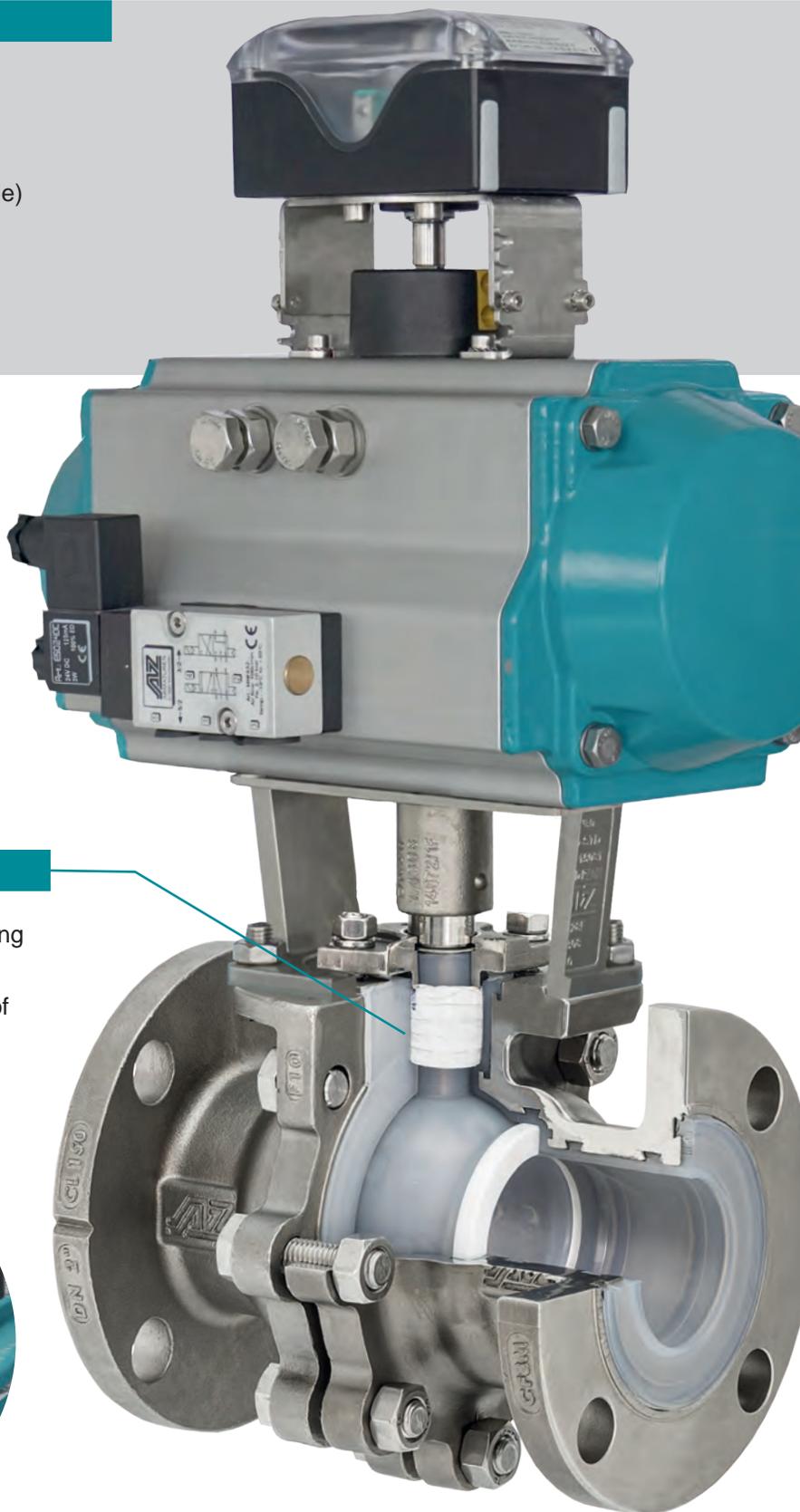


# Product range AZ ball valves

## Design overview and options

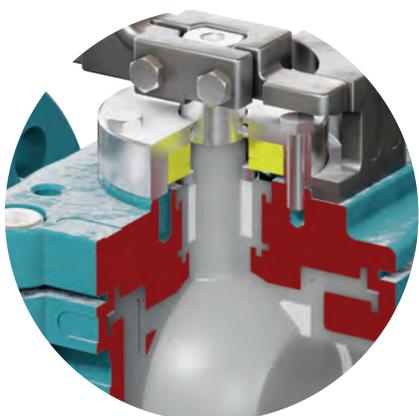
### Type NVN-EXTRA

- split body design
- cavity minimized
- full bore design (optional with reduced bore design available)



### Sealing systems

- adjustable triple packing (sealing system CAS)
- disc springs for initial tension of packing "live-loaded" (sealing system CAS-SL)



## other types

### Type NEO-VAL

- split body design (short face to face dimensions)



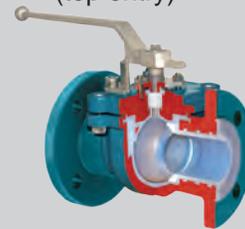
### Type KA

- split body design
- vessel bottom outlet valve



### Type Monobloc

- one-piece body design (top entry)



## one-piece ball

- anti blow-out design in case of high pressure or disassembly
- no risk of wear and tear between ball and shaft
- no danger for the lining
- constant torque
- optional: precise control with linear or equal percentage characteristics (type RH)
- customized solutions



## safe lining

- chemical resistant PFA/FEP lining
- minimum 3mm FEP/PFA lining
- locked in lining
- suitable for toxic and aggressive chemicals

## Standard materials

### Body:

- Stainless Steel 1.4408 / A351/CF8M
- Ductile Iron EN-GJS-400-18 / ASTM A395 (DN  $\geq$  8")
- Carbon Steel 1.0619 / ASTM A216 WCB

### Ball:

- ASTM A995 - CD4MCUN (DN  $\leq$  4")
- Carbon Steel 1.0619 / ASTM A216 WCB (DN  $\geq$  6")

# Type MONOBLOC / MONOBLOC-EXTRA

Fully lined ball valve, one piece body and ball design



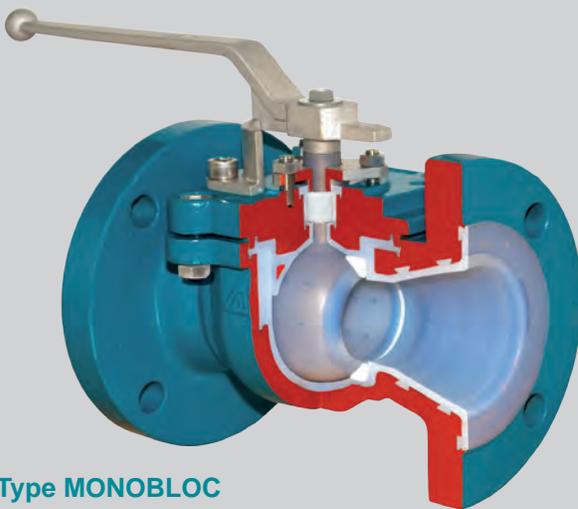
- one-piece body
- one-piece ball

NPS 1 - 8 / Class 150

Range of application:  
 $14 < T < 302/410^{\circ}\text{F}$

## Type MONOBLOC-EXTRA

- full bore design
- maximum flow rates - no pressure loss



## Type MONOBLOC

- reduced bore
- less torque = smaller actuation

## Design characteristics

- top entry design
- easy inline replacement
- chemical resistance
- adjustable stem packing
- reduced cavity between ball and body
- PFA / FEP lining of body, ball and cover

## Options

- other materials

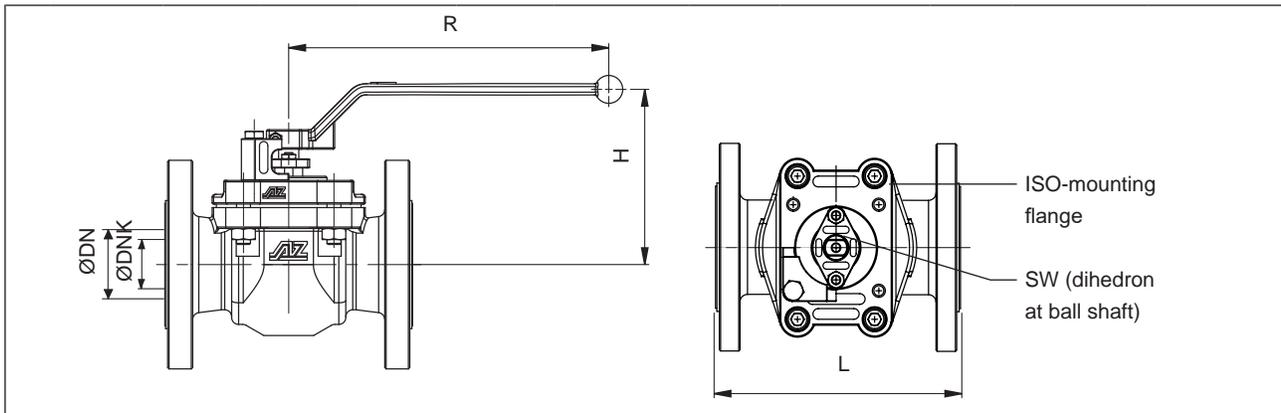
## Top entry design

- fast exchange of sealings and ball with repair kit
- no disassembling of the complete valve in case of service
- flange sealings remain
- final in-line leak test for the whole piping system



# Type MONOBLOC / MONOBLOC-EXTRA

## Technical information



### Type MONOBLOC-EXTRA

ASME B16.10	NPS	Class	L	R	H	ISO-5211 flange	SW	torque*	weight	$K_{vs}$ value	$C_v$ value
			[mm] [Inch]	[mm] [Inch]	[mm] [Inch]		[mm] [Inch]	[Nm] [ft lb]	[kg] [lb]	[m <sup>3</sup> /h]	[US.gal/min]
ASME B16.10	1	150	160 6.30	230 9.06	119 4.69	F07	11 0.433	45 33	**	70	81
	1½	150	200 7.87	230 9.06	126 4.96	F07	11 0.433	45 33	**	193	223
	2	150	230 9.06	320 12.20	143 5.63	F10	14 0.551	50 37	**	323	374
	3	150	310 12.20	600 23.62	199 7.84	F12	22 0.866	120 89	**	947	1095
	4	150	350 13.78	600 23.62	202 7.95	F14	22 0.866	120 89	**	1446	1672
	6	150	350 13.78	600 23.62	227 8.94	F16	27 1.063	160 118	**	3338	3859
	8	150	400 15.75	600 23.62	277 8.94	F16	27 1.063	270 199	**	6362	7356

### Type MONOBLOC

ASME B16.10	NPS	ØDNK	Class	L	R	H	ISO-5211 flange	SW	torque*	$K_{vs}$ value	$C_v$ value	
		[mm] [Inch]		[mm] [Inch]	[mm] [Inch]	[mm] [Inch]		[mm] [Inch]	[Nm] [ft lb]	[m <sup>3</sup> /h]	[US.gal/min]	
ASME B16.10	2	40 1.57	150	178 7.00	170 6.69	128 5.04	F07	11 0.433	45 33	**	**	
	3	50 1.97	150	203 8.00	230 9.06	143 5.63	F10	14 0.551	50 37	**	**	
	4	80 3.15	150	229 9.00	320 12.60	174 6.85	F12	19 0.748	120 89	**	**	
	6	100 3.94	150	267 10.50	420 16.54	200 7.87	F14	22 0.866	120 89	**	**	
	8	150	292	530	250	9.84	F16	27	160	118	**	**
		5.91	11.50	20.87								

\*)  $\Delta p=10$  bar, manufacturer recommended sizing torque (incl. 40% safety)

\*\*) on request

Some designs, sizes and/or configurations may be fitted with threaded flange holes.