

06954

# Series 26s Ball Valve with floating or trunnion-mounted ball

**Application:**

High-performance ball valve with long-term reliable shut-off performance suitable for various fields of applications in industrial processes:

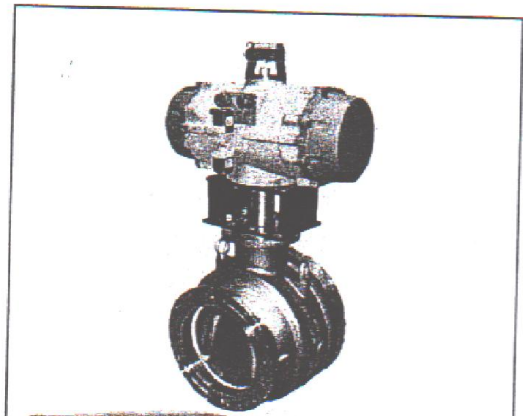
- Nominal size: DN 25 to 800 or NPS 1 to NPS 32
- Nominal pressure: PN 10 to 40 or Class 150 and 300 as well as graduated in high pressure range
- Temperature: -196 to +550 °C depending on version and materials used

The ball valves can be used in the chemical and petrochemical industries, power and utilities, gas transportation and storage as well as other plants.

The adaptation of the valve construction allows it to be used with media containing solids as well as in cryogenic or high-temperature applications.

The Series 26s Ball Valve has the following properties, depending on the version:

- **Body version**
  - Two-piece flanged body (up to DN 500/NPS 20)
- **Seat version**
  - Soft-seated, not spring-loaded
  - Soft-seated, spring-loaded
  - Soft-seated, with metal chambering and spring-loaded
  - Metal-seated, spring-loaded on both sides
- **Body material**
  - Steel
  - Stainless steel
  - High-alloy steels and special materials
- **Other features**
  - High-grade materials used for seals
  - Better casting quality
  - Bearings suitable for higher loads
  - Anti-static design
  - Blowout-proof shaft
  - Maintenance-free, spring-loaded packing meets requirements stipulated by TA Luft (2002)
  - Fire-safe according to API 607 4<sup>th</sup> edition
  - Face-to-face dimensions according to EN 558 or ASME B16.10/API 6D
  - Flange according to EN 1092 or ASME B16.5/API 6D
  - Actuator design according to ISO 5211



Series 26s Ball Valve with Series 31a AT Rotary Actuator, SRP 5000

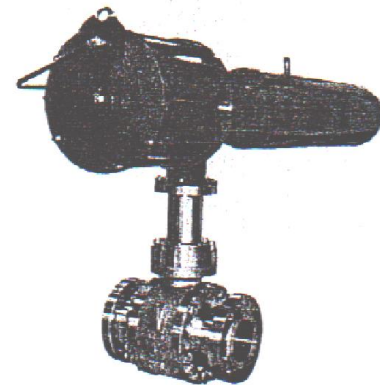


Fig 2 - Series 26s Ball Valve in high-pressure version

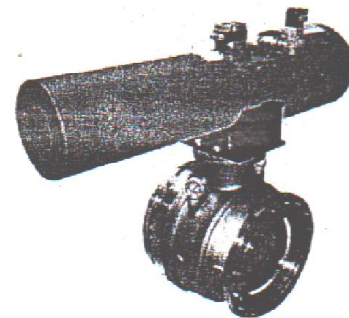


Fig 3 - Series 26s Ball Valve with Bellis pneumatic actuator

45600

**General technical data**

Nominal size	DN 25 to 800 or NPS 1 to NPS 32
Nominal pressure	PN 10 to 40 or Class 150 and 300 as well as up to max. PN 400 or Class 2500
Bauform	Flanges according to EN 1092 and ANSI B16.5/API 6D Two-piece body up to DN 500/NPS 20 Three-piece body DN 600 and higher/NPS 24 and higher
Temperature range	According to pressure-temperature diagram
Seat leakage	Soft-seated: Test P12 – EN 12266-1, leakage rate A Class VI – ANSI/FCI 70-2-1991 Metal-to-metal: Test P12 – EN 12266-1, leakage rate B (optional A) Class V – ANSI/FCI 70-2-1991 (optional Class VI)
Face-to-face dimensions	EN 558 R1 or R27/R15 ASME B16.10 or API 6D – regular pattern High pressure in PN 63 and higher/Class 600 and higher: EN 558 R2 or ASME B16.10 or API 6D – regular pattern
Flange type	EN 1092-1 Form B1 up to PN 40 EN 1092-1 Form B2 for PN 63 and higher ASME B16.5 RF smooth finish
Permissible operating pressures	According to pressure-temperature diagram

Table 2 - Technical data

**Materials:**

Body	1.0619 – A216 WCB/WCC	1.6220 – A352 LCB/LCC	1.4408 – A351 CF8M
Ball	Optional special materials for body		
Shaft	1.4408 – A351 CF8M	Optional HSB3 metal-to-metal sealing system	
Seat rings	TFM (PTFE), PTFE compounds, Devlon V®, special plastics Optional HSB3 metal-to-metal sealing system		
Spring for seat ring	1.4310 / 1.4401 / 2.4668		
Packing	PTFE V-rings Optional Inconel wire reinforced graphite/fiber yarn packing PTFE/glass		
Bearing bushing	Optional stainless steel reinforced by PTFE/glass/carbon/graphite compound Optional stainless steel bushings with hard coating		
Body gasket	PTFE/graphite · Optional graphite/graphite		
Surface treatment	Standard treatment: C steel with manganese phosphate coating		

Table 3 - Materials

**Maximum torques for shafts and ball valve version**

Nominal size	1.4571	1.4621	1.4980	PN 10	PN 25	PN 25	PN 40 Class 300
	A182 F316Ti	A182 F51	AISI660		Class 150		
DN 25/NPS 1	158	338	451	Floating ball			
DN 40/NPS 1½	305	654	872				
DN 50/NPS 2	305	654	872				
DN 80/NPS 3	466	998	1331				
DN 100/NPS 4	466	998	1331				
DN 125/NPS 5	1074	2302	3069	Floating or trunnion-mounted ball			
DN 150/NPS 6	1961	4202	5602				
DN 200/NPS 8	3222	6905	9207				
DN 250/NPS 10	3340	7156	9542				
DN 300/NPS 12	7059	15126	20168				
DN 350/NPS 14	7059	15126	20168	Trunnion-mounted ball			
DN 400/NPS 16	15121	32403	43204				
DN 450/NPS 18	15121	32403	43204				
DN 500/NPS 20	28293	60628	80837				
DN 600/NPS 24	57463	123133	164177				
DN 700/NPS 28	57463	123133	164177				
DN 800/NPS 32	99035	212218	282957				

Table 4 - Torques in Nm

75600  
0954

Selection and sizing of the ball valve:

1. Determine the required nominal size.
2. Select the valve taking into account the required materials and other equipment within the pressure-temperature limits.
3. Select the appropriate actuator with the required torque at the differential pressure and include sufficient safety reserve.
4. Select additional equipment for actuator control and feedback.



Note: All details relevant for the ordered version which deviate from those in the technical specifications can be taken from the corresponding order confirmation, if required.

Ordering text:

- Series 26s Ball Valve
- Temperature: .... ~~165~~ 165 °C
- Pressure: .... 3.58 bar
- Medium: .... ACI GAS
- Planned on/off switching frequency: ....
- Optional: Ball bearing
- DIN or ANSI version
- DN/NPS ..... and PN/Class .....
- End connections: ....
- Body material
- Packing material
- Optional special equipment
- Actuator (brand name): ....
- Mounting location of actuator
- Signal pressure ..... bar
- Fail-safe action
- Limit switch (brand name): ....
- Solenoid valve (brand name): ....
- Optional position transmitter (brand name): ....
- Others

Size: NPS 14

CLASS: ANSI 150

END connection: flange ANSI B16.5  
~~flange~~ flange spe: ASME B16.5 RF Smooth End  
Body material: A 216 WCB

Ball : ~ : 1.4408

Shaft : ~ : 1.4462

Seat Ring : ~~PTFE~~ carbon H6B3

Spring : 1.4401

Packing : graphite

Bearing bushing : stainless steel bushing with hard coat

Body gasket : PTFE / graphite

Seat Leakage : class V

Face To Face Dimension:

ASME B16.10



1	FLUID:	ACID GAS		STATE:	VAPOR		P&ID NO.:	116		CRIT. PRESS(PC):	1754 bara	
2	SERVICE CONDITIONS	FLOW RATE			UNITS	MAX. FLOW	NORM FLOW	MIN. FLOW	SHUT OFF			
3					kg/hr	14679	11290	5646				
4		INLET PRESSURE			bara		1.18		4.5			
5		OUTLET PRESSURE			bara		1.17					
6		INLET TEMPERATURE			°C		46					
7		DENSITY/MOL WT/FLASH% (kg/m3)/(kg/kmol)/(%WT)					1.24/28					
8		VISCOSITY			cp		0.02					
9		VAPOR PRESSURE PV			bara							
10		COMPRESSIBILITY Z					0.99					
11		Cp/Cv					1.38					
12		*REQUIRED CV										
13		*TRAVEL			%							
14		LINE	PIPE LINE SIZE		IN 14	OUT 14	54	*TYPE BR31a-SRP				
15	PIPE LINE SCHEDULE		IN STD	OUT STD	55	*MFR. MODEL						
16	PIPE LINE CLASS/INSULATION A52A / ET(H)					56	* SIZE 5000 EFF AREA					
17	* TYPE BALL					57	ON/OFF YES MODULATING -					
18	* SIZE 14		ANSI CLASS 150		58	AIR FAILURE ACTION CLOSE						
19	DES. PRESS.(barg) 3.5		DES.TEMP(°C) 165		59	*MAX ALLOWABLE PRESSURE (barg)						
20	*MFR. Pfeiffer		MODEL 26s		60	*MIN REQUIRED PRESSURE (barg)						
21	*BODY/BONNET MATERIAL A216 Gr. WCB					61	AVAILABLE AIR SUPPLY PRESSURE: (barg) 7.5					
22	END CONNECTION TYPE FLANGE						MAX. (barg) 8.5		MIN. (barg) 4.7			
23	END CONNECTION(SIZE)		IN 14	OUT 14	62	*BENCH RANGE barg						
24	END CONNECTION(RATING)		IN 150	OUT 150	63	ACT ORIENTATION						
25	FLANGE FACE/FINISH RF / SERRATED					64	HANDWHEEL TYPE NO					
26	END EXT/MATERIAL					65	AIR FAILURE VALVE		SET AT			
27	*FLOW DIRECTION					66	STROKING TIME SEC.					
28	VALVE BODY/ BONNET	*TYPE OF BONNET					67	INPUT SIGNAL -				
29		LUBE & ISO VALVE LUBE					68	*ELEC. FAILURE ACTION				
30		*PACKING MATERIAL GRAPHITE					69	*TYPE MFR. & MODEL				
31		*PACKING TYPE					70	*ON INCR SIGNAL OUTPUT INCR/DECR				
32		*LINER MATERIAL/ID					71	GAUGES BY-PASS				
33		*TYPE					72	INGRESS PROTECTION				
34		*SIZE RATED TRAVEL					73	PNEU. CONN./ELEC. CONN.				
35		*CHARACTERISTIC					74	FF CLASS		FF ADDRESS		
36		*BALANCED/UNBALANCED					75	*TYPE 3 / 2				
37		*RATED CV		FL	XT	76	*MFR. & MODEL Herion 9802765.2050.000.00					
38		*PLUG/BALL/DISK MAT. SS 316 + HF					77	BODY MATERIAL S.S. 316				
39		*SEAT MATERIAL SS 316 + HF					78	MANUAL RESET NO				
40		*CAGE/GUIDE MAT.					79	TAG NO. XY-09147		SUPPLY VOLTAGE 24 VDC		
41	*STEM MATERIAL SS 316 + HF					80	TYPE PROXIMITY SW. QUANTITY 2					
42	*FLOW ACTION/LEAKAGE CLASS / V					81	*MFR. P+F		MODEL SJ3,5-N			
43	*FULL/REDUCED FULL					82	HOUSING METALLIC					
44	SPECIAL ACCESSORIES	SOLENOID VALVE:			YES	83	ACTUATION POINTS OPEN/CLOSE					
45		FUSIBLE LINKAGE			NO	84	TAG NO : XZ50/XZSC-09147					
46		LOCK UP VALVE			NO	85	*MFR. Bifold		MODEL SH16L-FR-SR-MD-10-40-50µm-X4-X5 with Gauge			
47		BOOSTER			NO	86	*SET PRESSURE (bara)					
48		CARTRIDGE			NO	87	FILTER YES		GAUGE YES			
49		PROXIMITY/LIMIT SW.			YES	88	BODY MATERIAL ALUMINUM					
50		VOLUME TANK				89	CLASSIFICATION Zone 2 -IIC-T3					
51		ADJUSTABLE LIMIT STOP			NO	90	EXECT. FOR POSITIONER -					
52						91	EXECT. FOR SOLENOID Eexi					
53						92	CERTIFICATE YES					

NOTE:

NACE STANDARD TO BE CONSIDERED; FIRE SAFE