

# CARBON & STAINLESS STEEL BALL VALVE

## TC-580-CS and T-580-S6

### APPLICATIONS

The NIBCO TC-580-CS and T-580-S6 series two-piece ball valves provide exceptional performance and value for general service and industrial applications:

- Chemical
- Steam
- Water (Hot and Cold)
- Hydraulics
- Petroleum

### MATERIALS & CONSTRUCTION

- Carbon and/or Stainless steel construction
- Reinforced PTFE seats
- Carbon filled PTFE seals/packing
- Actuator mounting pad standard on TC-580-CS-R and T-580-S6-R
- Locking handle standard on TC-580-CS-R and T-580-S6-R

### DESIGN CRITERIA

- Two-piece valves conform to the requirements of MSS SP-110
- Threaded ends per ANSI B1.20.1
- Markings are in accordance with MSS SP-25
- All Valves are equipped with a grounding device

### T-580-S6-R-66-LL

Threaded



### TC-580-CS-R-66-LL

Threaded

### FIGURE NO. KEY

Sample: T	580	S6	R	66	LL
End Connection	Series	Body Style	Seat Material	Trim	Handle Option
T=Threaded	580=2 piece	S6=Stainless Steel CS=Carbon Steel	R=Reinforced PTFE	66=SS Ball & Stem 25=Carbon Steel Ball & Stem	LL=Locking Lever *OV=Oval Handle *Field retrofit Option

# Stainless Steel Ball Valves

Two-Piece Body • Conventional Port • Blowout-Proof Stem •  
316 SS Trim • Cast Mounting Pad • Vented Ball

**2000 PSI/138 Bar Non-Shock Cold Working Pressure**

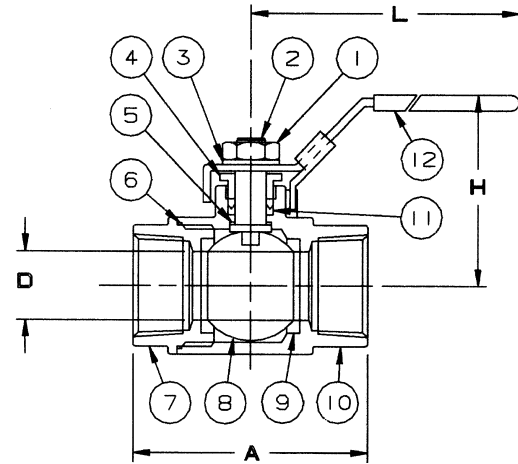
CONFORMS TO MSS SP-110 • NACE MRO175 •  
WW-V-35C, TYPE II, CLASS SS, STYLE 3



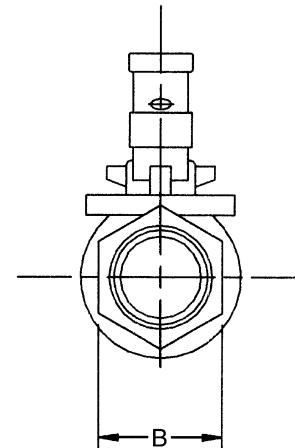
**T-580-S6-R-66-LL**  
Threaded

MATERIAL LIST	
PART	SPECIFICATION
1. Handle Nut	Stainless Steel ASTM A 276 Type 304
2. Stem	Stainless Steel ASTM A 276 Type 316
3. Spring Washer	Stainless Steel 304 SS
4. Threaded Pack Gland	Stainless Steel ASTM A 276 Type 316
5. Thrust Washer	Carbon Filled PTFE
6. Gasket	PTFE
7. Body End Piece	Stainless Steel ASTM A 351 Type CF8M
8. Ball (Vented)	Stainless Steel ASTM A 276 Type 316 or ASTM A 351 Type CF8M
9. Seat (2)	Reinforced TFE
10. Body	Stainless Steel ASTM A 351 Type CF8M
11. Stem Packing (2)	Carbon Filled PTFE
12. Locking Handle	Stainless Steel ASTM A 240 Type 304

NOTE: Valves are static grounded by thrust washer and packing.



**T-580-S6-R-66-LL**  
NPT x NPT



DIMENSIONS—WEIGHTS—QUANTITIES														
Size	Dimensions						T-580-S6-R-66-LL		Master Ctn. Qty.					
	A		B		D		L			H				
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.			
¼	8	2.07	53	.83	21	.37	9	1.76	45	4.33	110	.57	.27	10
⅜	10	2.07	53	.83	21	.37	9	1.76	45	4.33	110	.53	.27	10
½	15	2.34	59	1.06	27	.50	13	1.92	49	4.33	110	.73	.33	10
¾	20	2.80	71	1.34	34	.69	18	2.40	61	5.83	148	1.41	.64	10
1	25	3.23	82	1.61	41	.87	22	2.56	65	5.83	148	1.98	.90	10
1¼	32	3.57	91	1.89	48	1.00	25	2.74	70	7.76	197	2.77	1.26	5
1½	40	4.04	103	2.26	57	1.25	32	2.98	76	7.76	197	4.00	1.82	5
2	50	4.63	118	2.76	70	1.50	38	3.17	81	7.76	197	5.70	2.59	5

# Carbon Steel Ball Valves

Two-Piece Body • Conventional Port • Blowout-Proof Stem •  
CS Trim • Cast Mounting Pad • Vented Ball

**2000 PSI/138 Bar Non-Shock Cold Working Pressure**

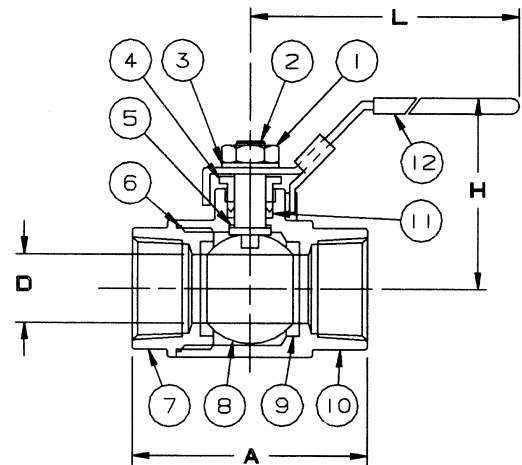
CONFORMS TO MSS SP-110 • NACE MRO175 •  
WW-V-35C, TYPE II, CLASS CS, STYLE 3



**TC-580-CS-R-25-LL**  
Threaded

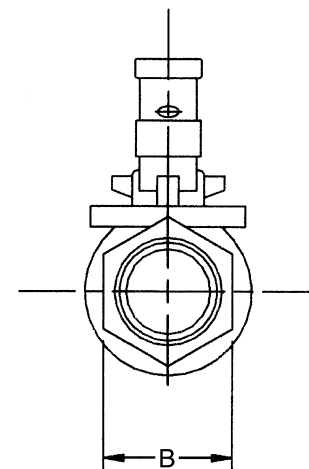
MATERIAL LIST	
PART	SPECIFICATION
1. Handle Nut	Carbon Steel ASTM A 283
2. Stem	Carbon Steel ASTM A 108 Type 1045
3. Spring Washer	Carbon Steel
4. Threaded Pack Gland	Carbon Steel ASTM A 108 Type 1045
5. Thrust Washer	Carbon Filled PTFE
6. Gasket	PTFE
7. Body End Piece	Carbon Steel ASTM A 216 Grade WCB (Investment Cast)
8. Ball (Vented)	Stainless Steel ASTM A 276 Type 304 or ASTM A 351 Type CF8M
9. Seat (2)	Reinforced TFE
10. Body	Carbon Steel ASTM A 216 Grade WCB
11. Stem Packing (2)	Carbon Filled PTFE
12. Locking Handle	Carbon Steel ASTM A 283

**NOTE:** Valves are static grounded by thrust washer and packing.



**TC-580-CS-R-25-LL**  
NPT x NPT

DIMENSIONS—WEIGHTS—QUANTITIES														
Size	Dimensions											TC-580-CS-R-25-LL		Master Ctn. Qty.
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.		
¼	8	2.07	53	.83	21	.37	9	1.76	45	4.33	110	.57	.26	10
⅜	10	2.07	53	.83	21	.37	9	1.76	45	4.33	110	.53	.24	10
½	15	2.34	59	1.06	27	.50	13	1.92	47	4.33	110	.73	.33	10
¾	20	2.80	71	1.34	34	.69	18	2.40	61	5.83	148	1.41	.64	10
1	25	3.23	82	1.61	41	.87	22	2.56	65	5.83	148	1.98	.90	10
1¼	32	3.57	91	1.89	48	1.00	25	2.74	70	7.76	197	2.77	1.26	5
1½	40	4.04	103	2.26	57	1.25	32	2.98	76	7.76	197	4.00	1.82	5
2	50	4.63	118	2.76	70	1.50	38	3.17	81	7.76	197	5.70	2.59	5



# Carbon Steel Ball Valves

Two-Piece Body • Conventional Port • Blowout-Proof Stem •  
316 SS Trim • Cast Mounting Pad • Vented Ball

**2000 PSI/138 Bar Non-Shock Cold Working Pressure**

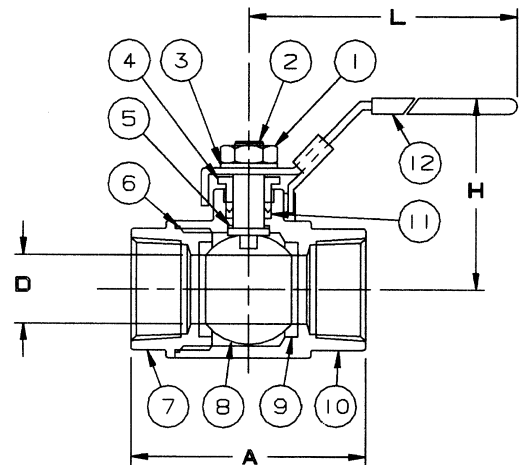
CONFORMS TO MSS SP-110 • NACE MR0175 •  
WW-V-35C, TYPE II, CLASS CS, STYLE 3



**TC-580-CS-R-66-LL**  
Threaded

MATERIAL LIST	
PART	SPECIFICATION
1. Handle Nut	Carbon Steel ASTM A 283
2. Stem	Stainless Steel ASTM A 276 Type 316
3. Spring Washer	Carbon Steel
4. Threaded Pack Gland	Carbon Steel ASTM A 108 Type 1045
5. Thrust Washer	Carbon Filled PTFE
6. Gasket	PTFE
7. Body End Piece	Carbon Steel ASTM A 216 Grade WCB (Investment Cast)
8. Ball (Vented)	Stainless Steel ASTM A 276 Type 316 or ASTM A 351 Type CF8M
9. Seat (2)	Reinforced TFE
10. Body	Carbon Steel ASTM A 216 Grade WCB
11. Stem Packing (2)	Carbon Filled PTFE
12. Locking Handle	Carbon Steel ASTM A 283

**NOTE:** Valves are static grounded by thrust washer and packing.



**TC-580-CS-R-66-LL**  
NPT x NPT

## DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions										TC-580-CS-R-66-LL		Master Ctn. Qty.	
	In.	mm.	A In.	mm.	B In.	mm.	D In.	mm.	L In.	mm.	H In.	mm.		Lbs.
¼	8	2.07	53	.90	23	.37	9	1.76	45	4.33	110	.57	.26	10
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