BUTTERFLY VALVES · WAFER PATTERN

TTV Ductile Iron Wafer Butterfly Valve – Aluminium Bronze Disc, EPDM Seat

Manufacturer: **TTV, S.A. (Spain)** Model: **20W3080 E** Sizes listed: **DN40 – DN200** Shopify ref: **10094748139784**



AT A GLANCE

Valve type	**Concentric, resilient-seated butterfly valve, wafer body**
Body	**Ductile iron, EN 1563 GJS500-7**
Disc	**Nickel-aluminium bronze, ASTM B148 C95500**
Shaft	**Stainless steel, ASTM A182 F304**
Seat	**EPDM**
Fits between	**PN10 / PN16 (EN 1092-1) and ANSI Class 150 flanges**
Top flange	**ISO 5211 F5/F7 (DN32–100), F7 (DN125–200)**
Temperature	**-20 °C to +110 °C (manufacturer data)**
WRAS	**Approved (see Approvals)**

PRODUCT OVERVIEW

The TTV 20W3080 E is a concentric (zero-offset), resilient-seated butterfly valve with a wafer-pattern body that is clamped between pipe flanges. Construction is a ductile iron body, nickel-aluminium bronze disc, stainless steel shaft (ASTM A182 F304) and an EPDM seat.

The valve is supplied with a bare shaft and an ISO 5211 top flange, so it can be fitted with a lever, gearbox or actuator. Face-to-face length follows EN 558 Series 20, ISO 5752 Series 20, API 609 Table 1 and BS 5155 Series 4. TTV pressure tests the body at 1.5 × PN and the seat at 1.1 × PN to EN 12266-1 / ISO 5208, with a zero-leakage tightness test.

KEY FEATURES

- Ductile iron body with nickel-aluminium bronze disc
- Stainless steel shaft (ASTM A182 F304)
- EPDM seat
- Wafer body to fit PN10/16 and ANSI 150 flanges
- ISO 5211 top flange for direct lever, gearbox or actuator mounting
- Face-to-face to EN 558 Series 20 / ISO 5752 Series 20 / API 609
- Seat leakage tested to ISO 5208 (zero leakage) and API 598

DETAILED TECHNICAL SPECIFICATION

CONSTRUCTION

Body	Ductile iron, EN 1563 GJS500-7
Disc	Nickel-aluminium bronze, ASTM B148 C95500
Shaft	Stainless steel, ASTM A182 F304
Seat	EPDM
Design	Concentric resilient-seated, wafer pattern, bare shaft

OPERATING CONDITIONS

Temperature range	-20 °C to +110 °C (manufacturer datasheet)

CONNECTIONS & STANDARDS

Mounting between flanges	PN10/16 to ISO 7005, DIN 2501, EN 1092-1; ANSI Class 150 to ASME B16.5
Face to face	EN 558 Series 20; ISO 5752 Series 20; API 609 Table 1; BS 5155 Series 4
Top flange	ISO 5211 – F5/F7 (DN32 to DN100), F7 (DN125 to DN200)
Tolerances	ISO 2768-M

TESTING

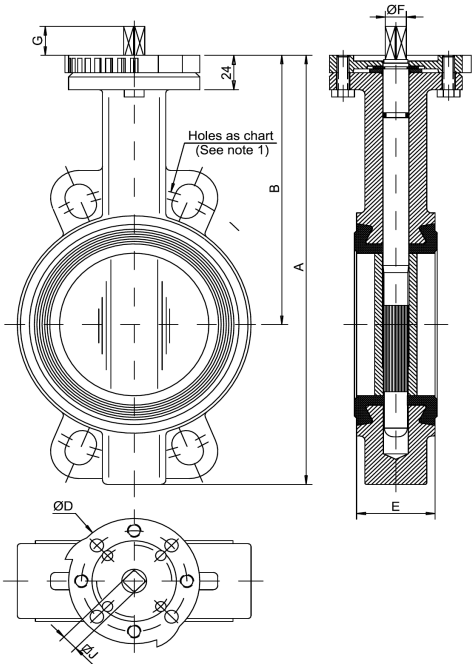
Pressure test	EN 12266-1, ISO 5208 – body 1.5 × PN, seat 1.1 × PN
Tightness test	ISO 5208, zero leakage; API 598

DIMENSIONS & WEIGHTS (MM, KG)

DN	inch	A	B	D	E	ØF	G	J	ISO 5211	Weight kg
40	1½"	205	140	88	33	9.8	14	8	F5/F7	2
50	2"	228	156	88	43	9.8	14	8	F5/F7	3.5
65	2½"	248	161	88	46	12	16	9	F5/F7	4.5
80	3"	265	169	88	46	14	16	11	F5/F7	5
100	4"	298	187	88	52	14	20	11	F5/F7	6.5
125	5"	331	206	105	56	18	20	14	F7	8
150	6"	349	215	105	56	18	20	14	F7	9
200	8"	430	255	105	60	22	24	17	F7	15

Dimensions from the TTV source datasheet listed in Source references. The manufacturer states that dimensions and standards may change without notice.

DIMENSIONAL DRAWING



Manufacturer drawing reproduced from the TTV source datasheet listed in Source references.

APPROVALS

WRAS approved

Status	**WRAS approval confirmed by Wras Valves**
Approval details	**Approval certificate and supporting letter available from Wras Valves on request**

Confirm current approval status on the WRAS Approvals Directory (wrasapprovals.co.uk) before specification. Water fittings must comply with the Water Supply (Water Fittings) Regulations 1999 (or the Scottish Water Byelaws 2014 / Northern Ireland Regulations 2009); WRAS approval is one recognised way of demonstrating this.

TYPICAL APPLICATIONS

- Isolation and flow control in water systems within the seat temperature range

INSTALLATION & OPERATION

- Install between PN10/PN16 (EN 1092-1) or ANSI Class 150 (ASME B16.5) flanges, as stated by the manufacturer
- Fit levers, gearboxes or actuators to the ISO 5211 top flange (F5/F7 or F7 according to size)

TECHNICAL NOTES

- Pressure classes are nominal. Check the pressure–temperature limits for the application with the manufacturer's current data.

SOURCE REFERENCES

1. TTV datasheet 'Wafer DN32-200 | PN10-16 & ANSI 150 – Valve with bare shaft – Model 20W3080 EPDM', ref. W32200203080E0, Rev 0, dated 21 Oct 2020
2. Wras Valves product listing 10094748139784 (size and pressure options offered)

Important. This datasheet is a supplier technical summary compiled by Wras Valves from the manufacturer and approval sources listed. It is provided for guidance and product identification only. Wras Valves does not independently test or certify products. Manufacturers may change designs, materials and data without notice: always check current manufacturer information, the WRAS Approvals Directory and the precise requirements of the application before selection and installation. Pressure ratings are nominal and may be reduced at elevated temperature.