

Three-way ball valves made of brass with pneumatic rotary actuator

Series BAT1-...-BLTV (T-port hole) and BAL1-...-BLTV (L-bore)



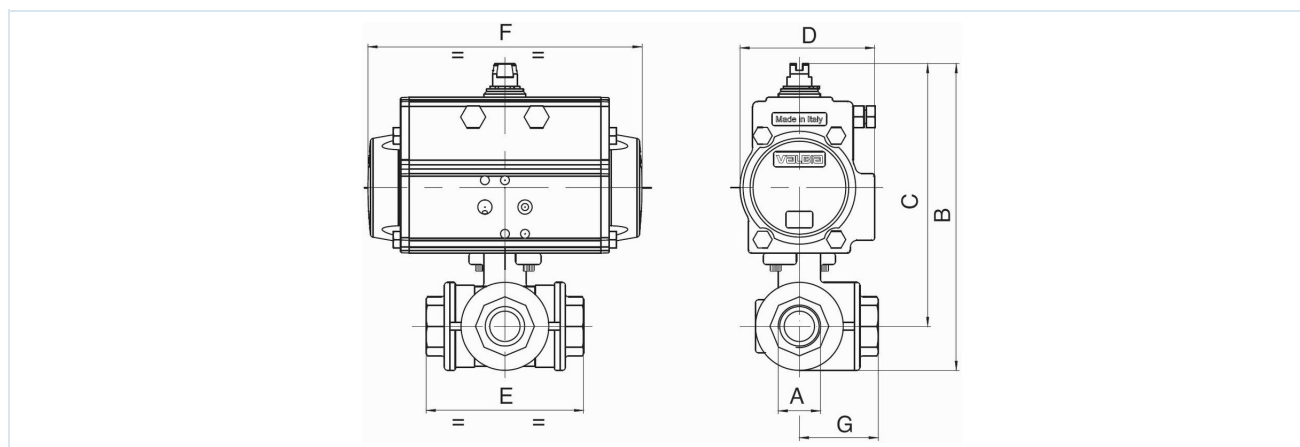
Design type	Actuator: Piston actuator with 2 opposing pistons, elastic sealing, actuator in all details in accordance with ISO 5211 or according to NAMUR recommendations, End positions adjustable on both sides +/-5° Ball valve: full bore passage, Three-piece ball sealing, not non-overlapping
Connection	RP1/4"...RP2" according to ISO7/1
Materials Standard version	Actuator: Hard anodized aluminium, Pinion, nickel-plated steel, Piston guide POM, Seals NBR Ball valve: Body Brass CW617N nickel-plated, Ball Brass CW617N hard chrome-plated, Seals PTFE/FKM/EPDM
Function	available in double-acting or single-acting Version
Mounting type	Installation in rigid piping system
Mounting position	any
Control medium	filtered and lubricated or non-lubricated compressed air
Application range	Gases and liquids of group 2 according to PED 2014/68/EU that do not attack the materials used.
Medium temperature	-20...+160°C
Ambient temperature	-20...+85°C
Control pressure	5,5...8 bar, Adaptation to lower pilot pressures available on request
Operating pressure	0 bar up to Operating pressure according to table and pressure-temperature diagram, not suitable for vacuum
Special version	Pinion in stainless steel, Ambient temperatures from -40...+85°C, or rather -20...+150°C on request
Accessories	assembled manual, pneumatic or electric control valve electrical end position feedback, Positioner in I/P or P/P Version Adjustment of the switching speed
Ordering note	When ordering, please also specify control pressure, operating medium, operating pressure and operating temperature. When ordering, the switching mode must be specified (see "switching diagram")
Application note	The pressure and temperature specifications are maximum values for normal conditions, for lubricating or non-degreasing media. Degreasing media in particular reduce the specified values and increase the required torque. For these special cases, we recommend prior consultation. When selecting the valve, the lowest control pressure occurring in the system must be taken as the basis.



Circuit diagram

BAT1				BAL1		
Switching type 01	Switching type 02	Switching type 03	Switching type 04	Switching type 05	Switching type 06	Switching type 07
Position 1 (Rest position for single-acting actuator)						
Position 2 (Operating position for single-acting actuator)						

Dimensions



Ball valves with double-acting rotary actuator

Connection A	Nominal size DN [mm]	max. Operating pressure [bar] up to 85°C	B	C	D	E	F	G	Actuator type	Kv value [m³/h]	Weight [approx. kg]	Type T-port hole	Type L-bore
RP1/4"	8	30	113	96	45	67	110	34	PAD032	2,8	1,0	BAT1-002-BLTV-D0	BAL1-002-BLTV-D0
RP1/4"	8	30	149	132	71	67	141	34	PAD052	2,8	1,8	BAT1-002-BLTV-D0B*	BAL1-002-BLTV-D0B*
RP3/8"	10	30	113	96	45	67	110	34	PAD032	3	1,0	BAT1-003-BLTV-D0	BAL1-003-BLTV-D0
RP3/8"	10	30	149	132	71	67	141	34	PAD052	3	1,8	BAT1-003-BLTV-D0B*	BAL1-003-BLTV-D0B*
RP1/2"	15	30	118	98	45	77	110	39	PAD032	3,9	1,1	BAT1-004-BLTV-D0	BAL1-004-BLTV-D0
RP1/2"	15	30	154	134	71	77	141	39	PAD052	3,9	1,9	BAT1-004-BLTV-D0B*	BAL1-004-BLTV-D0B*
RP3/4"	20	30	167	143	71	87	141	44	PAD052	7,9	2,2	BAT1-005-BLTV-D0	BAL1-005-BLTV-D0
RP1"	25	16	179	149	71	105	141	53	PAD052	13	2,9	BAT1-006-BLTV-D0	BAL1-006-BLTV-D0
RP1 1/4"	32	10	197	161	71	123	141	62	PAD052	20,7	3,9	BAT1-007-BLTV-D0	BAL1-007-BLTV-D0
RP1 1/2"	40	10	230	187	81	139	164	70	PAD063	38,7	6,3	BAT1-008-BLTV-D0	BAL1-008-BLTV-D0
RP2"	50	10	272	216	95	166	210	83	PAD075	54	10,2	BAT1-009-BLTV-D0	BAL1-009-BLTV-D0

*With the suffix B, the ball valves are equipped with the PAD052 actuator.. When using limit switch boxes and NAMUR control valves, B types must be used.

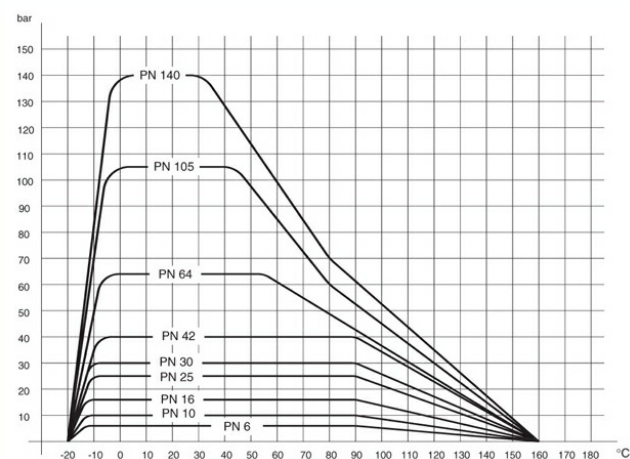


Ball valves with single-acting rotary actuator

Connection A	Nominal size DN [mm]	max. Operating pressure [bar] up to 85°C	B	C	D	E	F	G	Actuator type	Kv value [m³/h]	Weight [approx. kg]	Type T-port hole	Type L-bore
RP1/4"	8	30	149	132	71	67	141	34	PAS0525	2,8	2,0	BAT1-002-BLTV-S0	BAL1-002-BLTV-S0
RP3/8"	10	30	149	132	71	67	141	34	PAS0525	3	2,0	BAT1-003-BLTV-S0	BAL1-003-BLTV-S0
RP1/2"	15	30	154	134	71	77	141	39	PAS0525	3,9	2,1	BAT1-004-BLTV-S0	BAL1-004-BLTV-S0
RP3/4"	20	30	179	155	81	87	164	44	PAS0635	7,9	2,5	BAT1-005-BLTV-S0	BAL1-005-BLTV-S0
RP1"	25	16	190	160	81	105	164	53	PAS0635	13	3,2	BAT1-006-BLTV-S0	BAL1-006-BLTV-S0
RP1 1/4"	32	10	209	173	81	123	164	62	PAS0635	20,7	4,9	BAT1-007-BLTV-S0	BAL1-007-BLTV-S0
RP1 1/2"	40	10	262	219	106	139	241	70	PAS0855	38,7	9,4	BAT1-008-BLTV-S0	BAL1-008-BLTV-S0
RP2"	50	10	299	246	123	166	275	83	PAS1005	54	13,2	BAT1-009-BLTV-S0	BAL1-009-BLTV-S0

Single-acting actuators are supplied spring-closing (NC) unless otherwise ordered.

Pressure-temperature diagram



Illustrations non-binding

Design, dimensional and material changes reserved

Armatures / Ball valves - automatically operated / Ball valves - pneumatically operated / Ball valve with pneumatic actuator Series BAL1, BAT1

