

Automatic hose reel type ST

Our topseller the hose reel type ST is a very robust and reliable version with automatic spring rewind.

Available materials:

- Steel, powder coated, RAL7032, RAL3000 (Application in dry areas).
- Stainless steel (Application in wet areas).
- Stainless steel, electropolished (Application in hygienic areas).

Reel bearing:

Maintenance free, chemical resistant synthetic slide bearings, resistant to moisture and dirt.

Main spring:

High quality texture and spring band steel with maximum service life.

Tension release:

The hose can be stopped at 8 positions per each rotation.
A short pull of the hose releases the locking device.

Angled swivel:

The standard angled swivel is basically equipped with a stainless steel axle.
The housing consists of a hard anodized aluminium die cast alloy (3/8" & 1/2") or chemical nickel-plated brass (3/4").
All types can be supplied in stainless steel AISI 304 upon request. The used seals are made of PTFE and EPDM.
For a surcharge they are also available in Viton for chemistry.

Hose guide window:

Depending on the pulling direction the hose guide window can be mounted in three positions. Standard delivery condition is position 1 (see page 4).

Mounting possibilities:

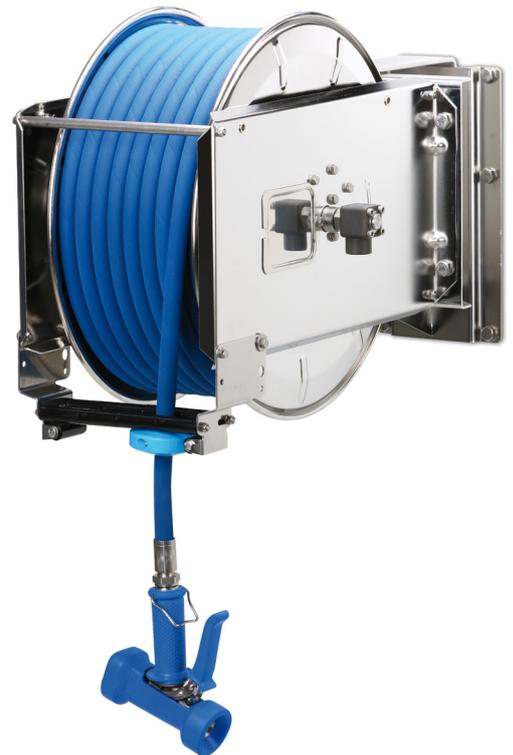
You will find on page 3 various mounting possibilities of the hose reels with the according brackets. For mounting on panel walls counter plates, made of stainless steel, are available for all types of mounting. We recommend a wall swinging bracket if the hose is pulled intensively lateral.

Application areas:

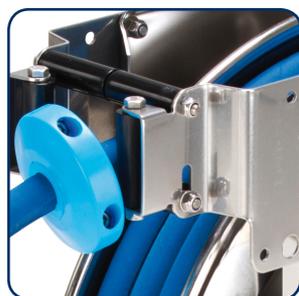
Water, water with detergents, air, oil and grease. The maximum permitted operating temperature is regularly 100°C.
If required, the hose reels can be modified to a temperature of 180°C for an extra charge (see page 7).

Accessories:

We are at your disposal to assist you for further accessories or assembling the appropriate hose and pistol (see page 46+47).



Angled swivel WDT10/Al



Hose guide window



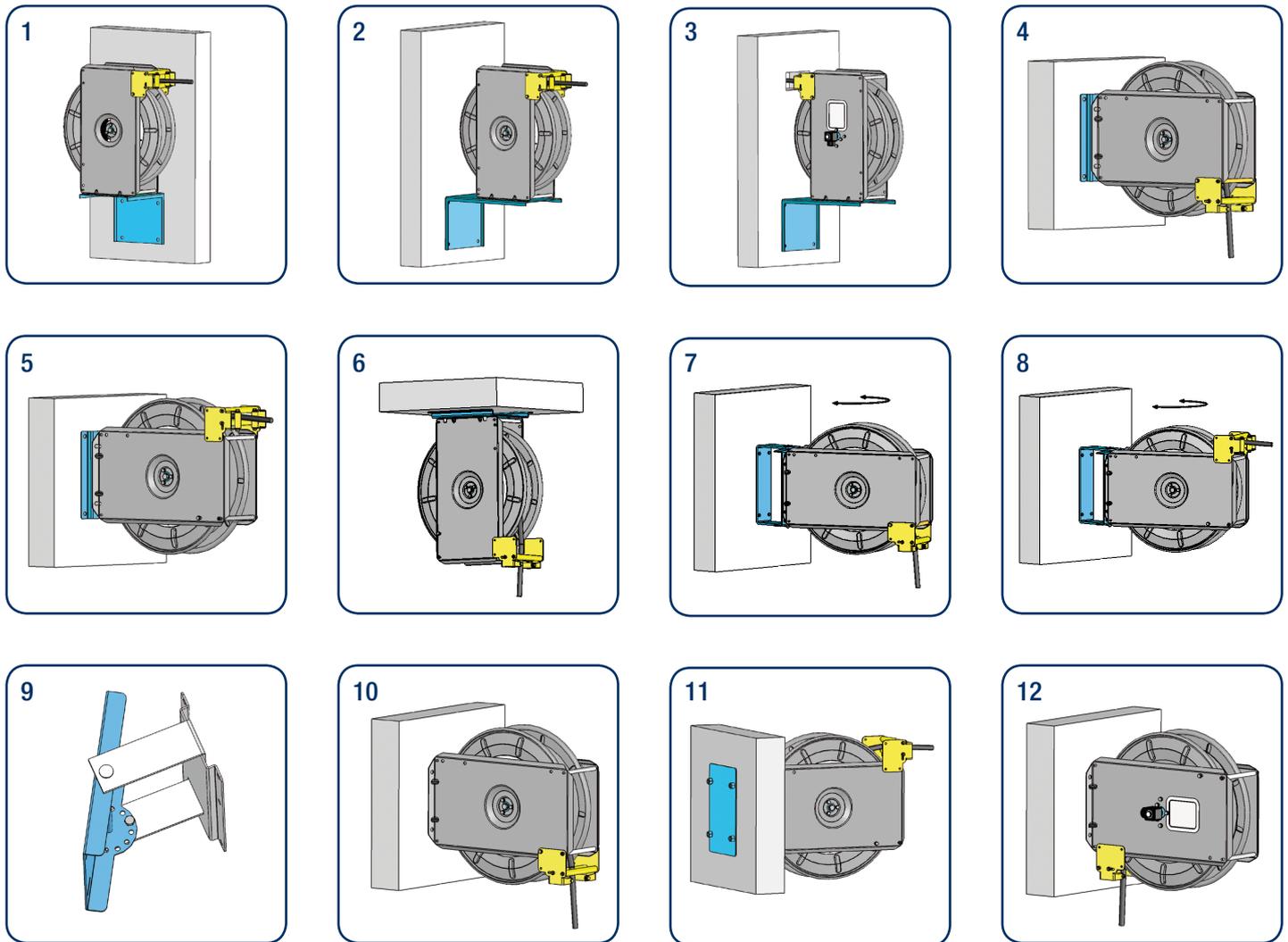
Locking screw for the hose installation



Wall swivel bracket SKW see page 42

Mounting possibilities

Hose reel ST



Pos.	Description	Window pos.	Bracket type
1	Angle bracket for fixed wall mounting, parallel to wall.	1	KHDp
2	Angle bracket for fixed wall mounting, right-angled to wall.	1	KHDr
3	Angle bracket for fixed wall mounting with wall duct window.	1	KHDr
4	Bracket for fixed wall and ceiling mounting, hose to the bottom.	1	KWH
5	Bracket for fixed wall and ceiling mounting, hose to the front.	2	KWH
6	Bracket for fixed wall and ceiling mounting, mounted to ceiling.	2	KWH
7	Wall swinging bracket, hose to the bottom, rotation 180°.	1	SKW
8	Wall swinging bracket, hose to the front, rotation 180°.	2	SKW
9	Wall swinging bracket SKW40/1 & 40/2 can be fixed in 7 positions.	X	SKW
10	Installation without bracket.	1	X
11	Installation on panel walls with back counter plate.	2	STG
12	Hose guide window close to the wall.	3	X



2006/42/EG
(machinery directive)



DIN EN 1672-2
(food process. machinery)



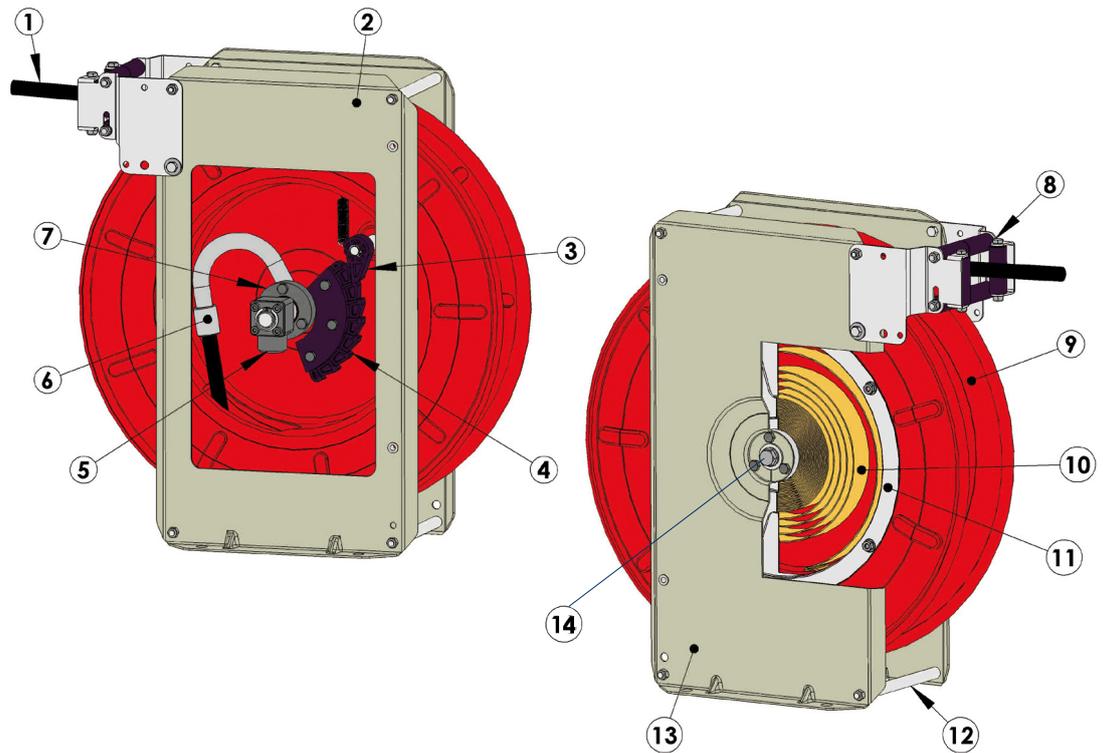
DIN EN ISO 12100
(security for machines)



Sectional view

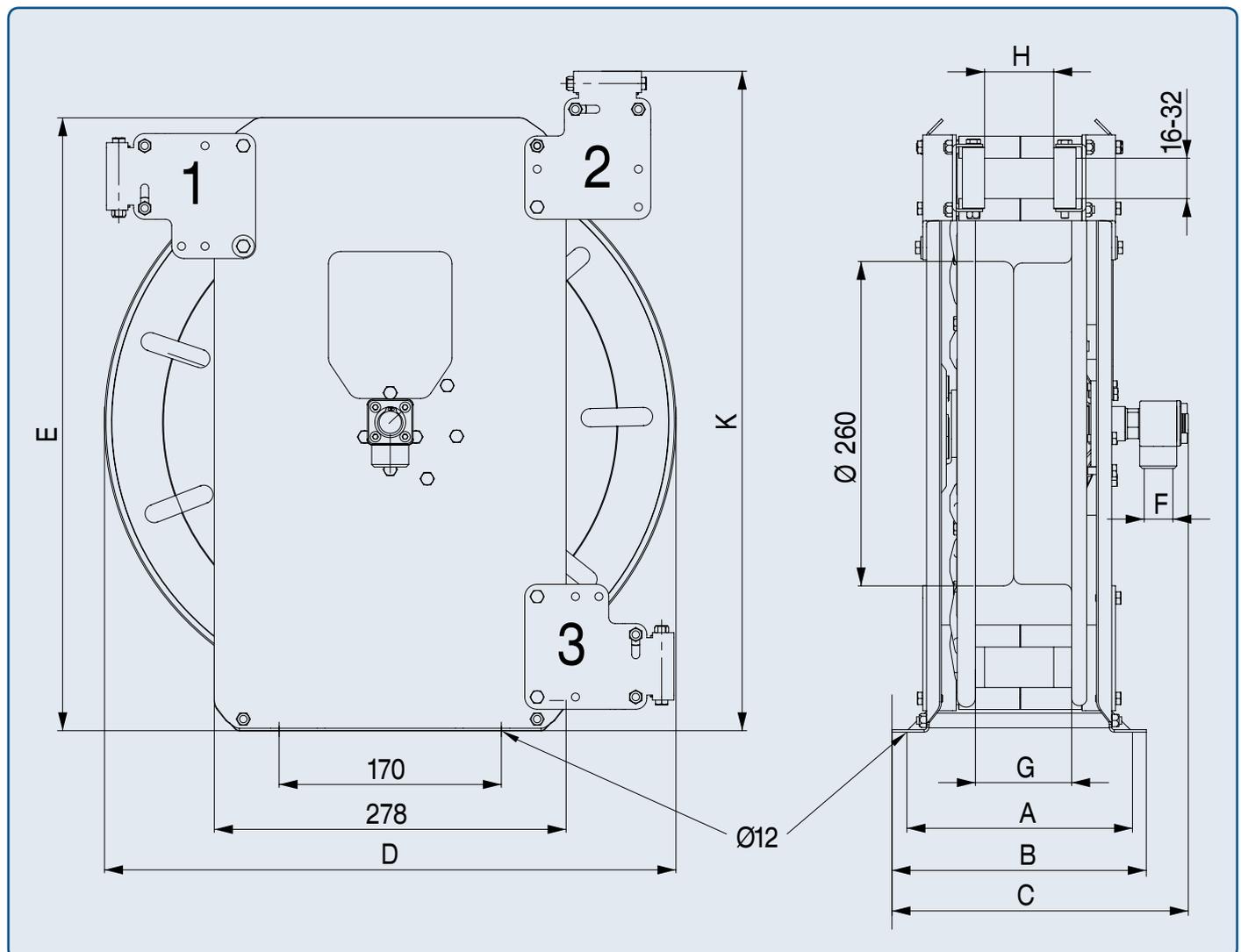
Hose reel ST

P.	Description
1	Working hose
2	Stand, right
3	Ratchet
4	Toothed segment
5	Angled swivel
6	Pipe elbow
7	Drum bearing
8	Hose guide window
9	Drum
10	Main spring
11	Spring cover
12	Distance bar
13	Stand, left
14	Fixing screw



Dimensions

Hose reel ST - Mounting possibilities of the hose guide window. Standard delivery condition is 1. Alternative 2 and 3.



Technical data

Hose reel ST

Type	Item number	Rewindable hose length in meter depending of the hose outside diameter-Ø [mm]				Nominal diameter/ thread* F		Max. pressure	Weight	Dimensions [mm]									Surface
		Ø15	Ø20	Ø25	Ø30	mm	Inch			bar	kg	A	B	C	D	E	G	H	
3/8" (DN10)																			
ST14/10	V10710002	14	12			10	3/8"	300	13,0	176	206	239	400	440	75	48	470	Powder coated	
ST14/10e	V10710011	14	12			10	3/8"	300	13,0	176	206	239	400	440	75	48	470	Stainless steel	
ST14/10ep	V10710007	14	12			10	3/8"	300	13,0	176	206	239	400	440	75	48	470	Electropolished	
ST20/10	V10710005	20	17			10	3/8"	300	16,0	176	206	239	460	500	75	48	530	Powder coated	
ST20/10e	V10710012	20	17			10	3/8"	300	16,0	176	206	239	460	500	75	48	530	Stainless steel	
ST20/10ep	V10710010	20	17			10	3/8"	300	16,0	176	206	239	460	500	75	48	530	Electropolished	
ST30/10	V10710003	28				10	3/8"	300	18,0	226	256	304	460	500	125	106	530	Powder coated	
ST30/10e	V1071000301	28				10	3/8"	300	18,0	226	256	304	460	500	125	106	530	Stainless steel	
ST30/10ep	V1071000302	28				10	3/8"	300	18,0	226	256	304	460	500	125	106	530	Electropolished	
ST40/10/2	V10710013	40	37			10	3/8"	300	22,0	276	306	339	460	500	182	152	530	Powder coated	
ST40/10/2e	V10710014	40	37			10	3/8"	300	22,0	276	306	339	460	500	182	152	530	Stainless steel	
ST40/10/2ep	V10710015	40	37			10	3/8"	300	22,0	276	306	339	460	500	182	152	530	Electropolished	
ST60/10/3e	V10710028	57				10	3/8"	300	32,5	376	406	454	460	500	282	252	530	Stainless steel	
ST60/10/3ep	On request	57				10	3/8"	300	32,5	376	406	454	460	500	282	252	530	Electropolished	
1/2" (DN12)																			
ST14/12	V10710002-1		12	8		12	1/2"	200	13,0	176	206	239	400	440	75	48	470	Powder coated	
ST14/12e	V1071001101		12	8		12	1/2"	200	13,0	176	206	239	400	440	75	48	470	Stainless steel	
ST14/12ep	V1071001102		12	8		12	1/2"	200	13,0	176	206	239	400	440	75	48	470	Electropolished	
ST20/12	V1071000501		17	13		12	1/2"	200	16,0	176	206	239	460	500	75	48	530	Powder coated	
ST20/12e	V1071001201		17	13		12	1/2"	200	16,0	176	206	239	460	500	75	48	530	Stainless steel	
ST20/12ep	V1071001202		17	13		12	1/2"	200	16,0	176	206	239	460	500	75	48	530	Electropolished	
ST30/12	V10710004		25	22		12	1/2"	200	18,0	226	256	304	460	500	125	106	530	Powder coated	
ST30/12e	V1071000401		25	22		12	1/2"	200	18,0	226	256	304	460	500	125	106	530	Stainless steel	
ST30/12ep	V1071000402		25	22		12	1/2"	200	18,0	226	256	304	460	500	125	106	530	Electropolished	
ST40/12/2	V1071001302		37			12	1/2"	200	22,0	276	306	339	460	500	182	152	530	Powder coated	
ST40/12/2e	V1071001402		37			12	1/2"	200	22,0	276	306	339	460	500	182	152	530	Stainless steel	
ST40/12/2ep	V1071001403		37			12	1/2"	200	22,0	276	306	339	460	500	182	152	530	Electropolished	
3/4" (DN19)																			
ST20/19	V10710019			10	7	19	3/4"	200	17,0	176	206	254	460	500	75	48	530	Powder coated	
ST20/19e	V10710020			10	7	19	3/4"	200	17,0	176	206	254	460	500	75	48	530	Stainless steel	
ST20/19ep	V10710021			10	7	19	3/4"	200	17,0	176	206	254	460	500	75	48	530	Electropolished	
ST40/19/1	V10710025			20	18	19	3/4"	200	19,0	276	306	354	460	500	182	152	530	Powder coated	
ST40/19/1e	V10710026			20	18	19	3/4"	200	19,0	276	306	354	460	500	182	152	530	Stainless steel	
ST40/19/1ep	V10710027			20	18	19	3/4"	200	19,0	276	306	354	460	500	182	152	530	Electropolished	
ST40/19/2	V10710022			36	30	19	3/4"	200	25,0	376	406	454	460	500	282	252	530	Powder coated	
ST40/19/2e	V10710023			36	30	19	3/4"	200	25,0	376	406	454	460	500	282	252	530	Stainless steel	
ST40/19/2ep	V10710024			36	30	19	3/4"	200	25,0	376	406	454	460	500	282	252	530	Electropolished	

* You will find the connection threads of the angled swivels on page 44.

Automatic hose reel ST

With following equipment: 3/8" and 1/2" angled swivel made of aluminium, 3/4" made of brass,
U-sit ring and hose stopper, WITHOUT hose (available on request)

Hose reel type 	Item number 			
3/8" (DN10)				
ST14/10	V10710002			
ST14/10e	V10710011			
ST14/10ep	V10710007			
ST20/10	V10710005			
ST20/10e	V10710012			
ST20/10ep	V10710010			
ST30/10	V10710003			
ST30/10e	V1071000301			
ST30/10ep	V1071000302			
ST40/10/2	V10710013			
ST40/10/2e	V10710014			
ST40/10/2ep	V10710015			
ST60/10/3e	V10710028			
ST60/10/3ep	On request			
1/2" (DN12)				
ST14/12	V10710002-1			
ST14/12e	V1071001101			
ST14/12ep	V1071000702			
ST20/12	V1071000501			
ST20/12e	V1071001201			
ST20/12ep	V1071001202			
ST30/12	V10710004			
ST30/12e	V1071000401			
ST30/12ep	V1071000402			
ST40/12/2	V1071001302			
ST40/12/2e	V1071001402			
ST40/12/2ep	V1071001403			
3/4" (DN19)				
ST20/19	V10710019			
ST20/19e	V10710020			
ST20/19ep	V10710021			
ST40/19/1	V10710025			
ST40/19/1e	V10710026			
ST40/19/1ep	V10710027			
ST40/19/2	V10710022			
ST40/19/2e	V10710023			
ST40/19/2ep	V10710024			

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" and 1/2" = 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 94/9/EG 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°C
 T5 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 1999/92/EG (ATEX 137).

1. Basic zoning decisions and allocation of equipment groups:

- Group I : underground 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 temporarily.
- 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 temporarily 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 temporarily.
- 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 temporarily 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	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.

Automatic hose reel ST Ex

With following equipment: Declaration of conformity according to guideline 94/9/EG, angled swivel from stainless steel, U-sit ring and hose stopper, WITHOUT hose (available on request)



Hose reel type 	Item number 			
3/8" (DN10)				
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			

Surcharges for special versions or accessories

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

Description 	Item number 	€ 
Spray pistol for EX-area, black, 75l/min, 24bar, 60°C	E10700114-5	
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	
We gladly supply hoses on request. You will find a selection among accessories on page 47.		