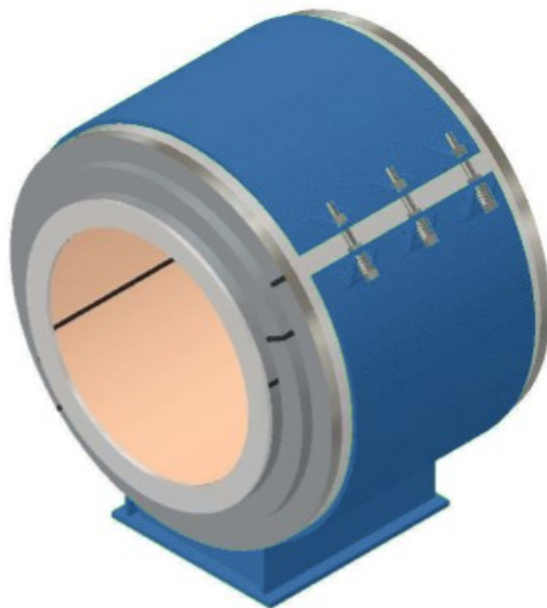




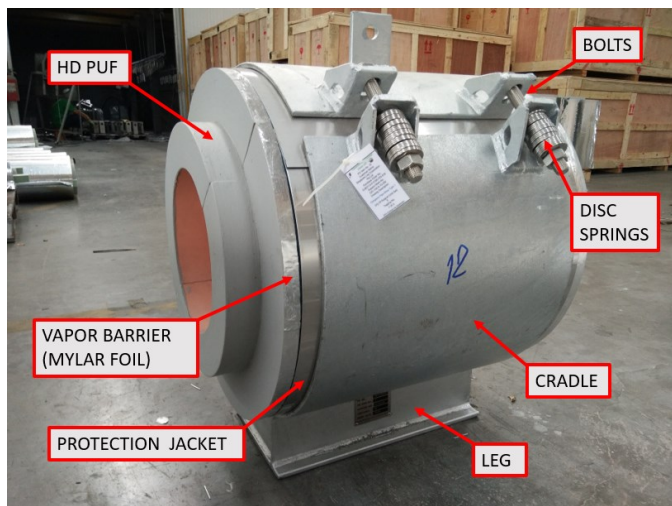
CRYOGENIC SUPPORTS



C&P USA offer a complete range of supports for cold and cryogenic pipework. The range includes cold shoes manufactured from high density polyurethane foam (HDPUF) and also items which use densified wood. Resting supports, guides, line stops, fixed point supports and hanging supports are all included, as are supports for vertical pipes. Standard supports can be selected using the tables in the catalog or we can design individual supports to suit the design conditions and applicable support loads and movements.

HDPUF Cold Shoes

CPA's range of HDPUF cold shoes incorpo-



rate load-bearing shells made from high density polyurethane foam. Polyurethane foam can be used over an extremely wide range of temperatures, typically -320°F to $+250^{\circ}\text{F}$. The shells are molded to the required dimensions using steel molds which are designed to ensure that the shell dimensions are maintained with high accuracy. The HDPUF is produced in three densities — 10, 14 and 20 lb/cu.ft. The choice of density depends on the loading on the support.

The HDPUF can be single layer or multi-layer; when multi-layer, it is stepped to match the layer thicknesses used on the line insulation. Layers are also stepped circumferentially to ensure that there is no direct path for heat transfer between the pipe and the outside of the insulation.

On cold pipework it is essential that moisture is not able to penetrate the insulation, where it could freeze and cause damage. To ensure that moisture is excluded, the outer layer of the PUF is completely covered with Mylar foil, a polyester-aluminum laminate. The Mylar foil is protected with a metallic jacket and the assembled insulation is clamped in a carbon steel cradle.

The cradle is welded to a steel leg of box construction, which is an inherently strong design. The cradle halves are bolted together and disc springs are used to ensure that a clamping force is maintained after the pipe cools to cryogenic temperature and the pipe and insulation contract radially. The required disc spring configuration is established by calculation to ensure that there is no slippage between pipe, insulation and cradle.

Cold Shoe Types and Part Numbering

Type CS1 shoe has a single leg and is used as a resting support on horizontal pipe or a guide support where the lateral load is relatively light (up to 30% of the vertical load on the standard designs).

Type CS2 shoe has two legs and is used as a vertical support on horizontal pipe where there can be an uplift load or as a one way guide on vertical pipes.

Type CS3 shoe has three legs and is used as a guide when the lateral loading is relatively high.

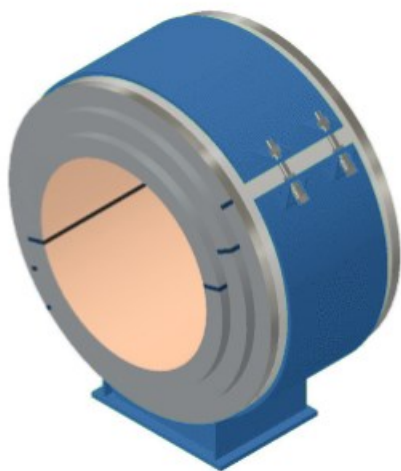
Type CS4 shoe has four legs and is used as a full guide on both vertical and horizontal pipes.

Where shoes are used to prevent or limit axial movement, the designs incorporate center stops in the cradle and thrust rings are provided for welding to the pipe.

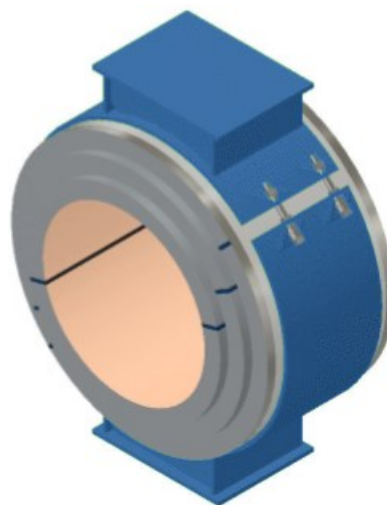
Type designations for shoes incorporating axial stops are CA1, CA2, CA3 and CA4.

For axial stops we can also supply pre-assembled support assemblies including pressure tested pipe spools with thrust flanges.

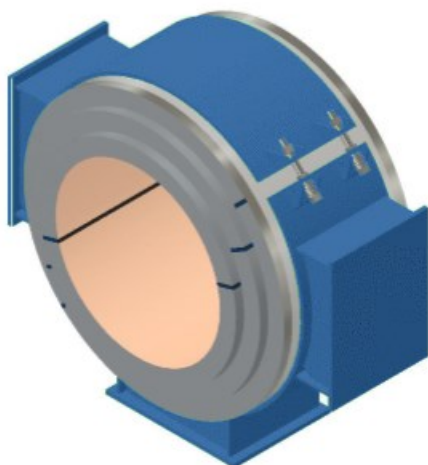
SHOE TYPES



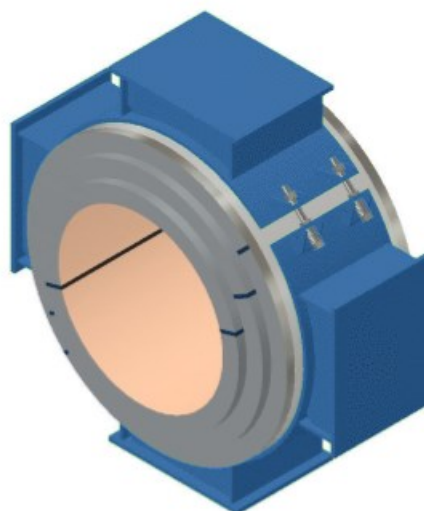
Type CS1



Type CS2



Type CS3



Type CS4

Example of Part Numbering

CS1 - 24" / 4" - 16" - 20

Shoe Type CS1 24" Pipe Size 4" Insulation 16" Shoe Length PUF Density 20

PROPERTIES OF HDPUF & DESIGN SERVICE

Properties of HDPUF

Nominal Density	lb/ft ³ , kg/m ³	10 lb / 160	14 lb / 224	20 lb / 320	32 lb / 500	ASTM D1622
Thermal Conductivity at 72°F	W/m.K BTU/(h.ft.°F)	0.028 0.0162	0.0344 0.0199	0.0434 0.0251	0.0794 0.0459	ASTM C518
Thermal Conductivity at -265°F	W/m.K BTU/(h.ft.°F)	0.0191 0.0110	0.0252 0.0146	0.0315 0.0182	0.0607 0.0351	ASTM C177
Closed Cell Content	%	99	98	98	99	ASTM D6226
Open Cell Content	%	0.42	1.1	1.23	1.62	ASTM D6226
Compressive Strength at 68°F	psi	323	529	1,063	2,574	ASTM D1621
Compressive Strength at -265°F	psi	731	1,292	2,753	7,551	
Water absorption by Volume	%	0.04	0.37	0.39	0.49	ASTM D2842
Coefficient Of Linear Thermal Expansion (-190°F to 115°F)	in / in / °F	30.7 x 10 ⁻⁶	31.1 x 10 ⁻⁶	30.2 x 10 ⁻⁶	31.4 x 10 ⁻⁶	ASTM D696

The above properties were confirmed by testing at the University of Southampton (UK).

Density and compressive strength are confirmed on every production batch.

Cryogenic Supports Design Service

CPA's design engineers will design special supporting arrangements to cover any requirement for supporting cryogenic pipes. Whether the requirement is for highly-loaded supports, hanging supports, or supports for vertical or inclined pipes, CPA will find a solution.

Specifying Design Parameters for Cryogenic Supports

The following information is needed for us to design cryogenic supports:

- Pipe Size and Orientation (horizontal / vertical)
- Support Type i.e. Resting, Guide, Line Stop etc.
- Pipe Material (Stainless Steel or Carbon Steel)
- Maximum and Minimum Design Temperature
- Installation Temperature
- Total Insulation Thickness and layering requirements
- Height to Bottom of Insulation or to Pipe Center
- Length of the shoe (if critical)
- Design Loads (Vertical, Lateral & Axial Loads)
- Base Plate Width if there is any restriction
- Maximum overall width (for clearance to adjacent pipes)

COLD SHOE SPECIFICATION

Standard CPA Specification for Cold Shoes

Clamp & Leg/Base: JIS G3101 Grade SS400 or ASTM A36, Hot Dip Galvanized

Pipe thrust rings: Material to match pipe

Insulation: Moulded High Density Polyurethane Foam - 10, 14 or 20 lb/cu.ft

Mastic: Cryogenic mastic applied to cut ends

Vapour Barrier: Mylar foil - polyester / aluminum laminate

Jacket: Aluzinc (zinc/aluminum coated steel sheet) 22 or 24 Gauge

Resilient blanket for expansion gaps: Fiberglass 2 lb/cu.ft

Bolts: ISO 898-1 Grade 8.8 and Nuts ISO 898-2 Grade 8, spin galvanized

Disc Springs (non-removable): High carbon or alloy spring steel, mechanically galvanized

Design Features

- Designed in accordance with Shell DEP and CINI Manual.
- Staggered Joints in PUF. The PUF layers are staggered both along the pipe and circumferentially around the pipe to minimize heat losses.
- Strip-bonded PUF. PUF layers are strip-bonded together to reduce thermal stresses in the PUF as the pipe cools.
- Box type leg/base. An inherently strong box design is used for the legs on all large size shoes.
- Disc springs are used to ensure that there is an adequate clamping force after radial contraction of the pipe and insulation. This ensures that there will not be slippage between pipe and insulation. The disc springs are factory-installed in the correct configuration and CPA's non-removable arrangement means that disc springs cannot be lost or installed incorrectly

Note:

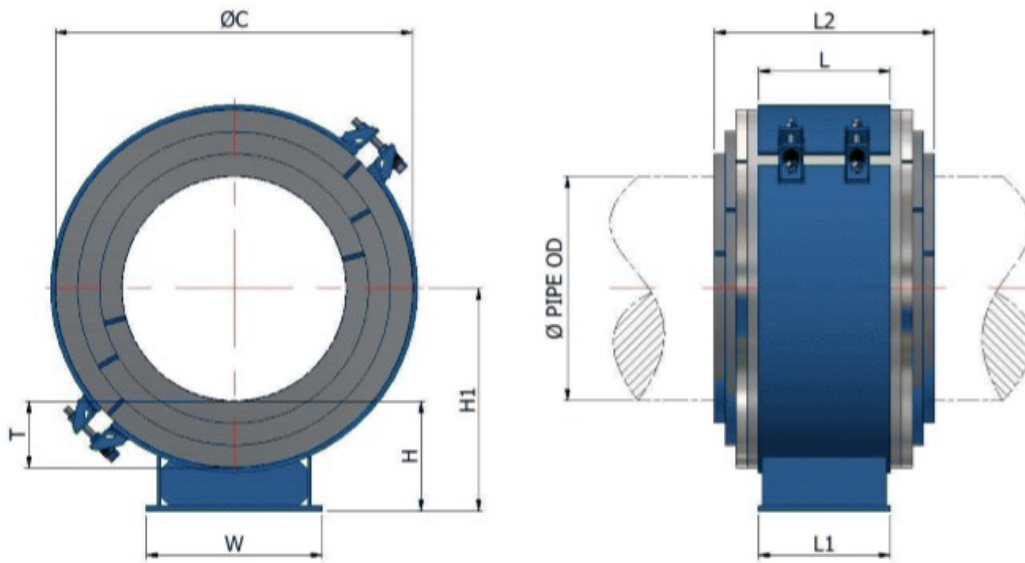
The lengths of the inner layer of PUF shown in the catalog tables (L2) assume the number of layers is as follows:

Up to 2" thick - 1 layer

3" to 4" thick - 2 layers

Above 4" thick - 3 layers.

SUPPORT TYPE CS1 (RESTING / GUIDE)



Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

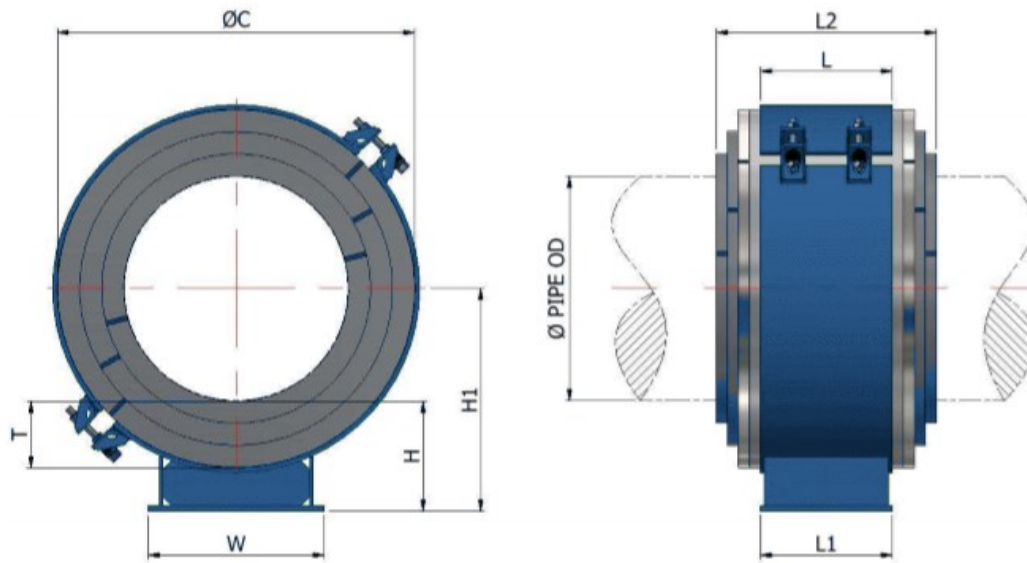
Pipe Size 0.5" / 15 mm (OD 0.84")	CS1-0.5"/1"-6"-Den.	1	2 7/8	6	6	10	3	3 7/16	2 1/4	0.26	9	0.42	9	0.85	9
	CS1-0.5"/2"-6"-Den.	2	4 13/16	6	6	10	4	4 7/16	3 1/4	0.26	13	0.42	13	0.85	14
	CS1-0.5"/3"-6"-Den.	3	6 13/16	6	6	12	5	5 7/16	4	0.26	17	0.42	18	0.85	19
	CS1-0.5"/4"-6"-Den.	4	8 13/16	6	6	12	6	6 7/16	4	0.26	21	0.42	22	0.85	24
	CS1-0.5"/1"-12"-Den.	1	2 7/8	12	12	16	3	3 7/16	2 1/4	0.52	15	0.83	15	1.71	16
	CS1-0.5"/2"-12"-Den.	2	4 13/16	12	12	16	4	4 7/16	3 1/4	0.52	22	0.83	22	1.71	24
	CS1-0.5"/3"-12"-Den.	3	6 13/16	12	12	18	5	5 7/16	4	0.52	31	0.83	31	1.71	33
	CS1-0.5"/4"-12"-Den.	4	8 13/16	12	12	18	6	6 7/16	4	0.52	37	0.83	40	1.71	44

Pipe Size 0.75" / 20 mm (OD 1.05")	CS1-0.75"/1"-6"-Den.	1	3 1/16	6	6	10	3	3 1/2	2 1/4	0.33	9	0.52	9	1.07	10
	CS1-0.75"/2"-6"-Den.	2	5 1/16	6	6	10	4	4 1/2	3 1/4	0.33	13	0.52	14	1.07	15
	CS1-0.75"/3"-6"-Den.	3	7 1/16	6	6	12	5	5 1/2	4	0.33	17	0.52	19	1.07	20
	CS1-0.75"/4"-6"-Den.	4	9 1/16	6	6	12	6	6 1/2	4	0.33	22	0.52	22	1.07	26
	CS1-0.75"/1"-12"-Den.	1	3 1/16	12	12	16	3	3 1/2	2 1/4	0.65	16	1.05	16	2.14	17
	CS1-0.75"/2"-12"-Den.	2	5 1/16	12	12	16	4	4 1/2	3 1/4	0.65	24	1.05	24	2.14	26
	CS1-0.75"/3"-12"-Den.	3	7 1/16	12	12	18	5	5 1/2	4	0.65	31	1.05	33	2.14	35
	CS1-0.75"/4"-12"-Den.	4	9 1/16	12	12	18	6	6 1/2	4	0.65	37	1.05	42	2.14	44

Pipe Size 1" / 25 mm (OD 1.32")	CS1-1"/1"-6"-Den.	1	3 3/8	6	6	10	3	3 11/16	2 1/4	0.41	10	0.66	10	1.35	10
	CS1-1"/2"-6"-Den.	2	5 3/8	6	6	10	4	4 11/16	3 1/4	0.41	14	0.66	14	1.35	15
	CS1-1"/3"-6"-Den.	3	7 5/16	6	6	12	5	5 11/16	4	0.41	18	0.66	19	1.35	21
	CS1-1"/4"-6"-Den.	4	9 5/16	6	6	12	6	6 11/16	4 3/4	0.41	24	0.66	24	1.35	26
	CS1-1"/5"-6"-Den.	5	11 5/16	6	6	14	7	7 11/16	4 3/4	0.41	29	0.66	31	1.35	35
	CS1-1"/1"-12"-Den.	1	3 3/8	12	12	16	3	3 11/16	2 1/4	0.83	17	1.32	17	2.70	18
	CS1-1"/2"-12"-Den.	2	5 3/8	12	12	16	4	4 11/16	3 1/4	0.83	24	1.32	24	2.70	26
	CS1-1"/3"-12"-Den.	3	7 5/16	12	12	18	5	5 11/16	4	0.83	33	1.32	33	2.70	37
	CS1-1"/4"-12"-Den.	4	9 5/16	12	12	18	6	6 11/16	4 3/4	0.83	42	1.32	44	2.70	49
	CS1-1"/5"-12"-Den.	5	11 5/16	12	12	20	7	7 11/16	4 3/4	0.83	51	1.32	55	2.70	60

Pipe Size 1.5" / 40 mm (OD 1.9")	CS1-1.5"/1"-6"-Den.	1	3 15/16	6	6	10	3	3 15/16	2 1/4	0.59	11	0.94	11	1.93	12
	CS1-1.5"/2"-6"-Den.	2	5 15/16	6	6	10	4	4 15/16	3 1/4	0.59	15	0.94	15	1.93	17
	CS1-1.5"/3"-6"-Den.	3	7 15/16	6	6	12	5	5 15/16	4	0.59	19	0.94	21	1.93	22
	CS1-1.5"/4"-6"-Den.	4	9 7/8	6	6	12	6	6 15/16	4 3/4	0.59	24	0.94	26	1.93	29
	CS1-1.5"/5"-6"-Den.	5	11 7/8	6	6	14	7	7 15/16	6	0.59	31	0.94	33	1.93	37
	CS1-1.5"/1"-12"-Den.	1	3 15/16	12	12	16	3	3 15/16	2 1/4	1.18	19	1.89	19	3.87	20
	CS1-1.5"/2"-12"-Den.	2	5 15/16	12	12	16	4	4 15/16	3 1/4	1.18	26	1.89	26	3.87	29
	CS1-1.5"/3"-12"-Den.	3	7 15/16	12	12	18	5	5 15/16	4	1.18	35	1.89	37	3.87	40
	CS1-1.5"/4"-12"-Den.	4	9 7/8	12	12	18	6	6 15/16	4 3/4	1.18	44	1.89	46	3.87	51
	CS1-1.5"/5"-12"-Den.	5	11 7/8	12	12	20	7	7 15/16	6	1.18	55	1.89	60	3.87	66

SUPPORT TYPE CS1 (RESTING / GUIDE)



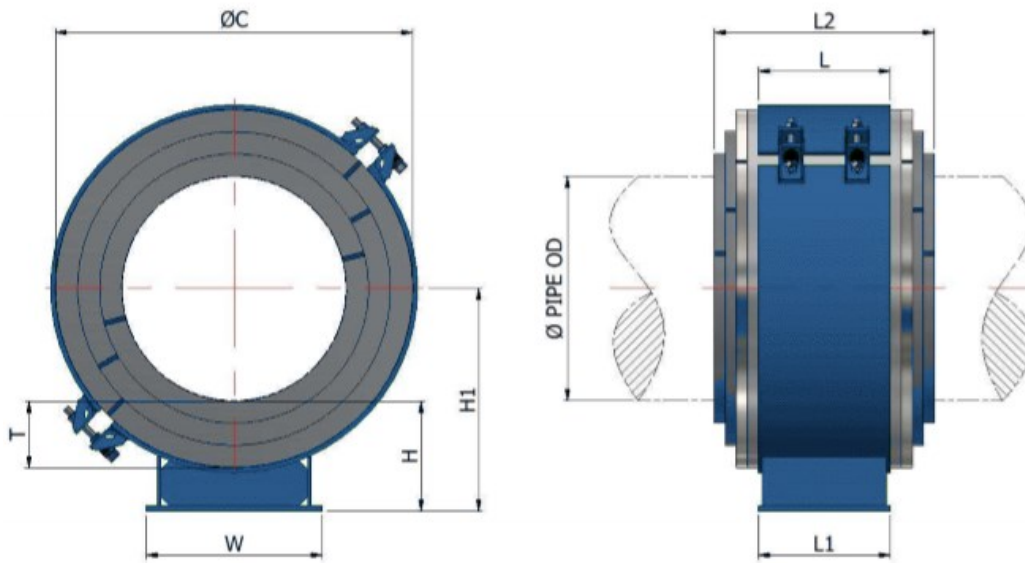
Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

Pipe Size 2" / 50 mm (OD 2.38")	CS1-2"/1"-6"-Den.	1	4 7/16	6	6	10	3	4 3/16	3 1/4	0.74	12	1.18	13	2.41	13
	CS1-2"/2"-6"-Den.	2	6 7/16	6	6	10	4	5 3/16	3 1/4	0.74	16	1.18	16	2.41	18
	CS1-2"/3"-6"-Den.	3	8 3/8	6	6	12	5	6 3/16	4 3/4	0.74	22	1.18	22	2.41	24
	CS1-2"/4"-6"-Den.	4	10 3/8	6	6	12	6	7 3/16	4 3/4	0.74	26	1.18	29	2.41	31
	CS1-2"/5"-6"-Den.	5	12 3/8	6	6	14	7	8 3/16	6	0.74	33	1.18	35	2.41	40
	CS1-2"/6"-6"-Den.	6	14 3/8	6	6	14	8	9 3/16	6	0.74	37	1.18	42	2.41	49
	CS1-2"/1"-12"-Den.	1	4 7/16	12	12	16	3	4 3/16	3 1/4	1.48	21	2.36	22	4.83	22
	CS1-2"/2"-12"-Den.	2	6 7/16	12	12	16	4	5 3/16	3 1/4	1.48	29	2.36	29	4.83	31
	CS1-2"/3"-12"-Den.	3	8 3/8	12	12	18	5	6 3/16	4 3/4	1.48	40	2.36	40	4.83	44
	CS1-2"/4"-12"-Den.	4	10 3/8	12	12	18	6	7 3/16	4 3/4	1.48	46	2.36	49	4.83	53
	CS1-2"/5"-12"-Den.	5	12 3/8	12	12	20	7	8 3/16	6	1.48	57	2.36	62	4.83	68
	CS1-2"/6"-12"-Den.	6	14 3/8	12	12	20	8	9 3/16	6	1.48	68	2.36	73	4.83	82

Pipe Size 3" / 80 mm (OD 3.5")	CS1-3"/1"-6"-Den.	1	5 9/16	6	6	10	3	4 3/4	3 1/4	1.09	16	1.74	16	3.55	17
	CS1-3"/2"-6"-Den.	2	7 9/16	6	6	10	4	5 3/4	4 3/4	1.09	21	1.74	22	3.55	24
	CS1-3"/3"-6"-Den.	3	9 9/16	6	6	12	5	6 3/4	4 3/4	1.09	26	1.74	26	3.55	29
	CS1-3"/4"-6"-Den.	4	11 1/2	6	6	12	6	7 3/4	6	1.09	31	1.74	33	3.55	37
	CS1-3"/5"-6"-Den.	5	13 1/2	6	6	14	7	8 3/4	6	1.09	37	1.74	40	3.55	44
	CS1-3"/6"-6"-Den.	6	15 1/2	6	6	14	8	9 3/4	7 3/4	1.09	46	1.74	49	3.55	55
	CS1-3"/1"-12"-Den.	1	5 9/16	12	12	16	3	4 3/4	3 1/4	2.18	26	3.48	29	7.13	31
	CS1-3"/2"-12"-Den.	2	7 9/16	12	12	16	4	5 3/4	4 3/4	2.18	37	3.48	37	7.13	40
	CS1-3"/3"-12"-Den.	3	9 9/16	12	12	18	5	6 3/4	4 3/4	2.18	44	3.48	46	7.13	51
	CS1-3"/4"-12"-Den.	4	11 1/2	12	12	18	6	7 3/4	6	2.18	55	3.48	57	7.13	64
	CS1-3"/5"-12"-Den.	5	13 1/2	12	12	20	7	8 3/4	6	2.18	64	3.48	68	7.13	77
	CS1-3"/6"-12"-Den.	6	15 1/2	12	12	20	8	9 3/4	7 3/4	2.18	79	3.48	84	7.13	95

Pipe Size 4" / 100 mm (OD 4.5")	CS1-4"/1"-8"-Den.	1	6 9/16	8	8	12	3	5 1/4	3 1/4	1.87	22	2.99	22	6.11	24
	CS1-4"/2"-8"-Den.	2	8 9/16	8	8	12	4	6 1/4	4	1.87	29	2.99	29	6.11	33
	CS1-4"/3"-8"-Den.	3	10 1/2	8	8	14	5	7 1/4	4 3/4	1.87	35	2.99	35	6.11	40
	CS1-4"/4"-8"-Den.	4	12 1/2	8	8	14	6	8 1/4	6	1.87	42	2.99	44	6.11	49
	CS1-4"/5"-8"-Den.	5	14 1/2	8	8	16	7	9 1/4	6	1.87	49	2.99	53	6.11	60
	CS1-4"/6"-8"-Den.	6	16 1/2	8	8	16	8	10 1/4	7 3/4	1.87	60	2.99	64	6.11	73
	CS1-4"/8"-8"-Den.	8	20 7/16	8	8	16	10	12 1/4	9 3/4	1.87	79	2.99	88	6.11	101
	CS1-4"/1"-16"-Den.	1	6 9/16	16	16	20	3	5 1/4	4	3.73	40	5.96	42	12.2	44
	CS1-4"/2"-16"-Den.	2	8 9/16	16	16	20	4	6 1/4	4	3.73	49	5.96	53	12.2	57
	CS1-4"/3"-16"-Den.	3	10 1/2	16	16	22	5	7 1/4	4 3/4	3.73	62	5.96	64	12.2	68
	CS1-4"/4"-16"-Den.	4	12 1/2	16	16	22	6	8 1/4	6	3.73	75	5.96	79	12.2	88
	CS1-4"/5"-16"-Den.	5	14 1/2	16	16	24	7	9 1/4	6	3.73	88	5.96	95	12.2	106
	CS1-4"/6"-16"-Den.	6	16 1/2	16	16	24	8	10 1/4	7 3/4	3.73	106	5.96	115	12.2	130
	CS1-4"/8"-16"-Den.	8	20 7/16	16	16	24	10	12 1/4	9 3/4	3.73	141	5.96	154	12.2	176

SUPPORT TYPE CS1 (RESTING / GUIDE)



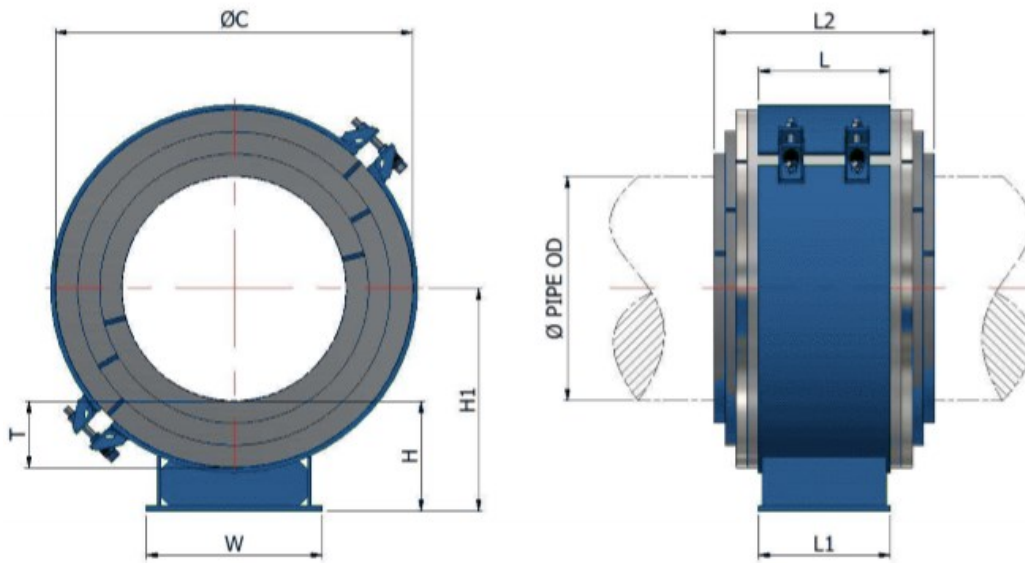
Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

Pipe Size 6" / 150 mm (OD 6.63")	CS1-6"/1"-8"-Den.	1	8 11/16	8	8	12	3	6 5/16	4	2.74	31	4.38	31	8.99	35
	CS1-6"/2"-8"-Den.	2	10 11/16	8	8	12	4	7 5/16	4 3/4	2.74	40	4.38	40	8.99	42
	CS1-6"/3"-8"-Den.	3	12 5/8	8	8	14	5	8 5/16	6	2.74	49	4.38	51	8.99	53
	CS1-6"/4"-8"-Den.	4	14 5/8	8	8	14	6	9 5/16	6 1/4	2.74	57	4.38	60	8.99	66
	CS1-6"/5"-8"-Den.	5	16 5/8	8	8	16	7	10 5/16	7 3/4	2.74	68	4.38	73	8.99	79
	CS1-6"/6"-8"-Den.	6	18 5/8	8	8	16	8	11 5/16	7 3/4	2.74	77	4.38	84	8.99	95
	CS1-6"/8"-8"-Den.	8	22 9/16	8	8	16	10	13 5/16	9 3/4	2.74	99	4.38	108	8.99	126
	CS1-6"/1"-16"-Den.	1	8 11/16	16	16	20	3	6 5/16	4 3/4	5.51	60	8.79	60	18.0	60
	CS1-6"/2"-16"-Den.	2	10 11/16	16	16	20	4	7 5/16	4 3/4	5.51	71	8.79	73	18.0	77
	CS1-6"/3"-16"-Den.	3	12 5/8	16	16	22	5	8 5/16	6	5.51	88	8.79	90	18.0	97
	CS1-6"/4"-16"-Den.	4	14 5/8	16	16	22	6	9 5/16	6 1/4	5.51	104	8.79	108	18.0	117
	CS1-6"/5"-16"-Den.	5	16 5/8	16	16	24	7	10 5/16	7 3/4	5.51	123	8.79	130	18.0	143

Pipe Size 8" / 200 mm (OD 8.63")	CS1-8"/1"-8"-Den.	1	10 11/16	8	8	12	4	8 5/16	5 1/2	3.57	40	5.71	40	11.7	42
	CS1-8"/2"-8"-Den.	2	12 11/16	8	8	12	5	9 5/16	6 1/4	3.57	49	5.71	49	11.7	53
	CS1-8"/3"-8"-Den.	3	14 5/8	8	8	14	6	10 5/16	6 1/4	3.57	55	5.71	60	11.7	64
	CS1-8"/4"-8"-Den.	4	16 5/8	8	8	14	7	11 5/16	7 3/4	3.57	66	5.71	71	11.7	77
	CS1-8"/5"-8"-Den.	5	18 5/8	8	8	16	8	12 5/16	7 3/4	3.57	77	5.71	82	11.7	90
	CS1-8"/6"-8"-Den.	6	20 5/8	8	8	16	9	13 5/16	9 3/4	3.57	90	5.71	97	11.7	110
	CS1-8"/8"-8"-Den.	8	24 9/16	8	8	16	11	15 5/16	11 3/4	3.57	115	5.71	126	11.7	146
	CS1-8"/1"-16"-Den.	1	10 11/16	16	16	20	4	8 5/16	5 1/2	7.15	73	11.4	73	23.4	75
	CS1-8"/2"-16"-Den.	2	12 11/16	16	16	20	5	9 5/16	6 1/4	7.15	88	11.4	90	23.4	95
	CS1-8"/3"-16"-Den.	3	14 5/8	16	16	22	6	10 5/16	6 1/4	7.15	104	11.4	108	23.4	115
	CS1-8"/4"-16"-Den.	4	16 5/8	16	16	22	7	11 5/16	7 3/4	7.15	121	11.4	128	23.4	139
	CS1-8"/5"-16"-Den.	5	18 5/8	16	16	24	8	12 5/16	7 3/4	7.15	139	11.4	148	23.4	163

Pipe Size 10" / 250 mm (OD 10.75")	CS1-10"/1"-12"-Den.	1	12 13/16	12	12	16	4	9 3/8	6 1/4	6.70	66	10.7	66	21.9	68
	CS1-10"/2"-12"-Den.	2	14 13/16	12	12	16	5	10 3/8	6 1/4	6.70	77	10.7	79	21.9	84
	CS1-10"/3"-12"-Den.	3	16 3/4	12	12	18	6	11 3/8	7 3/4	6.70	93	10.7	97	21.9	104
	CS1-10"/4"-12"-Den.	4	18 3/4	12	12	18	7	12 3/8	7 3/4	6.70	104	10.7	110	21.9	121
	CS1-10"/5"-12"-Den.	5	20 3/4	12	12	20	8	13 3/8	9 3/4	6.70	123	10.7	130	21.9	146
	CS1-10"/6"-12"-Den.	6	22 3/4	12	12	20	9	14 3/8	9 3/4	6.70	137	10.7	148	21.9	168
	CS1-10"/8"-12"-Den.	8	26 11/16	12	12	20	11	16 3/8	11 3/4	6.70	174	10.7	190	21.9	218
	CS1-10"/1"-20"-Den.	1	12 13/16	20	20	24	4	9 3/8	6 1/4	11.2	108	17.8	108	36.4	112
	CS1-10"/2"-20"-Den.	2	14 13/16	20	20	24	5	10 3/8	6 1/4	11.2	126	17.8	128	36.4	134
	CS1-10"/3"-20"-Den.	3	16 3/4	20	20	26	6	11 3/8	7 3/4	11.2	148	17.8	154	36.4	165
	CS1-10"/4"-20"-Den.	4	18 3/4	20	20	26	7	12 3/8	7 3/4	11.2	168	17.8	179	36.4	194
	CS1-10"/5"-20"-Den.	5	20 3/4	20	20	28	8	13 3/8	9 3/4	11.2	196	17.8	209	36.4	220

SUPPORT TYPE CS1 (RESTING / GUIDE)



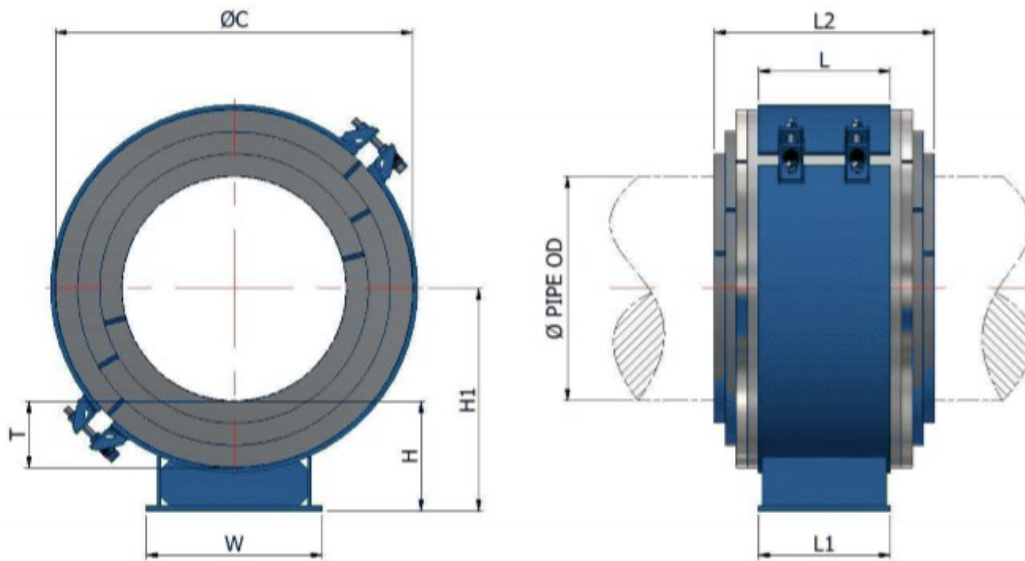
Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
									kips	lb	kips	lb	kips	lb

Pipe Size 12" / 300 mm (OD 12.75")	CS1-12"/1"-12"-Den.	1	14 13/16	12	12	16	4	10 3/8	6 1/4	7.94	93	12.7	93	25.9	97
	CS1-12"/2"-12"-Den.	2	16 13/16	12	12	16	5	11 3/8	7 3/4	7.94	108	12.7	112	25.9	117
	CS1-12"/3"-12"-Den.	3	18 13/16	12	12	18	6	12 3/8	7 3/4	7.94	123	12.7	128	25.9	137
	CS1-12"/4"-12"-Den.	4	20 3/4	12	12	18	7	13 3/8	9 3/4	7.94	141	12.7	150	25.9	161
	CS1-12"/5"-12"-Den.	5	22 3/4	12	12	20	8	14 3/8	9 3/4	7.94	159	12.7	168	25.9	183
	CS1-12"/6"-12"-Den.	6	24 3/4	12	12	20	9	15 3/8	11 3/4	7.94	183	12.7	194	25.9	216
	CS1-12"/8"-12"-Den.	8	28 11/16	12	12	20	11	17 3/8	13 3/4	7.94	220	12.7	243	25.9	265
	CS1-12"/1"-20"-Den.	1	14 13/16	20	20	24	4	10 3/8	6 1/4	13.2	150	21.1	152	43.2	159
	CS1-12"/2"-20"-Den.	2	16 13/16	20	20	24	5	11 3/8	7 3/4	13.2	176	21.1	181	43.2	187
	CS1-12"/3"-20"-Den.	3	18 13/16	20	20	26	6	12 3/8	7 3/4	13.2	198	21.1	205	43.2	218
	CS1-12"/4"-20"-Den.	4	20 3/4	20	20	26	7	13 3/8	9 3/4	13.2	220	21.1	243	43.2	265
	CS1-12"/5"-20"-Den.	5	22 3/4	20	20	28	8	14 3/8	9 3/4	13.2	265	21.1	265	43.2	287

Pipe Size 14" / 350 mm (OD 14")	CS1-14"/1"-12"-Den.	1	16 1/16	12	12	16	5	12	7 3/4	8.72	106	13.9	108	28.6	110
	CS1-14"/2"-12"-Den.	2	18 1/16	12	12	16	6	13	7 3/4	8.72	119	13.9	123	28.6	128
	CS1-14"/3"-12"-Den.	3	20 1/16	12	12	18	7	14	9 3/4	8.72	139	13.9	143	28.6	152
	CS1-14"/4"-12"-Den.	4	22 1/16	12	12	18	8	15	9 3/4	8.72	154	13.9	161	28.6	174
	CS1-14"/5"-12"-Den.	5	24	12	12	20	9	16	11 3/4	8.72	176	13.9	187	28.6	203
	CS1-14"/6"-12"-Den.	6	26	12	12	20	10	17	11 3/4	8.72	196	13.9	209	28.6	243
	CS1-14"/8"-12"-Den.	8	29 15/16	12	12	20	1'-0	19	13 3/4	8.72	243	13.9	265	28.6	287
	CS1-14"/1"-20"-Den.	1	16 1/16	20	20	24	5	12	7 3/4	14.5	172	23.2	174	47.4	176
	CS1-14"/2"-20"-Den.	2	18 1/16	20	20	24	6	13	7 3/4	14.5	194	23.2	198	47.4	205
	CS1-14"/3"-20"-Den.	3	20 1/16	20	20	26	7	14	9 3/4	14.5	220	23.2	220	47.4	243
	CS1-14"/4"-20"-Den.	4	22 1/16	20	20	26	8	15	9 3/4	14.5	243	23.2	265	47.4	287
	CS1-14"/5"-20"-Den.	5	24	20	20	28	9	16	11 3/4	14.5	287	23.2	287	47.4	331

Pipe Size 16" / 400 mm (OD 16")	CS1-16"/2"-12"-Den.	2	20 1/16	12	12	16	6	14	9 3/4	9.96	137	15.9	141	32.6	146
	CS1-16"/3"-12"-Den.	3	22 1/16	12	12	18	7	15	9 3/4	9.96	152	15.9	159	32.6	168
	CS1-16"/4"-12"-Den.	4	24 1/16	12	12	18	8	16	11 3/4	9.96	176	15.9	185	32.6	198
	CS1-16"/5"-12"-Den.	5	26	12	12	20	9	17	11 3/4	9.96	194	15.9	205	32.6	220
	CS1-16"/6"-12"-Den.	6	28	12	12	20	10	18	13 3/4	9.96	218	15.9	243	32.6	265
	CS1-16"/8"-12"-Den.	8	32	12	12	20	1'-0	20	15 3/4	9.96	265	15.9	287	32.6	309
	CS1-16"/10"-12"-Den.	10	35 15/16	12	12	20	1'-2	22	17 3/4	9.96	309	15.9	331	32.6	375
	CS1-16"/2"-20"-Den.	2	20 1/16	20	20	24	6	14	9 3/4	16.6	220	26.5	220	54.2	243
	CS1-16"/3"-20"-Den.	3	22 1/16	20	20	26	7	15	9 3/4	16.6	243	26.5	243	54.2	265
	CS1-16"/4"-20"-Den.	4	24 1/16	20	20	26	8	16	11 3/4	16.6	287	26.5	287	54.2	309
	CS1-16"/5"-20"-Den.	5	26	20	20	28	9	17	11 3/4	16.6	309	26.5	331	54.2	353
	CS1-16"/6"-20"-Den.	6	28	20	20	28	10	18	13 3/4	16.6	353	26.5	375	54.2	397

SUPPORT TYPE CS1 (RESTING / GUIDE)



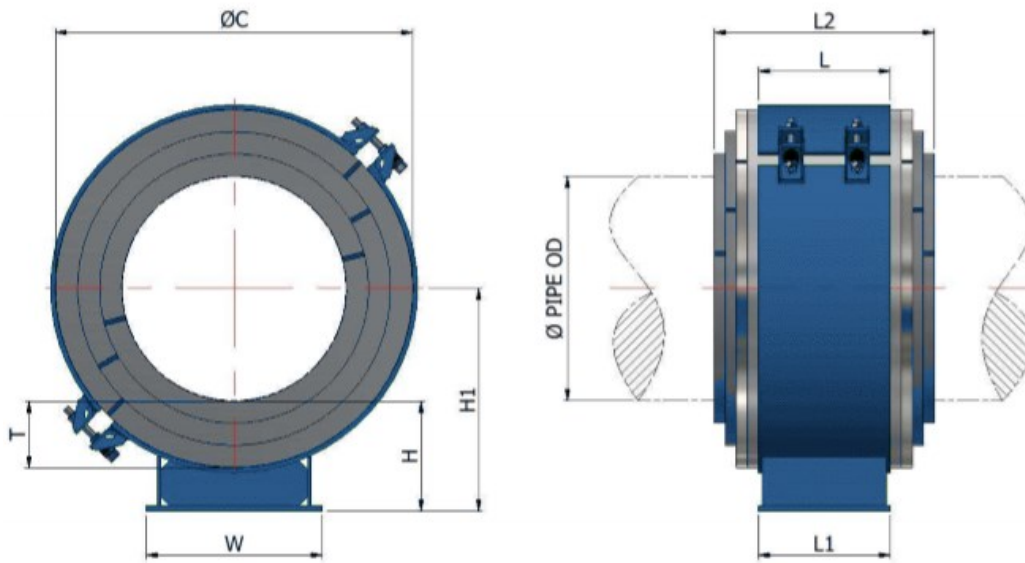
Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

Pipe Size 18" / 450 mm (OD 18")	CS1-18"/2"-12"-Den.	2	22 1/16	12	12	16	6	15	9 3/4	11.2	146	17.9	150	36.6	161
	CS1-18"/3"-12"-Den.	3	24 1/16	12	12	18	7	16	11 3/4	11.2	170	17.9	176	36.6	187
	CS1-18"/4"-12"-Den.	4	26 1/16	12	12	18	8	17	11 3/4	11.2	187	17.9	196	36.6	212
	CS1-18"/5"-12"-Den.	5	28 1/16	12	12	20	9	18	13 3/4	11.2	212	17.9	220	36.6	243
	CS1-18"/6"-12"-Den.	6	30	12	12	20	10	19	13 3/4	11.2	220	17.9	243	36.6	265
	CS1-18"/8"-12"-Den.	8	34	12	12	20	1'-0	21	15 3/4	11.2	265	17.9	287	36.6	331
	CS1-18"/10"-12"-Den.	10	37 15/16	12	12	20	1'-2	23	17 3/4	11.2	331	17.9	353	36.6	397
	CS1-18"/2"-20"-Den.	2	22 1/16	20	20	24	6	15	9 3/4	18.7	243	29.9	243	61.1	243
	CS1-18"/3"-20"-Den.	3	24 1/16	20	20	26	7	16	11 3/4	18.7	265	29.9	287	61.1	309
	CS1-18"/4"-20"-Den.	4	26 1/16	20	20	26	8	17	11 3/4	18.7	309	29.9	309	61.1	331
	CS1-18"/5"-20"-Den.	5	28 1/16	20	20	28	9	18	13 3/4	18.7	331	29.9	353	61.1	375
	CS1-18"/6"-20"-Den.	6	30	20	20	28	10	19	13 3/4	18.7	375	29.9	397	61.1	419

Pipe Size 20" / 500 mm (OD 20")	CS1-20"/2"-16"-Den.	2	24 1/16	16	16	20	6	16	11 3/4	16.6	212	26.5	218	54.2	220
	CS1-20"/3"-16"-Den.	3	26 1/16	16	16	22	7	17	11 3/4	16.6	243	26.5	243	54.2	265
	CS1-20"/4"-16"-Den.	4	28 1/16	16	16	22	8	18	13 3/4	16.6	265	26.5	265	54.2	287
	CS1-20"/5"-16"-Den.	5	30 1/16	16	16	24	9	19	13 3/4	16.6	287	26.5	309	54.2	331
	CS1-20"/6"-16"-Den.	6	32	16	16	24	10	20	15 3/4	16.6	309	26.5	331	54.2	375
	CS1-20"/8"-16"-Den.	8	36	16	16	24	1'-0	22	17 3/4	16.6	375	26.5	397	54.2	463
	CS1-20"/10"-16"-Den.	10	39 15/16	16	16	24	1'-2	24	19 3/4	16.6	441	26.5	485	54.2	551
	CS1-20"/2"-24"-Den.	2	24 1/16	24	24	28	6	16	11 3/4	25.0	309	39.8	331	81.4	331
	CS1-20"/3"-24"-Den.	3	26 1/16	24	24	30	7	17	11 3/4	25.0	353	39.8	353	81.4	375
	CS1-20"/4"-24"-Den.	4	28 1/16	24	24	30	8	18	13 3/4	25.0	397	39.8	397	81.4	441
	CS1-20"/5"-24"-Den.	5	30 1/16	24	24	32	9	19	13 3/4	25.0	419	39.8	441	81.4	485
	CS1-20"/6"-24"-Den.	6	32	24	24	32	10	20	15 3/4	25.0	463	39.8	507	81.4	551

Pipe Size 22" / 550 mm (OD 22")	CS1-22"/2"-16"-Den.	2	26 1/8	16	16	20	6	17	11 3/4	18.3	220	29.2	243	59.8	243
	CS1-22"/3"-16"-Den.	3	28 1/16	16	16	22	7	18	13 3/4	18.3	265	29.2	265	59.8	287
	CS1-22"/4"-16"-Den.	4	30 1/16	16	16	22	8	19	13 3/4	18.3	287	29.2	309	59.8	331
	CS1-22"/5"-16"-Den.	5	32 1/16	16	16	24	9	20	15 3/4	18.3	309	29.2	331	59.8	375
	CS1-22"/6"-16"-Den.	6	34 1/16	16	16	24	10	21	15 3/4	18.3	353	29.2	375	59.8	397
	CS1-22"/8"-16"-Den.	8	38	16	16	24	1'-0	23	17 3/4	18.3	397	29.2	441	59.8	485
	CS1-22"/10"-16"-Den.	10	41 15/16	16	16	24	1'-2	25	19 3/4	18.3	463	29.2	507	59.8	573
	CS1-22"/2"-24"-Den.	2	26 1/8	24	24	28	6	17	11 3/4	27.4	353	43.8	353	89.5	375
	CS1-22"/3"-24"-Den.	3	28 1/16	24	24	30	7	18	13 3/4	27.4	397	43.8	397	89.5	419
	CS1-22"/4"-24"-Den.	4	30 1/16	24	24	30	8	19	13 3/4	27.4	419	43.8	441	89.5	485
	CS1-22"/5"-24"-Den.	5	32 1/16	24	24	32	9	20	15 3/4	27.4	463	43.8	485	89.5	529
	CS1-22"/6"-24"-Den.	6	34 1/16	24	24	32	10	21	15 3/4	27.4	507	43.8	529	89.5	595

SUPPORT TYPE CS1 (RESTING / GUIDE)



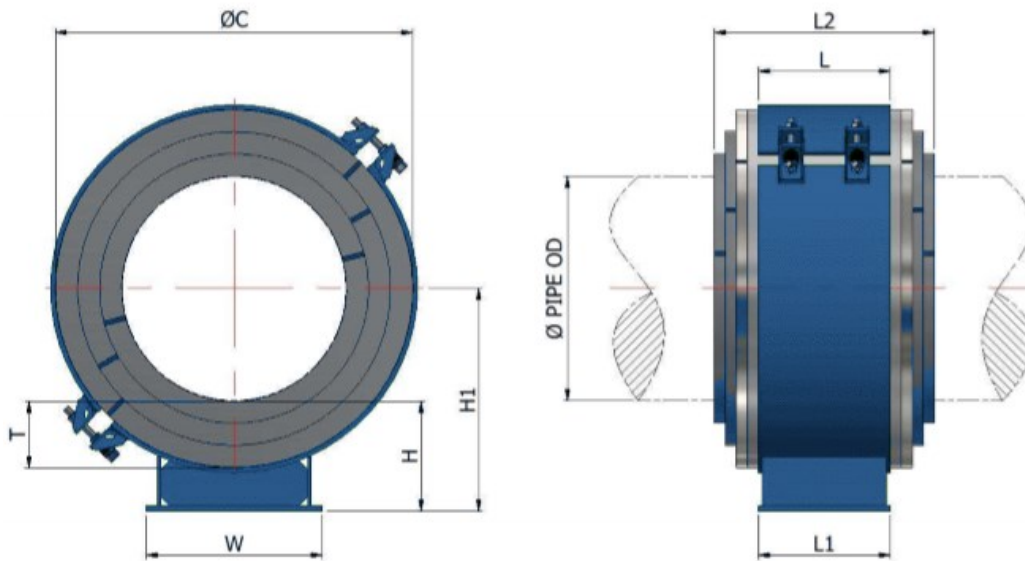
Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
									kips	lb	kips	lb	kips	lb

Pipe Size 24" / 600 mm (OD 24")	CS1-24"/2"-16"-Den.	2	28 1/8	16	16	20	6	18	13 3/4	19.9	243	31.9	265	65.2	265
	CS1-24"/3"-16"-Den.	3	30 1/16	16	16	22	7	19	13 3/4	19.9	265	31.9	287	65.2	309
	CS1-24"/4"-16"-Den.	4	32 1/16	16	16	22	8	20	15 3/4	19.9	309	31.9	331	65.2	353
	CS1-24"/5"-16"-Den.	5	34 1/16	16	16	24	9	21	15 3/4	19.9	331	31.9	353	65.2	397
	CS1-24"/6"-16"-Den.	6	36 1/16	16	16	24	10	22	17 3/4	19.9	375	31.9	397	65.2	441
	CS1-24"/8"-16"-Den.	8	40	16	16	24	1'-0	24	19 3/4	19.9	441	31.9	463	65.2	529
	CS1-24"/10"-16"-Den.	10	44	16	16	24	1'-2	26	21 3/4	19.9	507	31.9	551	65.2	617
	CS1-24"/2"-24"-Den.	2	28 1/8	24	24	28	6	18	13 3/4	29.9	375	47.7	375	97.6	397
	CS1-24"/3"-24"-Den.	3	30 1/16	24	24	30	7	19	13 3/4	29.9	419	47.7	419	97.6	463
	CS1-24"/4"-24"-Den.	4	32 1/16	24	24	30	8	20	15 3/4	29.9	463	47.7	485	97.6	507
	CS1-24"/5"-24"-Den.	5	34 1/16	24	24	32	9	21	15 3/4	29.9	485	47.7	529	97.6	573
	CS1-24"/6"-24"-Den.	6	36 1/16	24	24	32	10	22	17 3/4	29.9	551	47.7	573	97.6	639

Pipe Size 26" / 650 mm (OD 26")	CS1-26"/2"-16"-Den.	2	30 1/8	16	16	20	6	19	13 3/4	21.6	265	34.4	287	70.6	287
	CS1-26"/3"-16"-Den.	3	32 1/8	16	16	22	7	20	15 3/4	21.6	309	34.4	309	70.6	331
	CS1-26"/4"-16"-Den.	4	34 1/16	16	16	22	8	21	15 3/4	21.6	331	34.4	353	70.6	375
	CS1-26"/5"-16"-Den.	5	36 1/16	16	16	24	9	22	17 3/4	21.6	353	34.4	375	70.6	419
	CS1-26"/6"-16"-Den.	6	38 1/16	16	16	24	10	23	17 3/4	21.6	397	34.4	419	70.6	463
	CS1-26"/8"-16"-Den.	8	42	16	16	24	1'-0	25	19 3/4	21.6	463	34.4	485	70.6	551
	CS1-26"/10"-16"-Den.	10	46	16	16	24	1'-2	27	21 3/4	21.6	529	34.4	573	70.6	661
	CS1-26"/2"-24"-Den.	2	30 1/8	24	24	28	6	19	13 3/4	32.4	397	51.7	419	106	441
	CS1-26"/3"-24"-Den.	3	32 1/8	24	24	30	7	20	15 3/4	32.4	441	51.7	463	106	507
	CS1-26"/4"-24"-Den.	4	34 1/16	24	24	30	8	21	15 3/4	32.4	485	51.7	507	106	551
	CS1-26"/5"-24"-Den.	5	36 1/16	24	24	32	9	22	17 3/4	32.4	529	51.7	573	106	617
	CS1-26"/6"-24"-Den.	6	38 1/16	24	24	32	10	23	17 3/4	32.4	573	51.7	617	106	683

Pipe Size 28" / 700 mm (OD 28")	CS1-28"/2"-16"-Den.	2	32 1/8	16	16	20	6	20	15 3/4	23.2	287	37.1	309	76.0	309
	CS1-28"/3"-16"-Den.	3	34 1/8	16	16	22	7	21	15 3/4	23.2	309	37.1	331	76.0	353
	CS1-28"/4"-16"-Den.	4	36 1/16	16	16	22	8	22	17 3/4	23.2	353	37.1	375	76.0	397
	CS1-28"/5"-16"-Den.	5	38 1/16	16	16	24	9	23	17 3/4	23.2	375	37.1	397	76.0	441
	CS1-28"/6"-16"-Den.	6	40 1/16	16	16	24	10	24	19 3/4	23.2	419	37.1	441	76.0	507
	CS1-28"/8"-16"-Den.	8	44	16	16	24	1'-0	26	21 3/4	23.2	485	37.1	529	76.0	595
	CS1-28"/10"-16"-Den.	10	48	16	16	24	1'-2	28	23 1/2	23.2	551	37.1	595	76.0	705
	CS1-28"/2"-24"-Den.	2	32 1/8	24	24	28	6	20	15 3/4	34.8	441	55.8	441	114	463
	CS1-28"/3"-24"-Den.	3	34 1/8	24	24	30	7	21	15 3/4	34.8	463	55.8	485	114	529
	CS1-28"/4"-24"-Den.	4	36 1/16	24	24	30	8	22	17 3/4	34.8	529	55.8	551	114	595
	CS1-28"/5"-24"-Den.	5	38 1/16	24	24	32	9	23	17 3/4	34.8	551	55.8	595	114	639
	CS1-28"/6"-24"-Den.	6	40 1/16	24	24	32	10	24	19 3/4	34.8	617	55.8	639	114	728

SUPPORT TYPE CS1 (RESTING / GUIDE)



Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

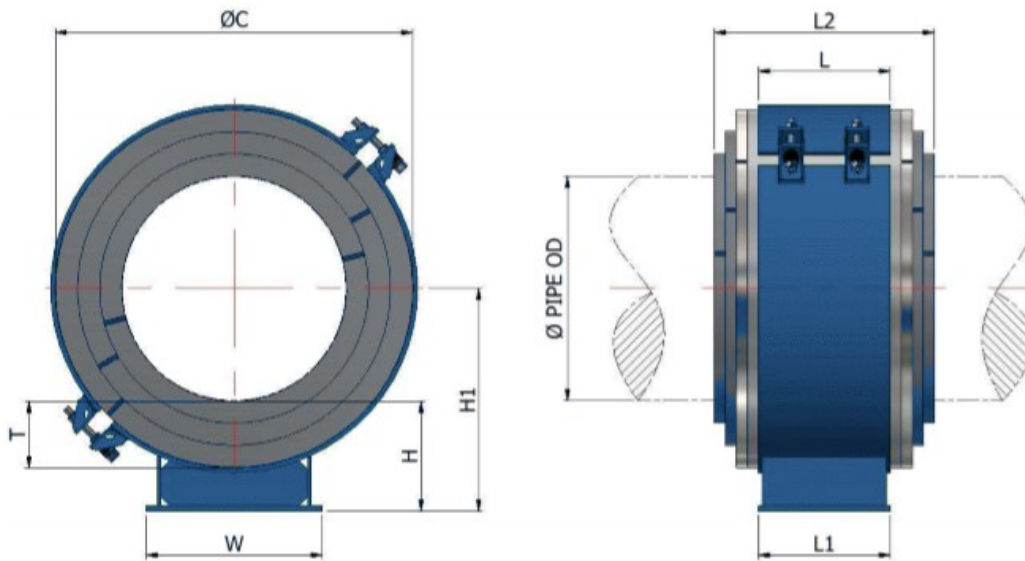
Pipe Size 30" / 750 mm (OD 30")	CS1-30"/2"-20"-Den.	2	34 1/8	20	20	24	6	21	15 3/4	31.0	375	49.7	397	102	419
	CS1-30"/3"-20"-Den.	3	36 1/8	20	20	26	7	22	17 3/4	31.0	419	49.7	441	102	485
	CS1-30"/4"-20"-Den.	4	38 1/8	20	20	26	8	23	17 3/4	31.0	463	49.7	485	102	529
	CS1-30"/5"-20"-Den.	5	40 1/16	20	20	28	9	24	19 3/4	31.0	507	49.7	529	102	573
	CS1-30"/6"-20"-Den.	6	42 1/16	20	20	28	10	25	19 3/4	31.0	529	49.7	573	102	639
	CS1-30"/8"-20"-Den.	8	46 1/16	20	20	28	1'-0	27	21 3/4	31.0	617	49.7	661	102	750
	CS1-30"/10"-20"-Den.	10	50	20	20	28	1'-2	29	23 1/2	31.0	705	49.7	772	102	882
	CS1-30"/2"-30"-Den.	2	34 1/8	30	30	34	6	21	15 3/4	46.8	551	74.6	573	153	617
	CS1-30"/3"-30"-Den.	3	36 1/8	30	30	36	7	22	17 3/4	46.8	617	74.6	639	153	683
	CS1-30"/4"-30"-Den.	4	38 1/8	30	30	36	8	23	17 3/4	46.8	661	74.6	683	153	750
	CS1-30"/5"-30"-Den.	5	40 1/16	30	30	38	9	24	19 3/4	46.8	728	74.6	772	153	838
	CS1-30"/6"-30"-Den.	6	42 1/16	30	30	38	10	25	19 3/4	46.8	772	74.6	816	153	926

Pipe Size 32" / 800 mm (OD 32")	CS1-32"/2"-20"-Den.	2	36 1/8	20	20	24	6	22	17 3/4	33.3	419	53.1	419	109	441
	CS1-32"/3"-20"-Den.	3	38 1/8	20	20	26	7	23	17 3/4	33.3	441	53.1	463	109	485
	CS1-32"/4"-20"-Den.	4	40 1/8	20	20	26	8	24	19 3/4	33.3	485	53.1	507	109	551
	CS1-32"/5"-20"-Den.	5	42 1/16	20	20	28	9	25	19 3/4	33.3	529	53.1	551	109	617
	CS1-32"/6"-20"-Den.	6	44 1/16	20	20	28	10	26	21 3/4	33.3	573	53.1	617	109	683
	CS1-32"/8"-20"-Den.	8	48 1/16	20	20	28	1'-0	28	23 1/2	33.3	661	53.1	705	109	794
	CS1-32"/10"-20"-Den.	10	52	20	20	28	1'-2	30	25 1/2	33.3	750	53.1	816	109	926
	CS1-32"/2"-30"-Den.	2	36 1/8	30	30	34	6	22	17 3/4	49.7	595	79.6	617	163	661
	CS1-32"/3"-30"-Den.	3	38 1/8	30	30	36	7	23	17 3/4	49.7	661	79.6	683	163	728
	CS1-32"/4"-30"-Den.	4	40 1/8	30	30	36	8	24	19 3/4	49.7	705	79.6	750	163	816
	CS1-32"/5"-30"-Den.	5	42 1/16	30	30	38	9	25	19 3/4	49.7	772	79.6	816	163	882
	CS1-32"/6"-30"-Den.	6	44 1/16	30	30	38	10	26	21 3/4	49.7	838	79.6	882	163	992

Pipe Size 34" / 850 mm (OD 34")	CS1-34"/2"-20"-Den.	2	38 1/8	20	20	24	6	23	17 3/4	35.3	419	56.4	441	115	463
	CS1-34"/3"-20"-Den.	3	40 1/8	20	20	26	7	24	19 3/4	35.3	485	56.4	485	115	529
	CS1-34"/4"-20"-Den.	4	42 1/8	20	20	26	8	25	19 3/4	35.3	507	56.4	529	115	573
	CS1-34"/5"-20"-Den.	5	44 1/8	20	20	28	9	26	21 3/4	35.3	551	56.4	595	115	639
	CS1-34"/6"-20"-Den.	6	46 1/16	20	20	28	10	27	21 3/4	35.3	595	56.4	639	115	705
	CS1-34"/8"-20"-Den.	8	50 1/16	20	20	28	1'-0	29	23 1/2	35.3	683	56.4	728	115	838
	CS1-34"/10"-20"-Den.	10	54	20	20	28	1'-2	31	25 1/2	35.3	772	56.4	838	115	970
	CS1-34"/2"-30"-Den.	2	38 1/8	30	30	34	6	23	17 3/4	52.8	639	84.5	639	173	683
	CS1-34"/3"-30"-Den.	3	40 1/8	30	30	36	7	24	19 3/4	52.8	683	84.5	728	173	772
	CS1-34"/4"-30"-Den.	4	42 1/8	30	30	36	8	25	19 3/4	52.8	750	84.5	772	173	838
	CS1-34"/5"-30"-Den.	5	44 1/8	30	30	38	9	26	21 3/4	52.8	816	84.5	860	173	948
	CS1-34"/6"-30"-Den.	6	46 1/16	30	30	38	10	27	21 3/4	52.8	860	84.5	926	173	1014

	CS1-34"/8"-30"-Den.	8	50 1/16	30	30	38	1'-0	29	23 1/2	52.8	992	84.5	1058	173	1213
	CS1-34"/10"-30"-Den.	10	54	30	30	38	1'-2	31	25 1/2	52.8	1124	84.5	1213	173	1389

SUPPORT TYPE CS1 (RESTING / GUIDE)



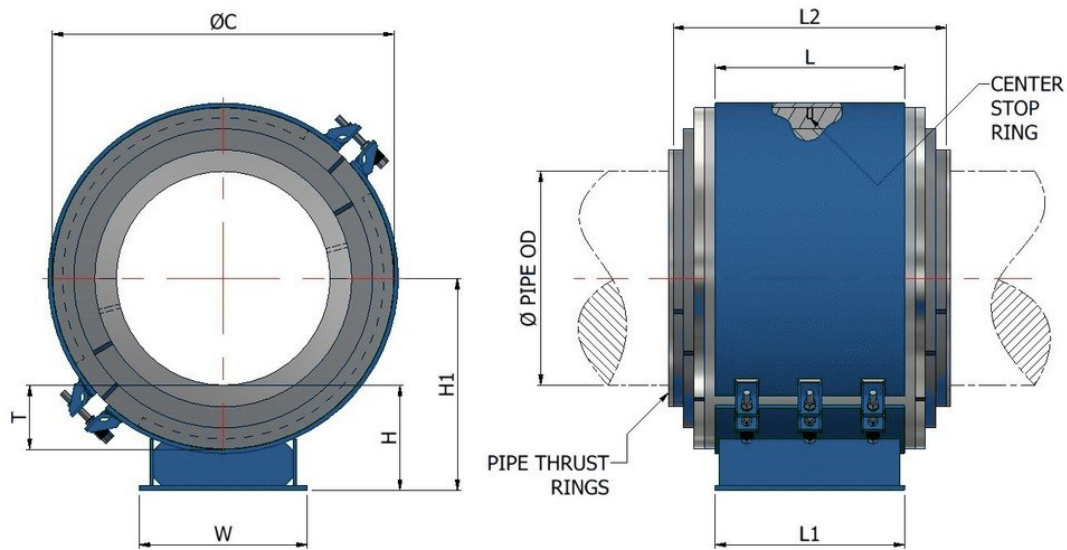
Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

Pipe Size 36" / 900 mm (OD 36")	CS1-36"/2"-20"-Den.	2	40 1/8	20	20	24	6	24	19 3/4	37.3	463	59.6	463	122	485
	CS1-36"/3"-20"-Den.	3	42 1/8	20	20	26	7	25	19 3/4	37.3	485	59.6	507	122	551
	CS1-36"/4"-20"-Den.	4	44 1/8	20	20	26	8	26	21 3/4	37.3	529	59.6	573	122	617
	CS1-36"/5"-20"-Den.	5	46 1/8	20	20	28	9	27	21 3/4	37.3	573	59.6	617	122	661
	CS1-36"/6"-20"-Den.	6	48 1/16	20	20	28	10	28	23 1/2	37.3	617	59.6	661	122	750
	CS1-36"/8"-20"-Den.	8	52 1/16	20	20	28	1'-0	30	25 1/2	37.3	705	59.6	772	122	882
	CS1-36"/10"-20"-Den.	10	56	20	20	28	1'-2	32	27 1/2	37.3	816	59.6	882	122	1014
	CS1-36"/2"-30"-Den.	2	40 1/8	30	30	34	6	24	19 3/4	56.0	661	89.5	683	183	728
	CS1-36"/3"-30"-Den.	3	42 1/8	30	30	36	7	25	19 3/4	56.0	728	89.5	750	183	816
	CS1-36"/4"-30"-Den.	4	44 1/8	30	30	36	8	26	21 3/4	56.0	794	89.5	816	183	882
	CS1-36"/5"-30"-Den.	5	46 1/8	30	30	38	9	27	21 3/4	56.0	838	89.5	882	183	970
	CS1-36"/6"-30"-Den.	6	48 1/16	30	30	38	10	28	23 1/2	56.0	904	89.5	970	183	1080

Pipe Size 38" / 950 mm (OD 38")	CS1-38"/2"-20"-Den.	2	42 3/16	20	20	24	6	25	19 3/4	39.3	463	62.9	485	129	529
	CS1-38"/3"-20"-Den.	3	44 3/16	20	20	26	7	26	21 3/4	39.3	529	62.9	529	129	595
	CS1-38"/4"-20"-Den.	4	46 3/16	20	20	26	8	27	21 3/4	39.3	551	62.9	573	129	639
	CS1-38"/5"-20"-Den.	5	48 1/8	20	20	28	9	28	23 1/2	39.3	617	62.9	639	129	705
	CS1-38"/6"-20"-Den.	6	50 1/8	20	20	28	10	29	23 1/2	39.3	639	62.9	683	129	772
	CS1-38"/8"-20"-Den.	8	54 1/8	20	20	28	1'-0	31	25 1/2	39.3	728	62.9	794	129	904
	CS1-38"/10"-20"-Den.	10	58 1/16	20	20	28	1'-2	33	27 1/2	39.3	838	62.9	904	129	1058
	CS1-38"/2"-30"-Den.	2	42 3/16	30	30	34	6	25	19 3/4	59.1	705	94.4	705	193	772
	CS1-38"/3"-30"-Den.	3	44 3/16	30	30	36	7	26	21 3/4	59.1	772	94.4	794	193	860
	CS1-38"/4"-30"-Den.	4	46 3/16	30	30	36	8	27	21 3/4	59.1	816	94.4	860	193	948
	CS1-38"/5"-30"-Den.	5	48 1/8	30	30	38	9	28	23 1/2	59.1	882	94.4	926	193	1036
	CS1-38"/6"-30"-Den.	6	50 1/8	30	30	38	10	29	23 1/2	59.1	948	94.4	992	193	1124

Pipe Size 40" / 1000 mm (OD 40")	CS1-40"/2"-20"-Den.	2	44 3/16	20	20	24	6	26	21 3/4	41.6	507	66.3	507	136	551
	CS1-40"/3"-20"-Den.	3	46 3/16	20	20	26	7	27	21 3/4	41.6	529	66.3	551	136	617
	CS1-40"/4"-20"-Den.	4	48 3/16	20	20	26	8	28	23 1/2	41.6	595	66.3	617	136	683
	CS1-40"/5"-20"-Den.	5	50 3/16	20	20	28	9	29	23 1/2	41.6	617	66.3	661	136	750
	CS1-40"/6"-20"-Den.	6	52 1/8	20	20	28	10	30	25 1/2	41.6	683	66.3	728	136	816
	CS1-40"/8"-20"-Den.	8	56 1/8	20	20	28	1'-0	32	27 1/2	41.6	772	66.3	838	136	948
	CS1-40"/10"-20"-Den.	10	60 1/16	20	20	28	1'-2	34	29 1/2	41.6	860	66.3	948	136	1102
	CS1-40"/2"-30"-Den.	2	44 3/16	30	30	34	6	26	21 3/4	62.3	728	99.4	750	203	816
	CS1-40"/3"-30"-Den.	3	46 3/16	30	30	36	7	27	21 3/4	62.3	794	99.4	816	203	882
	CS1-40"/4"-30"-Den.	4	48 3/16	30	30	36	8	28	23 1/2	62.3	860	99.4	904	203	992
	CS1-40"/5"-30"-Den.	5	50 3/16	30	30	38	9	29	23 1/2	62.3	904	99.4	970	203	1080
	CS1-40"/6"-30"-Den.	6	52 1/8	30	30	38	10	30	25 1/2	62.3	992	99.4	1058	203	1190

SUPPORT TYPE CA1 (LINE STOP / FIXED POINT)



Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

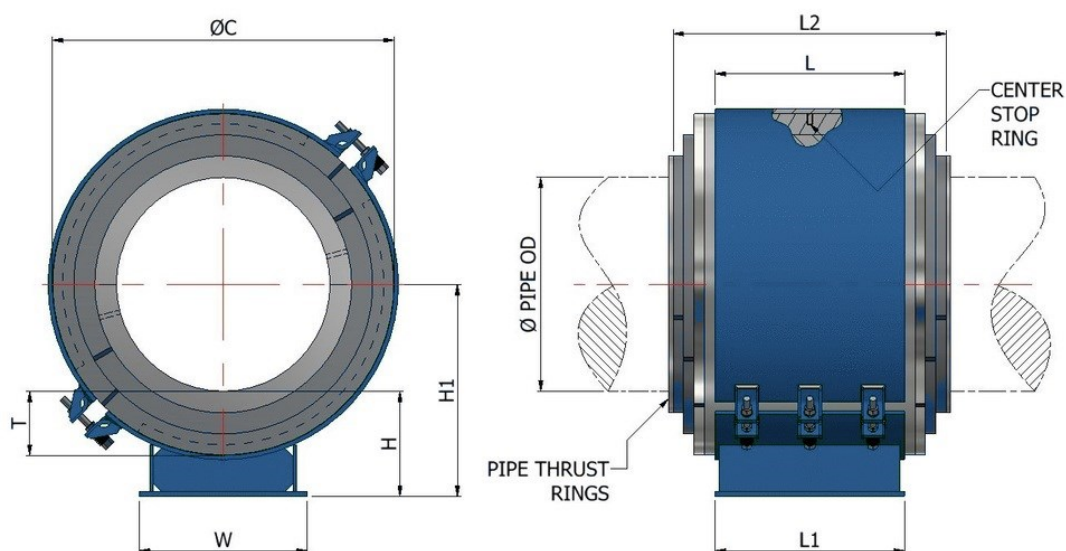
Pipe Size 0.5" / 15 mm (OD 0.84")	CS1-0.5"/1"-6"-Den.	1	2 7/8	6	6	10	3	3 7/16	2 1/4	0.26	9	0.42	9	0.85	9
	CS1-0.5"/2"-6"-Den.	2	4 13/16	6	6	10	4	4 7/16	3 1/4	0.26	13	0.42	13	0.85	14
	CS1-0.5"/3"-6"-Den.	3	6 13/16	6	6	12	5	5 7/16	4	0.26	17	0.42	18	0.85	19
	CS1-0.5"/4"-6"-Den.	4	8 13/16	6	6	12	6	6 7/16	4	0.26	21	0.42	22	0.85	24
	CS1-0.5"/1"-12"-Den.	1	2 7/8	12	12	16	3	3 7/16	2 1/4	0.52	15	0.83	15	1.71	16
	CS1-0.5"/2"-12"-Den.	2	4 13/16	12	12	16	4	4 7/16	3 1/4	0.52	22	0.83	22	1.71	24
	CS1-0.5"/3"-12"-Den.	3	6 13/16	12	12	18	5	5 7/16	4	0.52	31	0.83	31	1.71	33
	CS1-0.5"/4"-12"-Den.	4	8 13/16	12	12	18	6	6 7/16	4	0.52	37	0.83	40	1.71	44

Pipe Size 0.75" / 20 mm (OD 1.05")	CS1-0.75"/1"-6"-Den.	1	3 1/16	6	6	10	3	3 1/2	2 1/4	0.33	9	0.52	9	1.07	10
	CS1-0.75"/2"-6"-Den.	2	5 1/16	6	6	10	4	4 1/2	3 1/4	0.33	13	0.52	14	1.07	15
	CS1-0.75"/3"-6"-Den.	3	7 1/16	6	6	12	5	5 1/2	4	0.33	17	0.52	19	1.07	20
	CS1-0.75"/4"-6"-Den.	4	9 1/16	6	6	12	6	6 1/2	4	0.33	22	0.52	22	1.07	26
	CS1-0.75"/1"-12"-Den.	1	3 1/16	12	12	16	3	3 1/2	2 1/4	0.65	16	1.05	16	2.14	17
	CS1-0.75"/2"-12"-Den.	2	5 1/16	12	12	16	4	4 1/2	3 1/4	0.65	24	1.05	24	2.14	26
	CS1-0.75"/3"-12"-Den.	3	7 1/16	12	12	18	5	5 1/2	4	0.65	31	1.05	33	2.14	35
	CS1-0.75"/4"-12"-Den.	4	9 1/16	12	12	18	6	6 1/2	4	0.65	37	1.05	42	2.14	44

Pipe Size 1" / 25 mm (OD 1.32")	CS1-1"/1"-6"-Den.	1	3 3/8	6	6	10	3	3 11/16	2 1/4	0.41	10	0.66	10	1.35	10
	CS1-1"/2"-6"-Den.	2	5 3/8	6	6	10	4	4 11/16	3 1/4	0.41	14	0.66	14	1.35	15
	CS1-1"/3"-6"-Den.	3	7 5/16	6	6	12	5	5 11/16	4	0.41	18	0.66	19	1.35	21
	CS1-1"/4"-6"-Den.	4	9 5/16	6	6	12	6	6 11/16	4 3/4	0.41	24	0.66	24	1.35	26
	CS1-1"/5"-6"-Den.	5	11 5/16	6	6	14	7	7 11/16	4 3/4	0.41	29	0.66	31	1.35	35
	CS1-1"/1"-12"-Den.	1	3 3/8	12	12	16	3	3 11/16	2 1/4	0.83	17	1.32	17	2.70	18
	CS1-1"/2"-12"-Den.	2	5 3/8	12	12	16	4	4 11/16	3 1/4	0.83	24	1.32	24	2.70	26
	CS1-1"/3"-12"-Den.	3	7 5/16	12	12	18	5	5 11/16	4	0.83	33	1.32	33	2.70	37
	CS1-1"/4"-12"-Den.	4	9 5/16	12	12	18	6	6 11/16	4 3/4	0.83	42	1.32	44	2.70	49
	CS1-1"/5"-12"-Den.	5	11 5/16	12	12	20	7	7 11/16	4 3/4	0.83	51	1.32	55	2.70	60

Pipe Size 1.5" / 40 mm (OD 1.9")	CS1-1.5"/1"-6"-Den.	1	3 15/16	6	6	10	3	3 15/16	2 1/4	0.59	11	0.94	11	1.93	12
	CS1-1.5"/2"-6"-Den.	2	5 15/16	6	6	10	4	4 15/16	3 1/4	0.59	15	0.94	15	1.93	17
	CS1-1.5"/3"-6"-Den.	3	7 15/16	6	6	12	5	5 15/16	4	0.59	19	0.94	21	1.93	22
	CS1-1.5"/4"-6"-Den.	4	9 7/8	6	6	12	6	6 15/16	4 3/4	0.59	24	0.94	26	1.93	29
	CS1-1.5"/5"-6"-Den.	5	11 7/8	6	6	14	7	7 15/16	6	0.59	31	0.94	33	1.93	37
	CS1-1.5"/1"-12"-Den.	1	3 15/16	12	12	16	3	3 15/16	2 1/4	1.18	19	1.89	19	3.87	20
	CS1-1.5"/2"-12"-Den.	2	5 15/16	12	12	16	4	4 15/16	3 1/4	1.18	26	1.89	26	3.87	29
	CS1-1.5"/3"-12"-Den.	3	7 15/16	12	12	18	5	5 15/16	4	1.18	35	1.89	37	3.87	40
	CS1-1.5"/4"-12"-Den.	4	9 7/8	12	12	18	6	6 15/16	4 3/4	1.18	44	1.89	46	3.87	51
	CS1-1.5"/5"-12"-Den.	5	11 7/8	12	12	20	7	7 15/16	6	1.18	55	1.89	60	3.87	66

SUPPORT TYPE CA1 (LINE STOP / FIXED POINT)



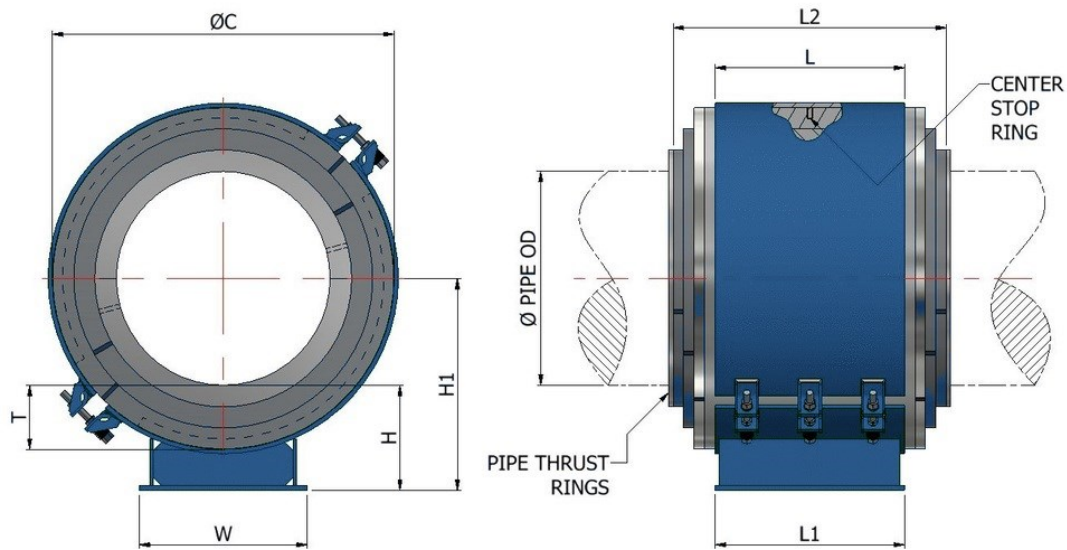
Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

Pipe Size 2" / 50 mm (OD 2.38")	CS1-2"/1"-6"-Den.	1	4 7/16	6	6	10	3	4 3/16	3 1/4	0.74	12	1.18	13	2.41	13
	CS1-2"/2"-6"-Den.	2	6 7/16	6	6	10	4	5 3/16	3 1/4	0.74	16	1.18	16	2.41	18
	CS1-2"/3"-6"-Den.	3	8 3/8	6	6	12	5	6 3/16	4 3/4	0.74	22	1.18	22	2.41	24
	CS1-2"/4"-6"-Den.	4	10 3/8	6	6	12	6	7 3/16	4 3/4	0.74	26	1.18	29	2.41	31
	CS1-2"/5"-6"-Den.	5	12 3/8	6	6	14	7	8 3/16	6	0.74	33	1.18	35	2.41	40
	CS1-2"/6"-6"-Den.	6	14 3/8	6	6	14	8	9 3/16	6	0.74	37	1.18	42	2.41	49
	CS1-2"/1"-12"-Den.	1	4 7/16	12	12	16	3	4 3/16	3 1/4	1.48	21	2.36	22	4.83	22
	CS1-2"/2"-12"-Den.	2	6 7/16	12	12	16	4	5 3/16	3 1/4	1.48	29	2.36	29	4.83	31
	CS1-2"/3"-12"-Den.	3	8 3/8	12	12	18	5	6 3/16	4 3/4	1.48	40	2.36	40	4.83	44
	CS1-2"/4"-12"-Den.	4	10 3/8	12	12	18	6	7 3/16	4 3/4	1.48	46	2.36	49	4.83	53
	CS1-2"/5"-12"-Den.	5	12 3/8	12	12	20	7	8 3/16	6	1.48	57	2.36	62	4.83	68
	CS1-2"/6"-12"-Den.	6	14 3/8	12	12	20	8	9 3/16	6	1.48	68	2.36	73	4.83	82

Pipe Size 3" / 80 mm (OD 3.5")	CS1-3"/1"-6"-Den.	1	5 9/16	6	6	10	3	4 3/4	3 1/4	1.09	16	1.74	16	3.55	17
	CS1-3"/2"-6"-Den.	2	7 9/16	6	6	10	4	5 3/4	4 3/4	1.09	21	1.74	22	3.55	24
	CS1-3"/3"-6"-Den.	3	9 9/16	6	6	12	5	6 3/4	4 3/4	1.09	26	1.74	26	3.55	29
	CS1-3"/4"-6"-Den.	4	11 1/2	6	6	12	6	7 3/4	6	1.09	31	1.74	33	3.55	37
	CS1-3"/5"-6"-Den.	5	13 1/2	6	6	14	7	8 3/4	6	1.09	37	1.74	40	3.55	44
	CS1-3"/6"-6"-Den.	6	15 1/2	6	6	14	8	9 3/4	7 3/4	1.09	46	1.74	49	3.55	55
	CS1-3"/1"-12"-Den.	1	5 9/16	12	12	16	3	4 3/4	3 1/4	2.18	26	3.48	29	7.13	31
	CS1-3"/2"-12"-Den.	2	7 9/16	12	12	16	4	5 3/4	4 3/4	2.18	37	3.48	37	7.13	40
	CS1-3"/3"-12"-Den.	3	9 9/16	12	12	18	5	6 3/4	4 3/4	2.18	44	3.48	46	7.13	51
	CS1-3"/4"-12"-Den.	4	11 1/2	12	12	18	6	7 3/4	6	2.18	55	3.48	57	7.13	64
	CS1-3"/5"-12"-Den.	5	13 1/2	12	12	20	7	8 3/4	6	2.18	64	3.48	68	7.13	77
	CS1-3"/6"-12"-Den.	6	15 1/2	12	12	20	8	9 3/4	7 3/4	2.18	79	3.48	84	7.13	95

Pipe Size 4" / 100 mm (OD 4.5")	CS1-4"/1"-8"-Den.	1	6 9/16	8	8	12	3	5 1/4	3 1/4	1.87	22	2.99	22	6.11	24
	CS1-4"/2"-8"-Den.	2	8 9/16	8	8	12	4	6 1/4	4	1.87	29	2.99	29	6.11	33
	CS1-4"/3"-8"-Den.	3	10 1/2	8	8	14	5	7 1/4	4 3/4	1.87	35	2.99	35	6.11	40
	CS1-4"/4"-8"-Den.	4	12 1/2	8	8	14	6	8 1/4	6	1.87	42	2.99	44	6.11	49
	CS1-4"/5"-8"-Den.	5	14 1/2	8	8	16	7	9 1/4	6	1.87	49	2.99	53	6.11	60
	CS1-4"/6"-8"-Den.	6	16 1/2	8	8	16	8	10 1/4	7 3/4	1.87	60	2.99	64	6.11	73
	CS1-4"/8"-8"-Den.	8	20 7/16	8	8	16	10	12 1/4	9 3/4	1.87	79	2.99	88	6.11	101
	CS1-4"/1"-16"-Den.	1	6 9/16	16	16	20	3	5 1/4	4	3.73	40	5.96	42	12.2	44
	CS1-4"/2"-16"-Den.	2	8 9/16	16	16	20	4	6 1/4	4	3.73	49	5.96	53	12.2	57
	CS1-4"/3"-16"-Den.	3	10 1/2	16	16	22	5	7 1/4	4 3/4	3.73	62	5.96	64	12.2	68
	CS1-4"/4"-16"-Den.	4	12 1/2	16	16	22	6	8 1/4	6	3.73	75	5.96	79	12.2	88
	CS1-4"/5"-16"-Den.	5	14 1/2	16	16	24	7	9 1/4	6	3.73	88	5.96	95	12.2	106
	CS1-4"/6"-16"-Den.	6	16 1/2	16	16	24	8	10 1/4	7 3/4	3.73	106	5.96	115	12.2	130
	CS1-4"/8"-16"-Den.	8	20 7/16	16	16	24	10	12 1/4	9 3/4	3.73	141	5.96	154	12.2	176

SUPPORT TYPE CA1 (LINE STOP / FIXED POINT)



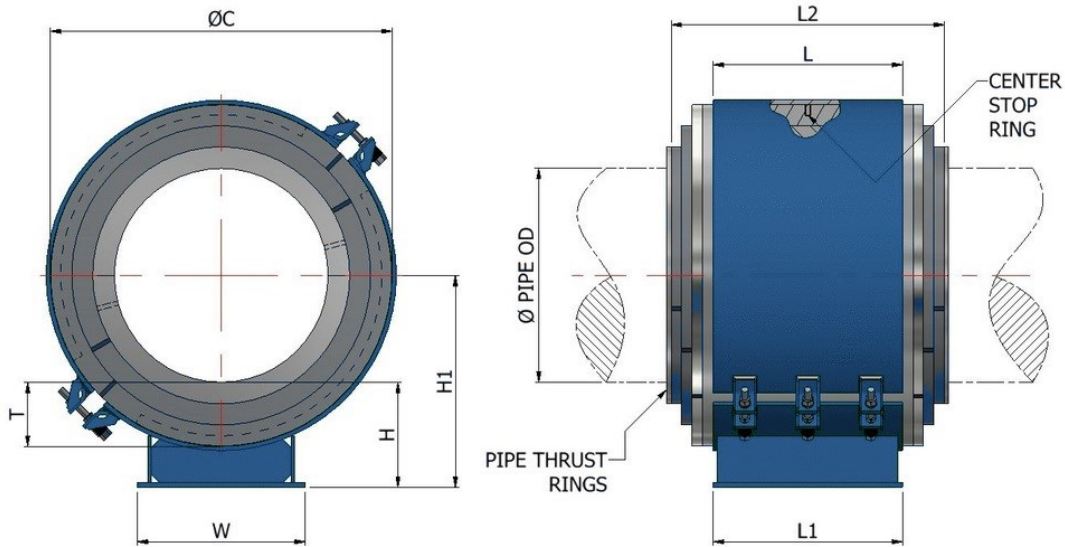
Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

Pipe Size 6" / 150 mm (OD 6.63")	CS1-6"/1"-8"-Den.	1	8 11/16	8	8	12	3	6 5/16	4	2.74	31	4.38	31	8.99	35
	CS1-6"/2"-8"-Den.	2	10 11/16	8	8	12	4	7 5/16	4 3/4	2.74	40	4.38	40	8.99	42
	CS1-6"/3"-8"-Den.	3	12 5/8	8	8	14	5	8 5/16	6	2.74	49	4.38	51	8.99	53
	CS1-6"/4"-8"-Den.	4	14 5/8	8	8	14	6	9 5/16	6 1/4	2.74	57	4.38	60	8.99	66
	CS1-6"/5"-8"-Den.	5	16 5/8	8	8	16	7	10 5/16	7 3/4	2.74	68	4.38	73	8.99	79
	CS1-6"/6"-8"-Den.	6	18 5/8	8	8	16	8	11 5/16	7 3/4	2.74	77	4.38	84	8.99	95
	CS1-6"/8"-8"-Den.	8	22 9/16	8	8	16	10	13 5/16	9 3/4	2.74	99	4.38	108	8.99	126
	CS1-6"/1"-16"-Den.	1	8 11/16	16	16	20	3	6 5/16	4 3/4	5.51	60	8.79	60	18.0	60
	CS1-6"/2"-16"-Den.	2	10 11/16	16	16	20	4	7 5/16	4 3/4	5.51	71	8.79	73	18.0	77
	CS1-6"/3"-16"-Den.	3	12 5/8	16	16	22	5	8 5/16	6	5.51	88	8.79	90	18.0	97
	CS1-6"/4"-16"-Den.	4	14 5/8	16	16	22	6	9 5/16	6 1/4	5.51	104	8.79	108	18.0	117
	CS1-6"/5"-16"-Den.	5	16 5/8	16	16	24	7	10 5/16	7 3/4	5.51	123	8.79	130	18.0	143

Pipe Size 8" / 200 mm (OD 8.63")	CS1-8"/1"-8"-Den.	1	10 11/16	8	8	12	4	8 5/16	5 1/2	3.57	40	5.71	40	11.7	42
	CS1-8"/2"-8"-Den.	2	12 11/16	8	8	12	5	9 5/16	6 1/4	3.57	49	5.71	49	11.7	53
	CS1-8"/3"-8"-Den.	3	14 5/8	8	8	14	6	10 5/16	6 1/4	3.57	55	5.71	60	11.7	64
	CS1-8"/4"-8"-Den.	4	16 5/8	8	8	14	7	11 5/16	7 3/4	3.57	66	5.71	71	11.7	77
	CS1-8"/5"-8"-Den.	5	18 5/8	8	8	16	8	12 5/16	7 3/4	3.57	77	5.71	82	11.7	90
	CS1-8"/6"-8"-Den.	6	20 5/8	8	8	16	9	13 5/16	9 3/4	3.57	90	5.71	97	11.7	110
	CS1-8"/8"-8"-Den.	8	24 9/16	8	8	16	11	15 5/16	11 3/4	3.57	115	5.71	126	11.7	146
	CS1-8"/1"-16"-Den.	1	10 11/16	16	16	20	4	8 5/16	5 1/2	7.15	73	11.4	73	23.4	75
	CS1-8"/2"-16"-Den.	2	12 11/16	16	16	20	5	9 5/16	6 1/4	7.15	88	11.4	90	23.4	95
	CS1-8"/3"-16"-Den.	3	14 5/8	16	16	22	6	10 5/16	6 1/4	7.15	104	11.4	108	23.4	115
	CS1-8"/4"-16"-Den.	4	16 5/8	16	16	22	7	11 5/16	7 3/4	7.15	121	11.4	128	23.4	139
	CS1-8"/5"-16"-Den.	5	18 5/8	16	16	24	8	12 5/16	7 3/4	7.15	139	11.4	148	23.4	163

Pipe Size 10" / 250 mm (OD 10.75")	CS1-10"/1"-12"-Den.	1	12 13/16	12	12	16	4	9 3/8	6 1/4	6.70	66	10.7	66	21.9	68
	CS1-10"/2"-12"-Den.	2	14 13/16	12	12	16	5	10 3/8	6 1/4	6.70	77	10.7	79	21.9	84
	CS1-10"/3"-12"-Den.	3	16 3/4	12	12	18	6	11 3/8	7 3/4	6.70	93	10.7	97	21.9	104
	CS1-10"/4"-12"-Den.	4	18 3/4	12	12	18	7	12 3/8	7 3/4	6.70	104	10.7	110	21.9	121
	CS1-10"/5"-12"-Den.	5	20 3/4	12	12	20	8	13 3/8	9 3/4	6.70	123	10.7	130	21.9	146
	CS1-10"/6"-12"-Den.	6	22 3/4	12	12	20	9	14 3/8	9 3/4	6.70	137	10.7	148	21.9	168
	CS1-10"/8"-12"-Den.	8	26 11/16	12	12	20	11	16 3/8	11 3/4	6.70	174	10.7	190	21.9	218
	CS1-10"/1"-20"-Den.	1	12 13/16	20	20	24	4	9 3/8	6 1/4	11.2	108	17.8	108	36.4	112
	CS1-10"/2"-20"-Den.	2	14 13/16	20	20	24	5	10 3/8	6 1/4	11.2	126	17.8	128	36.4	134
	CS1-10"/3"-20"-Den.	3	16 3/4	20	20	26	6	11 3/8	7 3/4	11.2	148	17.8	154	36.4	165
	CS1-10"/4"-20"-Den.	4	18 3/4	20	20	26	7	12 3/8	7 3/4	11.2	168	17.8	179	36.4	194
	CS1-10"/5"-20"-Den.	5	20 3/4	20	20	28	8	13 3/8	9 3/4	11.2	196	17.8	209	36.4	220

SUPPORT TYPE CA1 (LINE STOP / FIXED POINT)



Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

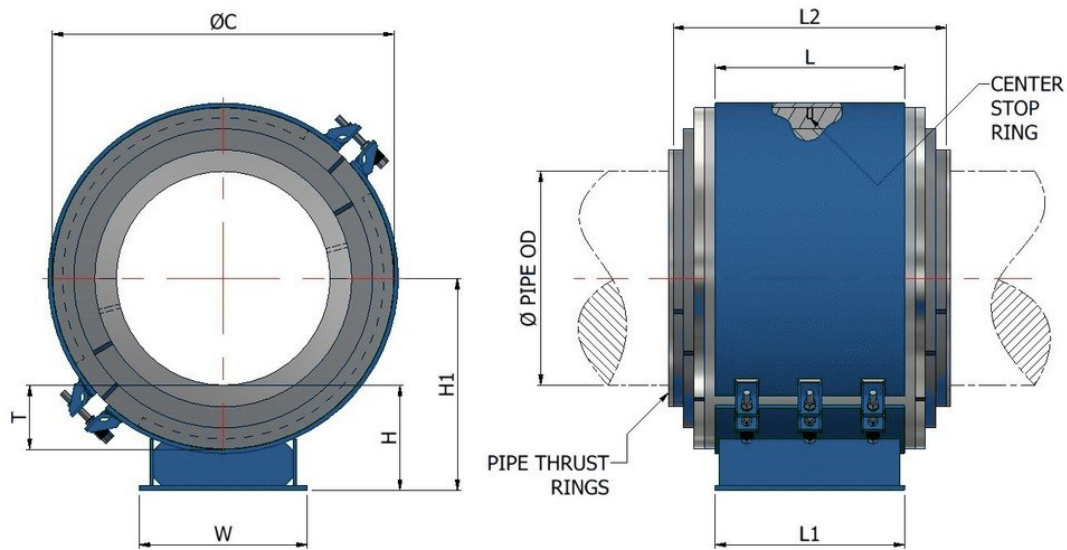
Pipe Size 12" / 300 mm (OD 12.75")	CS1-12"/1"-12"-Den.	1	14 13/16	12	12	16	4	10 3/8	6 1/4	7.94	93	12.7	93	25.9	97
	CS1-12"/2"-12"-Den.	2	16 13/16	12	12	16	5	11 3/8	7 3/4	7.94	108	12.7	112	25.9	117
	CS1-12"/3"-12"-Den.	3	18 13/16	12	12	18	6	12 3/8	7 3/4	7.94	123	12.7	128	25.9	137
	CS1-12"/4"-12"-Den.	4	20 3/4	12	12	18	7	13 3/8	9 3/4	7.94	141	12.7	150	25.9	161
	CS1-12"/5"-12"-Den.	5	22 3/4	12	12	20	8	14 3/8	9 3/4	7.94	159	12.7	168	25.9	183
	CS1-12"/6"-12"-Den.	6	24 3/4	12	12	20	9	15 3/8	11 3/4	7.94	183	12.7	194	25.9	216
	CS1-12"/8"-12"-Den.	8	28 11/16	12	12	20	11	17 3/8	13 3/4	7.94	220	12.7	243	25.9	265
	CS1-12"/1"-20"-Den.	1	14 13/16	20	20	24	4	10 3/8	6 1/4	13.2	150	21.1	152	43.2	159
	CS1-12"/2"-20"-Den.	2	16 13/16	20	20	24	5	11 3/8	7 3/4	13.2	176	21.1	181	43.2	187
	CS1-12"/3"-20"-Den.	3	18 13/16	20	20	26	6	12 3/8	7 3/4	13.2	198	21.1	205	43.2	218
	CS1-12"/4"-20"-Den.	4	20 3/4	20	20	26	7	13 3/8	9 3/4	13.2	220	21.1	243	43.2	265
	CS1-12"/5"-20"-Den.	5	22 3/4	20	20	28	8	14 3/8	9 3/4	13.2	265	21.1	265	43.2	287

Pipe Size 14" / 350 mm (OD 14")	CS1-14"/1"-12"-Den.	1	16 1/16	12	12	16	5	12	7 3/4	8.72	106	13.9	108	28.6	110
	CS1-14"/2"-12"-Den.	2	18 1/16	12	12	16	6	13	7 3/4	8.72	119	13.9	123	28.6	128
	CS1-14"/3"-12"-Den.	3	20 1/16	12	12	18	7	14	9 3/4	8.72	139	13.9	143	28.6	152
	CS1-14"/4"-12"-Den.	4	22 1/16	12	12	18	8	15	9 3/4	8.72	154	13.9	161	28.6	174
	CS1-14"/5"-12"-Den.	5	24	12	12	20	9	16	11 3/4	8.72	176	13.9	187	28.6	203
	CS1-14"/6"-12"-Den.	6	26	12	12	20	10	17	11 3/4	8.72	196	13.9	209	28.6	243
	CS1-14"/8"-12"-Den.	8	29 15/16	12	12	20	1'-0	19	13 3/4	8.72	243	13.9	265	28.6	287
	CS1-14"/1"-20"-Den.	1	16 1/16	20	20	24	5	12	7 3/4	14.5	172	23.2	174	47.4	176
	CS1-14"/2"-20"-Den.	2	18 1/16	20	20	24	6	13	7 3/4	14.5	194	23.2	198	47.4	205
	CS1-14"/3"-20"-Den.	3	20 1/16	20	20	26	7	14	9 3/4	14.5	220	23.2	220	47.4	243
	CS1-14"/4"-20"-Den.	4	22 1/16	20	20	26	8	15	9 3/4	14.5	243	23.2	265	47.4	287
	CS1-14"/5"-20"-Den.	5	24	20	20	28	9	16	11 3/4	14.5	287	23.2	287	47.4	331

Pipe Size 16" / 400 mm (OD 16")	CS1-16"/2"-12"-Den.	2	20 1/16	12	12	16	6	14	9 3/4	9.96	137	15.9	141	32.6	146
	CS1-16"/3"-12"-Den.	3	22 1/16	12	12	18	7	15	9 3/4	9.96	152	15.9	159	32.6	168
	CS1-16"/4"-12"-Den.	4	24 1/16	12	12	18	8	16	11 3/4	9.96	176	15.9	185	32.6	198
	CS1-16"/5"-12"-Den.	5	26	12	12	20	9	17	11 3/4	9.96	194	15.9	205	32.6	220
	CS1-16"/6"-12"-Den.	6	28	12	12	20	10	18	13 3/4	9.96	218	15.9	243	32.6	265
	CS1-16"/8"-12"-Den.	8	32	12	12	20	1'-0	20	15 3/4	9.96	265	15.9	287	32.6	309
	CS1-16"/10"-12"-Den.	10	35 15/16	12	12	20	1'-2	22	17 3/4	9.96	309	15.9	331	32.6	375
	CS1-16"/2"-20"-Den.	2	20 1/16	20	20	24	6	14	9 3/4	16.6	220	26.5	220	54.2	243
	CS1-16"/3"-20"-Den.	3	22 1/16	20	20	26	7	15	9 3/4	16.6	243	26.5	243	54.2	265
	CS1-16"/4"-20"-Den.	4	24 1/16	20	20	26	8	16	11 3/4	16.6	287	26.5	287	54.2	309
	CS1-16"/5"-20"-Den.	5	26	20	20	28	9	17	11 3/4	16.6	309	26.5	331	54.2	353
	CS1-16"/6"-20"-Den.	6	28	20	20	28	10	18	13 3/4	16.6	353	26.5	375	54.2	397

	CS1-16"/8"-20"-Den.	8	32	20	20	28	1'-0	20	15 3/4	16.6	419	26.5	441	54.2	485
	CS1-16"/10"-20"-Den.	10	35 15/16	20	20	28	1'-2	22	17 3/4	16.6	485	26.5	529	54.2	595

SUPPORT TYPE CA1 (LINE STOP / FIXED POINT)



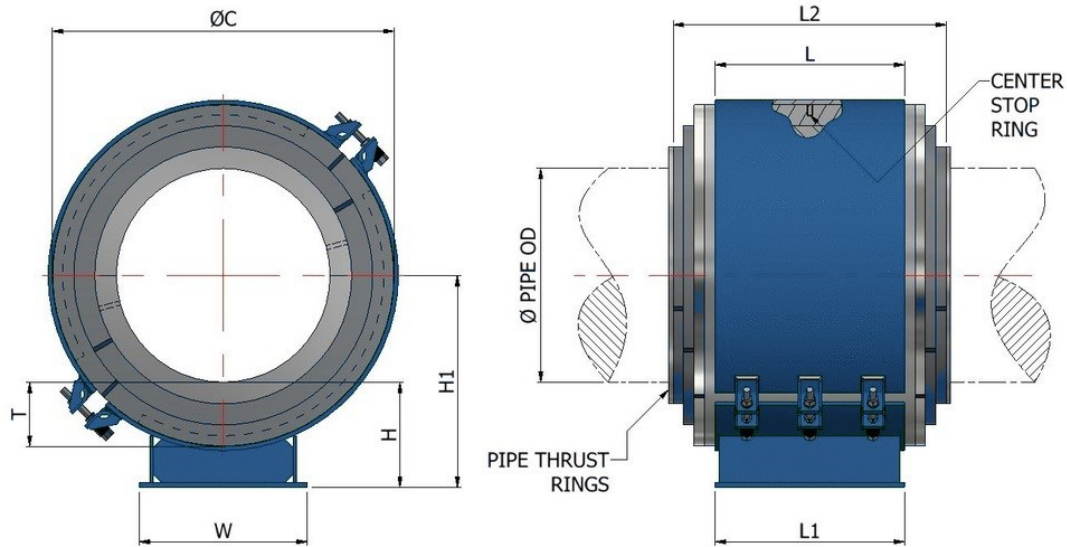
Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

Pipe Size 18" / 450 mm (OD 18")	CS1-18"/2"-12"-Den.	2	22 1/16	12	12	16	6	15	9 3/4	11.2	146	17.9	150	36.6	161
	CS1-18"/3"-12"-Den.	3	24 1/16	12	12	18	7	16	11 3/4	11.2	170	17.9	176	36.6	187
	CS1-18"/4"-12"-Den.	4	26 1/16	12	12	18	8	17	11 3/4	11.2	187	17.9	196	36.6	212
	CS1-18"/5"-12"-Den.	5	28 1/16	12	12	20	9	18	13 3/4	11.2	212	17.9	220	36.6	243
	CS1-18"/6"-12"-Den.	6	30	12	12	20	10	19	13 3/4	11.2	220	17.9	243	36.6	265
	CS1-18"/8"-12"-Den.	8	34	12	12	20	1'-0	21	15 3/4	11.2	265	17.9	287	36.6	331
	CS1-18"/10"-12"-Den.	10	37 15/16	12	12	20	1'-2	23	17 3/4	11.2	331	17.9	353	36.6	397
	CS1-18"/2"-20"-Den.	2	22 1/16	20	20	24	6	15	9 3/4	18.7	243	29.9	243	61.1	243
	CS1-18"/3"-20"-Den.	3	24 1/16	20	20	26	7	16	11 3/4	18.7	265	29.9	287	61.1	309
	CS1-18"/4"-20"-Den.	4	26 1/16	20	20	26	8	17	11 3/4	18.7	309	29.9	309	61.1	331
	CS1-18"/5"-20"-Den.	5	28 1/16	20	20	28	9	18	13 3/4	18.7	331	29.9	353	61.1	375
	CS1-18"/6"-20"-Den.	6	30	20	20	28	10	19	13 3/4	18.7	375	29.9	397	61.1	419

Pipe Size 20" / 500 mm (OD 20")	CS1-20"/2"-16"-Den.	2	24 1/16	16	16	20	6	16	11 3/4	16.6	212	26.5	218	54.2	220
	CS1-20"/3"-16"-Den.	3	26 1/16	16	16	22	7	17	11 3/4	16.6	243	26.5	243	54.2	265
	CS1-20"/4"-16"-Den.	4	28 1/16	16	16	22	8	18	13 3/4	16.6	265	26.5	265	54.2	287
	CS1-20"/5"-16"-Den.	5	30 1/16	16	16	24	9	19	13 3/4	16.6	287	26.5	309	54.2	331
	CS1-20"/6"-16"-Den.	6	32	16	16	24	10	20	15 3/4	16.6	309	26.5	331	54.2	375
	CS1-20"/8"-16"-Den.	8	36	16	16	24	1'-0	22	17 3/4	16.6	375	26.5	397	54.2	463
	CS1-20"/10"-16"-Den.	10	39 15/16	16	16	24	1'-2	24	19 3/4	16.6	441	26.5	485	54.2	551
	CS1-20"/2"-24"-Den.	2	24 1/16	24	24	28	6	16	11 3/4	25.0	309	39.8	331	81.4	331
	CS1-20"/3"-24"-Den.	3	26 1/16	24	24	30	7	17	11 3/4	25.0	353	39.8	353	81.4	375
	CS1-20"/4"-24"-Den.	4	28 1/16	24	24	30	8	18	13 3/4	25.0	397	39.8	397	81.4	441
	CS1-20"/5"-24"-Den.	5	30 1/16	24	24	32	9	19	13 3/4	25.0	419	39.8	441	81.4	485
	CS1-20"/6"-24"-Den.	6	32	24	24	32	10	20	15 3/4	25.0	463	39.8	507	81.4	551

Pipe Size 22" / 550 mm (OD 22")	CS1-22"/2"-16"-Den.	2	26 1/8	16	16	20	6	17	11 3/4	18.3	220	29.2	243	59.8	243
	CS1-22"/3"-16"-Den.	3	28 1/16	16	16	22	7	18	13 3/4	18.3	265	29.2	265	59.8	287
	CS1-22"/4"-16"-Den.	4	30 1/16	16	16	22	8	19	13 3/4	18.3	287	29.2	309	59.8	331
	CS1-22"/5"-16"-Den.	5	32 1/16	16	16	24	9	20	15 3/4	18.3	309	29.2	331	59.8	375
	CS1-22"/6"-16"-Den.	6	34 1/16	16	16	24	10	21	15 3/4	18.3	353	29.2	375	59.8	397
	CS1-22"/8"-16"-Den.	8	38	16	16	24	1'-0	23	17 3/4	18.3	397	29.2	441	59.8	485
	CS1-22"/10"-16"-Den.	10	41 15/16	16	16	24	1'-2	25	19 3/4	18.3	463	29.2	507	59.8	573
	CS1-22"/2"-24"-Den.	2	26 1/8	24	24	28	6	17	11 3/4	27.4	353	43.8	353	89.5	375
	CS1-22"/3"-24"-Den.	3	28 1/16	24	24	30	7	18	13 3/4	27.4	397	43.8	397	89.5	419
	CS1-22"/4"-24"-Den.	4	30 1/16	24	24	30	8	19	13 3/4	27.4	419	43.8	441	89.5	485
	CS1-22"/5"-24"-Den.	5	32 1/16	24	24	32	9	20	15 3/4	27.4	463	43.8	485	89.5	529
	CS1-22"/6"-24"-Den.	6	34 1/16	24	24	32	10	21	15 3/4	27.4	507	43.8	529	89.5	595

SUPPORT TYPE CA1 (LINE STOP / FIXED POINT)



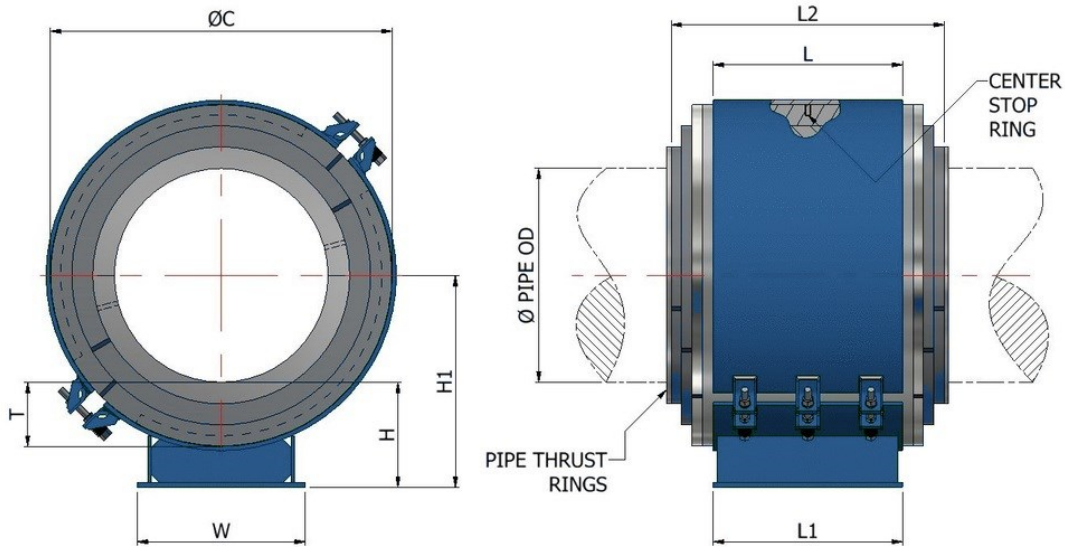
Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

Pipe Size 24" / 600 mm (OD 24")	CS1-24"/2"-16"-Den.	2	28 1/8	16	16	20	6	18	13 3/4	19.9	243	31.9	265	65.2	265
	CS1-24"/3"-16"-Den.	3	30 1/16	16	16	22	7	19	13 3/4	19.9	265	31.9	287	65.2	309
	CS1-24"/4"-16"-Den.	4	32 1/16	16	16	22	8	20	15 3/4	19.9	309	31.9	331	65.2	353
	CS1-24"/5"-16"-Den.	5	34 1/16	16	16	24	9	21	15 3/4	19.9	331	31.9	353	65.2	397
	CS1-24"/6"-16"-Den.	6	36 1/16	16	16	24	10	22	17 3/4	19.9	375	31.9	397	65.2	441
	CS1-24"/8"-16"-Den.	8	40	16	16	24	1'-0	24	19 3/4	19.9	441	31.9	463	65.2	529
	CS1-24"/10"-16"-Den.	10	44	16	16	24	1'-2	26	21 3/4	19.9	507	31.9	551	65.2	617
	CS1-24"/2"-24"-Den.	2	28 1/8	24	24	28	6	18	13 3/4	29.9	375	47.7	375	97.6	397
	CS1-24"/3"-24"-Den.	3	30 1/16	24	24	30	7	19	13 3/4	29.9	419	47.7	419	97.6	463
	CS1-24"/4"-24"-Den.	4	32 1/16	24	24	30	8	20	15 3/4	29.9	463	47.7	485	97.6	507
	CS1-24"/5"-24"-Den.	5	34 1/16	24	24	32	9	21	15 3/4	29.9	485	47.7	529	97.6	573
	CS1-24"/6"-24"-Den.	6	36 1/16	24	24	32	10	22	17 3/4	29.9	551	47.7	573	97.6	639
	CS1-24"/8"-24"-Den.	8	40	24	24	32	1'-0	24	19 3/4	29.9	639	47.7	683	97.6	750
	CS1-24"/10"-24"-Den.	10	44	24	24	32	1'-2	26	21 3/4	29.9	728	47.7	794	97.6	904

Pipe Size 26" / 650 mm (OD 26")	CS1-26"/2"-16"-Den.	2	30 1/8	16	16	20	6	19	13 3/4	21.6	265	34.4	287	70.6	287
	CS1-26"/3"-16"-Den.	3	32 1/8	16	16	22	7	20	15 3/4	21.6	309	34.4	309	70.6	331
	CS1-26"/4"-16"-Den.	4	34 1/16	16	16	22	8	21	15 3/4	21.6	331	34.4	353	70.6	375
	CS1-26"/5"-16"-Den.	5	36 1/16	16	16	24	9	22	17 3/4	21.6	353	34.4	375	70.6	419
	CS1-26"/6"-16"-Den.	6	38 1/16	16	16	24	10	23	17 3/4	21.6	397	34.4	419	70.6	463
	CS1-26"/8"-16"-Den.	8	42	16	16	24	1'-0	25	19 3/4	21.6	463	34.4	485	70.6	551
	CS1-26"/10"-16"-Den.	10	46	16	16	24	1'-2	27	21 3/4	21.6	529	34.4	573	70.6	661
	CS1-26"/2"-24"-Den.	2	30 1/8	24	24	28	6	19	13 3/4	32.4	397	51.7	419	106	441
	CS1-26"/3"-24"-Den.	3	32 1/8	24	24	30	7	20	15 3/4	32.4	441	51.7	463	106	507
	CS1-26"/4"-24"-Den.	4	34 1/16	24	24	30	8	21	15 3/4	32.4	485	51.7	507	106	551
	CS1-26"/5"-24"-Den.	5	36 1/16	24	24	32	9	22	17 3/4	32.4	529	51.7	573	106	617
	CS1-26"/6"-24"-Den.	6	38 1/16	24	24	32	10	23	17 3/4	32.4	573	51.7	617	106	683
	CS1-26"/8"-24"-Den.	8	42	24	24	32	1'-0	25	19 3/4	32.4	661	51.7	705	106	816
	CS1-26"/10"-24"-Den.	10	46	24	24	32	1'-2	27	21 3/4	32.4	772	51.7	816	106	948

Pipe Size 28" / 700 mm (OD 28")	CS1-28"/2"-16"-Den.	2	32 1/8	16	16	20	6	20	15 3/4	23.2	287	37.1	309	76.0	309
	CS1-28"/3"-16"-Den.	3	34 1/8	16	16	22	7	21	15 3/4	23.2	309	37.1	331	76.0	353
	CS1-28"/4"-16"-Den.	4	36 1/16	16	16	22	8	22	17 3/4	23.2	353	37.1	375	76.0	397
	CS1-28"/5"-16"-Den.	5	38 1/16	16	16	24	9	23	17 3/4	23.2	375	37.1	397	76.0	441
	CS1-28"/6"-16"-Den.	6	40 1/16	16	16	24	10	24	19 3/4	23.2	419	37.1	441	76.0	507
	CS1-28"/8"-16"-Den.	8	44	16	16	24	1'-0	26	21 3/4	23.2	485	37.1	529	76.0	595
	CS1-28"/10"-16"-Den.	10	48	16	16	24	1'-2	28	23 1/2	23.2	551	37.1	595	76.0	705
	CS1-28"/2"-24"-Den.	2	32 1/8	24	24	28	6	20	15 3/4	34.8	441	55.8	441	114	463
	CS1-28"/3"-24"-Den.	3	34 1/8	24	24	30	7	21	15 3/4	34.8	463	55.8	485	114	529
	CS1-28"/4"-24"-Den.	4	36 1/16	24	24	30	8	22	17 3/4	34.8	529	55.8	551	114	595
	CS1-28"/5"-24"-Den.	5	38 1/16	24	24	32	9	23	17 3/4	34.8	551	55.8	595	114	639
	CS1-28"/6"-24"-Den.	6	40 1/16	24	24	32	10	24	19 3/4	34.8	617	55.8	639	114	728
	CS1-28"/8"-24"-Den.	8	44	24	24	32	1'-0	26	21 3/4	34.8	705	55.8	750	114	860
	CS1-28"/10"-24"-Den.	10	48	24	24	32	1'-2	28	23 1/2	34.8	794	55.8	882	114	1014

SUPPORT TYPE CA1 (LINE STOP / FIXED POINT)



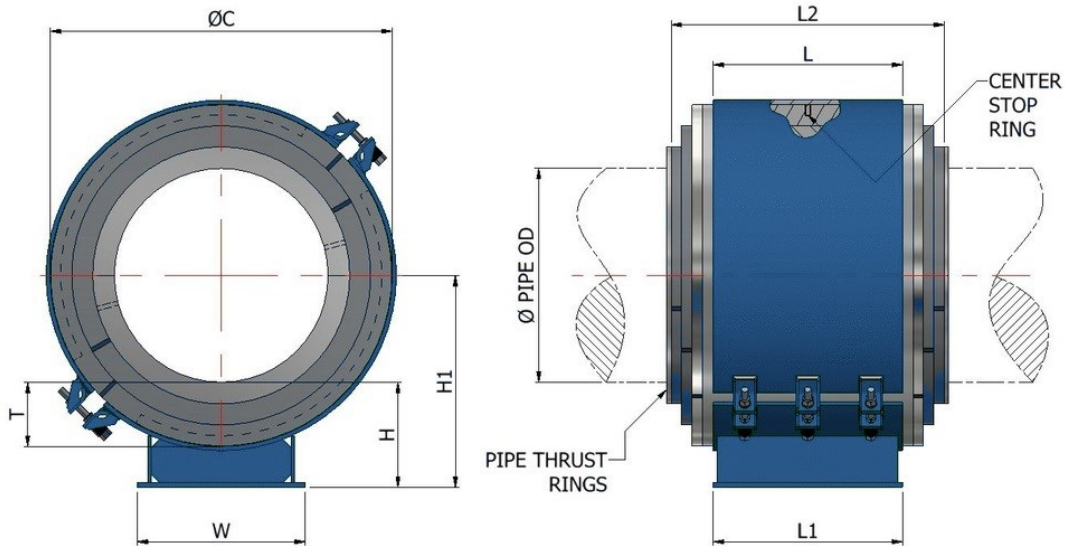
Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

Pipe Size 30" / 750 mm (OD 30")	CS1-30"/2"-20"-Den.	2	34 1/8	20	20	24	6	21	15 3/4	31.0	375	49.7	397	102	419
	CS1-30"/3"-20"-Den.	3	36 1/8	20	20	26	7	22	17 3/4	31.0	419	49.7	441	102	485
	CS1-30"/4"-20"-Den.	4	38 1/8	20	20	26	8	23	17 3/4	31.0	463	49.7	485	102	529
	CS1-30"/5"-20"-Den.	5	40 1/16	20	20	28	9	24	19 3/4	31.0	507	49.7	529	102	573
	CS1-30"/6"-20"-Den.	6	42 1/16	20	20	28	10	25	19 3/4	31.0	529	49.7	573	102	639
	CS1-30"/8"-20"-Den.	8	46 1/16	20	20	28	1'-0	27	21 3/4	31.0	617	49.7	661	102	750
	CS1-30"/10"-20"-Den.	10	50	20	20	28	1'-2	29	23 1/2	31.0	705	49.7	772	102	882
	CS1-30"/2"-30"-Den.	2	34 1/8	30	30	34	6	21	15 3/4	46.8	551	74.6	573	153	617
	CS1-30"/3"-30"-Den.	3	36 1/8	30	30	36	7	22	17 3/4	46.8	617	74.6	639	153	683
	CS1-30"/4"-30"-Den.	4	38 1/8	30	30	36	8	23	17 3/4	46.8	661	74.6	683	153	750
	CS1-30"/5"-30"-Den.	5	40 1/16	30	30	38	9	24	19 3/4	46.8	728	74.6	772	153	838
	CS1-30"/6"-30"-Den.	6	42 1/16	30	30	38	10	25	19 3/4	46.8	772	74.6	816	153	926
	CS1-30"/8"-30"-Den.	8	46 1/16	30	30	38	1'-0	27	21 3/4	46.8	904	74.6	970	153	1080
	CS1-30"/10"-30"-Den.	10	50	30	30	38	1'-2	29	23 1/2	46.8	1014	74.6	1102	153	1279

Pipe Size 32" / 800 mm (OD 32")	CS1-32"/2"-20"-Den.	2	36 1/8	20	20	24	6	22	17 3/4	33.3	419	53.1	419	109	441
	CS1-32"/3"-20"-Den.	3	38 1/8	20	20	26	7	23	17 3/4	33.3	441	53.1	463	109	485
	CS1-32"/4"-20"-Den.	4	40 1/8	20	20	26	8	24	19 3/4	33.3	485	53.1	507	109	551
	CS1-32"/5"-20"-Den.	5	42 1/16	20	20	28	9	25	19 3/4	33.3	529	53.1	551	109	617
	CS1-32"/6"-20"-Den.	6	44 1/16	20	20	28	10	26	21 3/4	33.3	573	53.1	617	109	683
	CS1-32"/8"-20"-Den.	8	48 1/16	20	20	28	1'-0	28	23 1/2	33.3	661	53.1	705	109	794
	CS1-32"/10"-20"-Den.	10	52	20	20	28	1'-2	30	25 1/2	33.3	750	53.1	816	109	926
	CS1-32"/2"-30"-Den.	2	36 1/8	30	30	34	6	22	17 3/4	49.7	595	79.6	617	163	661
	CS1-32"/3"-30"-Den.	3	38 1/8	30	30	36	7	23	17 3/4	49.7	661	79.6	683	163	728
	CS1-32"/4"-30"-Den.	4	40 1/8	30	30	36	8	24	19 3/4	49.7	705	79.6	750	163	816
	CS1-32"/5"-30"-Den.	5	42 1/16	30	30	38	9	25	19 3/4	49.7	772	79.6	816	163	882
	CS1-32"/6"-30"-Den.	6	44 1/16	30	30	38	10	26	21 3/4	49.7	838	79.6	882	163	992
	CS1-32"/8"-30"-Den.	8	48 1/16	30	30	38	1'-0	28	23 1/2	49.7	948	79.6	1036	163	1146
	CS1-32"/10"-30"-Den.	10	52	30	30	38	1'-2	30	25 1/2	49.7	1080	79.6	1168	163	1345

Pipe Size 34" / 850 mm (OD 34")	CS1-34"/2"-20"-Den.	2	38 1/8	20	20	24	6	23	17 3/4	35.3	419	56.4	441	115	463
	CS1-34"/3"-20"-Den.	3	40 1/8	20	20	26	7	24	19 3/4	35.3	485	56.4	485	115	529
	CS1-34"/4"-20"-Den.	4	42 1/8	20	20	26	8	25	19 3/4	35.3	507	56.4	529	115	573
	CS1-34"/5"-20"-Den.	5	44 1/8	20	20	28	9	26	21 3/4	35.3	551	56.4	595	115	639
	CS1-34"/6"-20"-Den.	6	46 1/16	20	20	28	10	27	21 3/4	35.3	595	56.4	639	115	705
	CS1-34"/8"-20"-Den.	8	50 1/16	20	20	28	1'-0	29	23 1/2	35.3	683	56.4	728	115	838
	CS1-34"/10"-20"-Den.	10	54	20	20	28	1'-2	31	25 1/2	35.3	772	56.4	838	115	970
	CS1-34"/2"-30"-Den.	2	38 1/8	30	30	34	6	23	17 3/4	52.8	639	84.5	639	173	683
	CS1-34"/3"-30"-Den.	3	40 1/8	30	30	36	7	24	19 3/4	52.8	683	84.5	728	173	772
	CS1-34"/4"-30"-Den.	4	42 1/8	30	30	36	8	25	19 3/4	52.8	750	84.5	772	173	838
	CS1-34"/5"-30"-Den.	5	44 1/8	30	30	38	9	26	21 3/4	52.8	816	84.5	860	173	948
	CS1-34"/6"-30"-Den.	6	46 1/16	30	30	38	10	27	21 3/4	52.8	860	84.5	926	173	1014
	CS1-34"/8"-30"-Den.	8	50 1/16	30	30	38	1'-0	29	23 1/2	52.8	992	84.5	1058	173	1213
	CS1-34"/10"-30"-Den.	10	54	30	30	38	1'-2	31	25 1/2	52.8	1124	84.5	1213	173	1389

SUPPORT TYPE CA1 (LINE STOP / FIXED POINT)



Part Number	T Thick	ØC	L	L1	L2	H	H1	W	Den. = 10 lb/cu.ft		Den. = 14 lb/cu.ft		Den. = 20 lb/cu.ft	
									Max Vertical Load	Weight	Max Vertical Load	Weight	Max Vertical Load	Weight
	in	in	in	in	in	in	in	in	kips	lb	kips	lb	kips	lb

Pipe Size 36" / 900 mm (OD 36")	CS1-36"/2"-20"-Den.	2	40 1/8	20	20	24	6	24	19 3/4	37.3	463	59.6	463	122	485
	CS1-36"/3"-20"-Den.	3	42 1/8	20	20	26	7	25	19 3/4	37.3	485	59.6	507	122	551
	CS1-36"/4"-20"-Den.	4	44 1/8	20	20	26	8	26	21 3/4	37.3	529	59.6	573	122	617
	CS1-36"/5"-20"-Den.	5	46 1/8	20	20	28	9	27	21 3/4	37.3	573	59.6	617	122	661
	CS1-36"/6"-20"-Den.	6	48 1/16	20	20	28	10	28	23 1/2	37.3	617	59.6	661	122	750
	CS1-36"/8"-20"-Den.	8	52 1/16	20	20	28	1'-0	30	25 1/2	37.3	705	59.6	772	122	882
	CS1-36"/10"-20"-Den.	10	56	20	20	28	1'-2	32	27 1/2	37.3	816	59.6	882	122	1014
	CS1-36"/2"-30"-Den.	2	40 1/8	30	30	34	6	24	19 3/4	56.0	661	89.5	683	183	728
	CS1-36"/3"-30"-Den.	3	42 1/8	30	30	36	7	25	19 3/4	56.0	728	89.5	750	183	816
	CS1-36"/4"-30"-Den.	4	44 1/8	30	30	36	8	26	21 3/4	56.0	794	89.5	816	183	882
	CS1-36"/5"-30"-Den.	5	46 1/8	30	30	38	9	27	21 3/4	56.0	838	89.5	882	183	970

Pipe Size 38" / 950 mm (OD 38")	CS1-38"/2"-20"-Den.	2	42 3/16	20	20	24	6	25	19 3/4	39.3	463	62.9	485	129	529
	CS1-38"/3"-20"-Den.	3	44 3/16	20	20	26	7	26	21 3/4	39.3	529	62.9	529	129	595
	CS1-38"/4"-20"-Den.	4	46 3/16	20	20	26	8	27	21 3/4	39.3	551	62.9	573	129	639
	CS1-38"/5"-20"-Den.	5	48 1/8	20	20	28	9	28	23 1/2	39.3	617	62.9	639	129	705
	CS1-38"/6"-20"-Den.	6	50 1/8	20	20	28	10	29	23 1/2	39.3	639	62.9	683	129	772
	CS1-38"/8"-20"-Den.	8	54 1/8	20	20	28	1'-0	31	25 1/2	39.3	728	62.9	794	129	904
	CS1-38"/10"-20"-Den.	10	58 1/16	20	20	28	1'-2	33	27 1/2	39.3	838	62.9	904	129	1058
	CS1-38"/2"-30"-Den.	2	42 3/16	30	30	34	6	25	19 3/4	59.1	705	94.4	705	193	772
	CS1-38"/3"-30"-Den.	3	44 3/16	30	30	36	7	26	21 3/4	59.1	772	94.4	794	193	860
	CS1-38"/4"-30"-Den.	4	46 3/16	30	30	36	8	27	21 3/4	59.1	816	94.4	860	193	948
	CS1-38"/5"-30"-Den.	5	48 1/8	30	30	38	9	28	23 1/2	59.1	882	94.4	926	193	1036

Pipe Size 40" / 1000 mm (OD 40")	CS1-40"/2"-20"-Den.	2	44 3/16	20	20	24	6	26	21 3/4	41.6	507	66.3	507	136	551
	CS1-40"/3"-20"-Den.	3	46 3/16	20	20	26	7	27	21 3/4	41.6	529	66.3	551	136	617
	CS1-40"/4"-20"-Den.	4	48 3/16	20	20	26	8	28	23 1/2	41.6	595	66.3	617	136	683
	CS1-40"/5"-20"-Den.	5	50 3/16	20	20	28	9	29	23 1/2	41.6	617	66.3	661	136	750
	CS1-40"/6"-20"-Den.	6	52 1/8	20	20	28	10	30	25 1/2	41.6	683	66.3	728	136	816
	CS1-40"/8"-20"-Den.	8	56 1/8	20	20	28	1'-0	32	27 1/2	41.6	772	66.3	838	136	948
	CS1-40"/10"-20"-Den.	10	60 1/16	20	20	28	1'-2	34	29 1/2	41.6	860	66.3	948	136	1102
	CS1-40"/2"-30"-Den.	2	44 3/16	30	30	34	6	26	21 3/4	62.3	728	99.4	750	203	816
	CS1-40"/3"-30"-Den.	3	46 3/16	30	30	36	7	27	21 3/4	62.3	794	99.4	816	203	882
	CS1-40"/4"-30"-Den.	4	48 3/16	30	30	36	8	28	23 1/2	62.3	860	99.4	904	203	992
	CS1-40"/5"-30"-Den.	5	50 3/16	30	30	38	9	29	23 1/2	62.3	904	99.4	970	203	1080



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