



# PRODUCT TECHNICAL SPECIFICATION

## BUTTERFLY VALVE WAFER

### SCOPE

Butterfly Valve, Wafer, Gray Cast Iron / Ductile Iron  
Sizes and Materials comply with the EN  
Standards, has TSE Certificate in accordance  
with the TS EN 593 Standard  
DN 40, 50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400, 500, 600  
PN 16

### A. MATERIALS

<b>Body</b>	in accordance with the TS 526 EN 1563/A1 Standard; Ductile Iron, EN GJS 400 (GGG 40.3 according to the older rating)
<b>Disc</b>	in accordance with the TS 526 EN 1563/A1 Standard; Ductile Iron, EN GJS 400 (GGG 40.3 according to the older rating), outer surface Nickel plated Stainless Steel, AISI 304 (CF8)
<b>Lever</b>	in accordance with the TS 526 EN 1563/A1 Standard; Ductile Iron, EN GJS 400 (GGG 40.3 according to the older rating)
<b>Stem</b>	Stainless Steel, AISI 410 or 420 or 304
<b>Seat</b>	Shore A EPDM or Fluorinated or NBR Rubber, Hardness $70 \pm 5$ , coating via Vulcanization process
<b>Sealing</b>	



**Components** EPDM or Fluorinated or NBR

## **B. FACE TO FACE DIMENSIONS**

TS EN 558-1 SERIES-20

## **C. WAFER CONNECTION DIMENSIONS**

in accordance with the TS EN 1092-2 and BS EN 1092-2 Standards; compatible with the PN 6, 10 and 16 connection

## **D. NOMINAL PRESSURE / OPERATING PRESSURE**

PN 16 / 16 Bar

## **E. OPERATING TEMPERATURE RANGE**

-10 ~ +120 °C

## **F. MARKING**

Minimal marking that is legible and obtained in the form of embossing from casting;

**MANUFACTURER**

**(BRAND) TSEN593**

**BODY MATERIAL**

**IF DUCTILE IRON: EN GJS 400**

**PRESSURE GRADING: PN6 / PN10 / PN16**

**NOMINAL SIZE: DN40/DN50/DN65 / DN80 / DN100 / DN125 / DN150 / DN200 / DN250  
/ DN300 / DN350 / DN400 / DN450 / DN500 / DN600**

## **G. PAINT**

**After Casting** Cast Iron parts are primed using Shop Primer

**After EPDM Coating** Top coat, wet spray paint

## **H. TEST**

in accordance with the EN 12266-1 Standard; RATE-A (Zero leakage)



## I. WARRANTY

2-year warranty against workmanship and material defects

## J. PACKAGING AND SHIPMENT

Products are shipped as packed in individual plastics bags

## K. OTHER ISSUES

The valves with an operating pressure of 16 bars not only fulfill opening, closing and partial adjustment functions in installations, but also provide 100% sealing in the closed position.

Valves with a connection diameter of DN40 to DN 200 are lever controlled, those with a connection diameter of DN250 and above are reducer (gear box) controlled.

They are compatible with ISO 5211 actuator connection standards providing the torque values for all sizes of butterfly valves in the table below.

Single Acting Pneumatic Actuator Double Acting Pneumatic Actuator Multi Turn Electrical Actuator  
can be installed, valve closing and opening can be controlled with these actuators.

VALV E SIZE [DN]	TORQU E VALUE [Nm]	TORQU E VALUE x 1.25 [Nm]	DOUBLE ACTING PNEUMA	SINGLE ACTING PNEUMA	MULTI TURN ELECTRI
			ACTUATOR TORQUE VALUE	ACTUATOR TORQUE VALUE	ACTUATOR TORQUE VALUE
4	13	16	4	14	6
5	23	29	4	48	6
6	29	36	4	48	6
8	36	45	9	48	8
1	46	58	9	106	8
1	71	89	9	106	1
1	105	131	1	134	1
2	198	248	3	230	3
2	313	391	5	607	5
3	434	543	5	607	6
3	624	780	7	1.1	8
4	871	1.089	15	1.1	1.2
5	1.509	1.886	29		
6	3.268	3.960	29		