

BTV 104

Fully lugged version – PN 25



TA-SC

Expert System Components

ENGINEERING ADVANTAGE

Fully lugged butterfly valve for heating and cooling systems. Available in pressure class PN 25.



Technical description

Applications:

Heating and cooling systems.

Function:

Shut-off

Dimensions:

DN 65-300

Pressure class:

PN 25

Temperature:

Max. working temperature: 120°C

Min. working temperature: -10°C

Material:

Body: Ductile iron EN-GJS-500-7 (EN 1563)

Shaft: Stainless steel X20Cr13 +A (EN 10088-2, BS 970 ~420S37, AISI 420)

Disc: Stainless steel X5CrNi18-10 +AT (EN 10088-2, BS 970 304S15, A351 CF8)

Bushing: PTFE

Liner: EPDM

O-rings: EPDM

Lever: DN 65-125 pressed steel trigger lever, DN 100-300 cast iron gear operator.

Marking:

TA-SC, CE, DN and PN.

Surface treatment:

Body: FBE (fusion bonded epoxy) coated, dark grey.

Lever and gear operator: FBE (fusion bonded epoxy) coated, black.

Valve standard:

According to EN 593 (BS 5155)

Flanges:

According to EN 1092-2.

Fully lugged has tapped through holes according to EN 1092-2.

Top flange: According to ISO 5211/1.

Installation

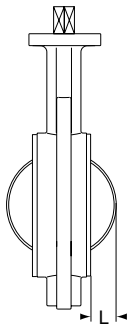
The distance between the flanges must be taken in consideration before installation of the valve. Place the valve in the centre and open the valve before mounting of the bolts. Tighten the bolts in the right order when assembly the valve between the flanges to keep an even pressure against the valve.

NOTE!

- The valve must be open at installation.
- Do not weld a flange after the valve is installed. The heat can damage the sealings of the valve.
- Blind flanges must be used if the valve is installed in the end of a piping system.

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DN	No of bolt holes
65	8 x M16
80	8 x M16
100	8 x M20
125	8 x M24
150	8 x M24
200	12 x M24
250	12 x M27
300	16 x M27



DN	L*
65	14
80	19
100	25
125	36
150	48
200	71
250	92
300	111

*) Excess disc length when fully open.

Tightening torque

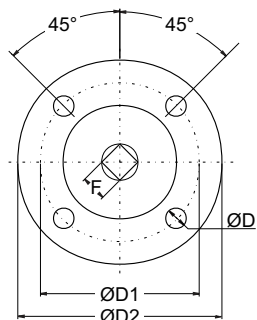
The test was performed under normal working conditions.

Media: Water at normal room temperature. Under certain working conditions it is necessary to increase the tightening torque with 30%.

Torque during operation

DN	Size [inch]	Nm.	Max working pressure [bar]
65	2 1/2	48	16
80	3	60	16
100	4	60	16
125	5	90	16
150	6	110	16
200	8	190	16
250	10	260	16
300	12	460	16

Top flange connection



Flange according to ISO 5211/1

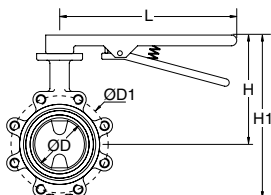
DN	F	D	D1	D2	Flange
65	11	9	70	90	F07
80	11	9	70	90	F07
100	14	9	70	90	F07
125	14	9	70	90	F07
150	17	9	70	90	F07
200	17	11	102	125	F10
250	22	11	102	125	F10
300	22	11	102	125	F10

Articles

Fully lugged version

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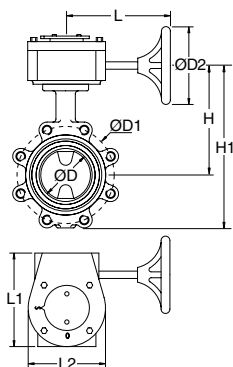
With lever



Article No	DN	D	D1	L	H	Face to face length	Kvs	Kg
77 104-165	65	72	145	260	181	45	230	6,1
77 104-180	80	83	160	260	190	46	380	6,5
77 104-190	100	102	190	260	211	52	515	9,0
77 104-191	125	128	220	260	221	56	900	12

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With gear operator



Article No	DN	D	D1	L	L1	L2	H	H1	Face to face length	Kvs	Kg
77 104-390	100	102	190	160	130	108	214	314	52	515	12
77 104-391	125	128	220	160	130	108	224	344	56	900	16
77 104-392	150	151	250	160	130	108	236	368	57	1920	18
77 104-393	200	201	310	238	177	153	278	438	60	3000	35
77 104-394	250	251	370	238	177	153	311	511	69	3940	38
77 104-395	300	301	430	226	198	161	371	601	80	6750	53

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