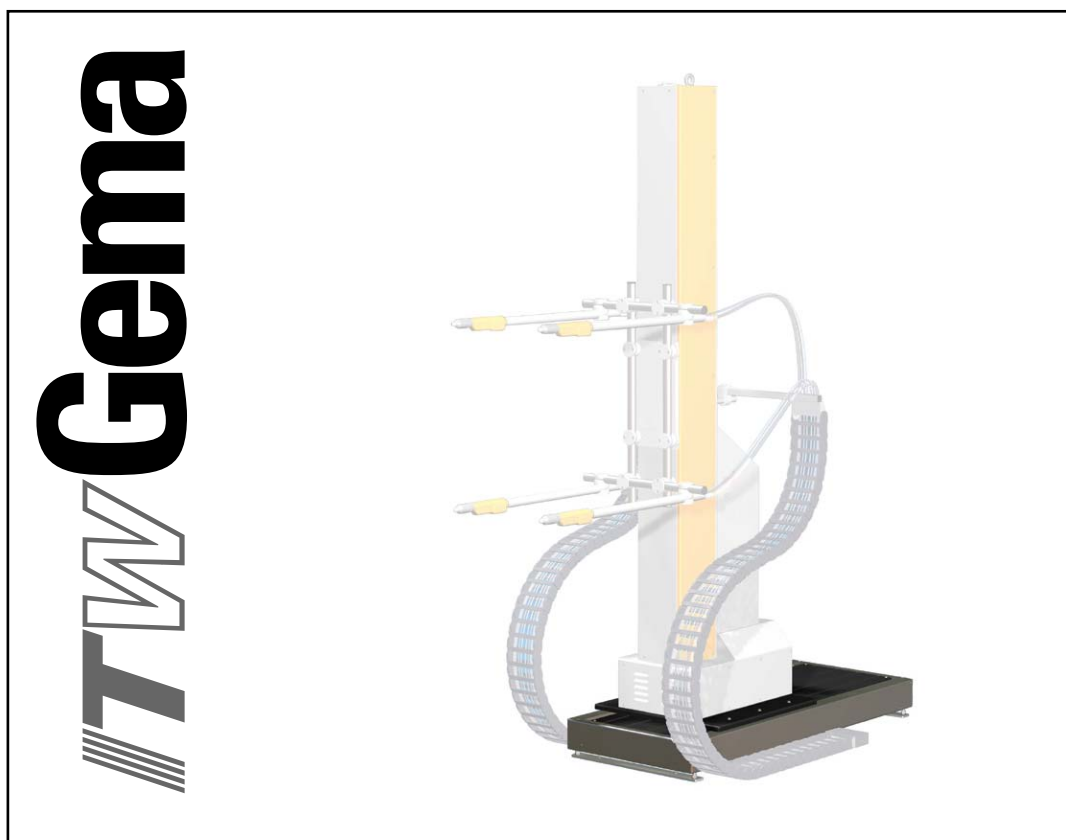

Operating instructions and spare parts list

XT11 Horizontal axis



Documentation XT11 Horizontal axis

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ITW Gema GmbH
Mövenstrasse 17
9015 St. Gallen
Switzerland

Phone: +41-71-313 83 00
Fax.: +41-71-313 83 83

E-Mail: info@itwgema.ch
Homepage: www.itwgema.ch

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General safety regulations

This chapter specifies out the fundamental safety regulations that must be followed by the user and third parties using the XT11 Horizontal axis.

These safety regulations must be read and understood before the XT11 Horizontal axis is used.

Safety symbols (pictograms)

The following warnings with their meanings can be found in the ITW Gema operating instructions. The general safety precautions must also be followed as well as the regulations in the operating instructions.

**DANGER!**

Danger due to live electricity or moving parts. Possible consequences: Death or serious injury

**WARNING!**

Improper use of the equipment could damage the machine or cause it to malfunction. Possible consequences: minor injuries or damage to equipment

**INFORMATION!**



Useful tips and other information

Conformity of use

1. The XT11 Horizontal axis is built to the latest specification and conforms to the recognized technical safety regulations. It is designed for the normal application of powder coating.
2. Any other use is considered as non-conform. The manufacturer is not responsible for damage resulting from improper use of this equipment; the end-user alone is responsible. If the XT11 Horizontal axis is to be used for other purposes or other substances outside of our guidelines then ITW Gema GmbH should be consulted.
3. Observance of the operating, service and maintenance instructions specified by the manufacturer is also part of conformity of use. The XT11 Horizontal axis should only be used, maintained

and started up by trained personnel, who are informed about and are familiar with the possible hazards involved.

4. Start-up (i.e. the execution of a particular operation) is forbidden until it has been established that the XT11 Horizontal axis has been set up and wired according to the guidelines for machinery (98/37 EG). EN 60204-1 (machine safety) must also be observed.
5. Unauthorized modifications to the XT11 Horizontal axis exempts the manufacturer from any liability from resulting damage.
6. The relevant accident prevention regulations, as well as other generally recognized safety regulations, occupational health and structural regulations are to be observed.
7. Furthermore the country-specific safety regulations must be observed.

Explosion protection	Protection type	Temperature class
 	IP54	T6 (zone 21)

Technical safety regulations for stationary electrostatic powder spraying equipment

General information

The powder spraying equipment from ITW Gema is designed with safety in mind and is built according to the latest technological specifications. This equipment can be dangerous if it is not used for its specified purpose. Consequently it should be noted that there exists a danger to life and limb of the user or third party, a danger of damage to the equipment and other machinery belonging to the user and a hazard to the efficient operation of the equipment.

1. The powder spraying equipment should only be started up and used once the operating instructions have been carefully studied. Improper use of the controlling device can lead to accidents, malfunction or damage to the control itself.
2. Before every start-up check the equipment for operational safety (regular servicing is essential)!
3. Safety regulations BGI 764 and VDE regulations DIN VDE 0147, part 1, must be observed for safe operation.
4. Safety precautions specified by local legislation must be observed.
5. The plug must be disconnected before the machine is opened for repair.
6. The plug and socket connection between the powder spraying equipment and the mains network should only be taken out when the power is switched off.
7. The connecting cable between the controlling device and the spray gun must be set up so that it cannot be damaged during operation. Safety precautions specified by local legislation must be observed!

8. Only original ITW Gema spare parts should be used, because the explosion protection will also be preserved that way. Damage caused by other parts is not covered by guarantee.
9. If ITW Gema powder spraying equipment is used in conjunction with machinery from other manufacturers then their safety regulations must also be taken into account.
10. Before starting work familiarize yourself with all installations and operating elements, as well as with their functions! Familiarization during operation is too late!
11. Caution must be exercised when working with a powder/air mixture! A powder/air mixture in the right concentration is flammable! Smoking is forbidden in the entire plant area!
12. As a general rule for all powder spraying installations, persons with pacemakers should never enter high voltage areas or areas with electromagnetic fields. Persons with pacemakers should not enter areas with powder spraying installations!



WARNING!

We emphasize that the customer himself is responsible for the safe operation of equipment. ITW Gema is in no way responsible for any resulting damages!

Safety conscious working

Each person responsible for the assembly, start-up, operation, service and repair of powder spraying equipment must have read and understood the operating instructions and the "Safety regulations"-chapter. The operator must ensure that the user has had the appropriate training for powder spraying equipment and is aware of the possible sources of danger.

The control units for the spray guns must only be set up and used in zone 22. The spray guns are permitted in the zone 21 created by them.

The powder spraying equipment should only be used by trained and authorized personnel. This applies to modifications to the electrical equipment, which should only be carried out by a specialist.

The operating instructions and the necessary closing down procedures must be followed before any work is carried out concerning the set-up, start-up, operation, modification, operating conditions, mode of operation, servicing, inspection or repairs.

The powder spray equipment can be turned off by using the main switch or failing that, the emergency shut-down. Individual components can be turned off during operation by using the appropriate switches.

Individual safety regulations for the operating firm and/or operating personnel

1. Any operating method which will negatively influence the technical safety of the powder spraying equipment is to be avoided.
2. The operator should care about no non-authorized personnel works on the powder spraying equipment (e.g. this also includes using the equipment for non-conform work).
3. For dangerous materials, the employer has to provide an operating instructions manual for specifying the dangers arising for hu-

mans and environment by handling dangerous materials, as well as the necessary preventive measures and behavior rules. The operating instructions manual has to be written in an understandable form and in the language of the persons employed, and has to be announced in a suitable place in the working area.

4. The operator is under obligation to check the powder spraying equipment at least once every shift for signs of external damage, defects or changes (including the operating characteristics) which could influence safety and to report them immediately.
5. The operator is obliged to check that the powder spraying equipment is only operated when in satisfactory condition.
6. As far as it is necessary, the operating firm must ensure that the operating personnel wear protective clothing (e.g. facemasks).
7. The operating firm must guarantee cleanliness and an overview of the workplace with suitable instructions and checks in and around the powder spraying equipment.
8. No safety devices should be dismantled or put out of operation. If the dismantling of a safety device for set-up, repair or servicing is necessary, reassembly of the safety devices must take place immediately after the maintenance or repair work is finished. The powder spraying device must be turned off while servicing is carried out. The operator must train and commit the responsible personnel to this.
9. Activities such as checking powder fluidization or checking the high voltage spray gun etc. must be carried out with the powder spraying equipment switched on.

Notes on special types of hazard

Power

It is necessary to refer once more to the danger of life from high voltage current if the shut-down procedures are not observed. High voltage equipment must not be opened - the plug must first be taken out - otherwise there is danger of electric shock.

Powder

Powder/air mixtures can be ignited by sparks. There must be sufficient ventilation in the powder coating booth. Powder lying on the floor around the powder spraying device is a potentially dangerous source of slipping.

Static charges

Static charges can have the following consequences: Charges to people, electric shocks, sparking. Charging of objects must be avoided - see chapter "Earthing".

Grounding/Earthing

All electricity conducting parts and machinery found in the workplace (according to DIN VDE 0745, part 102) must be earthed 1.5 meters either side and 2.5 meters around each booth opening. The earthing resistance must amount to maximally 1 MOhm. The resistance must be tested on a regular basis. The condition of the machinery surroundings as well as the suspension gear must ensure that the machinery remains earthed. If the earthing of the machinery includes the suspension arrangements, then

these must constantly be kept clean in order to guarantee the necessary conductivity. The appropriate measuring devices must be kept ready in the workplace in order to check the earthing.

Compressed air

When there are longer pauses or stand-still times between working, the powder spraying equipment should be drained of compressed air. There is a danger of injury when pneumatic hoses are damaged and from the uncontrolled release and improper use of compressed air.

Crushing and cutting

During operation, moving parts may automatically start to move in the operating area. It must be ensured that only instructed and trained personnel go near these parts. The operator should ensure that barriers comply with the local security regulations.

Access under exceptional circumstances

The operating firm must ensure that local conditions are met when repairs are made to the electronic parts or when the equipment is restarted so that there are additional measures such as barriers to prevent unauthorized access.

Prohibition of unauthorized conversions and modifications to machines

All unauthorized conversions and modifications to electrostatic spraying equipment are forbidden for safety reasons.

The powder spraying equipment should not be used if damaged, the faulty part must be immediately replaced or repaired. Only original ITW Gema replacement parts should be used. Damage caused by other parts is not covered by guarantee.

Repairs must only be carried out by specialists or in ITW Gema workshops. Unauthorized conversions and modifications may lead to injury or damage to machinery. The ITW Gema GmbH guarantee would no longer be valid.

Safety requirements for electrostatic powder coating

1. This equipment is dangerous if the instructions in this operating manual are not followed.
2. All electrostatic conductive parts, in particular the machinery within 5 meters of the coating equipment, must be earthed.
3. The floor of the coating area must conduct electricity (normal concrete is generally conductive).
4. The operating personnel must wear electricity conducting footwear (e.g. leather soles).
5. The operating personnel should hold the gun with bare hands. If gloves are worn, these must also conduct electricity.
6. The supplied earthing cable (green/yellow) must be connected to the earthing screw of the electrostatic powder spraying hand appliance. The earthing cable must have a good metallic connection with the coating booth, the recovery unit and the conveyor chain and with the suspension arrangement of the objects.

7. The electricity and powder supply to the hand guns must be set up so that they are fully protected against heat and chemical damage.
8. The powder coating device may only be switched on once the booth has been started up. If the booth cuts out then the powder coating device must be switched off.
9. The earthing of all electricity conducting devices (e.g. hooks, conveyor chains) must be checked on a weekly basis. The earthing resistance must amount to maximally 1 MOhm.
10. The control device must be switched off if the hand gun is cleaned or the nozzle is changed.
11. When working with cleaning agents there may be a risk of hazardous fumes. The manufacturers instructions must be observed when using such cleaning agents.
12. The manufacturers instructions and the applicable environmental requirements must be observed when disposing of powder lacquer and cleaning agents.
13. If any part of the spray gun is damaged (broken parts, tears) or missing then it should not be used.
14. For your own safety, only use accessories and attachments listed in the operating instructions. The use of other parts can lead to risk of injury. Only original ITW Gema replacement parts should be used.
15. Repairs must only be carried out by specialists and under no circumstances should they be carried out in the operating area. The former protection must not be reduced.
16. Conditions leading to dangerous levels of dust concentration in the powder spraying booths or in the powder spraying areas must be avoided. There must be sufficient technical ventilation available, to prevent a dust concentration of more than 50% of the lower explosion limit (UEG) (UEG = max. permissible powder/air concentration). If the UEG is not known then a value of 10 g/m³ should be used.

A summary of the rules and regulations

The following is a list of relevant rules and regulations which are to be observed:

Guidelines and regulations, German professional association

BGV A1	Prevention principles
BGV A3	Electrical equipment and material
BGI 764	Electrostatic coating
BGR 132	Guidelines for the avoidance of the dangers of ignition due to electrostatic charging (guideline "Static Electricity")
VDMA 24371	Guidelines for electrostatic coating with synthetic powder ¹⁾ - Part 1 General requirements - Part 2 Examples of use

EN European standards

RL94/9/EC	The approximation of the laws of the Member States relating to apparatus and safety systems for their intended use in potentially explosive atmospheres
EN 12100-1 EN 12100-2	Machine safety ²⁾
EN IEC 60079-0	Electrical equipment for locations where there is danger of explosion ³⁾
EN 50 050	Electrical apparatus for potentially explosive atmospheres - electrostatic hand-held spraying equipment ²⁾
EN 50 053, part 2	Requirements for the selection, installation and use of electrostatic spraying equipment for flammable materials - hand-held electrostatic powder spray guns ²⁾
EN 50 177	Stationary electrostatic spraying equipment for flammable coating powder ²⁾
EN 12981	Coating plants - spray booths for application of organic powder coating material - safety requirements
EN 60 529, identical: DIN 40050	IP-Type protection: contact, foreign bodies and water protection for electrical equipment ²⁾
EN 60 204 identical: DIN VDE 0113	VDE regulations for the setting up of high voltage electrical machine tools and processing machines with mains voltages up to 1000 V ³⁾

VDE (Association of German Engineers) Regulations

DIN VDE 0100	Regulations for setting-up high voltage equipment with mains voltages up to 1000 V ⁴⁾
DIN VDE 0105 part 1 part 4	VDE regulations for the operation of high voltage equipment ⁴⁾ General regulations Supplementary definitions for stationary electrical spraying equipment
DIN VDE 0147 part 1	Setting up stationary electrostatic spraying equipment ⁴⁾
DIN VDE 0165	Setting up electrical equipment in locations in areas with danger of explosion ⁴⁾

Sources:

¹⁾ Carl Heymanns Verlag KG, Luxemburger Strasse 449, 5000 Köln 41, or from the appropriate employers association

²⁾ Beuth Verlag GmbH, Burgrafenstrasse 4, 1000 Berlin 30

³⁾ General secretariat, Rue Bréderode 2, B-1000 Bruxelles, or the appropriate national committee

⁴⁾ VDE Verlag GmbH, Bismarckstrasse 33, 1000 Berlin 12

Product specific security measures

- The installation work, to be done by the customer, must be carried out according to local regulations
- Before starting up the plant, a check must be made that no foreign objects are in the booth or in the ducting (input and exhaust air)
- It must be observed, that all components are grounded according to the local regulations, before start-up

Personnel safety

- The XM11 Horizontal axis may only be switched on and operated after careful reading of this manual. Incorrect operating of the horizontal axis can lead to personal injuries as well as damage to the table or other parts.
- All moving axes must be secured by security gates before start-up and during operation (see local regulations).
- Before start-up, the grounding of the axis is to be checked!
- Safety devices may not be dismantled, bypassed or ignored! Open covers hide the danger of injury.
- Safety devices must be held in perfect functioning and may be not put out of operation!
- Maintenance works on the XT11 Horizontal axis may take place only when the plant is stopped! Switch off the plant, lock the main switch and remove the key!

Safety concept

- The XT11 Horizontal axis is a constituent part of the system and is thus integrated into the safety system of the plant. For the use outside of the safety concept, corresponding measures must be taken!
- Only original ITW Gema spare parts may be used! Damage caused by other parts is not covered by guarantee.
- Repairs on the axis may only be done by personnel correspondingly trained by ITW Gema.

Conformity of use

- The XT11 Horizontal axis is only intended for the defined application range. The use outside of this range is considered as not intended use.

About this manual

General information

This operating manual contains all the important information which you require for the working with the XT11 Horizontal axis. It will safely guide you through the start-up process and give you references and tips for the optimal use of your new powder coating system.

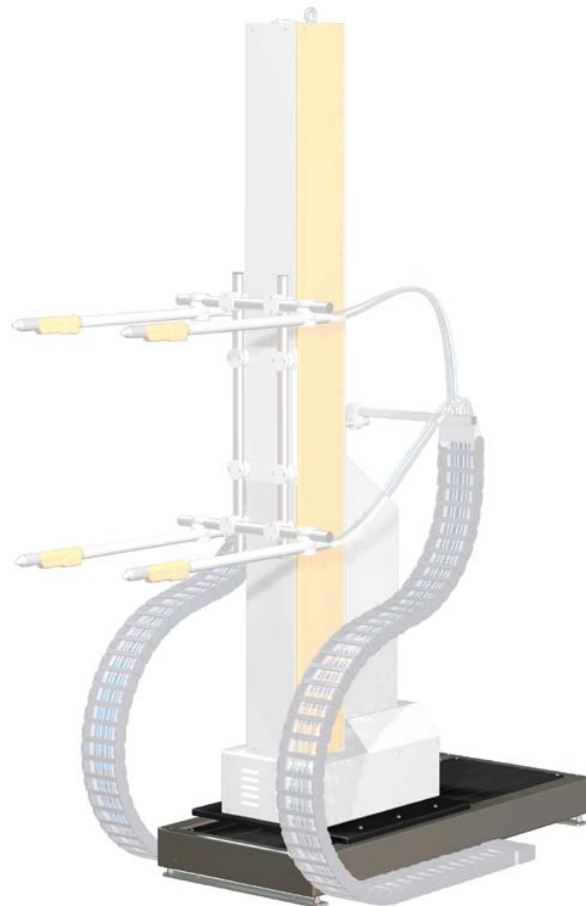
Information about the function mode of the individual system components - reciprocators, booths, powder gun control units, powder guns etc. - should be referenced to their corresponding documents.

Function description

Field of application

The XT11 Horizontal axis is used for the coating of parts with different widths. By coating in this way, the powder guns must be driven into each corresponding position for every given width.

The XT11 Horizontal axis is used in connection with the ZA reciprocator.

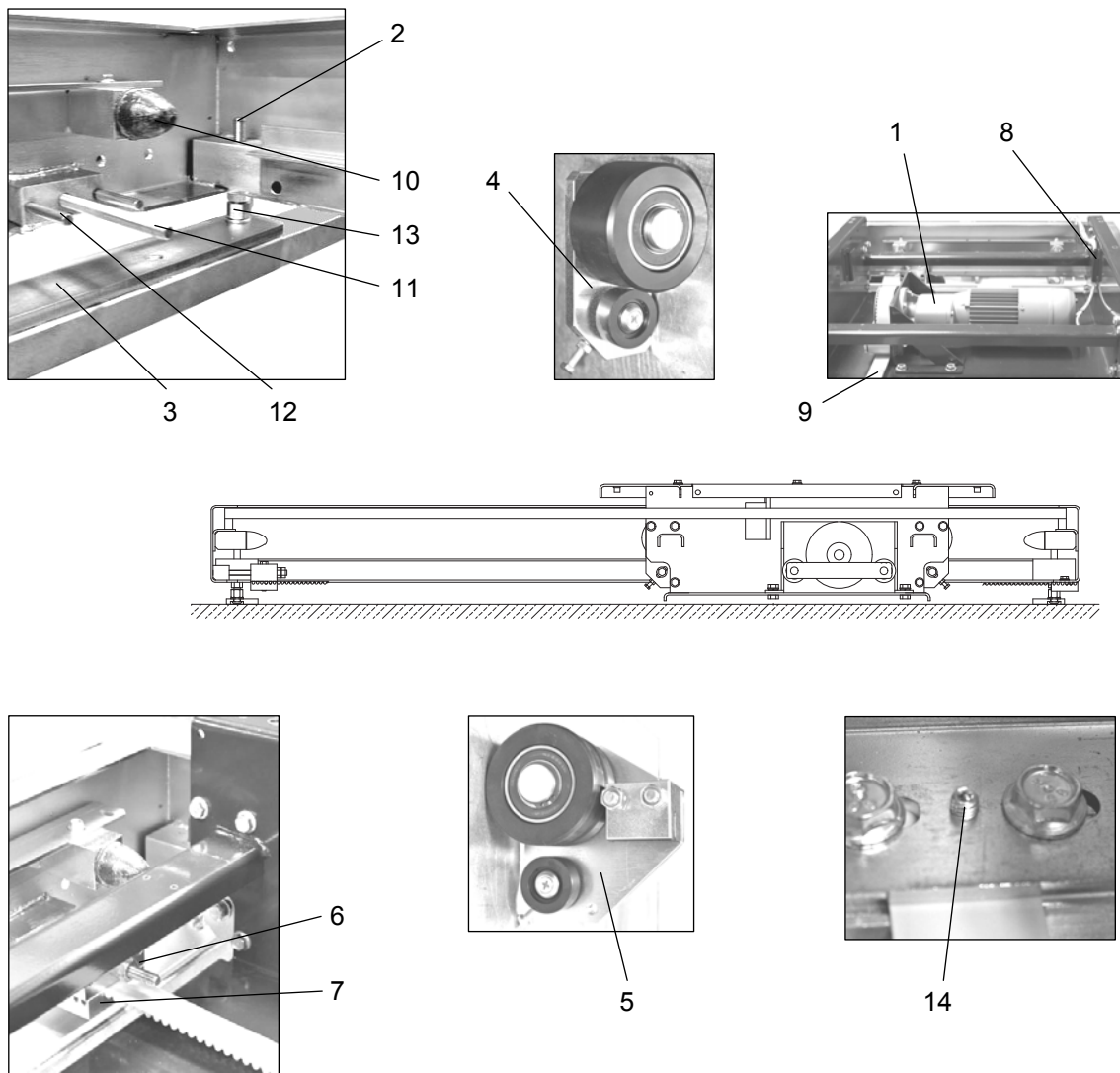


XT11 Horizontal axis with ZA reciprocator

Structure and function

Mechanical structure

The XT11 Horizontal axis consists of the following components:



XT11 Horizontal axis - structure

- | | | | |
|---|-----------------------|----|----------------|
| 1 | Drive unit - complete | 8 | Cable guide |
| 2 | Leveling bolt | 9 | Toothed belt |
| 3 | Baseboard | 10 | Rubber buffer |
| 4 | Running wheel bearing | 11 | Clamping bolt |
| 5 | Guide wheel bearing | 12 | Headless screw |
| 6 | Clamping plate | 13 | Washer |
| 7 | Clamp plate | 14 | Grub screw |

Description

The XT11 Horizontal axis is a feeding axis with the following characteristics:

- Same control as the ZA reciprocator
- Free position selection by OptiMove CR05/CR06 Control unit
- Built-in leveling pads
- Minimum space requirement
- No additional space required for dismantling and service works
- Low overall height

Further information about the axis control can be found in the corresponding CR05/CR06 OptiMove Control unit operating manual.

Function

The XT11 Horizontal axis is the feeding axis for the gun position adjustment to the work piece. This position detection takes place by a pulse generator installed onto the drive unit.

The drive takes place by the drive unit, installed onto the axis carriage (three-phase motor with spur gear and pulse generator) and the toothed belt, fitted into the travel frame.

Safety and monitoring devices



Attention:

All moving axes must be secured by safety barriers before start-up and during operation (see the local regulations)!

Technical data

XT11 Horizontal axis

Versions

The XT11 Horizontal axis is available in two versions with different travel distances.

XT11 Horizontal axis		
Travel distance length	1000 mm	1400 mm

Electrical data

XT11 Horizontal axis	
Power supply	230 VAC (from control unit)
Tolerance	± 10%
Frequency	50/60 Hz
Control unit	OptiMove CR05/CR06

Drive unit data

XT11 Horizontal axis	
Drive unit	Asynchronous three-phase AC motor
Motor voltage/frequency	3x230 V, 87 Hz
Motor power consumption	0.3 kW
Motor circuit	Triangle/three phase
Max. driving speed Recommended driving speed	0.08-0.6 m/sec. 0.1-0.2 m/sec.
Position detection	with incremental pulse generator
Drive torque	36 Nm
Brake torque	3 Nm
Motor RPM	67 1/min

Weights

XT11 Horizontal axis	
with travel distance - 1000 mm	150 kg
with travel distance - 1400 mm	166 kg

Start-up

Assembly of the XT11 Horizontal axis

The axis must be leveled, in order to ensure a safe and perfect operation.
After positioning, the XT11 Horizontal axis must be firmly fixed on the floor.

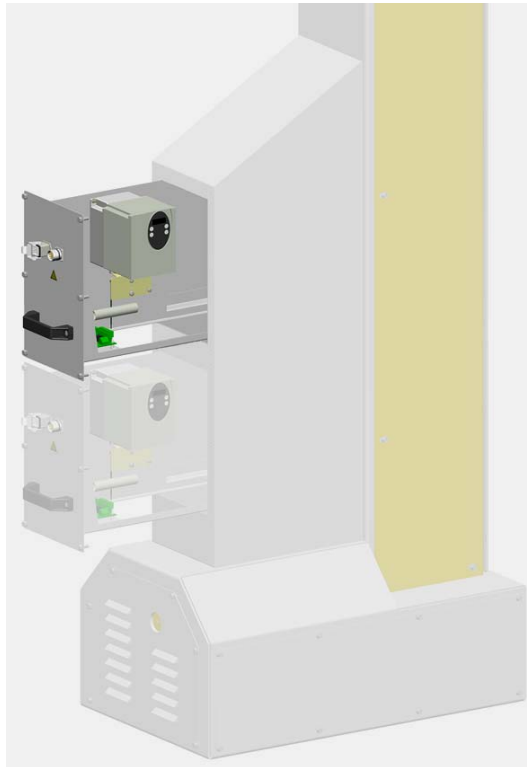
Connecting the XT11 Horizontal axis to the ZA reciprocator

1. The cables to be connected are lying loose on the carriage plate of the horizontal axis.



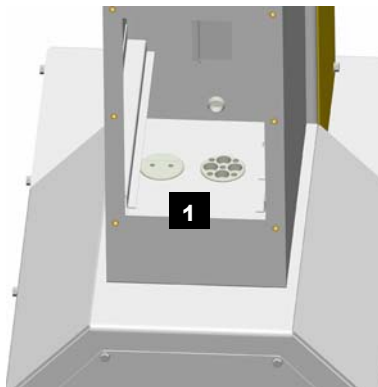
XT11 Horizontal axis with connection cable

2. Both cables must be inserted into the cable duct in the ZA reciprocator (1)
3. Loosen the screws on the rear side of the ZA reciprocator and pull out the electrical modules



Electrical modules in the ZA reciprocator

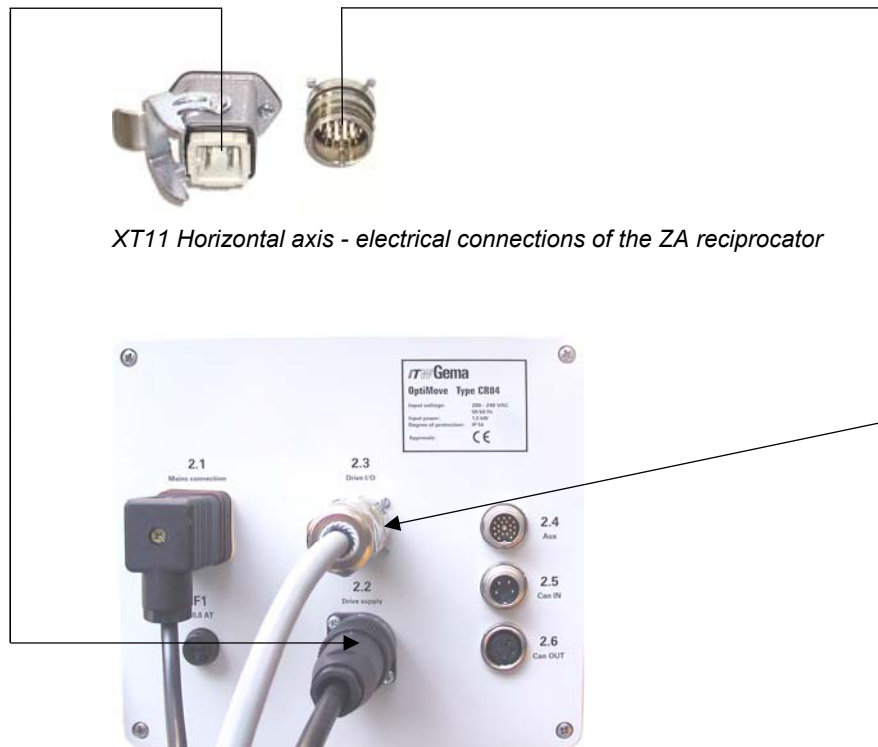
4. Break out the required opening in the feedthrough rubber and pull through the cables



Cable ducts in the ZA reciprocator

5. Connect the cable (according to the enclosed wiring diagram)
6. Push back the electrical modules and fasten them

Electrical connections / cable connections



XT11 Horizontal axis - electrical connections of the ZA reciprocator

OptiMove CR06 Control unit - connections

- The XT11 Horizontal axis mains connection on the ZA06 Reciprocator is connected to the **2.2 Drive supply** connection on the CR05/CR06 OptiMove Control unit by the XT11 power supply cable
- The XT11 Horizontal axis signal connection is connected to the **2.3 Drive I/O** connection on the CR05/CR06 OptiMove Control unit by the XT11 signal cable

Reference point

The reference point serves as starting point for the axis control unit for calculating the procedure positions.

By switching on the axis control unit, the horizontal axis travels automatically to the reference point (proximity switch).

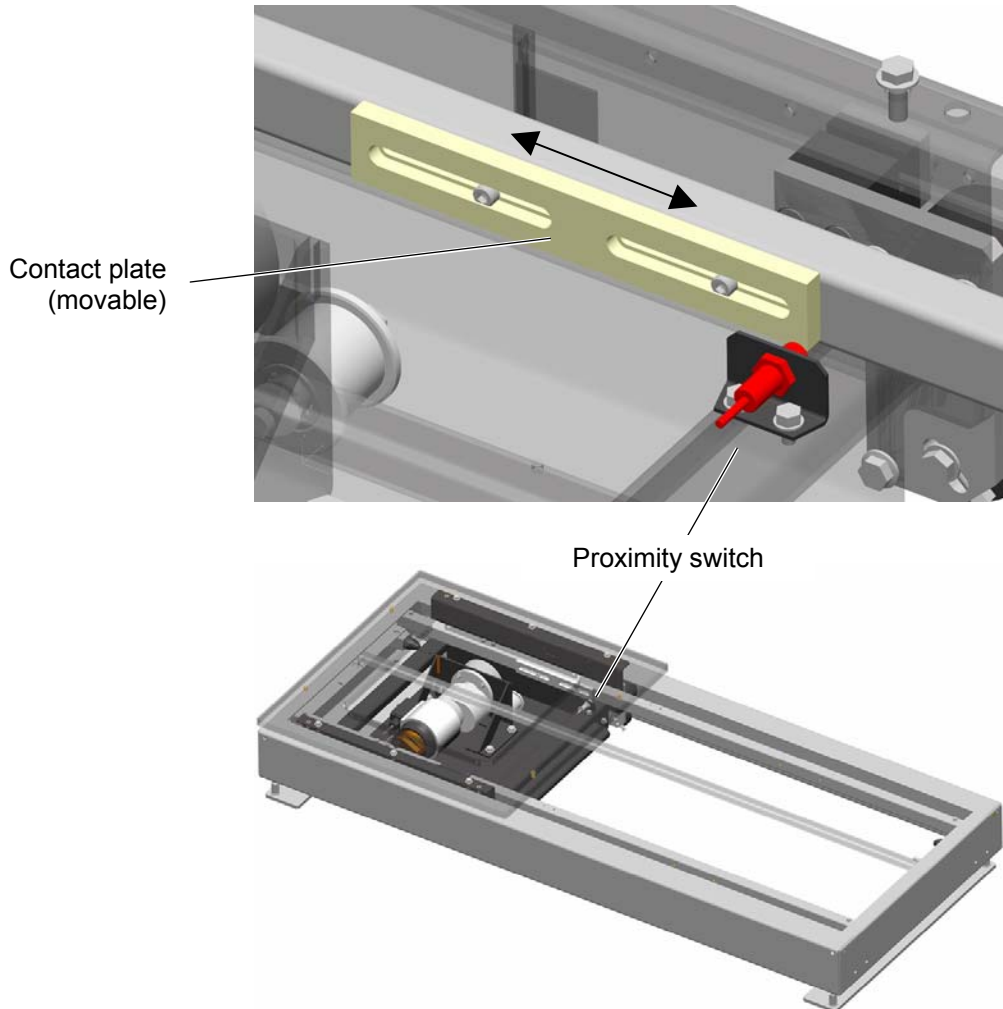


Attention!

In order to avoid damages to the booth or the gun holder etc. the reference point must be set before the first start-up!

Setting the reference point

1. Move the contact plate to the desired position and fasten it
2. Set the response gap of the proximity switch to approx. 2 mm



XT11 Horizontal axis - reference point

The position of the contact plate is set by an ITW Gema service engineer during assembly.



Attention:
The reference point must be referenced before each start-up (at each switching on, after an interruption of the power supply etc.)!

Initial start-up



Danger!

Never stand on the horizontal axis or under the carriage of the vertical axis when it is in operation - danger of accident!



Attention:

The power of the horizontal axis is much stronger than that of a human being!

All axes must be secured against admittance during operation (see local regulations)!

Before start-up the XT11 Horizontal axis, the following points must be observed:

- The frame and the drive carriage of the axis must be grounded! The grounding of the frame must be done by the customer
- Adjust the system parameters in the CR05/CR06 Control unit (see the OptiMove CR05/CR06 operating manual)

In addition, the following checks are necessary before the initial start-up:

- **Travel distance** - check by test run, as well as in accordance to the OptiMove CR05/CR06 operating manual
- **Control unit** - check the cable connections (correct connections, squeezed parts, cable lengths, cable movement etc.)
- **Toothed belt** - move manually to check if it does not ride up on the flanged wheel
- **Stability** - reciprocator and carriage plate must be stable!

Handling and maintenance

General operation

The horizontal axis is operated exclusively by the OptiMove CR05/CR06 Reciprocator control unit (see the OptiMove CR05/CR06 operating instructions).

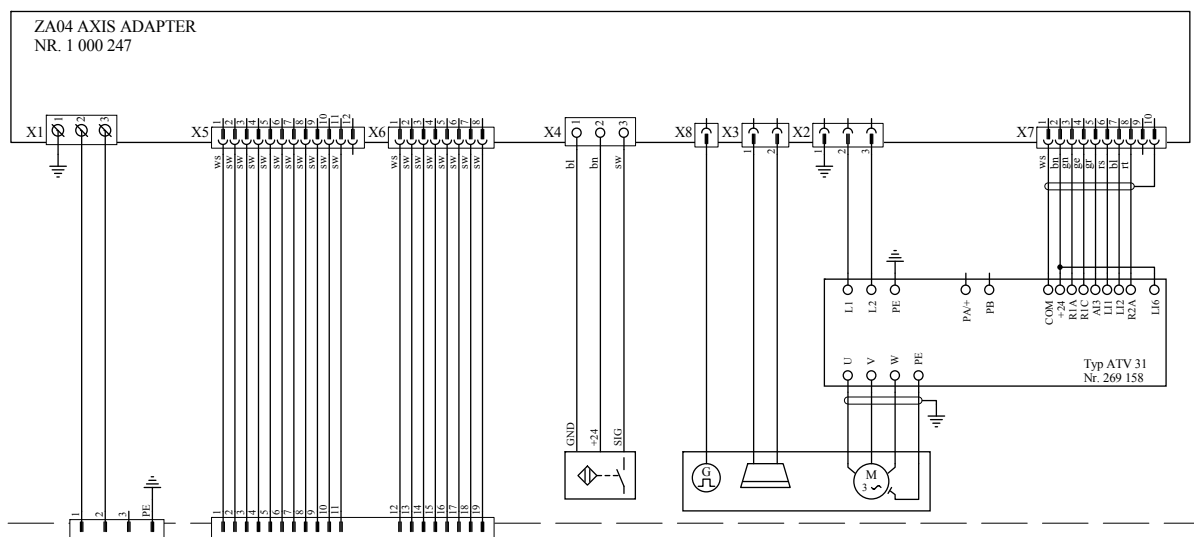
Maintenance schedule

The maintenance plan contains checking and maintenance notes for single shift operation of the horizontal axis. Wear checks, maintenance and repair must be adapted accordingly, when operation conditions deviate!

Maintenance interval	Maintenance and inspection works
Weekly	Coarse cleaning Check operating conditions Clean the running surface
Monthly	Check the toothed belt tensioning

Wiring diagram

XT11 Horizontal axis



XT11 Horizontal axis - wiring diagram

- | | |
|--------------------------------|---|
| X1 Power supply | X5 Drive I/O connection |
| X2 FU* power supply | X6 Drive I/O connection |
| X3 Motor brake connection | X7 FU* signal connection |
| X4 Proximity switch connection | X8 Incremental pulse generator connection |
- * FU = Frequency converter



Note:
A contact bridge must be installed between +24 and the LI6 input!

Troubleshooting

General information



Attention:
Faults are to be fixed by trained personnel only!

Fault clearance

Problem/error/malfunction	Procedures/remedy
Reciprocator and carriage plate are wagging	<p>Check the connecting bolts between reciprocator, carriage plate and the XT11 carriage for tightness</p> <p>Adjust the counter rollers without clearance by the corresponding screws on the running wheel bearing/guide wheel bearing (see also the spare parts list)</p> <p>In no case press the counter rollers, otherwise they wear quickly!</p>
Reference point not reached	<p>Remove the powder accumulation on the running surfaces!</p> <p>Check the XT11 axis for proper running (move manually)</p> <p>Consider the indications in the CR05/CR06 Control unit operating manual!</p>

Spare parts list

Ordering spare parts

When ordering spare parts for powder coating equipment, please indicate the following specifications:

- Type and serial number of your powder coating equipment
- Order number, quantity and description of each spare part

Example:

- **Type** XT11 Horizontal axis
Serial number 1234 5678
- **Order no.** 203 386, 1 piece, Clamp - Ø 18/15 mm

When ordering cable or hose material, the required length must also be given. The spare part numbers of this yard/meter ware is always marked with an *.

The wear parts are always marked with a #.

All dimensions of plastic hoses are specified with the external and internal diameter:

Example:

Ø 8/6 mm, 8 mm outside diameter (o/d) / 6 mm inside diameter (i/d)



WARNING!

Only original ITW Gema spare parts should be used, because the hazardous location approval will be preserved that way! The use of spare parts from other manufacturers will invalidate the ITW Gema guarantee conditions!

XT11 Horizontal axis - spare parts list


Attention!

When ordering toothed belts, indicate the toothed belt length (according to travel distance + 855 mm).

By replacing the toothed belt, screw in the grub screw, so that the steel cables in the toothed belt are touched and the grounding is ensured!

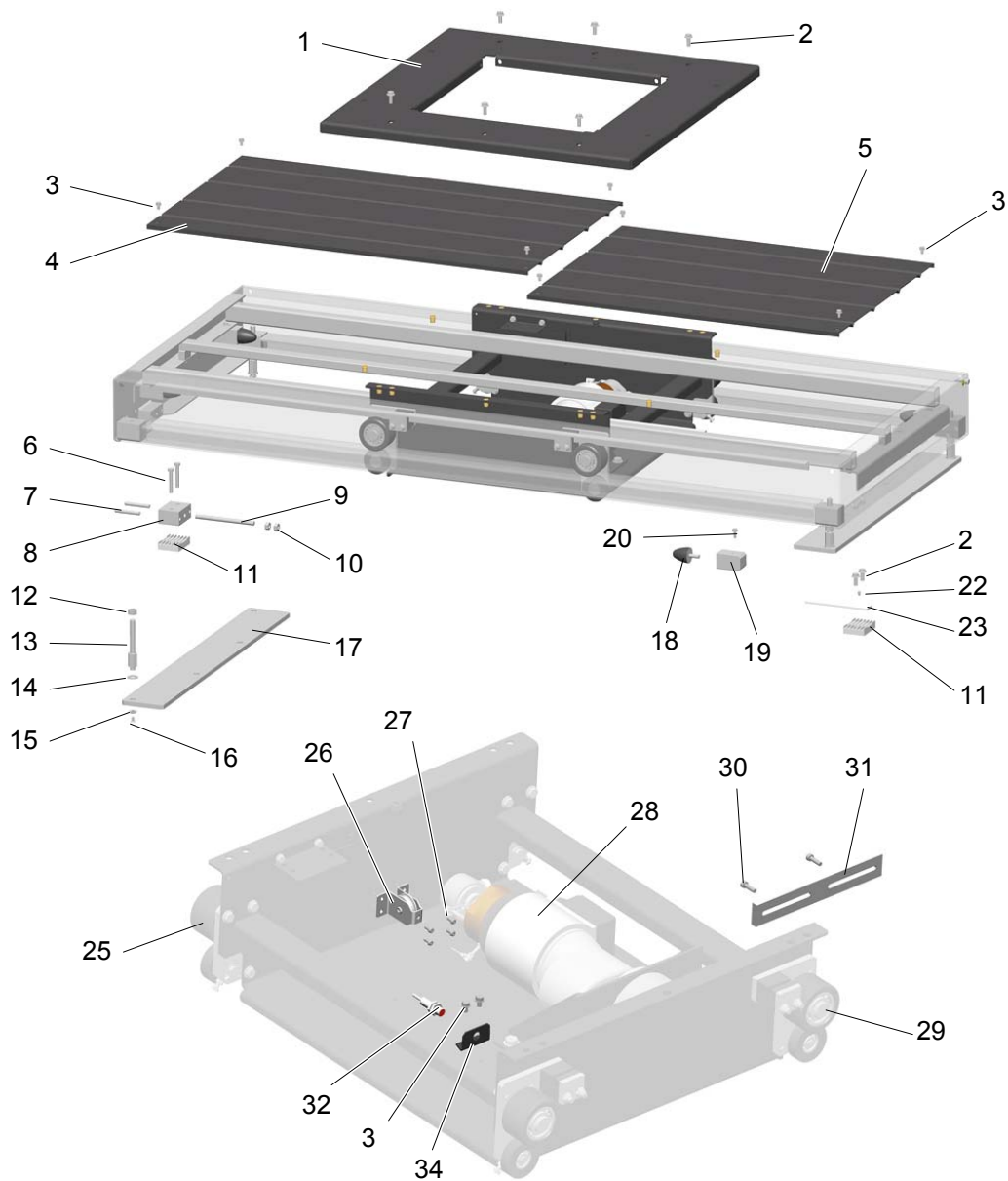
	XT11 Horizontal - stroke 1000 mm	1003 801
	XT11 Horizontal - stroke 1400 mm	1003 802
1	ZA06 carriage plate - lengthwise	387 355
	ZA06 carriage plate	387 525
2	Hexagon shakeproof screw - M8x20 mm	244 422
3	Hexagon screw - M6x10 mm	1001 081
4	Cover panel - stroke 1000 mm	384 151
	Cover panel - stroke 1400 mm	385 883
5	Cover panel - firm side	372 463
6	Hexagon screw - M8x50 mm	213 993
7	Headless screw - M8x60 mm	258 482
8	Clamping plate	372 420
9	Threaded bolt - M10x140 mm	258 474
10	Hexagon nut - M10	215 589
11	Clamp plate	345 067
12	Hexagon nut - M12	215 597
13	Threaded bolt - M12x115 mm	372 676
14	Washer - Ø 13/24x2.5 mm	215 830
15	Washer - M6 (for countersunk-head screw)	258 431
16	Countersunk-head screw - M6x12 mm	214 680
17	Foot plate	372 404
18	Rubber buffer - Ø 35x40 mm, M8	211 664
19	Buffer holder	389 285
20	Hexagon shakeproof screw - M6x16 mm	244 503
22	Allen grub screw - M6x10 mm	214 841
23	Toothed belt	103 730#*
25	Running wheel bearing - complete (see corresponding spare parts list)	
26	Roller - Ø 40 mm	256 366
27	Cap screw - M5x10 mm	241 849
28	XT11 drive unit - complete (see the corresponding spare parts list)	
29	Guide wheel bearing - complete (see corresponding spare parts list)	

XT11 Horizontal axis - spare parts

30	Allen cylinder screw - M6x20 mm	216 429
31	Contact plate	387 568
32	Proximity switch	229 180
34	Limit switch holder	387 576
XT11 Electrical module on ZA06 (not shown, see corresponding spare parts list)		

* Please indicate length

Wearing part



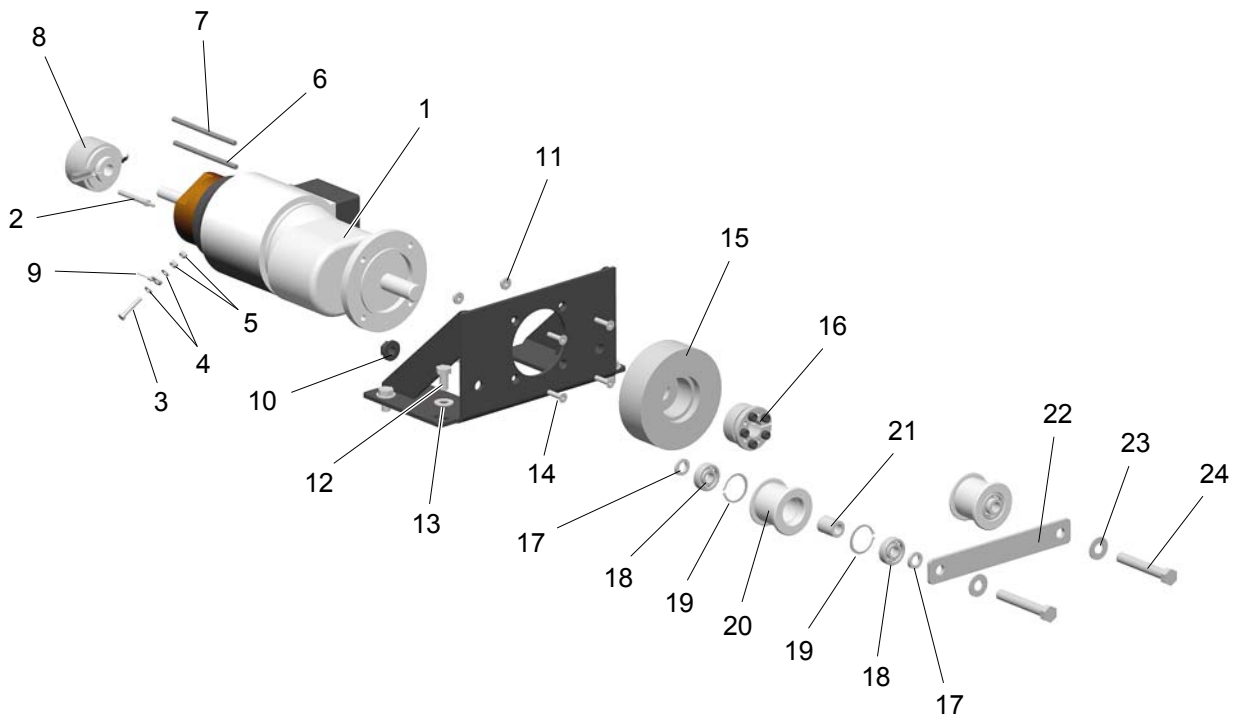
XT11 Horizontal axis - spare parts list

XT11 Horizontal axis - drive unit

	Motor/gearbox unit - complete (pos. 1-5)	1005 064
1	Motor/gearbox - 0.25 kW	1003 815
2	Torque support - Ø 6/M4	1003 126
3	Hexagon screw - M5x30 mm	213 764
4	Washer - Ø 5.3/10x1 mm	205 320
5	Hexagon nut - M5	205 150
6	XT11 motor cable - L=2 m	1000 904
7	XT11 motor brake cable - L=2 m	1001 343
8	Incremental pulse generator	268 925
9	Brake release cable	1002 855
10	Hexagon ribbed nut - M12	1003 797
11	Hexagon shakeproof nut - M6	244 430
12	Hexagon screw - M10x20 mm	214 108
13	Ribbed washer - M10	237 981
14	Countersunk Allen screw - M6x25 mm	241 598
15	Toothed belt wheel ¹⁾	1003 814
16	Tensioning set - Ø 20/47x22 mm ¹⁾	257 583
17	Spacer ring - Ø 20/12.1x3.7 mm	1003 795
18	Deep groove ball bearing - Ø 12/32x10 mm	245 720
19	Snap ring - A-32	235 741
20	Guide roller	1003 793
21	Spacer ring - Ø 20/12.1x25 mm	1003 812
22	Roller fixing plate - L=120 mm	1003 796
23	Ribbed washer - M12	237 973
24	Hexagon screw - M12x80 mm	221 325

¹⁾ If these parts must be replaced, clean off all grease before assembly!

XT11 Horizontal axis - drive unit

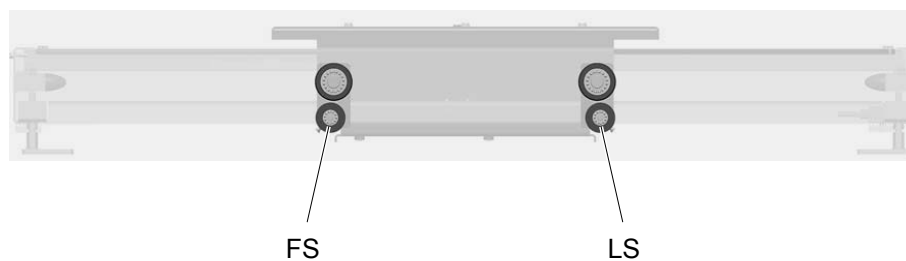


XT11 Horizontal axis - drive unit

XT11 Horizontal axis - running wheel bearing

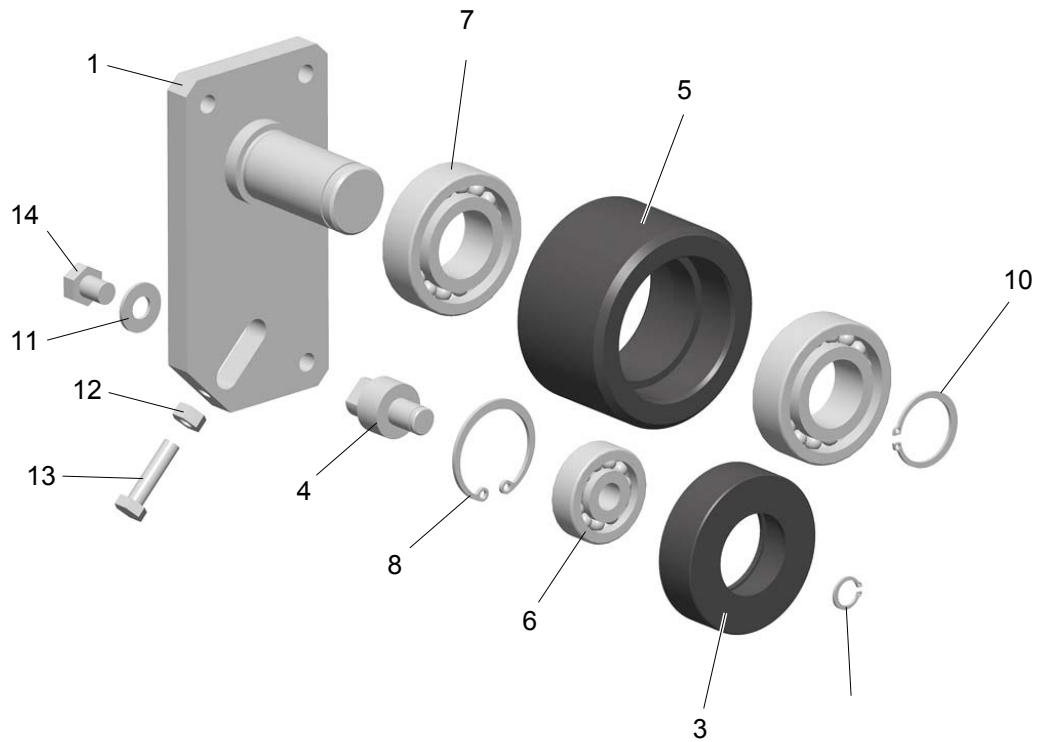
	Running wheel bearing - complete, FS	1003 808
	Running wheel bearing - complete, LS	1003 806
1	Running wheel bearing (support) - FS	1003 809#
1	Running wheel bearing (support) - LS	1003 807#
3	Counter roller	390 658#
4	Bearing bolt	1003 813
5	Running wheel - Ø 73 mm	1003 805#
6	Deep groove ball bearing - Ø 10/35x11 mm	201 359#
7	Deep groove ball bearing - Ø 15/52x15 mm	258 415#
8	Snap ring - I-35	216 135
9	Snap ring - A-10	256 358
10	Snap ring - A-25	237 094
11	Ribbed washer - M8	242 870
12	Hexagon nut - M6	205 095
13	Hexagon screw - M6x25 mm	213 845
14	Hexagon screw - M8x10 mm	213 900

Wearing part



XT11 Horizontal axis - running wheel bearing

XT11 Horizontal axis - running wheel bearing

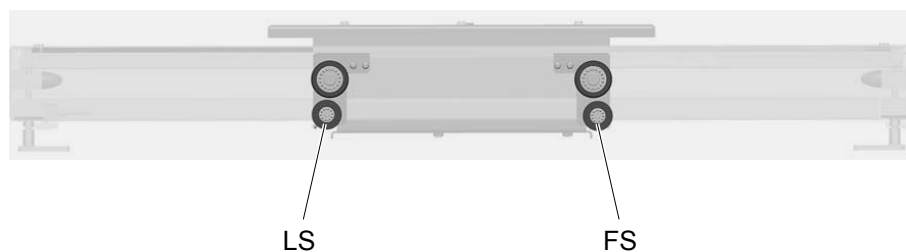


Running wheel bearing - FS

XT11 Horizontal axis - guide wheel bearing

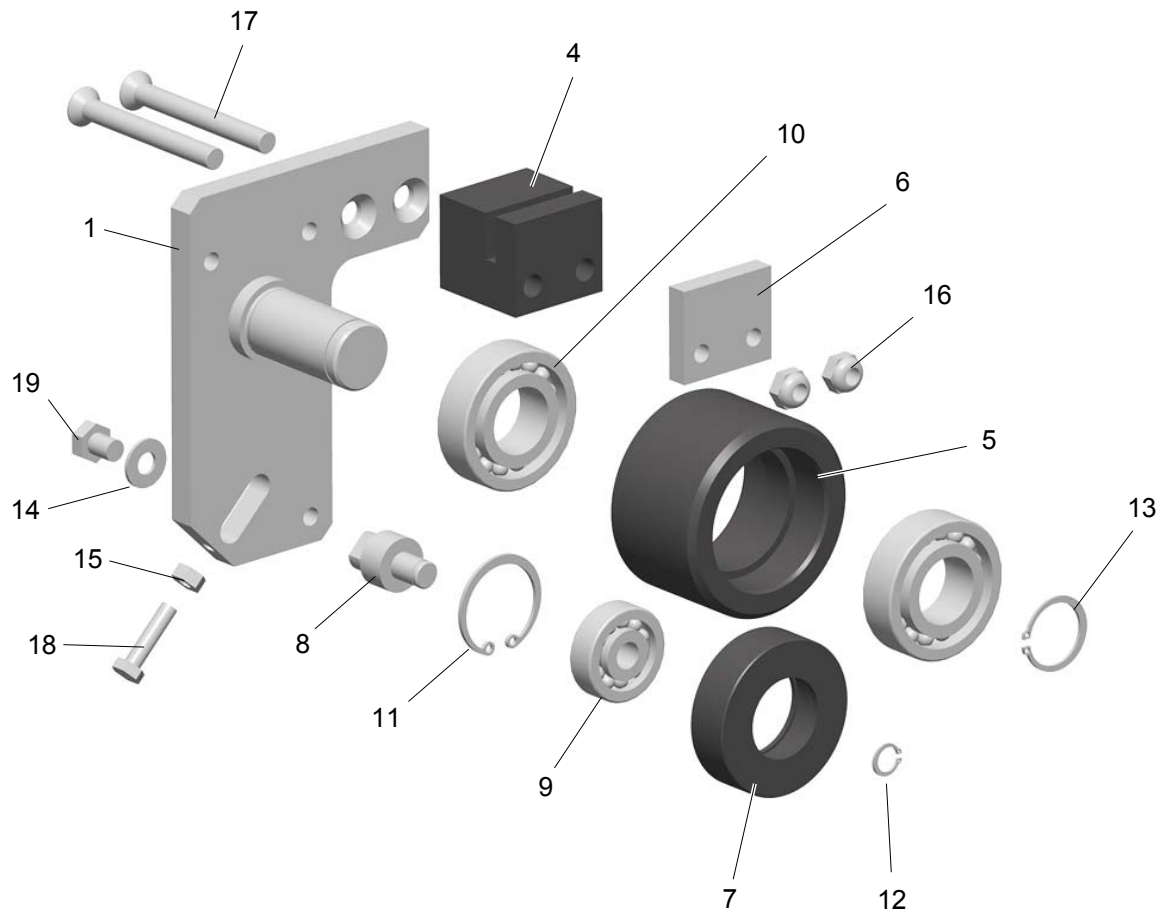
	Guide wheel bearing - complete, LS	1003 803
	Guide wheel bearing - complete, FS	1003 811
1	Guide wheel bearing (support) - LS	1003 804#
1	Guide wheel bearing (support) - FS	1003 810#
4	Guide profile	372 374#
5	Guide wheel - Ø 73 mm	1003 805#
6	Counter plate	372 382
7	Counter roller	309 658#
8	Bearing bolt	1003 813
9	Deep groove ball bearing - Ø 10/35x11 mm	201 359
10	Deep groove ball bearing - Ø 15/52x15 mm	258 415
11	Snap ring - I-35	216 135
12	Snap ring - A-10	256 358
13	Snap ring - A-25	237 094
14	Ribbed washer - M8	242 870
15	Hexagon nut - M6	205 095
16	Locknut - M8	221 317
17	Countersunk screw K-SI - M8x70 mm	258 440
18	Hexagon screw - M6x25 mm	213 845
19	Hexagon screw - M8x10 mm	213 900

Wearing part



XT11 Horizontal axis - guide wheel bearing

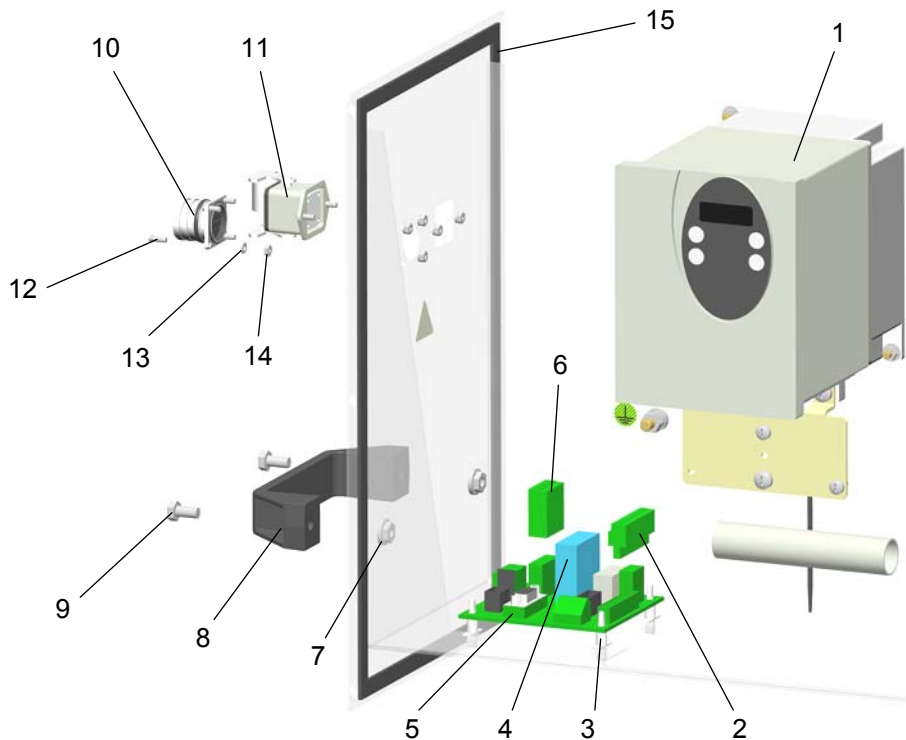
XT11 Horizontal axis - guide wheel bearing



Guide wheel bearing - LS

XT11 Horizontal axis - electrical module

1	Frequency converter - ATV31-XT11	269 158
2	Signals-frequency converter connection	1000 314
3	Spacer - Ø 4 / Ø 4.8/9.4 mm	266 833
4	Relay - 24 VDC, for motor brake	250 961
5	Axis adaptor - complete	1000 247
6	Frequency converter mains connection	1000 312
7	Hexagon shakeproof nut - M6	244 430
8	Handhold	244 864
9	Hexagon screw - M6x12 mm	213 810
10	Drive I/O connection - complete	1004 105
11	Power supply	1003 990
12	Cylinder screw - M3x8 mm	268 801
13	Shake proof washer - A-type, M3	205 885
14	Hexagon nut - M3	202 142
15	Adhesive seal strip - 9x2 mm	100 250
	OptiMove XT11 power supply cable - L=20 m (not shown)	1000 280
	OptiMove XT11 signal cable - L=20 m (not shown)	1000 281



XT11 Horizontal axis - electrical module in the ZA06 Reciprocator

