

Jandy HD Series Ball Valves

Important: This instruction manual contains important information on the safety measures to be adopted during installation and start-up. It is therefore essential that both the installer and the user read the instructions before starting assembly and start-up.

General safety instructions

The following symbols indicate the possible dangers that may result from not following these instructions:

⚠ Not following these instructions carries the risk of harm to the valve or persons.

ⓘ It is necessary that the manufacturer's instructions are complied with.

Manufacturer's declaration

Our valves have been subjected to pressure/temperature tests which can guarantee a long life for the product, as required by the norms of this product. Jandy guarantees its ball valves, always provided that the product has not been altered or manipulated; it should be installed by qualified technicians.

⚠ Jandy ball valves are not suitable for gas conduction.

⚠ Fluids with abrasive contents could affect the functioning of the valve.

⚠ ⓘ For the use of fluids which contain chemical products, the table in the technical manual referring to the behaviour of the materials of the valve should be consulted.

⚠ Avoid functioning under cavitation.

⚠ Take precautions in installations needing a pressure reducing/sustaining valve, as little peaks of pressure are usually produced that are harmful to the correct maintenance of the product.

ⓘ The maximum useful life of the valve is 25 years.

Installation of the valve

The valves should be transported in their original packaging. They should be protected from harmful external factors: light, dust, heat, humidity or UV radiation. In particular, the connections must not be damaged by mechanical or thermal factors.

The valve should be stored with the handle in the open position.

ⓘ Install the valve pointing in the direction of flow marked on the body of the valve – downstream.

ⓘ If the valve is dismantled, it is essential that there is no pressure in the installation, as this could cause injury to people and damage the valve.

ⓘ The valve is supplied assembled from the factory and the following steps should be followed for its installation:

- Check that the diameter of the tube corresponds to the inside of the end connector (if it is a solvent socket).
- Remove the valve nut and insert it through the end of one of the pipes, according to the orientation of Fig. 01.
- Clean the end of the pipe and the inside of the end connector with cleaner and apply the solvent cement to the pipe and end connector according to the generic instructions for gluing.
- Glue the end connector to the pipe. Ensure that the area to be joined to the valve is clean of glue (Fig. 02).
- Clean the end of the other pipe and the gluing area of the body with cleaner and apply the solvent cement on the pipe and body according to the generic gluing instructions. Attention, an excess of glue in the closing area of the ball could affect the sealing of the valve. (Fig. 03)
- The distance between the two ends of the pipes must respect measure A of table T1.
- Screw the valve nut (Fig.04).
- It is recommended not to apply hydraulic pressure until 24 hours after applying the solvent cement.
- In the case of threaded joints, place PTFE tape on the male threads, taking care not to place an excessive amount of tape, which could cause a break of the female element.
- In the solvent operation you have to separate the body of the end connectors, just to avoid the adhesive damages the valve internal parts.
- Teflon tape is placed in the male threads of the threaded unions: "it is very important that an excessive amount is not used as when it is put together it could cause breakage of the female housing".

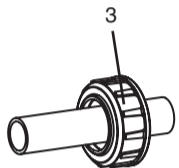


Fig.01



Fig.02

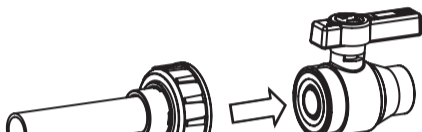


Fig.03

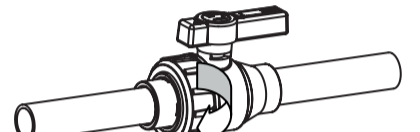


Fig.04

Adjustment and maintenance of the valve

It is essential that there is no pressure in the circuit when dismantling the union nut and end connector.

⚠ ⓘ The following steps can only be carried out when there is no fluid present in the lines.

The valve is factory adjusted to ensure correct operation over long periods of time. When the time comes to replace any part of the valve, this can be easily done. First, unscrew the nut and replace the end connector until the seal holder (12) comes free. At this stage, any of the body seals (6,8,9) or the ball seat (2) can be replaced.

If it is necessary to change the shaft (1) or its seals (7), then the ball should be removed. It is also necessary to remove the handle (4) by loosening the screw which is found below the press-in logo in its centre. Pressing down will then free the shaft. When reassembling the valve, lubricate the seals with vaseline or silicone. Never use greases or mineral oils.

ⓘ When reassembling the shaft, check that its slot is aligned/oriented with the housings in the neck of the body (see Fig.10).

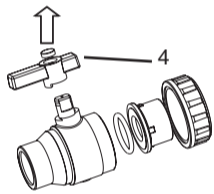


Fig.05

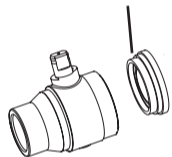


Fig.07

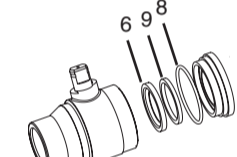


Fig.08

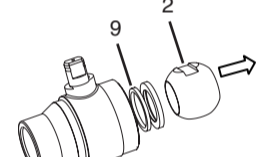


Fig.09

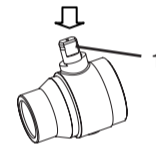


Fig.10

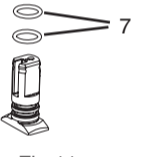


Fig.11

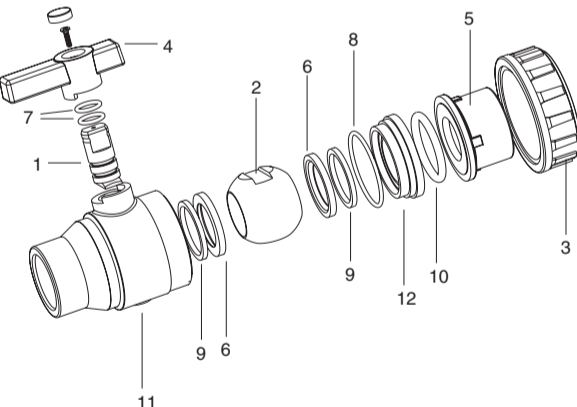
Threaded seal carriers contain a ring or ball seat (6) whose position during assembly is very important. Proceed as shown in the drawing. The inclined plane of piece 6 should be assembled so that it makes contact with the ball.

Le porte-joint à visser porte un anneau ou joint de siège de boisseau (6) dont la position de montage est très importante. Procéder tel qu'il est indiqué sur l'illustration. Le plan incliné de la pièce 6 doit rester monté de façon qu'elle entre en contact avec le boisseau.

El portajuntas roscado lleva alojado un anillo o junta asiento bola (6) cuya posición de montaje es muy importante. Proceder tal y como está indicado en el dibujo. El plano inclinado de la pieza 6 debe quedar montado de forma que entre en contacto con la bola.



low / Dé it / audal / Porta / Durchfluss / audal

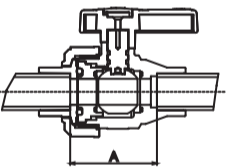


Components - Composants - Componentes

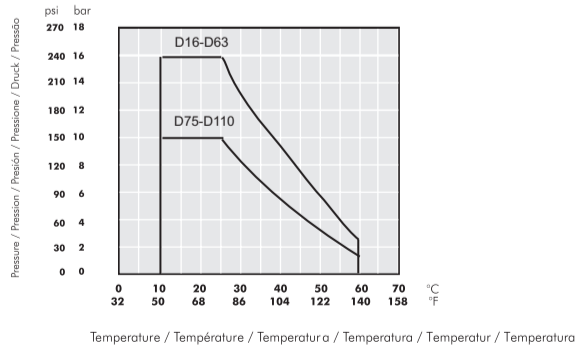
PARTS	PIÈCES	DESPIECE	MATERIAL	
1	Shaft	Axe	Eje	PVC-U
2	Ball	Boisseau	Bola	PVC-U
3	Union nut	Ecrou	Tuerca	PVC-U
4	Handle	Poignée	Conjunto maneta	PP
5	End connector	Collet	Manguito enlace	PVC-U
6	Ball seat	Garniture du boisseau	Asiento bola	HDPE
7	Shaft o-ring	Joint de l'axe	Junta eje	EPDM
8	Body o-ring	Joint du corps	Junta cuerpo	EPDM
9	Dampener seal	Joint siège	Junta amortiguación	EPDM
10	End connector o-ring	Joint du collet	Junta manguito	EPDM
11	Body	Corps	Cuerpo	PVC-U
12	Seal-carrier	Porte-joint	Porta-juntas	PVC-U

T1

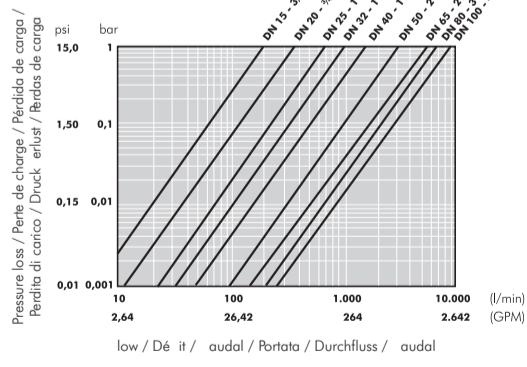
DN	D	A (mm)	A (in)
15	20-1/2"	49	1.93
20	25-3/4"	61	2.40
25	32-1"	67	2.64
32	40-1 1/4"	78	3.07
40	50-1 1/2"	73	2.87
50	63-2"	93	3.66
65	75-2 1/2"	132	5.20
80	90-3"	154	6.06



Pressure/temperature graph
Diagramme pression/température
Diagrama presión/temperatura



Pressure loss diagram
Diagramme de perte de charge
Diagrama de pérdidas de carga



D	DN	Kv ₁₀₀	Cv
20-1/2"	15	190	13,3
25-3/4"	20	380	26,6
32-1"	25	690	48,3
40-1 1/4"	32	980	68,6
50-1 1/2"	40	1600	112
63-2"	50	3000	210,1
75-2 1/2"	65	5500	385,2
90-3"	80	6800	476,2
110-4"	100	8900	623,2

Torque graph
Diagramme de couple
Diagrama de par

DN	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100
Nm	1	2	3,5	3,5	5	15	25	45	60
lbf-inch	8,9	17,7	31	31	44,3	132,8	221,3	398,3	531

Valve operating torque

Operating torque values at rated pressure (PN) and 20 °C in as new direct from the factory condition. Installation and operating conditions (pressure and temperature) will affect these values.

Couple de fonctionnement du robinet

Valeurs du couple de fonctionnement au niveau de pression (PN) et 20 °C tels que fournis par défaut de l'usine. Les conditions d'installation et de fonctionnement (pression et température) peuvent influencer sur ces valeurs.

Par de maniobra de la válvula

Los valores de par de maniobra se determinan a presión nominal (PN) y a 20 °C, en condiciones de salida de fábrica. Las condiciones de instalación y operación (presión y temperatura) afectarán a estos valores.

FAULT	POSSIBLE CAUSE	FAULT CLEARANCE
Leak in the valve body.	Wear of the body o'ring.	Change the o'ring.
	Loosening of the seal carrier.	Tighten the nuts.
	Presence of solids or strange elements.	Remove the valve and replace damaged parts.
Leak in the valve shaft.	Wear of the shaft o'rings.	Change the o'rings.
The torque is too strong or the valve is blocked.	The seal carrier is over-tight	Adjust the nuts.

PANNE	CAUSE PROBABLE	REPARATION DE LA PANNE
Fuite sur la structure du robinet.	Montage du joint annulaire de la structure.	Changement du joint annulaire.
	Desserrage du support de joint.	Serrer les écrous.
	Présence de matières solides ou étrangères.	Retirez le robinet et remplacez les pièces endommagées.
Fuite sur l'arbre du robinet.	Usure des joints annulaires de l'arbre.	Changement des joints annulaires.
Le couple est trop serré ou le robinet est bloqué.	Le support de joint est trop serré.	Ajustement du écrous.

PROBLEMA	POSIBLE CAUSA	SOLUCIÓN
Fuga en el cuerpo de la válvula.	Deterioro de la junta del cuerpo.	Cambio de la junta.
	Portajuntas con falta de presión.	Apriete de las tuercas.
	Presencia de sólidos o elementos extraños.	Desinstalar la válvula y reemplazar las partes dañadas.
Fuga por el eje de la válvula.	Desgaste de las juntas del eje.	Cambio de las juntas.
Par de apertura/cierre excesivo o válvula bloqueada.	Portajuntas con presión excesiva.	Ajuste de las tuercas.