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BUTTERFLY VALVE M3
DN 40 – 900 PN 10/16
Construction

O-ring for protection against inpurities

ISO 5211 Mounting flange

Brass bearings for exact stem leading

Stemform with square or with flathead

Stem orifice with semirings for better sealign

Seat elastomer vulcanised on supporting ring

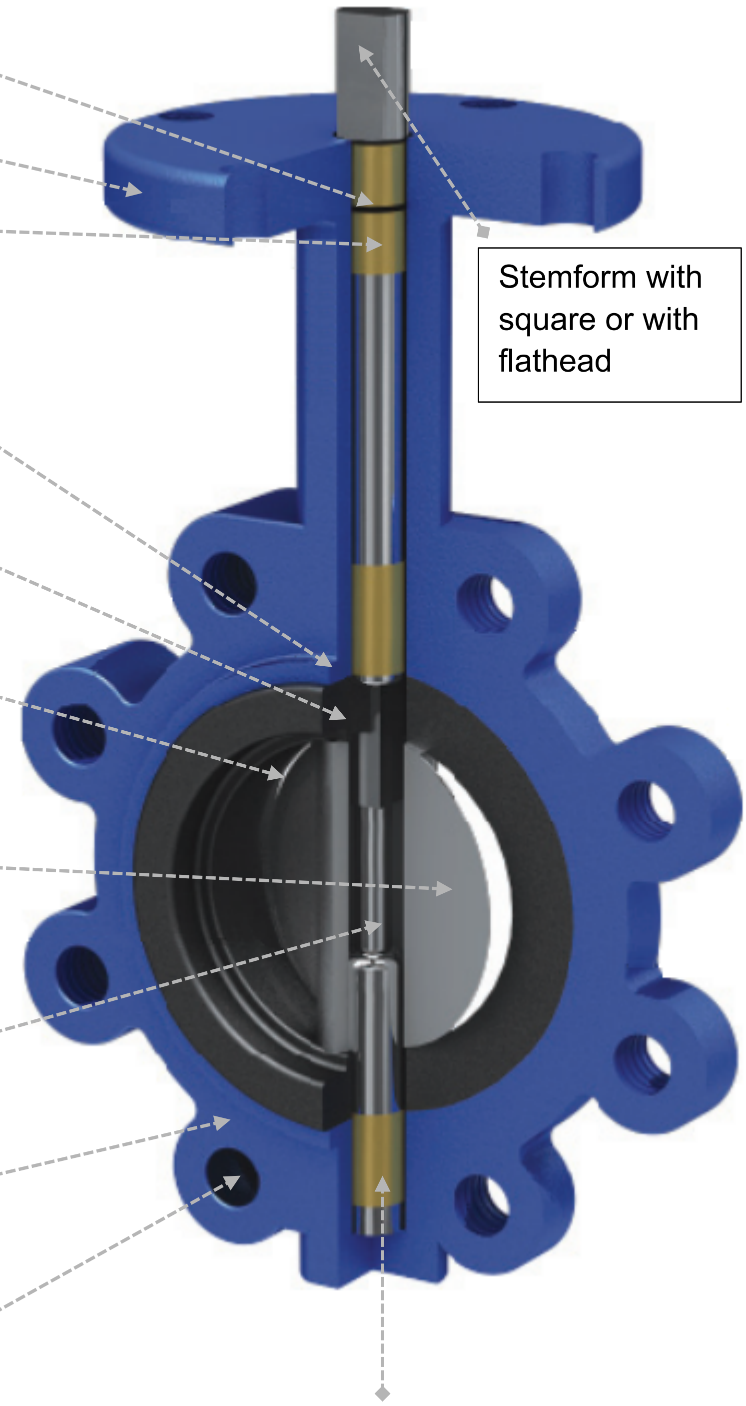
Disc tightning face polished for better seat life

Carefully formed disc offers best tightness and minimalizes damage of the seat and lowers moment

Throughstem with all lenght diameter for high loading in pipeaxis diametr

Bodies as lug or wafer type

Bolt orifices for exact assembly between flanges



Axial bearing against stem overloading

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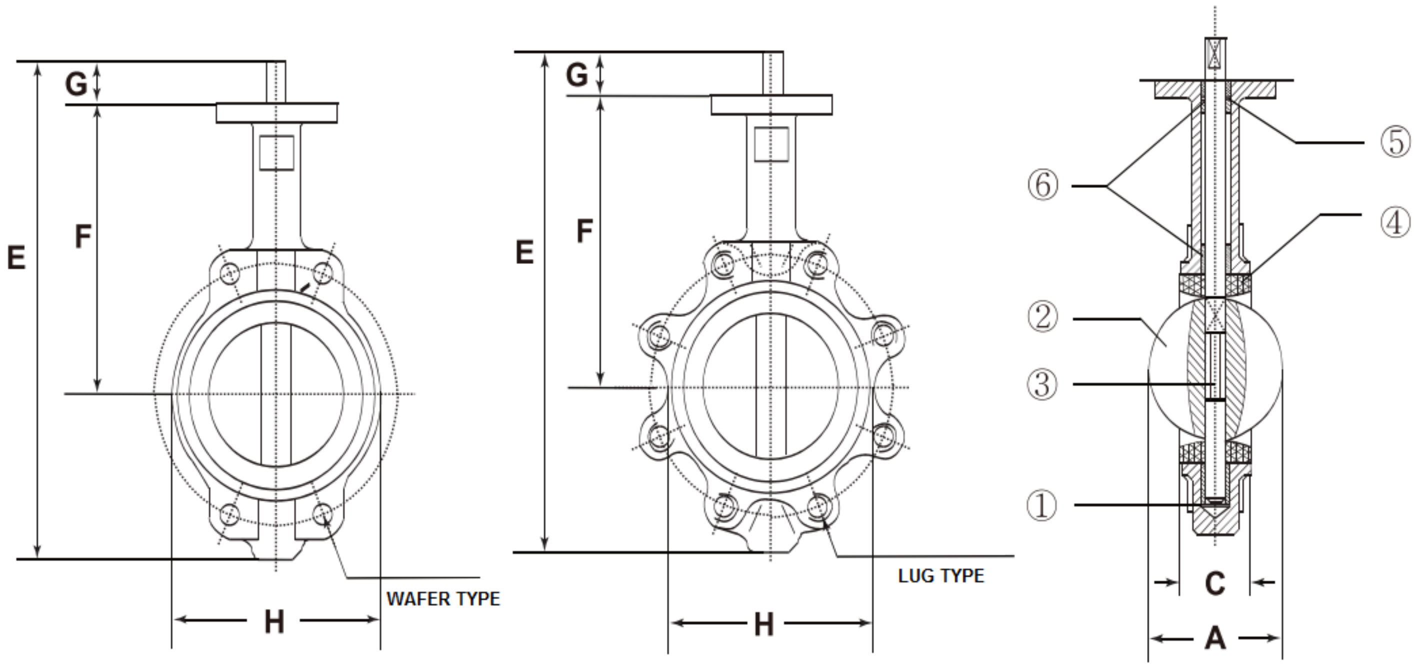
BUTTERFLY VALVE M3
DN 40 – 900 PN 10/16
Dimensions

Dimensions /mm/



DN	A	C	E	F	G	H	Wafer type	Lug type
50	53	43	273	161	32	100	4	5
65	64	45	296	175	32	120	5	5
80	89	46	308	181	32	127	5	6
100	104	46	346	200	32	165	6	10
125	123	52	372	213	32	185	8	11
150	155	56	397	226	32	212	9	13
200	202	61	480	260	45	268	16	22
250	250	67	540	292	45	341	21	31
300	301	77	614	337	45	400	35	49
350	331	77	680	368	45	436	43	72
400	390	87	748	400	51	490	52	90
450	441	106	788	422	51	539	87	111
500	492	132	922	480	58	593	98	123
600	593	152	1073	562	70	800	133	178

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BUTTERFLY VALVE M3
DN 40 – 600 PN 16
Dimension definition

Maximal pressure

- cast iron body DN 40 – 400 1,6 MPa
  DN 450 – 600 1,0 MPa
- steel and ductile iron body
  DN 40 – 600 1,6 MPa

Construction

- triple lodgment of stem in brass bearings
- disc connected with stem throug pins

Valve is excellent for control and trottling

Maximal working tempereture

- as per used elastomer of seat

Body - 1	
Matarial	**code**
cast iron GG25	1
ductile iron GGG40	2
Steel GS-C 25	6
SS AISI 316	8

Valve - 2	
Material	**code**
Ductile iron	1
Alu-brass	5
SS 316	8

Seat elastomer - 3		
Material	**Temp.range**	**Code**
EPDM	-20°C + 120°C	E
NBR	-10°C + 80°C	B
PTFE	-20°C + 150°C	P

M3 type □ □ □

Dimension definition for control operation

Firstly we define coefficient kv by the following formula:

a) for fluids

$$kv = Q.\sqrt{\frac{\gamma}{\Delta p}}$$

b) for gases

$$k = \frac{V_N}{514}.\sqrt{\frac{G.T}{\Delta p.p2}}$$

k_v = flow coefficient
V_N = max. flow in Nm^3/h
T = absoulute temp. /°C/
Q = max. flow in m^3/h

p_1 = absolute pressure /bar/
p_2 = absolute pressure back valve /bar/
G = specific weight in kg/m^3
Δp = pressure lost /bar/ γ = specific weight in kg/dm^3

DN is specified by the coefficient kv from the following table

DN	Flow space S /cm³/	10°	20°	30°	40°	50°	60°	70°	80°	90°
50	19,6	0	9	17	30	49	72	89	97	125
65	33,2	5	14	26	45	80	123	158	190	236
80	50,3	7	20	45	76	112	172	250	312	391
100	78,5	9	32	68	120	185	276	420	590	700
125	123	12	48	115	190	301	441	661	942	1109
150	177	18	66	152	270	421	611	863	1212	1467
200	314	25	120	267	486	730	1123	1521	2257	2605
250	491	32	217	420	750	1187	1812	2390	3421	4319
300	707	45	270	630	1189	1679	2412	3560	5252	6507

Flow velocity should not exceed:

a) for fluids 4,5m/s b) for gases 100m/s

Velocity calculation is according to following formulas.

a) for fluids $V = \frac{Q}{\;}$ b) for gases $V = \frac{V_N.T}{\;}$