

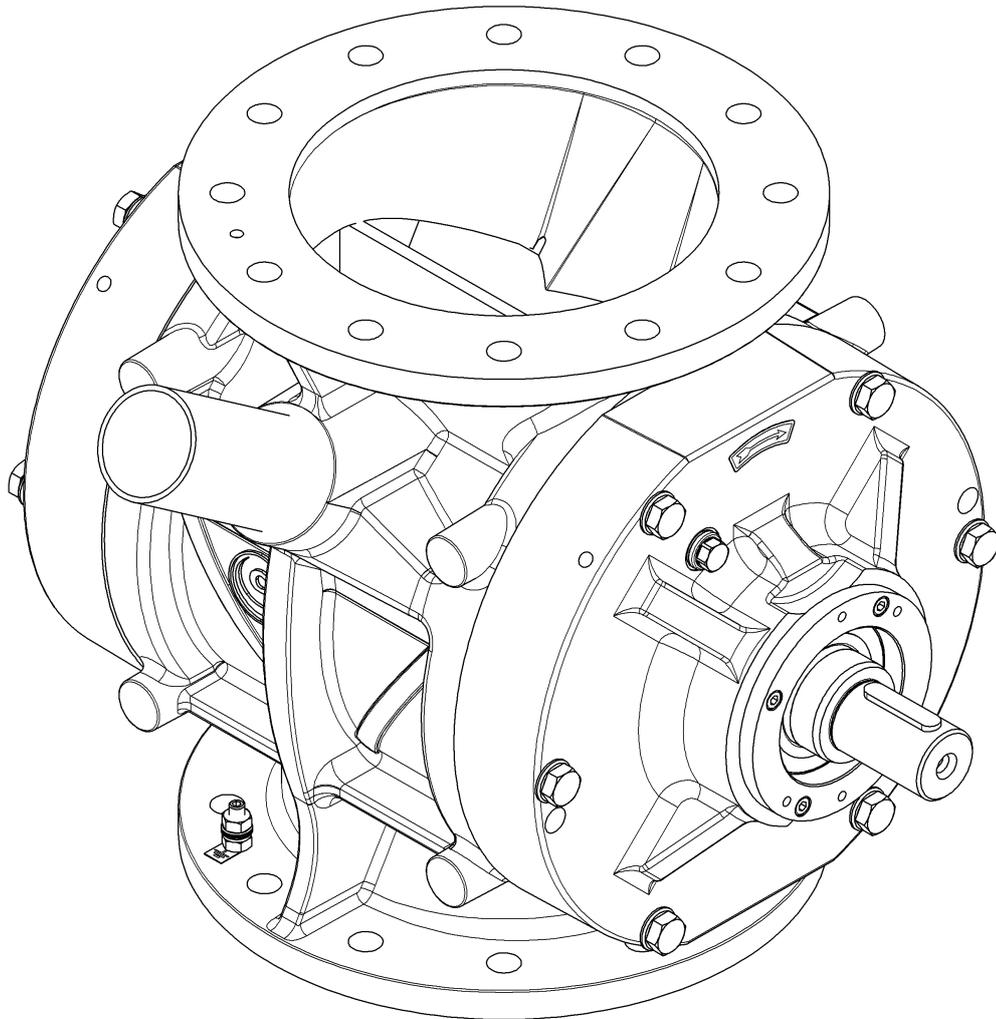
## Spare Parts Catalogue

### Rotary valves

Typ ZGH, ZPH, ZVH, ZVH 550.1-120 Liter

Spare Parts Catalogue Number

**S55655\_GB\_2021-09**



If necessary, contact our Service Center:

Mailing address:	Plant and delivery address:
<b>Coperion GmbH</b>	<b>Coperion GmbH</b>
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	+49 / 751 4 08-450 (service number)
Fax:	+49 / 751 4 08-200
Email:	service@coperion.com

To be able to ensure smooth and speedy handling, we need the following information from you:

- Serial number (information on the name plate)
- Type designation
- Coperion contract number with assembly (if available)
- Operating data (information on the name plate)
- Description of the problem

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(PLZ 91550)

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## 1 Spare and wear parts

### 1.1 Spare parts inventory

Having the most important spare and wear parts on hand at the setup location is an important condition for the continuous operation and operational readiness of the rotary valve.

Please use the spare parts list to order spare parts.

The spare parts drawings listed in the spare parts list can provide additional information.

We only guarantee the genuine spare parts that we supply.

We expressly state that genuine spare parts and accessories not supplied by us have also not been tested or approved by us. Installing and/or using such products may have a negative impact, under certain circumstances, on the properties of the rotary valve specified in the design and consequently may impair active and/or passive safety. Coperion does not assume any liability or provide any warranty for damage resulting from the use of non-genuine spare parts and accessories.



#### **Malfunction or failure of the machine resulting from poor-quality spare parts!**

When being used in potentially explosive atmospheres and/or as a protection system, poor-quality or incorrect spare parts may lead to the creation of an ignition source and may trigger explosions.

- ▶ Use only genuine Coperion spare parts.
- ▶ The use of genuine spare parts is required, depending on national specifications.

Keep in mind that, for in-house or foreign parts, there are often special manufacturing and shipment specifications. We always offer you spare parts that are up-to-date and that comply with the latest legislative regulations.

When ordering spare parts, specify the following data:

#### **Machine data:**

- Serial number (information on the name plate)
- Type designation (information on the name plate)
- Coperion contract number with assembly (if available)

#### **Spare part data:**

- Repair manual number (see the cover sheet)
- Item
- Name
- Quantity

## 1.2 Service

Regular service performed by our technical personnel is recommended. We would like to increase the operational readiness of your components even after being in service for a long time. For this, we offer the services provided by our Service Center.

- We would be happy to negotiate a maintenance contract with you. With such a contract, we do not just perform the actual maintenance activities, we also monitor maintenance cycles, etc. This works very simply: We enter you into our service EDP file and contact you to schedule a time automatically.
- If you wish to perform maintenance yourself, we would be glad to train your operating personnel intensively regarding the operation and maintenance of Coperion components. In our Technical Center and our training rooms, we give courses that provide comprehensive knowledge about rotary valves, shut-off devices and diverter elements. This improves the option of in-house maintenance and correcting malfunctions.
- Of course, we would also be glad to perform the installation and commissioning of your Coperion components.



### **Malfunction / failure of the machine due to poor maintenance!**

When used in a potentially explosive atmosphere and / or when used as a protection system, inadequate or incorrect maintenance can lead to an ignition source and explosions.

- ▶ Exclusive maintenance by qualified and currently trained personnel.
- ▶ Maintenance by COPERION-Service.

If necessary, contact our Service Center:

**Coperion GmbH**  
Niederbiegerstraße 9  
D-88250 Weingarten

Tel: +49 / 751 4 08-0  
+49 / 751 4 08-450 (service number)  
Fax: +49 / 751 4 08-200



### **Information**

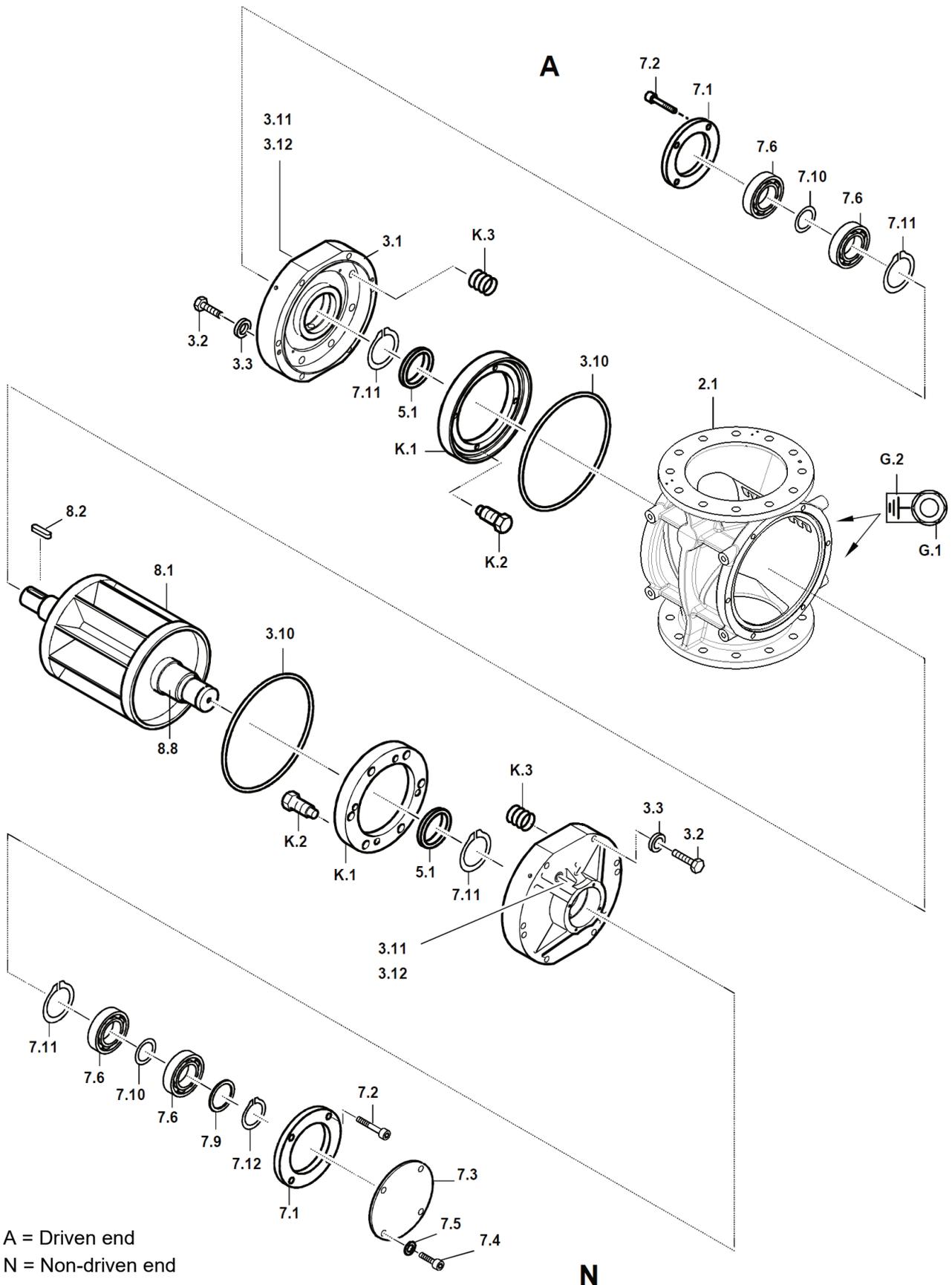
For safety reasons, use only genuine Coperion spare parts.

To be able to ensure smooth and speedy handling, we need the following information from you:

- Serial number (information on the name plate)
- Type designation
- Coperion contract number with assembly (if available)
- Operating data (information on the name plate)
- Description of the problem

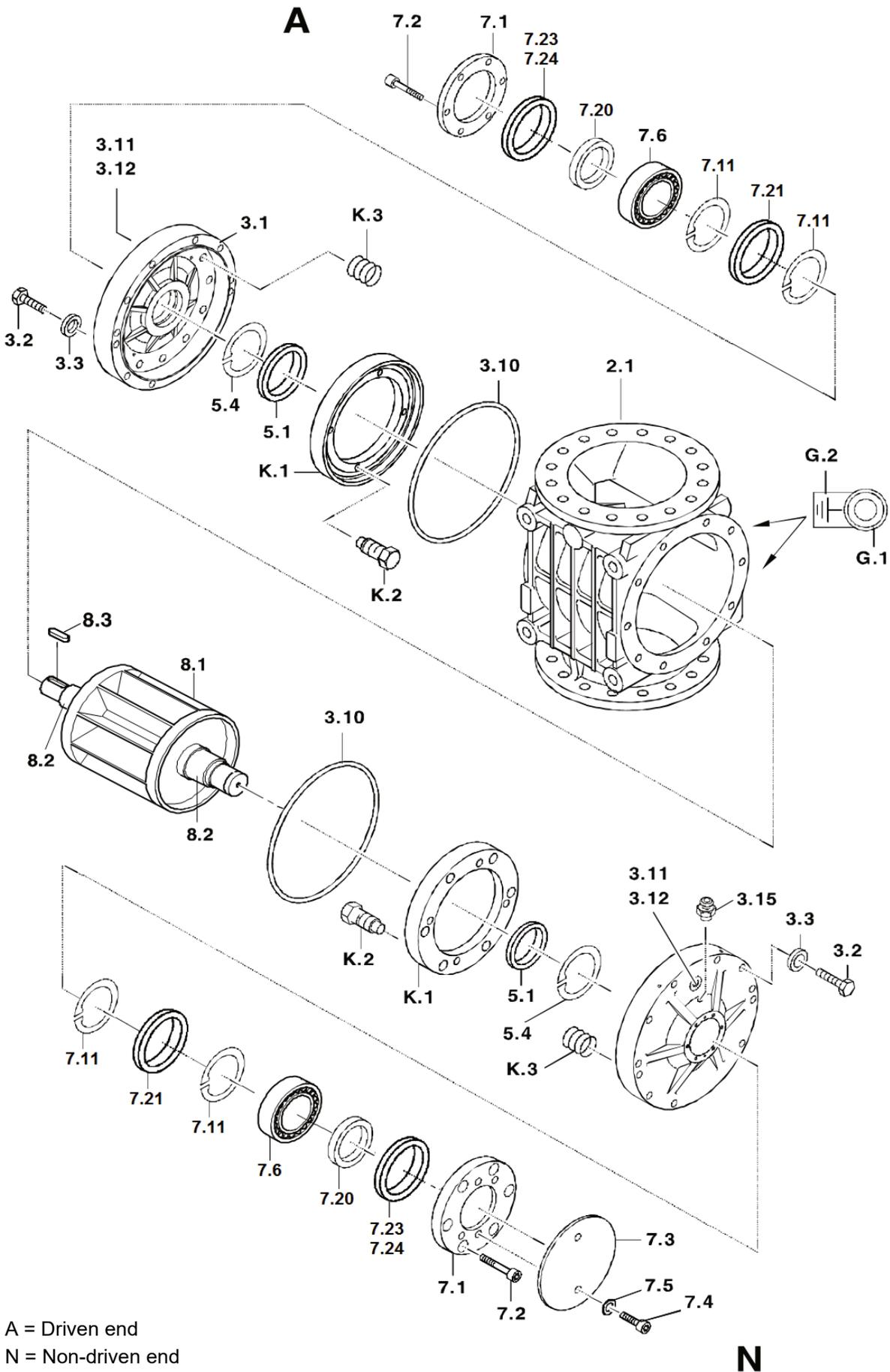
## 1.3 Exploded-view drawing and parts lists

### 1.3.1 Design .1 up to size 400



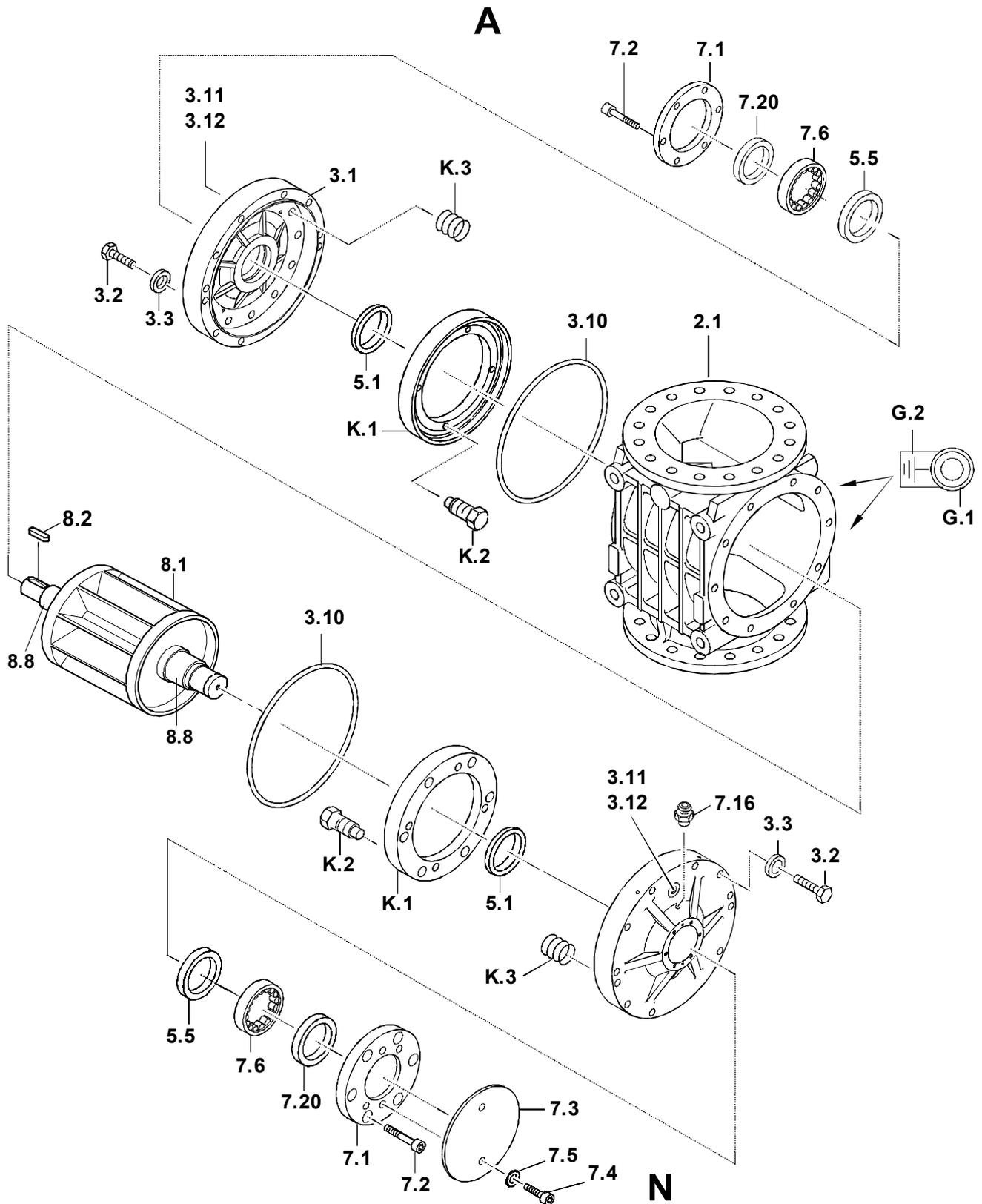
Item	Name	Pieces/device
<b>2</b>	<b>HOUSING</b>	
2.1	Housing ZG	1
2.1	Housing ZP	1
2.1	Housing ZV	1
<b>3</b>	<b>SIDE COVER</b>	
3.1	the side cover	2
3.2	Hexagon bolt	12 (sizes 200 to 320) 16 (size 400)
3.3	Washer	12 (sizes 200 to 320) 16 (size 400)
3.10	O-ring	2
3.11	Screwed plug R1/2	2
3.12	Seal ring	2
<b>5</b>	<b>SHAFT SEAL</b>	
5.1	Shaft seal	2
<b>7</b>	<b>BEARING SET</b>	
7.1	Bearing ring	2
7.2	Cylinder head bolt	8
7.3	Cover plate	1
7.4	Cylinder head bolt	4
7.5	Washer	4
7.6	Deep-groove ball bearing	4
7.9	Supporting ring	1
7.10	Shim	2
7.11	Retaining ring	4
7.12	Retaining ring	1
<b>8</b>	<b>ROTOR</b>	
8.1	Rotor	1
8.2	Feather key	1
8.8	Shaft sleeve	2
<b>G</b>	<b>GROUND</b>	
G.1	Grounding bolt, complete	2
G.2	Ground symbol	2

1.3.2 Design .1, size 480



Item	Name	Pieces/device
<b>2</b>	<b>HOUSING</b>	
2.1	Housing ZG	1
2.1	Housing ZP	1
2.1	Housing ZV	1
<b>3</b>	<b>SIDE COVER</b>	
3.1	the side cover	2
3.2	Hexagon bolt	20
3.3	Washer	20
3.10	O-ring	2
3.11	Screwed plug R1/2	2
3.12	Seal ring	2
<b>5</b>	<b>SHAFT SEAL</b>	
5.1	Shaft seal	2
5.4	Retaining ring	2
<b>7</b>	<b>BEARING SET</b>	
7.1	Bearing ring	2
7.2	Cylinder head bolt	8
7.3	Cover plate	1
7.4	Cylinder head bolt	2
7.5	Washer	4
7.6	Cylindrical roller bearing	4
7.11	Retaining ring	4
7.20	Shaft seal	2
7.21	Shaft seal	2
7.23	Bearing seal	2
7.24	O-ring	2
<b>8</b>	<b>ROTOR</b>	
8.1	Rotor	1
8.2	Feather key	1
8.8	Shaft sleeve	2
<b>G</b>	<b>GROUND</b>	
G.1	Grounding bolt, complete	2
G.2	Ground symbol	2

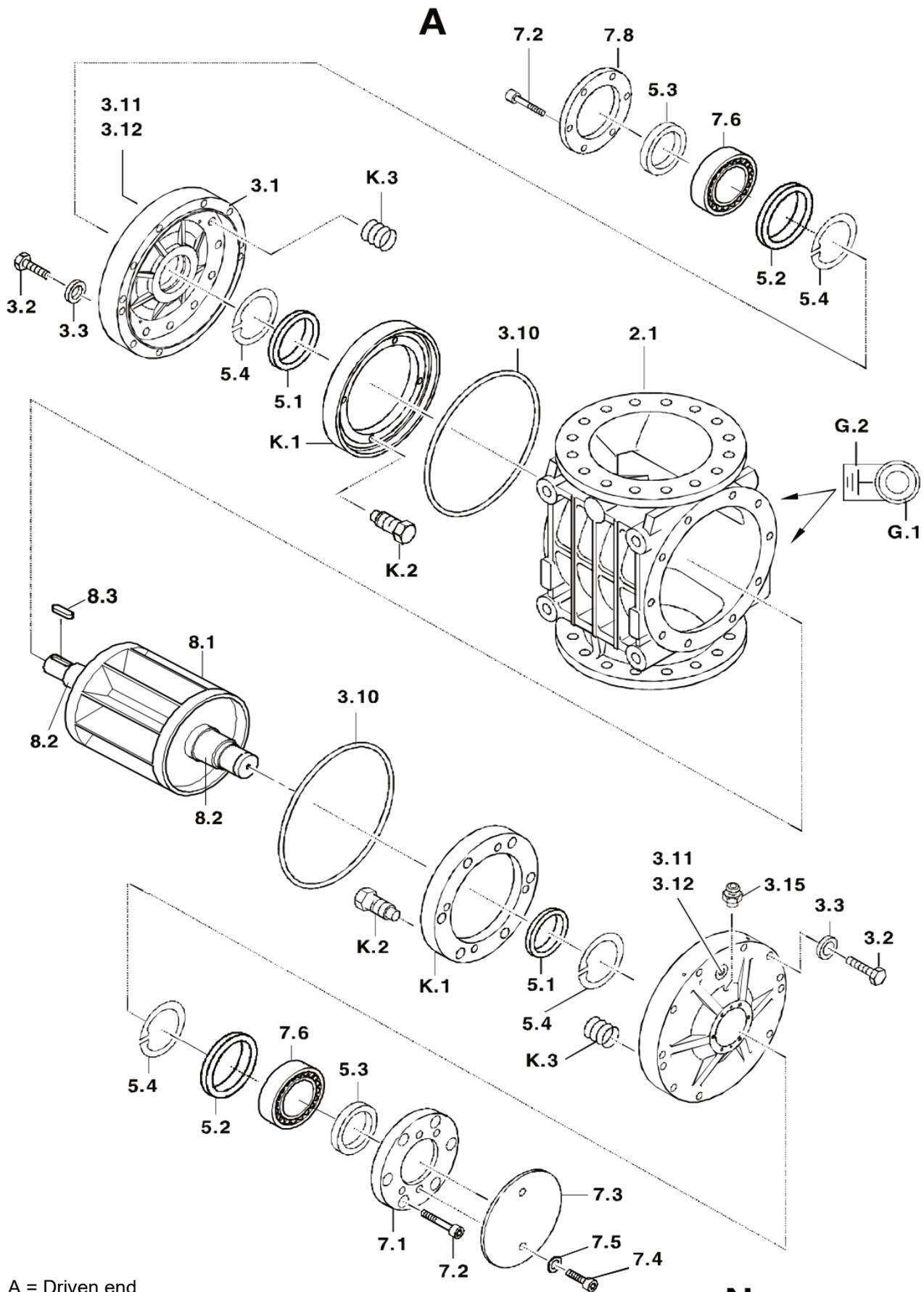
1.3.3 Design .1, sizes 550 and 630



A = Driven end  
N = Non-driven end

Item	Name	Pieces/device
<b>2</b>	<b>HOUSING</b>	
2.1	Housing ZG	1
2.1	Housing ZP	1
2.1	Housing ZV	1
<b>3</b>	<b>SIDE COVER</b>	
3.1	Side cover Z_H 630	2
3.2	Hexagon bolt	24
3.3	Washer	24
3.10	O-ring	2
3.11	Screwed plug R 1 ½	2
3.12	Seal ring	2
<b>5</b>	<b>SHAFT SEAL</b>	
5.1	Shaft seal	2
5.5	Shaft seal	2
<b>7</b>	<b>BEARING SET</b>	
7.1	Bearing ring	2
7.2	Cylinder head bolt	8
7.3	Cover plate	1
7.4	Cylinder head bolt	4
7.5	Washer	4
7.6	Cylindrical roller bearing	2
7.16	Lubricating nipple	2
7.20	Shaft seal	2
<b>8</b>	<b>ROTOR</b>	
8.1	Rotor	1
8.3	Feather key	1
8.8	Shaft sleeve	2
<b>G</b>	<b>GROUND</b>	
G.1	Grounding bolt, complete	2
G.2	Ground symbol	2

1.3.4 Design .1, size 800

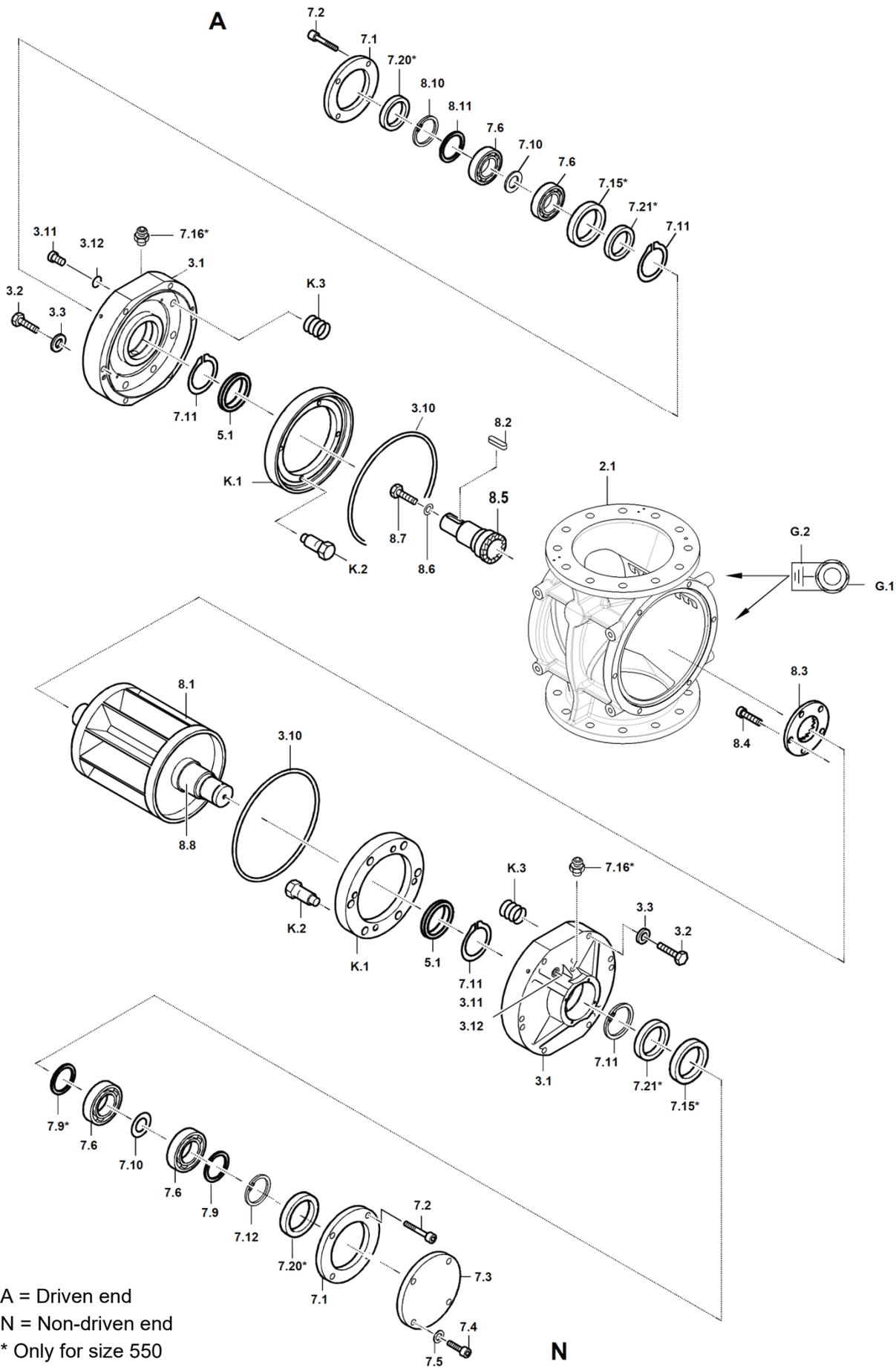


A = Driven end  
N = Non-driven end

**N**

Item	Name	Pieces/device
<b>2</b>	<b>HOUSING</b>	
2.1	Housing ZV	1
2.1	Housing ZP	1
<b>3</b>	<b>SIDE COVER</b>	
3.1	the side cover	2
3.2	Hexagon bolt	40
3.3	Washer	40
3.10	O-ring	2
3.11	Screwed plug R 1 ½	2
3.12	Seal ring	2
3.15	Lubricating nipple	2
<b>5</b>	<b>SHAFT SEAL</b>	
5.1	Shaft seal	2
5.2	Shaft seal	2
5.3	Shaft seal	2
5.4	Retaining ring	4
<b>7</b>	<b>BEARING SET</b>	
7.1	Bearing ring	1
7.2	Cylinder head bolt	8
7.3	Cover plate	1
7.4	Cylinder head bolt	4
7.5	Washer	4
7.6	Cylindrical roller bearing	2
7.8	Bearing ring	1
<b>8</b>	<b>ROTOR</b>	
8.1	Rotor	1
8.2	Shaft sleeve	2
8.3	Feather key	1
<b>G</b>	<b>GROUND</b>	
G.1	Grounding bolt, complete	2
G.2	Ground symbol	2

**1.3.5 Design .2 (sizes 200 to 550)**

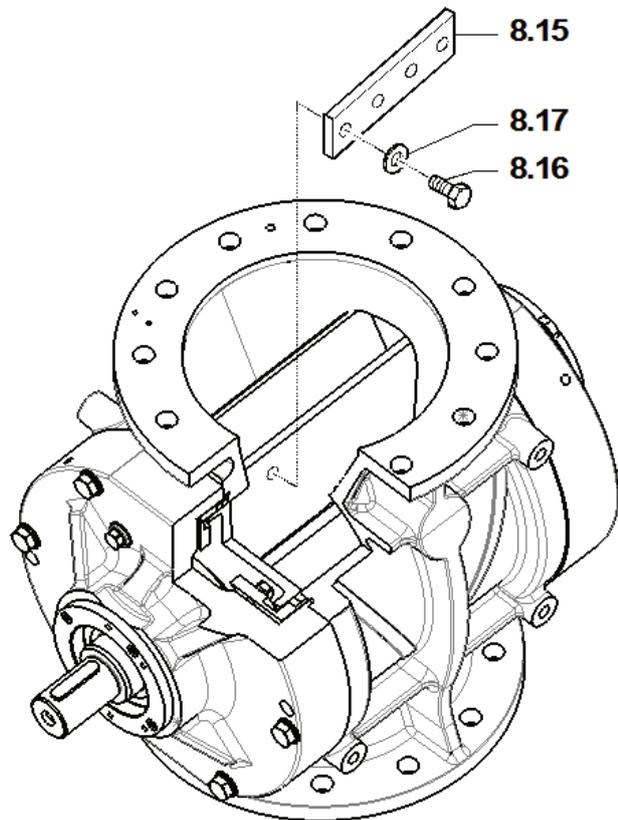


Item	Name	Pieces/device
<b>2</b>	<b>HOUSING</b>	
2.1	Housing ZG	1
2.1	Housing ZP	1
2.1	Housing ZV	1
<b>3</b>	<b>SIDE COVER</b>	
3.1	the side cover	2
3.2	Hexagon bolt	12 (sizes 200 to 320) 16 (size 400) 20 (size 480) 24 (size 550)
3.3	Washer	12 (sizes 200 to 320) 16 (size 400) 20 (size 480) 24 (size 550)
3.10	O-ring	2
3.11	Screwed plug R1/2	2
3.12	Seal ring	2
<b>5</b>	<b>SHAFT SEAL</b>	
5.1	Shaft seal	2
<b>7</b>	<b>BEARING SET</b>	
7.1	Bearing ring	2
7.2	Cylinder head bolt	8
7.3	Cover plate	1
7.4	Cylinder head bolt	4
7.5	Washer	4
7.6	Deep-groove ball bearing	4
7.9	Supporting ring	1 (size 550)
7.10	Shim	2
7.11	Retaining ring	4
7.12	Retaining ring	1
7.15	Bearing seal	2 (size 550)
7.16	Lubricating nipple	2 (size 550)
7.20	Shaft seal	2 (size 550)
7.21	Shaft seal	2 (size 550)
<b>8</b>	<b>ROTOR</b>	
8.1	Rotor	1
8.2	Feather key	1
8.3	Coupling flange	1
8.4	Cylinder head bolt	5-6
8.5	Driving sleeve	1
8.6	Seal ring	1

Item	Name	Pieces/device
8.7	Hexagon bolt	1
8.8	Wearing sleeve	1
8.10	Retaining ring	1
8.11	Supporting ring	1
<b>G</b>	<b>GROUND</b>	
G.1	Grounding bolt, complete	2
G.2	Ground symbol	2

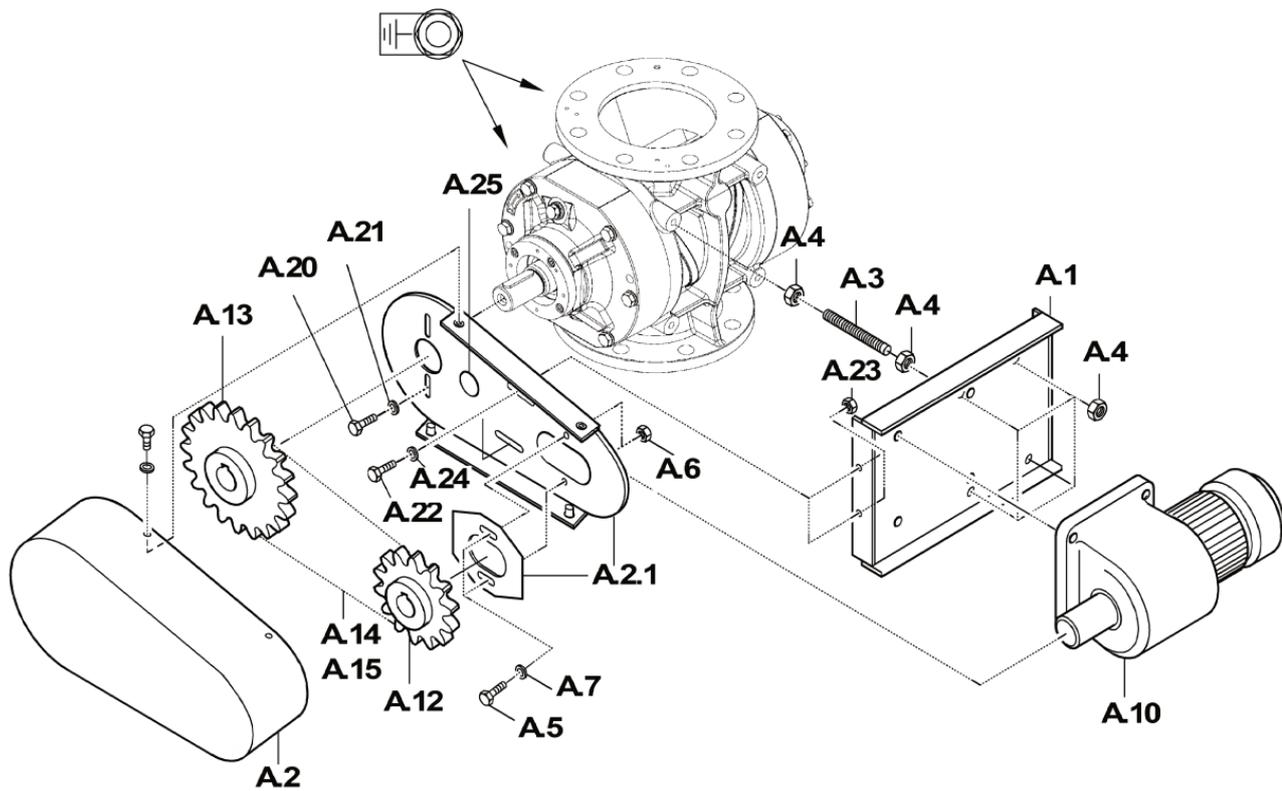
## 2 Accessories

### 2.1 Wear blade - rotor



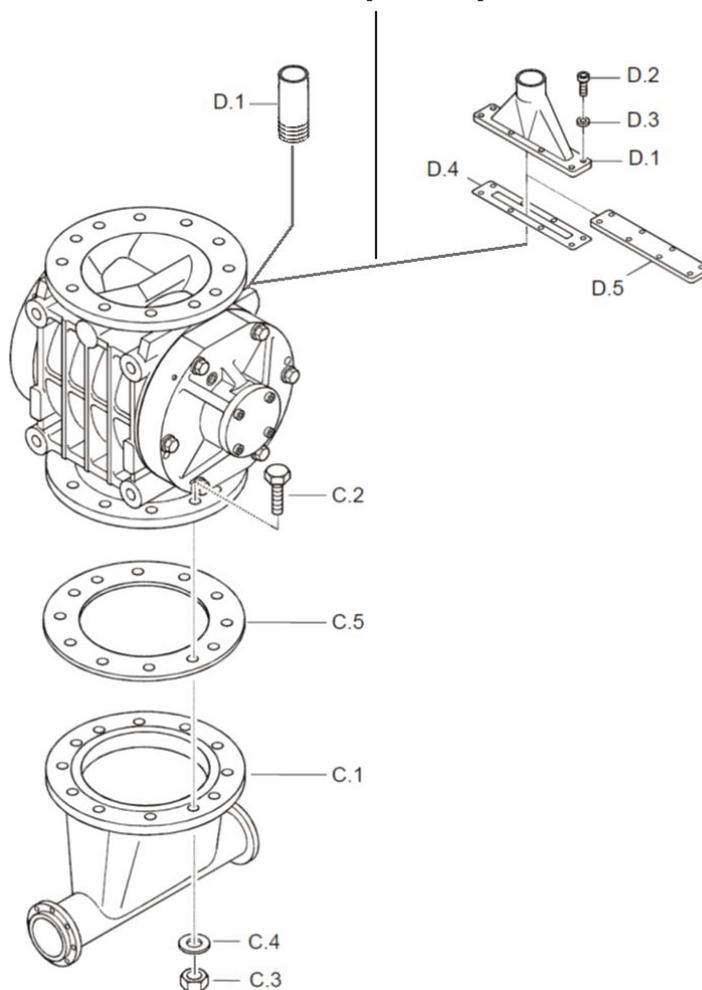
Item	Name	Pieces/device
<b>8</b>	<b>KNIFE ATTACHMENT, ROTOR</b>	-
8.15	Wear blade	-
8.16	Hexagon bolt	-
8.17	Washer	-

## 2.2 Motor attachment



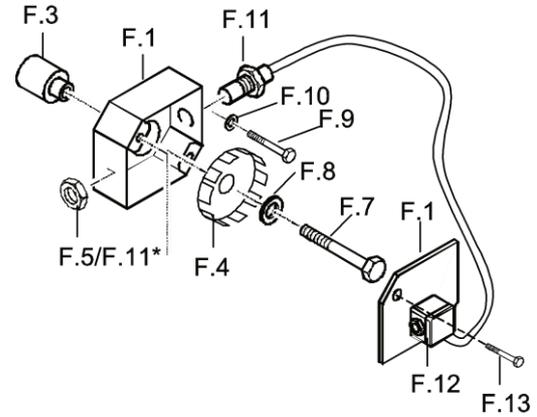
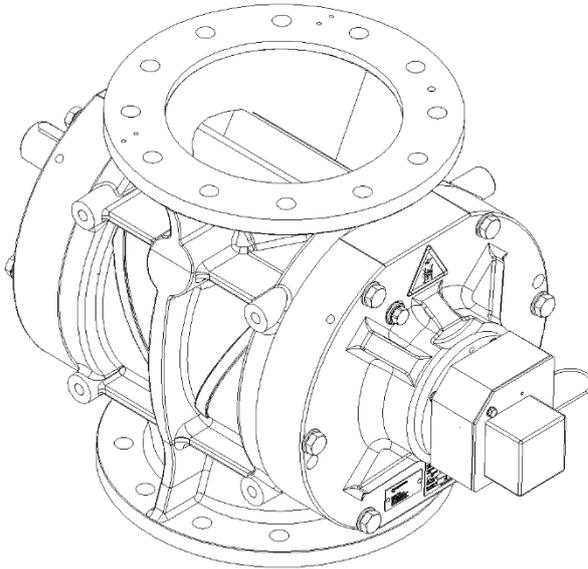
Item	Name	Pieces/device
<b>A</b>	<b>MOTOR ATTACHMENT</b>	
A.1	Motor plate	1
A.2	Chain box, complete	1
A.3	Threaded rod	4
A.4	Hexagon nut	12
A.5	Hexagon bolt	4
A.6	Hexagon nut	4
A.7	Washer	8
A.10	Gear motor	1
A.12	Chain sprocket, motor	1
A.13	Chain sprocket, rotary valve	1
A.14	Roller chain	1
A.15	Chain connecting link	1
A.20	Hexagon bolt	2
A.21	Washer	2
A.22	Hexagon bolt	2
A.23	Hexagon nut	2
A.24	Washer	2
A.25	Rubber guide	1

## 2.3 Leakage gas deduction and/ or pick-up tee



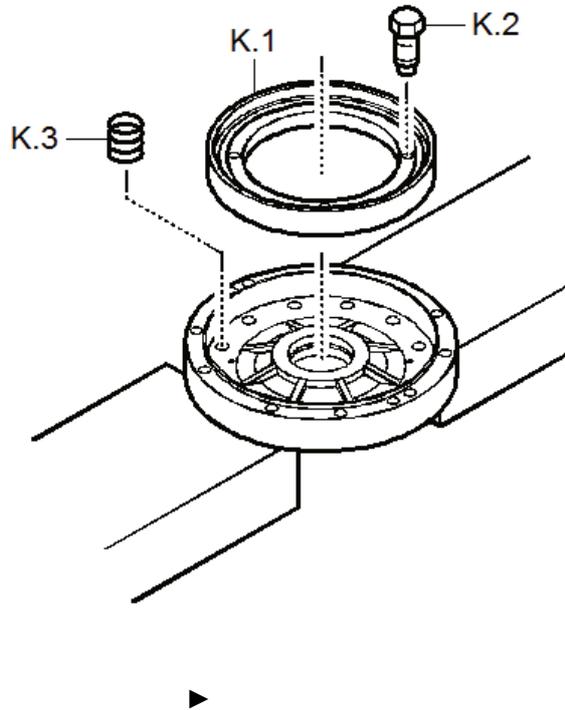
Item	Name	Pieces/device
<b>C</b>	<b>PICK-UP TEE TYPE ZP_ / ZG_</b>	
C.1	Pick-up tee	1
C.2	Hexagon bolt	-
C.3	Hexagon nut	-
C.4	Washer	-
C.5	Seal	1
<b>D</b>	<b>HOUSING VENT</b>	
D.1	Connecting pipe <b>ZG_</b> , <b>ZV_</b>	1 (up to size 630)
D.1	Housing vent <b>ZG_</b> , <b>ZV_</b>	1 (starting at size 700)
D.2	Cylinder head bolt	- (starting at size 700)
D.3	Washer	- (starting at size 700)
D.4	Seal	1 (starting at size 700)
D.5	Blind cover	1 (starting at size 700)
D.1	Housing vent <b>ZP_</b>	1
D.2	Hexagon bolt	2
D.3	Washer	2
D.4	Seal	1
D.5	Blind cover	1

## 2.4 Rotational speed sensor



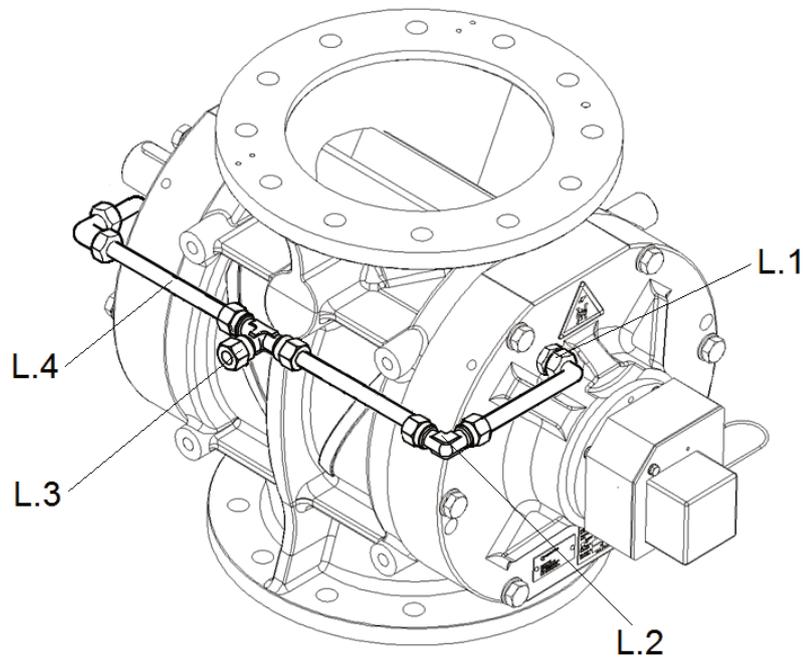
Item	Name	Pieces/device
<b>F</b>	<b>ROTATIONAL SPEED SENSOR</b>	
F.1	Housing	1
F.3	Centering sleeve	1
F.4	Speed indicator	1
F.5	Washer with lug	1
F.7	Hexagon bolt	1
F.8	Washer	1
F.9	Hexagon bolt	2
F.10	Washer	2
F.11	Limit switch	1
F.12	Terminal box	1
F.13	Cylinder head bolt	2

## 2.5 Sealing cartridge



Item	Name	Pieces/device
<b>K</b>	<b>SEALING CARTRIDGE</b>	
K.1	Sealing cartridge	2
K.2	Shoulder bolt	8
K.3	Pressure spring	10 (size 200) 12 (size 250) 16 (size 320) 20 (size 400) 24 (size 480) 30 (size 550) 36 (size 630) 90 (size 800)

## 2.6 Locking gas piping



Item	Name	Pieces/device
<b>L</b>	<b>GAS LOCK FOR SIDE COVER</b>	
L.1	Nipple	2
L.2	Right-angle connector	2
L.3	T-piece	1
L.4	Pipe	-

## 3 Appendix

### 3.1 Tightening torques

If no other data are provided, all fittings on the components must be tightened as per the following tables with due consideration given to the permissible mounting flanges:

Property class (bolt head)	Bolt size										
	M6	M8	M10	M12	M14	M16	M20	M24	M27	M30	M33
	Channel hole [mm]										
	6,4-7	8,4-10	10,5-12	13-14,5	15-16,5	17-18,5	21-24	25-28	28-32	31-35	34-38
Tightening torque $M_a$ [Nm]											
5.6	4	15	21	36	57	90	176	302	446	610	815
8.8	9	23	45	77	122	192	375	645	951	-	-
10.9	14	33	66	114	179	282	551	947	1397	-	-
A2/A4 – 70	6	14	28	48	76	119	233	402	-	-	-
A2/A4 – 50	-	-	-	-	-	-	-	187	275	271	503

5.6 - 10.9: with washer, dry and zinc plated; A2/A4 – XX: with washer, greased

Property class (bolt head)	Bolt size									
	-	-	-	-	5/8"	3/4"	7/8"	1"	1 1/4"	
	Channel hole [mm]									
	-	-	-	-	17-19,1	20-22,2	23,2-25,4	26,4-28,6	32,8-34,9	
Tightening torque $M_a$ [Nm]										
ASTM A 193 B7	-	-	-	-	291	418	679	1015	1827	
18 – 8	-	-	-	-	79	139	224	335	665	

ASTM A 193 B7: with washer, dry and zinc plated; 18 – 8: with washer, greased



#### Information

The tightening torques given in the tables above must not be exceeded.