

API 6A BALL VALVES

Metallic sealing
ball valves for wellheads

Safe.
Low maintenance.
Gas-tight.



WHY BALL VALVE INSTEAD OF GATE VALVE

BALL VALVE

GATE VALVE



HIGHER OPERATIONAL SAFETY

- Gas-tight for large dimensions at low and high pressure
- No tendency to lock or jam
- Multiple sealing barriers



MINIMAL MAINTENANCE

- Light function check maintenance only
- No grease injection nor shaft seal replacement



HIGHER PLANT AVAILABILITY

- No contamination from grease
- No downtime due to maintenance or failure



REDUCED COSTS

- Higher plant productivity
- Lower maintenance costs for planning, service and spare parts



ENVIRONMENTALLY FRIENDLY

- Sealing fulfils threshold values for fugitive emissions acc. ISO 15848
- No grease or sealant necessary



TECHNICAL EXPLANATORY VIDEO:

Why ball valves instead of gate valves at the wellhead?

www.6Aballvalves.com

TECHNICAL CHARACTERISTICS

DESIGN FEATURES

- 2-piece housing
- Type AST with trunnion mounted ball $\geq 2 \frac{1}{16}"$
- Type ASF with floating ball for 10,000psi $\leq 2 \frac{1}{16}"$
- Metallic sealing system with tungsten carbide hard-faced coating
- Triple shaft seals (type AST)
- Fugitive emission acc. ISO 15848-1 up to +200°C
- Anti-blowout shaft /anti-static design
- Conforms DIN/ISO standard gear mounting
- Position indicator for open position on all ball valves $\geq 4 \frac{1}{16}"$
- Drain port NPT or ISO incl. bleeder plug
- DIB-2 design* (type AST)



*Double Isolation and Bleed 2 (DIB-2) design: has upstream seat equipped with a standard seat ring to ensure pressure relief of valve cavity in the direction of the well. The downstream seat ring is equipped with split seat ring to provide a "Double Piston effect" and seals in both directions. → **Double barrier against well pressure.**

CLASSIFICATION API 6A

- Material class EE-NL
Also, AA, BB, DD; EE-NL (H₂S no limit), EE-1.5
- Quality class PSL3 or PSL3G
- Performance level PR1 (PR2 on request)
- Temperature class L/X
L/X also includes N, P, S, T, U and V
- All wetted parts acc. API 6A ductility
- All wetted parts with hardness values acc. ISO 15156 (NACE)

COLOUR SYSTEMS

- Light protection primer C2 in acc. DIN ISO 12944-5, RAL 1013 (HV 2)
- Medium protection C3 in acc. DIN ISO 12944-5, RAL 5012 (HV 3)
- High protection C5-M in acc. DIN ISO 12944-5, RAL 5012 (HV 4)
- High temperature resistant aluminium (HV 6)

Other colour systems on request

STANDARD SUPPLY RANGE

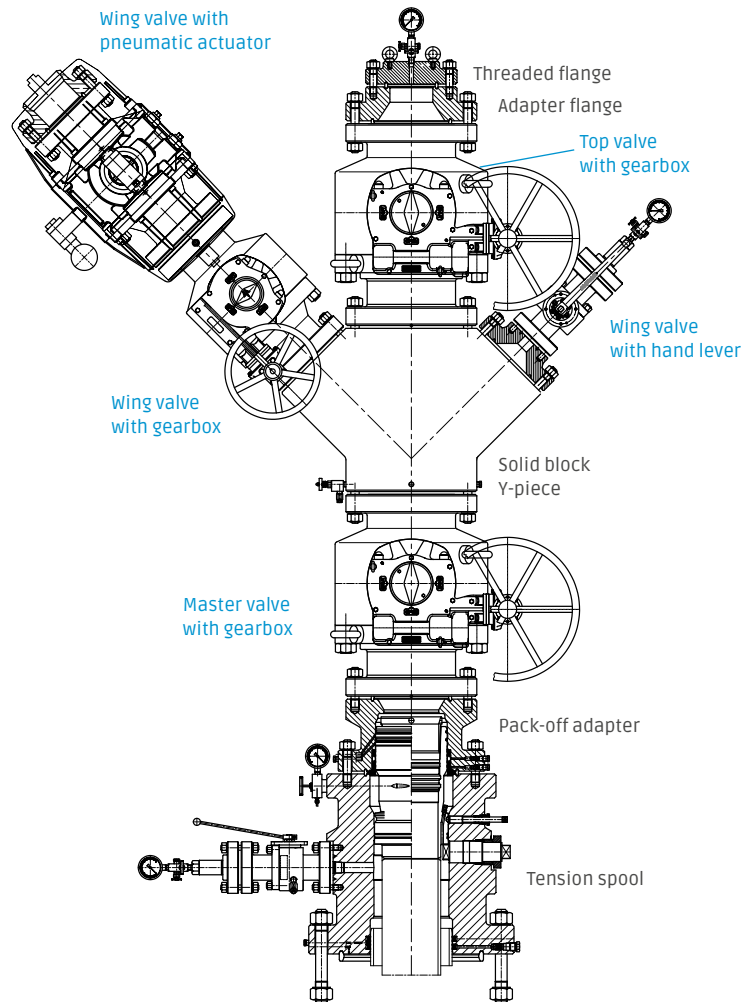
TYP	Pressure rating [psi] Nominal bore [inch]	2K	3K	5K	10K	Drift-Ø [mm]	Hartmann ball valve overall length [mm]	Comparison with standard overall length as per API 6A [mm]		Ring nut	Article number	Adaption		Drainage [inch]
								Ball valve	Gate Valve					
ASF	1 - 13/16 x 1 (reduced)				●	25,4	464	-	-	BX151	55000043 55000044	- F12	SW15 Ø30	-
	1 - 13/16				●	46	464	464	464	BX151	10078264 10082605	- F16	SW32 Ø60	
AST	2 - 1/16	●				52,5	295	295	295	R23	10078300 10082603	- F12	SW19 Ø25	1/2 NPT
			●	●			371	371	371	R24	10078302 10082601	- F14	SW27 Ø40	
					●		521	521	521	BX125	10082600	F16	Ø40	
	3 - 1/8	●				79,5	359	359	359	R31	10078235 10082599	- F12	SW27 Ø30	
			●				384	384	435	R31	10078230 10082598	- F12	SW27 Ø30	
				●			473	473	473	R35	10078205 10082597	- F14	SW27 Ø40	
					●									
	3 - 1/16				●	78	619	619	619	BX154	10078203	F25	Ø60	
	4 - 1/16	●				103,2	435	435	435	R37	10078192	F16	Ø40	
			●				460	460	511	R37	10078099	F16	Ø40	
				●			549*	549	549	R39	10080584	F16	Ø60	
				●			683**	549	549	R39	10078095	F16	Ø60	
					●		670	670	670	BX155	10076954	F25	Ø70	
	5 - 1/8	●				130,2	562	-	562	R41	10078146	F16	Ø50	
			●				613	-	613	R41	10076956	F16	Ø50	
				●			727	-	727	R44	10078090	F25	Ø60	
	7 - 1/16 x 6 - 3/8 (reduced)	●				162,1	613	-	-	R45	10078103	F25	Ø70	3/4 NPT
			●				613	-	-	R45	10078092	F25	Ø70	
				●			737	-	737	R46	10078089	F25	Ø70	
	7 - 1/16	●				179,4	664	-	664	R45	10078074	F25	Ø60	1 NPT
			●				714	-	714	R45	10078076	F25	Ø60	
				●			813	-	813	R46	10080585	F25	Ø80	
				●			840**	-	813	R46	10078088	F25	Ø80	
	9	●				228,6	787	-	-	R49	10078118	F30	Ø100	1 NPT
			●				787	-	-	R49	10076916	F30	Ø100	
				●			972**	-	1041	R50	10076934	F30	Ø100	
				●			1041	-	1041	R50	10077098	F30	Ø100	
	11 x 10 (reduced)	●				254	841	-	-	R53	10078133	F30	Ø100	1 NPT
			●				841	-	-	R53	10078087	F30	Ø100	
				●			1092	-	-	R54	10078067	F35	Ø100	

* Housing side with block flange (studded design)

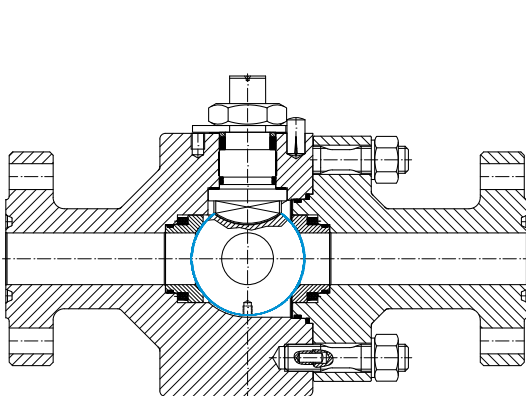
** Customs dimensions– can also be supplied on request

LEAD TIME: 12 weeks. Shorter delivery upon request

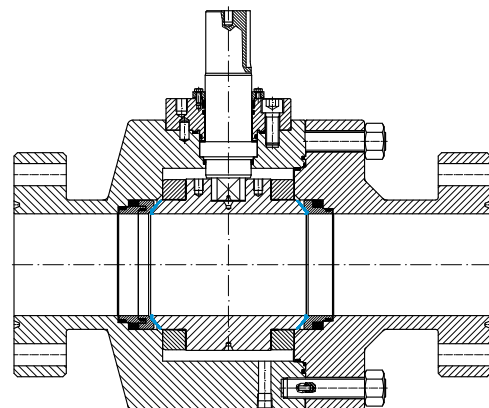
EXAMPLES



API 6A BALL VALVES ON A WELLHEAD FOR GAS STORAGE OPERATION



TYPE ASF (FLOATING BALL)



TYPE AST (TRUNNION MOUNTED BALL)

APPLICATION EXAMPLES



GAS STORAGE

Natural gas storage wellhead incl. API 6A ball valves, gas-tight at high pressures and large diameters.



DEEP GEOTHERMAL ENERGY

Deep geothermal energy wellhead incl. API 6A ball valves, resistant to temperature, corrosion and scaling.



OIL STORAGE

Wellhead with integrated API 6A ball valves to minimize flange connections and large 13 5/8" full bore top valve.



GAS STORAGE

Wellhead for gas storage in solid block design with integrated API 6A ball valves, two master valves in one block.

WHAT DISTINGUISHES US?

HARTMANN VALVES & WELLHEADS

We start where others stop: Hartmann develops custom-build performance components of the highest quality.

Hartmann Valves is a leading manufacturer of ball valves, pigging valves and wellheads. Our worldwide experience lies in the fields of crude oil, natural gas, petrochemicals, power stations, geothermal and emerging renewables such as hydrogen. Our customers value and endorse our pure metallic sealing system. Design, assembly and tests are carried out solely in our facilities in Celle and Burgdorf-Ehlershausen, Germany.

Founded in 1946, this family-owned and managed company is in its third generation and continues to evolve as an international operating organization now with 200 employees.

INSIGHTS INTO OUR PRODUCTION

www.hartmann-valves.com/en/film



INDIVIDUAL DESIGN

Our project sales and engineering teams are eager to engage and collaborate with you in developing high performance solutions.



SOLUTIONS FOR EXTREME CONDITIONS

Hartmann ball valves and wellheads are designed for pressure ratings up to 690 bar, temperatures from -200 to +550°C (-328 to 1022 °F) as well as high cycle applications.



QUALITY THAT PAYS

A long lasting product with low maintenance will fundamentally reduce the lifecycle cost of your plant. German product excellence through innovative engineering and excellence.



FROM A SINGLE SOURCE EXPERTISE & ADVICE

You benefit from more than 75 years' experience across all project phases. We offer support from early project development through engineering, build, installation and maintenance.

CONTACT

HARTMANN VALVES GMBH

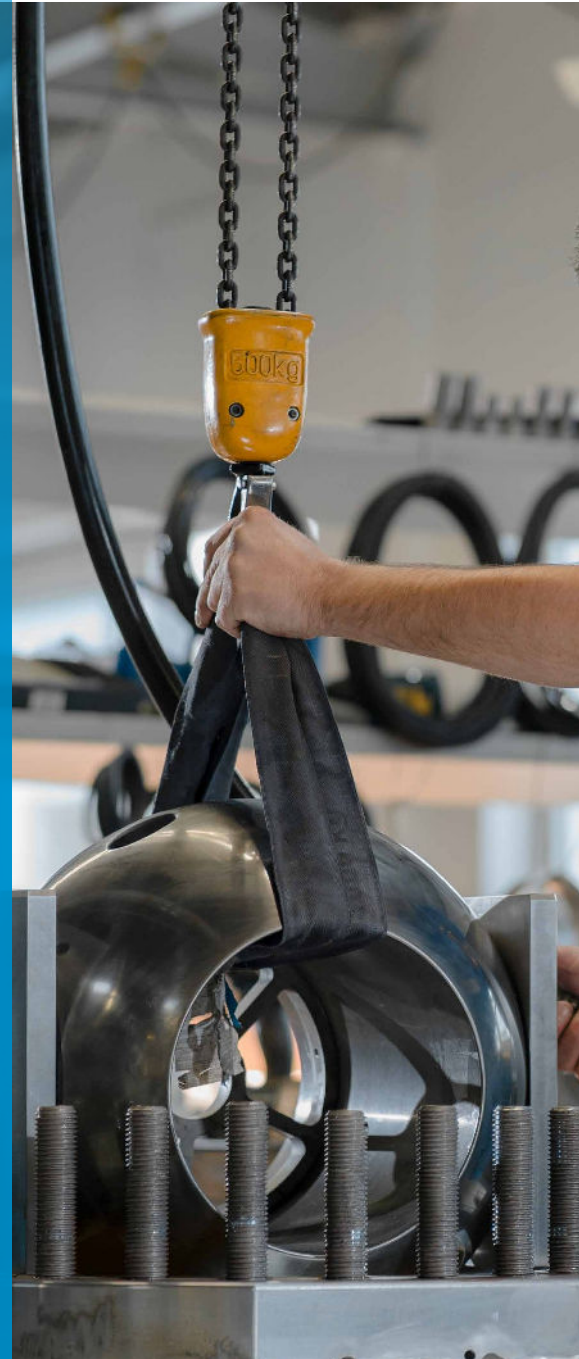
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