

FORGED GLOBE VALVES

Drop forged stop valve with straight or angle pattern body, suitable for instrumentation and industrial line. Suitable for process fluids, steam at high pressure and temperature.



Mod. 25D

Models

Straight body code	Diameter	ANSI Rating	Weight Kg
15D	1/4"-1/2"	1500 - 2000	1.13
16D	1/4"-1/2"	1500 O.S. & Y.	1.53
25D	1/4"-1/2"	2500 O.S. & Y.	1.97
25D	3/4" - 1"	2500 O.S. & Y.	2.9
45D	1/2" - 3/4" - 1"	4500 O.S. & Y.	2.9

Trim table

Trim code	SEAT	PLUG	PACKING	Packing code
T1	Stellite seat	Stellite Plug	Graphoil T max 600°C	P1
T2	Integral seat with body	AISI 316L Plug		
T3	Integral seat with body	Stellite Plug		

Inlet/Outlet End connections table

Inlet	Outlet	NPT-F NPT-F Code	NPT-M NPT-F Code	SW / SW Code	SW / NPT-F Code
1/4"	1/4"	A	H	O	V
1/4"	1/2"	B	I	P	W
1/2"	1/4"	C	J	Q	X
1/2"	1/2"	D	K	R	Y
3/4"	1/2"	E	L	S	Z
3/4"	3/4"	F	M	T	AA
1"	1"	G	N	U	BB

Body materials table

Code	Body Material	
1	ASTM A105	Carbon Steel
2	ASTM A182 F 11	Alloy Steel
3	ASTM A182 F22	
4	ASTM A182 F91	
5	ASTM A182 LF2	
6	ASTM A182 F304L	Stainless Steel
7	ASTM A182 F316	
8	ASTM A182 F316L	
9	ASTM A182 F316 Ti	
10	ASTM A182 F321	

Example: Code 25D-T1-P1-T-7

ANSI 2500 Straight valve, stellite seat and plug, Graphoil packing, 3/4" Socket welding connections, ASTM A182 F316 body material



SATEMA

13856 VIGLIANO B.SE - Via Milano, 395

Tel. +39 015811102 - 015510156 - Fax 0158853029

Mail: info@satema.it <http://www.satema.it>

15D FORGED GLOBE VALVES

15D Model - PN250 ANSI 1500

Forged straight body valve.

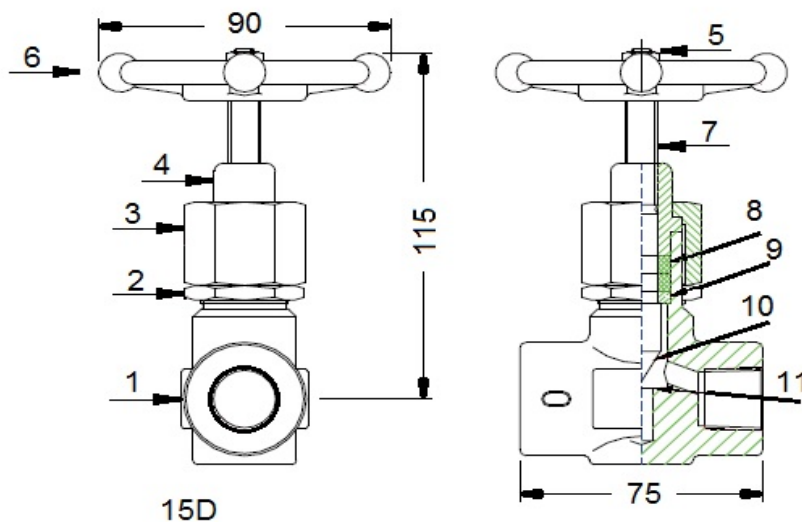
Bonnet-less

S.S 316L salient stem with external thread integral the plug

Stainless steel packing gland and stem bushing

A105 forged and galvanized handwheel

Option 15A Angle body



Item	No.	Description	Materials
1	1	Body	See body material table
2	1	Lock nut	Stainless steel
3	1	Nut	Stainless steel
4	1	Stem bushing	ASTM A276 TP303
5	1	Nut	Stainless steel
6	1	Handwheel	Forged Steel galvanized
7	1	Stem	ASTM A276 TP316L
8	1	Packing	Graphoil
9	1	Back ring	ASTM A276 TP316L
10	1	Plug	See Trim Table
11	1	Seat	



SATEMA

13856 VIGLIANO B.SE - Via Milano, 395

Tel. +39 015811102 - 015510156 - Fax 0158853029

Mail: info@satema.it <http://www.satema.it>

16D FORGED GLOBE VALVES

16D Model - PN250 ANSI 1500

Forged straight body valve.

Bonnet-less

S.S 316L salient stem with external thread integral the plug

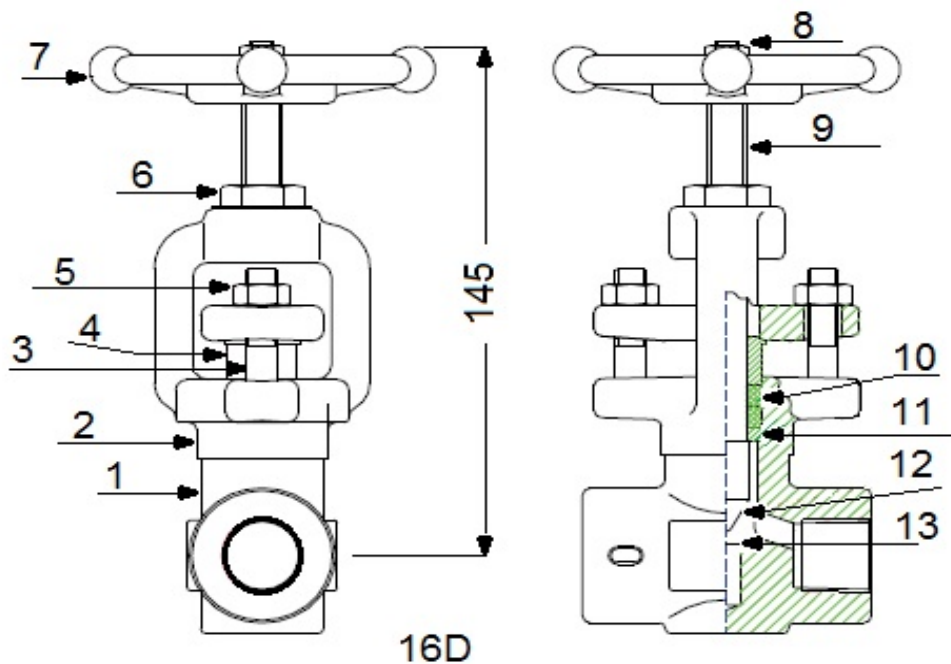
A105 forged and galvanized Yoke (Type O.S. & Y)

S.S. AISI 303 Stem bushing

Stainless steel packing bolt and nuts

A105 forged and galvanized handwheel

Option 16A Angle body



Item	No.	Description	Materials
1	1	Body	See body material table
2	1	Threaded and welding yoke	ASTM A105 Galvanized
3	2	Packing bolts	Stainless steel
4	1	Packing gland nut	ASTM A276 TP316L
5	2	Nuts	Stainless steel
6	1	Stem bushing	ASTM A276 TP303
7	1	Handwheel	Forged Steel galvanized
8	1	Nuts	Stainless steel
9	1	Stem bushing	ASTM A276 TP316L
10	1	Packing	Graphoil
11	1	Back ring	ASTM A276 TP316L
12	1	Plug	See Trim Table
13	1	Seat	



SATEMA

13856 VIGLIANO B.SE - Via Milano, 395

Tel. +39 0158111102 - 015510156 - Fax 0158853029

Mail: info@satema.it <http://www.satema.it>

25D FORGED GLOBE VALVES

25D Model - PN400 ANSI 2500

Forged straight body valve.

Bonnet-less

S.S 316L salient stem with external thread integral the plug

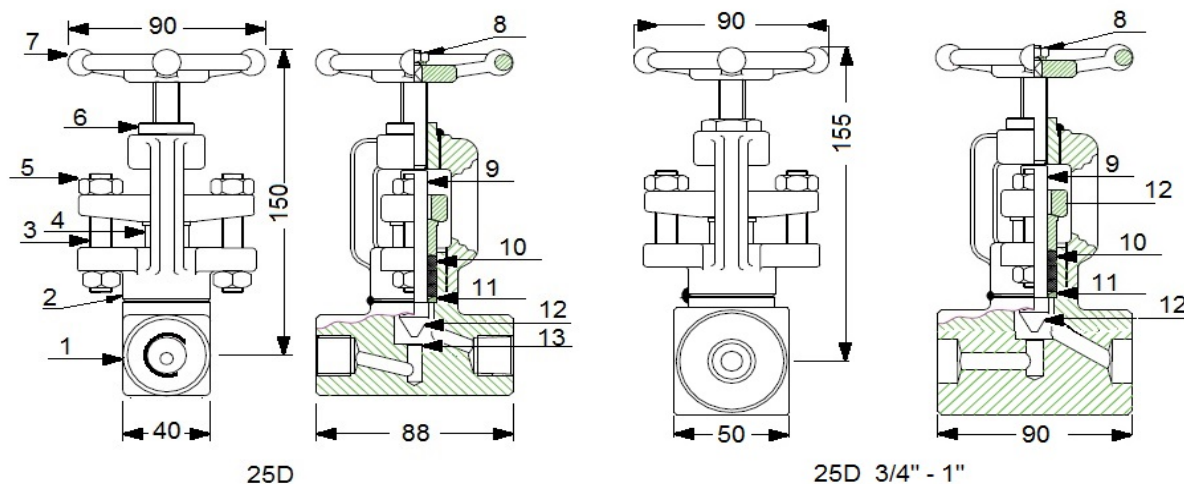
A105 forged and galvanized Yoke (Type O.S. & Y)

S.S. AISI 303 Stem bushing

Stainless steel packing bolt and nuts

A105 forged and galvanized handwheel

Option 25A Angle body



Item	No.	Description	Materials
1	1	Body	See body material table
2	1	Threaded and welding yoke	ASTM A105 Galvanized
3	2	Packing bolts	Stainless steel
4	1	Packing gland nut	ASTM A276 TP316L
5	2	Nuts	Stainless steel
6	1	Stem bushing	ASTM A276 TP303
7	1	Handwheel	Forged Steel galvanized
8	1	Nuts	Stainless steel
9	1	Stem bushing	ASTM A276 TP316L
10	1	Packing	Graphoil
11	1	Back ring	ASTM A276 TP316L
12	1	Plug	See Trim Table
13	1	Seat	



SATEMA

13856 VIGLIANO B.SE - Via Milano, 395

Tel. +39 015811102 - 015510156 - Fax 0158853029

Mail: info@satema.it <http://www.satema.it>

45D FORGED GLOBE VALVES

45D Model - PN750 ANSI 4500

Forged straight body valve.

Bonnet-less

S.S 316L salient stem with external thread integral the plug

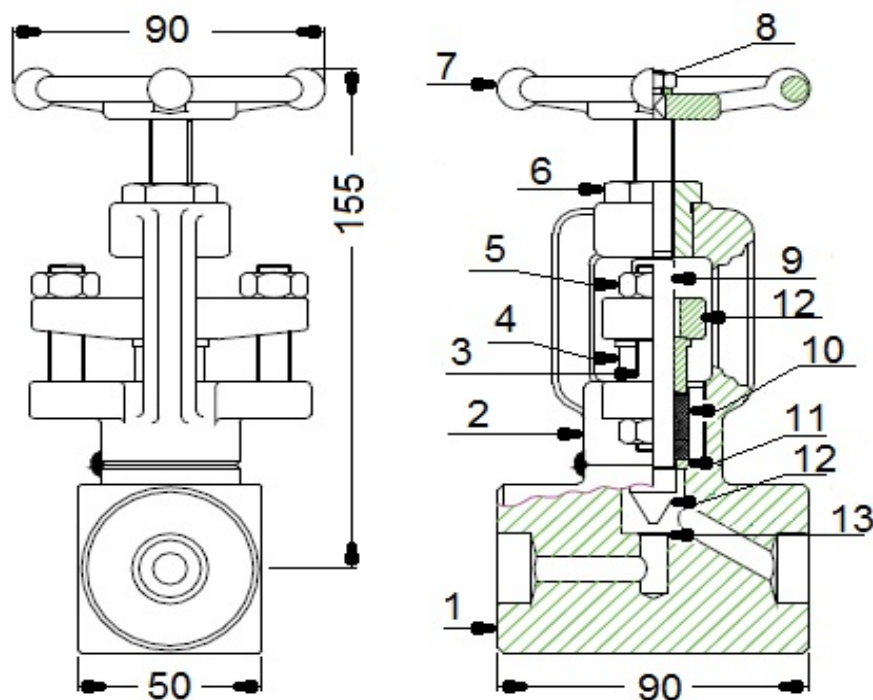
A105 forged and galvanized Yoke (Type O.S. & Y)

S.S. AISI 303 Stem bushing

Stainless steel packing bolt and nuts

A105 forged and galvanized handwheel

Option 45A Angle body



45D

Item	No.	Description	Materials
1	1	Body	See body material table
2	1	Threaded and welding yoke	ASTM A105 Galvanized
3	2	Packing bolts	Stainless steel
4	1	Packing gland nut	ASTM A276 TP316L
5	2	Nuts	Stainless steel
6	1	Stem bushing	ASTM A276 TP303
7	1	Handwheel	Forged Steel galvanized
8	1	Nuts	Stainless steel
9	1	Stem bushing	ASTM A276 TP316L
10	1	Packing	Graphoil
11	1	Back ring	ASTM A276 TP316L
12	1	Plug	See Trim Table
13	1	Seat	



SATEMA

13856 VIGLIANO B.SE - Via Milano, 395

Tel. +39 015811102 - 015510156 - Fax 0158853029

Mail: info@satema.it <http://www.satema.it>

FORGED GLOBE VALVES

TRIMS			
Class	Seat	Disc	Stem
1	13 Cr	13 Cr	13 Cr
2	13 Cr Stellite	13 Cr	13 Cr
3	13 Cr Stellite	13 Cr Stellite	13 Cr
4	Nicker Alloy	13 Cr	13 Cr
5	Monel	Monel	13 Cr
6	Monel	Monel	Monel
7	F 304	F 304	F 304
8	F 316	F 316	F 316
9	F 321 stellite	F 321 stellite	F 321
10	Bronze	Bronze	Brass

BODY - BONNET

Classification		Casting		Forgings	
		Symbol	ASTM	Symbol	ASTM
Carbon steel		WCB	A 216 WCB	A 105	A 105 II
Alloy steels	1/2 Mo	WC 1	A 217 WC1	F1	A182 F1
	1/2 Cr 1/2 Mo	WC 4	A 217 WC4		
	1 Cr - 1 Mo	WC 5	A 217 WC5	F12	A182 F12
	1/4 Cr - 1/2 Mo	WC 6	A 217 WC6	F11	A182 F11
	2 1/4 Cr - 1 Mo	WC 9	A 217 WC9	F22	A182 F22
	5 Cr - 1/2 Mo	C 5	A 217 C 5	F5	A182 F5
	9 Cr - 1 Mo	C 12	A 217 C 12	F9	A182 F9
Stainless steel	13 Cr	CA15	A351 CA15	F6	A182 F6
	19 Cr - 9 Ni	CF8	A296 CF8	304	A182 F304
	19 Cr - 9 Ni - LC	CF3	A296 CF3	304L	A182 F304L
	25 Cr - 20 Ni	CK20	A296 CK20	310	A182 F310
	19 Cr - 9 Ni - 2 1/2 Mo	CF8M	A296 CF8M	316	A182 F316
	19 Cr - 9 Ni - 2 1/2 Mo - LC	CF3M	A296 CF3M	316L	A182 F316L
	19 Cr - 11 Ni - 3 1/2 Mo	CG8M	A296 CG8M	317	
	17 Cr - 14 Ni - 2 Mo - Cb	CF10MC	A351 CF10MC	318	
	18 Cr - 8 Ni - Ti			321	A182 F321
	19 Cr - 10 Ni	CF8C	A351 CF8C	347	A182 F347
	20 Cr - 29 Ni - 2 1/2 Mo - Cu	CN7M	A296 CN7M	LF1	A350 LF1
Low temperature Alloy steel		CLB	A352 LCB		
	1/2 Mo	LC1	A352 LC1		
	2 1/2 Ni	LC2	A352 LC2		
	3 1/2 Ni	LC3	A352 LC3	LF3	A350 LF3
Other material	65 Ni - 30 Cu	Monel		Monel K	B164B
	60 Ni - 28 Mo	Hastelloy B	A494-NI Mo	Hastelloy B	
	50 Ni - 17 Cr - 17 Mo	Hastelloy C	A494-NI Cu Mo	Hastelloy C	
		Titanium		Titanium	



SATEMA

13856 VIGLIANO B.SE - Via Milano, 395

Tel. +39 015811102 - 015510156 - Fax 0158853029

Mail: info@satema.it

<http://www.satema.it>

FORGED GLOBE VALVES

HYDROSTATIC TEST PRESSURE						
Class	A105 - LF2 - F5 - F9 - F11 - F22		F1 - F304 - F316 - F321 - F347		F304L - F316L	
	Body	Seats	Body	Seats	Body	Seats
	psi - bar	psi - bar	psi - bar	psi - bar	psi - bar	psi - bar
150	435 - 31	320 - 24	413 - 30	302 - 22	345 - 25	253 - 18
300	1125 - 81	825 - 60	1080 - 78	792 - 57	900 - 65	660 - 47
600	2250 - 162	1650 - 119	2160 - 156	1584 - 115	1800 - 129	1320 - 96
800	3000 - 216	2200 - 159	2880 - 208	2112 - 153	2400 - 173	1760 - 127
1500	5625 - 405	4125 - 298	5400 - 390	3960 - 285	4500 - 324	3300 - 238
2500	9375 - 676	6875 - 497	9000 - 650	6600 - 476	7500 - 541	5500 - 397

In accordance with API 598 - ANSI B16.34 - MSS SP 41

PRESSURE - TEMPERATURE RATING °C - bar

Temp °C	F304 - 304H					
	150	300	600	800	1500	2500
-29 +38	19.0	49.6	99.2	132.4	248.1	413.5
50	18.4	47.8	95.7	126.5	239.2	398.6
100	15.7	40.9	81.8	108.3	204.4	340.7
150	13.9	36.3	72.7	97.0	181.7	302.8
200	12.6	32.8	65.5	87.9	163.8	273.0
250	11.7	30.5	61.1	81.5	152.7	254.5
300	10.2	29.1	58.1	77.2	145.3	242.1
350	8.4	28.1	56.1	74.0	140.3	233.8
375	7.4	27.8	55.5	73.8	138.8	231.3
400	6.5	27.5	54.9	73	137.3	228.9
425	5.6	27.2	54.3	72.8	135.8	226.4
450	4.7	26.9	53.7	72.0	134.3	223.9
475	3.7	26.6	53.1	71.5	132.8	221.4
500	2.8	26.1	52.1	70.0	130.3	217.2
525	1.9	23.9	47.8	64.0	119.4	199.0
550		21.8	43.6	57.8	109.1	181.8
575		20.1	40.1	55.2	100.4	167.3
600		16.7	33.4	43.6	83.6	139.3
625		13.1	26.2	35.0	65.4	109.0
650		10.5	21.0	28.1	52.6	87.6



SATEMA

13856 VIGLIANO B.SE - Via Milano, 395

Tel. +39 015811102 - 015510156 - Fax 0158853029

Mail: info@satema.it <http://www.satema.it>

FORGED GLOBE VALVES

PRESSURE - TEMPERATURE RATING °C - bar

	F316- 316H					
Temp °C	150	300	600	800	1500	2500
-29 +38	19.0	49.6	99.3	132.4	248.1	413.6
50	18.4	48.1	96.3	128.0	240.6	401.0
100	16.2	42.2	84.4	113.2	211.0	351.7
150	14.8	38.5	77.0	102.9	192.5	320.9
200	13.7	35.7	71.3	95.5	178.4	297.3
250	12.1	33.4	66.8	89.2	166.9	278.2
300	10.2	31.6	63.3	84.0	158.1	263.6
350	8.4	30.4	60.8	80.9	152.1	253.8
375	7.4	29.7	59.4	79.0	148.5	247.5
400	6.5	29.1	58.2	77.6	145.6	242.6
425	5.6	28.7	57.3	76.3	143.3	238.9
450	4.7	28.1	56.2	74.8	140.4	234.01
475	3.7	27.4	54.7	73.5	136.8	228.8
500	2.8	26.8	53.7	72.2	134.1	223.6
525	1.9	25.8	51.6	68.9	129.0	214.9
550		25.0	49.6	67.5	124.8	208.01
575		24.1	48.2	63.2	120.5	200.8
600		21.4	42.9	58.1	107.2	178.6
625		18.3	36.5	49.5	91.3	152.1
650		14.1	28.2	38.3	70.6	117.1

	F304L- F316L					
Temp °C	150	300	600	800	1500	2500
-29 +38	15.9	41.4	82.7	110.3	206.8	344.6
50	15.3	40.0	79.9	105.8	199.8	333.0
100	13.2	34.5	69.0	92.7	172.4	287.4
150	12.0	31.2	62.5	83.5	156.1	260.2
200	11.0	28.7	57.4	76.2	143.5	239.1
250	10.2	26.7	53.4	72.0	133.5	222.5
300	9.7	25.5	50.5	66.9	126.2	210.4
350	8.4	24.0	48.1	64.0	120.2	200.4
375	7.4	23.6	47.2	62.7	118.0	196.7
400	6.5	23.2	46.3	61.0	115.8	192.9
425	5.6	22.7	45.4	60.8	113.5	189.2
450	4.7	22.3	44.5	60.0	111.3	185.5
475	-	-	-	-	-	-
500	-	-	-	-	-	-
525	-	-	-	-	-	-
550	-	-	-	-	-	-
575	-	-	-	-	-	-
600	-	-	-	-	-	-
625	-	-	-	-	-	-
650	-	-	-	-	-	-



SATEMA

13856 VIGLIANO B.SE - Via Milano, 395

Tel. +39 015811102 - 015510156 - Fax 0158853029

Mail: info@satema.it

<http://www.satema.it>