

TECHNICAL DATASHEET
WRAS APPROVED BALL
VALVE



Item No.: HC-88881

1 CERTIFICATION INFORMATION

Declaration of conformity: WRAS approved ball valve, Confirmation of the approval can be obtained from the WRAS Approvals Directory (www.wras.co.uk/directory)

Approval Number: 2204037



2 PRODUCT BASICS

Product Name: WRAS APPROVED BALL VALVE (FXF series)

Purpose: It is used as a shut-off valve in pipeline systems (water supply, household drinking, heating), transporting any media that are not aggressive to the materials of the product.

Manufacture (supplier): HOME CREATOR TECHNOLOGY CO. LTD (Qinggang, Yuhuan, Taizhou, Zhejiang province, China).

3 MAIN TECHNICAL DATA AND CHARACTERISTICS

3.1 SPECIFICATIONS

Table 1

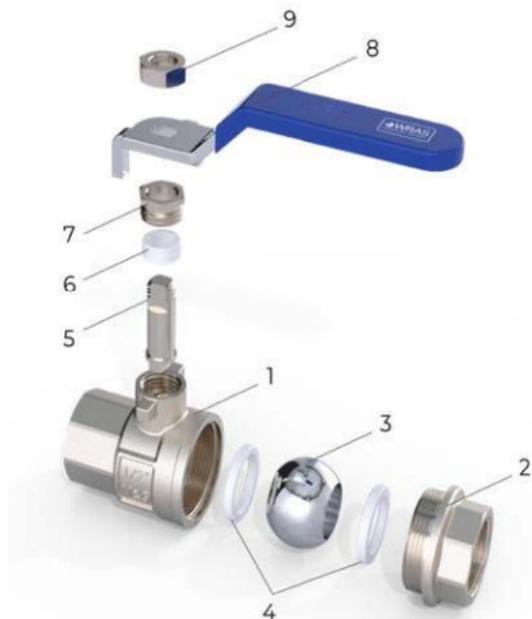
Connection thread, inch		1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Nominal diameter DN, mm		15	20	25	32	40	50
Nominal pressure PN, MPa		2.5	2.5	2.5	2.5	2.5	2.5
Operating temperature range, °C		-20 to +120					
Ambient temperature, °C		-20 to +60					
Maximum force on the handle, N-m		10					
Seal tightness		Class "A"					
Connection thread (ISO 228)		Parallel					
Uptime	average full-service life	30 years old					
	average full resource	55,000 cycles					
	MTBF	25,000 cycles					



3.2 MATERIAL OF MANUFACTURE AND CONSTRUCTION BALL SERIES

Female-Female thread (FxF)

Table 2



Name	Material
Body Nickle plated (1)	Brass CW617N
Bonnet Nickle plated (2)	Brass CW617N
Ball Chrome plated (3)	Brass
Seats (4)	PTFE
Stem Nickle plated (5)	Brass
Washer (6)	PTFE
Oil seal bushing (7)	Brass
Lever handle (8)	Steel
Nut (9)	Brass

1. HOME CREATOR brass products are made by hot stamping of brass grade CW617N as per the European standard EN12165.
2. Sealing products are made of PTFE according to the European standard EN 13000-2.
3. The handle-lever is made of steel grade S235 according to the European standard EN 10025-2.

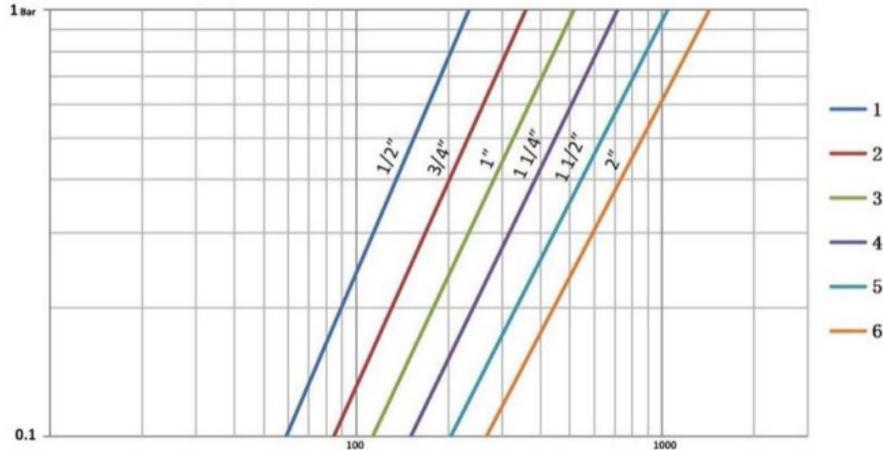
3.3 FLOW-DIFFERENCE CHARACTERISTIC

Table 3

Size, Inch	Size, Inch	Cv	Kv
HC-88881	1/2"	16.82	14.5
HC-88881	3/4"	31.9	27.5
HC-88881	1"	56.5	48.7
HC-88881	1 1/4"	88.5	76.3
HC-88881	1 1/2"	162.8	140.4
HC-88881	2"	255.9	220.6

-Cv: flow rate in US GPM at a pressure drop of 1 psi.

-Kv: flow rate in m3 per hour at pressure drop of 1 bar.



3.4 BALL VALVE LEVER HANDLE

Female-Female thread (FxF)



3.5 CROSS SECTION

Female-Female thread (FxF)

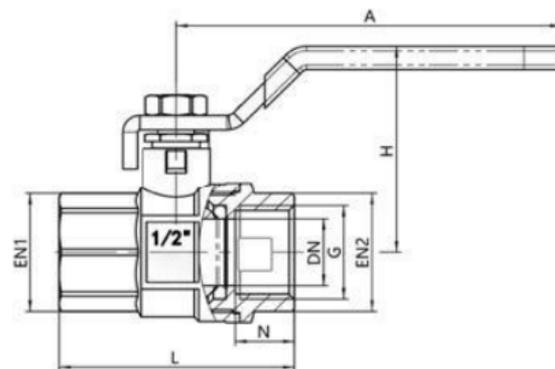


Table 4

Item	DN	Size	Weight, g	Overall dimensions, mm					
				L	A	H	N	EN1	EN2
HC-88881	15	1/2"	198.7	52	85	46.5	13	25	25
HC-88881	20	3/4"	309.2	60.4	85	52.4	13.5	32	32
HC-88881	25	1"	451.3	69	104	58	16	38	38
HC-88881	32	1 1/4"	730.3	83	123.5	72.9	17	48	48
HC-88881	40	1 1/2"	1037.3	97	123.5	78.5	19.5	55	55
HC-88881	50	2"	1547.3	110.2	155.8	93.7	20	65	65

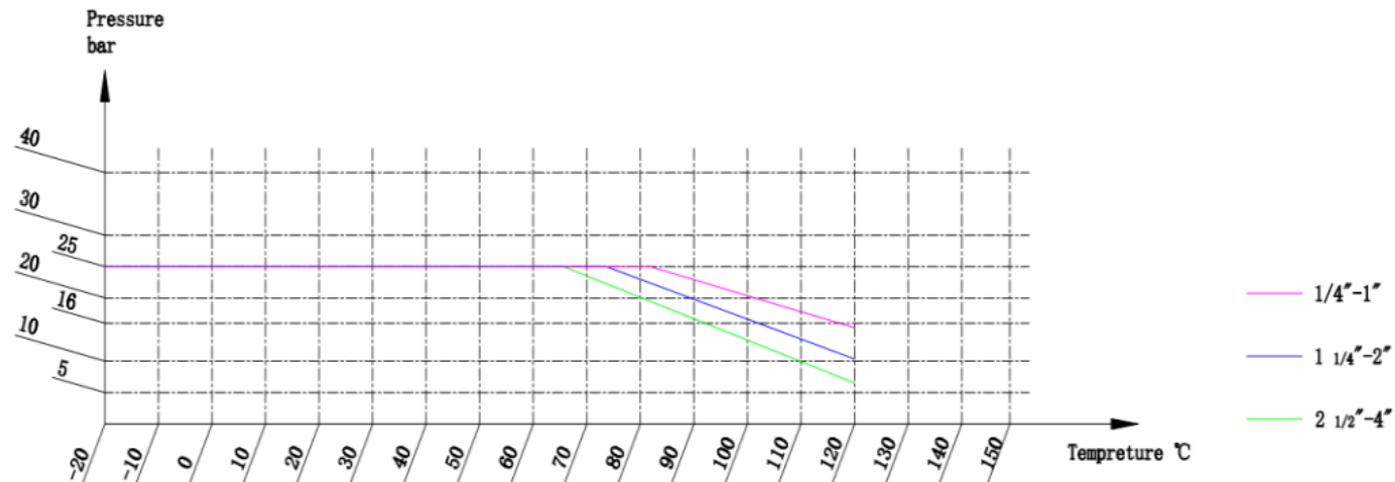


3.6 MAXIMUM PRESSURE CONDITIONS

Female-Female thread (FxF)

Table 5

Size	Max Pressure (bar)	Min/Max Temperature (°C)	Test Pressure		Max Pressure (psi)	Min/Max Temperature (°F)	Test Pressure	
			Shell (bar)	Seat (bar)			Shell (psi)	Seat (psi)
½" to 2"	25	-20°C + 120°C	37.5	27.5	362.6	-4 °F + 248 °F	543.9	398.9



4 INSTALLATION AND OPERATION

- 4.1 Installation of a ball valve should be carried out by a specialist or a specialized organization in accordance with the Installation Requirement Notes (IRNs) "WRAS water regulation approval schedule".
- 4.2 The ball valve can be installed in any mounting position, both horizontal and vertical. Any direction of the working medium is allowed.
- 4.3 Sealing of threaded connections should be carried out using standard sealing materials.
- 4.4 The ball valve should not experience loads from the pipeline (when bending, compressing, stretching, torsion, braiding, vibration, uneven tightening of the fasteners, etc.)
- 4.5 Upon completion of the installation work, it is necessary to carry out individual tests of the equipment with the preparation of the act.
- 4.6 The ball valves shall be operated in accordance with the characteristics specified in paragraph 3. of this technical passport.
- 4.7 When installing a valve, in order to prevent the formation of cracks and chips on the coupling ends of the valve, as well as deformation of the valve body or depressurization of the connection point of the semi-hulls, it is recommended to use standard carob Keys.
- 4.8 During installation, when tightening the valve, the key must be captured by the hexagon of the housing closest to the connection thread. It is not allowed to exceed the tightening moments indicated in the table below:

Size, inch	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Maximum torque, N·m	40	68	100	128	160	200

- 4.9 To exclude possible contaminants associated with the installation of the valve (excess sealing material, paste, etc.) into the internal cavities of the tap, the valve should be mounted in a fully open position.
- 4.10 The ball valve has only two operating positions: fully open or fully closed. It is not allowed to use HOME CREATOR ball valves as control valves, this can lead to a reduction in service life.
- 4.11 In the case of using the valve in pipeline systems with a high content of mechanical impurities, it is recommended to additionally mount a U-shaped filter for cleaning HOME CREATOR(Art. HC-301).

5 DESCRIPTION AND WORK

The ball valve blocks the flow of the transported medium with a spherical gate shape. The shutter rotates 90 degrees by transmitting torque from the crane handle through the rod. The bolt has seals on the sides of the outlet pipes and rod.



6 MAINTENANCE

- 6.1 Articles must be operated within the values specified in para. 3, para. 4 of this technical passport.
- 6.2 To extend the service life of sealing elements, it is recommended to open / close the HOME CREATOR ball valve at least 1 time in 6 months.

7 STORAGE AND TRANSPORTATION CONDITIONS

Products are transported in the packaging of the manufacturer in accordance with the rules operating on the mode of transport used.

8 RESOURCES, LIFETIMES AND MANUFACTURER'S (SUPPLIER'S) WARRANTIES

- 8.1 Average full service life of a ball valve: 30 years.
- 8.2 The manufacturer (supplier) guarantees the operability and compliance with the safety requirements of the product if the consumer complies with this technical passport HC-88881.
- 8.3 Warranty period: 36 months from the date of sale to the end user / from the date of commissioning of the object. The warranty covers all defects caused by the manufacturer.
- 8.4 When making claims about the quality of the goods, the buyer provides the following documents:
 - 8.4.1 An application in any form, which indicates:
 - a) Name of the organization or F. And. About. buyer, actual address, contact phone number;
 - b) The name and address of the organization that carried out the installation of the product; c) a brief description of the malfunction of the product.
 - 8.4.2 A document confirming the purchase of the product (cash/sales receipt, waybill, receipt, etc.).
 - 8.4.3 Photos of the product confirming its malfunction, or the product itself.
 - 8.4.4 Act of hydraulic testing of the system in which the product was mounted.
 - 8.4.5 Completed warranty card.
- 8.5 The warranty does not cover defects arising from:
 - 8.5.1 Violations of the passport regimes of storage, transportation, installation and operation of the product.
 - 8.5.2 The presence of traces of extraneous interference in the design of the product.
 - 8.5.3 Effects of substances aggressive to the materials of the product.



- 8.5.4 Effects on the product of excessive force.
- 8.5.5 Impact on the product of fire, natural disasters and other force majeure circumstances.
- 8.6 The warranty also does not apply in cases where the manufacturer's markings are partially or completely changed, erased, removed or illegibly visible.
- 8.7 In case of unreasonableness of the claim, the costs of diagnostics and examination of the product are paid by the buyer.
- 8.8 Manufacturer HOME CREATOR TECHNOLOGY CO. LTD reserves the right to make changes to the design of the product that do not affect the declared technical characteristics.
- 8.9 Claims for the quality of the goods can be made during the warranty period at the address of the manufacturer HOME CREATOR TECHNOLOGY CO. LTD.

9 CERTIFICATE OF ACCEPTANCE AND PACKAGING

- 9.1 Ball valves packed by the manufacturer.
- 9.2 Packaging ensures the safety of products subject to compliance with clause 7.
- 9.3 The materials and substances used for packaging are safe for people and the environment.
- 9.4 The ball valve is in the open position.
- 9.5 The batch of ball valves is recognized as suitable for operation and is accepted with 100% control at $RPR = 2.5 * PW$.

Date of manufacture		QUALITY Mark	
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Name: WRAS APPROVED BALL VALVE

Article: HC-88881

Quantity: _____

Name and Address of the trading organization: _____

Date of Sale: _____ Seller's full name / Seller's signature, Stamp / seal of the trading organization: _____

I agree with the terms of the warrant: _____

Product Return Mark: _____

Buyer's signature: _____

Date / Signature: _____

View your passport Online:



WARRANTY PERIOD: 36 MONTHS

Warranty is provided.
according to paragraph 8 of the technical passport HC-88881





HOME CREATOR

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