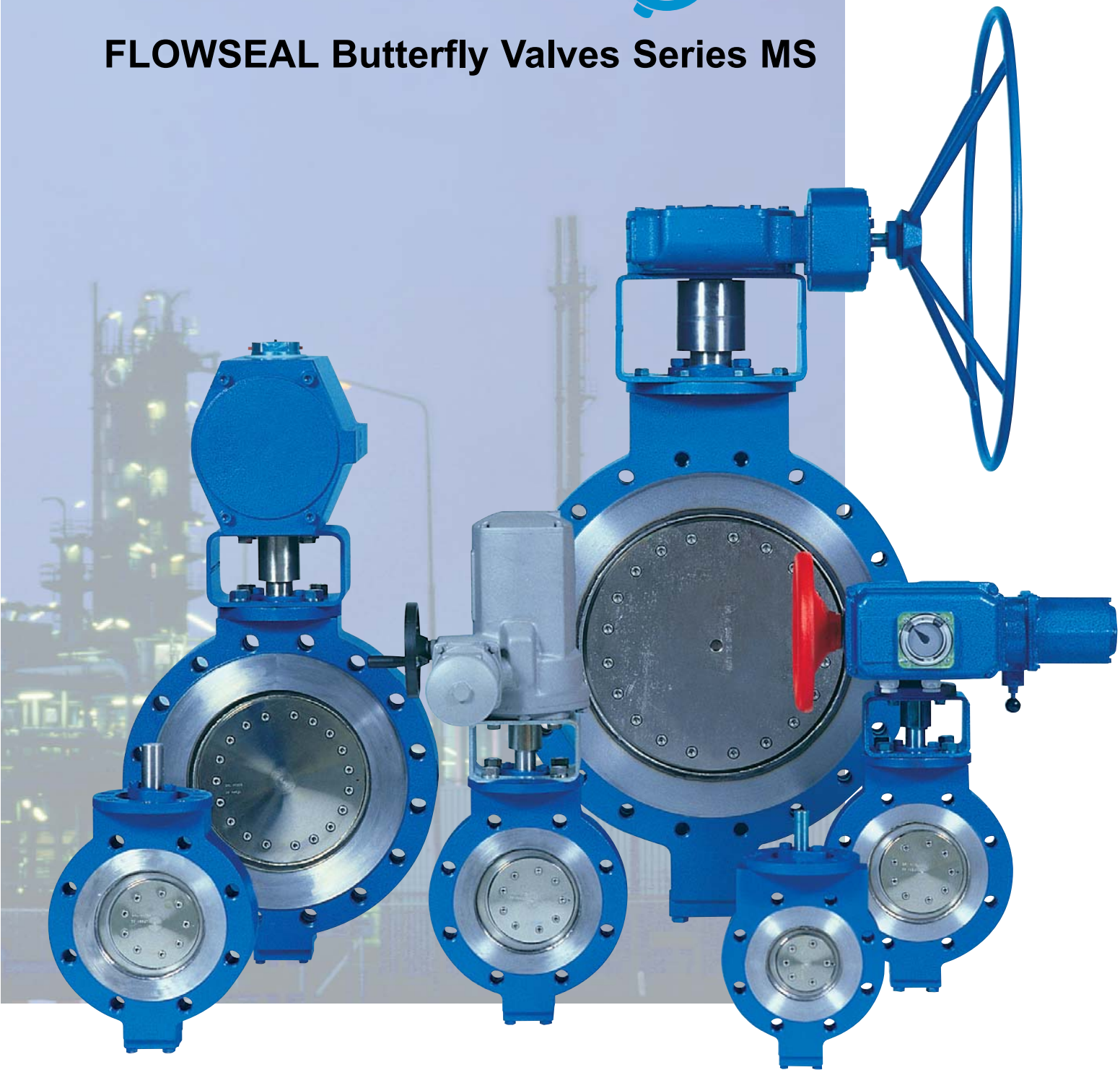
FS-MS-BR-001-01-GB-09.06

FLOWSEAL®

FLOWSEAL Butterfly Valves Series MS



CRANE®

FLOWSEAL Butterfly Valves Series MS

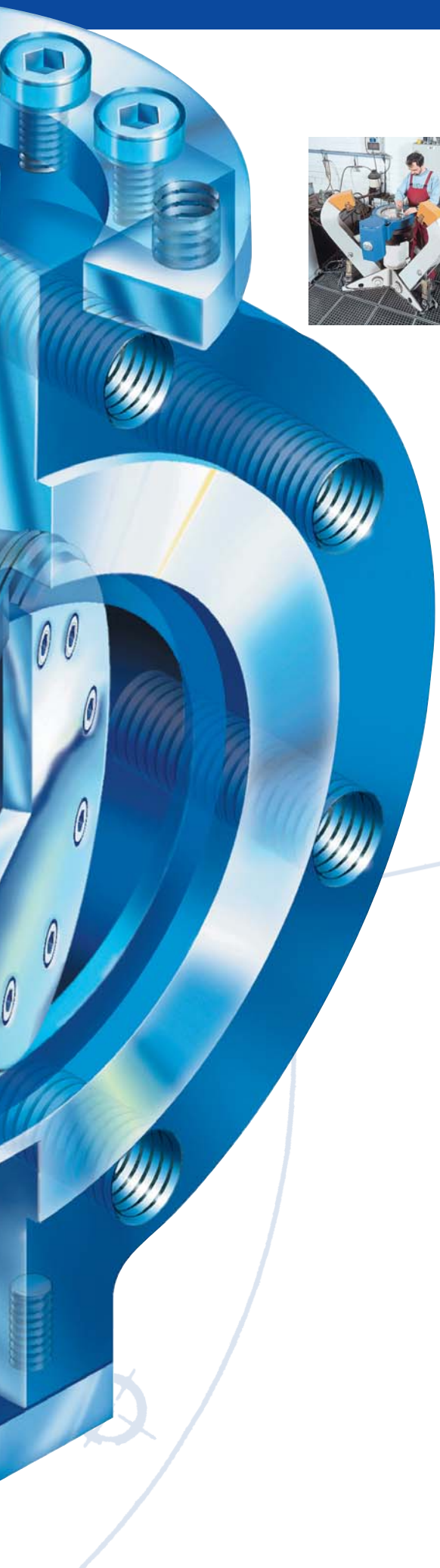
High-quality process valves for demanding applications

Areas of application
Decades of continuing development of the FLOWSEAL Butterfly Valves Series MS have enhanced their reputation for reliable shut-off and control throughout the process industries.

Product features:
- Triple offset design
- Metal-to-metal sealing
- Leak tightness in both directions, leakage rate 1 acc. to DIN 3230
- Anti-Blow-out shaft
- Laminated seal, Stainless Steel / Graphite
- Body seat options in Stainless Steel or Stellite
- "Floating" disc
- Frictionless closure with no jamming
- Self-compensating in case of temperature changes
- Cycle testing of material combinations ensures no seizing of spindles in dry media

Main areas of application:
Mineral oils
Chemical industry
Gas industry
Power plants
District heating plants
Steel industry
Sugar industry
Paper and pulp industry
Refrigeration technology

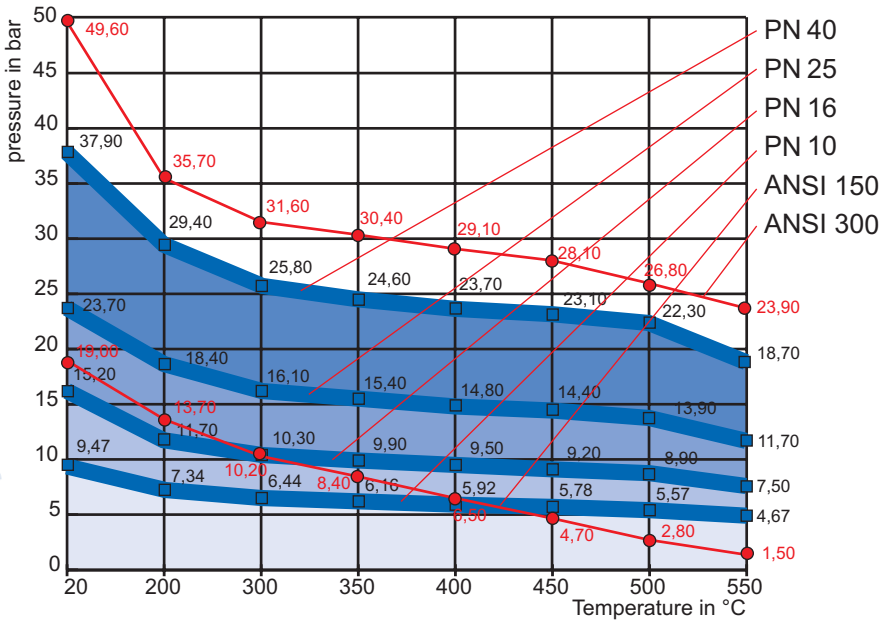
Applications:
Steam / condensate
Heating water
Combustible media
Oxygen
Processing media
Bitumen
Hot gas and exhaust gas
Low temperatures (cryogenics)
Toxic media

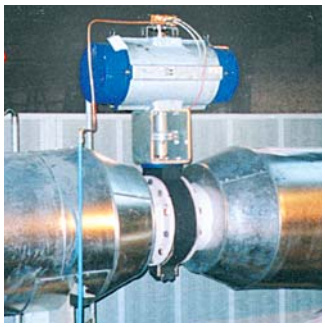


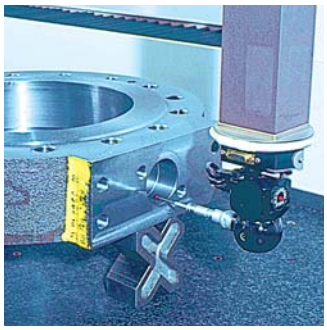
For optimum performance over a wide range of pressures and temperatures

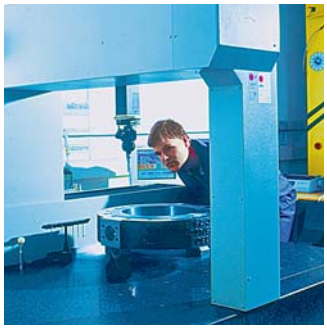
Technical data:

The manufacturing range covers Butterfly Valves from DN 80 – 600, PN 10 - 100, ANSI 150/300/600 for temperatures ranging from -196 °C to +550 °C.

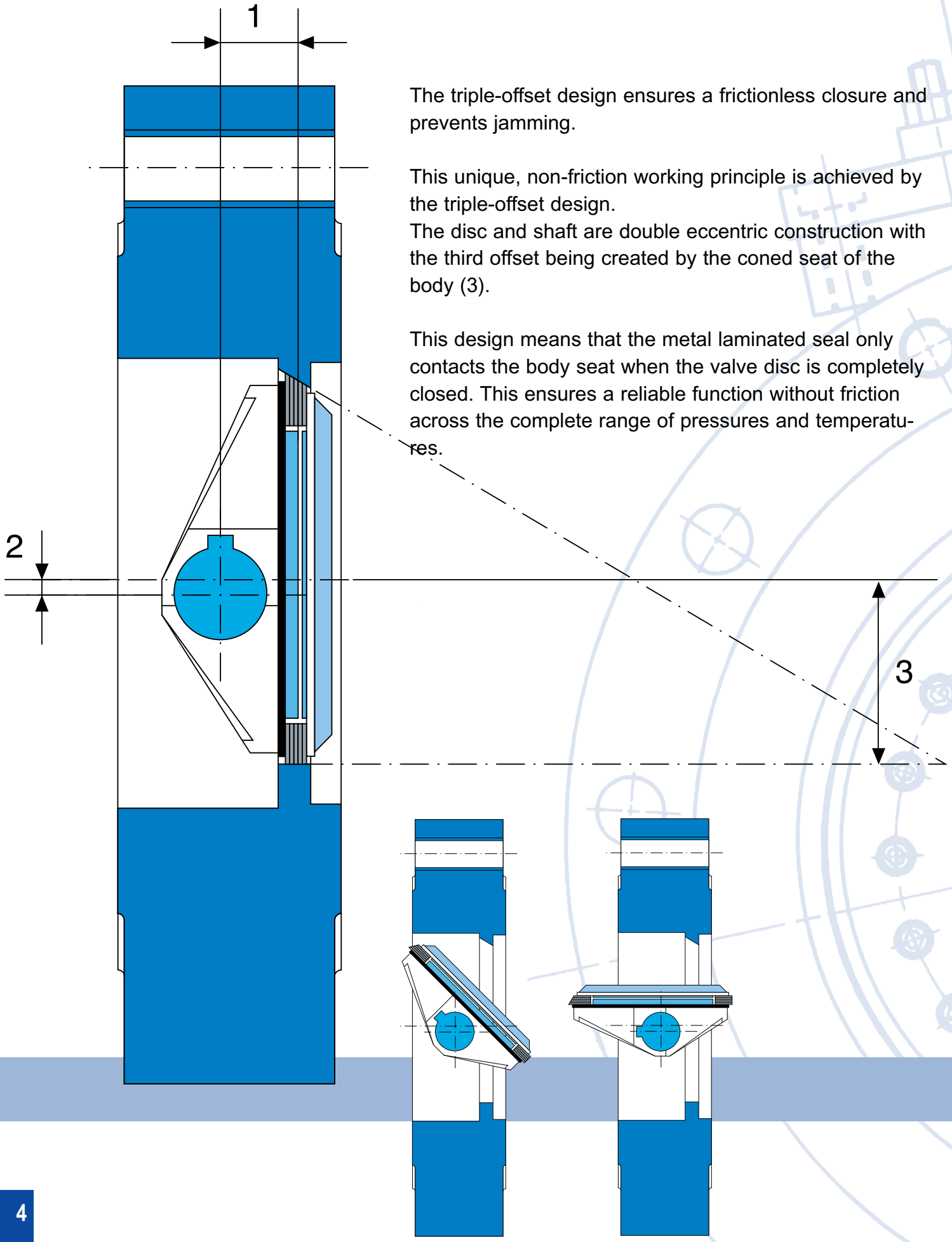








Design features



The triple-offset design ensures a frictionless closure and prevents jamming.

This unique, non-friction working principle is achieved by the triple-offset design.
The disc and shaft are double eccentric construction with the third offset being created by the coned seat of the body (3).

This design means that the metal laminated seal only contacts the body seat when the valve disc is completely closed. This ensures a reliable function without friction across the complete range of pressures and temperatures.

Self-compensation in case of temperature changes

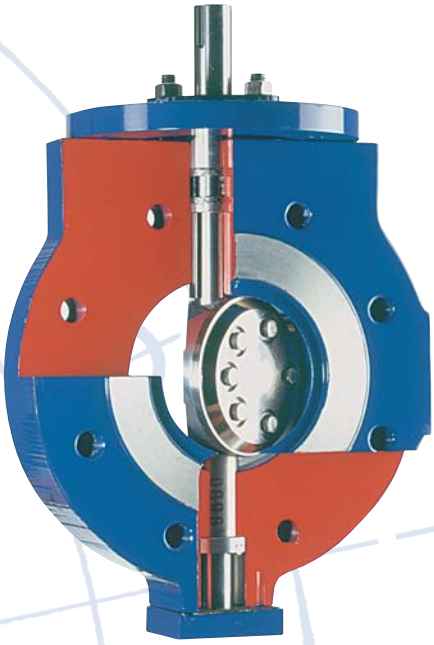
The special design for arrangement of bearings of the disc ensures that the disc is always correctly positioned, without any fastening devices. The unique design of the "floating" disc ensures a leaktight seal, even under extreme temperature fluctuations.

The "floating" disc allows the multi-disc seal to adapt itself to the housing seat, even if the spindle expands or contracts under changing temperatures. The lamination therefore always finds its ideal position and ensures reliable sealing without friction and wear.

Material matching for dry media

Firesafe

Specially designed and extensively tested materials for the shaft and bearings allow high cycling duties at temperatures greater than 300°C to be accomodated without seizure.



Due to their special design and excellent operating characteristics FLOWSEAL Butterfly Valves Series MS are an economical replacement for globe valves, gate valves and ball valves.

FLOWSEAL Butterfly Valve Series MS

Construction length 76 mm
Weight 55 kg

Gate Valve

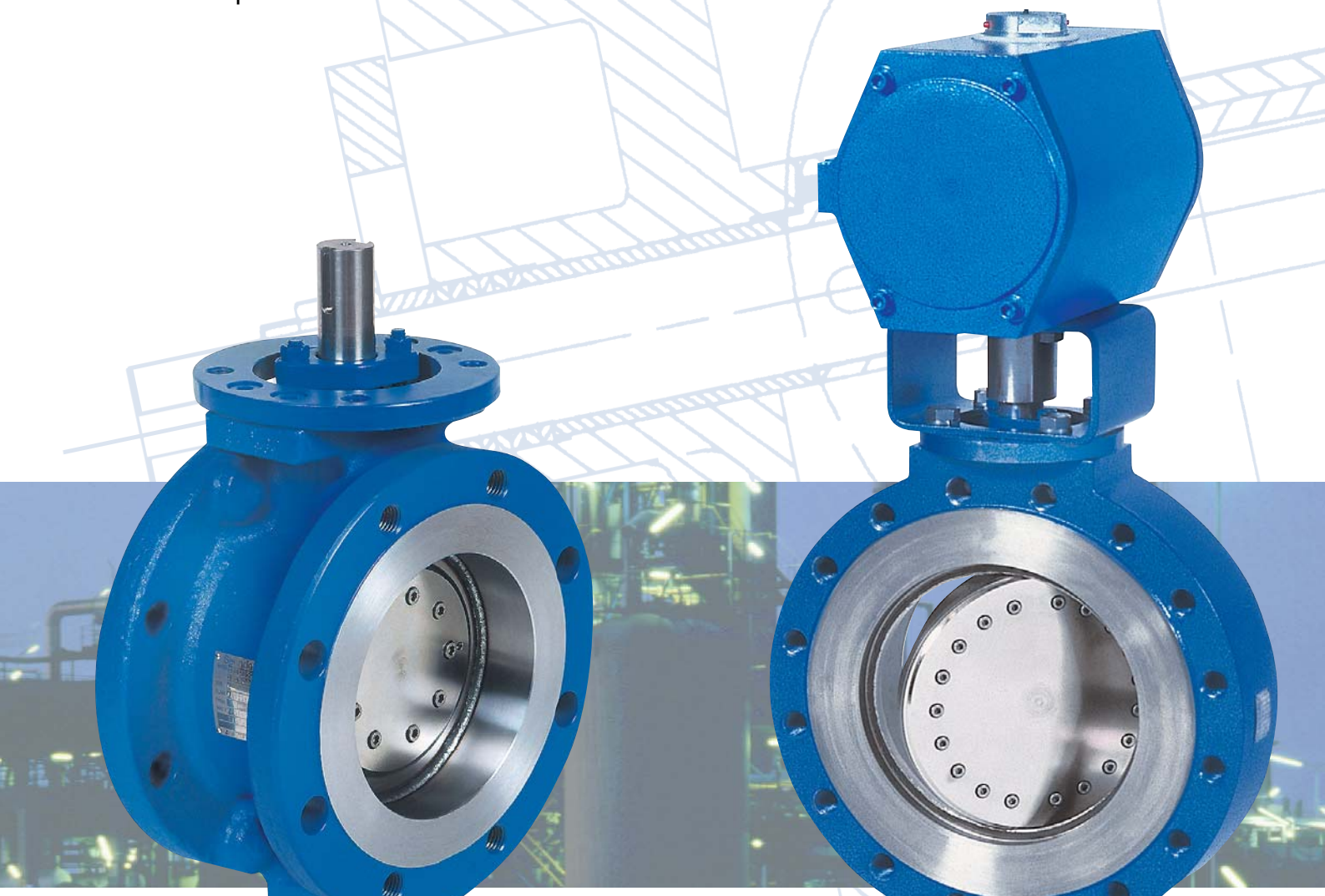
Construction length 350 mm
Weight 95 kg

Globe Valve

Construction length 480 mm
Weight 90 kg

Versions available

In contrast to other valve designs FLOWSEAL Butterfly Valves Series MS have extremely low torques. This allows the selection of smaller actuators resulting in lower initial purchase and whole life costs.



Model GG / Double flange Gate Valve replacement DN 100 - 300

GG: ANSI B16.10
ANSI 100, 300

other pressure ranges on request

Model GA / GE Lug type DN 80 - 600

GE: EN 558-1, Series 16
PN 10 - 100

GA: API 609-Tab 2
ANSI 150, 300, 600

other pressure ranges on request

Standards considered

Design:	ASME SEC VIII, ANSI B31.1, ANSI B31.3, ANSI B16.34 API 609 TRD 110, DIN 3840
Face to Face :	ISO 5752 API 609 EN 558-1 MSS-SP-69
Flange connection:	ANSI B 16.5, CL 150, 300, 600 DIN 2501, ISO 7005, PN 10, 16, 25, 40, 63, 100
Testing:	BS 6755 leak rate A API 598 ANSI / FCI 70-2 class VI DIN 3230 leak rate 1
Fire-Safe Testing:	API 607 4th edition (no leak to both flow directions)
TA – Air certificate:	Testing of the equivalence of the spindle seal by means of a packing gland in comparison with a seal consisting of bellows and an additional safety packing gland.
Marking:	EN 19 MSS SP-25 CE-Tag acc. PED 97/23 EG
Quality assurance:	DIN / ISO 9001

Model GI / GF
Double flange
DN 80 - 600

GI: ISO 5752-Tab 4 short
ANSI 150, 300

GF: EN 558-1, Series 13, 14
PN 10, 16, 25, 40

other pressure ranges on request

International Organisation:

Crane Process Flow Technologies SPRL / BV
Avenue Franklin No. 1
B-1300 Wavre
BELGIUM
Tel: +32 10 8184 44
Fax: +32 10 8184 58
www.craneflow.com

Crane Process Flow Technologies India Ltd.
Amar Avinash Corporate Plaza,
7th Floor, Plot No. D2
C.T.S. No. 11/1 to 11/4
Near Inox Multiplex, Bund Garden Road,
Pune 411 001
INDIA
Tel: +91 20 26050922 - 26
Fax: +91 20 26050927
www.craneflow.com

Crane Process Flow Technologies
6 Alexander Road
Belfast
BT6 9HJ
NORTHERN IRELAND
Tel: +44 28 9070 4222
Fax: +44 28 9040 1582
www.craneflow.com

Crane Process Flow Technologies GmbH
IZ NÖ Süd, Str. 2/M6
2355 Wr. Neudorf
AUSTRIA
Tel: +43 2236 682-0
Fax: +43 2236 64353
www.craneflow.com

Crane Process Flow Technologies s.r.l.
Via Pusiano 2
20052 - Monza MI
ITALY
Tel: +39 039 2704 280
Fax: +39 039 2704 450
www.craneflow.com

Crane Process Flow Technologies Ltd.
Grange Road
Cwmbran
Gwent NP44 3XX
UNITED KINGDOM
Tel: +44 163 348 6666
Fax: +44 163 348 6777
www.craneflow.com

Crane Process Flow Technologies GmbH
Heerdter Lohweg 63-71
D-40549 Düsseldorf
GERMANY
Tel: +49 211 59 56 0
Fax: +49 211 59 56 111
www.craneflow.com

Crane Process Flow Technologies
Quatro House
Frimley Road, Camberley
Surrey GU16 7ER
UNITED KINGDOM
Tel: +44 1276 804421
Fax: +44 1276 804422
www.craneflow.com
for sales and technical enquiries originating in the UK, please contact Crane Process Flow Technologies Ltd in Cwmbran






Due to constant development and innovation, we reserve the right to make changes to technical specifications as and when required.

CRANE®

FLOWSEAL-Butterfly Valves Series MS

Model GE/GA/GI/GF/GG

Model-Numbers

N	L	H	A	1	1	1	0	0	F
1	2	3	4	5	6	7	8	9	10

FS/DB-0002-GB/07.04/GP

1. Series:

N	=	Series MS current series 2

2. Nominal Diameter:

L	=	080 (3”)
M	=	100 (4“)
N	=	125 (5")
P	=	150 (6")
R	=	200 (8")
S	=	250 (10")
T	=	300 (12")
U	=	350 (14")
V	=	400 (16")
W	=	450 (18")
X	=	500 (20")
Y	=	600 (24")

3. Nominal Pressure:

B	=	PN 10 ≥ DN 200
C	=	PN 16 ≥ DN 200
D	=	PN 10/16 only DN 100-150
E	=	PN 25 ≥ DN 200
F	=	PN 40 ≥ DN 200
H	=	PN 10-40 only DN 080
K	=	PN 25/40 only DN 100-150
L	=	PN 63
M	=	PN 100
N	=	ANSI 150
P	=	ANSI 300
R	=	ANSI 600

4. Body Design:

A	=	GE - DIN (K3)	Lug type, **Steel**
B	=	GA - ANSI	Lug type, **Steel**
C	=	GF-14 DIN (F4)	Flange long, **Steel**
D	=	GG - ANSI	Flange long, **Steel**
E	=	GF - 13 DIN (F16)	Flange short, **Steel**
F	=	GI - ANSI	Flange short, **Steel**
G	=	GE - DIN (K3)	Lug type, **Stainless Steel**
H	=	GA - ANSI	Lug type, **Stainless Steel**
M	=	GF - 13 DIN (F16)	Flange short, **Stainless Steel**
N	=	GI - ANSI	Flange short, **Stainless Steel**

5. Flange Face:

1	=	Raised face DIN 2526 form C (=standard)
3	=	Groove DIN 2512
4	=	Recess DIN 2513

6. Gland Bushing:

1	=	Graphite (= standard)

7. Standard Material Combination *[3]):

Body	Body seat	Disc	Shaft	Seal
1 = Steel	Stainless steel	Steel	1.4057	Stainless steel/graphite
2 = Steel	Stainless steel	Steel nickel-plated*)	1.4057	Stainless steel/graphite
3 = Stainless steel	Stainless steel	Stainless steel	1.4057	Stainless steel/graphite
4 = Stainless steel	Stainless steel	Stainless steel	1.4462	Stainless steel/graphite
5 = Stainless steel	Stainless steel	Stainless steel	1.4980	Stainless steel/graphite
6 = Steel	Stellite	Steel nickel-plated*)	1.4057	Stainless steel/graphite
9 = Steel	Stainless steel	Steel	1.4462	Stainless steel/graphite
A = Steel	Stainless steel	Steel nickel-plated*)	1.4462	Stainless steel/graphite

*) Nickel-plated steel designs are only available as ANSI versions.
*[3]) For exact material specification please refer to data sheet "Materials/Temperature Range".
Special versions available on request.

8. + 9. Design:

0 0 =	Standard
U D =	Pressure and leak test BA/BN acc. to DIN 3230-T3 as well as material certification for body acc. to EN 10204- 3.1B
U G =	Pressure and leak test BA/BN acc. to DIN 3230-T3 as well as material certification for body acc. to EN 10204- 3.1B, as well as separate KKS head flange plate
V U =	Pressure and leak test BA/BN/BO acc. to DIN 3230-T3 as well as material certification for body acc. to EN 10204- 3.1B

10. Actuation:

F =	bare shaft
GX =	Gear + manufacturer symbol (X)
M =	Valve + mounting kit *[2]) for installation of pneumatic or electric actuators

*[2]) this requires specification of actuator flange and shaft end, other operators available on request

Each FLOWSEAL-Butterfly Valves Series MS has a name plate with the model number stamped on.
This number is complete to such an extent that it specifies each detail of the valve. It can be taken from above model number key.

Ordering example:
FLOWSEAL-Butterfly Valves Series MS, DN 80, PN10, body GE–DIN lug type, steel disc, shaft made of 1.4057, graphite packing, with bare shaft end: Art-No.: NLHA11100F.

CRANE®

Model-Numbers for Gears with Hand Wheel

Size			Gear Model*
80	3“	PN 10	GMSB01F10-H10A
		PN 16	GMSB01F10-H10A
		PN 25	GMSB01F10-H10A
		PN 40	GMSB01F10-H10A
		PN 63	GMSB01H10-H10A
		PN 100	GMSB01H10-H10A
		ANSI 150	GMSB01G10-H10A
		ANSI 300	GMSB01G10-H10A
		ANSI 600	GMSB01J10-H10A
100	4“	PN 10	GMSB02F10-H10A
		PN 16	GMSB02F10-H10A
		PN 25	GMSB02F10-H10A
		PN 40	GMSB02F10-H10A
		PN 63	GMSB02H14-H10A
		PN 100	GMSB02H14-H10A
		ANSI 150	GMSB02G10-H10A
		ANSI 300	GMSB02G10-H10A
		ANSI 600	GMSB02J14-H10A
125	5“	PN 10	GMSB03F10-H10A
		PN 16	GMSB03F10-H10A
		PN 25	GMSB03F10-H10A
		PN 40	GMSB03F10-H10A
		ANSI 150	GMSB03G10-H10A
		ANSI 300	GMSB03G10-H10A
150	6“	PN 10	GMSB04F10-H10A
		PN 16	GMSB04F10-H10A
		PN 25	GMSB05F14-H10A
		PN 40	GMSB05F14-H10A
		PN 63	GMSB03H14-H10A
		PN 100	GMSB04H16-H10A
		ANSI 150	GMSB04G14-H10A
		ANSI 300	GMSB05G14-H10A
		ANSI 600	GMSB04J16-H10A
200	8“	PN 10	GMSB06F10-H10A
		PN 16	GMSB06F10-H10A
		PN 25	GMSB07F14-H10A
		PN 40	GMSB07F14-H10A
		PN 63	GMSB05H16-H10A
		PN 100	GMSB05H16-H10A
		ANSI 150	GMSB07G14-H10A
		ANSI 300	GMSB07G14-H10A
		ANSI 600	GMSB05J16-H10A
250	10“	PN 10	GMSB08F14-H10A
		PN 16	GMSB08F14-H10A
		PN 25	GMSB08F14-H10A
		PN 40	GMSB08F14-H10A
		PN 63	GMSB06H16-H10A
		PN 100	GMSB07H16-H10A
		ANSI 150	GMSB08G14-H10A
		ANSI 300	GMSB29G16-H10A
		ANSI 600	GMSB07J16-H10A

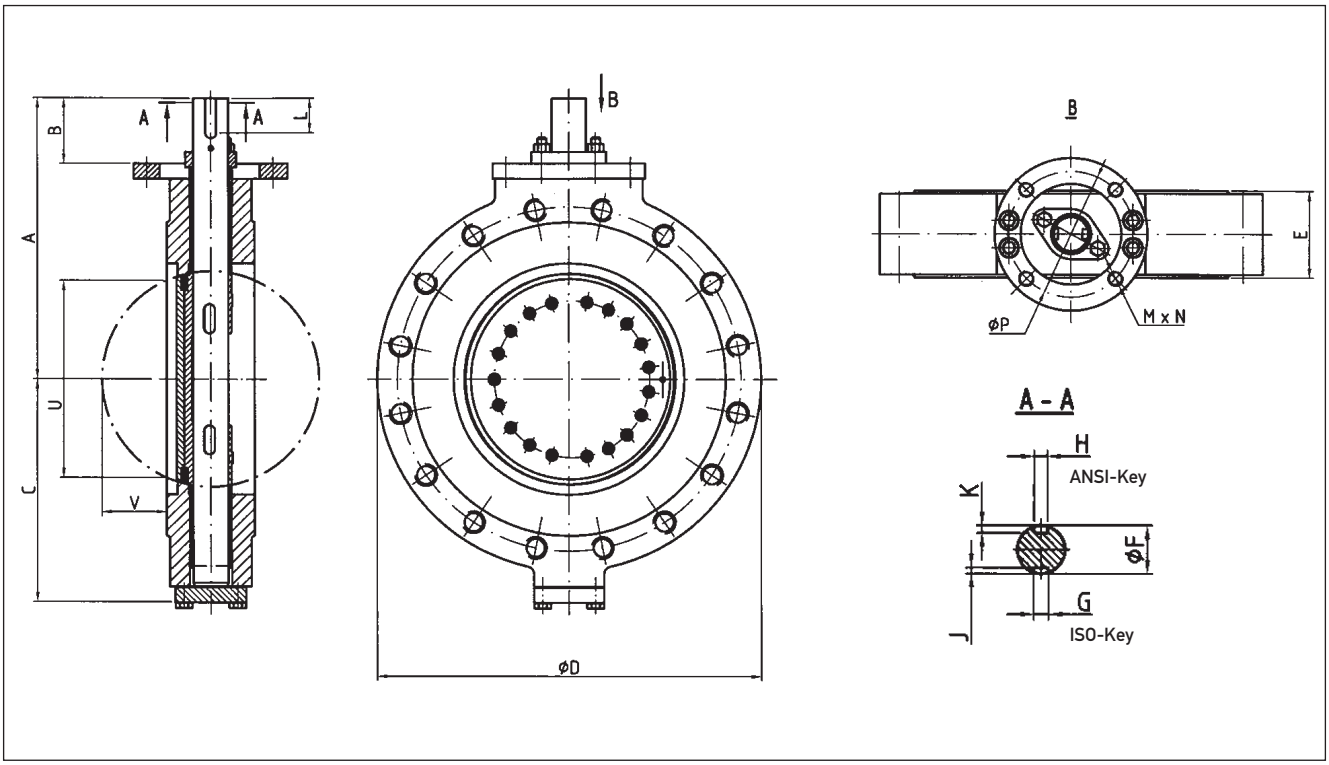
Size			Gear Model*
300	12“	PN 10	GMSB09F14-H10A
		PN 16	GMSB09F14-H10A
		PN 25	GMSB10F16-H10A
		PN 40	GMSB11F16-H10A
		PN 63	GMSB08H16-H10A
		PN 100	GMSB09H25-H10A
		ANSI 150	GMSB10G16-H10A
		ANSI 300	GMSB11G16-H10A
		ANSI 600	GMSB09J25-H10A
350	14“	PN 10	GMSB12F14-H10A
		PN 16	GMSB12F14-H10A
		PN 25	GMSB13F16-H10A
		PN 40	GMSB14F16-H10A
		PN 63	GMSB10H25-H10A
		PN 100	GMSB10H25-H10A
		ANSI 150	GMSB13G16-H10A
		ANSI 300	GMSB30G16-H10A
		ANSI 600	GMSB10J25-H10A
400	16“	PN 10	GMSB15F14-H10A
		PN 16	GMSB16F16-H10A
		PN 25	GMSB16F16-H10A
		PN 40	GMSB17F16-H10A
		PN 63	GMSB11H25-H10A
		PN 100	GMSB11H25-H10A
		ANSI 150	GMSB16G16-H10A
		ANSI 300	GMSB31G25-H10A
		ANSI 600	GMSB11J25-H10A
450	18“	PN 10	GMSB18F16-H10A
		PN 16	GMSB19F16-H10A
		PN 25	GMSB20F16-H10A
		PN 40	GMSB21F25-H10A
		ANSI 150	GMSB20G16-H10A
		ANSI 300	GMSB21G25-H10A
500	20“	PN 10	GMSB22F16-H10A
		PN 16	GMSB23F16-H10A
		PN 25	GMSB24F16-H10A
		PN 40	GMSB25F25-H10A
		ANSI 150	GMSB24G16-H10A
		ANSI 300	GMSB33G25-H10A
600	24“	PN 10	GMSB26F16-H10A
		PN 16	GMSB26F16-H10A
		PN 25	GMSB27F25-H10A
		ANSI 150	GMSB27G25-H10A
		ANSI 300	GMSB28G30-H10A

*Mounting kit included

CRANE®

Model GE - Lug Type Body EN 558-1, R16

Dimensions / Weights DN 80 - 600



FS/DB-0004-GB/02.03/GP

Dimensions in mm, bare shaft

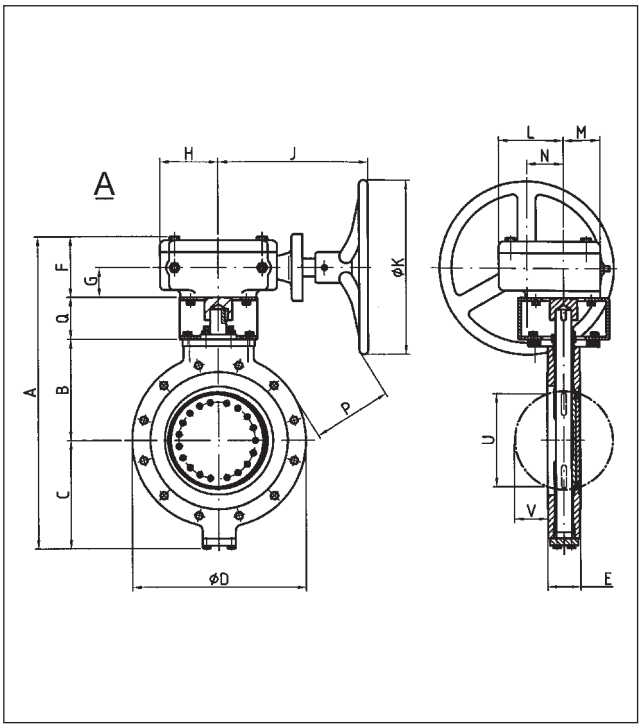
DN	80 3“	100 4“	125 5“	150 6“	200 8“	250 10“	300 12“	350 14“	400 16“	500 20“	600 24“
A	192	207	227	252	303	339	367	407	476	575	657
B	62	62	72	72	80	80	85	90	113	130	140
C	130	145	140	180	208	240	292	317	383	465	573
D (PN10)	200	225	260	292	367	400	452	516	575	670	780
D (PN16)	200	225	260	292	367	400	452	516	575	715	842
D (PN25)	200	225	260	292	367	440	502	567	620	740	842
D (PN40)	200	225	260	292	367	440	502	567	660	740	-
E	64	64	70	76	89	114	114	127	140	152	178
øF	20	22	25	32	38	40	45	55	65	75	90
G	6	6	8	10	10	12	14	16	18	20	25
H	4,8	4,8	-	8	9,5	9,5	12,7	12,7	16	19,1	22,3
J	3,5	3,5	4	5	5	5	5,5	6	7	7,5	9
K	2,7	2,7	-	4,5	5,4	5,4	7,3	7,1	9	10,8	12,6
L	22	22	32	32	40	40	45	50	63	80	90
M	4	4	4	4	4	4	4	4	8	8	8
N	M12	M12	M16	M16	M20	M20	M20	M20	M16	M16	M16
øP	125 F12		140 F14		165 F16				254 F25		
U	60	89	110	136	181	222	274	312	352	450	547
V	12	24	31	42	57	68	92	106	119	161	197

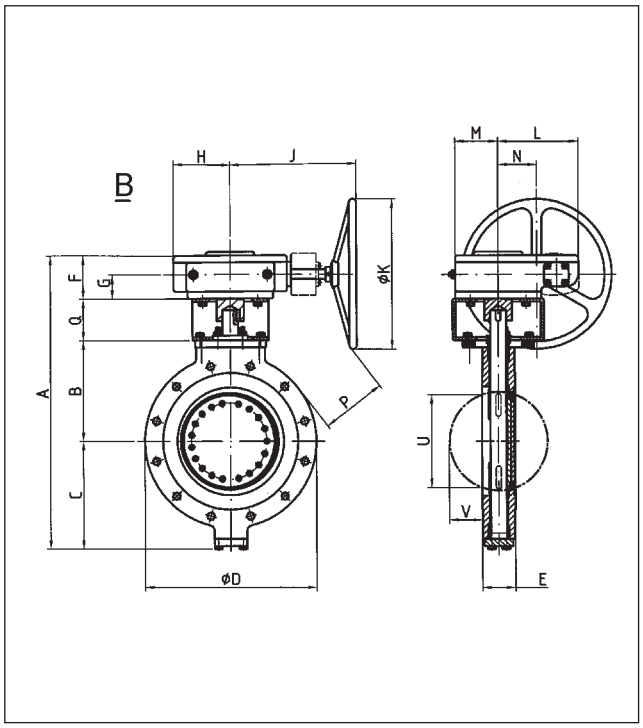
refer to next page

CRANE

Weights in kg

DN	80 3“	100 4“	125 5“	150 6“	200 8“	250 10“	300 12“	350 14“	400 16“	500 20“	600 24“
bare shaft											
PN10/16/25/40	20	24	25	37	64	106	135	168	239	359	554
with gear operator											
PN10	34	38	39	51	83	132	161	195	280	419	644
PN16	34	38	39	51	83	132	161	195	296	431	644
PN25	34	38	39	51	90	132	176	211	296	447	644
PN40	34	38	39	51	90	132	189	224	325	417	-





Dimensions in mm with Gear Operator

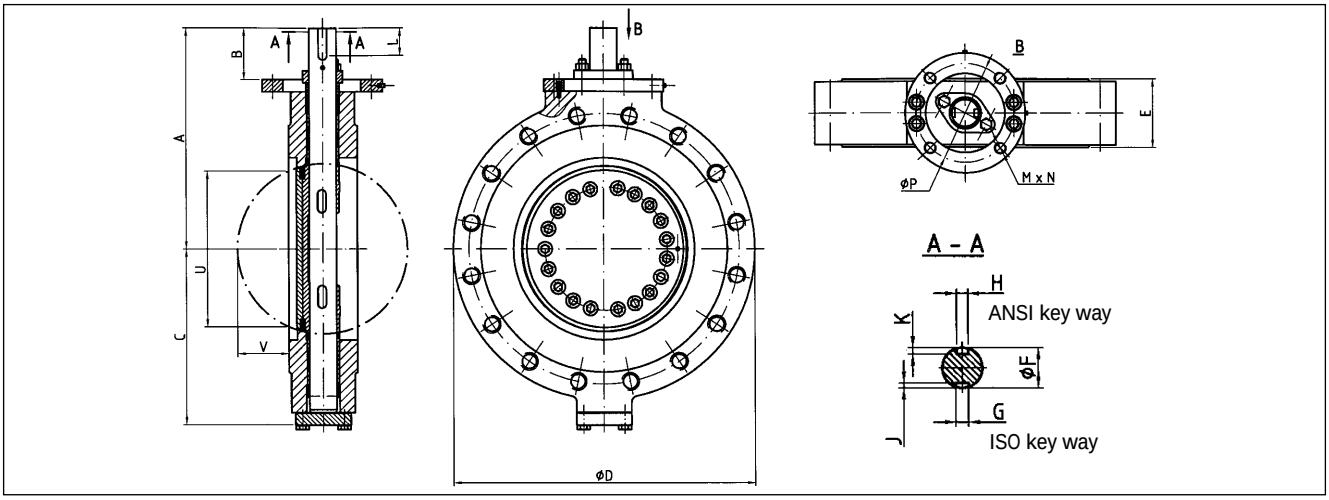
DN	80	100	125	150		200		250	300			350			400			500				600	
Δp max	3“	4“	5“	6“		8“		10“	12“			14“			16“			20“				24“	
(bar)	40	40	40	16	40	16	40	40	16	25	40	16	25	40	16	25	40A	10	16	25	40	16	25
A	416	446	461	526	530	627	631	699	774	800	821	834	860	881	1006	1032	1078	1196	1217	1242	1240	1366	1384
B	130	145	155	180		223		259	282			317			363			445				517	
F	76	76	76	76	80	76	80	80	80	106	127	80	106	127	80	106	152	106	127	152	150	152	150
G	42	42	42	42	44.5	42	44.5	44.5	44.5	50	50	44.5	50	50	44.5	50	66	50	50	66	64	66	64
H	64	64	64	64	100	64	100	100	100	126	158	100	126	158	100	126	155	126	158	155	153	155	153
J	240	240	240	240	282	240	282	282	282	362	387	282	362	387	282	362	493	362	387	493	509	493	509
K	250	250	250	250	400	250	400	400	400	600	600	400	600	600	400	600	600	600	600	600	600	600	600
L	98	98	98	98	134	98	134	134	134	178	209	134	178	209	134	178	232	178	209	232	239	232	239
M	45	45	45	45	64	45	64	64	64	114	117	64	114	117	64	114	158	114	117	158	171	158	171
N	65	65	65	65	96.4	65	96.4	96.4	96.4	123	154	96.4	123	154	96.4	123	60	123	154	60	68	60	68
P (PN10)	154	149	143	142	-	157	-	144	133	-	-	126	-	-	180	-	-	172	-	-	-	272	-
P (PN16)	154	149	143	142	-	157	-	144	133	-	-	126	-	-	180	-	-	150	167	-	-	241	-
P (PN25)	154	149	143	142	140	157	138	124	108	123	146	101	106	128	157	140	255	137	154	243	-	241	25
P (PN40)	154	149	143	142	140	157	138	124	108	123	146	101	106	128	137	120	235	137	154	243	255	-	-
Q	80	80	90	90		120		120	120			120			180			180				180	
Drawing	A	A	A	A	A	A	A	A	A	B	B	A	B	B	A	B	B	B	B	B	B	B	B

Remark:
- Dimensions C, D, E, U, V see Frontpage

CRANE

Model GA - Lug Body API 609

Dimensions / Weights DN 80 - 600



FS/DB-0005-GB/02.02/GP

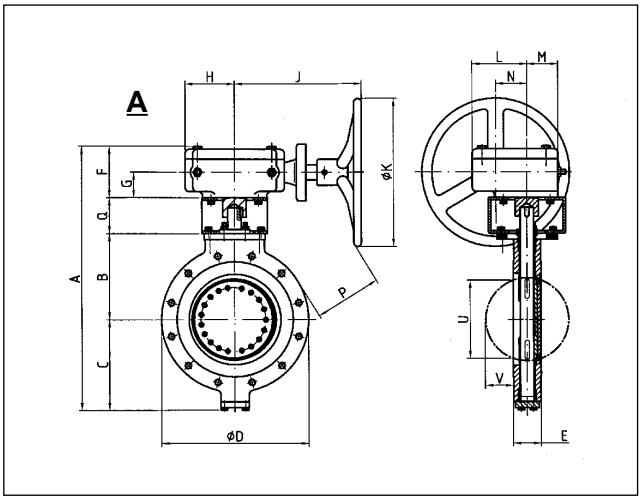
Dimensions in mm, bare shaft end

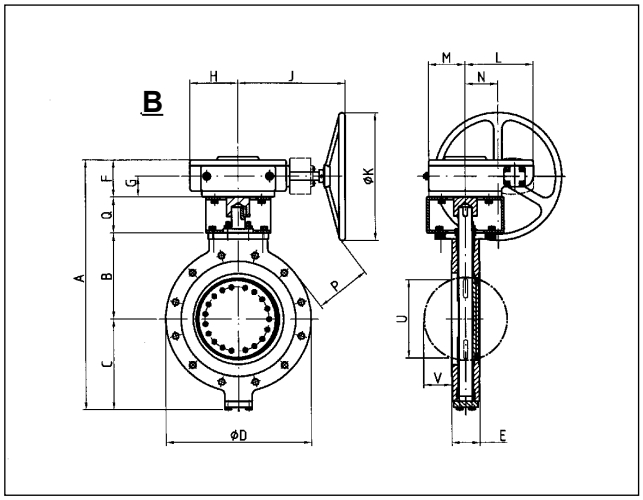
DN	80 3“	100 4“	150 6“	200 8“	250 10“	300 12“	350 14“	400 16“	450 18“	500 20“	600 24“
A	192	207	252	303	339	367	407	476	533	575	657
B (ANSI 150)	62	62	72	80	80	85	90	113	120	130	140
B (ANSI 300)	62	62	72	80	80	85	90	113	120	130	120
C	130	145	180	208	240	292	317	383	433	465	537
D (ANSI 150)	190	240	280	343	406	482	533	597	635	698	813
D (ANSI 300)	210	240	318	381	444	520	584	648	711	774	914
E (ANSI 150)	48	54	57	64	71	81	92	102	114	127	154
E (ANSI 300)	48	54	59	73	83	92	117	133	149	159	181
F	20	22	32	38	40	45	55	65	70	75	90
G	6	6	10	10	12	14	16	18	20	20	25
H	4.8	4.8	8	9.5	9.5	12.7	12.7	15,9	19.1	19.1	22.3
J	3.5	3.5	5	5	5	5.5	6	7	7.5	7.5	9
K	2.7	2.7	4.5	5.4	5.4	7.3	7.1	9	10.9	10.8	12.6
L	22	22	32	40	40	45	50	63	70	80	90
M	4	4	4	4	4	4	4	8	8	8	8
N	$^{7}/_{16}$-14 UNC		$^{5}/_{8}$-11 UNC	$^{3}/_{4}$-10 UNC				$^{5}/_{8}$-11 UNC			
P	125 F12		140 F14	165 F16				254 F25			
U (ANSI 150)	72	96	146	191	239	287	326	366	409	457	559
U (ANSI 300)	72	96	144	187	234	281	315	353	396	446	545
V (ANSI 150)	20	31	55	73	93	114	129	144	159	173	219
V (ANSI 300)	31	31	53	65	84	103	109	121	137	156	194

Weights in kg

DN	80 3“	100 4“	150 6“	200 8“	250 10“	300 12“	350 14“	400 16“	450 18“	500 20“	600 24“
bare shaft											
ANSI 150	15	20	28	46	66	82	94	132	249	319	545
ANSI 300	15	20	29	52	77	83	120	172	325	400	770
with gear											
ANSI 150	29	34	42	65	92	108	121	189	320	391	635
ANSI 300	29	34	50	78	103	147	176	258	436	512	973

CRANE





Dimensions in mm, with manual gear

DN	80 3“	100 4“	150 6“		200 8“		250 10“		300 12“			350 14“				400 16“			
ΔP max (psi)	715	715	285	715	230	715	570	715	230	360	715	230	360	570	715	145	360	570	715
A	416	446	526	530	627	631	699	699	774	800	821	834	860	881	906	1006	1032	1078	1076
B	130	145	180		223		259		282			317				363			
Q	80	80	90		120		120		120			120				180			
F	76	76	76	80	76	80	80	106	80	106	127	80	106	127	152	80	106	152	150
G	42	42	42	44.5	42	44.5	44.5	50	44.5	50	50	44.5	50	50	66	44.5	50	66	64
H	64	64	64	100	64	100	100	126	100	126	158	100	126	158	155	100	126	155	153
J	240	240	240	282	240	282	282	362	282	362	387	282	362	387	493	282	362	493	509
K	250	250	250	400	250	400	400	600	400	600	600	400	600	600	600	400	600	600	600
L	98	98	98	134	98	134	134	178	134	178	209	134	178	209	232	134	178	232	239
M	45	45	45	64	45	64	64	114	64	114	117	64	114	117	158	64	114	158	171
N	65	65	65	96.4	65	96.4	96.4	123	96.4	123	154	96.4	123	154	60	96.4	123	60	68
P (ANSI 150)	159	142	148	-	169	150	141	-	118	133	-	118	123	-	-	169	151	-	-
P (ANSI 300)	149	142	129	127	150	131	122	143	99	114	137	92	97	120	222	143	126	241	253
Drawing	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B

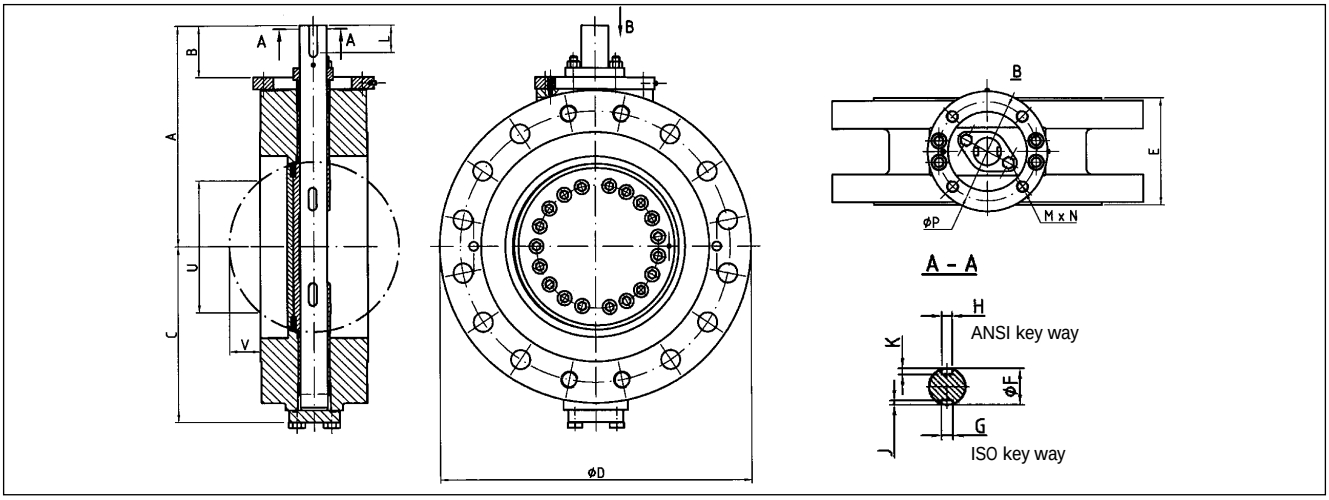
DN	450 18“				500 20“					600 24“ (cl.150)		
ΔP max (psi)	145	230	360	675	145	230	360	570	715	230	360	715
A	1082	1103	1128	1226	1196	1217	1242	1240	1254	1386	1384	1418
B	413				445					517		
Q	180				180					180		
F	106	127	152	150	106	127	152	150	164	152	150	164
G	50	50	66	64	50	50	66	64	70	66	64	70
H	126	158	155	153	126	158	155	153	175	155	153	175
J	362	387	493	509	362	387	493	509	464	493	509	464
K	600	600	600	600	600	600	600	600	600	600	600	600
L	178	209	232	239	178	209	232	239	175	232	239	175
M	114	117	158	171	114	117	158	171	326	158	171	326
N	123	154	60	68	123	154	60	68	153	60	68	153
P(150)	167	184	196	-	158	175	264	-	-	255	265	-
P(300)	129	146	158	237	120	137	226	238	207	204	215	224
Drawing	B	B	B	B	B	B	B	B	B	B	B	B

Note:
- Dimensions C, D, E, U, V see front page
-14,5 psi ≙ 1 bar

CRANE

Model GI - Double Flange Body ISO 5752

Dimensions / Weights DN 80 - 600



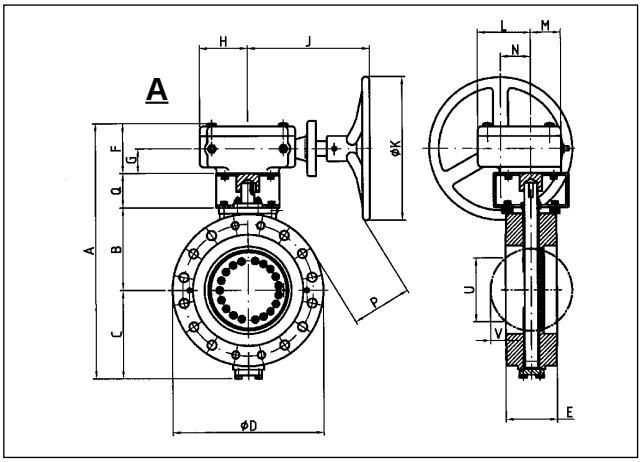
Dimensions in mm, bare shaft end

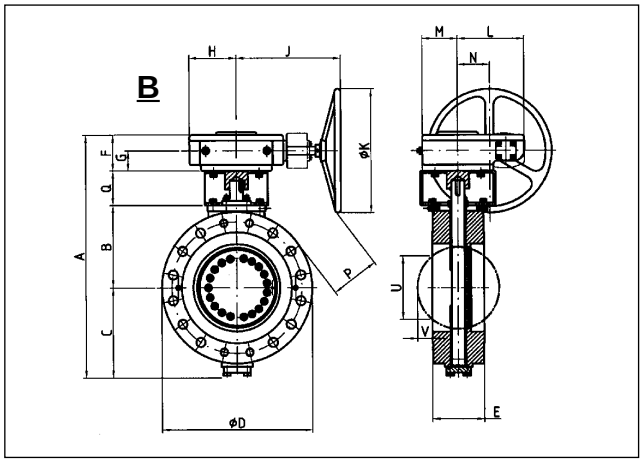
DN	80 3“	100 4“	150 6“	200 8“	250 10“	300 12“	350 14“	400 16“	450 18“	500 20“	600 24“
A	192	207	252	303	339	367	407	476	553	575	657
B (ANSI 150)	62	62	72	80	80	85	90	113	120	130	140
B (ANSI 300)	62	62	72	80	80	85	90	113	120	130	120
C	130	145	180	208	240	292	317	383	433	465	537
D (ANSI 150)	190	229	280	343	406	482	533	597	635	698	813
D (ANSI 300)	210	254	318	381	444	520	584	648	711	774	914
E	114	127	140	152	165	178	190	216	222	229	267
F	20	22	32	38	40	45	55	65	70	75	90
G	6	6	10	10	12	14	16	18	20	20	25
H	4,8	4,8	8	9,5	9,5	12,7	12,7	16	19,1	19,1	22,3
J	3,5	3,5	5	5	5	5,5	6	7	7,5	7,5	9
K	2,7	2,7	4,5	5,4	5,4	7,3	7,1	9	10,9	10,8	12,6
L	22	22	32	40	40	45	50	63	70	80	90
M	4	4	4	4	4	4	4	8	8	8	8
N	$^{7}/_{16}$ -14UNC		$^{5}/_{8}$ -11UNC	$^{3}/_{4}$ -10UNC				$^{5}/_{8}$ -11UNC			
P	125 F12		140 F14	165 F16				254 F25			
U	0	0	78	137	189	239	280	313	362	418	511
V	0	0	10	26	43	60	74	81	100	122	152

Weights in kg

DN	80 3“	100 4“	150 6“	200 8“	250 10“	300 12“	350 14“	400 16“	450 18“	500 20“	600 24“
bare shaft											
ANSI 150	18	22	36	60	96	106	151	227	281	316	506
ANSI 300	22	31	53	85	134	157	226	318	407	463	736
with gear											
ANSI 150	32	36	50	79	122	132	178	284	352	388	596
ANSI 300	36	45	74	111	160	211	282	404	518	575	939

CRANE





Dimensions in mm, with manual gear

DN	80	100	150		200		250		300			350				400			
	3“	4“	6“		8“		10“		12“			14“				16“			
Δp max (psi)	715	715	285	715	230	715	570	715	230	360	715	230	360	570	715	145	360	570	715
A	416	446	526	530	627	631	699	699	774	800	821	834	860	881	906	1006	1032	1078	1076
B	130	145	180		223		259	259	282			317				363			
Q	80	80	90		120		120		120			120				180			
F	76	76	76	80	76	80	80	106	80	106	127	80	106	127	152	80	106	152	150
G	42	42	42	44,5	42	44,5	44,5	50	44,5	50	50	44,5	50	50	66	44,5	50	66	64
H	64	64	64	100	64	100	100	126	100	126	158	100	126	158	155	100	126	155	153
J	240	240	240	282	240	282	282	362	282	362	387	282	362	387	493	282	362	493	509
K	250	250	250	400	250	400	400	600	400	600	600	400	600	600	600	400	600	600	600
L	98	98	98	134	98	134	134	178	134	178	209	134	178	209	232	134	178	232	239
M	45	45	45	64	45	64	64	114	64	114	117	64	114	117	158	64	114	158	171
N	65	65	65	96,4	65	96,4	96,4	123	96,4	123	154	96,4	123	154	60	96,4	123	60	68
P(ANSI150)	159	147	148	-	169	150	141	-	118	133	-	118	123	-	-	169	151	-	-
P(ANSI300)	149	135	129	127	150	131	122	143	99	114	137	92	97	120	222	143	126	241	253
Drawing	A	A	A	A	A	A	A	B	A	B	B	A	B	B	B	A	B	B	B

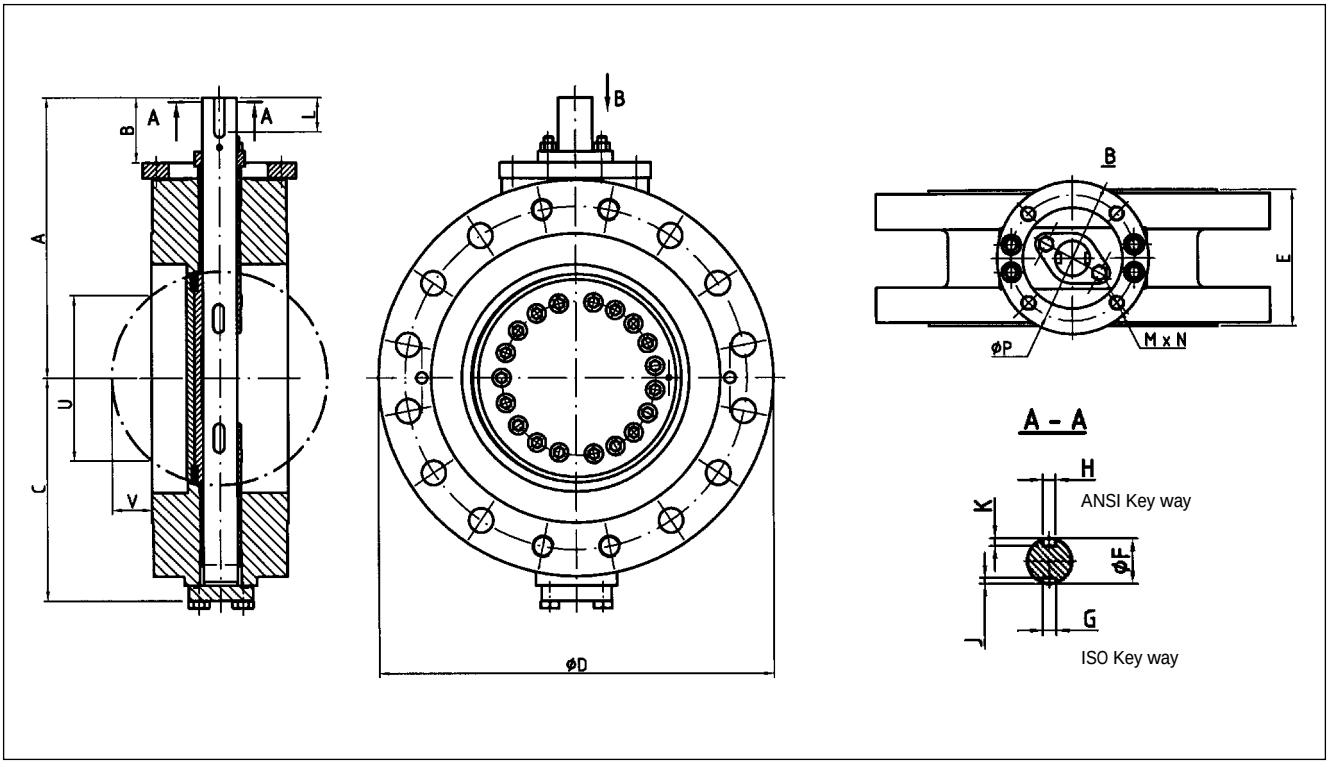
DN	450				500					600		
	18“				20“					24“		
Δp max (psi)	145	230	360	675	145	230	360	570	715	230	360	715
A	1082	1103	1128	1226	1196	1217	1222	1240	1254	1386	1364	1418
B	413				445					517		
Q	180				180					180		
F	106	127	152	150	106	127	152	150	164	152	150	164
G	50	50	66	64	50	50	66	64	70	66	64	70
H	126	158	155	153	126	158	155	153	175	155	153	175
J	362	387	493	509	362	387	493	509	464	493	509	464
K	600	600	600	600	600	600	600	600	600	600	600	600
L	178	209	232	239	178	209	232	239	175	232	239	175
M	114	117	158	171	114	117	158	171	326	158	171	326
N	123	154	60	68	123	154	60	68	153	60	68	153
P (ANSI150)	167	184	196	-	158	175	264	-	-	255	265	-
P (ANSI300)	129	146	158	237	120	137	226	238	207	204	215	224
Drawing	B	B	B	B	B	B	B	B	B	B	B	B

Note:
- Dimensions C,D,E,U,V, see front page
- 14,5 psi ≙ 1 bar

CRANE

Modell GF - Double Flange Body EN 558-1, R13

Dimensions / Weights DN 80 - 600



FS/DB-0007-GB/06.02/GP

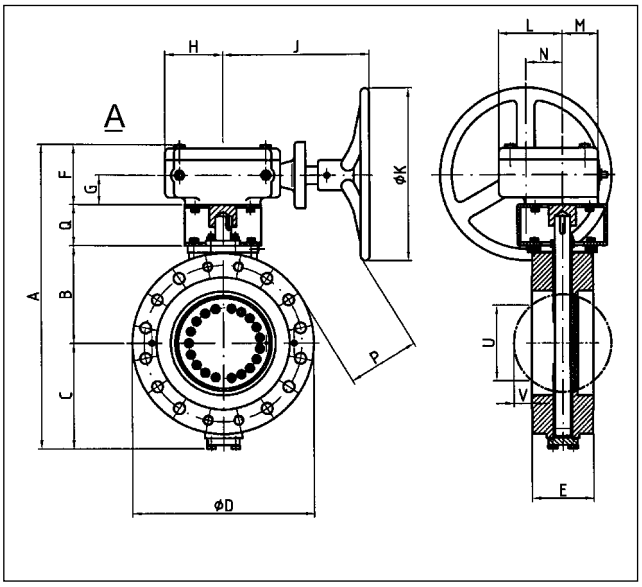
Dimensions in mm, bar shaft end

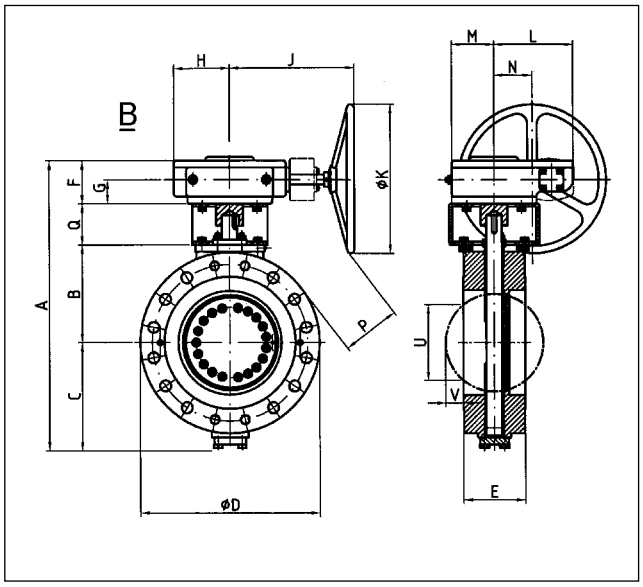
DN	80 3“	100 4“	150 6“	200 8“	250 10“	300 12“	350 14“	400 16“	500 20“	600 24“
A	192	207	252	303	339	367	407	476	575	657
B	62	62	72	80	80	85	90	113	130	140
C	130	145	180	208	240	292	317	383	465	537
D (PN10)	210	229	280	343	406	482	533	597	699	813
D (PN16)	210	229	280	343	406	482	533	597	699	914
D (PN25)	210	254	318	381	444	482	584	648	774	914
D (PN40)	210	254	318	381	444	520	584	648	774	-
E	114	127	140	152	165	178	190	216	229	267
F	20	22	32	38	40	45	55	65	75	90
G	6	6	10	10	12	14	16	18	20	25
H	4,8	4,8	8	9,5	9,5	12,7	12,7	15,9	19,1	22,3
J	3,5	3,5	5	5	5	5,5	6	7	7,5	9
K	2,7	2,7	4,5	5,4	5,4	7,3	7,1	9	10,8	12,6
L	22	22	32	40	40	45	50	63	80	90
M	4	4	4	4	4	4	4	8	8	8
N	M12	M12	M16	M20	M20	M20	M20	M16	M16	M16
P	125 F12		140 F14	165 F16				254 F25		
U	0	0	78	137	189	239	280	313	418	511
V	0	0	10	26	43	60	74	81	122	152

CRANE

Weights in kg

DN	80 3“	100 4“	150 6“	200 8“	250 10“	300 12“	350 14“	400 16“	500 20“	600 24“
bare shaft										
PN10/16	22	22	36	60	96	106	151	227	316	506/736
PN25/40	22	31	53	85	134	106/157	226	318	463	736/-
with gear										
PN10	34	38	51	83	132	161	195	280	419	644
PN16	34	38	51	83	132	161	195	296	431	644
PN25	34	38	51	90	132	176	211	296	447	644
PN40	34	38	51	90	132	189	224	325	471	-





Dimensions in mm, with manual gear

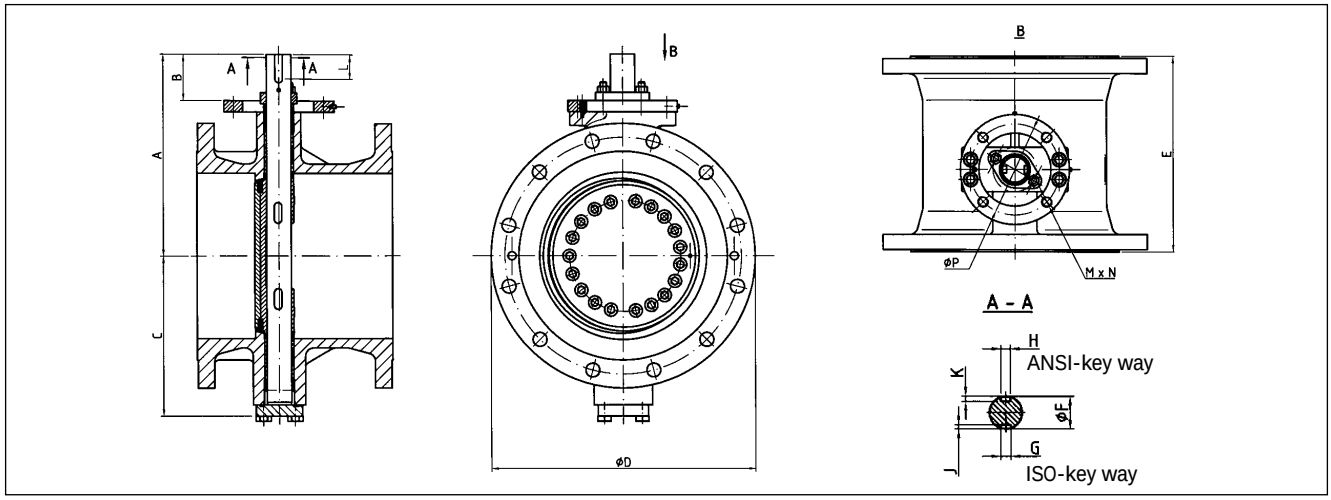
DN	80 3“	100 4“	150 6“		200 8“		250 10“	300 12“			350 14“			400 16“			500 20“				600 24“	
Δp max (bar)	**40**	**40**	**16**	**40**	**16**	**40**	**40**	**16**	**25**	**40**	**16**	**25**	**40**	**16**	**25**	**40**	**10**	**16**	**25**	**40**	**16**	**25**
A	416	446	526	530	627	631	699	774	800	821	834	860	881	1006	1032	1078	1196	1217	1242	1240	1366	1384
B	130	145	180		223		259	282			317			363			445				517	
F	76	76	76	80	76	80	80	80	106	127	80	106	127	80	106	152	106	127	152	150	152	150
G	42	42	42	44,5	42	44,5	44,5	44,5	50	50	44,5	50	50	44,5	50	66	50	50	66	64	66	64
H	64	64	64	100	64	100	100	100	126	158	100	126	158	100	126	155	126	158	155	153	155	153
J	240	240	240	282	240	282	282	282	362	387	282	362	387	282	362	493	362	387	493	509	493	509
K	250	250	250	400	250	400	400	400	600	600	400	600	600	400	600	600	600	600	600	600	600	600
L	98	98	98	134	98	134	134	134	178	209	134	178	209	134	178	232	178	209	232	239	232	239
M	45	45	45	64	45	64	64	64	114	117	64	114	117	64	114	158	114	117	158	171	158	171
N	65	65	65	96,4	65	96,4	96,4	96,4	123	154	96,4	123	154	96,4	123	60	123	154	60	68	60	68
P(PN10)	149	147	149	-	169	-	141	119	-	-	118	-	-	169	-	-	158	-	-	-	255	-
P(PN16)	149	147	149	-	169	-	141	119	-	-	118	-	-	169	152	-	158	175	-	-	205	-
P(PN25)	149	135	130	127	150	131	122	119	133	-	93	98	-	144	126	-	121	138	227	-	205	215
P(PN40)	149	135	130	127	150	131	122	110	114	137	93	98	120	144	126	241	121	138	227	238	-	-
Q	80	80	90		120		120	120			120			180			180				180	
Drawing	A	A	A	A	A	A	A	A	B	B	A	B	B	A	B	B	B	B	B	B	B	B

Note:
- Dimensions C;D;E;U;V; see front page

Crane Process Flow Technologies GmbH
Postfach 11 12 40, D-40512 Düsseldorf
Heerdter Lohweg 63-71, D-40549 Düsseldorf
Telefon +49 211 5956-0
Telefax +49 211 5956-111
info.germany@craneflow.com
www.craneflow.de

Model GG - Double Flange Body ANSI B16.10

Dimensions / Weights DN 100 - 300



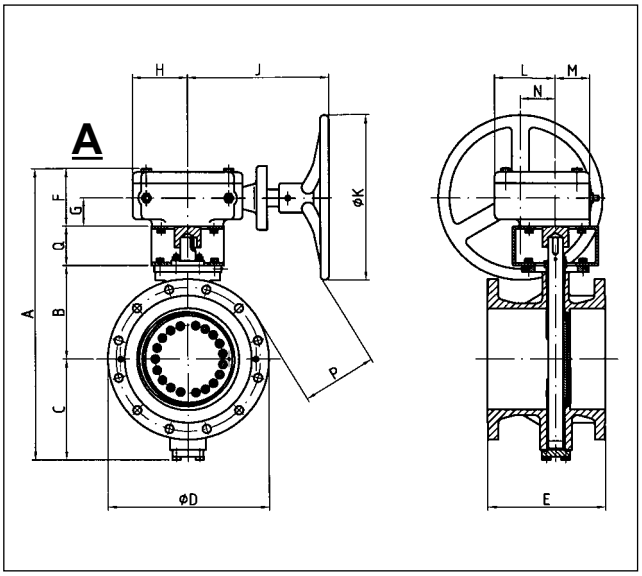
Dimensions in mm, bare shaft end

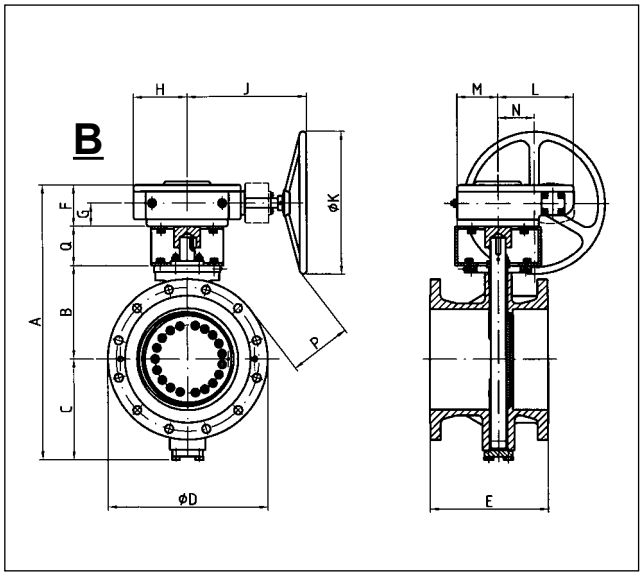
DN	100 4“	150 6“	200 8“	250 10“	300 12“
A	207	252	303	339	367
B	62	72	80	80	85
C	145	180	208	240	292
D (ANSI 150)	229	280	343	406	482
D (ANSI 300)	254	318	381	444	520
E (ANSI 150)	229	267	292	330	356
E (ANSI 300)	305	403	419	457	502
F	22	32	38	40	45
G	6	10	10	12	14
H	4.8	8	9.5	9.5	12.7
J	3.5	5	5	5	5.5
K	2.7	4.5	5.4	5.4	7.3
L	22	32	40	40	45
M	4	4	4	4	4
N	$^{7}/_{16}$ -14 UNC	$^{5}/_{8}$ -11 UNC	$^{3}/_{4}$ -10 UNC	$^{3}/_{4}$ -10 UNC	$^{3}/_{4}$ -10 UNC
P	125 F12	140 F14	165	165 F16	165

Weights in kg

DN	100 4“	150 6“	200 8“	250 10“	300 12“
bare shaft					
ANSI 150	25	46	73	89	132
ANSI 300	37	71	110	169	203
with gear					
ANSI 150	39	60	92	115	158
ANSI 300	51	74	136	195	253

CRANE





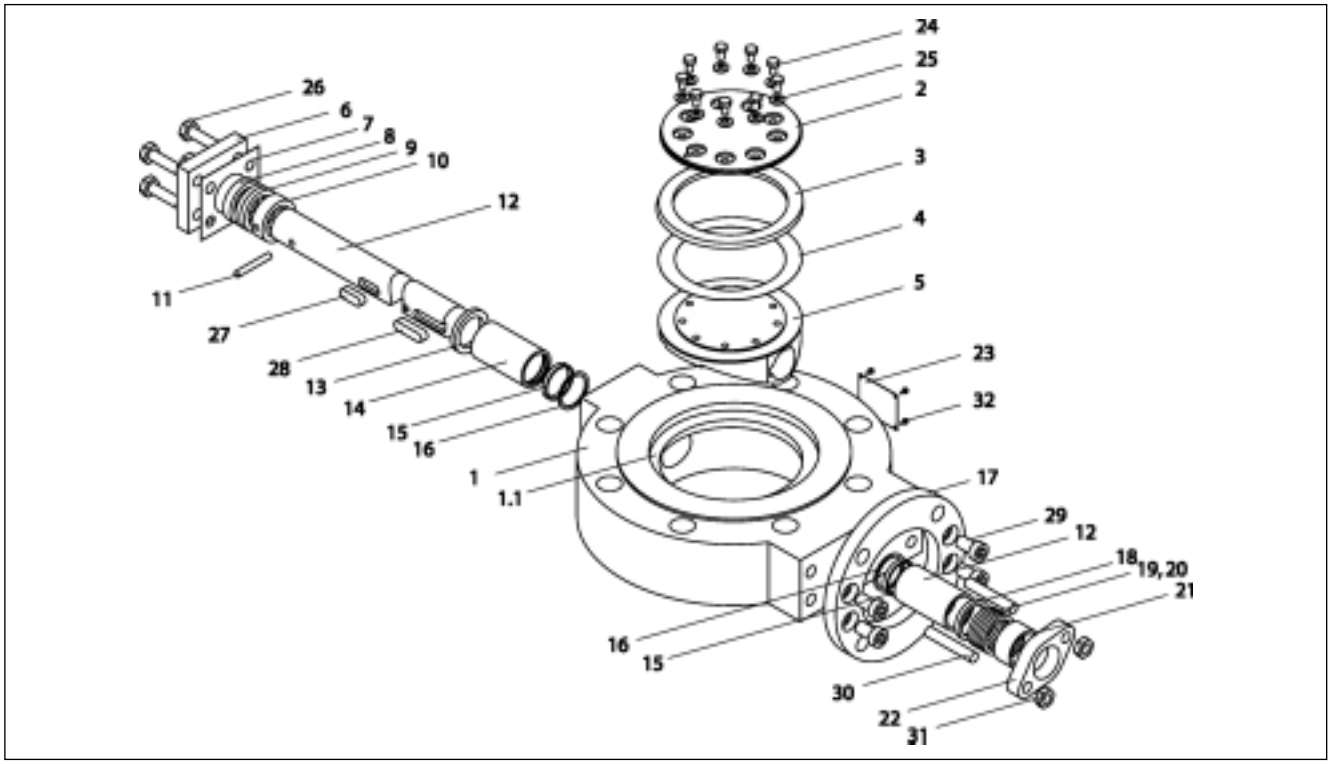
Dimensions in mm, with manual gear

DN	100 4“	150 6“		200 8“		250 10“		300 12“		
ΔP max (psi)	715	285	715	230	715	570	715	230	360	715
A	446	526	530	627	631	699	699	774	800	821
B	145	180		223		259		282		
Q	80	90		120		120		120		
F	76	76	80	76	80	80	106	80	106	127
G	42	42	44,5	42	44,5	44,5	50	44,5	50	50
H	64	64	100	64	100	100	126	100	126	158
J	240	240	282	240	282	282	362	282	362	387
K	250	250	400	250	400	400	600	400	600	600
L	98	98	134	98	134	134	178	134	178	209
M	45	45	64	45	64	64	114	64	114	117
N	65	65	96,4	65	96,4	96,4	123	96,4	123	154
P (ANSI 150)	147	148	-	169	150	141	-	118	133	-
P (ANSI 300)	135	129	127	150	131	122	143	99	114	137
See drawing above	A	A	A	A	A	A	B	A	B	B

Note:
- Dimensions C,D,E see front page
14,5 psi ≙ 1 bar

Model GE - Lug Body DIN

Materials / Temperature range



Item	Part	Temperature range / Model No.	Steel version *2		Stainless steel version*2		
			-10°C bis +400°C (14°F to 752°F) -A11100F Standard	-10°C bis +300°C (14°F to 572°F) -A11900F Nace	-10°C bis +400°C (14°F to 752°F) -G11300F Standard	-10°C bis +300°C (14°F to 572°F) -G11400F Nace	-60°C bis +550°C (-76°F to 1022°F) -G11500F High and low temperature
1	Body *		GP240GH / P265GH		1.4552 / 1.4541		
1.1	Body seat*		1.4571 or similar		1.4552 / 1.4541		
			(Stellite on request)		(Stellite on request)		
2	Seal retainer ring *		P265GH / P250GH		1.4541		
3	Laminated seal		1.4541 / Graphite		1.4541 / Graphite		
4	Gasket		Graphite		Graphite		
5	Disc *		GP240GH / P265GH / P250GH		1.4552 / 1.4541		
6	Cover		P265GH		1.4541		
7	Cover gasket		Graphite		Graphite		
8	Intermediate ring		1.4305		1.4305		
9	Ring		Graphite		Graphite		
10	Shaft retainer		1.4305 hard-chromium-plated		1.4305 hard-chromium-plated		
11	Pin		1.4571 or equivalent		1.4571 or equivalent		
12	Shaft		1.4057	1.4462	1.4057	1.4462	1.4980
13	Thrust ring *		1.4112 / 1.4034 (hardened)		1.4112 / 1.4034 (hardened)		
14	Bushing		1.4305 (coated)		1.4305 (coated)		
15	Bearing protector		Carbon fiber mesh		Carbon fiber mesh		

* Material according to the manufacturer's choice
*2 The application type (medium / temperature) has to be specified when ordering

To be continued on the next page

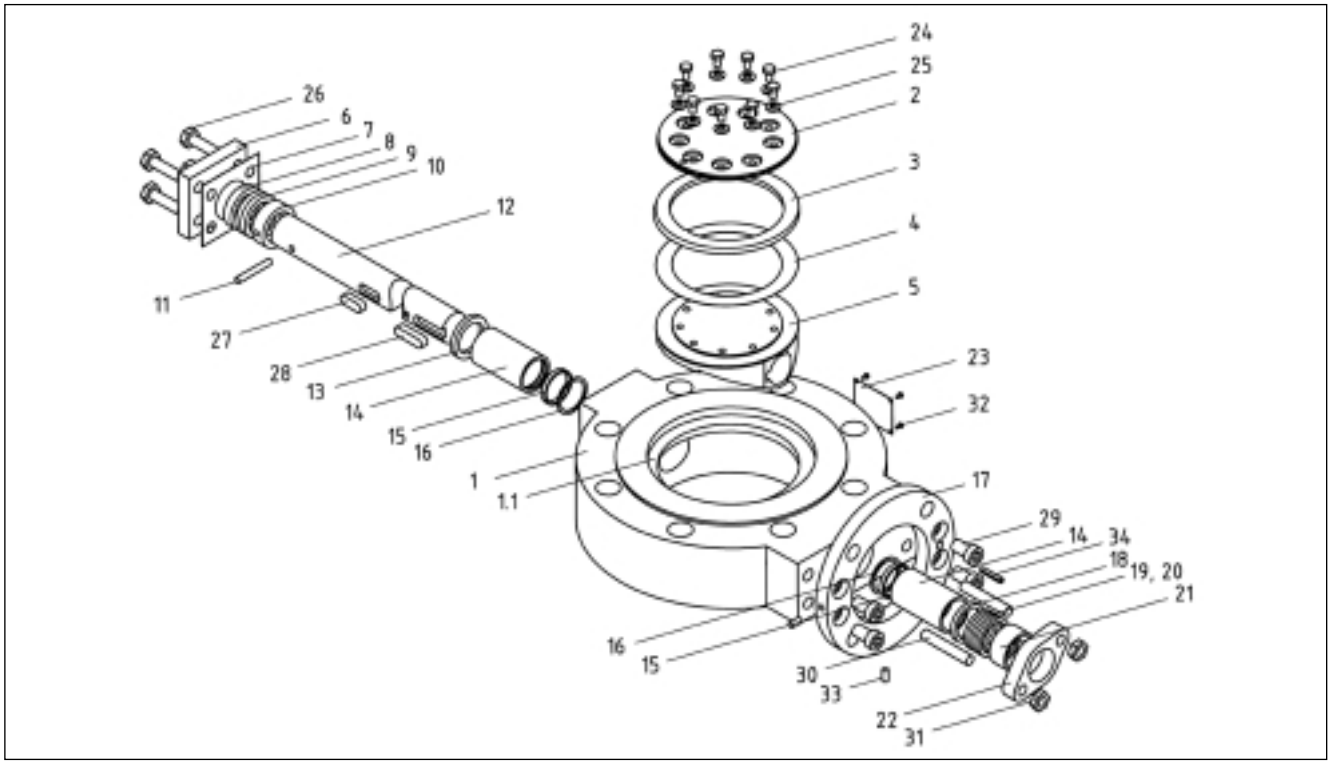
Item	Part	Steel version *2		Stainless steel version*2		
	Temperature range	**-10°C bis +400°C (14°F to 752°F)**	**-10°C bis +300°C (14°F to 572°F)**	**-10°C bis +400°C (14°F to 752°F)**	**-10°C bis +300°C (14°F to 572°F)**	**-60°C bis +550°C (-76°F to 1022°F)**
	Model No.	**-A11100F**	**-A11900F**	**-G11300F**	**-G11400F**	**-G11500F**
	Part	**Standard**	**Nace**	**Standard**	**Nace**	**High and low temperature**
16	Anti seize ring	-		1.4112 / 1.4034 (hardened)		
17	Mounting plate	Steel		Steel, nickel-plated		
18	Ring	1.4305		1.4305		
19	Gland packing	Carbon fiber mesh		Carbon fiber mesh		
20	Gland packing	Graphite		Graphite		
21	Gland bushing	1.4305		1.4305		
22	Gland flange	P265GH		1.4541		
23	Name plate	Stainless steel		Stainless steel		
24	Screw	A2 - 70		A2 - 70		1.4980
25	Spring washer*	1.4923 / 1.4122	Inconel	1.4923 / 1.4122	Inconel	
26	Screw	A2 - 70		A2 - 70		1.4980
27	Disc key	1.4571		1.4571		
28	Drive key	1.4571		1.4571		
29	Screw	A2 - 70		A2 - 70		1.4980
30	Stud	A2 - 70		A2 - 70		1.4980
31	Nut	A2 - 70		A2 - 70		1.4980
32	Round head grooved pin	Stainless steel		Stainless steel		

* Material according to the manufacturer's choice
*2 The application type (medium / temperature) has to be specified when ordering

CRANE®

Model GA

Materials / Temperature range



Item	Part	Temperature range / Model No.	Steel version *2		Stainless steel version*2		
			-10°C bis +400°C (14°F to 752°F) -B11200F Standard	-10°C bis +300°C (14°F to 572°F) -B11A00F Nace	-10°C bis +400°C (14°F to 752°F) -H11300F Standard	-10°C bis +300°C (14°F to 572°F) -H11400F Nace	-60°C bis +550°C (-76°F to 1022°F) -H11500F High and low temperature
1	Body*		A216 WCB/A516 Gr. 60		A351 CF8M / A240 Type 321		
1.1	Body seat*		1.4571 or similar (Stellite on request)		1.4552 / 1.4541 (Stellite on request)		
2	Seal retainer ring *		P265GH / P250GH (nickel-plated)		1.4541		
3	Laminated seal		1.4541 / Graphite		1.4541 / Graphite		
4	Gasket		Graphite		Graphite		
5	Disc *		A216 WCB / P265GH / P250GH (nickel-plated)		A351 CF8M / A240 Type 321		
6	Cover		P265GH		1.4541		
7	Cover gasket		Graphite		Graphite		
8	Intermediate ring		1.4305		1.4305		
9	Ring		Graphite		Graphite		
10	Shaft retainer		1.4305 hard-chromium-plated		1.4305 hard-chromium-plated		
11	Pin		1.4571 or equivalent		1.4571 or equivalent		
12	Shaft		1.4057	1.4462	1.4057	1.4462	1.4980
13	Thrust ring		1.4112 / 1.4034 (hardened)		1.4112 / 1.4034 (hardened)		
14	Bushing		1.4305 (coated)		1.4305 (coated)		
15	Bearing protector		Carbon fiber mesh		Carbon fiber mesh		
16	Anti seize ring		-		1.4112 / 1.4034 (hardened)		
17	Mounting plate		Steel		Steel, nickel-plated		
18	Ring		1.4305		1.4305		
19	Gland packing		Carbon fiber mesh		Carbon fiber mesh		
20	Gland packing		Graphite		Graphite		

* Material according to the manufacturer's choice

*2 The application type (medium / temperature) has to be specified when ordering

To be continued on the next page

CRANE

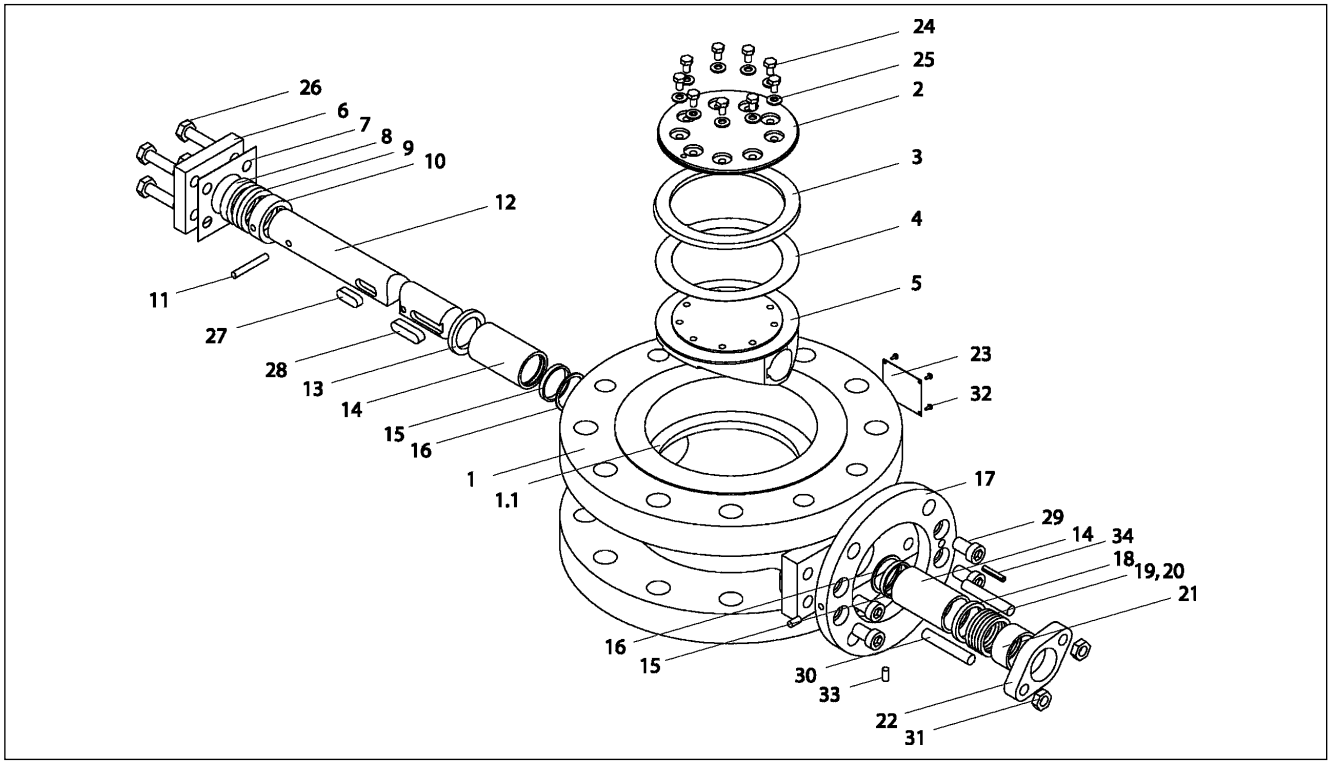
Item	Part	Steel version *2		Stainless steel version*2		
	Temperature range	**-10°C bis +400°C (14°F to 752°F)**	**-10°C bis +300°C (14°F to 572°F)**	**-10°C bis +400°C (14°F to 752°F)**	**-10°C bis +300°C (14°F to 572°F)**	**-60°C bis +550°C (-76°F to 1022°F)**
	Model No.	**-B11200F**	**-B11A00F**	**-H11300F**	**-H11400F**	**-H11500F**
	Part	**Standard**	**Nace**	**Standard**	**Nace**	High and low temperature
21	Gland bushing	1.4305		1.4305		
22	Gland flange	P265GH		1.4541		
23	Name plate	Stainless steel		Stainless steel		
24	Screw	A2 - 70		A2 - 70		1.4980
25	Spring washer *	1.4923 / 1.4122	Inconel	1.4923 / 1.4122	Inconel	
26	Screw	A2 - 70		A2 - 70		1.4980
27	Disc key	1.4571		1.4571		
28	Drive key	1.4571		1.4571		
29	Screw	A2 - 70		A2 - 70		1.4980
30	Stud	A2 - 70		A2 - 70		1.4980
31	Nut	A2 - 70		A2 - 70		1.4980
32	Round head grooved pin	Stainless steel		Stainless steel		
33	Groove pin (mounting plate)	Galvanized steel		Galvanized steel		
34	Roll pin	Galvanized steel		Galvanized steel		

* Material according to the manufacturer's choice
*2 The application type (medium / temperature) has to be specified when ordering

CRANE

Model GI – Double Flange Body ISO

Materials / Temperature range



Item	Part	Temperature range / Model - No.	Steel version *2		Stainless steel version*2		
			-10°C bis +400°C (14°F to 752°F)	-10°C bis +300°C (14°F to 572°F)	-10°C bis +400°C (14°F to 752°F)	-10°C bis +300°C (14°F to 572°F)	-60°C bis +550°C (-76°F to 1022°F)
			-F11200F	-F11A00F	-N11300F	-N11400F	-N11500F
			Standard	Nace	Standard	Nace	High and low temperature
1	Body *		A216 WCB		A351 CF8M		
1.1	Body seat*		1.4571or similar (Stellite on request)		1.4552 / 1.4541 (Stellite on request)		
2	Seal retainer ring *		P265GH / P250GH (nickel-plated)		1.4541		
3	Laminated seal		1.4541 / Graphite		1.4541 / Graphite		
4	Gasket		Graphite		Graphite		
5	Disc *		A216 WCB / P265GH/ P250GH (nickel-plated)		A351 CF8M		
6	Cover		P265GH		1.4541		
7	Cover gasket		Graphite		Graphite		
8	Intermediate ring		1.4305		1.4305		
9	Ring		Graphite		Graphite		
10	Shaft retainer		1.4305 hard-chromium-plated		1.4305 hard-chromium-plated		

* Material according to the manufacturer's choice
*2 The application type (medium / temperature) has to be specified when ordering

To be continued on the next page

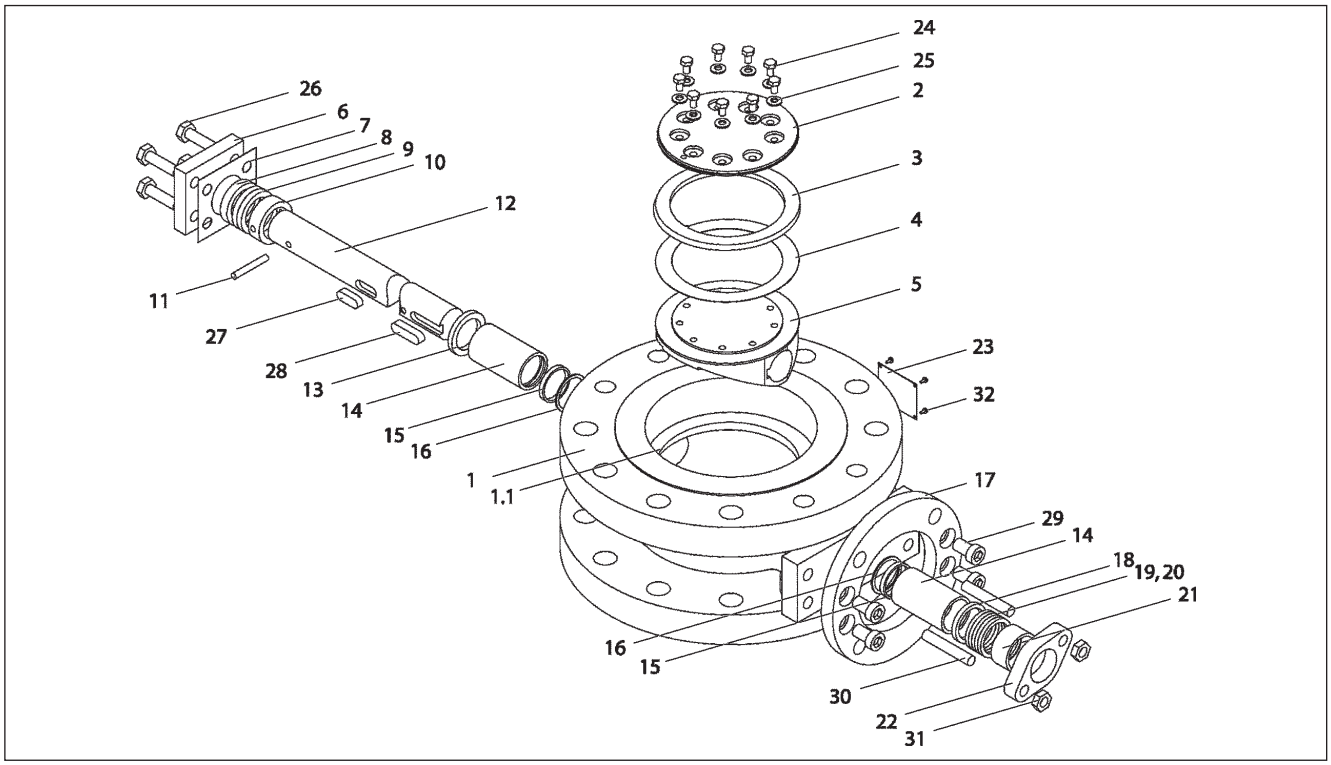
Item	Temperature range Model - No. Part	Steel version *2 -10°C bis +400°C (14°F to 752°F) -F11200F Standard	Steel version *2 -10°C bis +300°C (14°F to 572°F) -F11A00F Nace	Stainless steel version*2 -10°C bis +400°C (14°F to 752°F) -N11300F Standard	Stainless steel version*2 -10°C bis +300°C (14°F to 572°F) -N11400F Nace	Stainless steel version*2 -60°C bis +550°C (-76°F to 1022°F) -N11500F High and low temperature
11	Pin	1.4571 or similar		1.4571 or similar		
12	Shaft	1.4057	1.4462	1.4057	1.4462	1.4980
13	Thrust ring	1.4112 / 1.4034 (hardened)		1.4112 / 1.4034 (hardened)		
14	Bushing	1.4305 (coated)		1.4305 (coated)		
15	Bearing protector	Carbon fiber mesh		Carbon fiber mesh		
16	Anti seize ring	-		1.4112 / 1.4034 (hardened)		
17	Mounting plate	Steel		Stee, nickel-plated		
18	Ring	1.4305		1.4305		
19	Gland packing	Carbon fiber mesh		Carbon fiber mesh		
20	Gland packing	Graphite		Graphite		
21	Gland bushing	1.4305		1.4305		
22	Gland flange	P265GH		1.4541		
23	Name plate	Stainless steel		Stainless steel		
24	Screw	A2 - 70		A2 - 70		1.4980
25	Spring washer *	1.4923 / 1.4122	Inconel	1.4923 / 1.4122	Inconel	
26	Screw	A2 - 70		A2 - 70		1.4980
27	Disc key	1.4571		1.4571		
28	Drive key	1.4571		1.4571		
29	Screw	A2 - 70		A2 - 70		1.4980
30	Stud	A2 - 70		A2 - 70		1.4980
31	Nut	A2 - 70		A2 - 70		1.4980
32	Round head grooved pin	Stainless steel		Stainless steel		
33	Groove pin (mounting plate)	Galvanized steel		Galvanized steel		
34	Roll pin	Galvanized steel		Galvanized steel		

* Material according to the manufacturer's choice
*2 The application type (medium / temperature) has to be specified when ordering

CRANE

Model GF

Materials / Temperature range



Item	Part	Temperature range / Model - No.	Steel version *2		Stainless steel version *2		
			-10°C bis +400°C (14°F to 752°F) -E11100F Standard	-10°C bis +300°C (14°F to 572°F) -E11900F Nace	-10°C bis +400°C (14°F to 752°F) -M11300F Standard	-10°C bis +300°C (14°F to 572°F) -M11400F Nace	-60°C bis +550°C (-76°F to 1022°F) -M11500F High and low temperature
1	Body *		A216WCB		A351CF8M		
1.1	Body seat*		1.4571 or similar (Stellite on request)		A351CF8M (Stellite on request)		
2	Seal retainer ring *		P265GH / P250GH		1.4541		
3	Laminated seal		1.4541 / Graphite		1.4541 / Graphite		
4	Gasket		Graphite		Graphite		
5	Disc *		A216WCB / P265GH / P250GH		A351CF8M		
6	Cover		P265GH		1.4541		
7	Cover gasket		Graphite		Graphite		
8	Intermediate ring		1.4305		1.4305		
9	Ring		Graphite		Graphite		
10	Shaft retainer		1.4305 hard-chromium-plated		1.4305 hard-chromium-plated		

* Material according to the manufacturer's choice
*2 The application type (medium / temperature) has to be specified when ordering

To be continued on the next page

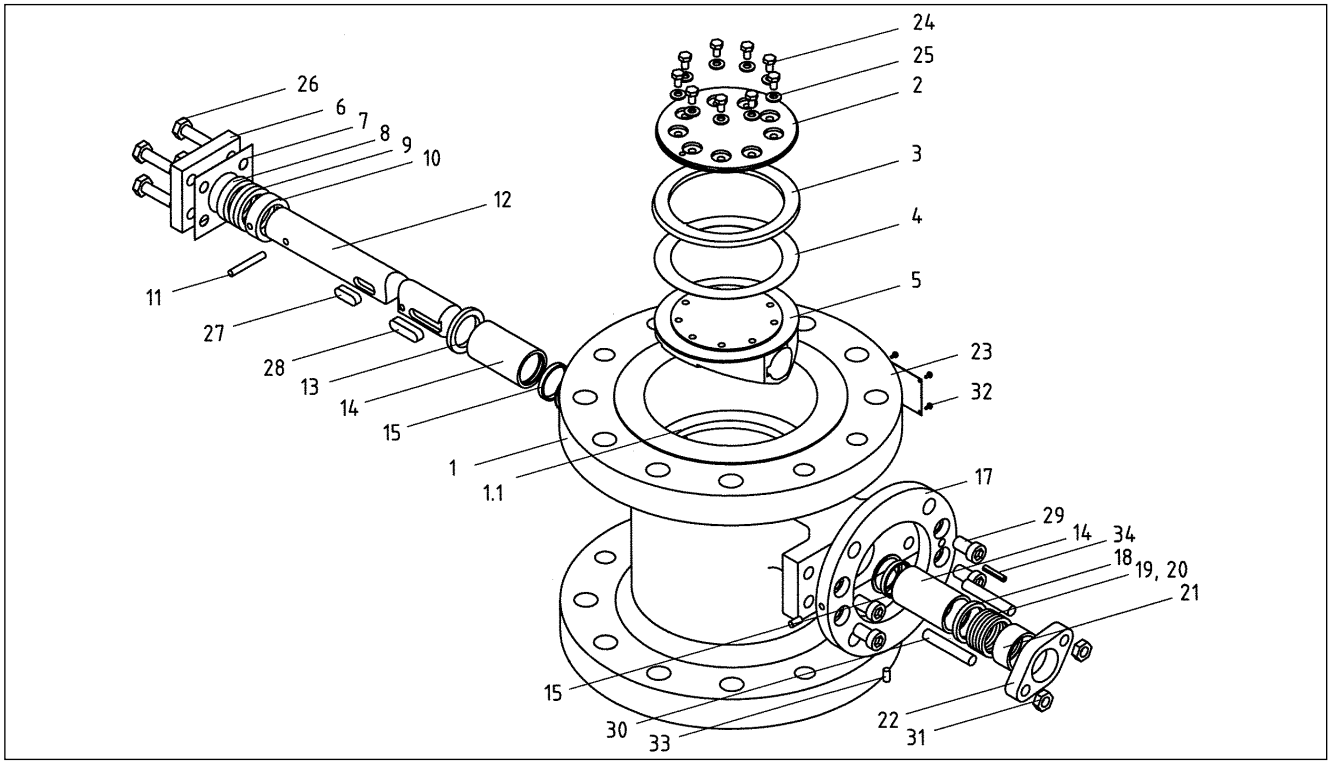
FS/DB-0012-GB/12.03/GP

Item	Temperature range Model - No. Part	Steel version *2 -10°C bis +400°C (14°F to 752°F) -E11100F Standard	Steel version *2 -10°C bis +300°C (14°F to 572°F) -E11900F Nace	Stainless steel version*2 -10°C bis +400°C (14°F to 752°F) -M11300F Standard	Stainless steel version*2 -10°C bis +300°C (14°F to 572°F) -M11400F Nace	Stainless steel version*2 -60°C bis +550°C (-76°F to 1022°F) -M11500F High and low temperature
11	Pin	1.4571 or equivalent		1.4571 or equivalent		
12	Shaft	1.4057	1.4462	1.4057	1.4462	1.4980
13	Thrust ring *	1.4112 / 1.4034 (hardened)		1.4112 / 1.4034 (hardened)		
14	Bushing	1.4305 (coated)		1.4305 (coated)		
15	Bearing protector	Carbon fiber mesh		Carbon fiber mesh		
16	Anti seize ring	-		1.4112 / 1.4034 (hardened)		
17	Mounting plate	Steel		Steel, nickel-plated		
18	Ring	1.4305		1.4305		
19	Gland packing	Carbon fiber mesh		Carbon fiber mesh		
20	Gland packing	Graphite		Graphite		
21	Gland bushing	1.4305		1.4305		
22	Gland flange	P265GH		1.4541		
23	Name plate	Stainless steel		Stainless steel		
24	Screw	A2 - 70		A2 - 70		1.4980
25	Spring washer *	1.4923 / 1.4122	Inconel	1.4923 / 1.4122	Inconel	
26	Screw	A2 - 70		A2 - 70		1.4980
27	Disc key	1.4571		1.4571		
28	Drive key	1.4571		1.4571		
29	Screw	A2 - 70		A2 - 70		1.4980
30	Stud	A2 - 70		A2 - 70		1.4980
31	Nut	A2 - 70		A2 - 70		1.4980
32	Round head grooved pin	Stainless steel		Stainless steel		

* Material according to the manufacturer's choice
*2 The application type (medium / temperature) has to be specified when ordering

CRANE

Modell GG
Materials / Temperature range



Item	Temperature range Model No. Part	Steel version *² -10°C bis +400°C (14°F to 752°F) -D11200F Standard	 -10°C bis +300°C (14°F to 572°F) -D11A00F Nace
1	Body*	A216 WCB	
1.1	Body seat*	1.4571 or similar (Stellite on request)	
2	Seal retainer ring *	P265GH / P250GH (nickel-plated)	
3	Laminated seal	1.4541 / Graphite	
4	Gasket	Graphite	
5	Disc *	A216WCB / P265GH / P250GH (nickel-plated)	
6	Cover	P265GH	
7	Cover gasket	Graphite	
8	Intermediate ring	1.4305	
9	Ring	Graphite	
10	Shaft retainer	1.4305 hard-chromium-plated	
11	Pin	1.4571 or equivalent	
12	Shaft	1.4057	1.4462
13	Thrust ring	1.4112 / 1.4034 (hardened)	
14	Bushing	1.4305 (coated)	
15	Bearing protector	Carbon fiber mesh	
17	Mounting plate	Steel	
18	Ring	1.4305	
19	Gland packing	Carbon fiber mesh	
20	Gland packing	Graphite	

* Material according to the manufacturer's choice
*² The application type (medium / temperature) has to be specified when ordering

To be continued on the next page

CRANE

Item	Temperature range Model No. Part	Steel version *2 -10°C bis +400°C (14°F to 752°F) -D11200F Standard	 -10°C bis +300°C (14°F to 572°F) -D11A00F Nace
21	Gland bushing	1.4305	
22	Gland flange	P265GH	
23	Name plate	Stainless steel	
24	Screw	A2 - 70	
25	Spring washer *	1.4923 / 1.4122	Inconel
26	Screw	A2 - 70	
27	Disc key	1.4571	
28	Drive key	1.4571	
29	Screw	A2 - 70	
30	Stud	A2 - 70	
31	Nut	A2 - 70	
32	Round head grooved pin	Stainless steel	
33	Groove pin (mounting plate)	Galvanized steel	
34	Roll pin	Galvanized steel	

* Material according to the manufacturer's choice
*2 The application type (medium / temperature) has to be specified when ordering

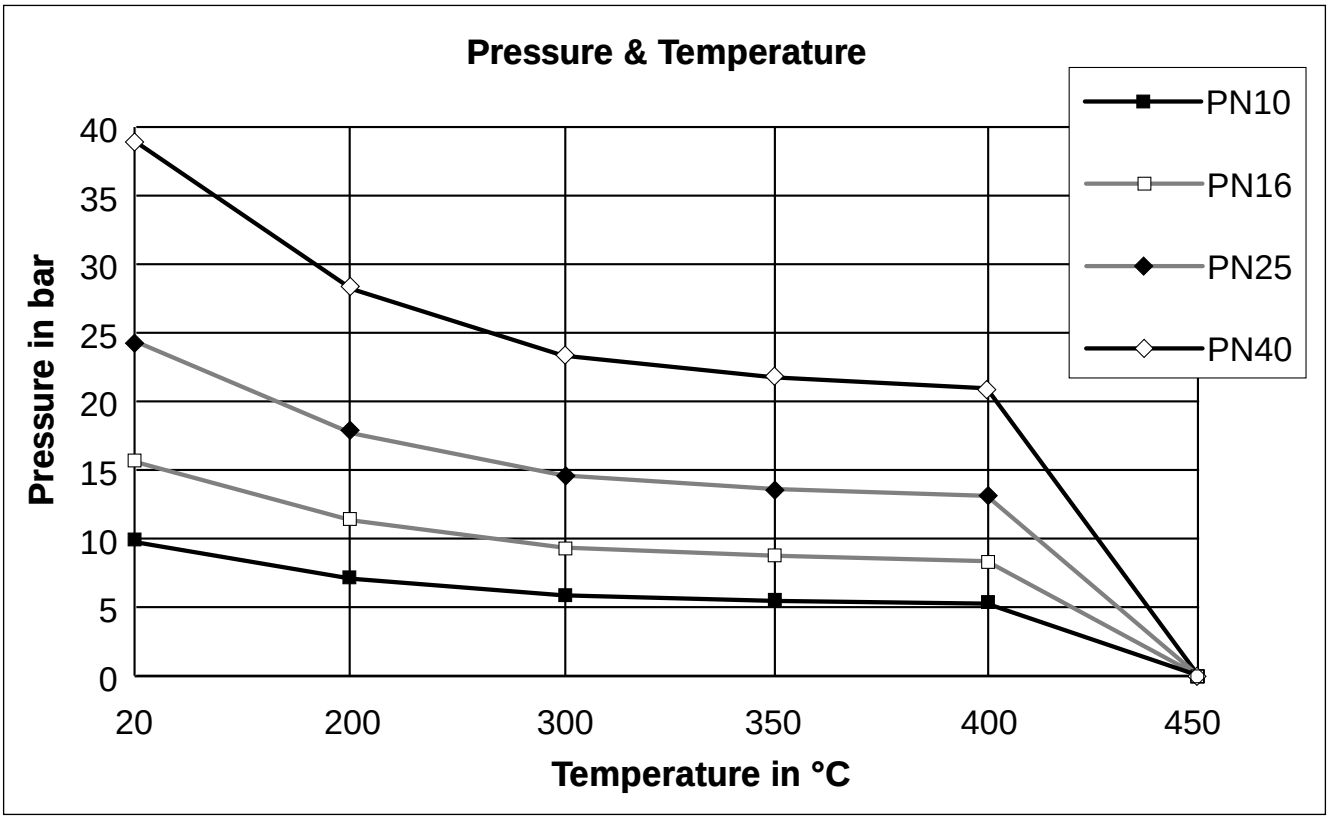
CRANE

Model GE/GF

Pressure/Temperature ratings for Steel

Temperature C°	Max. working pressure in bar GP 240GH/P265GH PN 10	PN 16	PN 25	PN 40
20	9,74	15,6	24,4	39,0
200	7,11	11,4	17,8	28,4
300	5,89	9,4	14,7	23,5
350	5,48	8,8	13,7	21,9
400	5,28	8,4	13,2	21,1
450	-	-	-	-
500	-	-	-	-
550	-	-	-	-

Values in accordance with EN 12516, table 3 EO

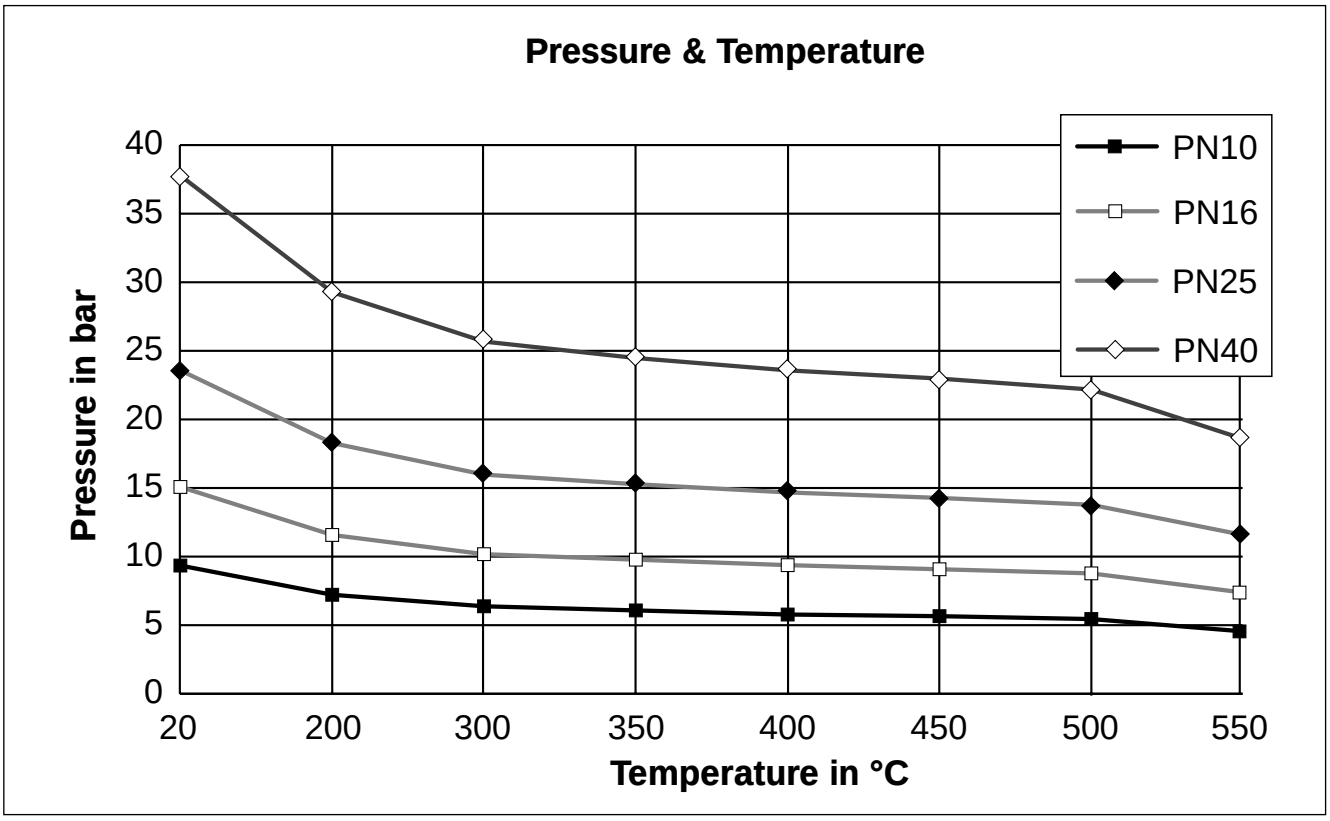


CRANE

Pressure/Temperature ratings for Stainless Steel

Temperature C°	Max. working pressure in bar 1.4552/1.4541			
	PN 10	PN 16	PN 25	PN 40
20	9,47	15,2	23,7	37,9
200	7,34	11,7	18,4	29,4
300	6,5	10,3	16,1	25,8
350	6,2	9,9	15,4	24,6
400	5,9	9,5	14,8	23,7
450	5,78	9,2	14,4	23,1
500	5,57	8,9	13,9	22,3
550	4,67	7,5	11,7	18,7

Values in accordance with EN 12516, Tab. 3 EO



Crane Process Flow Technologies GmbH
Niederlassung Österreich
IZ Nö-Süd, Straße 2/M6, A-2355 Wr. Neudorf
Telefon +43 22 36 6 82-0
Telefax +43 22 36 64-353

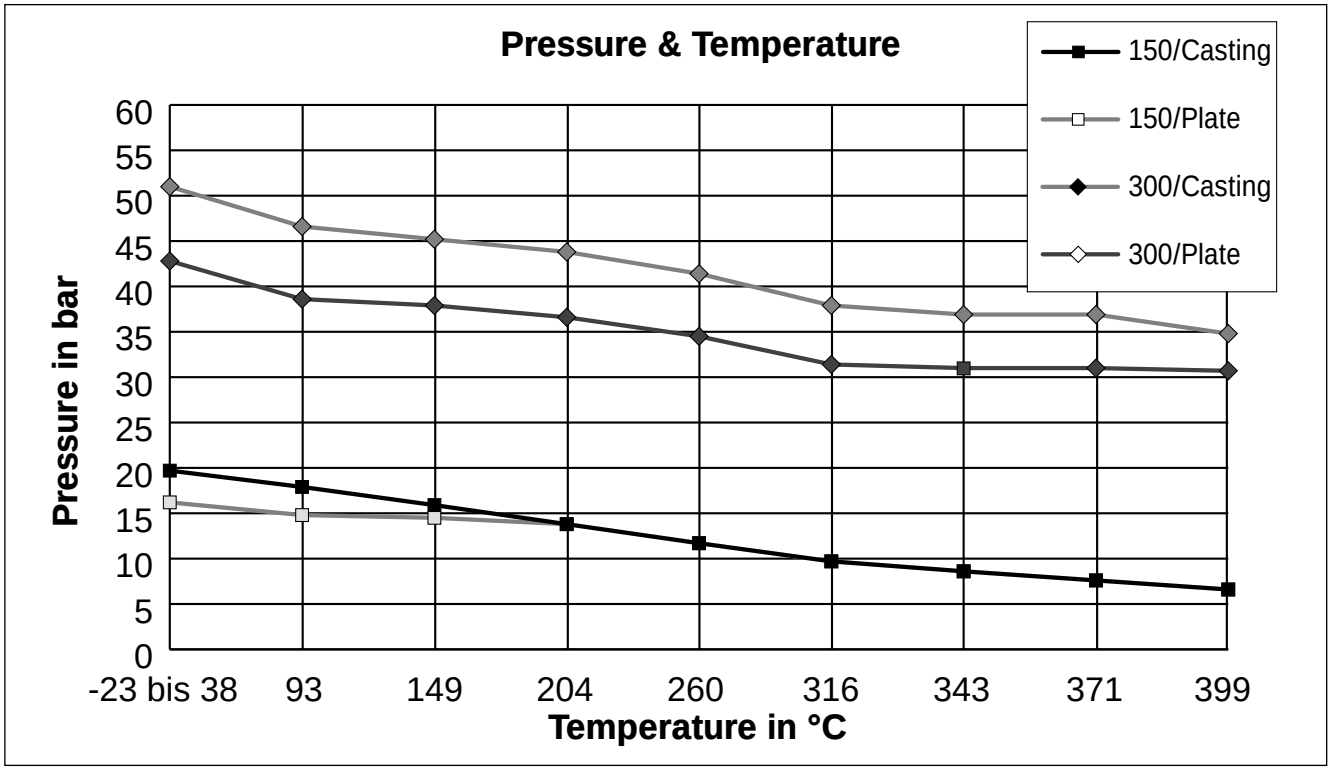
CRANE

Model GA/GI/GG

Pressure/Temperature ratings for Steel

Temperature		Max working pressure in psig / bar ANSI class 150 Steel				Max working pressure in psig / bar ANSI class 300 Steel			
		Casting A216 WCB		Plate *1) A516 Gr.60		Casting A216 WCB		Plate *1) A516 Gr.60	
°F	°C	psig	bar	psig	bar	psig	bar	psig	bar
-20 bis 100	-29 bis 38	285	19,7	235	16,2	740	51,0	620	42,8
200	93	260	17,9	215	14,8	675	46,6	560	38,6
300	149	230	15,9	210	14,5	655	45,2	550	37,9
400	204	200	13,8	200	13,8	635	43,8	530	36,6
500	260	170	11,7	170	11,7	600	41,4	500	34,5
600	316	140	9,7	140	9,7	550	37,9	455	31,4
650	343	125	8,6	125	8,6	535	36,9	450	31,0
700	371	110	7,6	110	7,6	535	36,9	450	31,0
750	399	95	6,6	95	6,6	505	34,8	445	30,7
800	427	-	-	-	-	-	-	-	-
850	454	-	-	-	-	-	-	-	-
900	482	-	-	-	-	-	-	-	-
950	510	-	-	-	-	-	-	-	-
1000	538	-	-	-	-	-	-	-	-

Note: Values in accordance with ANSI B16.34
*1) Used only with model GA up to DN150, >DN200 body made of casting

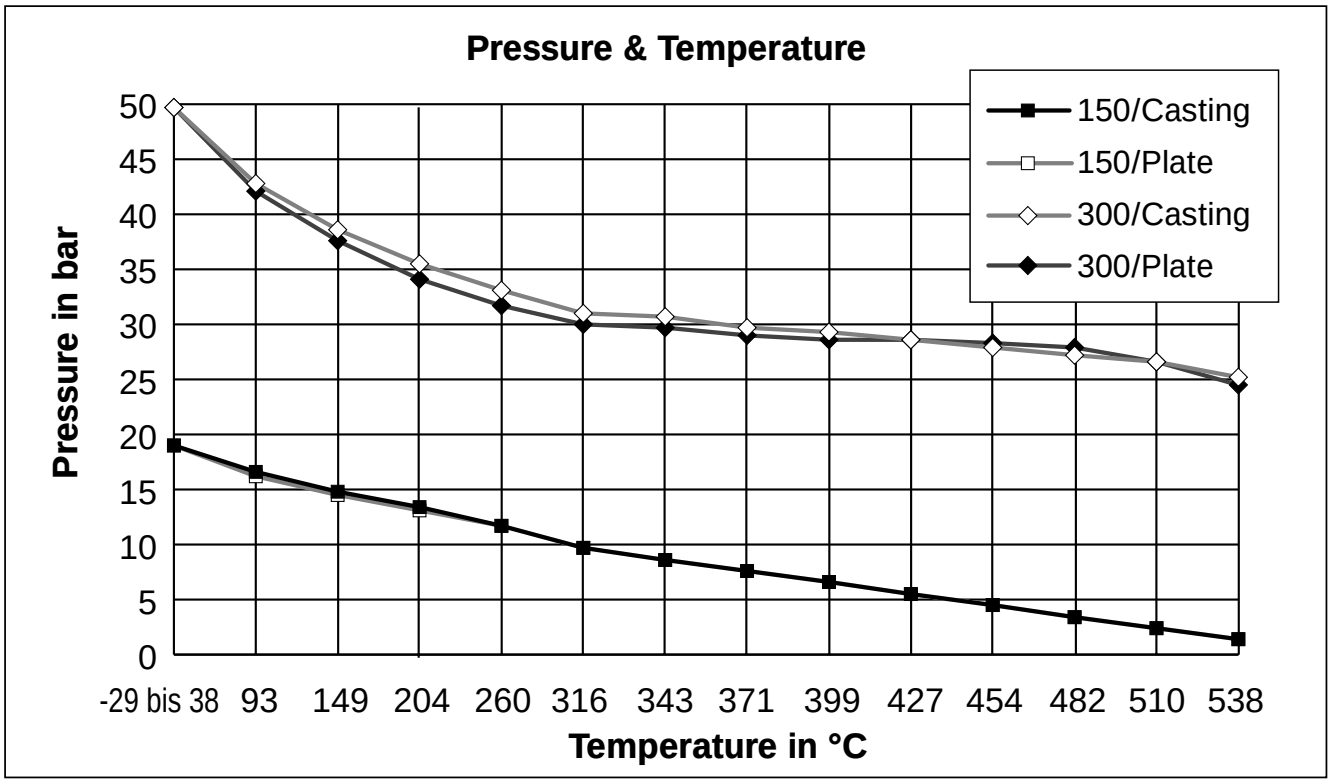


Model GA/GI/GG

Pressure/Temperature ratings for Stainless Steel

Temperature		Max working pressure in psig / bar ANSI class 150 Stainless steel				Max working pressure in psig / bar ANSI class 300 Stainless steel			
		Casting A351 CF 8M		Plate *1) A240 Type 321		Casting A351 CF 8M		Plate *1) A240 Type 321	
°F	°C	psig	bar	psig	bar	psig	bar	psig	bar
-20 bis 100	-29 bis 38	275	19,0	275	19,0	720	49,7	720	49,7
200	93	240	16,6	235	16,2	620	42,8	610	42,1
300	149	215	14,8	210	14,5	560	38,6	545	37,6
400	204	195	13,4	190	13,1	515	35,5	495	34,1
500	260	170	11,7	170	11,7	480	33,1	460	31,7
600	316	140	9,7	140	9,7	450	31,0	435	30,0
650	343	125	8,6	125	8,6	445	30,7	430	29,7
700	371	110	7,6	110	7,6	430	29,7	420	29,0
750	399	95	6,6	95	6,6	425	29,3	415	28,6
800	427	80	5,5	80	5,5	415	28,6	415	28,6
850	454	65	4,5	65	4,5	405	27,9	410	28,3
900	482	50	3,4	50	3,4	395	27,2	405	27,9
950	510	35	2,4	35	2,4	385	26,6	385	26,6
1000	538	20	1,4	20	1,4	365	25,2	355	24,5

Note: Values in accordance with ANSI B16.34
*1) Used only with model GA up to DN150, >DN200 body made of casting



CRANE

Model GE

Screw dimensions for weld neck flanges in accordance with DIN

DN		PN	Flange DIN	Quantity	x	Thread	x	Length (mm)
80	3“	10-40	2633/2635	16	x	M16	x	50
100	4“	10/16	2633	16	x	M16	x	50
		25/40	2635	16	x	M20	x	55
125	5“	10/16	2633	16	x	M16	x	50
		25/40	2635	16	x	M24	x	55
150	6“	10/16	2633	16	x	M20	x	50
		25/40	2635	16	x	M24	x	60
200	8“	10	2632	16	x	M20	x	55
		16	2633	24	x	M20	x	55
		25	2634	24	x	M24	x	65
		40	2635	24	x	M27	x	70
250	10“	10	2632	24	x	M20	x	55
		16	2633	24	x	M24	x	60
		25	2634	24	x	M27	x	70
		40	2635	24	x	M30	x	80
300	12“	10	2632	24	x	M20	x	55
		16	2633	24	x	M24	x	60
		25	2634	32	x	M27	x	70
		40	2635	24	x	M30	x	90
			2635	8*	x	M30	x	80
350	14“	10	2632	32	x	M20	x	55
		16	2633	32	x	M24	x	65
		25	2634	32	x	M30	x	80
		40	2635	32	x	M33	x	90
400	16“	10	2632	32	x	M24	x	60
		16	2633	32	x	M27	x	70
		25	2634	32	x	M33	x	90
		40	2635	32	x	M36	x	100
500	20“	10	2632	32	x	M24	x	65
				8*	x	M24	x	60
		16	2633	32	x	M30	x	80
				8*	x	M30	x	70
		25	2634	32	x	M33	x	90
				8*	x	M33	x	80
		40	2635	32	x	M39	x	110
				8*	x	M39	x	80
600	24“	10	2632	32	x	M27	x	70
				8*	x	M27	x	65
		16	2633	32	x	M33	x	80
				8*	x	M33	x	75
		25	2634	32	x	M36	x	100
				8*	x	M36	x	80

* The shorter screws are to be provided for the tapped holes next to the shaft

FS/DB-0017-GB/02.02/GP

CRANE

Model GA

Screw dimensions for weld neck flanges in accordance with ANSI B 16.5

DN		ANSI Class	Quantity	x	Thread	x	Length
80	3"	150	8	x	5/8 - 11UNC	x	1 3/4"
		300	16	x	3/4 - 10UNC	x	2"
100	4"	150	16	x	5/8 - 11UNC	x	2"
		300	16	x	3/4 - 10UNC	x	2 1/4"
150	6"	150	16	x	3/4 - 10UNC	x	2"
		300	24	x	3/4 - 10UNC	x	2 1/2"
200	8"	150	16	x	3/4 - 10UNC	x	2 1/4"
		300	24	x	7/8 - 9UNC	x	3"
250	10"	150	24	x	7/8 - 9UNC	x	2 1/2"
		300	24	x	1 - 8UNC	x	3 1/4"
			8*	x	1 - 8UNC	x	2 3/4"
300	12"	150	24	x	7/8 - 9UNC	x	2 1/2"
		300	32	x	1 1/8 - 7UNC	x	3 1/2"
			8*	x	1 1/8 - 7UNC	x	3“
350	14"	150	24	x	1 - 8UNC	x	2 3/4"
		300	32	x	1 1/8 - 7UNC	x	4"
			8*	x	1 1/8 - 7UNC	x	3"
400	16"	150	32	x	1 - 8UNC	x	2 3/4"
		300	32	x	1 1/4 - 7UNC	x	4"
			8*	x	1 1/4 - 7UNC	x	3 1/4"
450	18"	150	24	x	1 1/8 - 7UNC	x	3"
			8*	x	1 1/8 - 7UNC	x	2 1/2"
		300	40	x	1 1/4 - 7UNC	x	4"
			8*	x	1 1/4 - 7UNC	x	3 1/4"
500	20"	150	32	x	1 1/8 - 7UNC	x	3 1/4"
			8*	x	1 1/8 - 7UNC	x	2 1/2"
		300	40	x	1 1/4 - 7UNC	x	4 1/2"
			8*	x	1 1/4 - 7UNC	x	3 1/2"
600	24"	150	32	x	1 1/4 - 7UNC	x	3 1/2"
			8*	x	1 1/4 - 7UNC	x	2 3/4"
		300	40	x	1 1/2 - 6UNC	x	5"
			8*	x	1 1/2 - 6UNC	x	4"

* The shorter screws are to be provided for the tapped holes next to the shaft.

Model GG

Screw/Nut dimensions for weld neck flanges in accordance with ANSI B 16.5

DN		ANSI Class	Quantity	x	Thread	x	Length	
100	4"	150	16	x	5/8 - 11UNC	x	2 3/4"	Screw with nut
		300	16	x	3/4 - 10UNC	x	3 1/2"	Screw with nut
150	6"	150	16	x	3/4 - 10UNC	x	3"	Screw with nut
		300	24	x	3/4 - 10UNC	x	4"	Screw with nut
200	8"	150	16	x	3/4 - 10UNC	x	3 1/4"	Screw with nut
		300	24	x	7/8 - 9UNC	x	4 1/2"	Screw with nut
250	10"	150	24	x	7/8 - 9UNC	x	3 1/2"	Screw with nut
		300	32	x	1 - 8UNC	x	5 1/8"	Screw with nut
300	12"	150	24	x	7/8 - 9UNC	x	3 3/4"	Screw with nut
		300	32	x	1 1/8 - 7UNC	x	5 1/2"	Screw with nut

Model GI

Screw/Nut dimensions for weld neck flanges in accordance with ANSI B 16.5

DN		ANSI Class	Quantity	x	Thread	x	Length	
80	3“	150	8	x	5/8 - 11UNC	x	2 3/4“	Screw with nut
		300	8	x	3/4 - 10UNC	x	3 1/4“	Screw with nut
			8*	x	3/4 - 10UNC	x	2“	
100	4“	150	8	x	5/8 - 11UNC	x	2 3/4“	Screw with nut
			8*	x	5/8 - 11UNC	x	1 3/4“	
		300	8	x	3/4 - 10UNC	x	3 1/2“	Screw with nut
			8*	x	3/4 - 10UNC	x	2 1/4“	
150	6“	150	8	x	3/4 - 10UNC	x	3“	Screw with nut
			8*	x	3/4 - 10UNC	x	1 3/4“	
		300	16	x	3/4 - 10UNC	x	4“	Screw with nut
			8*	x	3/4 - 10UNC	x	2 1/4“	
200	8“	150	8	x	3/4 - 10UNC	x	3 1/4“	Screw with nut
			8*	x	3/4 - 10UNC	x	2“	
		300	16	x	7/8 - 9UNC	x	4 1/2“	Screw with nut
			8*	x	7/8 - 9UNC	x	2 3/4“	
250	10“	150	16	x	7/8 - 9UNC	x	3 1/2“	Screw with nut
			8*	x	7/8 - 9UNC	x	2 1/4“	
		300	24	x	1 - 8UNC	x	5 1/8“	Screw with nut
			8*	x	1 - 8UNC	x	3“	
300	12“	150	16	x	7/8 - 9UNC	x	3 3/4“	Screw with nut
			8*	x	7/8 - 9UNC	x	2 1/4“	
		300	24	x	1 1/8 - 7UNC	x	5 1/2“	Screw with nut
			8*	x	1 1/8 - 7UNC	x	3 1/4“	
350	14“	150	16	x	1 - 8UNC	x	4 1/4“	Screw with nut
			8*	x	1 - 8UNC	x	2 3/4“	
		300	32	x	1 1/8 - 7UNC	x	5 3/4“	Screw with nut
			8*	x	1 1/8 - 7UNC	x	3 1/2“	
400	16“	150	24	x	1 - 8UNC	x	4 1/4“	Screw with nut
			8*	x	1 - 8UNC	x	2 3/4“	
		300	32	x	1 1/4 - 7UNC	x	6 1/4“	Screw with nut
			8*	x	1 1/4 - 7UNC	x	3 1/2“	
450	18“	150	24	x	1 1/8 - 7UNC	x	5“	Screw with nut
			8*	x	1 1/8 - 7UNC	x	3“	
		300	40	x	1 1/4 - 7UNC	x	6 1/2“	Screw with nut
			8*	x	1 1/4 - 7UNC	x	4“	
500	20“	150	32	x	1 1/8 - 7UNC	x	5“	Screw with nut
			8*	x	1 1/8 - 7UNC	x	3 1/4“	
		300	40	x	1 1/4 - 7UNC	x	7“	Screw with nut
			8*	x	1 1/4 - 7UNC	x	4“	
600	24“	150	32	x	1 1/4 - 7UNC	x	5 3/4“	Screw with nut
			8*	x	1 1/4 - 7UNC	x	3 1/2“	
		300	40	x	1 1/2 - 6UNC	x	7 3/4“	Screw with nut
			8*	x	1 1/2 - 6UNC	x	4 1/2“	

*The shorter screws are to be provided for the tapped holes next to the shaft.

FS/DB-0020-GB/10.02/GP

Model GF-13 (F16)

Bolting-/Nuts dimensions for weld neck flanges in accordance with DIN

DN		PN	DIN*	Thread Size	Through holes		Tapped holes next to the shaft	
					Quantity of Bolts with Nuts	Length (mm)	Quantity of Bolts	Length (mm)
80	3“	10-40	2633/2635	M16	8	75	8	50
100	4“	10/16	2633	M16	8	70	8	45
		25/40	2635	M20	8	80	8	50
150	6“	10/16	2633	M20	8	75	8	50
		25/40	2635	M24	8	100	8	65
200	8“	10	2632	M20	8	80	8	55
		16	2633	M20	16	80	8	55
		25	2634	M24	16	100	8	60
		40	2635	M27	16	110	8	70
250	10“	10	2632	M20	16	80	8	55
		16	2633	M24	16	90	8	60
		25	2634	M27	16	120	8	65
		40	2635	M30	16	120	8	75
300	12“	10	2632	M20	16	90	8	55
		16	2633	M24	16	90	8	60
		25	2634	M27	24	100	8	75
		40	2635	M30	24	130	8	80
350	14“	10	2632	M20	24	90	8	55
		16	2633	M24	24	100	8	65
		25	2634	M30	24	130	8	80
		40	2635	M33	24	140	8	90
400	16“	10	2632	M24	24	100	8	60
		16	2633	M27	24	100	8	70
		25	2634	M33	24	140	8	80
		40	2635	M36	24	150	8	90
500	20“	10	2632	M24	32	100	8	60
		16	2633	M30	32	140	8	80
		25	2634	M33	32	150	8	90
		40	2635	M39	32	170	8	100
600	24“	10	2632	M27	32	110	8	70
		16	2633	M33	32	150	8	80
		25	2634	M36	32	160	80	90

Number of Boltings/Nuts refering to both flange faces.

* Dimensions referring to hole diameter, thread size, number of screws.
The flange outside diameter conforms to ANSI B16.5

FS/DB-0021-GB/07.04/GP

Model GF-14 (F4)

Bolting-/Nuts dimensions for weld neck flanges in accordance with DIN

					Through holes		Tapped holes next to the shaft	
DN		**PN**	**DIN**	**Thread Size**	**Quantity of Bolts with Nuts**	**Length (mm)**	**Quantity of Bolts**	**Length (mm)**
80	3“	10-40	2633/2635	M16	8	80	8	50
100	4“	10/16	2633	M16	8	70	8	45
		25/40	2635	M20	8	80	8	50
125	5“	10/16	2633	M16	8	80	8	50
		25/40	2635	M24	8	90	8	65
150	6“	10/16	2633	M20	8	90	8	55
		25/40	2635	M24	8	100	8	70
200	8“	10	2632	M20	8	100	8	60
		16	2633	M20	16	100	8	60
		25	2634	M24	16	110	8	70
		40	2635	M27	16	120	8	80
250	10“	10	2632	M20	16	90	8	60
		16	2633	M24	16	90	8	65
		25	2634	M27	16	120	8	75
		40	2635	M30	16	130	8	90
300	12“	10	2632	M20	16	90	8	65
		16	2633	M24	16	100	8	70
		25	2634	M27	24	130	8	80
		40	2635	M30	24	150	8	90
350	14“	10	2632	M20	24	100	8	60
		16	2633	M24	24	110	8	70
		25	2634	M30	24	160	8	90
		40	2635	M33	24	140	8	100
400	16“	10	2632	M24	24	110	8	65
		16	2633	M27	24	120	8	75
		25	2634	M33	24	160	8	90
		40	2635	M36	24	150	8	90
500	20“	10	2632	M24	32	110	8	65
		16	2633	M30	32	160	8	80
		25	2634	M33	32	180	8	100
		40	2635	M39	32	200	8	110
600	24“	10	2632	M27	32	110	8	70
		16	2633	M33	32	160	8	90
		25	2634	M36	32	180	80	100

Number of Boltings/Nuts refering to both flange faces.

CRANE®

Model GE / GA / GI / GF / GG

DN 80-250, weights in kg

DN	Nominal Pressure	Valve with bare shaft end					Valve with gear				
		Model GE	Model GA	Model GI	Model GF	Model GG	Model GE	Model GA	Model GI	Model GF	Model GG
80	PN 10	20	-	-	22	-	34	-	-	32	-
	PN 16	20	-	-	22	-	34	-	-	32	-
	PN 25	20	-	-	22	-	34	-	-	32	-
	PN 40	20	-	-	22	-	34	-	-	32	-
	ANSI 150	-	15	18	-	-	-	29	32	-	-
	ANSI 300	-	15	22	-	-	-	29	36	-	-
100	PN 10	24	-	-	22	-	38	-	-	36	-
	PN 16	24	-	-	22	-	38	-	-	36	-
	PN 25	24	-	-	31	-	38	-	-	45	-
	PN 40	24	-	-	31	-	38	-	-	45	-
	ANSI 150	-	20	22	-	25	-	34	36	-	39
	ANSI 300	-	20	31	-	37	-	34	45	-	51
125	PN 10	25	-	-	-	-	39	-	-	-	-
	PN 16	25	-	-	-	-	39	-	-	-	-
	PN 25	25	-	-	-	-	39	-	-	-	-
	PN 40	25	-	-	-	-	39	-	-	-	-
150	PN 10	37	-	-	36	-	51	-	-	50	-
	PN 16	37	-	-	36	-	51	-	-	50	-
	PN 25	37	-	-	53	-	51	-	-	74	-
	PN 40	37	-	-	53	-	51	-	-	74	-
	ANSI 150	-	28	36	-	46	-	42	50	-	60
	ANSI 300	-	29	53	-	71	-	50	74	-	74
200	PN 10	64	-	-	60	-	83	-	-	79	-
	PN 16	64	-	-	60	-	83	-	-	79	-
	PN 25	64	-	-	85	-	90	-	-	111	-
	PN 40	64	-	-	85	-	90	-	-	111	-
	ANSI 150	-	46	60	-	73	-	65	79	-	92
	ANSI 300	-	52	85	-	110	-	78	111	-	136
250	PN 10	106	-	-	96	-	132	-	-	122	-
	PN 16	106	-	-	96	-	132	-	-	122	-
	PN 25	106	-	-	134	-	132	-	-	160	-
	PN 40	106	-	-	134	-	132	-	-	160	-
	ANSI 150	-	66	96	-	89	-	92	122	-	115
	ANSI 300	-	-	134	-	169	-	103	-	-	195

CRANE

DN 300-600, weights in kg

DN	Nominal Pressure	Valve with bare shaft end					Valve with gear				
		Model GE	Model GA	Model GI	Model GF	Model GG	Model GE	Model GA	Model GI	Model GF	Model GG
300	PN 10	135	-	-	106	-	161	-	-	132	-
	PN 16	135	-	-	106	-	161	-	-	132	-
	PN 25	135	-	-	106	-	176	-	-	132	-
	PN 40	135	-	-	157	-	189	-	-	211	-
	ANSI 150	-	82	106	-	132	-	108	132	-	158
	ANSI 300	-	93	157	-	203	-	147	211	-	253
350	PN 10	168	-	-	151	-	195	-	-	178	-
	PN 16	168	-	-	151	-	195	-	-	178	-
	PN 25	168	-	-	226	-	211	-	-	226	-
	PN 40	168	-	-	226	-	224	-	-	226	-
	ANSI 150	-	94	151	-	-	-	121	178	-	-
	ANSI 300	-	120	226	-	-	-	176	282	-	-
400	PN 10	239	-	-	227	-	280	-	-	284	-
	PN 16	239	-	-	227	-	296	-	-	284	-
	PN 25	239	-	-	318	-	296	-	-	404	-
	PN 40	239	-	-	318	-	325	-	-	404	-
	ANSI 150	-	132	227	-	-	-	189	284	-	-
	ANSI 300	-	172	318	-	-	-	258	404	-	-
450	ANSI I50	-	249	281	-	-	-	320	352	-	-
	ANSI 300	-	325	407	-	-	-	436	518	-	-
500	PN 10	359	-	-	316	-	418	-	-	388	-
	PN 16	359	-	-	316	-	431	-	-	388	-
	PN 25	359	-	-	463	-	447	-	-	575	-
	PN 40	359	-	-	463	-	471	-	-	575	-
	ANSI 150	-	319	316	-	-	-	391	388	-	-
	ANSI 300	-	400	463	-	-	-	512	575	-	-
600	PN 10	554	-	-	506	-	664	-	-	596	-
	PN 16	554	-	-	736	-	664	-	-	939	-
	PN 25	544	-	-	736	-	664	-	-	939	-
	ANSI 150	-	545	506	-	-	-	635	596	-	-
	ANSI 300	-	770	736	-	-	-	973	939	-	-

Model GE / GA / GI / GF / GG
Torques / kv - values

Torques in Nm

DN		Max. defferential pressure Δp in bar with closed valve								
		10	**16**	**20**	**25**	**30**	**35**	**40**	**45**	**50**
80	3“	44	64	77	94	110	127	143	160	176
100	4“	79	114	137	165	194	223	251	280	309
125	5“	132	185	221	266	311	355	400	445	490
150	6“	274	373	439	521	603	685	768	850	932
200	8“	290	464	580	725	870	1015	1160	1305	1450
250	10“	488	750	925	1144	1363	1581	1800	2019	2238
300	12“	795	1107	1315	1575	1835	2095	2355	2615	2875
350	14“	1286	1817	2171	2614	3057	3500	39433	4386	4829
400	16“	1450	2230	2750	3400	4050	4700	5350	6000	6650
450	18“	1900	2770	3350	4075	4800	5525	6250	6975	7700
500	20“	2600	3680	4400	5300	6200	7100	8000	8900	9800
600	24“	4460	6176	7320	8750	10180	11610	13040	14470	15900

The torques above are disign torques for actuators. They feature a safety factor and may be used for any application, regardless whether the higher pressure is effective in preferred direction (shaft side) or in opposite direction (disc side). The value for 10 bar differential pressure is to be taken as minimum torque.

k_v values in dependence on the opening angle

DN		opening angle							
		90°	**80°**	**70°**	**60°**	**50°**	**40°**	**30°**	**20°**
80	3“	81	76	63	51	43	32	22	8
100	4“	193	180	180	161	121	97	70	45
125	5“	340	326	265	195	145	105	69	41
150	6“	527	525	427	327	256	201	158	112
200	8“	1020	1000	855	694	568	455	334	218
250	10“	2060	2055	1790	1440	1050	765	543	380
300	12“	3200	3190	2680	2110	1512	1089	717	481
350	14“	4600	4416	3542	2668	1978	1426	966	552
400	16“	6400	6144	4928	3712	2752	1984	1344	768
450	18“	8700	8352	6699	5046	3741	2697	1827	1044
500	20“	11000	10560	8470	6380	4730	3410	2310	1320
600	24“	17000	16320	13090	9860	7310	5270	3570	2040

Model GE/GA/GI/GF/GG

Standard spare parts

Item	Part	Material
3	Laminated seal	1.4541 / Graphite
4	Gasket	Graphite
7	Cover gasket	Graphite
19/20	Gland packing	3 Graphite rings, 2 rings made of carbon fiber mesh

DN		MODEL GE, GA, GF Article No. *2)	MODEL GI, GG Article No. *2)
80	3“	GSPA0080	GSPA0080S
100	4“	GSPA0100	GSPA0100S
125	5“	GSPA0125	GSPA0125S
150	6“	GSPA0150 *)	GSPA0150S
150	6“	GSPA0150A **)	
200	8“	GSPA0200 *)	GSPA0200S
200	8“	GSPA0200A **)	
250	10“	GSPA0250	GSPA0250S
300	12“	GSPA0300	GSPA0300S
350	14“	GSPA0350	GSPA0350S
400	16“	GSPA0400	GSPA0400S
450	18“	GSPA0450	GSPA0450S
500	20“	GSPA0500	GSPA0500S
600	24“	GSPA0600	GSPA0600S

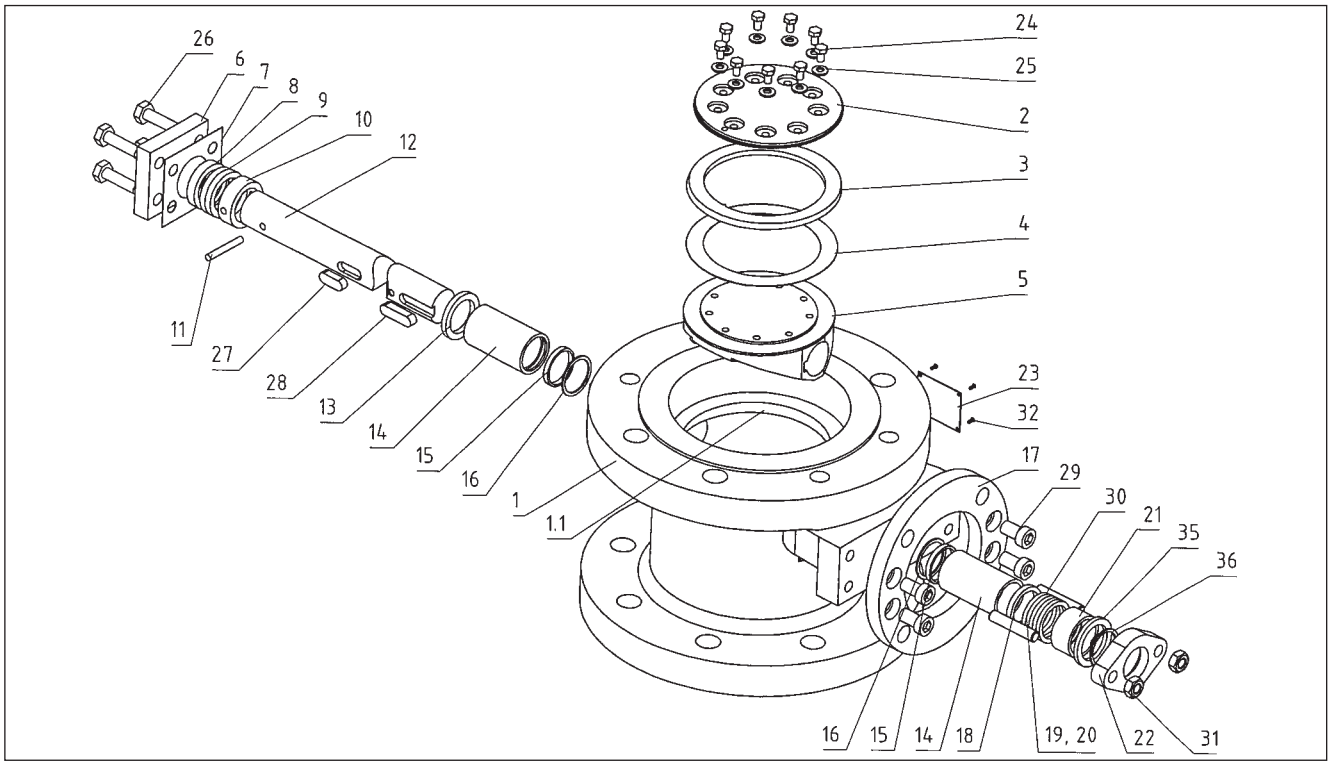
*) not for model GA in ANSI 150
**) only for model GA in ANSI 150
*2) applies only to the current series 2

Spare parts for other series indicating the complete MS article no. on request

CRANE

Model GF-14 (F4)

Materials / Temperature range



Item	Temperature range Model - No. Part	Steel version *2 -10°C bis +400°C (14°F to 752°F) -C11100F Standard	 -10°C bis +300°C (14°F to 572°F) -C11900F Nace
1	Body*	GP240GH	
1.1	Body seat*	1.4571 or similar (Stellite on request)	
2	Seal retainer ring *	P265GH / P250GH	
3	Laminated seal	1.4541 / Graphite	
4	Gasket	Graphite	
5	Disc *	GP240GH / P265GH / P250GH	
6	Cover	P265GH	
7	Cover gasket	Graphite	
8	Intermediate ring	1.4305	
9	Ring	Graphite	
10	Shaft retainer	1.4305 hard-chromium-plated	

* Material according to the manufacturer's choice

*2 The application type (medium / temperature) has to be specified when ordering

To be continued on the next page

CRANE

Item	Temperature range Model - No. Part	Steel version *2 -10°C bis +400°C (14°F to 752°F) -C11100F Standard	 -10°C bis +300°C (14°F to 572°F) -C11900F Nace
11	Pin	1.4571 or equivalent	
12	Shaft	1.4057	1.4462
13	Thrust ring *	1.4112 / 1.4034 (hardened)	
14	Bushing	1.4305 (coated)	
15	Bearing protector	Carbon fiber mesh	
16	Anti seize ring	-	
17	Mounting plate	Steel	
18	Ring	1.4305	
19	Gland packing	Carbon fiber mesh	
20	Gland packing	Graphite	
21	Gland bushing	1.4305	
22	Gland flange	P265GH	
23	Name plate	Stainless steel	
24	Screw	A2 - 70	
25	Spring washer *	1.4923 / 1.4122	Inconel
26	Screw	A2 - 70	
27	Disc key	1.4571	
28	Drive key	1.4571	
29	Screw	A2 - 70	
30	Stud	A2 - 70	
31	Nut	A2 - 70	
32	Round head grooved pin	Stainless steel	
35	Intermediate Ring	1.4305	
36	Circlip for shaft	1.4122	

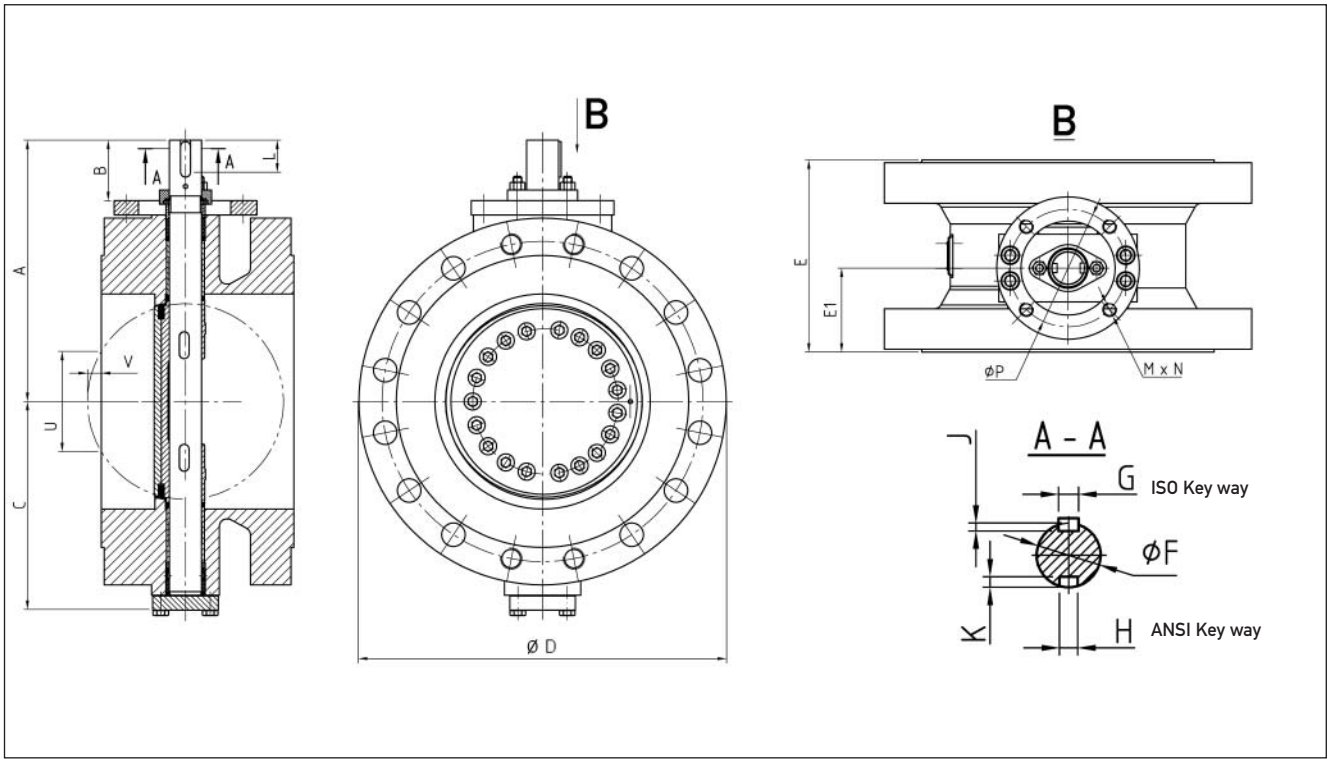
* Material according to the manufacturer's choice
*2 The application type (medium / temperature) has to be specified when ordering

CRANE

Model GF-14 Double Flange Body EN 558-1, R14 (F4)

FS/DB-0026GB/07.04/GP

Dimensions / Weights DN 80 - 600



Dimensions in mm, bare shaft end

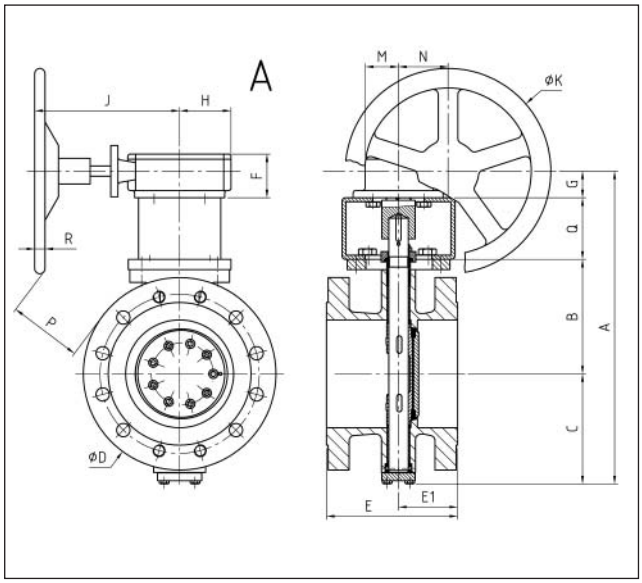
DN	80 3”	100 4”	125 5”	150 6”	200 8”	250 10”	300 12”	350 14”	400 16”	500 20”	600 24”
A	192	207	227	252	303	339	367	407	476	575	657
B	62	62	72	72	80	80	85	90	113	130	140
C	130	145	140	180	208	240	292	317	383	465	537
ØD (PN10)	-	-	-	-	375	405	460	520	580	670	780
ØD (PN16)	-	235	270	300	375	405	460	520	580	755	854
ØD (PN25)	-	-	-	-	375	450	515	580	660	755	854
ØD (PN40)	200	235	270	300	375	450	515	580	660	755	-
E	180	190	200	210	230	250	270	290	310	350	390
E1	40	50	60	68	115	122	118	118	117	109	106
øF	20	22	25	32	38	40	45	55	65	75	90
G	6	6	8	10	10	12	14	16	18	20	25
H	4,8	4,8		8	9,5	9,5	12,7	12,7	15,9	19,1	22,3
J	3,5	3,5	4	5	5	5	5,5	6	7	7,5	9
K	2,7	2,7		4,5	5,4	5,4	7,3	7,1	9	10,8	12,6
L	22	22	32	32	40	40	45	50	63	80	90
M	4		4		4				8		
N	M12		M16		M20				M16		
øP	125 / F12		140 / F14		165 / F16				254 / F25		
U	0	0	0	0	0	0	155	218	281	411	525
V	0	0	0	0	0	0	21	38	60	116	167

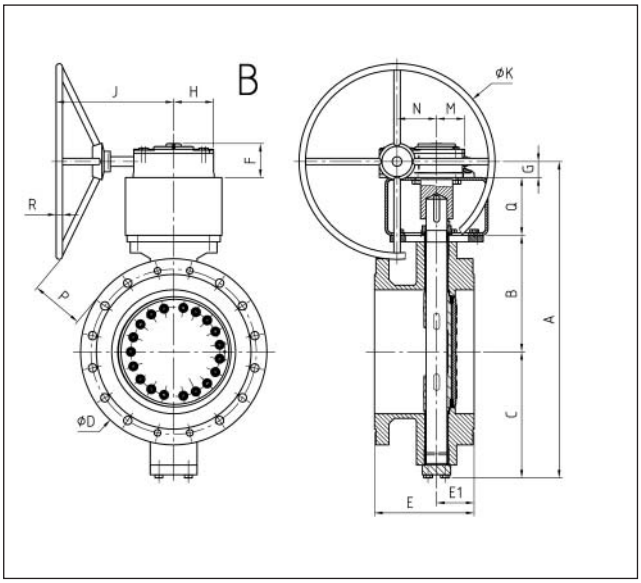
refer to next page

CRANE

Weights in kg

DN	80 3”	100 4”	125 5”	150 6”	200 8”	250 10”	300 12”	350 14”	400 16”	500 20”	600 24”
bare shaft											
PN10/16	19	26	37	47	80	78	112	172	232	294/499	447/600
PN25/40	19	26	37	47	80	121	183	262	378	499	600/-
with gear											
PN10	33	40	51	61	99	104	138	199	273	354	537
PN16	33	40	51	61	99	104	138	199	289	571	690
PN25	33	40	51	61	106	147	224	305	435	587	690
PN40	33	40	51	61	109	147	237	318	464	587	-





Dimensions in mm, with manual gear

DN	80 3”	100 4”	125 5”	150 6”		200 8”		250 10”	300 12”			350 14”			400 16”			500 20”				600 24”	
Δpmax (bar)	**40**	**40**	**40**	**20**	**40**	**16**	**40**	**40**	**16**	**25**	**40**	**16**	**25**	**40**	**10**	**25**	**40**	**10**	**16**	**25**	**40**	**16**	**25**
A	416	446	461	526	530	627	631	699	774	800	821	834	860	881	1006	1032	1078	1196	1217	1242	1240	1386	1384
B	130	145	155	180		223		259	282			317			363			445				517	
E1	40	50	60	68		115		122	118			118			117			109				106	
F	76	76	76	76	80	76	80	80	80	106	127	80	106	127	80	106	152	106	127	152	150	152	150
G	42	42	42	42	52	42	52	52	52	50	50	52	50	50	52	50	66	50	50	66	64	66	64
H	64	64	64	64	100	64	100	100	100	126	158	100	126	158	100	126	155	126	158	155	153	155	153
J	240	240	240	240	282	240	282	282	282	362	387	282	362	387	282	362	493	362	387	493	509	493	509
øK	250	250	250	250	400	250	400	400	400	600	600	400	600	600	400	600	600	600	600	600	600	600	600
M	45	45	45	45	64	45	64	64	64	114	117	64	114	117	64	114	158	114	117	158	171	158	171
N	65	65	65	65	96	65	96	96	96	123	154	96	123	154	96	123	60	123	154	60	68	60	68
P (PN10)	-	-	-	-		151	122	131	119	140	163	116	125	147	172	157	271	169	186	275	286	268	278
P (PN16)	-	141	135	136	119	151	122	131	119	140	163	116	125	147	172	157	271	127	144	232	243	231	241
P (PN25)	-	-	-	-	151	122	108	92	112	135	86	95	117	132	117	231	127	144	232	243	231	241	
P (PN40)	150,6	141	135	136	119	151	122	108	92	112	135	86	95	117	132	117	231	127	144	232	243	-	
Q	80	80	90	90		120		120	120			120			180			180				180	
R	24	24	24	24	42	24	42	42	42	25	25	42	25	25	42	25	25	25	25	25	25	25	25
Drawing	A	A	A	A	A	A	A	A	A	B	B	A	B	B	A	B	B	B	B	B	B	B	B

Note:
- Dimensions C, D, E, U, V see front page

CRANE