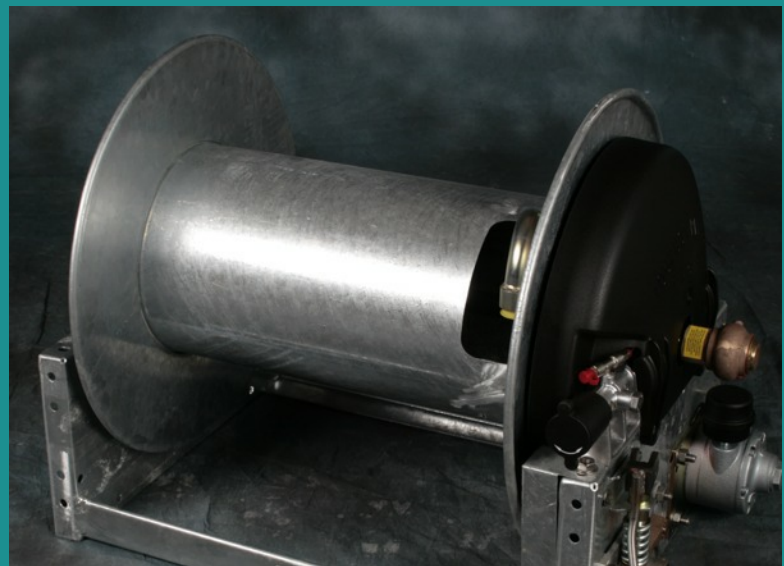


Safety by Engineering  
**Supply +**

# Fuel Delivery Hose Reel Catalogue



Safety by Engineering  
**Supply +**

+ **AS** Fire & Safety + **Bayley** + **Collins Youldon** + **Todd** Research

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## Introduction

Collins Youldon have manufactured hose reels since the early 1980s. During this time we have developed a comprehensive range of products for various applications including fire fighting and domestic fuel oil delivery. Whilst the company is the largest supplier of vehicle-mounted hose reels in the United Kingdom, over 50% of its hosereel production is currently exported.

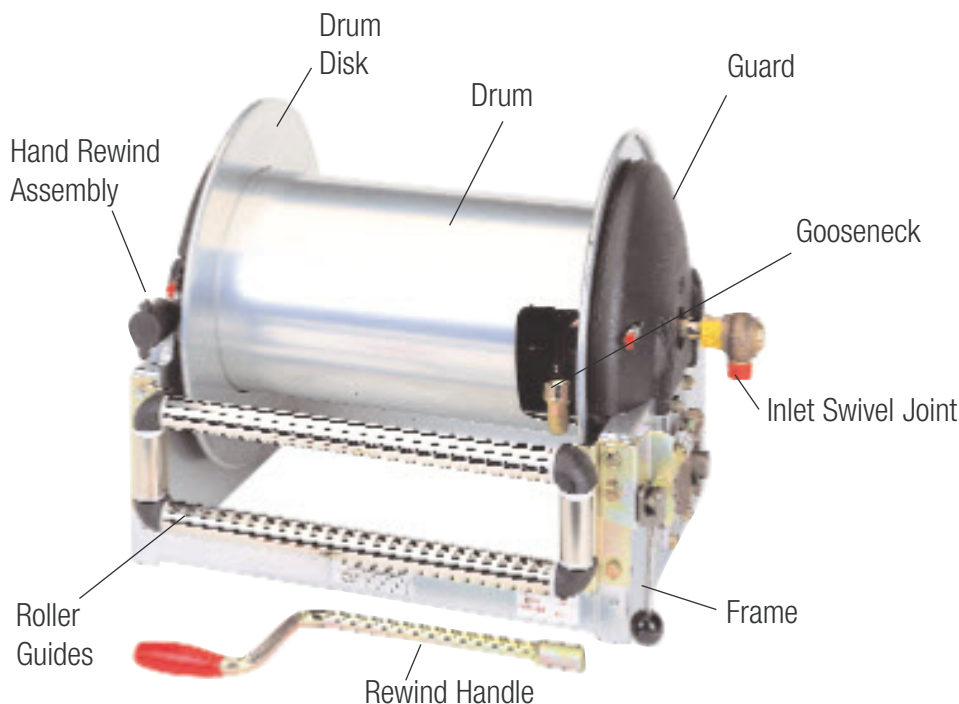
This brochure describes the range of models in production, and some of their applications. It also gives details of the many optional features available to provide the hose reel best suited to your requirements.



Our Sales Department is always available to recommend the best combination of features for each customer. The hose reels enquiry sheet (inside the back cover of this brochure) lists the information that will enable our sales team to offer the best

hose reel for your application. If you prefer, they will be pleased to discuss your requirements before you complete the enquiry sheet.

***Please visit our website : [www.supplyplus.com](http://www.supplyplus.com)***

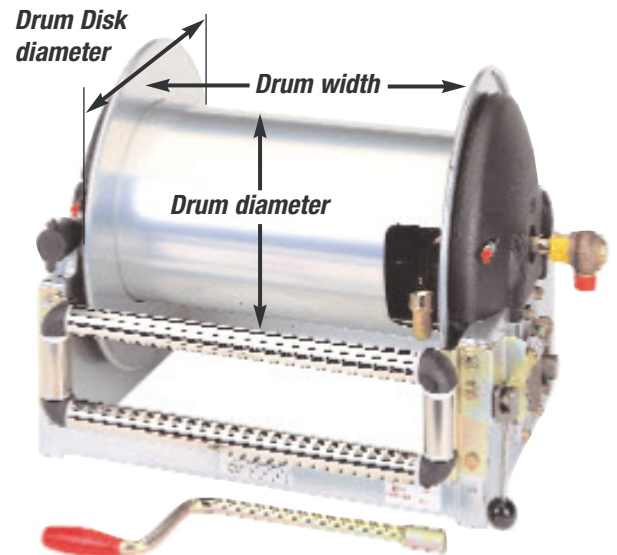


## Hose Reels Types and Capacities

There are five standard types, each having different dimensions. Each type can be supplied with a range of fluid paths with an internal diameter from  $\frac{3}{4}$  /19mm up to 2/50mm. Dimensions and capacities are shown in the table below.

Hose Reel Type	Drum Disk Diameter	Smallest Drum Diameter	Maximum Drum Width	Available fluid bores and typical maximum hose capacity				
				$\frac{3}{4}$ in/19mm	1in/25mm	1 $\frac{1}{4}$ in/32mm	1 $\frac{1}{2}$ in/38mm	2in/50mm
Lowline	17"/432mm	10"/254mm	6"/914mm	263ft/72m	121ft/37m	108ft/33m	Not Suitable	Not suitable
Fire	19"/483mm	11.25"/286mm	32"/813mm	240ft/73m	118ft/36m	105ft/32m	95ft/29m	Not Suitable
Compact	20"/508mm	10"/254mm	32"/813mm	292ft/89m	187ft/54m	157ft/48m	Not Suitable	Not Suitabl
Standard	23"/584mm	11.25"/286mm	32"/813mm	335ft/102m	302ft/92m	174ft/53m	161ft/49m	79ft/24m
Hlgh Capacity	29"/737mm	11.25"/286mm	32"/813mm	735ft/224m	525ft/160m	361ft/110m	240ft/73m	138ft/42m

Hosereels with drum diameters of 15.5"/394mm and 19.5"/495mm are also available for



## Fluid Path Materials

The fluid paths and inlet swivel joints for these hose reels are made from several different materials. For special applications such as aircraft refuelling, and for use with chemicals and solvents, full details of the fluid to be delivered should be given to our Sales Department. The table below shows the most common combinations.

Centre Shaft



Swivel Joints



Spindle



Fluid path size	Mild steel fluid path with brass or gun metal swivel joint	Mild steel fluid path, with mild steel swivel joint.	Stainless steel fluid path with brass or gun metal swivel joint	Stainless steel fluid path, with stainless steel swivel joint.	Cast aluminium fluid path with gun metal inlet.	Cast gun metal fluid path with gun metal inlet.
$\frac{3}{4}$ "/19mm	✓	✓				
1"/25mm	✓	✓	✓	✓		
1.25"/32mm	✓	✓		✓	✓	✓
1.5"/38mm				✓	✓	✓
2in/50mm				✓	✓	✓

## Inlet Swivel Joints

A range of special swivel joints is available to suit particular applications. These include in-line swivel joints for use with powders (or to simplify feed pipework), special thread forms and non-standard seal materials.

## Manual Rewind Options

The most commonly used version is the 90° manual rewind. However, when space permits, the 65° angled manual rewind is recommended. This makes rewinding easier because the rewind handle is offset to the line of the hose that is being rewound onto the drum. Axial rewind (direct or geared) is also available.

Direct axial type requires a greater effort to rewind the hose, and should be used only on small reels that are not in frequent use.

The sloping frame option provides a comfortable operating height when the hose reel is mounted in either a low or high position, e.g. the top cabinet of a vehicle. The table below shows availability.

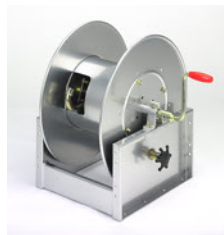
Geared 90°



Geared 65°



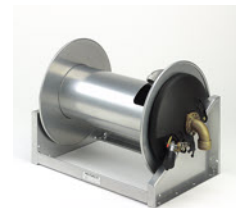
Direct Axial



Geared Axial



Sloping Frame



Hose Reels	Fluid Path Internal Diameter	Geared 90°	Geared 65°	Direct Axial	Geared Axial	Sloping Frame
Lowline	3/4" /19mm	✓	✓	✓	✓	✓
Lowline	1" /25mm	✓	✓	✓	✓	✓
Lowline	1.25" /32mm	✓	✓	✓	✓	✓
Fire	3/4" /19mm	✓	✓	✓	✓	✓
Fire	1" /25mm	✓	✓	✓	✓	✓
Fire	1.25" /32mm	✓	✓	✓	✓	✓
Fire	1.5" /38mm	✓	✓			✓
Compact	3/4" /19mm	✓	✓	✓	✓	✓
Compact	1" /25mm	✓	✓	✓	✓	✓
Compact	1.25" /32mm	✓	✓	✓	✓	✓
Standard	3/4" /19mm	✓	✓	✓	✓	✓
Standard	1" /25mm	✓	✓	✓	✓	✓
Standard	1.25" /32mm	✓	✓	✓	✓	✓
Standard	1.5" /38mm	✓	✓			✓
Standard	2" /50mm	✓	✓			✓
High Capacity	3/4" /19mm	✓	✓	✓	✓	
High Capacity	1" /25mm	✓	✓	✓	✓	
High Capacity	1.25" /32mm	✓	✓	✓	✓	
High Capacity	1.5" /38mm	✓	✓			
High Capacity	2" /50mm	✓	✓			



## Powered

The Collins Youldon hose reel range is available with pneumatic, hydraulic, or electric rewind motors.

### 1 Electric

Electric rewind hose reels are suitable for road vehicles and other applications where a DC electrical supply is available. These are fitted with a durable motor, which provides great resistance against stalling and consequent burn-out. For protection of both the motor and the operator a centrifugal clutch is fitted.

When the hose is deployed the clutch does not engage, and the motor remains stationary. This minimises the effort required by the operator to unwind the hose. A speed reduction/idler assembly is also fitted, thereby ensuring that rewind speeds are safe and the hose can be wound neatly onto the drum.

Motors suitable for single or three-phase mains supply are also available. These can be supplied with flameproof protection if required.

### 2 Pneumatic

Two sizes of air motor are used to provide a comparatively lightweight and controllable rewind solution on small to medium size hose reels. Pneumatic rewind hose reels are ideally suited to vehicles with an air brake system. An optional Air Supply Control Kit is available. This consists of a control valve, filter/regulator and lubricator to ensure that the motor has a long, trouble free life.

### 3 Hydraulic

For applications where there is an existing hydraulic supply system, a hydraulic rewind hose reel should be considered. Hydraulic motors are powerful and quiet in operation, and are available on all models and sizes of hose reel. Hydraulic control valves are available for use with these hose reels. They facilitate the setting of the rewind speed and the maximum rewind torque as well as operating the hose reel.

Electric



Pneumatic



Hydraulic



## Hose Reel Drum

A drum-braking system is fitted to every Collins Youldon hose reel. To minimise over-run when hose is being deployed, and to secure the drum when not in use. Three different systems are available.

### 1 Handwheel Friction Brake

Most manual and powered rewind hose reels are fitted with a hand-adjustable friction brake that is part of the handwind assembly.

### 2 Pinch bearing and Pin-lock Brakes

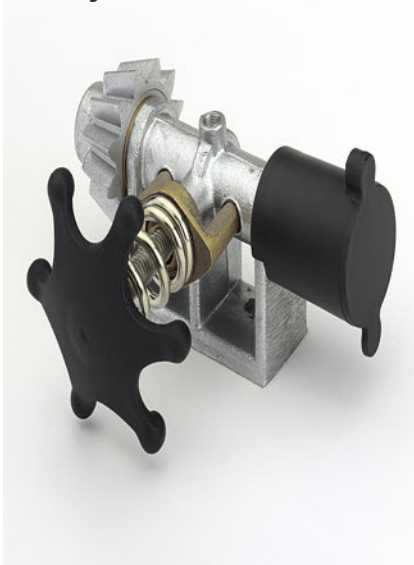
On direct axial rewind hose reels an adjustable pinch bearing acts on the centre shaft of the hose reel drum to reduce over-run. To lock the drum a pin-lock is provided to engage with holes in the end disc.

### 3 3-Way Brake

The Three-way Brake was developed at the request of fire brigades using pulsing-jet fire-fighting techniques.

The Three-way Brake minimises the risk of the hose reel drums moving with the pulses, and shaking the hose loose on the drum. It provides three pre-set levels of friction: off, braked and locked, which can be instantly selected as required. This braking option can be incorporated into the majority of Collins Youldon hose reels, provided that it is specified at the time of ordering.

1 Adjustable Handwind Brake



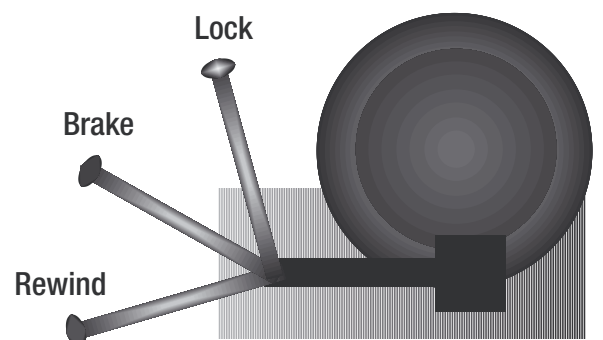
2 Pinch bearing and Pin-lock



3 Three way lever controlled



Three way lever



## Hose Roller Guides

Three types of Hose Roller Guide are available for use with Collins Youldon hose reels. They are designed to allow the operator to pull the hose off the hose reel at an angle without fouling the drum and frame.

### 1 Four-way roller



### 1 Four-way Roller guides

These are the most commonly used, and are available in either standard or marine specifications. They are bolted to the front of the frame of bottom-wound hose reels. They can normally be fitted to all hose reels during production assembly.

### 2 Top-mounted Four-way roller



### 2 Top-mounted Four-way Roller Guides

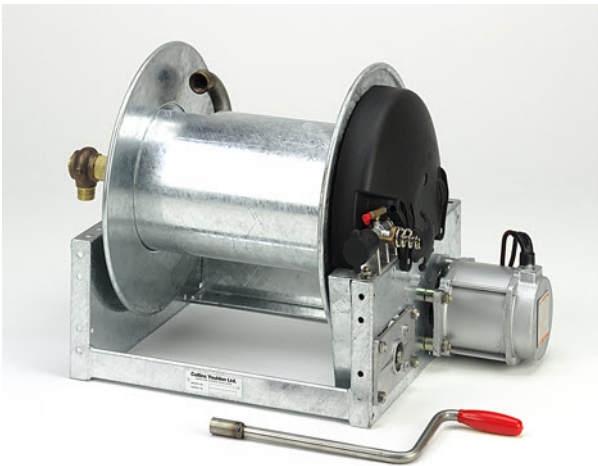
These are available for Compact, 'Fire', and 'Lowline' hose reels where a bottom-wound configuration is not suitable. The extra space required for these rollers is minimised by tilting the rollers backwards over the drum.

## Materials and Finish

The materials and coating systems used on the Collins Youldon range of hose reels have undergone continuous development. This ensures optimum durability for both firefighting and commercial applications. The materials and finishes used in most cases are as follows:

- |                           |   |
|---------------------------|---|
| <b>Drum and End Disks</b> | - Zintec™, ready-coated mild steel, polyester powder-coated.            |
| <b>Hose Reels Frame</b>   | - Zinc-plated and clear passivated mild steel, polyester powder coated. |
| <b>Castings</b>           | - Aluminium.  |
| <b>Fluid Path</b>         | - Mild steel or aluminium with gun-metal inlet.                         |

Other materials and finishes offered for more difficult environments include galvanising instead of powder coating, gun metal castings and stainless steel fasteners.



## Safety Features

Collins Youldon have developed a unique range of guarding to protect hose reel users from hazardous components including chains, sprockets, gearwheels and other rotating parts. In addition, the DC drive motors supplied with the hose reels have been independently tested, and comply with the electromagnetic compatibility requirements of the European Directive.



## Special Options

Several special options are available to enable hose reels to be used in unusual applications.

### 1 Inverted Mounting Kits

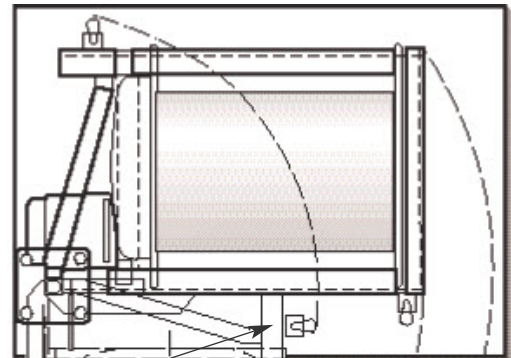
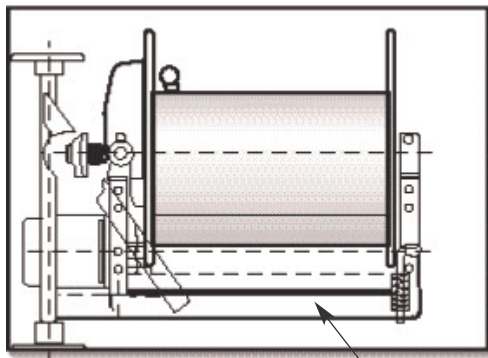
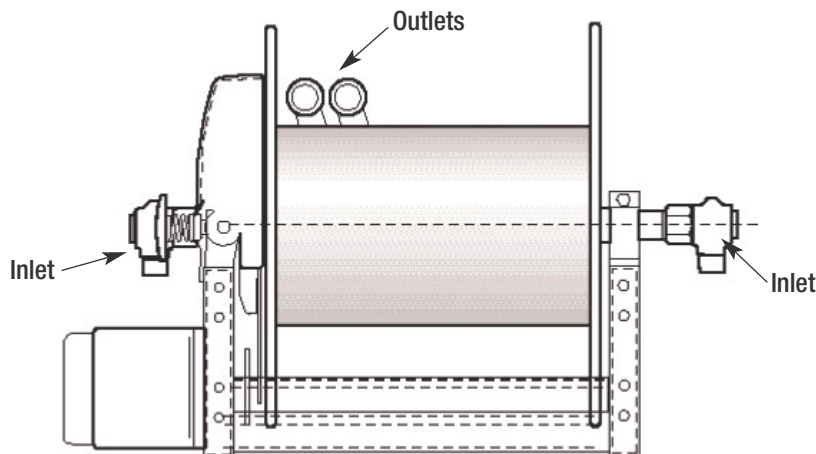
are fitted during the assembly process to hose reels that are to be mounted upside down. They provide the extra strength required for the frame to

### 3 Swing Out Frames

are available for most types of reel. These were developed for applications where it was necessary for the hose reel to be swung out clear of a vehicle body, e.g. on aircraft crash tenders. The design minimises the increase in height and floor area required for installation, and is supplied with two pin-locks so that the frame can be secured in both the open and closed positions. A hot dip galvanised finish is applied.

### 2 Twin Fluid Paths

are available and are typically used for hydraulic and firefighting applications. The fluid paths can be of different sizes, and some versions can be used at high pressures.



Swing out frame

## Special Hose

### 1 L.P. Gas Hose Reels

Hose reels with 1" and 1 1/2" fluid paths have been developed for use with L.P. Gas. NPT inlet and outlet threads are incorporated, along with high pressure inlet swivels. An electrical continuity device between the drum and the frame eliminates static build-up. A range of drum diameters is offered to suit the minimum bend radius of the hose to be fitted.

### 2 Marine Hose Reels

For off-shore use or for other marine-type environments special Hose reels are available with 1 1/2"/38mm, 1 1/2"/38mm and 2"/50mm fluid paths. These are manufactured from 316 stainless steel, with stainless steel fastenings, and have gun-metal instead of aluminium castings. Their dimensions are generally the same as the 'Standard' type of Hose reel.



### 3 Dry Storage / Layflat Hose Reels

All hose reels are available without fluid paths if required, and can be used for dry storage of hose or for cable. A modified version of the 'compact' hose reel with a 5 1/4"/133mm diameter drum is available for storage of layflat hose.



### 4 Catherine Reels

The HR30 series of Catherine Reels is the most widely used type of hose reel on fuel oil delivery vehicles in the UK. Two versions are available. The 'Standard' for up to 180ft/55m of 1 1/2" bore or 120ft/36m of 2" bore hose, and the 'Slimline' for up to 150ft/46m of 1 1/2" bore or 100ft/30m of 2" bore hose. The 'Slimline' was developed for use where the space between the tank and the chassis on a vehicle is restricted. The galvanised driptrays supplied on these hose reels are available in two lengths, 90in/2.29m or 84in/2.13m to suit the width of the vehicle to which they are to be fitted. Electric or hydraulic powered rewinds are available, with an option of either electromagnetic or mechanical clutches on the electric version.

### Detailed Information / Quotations

Technical specification sheets, installation and maintenance manuals, and installation drawings are available for all hose reels. If you would like further information or a quotation for a hose reel to suit your application, please complete a 'Hose reel Enquiry Sheet' (inside the back cover of this brochure) and fax it to our sales department.