

Installation Instructions

for TU25 Un-braided Type Flexible Sprinkler Hoses

Version: TRX-II-TU25-2014.V1.0

WARNING

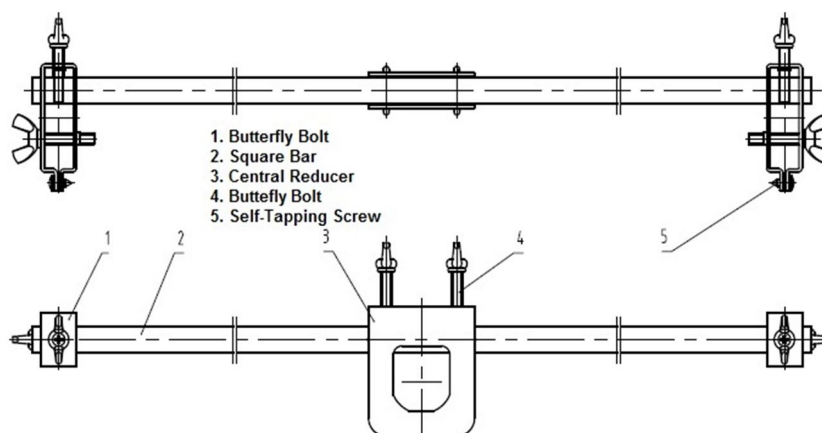
- ✓ Please read carefully and understand the contents before installing TRONFLEX flexible hoses;
- ✓ Please wear safety shoes, safety glasses, helmet and other personal protection equipments;
- ✓ Failure on reading this instruction might leads to serious injury and property losses.

Brief Introduction

TRONFLEX TU25 flexible sprinkler hoses and fittings are basically with a stainless steel un-braided hose with both ends connected by inlet nipple and sprinkler reducer, one end was installed into the branch line of automatic sprinkler pipe system while another end was connected with sprinkler head and using bracket system to installed into the ceiling systems.

Each set of TU25 flexible sprinkler hose includes:

A un-braided hose/ A inlet nipple/ A sprinkler reducer/ A set of bracket with a square bar, two end brackets and one reducer (central) bracket.



Technical Data:

(Approved for wet and dry systems as noted in NFPA13, NFPA 13D and NFPA 13R, intended use for direct connection to fire sprinkler heads.)

Rated Working Pressure: **175 psi (12 Bar)**

Maximum Ambient Temperature: **225°F (107°C)**

Sprinkler K-Factor (gpm/psi^{1/2}): **K5.6 and K8.0**

Application: **Both wet and dry pipe systems**

Standard Hose Assembly Length:

700mm (28")/1000mm (40")/1200mm (48")/1500mm (60")/1800mm (71")

Inlet Nipple: **1" in NPT/BSPT/Rp (Optional)**

Reducer Outlet: **1/2" and 3/4" in NPT/BSPT/Rp (Optional)**

Flexibility: **Limited**

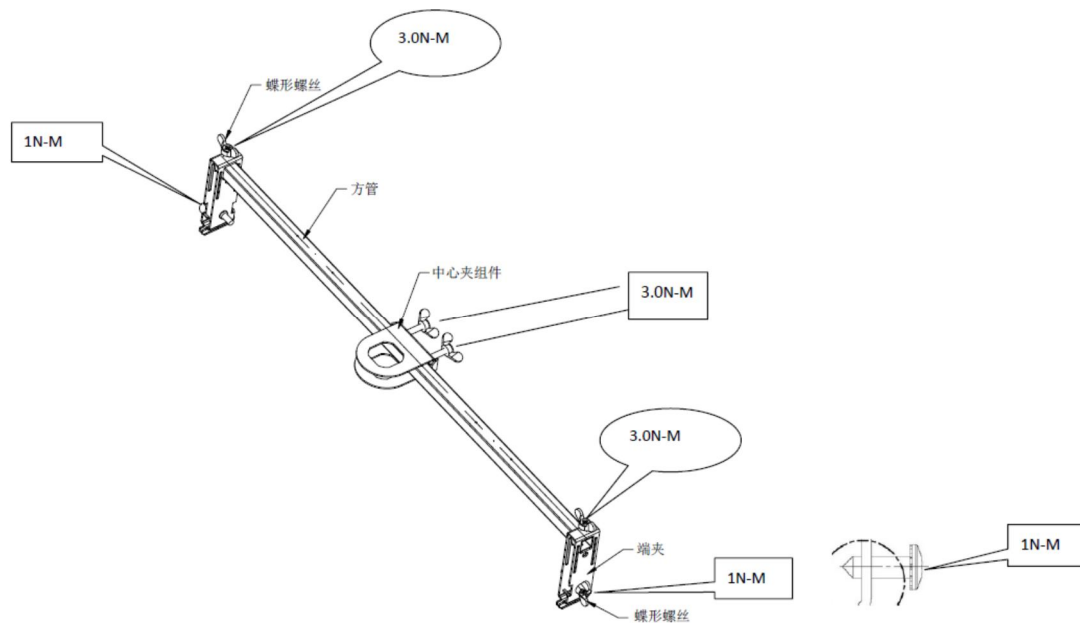
Friction Loss Data Sheet:

Model	Nominal Inlet by Outlet Size, in.	Assembly Length, (mm)	Max No. of 90° Bends	Min Bend Radius (mm)	Equivalent Length of 1 in. Schedule 40 Steel Pipe (C = 120), ft
TU25-700	1 X 1/2	700	1	100	30
TU25-700	1 X 3/4	700	1	100	30
TU25-1000	1 X 1/2	1000	2	100	44
TU25-1000	1 X 3/4	1000	2	100	49
TU25-1200	1 X 1/2	1200	3	100	54
TU25-1200	1 X 3/4	1200	3	100	56
TU25-1500	1 X 1/2	1500	3	100	76
TU25-1500	1 X 3/4	1500	3	100	77
TU25-1800	1 X 1/2	1800	3	100	86
TU25-1800	1 X 3/4	1800	3	100	80

Installation Instructions:

WARNING

- ✓ Any changes and re-processing to TRONFLEX flex hose product and components after purchase may lead to failure of installation and will lose any quality warranty from TRONFLEX automatically.
- ✓ Please follow the local fire protection, building and construction laws and regulations;
- ✓ Teflon tape or equivalent tape seal is strongly suggested applied to the parts with threads before connection;
- ✓ Please DO NOT bend the hose over and lower the minimum bending radius;
- ✓ Please DO NOT place the hose and install it under the temperature exceeding the maximum ambient temperature;
- ✓ Please DO NOT place the hose close to sharp-edged objects which may lead to damage to the hose and d people.
- ✓ Instructions for securing the anchoring components to the building components. If intended for use with drop ceilings, reference to specific ceiling constructions such as intermediate and heavy duty ceilings as described in the Standard Specification for the Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings, ASTM C635 when installed in accordance with the Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels, ASTM C636.



Step 1: Use pipe wrench SW-36 to connect the 1" inlet nipple to the branch line until connected firmly. You may need to check NFPA guidelines for using Teflon tape or pipe sealant during this process.

Step 2: Connect the reducer to the hose, the torque is 12 N.m in minimum and connect the other side of the hose to the branch line with inlet nipple, the torque is 12 N.m in minimum as well.

Step 3: Pick up the bracket, check the ceiling and the T-bar and locate the position where the sprinkler will be installed. After position is confirmed, install the end bracket with the T-bar. Fasten the butterfly bolt on the top of the both end brackets using torque 3 N.m and fasten the butterfly bolt in the side of both brackets using torque of 1 N.m

Step 4: Bend the hose down and insert the reducer into the central bracket. Adjust the vertical level of the reducer and after position is confirmed, fastening the butterfly bolts on the central bracket and using torque of 3 N.m and firmly connect the hose and the central bracket with the square bar.

Step 5: Follow the NFPA guidelines and the instructions from sprinkler manufacturer and get the data of the force for sprinkler installations, use two wrenches to install the sprinkler head to the reducer.

Step 6: Finally check if the final position of the sprinkler is correct. If NO, loose the butterfly bolts either on the central brackets or the end brackets to adjust the sprinkler vertically or horizontally until it gets to the right place and fasten the butterfly bolts using torque mentioned above. And then securing the self-tapping screws shown as below:
If YES, please securing the self-tapping screws on both sides of end brackets into the T-bar until contact of screw head to end bracket.

Step 7: Conduct the leakage test the installation of the sprinkler system following the NFPA guidelines until finally the flexible sprinkler hose is correctly and firmly connected with sprinkler, ceiling and branch line and be ready helping protecting lives and properties against risk of fire.