

TECHNICAL MANUAL

NITA Automatic Hose Reels

Item No. 23-12108

Item No. 23-12111

Item No. 23-12112

Item No. 23-12113

Item No. 23-12114

Item No. 23-12127

Item No. 23-12128

Item No. 23-12129

Item No. 23-12130



Issue 08.2025

GENERAL

Applications Food industry: butcher shops, slaughterhouses, dairies, breweries, beverage manufacturers, etc.

SAFETY

Potential hazards that may arise from improper installation, handling, or repair:

- The hose reel and swivel console must each be securely fastened with 4 M8 or M10 screws. Ensure the surface is stable. Falling equipment can cause serious accidents—and in some cases, fatalities.
- Never allow the hose to snap back uncontrollably. The whirling end of the hose or the gun with lance can seriously injure people standing in the way.
- After hose installation, as well as after working on the shut-off device, be sure to close the access window (**Fig. 1, Item 5**) with the cap. Otherwise, hand injuries may occur if the drum is rotating.
- Before performing any repairs, relieve pressure from the hose by turning off the pressure generator, closing the medium supply, and opening the gun. Additionally, the drive spring must be completely released. Repairs to the drive spring must only be performed by trained personnel. A spring that springs out, or failure to follow the above instructions, can result in serious injury.

Challenge: Hose reel releases from its locking position when the wash gun is closed

In some situations, hose reels disengage from their locked position after the wash gun is closed and automatically retract the hose. This is not only annoying for the operator but also poses a hazard, as the rapidly retracting hose and wash gun can injure people or damage equipment.

The release from the locking position is caused by backpressure in the hose when the spray gun is closed. The abrupt stop of the water flow creates backpressure in the hose, which moves the hose reel to the next locking position and subsequently releases it from the lock. The automatic reel then abruptly retracts the hose, and the user often loses their grip on the spray gun.

The following measures can be taken to minimize backflow. Often, several of these measures are necessary to achieve the desired improvement.

1. For water pressures up to 40 bar (medium pressure), a spray gun with a delay shut-off should be used.
2. Unwind the entire length of the hose before starting the cleaning process.
3. Ensure that the user does not use the spray gun without a cleaning nozzle, e.g., by securely mounting the nozzle on the spray gun or lance.
4. Use smaller nozzle sizes to reduce the water flow.

5. Install a water-reducing unit in the water supply to the hose reel.

Please feel free to contact our technical support for assistance in implementing these measures. We're happy to help!

INSTALLATION

HOSE ASSEMBLY

Use only hoses that are suitable for the desired pressure and temperature range.

Attach suitable fittings to the swivel joint (**Fig. 1, Item 6**) and the connecting pipe (**Fig. 1, Item 4**) and use a suitable sealant. Lubricate the thread of the swivel joint before screwing it into the reel. If the swivel joint is stiff, do not force it in, as this may damage the threads.

Due to the risk of leakage at the swivel joint, avoid connecting it with rigid piping.

Remove the cap from the mounting window (**Fig. 1, Item 5**). Secure the hose reel to the designated mounting surface with 4 M8 or M10 screws, or clamp it to a stable surface using 2 clamps.

Wind the drive spring by turning the drum in the direction of the arrow. The number of turns depends on the length of the hose to be installed in meters plus two turns. Example: 25 m of hose corresponds to $25+2=27$ turns. Clamp the drum with the clamping screw (**Fig. 2, Item 9**) so that the pipe connection (**Fig. 1, Item 4**) is accessible in the mounting window (**Fig. 1, Item 5**). Caution! When pre-tensioning, lock the drum after each turn and retighten. Uncontrolled springback of the drum can result in injury to the operator and breakage of the drive spring.

Unroll the hose to its full length, feed one end (without the kink protector) through the inlet window (**Fig. 1, item 1**) and the drum opening, and connect it to the connecting pipe (**Fig. 1, item 4**).

Release the clamp by loosening the clamping screw (**Fig. 2, item 9**) and allow the hose to unwind by guiding it carefully by hand.

ADJUSTMENT OF THE HOSE INLET WINDOW

Unless otherwise specified, the default setting is Position I (**Fig. 1**).

To set to position II (**Fig. 4**), proceed as follows:

- Loosen the inlet window (**Fig. 1, item 1**).
- Loosen the spacer shaft (**Fig. 1, item 3**) and insert it into the holes (**Fig. 1, item 2**).
- Install the inlet window in position II (**Fig. 4**).

To set to Position III (**Fig. 2**), proceed as follows:

- Loosen the inlet window (**Fig. 1, Item 1**) and install it in Position III (**Fig. 2**).

- Install the additional spacer shaft (**Fig. 1, Item 3**) into the holes (**Fig. 1, Item 2**). (Please order from Nita Hygiene!)

Hose brake: The lower guide roller of the hose inlet window (**Fig. 1, Item 1**) is arranged so that it can slide within slotted holes. By adjusting the gap to the hose's outer diameter, both rollers act as a hose brake. This prevents snapping back of the hose is thus prevented.

INSTALLATION OF THE HOSE REEL

See Figures 1 through 4 for installation and possible applications.

Use fixed mounting (**Figs. 1 and 2**) only if the direction of pull of the hose does not exceed 30° (**Figure 6**). Otherwise, use swivel brackets (**Figure 3, Item 8**). A level, load-bearing surface is required for mounting the hose reels. Suitable surfaces include: concrete, masonry, steel, and panel walls (a backing plate is required here).

The mounting holes to be drilled must absolutely match the hole pattern of the hose reel. Otherwise, installation in a constrained position will result in strain on the bearings. As a result, the drum will jam.

To avoid such installation errors, we strongly recommend the use of mounting brackets.

The hose reel and the selected bracket must each be securely fastened with 4 mounting screws (Ø 8 or 10. When using wall anchors, ensure that the masonry is load-bearing.

Spray guns: When using spray guns, prevent recoil forces greater than 150 N by limiting the flow rates. See also "Guidelines for Liquid Sprayers"! Failure to do so may result in injury to the operator and damage to the hose reel.

Hose stopper: Hose reels are supplied as standard with a hose stopper. The included insert set allows for use with hose diameters ranging from 10 to 34 mm.

Bild 1

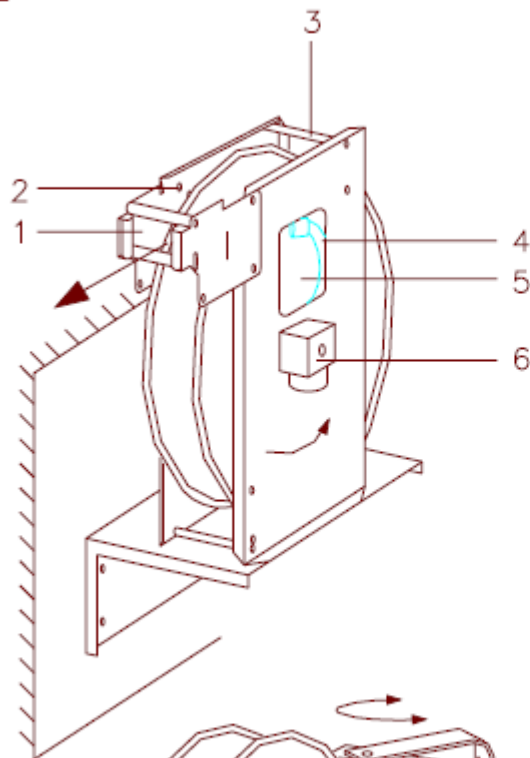


Bild 2

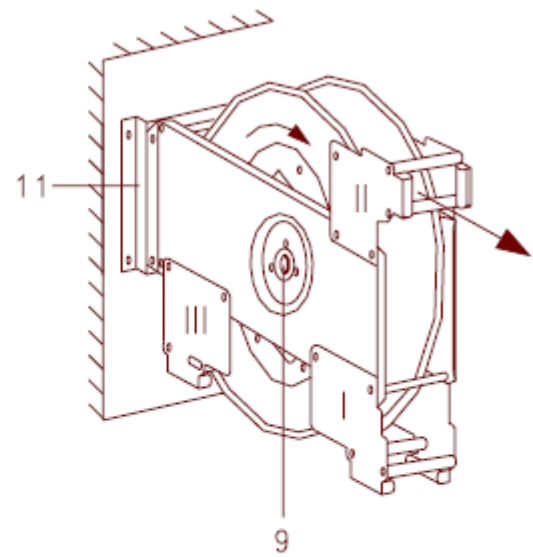


Bild 3

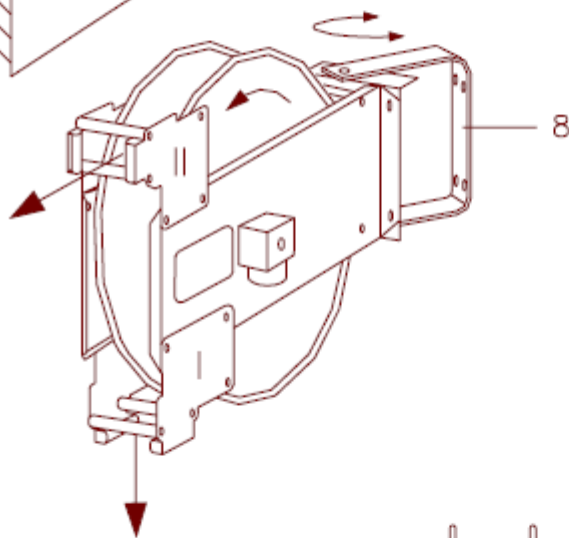


Bild 4

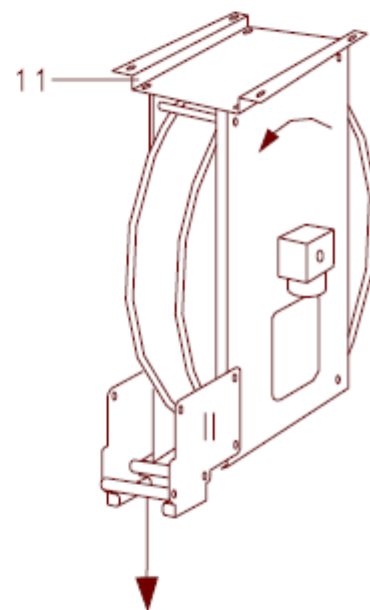
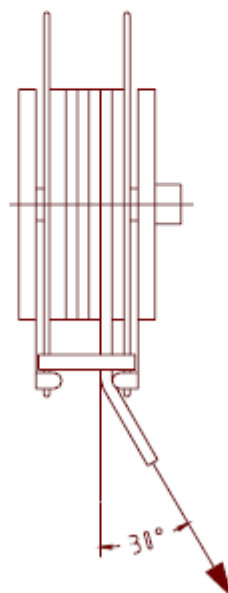


Bild 6



OPERATION

As soon as you release the mechanical lock, you must hold the hose in your hand while it is being reeled in to prevent rapid and uncontrolled retraction.

The product is intended for use by a single operator.

The user should always wear appropriate protective equipment (e.g., gloves, coveralls, shoes, safety goggles) while using the product.

Before each use, ensure the following:

- Is the hose reel securely mounted to the wall?
- Is it ensured that there is no contact with electrical wires?

Follow these steps during operation:

1) Unroll the hose

Pull the hose away from the reel toward your work area.

2) Lock the hose reel

Stop unrolling the hose when you have enough hose length to perform your cleaning task without any problems. Make sure that the hose reel locks only in specific positions.

3) Perform the cleaning process

Open the media supply to the reel and perform the cleaning process by opening the spray gun at the end of the hose.

4) Rewind the hose

Release the lock by unrolling the hose a little further. Once the lock is released, you must hold the hose firmly in your hand to prevent it from retracting quickly and uncontrollably. Slowly guide the hose back using the drum's pulling force until it is fully wound up and the hose stopper is at the reel's inlet.

5) Turn off the media supply

Turn off the media supply to the hose reel so that it is not under pressure when not in use.

The hose reels are virtually maintenance-free; only the two drum bearings should be lubricated every six months with standard machine oil. The hose should be inspected monthly for breaks and cracks, especially at the connection points of the fittings.
A jet of water escaping under high pressure can cause injury.

TECHNICAL SPECIFICATIONS

Suitable media: water, oils, air, and greases

The material 1.4301 (V2A) used in the stainless steel reels is not suitable for environments.

Pressure range: 0–300 bar

Temperature range: 0–100°C

Max. recoil force: 150 N

Nominal Ø: 8 – 19 mm (3/8" – 3/4")

Model	Inlet connection	Outlet connection	Max. hose length			Max. pressure bar	Weight kg
			3/8"	1/2"	3/4"		
23-12108	Swivel joint 1/2" female thread	1/2" female		8 m		200	13
23-12111	Swivel joint 3/8" female thread	3/8" female	12 m			300	13
23-12112	Swivel joint 3/8" female thread	3/8" female	18 m			300	16
23-12113	Swivel joint 1/2" female thread	1/2" female		30 m		200	22
23-12114	Swivel joint 3/4" female thread	3/4" female		35 m	25 m	200	25
23-12127	Swivel joint 1/2" female thread	1/2" female		15 m		200	16
23-12128	Swivel joint 3/4" female thread	3/4" female			7 m	200	17
23-12129	Swivel joint 1/2" female thread	1/2" F		22 m		200	18
23-12130	Swivel joint 3/4" female thread	3/4" female			17 m	200	19

SPARE PARTS / EXPLODED VIEWS

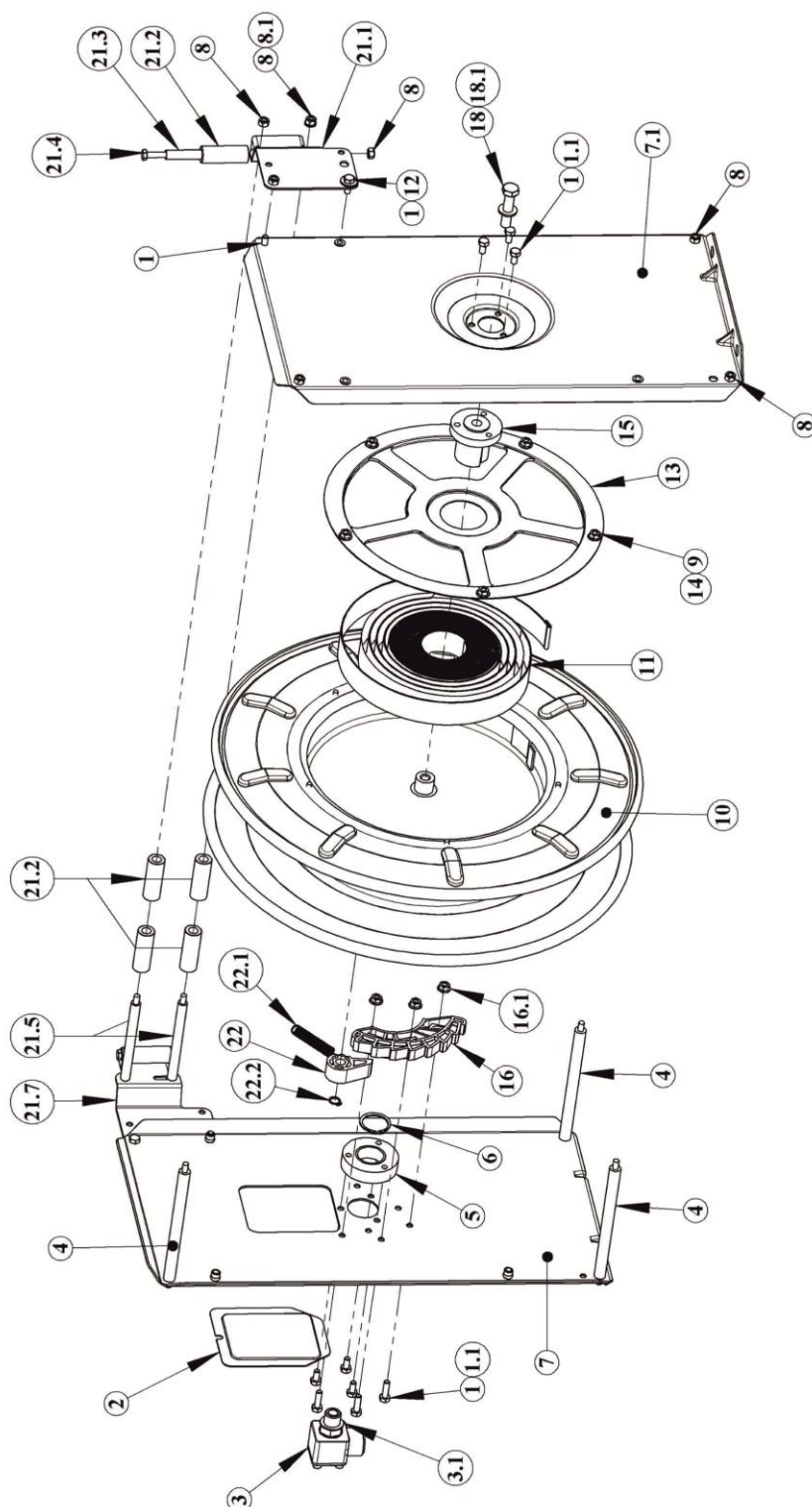
The following exploded views are used to identify the various components that make up the hose reels and to facilitate the ordering of spare parts. When ordering spare parts, please provide the following information:

- Year of manufacture (see nameplate)
- Model or type (see nameplate)
- Part numbers, including the quantity required.

If you have any questions, please contact our technical support.

Drawing for the models:

23-12108, 23-12111, 23-12112, 23-12127, 23-12128, 23-12129, and 23-12130

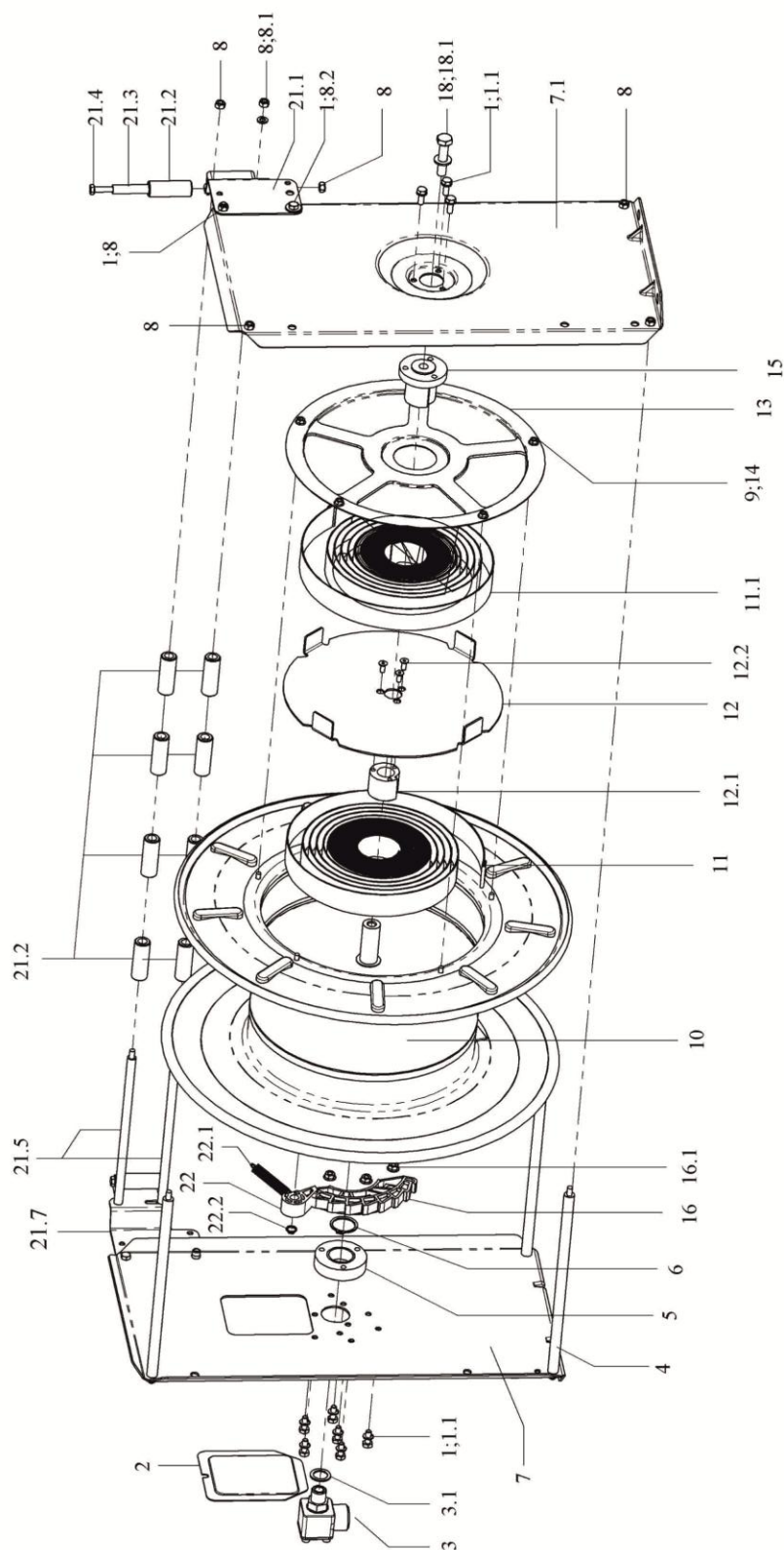


Spare parts for models manufactured from August 2008:

23-12108, 23-12111, 23-12112, 23-12127, 23-12128, 23-12129, and 23-12130

Item	Item	Part No.
1	Hexagon head screw M6x16	E10700092
1.1	Spring washer 6.4	E10700050
2	Cover, right	62-2234
3	Angular swivel joint WDT12/Al	50-42134
3.1	Usit ring 3/8"	62-2224
4	Spacer bar Ø12 x 196	E10710282KU
5	Bearing bushing, right, complete	62-2237
7	Stand, right	B10710019201
7.1	Stand, left	B10710020201
8	M6 nut, self-locking	E10450027
8.1	Washer, 6.4	E10450026
8.2	Washer 6.6 DIN 440 zinc-plated / stainless steel	E10400926
9	Hex socket screw M5x8	E10710025
10	Drum, complete	B1071000301KU
11	Drive spring	62-2225
13	Spring cover	B10700008E
14	M5 nut, self-locking	E10450087
15	Bearing bushing, left, complete	62-2262
16	Tooth segment made of PA6, black	62-2226
16.1	Tensilock nut M6	E10710275
18	Hex head screw M10x40	E10700152
18.1	Washer 10.4	E10710027
21	Hose inlet window, complete	62-2209
21.1	Roller holder, left	B107100242KU
21.2	Guide roller Ø18x50	62-2232
21.3	Spacer sleeve Ø10x51	E10710020
21.4	Hex head screw M6x60	E10710021
21.5	Roller axle Ø10x 152	E10710284KU
21.7	Roller holder, right	B107100232KU
22	Latch made of PA6, black	62-2230
22.1	Tension spring	62-2202
22.2	Circular spring washer A10	62-2205

Drawing for models: 23-12113 and 23-12114



Spare parts for models manufactured from August 2008: 23-12113 and 23-12114

Item	Item	Part No.
1	Hexagon head screw M6x16, stainless steel	E10700092
1.1	Washer, 6.4, stainless steel	E10450026
2	Cover, right, VA	62-2234
3	Angular swivel joint WDT12/Al	50-42134
3.1	Usit ring 3/8", VA	62-2224
4	Spacer bar Ø12 x 247	E107100172KU
5	Bearing bushing, right, complete, aluminum	62-2237
6	circlip A28, stainless steel	62-2223
7	Stand, right	B10710019201
7.1	Stand, left	B10710020201
8	M6 nut, self-locking, stainless steel	E10450027
8.1	Washer, 6.4	E10450026
8.2	Washer 6.6 DIN 440, VA	E10400926
9	Pan head screw with hex socket M5x8, VA	E10710025
10	Drum, complete	B1071012403KU
11	Drive spring, bottom	62-2217
11.1	Drive spring, top	62-2219
12	Drive disc	B10710093KU
12.1	Spring core, inner	B10710112KU
12.2	Hex socket screw M5x12, VA	E10700100
13	Spring cover	B10700008E
14	Hex nut with locking teeth M5, VA	E10710191
15	Bearing bushing, left, complete, aluminum	62-2262
16	Tooth segment made of PA6, black	62-2226
18	Hex head screw M10x45, VA	62-2229
18.1	Washer 10.4, VA	E10710027
21	Hose inlet window, complete	62-2131
21.1	Roller holder, left	B107100242KU
21.2	Guide roller Ø18x50	62-2232
21.3	Spacer sleeve Ø10x51, VA	E10710020
21.4	Hex head screw M6x65, VA	E10710169
21.5	Roller shaft Ø20x 202	62-2256
21.7	Roller holder, right	B107100232KU
22	PA6 pawl, black	62-2230
22.1	Tension spring	62-2202
22.2	A10 retaining ring, VA	62-2205

DECLARATION OF CONFORMITY

Product: Hose reel with self-winding spring retraction and locking mechanism

Brand: Nita

Harmonized standards and directives:

- DIN EN ISO 12100-1:2003
- DIN EN ISO 12100-2:2003
- DIN EN 1672-2:2005-07
- Machinery Directive 2006/42/EC



National regulations: Law on Technical Work Equipment 9. ProdSV, TRD 801

We declare that the products described above comply with the relevant essential safety and health requirements of the Machinery Directive 2006/42/EC.



Managing Director: Barry Fulcher

Date: January 21, 2021