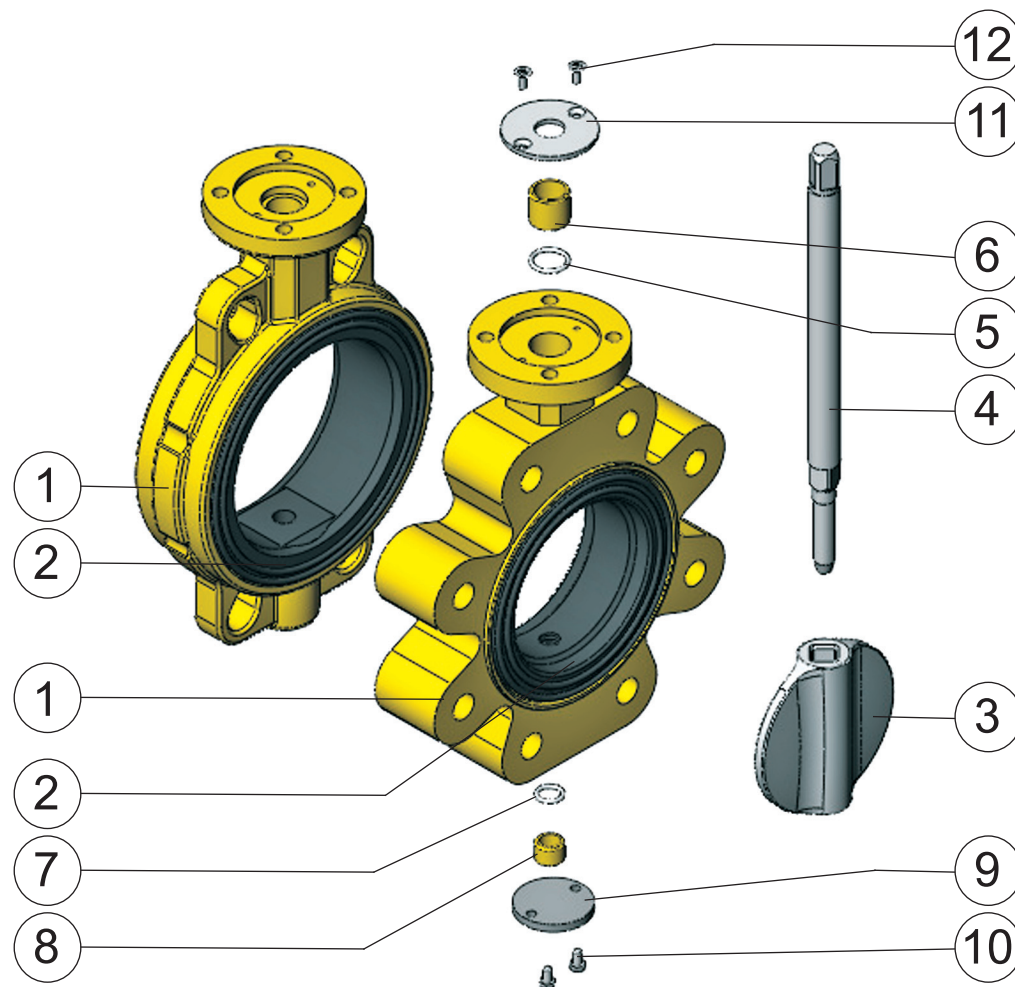




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Please contact us for other sizes and materials.

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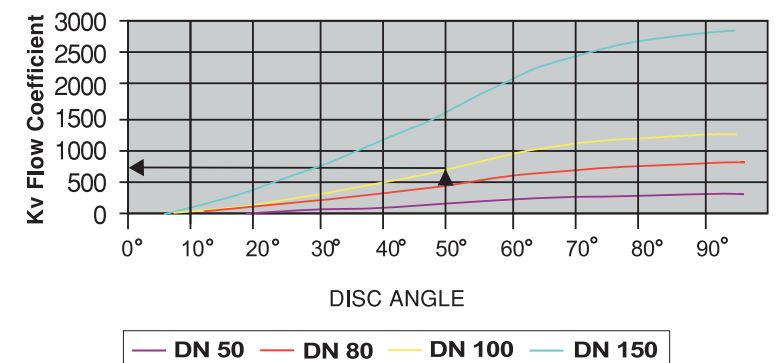
14.02.2012

Part List & Material Specification

Ø50-300

P.NO	PART NAME	MATERIAL
1	Body	GS C-25 (ASTM A216 WCB)
2	Body seat	NBR (BUNA - N) Vulcanized
3	Disc	AISI 316
4	Stem	AISI 420
5	O-Ring	NBR (BUNA - N)
6	Bearing	Bronze
7	O-Ring	NBR (BUNA - N)
8	Bearing	Bronze
9	Lower cover	Carbon steel
10	Bolt	8.8
11	Washer	St-37
12	Bolt	8.8

TYPE 1220-1240 FLOW CHARACTERISTICS



The above diagram has calculated according to 2 bar pressure
When the disc is 90° open

$$\Delta P = P_1 - P_2 = 1 \text{ Kp/cm}^2$$

Sample calculation:

When the disc is 50° opened, the ΔP is calculated as

P = 2 bars Q = Flow capacity m³/s V = Flow speed m/s
d = 100 mm. P = Pressure bar α = Disc angle
V = 24 m/s γ = Specific gravity of the medium

d = DN (mm)

ΔP = Pressure drop through the butterfly valve

Kv = Definition of the flow coefficient

$\alpha = 50^\circ$

$$Q = \frac{V \times d^2 \times P}{378}$$

$$Q = \frac{24 \times 100^2 \times 2}{378}$$

$$Q = 1269,841 \approx 1270 \text{ m}^3/\text{s}$$

From the diagram for DN 100 curve, cutting from 50° will
give the Kv value.

$\alpha = 50^\circ$

Q = 1270 m³/s

If Kv = 730

$$Q = Kv \times \sqrt{\frac{\Delta P}{\gamma}} \Rightarrow \Delta P = \gamma \times \left(\frac{Q}{Kv} \right)^2$$

$\gamma = 0,53 \text{ gr/cm}^3$ (for gas)

$$\Delta P = 0,53 \times \left(\frac{1270}{730} \right)^2$$

$$\Delta P = 1,602 \text{ Kp/cm}^2$$



1220 WAFER TYPE NATURAL GAS VALVE
1240 LUG TYPE NATURAL GAS VALVE

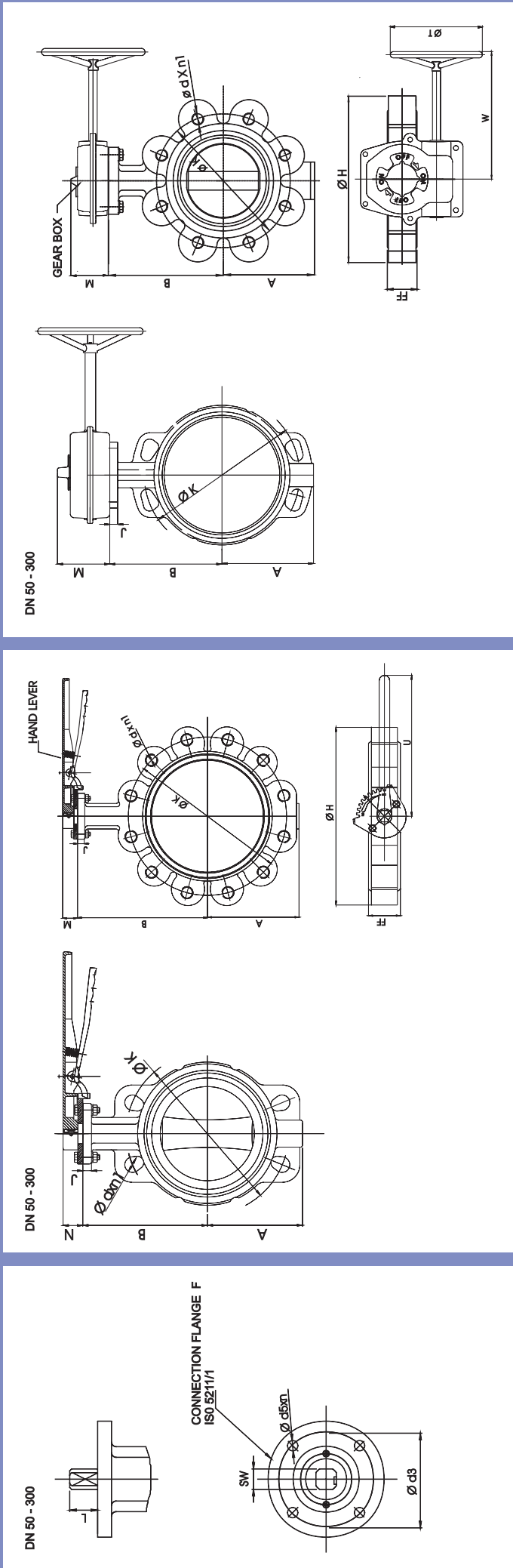
Type 1220 wafer and 1240 lug type threaded holes butterfly valve is used in all natural gas and LNG distribution systems by its vulcanized NBR seat design with DVGW approval.

- Asteknik Valve Type : 1220 / 1240
Valve type : Wafer and Lug type (threaded) natural gas valve.
DN/ANSI : DN 50 - DN 300 2" - 12"
Flange Connection : ANSI CL 150
Top Flange : ISO 5211
Marking : EN 19
Face-to-Face : EN 558-1/20
Test Standard : EN 12266-1

Please contact us for other sizes, pressures and flange connections.



Wafer / Lug type (threaded) natural gas valve dimensional drawing



DN	A	B	FF	Ø H		J	M	N	U	W	Ø T	F	Ød5xn	ØSW	L	Ø d3	CL 150			PN 10			PN 16			FREE SHAFT Weight (kg)		HAND LEVER		GEAR BOX	
				1220	1240												Ø K	Ø d	n1	Ø K	Ø d	n1	Ø K	Ø d	n1	1220	1240	Type	Weight (kg)	Type	Weight (kg)
Ø 50	66	108	43	100	130	13	50	37	220	159	200	07	9x4	Ø 9	20	70	120.7	5/8	4	125	M 16	4	125	M 16	4	2.5	4.0	92-150	0.600	AST-20	2,900
Ø 65	78	127	46	123	154	13	50	37	220	159	200	07	9x4	Ø 11	20	70	139.7	5/8	4	145	M 16	4	145	M 16	4	3.8	6.5	92-150	0.600	AST-20	2,900
Ø 80	97	132	46	137	188	14	50	37	260	159	200	07	9x4	Ø 14	20	70	152.4	5/8	4	160	M 16	8	160	M 16	8	4.1	7.0	92-200	0.800	AST-20	2,900
Ø 100	110	155	52	156	218	14	50	37	260	159	200	07	9x4	Ø 14	20	70	190.5	5/8	8	180	M 16	8	180	M 16	8	5.3	10.5	92-200	0.800	AST-20	2,900
Ø 125	122	160	56	187	234	14	50	37	260	159	200	07	9x4	Ø 14	20	70	215.9	3/4	8	210	M 16	8	210	M 16	8	6.5	11.5	92-200	0.800	AST-20	2,900
Ø 150	138	185	56	212	268	14	50	37	350	159	200	07	9x4	Ø 17	22	70	241.3	3/4	8	240	M 20	8	240	M 20	8	8.0	13.0	92-300	0.900	AST-20	2,900
Ø 200	160	213	60	265	317	15	50	37	350	159	200	07	9x4	Ø 17	22	70	298.5	3/4	8	295	M 20	8	295	M 20	8	12.5	24.0	92-300	0.900	AST-20	2,900
Ø 250	202	245	68	319	393	15	75	47	400	238	260	10	11x4	Ø 22	32	102	362	7/8"	12	350	M 20	12	355	M 24	12	20.5	33.5	92-400	2.600	AST-30	8,220
Ø 300	239	282	77	372	446	15	75	47	400	238	260	10	11x4	Ø 27	32	102	431.8	7/8"	12	400	M 20	12	410	M 24	12	30.00	45.0	92-400	2.600	AST-30	8,220

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Please contact us for other sizes.

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