

Challenger Concentric Flange seal on body BFV

Features

1. Flanged End Connections conforming to the requirements of AS4087:2011 (B5)
2. Available in PN16 Pressure Class
3. EPDM Seat is vulcanised directly to the ductile Iron body casting
4. Available in Size Range DN80 – DN1200. Alternative sizes available without 3rd party certification
5. FBE Coated in accordance with AS4158:2003
6. Seal vulcanised to body – is not replaceable
7. Grade 316 Stainless Steel Fasteners
8. Integral flange seal connection includes moulded double “O” ring seal eliminating the requirement for flange gaskets as shown in Figure 1.



Figure 1: Challenger Butterfly Valve with integral flange gasket (Double O rings)

List of products for assessment

List of products to be considered for appraisal					
Brand Name	Model Name	Model ID	Nominal Size	Nominal Pressure	Product Description
Challenger	BFD	BFDEE_40080	DN80	PN16	<p>Challenger BFD Resilient Seated Butterfly Valve.</p> <p>Double Flanged Concentric Design, Ductile Iron Body FBE Coated, Stainless Steel Stem and Disc, EPDM Rubber Seat Encapsulated to the body, Rated to PN16.</p> <p>AS4795.2 OceanaMark & WaterMark Approved.</p> <p>Options; Flange Drillings: AS4087 PN16 Figure B5, AS2129 Table E, AS2129 Table D, ANSI#150</p> <p>(Other drillings available on request)</p> <p>Options; Operator: Lever and Notchplate, Gear Box and Hand Wheel, Pneumatic and Electric Actuator.</p> <p>Note: prefix in model ID relates to selected options - Refer to Data Sheet Code Builder for further descriptions</p>
	BFD	BFDEE_40100	DN100		
	BFD	BFDEE_40125	DN125		
	BFD	BFDEE_40150	DN150		
	BFD	BFDEE_40200	DN200		
	BFD	BFDEE_40225	DN225		
	BFD	BFDEE_40250	DN250		
	BFD	BFDEE_40300	DN300		
	BFD	BFDEE_40350	DN350		
	BFD	BFDEE_40375	DN375		
	BFD	BFDEE_40400	DN400		
	BFD	BFDEE_40450	DN450		
	BFD	BFDEE_40500	DN500		
	BFD	BFDEE_40600	DN600		
	BFD	BFDEE_40700	DN700		
	BFD	BFDEE_40750	DN750		
	BFD	BFDEE_40800	DN800		
	BFD	BFDEE_40900	DN900		
	BFD	BFDEE_41000	DN1000		
	BFD	BFDEE_41200	DN1200		

Compliance Data

- AS4795.2 Butterfly valves for waterworks purposes – Double Flanged, Certified by IAPMO R&T Oceana (License No OMK32262)
- Flanges comply with AS4087 PN16 Figure B5
- AS4158 Thermal-bonded polymeric coatings on valves and fittings for water industry purposes. Jindapeng coating certified by SAI Global (License No SMK41095)
- AS4020 Testing of products for use in contact with drinking water Certified by Beijing Building Materials Testing Academy (Report No JS2019WS0037)



Large of valve with gear box
Dial Indicator, torque limiter and
Key Cap operator



Pictures of the BFD series installed at the Douglas
Water Treatment Plant in Townsville QLD.
Project completed via BMD

Figure 2: Challenger Butterfly Valve with accessories

Refer to Figure 3 for the Buried Service BFVs.



Figure 3: Challenger BFV buried installation with gear, torque limiter and dial position indicator

Challenger offers the following accessories for buried BFV service applications:

- a) SBWG-TNM which is a heavy duty 90° worm gear operator incorporating a travelling nut input stop & MOV Pad (used to mount spindle extensions etc). Challenger stock this item with an IP68 rating which is manufactured by Sambo in South Korea
[SBWG Travel Nut QAD8025 Rev0 18 09 2018.pdf](#)
- b) SBWG-DIP which is a Dial Position Indicator (DIP). Challenger stock this item which is manufactured by Sambo in South Korea
[SBWG-DIP Dial Indicator QAD9210 REVA 21-05-15.pdf](#)
- c) SBWG-TL which is an adjustable torque limiting device used to prevent excessive torque being exerted onto a spindle extension/gear operator's input shaft. Challenger stock this item with an IP67 rating which is manufactured by Sambo in South Korea
[SBWG Torque Limiter QAD8020 Rev1 17 09 2018.pdf](#)