

Soft seal Ball valve

Trunnion ball

Flange

PN16-40:

Casted valve DN150-300

Forged valve DN150-800



FLEU Type 761

TA-Luft 2021 , ISO 15848-1 FE BH CO3 t (-60°C 200°C)

100 000 cycle

Range of application:

In industrial facilities, oil and chemical industry and related manufacturing industries.

Temperature range:

Max. working temperature :

-29°C to +260°C (carbon steel)

-50°C to +260°C (stainless steel)

-196°C acc. to requirement

Material [according DIN EN (DIN)]

Body: —1.0619N, 1.0619QT, 1.0460
—1.4408, 1.4409, 1.4539, 1.4470, 1.4404

Ball: —C22.8+ENP
—1.4401
—1.4404

Body Seal: PTFE /Graphite

Seat: PTFE / RPTFE /TFM1600 / VX1 / PEEK /PCTFE

Perform standard:

Design: split body with full bore round port , floating ball.

acc. DIN 3357 .

Design minimum wall thickness calculation acc. : EN12516-1 .

Face to face : PN16 DN150 - DN300 DN350 DN400 DN500 EN 558 G27 , DN450 DN600-DN800 EN558 G12;
PN25 PN40 DN150 - DN300 DN350 DN400 DN500 EN 558 G27, DN450 DN600 -DN800 EN558 G4.

Flange ends : DIN EN 1092-1.

Operating: with a two flat stem acc to the NAMUR-recommends.

90° -rotary switch

Actuator mounting: mounting flange acc. to DIN ISO 5211

for gear box , air- , electric-or hydraulic pattern actuator .

Fire test : API 607 & BS 6755 .

TA-Luft 2002 10000 cycles RT.

TA-Luft acc. to ISO 15848-1 FE BH CO3 t (-60°C 200°C).

ISO 15848-1 FE BH CO3 t (-60°C 200°C).

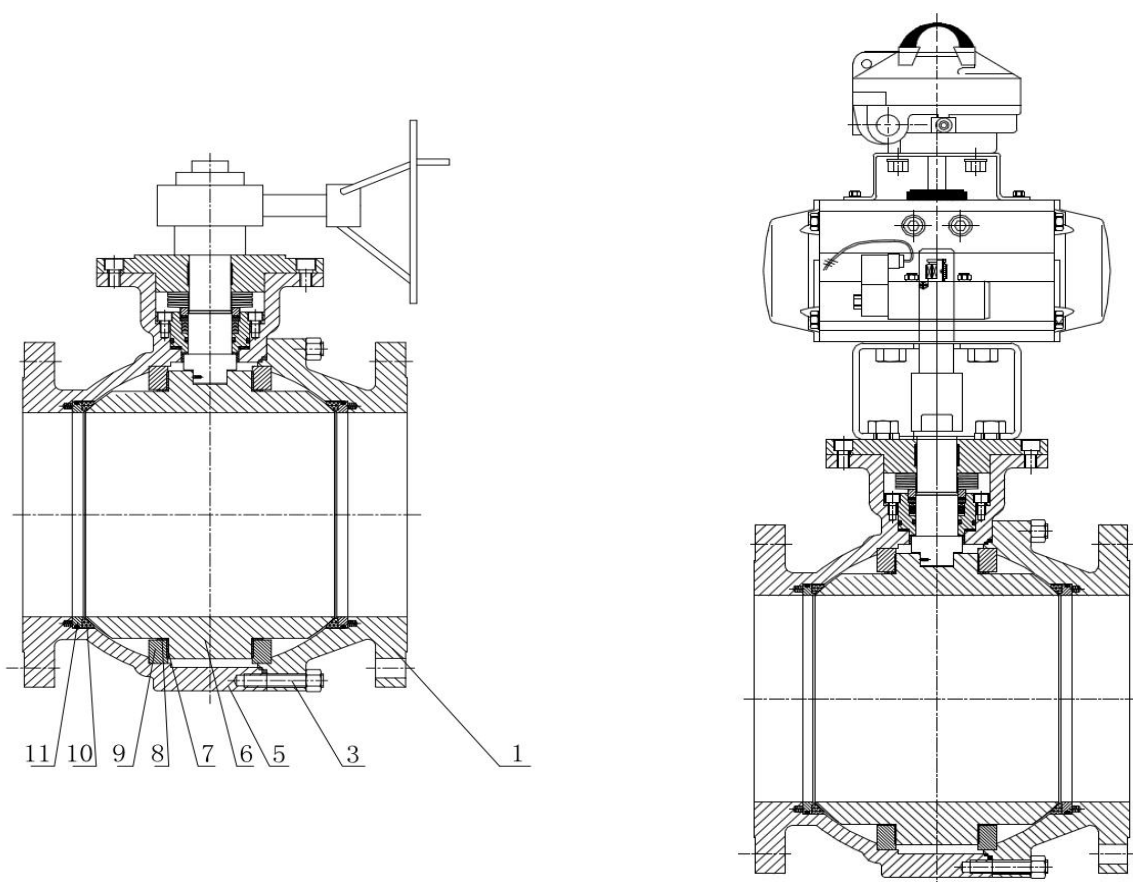
Antistatic device acc.: BS 5351 .

Preloaded belleville spring design for stem sealing system,
offers the possibility of adjustment of the sealing.

Optional: Ball with relief bore on pressure side (requires unidirectional installation)

Two-piece casted ball valve

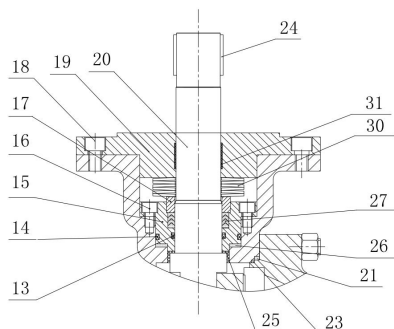
FIG.	Pressure	Material	RANGE
133.761	PN16	1.0619N	DN150-DN300
135.761	PN40	1.0619N	DN150-DN300
153.761	PN16	1.4408	DN150-DN300
155.761	PN40	1.4408	DN150-DN300



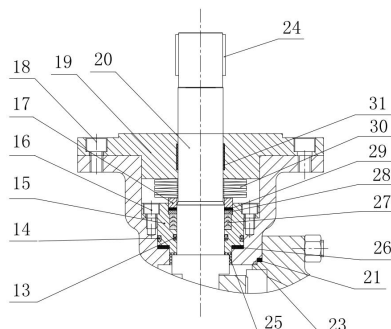
Ball valve with full bore and Flange .

Material list

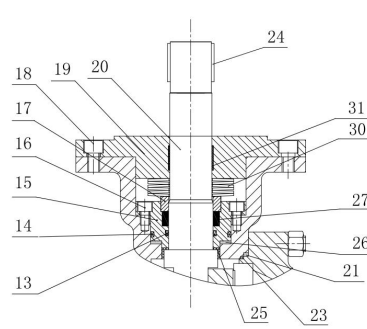
NO.	Part	Material	
		FIG. 153.761/ 155.761	FIG. 133.761 /135.761
1	Adapter	1.4408	1.0619N
3	Bolts	A4-70	1.7225
5	Body	1.4408	1.0619N
6	Ball	1.4401	C22.8+ENP
7	Thrust bearing	1.4401+PTFE+MoS2	1.4401+PTFE+MoS2
8	Gasket	PTFE	PTFE
9	Bracket	1.4308	C22.8
10	Seat	PTFE/RPTFE/TFM 1600/VX1/ PEEK /PCTFE	PTFE/RPTFE/TFM 1600/VX1/ PEEK /PCTFE
11	Support plate	PTFE	PTFE

STUFFING BOX TYPE :

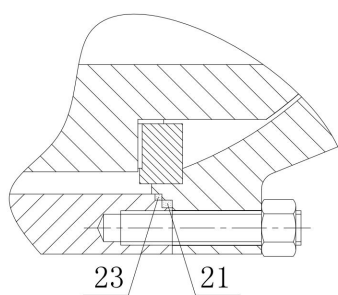
GP(Gland, PTFE)



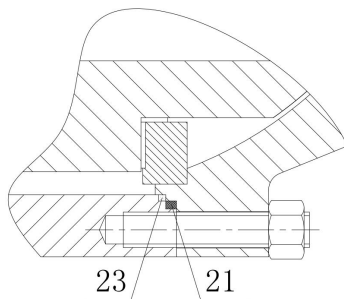
GPG(Gland, PTFE+Graphite)



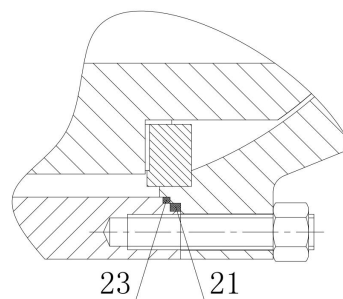
GG(Gland, Graphite)

BODY SEALING TYPE :

For GP



For GPG

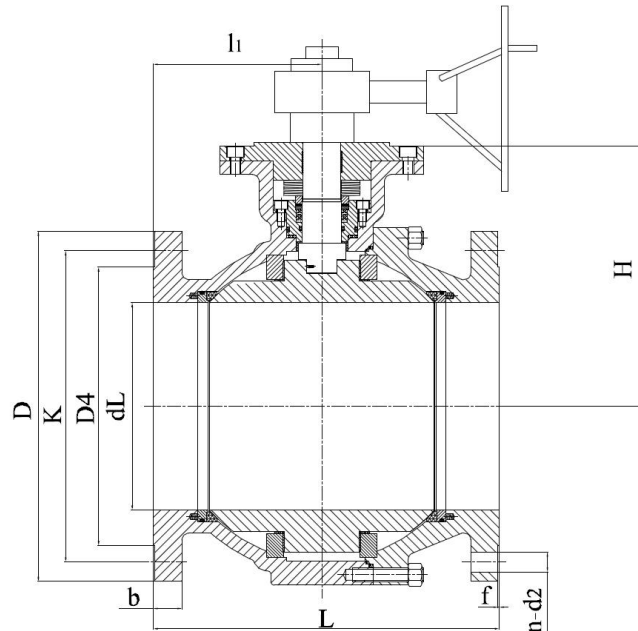


For GG

Material list

NO.	Part	Material		
		Fig.761 GP	Fig.761 GPG	Fig.761 GG
13	O-ring	VITON		
14	O-ring	VITON		
15	Packing-box	1.4408 / C22.8+ENP		
16	Bolts	A4-70 / A2-70		
17	Metal-ring	1.4401 / 1.4301		
18	Bolts	A4-70 / A2-70		
19	Gland	1.4401 / C22.8		
20	Stem	17-4PH/1.4462/1.4571/1.4401		
21	Body seal	PTFE	Graphite	Graphite
23	Body seal	PTFE	PTFE	Graphite
24	Key	45		
25	Gasket	PTFE		
26	Gasket	PTFE	Graphite	Graphite
27	Packing	PTFE	PTFE	Graphite
28	Metal gasket	1.4401/1.4301		
29	Packing		Graphite	
30	Belleville spring	17-7PH		
31	Thrust bearing	1.4401+PTFE+MoS2		

FIG.	Pressure	Material	RANGE
133.761	PN16	1.0619N	DN150-DN300
135.761	PN40	1.0619N	DN150-DN300
153.761	PN16	1.4408	DN150-DN300
155.761	PN40	1.4408	DN150-DN300

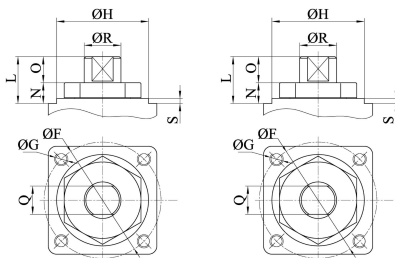


Dimension List

PN	DN	dL	L	l1	H	D	b	K	n-d2	D4×f	Weight (kg)
16	150	150	350	124	256	285	22	240	8-Φ22	Φ212×3	70
	200	200	400	200	315	340	24	295	12-Φ22	Φ268×3	125
	250	250	450	225	316	405	26	355	12-Φ26	Φ320×2	256
	300	300	500	240	383	460	28	410	12-Φ26	Φ378×2	450
40	150	150	350	124	256	300	28	250	8-Φ26	Φ218×3	75
	200	200	400	200	315	375	34	320	12-Φ30	Φ285×3	130
	250	250	450	225	316	450	38	385	12-Φ33	Φ345×2	260
	300	300	500	240	383	515	42	450	16-Φ33	Φ410×2	455

Flanges of PN25 shall comply with EN 1092-1 for dimensional requirements; all other dimensions shall be identical to those of PN40.

Dimension List



DN	ΦF	ΦG	ΦH	L	O	N	Q	ΦR	S	M	P	T
150	140	M16	100	61	39.8	21.2	20	36	3	-	-	-
200	125	M12	85	61	39.8	21.2	27	50	3	-	-	-
250	165	M20	130	172	90	82	12	50	3	58	70	3
300	254	M16	200	172	90	82	14	55	5	69	70	3

Connecting format

Flanged		
Pressure rating	Flange dimension	Sealing form
PN16 PN40	DIN EN 1092-1	DIN EN 1092-1 Form B 1 Ra max : 12.5 μm Rz max : 50 μm

Installation instructions

Installation site is not prescribed.
Regardless of the flow direction.

Details please consult.

Technical parameters

Flow characteristics - Kv (m³/h)

DN	150	200	250	300
Kv	3500	6500	10200	14700

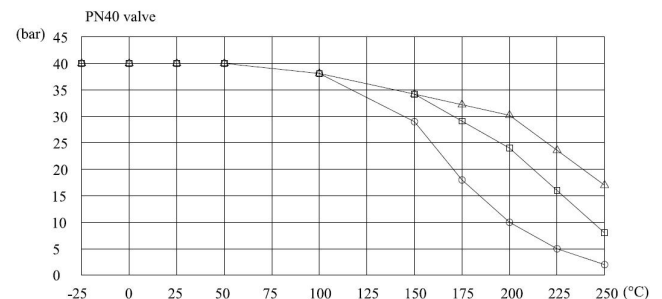
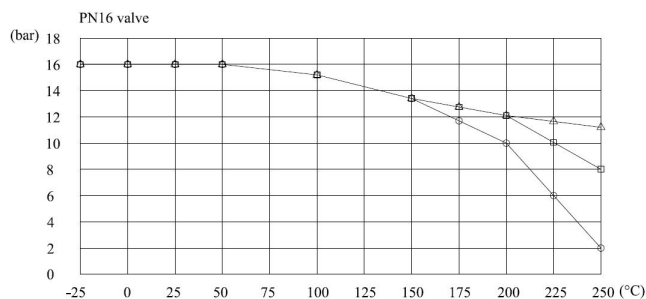
Open torque - Nm

ΔP (bar)	DN			
	150	200	250	300
0	126	180	321	500
10	233	320	653	989
16	297	450	852	1282
25	393	650	1151	1722
40	553	1010	1648	2455

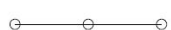
Maximum and minimum

DN	150	200	250	300
M _{d max}	3500	4800	7000	15000
M _{d min}	63	90	160	250

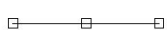
Allowable pressure in dependence of the temperature



Seat material:



TFM



PFFE+25%Glass

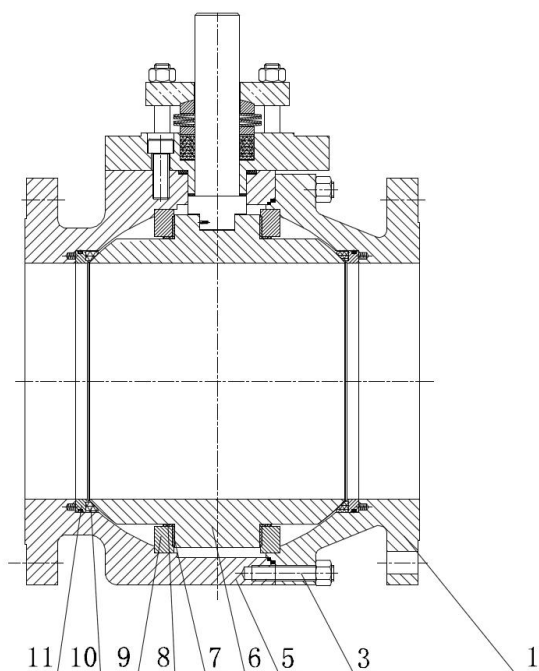


PFFE+15%Graphite

The shown values refer to austenitic stainless steel 1.4408. More details please consult.

Two-piece forged ball valve

FIG.	Pressure	Material	RANGE
143.761	PN16	1.0460	DN150-DN350
145.761	PN40	1.0460	DN150-DN350
243.761	PN16	1.4404	DN150-DN350
245.761	PN40	1.4404	DN150-DN350

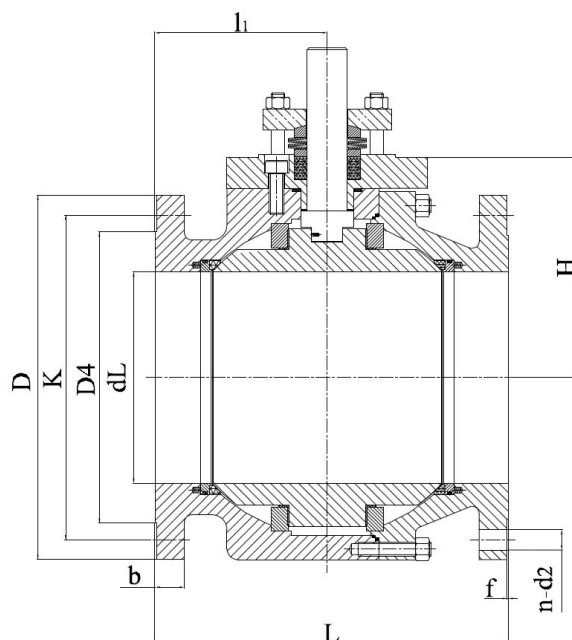


Ball valve with full bore and Flange .

Material list

NO.	Part	Material	
		FIG. 143.761/ 145.761	FIG. 243.761 /245.761
1	Adapter	1.4404	1.0460
3	Bolts	A4-70	1.7225
5	Body	1.4404	1.0460
6	Ball	1.4404	1.0460
7	Thrust bearing	1.4401+PTFE+MoS2	1.4401+PTFE+MoS2
8	Gasket	PTFE	PTFE
9	Bracket	1.4404	1.0619
10	Seat	TFM1600	TFM1600
11	Support plate	1.4404	1.0460

FIG.	Pressure	Material	RANGE
143.761	PN16	1.0460	DN150-DN350
145.761	PN40	1.0460	DN150-DN350
243.761	PN16	1.4404	DN150-DN350
245.761	PN40	1.4404	DN150-DN350

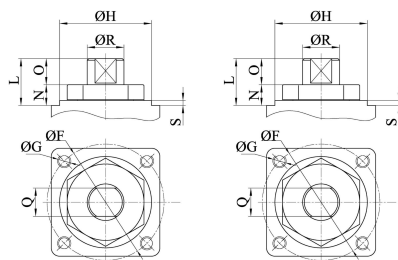


Dimension List

PN	DN	dL	L	l1	H	D	b	K	n-d2	D4×f	Weight (kg)
16	150	150	350	124	256	285	22	240	8-Φ22	Φ212×3	70
	200	200	400	200	315	340	24	295	12-Φ22	Φ268×3	125
	250	250	450	225	316	405	26	355	12-Φ26	Φ320×2	256
	300	300	500	240	383	460	28	410	12-Φ26	Φ378×2	450
	350	350	550	270	435	520	30	470	16-Φ26	Φ438×4	610
40	150	150	350	124	256	300	28	250	8-Φ26	Φ218×3	75
	200	200	400	200	315	375	34	320	12-Φ30	Φ285×3	130
	250	250	450	225	316	450	38	385	12-Φ33	Φ345×2	260
	300	300	500	240	383	515	42	450	16-Φ33	Φ410×2	455
	350	350	550	270	435	580	46	510	16-Φ36	Φ465×4	610

Flanges of PN25 shall comply with EN 1092-1 for dimensional requirements; all other dimensions shall be identical to those of PN40.

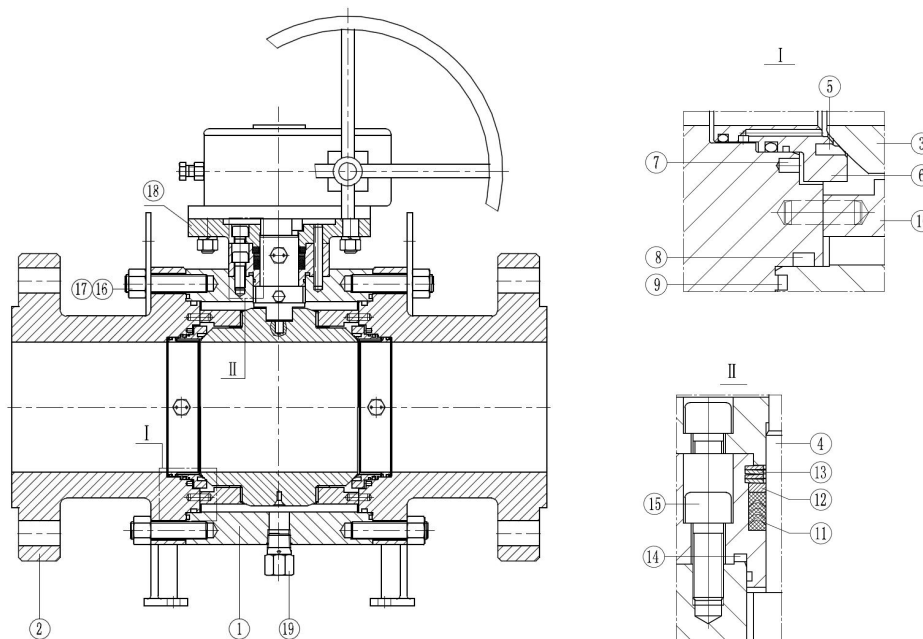
Dimension List



DN	ΦF	ΦG	ΦH	L	O	N	Q	ΦR	S	M	P	T
150	140	M16	100	61	39.8	21.2	20	36	3	-	-	-
200	125	M12	85	61	39.8	21.2	27	50	3	-	-	-
250	165	M20	130	172	90	82	12	50	3	58	70	3
300	254	M16	200	172	90	82	14	55	5	69	70	3

Three-piece forged ball valve

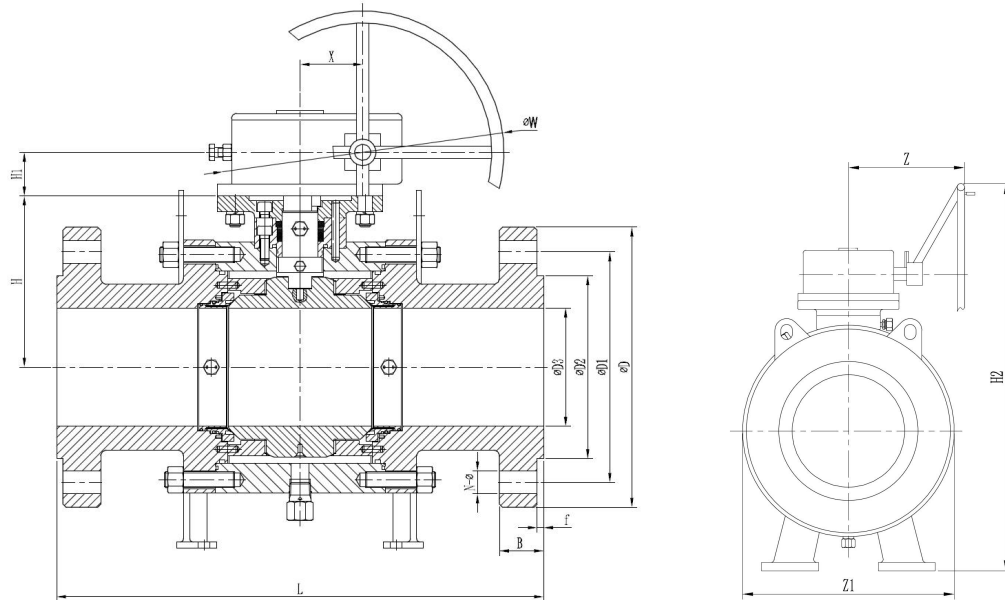
FIG.	Pressure	Material	RANGE
143.761	PN16	1.0460	DN400-DN800
145.761	PN40	1.0460	DN400-DN800
243.761	PN16	1.4404	DN400-DN800
245.761	PN40	1.4404	DN400-DN800



Material list

NO.	Part	Material	
		FIG. 143.761/ 145.761	FIG. 243.761 /245.761
1	Body	1.0460	1.4404
2	Cover	1.0460	1.4404
3	Ball	1.0460	1.4404
4	Stem	1.4462	1.4462
5	Seat Ring	TFM1600	TFM1600
6	Seat Retainer	1.0460	1.4404
7	Seat spring	17-7PH	17-7PH
8	Sealing	PTFE	PTFE
9	Gasket	1.4401+F.G	1.4401+F.G
10	Trunnion support	1.0619	1.4404
11	Packing	PTFE	PTFE
12	Press ring	1.4401	1.4401
13	Belleville spring	1.4401	1.4401
14	Gasket	1.4401+F.G	1.4401+F.G
15	Screw	GC	A4-70
16	Nut	YK	A4-70
17	Stud	GC	A4-70
18	Top flange	1.0460	1.4401
19	Drain valve	1.0460+Zn	1.4404

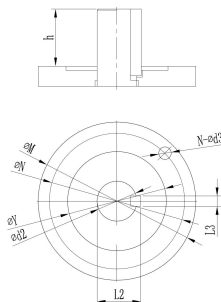
FIG.	Pressure	Material	RANGE
143.761	PN16	1.0460	DN400-DN800
145.761	PN40	1.0460	DN400-DN800
243.761	PN16	1.4404	DN400-DN800
245.761	PN40	1.4404	DN400-DN800



Dimension List

PN	DN	L	D	D1	D2	D3	B	f	N-Φ	H	H1	X	W	H2	Z	Z1	Weight (kg)
16	400	762	580	525	490	385	32	4	16-Φ30	401	128.5	126	600	1245	457	670	1048
	450	864	640	585	550	436	40	4	20-Φ30	442	128.5	126	600	1320	457	746	1383
	500	914	715	650	610	487	44	4	20-Φ33	480	159	138	600	1436	479	822	1762
	600	1067	840	770	725	589	54	5	20-Φ36	564	169	154.5	600	1518	507	983	2820
	700	1245	910	840	795	686	76	5	24-Φ36	645	174	185	600	1620	567	1060	4796
	800	1372	1025	950	900	789	79	5	24-Φ39	715	196	185	600	1716	596	1185	6850
40	400	838	660	585	535	385	50	4	16-Φ39	401	128.5	126	600	1245	457	670	1078
	450	914	685	610	560	436	57	4	20-Φ39	442	128.5	126	600	1320	457	746	1413
	500	991	755	670	615	487	57	4	20-Φ42	480	159	138	600	1436	479	822	1812
	600	1143	890	795	735	589	72	5	20-Φ48	564	169	154.5	600	1518	507	983	2870
	700	1346	995	900	840	686	92	5	24-Φ48	645	174	185	600	1620	567	1060	4846
	800	1524	1140	1030	960	789	95	5	24-Φ56	715	196	185	600	1716	596	1185	6920

Flanges of PN25 shall comply with EN 1092-1 for dimensional requirements; all other dimensions shall be identical to those of PN40.



Dimension List

DN	ΦM	ΦN	ΦY	L2	L3	Φd2	N-Φd3	h
400	300	254	200	70.5	18	63	8-Φ18	95
450	300	254	200	81.5	20	73	8-Φ18	110
500	300	254	200	81.5	20	73	8-Φ18	110
600	300	254	200	95.5	25	85	8-Φ18	120
700	300	254	200	108.5	28	96	8-Φ18	135
800	300	254	200	108.5	28	96	8-Φ18	135

Connecting format

Flanged		
Pressure rating	Flange dimension	Sealing form
PN16 PN40	DIN EN 1092-1	DIN EN 1092-1 Form B 1 Ra max : 12.5 μm Rz max : 50 μm

Installation instructions

Installation site is not prescribed.
Regardless of the flow direction.

Details please consult.

Technical parameters

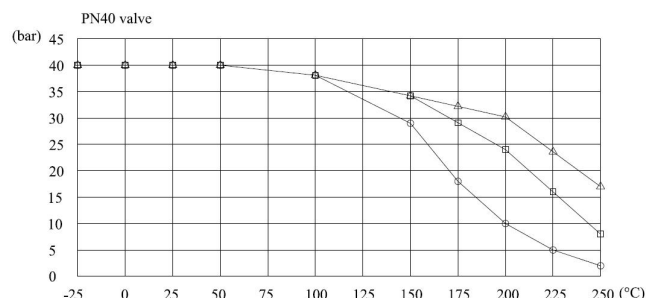
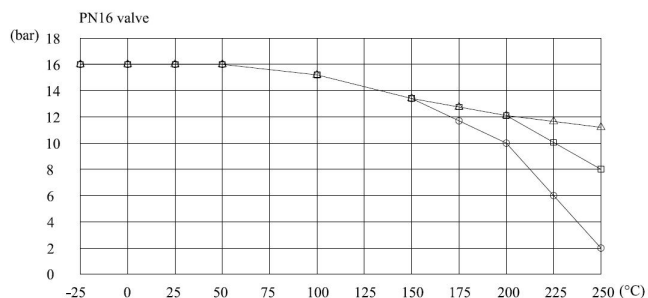
Flow characteristics - Kv (m³/h)

DN	350	400	450	500	600	700	800
Kv	8500	11200	14100	17300	23000	28500	33500

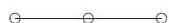
Maximum

DN	350	400	450	500	600	700	800
M _{d max}	15500	32500	32500	60800	123000	123000	212000

Allowable pressure in dependence of the temperature



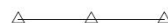
Seat material:



TFM



PFFE+25%Glass



PFFE+15%Graphite