LIV MONOBLOCK PROCESS TO INSTRUMENT BALL VALVES

SERIES MBT
Flanged inlet
and threaded outlet

Principle

LIV Monoblock process to instrument ball valve is furnished in 3 different configurations: single block & bleed, double block & bleed, and double block. The LIV Monoblock ball valve has 1 or 2 ball valves for isolation and 0 or 1 needle valve for bleed. The LIV Monoblock ball valve solutions offer cost, weight, and space saving with isolation and venting valves incorporated into the process interface with simplified installation

Construction

- The valve body is machined from a round bar stock material.
- The valve body is machined from a round bar stock material or from forged material standard.
- The raw material of the valve can be supplied according to NORSOK M 630 or to customer´s specific requirements.
- The valve spindle is anti-blow out design with PTFE back seat gaskets.
- The Monoblock valves have a ball or balls with 10 mm bore.
- The balls are polished for low friction. The ball valves have PEEK seats.
- The process connection is flanged, and outlet is ½″ NPT int. (standard).
- The handle has a plastic sleeve for protection.
- The dust covers are coloured for application indication (vent)
- The valves are designed for PED 2014/68/EU.

Technical Data

| Size	½ - 2"
Pressure rating	150 lbs – 2500 lbs
Flange facing	RF or RTJ to ANSI B 16.5
Material	AISI 316 (standard), A350LF2, 22Cr Duplex, 25Cr Duplex, 6Mo, Titanium, others on request.
Packing	PTFE, Graphite, PEEK
Temperature	÷40 to +260 ºC
Operation	Handle, T-bar or Anti tamper.
Coating	Standard offshore, to customer´s spec., or none

Testing and Documentation

- Material certificate to EN 10204-3.1
- Certificate of compliance to NACE MR 01-75 or EN 15156
- Optional: cleaned for oxygen and hydrogen
- PMI test
- Pressure test certificate.
- Fire safe tested acc. to EN 10497-2010
- Penetrant test on valve body to ASME BPV, ISO 3452-1 2021
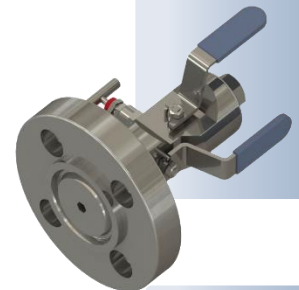- Fugitive emission to ISO 15848-1 2017

Accessories

- ¼″ NPT plugs (for valves with bleed connection)
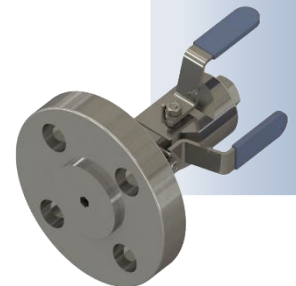- Locking device for valve operation (only valves with handwheel)
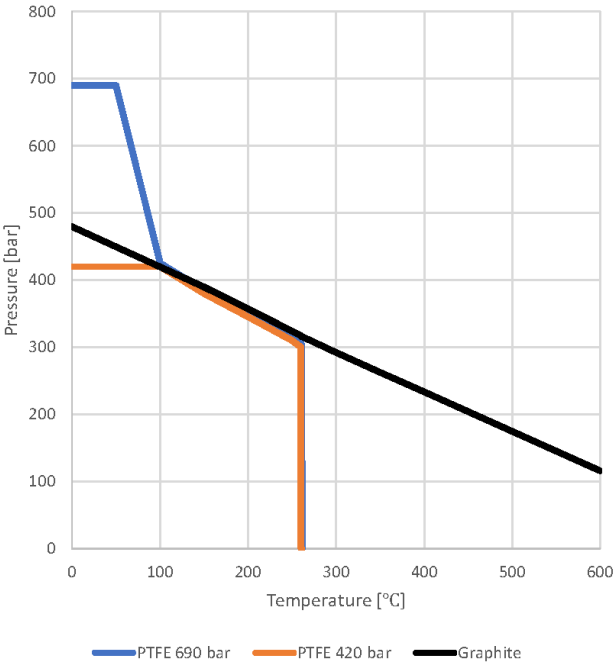
TYPE
MBT12/22
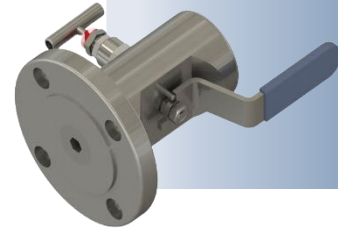
TYPE
MBT13/23

TYPE
MBT14/24

Pressure and Temperature Rating

HOW TO ORDER

Choose a code for each of the configuration steps. For special orders, please reach out to our sales team.

1 VALVE TYPE		**2 VALVE SIZE**		**3 PRESSURE RATING**		**4 FLANGE FACING**	
MBT12	Block and bleed (10 mm holes)	3	½"	01	150 lbs	F	Raised face
MBT13	Double Block and bleed (10 mm holes)	4	¾"	03	300 lbs	T	Ring type joint
MBT14	Double block (10 mm holes)	5	1"	06	600 lbs		
MBT22	Block and bleed (20 mm holes)	6	1½"	15	1500 lbs		
MBT23	Double block and bleed (20 mm holes)	7	2"	25	2500 lbs		
MBT24	Double block (20 mm holes)						

5 MATERIAL

	Body material	Trim material
01	A350 LF2	AISI 316
02	A479 316	AISI 316
04	A479 316 22Cr duplex	22Cr. Duplex
06	A479 316 25Cr duplex	25Cr. Duplex
08	A479 6Mo	6Mo
10	Titanium	Titanium
11	Monel 400	Monel 400
12	Hastelloy C-276	Hastelloy C-276
13	Inconel 625	Inconel 625
14	Inconel 825	Inconel 825

6 BONNET TYPES

1	OS&Y	2	Needle	3	Anti-tamper	4	Anti-tamper lockable

7 BONNET COMBINATIONS

	MBT12/MBT22			MBT13/MBT23			MBT14/MBT24		
	Primary	Secondary	Vent	Primary	Secondary	Vent	Primary	Secondary	Vent
01	1	2	-	1	1	2	1	1	-
02	1	3	-	1	1	3	-	-	-
03	1	4	-	1	1	4	-	-	-

8 SEALS / 9 BLEED CONNECTION / 10 CONNECTION OUTLET

8 SEALS		**9 BLEED CONNECTION**		**10 CONNECTION OUTLET**	
T	PTFE Solid	14	¼" NPT Int.	1	½" NPT Int.
G	Graphite	12	½" NPT Int.	2	¾" NPT Int.
		13	½" BSPT int.	3	½" BSPT Int.
		00	None	4	¾" BSPT Int.

Example: Type MBT13501.03F02T12.1
In line with ball valves double block & bleed, 10 mm balls, valve size 1", Lever, Lever, T-bar, 300 lbs rating with RF facing, body in 316, needle packing in PTFE, 1/2" NPT int. bleed connection, 1/2" NPT int. outlet.