



Globe Valves

“Your Source for Much Better Valves”

Available in Cast & Forged

MBV Provide the best user experience



MBV is a company specializing in the design, development, production and sales of fluid valves and fluid systems. We have always been committed to providing users with reliable products, and continue to seek innovation, to provide reliable products and excellent system solutions for more industries.

At present, MBV products have been widely used in many industries around the world, including thermal power, petroleum, petrochemical, natural gas, nuclear power, process instruments, analytical instruments, semiconductors and other aviation, and have been unanimously approved by customers.

In addition to the products included in this catalog, MBV also provides a wider range of products, components and services, and can design products and customize configurations according to customer orders.

For more information or to order products, please visit the website or consult an authorized agent.

Unibody Y Style Globe Valve SY Series

Size Range: 1/2" - 4" (15 - 100mm)

Pressure Class: ASME Class 1500, 1690, 2500, 2680, 4500

Standards and Specifications

Design: ASME B16.34

Inspection: ASME B16.34, API 598

Marking: MSS-SP-25

Socket Weld End: ASME B16.11

Butt Weld End: ASME B16.25

NPT Threaded End: ASME 1.20.1

Feature

One-piece forged, trap valve without bonnet structure design reduces the leakage point between the valve body and the bonnet. Online maintenance can eliminate the need to remove the bonnet.

Compared with the vertical cut-off valve, the 65 ° slope has a smaller pressure drop.

The non-rotating valve stem is hardened, ground and polished to ensure reduced torque and protect the packing from torsional damage.

The polished packing cavity and the pre-compressed combined graphite ring make the seal more tight.

Tungsten chromium cobalt alloy disc, valve seat and rear seat can maintain a long service life even in harsh application fields.

Fully guided flaps ensure accurate alignment of the valve seat and flap without being affected by the side thrust generated by high-speed fluids. Avoid scratching the valve body, scratching or bending the stem, and prolong the service life of the disc seal and valve body

The double hole of the valve seat is helpful to reduce the erosion of the discharge fluid passing through the auxiliary valve seat.

The angle of the rear seat is located on the valve stem, not on the valve flap, which complies with the relevant regulations of API-600 and API-602.

There are two pieces of flat steel under the stem and clapper, so it has non-rotating characteristics.

Dynamic load is optional, and dynamic load can maintain long-term tightness without maintenance. The bolt torque controls the full spring load.

Fully enclosed, lubricated stem drive system with two needle roller bearings to ensure reduced operating torque.

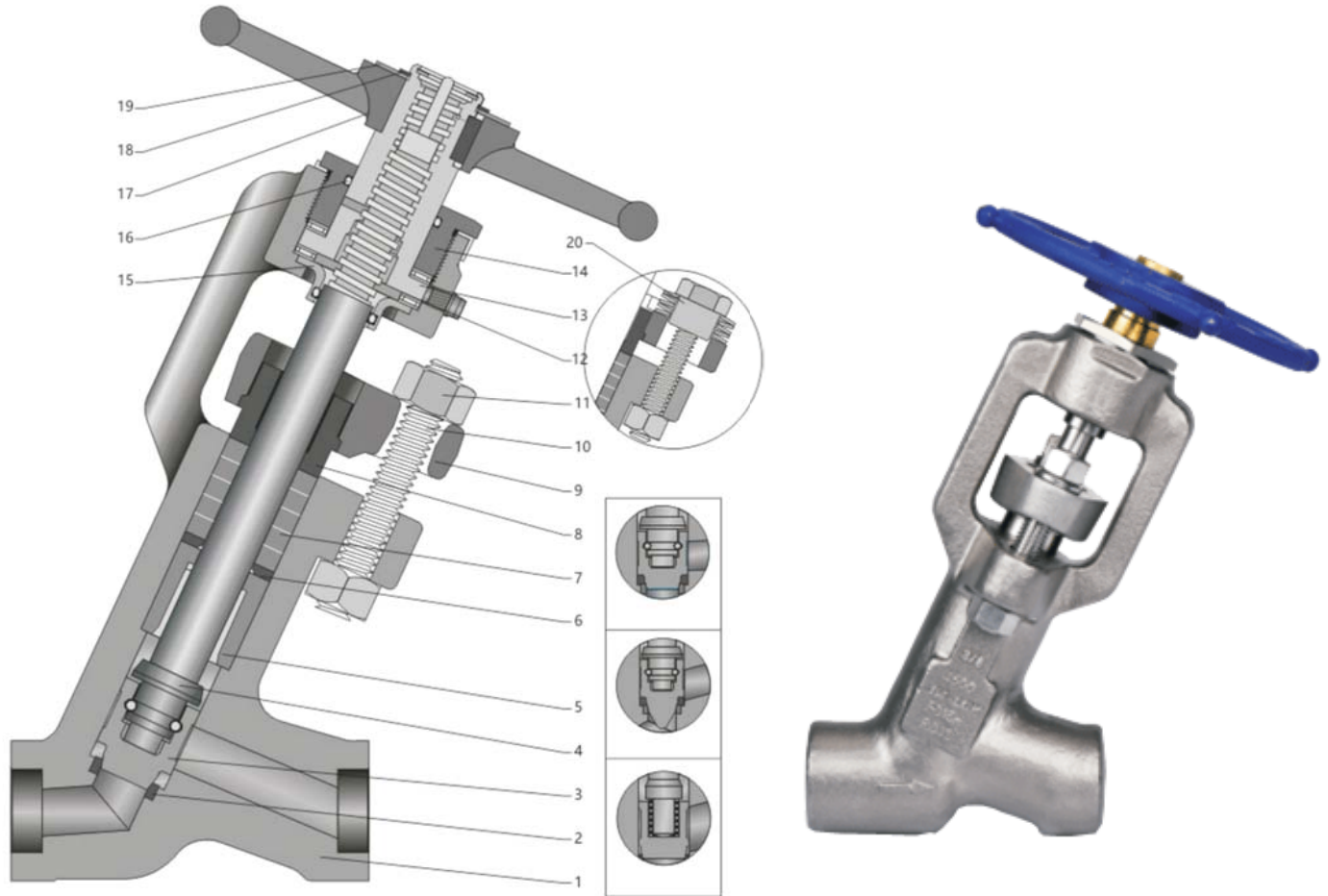
Dust cover and shaft sleeve protect the valve stem from dirt, dust and sand.

Standard configuration of position indicator.

Good resistance to thermal changes.

Suitable for sewage and discharge applications, the dynamic load of the filler can be selected.

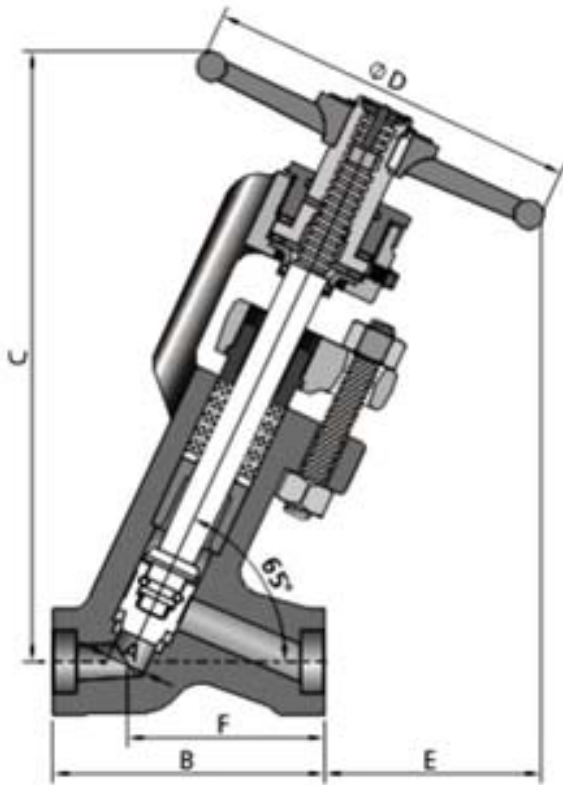
There are three options for disc type. Block, needle and cut-off check plates.



No.	Parts	Material				
		A105	F22	F91	F92	F316
1	Body	A105N	F22/A182	F91/A182	F92/A182	F316/A182
2	Seat	Stellite				
3	Disk	Stellite				
4	Stem	410SS / A276				316SS/A276
5	Bushing	630 SS				
6	Packing Seat	304 SS				
7	Packing	Graphite				
8	Split Seal Bushing	410 SS				
9	Packing Flange	A105				F304 / A182
10	Sealed Stud	B7 A193				B8M2 A193
11	Sealing Nut	2H A194				8M A194
12	Stem Nut	Austenitic Malleable Iron Castings D-2C				
13	Thrust Bearing	Steel				
14	Yoke Bushing	Steel				Nickel Plated Steel
15	Grease Ring	Steel				Nickel Plated Steel
16	O-Ring	NBR				
17	Handwheel	Malleable Cast Iron				
18	Snap Ring	Steel				
19	Nameplate	304 SS				
20	Disc Spring	S17700				

Sour Gas Service

The connection form of the steam trap has NPT female thread, NPT male thread, socket port and butt welding port, which can be used in acid gas environment. All materials that are in contact with the medium are subjected to NACE Mr0175 materials that resist sulfide stress cracking.



NPS	DN	A		B		C		D		E		F	
		1500 ~ 2680	4500	1500 ~ 2680	4500	1500 ~ 2680	4500	1500 ~ 2680	4500	1500 ~ 2680	4500	1500 ~ 2680	4500
1/2"	15	14.2	9.5	124	146	245	298	152	152	92	83	81	106
3/4"	20	14.2	14.2	124	178	245	361	152	203	92	152	81	99
1"	25	21.2	14.2	146	178	335	361	203	203	130	152	106	99
1 1/4"	32	28.6	21.2	184	257	422	480	305	305	192	178	125	167
1 1/2"	40	28.6	28.6	184	305	422	527	305	457	192	203	125	203
2"	50	42.9	38.1	257	305	505	527	305	457	190	203	167	203
2 1/2"	65	42.9	38.1	305	305	526	527	406	406	184	184	203	203
3"	80	42.9	38.1	305	305	526	527	406	406	184	184	203	203
4"	100	42.9	38.1	305	305	526	527	406	406	184	184	203	203

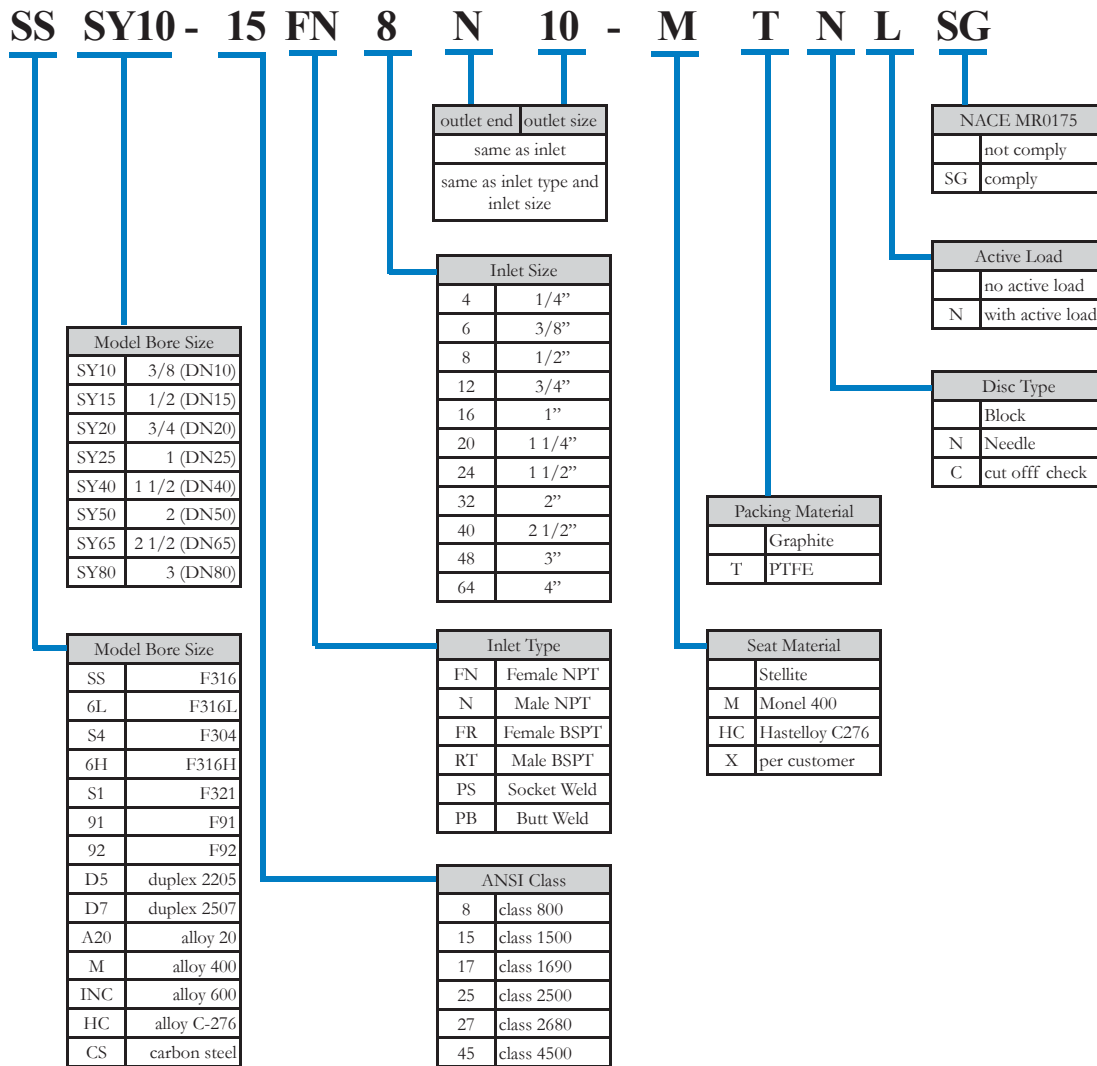
The sizes and types listed are standard, other sizes and types are available upon request.

Material	A105					F22					F91					F316				
Class	1500	1690	2500	2680	4500	1500	1690	2500	2680	4500	1500	1690	2500	2680	4500	1500	1690	2500	2680	4500
°F Temp.	psig																			
-20-100	3705	4175	6170	6615	11110	3750	4225	6250	6700	11250	3750	4225	6250	6700	11250	3600	4055	6000	6430	10800
200	3375	3805	5625	6030	10120	3750	4225	6250	6700	11250	3750	4225	6250	6700	11250	3095	3485	5160	5530	9290
300	3280	3695	5470	5865	9845	3640	4100	6070	6505	10925	3640	4100	6070	6505	10925	2795	3150	4660	4995	8390
400	3170	3570	5280	5660	9505	3530	3975	5880	6300	10585	3530	3975	5880	6300	10585	570	2895	4280	4585	7705
500	2995	3375	4990	5350	8980	3325	3745	5540	5935	9965	3325	3745	5540	5935	9965	2390	2690	3980	4265	7165
600	2735	3080	4560	4890	8210	3025	3405	5040	5400	9070	3025	3405	5040	5400	9070	2255	540	3760	4030	6770
650	2685	3025	4475	4795	8055	2940	3310	4905	5255	8825	2940	3310	4905	5255	8825	2220	2500	3700	3965	6660
700	2665	3005	4440	4760	7990	2840	3200	4730	5070	8515	2840	3200	4730	5070	8515	2170	2445	3620	3880	6515
750	2520	2840	4200	4500	7560	2660	2995	4430	4745	7970	2660	2995	4430	4745	7970	2135	2405	3560	3815	6410
800	2060	2320	3430	3675	6170	2540	2860	4230	4530	7610	2540	2860	4230	4530	7610	2110	2375	3520	3770	6335
850	1340	1510	2230	2390	4010	2435	2740	4060	4350	7305	2435	2740	4060	4350	7305	2090	2350	3480	3730	6265
900	-	-	-	-	-	2245	2530	3745	4010	6740	2245	2530	3745	4010	6740	2075	2338	3460	3705	6230
950	-	-	-	-	-	1885	2125	3145	3370	5665	1930	2175	3220	3450	5795	1930	2175	3220	3450	5795
1000	-	-	-	-	-	1305	1470	2170	2325	3910	1820	2050	3030	3245	5450	1750	1970	2915	3125	5245
1050	-	-	-	-	-	875	985	1455	1550	2625	1800	2030	3000	3215	5400	1720	1935	2865	3070	5155
1100	-	-	-	-	-	550	620	915	980	1645	1510	1700	2515	2695	4525	1525	1715	2545	2725	4575
1150	-	-	-	-	-	-	-	-	-	-	1115	1255	1855	1990	3345	1185	1330	1970	2110	3550
1200	-	-	-	-	-	-	-	-	-	-	720	810	1200	1285	2160	925	1040	1545	1655	2775
1250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	735	829	1230	1315	2110

Note: A105 is not recommended for long-term use at 800 ° F (425 ° C).

Material	F51					F92					F316H									
Class	150	300	600	800	1500	2500	150	300	600	800	1500	2500	4500	150	300	600	800	1500	2500	4500
°F Temp.	psig																			
-20-100	290	750	1500	2000	3750	6250	290	750	1500	2000	3750	6250	11250	275	720	1440	1920	3600	6000	10800
200	260	720	1440	1920	3600	6000	260	750	1500	2000	3750	6250	11250	235	620	1240	1655	3095	5160	9290
300	230	665	1330	1770	3325	5540	230	730	1455	1940	3640	6070	10925	215	560	1120	1495	2795	4660	8390
400	200	615	1230	1640	3070	5120	200	705	1410	1880	3530	5880	10585	195	515	1025	1370	2570	4280	7705
500	170	575	1150	1535	2880	4800	170	665	1330	1775	3325	5540	9965	170	480	965	1275	2390	3980	7165
600	140	555	1115	1480	2785	4640	140	605	1210	1615	3025	5040	9070	140	450	900	1205	2255	3760	6770
650	-	-	-	-	-	-	125	590	1175	1570	2940	4905	8825	125	445	890	1185	2220	3700	6660
700	-	-	-	-	-	-	110	570	1135	1515	2840	4730	8515	110	430	870	1160	2170	620	6515
750	-	-	-	-	-	-	95	530	1065	1420	2660	4430	7970	95	425	855	1140	2135	3560	6410
800	-	-	-	-	-	-	80	510	1015	1355	2540	4230	7610	80	420	845	1125	2110	3520	6335
850	-	-	-	-	-	-	65	485	975	1300	2435	4060	7305	65	420	835	1115	2090	3480	6265
900	-	-	-	-	-	-	50	450	900	1200	2245	3745	6740	50	415	830	1105	2075	3460	6230
950	-	-	-	-	-	-	35	385	775	1030	1930	3220	5795	35	385	775	1030	1930	3220	5795
1000	-	-	-	-	-	-	20	365	725	970	1820	3030	5450	20	350	700	935	1750	2915	5245
1050	-	-	-	-	-	-	20	360	720	960	1800	3000	5400	20	345	685	915	1720	2865	5155
1100	-	-	-	-	-	-	20	300	605	805	1510	2515	4525	20	305	610	815	1525	2545	4575
1150	-	-	-	-	-	-	20	225	445	595	1115	1855	3345	2	235	475	630	1185	1970	3550
1200	-	-	-	-	-	-	20	145	290	385	720	1200	2160	20	185	370	495	925	1545	2775
1250	-	-	-	-	-	-	-	-	-	-	-	-	-	20	145	295	390	735	1230	2210

Pressure conversion formula: 1 psi (pounds per inch 2) = 6.895 kPa (kPa) = 0.0689476 bar (bar) = 0.006895 MPa (MPa)



Forged Steel Y Style Globe Valve SL Series

Size Range: 3/8" - 2" (10 - 50mm)

Pressure Class: ASME Class 1500, 1690, 2500, 2680, 4500

Standards and Specifications

Design: ASME B16.34, BS5352, EN12516

Inspection: ASME B16.34, API 598, BS6755, DIN3230, EN12266

Marking: MSS-SP-25

Socket Weld End: ASME B16.11, EN12760

Butt Weld End: ASME B16.25, DIN2559, EN12627

NPT Threaded End: ASME 1.20.1

Feature

Integral valve cover and floating rear packing seat structure

Thickness > 5 mm (1/5 ") high temperature vacuum welded Stellite seat ring

Available in valves larger than 2 "

Body material: A105N, F22, F91, F316 and other materials are available

Graphite with integral stainless steel reinforced anti-dropout ring

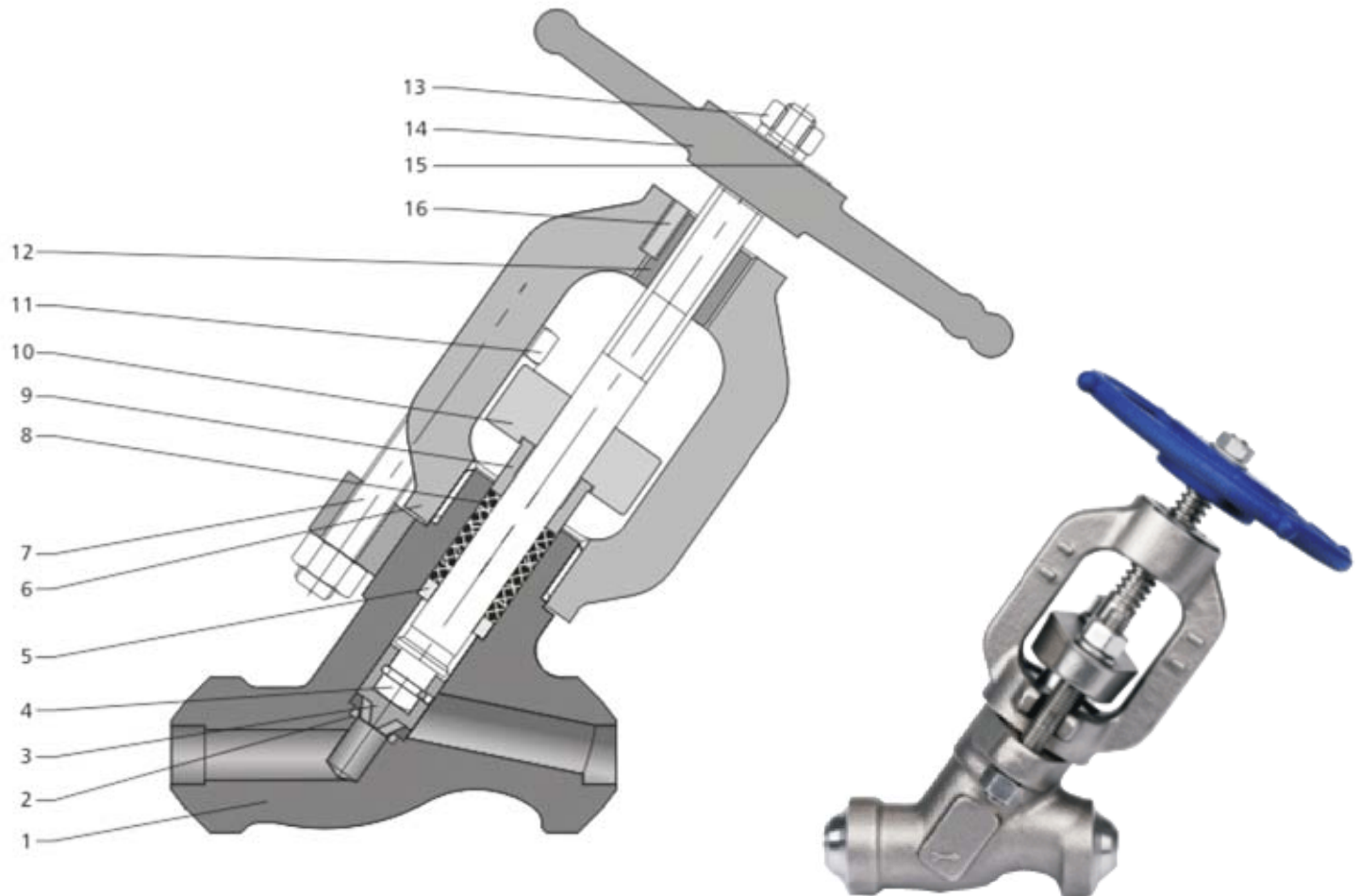
Gland bolt connected to valve body, Further prevent loosening of yoke thread, Valve stem anti-dropout design

Removable back seat packing seat, valve stem, valve head and packing are easy to handle and take out online.

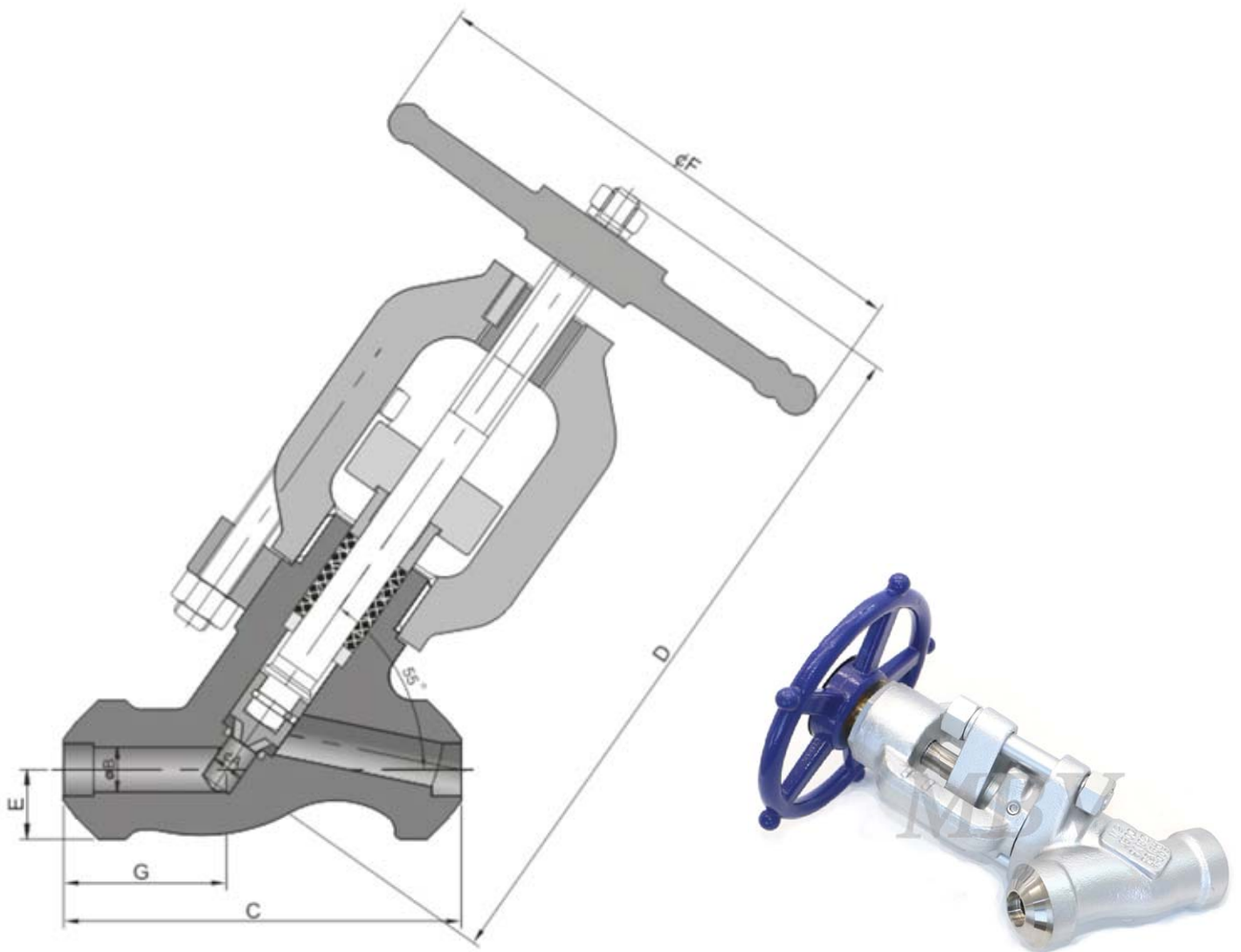
Repair and install packing quickly. Optional screw-in fixed rear packing seat.

Integral bonnet design. Eliminate leakage at the connection between valve body and bonnet. Provides a stronger structure. The pressure-bearing parts of the valve body welding or bolt connection structure are removed. Simplify online maintenance and reduce overall costs.

Standard Part Materials



No.	Parts	Material				
		A105N	F11/A182	F22/A182	F91/A182	F316/A182
1	Body	A105N	F11/A182	F22/A182	F91/A182	F316/A182
2	Seat	Stellite				
3	Disc	Stellite				
4	Stem	17Cr / Stellite	316SS/A276			
5	Floating rear packing seat	304 SS				316
6	Bracket	A105N	F11/A182	F22/A182	F91/A182	F316/A182
7	Bracket Bolt	B7 A193				B8M2 A193
8	Packing	Graphite				
9	Packing Gland	416 SS / A276				316SS / A276
10	Gland Flange	A150				F304 / A182
11	Gland Nut	2H				8M
12	Yoke	Copper Alloy				
13	Stem Nut	410 SS				
14	Handwheel	Galvanized Steel				
15	Nameplate	304 SS				
16	Dowel	Hardened Steel				



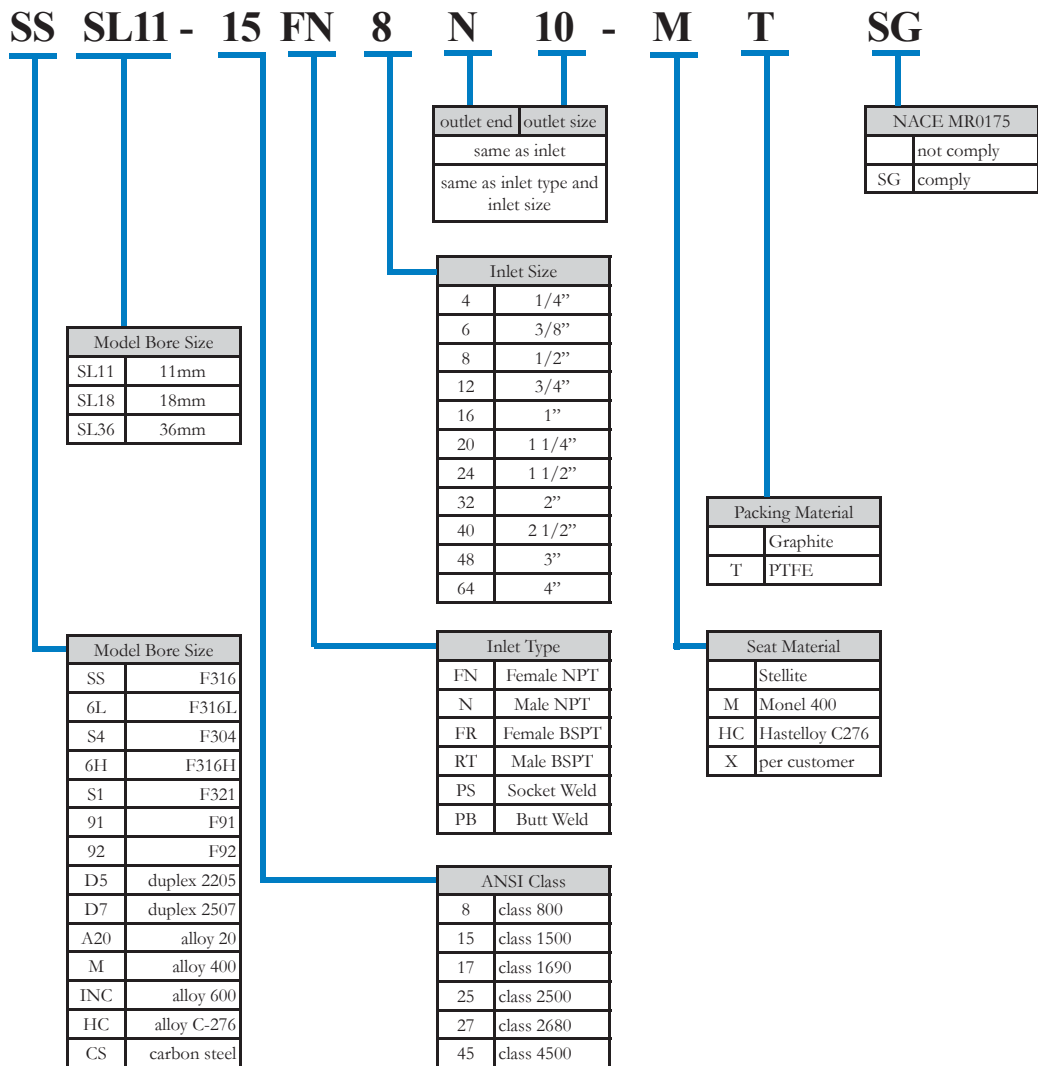
NPS	DN	A	B	C	D	E	F	G	Cv	Weight kg
3/8"	10	11	7	115	236	21	150	43.3	1.5	3.4
1/2"	15	11	11	115	236	21	150	43.3	2.7	3.3
3/4"	20	18	16	140	291	29	200	51.5	8.0	5.9
1"	25	18	20	140	291	29	200	51.5	8.7	5.7
1 1/4"	32	36	30	245	469	50	350	85	34.4	28.9
1 1/2"	40	36	30	245	469	50	350	85	34.4	28.9
2"	50	36	40	245	469	50	350	85	44.2	27.6

Material	A105&A350-LF2							F11						F22							
	Class	150	300	600	800	1500	2500	4500	150	300	600	800	1500	2500	150	300	600	800	1500	2500	4500
Temp. °F	psig																				
-20 至 100	285	740	1480	1975	3705	6170	11110	290	750	1500	2000	3750	6250	290	750	1500	2000	3750	6250	11250	
200	260	675	1350	1800	3375	5625	10120	260	750	1500	1900	3750	6250	260	750	1500	2000	3750	6250	11250	
300	230	655	1315	1750	3280	5470	9845	230	720	1455	1795	3610	6015	230	730	1455	1940	3640	6070	10925	
400	200	635	1270	1690	3170	5280	9505	200	695	1385	1755	3465	5775	200	705	1410	1880	3530	5880	10585	
500	170	600	1200	1595	2995	4990	8980	170	665	1330	1710	3325	5540	170	665	1330	1775	3325	5540	9965	
600	140	550	1095	1460	2735	4560	8210	140	605	1210	1615	3025	5040	140	605	1210	1615	3025	5040	9070	
650	125	535	1075	1430	2685	4475	8055	125	590	1175	1570	2940	4905	125	590	1175	1570	2940	4905	8825	
700	110	535	1065	1420	2665	4440	7990	110	570	1135	1515	2840	4730	110	570	1135	1515	2840	4730	8515	
750	95	505	1010	1345	2520	4200	7560	95	530	1065	1420	2660	4430	95	505	1065	1420	2660	4430	7970	
800	80	410	825	1100	2060	3430	6170	80	510	1015	1355	2540	4230	80	530	1015	1355	2540	4230	7610	
850	65	270	535	715	1340	2230	4010	65	485	975	1300	2435	4060	65	510	975	1300	2435	4060	7305	
900	-	-	-	-	-	-	-	50	450	900	1200	2245	3745	50	450	900	1200	2245	3745	6740	
950	-	-	-	-	-	-	-	35	320	640	1005	1595	2655	35	375	755	1005	1885	3145	5665	
1000	-	-	-	-	-	-	-	20	215	430	595	1080	1800	20	260	520	695	1305	2170	3910	
1050	-	-	-	-	-	-	-	20	145	290	365	720	1200	20	175	350	465	875	1455	2625	
1100	-	-	-	-	-	-	-	-	95	190	225	480	800	20	110	220	295	550	915	1645	
1150	-	-	-	-	-	-	-	-	60	125	140	310	515	-	70	135	180	345	570	-	
1200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40	82	110	205	345	-	

Note: A105 is not recommended for long-term use at 800 ° F (425 ° C).
 F11 and F22 are not recommended for long-term high temperature applications above 1100 ° F (593 ° C).

Material	F51						F91							F316							
	Class	150	300	600	800	1500	2500	150	300	600	800	1500	2500	4500	150	300	600	800	1500	2500	4500
Temp. °F	psig																				
-20 至 100	290	750	1500	2000	3750	6250	290	750	1500	2000	3750	6250	11250	275	720	1440	1920	3600	6000	10800	
200	260	720	1440	1920	3600	6000	260	750	1500	2000	3750	6250	11250	235	620	1240	1655	3095	5160	9290	
300	230	665	1330	1770	3325	5540	230	730	1455	1940	3640	6070	10925	215	560	1120	1495	2795	4660	8390	
400	200	615	1230	1640	3070	5120	200	705	1410	1880	3530	5880	10585	195	515	1025	1370	2570	4280	7705	
500	170	575	1150	1535	2880	4800	170	665	1330	1775	3325	5540	9965	170	480	955	1275	2390	3980	7165	
600	140	555	1115	1480	2785	4640	140	605	1210	1615	3025	5040	9070	140	450	900	1205	2255	3760	6770	
650	-	-	-	-	-	-	125	590	1175	1570	2940	4905	8825	125	445	890	1185	2220	3700	6660	
700	-	-	-	-	-	-	110	570	1135	1515	2840	4730	8515	110	430	870	1160	2170	620	6515	
750	-	-	-	-	-	-	95	530	1065	1420	2660	4430	7970	95	425	855	1140	2135	3560	6410	
800	-	-	-	-	-	-	80	510	1015	1355	2540	4230	7610	80	420	845	1125	2110	3520	6335	
850	-	-	-	-	-	-	65	485	975	1300	2435	4060	7305	65	420	835	1115	2090	3480	6265	
900	-	-	-	-	-	-	50	450	900	1200	2245	3745	6740	50	415	830	1105	2075	3460	6230	
950	-	-	-	-	-	-	35	385	775	1030	1930	3220	5795	35	385	775	1030	1930	3220	5795	
1000	-	-	-	-	-	-	20	365	725	970	1820	3030	5450	20	350	700	935	1750	2915	5245	
1050	-	-	-	-	-	-	20	360	720	960	1800	3000	5400	20	345	685	915	1720	2865	5155	
1100	-	-	-	-	-	-	20	300	605	805	1510	2515	4525	20	305	610	815	1525	2545	4575	
1150	-	-	-	-	-	-	20	225	445	595	1115	1855	3345	2	235	475	630	1185	1970	3550	
1200	-	-	-	-	-	-	20	145	290	385	720	1200	2160	20	185	370	495	925	1545	2775	
1250	-	-	-	-	-	-	-	-	-	-	-	-	-	20	145	295	390	735	1230	2210	

Pressure conversion formula: 1 psi (pounds per inch 2) = 6.895 kPa (kPa) = 0.0689476 bar (bar) = 0.006895 MPa (MPa)



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