



## DS-8 FAQ



The power behind **your mission**



# Frequently Asked Questions

## What is the DS-8 Dry Sprinkler?

The DS-8 is an 8.0k (K115) dry sprinkler. It is similar in style and appearance to the currently offered DS-1 and DS-R but with a larger k-factor and several design improvements. It is offered in standard 1" NPT connection and 1" BSP connection, and is available in 1/4" length increments up to 48" length.

## What are the available finishes?

Available in plain brass, chrome plated and white polyester coated frame and deflector. Each is paired with a similarly finished escutcheon or without escutcheon (plain barrel). The chrome finished frame/deflector assembly can be paired with a standard chrome escutcheon, or stainless steel escutcheon in all available styles.

## What escutcheons are available with the DS-8?

The DS-8 sprinklers are available without escutcheon, recessed escutcheon, deep escutcheon, or standard (flush style) escutcheon. Escutcheons are available in finishes to match the frame/deflector and additionally, a stainless steel series of escutcheons is available as an option for chrome frame/deflector assemblies.

## Does the DSB-2 work with the DS-8?

Yes. Our patented Dry Sprinkler Boot can be used with the entire line of Tyco Dry Sprinklers. This unique solution provides an easy installation and long term protection against condensation from the warm space above a freezer ceiling dripping down onto spray foam used for filling the through penetration of the ceiling.

## Is the DS-8 similar to other Tyco Dry Sprinklers?

The DS-8 is built utilizing similar components from existing Tyco Dry Sprinklers. It is comprised of our standard 1" steel barrel and 1" brass threaded connection. The internals of the sprinkler are similar to our DS-1 and DS-R type sprinklers with some improved design features.

## Dry Sprinkler comparison chart

Model	DS-8		DS-1				
<b>Style</b>	Pendent (Standard Coverage)		Pendent			Pendent	
<b>Occupancy Classification</b>	NFPA Light Hazard, Ordinary Hazard, Extra Hazard		NFPA 13 Commercial Light, Ordinary and Extra Hazard			NFPA 13 Commercial Light, Ordinary and Extra Hazard	
<b>K-Factor</b>	8.0 K (K 115)	8.0 (K 115)	5.6 K (K 80)	5.6 K (K 80)	5.6 K (K 80)	5.6 K (K 80)	5.6 K (K 80)
<b>SIN</b>	TY4235	TY4255	TY3235	TY3935	TY3230	TY3255	TY3250
<b>Lightings</b>	cULus	cULus	cULus FM	cULus	cULus	cULus, FM, LPCB, CE, VdS	cULus LPCB
<b>Response Rating</b>	QR	SR	QR	QR	QR	SR	SR
<b>Activation Temperature</b>	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C 360 °F / 182.2 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C 360 °F / 182.2 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C 360 °F / 182.2 °C
<b>Escutcheon Style</b>	Standard Recessed Deep Plain Barrel	Standard Recessed Deep Plain Barrel	Standard Recessed Deep Plain Barrel	Standard Recessed Deep Plain Barrel	Standard Recessed Deep Plain Barrel	Standard Recessed Deep Plain Barrel	Standard Recessed Deep Plain Barrel
<b>Finish Options</b>	Chrome Brass White	Chrome Brass White	Brass White Chrome	Brass White Chrome	Stainless Steel	Brass White Chrome	Stainless Steel
<b>Minimum Order Length</b>	3/4 in. (19 mm)	3/4 in. (19 mm)	1/2 in. (12.7 mm)	1/2 in. (12.7 mm)	1/2 in. (12.7 mm)	1/2 in. (12.7 mm)	1/2 in. (12.7 mm)
<b>Maximum Order Length</b>	48 in. (1219 mm)	48 in. (1219 mm)	48 in. (1219 mm)	48 in. (1219 mm)	48 in. (1219 mm)	48 in. (1219 mm)	48 in. (1219 mm)
<b>Thread Type</b>	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	3/4" NPT	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1
<b>Data Sheet</b>	TFP513	TFP503	TFP560	TFP510	TFP560	TFP500	TFP560

### Typical Installation for the DS-8 & DS-1 Pendent

Both the DS-8 and DS-1 can be used in commercial systems or portions of wet pipe commercial systems exposed to freezing temperatures. Examples include overhangs, breezeways, parking garages, balconies, outdoor walkways in mixed-use or commercial areas such as shopping centres, and box-in-box freezers. The use of these pendent dry sprinklers reduces low points, and you can typically use both pendants in dry pipe systems where the piping is subject to freezing temperatures.

## Dry Sprinkler comparison chart

Model	DS-1							
Style	Horizontal Sidewall (Standard Coverage)					Horizontal Sidewall (Extended Coverage)		
Occupancy Classification	NFPA 13 Commercial Light and Ordinary Hazard					NFPA 13 Commercial Light Hazard		
K-Factor	5.6 K (K 80)	5.6 K (K 80)	5.6 K (K 80)	5.6 K (K 80)	5.6 K (K 80)	5.6 K (K 80)	5.6 K (K 80)	5.6 K (K 80)
SIN	TY3355	TY3337	TY3357	TY3335	TY3735	TY3338	TY3358	TY3339
Lightings	cULus	cULus	cULus	cULus	cULus	cULus	cULus	cULus
Response Rating	SR	QR	SR	QR	QR	QR	SR	QR
Activation Temperature	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C 360 °F / 182.2 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C 360 °F / 182.2 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C	135 °F / 57.2 °C 155 °F / 68.3 °C	135 °F / 57.2 °C 155 °F / 68.3 °C	135 °F / 57.2 °C 155 °F / 68.3 °C
Escutcheon Style	Standard Deep Plain Barrel	Standard Deep Plain Barrel	Standard Deep Plain Barrel	Standard Deep Plain Barre	Standard Deep Plain Barrel	Standard	Standard	Standard
Finish Options	Brass White Chrome	Stainless Steel	Stainless Steel	Brass White Chrome	Brass Chrome White	Brass White Chrome	Brass White Chrome	Stainless Steel
Minimum Order Length	1/2 in. (12.7 mm)	1/2 in. (12.7 mm)	1/2 in. (12.7 mm)	1/2 in. (12.7 mm)	1/2 in. (12.7 mm)	2 3/4 in. (70 mm)	2 3/4 in. (70 mm)	2 3/4 in. (70 mm)
Maximum Order Length	48 in. (1219 mm)	48 in. (1219 mm)	48 in. (1219 mm)	48 in. (1219 mm)	48 in. (1219 mm)	47 in. (1219 mm)	47 in. (1219 mm)	48 in. (1219 mm)
Thread Type	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	3/4" NPT	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1
Data Sheet	TFP500	TFP560	TFP560	TFP500	TFP510	TFP520	TFP520	TFP560

### Typical Installation for the DS-1 Horizontal Sidewall (Standard & Extended Coverage)

DS-1 Horizontal Sidewall, Standard Coverage, and Extended Coverage can be used in commercial systems or portions of wet pipe commercial systems exposed to freezing temperatures. Examples include overhangs, breezeways, balconies, and outdoor walkways in mixed-use or commercial areas such as shopping centers.

## Dry Sprinkler comparison chart

Model	DS-1		DS-R		DS-3
<b>Style</b>	Upright		Sidewall	Sidewall	Sidewall (Extended Coverage)
<b>Occupancy Classification</b>	NFPA 13 Commercial Light, Ordinary and Extra Hazard		Ordinary Residential (NFPA 13, 13R, 13D)	Residential (NFPA 13, 13R, 13D)	NFPA Light Hazard, Ordinary Hazard
<b>K-Factor</b>	5.6 K (K 80)	5.6 K (K 80)	4.4 K (K 63)	4.9 K (K 68)	11.2 K (K 161)
<b>SIN</b>	TY3155	TY3235	TY2335	TY2235	TY5339
<b>Lightings</b>	cULus FM	cULus FM	UL	UL	cULus
<b>Response Rating</b>	SR	QR	FR	FR	QR
<b>Activation Temperature</b>	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C 360 °F / 182.2 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C	155 °F / 68.3 °C	155 °F / 68.3 °C 175 °F / 79.4 °C	155 °F / 68.3 °C 200 °F / 93.3 °C
<b>Escutcheon Style</b>	Plain Barrel	Plain Barrel	Recessed, Plain Barrel	Recessed	Standard Deep Plain Barrel
<b>Finish Options</b>	Brass White Chrome	Brass White Chrome	Brass White Chrome	Brass White Chrome	Chrome Brass White
<b>Minimum Order Length</b>	5 in. (127 mm)	5 in. (127 mm)	3-3/4 in. (95.3 mm)	3-3/4 in. (95.3 mm)	1 in. (25.4 mm)
<b>Maximum Order Length</b>	48 in. (1219 mm)	48 in. (1219 mm)	24 in. (609.3 mm)	24 in. (609.3 mm)	48 in. (1219 mm)
<b>Thread Type</b>	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1
<b>Data Sheet</b>	TFP500	TFP510	TFP461	TFP460	TFP550

### Typical Installation for the DS-1 Upright, DS-R Sidewall & Pendent, and DS-3 Sidewall

DS-1 Upright is suitable for commercial systems or portions of wet pipe commercial systems exposed to freezing temperatures such as unheated attics.

DS-R Sidewall and Pendent can be used in areas such as balconies and corridors exposed to freezing temperatures as part of a wet system. The DS-R pendent can be used in dry pipe residential systems.

DS-3 Sidewall (Extended Coverage) can also be used in commercial systems or portions of wet pipe commercial systems exposed to freezing temperatures. Examples include loading docks, overhangs, breezeways, parking garages, balconies, outdoor walkways in mixed-use or commercial areas such as shopping centers, and box-in-box freezers.

## Dry Sprinkler comparison chart

Model	DS-C		DS-ECC	DS-2		
<b>Style</b>	Concealed Pendent (Standard Coverage)		Concealed Pendent (Extended Coverage)	Pendent (Standard Coverage)		Pendent (Extended Coverage)
<b>Occupancy Classification</b>	NFPA Light Hazard, Ordinary Hazard, Extra Hazard		NFPA Light Hazard	NFPA Light Hazard, Ordinary Hazard, Extra Hazard		NFPA Light Hazard, Ordinary Hazard
<b>K-Factor</b>	5.6 K (K 80)	5.6 K (K 80)	5.6 K (K 80)	11.2 K (K 161)	11.2 K (K 161)	11.2 K (K 161)
<b>SIN</b>	TY3535	TY3555	TY3539	TY5255	TY5235	TY5238
<b>Lightings</b>	cULus	cULus	cULus	cULus	cULus	cULus
<b>Response Rating</b>	QR	SR	QR	SR	QR	QR
<b>Activation Temperature</b>	155 °F / 68.3 °C 200 °F / 93.3 °C	155 °F / 68.3 °C 200 °F / 93.3 °C	155 °F / 68.3 °C 200 °F / 93.3 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C	135 °F / 57.2 °C 155 °F / 68.3 °C 175 °F / 79.4 °C 200 °F / 93.3 °C 286 °F / 141.1 °C
<b>Escutcheon Style</b>	Flat Plate Concealed		Flat Plate Concealed	Standard Recessed Deep Plain Barrel	Standard Recessed Deep Plain Barrel	Standard Recessed Deep Plain Barrel
<b>Finish Options</b>	Grey White (RAL9002) Brass Pure White (RAL9010) Signal White (RAL9003) Jet Black (RAL9005) Custom		Grey White (RAL9002) Brass Pure White (RAL9010) Signal White (RAL9003)	Chrome Brass White	Chrome Brass White	Chrome Brass White Recessed
<b>Minimum Order Length</b>	5 in. (127 mm)	5 in. (127 mm)	5 in. (127 mm)	1 in. (25.4 mm)	1 in. (25.4 mm)	1 in. (25.4 mm)
<b>Maximum Order Length</b>	48 in. (1219 mm)	48 in. (1219 mm)	48 in. (1219 mm)	48 in. (1219 mm)	48 in. (1219 mm)	48 in. (1219 mm)
<b>Thread Type</b>	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1	1" NPT and 1" ISO 7-R-1
<b>Data Sheet</b>	TFP515	TFP515	TFP518	TFP530	TFP530	TFP540

### Typical Installation for the DS-C & DS-ECC Concealed Pendent and DS-2 Pendent

DS-C and DS-ECC Concealed Pendent can be used in commercial systems exposed to freezing temperatures where aesthetic requirements demand the sprinkler be hidden. Examples include overhangs, breezeways, and balconies, outdoor walkways in mixed-use or commercial areas such as shopping centers. The use of these concealed pendent dry sprinklers reduces low points, and you can typically use both concealed pendants in dry pipe systems where the piping is subject to freezing temperatures.

DS-2 Pendent, Standard Coverage, and Extended Coverage are also suitable for use in commercial systems or portions of wet pipe commercial systems exposed to freezing temperatures. Examples include overhangs, breezeways, parking garages, balconies, outdoor walkways in mixed-use or commercial areas such as shopping centers, and box-in-box freezers. The use of these pendent dry sprinklers reduces low points in dry pipe systems where the piping is subject to freezing temperatures.



## About Johnson Controls

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