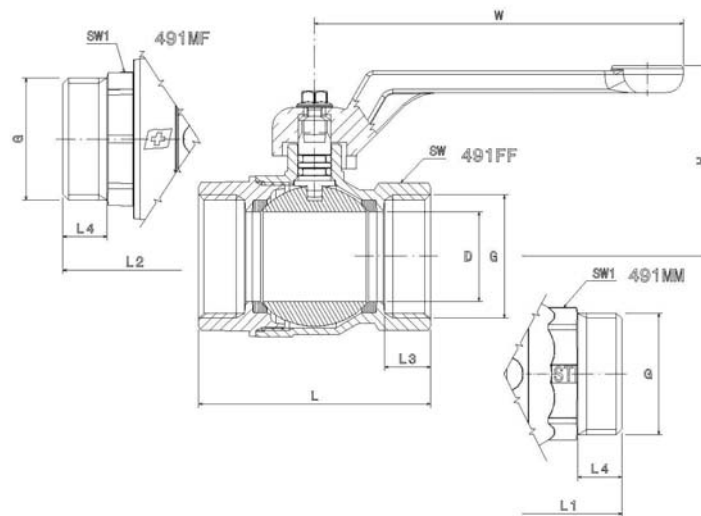


Full Port Ball Valve

Pressure Rating PN 30 (435 psi)*
Temperature Rating max. 100°C (212°F) water
(no steam), (depending on pressure)
For higher temperatures see Fig. 594

*18°C (64,4°F) water

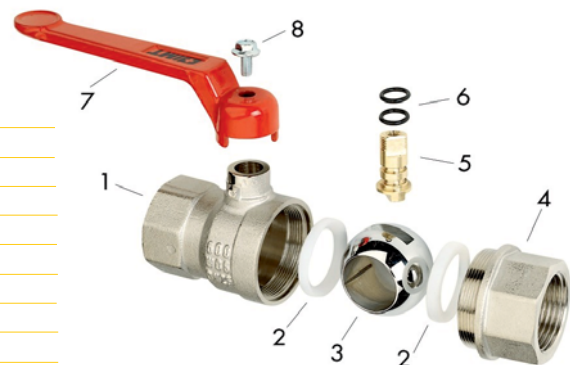
Forged Brass Nickel Plated Body
Threaded Ends according to ISO 228
Full Port Opening
Blow Out Proof Stem



G	D	L	L1	L2	L3	L4	SW	SW1	H	W
1/4	10	37			8		21		42	100
3/8	10	37	48	39	8	8.5	21	18	42	100
1/2	15	46	53	46	10.4	9.5	25	24	45	100
3/4	20	54	60	54	11	10.5	31	28	48	100
1	25	63	69	63	12.5	12	38	34	53	100
1 1/4	32	78	82	77	14.8	13	47	44	64	120
1 1/2	40	88	91	87	15.8	14	53	53	69	120
2	50	105	110	103	18	16	66	65	91	150

Dimensions in mm. 1 inch = 25,4 mm

1	Valve Body	CW617N - DIN EN 12164/5
2	Seat Ring	PTFE
3	Ball	CW617N - DIN EN 12164/5
4	Retainer-body end	CW617N - DIN EN 12164/5
5	Stem	CW617N - DIN EN 12164/5
6	"O"Ring	NBR 70 Shore
7	Handle	Aluminium
		AlSi11Cu2(Fe)
8	Handle screw	Steel, zinc plated



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Application

The ball valve 491 is used in residential, commercial and industrial applications.

It is designed for use on water, compressed air and oils, but not on aggressive fluids. Pay attention also on additives (see also resistance table for other uses) !

The ball valve is used as a shutoff device. It is not used as a regulating device and has to be in fully opened or fully closed position.

The valve is not heat treated.

Installation

The ball valve can be used in each direction. The handle is reversible for tight space applications. Piping should have clean threads free from dirt and debris; copper pipe applications should be cut and burrs removed before installation.

The tubing must be precisely cut in order to avoid the valve be subject to mechanical bending moment.

There are no pressure losses because the dimensions of the pipe and the valve are the same.

PTFE-based sealants are recommended for the connection. Attention! Too much seal tape can destroy the threads. See also our installation instruction for ball valves.

Maintenance

Once the valve is properly installed there is no maintenance required, but the valve should be operated regularly, according to DIN EN 806-5, to maintain a smooth operation. Attention! Aggressive fluids and additives can attack the PTFE seats, "O" rings or "Loctite" connection between body and body end.

Operation

The ball valve opens by rotating the handle 90° in a counter-clockwise direction and closes by rotating the handle 90° in a clockwise direction.

The handle direction indicates whether the valve is opened or closed. If the handle is on the same line of the tubing, the valve is opened ; if it's placed at 90° respect to the tubing, then the valve is closed.

Brass

IMT uses only brass according to the latest European norms DIN EN 12165 which corresponds to American norm ASTM C37700 and DIN EN 12164 which corresponds to American norm ASTM C38500.

Advantages

- Nickel plated body and body end made of forging brass
- Chrome plated ball
- Full port opening
- Blow out proof stem
- Free handle position, handle can be turned 180° if there is a space problem
- Stem with 2 "O" rings - double safety - stem is better supported during opening and closing operation
- Various handle types fit on this valve
- Various accessories available
- 100% electronic leakage control, additional manual leakage control according to AQL and various controls during manufacturing
- 100% made in Europe

Design

Ball valve designed to shut off fluids filled pipe systems.

Threads according to ISO 228 in the dimensions from 1/4" to 2". Body and body end made of forging brass, chromium plated ball made of forging brass or machining brass.

Stem made of machining brass with 2 "O" rings and blow out proof assembled. Ball seats in PTFE. Standard version is with a red aluminum handle.

Versions:

Fig. 491 FF	Female Ends
Fig. 491 FF F	Female Ends with Butterfly Handle
Fig. 491 FF V	Female Ends with Square Handle
Fig. 491 MF	Male/Female Ends
Fig. 491 MM	Male Ends
Fig. 491 E FF	Female Ends with Drain with T-Handle
Fig. 491 E FF V	Female Ends with Drain with Square Handle
Fig. 491 FH	Female End/Hose Union

Accessories

Fig. 491+005	Insulation custom-made
Fig. 491+008	Locking Handle
Fig. 491+010	Stem Extension
Fig. 491+009	Memory Stop
Fig. 491+014	Square handle