

Revised in June,2016



Operation Manual

High Pressure Spring Hose Reel

EF460SRSH EF460MRSH



The company reserves the right for random changes and make unannounced notice !

“ Fold ,unfold and wind at ease”—— This is the latest high pressure spring hose reel released by Ebenalp.

It creatively designs the adjustable structure at exit hose, which facilitates installation on-site. We inherit the notion of providing the most enjoyable working process and extraordinary value of use... ..



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1.Safety and Points for Attention

Ebenalp designs and provides the best quality hose reel products for clients in every area. Each series of hose reel has its own unique advantages and recommended application. As for unique advantages in different areas, Ebenalp specifies detailed safety instructions and regulations. To ensure the safety and reliability of hose reel products, working staff should strictly adheres to safety instructions and regulations provided by the manufacturer, so as to avoid accidents. The following regulations should be observed:

- 1) Before using, ensure that installation seat of hose reel has been fixed.
- 2)Before using, according to the chapter of “ Recommended and forbidden transmission medium” in 《Operation Manual》 , confirm whether medium is suitable for transmission.
- 3) Before using, ensure that all connectors have been tightened up.
- 4) According to the “ operation instructions ” in 《Operation Manual》 , conduct reasonable use.
- 5) Do not release the soft pipe while rewinding it.
- 6) Unauthorized maintenance personnel are forbidden to disassemble the hose reel.
- 7) According to the “ Malfunction elimination ” in 《Operation Manual》 , eliminate and remove malfunctions.

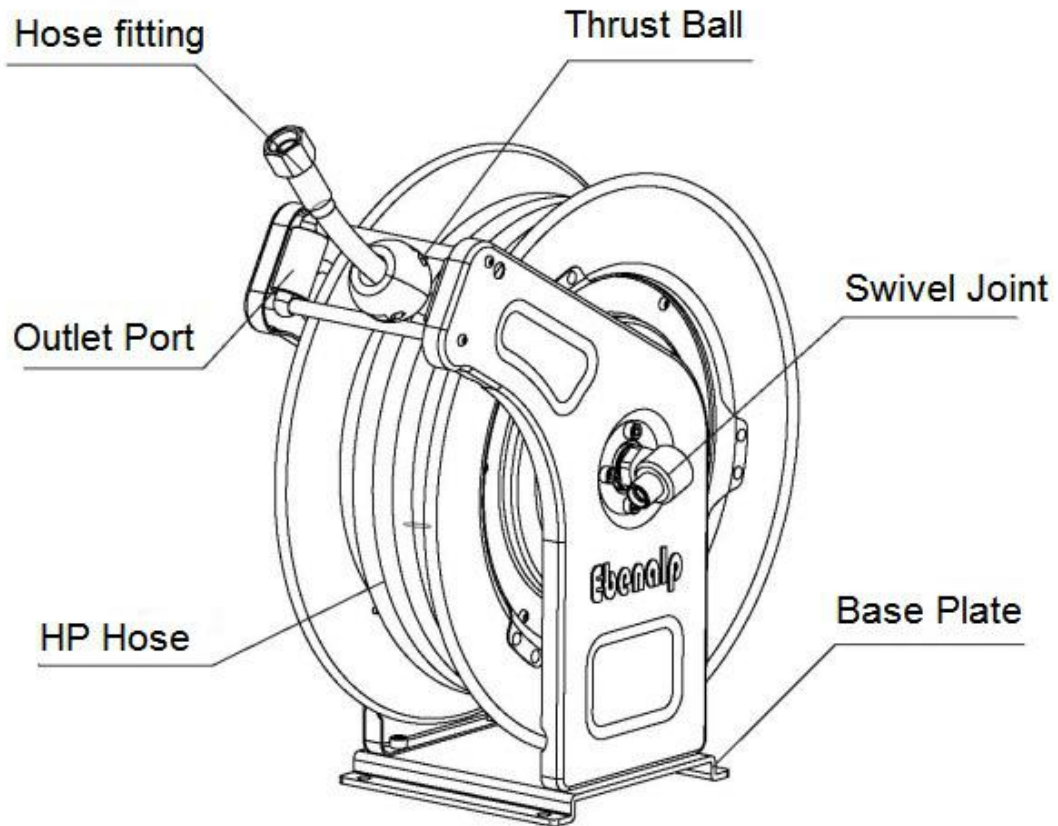
2.Overview

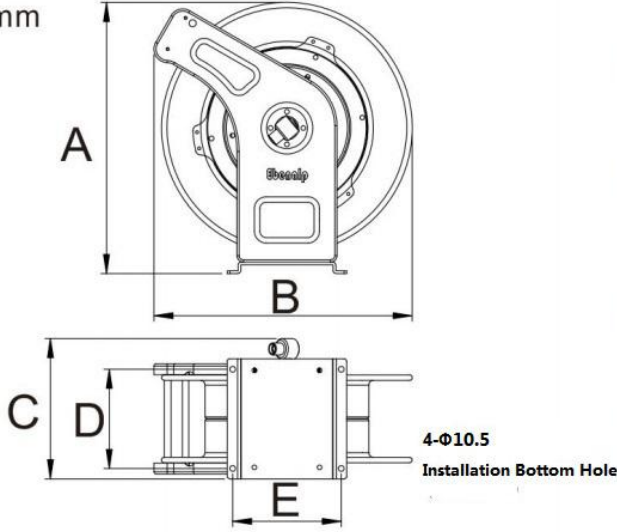
2.1 Introduction of EB series

① Application area: Ebenalp EF serie hose reel, a type of high-pressure spring hose reel, includes the model of EF460SRSH, EF460MR, etc. It can be applied in oil transportation, sanitation cleaning, engineering machinery, workshop management in factory, special fire vehicles, automation equipment, fiber optic cable communication, power supply through power cable, charging pile cable releasing and retraction, oxygen acetylene double hose releasing and retraction, and other situations. As a special type of Ebenalp EF seria hose reel, stainless steel hose reel can be used for usage situations with strict requirement and special medium such as food and pharmaceutical machinery, transport of petrochemical medium, marine vessel, airport ground service, high pressure water mist fire protection, etc.

② Drive modes: driven by spring and rewinds automatically.

2.2 Size descriptions



| | | |
|--|---|-----|
| <p>Installation Diamonds Unit : mm</p>  <p>4-Φ10.5 Installation Bottom Hole</p> | A | 500 |
| | B | 475 |
| | C | 257 |
| | D | 182 |
| | E | 120 |

3. Installation Instructions

3.1 Hose arrangement device


Automatic hose arrangement device is configured as B serie which arranges hose without any manual operation. For each set of –B serie hose reel, hose and hose arrangement device are fitted at the factory with no need for any change.

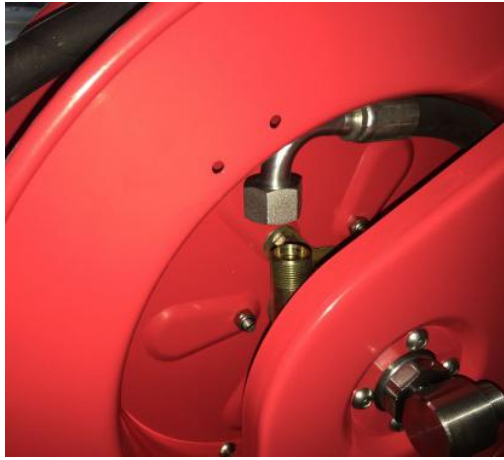







3.2 Installation of hose reel

EF serie hose reel is integral structure. Each hose reel is assembled in accordance with relevant standard in factory and strictly inspected concerning various quality index. It only needs to have the bottom plate fixed before use.

Replacement of the hose in hose reel shall be performed in strict accordance with the following steps:

| Item | Installation Steps | Installation Diagram |
|------|--|--|
| 1 | Pull the hose around the reel until the final circle and adjust the positioning point ensuring the hose fitting does not affect the use of wrench. |  |

| | | |
|---|--|--|
| 2 | Remove the hose fitting |  |
| 3 | Pull the whole hose out and remove thrust ball |  |
| 4 | Mount the thrust ball at an appropriate position on the new hose |  |

| | | |
|---|--|--|
| 5 | Pass one end of the hose through the outlet port. |  |
| 6 | 6Pass the hose fitting at one end of the hose though outlet |  |
| 7 | Connect hose fitting with hose reel joint and then fasten it |  |

| | | |
|---|--|--|
| 8 | Manually pull the reel to the automatic rollback position for rollback |  |
|---|--|--|


Notice:

- 1.If the hose to be replaced differs from the original one in specification, please contact the manufacturer. Replacement by yourself without any permission is strictly prohibited.
- 2.For replacement by your own staff, there must be two workers in cooperation with each other, one is responsible for protection while the other one is replacing.

4. Recommend and prohibited transmission medium

Synthetic rubber hose, unless special order from customers, when using the hose reel must strictly follow the provisions of this chapter of commonly recommend medium and commonly used banned medium

When confirm whether medium is suitable for conveying, in addition to the hose material, also need to consider the intermiscibility of materials and chemicals such as joint, flowing liquid Shaft, seals and other parts .



Forbidden to transport medium which
is not in the recommend medium list !
Others please consult the manufacture.

4.1 Commonly recommend medium



| Class | Medium |
|---------------------|---|
| Oils | L-HL Mineral Oil |
| | Diesel Gasoline fuel oil Kerosene |
| Chemical substances | Glycol |
| Others | Water waste water soapy water soya-bean oil |

4.2 Commonly used banned medium



| Class | Medium |
|---------------------|---|
| Oils | Phosphate based hydraulic oil |
| Chemical substances | Acetaldehyde Acetylene Ammonium hydroxide |
| | Banana oil hydrochloric acid hydrogen nitrate |
| Others | strong brine carbonic acid vapour |

5.Operation Instructions

Using hose reel, need to strictly follow with below standards.

- ① Ensure the hose reel is installed in place before using ;
- ② It could be positioned when heard "kaka" after pulling the hose reel ;
- ③ Loosen hose reel to confirm whether positioning is firmed after positioning ;
- ④ After operation, please pull the hose reel until it could automatic rewinding ;
- ⑤ Forbidden to release grip on hose reel when rewinding,must hold it until all roll back,in case of personal injury.

6. Malfunction elimination

6.1 Hose reel could not rewinding automatically.

Firstly, to ensure you have pulled the hose to automatically rollback position.

If the hose reel is stuck in the process of rewinding, check whether the part of the hose with bottom friction and get stuck.

If it is too long time no maintenance, or let the hose reel in bad condition for a long time, it could lead to failure of spring, should contact the manufacturer for repair maintenance.



6.2 After pulling out the hose reel could not positioning

Ebenalp unique design to ensure the high reliability of the hose reel, also the reliability of the positioning function.

Under normal service conditions, a remote possibility to lose positioning function.

Once the positioning function is failure, please contact the manufacturer for repair maintenance.

6.3 In the process of winding, the winding drum shakes to large.

In the situation, should check the volume on time whether side plate and bottom screw is loose or not, if there are any loose, please follow criteria to screw down the screws.

Hose reel standard assembly

① Screw fastening torque M10 refer to 40N.m , M8 refer to 25N.m , M5 refer to 8N.m;






② Screw should apply proper amount of fastening adhesive;

③ Coupling nut between sides and bottom should use lock nut.

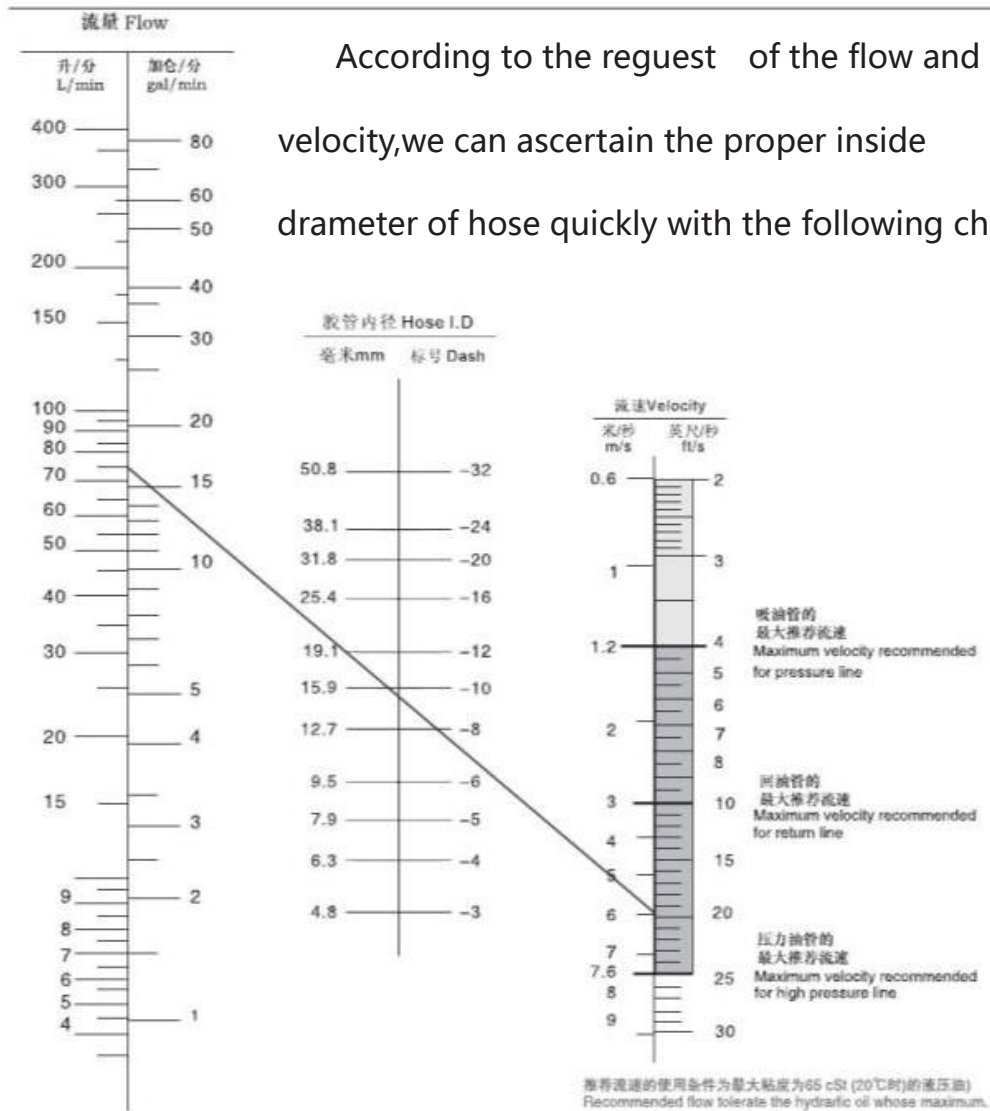
④ Circular uniform screw should tighten twice in accordance with the "diagonal order".

If the problem still exists, may be due to improper operation caused by the shell deformation, please contact the manufacturer for repair maintenance.

7.Tool lists

| Item | Name | Spec | Product Diagram |
|------|-----------------|------|--|
| 1 | Allen wrench | M4 |  |
| 2 | Allen wrench | M6 |  |
| 3 | Allen wrench | M8 |  |
| 4 | Open-end wrench | 36 |  |
| 5 | Open-end wrench | 46 |  |

How to choose with right inside diameter





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