

## Contents

Contents.....	1
Spare parts list for Rotor / Stator.....	4
Spare parts drawing for Rotor / Stator .....	5
Spare parts list for Rotor / Stator.....	6
Spare parts drawing for Rotor / Stator .....	7
Spare parts drawing for pump shaft ZP 3 .....	8
Spare parts list for pump-shaft ZP 3 .....	9
Spare parts drawing for pump shafts N 2 / F 2, T2E.....	10
Spare parts list for pump shafts N 2 / F 2, T2E .....	11
Spare parts drawing for clamps .....	12
Spare parts list for clamps.....	13
Spare parts drawing for pressure flanges .....	14
Spare parts list for pressure flanges .....	15
Spare parts drawing for pressure flanges .....	16
Spare parts list for pressure flanges .....	17
Spare parts drawing for suction flange.....	18
Spare parts list for suction flange.....	19
Spare parts drawing for suction flange.....	20
Spare parts list for suction flange.....	21
Spare parts drawing for tie rods G 4 .....	22
Spare parts list for tie rods G 4 .....	23
Spare parts drawing for tie rods ZP 3 .....	24
Spare parts list for tie rods ZP 3.....	25
Spare parts drawing for tie rods N 2, F 2, T 2 E, GXE .....	26
Spare parts list for tie rods N 2, F 2, T 2 E, GXE .....	27
Spare parts drawing for dosing shafts HM 2, HM 22 / 24, HM 104, HM 200, HM 2002.....	28
Spare parts list for dosing shafts HM 2, HM 22 / 24, HM 104, HM 200, HM 2002.....	29
Spare parts drawing for dosing shafts HM 3, HM 5, HM 202 / 204, HM 4000, CMP .....	30
Spare parts list for dosing shafts HM 3, HM 5, HM 202 / 204, HM 4000, CMP .....	31
Spare parts drawing for dosing-mixing shafts HM 6 .....	32
Spare parts list for dosing-mixing shafts HM 6.....	33
Spare parts drawing for dosing-mixing shafts HM 6 two-piece (new).....	34
Spare parts list for dosing-mixing shafts HM 6 two-piece (new) .....	35
Spare parts drawing for mixing shafts HM 5 .....	36
Spare parts list for mixing shafts HM 5 .....	37
Spare parts drawing for mixing shafts HM 2, HM 3, HM 200, HM 2002, HM 4000, HM 4004 .....	38

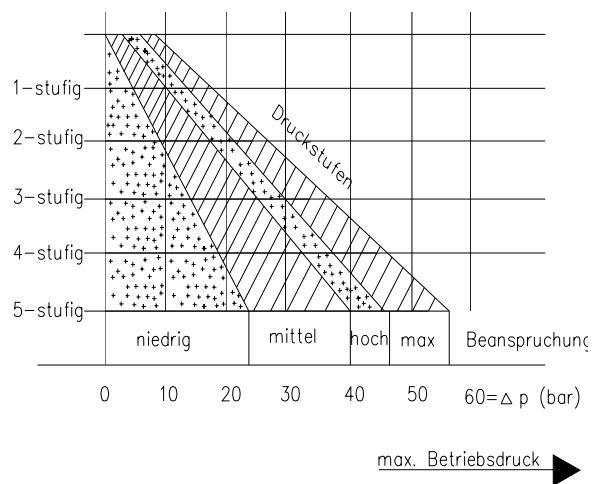
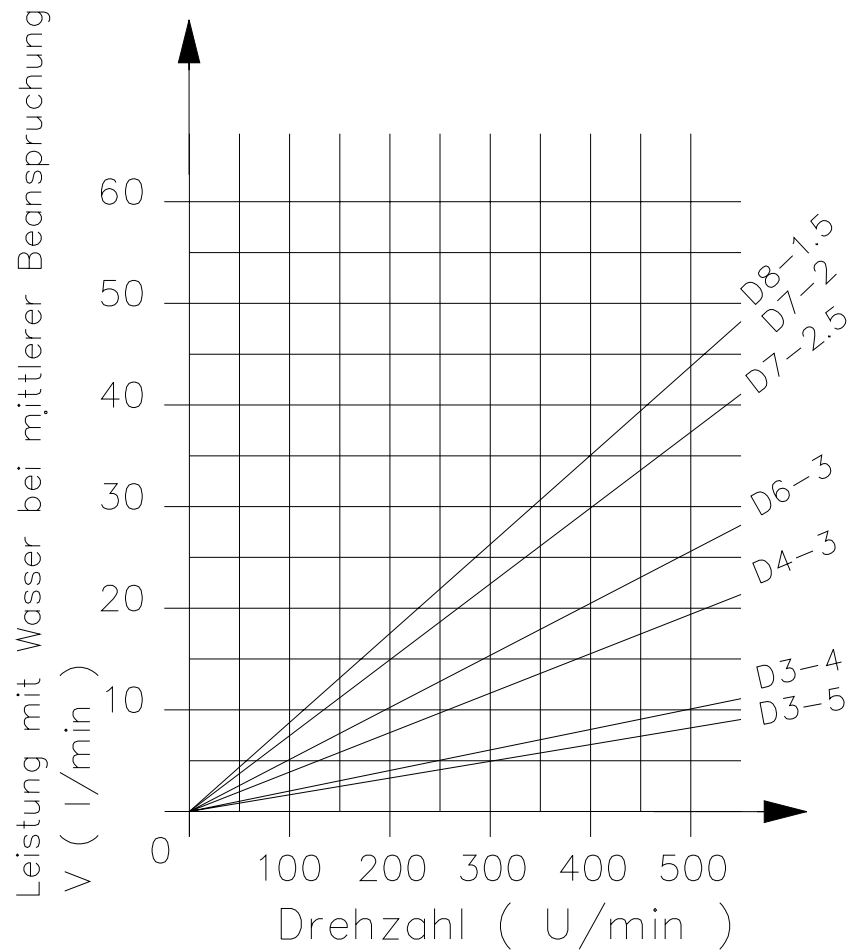
Spare parts list for mixing shafts HM 2, HM 3, HM 200, HM 2002, HM 4000, HM 4004 .....	39
Spare parts drawing for mixing tube HM 2.....	40
Spare parts list for mixing tube HM 2 .....	41
Spare parts drawing for mixing tube HM 2, 300 mm longer .....	42
Spare parts list for mixing tube HM 2, 300 mm longer .....	43
Spare parts drawing for mixing tubes HM 2, Hm 22 / 24, HM 104, HM 200, HM 204, HM 2002 ...	44
Spare parts list for mixing tubes HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002 .....	45
Spare parts drawing for mixing tubes HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002, 300 mm lon.....	46
Spare parts list for mixing tubes HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002, 300 mm lon. ....	47
Spare parts drawing for rubber mixing tube HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002.....	48
Spare parts list for rubber mixing tube HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002..	49
Spare parts drawing for rubber mixing tube HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002.....	50
Spare parts list for rubber mixing tube HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002..	51
Spare parts drawing for rubber mixing tube HM 2, 300 mm longer .....	52
Spare parts list for rubber mixing tube HM 2, 300 mm longer.....	53
Spare parts drawing for mixing tube HM 22, HM 24 .....	54
Spare parts list for mixing tube HM 22, HM 24 .....	55
Spare parts drawing for mixing tube HM 22, HM 24, 300 mm longer .....	56
Spare parts list for mixing tube HM 22, HM 24, 300 mm longer .....	57
Spare parts drawing for mixing tube CMP, HMP, HM 3.....	58
Spare parts list for mixing tube CMP, HMP, HM 3 .....	59
Spare parts drawing for mixing tube CMP, HMP, HM 3, 300 mm longer .....	60
Spare parts list for mixing tube CMP, HMP, HM 3, 300 mm longer .....	61
Spare parts drawing for mixing tube CMP, HMP, HM 3, shortened mortar output flange.....	62
Spare parts list for mixing tube CMP, HMP, HM 3, shortened mortar output flange .....	63
Spare parts drawing for mixing tube HM 5.....	64
Spare parts list for mixing tube HM 5 .....	65



## Spare parts list for Rotor / Stator

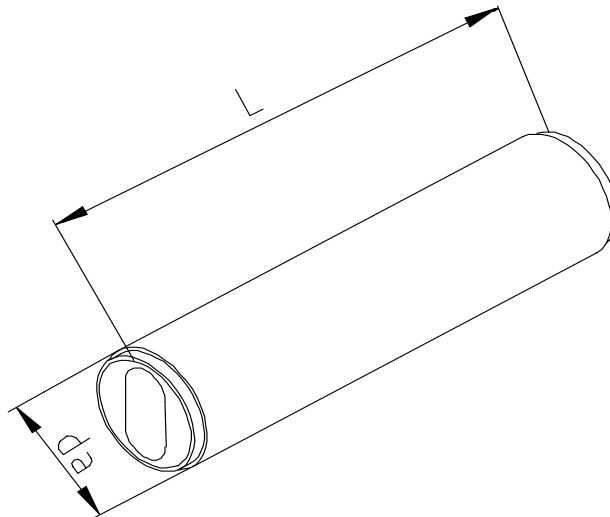
Pump	Colour	Stator	Rotor with tangs Item no.	Rotor without tangs Item no.	Stator L mm	Stator da mm	Max. grain size mm	Output l/min at 400 rpm	Operating pressure bar
A 3-2 L	Silver	00 04 78 93		00 04 78 92	160	42	2	4 at 350U/	20
B 4-1.5 L	Greyish white	00 04 85 66		00 04 85 65	160	51	2	8 at 350U/	15
B 4-2	Orange	00 00 84 62		00 00 84 63	210	51	2	4 at 150U/	20
D 3-3	Black	20 11 60 50		20 11 49 10	200	90	3	8	30
D 3-4	Black	20 11 61 00	20 11 49 20	20 11 49 30	270	90	3	8	40
D 3-5 wf	White	00 01 07 58	20 11 49 50	20 11 49 40	270	90	3	7	40
D 4-2 special	Blue	20 11 52 00	20 11 42 10	20 11 40 00	270	90	2	22	20
D 4-2/64	Red	20 11 50 00	20 11 42 10	20 11 42 00	270	90	2	22	20
D 4-3	Green	20 11 53 10	20 11 43 20	20 11 43 10	270	90	4	14	30
D 5-2.5 wf	Silver	00 00 20 71	00 00 20 70	00 02 13 99	270	90	3	22	30
D 6-2 smooth running	Blue	20 11 55 01		20 11 30 13	200	88	3.5	20	15
D 6-2 L wf	Blue	20 11 55 07		20 11 30 13	200	88	3.5	20	15
D 6-3	White/bl	20 11 55 00	20 11 30 10	20 11 30 00	270	90	3.5	22	30
D 6-3 wf	Orange	20 11 55 10	20 11 30 10	20 11 30 00	270	88	3.5	22	30
D 6-3 smooth running	Orange	20 11 55 10	20 11 30 10	20 11 30 12	270	90	3.5	22	20
D 6-3 L Wf	Orange	20 11 55 06		20 11 30 12	270	90	3.5	22	20
D 6-3 Z air pore wf	Orange	00 00 22 78	20 11 30 10	20 11 30 00	270	90	3.5	22	30
D 6-3 Z wr	Pink	20 11 55 12	20 11 30 10	20 11 30 00	270	90	3.5	22	30
D 7-1.5 wf	Ruby	00 04 47 67		00 04 47 66	270	90	4.5		20
D 7-2 wf	Red	20 11 55 20	00 00 16 20	20 11 30 16	270	90	4.5	35	20
D 7-2.5	Black	20 11 55 50	20 11 35 10	20 11 35 00	270	90	4.5	28	20
D 7-2.5 wf	Purple	20 11 55 51	20 11 35 10	20 11 35 00	270	90	4.5	28	20
D 7-2.5 wf smooth running	Purple	00 03 98 41	20 11 35 10	20 11 35 00	270	90	4.5	28	20
D 8-1.5	Yellow	20 11 64 00	20 11 47 20	20 11 47 00	270	90	5	35	20
D 8-1.5 Wf	Yellow	20 11 64 10	20 11 47 20	20 11 47 00	270	90	5	35	20
TWISTER D4-3	Green	00 01 09 03	20 11 43 20	20 11 43 10	270	90	4	14	30
TWISTER D4-3 pin	Green	00 01 05 43	20 11 43 20	20 11 43 10	270	90	4	14	30
TWISTER D5-2.5 maintenance-free	Silver	00 01 05 45	00 00 20 70	00 02 13 99	270	90	3.5	22	30
TWISTER D5-2.5 pin	Silver	00 01 09 04	00 00 20 70	00 02 13 99	270	90	3.5	22	30
TWISTER D6-3 WF pin	Orange	00 00 78 99	20 11 30 10	20 11 30 00	270	90	3.5	22	30
TWISTER D6-3	Orange	00 00 88 62	20 11 30 10	20 11 30 00	270	90	3.5	22	30
TWISTER D6-3 pin	Pink	00 02 08 48	20 11 30 10	20 11 30 00	270	90	3.5	22	30
TWISTER D8-1.5	Yellow	00 01 05 44	20 11 47 20	20 11 47 00	270	90	4	35	20
TWISTER D8-1.5 pin	Yellow	00 01 09 05	20 11 47 20	20 11 48 40	270	90	4	35	20

## Spare parts drawing for Rotor / Stator

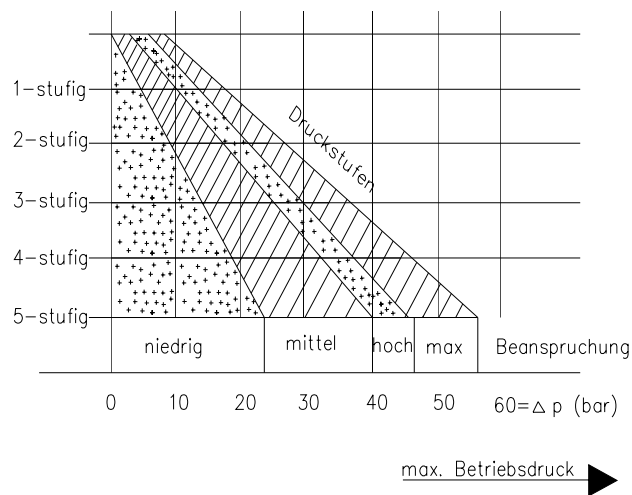
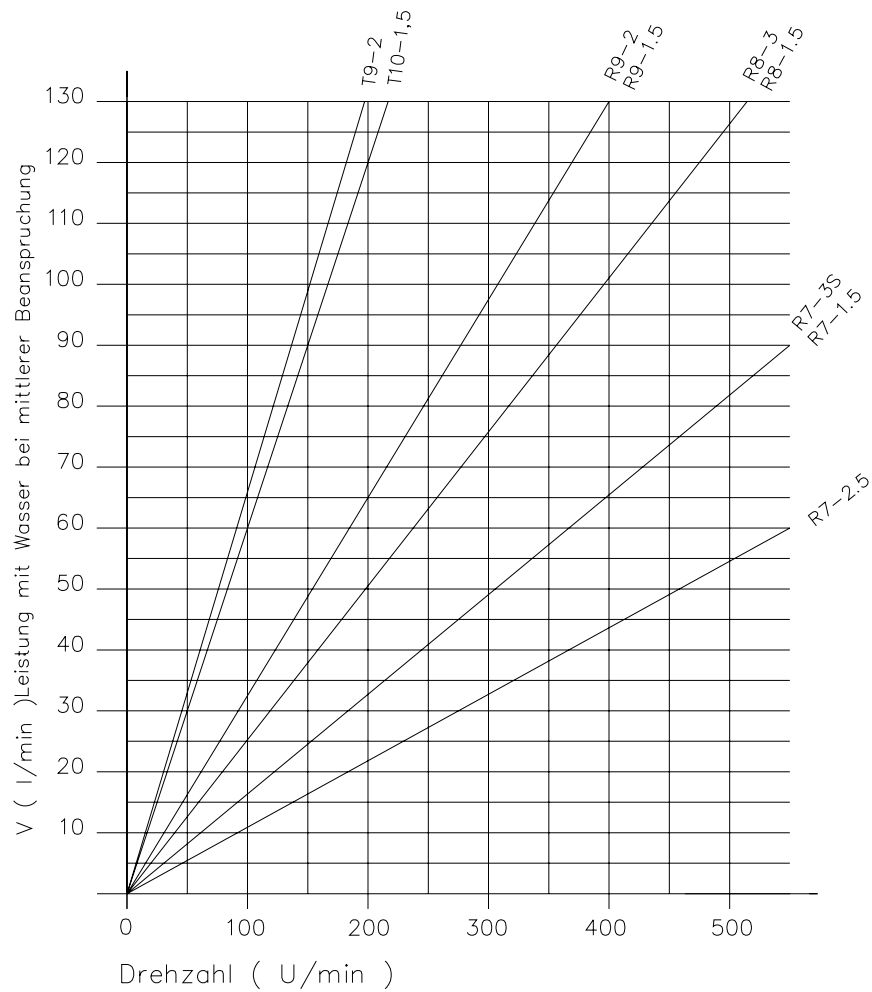


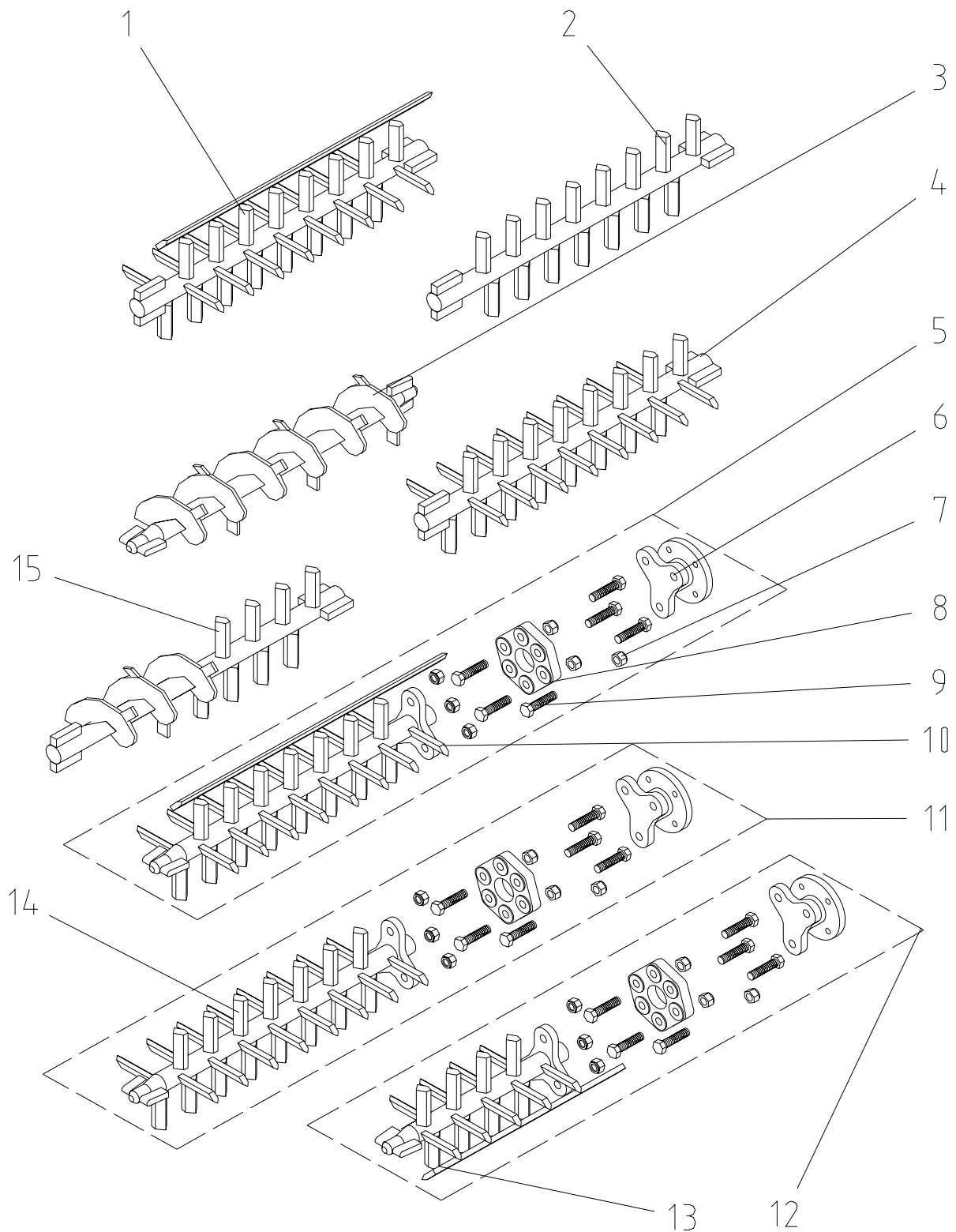
**Spare parts list for Rotor / Stator**

Pump	Colour	Stator	Rotor with tangs Item no.	Rotor without tangs Item no.	Stator l mm	Stator da mm	Max. grain size mm	Output l/min 400 rpm	Output l/min 180 rpm	Operating pressure bar
R 7-1.5	Ocher	20 11 62 00	20 11 48 10	20 11 48 00	270	114	7	60	30	15
R 7-2.5	Brown	20 11 63 50	20 11 48 50	20 11 48 51	270	114	7	44	20	20
R 7-3 S	Ocher	20 11 63 01		20 11 48 21	540	114	7		30	30
R 7-3 S wf	Ocher	00 04 28 45		20 11 48 21	540	114	7		30	30
R 8-1	Black	00 04 47 68		00 04 47 65		114	8		43	
R 8-1.5	Black	20 11 62 20	20 11 48 60	20 11 48 40	270	114	8		43	15
R 8-2	Black	20 11 63 80		20 11 48 90	360	114	8		43	20
R 8-3	Black	20 11 63 10		20 11 48 30	540	114	8		43	30
R 9-1	Green	20 11 63 59		20 11 48 69	300	114	8		58	8
R 9-1.5	Green	20 11 63 60		20 11 48 70	360	114	8		58	15
R 9-2	Green	20 11 63 70		20 11 48 80	540	114	8		58	20
T 9-2	Orange	00 00 11 66		00 00 11 67	665	125	8		115	20
T10-1.5	Orange	20 11 66 00		20 11 49 70	540	125	9		105	15
SWING 4   D=50	Red	00 00 84 62		00 00 84 63	210	50	2		4	15
SWING 8   D=59	Red	00 03 71 86		00 03 71 87	300	59	2		8	15



## Spare parts drawing for Rotor / Stator

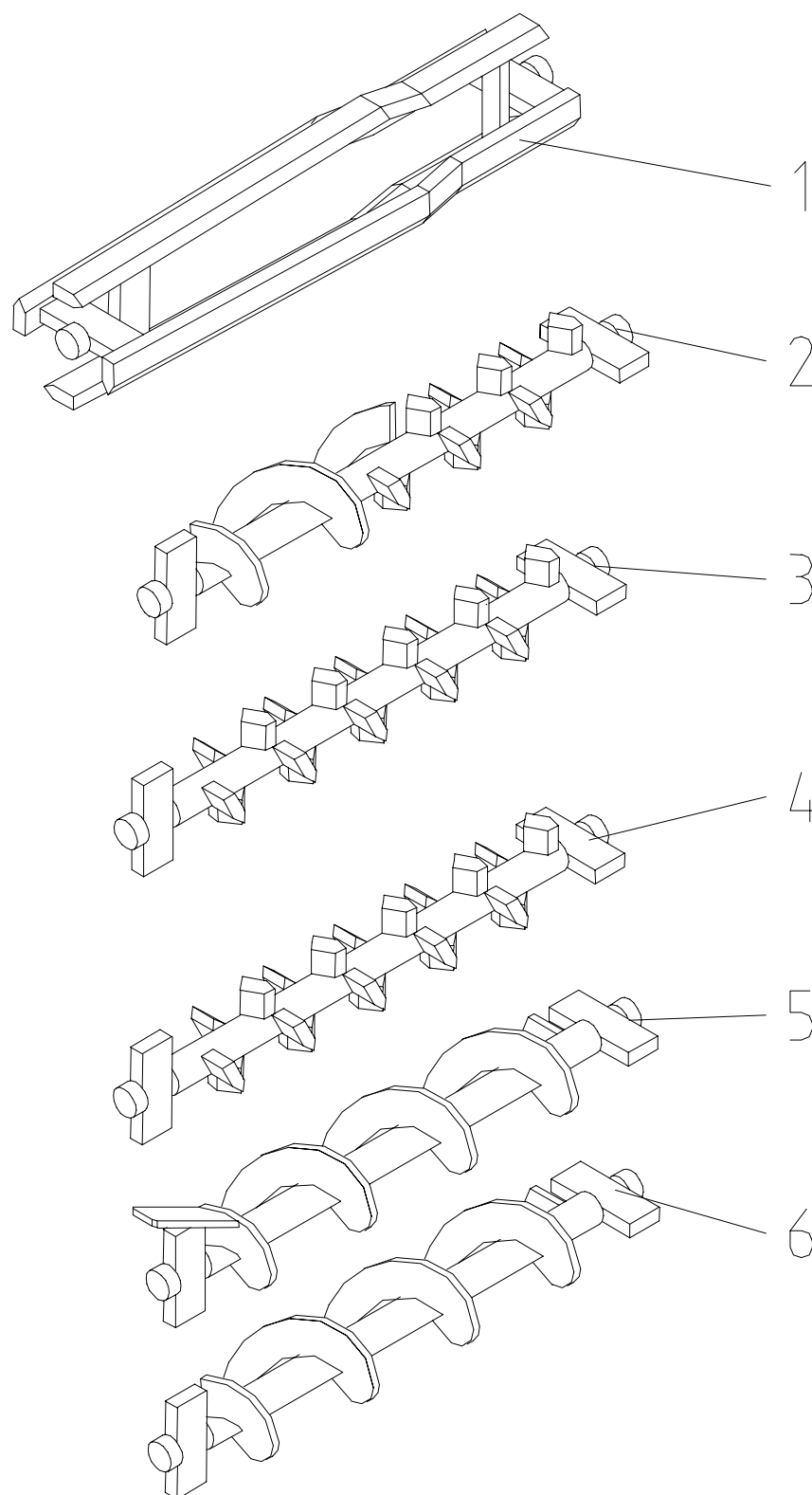


**Spare parts drawing for pump shaft ZP 3**



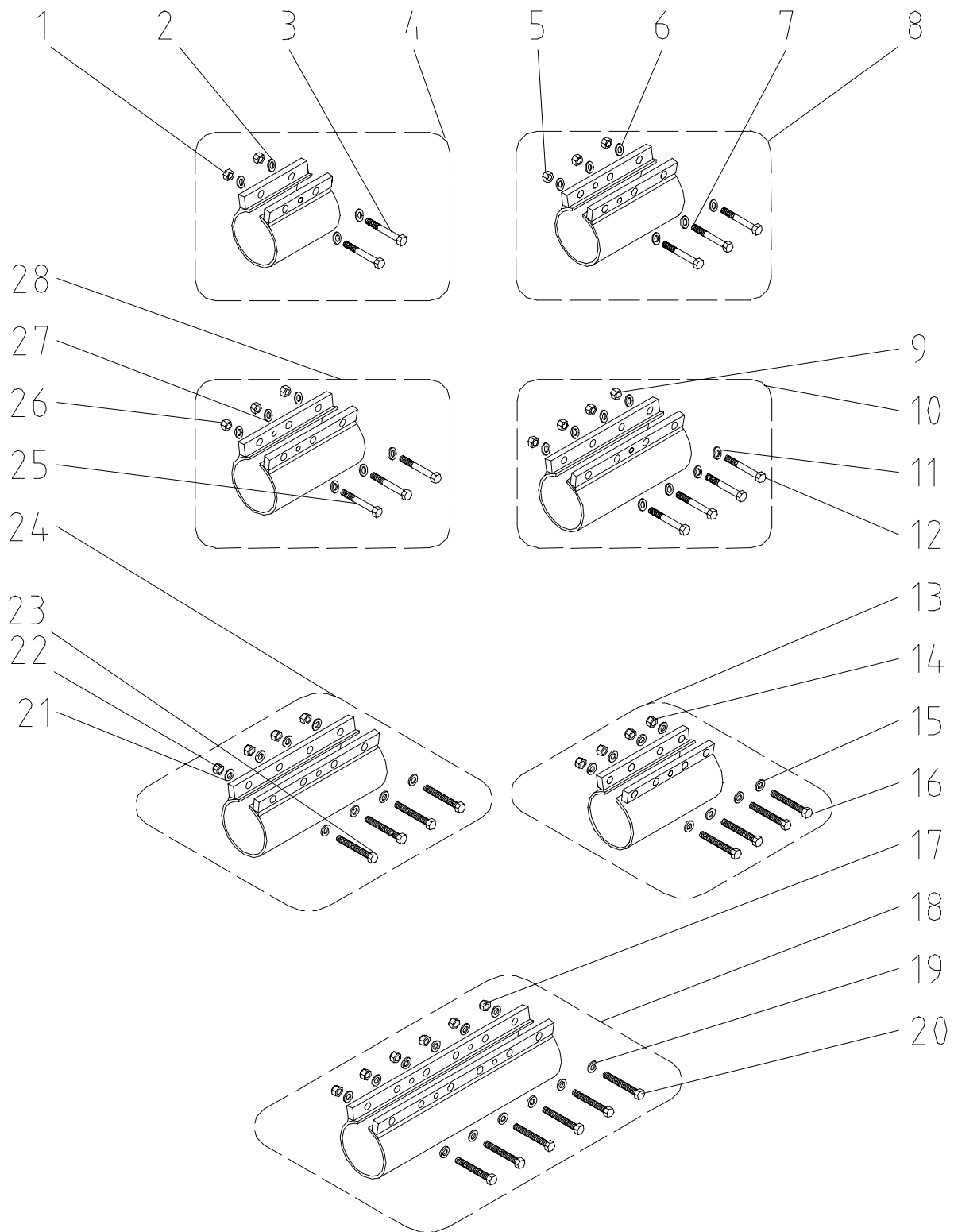
**Spare parts list for pump-shaft ZP 3**

Pos.	Qty.	Item no.	Description
1	1	20172413	Sprocket pump shaft 4 rows with cleaning arm RAL2004
2	1	20172405	Sprocket pump shaft 2 rows
3	1	20172403	Spiral pump shaft ZP 3
4	1	20172402	Sprocket pump-shaft 4 rows RAL2004
5	1	00002062	Sprocket pump-shaft 4 rows with cleaning arm and Hardy disc cpl.
6	1	00002065	Hauling hub for pump shaft with Hardy-disc RAL2004
7	6	20208900	Safety nut M12 DIN 985 galv.
8	1	00002064	Hardy disc type GN 161s
9	6	20205900	Hex. screw M12 x 50 DIN 933 galv.
10	1	00002063	Sprocket pump-shaft 4 rows with cleaning arm for Hardy-disc
11	1	00002710	Sprocket pump-shaft 4 rows for Hardy-disc
12	1	00002442	Sprocket pump-shaft 4 rows for CMP with Hardy-disc cpl.
13	1	00002443	Sprocket pump-shaft 4 rows for CMP with Hardy-disc RAL2004
14	1	00002710	Sprocket pump-shaft 4 rows for Hardy-disc
15	1	20172406	Sprocket / screw pump shaft ZP 3 RAL2004

**Spare parts drawing for pump shafts N 2 / F 2, T2E**

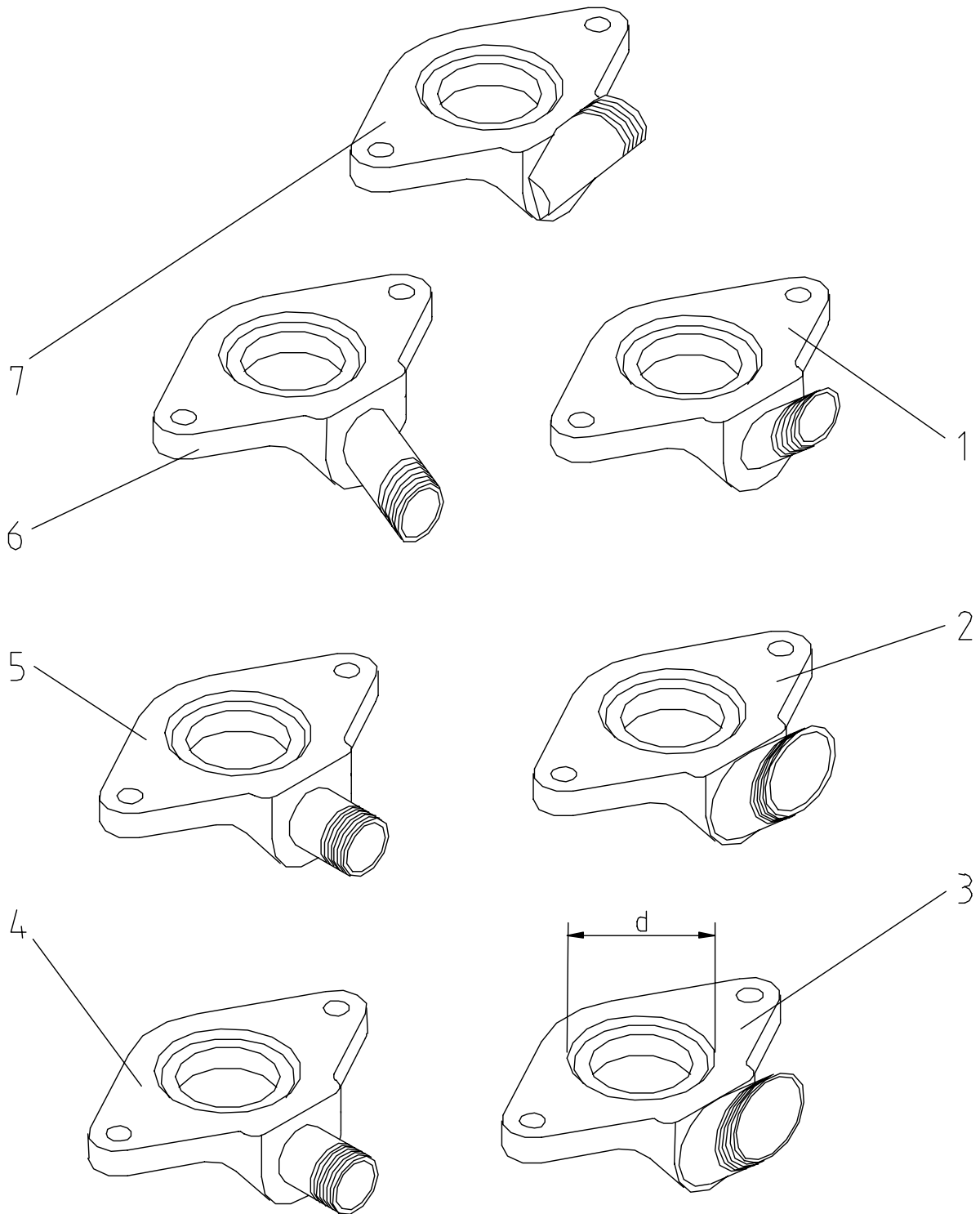
**Spare parts list for pump shafts N 2 / F 2, T2E**

Pos.	Qty.	Item no.	Description
1	1	20120800	Pump shaft for GX/GXE/UP
2	1	20172409	Sprocket / screw pump shaft UP RAL2004
3	1	20172408	Sprocket pump-shaft 4 rows for UP with plated carriers
4	1	20172407	Sprocket pump-shaft 4 rows for UP
5	1	20120811	Spiral pump shaft with scratcher for N 2
6	1	20120810	Spiral pump shaft for N 2, GXE,T 2 E RAL2004

**Spare parts drawing for clamps**

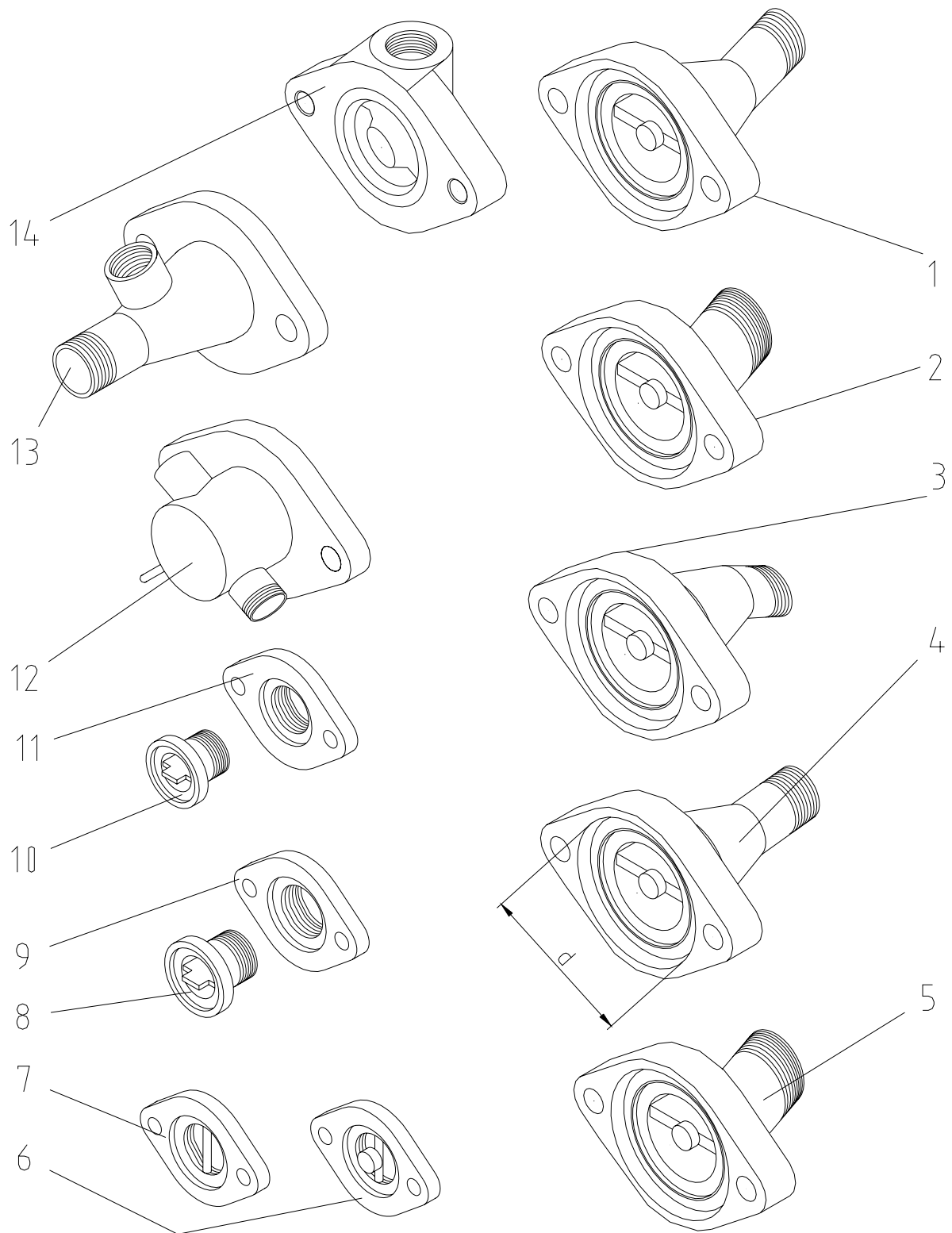
**Spare parts list for clamps**

Pos.	Qty.	Item no.	Description
1	2	20208900	Safety nut M12 DIN 985 galv.
2	4	20209000	Washer B 13 DIN 125 galv.
3	2	20208890	Hex. screw M12 x 85 DIN 933 galv.
4	1	20117050	Clamp 175 mm for D-pump 200 mm RAL2004
5	3	20208900	Safety nut M12 DIN 985 galv.
6	6	20209000	Washer B 13 DIN 125 galv.
7	3	20208890	Hex. screw M12 x 85 DIN 933 galv.
8	1	20117001	Clamp 245 mm for D-pump 270 mm RAL9010
9	4	20208900	Safety nut M12 DIN 985 galv.
10	1	20117400	Clamp 310 mm for D-pump 335 mm
11	8	20209000	Washer B 13 DIN 125 galv.
12	4	20208890	Hex. screw M12 x 85 DIN 933 galv.
13	1	20117800	Clamp 245 mm for R-pump 270 mm
14	4	20208900	Safety nut M12 DIN 985 galv.
15	8	20209000	Washer B 13 DIN 125 galv.
16	4	20207000	Hex. screw M12 x 100 DIN 933 galv.
17	6	20208900	Safety nut M12 DIN 985 galv.
18	1	20117900	Clamp 515 mm for R-pump 545 mm RAL2004
	1	00042714	Clamp 515 mm for R-pump 545 mm RAL9006 cpl
19	12	20209000	Washer B 13 DIN 125 galv.
20	6	20207000	Hex. screw M12 x 100 DIN 933 galv.
21	8	20209000	Washer B 13 DIN 125 galv.
22	4	20208900	Safety nut M12 DIN 985 galv.
23	4	20207000	Hex. screw M12 x 100 DIN 933 galv.
24	1	20117810	Clamp 335 mm for R-pump 360 mm
25	3	20208890	Hex. screw M12 x 85 DIN 933 galv.
26	3	20208900	Safety nut M12 DIN 985 galv.
27	6	20209000	Washer B 13 DIN 125 galv.
28	1	20117000	Clamp 255 mm for D pump 270 mm

**Spare parts drawing for pressure flanges**

**Spare parts list for pressure flanges**

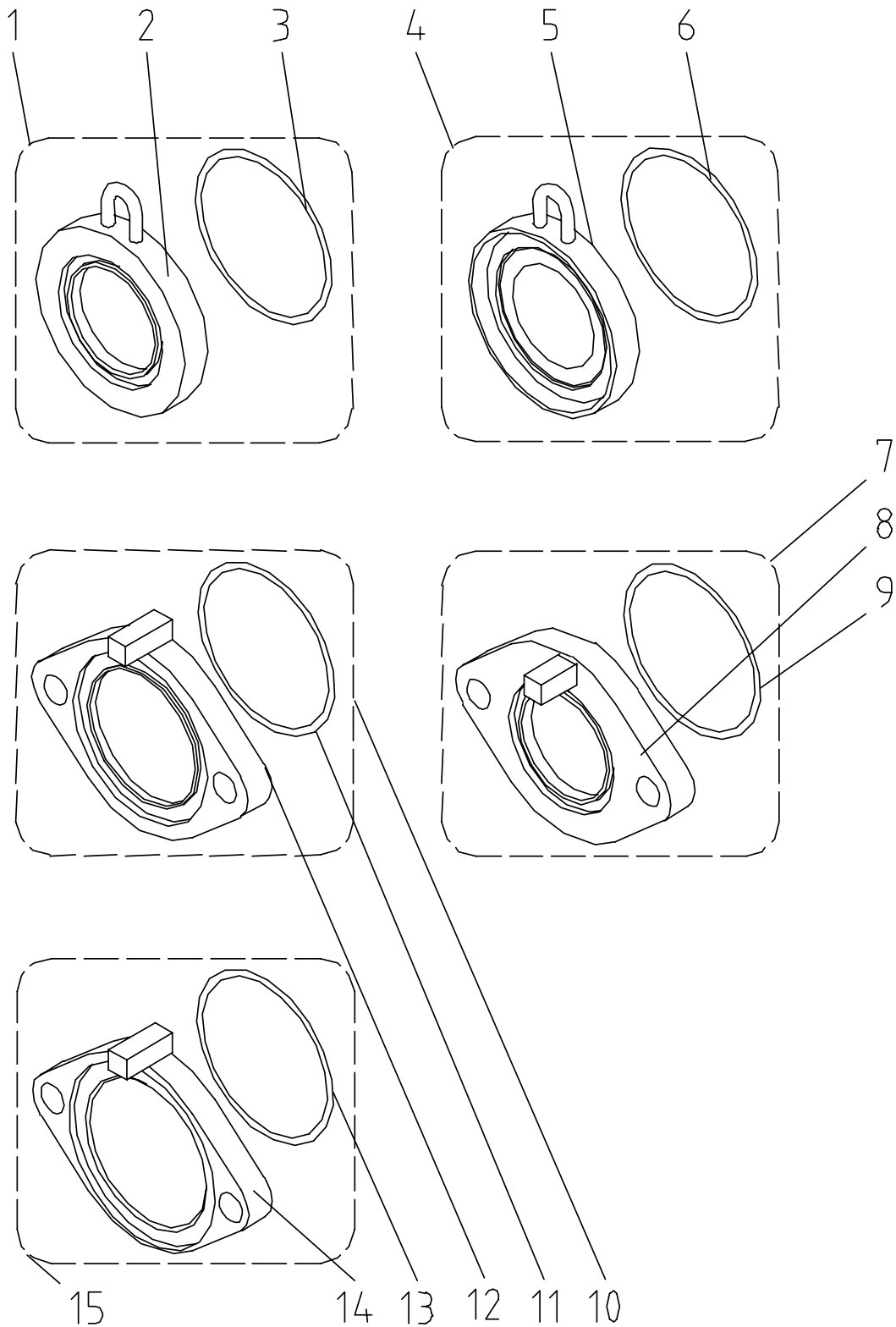
Pos.	Qty.	Item no.	Description	Ø d [mm]
1	1	20118901	Pressure flange D pump 1 1/4" ext. thread, angled 25° RAL2004	90
	1	00021478	Pressure flange D pump, 1 1/4" ext. thread, 25° RAL1021	90
	1	00019666	NO LONGER AVAILABLE, REPLACEMENT 00047681	90
2	1	20118905	Pressure flange D pump 2" ext. thread, angled 27° RAL9010	90
	1	20118904	Pressure flange D pump 2" ext. thread, angled 27°	90
3	1	20118902	Pressure flange R pump 2" ext. thread, angled 27°	115
4	1	20118813	Pressure flange D pump 1 1/4" ext. thread, G 4 gold	90
	1	20118811	NO LONGER AVAILABLE, REPLACEMENT 00041664	90
	1	00039764	Pressure flange D pump 1 1/4" ext. thread G 4 RAL1018	90
	1	00020315	Pressure flange D pump 1 1/4" ext. thread, G 4 RAL9001	90
	1	00001837	Pressure flange D pump 1 1/4" ext. thread, G 4, RAL6018	90
	1	00039572	Pressure flange D pump 1 1/4" ext. thread G 4 RAL9002	90
5	1	20118820	Pressure flange R pump 1 1/4" ext. thread, G 4 galv.	115
6	1	00001454	Pressure flange D pump 1 1/4" ext. thread MINIJET adhesive	90
7	1	00021464	Pressure flange D pump, outlet at the side	90

**Spare parts drawing for pressure flanges**



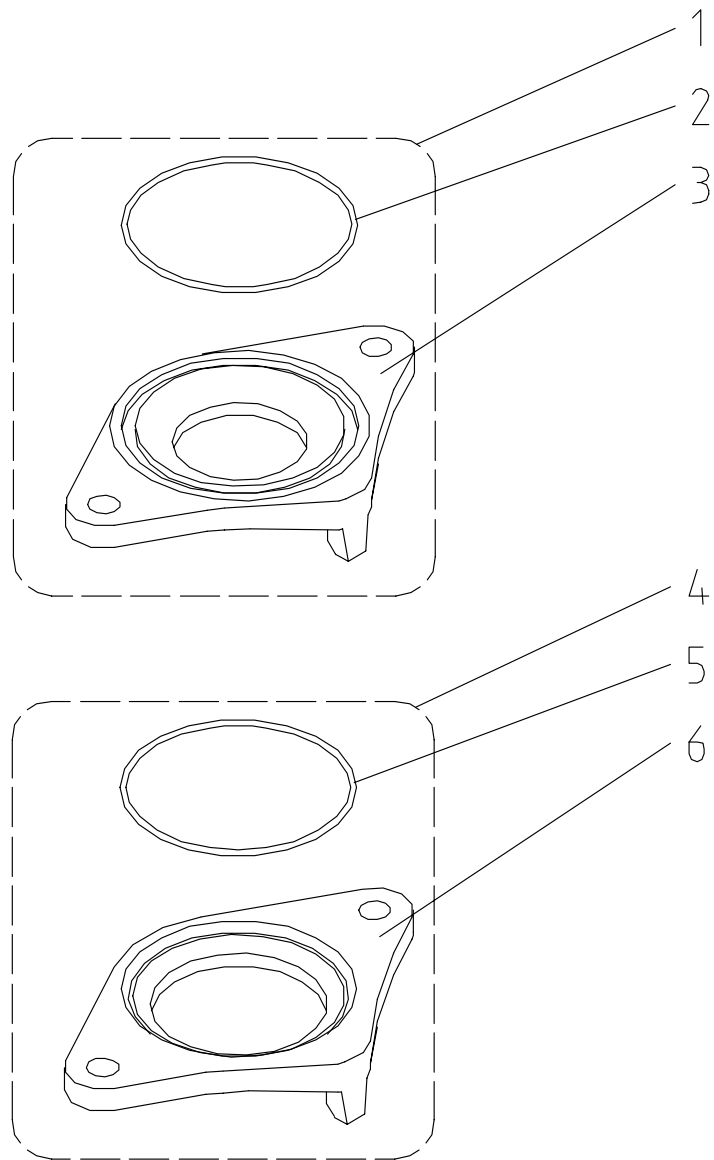
**Spare parts list for pressure flanges**

Pos.	Qty.	Item no.	Description	Ø d [mm]
1	1	20118906	Pressure flange R pump 1 1/4" ext. thread, ZP 3 snap lock	90
	1	20118703	Pressure flange D pump 1 1/4" ext. thread, ZP 3/UP RAL9010	90
	1	20118702	Pressure flange D pump 1 1/4" ext. thread, UP RAL2004	90
	1	00037539	Pressure flange R pump 1 1/4" ext. thread ZP RAL1021	90
	1	00019828	Pressure flange D pump, 1 1/4" ext. thread, UP RAL9003	90
	1	00019731	Pressure flange D pump, 1 1/4" ext. thread, UP RAL1018	90
	1	00008768	Pressure flange R pump 1 1/4" ext. thread RAL5015 ZP 3/UP	90
	1	00001881	Pressure flange D pump 1 1/4" ext. thread ZP/UP RAL5018	90
	1	00001736	Pressure flange R pump 1 1/4" ext. thread ZP RAL1018	90
	1	00041662	NO LONGER AVAILABLE, REPLACEMENT 00 04 41 54	90
2	1	20118920	Pressure flange R pump 2" ext. thread, ZP 3/UP RAL2004	115
	1	00045830	Pressure fl. R pu. 2" ext. thr. ZP 3/UP Mu ge RAL2004	115
3	1	00001704	Pressure flange T pump 1 1/4" ext. thread RAL1018	125
4	1	20118900	Pressure flange R pump 1 1/4" ext. thread, ZP 3/UP	115
	1	00044130	Pressure flange R pump 1 1/4" ext. thread socket for pressure gauge straight RAL1021	115
	1	00044974	Pressure flange R pump 1 1/4" ext. thread socket for Pressure gauge straight RAL9003	115
5	1	20119110	Pressure flange T pump 2" ext. thread, ZP 3/UP RAL2004	125
6	1	00008457	NO LONGER AVAILABLE, REPLACEMENT BY INDIVIDUAL PARTS: 00 04 22 45-1x; 00 02 36 58-1x; 20 20 16 30-1x; 00 04 27 74-2x;	50
7	1	00037189	NO LONGER AVAILABLE, REPLACEMENT BY INDIVIDUAL PARTS 00 04 23 60; 00 02 36 58; 20 20 16 30; 00 04 27 74	59
8	1	00042360	Adapter w. stop plate VA D=59 pressure flange SWING II	59
9	1	00023658	Pressure flange 1 1/4" zinc-pl. SWING II No. 770326207	59
10	1	00042245	Adapter with bar VA D=50 pressure flange SWING II cpl.	50
11	1	00023658	Pressure flange 1 1/4" zinc-pl. SWING II No. 770326207	50
12	1	00041212	Pressure flange UNIJET RAL9010	
	1	00039696	NO LONGER AVAILABLE, NO REPLACEMENT	
	1	00023546	Pressure flange UNIJET RAL2004	
13	1	00044154	Pressure flange R pump 1 1/4" ext. thread socket for Pressure gauge angled RAL9003	
14	1	00041664	Pressure flange for D pumps G 4 galv. 1	94

**Spare parts drawing for suction flange**

**Spare parts list for suction flange**

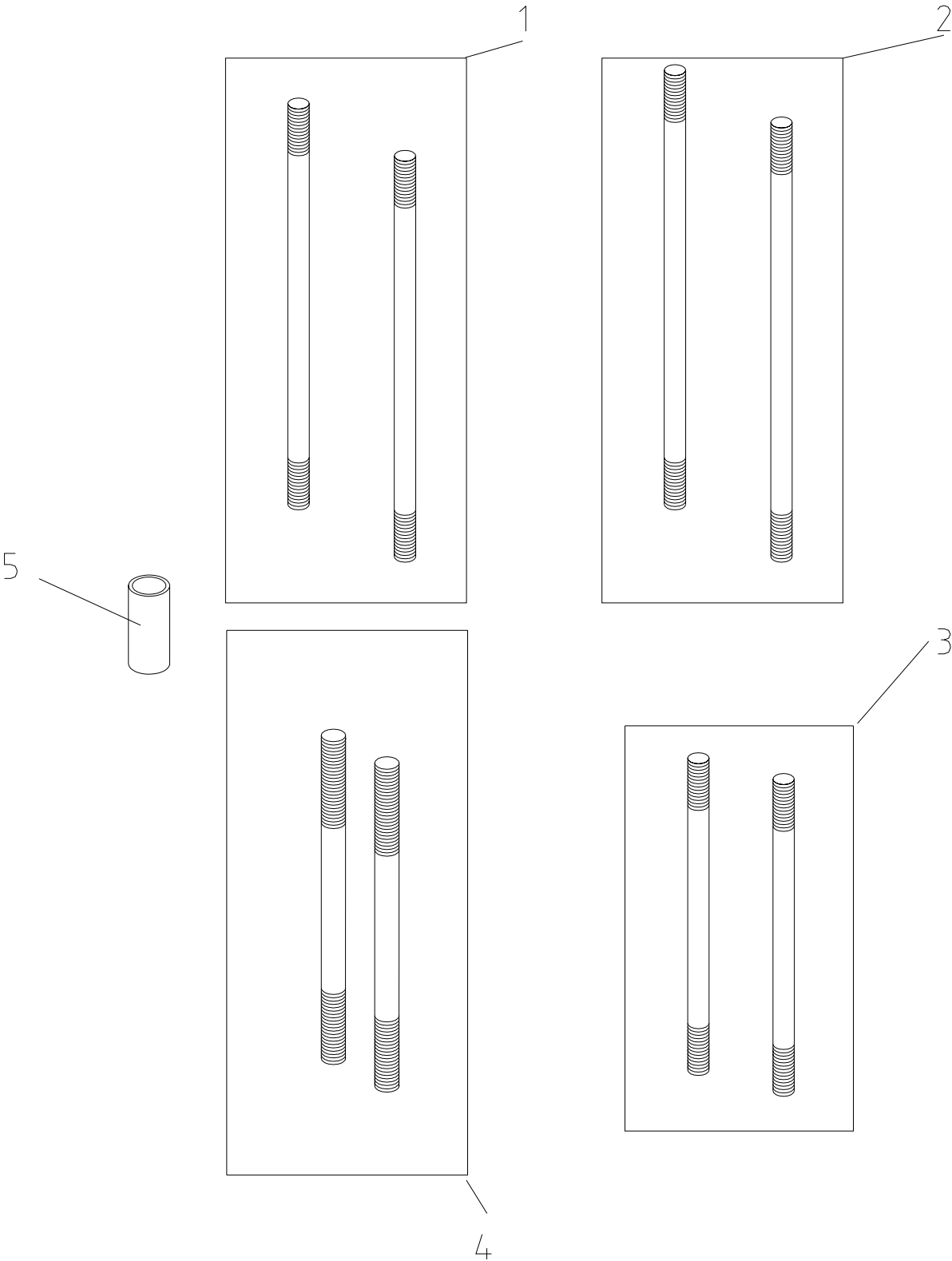
Pos.	Qty.	Item no.	Description
1	1	20175207	Suction flange D-pumps UP with O-ring
	1	00019829	Suction flange D-pumps UP with O-ring RAL9003
2	1	20175203	Suction flange D-pumps for UP RAL9010
	1	00019830	Suction flange D-pumps UP for O-ring RAL9003
	1	00019732	Suction flange D-pumps UP for O-ring RAL1018
	1	00001882	Suction flange D-pumps UP for O-ring RAL5018
3	1	20104230	O-ring 117 x 5 for suction flange
4	1	20175003	Suction flange R-pumps UP with O-ring
5	1	20175002	Suction flange R-pumps UP for O-ring
6	1	20104230	O-ring 117 x 5 for suction flange
7	1	20120922	Suction flange D-pumps with O-ring 155 mm
8	1	20120923	Suction flange D-pumps for O-ring 155 mm
9	1	20104230	O-ring 117 x 5 for suction flange
10	1	20175202	Suction flange D-pumps N 2, T 2, with gasket RAL9010
	1	20120912	Suction flange R-pumps with O-ring 155 mm
	1	00001734	Suction flange R-pumps with O-ring 155 mm RAL1018
11	1	20104230	O-ring 117 x 5 for suction flange
12	1	20175001	NO LONGER AVAILABLE REPLACEMENT 20175002
	1	20120913	Suction flange R-pumps for O-ring 15 5mm RAL2004
	1	00008769	Suction flange R-pumps for O-ring RAL5015 155 mm
	1	00042718	Suction flange R-pumps for O-ring 155 mm RAL9006
	1	00001735	Suction flange R-pumps for O-ring 155 mm RAL1018
	1	00037541	Suction flange R pump for O-ring RAL1021
	1	00044976	Suction flange R pump for O-ring RAL9003
	1	00036874	Suction flange R pump for O-ring RAL1018
13	1	20104230	O-ring 117 x 5 for suction flange
14	1	20175211	Suction flange T-pumps for O-ring RAL2004
	1	00001705	Suction flange T-pumps for O-ring RAL1018
15	1	20175210	Suction flange T-pumps RAL2004

**Spare parts drawing for suction flange**

**Spare parts list for suction flange**

Pos.	Qty.	Item no.	Description
1	1	20104215	Suction flange D-pumps with O-ring LA=200 mm
	1	00001833	Suction flange D-pumps with O-ring La=200 mm RAL6018
	1	20104209	Suction flange D-pumps with O-ring La=200 mm RAL9010
2	1	20104230	O-ring 117 x 5 for suction flange
3	1	20104214	Suction flange D-pumps for O-ring LA=200 mm RAL2004
	1	00001834	Suction flange D-pumps for O-ring La=200 mm RAL6018
	1	20051546	Suction flange D-pumps (for O-ring) La=200 mm RAL9010
4	1	20104217	Suction flange R-pumps with O-ring LA=200 mm
5	1	20104230	O-ring 117 x 5 for suction flange
6	1	20104216	Suction flange R-pumps for O-ring LA=200 mm
	1	00001784	NO LONGER AVAILABLE

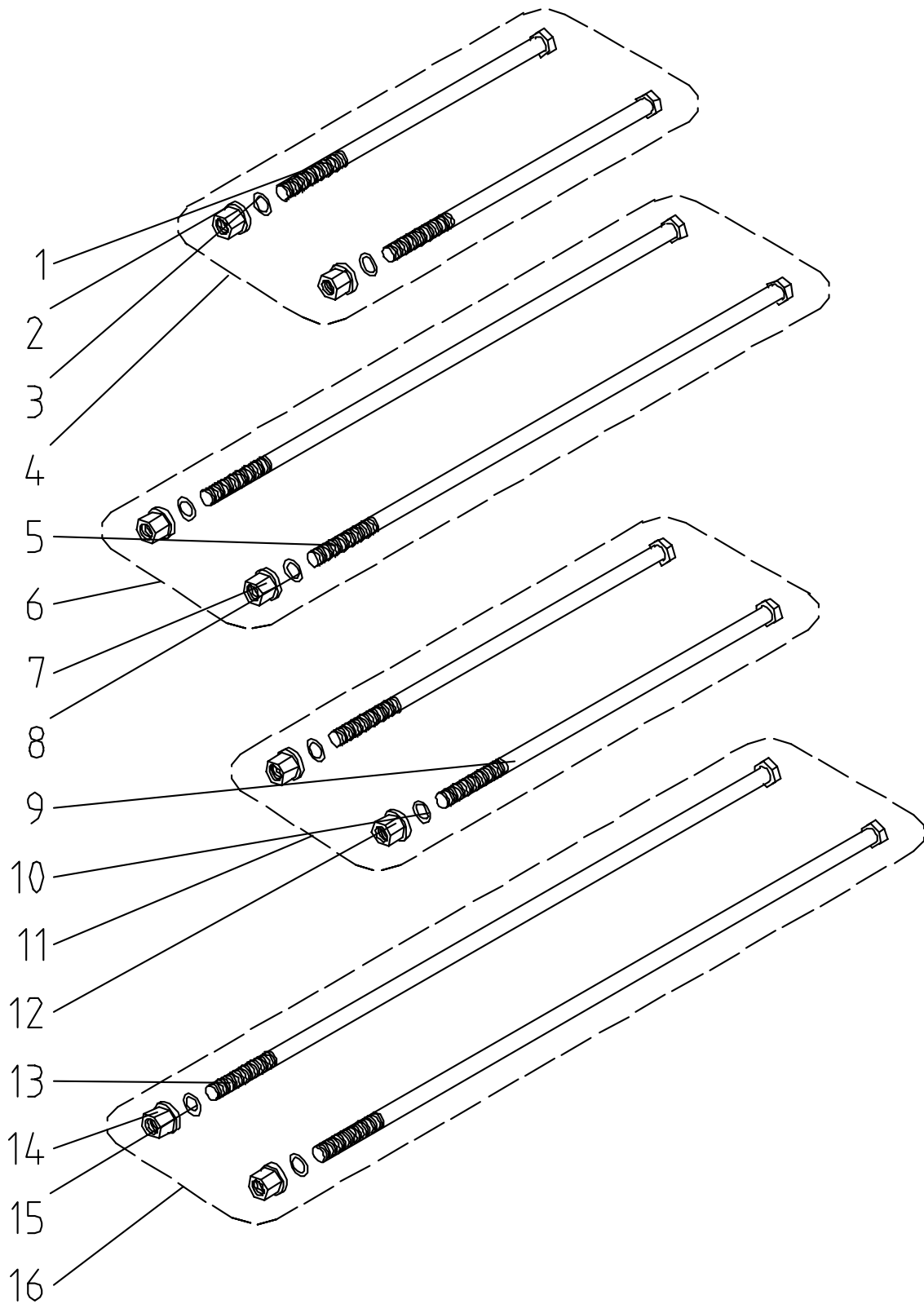
Spare parts drawing for tie rods G 4



**Spare parts list for tie rods G 4**

Pos.	Qty.	Item no.	Description
1	1	20118780	Tie rods M16 x 370 mm (1 set = 2 pieces)
2	1	20118193	Tie rods M16 x 390 mm ROTOMIX (1 set = 2 pieces)
3	1	20118404	Tie rods M16 x 280 mm (1 set = 2 pieces)
4	1	20118709	Tie rods M16 x 290 mm (1 set = 2 pieces)
5	1	20119060	Spacer tube 70 mm for pressure flange for D-pumps 200 mm

Item no.	Length of tie rod	Length of pump	Use	Remark
20118404	280 mm	200 mm	in combination with spacer tube	G4, MONOJET, MINIJET
20118709	290 mm	273 mm	D pump	G4, MONOJET, MINIJET
20118709	290 mm	270-273 mm	ROTOQUIRL	G4, MONOJET, MINIJET
20118780	370 mm	335 mm	D pump	G4, MONOJET, MINIJET
20118193	390 mm	270-273 mm	ROTOMIX	G4, MONOJET, MINIJET
20118193	390 mm	360 mm	in combination with spacer tube	G4, MONOJET, MINIJET

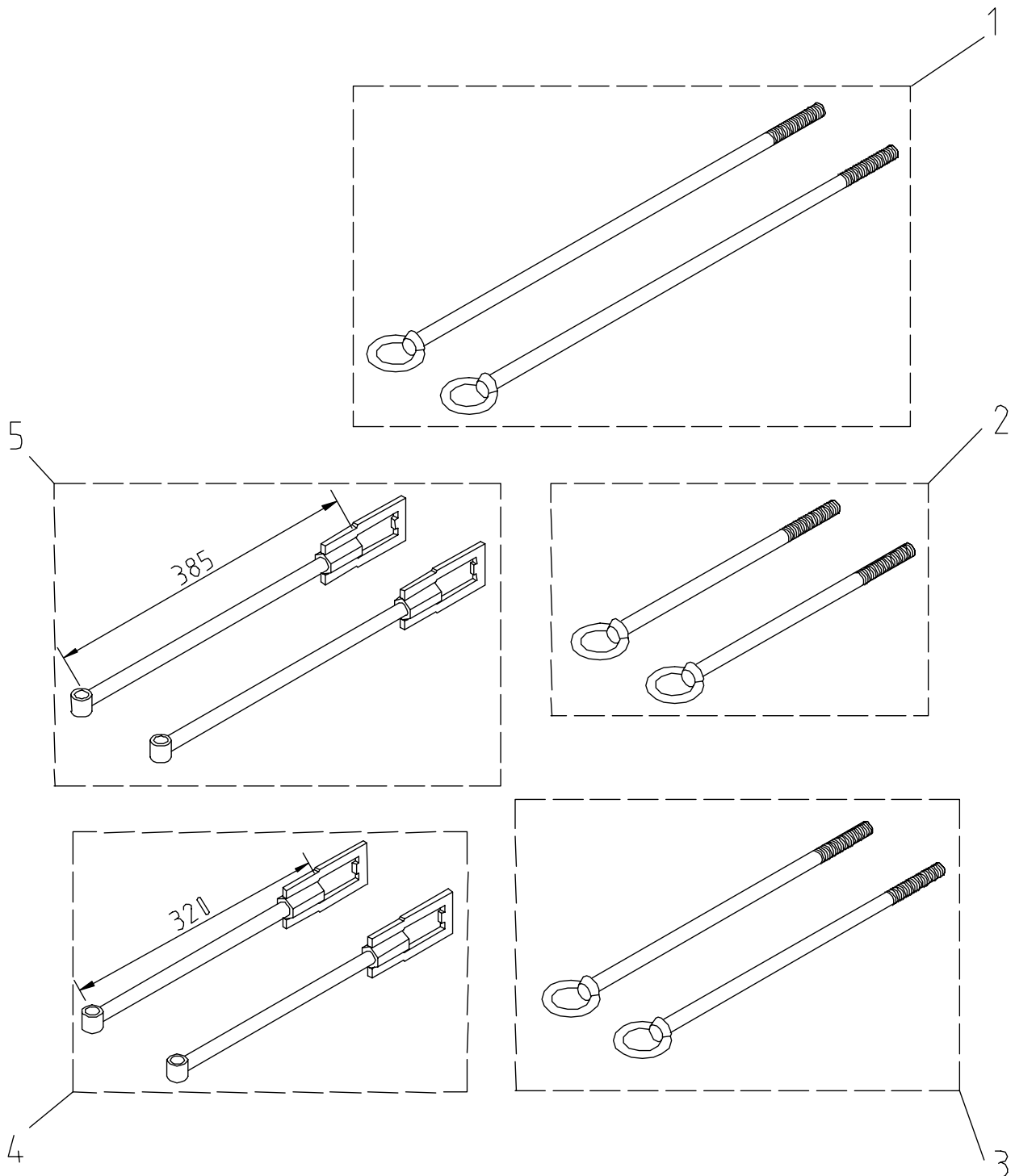
**Spare parts drawing for tie rods ZP 3**



**Spare parts list for tie rods ZP 3**

Pos.	Qty.	Item no.	Description
1	2	20118721	Tension screw M16 x 350 DIN 931 galv. for tie rod 20 11 87 20
2	2	20209921	Collar nut M16 DIN 6331 galv.
3	2	20172800	O-ring 16 x 2 DIN 3771-NBR 70
4	1	20118720	Tie rods M16 x 350 mm for pumps 270 mm for ZP 3 (1 set = 2 pieces)
5	2	20118912	Tension screw M16 x 630 DIN 931 galv. for tie rod 20 11 89 10
6	1	20118910	Tie rods M16 x 630 mm for pumps 545 mm (1 set = 2 pieces)
7	2	20209921	Collar nut M16 DIN 6331 galv.
8	2	20172800	O-ring 16 x 2 DIN 3771-NBR 70
9	2	20118732	Tension screw M16 x 440 DIN 931 galv. for tie rod 20 11 87 31
10	2	20172800	O-ring 16 x 2 DIN 3771-NBR 70
11	1	20118731	Tie rods M16 x 440 mm for pumps 360 mm ZP 3 (1 set = 2 pieces)
12	2	20209921	Collar nut M16 DIN 6331 galv.
13	2	00001173	Tension screw M16 x 750 DIN 931 galv.
14	2	20209921	Collar nut M16 DIN 6331 galv.
15	2	20172800	O-ring 16 x 2 DIN 3771-NBR 70
16	1	00001165	Tie rods M16 x 750 mm (1 set = 2 pieces)

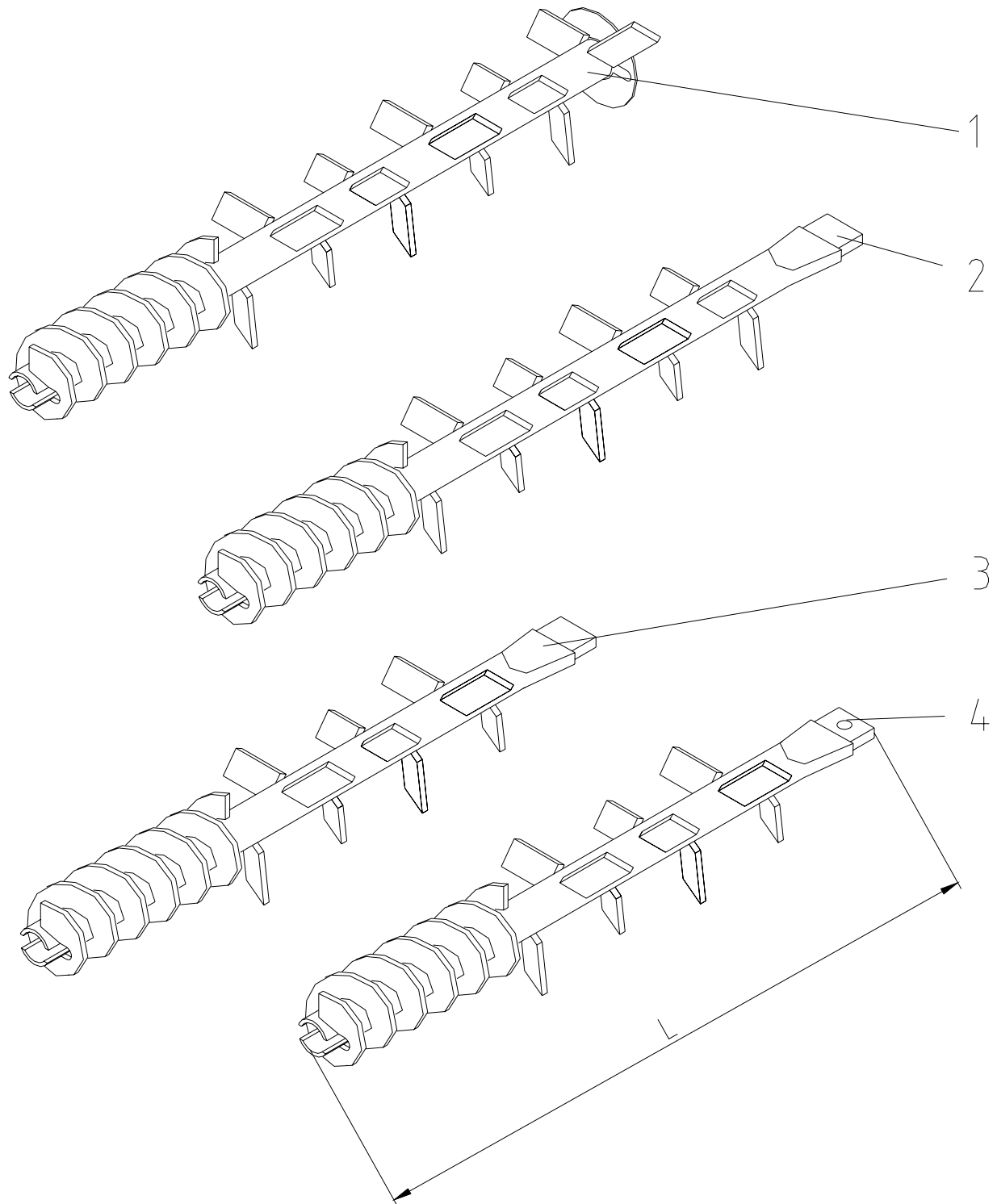
Item no.	Length of tie rod	Length of pump	Use	Remark
20118720	350 mm	270 mm	R8-1.5 / R7-1.5	ZP 3, G 400
20118731	440 mm	335 mm	R8-2 / R9-1	ZP 3, G 400
20118910	630 mm	546 mm	R9-2 / R8-3 / R7-3 / T10-1.5	ZP 3, G 400
00001165	750 mm	665 mm	T9-2	ZP3, G 400

**Spare parts drawing for tie rods N 2, F 2, T 2 E, GXE**

**Spare parts list for tie rods N 2, F 2, T 2 E, GXE**

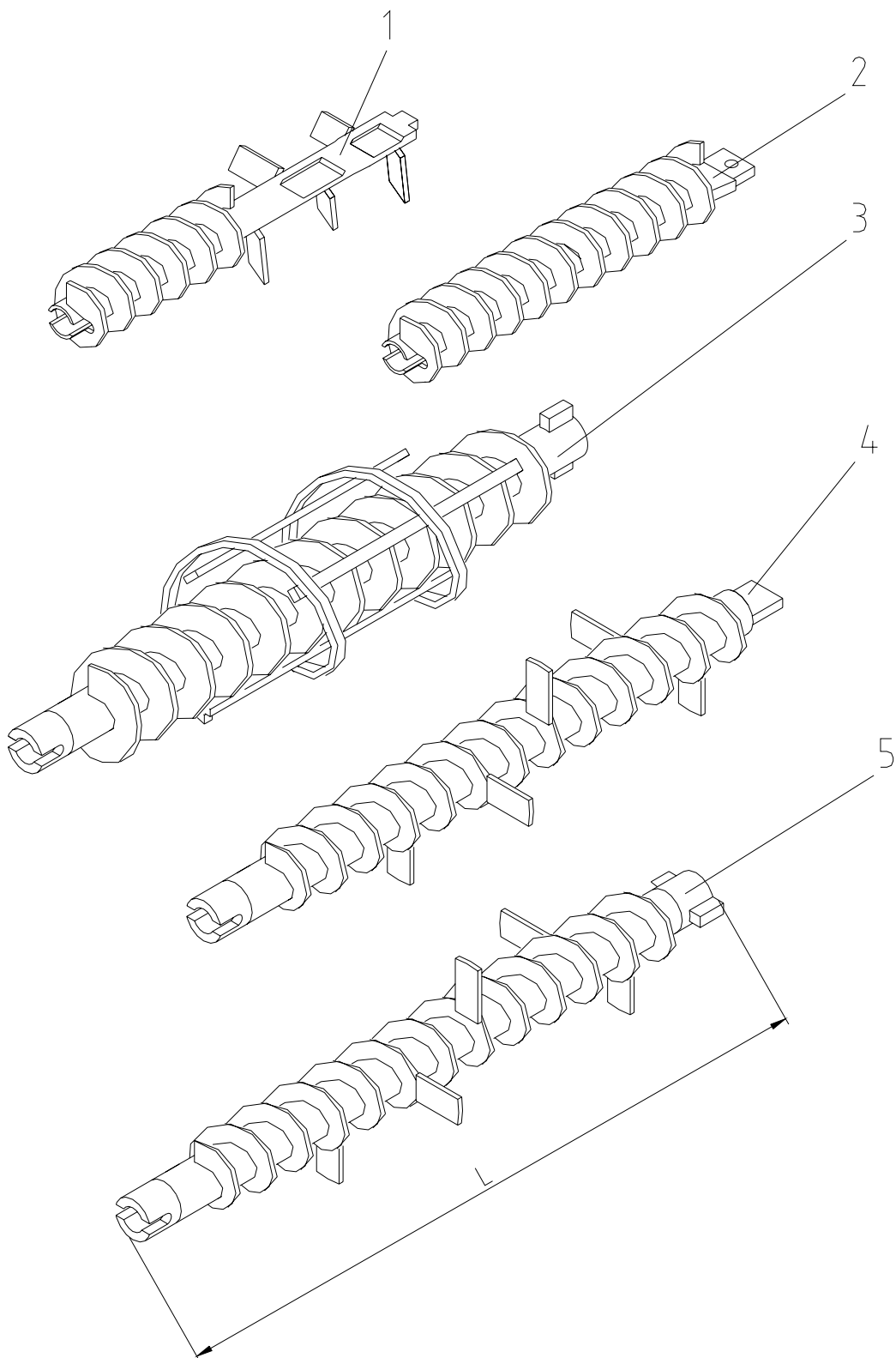
Pos.	Qty.	Item no.	Description
1	1	00002132	Tie rods M16 x 630 mm with lug (1 set = 2 pieces)
2	1	20118710	Tie rods M16 x 340 mm with lug (1 set = 2 pieces)
3	1	20118711	Tie rods M16 x 435 mm with lug (1 set = 2 pieces)
4	1	00002130	Tie rods M16 x 320 mm (1 set = 2 pieces)
5	1	00002131	Tie rods M16 x 385 mm (1 set = 2 pieces)

Item no.	Length of tie rod	Length of pump	Use	Remark
00002130	320 mm	200 mm		N2, F2, T2E, GXE
20118710	340 mm	273 mm	D pump	N2, F2, T2E, GXE
00002131	385 mm	335 mm	D8-2	N2, F2, T2E, GXE
20118711	435 mm	360 mm	R8-1.5 / R 7-1.5	N2, F2, T2E, GXE
00002132	630 mm	540 mm	R8-3 / R7-3	N2, F2, T2E

**Spare parts drawing for dosing shafts HM 2, HM 22 / 24, HM 104, HM 200, HM 2002**

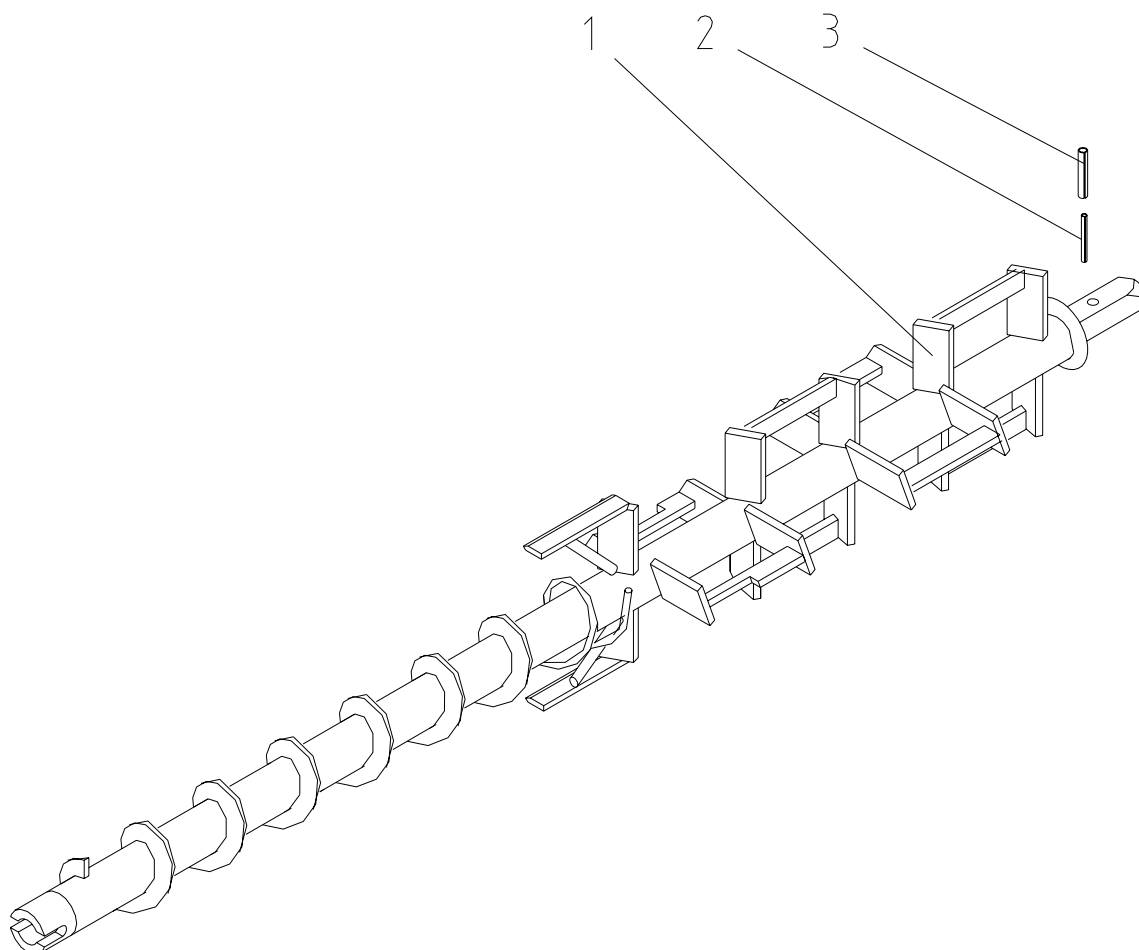
**Spare parts list for dosing shafts HM 2, HM 22 / 24, HM 104, HM 200, HM 2002**

Pos.	Qty.	Item no.	Description	Length L [mm]
1	1	20547300	Dosing shaft HM 2000/2002, 30 l/min P35 D=80	800
	1	20547301	Dosing shaft HM 2000	800
2	1	20549030	Dosing shaft HM 2, pitch 80, white	719
	1	20549011	Dosing shaft HM 2, 50 l/min, P50 D=80 reinforced, green RAL2004	719
	1	20549001	Dosing shaft HM 2, 30 l/min, P35 D=80 reinforced, red	719
	1	20549002	Dosing shaft HM 2/200, 20 l/min P25 D=80	719
3	1	20549050	Dosing shaft HM 104, 20 l/min	619
	1	00040722	Dosing shaft HM 104 50 l at 280 rpm	619
	1	00040721	Dosing shaft HM 104 35 l at 280 rpm RAL2004	619
4	1	00010163	Dosing shaft HM 22/24 50 l at 280 rpm	619
	1	00002569	Dosing shaft HM 22/24 35 l at 280 rpm	619
	1	00002111	Dosing shaft HM 22/24 25 l at 280 rpm	619

**Spare parts drawing for dosing shafts HM 3, HM 5, HM 202 / 204, HM 4000, CMP**

**Spare parts list for dosing shafts HM 3, HM 5, HM 202 / 204, HM 4000, CMP**

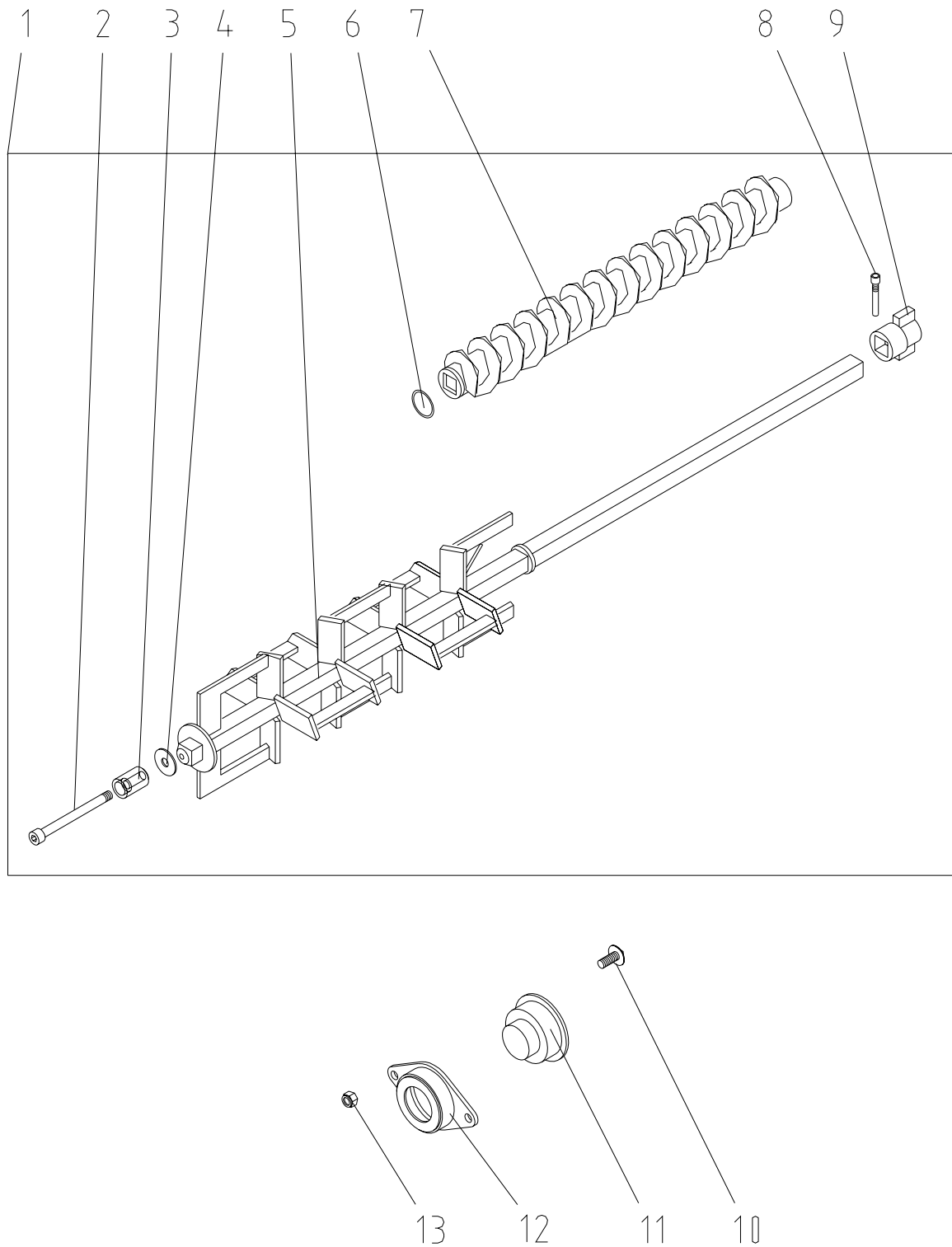
Pos.	Qty.	Item no.	Description	Length L [mm]
1	1	20549003	Dosing shaft HM 202/204 20 l/min P25 D=80	440
	1	20547250	Dosing shaft HM 202/204 30 l/min P35 D=80	440
	1	00009092	Dosing shaft HM 202/204 50 l/min P50 D=8	440
2	1	00002383	Dosing shaft CMP 130 l/min at 370 rpm	440
3	1	20541800	Dosing shaft HM 3, 120 l/min, 280 rpm with counter spiral	722
	1	20160041	Dosing shaft HM 3, 45 l/min, 280 rpm with counter spiral	722
	1	20160023	Dosing shaft HM 3, 100 l/min, 375 rpm with counter spiral RAL2004	722
	1	00036830	Dosing shaft HM 3/CMP with return spiral 70 litres at 375 rpm	722
	1	00001328	Dosing shaft HM 3, 33 l/min, with counter spiral RAL2004	722
4	1	20541703	Dosing shaft HM 5 45 l/min, armoured, reinforced hauling shaft	713
	1	20541700	Dosing shaft HM 5 45 l/min, P45 red	713
	1	20541504	Dosing shaft HM 5, 60 l/min armoured (Intocast )	713
	1	20541501	Dosing shaft HM 5, 60 l/min armoured, reinforced hauling shaft	713
	1	20541301	Dosing shaft HM 5, 90 l/min armoured, reinforced hauling shaft	713
	1	20541300	Dosing shaft HM 5 90 l/min, P90 white	713
	1	00002179	Dosing shaft HM 5 60 l/min, P60 green D=90	713
5	1	20541704	Dosing shaft HM 5 45 l/min, D=92	713
	1	20541702	Dosing shaft HM 5, 45 l/min armoured, reinforced hauling shaft+C1540	713
	1	20541503	Dosing shaft HM 5, 60 l/min, armoured and reinforced coupling	713
	1	20541303	Dosing shaft HM 5, 90 l/min armoured, reinforced hauling shaft	713
	1	20541801	Dosing shaft HM 5, 80 l/min D=235	713
	1	20541701	Dosing shaft HM 5 45 l/min, P45 red reinforced	713
	1	20541304	Dosing shaft HM 5 90 l/min, P85 D=90 reinforced RAL2004	713
	1	20541705	Dosing shaft HM 5 45 l/min D=90 reinforced	713
	1	20541502	Dosing shaft HM 5 60 l/min, P60 green reinforced	713
	1	00020658	NO LONGER AVAILABLE, REPLACEMENT 20 54 15 03	713
	1	00046947	Dosing shaft HM 5 35 l/min reinforced RAL2004	713

**Spare parts drawing for dosing-mixing shafts HM 6**



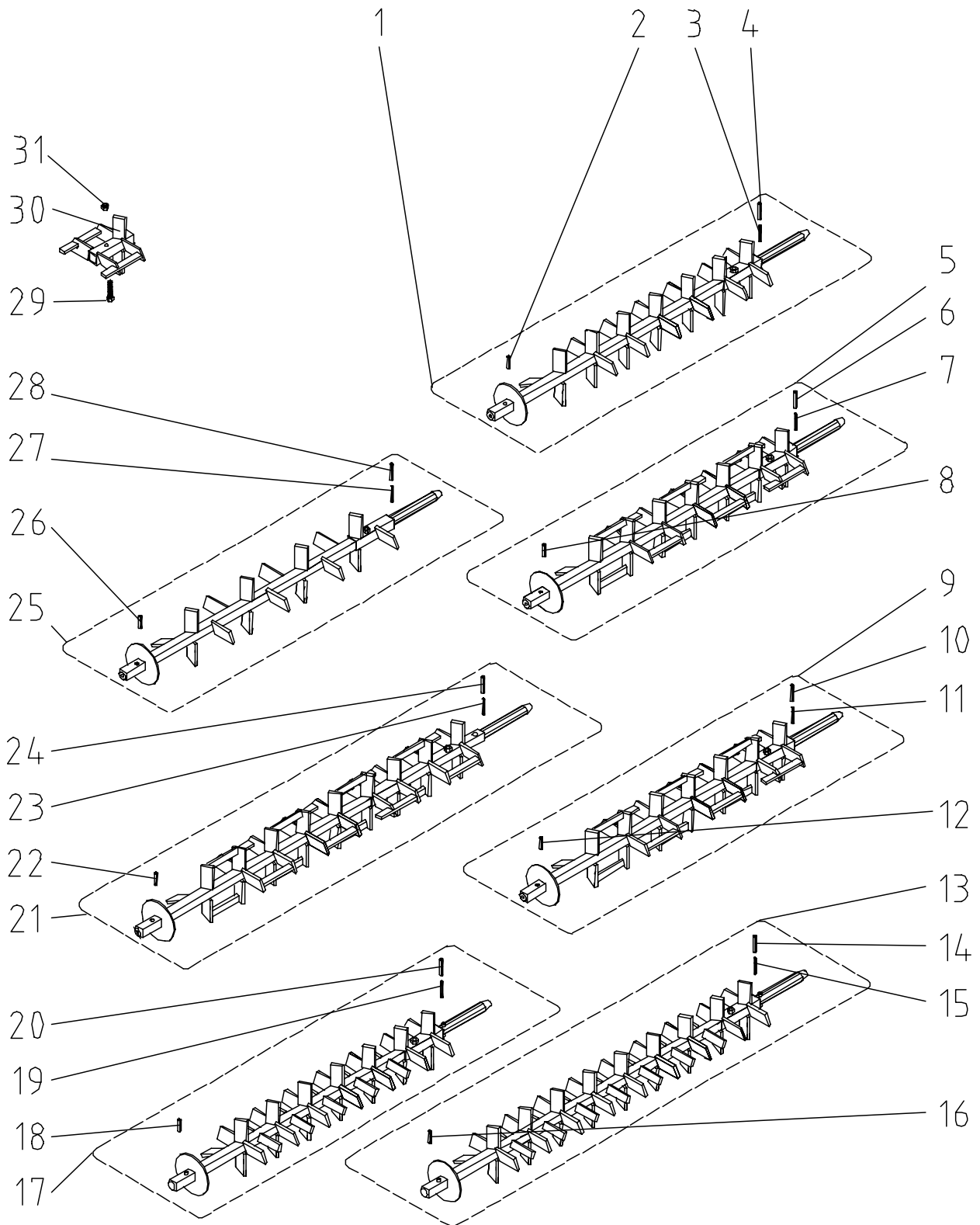
**Spare parts list for dosing-mixing shafts HM 6**

Pos.	Qty.	Item no.	Description	Length L [mm]
1	1	00045832	Dosing-mixing shaft 90 L white HM 6 RAL2004	1451
	1	00045845	Dosing-mixing shaft 60 L green HM 6 RAL2004	1451
	1	00039958	Dosing-mixing shaft 45 L HM 6 RAL2004	1451
2	1	20547603	Dowel pin 6 x 40 DIN 1481	
3	1	20547600	Dowel pin 10 x 40 DIN 1481	

**Spare parts drawing for dosing-mixing shafts HM 6 two-piece (new)**

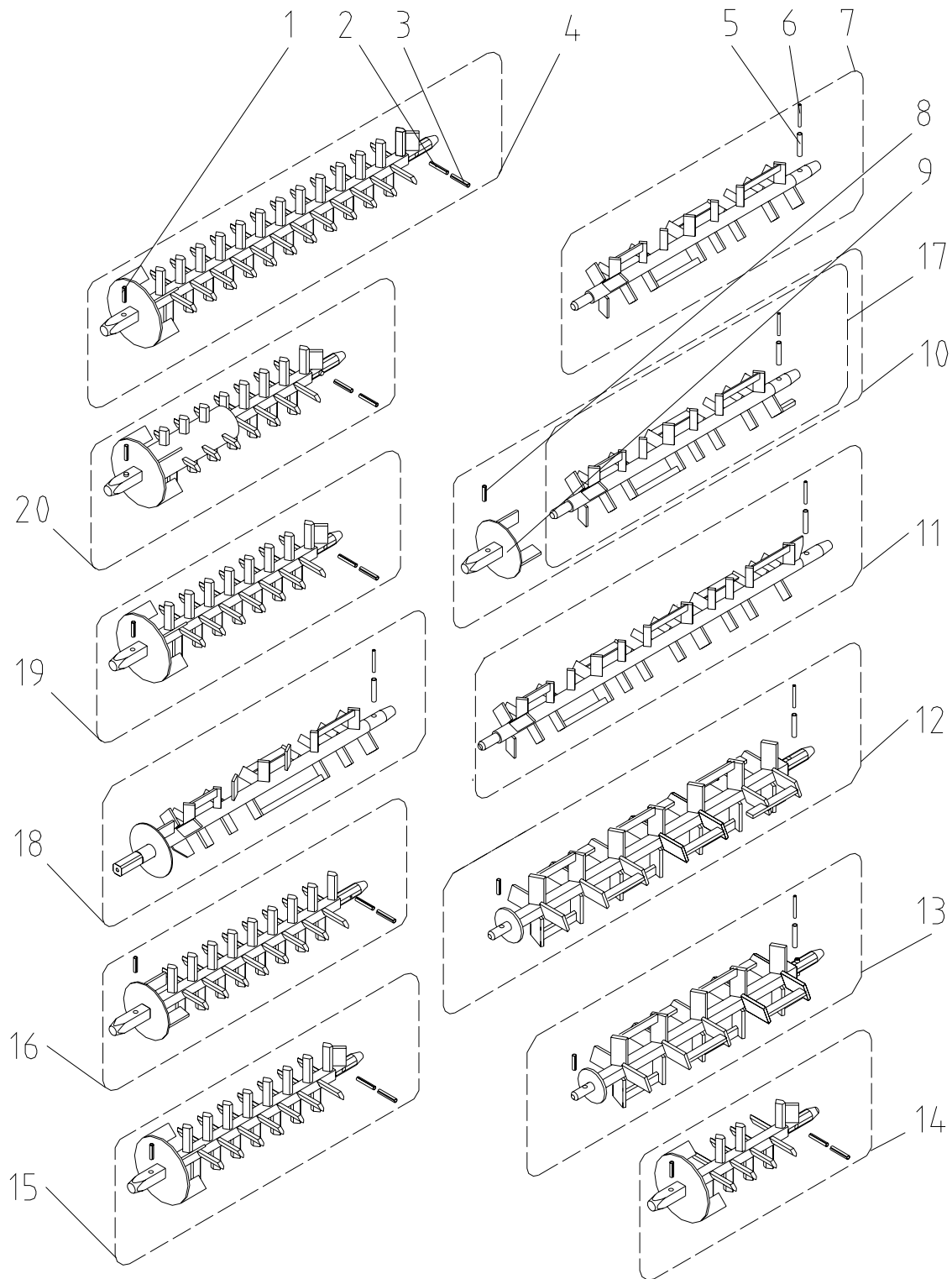
**Spare parts list for dosing-mixing shafts HM 6 two-piece (new)**

Pos.	Qty.	Item no.	Description	Length L [mm]
1	1	00047667	Mixing shaft dosing segment 45L HM 6 RAL2004 cpl.	
	1	00047701	Mixing shaft dosing segment 60L HM 6 RAL2004 cpl.	
	1	00047704	Mixing shaft dosing segment 90L HM 6 RAL2004 cpl.	
2	1	00053592	Cylinder screw int. hexag. M12 x 60 galv	
3	1	00053587	Shaft adapter for rubber bearing not var	
4	1	00035967	WASHER 13 (D=40/t=4)zinc-pl.DIN522	
5	1	00047662	Mixing shaft for dosing shaft, replaceable HM 6 RAL2004	1332
6	1	20196324	O-ring 43 x 3 DIN 3770-NBR 70	
7	1	00047664	Dosing segment 45 L HM 6 RAL2004	644
	1	00047696	Dosing segment 60 L HM 6 RAL2004	644
	1	00047703	Dosing segment 90 L HM 6 RAL2004	644
8	1	00023261	Cylindrical screw with hex. socket M8 x 50 DIN 912 zinc-pl.	
9	1	00047694	Coupling dosing-mixing shaft HM 6 RAL2004	
10	2	00045137	Flat screw M12 x 30 DIN 603 zinc-pl.	
11	1	00052741	Rubber bearing HM 6	
12	1	00053569	Socket for external rubber bearing HM 6	
	1	00056227	Socket for external rubber bearing HM 6	
	1	00057091	Socket external rubber bearing HM 6 RAL	
	1	00057103	Socket external rubber bearing HM 6 RAL	
	1	00057128	Socket for external rubber bearing HM 6	
13	2	20208900	Safety nut M12 DIN 985 galv.	

**Spare parts drawing for mixing shafts HM 5**

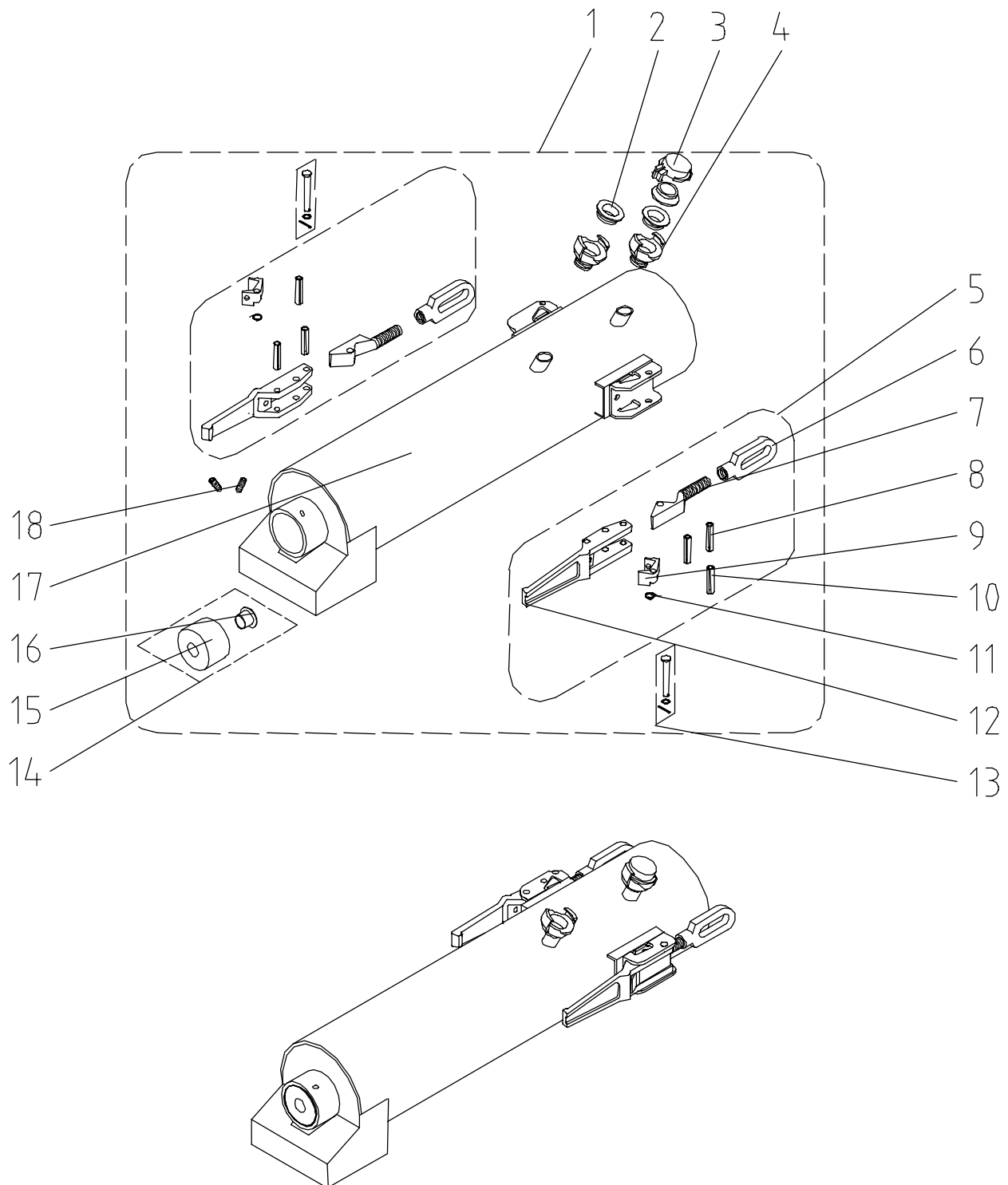
**Spare parts list for mixing shafts HM 5**

Pos.	Qty.	Item no.	Description
1	1	20541102	Mixing shaft HM 5 without cross bars, armoured
2	1	20547604	Dowel pin 10 x 36 DIN 1481
3	1	20547605	Dowel pin 6 x 50 DIN 1481
4	1	20547606	Dowel pin 10 x 50 DIN 1481
5	1	00001210	Mixing shaft HM 5, 6 chambers 1180 mm wear-chamber, reinforced, totally armoured
6	1	20547606	Dowel pin 10 x 50 DIN 1481
7	1	20547605	Dowel pin 6 x 50 DIN 1481
8	1	20547604	Dowel pin 10 x 36 DIN 1481
9	1	20545405	Mixing shaft HM 5, 6 chambers 1125 mm wear-chamber, reinforced
10	1	20547606	Dowel pin 10 x 50 DIN 1481
11	1	20547605	Dowel pin 6 x 50 DIN 1481
12	1	20547604	Dowel pin 10 x 36 DIN 1481
13	1	20545411	Sprocket mixing shaft 8 chambers 1460 mm
14	1	20547606	Dowel pin 10 x 50 DIN 1481
15	1	20547605	Dowel pin 6 x 50 DIN 1481
16	1	20547604	Dowel pin 10 x 36 DIN 1481
17	1	20545410	Sprocket mixing shaft 6 chambers 1180 mm
18	1	20547604	Dowel pin 10 x 36 DIN 1481
19	1	20547605	Dowel pin 6 x 50 DIN 1481
20	1	20547606	Dowel pin 10 x 50 DIN 1481
21	1	20545403	Mixing shaft HM 5 8 chambers 1460 mm
22	1	20547604	Dowel pin 10 x 36 DIN 1481
23	1	20547605	Dowel pin 6 x 50 DIN 1481
24	1	20547606	Dowel pin 10 x 50 DIN 1481
25	1	20545404	Mixing shaft HM 5 without cross bars for low humidity material RAL2004
26	1	20547604	Dowel pin 10 x 36 DIN 1481
27	1	20547605	Dowel pin 6 x 50 DIN 1481
28	1	20547606	Dowel pin 10 x 50 DIN 1481
29	1	20209601	Hex. screw M10 x 45 DIN 931 galv.
30	1	20545402	Wear chamber, reinforced, for mixing shaft HM 5 RAL2004
31	1	20207210	Safety nut M10 DIN 985 galv.

**Spare parts drawing for mixing shafts HM 2, HM 3, HM 200, HM 2002, HM 4000, HM 4004**

**Spare parts list for mixing shafts HM 2, HM 3, HM 200, HM 2002, HM 4000, HM 4004**

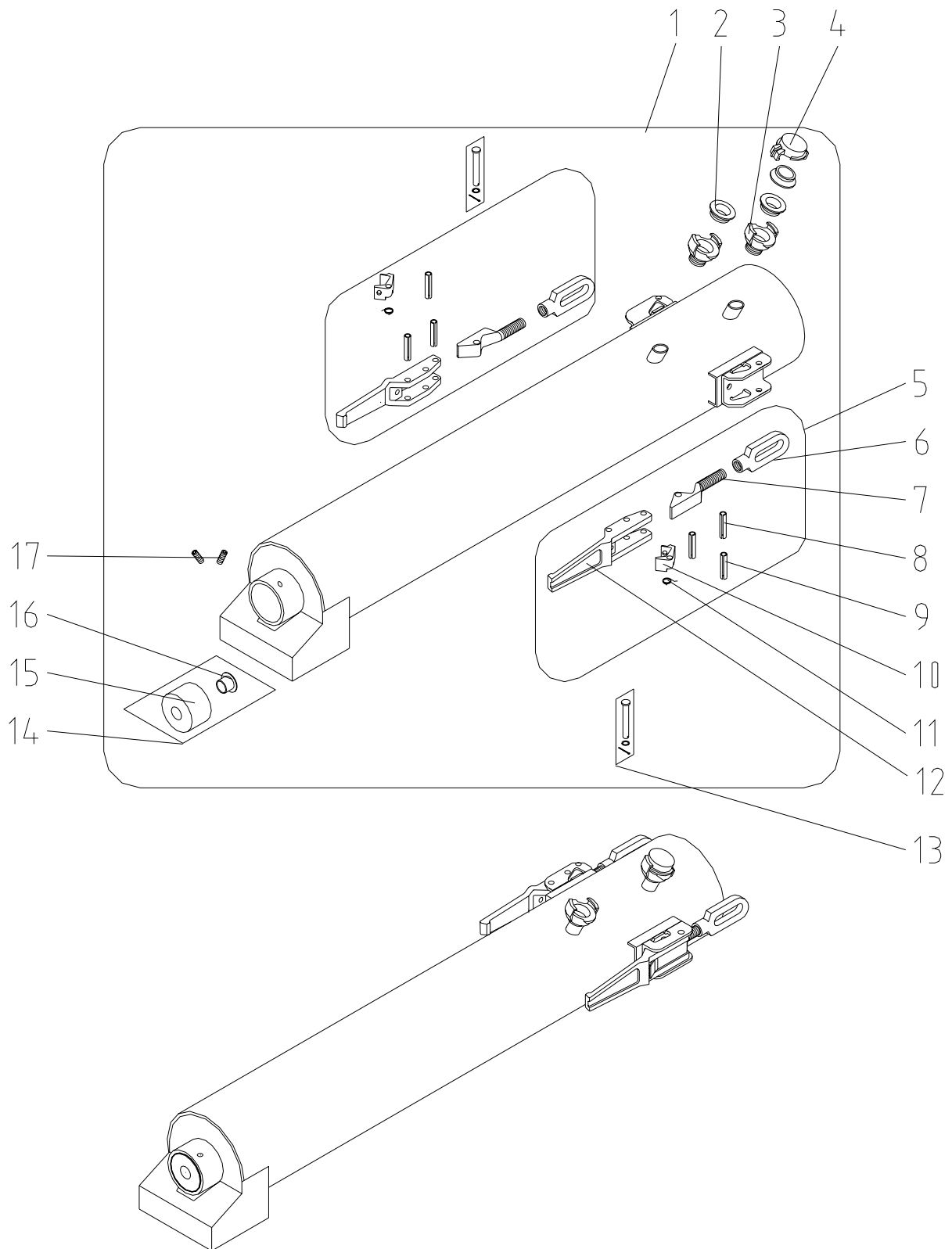
Pos.	Qty.	Item no.	Description
1	1	20547604	Dowel pin 10 x 36 DIN 1481
2	1	20547606	Dowel pin 10 x 50 DIN 1481
3	1	20547605	Dowel pin 6 x 50 DIN 1481
4	1	20549530	Mixing shaft HM 3, 300 mm extended RAL2004
5	1	20547600	Dowel pin 10 x 40 DIN 1481
6	1	20547603	Dowel pin 6 x 40 DIN 1481
7	1	00021499	Mixing shaft HM 2000/2/2002 without clearing unit
	1	00019967	Mixing shaft HM 2/22/24/2002 with clearing unit
8	1	20547604	Dowel pin 10 x 36 DIN 1481
9	1	20548110	Adapter for mixing shaft HM 2/200/2002 RAL2004
10	1	00020002	NO LONGER AVAILABLE, REPLACEMENT 00 02 14 96
	1	00021495	Mixing shaft HM 200/2002 rectangular with clearing unit RAL2004
11	1	20547210	Mixing shaft HM 2002, HM2 300 mm longer RAL2004
12	1	20551000	Mixing shaft, 6 chambers, 1060 mm long
13	1	20541100	Mixing shaft HM 5 5 chambers, shortened dosing channel
14	1	00001434	Mixing shaft HM 3/WMP 30
15	1	20549505	Mixing shaft HM 3 RAL2004
16	1	20547220	Sprocket mixing shaft HM 200
	1	00046943	Sprocket mixing shaft HM 5 earth-moist RAL2004
17	1	00019967	Mixing shaft HM 2/22/24/2002 with clearing unit
18	1	00021496	Mixing shaft HM 200/2002 rectangular without clearing unit
	1	00021495	Mixing shaft HM 200/2002 rectangular with clearing unit RAL2004
19	1	00038706	Mixing shaft CMP for rubber mixing tube unl.
20	1	00036823	Mixing shaft HM 3/CMP with hold-up roller for rubber mixing tube RAL2004

**Spare parts drawing for mixing tube HM 2**



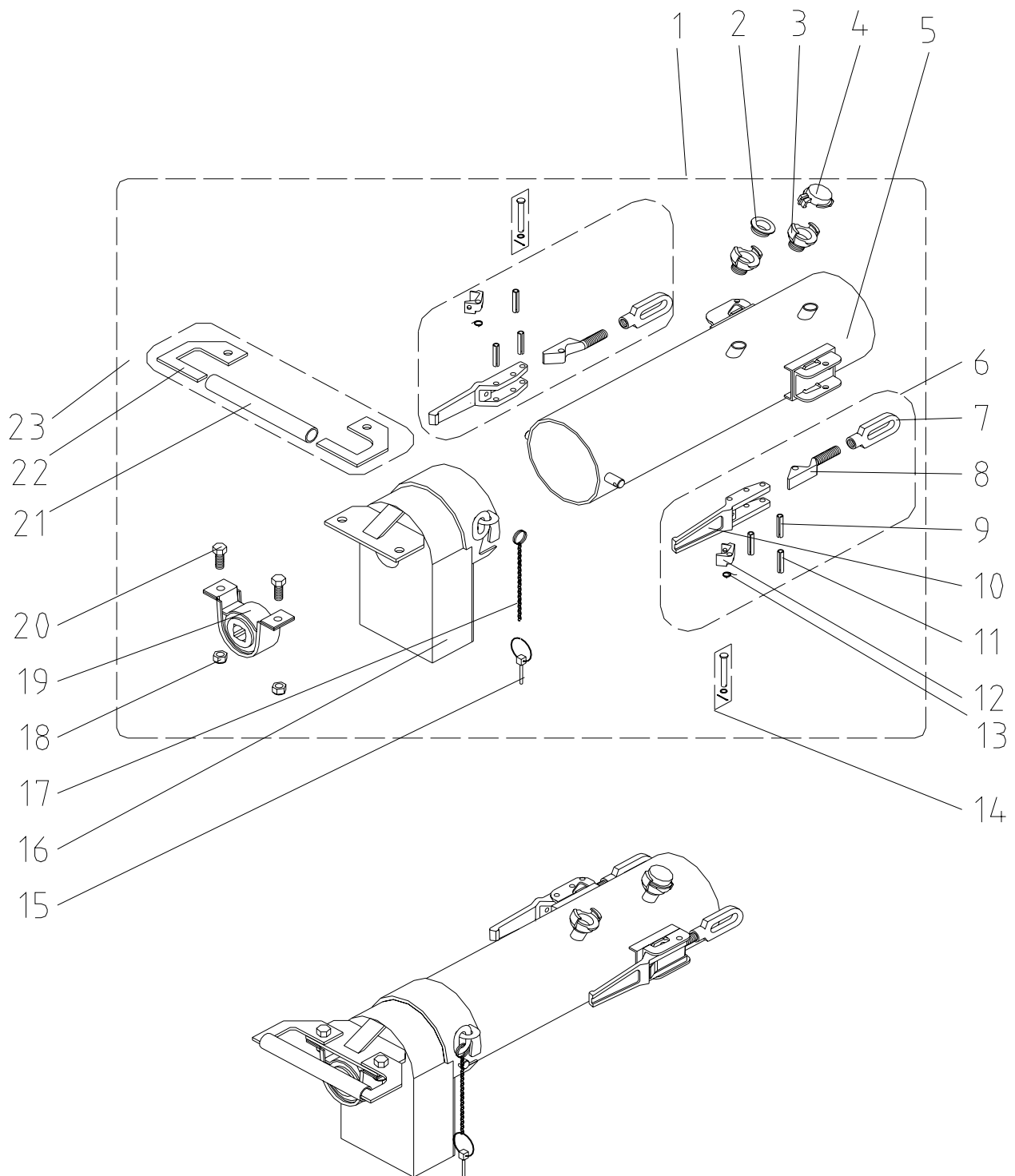
**Spare parts list for mixing tube HM 2**

Pos.	Qty.	Item no.	Description
1	1	20548200	Mixing tube HM 2 cpl.
	1	20548206	Mixing tube HM 2 cpl. RAL9010
2	3	20201700	Gasket Geka coupling
3	1	20201650	Geka coupling dummy cover
4	2	20200900	Geka coupling 1/2" ext. thread
5	2	20100801	Snap lock with safety device M14
6	2	20209971	Nut for snap lock M14x1.5
7	2	20209974	Screw for snap lock
8	4	20208519	Dowel pin 8 x 40 DIN 1481
9	2	20547602	Dowel pin 5 x 36 DIN 1481
10	2	20100802	Snap lock M14
11	2	20100804	Spring M14
12	2	20100803	Handle for snap lock M14
13	2	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
14	1	20548210	Bearing bush HM 2/2000/2002 with bushing
15	1	20026002	Bearing bushing Thermoplast D60 x 40
16	1	20026001	Glide bearing with insert IHG-BB 2017DU
17	1	20548207	Mixing tube HM 2 RAL9010
18	2	20209992	Threaded pin hex.socket M6 x 6 DIN 914 galv.

**Spare parts drawing for mixing tube HM 2, 300 mm longer**

**Spare parts list for mixing tube HM 2, 300 mm longer**

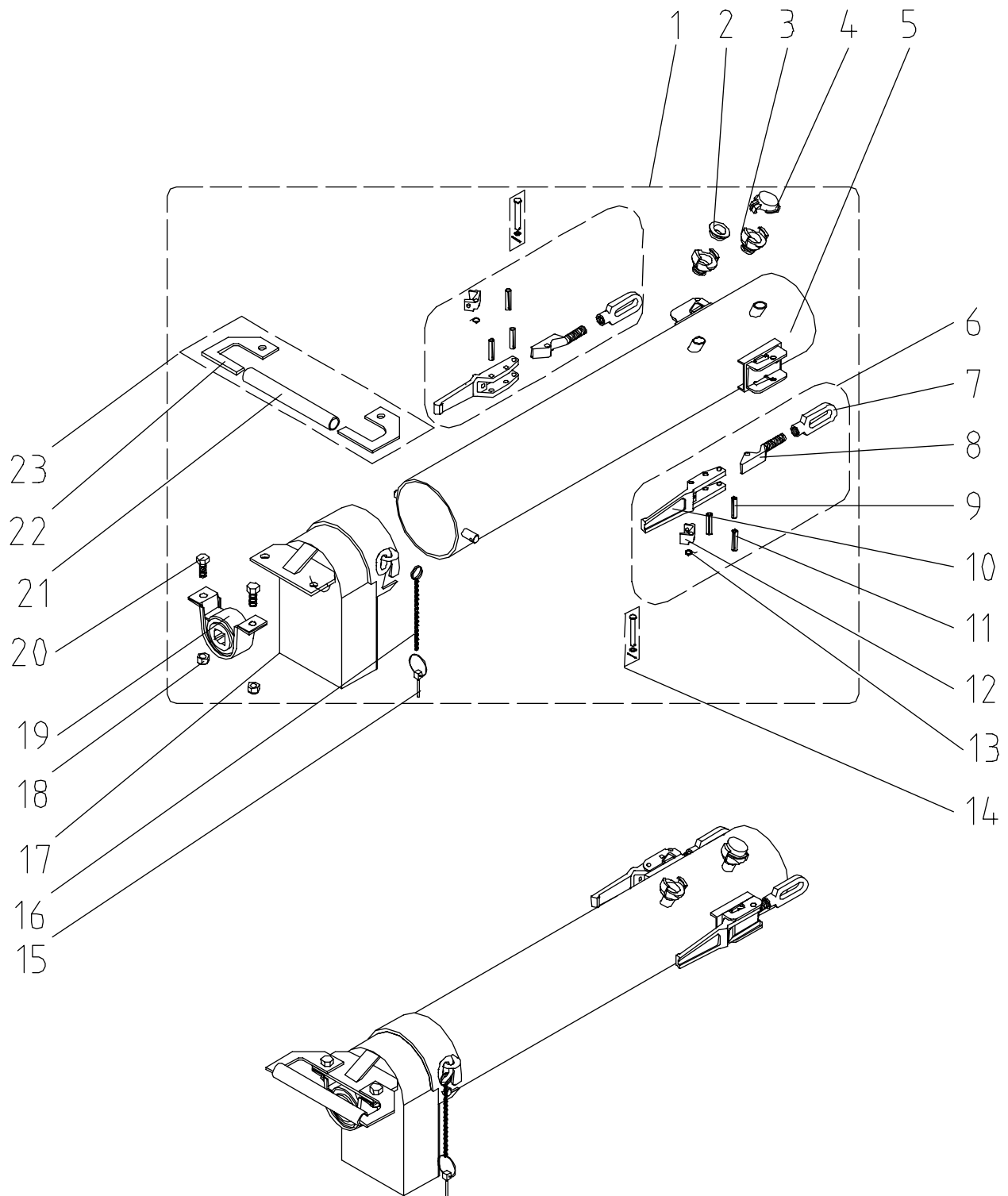
Pos.	Qty.	Item no.	Description
1	1	20548202	NO LONGER AVAILABLE, REPLACEMENT 00 00 13 91
2	3	20201700	Gasket Geka coupling
3	2	20200900	Geka coupling 1/2" ext. thread
4	1	20201650	Geka coupling dummy cover
5	2	20100801	Snap lock with safety device M14
6	2	20209971	Nut for snap lock M14x1.5
7	2	20209974	Screw for snap lock
8	4	20208519	Dowel pin 8 x 40 DIN 1481
9	2	20547602	Dowel pin 5 x 36 DIN 1481
10	2	20100802	Snap lock M14
11	2	20100804	Spring M14
12	2	20100803	Handle for snap lock M14
13	2	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
14	1	20548210	Bearing bush HM 2/2000/2002 with bushing
15	1	20026002	Bearing bushing Thermoplast D60 x 40
16	1	20026001	Glide bearing with insert IHG-BB 2017DU
17	2	20209992	Threaded pin hex.socket M6 x 6 DIN 914 galv.

**Spare parts drawing for mixing tubes HM 2, Hm 22 / 24, HM 104, HM 200, HM 204, HM 2002**

**Spare parts list for mixing tubes HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002**

Pos.	Qty.	Item no.	Description
1	1	20548520	Mixing tube HM 2/200/2002 cpl.
	1	20548521	Mixing tube HM 2/200/2002 cpl., RAL9010
	1	00020979	Mixing tube HM 2/200/2002 cpl. RAL1012
	1	00002033	Mixing tube HM 2/200/2002 RAL1018 cpl.
2	1	20201700	Gasket Geka-coupling
3	2	20200900	Geka coupling 1/2" ext. thread
4	1	20201650	Geka coupling dummy cover
5	1	20548105	Mixing tube HM 2/200/2002 RAL2004
	1	20548113	Mixing tube HM 2/200/2002 RAL9010
	1	00002034	Mixing tube HM 2/200/2002 RAL1018
	1	00020984	Mixing tube HM 2/200/2002 RAL1012
6	2	20100801	Snap lock with safety device M14
7	2	20209971	Nut for snap lock M14 x 1.5
8	2	20209974	Screw for snap lock
9	2	20208519	Dowel pin 8 x 40 DIN 1481
10	2	20100803	Handle for snap lock M 14
11	2	20547602	Dowel pin 5 x 36 DIN 1481
12	2	20100802	Snap lock M14
13	2	20100804	Spring M14
14	2	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
15	1	20101010	Splint D 4.5 with ring
16	1	20548103	Mortar outlet flange removable HM 2/200/2002 RAL2004
	1	20548114	Mortar outlet flange removable HM 2/200/2002 RAL9010
	1	00002035	Mortar output flange removable HM 2/200/2002 RAL1018
17	1	20552910	Safety chain 2 mm 250 mm long K20
18	2	20208900	Safety nut M12 DIN 985 galv.
19	1	20545501	Bearing with square bore and housing
20	2	20206801	Hex. screw M12 x 30 DIN 933 galv.
21	1	00002149	Tube 3/4" x 2.6 x 210 RAL2004
	1	00002221	Tube 3/4" x 2.6 x 210 RAL9010
	1	00002751	Tube 3/4" x 2.6 x 210 RAL1018
22	2	00002148	Fixation for handle mortar output flange RAL2004
	2	00002220	Fixation for handle mortar output flange RAL9010
	2	00002750	Fixation for handle mortar output flange HM 200 RAL1018
23	1	00002147	Handle for mortar outlet flange cpl. HM 200
	1	00002219	Handle for mortar outlet flange cpl. HM 200 RAL9010
	1	00002749	Handle for mortar outlet flange cpl. HM 200 RAL1018

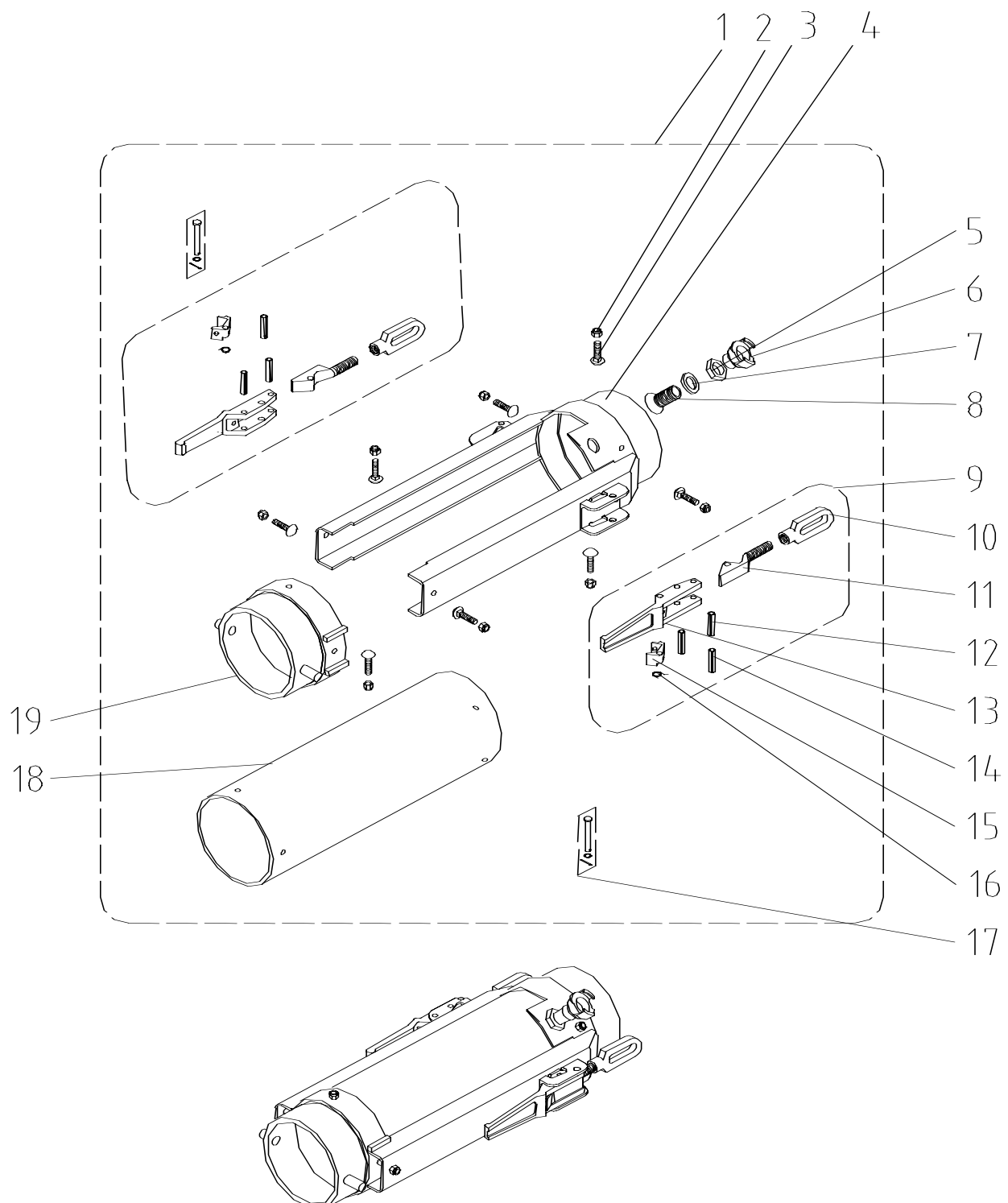
**Spare parts drawing for mixing tubes HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002, 300 mm lon.**



**Spare parts list for mixing tubes HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002, 300 mm lon.**

Pos.	Qty.	Item no.	Description
1	1	00001391	Mixing tube HM 2/200/2002 300 mm longer cpl
	1	00002295	Mixing tube HM 2/200/2002 300 mm longer cpl. RAL9010
2	1	20201700	Gasket Geka-coupling
3	2	20200900	Geka coupling 1/2" ext. thread
4	1	20201650	Geka coupling dummy cover
5	1	00001392	Mixing tube HM 2/200/2002 300 mm longer
	1	00002296	Mixing tube HM 2/200/2002 300 mm longer RAL9010
6	2	20100801	Snap lock with safety device M14
7	1	20209971	Nut for snap lock M14x1.5
8	1	20209974	Screw for snap lock
9	2	20208519	Dowel pin 8 x 40 DIN 1481
10	1	20100803	Handle for snap lock M 14
11	1	20547602	Dowel pin 5 x 36 DIN 1481
12	1	20100802	Snap lock M14
13	1	20100804	Spring M14
14	2	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
15	1	20101010	Splint D 4.5 with ring
16	1	20552910	Safety chain 2 mm 250 mm long K20
17	1	20548103	Mortar outlet flange removable HM 2/200/2002 RAL2004
	1	20548114	Mortar outlet flange removable HM 2/200/2002 RAL9010
18	2	20208900	Safety nut M12 DIN 985 galv.
19	1	20545501	Bearing with square bore and housing
20	2	20206801	Hex. screw M12 x 30 DIN 933 galv.
21	1	00002149	Tube 3/4" x 2.6 x 210 RAL2004
		00002221	Tube 3/4" x 2.6 x 210 RAL9010
22	2	00002148	Fixation for handle mortar output flange RAL2004
	2	00002220	Fixation for handle mortar output flange RAL9010
23	1	00002147	Handle for mortar outlet flange cpl. HM 200
	1	00002219	Handle for mortar outlet flange cpl. HM 200 RAL9010

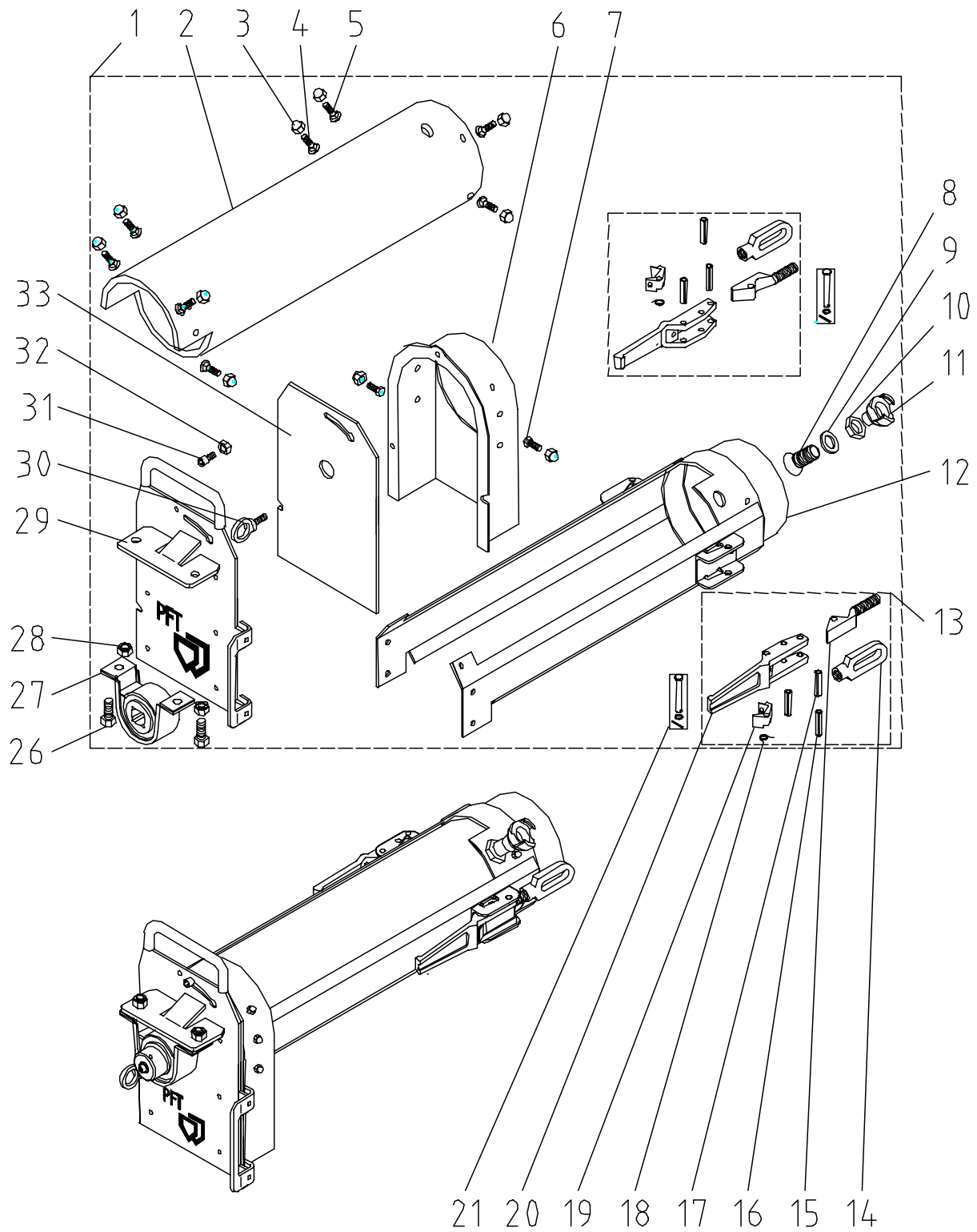
## Spare parts drawing for rubber mixing tube HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002





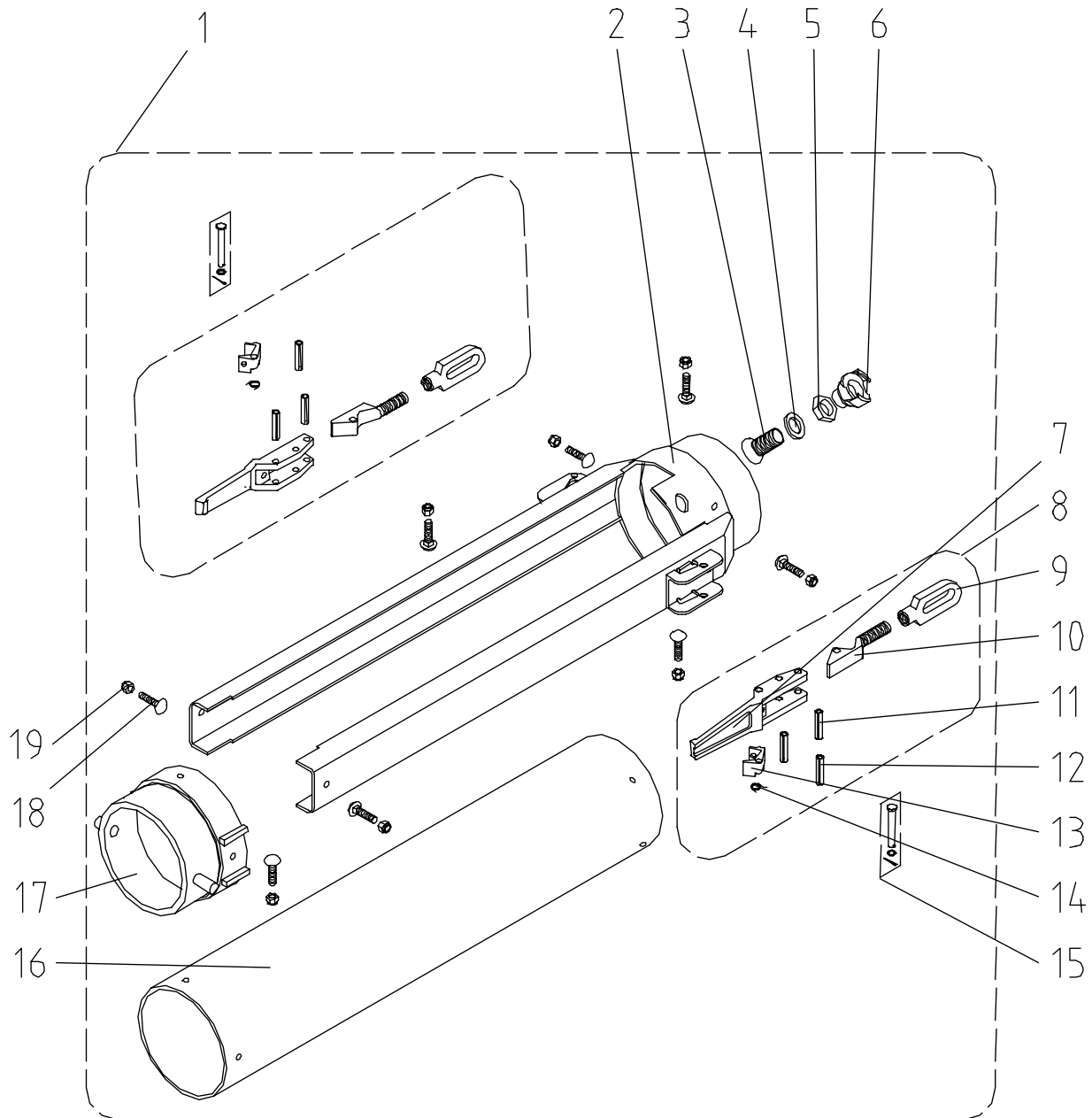
**Spare parts list for rubber mixing tube HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002**

Pos.	Qty.	Item no.	Description
1	1	00002155	Mixing tube HM 2 with rubber mixing zone
2	8	20207200	Safety nut M 8 DIN 985 galv.
3	8	20206323	Saucer-head screw M8 x 25 DIN 603 galv.
4	1	00002156	Connection flange rubber mixing tube HM 2 RAL2004
5	1	00002811	Nut 1/2" int. thread
6	1	20201300	Geka coupling 1/2" int. thread
7	1	00002812	Washer for pin (22/34 x 4) DIN 1440
8	1	00002229	Water inlet for rubber mixing tube HM 2
9	2	20100801	Snap lock with safety device M14
10	2	20209971	Nut for snap lock M14 x 1.5
11	2	20209974	Screw for snap lock
12	4	20208519	Dowel pin 8 x 40 DIN 1481
13	2	20100803	Handle for snap lock M14
14	2	20547602	Dowel pin 5 x 36 DIN 1481
15	2	20100802	Snap lock M14
16	2	20100804	Spring M14
17	2	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
18	1	00002158	Rubber mixing tube HM 2
19	1	00002157	Terminal ring rubber mixing tube HM 2 RAL2004

**Spare parts drawing for rubber mixing tube HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002**

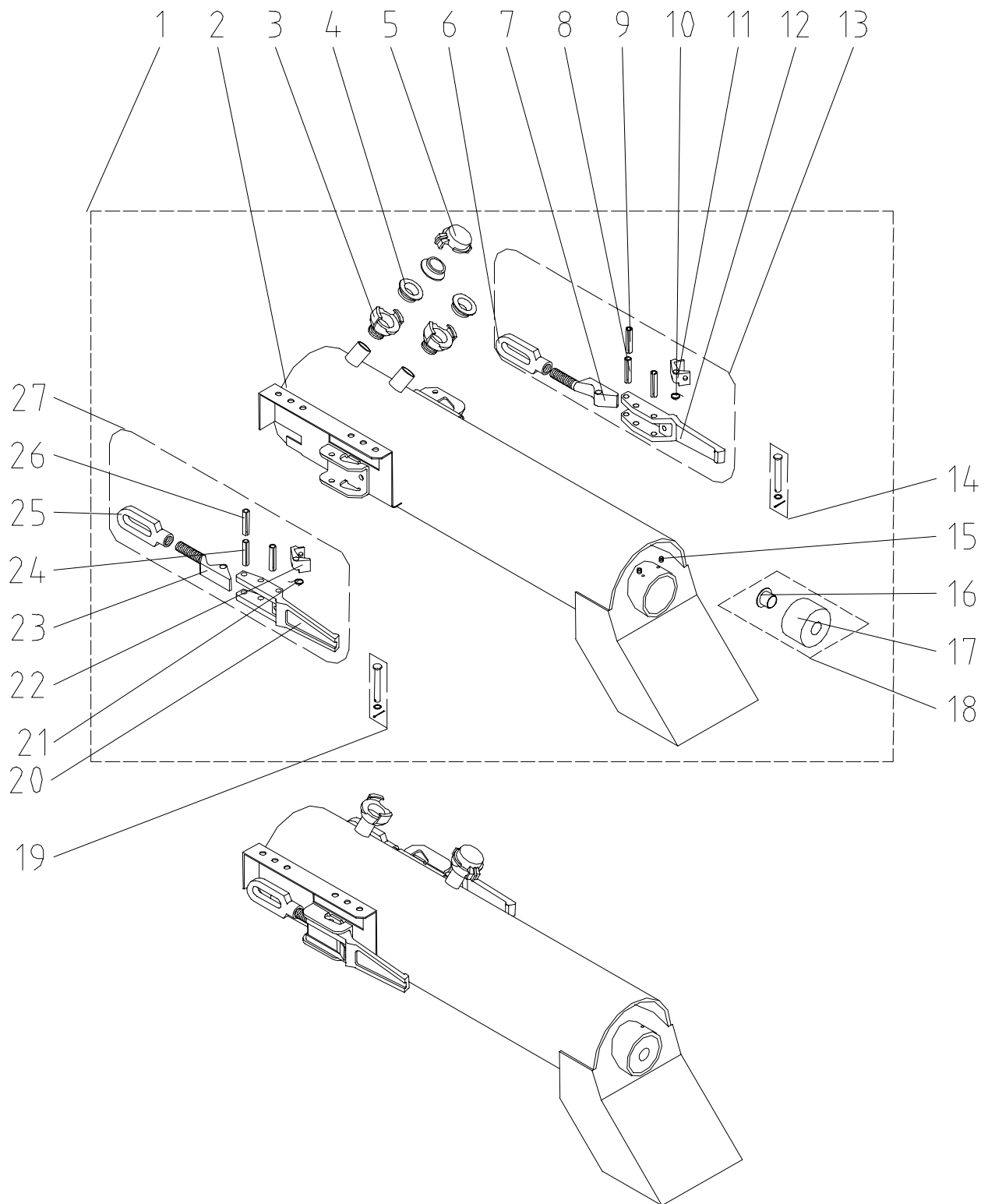
**Spare parts list for rubber mixing tube HM 2, HM 22 / 24, HM 104, HM 200, HM 204, HM 2002**

Pos.	Qty.	Item no.	Description
1	1	00012594	Mixing tube HM 2 with rubber mixing zone and fixed mortar output flange RAL2004
	1	00020947	Mixing tube HM 2 with rubber mixing zone and rigid mortar outlet flange RAL1012
2	1	00012593	Rubber mixing tube HM 104/204 620 mm long
3	10	20206603	Safety nut M8 DIN 986 galv.
4	4	20206322	Saucer-head screw M8 x 20 DIN 603 galv.
5	4	20206323	Saucer-head screw M8 x 25 DIN 603 galv.
6	1	00012592	Mortar output flange fixed to rubber mixing tube HM 2 RAL2004
	1	00019968	Mortar outlet flange HM 2 rigid RAL9001
7	2	20206100	Hex. screw M8 x 20 DIN 933 galv.
8	1	00002229	Water inlet for rubber mixing tube HM 2
9	1	00002812	Washer for pin (22/34x4) DIN 1440
10	1	00002811	Nut 1/2" int. thread
11	1	20201300	Geka coupling 1/2" int. thread
12	1	00012591	Flange for rubber mixing tube HM 2 with fixed mortar output
13	2	20100801	Snap lock with safety device M14
14	2	20209971	Nut for snap lock M14 x 1.5
15	2	20209974	Screw for snap lock
16	4	20547602	Dowel pin 5 x 36 DIN 1481
17	2	20208519	Dowel pin 8 x 40 DIN 1481
18	2	20100804	Spring M14
19	2	20100802	Snap lock M14
20	2	20100803	Handle for snap lock M14
21	2	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
24	1	00019750	Bush rubber-metal buffer
25	1	20209903	Countersunk screw M8 x 16 DIN 963 galv.
26	2	20206801	Hex. screw M12 x 30 DIN 933 galv.
27	1	20545501	Bearing with square bore and housing
28	2	20208900	Safety nut M12 DIN 985 galv.
29	1	00019420	Front plate for mortar output flange RAL2004
	1	00019970	Lug mortar outlet flange RAL9001
30	1	20209979	Ring screw M8 x 30 galv.
31	1	20209711	Hex. socket head screw M8 x 20 DIN 912 galv.
32	1	20206400	Hex. nut M8 DIN 934 galv.
33	1	00019421	Rubber front plate for mortar output flange

**Spare parts drawing for rubber mixing tube HM 2, 300 mm longer**

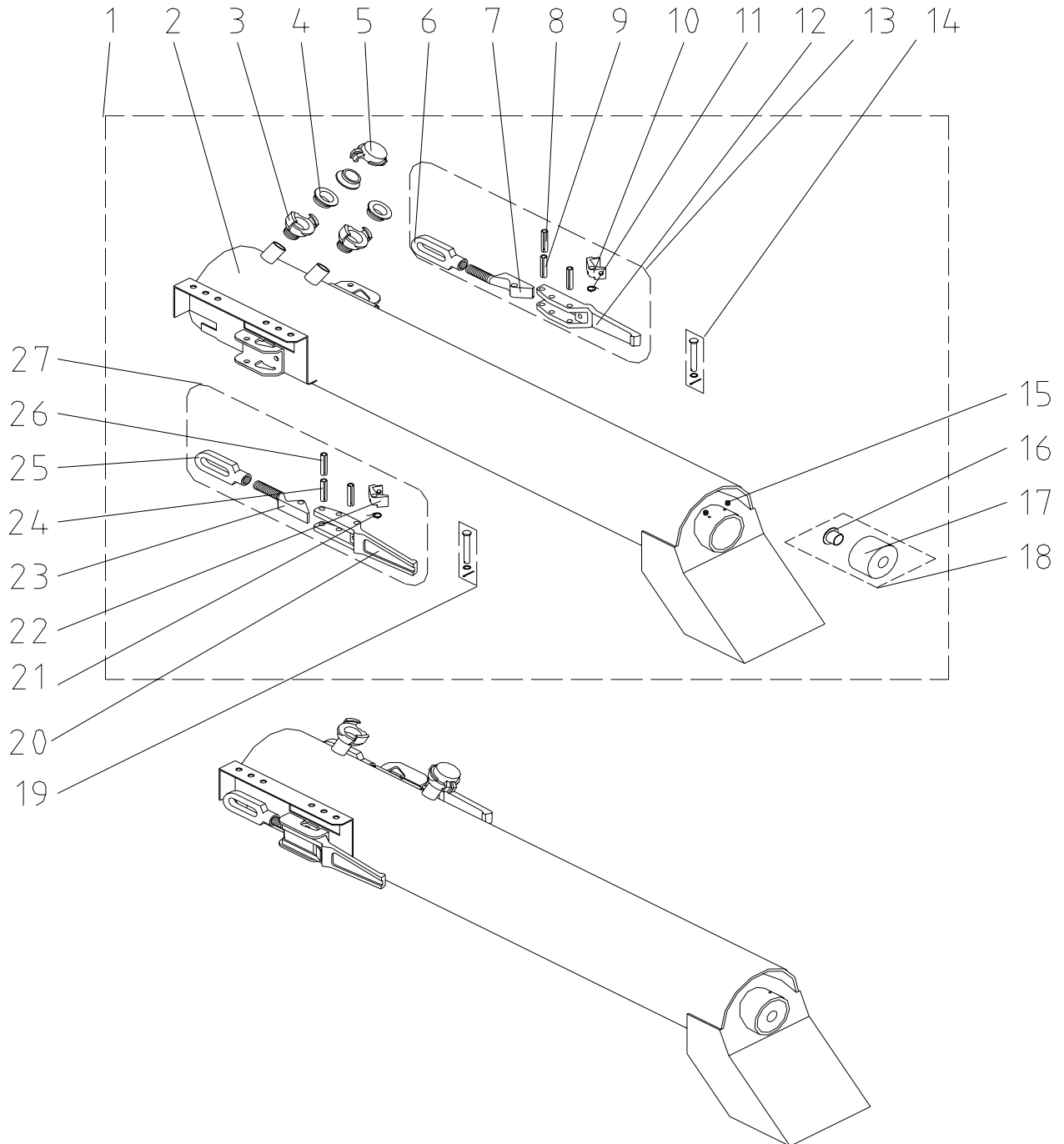
**Spare parts list for rubber mixing tube HM 2, 300 mm longer**

Pos.	Qty.	Item no.	Description
1	1	00020291	Mixing tube HM 2 with rubber mixing zone 300 mm extended for removable mortar outlet flange
2	1	00020293	Flange rubber mixing tube HM 2 300 mm extended without outlet flange RAL2004
3	1	00002229	Water inlet for rubber mixing tube HM 2
4	1	00002812	Washer for pin (22/34 x 4) DIN 1440
5	1	00002811	Nut 1/2" int. thread
6	1	20201300	Geka coupling 1/2" int. thread
7	1	20100803	Handle for snap lock M 14
8	1	20100801	Snap lock with safety device M14
9	1	20209971	Nut for snap lock M14 x 1.5
10	1	20209974	Screw for snap lock
11	1	20208519	Dowel pin 8 x 40 DIN 1481
12	1	20547602	Dowel pin 5 x 36 DIN 1481
13	1	20100802	Snap lock M14
14	1	20100804	Spring M14
15	1	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
16	1	00020292	Rubber mixing tube HM 2 740 mm straight for removable outlet flange
17	1	00002157	Terminal ring rubber mixing tube HM 2 RAL2004
18	1	20206323	Saucer-head screw M8 x 25 DIN 603 galv.
19	1	20207200	Safety nut M8 DIN 985 galv.

**Spare parts drawing for mixing tube HM 22, HM 24**

**Spare parts list for mixing tube HM 22, HM 24**

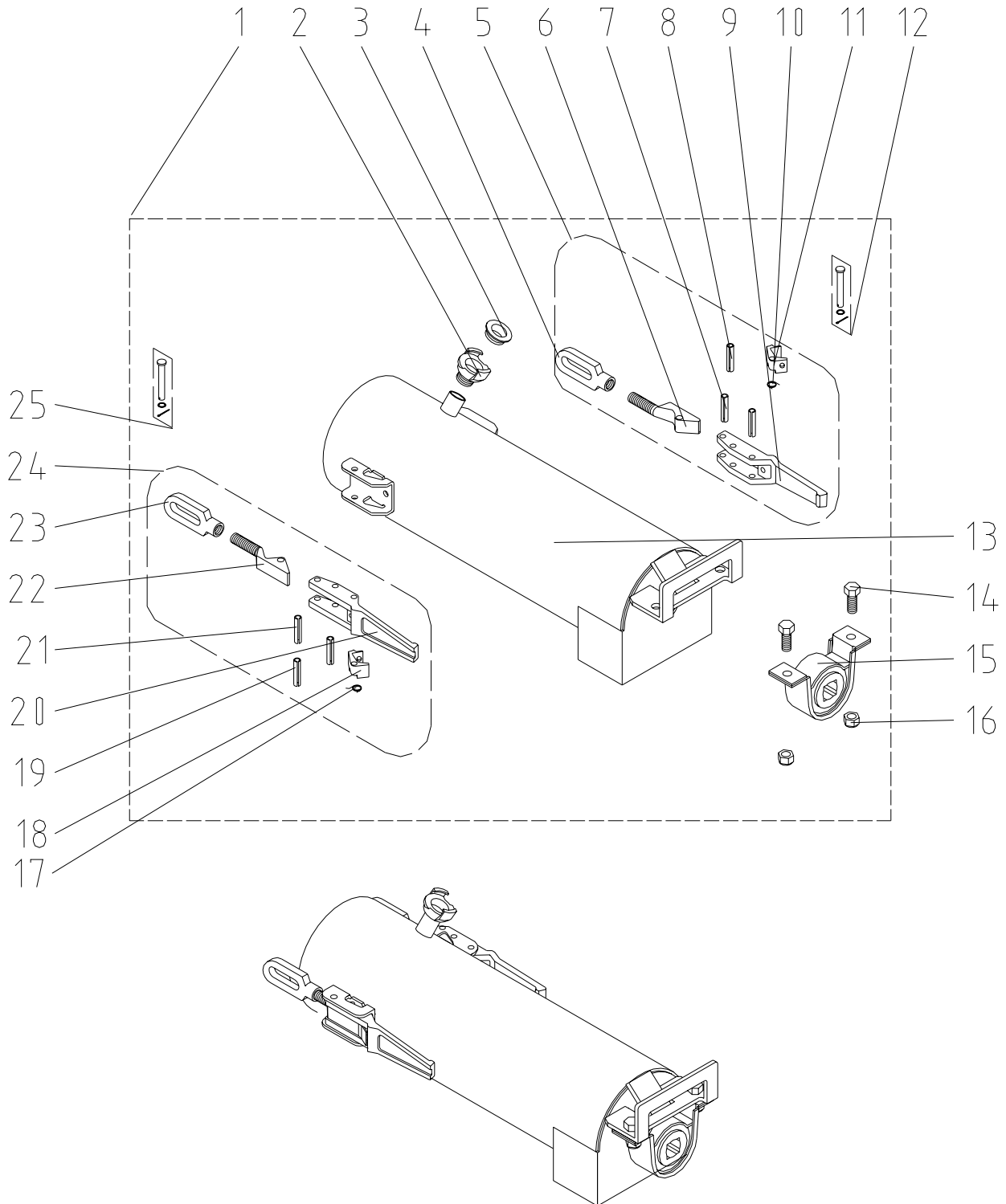
Pos.	Qty.	Item no.	Description
1	1	00002116	Mixing tube HM 22/24 cpl.
2	1	00040746	Mixing tube HM 22/24 RAL9002
	1	00002117	Mixing tube HM 22/24 RAL2004
3	2	20200900	Geka coupling 1/2" ext. thread
4	3	20201700	Gasket Geka-coupling
5	1	20201650	Geka coupling dummy cover
6	1	20209971	Nut for snap lock M14 x 1.5
7	1	20209974	Screw for snap lock
8	2	20208519	Dowel pin 8 x 40 DIN 1481
9	1	20547602	Dowel pin 5 x 36 DIN 1481
10	1	20100804	Spring M14
11	1	20100802	Snap lock M14
12	1	20100803	Handle for snap lock M14
13	1	20100801	Snap lock with safety device M14
14	1	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
15	2	20209992	Threaded pin hex. socket M6 x 6 DIN 914 galv.
16	1	20026001	Glide bearing with insert IHG-BB 2017DU
17	1	20026002	Bearing bushing Thermoplast D60 x 40
18	1	20548210	Bearing bush HM 2/2000/2002 with bushing
19	1	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
20	1	20100803	Handle for snap lock M14
21	1	20100804	Spring M14
22	1	20100802	Snap lock M14
23	1	20209974	Screw for snap lock
24	2	20208519	Dowel pin 8 x 40 DIN 1481
25	1	20209971	Nut for snap lock M14x1.5
26	1	20547602	Dowel pin 5 x 36 DIN 1481
27	1	20100801	Snap lock with safety device M14

**Spare parts drawing for mixing tube HM 22, HM 24, 300 mm longer**



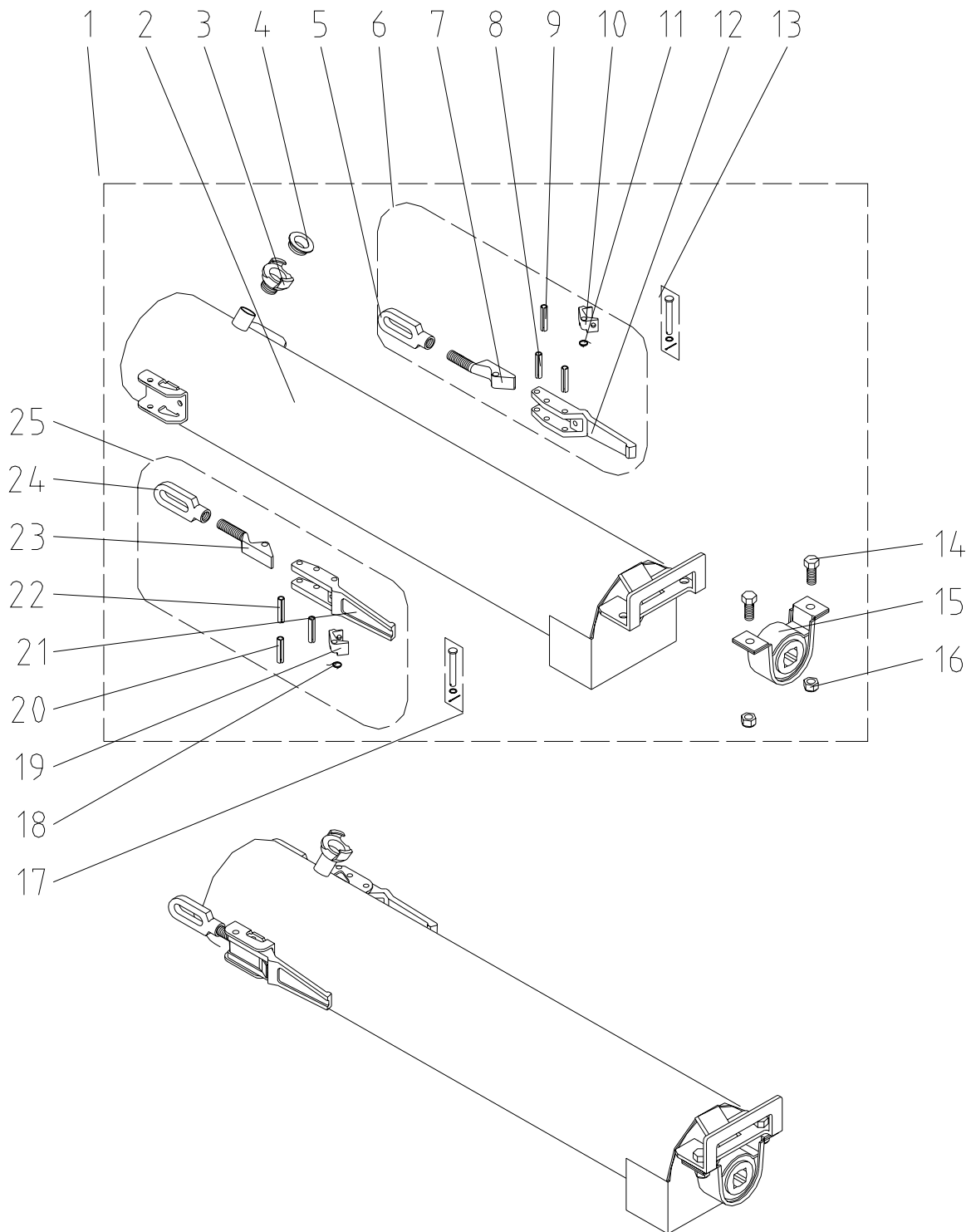
**Spare parts list for mixing tube HM 22, HM 24, 300 mm longer**

Pos.	Qty.	Item no.	Description
1	1	00002513	Mixing tube HM 22/24 cpl. 300 mm longer
2	1	00002514	Mixing tube HM 22/24 300 mm longer
3	2	20200900	Geka coupling 1/2" ext. thread
4	3	20201700	Gasket Geka-coupling
5	1	20201650	Geka coupling dummy cover
6	1	20209971	Nut for snap lock M14 x 1.5
7	1	20209974	Screw for snap lock
8	1	20547602	Dowel pin 5 x 36 DIN 1481
9	2	20208519	Dowel pin 8 x 40 DIN 1481
10	1	20100802	Snap lock M14
11	1	20100804	Spring M14
12	1	20100803	Handle for snap lock M14
13	1	20100801	Snap lock with safety device M14
14	1	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
15	2	20209992	Threaded pin hex.socket M6 x 6 DIN 914 galv.
16	1	20026001	Glide bearing with insert IHG-BB 2017DU
17	1	20026002	Bearing bushing Thermoplast D60 x 40
18	1	20548210	Bearing bush HM 2/2000/2002 with bushing
19	1	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
20	1	20100803	Handle for snap lock M14
21	1	20100804	Spring M14
22	1	20100802	Snap lock M14
23	1	20209974	Screw for snap lock
24	2	20208519	Dowel pin 8 x 40 DIN 1481
25	1	20209971	Nut for snap lock M14 x 1.5
26	1	20547602	Dowel pin 5 x 36 DIN 1481
27	1	20100801	Snap lock with safety device M14

**Spare parts drawing for mixing tube CMP, HMP, HM 3**

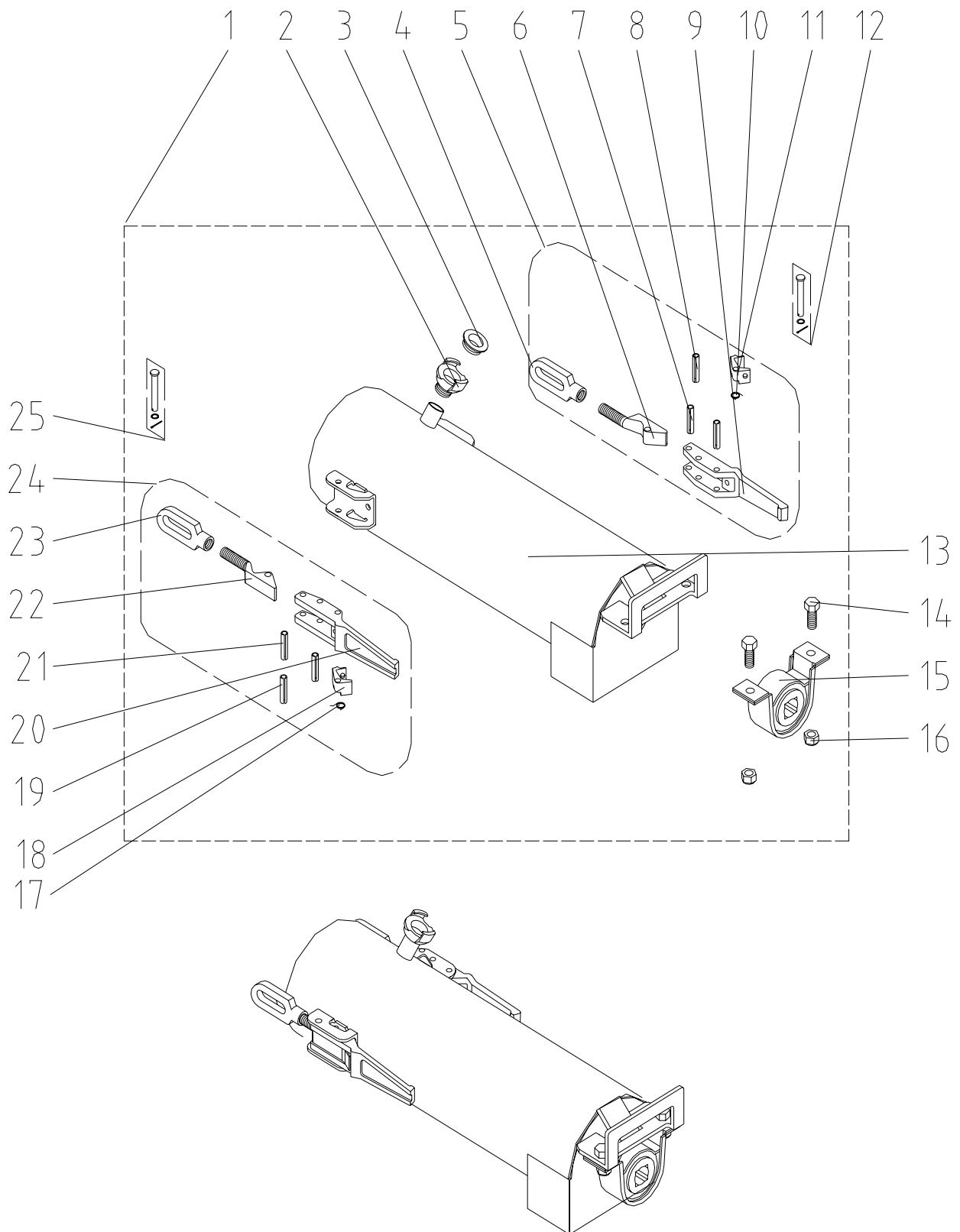
**Spare parts list for mixing tube CMP, HMP, HM 3**

Pos.	Qty.	Item no.	Description
1	1	00002639	Mixing tube HM 3 cpl.
2	1	20200900	Geka coupling 1/2" ext. thread
3	1	20201700	Gasket Geka-coupling
4	1	20209971	Nut for snap lock M14 x 1.5
5	1	20209974	Screw for snap lock
6	1	20100801	Snap lock with safety device M14
7	2	20208519	Dowel pin 8 x 40 DIN 1481
8	1	20547602	Dowel pin 5 x 36 DIN 1481
9	1	20100803	Handle for snap lock M14
10	1	20100804	Spring M14
11	1	20100802	Snap lock M14
12	1	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
13	1	20549504	Mixing tube HM 3 RAL2004
14	2	20209963	Hex. screw M12 x 25 DIN 933 galv.
15	1	20545501	Bearing with square bore and housing
16	2	20208900	Safety nut M12 DIN 985 galv.
17	1	20100804	Spring M14
18	1	20100802	Snap lock M14
19	1	20547602	Dowel pin 5 x 36 DIN 1481
20	1	20100803	Handle for snap lock M14
21	2	20208519	Dowel pin 8 x 40 DIN 1481
22	1	20209974	Screw for snap lock
23	1	20209971	Nut for snap lock M14 x 1.5
24	1	20100801	Snap lock with safety device M14
25	1	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.

**Spare parts drawing for mixing tube CMP, HMP, HM 3, 300 mm longer**

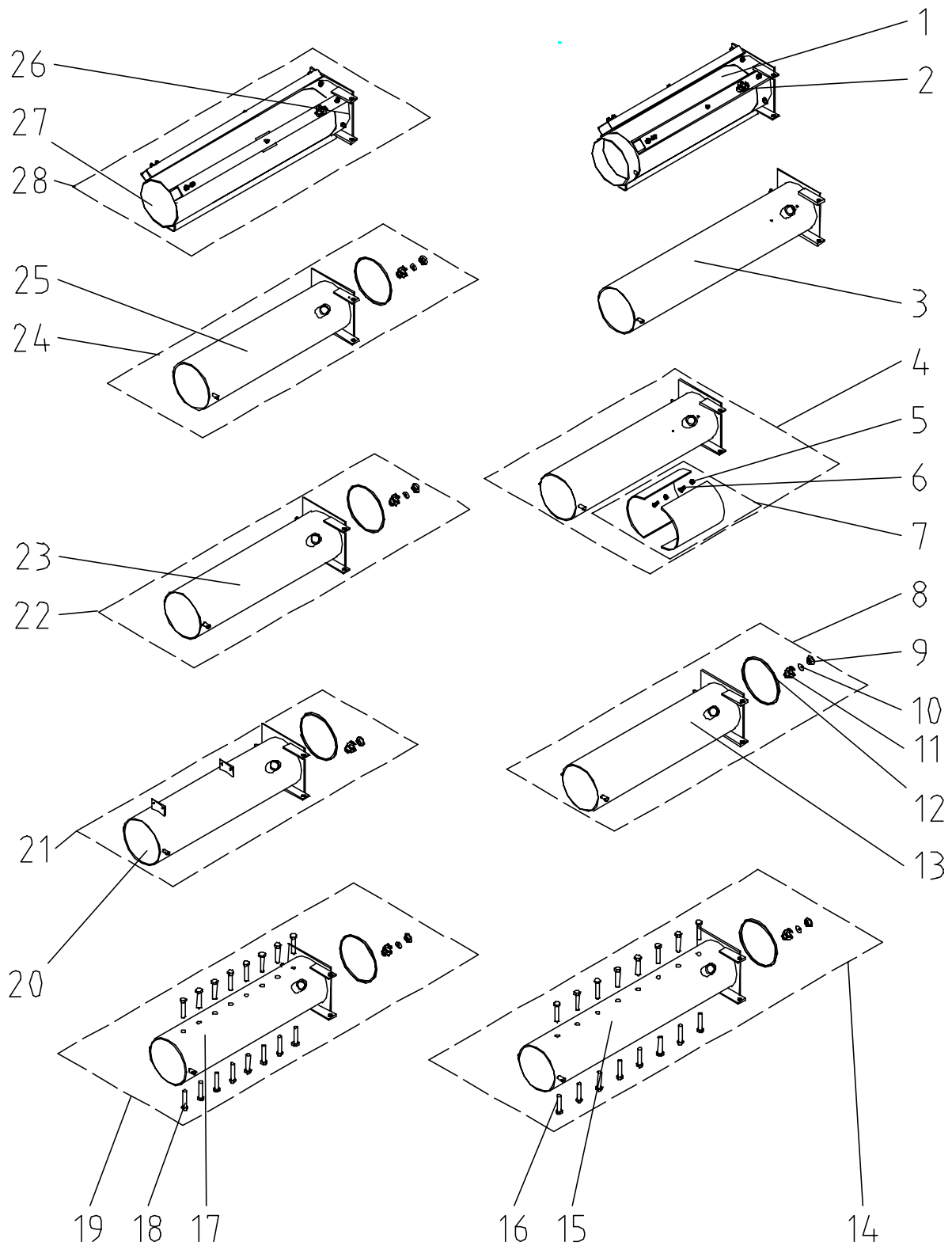
**Spare parts list for mixing tube CMP, HMP, HM 3, 300 mm longer**

Pos.	Qty.	Item no.	Description
1	1	00002273	Mixing tube HM 3/HMP 300 mm longer cpl.
2	1	00001643	Mixing tube HM 3/HMP 300 mm longer RAL2004
3	1	20200900	Geka coupling 1/2" ext. thread
4	1	20201700	Gasket Geka-coupling
5	1	20209971	Nut for snap lock M14 x 1.5
6	1	20100801	Snap lock with safety device M14
7	1	20209974	Screw for snap lock
8	2	20208519	Dowel pin 8 x 40 DIN 1481
9	1	20547602	Dowel pin 5 x 36 DIN 1481
10	1	20100802	Snap lock M14
11	1	20100804	Spring M14
12	1	20100803	Handle for snap lock M14
13	1	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
14	2	20209963	Hex. screw M12 x 25 DIN 933 galv.
15	1	20545501	Bearing with square bore and housing
16	2	20208900	Safety nut M12 DIN 985 galv.
17	1	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
18	1	20100804	Spring M14
19	1	20100802	Snap lock M14
20	1	20547602	Dowel pin 5 x 36 DIN 1481
21	1	20100803	Handle for snap lock M14
22	2	20208519	Dowel pin 8 x 40 DIN 1481
23	1	20209974	Screw for snap lock
24	1	20209971	Nut for snap lock M14 x 1.5
25	1	20100801	Snap lock with safety device M14

**Spare parts drawing for mixing tube CMP, HMP, HM 3, shortened mortar output flange**

**Spare parts list for mixing tube CMP, HMP, HM 3, shortened mortar output flange**

Pos.	Qty.	Item no.	Description
1	1	00002184	Mixing tube HM 3 shortened mortar output flange cpl.
2	1	20200900	Geka coupling 1/2" ext. thread
3	1	20201700	Gasket Geka-coupling
4	1	20209971	Nut for snap lock M14 x 1.5
5	1	20100801	Snap lock with safety device M14
6	1	20209974	Screw for snap lock
7	2	20208519	Dowel pin 8 x 40 DIN 1481
8	1	20547602	Dowel pin 5 x 36 DIN 1481
9	1	20100803	Handle for snap lock M14
10	1	20100804	Spring M14
11	1	20100802	Snap lock M14
12	1	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.
13	1	20549509	Mixing tube HM 3 with shortened mortar outlet flange RAL2004
14	2	20209963	Hex. screw M12 x 25 DIN 933 galv.
15	1	20545501	Bearing with square bore and housing
16	2	20208900	Safety nut M12 DIN 985 galv.
17	1	20100804	Spring M14
18	1	20100802	Snap lock M14
19	1	20547602	Dowel pin 5 x 36 DIN 1481
20	1	20100803	Handle for snap lock M14
21	2	20208519	Dowel pin 8 x 40 DIN 1481
22	1	20209974	Screw for snap lock
23	1	20209971	Nut for snap lock M14 x 1.5
24	1	20100801	Snap lock with safety device M14
25	1	20208522	Pin 8 H11 x 58 x 54 with washer and spline galv.

**Spare parts drawing for mixing tube HM 5**



**Spare parts list for mixing tube HM 5**

Pos.	Qty.	Item no.	Description
1	1	20545315	Mixing tube HM 5 with rubber mixing zone
2	1	20201300	Geka coupling 1/2" int. thread
3	1	20545303	Mixing tube HM 5 with wear plates 8 chambers
4	1	00001920	Mixing tube HM 5 6 chambers welded wear plates RAL2004
5	4	20207210	Safety nut M10 DIN 985 galv.
6	4	20209933	Countersunk screw M10 x 25 DIN 7991 galv
7	1	20545301	Wear plate (2 parts) with 4 countersunk screws M10 x 25 for HM 5
8	1	00006934	Mixing tube HM 5 with wear plates cpl. 6 chambers
9	1	20201700	Gasket Geka-coupling
10	1	20209321	Washer 8.4 x 30 x 1.5 galv.
11	1	20200900	Geka coupling 1/2" ext. thread
12	1	20542210	Ring gasket for mixing tube 20 x12 x 645
13	1	00006935	Mixing tube HM 5 with wear plates
14	1	20545311	Mixing tube for sprocket mixing shaft 8 chambers
15	1	20084046	Mixing tube HM 5 with wear plates 8 chambers, for sprocket mixing shaft
16	16	20209967	Hex. screw M20 x 80 modified
17	1	20084059	Mixing tube HM 5 with wear plates 6 chambers, for sprocket mixing shaft
18	16	20209967	Hex. screw M20 x 80 modified
19	1	20545310	Mixing tube for sprocket mixing shaft 6 chambers
20	1	00002211	Mixing tube HM 5 LBS with wear plates 6 chambers RAL2004
		00001675	Mixing tube HM 5 LBS with wear plates 6 chambers RAL1018
21	1	00002210	Mixing tube HM 5 LBS with wear plates 6 chambers cpl.
		00001674	Mixing tube HM 5 LBS with wear plates 6 chambers cpl. RAL1018
	1	00020433	Mixing tube HM 5 LBS for control unit, removable
	1	00020703	Mixing tube HM 5 LBS control unit, removable RAL6018
22	1	00006917	Mixing tube HM 5 6 chambers cpl. welded wear plates
23	1	00001920	Mixing tube HM 5 6 chambers welded wear plates RAL2004
24	1	20545305	Mixing tube HM 5 with wear plates 6 chambers cpl., RAL9010 no.:
25	1	20545304	Mixing tube HM 5 with wear plates 6 chambers, RAL9010
26	1	00019619	Connection flange, extended HM 5 for rubber mixing tube
27	1	00019621	Rubber mixing tube HM 5 1005 mm long
28	1	00019524	Mixing tube HM 5 with rubber mixing zone, 240 mm longer