## Surcharges for special versions or accessories

The following surcharges have to be added to the table on page 6.

Description	Item number		
Tensioning the main spring for type ST14, ST20, ST40/19/1	B10700064		
Tensioning the main spring for type ST30, ST40/10/2, ST40/12/2 u. ST40/19/2	B10700064-1		
Tensioning the main spring for type ST60/10/3	B10700064-10		
Surcharge for high temperature seals 1-180°C as well as chemistry, 3/8" and 1/2"	M1071001201		
Surcharge for high temperature seals 1-180°C as well as chemistry, 3/4" and 1"	M10710012		
Surcharge for EPDM AP540 seals for Acetone, 3/8" and 1/2"	M1071001202		
Surcharge for stainless steel angled swivel, $3/8^{\circ}$ and $1/2^{\circ} = DN10$ and DN12	MP10700035011		
Surcharge for stainless steel angled swivel, 3/4" = DN19	MP10700035012		
Surcharge for 400bar version (only for 3/8" ST) with 3/8" WDTH10/304	MP1070003509		
Surcharge for 500bar version (only for 3/8" ST) with 1/4" WDTH5/304	MP1070003505		
Locking angle for WDTH10/12 + WDTH19	V10710054		
We gladly supply hoses on request. You will find a selection among accessories on page 47.			

# ATEX automatic hose reel type ST Ex

These highly robust and reliable Atex hose reels of the type ST EX are provided with an automatic spring rewind and can be used in every explosive area above ground, not applicable to underground mining.

The hose reels passed a conformity assessment procedure and will be supplied with an EU declaration of conformity. They correspond to the 2014/34/EU guideline, known as "ATEX 95" or "ATEX 100".

Important information about the ATEX area:

## Application areas:

1. Above ground but not in underground mining,

Zone 1 + 2 (gas, mists, vapors), Zone 21 + 22 (dusts)

2. Chemical industries, dump areas, civil engineering, energy producer, waste management companies, gas suppliers, wood-processing industries, paint shops, agriculture, metal-working companies, forage producer, pharmaceutical industry, refineries and oil rigs.

## **ATEX specifications:**

The hose reels correspond to the device group II, category 2 + 3, G + D,temperature class:T6 for environmental and medium temperatures up to 85°CT5 for environmental and medium temperatures up to 100°C

#### Technical data and dimensions:

The technical data and dimensions correspond to type ST except a few details, page 4+5.

#### Materials:

Stainless steel AISI 304, Stainless steel electropolished and electrically conducted plastic.

#### Assistance for machine selection:

The "assistance for machine selection" will guide the operator of a potentially explosive section through the procedure to select the most suitable device (page 8).





E10700114-5 75 ltr./min, 24bar

## Assistance for machine selection hose reels

The assistance for machine selection will guide the operator of a potentially explosive section through the procedure to select the most suitable device in accordance with guideline 2014/34/EU (ATEX 137).

#### 1. Basic zoning decisions and allocation of equipment groups:

- Group I : undergound mining. We don't produce devices for group I, for this reason you won't find any further instructions.
- Group II : all other explosive areas.

## 2. Classification of explosive sections in different zones: Zone definition

#### Zone G : gas, mists, vapors

- Zone 0 : section, in which an explosive atmosphere (as a compound of air, flammable gas, vapors or mists) is present for long term, constantly or temporarely.
- Zone 1 : section, in which, at normal operation, an explosive atmosphere (as a compound of air, flammable gas, vapors or mists) can develop occasionally.
- Zone 2 : section, in which, at normal operation, an explosive atmosphere (as a compound of air, flammable gas, vapors or mists) appears temporarely or never.

### Zone D : dust

- Zone 20 : section, in which an explosive atmosphere (in shape of a cloud consisting of flammable dust contained in the air) is present for long term, constantly or temporarely.
- Zone 21 : section, in which, at normal operation, an explosive atmosphere (in shape of a cloud consisting of flammable dust contained in the air) can develop occasionally.
- Zone 22 : section, in which, at normal operation, an explosive atmosphere (in shape of a cloud consisting of flammable dust contained in the air) appears temporarely or never.

## 3. Choice of the required product groups according to selected zone:

Zone G: gas, vapors, mists	Product group	Zone D: dust
0	category 1	20
1	category 2	21
2	category 3	22

Our hose reels correspond with product group II, as well as categories 2 + 3.

Thus they are applicable in zones 1 + 2, as well as zones 21 + 22. Furthermore, following temperature classes have to be considered.

#### 4. Temperature classes

Temperature class	Ignition temperature array of the compounds	Tolerable surface temperatures of the devices	
T1	>450°C	450°C	
T2	> 300 - 450°C	°C 300°C	
T3	>200 - 300°C	200°C	
T4	>135-200°C	135°C	
T5	>100 - 135°C	100°C	
T6	>85-100°C	85°C	

The temperature class has to be determined depending on the ignition temperature of the mixture as well as the surface temperature of the apparatus. Due to the fact that the hose reel don't have an own source of temperature they are classified in category T6. The installation in hot surroundings as well as the passing through of media with more than 85 ° C disqualifies the apparatus accordingly.



## Gross price list, automatic hose reel ST Ex

With following equipment: Declaration of conformity according to guideline 2014/34/EU, angled swivel from stainless steel, U-sit ring and hose stopper, WITHOUT hose (available on request)



Hose reel type	Item number			
රිටු				
3/8" (DN10)	T	1	Γ	
ST14/10e/Ex	V10710074			
ST14/10ep/Ex	V10710075			
ST20/10e/Ex	V10710078			
ST20/10ep/Ex	V10710079			
ST30/10e/Ex	V10710099			
ST30/10ep/Ex	V10710100			
ST40/10/2e/Ex	V10710086			
ST40/10/2ep/Ex	V10710087			
ST60/10/3e/Ex	V10710094			
ST60/10/3ep/Ex	V10710095			
1/2" (DN12)	• •			
ST14/12e/Ex	V10710076			
ST14/12ep/Ex	V10710077			
ST20/12e/Ex	V10710080			
ST20/12ep/Ex	V10710081			
ST30/12e/Ex	V10710101			
ST30/12ep/Ex	V10710102			
ST40/12/2e/Ex	V10710088			
ST40/12/2ep/Ex	V10710089			
3/4" (DN19)				
ST20/19e/Ex	V10710082			
ST20/19ep/Ex	V10710083			
ST40/19/1e/Ex	V10710090			
ST40/19/1ep/Ex	V10710091			
ST40/19/2e/Ex	V10710092			
ST40/19/2ep/Ex	V10710093			
	1		I.	

#### Surcharges for special versions or accessories

The following surcharges have to be added to the table above. For more see page 7.

Item number			
E10700114-5			
M1071001201			
M10710012			
We gladly supply hoses on request. You will find a selection among accessories on page 47.			
	E10700114-5 M1071001201 M10710012		