

FASTFLEX Model FB Flexible Braided Hose

General Description

The TYCO FASTFLEX Model FB Flexible Braided Hose is a unique sprinkler drop assembly comprised of a stainless steel flexible hose, a swivel inlet nipple, a sprinkler reducer, and lightweight ceiling bracket components. (Refer to Figure 1.)

The FASTFLEX Model FB Flexible Braided Hose can be installed in false ceilings without cutting and threading pipes associated with installing a drop, arm-over, and elbow. It provides easier maneuverability around ducts and trays in congested spaces and for unusual ceiling types and curved plasterboard ceilings. The FASTFLEX Model FB Flexible Braided Hose makes it possible to test and charge the system with water before the ceiling grid is installed. Once the ceiling grid is in position, the hoses can be reshaped to suit the final sprinkler location without draining the system.

The FASTFLEX Model FB Flexible Braided Hose hoses are for use on wet pipe sprinkler systems only.

NOTICE

The TYCO FASTFLEX Model FB Flexible Braided Hose flexible sprinkler hoses described herein must be installed and maintained in compliance with this document and with the applicable standards recognized by the Approval agency, in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of these devices.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

Technical Data

Approvals

VdS Approved
(Refer to Table A for specific laboratory approvals and the approvals apply to the service conditions indicated in the Design Criteria sections.)

CSTB accepted for all models and assembly lengths.

Inlet Connections (Ref Fig. 1)
ISO 7-R 1

Outlet Connections (Ref Fig. 2)
1/2 inch NPT
3/4 inch NPT

Nominal Assembly Lengths
Refer to Table A

Construction (Ref. Fig. 1)

The Inlet Nipple is mild steel, and the Flexible Hose is SS AISI 304. The Sprinkler Reducer is mild steel. The Reducer Bracket, Bar Fixing Clamps, and Support Bar are pressed steel.

Design Criteria

The TYCO FASTFLEX Model FB Flexible Braided Hose is VdS Listed and used with pendent sprinklers. The following paragraph provides the design criteria unique to VdS Approval listing.

VdS Listing Design Criteria

- Wet-pipe systems only
- Minimum bend radius of 55 mm
- Maximum service pressure of 16 bar
- Pendent sprinklers with nominal K57, K80, or K115
- Maximum ambient temperature of 107°C



Approved Ceiling Systems

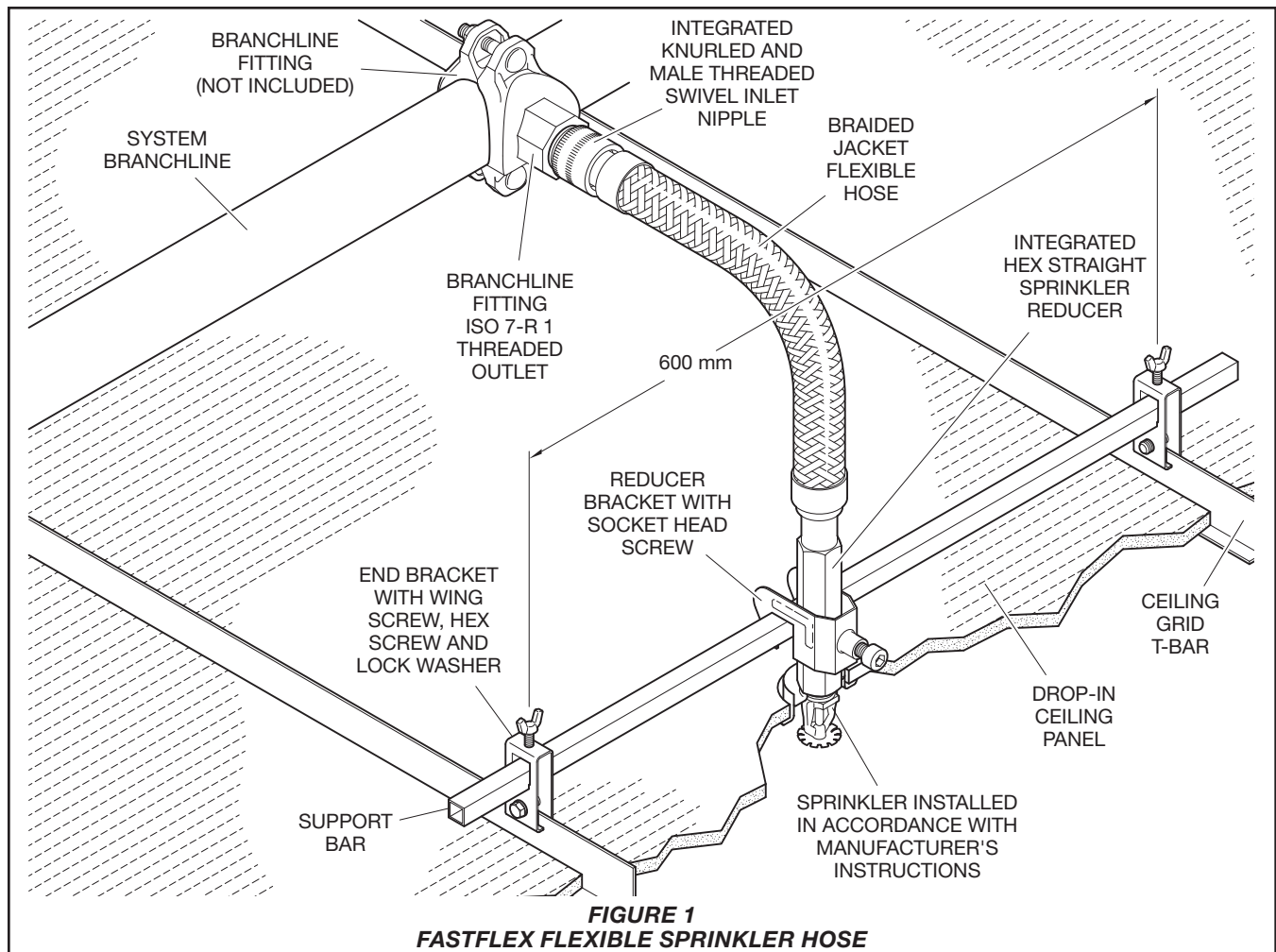
FASTFLEX Model FB Flexible Braided Hose is approved for use only in the following manufacturers suspended ceilings listed below on the condition that the profile is based on a T-shaped profile:

AMF
Odenwald
Richter
Armstrong
Rigips
Knauf
Chicago Metallic
Durlum
Geipel
Gema Armstrong
Suckow & Fischer
USG Donn
Daldrop & Dr. Huber
Rockfon Pagos

VdS Friction Loss

For compensation of pressure loss, the nominal assembly length is to be multiplied by 10. The resulting length will provide pressure drop in equivalent length DN25 (33,7 x 3,25 mm) metal tube per EN 10255.

- Add 2,3 m when using a 90° sprinkler reducer.



Installation

The TYCO FASTFLEX Model FB Flexible Braided Hose, as shown in Figure 1, must be installed in accordance with this section.

NOTICE

Flexible Braided Hoses are intended only to connect sprinklers directly to system piping (refer to Figure 1). Flexible Hoses cannot be joined together to form longer hoses. Joining Flexible Hoses together creates an assembly with unknown performance that has not been accounted for in system calculations or safe product performance.

Step 1. Review the Design Criteria section that applies to the approval agency recognized by the authority having jurisdiction, as well as Figure 3 that provides Installation Guidance.

Step 2. Determine approximately where the sprinkler will be located. Mount the End Brackets to the Support Bar then slide the End Brackets over the ceiling grid T-bars. The sprinkler should be

located as close to the center of the distance between the ceiling grid T-bars as possible.

Step 3. Hand-tighten the Wings Screws and the Hex Screws on the End Brackets securing the Support Bar.

Step 4. Attach the Swivel Inlet Nipple to the Branchline Fitting outlet. (Refer to Figure 1.) Apply the wrench directly to the Swivel Inlet Nipple and tighten to the maximum torque of 35 Nm.

Step 5. Attach the sprinkler to the Sprinkler Reducer. Place a wrench on the Sprinkler Reducer to counteract the tightening torque of the sprinkler and torque the sprinkler to the recommended torque setting. Refer to the sprinkler manufacturer's sprinkler data sheet for appropriate sprinkler torque setting, sprinkler wrench, and other guidance.

Step 6. Bend the Flexible Hose and place the Sprinkler Reducer to where the sprinkler will be located. The hose arc should not be twisted, and the arc should be as large and smooth as possible. (Refer to Figures 2 and 3.)

NOTICE

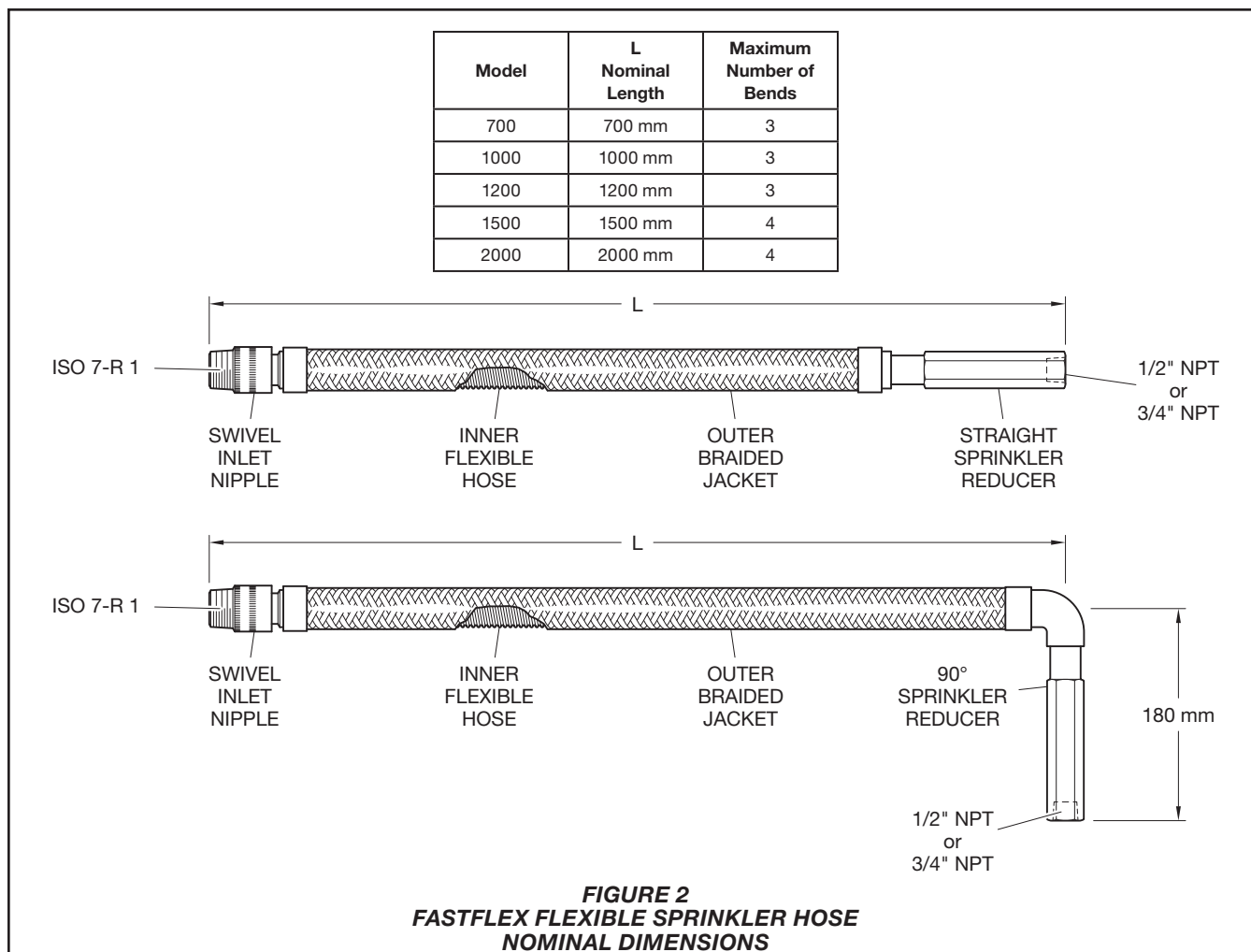
For minimum bend criteria, refer to the Design Criteria section that applies to the approval agency recognized by the authority having jurisdiction.

A bend radius smaller than provided by the minimum bend criteria may adversely effect the friction loss specifications stated by the approval laboratory.

Step 7. Slide the Reducer Bracket over the Sprinkler Reducer end of the Flexible Sprinkler Hose and clip over the Support Bar. Hand-tighten the fastener on the Reducer Bracket securing the Reducer Bracket to the Support Bar. Ensure that the Reducer Bracket fastener is secured to the flat surface of the Sprinkler Reducer.

Step 8. After tightening the Reducer Bracket fastener, verify that the sprinkler is properly located in accordance with the manufacturer's instructions. If not in the proper location, adjust its position as necessary.

Step 9. Once the sprinkler is in the proper location, torque all hardware as follows:



NOTE: The End Brackets Wing Screws must be tightened before tightening the Reducer Bracket to the Support Bar.

End Bracket
Hex Screws 4,5 Nm (min)
End Bracket
Wing Screws 4,5 to 5,7 Nm
Reducer Bracket
Fastener 2,3 Nm (min)

Care and Maintenance

The TYCO FASTFLEX Model FB Flexible Braided Hose must be maintained and serviced in accordance with this section.

Before closing a fire protection system control valve for inspection or maintenance work on the fire protection system that it controls, permission to shut down the effected fire protection system must first be obtained from the proper authorities and all personnel who may be affected by this action must be notified.

Inspection, testing, and maintenance must be performed as indicated below and in accordance with the local requirements and/or national codes. Any impairment must be immediately corrected.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the authorities having jurisdiction. Contact the installing contractor or product manufacturer with any questions.

After placing a fire protection system in service, notify the proper authorities and advise those responsible for monitoring proprietary and/or central station alarms.

Automatic sprinkler systems are recommended to be inspected, tested, and maintained by a qualified Inspection Service in accordance with local requirements and/or national codes.

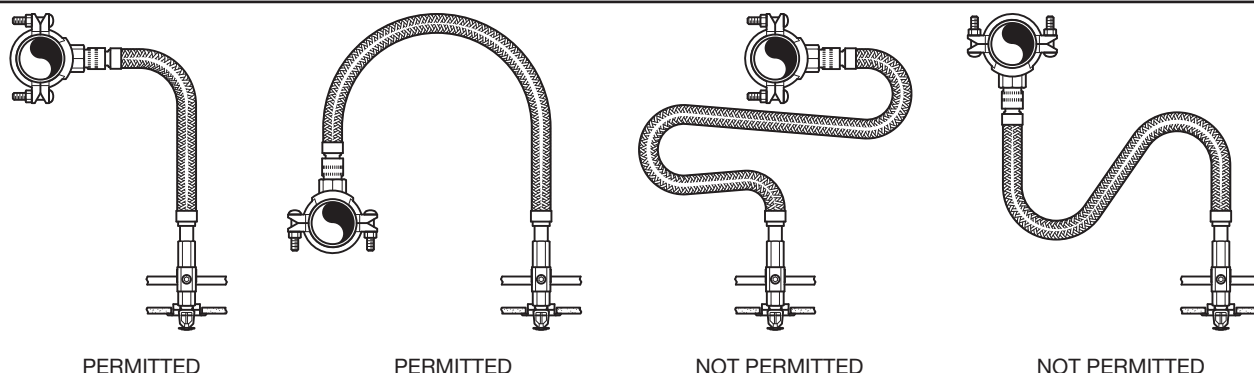
Limited Warranty

For warranty terms and conditions, visit www.tyco-fire.com.

Model	Type	Assembly Length in Millimeters	VdS	
			50 and 90 mm Bar Fixing Clamp	
			Sprinkler Reducer Type	
			0°	90°
YB25-700	Braided	700	x	x
YB25-1000	Braided	1000	x	x
YB25-1200	Braided	1200	x	x
YB25-1500	Braided	1500	x	x
YB25-2000	Braided	2000	x	x

x Indicates Listed or Approved as applicable.

TABLE A
FASTFLEX SPRINKLER HOSE ASSEMBLY
MODELS, ASSEMBLY LENGTHS, AND APPROVALS



Route the Model FB Flexible Hose to permit the water to drain back into the branchline or through the sprinkler reducer.

FIGURE 3
FASTFLEX FLEXIBLE BRAIDED SPRINKLER HOSE
INSTALLATION GUIDANCE

Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name and Part Number (P/N).

Flexible Hose Assembly*

Specify: FASTFLEX Model FB Flexible Braided Hose Model (specify - refer to Table A), (specified) length, and (50 or 90 mm) Bar Fixing Clamps, P/N (specify):

*The FASTFLEX Model FB Flexible Braided Hose Assembly includes the following items:

- Flexible Braided Hose
- Inlet Nipple, ISO 7-R 1
- Straight Sprinkler Reducer, 1/2" NPT
- Reducer Bracket
- End Brackets
- Support Bar

Model with 1/2 inch Straight Reducer:

700	P/N FBS1250700
1000	P/N FBS1251000
1200	P/N FBS1251200
1500	P/N FBS1251500
2000	P/N FBS1252000

Model with 1/2 inch Angled Reducer:

700	P/N FBA1250700
1000	P/N FBA1251000
1200	P/N FBA1251200
1500	P/N FBA1251500
2000	P/N FBA1252000

Model with 3/4 inch Straight Reducer:

700	P/N FBS3250700
1000	P/N FBS3251000
1200	P/N FBS3251200
1500	P/N FBS3251500
2000	P/N FBS3252000

Model with 3/4 inch Angled Reducer:

700	P/N FBA3250700
1000	P/N FBA3251000
1200	P/N FBA3251200
1500	P/N FBA3251500
2000	P/N FBA3252000

End Bracket

Specify: FASTFLEX End Bracket, P/N FENDBRA

Support Bar

Specify: FASTFLEX Support Bar, (specify) length, (P/N (specify):

700	P/N FSUPBAR0700
1000	P/N FSUPBAR1000
1300	P/N FSUPBAR1300

Reducer Bracket

Specify: FASTFLEX Reducer Bracket, (specify) size, (P/N (specify):

1/2"	P/N FREDBRA050
3/4"	P/N FREDBRA075