPE-E ball valves are completely maintenance-free.
SKPE-E Ball valves can be supplied without the actuating device or as a complete set, with adjustable telescopic key bar or rigid key bar, upon which a 4 kt protector 14 is installed and secured, or with a 27/32 protective tube for the stem, and a cover.

Sealing system

The seal on the passage is created using a Teflon or Perbunan sealing ring on a chromium-plated or brass ball. This combination prevents seizing-up of the sealing rings. This compensates for any thermal or mechanical changes.

Design

SCHUCK-SKPE-E underground ball valves
Series:
Weld-on ends (basic design)
Connecting pipes in conformity with DIN 8074/8075

- PE 80, PE 100, PEX
- Outer coating of polyurethane in conformity with DIN 30677
- Temperature range –10° to 70°

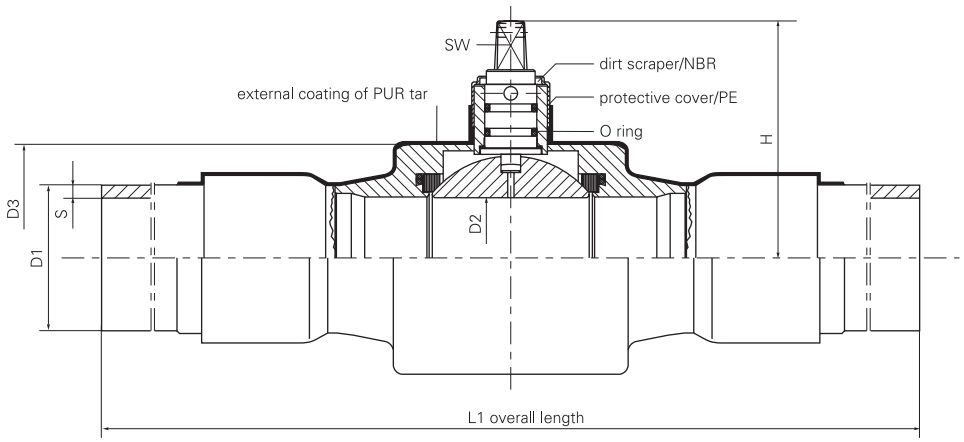
Tests

- in conformity with DIN 3230 Part 5
- proof of quality with DIN-DVGW registration or approval certificate 3.1B in conformity with EN 10204

Advantages

- fully welded construction
- unrestricted passage
- suitable for pig
- floating ball
- low torques
- maintenance-free seals and mountings
- parts cannot seize-up

Applications
In underground PE gas pipelines for gas quality in accordance with DVGW Worksheet G 260.



- can be laid underground

Materials

housing:	steel
connecting pipe	PE 80 (MRS 8)
or	PE 100 (MRS 10), SDR 11
actuator	shaft brass
ball	steel, hard chromium-plated
seals	Perbunan (DIN 3535 T3/ DIN EN 682),
or	Teflon

Typical order
SCHUCK-SKPE-E underground ball valves
Connecting pipe made of PE 80 (MRS 8), PE 100 (MRS 10), SDR 11.
When ordering or making enquiries please state nominal width, medium, operating pressure and quantity. Other materials and versions available on request (customer specification).

Connection dimensions for weld-on ends in accordance with table.

DN	PN	D_1	D_2	D_3	H	L_1 overall length	S	sealing system	weight/kg
25	4/10	32	24	56	100	500	2,9	NBR	2,1
32	4/10	40	39	80	110	520	3,7	NBR	4,0
40	4/10	50	39	80	110	520	4,6	NBR	4,3
50	4/10	63	45	95	120	540	5,8	NBR	6,2
80	4/10	90	74	140	145	945	8,2	PTFE	16,7
100	4/10	110	95	170	160	1010	10,0	PTFE	24,8
100	4/10	125	95	170	160	1025	11,4	PTFE	25,2
150	4/10	160	142	250	195	1100	14,6	PTFE	65,5
150	4/10	180	142	250	195	1100	16,4	PTFE	65,0
200	4/10	225	142	250	195	1200	20,5	PTFE	80,2

Size in mm / Weight in kg
Details conform to the latest technical developments. We reserve the right to make alterations.

PN 16, steel with weld-on end made of steel

Features
SCHUCK-SKS-E underground ball valves are designed in conformity with DIN 3547 T1/DIN EN 13774.
SKS-E ball valves provide a thoroughly effective seal and excellent resistance to deformation, and even after long periods of inactivity they are guaranteed to operate smoothly and leak-free.
SCHUCK- SKS-E ball valves are completely maintenance-free.
SKS-E ball valves can be equipped without the actuating device or as a complete set, with adjustable telescopic key bar or rigid key bar, upon which a 4 kt protector 14 is installed and secured, or a 27/32 protective tube for the stem and a cover.

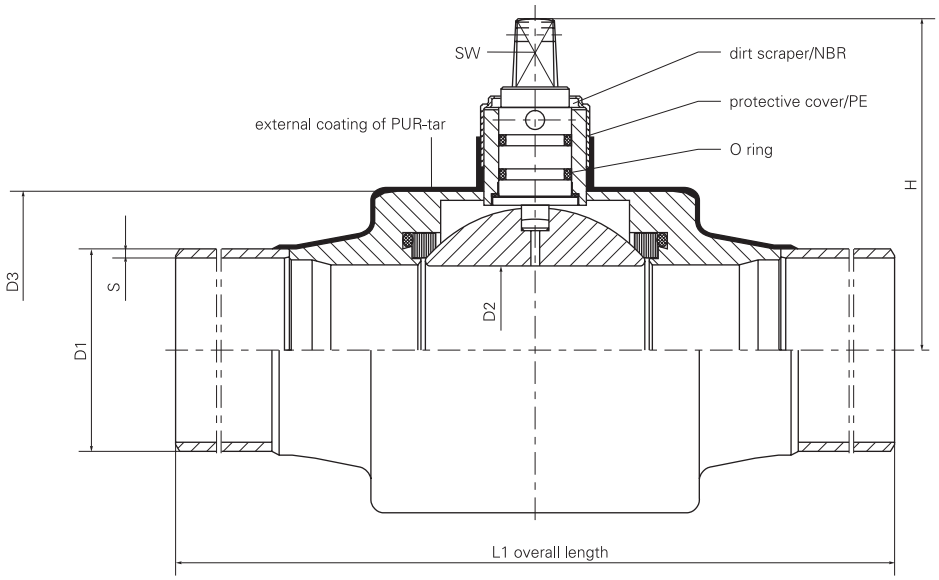
Sealing system
The seal on the passage is created using a Teflon or Perbunan sealing ring on a chromium-plated or brass ball. This combination prevents seizing-up of the sealing rings. This compensates for any thermal or mechanical changes.

Design
SCHUCK-SKS-E underground ball valves Series:
Weld-on ends (basic design)
- gas pipes made of P235TR2 in conformity with DIN 1626/1629
- PE 80, PE 100, PEX
- outer coating of polyurethane in conformity with DIN 30677
- Temperature range –10° to 70°

Tests
- in conformity with DIN 3230 Part 5
- proof of quality with DIN-DVGW registration or approval certificate 3.1B in conformity with EN 10204

Advantages
- fully welded construction
- unrestricted passage
- suitable for pig
- floating ball
- low torques
- maintenance-free seals and mountings
- parts cannot seize-up
- can be laid underground

Applications
In underground gas pipelines for gas quality in accordance with DVGW Worksheet G 260.



Materials

housing	steel
connecting pipe	steel P235TR2
actuator shaft	brass
ball	brass
or	steel, hard chromium plated
seals	Perbunan (DIN 3535 T3/ DIN EN 682),
or	Teflon

Typical order
SCHUCK-SKS-E underground ball valves
Connecting pipe made of steel.
When ordering or making enquiries please state medium, operating pressure and quantity. Other materials and versions available on request (customer specification).
Connection dimensions for weld-in ends in accordance with table.

DN	PN	D_1	D_2	D_3	H	$L_{1\ \text{overall length}}$	S	sw	sealing system	weight/kg
25	16	33,7	24	56	100	500	4,0	14	NBR	2,8
32	16	42,4	39	80	110	520	4,0	14	NBR	4,5
40	16	48,3	39	80	110	520	4,0	14	NBR	4,7
50	16	60,3	45	95	120	540	4,0	14	NBR	6,2
80	16	88,9	74	140	145	515	4,0	20	PTFE	12,4
100	16	108	95	170	160	550	4,0	20	PTFE	18,4
100	16	114,3	95	170	160	550	4,0	20	PTFE	18,6
125	16	133	95	170	160	550	4,0	20	PTFE	19,8
125	16	139,7	95	170	160	550	4,0	20	PTFE	20,1
150	16	159	142	245	195	700	4,5	20	PTFE	35,0
150	16	168,3	142	245	195	700	4,5	20	PTFE	35,3
200	16	219,1	142	245	195	700	4,5	20	PTFE	43,2

dimensions in mm / weight in kg
Details conform to the latest technical developments. We reserve the right to make alterations.

Full bore, PN 10 for gas, PN 16 for water

Features
SCHUCK PEK-FB underground ball valves are designed in conformity with VP 302 and EN 1555-4.
The welded-on ends on both sides on the basic model are suitable for double welding and can be provided with other connection combinations. The special design of the PEK-FB provides complete longitudinal adhesion, imperviousness and resistance to deformation. PEK-KB ball valves are guaranteed to operate smoothly and leak-free even after long periods of inactivity. SCHUCK PEK-KB ball valves are completely maintenance-free.

New type of sealing system
The new type of sealing system, with sprung Teflon seals, prevents the sealing rings from seizing-up on the ball. This easily compensates for any thermal or mechanical changes.

Actuation using the stem extension
PEK-FB ball valves can be supplied as a complete set with adjustable telescopic key bar or rigid key bar, upon which a protective tube for the stem and a cover are installed. If required the ball valve can be supplied on its own.

Torque limiter
A safety clutch can supplied to prevent damage to the actuating mechanism caused by incorrect operation for up to DN 100. If there is excessive operating torque, a freewheel comes into action and is stopped again after the unit has rotated by 180°.

Base plate
PEK-FB ball valves can be fitted with a base plate, either on site or already installed.

Design
SCHUCK-PEK-FB underground ball valves Series:
Weld-in ends (basic model)
Connecting pipes in conformity with DIN 8074/8075
- PE 100 (MSR 10)
- SDR 11
- MFI Group 003-005 (190/5)

Applications
Underground water and gas pipelines.
If they are installed while the pipeline is being laid, SCHUCK-PEK-FB underground ball valves do not require any special installation work.
SCHUCK-PEK-FB underground ball valves can be connected to the pipeline system using all current and approved PE-HD welding equipment.

Advantages
- fully welded construction
- unrestricted passage
- suitable for pig
- floating ball
- low torques
- maintenance-free seals and mountings
- parts cannot seize up
- can be laid underground
- no special installation work necessary
- can be welded using all current and approved PE-HD welding equipment.

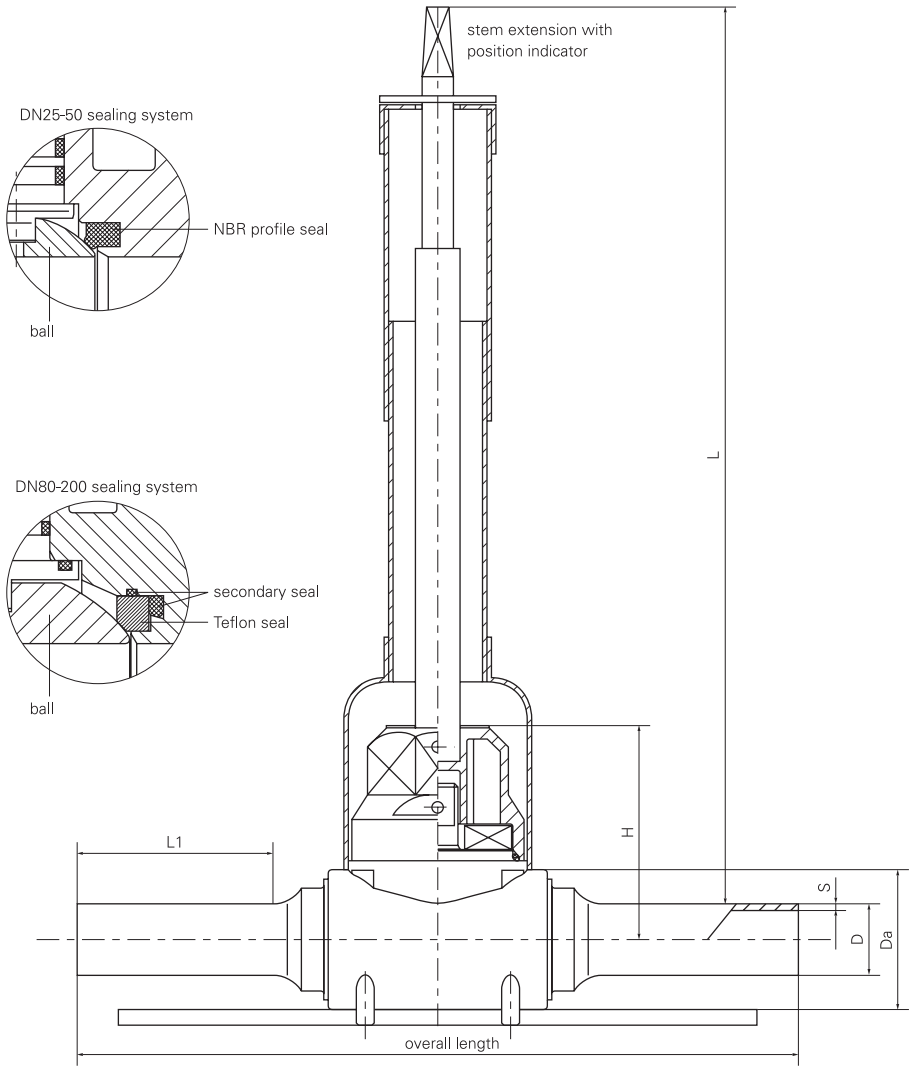
Optional
- Limiter, in the form of a safety clutch

Materials

housing and cover	PE 100
connecting pipe	PE 100
ball	POM
seals	Perbunan (DIN 3535 T3/ DIN EN 682),
or	Teflon
actuating boss	POM
actuating stem	POM

Typical order

SCHUCK-PEK underground ball valves PE 100 (MSR 10) connecting pipe Steel connecting pipe .
When ordering or making enquiries please state medium, operating pressure, temperature, flow rate and quantity. Other materials and versions available on request (customer specification).
Connection dimensions for weld-on ends in accordance with table.



DN	PN		D_{PE}*	S	Da ± 2	Di_{ball}	H ± 2	overall length ± 5	L_1	L	sealing system
	gas	water									
25	10	16	32	2,9	63	24	96	300	90	600-1200	NBR
32	10	16	40	3,7	70	30	100	365	102	600-1200	NBR
40	10	16	50	4,6	84	38	106	400	110	600-1200	NBR
50	10	16	63	5,8	103	48	114	360	110	600-1200	NBR
80	10	16	90	8,2	150	68	147	480	150	700-1300	PTFE
100	10	16	110	10,0	177	83	161	520	160	700-1300	PTFE
150	10	16	160	14,6	325	121	215	560	160	700-1300	PTFE
200	10	16	225	20,5	325	121	215	720	240	700-1300	PTFE

dimensions in mm

Details conform to the latest technical developments. We reserve the right to make alterations.

* DPE 125, DPE 160 and DPE 225: reduced bore.

Our range of products

Valves and Accessories

Actuators and Controls

Fittings and Pipeline Equipment

House Lead-in Gas Connection

Cathodic Corrosion Protection

Schuck Armaturen
Daimlerstraße 4 – 7
D - 89555 Steinheim
Phone +49 7329 950-0
Fax +49 7329 950-161
info@Schuck-Armaturen.de
www.Schuck-Armaturen.de

Request individual brochures or download them from the Internet as PDF files.

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