VP4208-08 EN // 10/06/2021 // Version F

DUBLU EXCENTRIC ROBINET FLUTURE TIP TECWAT



DATE TEHNICE

VP 4208-08

PN10 FLANSA DUBLU EXCENTRIC ROBINET FLUTURE CU REDUCTOR MANUAL IP67

APLICATI

Robinetul fluture Tecwat este folosit pentru aplicatii cu operare ON/OFF. in instalatii cu diferite fluide.

Utilizare : apa, centrale termice, statii de pompare. circuite de incendiu aplicatii industriale, etc.









Fluide: apa, apa potabila.

CARACTERISTICI GENERALE

TECWAT model: Model lung.

- Design in conformitate cu NF EN 595.
- Conexiuni: from DN200 to DN1600.
- Etansare bi-directionala, de preferat montajul conform directie indicate de sageata de pe corp.
- Tija/ disc conexiuni
- Robinetul fluture dublu excentric previne uzura datorita scaunului din inox aflat pe corp.
- Etanșarea discului reținut de un inel de fixare din oțel inoxidabil.
- Curba de manevra optimizata.
- Pierdere de presiune mica.
- Reductor manual IP67 .
- Posibilitatea de montaj de actionare ISO 5210 .



DRY SHAFT

Digitally signed by Moraru Mircea Date: 2023.05.30 16:01:53 EEST Reason: MoldSign Signature

Location: Moldova



STANDARDE

Design	Conform cu standardul EN 593
Lungime	Lungime in conformitate cu standard NF EN 558 série 14.
Conexiune	Flanse ISO PN10 conform standard EN1092-2.
Teste	Test hidraulic conform cu standard EN12266-1: -Corp: 15 bar -Scaun: 11 bar

APROBARI DE PRODUS

Certificat WRAS n° 1607394

Declaratie de conformitate sanitara n° 19 ACC LY 582





EN 1074





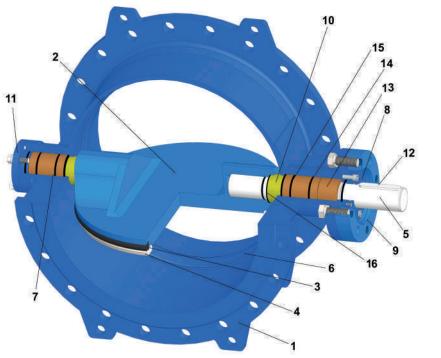
DUBLU EXCENTRIC ROBINET FLUTURE TIP TECWAT

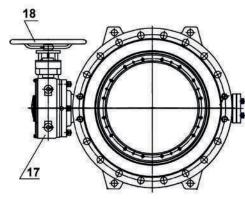


DATE TEHNICE

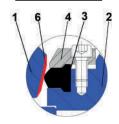
VP 4208-08

CONSTRUCTIE





ETANSARE



Componente	Acoperire
Corp	Epoxy powder RAL 5015
0016	250 microne

Pos.	Descriere	Material		Echivalente						
P05.	Descriere	Waterial	DIN	ASTM	BS					
1	Corp	Fonta ductila ENGJS-500-7	GGG 50	ASTM 80-55-06	BS 500/7					
2	Disc	Fonta ductila ENGJS-500-8	GGG 50	ASTM 80-55-06	BS 500/7					
3	Garnitura etansare	EPDM								
4	Inel	otel inox X5CrNi 18 10	X5CrNi 18 10	A 182 AISI 304	1449-2 304 S15					
5	Bolt	otel inox 420	1.4021	AISI 420	420 S 37					
6	Inel etansare corp	otel inox X5CrNi 18 10	X5CrNi 18 10	A 182 AISI 304	1449-2 304 S15					
7	semering	Al-Bronz	G-CuAl10Fe	C95200	ZCuAl10Fe3					
8	Packing gland	Fonta ductila	GGG 50	ASTM 80-55-06	BS 500/7					
9	Flanse	Otel Q235B	EN 10025-2	ASTM A36	S235JR					
10	Bucsa ajustare	Al-Bronz	G-CuAl10Fe	C95200	ZCuAl10Fe3					
11	Cover	Fonta ductila ENGJS-500-7	GGG 50	ASTM 80-55-06	BS 500/7					
12	Key	Inox 420	1.4021	AISI 420	420 S 37					
13	Bucsa ajustare	Al-Bronz	G-CuAl10Fe	C95200	ZCuAl10Fe3					
14	O seal ring	EPDM								
15	garnitura	EPDM								
16	Garnitura etansare	EPDM								
17	Reductor	Fonta ductila								
18	Maner	Otel carbon	St 37-2	A283C	S235					



VP4208-08_EN // 10/06/2021 // Version F

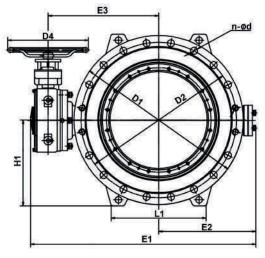
DUBLU EXCENTRIC ROBINET FLUTURE TIP TECWAT

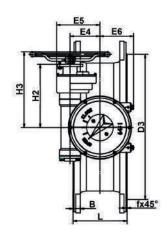


DATE TEHNICE

VP 4208-08

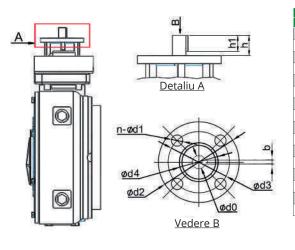
DIMENSIUNI





D	N	ØD1	ØD2	ØD3	В	· f		n-Ød	H1	H2	НЗ	E1	E2	E3	E4	E5	E6	L1	D4	ISO 5210	Greutate
mm	inch	וטש	202	DD3		'		II-wu		112	113	'							D4	130 3210	(kg)
200	8"	340	295	266	20	3	230	8-Ø23	175	137	193	526	198	272	64	99	86	196	240	F10	52
250	10"	395	350	319	22	3	250	12-Ø23	202.7	137	190	568	219	293	64	99	86	240	240	F10	66
300	12"	460	400	370	24.5	4	270	12-Ø23	227.5	178	233	670	254	351	93.4	135	115	275	320	F10	96
350	14"	505	460	429	24.5	4	290	16-Ø23	257.5	178	233	720	279	376	93.4	135	115	280	320	F10	114
400	16"	565	515	480	24.5	4	310	16-Ø28	287.5	192	283	834	320	432	120	169	138	310	400	F10	158
450	18"	615	565	530	25.5	4	330	20-Ø28	312.5	192	283	903	359	462	120	169	138	340	400	F10	189
500	20"	670	620	582	26.5	4	350	20-Ø28	340	317	378	988	393	513	120	186	138	370	240	F10	238
600	24"	780	725	682	30	5	390	20-Ø31	395	315	376	1119	450	580	148	214	166	430	400	F10	344
700	28"	895	840	794	32.5	5	430	24-Ø31	452.5	315	376	1217	530	598	148	214	166	480	400	F10	470
800	32"	1015	950	901	35	5	470	24-Ø34	512.5	346	407	1410	614	691	185	265	196	560	400	F10	662
900	36"	1115	1050	1001	37.5	5	510	28-Ø34	562.5	346	407	1530	675	750	185	265	196	615	400	F10	834
1000	40"	1230	1160	1112	40	5	550	28-Ø37	620	390	451	1712	748	839	230	333	232	670	400	F10	1172
1200	48"	1455	1380	1328	45	5	630	32-Ø41	732.5	451	512	1971	865	981	230	368	232	800	400	F10	1714
1400	56"	1675	1590	1530	46	5	710	36-Ø44	842.5	507	568	2313	1011	1138	315	453	360	920	400	F10	2570
1500	60"	1785	1700	1640	48	5	750	36-Ø44	897.5	507	568	2489	1112	1213	315	453	360	980	400	F10	3140
1600	64"	1915	1820	1750	49	5	790	40-Ø50	962.5	507	568	2588	1161	1263	315	453	360	1050	400	F10	3841

DIMENSIUNI FLANSA ISO 5210



D	DN ISO 5210									Numar de	Cuplu *	
mm	inch	ISO flange	Ød0	n-Ød1	Ød2	Ød3	Ød4	h	bxh1	rotati	(Nm)	
200	8"	F10	20	4-Ø10	125	102	70	28	6X20	10	23	
250	10"	F10	20	4-Ø10	125	102	70	28	6X20	10	36	
300	12"	F10	20	4-Ø10	125	102	70	28	6X20	12	47	
350	14"	F10	20	4-Ø10	125	102	70	28	6X20	12	65	
400	16"	F10	20	4-Ø10	125	102	70	30	6X25	20	57	
450	18"	F10	20	4-Ø10	125	102	70	30	6X25	20	72	
500	20"	F10	20	4-Ø10	125	102	70	30	6X25	80	28	
600	24"	F10	20	4-Ø10	125	102	70	30	6X25	64	53	
700	28"	F10	20	4-Ø10	125	102	70	30	6X25	64	76	
800	32"	F10	20	4-Ø10	125	102	70	30	6X25	96	73	
900	36"	F10	20	4-Ø10	125	102	70	30	6X25	96	100	
1000	40"	F10	20	4-Ø10	125	102	70	30	6X25	198,9	65	
1200	48''	F10	20	4-Ø10	125	102	70	30	6X25	382,2	52	
1400	56"	F10	20	4-Ø10	125	102	70	30	6X25	421,4	67	
1500	60"	F10	20	4-Ø10	125	102	70	30	6X25	421,4	82	
1600	60"	F10	20	4-Ø10	125	102	70	30	6X25	421,4	98	

^{*} Valori fara factor de siguranta



DUBLU EXCENTRIC ROBINET FLUTURE TIP TECWAT



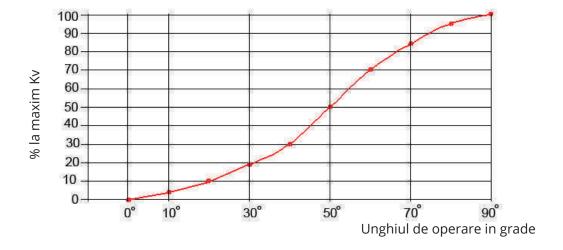
DATE TEHNICE

VP 4208-08

CONDITII DE LUCRU

Presiune maxima de lucru: 10 bar. Temperatura maxima de lucru: + 80 °C.

COEF DEBIT - Kv



	[mm	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	1400	1600
٦	N	inch	8"	10"	12"	14"	16"	18"	20"	24"	28"	32"	36"	40"	44"	48"	56"	64"
	K	vs	1880	3800	4950	8000	10900	14200	18250	28000	40500	55100	74000	93338	116213	142516	167310	264433

Valori informative



CARSO - LABORATOIRE SANTÉ ENVIRONNEMENT HYGIÈNE DE LYON

Laboratoire Agréé pour les analyses d'eaux par le Ministère de la Santé

Laboratoire habilité par le Ministère chargé de la santé en application de l'article R*.1321-52 du code de la santé publique

ATTESTATION DE CONFORMITE SANITAIRE

Certificate of sanitary conformity

Conformément à l'arrêté du 29 mai 1997 modifié et à la circulaire du Ministère de la Santé Direction Générale de la Santé DGS/SD7A N° 571 du 25 Novembre 2002

Coordonnées du demandeur d'ACS / Contact details of the ACS owner :

TECOFI SAS 83, rue Marcel Mérieux CS 92013

69969 CORBAS Cedex

Nom de l'accessoire représentatif / Reference of the representative accessory :

Robinet à papillon à double excentrique / Double eccentric butterfly valve TECWAT VP4201 PN10 DN 100

N° de dossier attribué par le laboratoire habilité / File reference

19 ACC LY 582

Date de réalisation des essais d'inertie selon la norme XP P41-280 : aucun essai de migration n'est nécessaire Tests date (according to the standard XP P 41-280) : No testing is required to issue this ACS

Commentaires : Les composants organiques sont conformes à l'arrête du 29 mai 1997 modifié. Les composants métalliques sont conformes à l'arrêté du 25 juin 2020

Comments: Organic components are compliant with the decree dated 29th May 1997 modified. Metallic components are compliant with the decree dated 25th June 2020.

Familie d'accessoires couverte par l'ACS / Accessories' family covered by this certificate:

Robinets à papillon à double excentrique TECWAT / Double eccentric butterfly valves TECWAT

Références / References (4 références) :

VP4201 (PN10 / PS 10 bar / DN 100 à 2000) VP4208 (PN10 / PS 10 bar / DN 100 à 2000) VP4241 (PN16 / PS 16 bar / DN 100 à 2000) VP4248 (PN16 / PS 16 bar / DN 100 à 2000) VP4251 (PN25 / PS 25 bar / DN 100 à 2000) VP4258 (PN25 / PS 25 bar / DN 100 à 2000)

VP4261 (PN40 / PS 40 bar / DN 100 à 2000)

VP4268 (PN40 / PS 40 bar / DN 100 à 2000)

Digitally signed by Mora Date: 2023 05 30 16:00:

Attestation délivrée par l'Certificate issued by :

Christelle AUTUGELLE Responsable MCDE

CARSO - L.S.E.H.L.

Signature :

ocation: Moldov

...

Date de délivrance / Date of issue : 23 Novembre 2020

Date d'expiration / Expiry date : 07 Octobre 2024

Commentaires / Comments: Mise à jour de l'ACS par ajout de références. Cette ACS conserve donc la même date d'expiration que celle émise le 07 October 2019 / This ACS is an update of the ACS issued on October 07, 2019 (additional references). Consequently, its expiry date remains the same.

F_MC060-b 15/09/2014 MLN

Société par action simplifiée au capital de 2 283 622,38 Euros - RCS Lyon B 410 545 313 - SIRET 410 545 313 00042 - APE 743 B - N° TVA : FR 82 410 545 313 Siège Social et laboratoire : 4, avenue Jean Moulin - CS 30228 - F - 69633 VENISSIEUX cedex - Tél. : (33) 04 72 76 16 16 - Fax : (33) 04 78 72 35 03

Site web: www.groupecarso.com - e-mail: mcde@groupecarso.com



This certifies that

TECOFI FRANCE

has had the undermentioned product(s) examined, tested and certified as being of an appropriate quality and standard as required in the Water Supply (Water Fittings) Regulations and Scottish Water Byelaws, subject to scheme requirements being met when installed.

Model Numbers

VP4201 (PN10) & VP4241 (PN16) BUTTERFLY VALVES MODELS ADDED 21/10/2020 VP4208 - (PN10) VP4248 - (PN16)

The certificate by itself is not evidence of a valid WRAS Approval. Confirmation of the current status of an approval must be obtained from the WRAS Approvals Directory (www.wras.co.uk/directory)

The product so mentioned will be valid until the end of:

July 2021

Certificate No.

1607394

Digitally signed by Moraru Mircea Date: 2023.05.30 16:02:30 EEST Reason: MoldSign Signature

Location: Moldova

lan Hughes, WRAS Approvals Manager





5th October 2018

Tecofi France 83 Rue Marcel Meriex, 69969 Corbas

Approval Number: 1607394

Water Regulations Advisory Scheme Ltd. Unit 13, Willow Road, Pen y Fan Industrial Estate, Crumlin, Gwent, NP11 4EG

Dear Sir/Madam

Production samples of the products described in the **Approval Information** section below ("Products"), have been subjected to the relevant mechanical and water quality tests as defined in Regulation 4 (2) and Schedule 2 to demonstrate a product is of an **appropriate quality or standard** for the purposes of a WRAS Approval application.

- After considering the test reports and examining the Product/s, The Water Regulations Advisory Scheme Ltd. ("WRAS Ltd" / "WRAS") finds that:
 - The product is of an appropriate quality and standard as defined in The Water Supply (Water Fittings) Regulations 1999, The Water Supply (Water Fittings) (Scotland) Byelaws 2014, The Water Supply (Water Fittings) Regulations (Northern Ireland) 2009 and all other applicable WRAS requirements,
 - The non-metallic materials of construction, in contact with the water, are suitable for contact with wholesome water intended for domestic purposes having met the requirements of BS 6920-1: 2014 'Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water'.
- 2. WRAS Approvals are granted subject to, and in accordance with, the Standard Terms and Conditions of WRAS Approvals Schemes (WRAS.Cust-401) as amended from time to time ("Standard Terms of Approval").
 - You have confirmed your acceptance of the Standard Terms of Approval by submitting your application for WRAS Approval. A copy of the current Standard Terms of Approval are available from the WRAS website: www.wras.co.uk.
 - Terms defined in the Standard Terms of Approval shall have the same meaning in this letter unless the context otherwise requires.
- 3. Installation Requirements & Notes (IRNs) are set out in Appendix A. A Product only qualifies for Approval if WRAS is satisfied that the relevant Product complies with Regulation 4(1)(a) and the requirements of the Scheme when installed in accordance with the manufacturer's instructions and any applicable Approval Scheme Installation Requirements and Notes.
 - Since the incorrect installation of Products will not be within the scope of an approval and may result in contravention of the Regulations or Byelaws requirements, the attention of your customers should be drawn to any IRNs applied.
- 4. Please note that the use of the Products described in any particular area of supply is at the discretion of the Water Company (water undertaker) in that area.
- 5. Approval Holders may quote in their sales literature that their product is WRAS approved. A WRAS product approval demonstrates that a water fitting is of a suitable quality and standard, provided that it meets the requirements of the Scheme when installed in accordance with the manufacturer's instructions and any applicable Approval Scheme Installation Requirements and Notes
- **6.** The "WRAS Approved Product" logos are certification marks registered under the Trade Marks Act 1994 ("Certification Marks"). Approval Holders may use the Certification Marks in accordance with the Standard Terms of Approval.
- 7. Please verify the details of your Product as set out in the approval information and advise us of any discrepancies by no later than 5th November 2018.

Yours Faithfully

lan Hughes

WRAS Approvals Manager

APPROVAL INFORMATION

Validity dates: This approval is valid for fittings (as listed below in model) manufactured AND installed between

July 2016 & July 2021

Additions to the approval are valid from the date of the addition

Section Number: 2020

Section title: VALVES - BUTTERFLY.

Installation R001

requirement notes: (IRN's are set out in Appendix A)

Product description: Range of butterfly valves with ductile iron bodies, blue epoxy coating, EPDM rubber lining and 'O'- rings

and ductile iron (blue epoxy coated) or stainless steel valve discs. Supplied with lever or rotating wheel

operating members.

Maximum working pressure DN100 = 16.0 bar & DN150 - DN1000 = 10.0 bar. Maximum operating

temperature 80°C.

Size: See model.

Identification Marking: TECOFI, COMPANY INFORMATION & TECHNICAL INFORMATION ON DATAPLATE ON BODY

Factor: Tecofi France

Model: VP4201 (PN10): DN100-1000.

VP4241 (PN16): DN100.

Models added 21/10/2020 VP4208 - (PN10)

VP4248 - (PN16) DN100 - 1000

APPENDIX A

INSTALLATION REQUIREMENTS & NOTES

You are advised to draw customers' attention to the installation requirements and notes set out below which must be followed to ensure that the fittings described above are installed in accordance with the requirements of the Regulations and Byelaws:

IRN R001

See text of entry for Installation Requirements or Notes.

APPENDIX B - Standard Terms of Approval

1. WRAS Approvals Schemes

- 1.1. The WRAS Approval Schemes ("the Schemes") and the WRAS Products and Materials Directory are owned and operated by the Water Regulations Advisory Scheme Ltd ("WRASLtd" or "WRAS").
- 1.2. To be eligible for WRAS approval products or materials must be capable of lawfully installed or used in the UK.
- 1.3. The WRAS Approvals Scheme Requirements & Code of Practice (WRAS.Cust-402) sets out what an Approval is.
- 1.4. WRAS is not responsible for enforcement of the Regulations, nor does it have any statutory powers. A WRAS Approval does not guarantee a water fitting will be accepted by Water Companies or that enforcement actions will not be taken. Site specific circumstances will be relevant such as aspects of the plumbing system design in which the fitting is installed, as well as water company terms and condition of consent.
- 1.5. Installation Requirement Notes (IRNs) applied to an Approval are designed to help installers, but do not guarantee all site-specific requirements are covered.
- 1.6. These Standard Terms and Conditions of Approval (T&Cs) and the Scheme Requirements form the agreement between WRAS and the Applicant / Approval Holder in respect of applications and Approvals.
- 1.7. The definitions in document WRAS.Gen-601: "WRAS Approvals Terms & Definitions" shall apply throughout.
- ^{1.8.} In the event of any conflict between these T&Cs and any of the documents referred to in them, the T&Cs shall take precedence.

2. Obligations of the Applicant & Approval Holder

- 2.1. It is the responsibility of Applicants to ensure that they are familiar with, accept and comply at all times with the requirements of the Scheme as detailed in these Standard Terms and Conditions, the Code of Practice (WRAS.Cust-402) and the WRAS Scheme guidance. This includes, but is not limited to, the following documents:
 - WRAS Approval Scheme Brand Guidelines
 - ii WRAS Approvals Guides
 - iii Test Code Sheet Matrix.
 - iv Guidance for non-metallic materials in fittings
 - Sampling Matrix
 - vi Installation Requirement Notes (IRNs).

These are available for download from the WRAS website www.wras.co.uk.

- 2.8. The Applicant guarantees the accuracy and completeness of all information contained in the Application and any other information now or subsequently provided by the Applicant or its Agents to WRAS and/or the Recognised Test Laboratory in pursuance of the application and confirms that none of this information is or may be construed as misleading in any way. WRAS accepts no liability for any losses or any other damage arising from incomplete or incorrect information provided by the Applicant.
- 2.9. The Applicant must implement suitable quality assurance methods / Factory Production Control (fpc), in order to ensure that the characteristics verified during certification remain of the same quality throughout the period of approval. This may be ensured through direct self-monitoring, as well as through measures under a quality management system in accordance with ISO 9001/ CE Mark. Assurance records and details of any investigations into complaints relating to Approved Products shall be presented to WRAS on request. The records shall be retained by the Applicant for ten years.
- 2.10. Approvals granted shall be subject to surveillance by WRAS, either as part of routine or investigative auditing activity. The Approval Holder shall co-operate fully with WRAS for this purpose, including accommodating inspection observers if necessary. The Approval Holder shall reimburse WRAS for all reasonable costs incurred in connection with surveillance & audit activities.
- 2.11. WRAS reserves the right to undertake unannounced audits of Approval Holders' facilities as part of investigations.
- 2.12. In order to maintain an Approval, the self-declaration of continued compliance must be completed annually by the Approval Holder in accordance with the Scheme Requirements. If these requirements are not met sanctions will be applied to the Approval.

Pre-Application Advice

- Applicants may seek pre-application advice before submitting an application for WRAS Approvals
- 3.2. WRAS Product Approval will only be granted to production samples. Prototype or pre-production samples may be submitted for pre-application advice however additional testing may be required when subsequently submitted for full approval as a production sample.
- Any pre-application advice is provided on the basis of the preliminary information provided. This advice should not be taken as guaranteeing that a product will be granted a WRAS approval nor that no enforcement action will be taken in respect of it by water companies. WRAS Approvals will carry out a full assessment of the product when an approval application is submitted.
- No reliance should be placed on any pre-application advice for the purposes of designing or producing any product. WRAS accepts no liability for loss of goodwill, business, revenue or profits, anticipated savings or wasted expenditure (whether reasonably foreseeable or not) or indirect or consequential loss arising from or in connection with such advice.

Applications

- All applications for WRAS Approval must be submitted using the appropriate official WRAS Application form.
- Applications for WRAS Material Approval for non-metallic materials must be supported by test certificates to BS 6920, instructions and data safety sheets where required.
- All applications for a WRAS Product Approval must be supported by schematic diagrams, technical drawings, photographs of product and markings, and installation manuals where appropriate. These must illustrate the arrangement of the product, clearly showing the water supply connections, discharge points (including overflows and waste discharges) and the water pathway through the product.
- Product Approval applicants must provide a schedule of materials. All component parts of a product (including solder, thread sealant tape, lubricant and grease) which come into contact with wholesome water must be listed.
- The Application Form must include details of any Agents appointed by the Applicant detailing the scope of the Agent's authority. The Applicant takes responsibility for all acts of their Agent in connection with the Application / Approval and indemnifies WRAS for any losses incurred as a result of any breach of these T&Cs by the Applicant or its Agent(s).
- Applications are valid for a period of 12 months from the date of which they are verified by the applicant, after which time confirmation will be required that the information provided is up-to-date.
- WRAS reserves the right to reject an application if it has reasonable grounds to believe the terms and conditions and other scheme requirements will not be met.

Application Fees 5.

- WRAS charges an administration fee ("WRAS Fee") for processing an Application. Details of the WRAS Fee are available from WRAS website and can be confirmed on request. Where applicants are using a Recognised Test Laboratory to project manage their application, WRAS will collect this fee from the Recognised Test Laboratory. In such cases, this fee is usually included in the charges made by the Recognised Test Laboratory to the Applicant, but it is the Applicant's responsibility to confirm this and to ensure that the WRAS Fee is discharged in full.
- The Applicant will commit to pay WRAS fees within 30 days of the invoice. This includes surveillance fees and any thirdparty payments e.g. bank charges and additional courier charges. WRAS shall apply an additional administration fee for processing third party payments. Approval may be suspended if payment is not received on time. New applications will not be processed until overdue debts are paid.
- 5.3. The Applicant accepts responsibility for any import duties for samples supplied.

6. Termination

- 6.1. Either party may close an application at any time upon giving the other party written notice.
- In the event that an applicant withdraws an application they shall pay to WRAS all sums due or committed up to the date of withdrawal.
- 6.3. Termination of this agreement shall not affect the rights and liabilities of either party accrued prior to termination.

7. **Intellectual Property and Ownership of documents**

- All intellectual property owned by either party or any third independent party shall remain exclusively the property of the
- The Applicant grants to WRAS a perpetual, world-wide, non-exclusive, royalty-free licence to use any materials supplied by or on behalf of the Applicant for the purpose of administering the Scheme and exercising WRAS's rights and performing WRAS's obligations under this agreement. This licence includes the right to copy and modify the licenced materials, and to grant sub licences.
- Subject to any confidential information or other intellectual property belonging to the Applicant, all application forms are the property of WRAS.

Confidentiality

Subject to the remaining terms of this clause 8, both WRAS and the Applicant undertake not to divulge to any third party, any information which was designated as confidential by the other party at the time it was made available ("Confidential Information"), without prior written consent of that other party.

- WRAS may make information relating to granted and expired Approvals available to the Water Companies. This includes information which is, or was, published in the public directory and photographs that could help to identify a product. This includes the dates any modifications, suspensions or withdrawals were implemented.
- WRAS may publish in the Directory any information that these T&Cs, the Scheme Requirements, or any of the other Scheme documents state will be published in the Directory. Any information that is published in the Directory shall be treated as being in the public domain even after the expiry, suspension or withdrawal of an Approval.
- It is acknowledged and agreed that WRAS shall be entitled to retain all information provided by an Applicant for the entire duration of the Approval Period (including any renewal period granted by WRAS) and for up to seven years following the expiry of any granted Approvals. This includes, but is not limited to, test results and analyses of Confidential Information, provided that the Confidential Information is kept secure at all times.
- Nothing in this agreement shall prevent a party from disclosing or otherwise using information if (i) the information is in, or enters, the public domain other than as a result of a breach of this agreement, (ii) the information was known to that party prior to receiving it from the other party, (iii) the information is received from a third party not subject to a duty of confidentiality, or (iv) such disclosure or use of the information is required by any rule of law or the order or direction of a court or regulatory body of competent jurisdiction, or (v) such disclosure is permitted by any other term of this agreement.

Performance Testing

- 9.1. WRAS will only accept Applications which include test reports from a Recognised Test Laboratory which cover in full, the Scheme's acceptance criteria.
- Products must be tested in accordance with the requirements identified in the Test Code Sheet (TCS) matrix published on the WRAS website, against appropriate standards or in accordance with relevant harmonised standards and additional scheme requirements as notified by WRAS.
- Where a product is an assembly of components, all individual constituent components must satisfy the requirements applicable to that component and unless already WRAS Approved will require testing.
- In the case of non-standard products clarification of the testing required should be sought from WRAS in advance.
- The scope of an Approval is restricted to those conditions applied during testing. Applications should include all scenarios and variations the applicant wishes to be covered in the Approval.
- 9.6. Mechanical testing of products must have been completed no more than two years before the report is presented for Approval.
- 9.7. WRAS shall exercise reasonable skill and care in applying its policies for the recognition of test laboratories, as set out in the Requirements Documents. WRAS shall require every Recognised Test Laboratory to enter into a contract with WRAS requiring the laboratory to comply with the Requirements Documents.

10. Test Samples

10.1. A sample on which a WRAS Approval is to be based should have been manufactured no more than 12 months before the date of its receipt by the Recognised Test Laboratory.

11. Markings

11.1. It is a condition of WRAS Product Approval that all products be adequately and consistently marked to facilitate identification.

12. Testing Failure

- 12.1. Should a product undergoing mechanical performance testing fail to satisfy the requirements of an individual test then a record of the failure will be reported to WRAS by the Recognised Test Laboratory. Complete retesting of a new sample will be required unless WRAS accepts that replacement of the failed component or product would not affect the performance of the other tests already carried out on the sample that failed.
- Should a replacement sample subsequently fail the same test then it is deemed to be an outright failure and will be reported as such to WRAS by the Recognised Test Laboratory. If the replacement fails a different test it is considered to be a first failure and treated as a failure during testing.

13. Modified replacement samples

- 13.1. If a product fails to satisfy the requirements of an individual test and is then modified, the Applicant must provide a declaration detailing the nature and full extent of all modifications. In such cases the status of any earlier testing should be clarified with WRAS.
- 13.2. Where a modified product is re-tested it is only deemed to be an outright failure if two failures are recorded for the same

14. Failure of samples representing a product range

14.1. Failure of one sample from amongst a number of samples representing a product range will be treated as a first failure of that particular model/size. In this circumstance the same variant should be retested. An outright failure would only occur if the replacement example failed the same test.

15. Failure of early audits

15.1. The failure of a product submitted for early audit will at the discretion of WRAS render the current Approval null and void and will result in the Approval being removed from the Directory.

16. Certificates

- ^{16.1.} WRAS will normally issue a certificate within two weeks of a product gaining Approval.
- ^{16.2.} Approval Holders must not use old versions of any WRAS certificate or modify any WRAS certificate. Any certificate provided by an Approval Holder to a third party must be current and in the full and complete form as issued by WRAS, including any IRNs and conditions attached.
- ^{16.3.} A certificate issued by WRAS shall remain the property of WRAS at all times.

17. Directory entries

- 17.1. Duplicate Directory entries for Products are not permitted.
- 17.2. All recently approved WRAS listings will normally be added to the Directory within two weeks of them gaining Approval.
- 17.3. All expired Approvals will be removed from the Directory following their expiry dates.

18. Alterations and additions to an existing approval

- ^{18.1}. All requests for alterations or addition to a current Approval should be made directly to WRAS.
- 18.2. There are no restrictions on the number of revisions that can be made to an Approval during its lifetime provided that the conditions of the Scheme are complied with.
- 18.3. An application fee for alterations and additions to existing approvals will be applied regardless of outcome.
- 18.4. Additions to an existing Approval without the need for additional testing of the Product will only be permitted if the Scheme's sampling acceptance criteria are satisfied.

19. Secondary Approvals

- 19.1. Applicants for Secondary Approvals do not need to be the Primary Approval holder. In all circumstances the Applicant must obtain the written consent of the Primary Approval holder before submitting an application for a Secondary
- 19.2. Any changes made to a Primary Approval (including the withdrawal of that Approval) shall automatically apply to any Secondary Approval based on that Primary Approval. WRAS shall notify the Secondary Approval holder of the change, but shall not be obliged to disclose the reasons for the change.

20. Registered Certification Marks

- ^{20.1} The "WRAS Approved Product" and "WRAS Approved Material" logos are certification marks registered under the Trade Marks Acts 1994 ("Certification Marks"). Approval Holders shall be entitled to use the Certification Marks upon the licence terms set out in this clause 20 ("Licence Terms"). The Brand Guidelines can be found on the WRAS Website.
- ^{20.2.} The Approval Holder acknowledges that WRAS is the owner of the Certification Marks and the Approval Holder shall not do anything which may be taken to indicate the Approval Holder has any right or interest in the Certification Marks other than as set out in these T&Cs.
- ^{20.3} Prior to an Approval being granted Applicants shall not use the Certification Marks or the WRAS name or logo in any publication or suggest or imply any endorsement of a particular product or range of products by the Scheme either verbally, in writing or by any other means.
- ^{20.4.} Approval Holders may use the Certification Marks only in respect of those Approved Products listed in the Approval Letter and only for the duration of the Approval Period applicable to those Approved Products. Where Approval has lapsed or is withdrawn, the Approval Holder must immediately stop using the Certification Marks in relation to the relevant Product.
- ^{20.5.} Subject to the rest of these Licence Terms, Approval Holder may use the Certification Marks on the packaging, promotional literature and point of sale advertising for the relevant Approved Products.
- ^{20.6.} If the Approval Holder's right to use the Certification Marks in relation to a Product ends then the Approval Holder must remove the Certification Mark from or destroy the packaging, promotional literature, point of sale advertising and any other materials relating to that Product. The Approval Holder shall ensure that its Factors also comply with this clause 20.6.
- ^{20.7}. Where a Certification Mark is used, it must be replicated without adaptation or alteration, save that reproducing the logo in black and white as opposed to colour is permissible.
- ^{20.8.} The Certification Marks may only be used in connection with a product range where each individual product and/or material and/or component within that product range has been granted individual WRAS Approval.
- ^{20.9.} The Approval Holder shall inform its Factors and agents that any Modification or other alteration to the Approved Product may invalidate the Approval and shall inform WRAS of any Modification or other alteration as soon as this comes to the Approval Holder's attention.
- ^{20.10.} The Approval Holder shall not sub-licence, assign, transfer or otherwise deal with the Certification Marks other than on these Licence Terms.
- ^{20.11.} The Approval Holder shall adhere to the terms of all brand guidelines issued by WRAS from time to time. Failure to comply with all brand guidelines will immediately invalidate a previously granted Approval.
- ^{20.12.} The Approval Holder at all times remains responsible for the correct use of the Certification Marks by its Factors.

21. Complaint Management

21.1. The Approval Holder shall be required to keep a record of all the complaints made known to it in respect of an Approved Product during the validity of the Approval, and retain such record for ten years from the end of that period. The Approval Holder shall provide WRAS with a copy of the record referred to in clause 21.1 upon WRAS's request at any time during the period the Approval Holder is required to keep and retain that record.

22. WRAS Approval Schemes Sanctions

- ^{22.1.} WRAS reserves the right to suspend, amend or withdraw an Approval or to amend or remove details of it from the WRAS Product and Materials Directory in the following circumstances:
 - where there has been a breach by the Applicant / Approval Holder of any of its obligations detailed in the Scheme Requirements or any other provision of these T&Cs:
 - where WRAS considers this necessary as result of a change in any relevant law, regulation, specification, standard or any other requirement which affects the issue of WRAS Approvals.
 - where WRAS is no-longer satisfied that the relevant Product or material complies with Regulation 4(1)(a), Schedule 2 paragraph 2 of the Regulations or the Scheme Requirements.
- 22.5. WRAS reserves the right to notify the Water Companies of suspensions, amendments and withdrawals.
- ^{22.6.} At its sole discretion, WRAS may publish details of the withdrawal, amendment or suspension of an Approval.

23. Limitation of Liability

- ^{23.1.} Nothing in this agreement shall limit or exclude WRAS's liability for:
 - death or personal injury caused by its negligence, or the negligence of its employees, agents or subcontractors;
 - ii fraud or fraudulent misrepresentation; or
 - iii any other liability that cannot be so limited or excluded under law.
- 23.5. WRAS shall not be liable to the Applicant or Approval Holder, whether in contract, tort (including negligence), breach of statutory duty, or otherwise, for any:
 - loss of profits or revenue;
 - ii loss of sales or business;
 - iii loss of opportunity or contracts;
 - iv loss of or damage to goodwill or reputation; or
 - indirect or consequential loss;

(in each case) arising under or in connection with this agreement or any Application, suspension, amendments or withdrawal of Approval.

- ^{23.11.} WRAS shall have no liability whether in contract, tort (including negligence), breach of statutory duty, or otherwise arising out of or in connection with the acts or omissions of any Recognised Test Laboratory, except to the extent that such liability arises from WRAS's failure to perform its obligations under clause 9.7 in relation to that laboratory.
- 23.12. WRAS shall not be liable for any delays in processing Applications which are beyond its control, including those which are attributable to test laboratories or arise from an applicant's failure to respond to WRAS's queries, provide requested information or failure to satisfy the Scheme's acceptance criteria.
- 23.13. WRAS's total liability to the Applicant / Approval Holder whether in contract, tort (including negligence), breach of statutory duty, or otherwise arising under or in connection with this Agreement or any Application, suspension, amendments or withdrawal of Approval shall not exceed £1,000,000.
- 23.14. The limit of liability set out in clause 23.5 is based on the limits of the relevant insurance policies that WRAS has obtained. The Applicant / Approval Holder acknowledges that this is a commercially reasonable limit. WRAS may agree a higher limit, subject to being able to obtain appropriate insurance cover up to that higher limit and subject to the Applicant / Approval Holder agreeing to pay any additional costs that WRAS incurs in obtaining that insurance. Any such agreement concerning a higher limit of liability shall be effective only if made in writing signed by WRAS and the Applicant / Approval Holder.
- ^{23.15.} WRAS shall exercise reasonable skill and care in performing its obligations under the agreement. Except as set out in these T&Cs, all warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded.

24. Complaints

- ^{24.1.} WRAS has a complaints process for the resolution of disputes regarding decisions that WRAS makes on the following
 - Refusal to grant an Approval,
 - ii Suspension or withdrawal of an Approval
 - iii Conditions attached to an Approval,
 - iv Other aspects of the WRAS Approval Scheme,
- $^{24.6}$. If the Applicant / Approval Holder disputes a decision that is subject to the complaints process the Applicant / Approval holder agrees to refer the dispute to the complaints process. The Applicant / Approval holder shall not seek any other remedy (including commencing any court proceedings) until the Applicant / Approval holder has exhausted the complaints process.
- ^{24.7.} To refer a dispute to the complaints, process the Applicant / Approval Holder shall notify the WRAS Approvals Manager in writing setting out why the Applicant / Approval Holder disputes the relevant decision.
- ^{24.8.} Where a dispute is referred to the complaints process WRAS and the Applicant / Approval Holder shall comply with the following process:
 - Stage 1: The WRAS Approvals Manager will review the complaint and take such action as he or she considers appropriate to resolve the complaint.
 - Stage 2: Where the Applicant / Approval Holder is not satisfied with the outcome of Stage 1, the Applicants/Approval Holders shall write to the Managing Director of WRAS setting out details of the complaint and why the Applicant / Approval Holder is not satisfied with the outcome of Stage 1. The Managing Director shall review the complaint and take such action as he or she considers appropriate to resolve it.
 - Stage 3: If an Applicant/Approval Holder is dissatisfied with the way a complaint has been dealt with by the Managing Director, the Applicant/Approval Holder shall request a review by the WRAS Chairman. The Chairman may appoint a panel with relevant experience to investigate the complaint and make a recommendation. The WRAS Chairman shall take such action as he or she considers appropriate to resolve the complaint.

Each stage of the complaints process shall be complete when the WRAS decision-maker responsible for that stage provides a written notice to the Applicant / Approval Holder setting out the action he or she considers appropriate to resolve the complaint and confirming that stage of the complaints process has been completed.

25. Impartiality

^{25.1.} WRAS shall ensure that it and its staff comply with its Impartiality Policy (WRAS.Admin-103) in relation to each Application and Approval.

26. Revisions to the Scheme documents

- ^{26.1.} WRAS may amend these T&Cs and the Scheme Requirements from time to time. Such amendments shall take effect between WRAS and the Approval Holder when the Approval Holder completes the annual Approval self-declaration process referred to in the Scheme Requirements, except where clause 26.2 applies.
- ^{26.2.} If WRAS amends these T&Cs or the Scheme Requirements in order to reflect changes in applicable law or regulation or ISO/EN 17065 then such amendment shall take effect on the date that WRAS gives the Applicant / Approval Holder written notice or publishes the amended document at www.wras.co.uk (whichever is sooner).

27. General

- ^{27.1.} Any decision, requirement or notification under these T&Cs shall be given by in writing (which shall include email) by or on behalf of the party giving it.
- 27.2. WRAS will not be liable or responsible for any failure to perform, or delay in performance of any of its obligations to Applicants or Approval Holders that is caused by an Event Outside Our Control.
- 27.3. These T&Cs and any disputes or claims arising out of or in connection with them or their subject matter (including noncontractual disputes or claims) shall be governed by, and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

28. Severance

- ^{28.1}. If any provision or part-provision of this agreement is or becomes invalid, illegal or unenforceable, it shall be deemed deleted, but that shall not affect the validity and enforceability of the rest of the agreement.
- ^{28.2.} If any provision or part-provision of this agreement is deemed deleted under clause 28.1 the parties shall negotiate in good faith to agree a replacement provision that, to the greatest extent possible, achieves the intended commercial result of the original provision.

29. Entire Agreement

^{29.1.} This agreement constitutes the entire agreement between WRAS and the Applicant / Approval Holder and supersedes and extinguishes all previous agreements, promises, assurances, warranties, representations and understandings between them, whether written or oral, relating to its subject matter.

29.2. The Applicant / Approval Holder agrees that it shall have no remedies in respect of any statement, representation, assurance or warranty (whether made innocently or negligently) that is not set out in this agreement. The Applicant / Approval Holder agrees that it shall have no claim for innocent or negligent misrepresentation or negligent misstatement based on any statement in this agreement.

30. Waiver

^{30.1.} No failure or delay by a party to exercise any right or remedy provided under this agreement or by law shall constitute a waiver of that or any other right or remedy, nor shall it prevent or restrict the further exercise of that or any other right or remedy. No single or partial exercise of such right or remedy shall prevent or restrict the further exercise of that or any other right or remedy.

Page 10 of 10





VANNE À PAPILLON DOUBLE EXCENTRATION A BRIDES : TECWAT DOUBLE ECCENTRIC FLANGED TYPE BUTTERFLY VALVE: TECWAT

APPLICATIONS

APPLICATION

Les vannes à papillon de type TECWAT sont destinées à être utilisées dans les **circuits de transfert de fluides** type : réseaux d'eau, stations de pompage, barrages, usines de production et sites industriels.

TECWAT type butterfly valves are intended to be used in **fluid transfer circuits** such as: water networks, pumping stations, dams, and industrial sites.

Fluide: eau brute, claire, potable Fluid: raw, clear, potable water





EN STOCK JUSQU'AU DN 1000 AVEC SON JOINT DE DÉMONTAGE!

NEW

IN STOCK
UP TO DN 1000!
DISMANTLING JOINT INCLUDED

GAMME COMPLÈTE COMPLETE RANGE

Gamme: DN 80 au DN 1600 (EN558, série 14)

Notre gamme est équipée en standard d'un **réducteur mécanique** à commande par volant avec **indice de protection IP67**. Ce réducteur mécanique est également équipé d'un **indicateur de position** d'ouverture/fermeture et possède une **bride suivant ISO5210** pour permettre le montage aisé d'actionneurs électriques multitours.

Range: DN 80 up to DN 1600 (EN558, series 14)

Our range is equipped with an **IP67 mechanical gearbox and an open/closed position indicator** as a standard, with an **ISO5210 flange** to easily mount a multi-turn electric actuator.

La corrosion étant à l'origine de phénomènes de grippage, notre conception permet de **protéger les parties en mouvement rotatif de tout contact avec le fluide** (chemisage en aluminium bronze et joints d'étanchéité de type torique). Notre fabrication suit scrupuleusement les caractéristiques et procédures énoncées dans les normes **EN1074-1 et EN1074-2.**

Corrosion is the source of jams. Our design protects the **rotating pieces in contact with the fluid** (aluminum-bronze lining and O-ring seals). Our production scrupulously follows the characteristics and procedures stated in the standards



EN1074-1 and EN1074-2





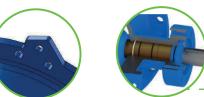


CORPS ET PAPILLON FONTE DUCTILE EN-GJS-500-7 (GGG50)*

Ductile iron EN-GIS-500-7 body and disc (GGG50)*

ANNEAUX DE LEVAGE

Montage facilité et sécurisé Lifting eyes: secured and eased installation



ARBRE EN ACIER INOXYDABLE 420

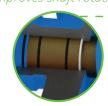
Les arbres sont en Acier Inoxydable à base de 13% de chrome qui garantit une grande résistance mécanique. Couplés avec les paliers aluminium bronze, la conception de type arbre sec est assurée! The thirteen percent chrome SS 420 shaft guarantees high mechanical resistance.

Coupled with aluminum-bronze bearings, the dry shaft type design is ensured!



PALIER ALUMINIUM **BRONZE**

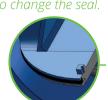
Améliore la rotation et évite tout phénomène de grippage de l'arbre Aluminium bronze bearing: *improves shaft rotation*



JOINT DE SIÈGE EPDM

Maintenu par une frette en Inox 304 resserable qui permet de comprimer le joint et de le changer sans démontage du papillon : maintenance aisée et durée de vie augmentée

The EPDM seat gasket: held in place by a 304 stainless steel ring. No disassembly required to change the seal.



SIÈGE INOX 304

Haute résistance à la corrosion. Faible rugosité de la surface. Matériau inerte.

Stainless steel 304 seat: High resistance DN200-1600 : siège soudé to corrosion. Low surface roughness. Inert material.

DN80-150 : siège ajusté mécaniquement Built-in seat

Welded seat

RÉDUCTEUR À VOLANT AVEC

PLATINE DE

MOTORISATION

IP67

Manual gearbox

IP67 with

handwheel and

ISO top flange for actuator connection





PIEDS D'APPUI Stabilité garantie

Support feet: Guaranteed stability



Autres types de commandes possibles : Other operating systems available:

CARACTÉRISTIQUES **CHARACTERISTICS**

Revêtement par poudre époxy cuite au four mini 250 µm RAL 5015 Oven-baked epoxy powder coating, min. thickness 250µm RAL5015

Indice de protection du réducteur IP 67 Gearbox protection class IP 67

Papillon à double excentration **Double eccentric** disc

Fermeture **sens horaire** standard (option anti-horaire possible) Gearbox clockwise to close as standard (counterclockwise option possible)

Embase normalisée ISO 5210 permettant le montage **ISO 5210 standardized upper flange** for actuator connection

Conforme aux agréments WRAS et ACS pour eau potable Complies with WRAS and ACS agreements WRAS (ACS)

> * Autres nuances sur demande * Other material on request



- ✓ Avantage de la double excentration : le joint de siège n'est pas en contact avec le corps lors de ses mouvements mais uniquement en position fermeture sur son siège conique en inox et les couples de manœuvre sont diminués.
- ✓ The advantage of the double eccentric disc: the seat gasket is not in contact with the body during operation but only when in the fully closed position on its conical stainless steel seat.

CONSTRUCTION ROBUSTE

- ✓ Corps en fonte ductile EN-GJS-500-7 (GGG50)
- ✓ Joint d'étanchéité EPDM remplaçable
- ✓ Siège soudé en acier inoxydable 304 à partir du DN200 (en dessous, siège emmanché à froid)
- → Boulonnerie de maintien de frette inox (A2, 304)
- ✓ Revêtement époxy 250µm
- ✓ Réducteur IP67 en standard (option IP68)

UTILISATION SIMPLIFIÉE

- ✓ Sans entretien grâce aux paliers auto-lubrifiés
- ✓ Faible perte de charge grâce au papillon profilé pour améliorer l'écoulement du fluide
- Couple de manœuvre réduit
- ✓ Papillon à double excentration permettant une parfaite étanchéité et une résistance à de fortes pressions

100% ÉTANCHE

- ✓ Étanchéité bidirectionnelle avec sens d'écoulement préférentiel (indiqué par une flèche sur le corps)
- ✓ Arbres chemisés pour un meilleur coefficient de friction avec bagues d'étanchéité afin d'éviter tout contact du fluide sur les parties en mouvement qui pourraient être sensibles à des phénomènes de corrosion

TESTS ET NORMES

- ✓ Essais hydrauliques réalisés suivant la norme EN12266-1 Essais corps : 1,5 x PN / Essai siège : 1,1 x PN
- ✓ Conception suivant la norme NF EN 593
- ✓ Raccordement par bride PN10 ou PN16 suivant normes EN1092-2 / ISO7005-2

ROBUST DESIGN

- ✓ Ductile iron body EN-GJS-500-7 (GGG50)
- ✓ Replaceable EPDM seal
- ✓ SS 304 welded seat from DN200 (smaller DN, seat built in)
- ✓ Retaining bolts in stainless steel (A2,304)
- ✓ Epoxy coating 250µm
- ✓ IP67 manual gearbox (IP68 option)

EASY TO USE

- ✓ Self-lubricated bearings: maintenance free
- ✓ Low pressure drop due to special disc design to improve the flow
- ✓ Reduced operating torque
- Double eccentric disc: perfect sealing and resistance to high pressures

100% WATERTIGHT

- ✓ Bidirectional sealing with preferential flow direction (indicated with an arrow on the body)
- ✓ Shafts with aluminum bronze bearing for a better friction coefficient and with sealing rings to prevent all contact between the fluid and the moving parts that could be susceptible to corrosion

STANDARDS & TESTS

- → Hydraulic tests according to standard EN12266-1
 Body test: 1,5 x PN / Seat test: 1,1 x PN
- ✓ Design according to standard NF EN 593
- ✓ Flanged connection ISO PN10 or PN16 according to standards EN1092-2 / ISO7005-2

LA QUALITÉ TECOFI

Fabricant français expert dans le domaine de l'eau, TECOFI vous propose des produits 100% testés et répondant aux normes européennes et internationales.

Notre équipe R&D est à votre disposition pour étudier vos besoins et vos contraintes en adaptant nos produits à vos demandes spécifiques.

TECOFI QUALITY

French manufacturer and an expert in the water field, TECOFI offers valves that are 100% tested and designed according to EU and international standards. Our R&D team is at your disposal to study your constraints, adapting our products to your specific needs.



Linked in Suivez-nous sur notre page

Follow us!

Tous nos produits et fiches techniques sur notre site

Find all of our product and technical datasheets on our website.

www.tecofi.fr



T. +33 (0)4 72 79 05 79 F. +33 (0)4 78 90 19 19 WhatsApp Chat : \$\Omega\$+33 623 898 706 \$\omega\$ sales@tecofi.fr



INSTALLATION AND MAINTENANCE INSTRUCTIONS

TECOFI DOUBLE-ECCENTRIC BUTTERFLY VALVE TECWAT

VP4201 / VP4241 / VP4251 / VP4261



Digitally signed by Moraru Mircea Date: 2023.05.30 16:02:18 EEST Reason: MoldSign Signature

Location: Moldova





INSTALLATION AND MAINTENANCE INSTRUCTIONS FOR THE TECWAT BUTTERFLY VALVE

Contents

l.	Introduction	3
II.	Product Description	3
III.	Main Parts of TECWAT Valves	.3
	Storage Instructions. a) Handling b) Storage	4
V.	Installation.	4
VI.	Operation and Use	.5
VII.	Possible problems, reasons and measures to take	. 5



INSTALLATION AND MAINTENANCE INSTRUCTIONS FOR THE TECWAT BUTTERFLY VALVE

I. Introduction

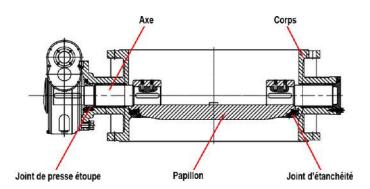
TECWAT butterfly valves are used for fluid transfer in water lines and drainage

II. Product Description

This TECOFI manufactured product is a flanged, eccentric butterfly valve conform to the standard EN1092-2 for the nominal pressures ISO PN10, PN16, PN25, and PN40

Its design is conform to the standards ASME B16.34, BS 5155 and DIN 3354

III. Main parts of TECWAT valves



Description	Material		Equivalence	
Docompacti	matorial	DIN	ASTM	BS
Body	Ductile iron EN-GJS-500-7	GGG 50	A536 70-50-05	1563 EN-JS1050
Disc	Ductile iron EN-GJS-500-7	GGG 50	A536 70-50-05	1563 EN-JS1050
Stem	Stainless steel X20Cr13	1.4021	AISI 420	420 S 37
Gasket	EPDM	EPDM	EPDM	EPDM



INSTALLATION AND MAINTENANCE INSTRUCTIONS FOR THE TECWAT BUTTERFLY VALVE

IV. Storage Instructions

a) Handling

The valves must be handled with precaution to avoid all shocks that could cause damage. Each time the valve is lifted, it is necessary to protect the shaft and operating elements of the valves. To avoid all risks of deterioration, the cables must be attached to the rings on the outside of the flanges. It is prohibited to use hooks.

b) Storage

The valves may be delivered with caps or on filmed palettes. If this is not the case and the valves are delivered without packaging and if they must remain in storage for a long period before installation, it is necessary to stock the valves with the shafts and the flanges horizontal. It is important to protect the interior of the valves, the seat in particualr, and the disc should not come in contact with exterior pollution.

The storage must be in a dry and well-ventilated place with a temperature between 10 and 28° C, providing good protection from the sun, rain and all other climatic factors that could damage the valves.

It is strictly prohibited to place the valves on their shaft or actuation mechanism, and in the case where they are placed one on top of another, the painted surfaces must not come in direct contact with one another; place cardboard between them. In addition, in case of prolonged storage, it is important to clean and paint the valve surfaces with the help of anticorrosion oil. If storage exceeds 18 months, check the structure and the operation of the valves. The disc must be kept slightly open at an angle of 5-10 degrees.

It is imperative to check valves stored for more than 18 months before their installation. Verify the following elements:

- The surface in contact with the seal
- The valve's stem and operating nut
- The packing gland
- The presence or absence of contamination on the bodys

V. Installation

Before installation, ensure that the type, nominal diameter, nominal pressure, material and all other important characteristics are conform to what was specified. Closely verify the state of the passage and the sealing contacts. If a contamination is noted, procede to cleaning..

THE TECWAT VALVE MUST IMPERATIVELY BE ASSEMBLED WITH THE SHAFT HORIZONTAL

Verify that the bolts are well tightened. Ensure that the packing gland is properly tightened and it does not impede the free rotation of the disc's driving shaft.

Consider that a valve destined to often remain closed is not made for an installation where the working pressure frequently changes, due to the high risk of wear on the shaft of the valve.

Avoid installing the valves in pipelines where the working pressure is higher than what the valves can handle. After installation, the valves must be completely open when testing the pressure of the piping.

THE MAXIMUM PASSAGE SPEED ALLOWED IS 2.5M/S.



INSTALLATION AND MAINTENANCE INSTRUCTIONS FOR THE TECWAT BUTTERFLY VALVE

VI. Operation and Use

It is preferable to use the handwheel, which is the actuation device required to open the valves. It is prohibited to use assistance tools such as levers, keys, etc. The working pressure must not go past the maximum authorized pressure in relation to the range of temperature of the fluid. Ensure that the peak maximum pressure in the piping never reaches higher than 1.1 times the maximum allowable pressure corresponding to the working temperature. Ensure the presence of safety devices in the circuit to prevent the maximum pressure from exceeding the authorized values.

It is not authorized to change the gasket of the packing gland. Take the necessary measures to limit or avoid leaks or damage to the valves caused by long lasting vibrations. The valves must not be used when the corrosiveness of the fluid exceeds the preformance of the anticorrosive materials.

Every 6 months verify the surface seal of the valves (every 6 months in the case of normal use).

Description	Leak
Flanged Connection	Zero
Packing Gland Gasket	Zero
Sealing Ring	Conform to technical standard

Carefully check the sealing surfaces and the state of wear of the packing gland. In case of damage, repair if possible. Otherwise, replace the valve without waiting for replacement parts.

VII. Possible problems, reasons and measures to take

Problem	Reasons	Solutions			
	Presence of impurities or other objects on the seal surface.	Remove the impurites or other objects on the sealing surface.			
Leak at contact seals	Scratches or wear on the seal face. The closed position of the sealing surface is incorrectly adjusted	2. Repair or replace the sealing pieces.3. Ajust the position of the disc with a position indicator			
Leak at packing gland	The packing gland is not well tightened The packing gland gasket is defective	Tighten the screws of the packing gland Add a gasket			

The maintenance of the valves must be done by qualified and experienced personnel.



83 RUE MARCEL MERIEUX 69969 CORBAS CEDEX - FRANCE

Bureau Veritas Certification France certify that the Management System of the above organization has been audited and found to be in accordance with the requirements of the management system standard detailed below

Standard

ISO 9001:2015

Scope of certification

DESIGN, ASSEMBLY AND SALES OF INDUSTRIAL VALVES.

Certification cycle start date: 07 February 2020

Subject to the continued satisfactory operation of the organization's Management System,

this certificate expires on : 06 February 2023

Original certification date: 17 May 1999

Certificate No.: FR053829-1

Date: **05**

05 february 2020

Contract No.: 7244061

Jean-Michel Audrain - Managing Director

Local office: Bureau Veritas Certification France 60, avenue du Général de Gaulle – 92046 Paris La Défense

Further clarifications regarding the scope of this certificate the applicability of the management system requirements may be obtained by consulting the organization. To check this certificate validity, please call + 33(0) 1 41 97 00 60.





ACCREDITATION N°4-0002 Liste des sites et portées disponibles sur www.cofrac.fr



83 RUE MARCEL MERIEUX 69969 CORBAS CEDEX - FRANCE

Bureau Veritas Certification France certify that the Management System of the above organization has been audited and found to be in accordance with the requirements of the management system standard detailed below

Standard

ISO 9001:2015

Scope of certification

DESIGN, ASSEMBLY AND SALES OF INDUSTRIAL VALVES.

Certification cycle start date: 07 February 2020

Subject to the continued satisfactory operation of the organization's Management System,

this certificate expires on : 06 February 2023

Original certification date: 17 May 1999

Certificate No.: FR053829-1

Date: **05**

05 february 2020

Contract No.: 7244061

Jean-Michel Audrain - Managing Director

Local office: Bureau Veritas Certification France 60, avenue du Général de Gaulle – 92046 Paris La Défense

Further clarifications regarding the scope of this certificate the applicability of the management system requirements may be obtained by consulting the organization. To check this certificate validity, please call + 33(0) 1 41 97 00 60.





ACCREDITATION N°4-0002 Liste des sites et portées disponibles sur www.cofrac.fr