

# Flexible Sprinkler Connection (For Wet Pipe Sprinkler Systems)

## Description

The unique system easily positions the sprinkler in the centre of the ceiling tile at the correct height and can be installed in 10 to 15 minutes. The concept is very simple and breathtakingly efficient.

is a complete unit, a corrugated stainless steel flexible with nipple, reducer, bar and brackets, which are fitted to the ceiling tile support rails to locate and secure the sprinkler in the correct position. As well as considerably reduced installation time, the risk of mess (from the cutting and threading activity associated with the traditional armover method) in the clean area below the suspended ceiling is eliminated, allowing other activities to proceed more efficiently.

## Pressure Rating

Max. Service Pressure:

LPCB 16 Bar  
UL 12 Bar

Inlet  
Outlet

R1 or R1.1/4 or 1" NPT  
A = Rc1/2 or 1/2" NPT  
B = Rc3/4 or 3/4" NPT  
C = R1 (External Thread)

## Standard Lengths

Product	Length	Equivalent Pipe Length	
		UL Schedule 40	LPCB BS EN 10255
SP-1AS	0.70m	5.5m	5.1m
SP-1A	0.78m	8.2m	6.0m
SP-2AS	1.00m	13.4m	8.5m
SP-2A	1.22m	16.2m	11.0m
SP-3A	1.54m	20.7m	14.2m
SP-4A	1.88m	22.3m	18.2m
SP-5A	2.54m	-	25.2m
SP-6A	3.22m	-	32.5m

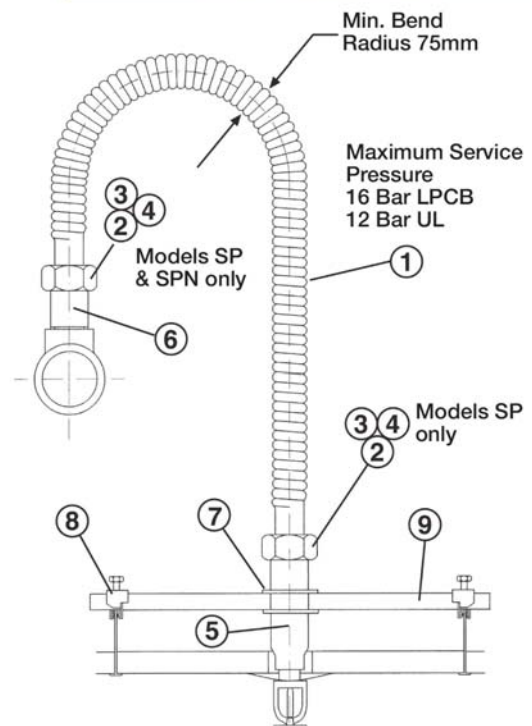
## Material Specification

Ref No.	Description	MODEL SP		MODEL SPN		MODEL SPW	
		Qty	Material	Qty	Material	Qty	Material
1	Flexible	1	AISI 304	1	AISI 304	1	AISI 304
2	Nut	2	SS400 Zinc Plated	1	SS400 Zinc Plated	Nil	Not Applicable
3	Isolation Ring	2	Nylon 66	1	Nylon 66	Nil	Not Applicable
4	Packing (Seal)	2	NBR	1	NBR	Nil	Not Applicable
5	Reducer	1	Carbon Steel Zinc Plated	1	ASIM IP304	1	ASIM IP304
6	Nipple	1	Carbon Steel Zinc Plated	1	Carbon Steel Zinc Plated	1	ASIM IP304
7	Bracket A	1	Mild Steel Zinc Plated	1	Mild Steel Zinc Plated	1	Mild Steel Zinc Plated
8	Bracket B	2	Mild Steel Zinc Plated	2	Mild Steel Zinc Plated	2	Mild Steel Zinc Plated
9	Square Bar	1	Mild Steel Zinc Plated	1	Mild Steel Zinc Plated	1	Mild Steel Zinc Plated

## Benefits

- Save Time
- No Cutting
- No Welding
- Save Labour
- No Threading
- No Mess - Clean
- Save Money
- No Oil
- Ideal for Retrofit Applications
- No Measuring
- No Grease
- Easy to move for layout changes

UL Listed / LPCB Approved



# Flexible Sprinkler Connections

## Models SP, SPN & SPW (See Fig 1 Overleaf)

### Installation Instructions

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- 1) Install the Inlet Nipple (R1 or R1.1/4 pipe thread end) in the range pipe outlet using the normal sealing and tightening methods for connecting pipe threads for leak proof joints. NB. For SPW this nipple is permanently fixed to the flexible hose and care must be taken not to twist the hose or use it as a lever when tightening in the nipple.
- 2) For SP only - Check the '□' Packing is in place flush against the shoulder on one end of the flexible and connect the Reducer (M33 x 1.5 thread end) to that end and tighten the nut. NB. For SPN and SPW the reducer is permanently fixed to the flexible hose.
- 3) For SP and SPN - Check that the '□' Packing is in place flush against the shoulder on the other end of the flexible and connect that end to the open end of the inlet nipple on the range pipe and tighten the nut. NB. For SPW this step does not apply.
- 4) Bend the flexible by hand (Min. Bend Radius 75mm – See Fig. 5) to take up the desired route for the flexible and position the reducer for the sprinkler location. (eg. Centre of Tile)  
When bending leave 60mm straight (no bend) from the end fitting, ensure there are no kinks and use the radius gauge to ensure that no bends are tighter than the minimum bend radius.  
Where required by the Authority Having Jurisdiction (AHJ) a Rapidrop® Minimum Radius Indicator (MRI) (see Fig. 6 & Fig. 7) must be fitted to each and all bends which exceed 45 degrees, if the bend exceeds 90 degrees two MRIs are to be used adjacent.

For LPCB installations the LPCB guidelines for the installation of all flexibles must be followed.

- 5) The reducer (Outlet) must be located securely to prevent movement relative to the ceiling resulting from the system being pressurized, from sprinkler operation and from discharge of water if the sprinkler operates as the result of a fire. The fixing must also resist torsional forces which result from a sprinkler being installed in the reducer.

The Reducer is easily located centre of tile in 1,200mm x 600mm (See Fig.2) and 600mm x 600mm tiles (See Fig.3) but must be fixed to the 1,200mm long Cross Tees of the ceiling suspension system using the Rapidrop® support bar and brackets supplied. (NB. must not be bracketed to reduced height or lightweight cross tees.)

If there are no available, suitable 1,200mm long cross tees, must be fixed to the Main Runners of the ceiling suspension system. As the Main Runners are spaced at 1,200mm this method requires a longer support bar which is available. (See Fig. 4)

Various types of Bracket B (See Fig. 8 & Fig. 9) are available to suit the ceiling suspension Cross Tees and Main Runners and with variable heights to enable both normal sprinklers with escutcheons or concealed sprinklers to be installed. Do not over tighten the bracket setscrews.

less than 1.6 metre long do not require any intermediate support between the range pipe connection and the brackets to the ceiling suspension system. longer than 1,6m up to 3.2m long must have one intermediate support direct from the building structure. This support must be located not more than 1.6m (measured along the route of the flexible) from the sprinkler connection. As the flexible is stainless steel, insulation between the support hanger and the corrugated flexible must be provided to prevent direct metal to metal contact.

- 6) Install the sprinkler and pressure test in the normal way. Max. Working Pressure 16 bar. After filling with water for pressure test please keep the sprinkler system always filled with water. Do not leave the system drained for long periods.



## Flexible Sprinkler Connections

Models SP, SPN & SPW (See Fig 1)

Installation Instructions

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Figure 1

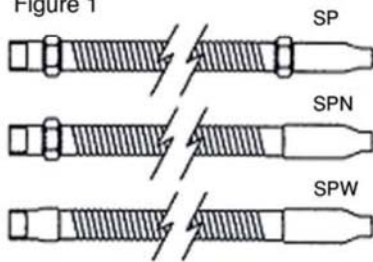


Figure 2

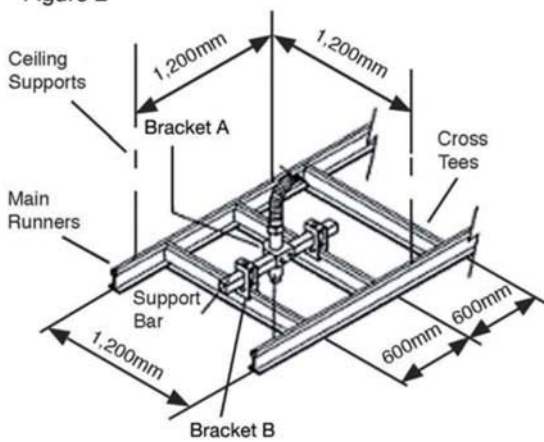


Figure 3

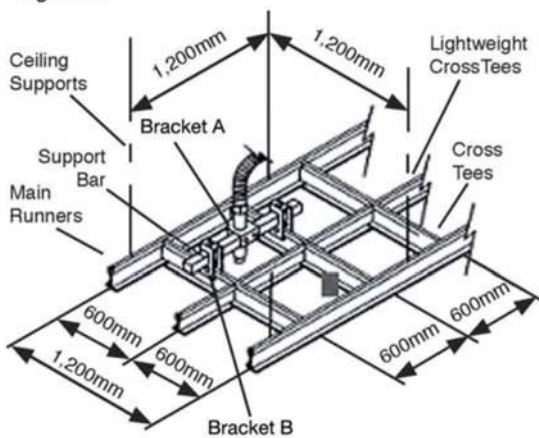


Figure 4

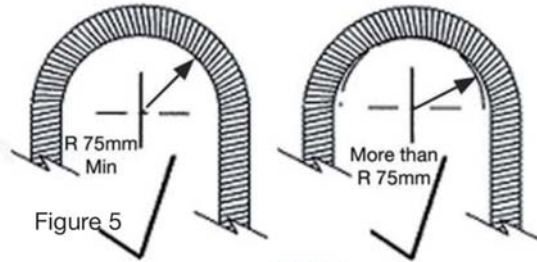
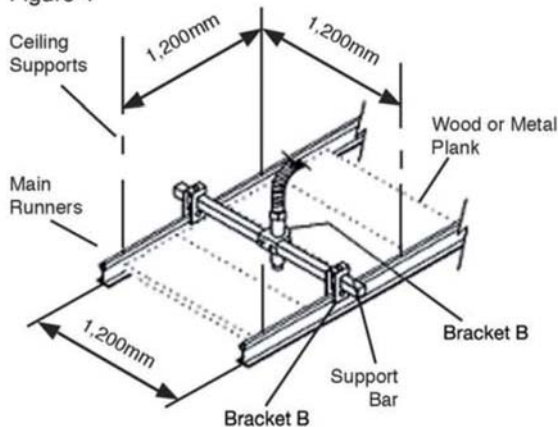
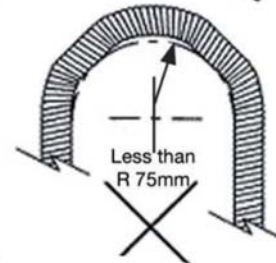


Figure 5



### Minimum Radius Indicator

UK Patent No GB2420413

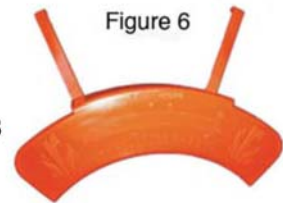


Figure 6

Figure 7

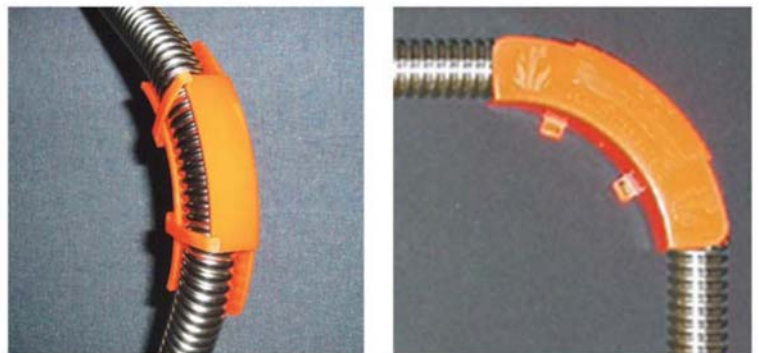


Figure 8

Bracket B 4 : B 7 : B 10 : B 11  
Different Heights

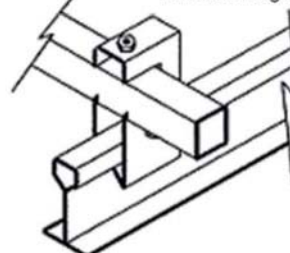


Figure 9

