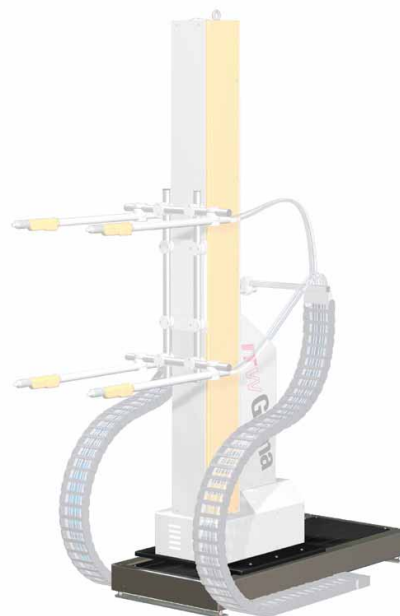

Operating instructions and spare parts list

XT08 Horizontal axis

TW
Gema



Documentation XT08

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Safety

Personnel safety

- The 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 axle is to be checked!
- Safety devices may not be dismantled, bypassed or ignored. Open covers hide the danger of injury.
- Safety devices must be kept in good working condition and not be allowed to be put out of action.
- Maintenance works on the XT08 Horizontal axle may take place only when the plant is stopped! Switch off the plant, lock the main switch and remove the key!

Safety concept

- The XT08 Horizontal axis is a component part of the unit, integrated in the safety system of the plant. Suitable measures must be taken for the use outside of the safety concept.
- 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 carried out by ITW Gema trained personnel.

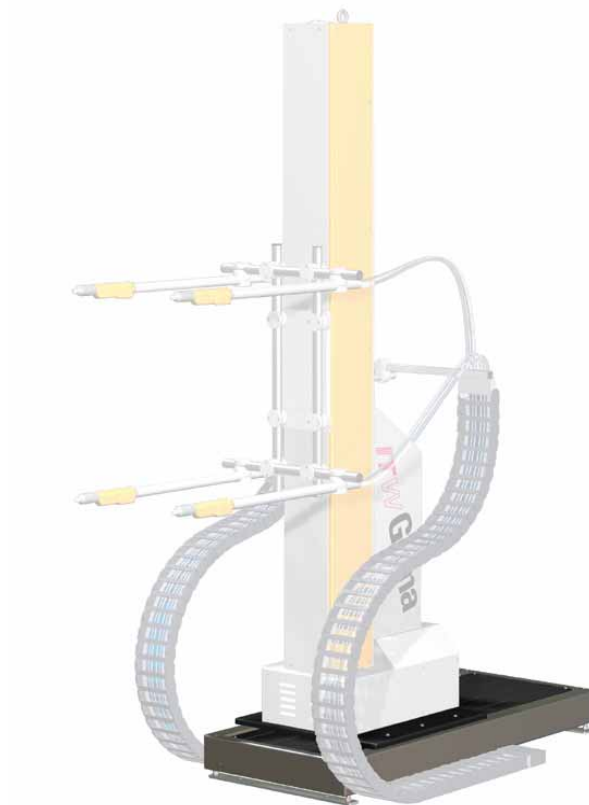
Conformity of use

The horizontal axis is only intended for a defined application range. Use outside of this area is considered as inapplicable use.

Product description

Field of application

The XT08 Horizontal axis is used for the coating of parts with different widths. In particular if the powder guns must be driven into in each corresponding position for every given width. The XT08 Horizontal axis is used in connection with the ZA reciprocator.



XT08 Horizontal axis with ZA reciprocator

Description

The XT08 horizontal axis is a feeding axis with the following characteristics:

- same control as the ZA reciprocator
- free position selection by CR03 control
- built-in levelling pads
- minimum space requirement
- no additional space required for dismantling and service works
- low overall height
- manual displacement (when the control unit is switched off)

(Further information about axis controlling can be found in the corresponding CR03-Gematic control unit operating instructions)

Product identification

The identification label of the horizontal axis is found inside the ZA reciprocator, directly next to the frequency converter.

Detail view see below



The following specifications can be taken from it:

- Station address
- Node ID
- max. stroke

XT08	Station A
	Node ID : #3
	H max. : 1000mm

Identification label inside the ZA reciprocator

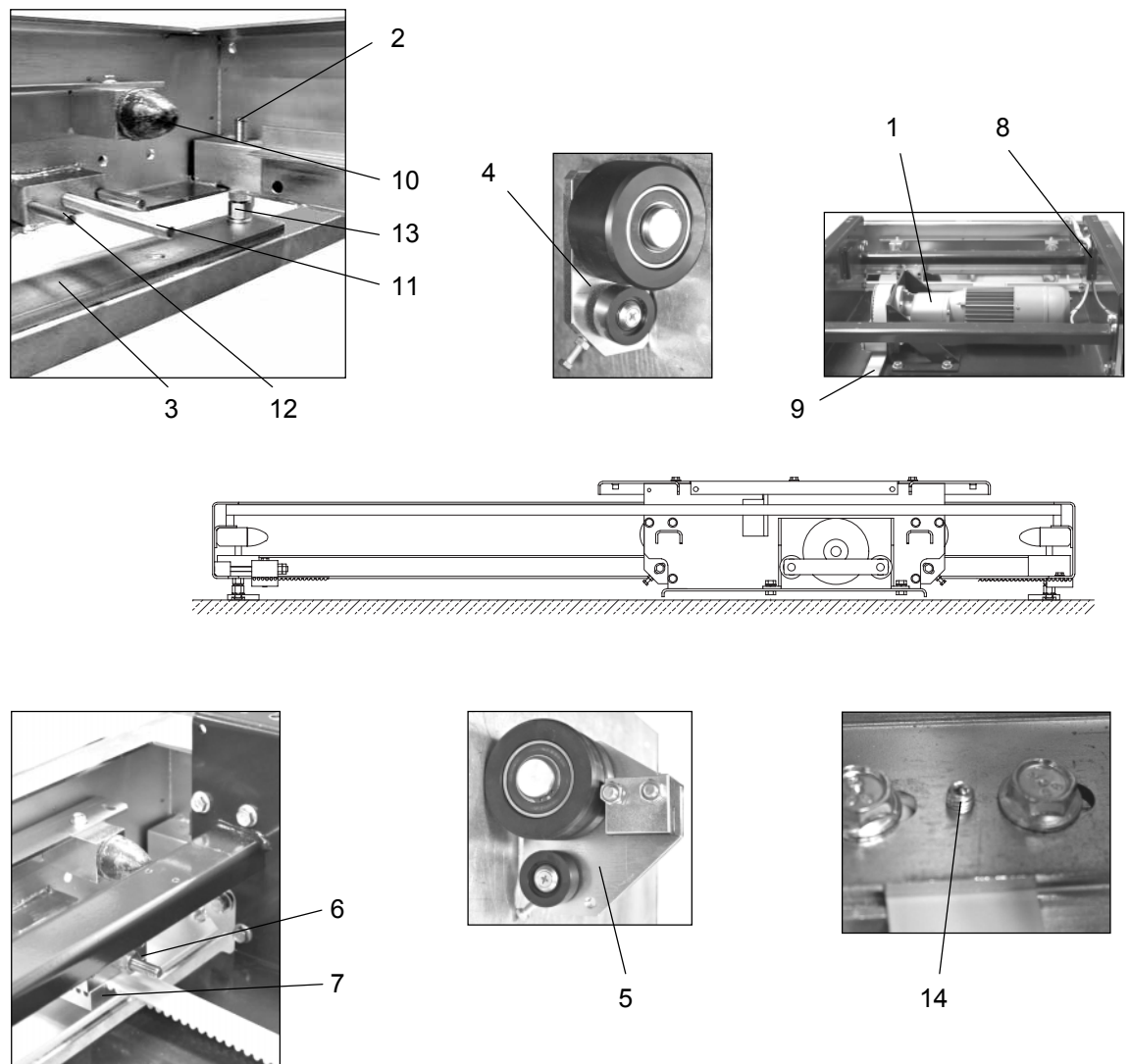
Technical Data

- Electrical connection: frequency converter (controlled by CR03)
- driving speed: 0,16 m/s
- Position detection Pulse generator
- Reference point corresponds to the zero point
- Zero point selectable in both end positions
- Standard driveway
- 1000 mm oder 1400 mm
(other driveways on request)

Structure and function

Mechanical construction

The XT08 Horizontal axis consists of the following components:



XT08 Horizontal axis - structure

1	Drive unit - complete	8	Cable guide
2	Levelling bolt	9	Toothed belt
3	Foot plate	10	Rubber buffer
4	Running wheel bearing	11	Pulling bolt - M10x140
5	Guide wheel bearing	12	Headless screw
6	Clamping plate	13	Washer
7	Clamp plate	14	Grubscrew

Function description

- The XT08 horizontal axis is the setting axis for the gun position adjustment to the work piece.
- This position detection takes place by a pulse generator fitted onto the drive unit.
- The drive takes place by the drive unit, fitted 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 features

All moving axes must be secured by security gates before start-up and during operation (see local regulations).

Start-up

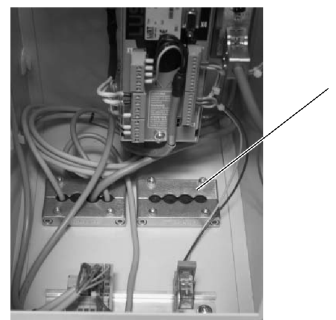
Setup and assembly

Connecting the XT08 horizontal axis to the ZA reciprocator

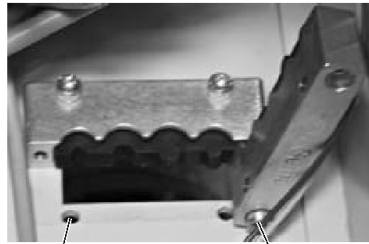
1. The cables to be connected are lying loose on the carriage plate of the horizontal axis.



2. Both cables must be inserted into the cable duct in the ZA reciprocator (1) - therefore the following points are to be considered:



3. Remove screw (2) and loose screw (3). Lift the half of the cable duct, break out the required opening in the lead-through rubber and pull the cables trough.

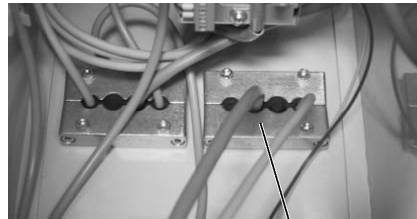


2

3



4. Lock the cable connection (4)!



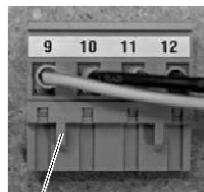
4

Cable duct in the reciprocator

5. Connect the cable Connect the cables:
Pulse generator cable (yellow) (6) to the rearmost socket (7)
and motor cable (grey) (8) to the X1 terminal (9).



Attention: The "foot" (5) on port 9 on the X1 terminal (green) must be removed before connecting the engine cable!



5



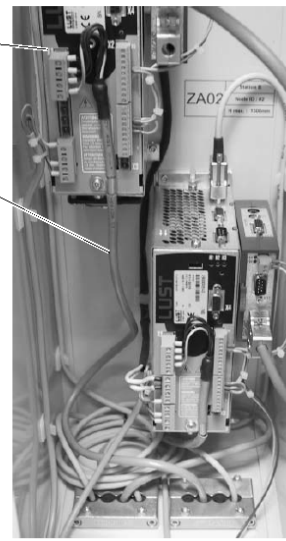
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7



9

8



Place of installation and operation

- The axis must be levelled, in order to ensure a safe and perfect operation.
- After positioning, the XT08 horizontal axis must be firmly fixed on the floor.

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



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

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

Before start-up the 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 CR03 control unit (see CR03 operating instructions).

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

- **Travel distance** Check by moving manually and in accordance with the CR03 operating instructions
- **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!

Operation

The horizontal axis is operated exclusively by the CR03 reciprocator control unit (see CR03 control unit operating instructions).

Maintenance

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.

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

Fault clearance



Faults are to be corrected by trained personnel only!

Fault/Error	Procedures / remedy
The toothed belt rides up on the flanged wheel	<p>Loosen the motor and move it manually into the appropriate opposite direction</p> <p>The toothed belt may not ride up on the flanged wheel at the whole driveway as well as in the reversal points</p>
Reciprocator and carriage plate are wagging	<p>Check the connecting bolts between reciprocator, carriage plate and the XT08 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 surface!</p> <p>Check the axis for proper running (move manually)</p> <p>Consider the indications in the CR04 control unit operating instructions</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** XT08, **serial number** 1234 5678
- **Order number:** 234 265, 1 piece , gasket

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

Wear parts are always marked with a #.

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

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



Attention:

Only original ITW-Gema spare parts should be used, because the explosion protection will also be preserved that way. The use of spare parts from other manufacturers will invalidate the ITW Gema guarantee conditions!

Spare parts list (axis complete)



When ordering toothed belts:

Toothed belt length = indicate travel distance + 855 mm

When 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.

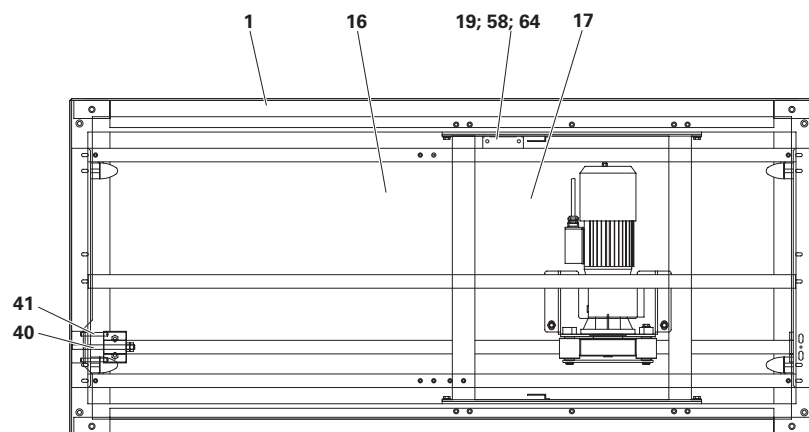
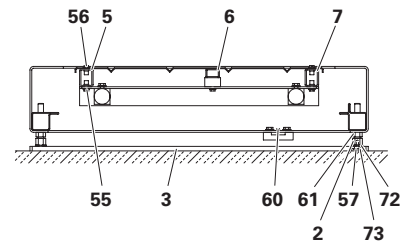
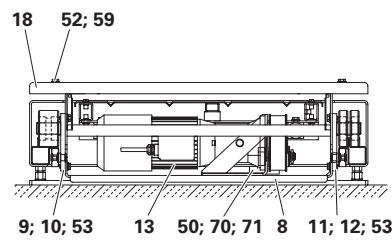
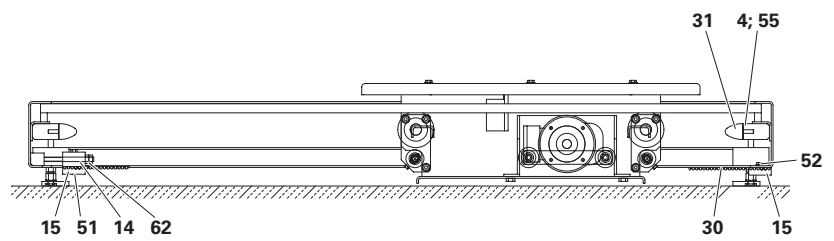
The horizontal axis is provided with the following spare parts:

2	Studding	372 412
3	Foot plate	372 404
4	Buffer holder	389 285
8	Carriage	387 436
9	Running wheel bearing - complete, front	390 593
10	Running wheel bearing - complete, rear	390 607
11	Guide wheel bearing - complete, front	390 577
12	Guide wheel bearing - complete, rear	390 585
13	XT08 drive unit - complete (see also the corresponding spare parts list)	387 266
14	Clamping plate	372 420
15	Clamp plate	345 067
16	Cover panel - firm side	372 463
17	Cover panel - stroke 1400 mm	385 883
17	Cover panel - stroke 1000 mm	384 151
18	ZA02 carriage plate	387 525
18	ZA02 carriage plate - lengthwise	387 355
19	XT08 cable duct	387 843
30	Toothed belt	103 730#*
31	Rubber buffer - Ø 35x40 mm, M8	211 664
40	Threaded bolt M10x140 mm	258 474
41	Set screw - M8x60 mm	258 482
50	Hexagon screw - M10x20 mm	214 108
51	Hexagon screw - M8x50 mm	213 993
52	Hexagon shakeproof screw M08x020	244 422
53	Hexagon shakeproof screw M8x16	244 457
55	Hexagon shakeproof screw M6x16	244 503
56	Cap screw M6x16	243 833
57	Countersunk-head screw K-S1 M6x12	214 680
58	Hexagon screw M6x12	213 810
59	Countersunk head Allen screw M8x16	264 300
60	Allen grub screw M6x10	214 841

61	Hexagon nut M12	215 597
62	Hexagon nut M10	215 589
64	Hexagon nut M06	205 095
70	Lock washer - M10 R	215 961
71	Washer D10.5/21.0x2.0	215 821
72	Washer D13.0/24.0x2.5	215 830
73	Washer - M6 (for countersunk-head screw)	258 431
80	Kit for electrical parts	386 944

Wearing part

* Please indicate length

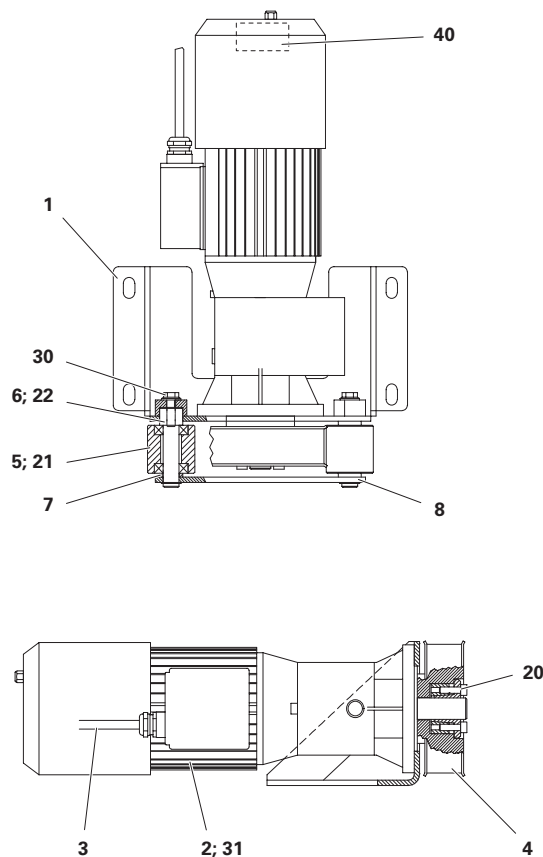


Drive unit - spare parts list

The complete drive unit consists of the following spare parts:

1	Motor support	387 428
2	Motor drive unit	387 266
3	XT08 motor cable L=2.00 m	387 169
4	Toothed belt wheel ¹⁾	369 748
5	Guide roller	344 850
6	Bearing bolt	369 713
7	Washer	345 407
8	Roller fixing plate	387 410
20	Clamping set 20.0 / 47.0 x 0.22 mm ¹⁾	257 583
21	Bearing - Ø 15 / 32x9 mm	241 709
22	Snap ring - A-15	233 617
30	Hex. Shakeproof screw M08x025	244 465
31	Hex. Shakeproof screw M06x020	244 414
40	Incremental pulse generator	264 652

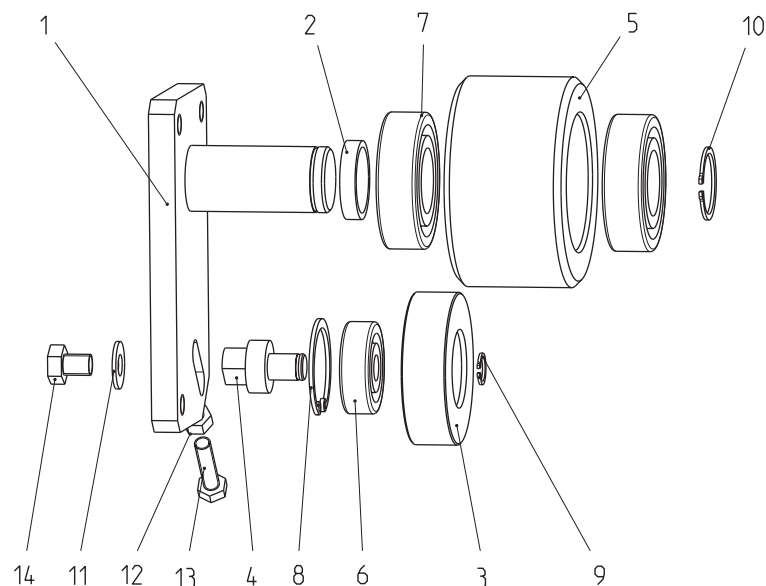
¹⁾ If these parts must be replaced, clean off all grease before assembly!



XT08 Horizontal axis - running wheel bearing

	Running wheel bearing - complete, front	390 593
	Running wheel bearing - complete, rear	390 607
1	Running wheel bearing (support) - front	390 615#
1	Running wheel bearing (support) - rear	390 623#
2	Spacer ring - Ø 30/25.1x5.9 mm	372 340
3	Counter roller	390 658#
4	Bearing bolt	390 666
5	Running wheel - Ø 80 mm	372 323#
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

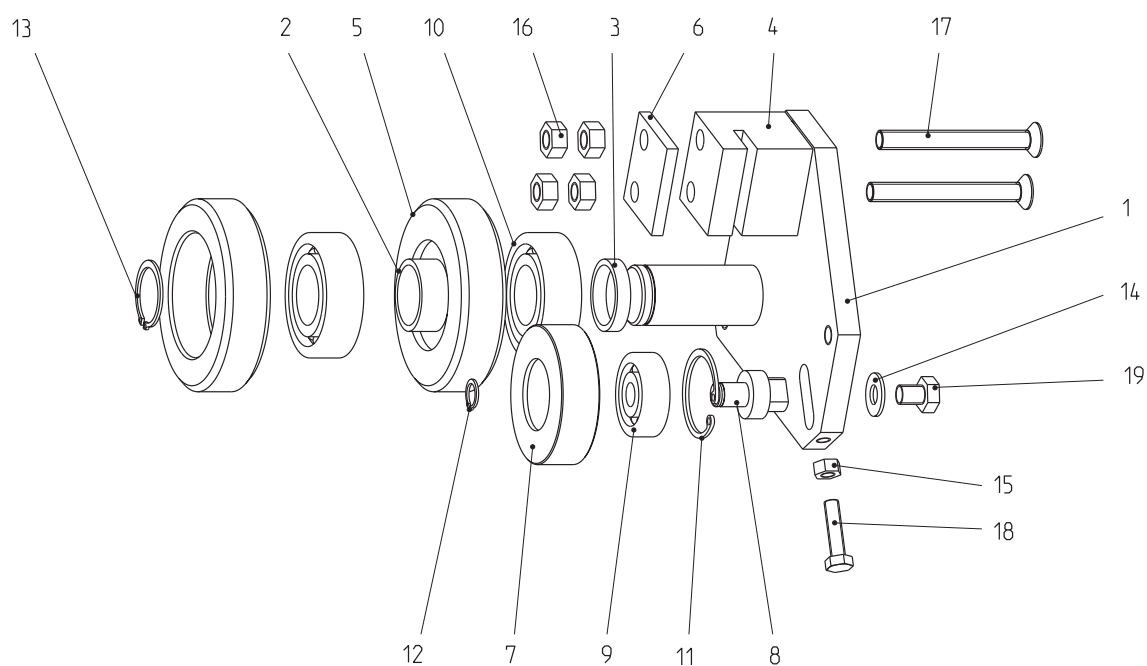


Running wheel bearing - front

XT08 Horizontal axis - guide wheel bearing

1	Guide wheel bearing - front	390 631#
1	Guide wheel bearing - rear	390 640#
2	Spacer ring - Ø 30/25.1x12.1 mm	372 331
3	Spacer ring - Ø 30/25.1x5.9 mm	372 340
4	Guide profile	372 374#
5	Guide wheel - Ø 80 mm	372 315#
6	Counter plate	372 382
7	Counter roller	309 658#
8	Bearing bolt	390 666
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	Hexagon nut - M8	215 570
17	Countersunk-head screw - M8x70 mm	258 440
18	Hexagon screw - M6x25 mm	213 845
19	Hexagon screw - M8x10 mm	213 900

Wearing part



Guide wheel bearing - front

Electrical connections - XT08 Reciprocator (in addition to ZA02)

2	Internal mains cable - XT08	387 630
3	Cable set - control current	387 193
12	Contact clamp - PE3-L	241 636
13	Contact clamp - N3-LT	241 644
14	Contact bridge (single)	238 392

