

Pipe Slides Assembly, Complete

Fig. 257: Structural Tee Slide Assembly

Fig. 257A: Structural Tee

Fig. 436: Fabricated Tee Slide Assembly

Fig. 436A: Fabricated Tee



Fig. 257
Structural Tee
Slide Assembly

Features:

- No lubrication required
- Designed to minimize heat loss
- Allows up to 3" of insulation on Types 1, 2, 4 and 5 and up to 2 1/2" of insulation on Types 3 and 6
- Allows up to 10" travel standard
- Weld in place design

Available Options:

- Increased travels
- Increased tee heights
- End plates
- Clamps, Fig. 212 or Fig. 432
- Base plate with mounting holes
- High temperature option, 1000°F (Fig. 436)
- Stainless steel tee slide with an insulated PTFE slide

Note:

In the PH-92 and PH-92R Catalogs: The Fig. 257 & 436 (slide "T" section only) formerly referred to as Fig. 280 & 435. The Fig. 257 & 436 (slide base plate) formerly referred to as Fig. 438 (slide base plate). The acceptability of galvanized coatings at temperatures above 450°F is at the discretion of the end user.

Description

Size Range

All sizes within maximum load rating.

Material

Carbon steel tee, PTFE bonded slide plates and carbon steel base.

Finish

Plain

Painted

Hot-Dip Galvanized (Welded after Galvanizing and Cold Spray Touched-up)

Service

For the support of piping where horizontal movement resulting from expansion and contraction takes place and where a low coefficient of friction is desired.

Approvals

Complies with Federal Specification A-A-1192A (Type 35), ANSI/MSS SP-69 and MSS SP-58 (Type 35).

Maximum Load

As indicated at 70° F see page 141 for rating factor at higher temperatures.

Maximum Temperature

750° F

Temperature Range at PTFE

-20° F to 400° F

Ordering

Specify figure number, type, name, finish and any other option desired.



ANVIL
An ASC Engineered Solution

PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

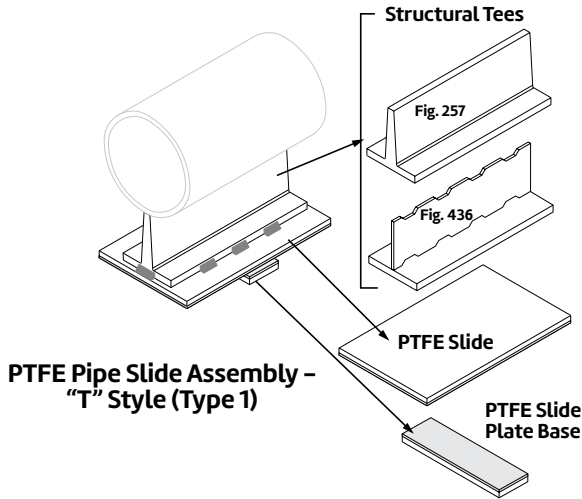
Pipe Slides Assembly, Complete

Fig. 257: Structural Tee Slide Assembly

Fig. 257A: Structural Tee

Fig. 436: Fabricated Tee Slide Assembly

Fig. 436A: Fabricated Tee



Dimensions (In) • Loads (Lbs) • Weights (Lbs)

Figure Number	Type	Max Load				Welded Slide				Bolted Slide				Weight
		Down	Side*	Up	H**	W	BL	Weight	H**	W	BL	Hole Locations	Bolt Size	
Fig. 257	Tee				3 ¹⁵ / ₁₆	4	12	7.00	-	-	-	-		-
	1		-	-	4 ³ / ₄	4	2	11.93	5					15.25
	2							16.10	5	8	4	2 ¹ / ₂ x 6 ¹ / ₂		16.10
	3	8,000	2,000	800	5	8	4	16.95	5				1/2	16.95
	4		-	-	4 ³ / ₄	6	2	12.47	5					18.36
	5		2,000		5	11 ¹ / ₂	5	18.81	5	11 ¹ / ₂	5	3 ¹ / ₂ x 10		19.21
Fig. 436	6		800		5		19.66							20.06
	Tee				4		12	7.00	-	-	-	-		-
	1		-	-	4 ¹¹ / ₁₆	4	2	15.42	4 ¹⁵ / ₁₆					18.74
	2							19.59	4 ¹⁵ / ₁₆	8	4	2 ¹ / ₂ x 6 ¹ / ₂		19.59
	3	8,000	2,000	800	4 ¹⁵ / ₁₆	8	4	20.44	4 ¹⁵ / ₁₆				1/2	20.44
	4		-	-	4 ¹¹ / ₁₆	6	2	15.97	4 ¹⁵ / ₁₆					21.85
6	5		2,000		4 ¹⁵ / ₁₆	11 ¹ / ₂	5	22.30	4 ¹⁵ / ₁₆	11 ¹ / ₂	5	3 ¹ / ₂ x 10		22.70
	6		800					23.15						23.55

Notes:

* Side load is only applicable if appropriate endplates are added to slide or "T" Section

** With the Fig. 432 clamp, add the material thickness. The Tees are now being notched for the material thickness when welding on the Fig. 212.



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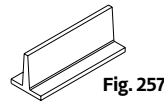
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Fig. 257 and 436: PTFE Pipe Slide Assemblies

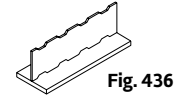
Notes:

- Types 1, 2, and 3 provide for longitudinal movement only.
- Types 4, 5, and 6 provide for both longitudinal and transverse movement of piping.

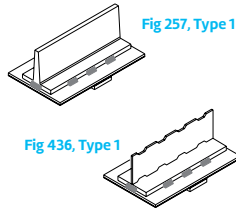
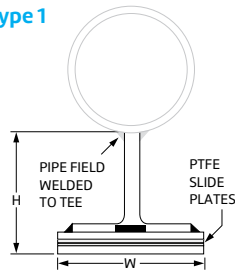
Structural Tee



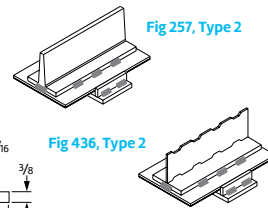
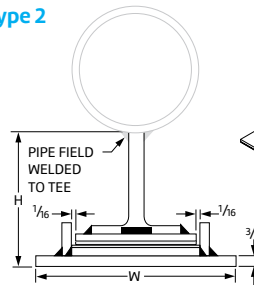
Fabricated Tee



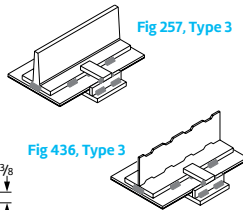
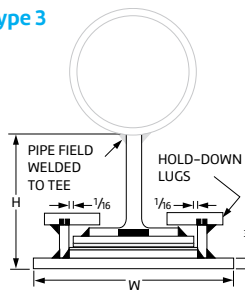
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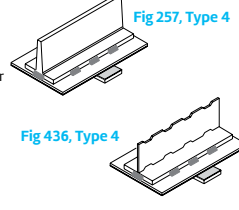
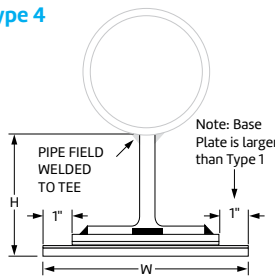
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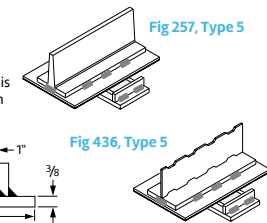
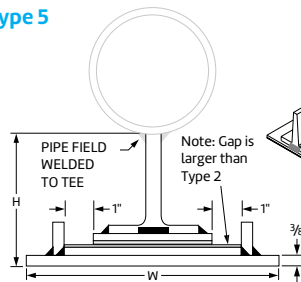
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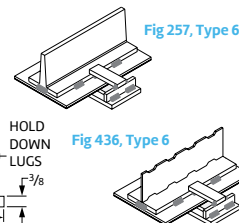
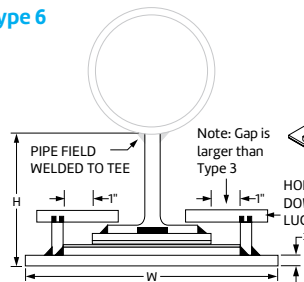
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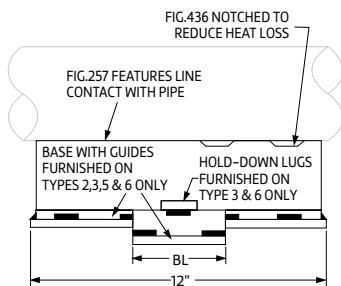
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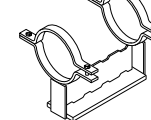
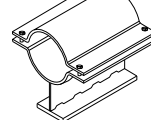
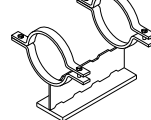
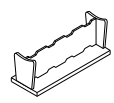
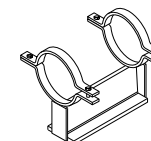
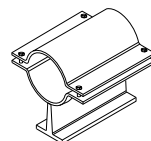
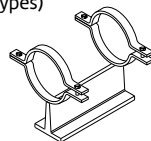
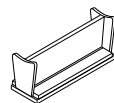
Type 6



Side View, All Types



Options (for all types)



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PTFE Pipe Slide Assemblies

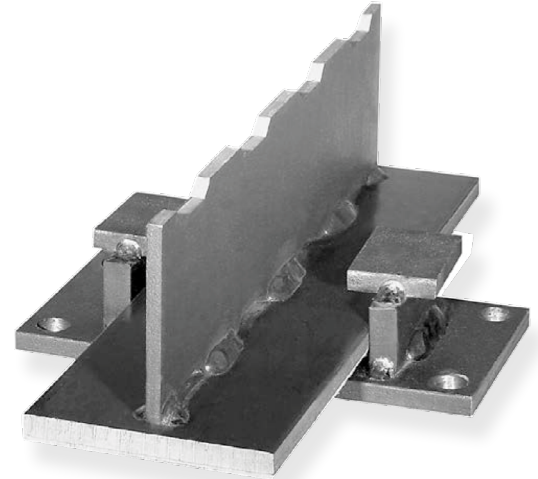
Overview

Application:

Anvil PTFE pipe slide assemblies are designed to support the pipe and provide for lateral and axial movement due to thermal expansion and contraction of the piping system. Assemblies are fabricated using PTFE slide bearings to provide a low coefficient of friction, minimizing frictional stress on the pipe and support structure.

Features:

- Pre-engineered to save calculation and installation time.
- PTFE slide bearing pads are composed of 25% glass-filled virgin Polytetrafluoroethylene (PTFE) polymer.
- Capable of supporting constant loads up to 2000 PSI at 70° F.
- Coefficient of friction typically ranges between 0.06 and 0.2 depending on bearing surface area, bearing load (sample ranges shown in chart for given pressures at 70° F). Consult your ASC representative for further information. The low coefficient of friction for the PTFE slide assemblies permits a smooth, unrestrained movement of the pipe and reduces overturning movements on supporting structures.
- PTFE is chemically inert and resists damage from chemicals, with the exception of alkalis such as bleach, lye, ammonia, etc., humidity and other elements found in harsh environments provided that the steel supports are suitably protected.
- Self-lubricating, maintenance-free.
- Provides resistance to galvanic corrosion between pipe and support structure.
- Maximum temperature: 400° F at PTFE.
- Allows for up to 4" insulation thickness as standard. Greater than 4" insulation available on special request. Special designed slides and tees available on request.



Selection:

1. Determine the support location based on allowable span and loading conditions.
2. Calculate the load for each slide assembly location.
3. Determine the lateral and axial movement of the pipe and the direction of movement, cold to hot.
4. Select pipe slide or tee figure number and attachment configuration, welded or bolted.
5. Select the method of slide plate attachment to support structure, welded or bolted.
6. Designate whether guided or non-guided slide plate is required.
7. Maximum recommended loads shown for pipe slides and structural tees are for vertical loading. Transitional loads for pipe structural tees are to be determined by customer.



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PTFE Pipe Slide Assemblies Overview (cont.)

Installation:

1. Determine offset of pipe slide–slide plate interface to allow maximum pipe movement in direction of greatest thermal displacement.
2. Attach PTFE slide to pipe by welding or clamping with standard Fig. 212 pipe clamp or Fig. 432 special pipe clamp.
3. Attach slide plates to supporting structure by bolting or welding.
4. Verify setting to insure full bearing between the PTFE slide and slide base surfaces under all pipe movement conditions.

Note: PTFE surfaces should be protected from mechanical damage and contamination as well as from ultraviolet rays prior to installation.

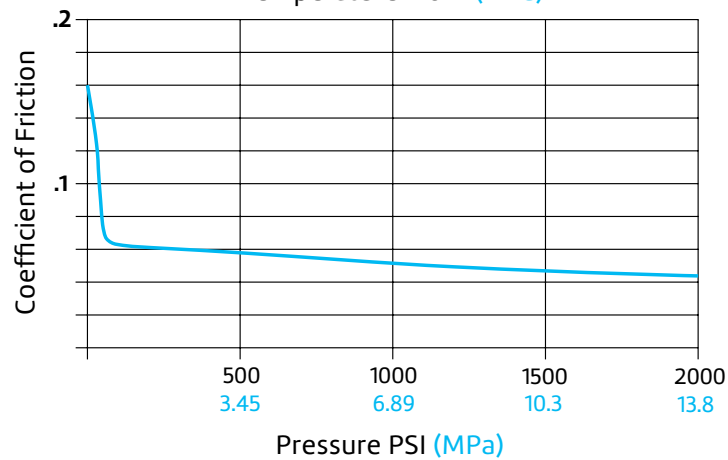
The maximum load on the pipe slides is based on using a PTFE width of 2" for the slide plate and a 70° F temperature. For a different temperature at the bearing surfaces, multiply the maximum load rating by the following factor.

Temperature °F	Factor
70	1.00
100	0.85
200	0.55
300	0.40
400	0.25

Coefficient of Friction Versus Pressure

Test Speed: 1"/min. (25mm/min.)

Temperature: 70°F (21°C)



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