

# FASTFLEX Model FB Flexible Braided Hose Europe, Middle East, and Africa Only

## 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 light-weight ceiling bracket components. (Ref. 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 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

(Approvals apply to the service conditions indicated in the Design Criteria sections.)

CSTB accepted for all models and assembly lengths.

### Inlet Connections

ISO 7-R 1

Ref. Figure 1

### Outlet Connections

1/2 inch NPT

3/4 inch NPT

Ref. Figure 3

### Nominal Assembly Lengths

Ref. Figure 3

### Materials of Construction

Ref. Figure 1

Inlet Nipple	Mild Steel
Flexible Hose	AISI 304 Stainless Steel
Sprinkler Reducer	Mild Steel
Reducer Bracket	Pressed Steel
Bar Fixing Clamps	Pressed Steel
Support Bar	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 assemblies are approved for installation above suspended ceiling systems having T-profile grid supports manufactured only by:

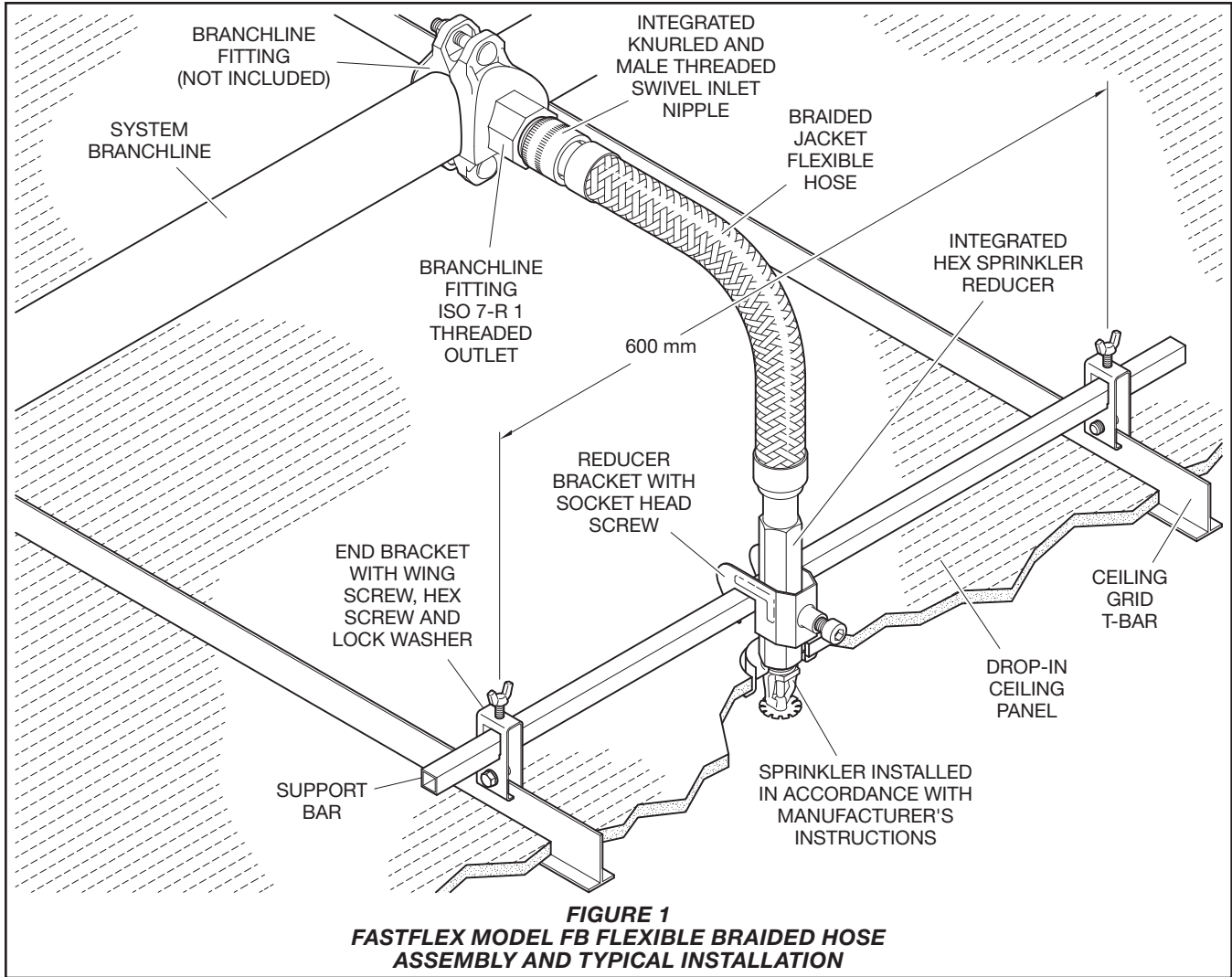
AMF\*  
Odenwald  
Richter\*  
Armstrong  
Rigips\*  
Knauf\*  
Chicago Metallic\*  
Durlum  
Geipel  
Gema Armstrong  
Suckow & Fischer\*  
USG Donn  
Daldrop & Dr. Huber  
Rockfon Pagos

**NOTE:** FASTFLEX Model FB Flexible Braided Hose assemblies making use of gypsum end brackets RBF38T are approved for use with U-profile channel support construction with the brands marked with an asterisks (\*).

### 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.



**FIGURE 1**  
**FASTFLEX MODEL FB FLEXIBLE BRAIDED HOSE**  
**ASSEMBLY AND TYPICAL INSTALLATION**

## Installation

### T-Bar Bracket Application

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

#### NOTICE

*TYCO Model FB Flexible Braided Hoses are intended only to connect sprinklers directly to system piping (Ref. Figure 1). Model FB Flexible Braided 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 4 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. (Ref. 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.

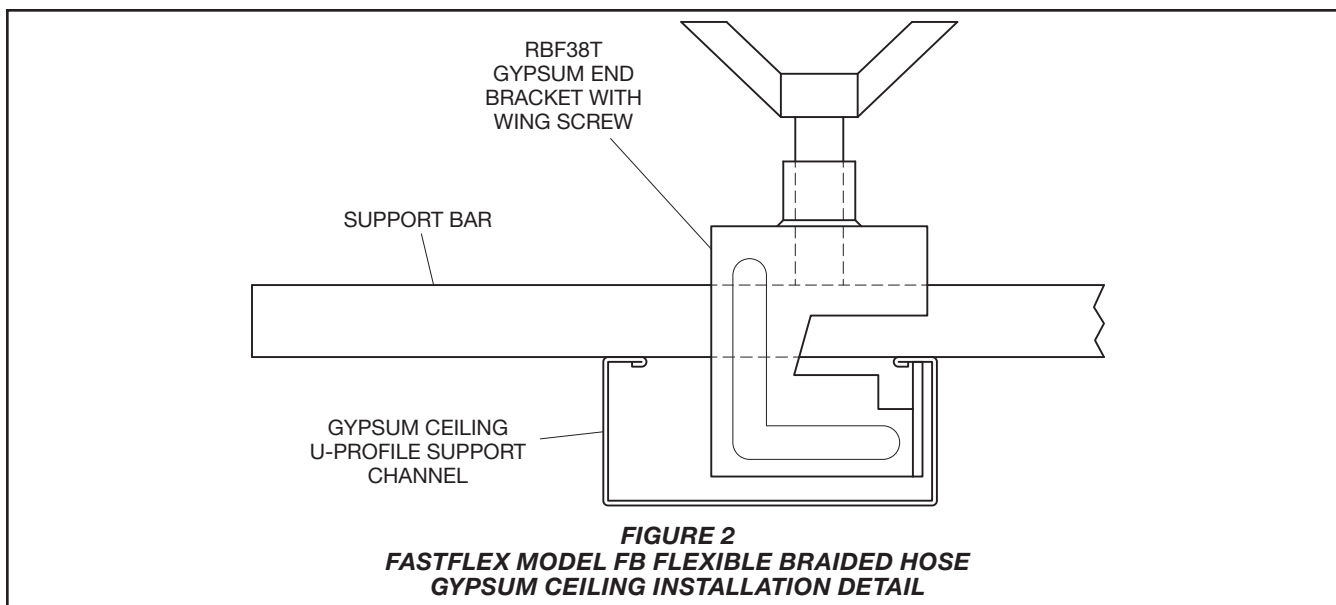
**Step 6.** Bend the Flexible Braided Hose and place the Sprinkler Reducer to where the sprinkler will be located. The hose arc should not be twisted, and the arc should be as large and smooth as possible. (Ref. Figures 3 and 4)

#### 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 Braided 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)

## Installation

### Gypsum End Bracket Application

THE TYCO FASTFLEX Model FB Flexible Braided Hose gypsum ceiling installation, using the Gypsum End Bracket RBF38T as shown in Figure 2, must be installed in accordance with this section.

#### NOTICE

*TYCO Model FB Flexible Braided Hoses are intended only to connect sprinklers directly to system piping (Ref. Figure 1). Model FB Flexible Braided 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 4 that provides Installation Guidance.

**Step 2.** Determine approximately where the sprinkler will be located. Set the Support Bar on the U-profile Support Channel, then mount the Gypsum End Bracket to the Support Bar. Hook the Gypsum End Bracket under the edge of the U-profile Support Channel. The sprinkler should be located as close to the center of the distance between the U-profile Support Channels as possible.

**Step 3.** Hand-tighten the Wing Screw on the Gypsum End Bracket securing it to the Support Bar.

**Step 4.** Attach the Swivel Inlet Nipple to the Branchline Fitting outlet. (Ref. 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 Braided 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. (Ref. Figures 3 and 4)

#### 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 Braided 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.

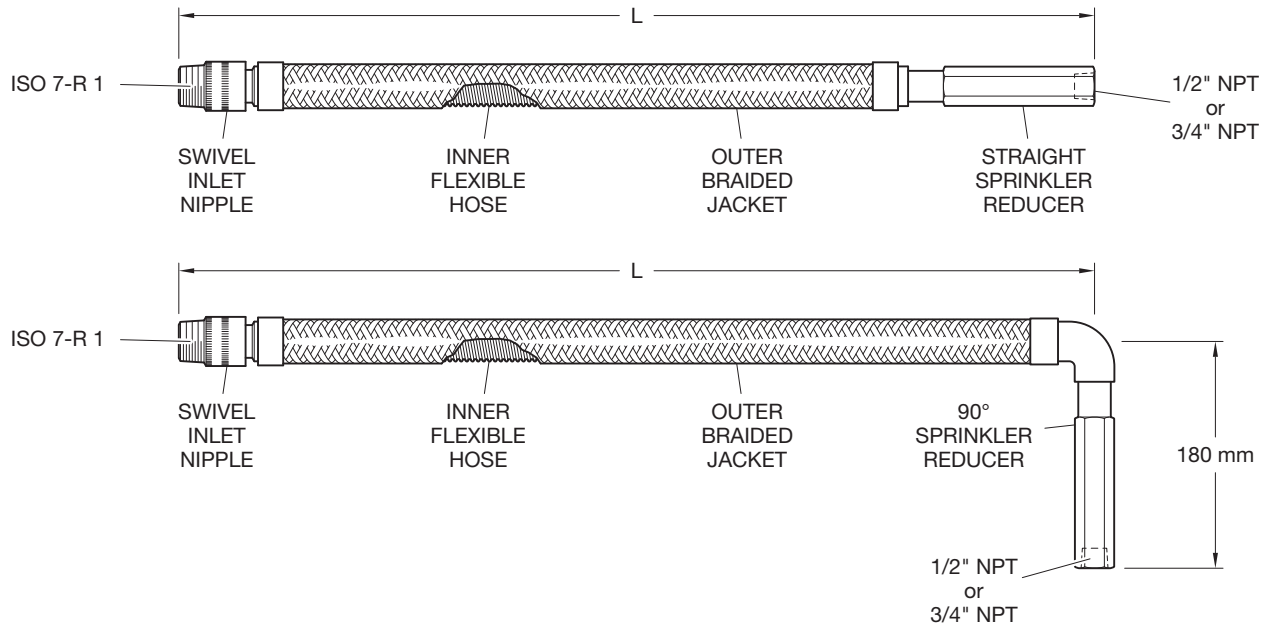
**Step 8.** After tightening the Reducer Bracket fastener, verify that the sprinkler is properly located in accordance with the manufacturer's instructions. If not in the proper location, adjust its position as necessary.

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

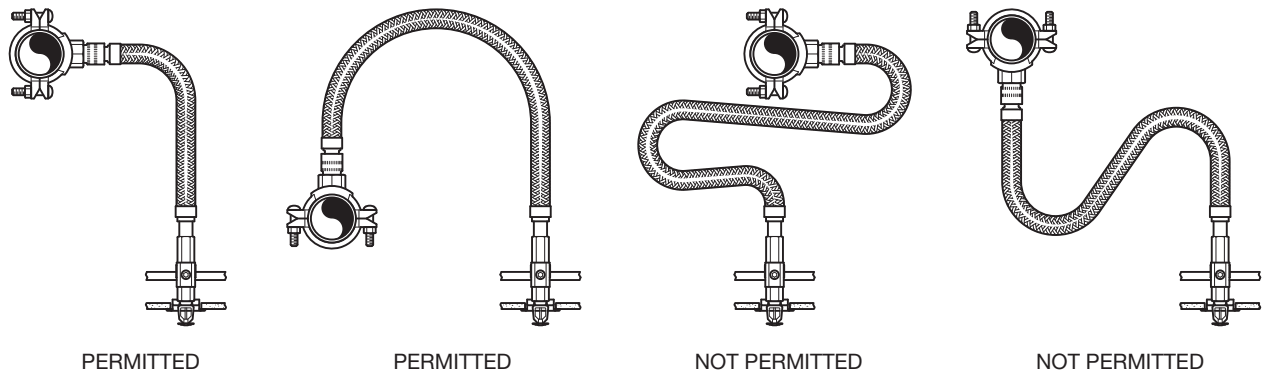
**NOTE:** The Gypsum End Bracket Wing Screws must be tightened before tightening the Reducer Bracket to the Support Bar.

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

Model	Type	L Nominal Length	Maximum Number of Bends
FB25-700	Braided	700 mm	3
FB25-1000	Braided	1000 mm	3
FB25-1200	Braided	1200 mm	3
FB25-1500	Braided	1500 mm	4
FB25-2000	Braided	2000 mm	4



**FIGURE 3**  
**FASTFLEX MODEL FB FLEXIBLE BRAIDED HOSE ASSEMBLY**  
**NOMINAL DIMENSIONS**



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

**FIGURE 4**  
**FASTFLEX MODEL FB FLEXIBLE BRAIDED HOSE**  
**INSTALLATION GUIDANCE**

## 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](http://www.tyco-fire.com).

## 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**  
 FASTFLEX Model FB assembly includes the following items:

- Flexible Braided Hose
- Inlet Nipple, ISO 7-R 1
- Sprinkler Reducer  
 1/2" or 3/4" NPT,  
 Straight or Angled
- Reducer Bracket
- End Brackets
- Support Bar

Specify: FASTFLEX Model FB Flexible Braided Hose Model (specify, Ref. Figure 3), (specified) length, and (specify size, 50 or 90 mm) Bar Fixing Clamps, P/N (specify):

**With 1/2 inch Straight Reducer:**

700 .....	FBS1250700
1000 .....	FBS1251000
1200 .....	FBS1251200
1500 .....	FBS1251500
2000 .....	FBS1252000

**With 1/2 inch Angled Reducer:**

700 .....	FBA1250700
1000 .....	FBA1251000
1200 .....	FBA1251200
1500 .....	FBA1251500
2000 .....	FBA1252000

**With 3/4 inch Straight Reducer:**

700 .....	FBS3250700
1000 .....	FBS3251000
1200 .....	FBS3251200
1500 .....	FBS3251500
2000 .....	FBS3252000

**With 3/4 inch Angled Reducer:**

700 .....	FBA3250700
1000 .....	FBA3251000
1200 .....	FBA3251200
1500 .....	FBA3251500
2000 .....	FBA3252000

### Accessories

#### End Bracket

Specify: FASTFLEX End Bracket, P/N FENDBRA

#### Gypsum End Bracket

Specify: Gypsum End Bracket, P/N RBF38T

#### Support Bar

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

700 .....	FSUPBAR0700
1000 .....	FSUPBAR1000
1300 .....	FSUPBAR1300

#### Reducer Bracket

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

1/2" .....	FREDBRA050
3/4" .....	FREDBRA075

