



**OPERATING AND MAINTENANCE INSTRUCTIONS/
SPARE PARTS**

EDITION 01/2017

**Serving the Gas Industry
Worldwide**

Honeywell

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1. General information

All persons involved with the assembly, operation and/or maintenance of safety shut-off valve HON 711 must read and understand all of the following documents:

- Technical product information 711.01 — this Honeywell document contains the technical data and dimensions of the equipment as well as instructions concerning construction and mode of operation.
- General operating manual for gas pressure regulators and safety devices – this Honeywell document contains information on assembly and operation as well as general information on troubleshooting.
- Operating and maintenance instructions, spare parts 711.21 – this Honeywell document contains more details concerning installation and operation of safety shut-off valve HON 711. Furthermore it contains the maintenance instructions and spare parts drawings and lists of the main valve.
- The various components and units are described in separate booklets "Operating and Maintenance Instructions, spare parts":

Control unit	K 10a, K 11a/1, K 11a/2	672.20
Control unit	K 16, K 17, K 18, K 19	670.20
Sensing valve	HON 910a	910.20

There are national laws and regulations for all sorts of jobs on gas pressure governors, from planning to maintenance. Be sure to comply. (In Germany, for instance, DVGW work sheets G 600, G 459/II, G 491 and G 495.)

Inspection and maintenance intervals depend mostly on operating conditions and the nature and properties of the gas. There are no general rules or recommendations for intervals. For Germany, we recommend to consider maintenance intervals as stated in DVGW work sheet G 495 in a first instance. However, in the mid-term, intervals must be adapted to the requirements of each specific equipment.



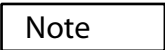
During maintenance, components must be cleaned and then checked thoroughly. This is necessary even if there have not been any unusual observations during operation and/or functional testing. Checks must focus, in particular, on diaphragms and seals and all movable parts and their respective bearings. Any and all defective parts must be replaced with new ones. The same applies to O rings removed during disassembly.

Item numbers mentioned in the specific operating and maintenance instructions correspond with the numbers in the spare parts lists and drawings.

Some parts in the lists and drawings are marked with a letter "W". We recommend to always have a reserve of those parts in stock for maintenance purposes. Those spare parts are put together in another separate list at the end of the spare parts list.

1.1 Safety information

In this manual, safety information is highlighted by means of the following titles and eye catchers:

Eye catcher	Used for:
	Danger to life and limb
	Danger of damage to property and/or the environment
	Important additional information

2. Specific operating instructions

2.1 Opening the safety shut-off valve (SSV).

- Before you can open the SSV actuator, compensate pressure in the bypass line by actuating the sensing valve and
- The switching device may be engaged by pulling the T handle (160) up as far as it will go.

Note

The switching devices of control units 10a and K 11a cannot engage unless the control unit has been engaged first.

- Engage control units K 10a and K 11a by pulling on the switching rod.
To do that, unscrew the sealing cap, turn it around and put it back on the switching rod (see 672.20).

Note

Control units K 10a and K 11a work on the principle of underpressure shut-off. They can be engaged only if the pressure at the measuring point corresponds to the operating pressure.

2.2 Actuation tests with control units 10a and K 11a



Caution

Actuation tests must not be carried out unless the control unit has been mounted on the switching device and the latter has been mounted on the actuator. Otherwise, mechanical damage might occur.

- Engage the hand wheel on the actuator housing by turning it in the direction of the device.
- Turn the hand wheel in the direction of the arrow until the valve flap engages in its open position.

Note

The hand wheel will turn freely when not engaged. The safety coupling is not engaged.

3. Specific maintenance instructions



Danger

Before disassembly, chambers filled with gas must be evacuated.

3.1 Actuator unit

- Coil springs (83)
The coil springs must be checked for corrosion. Replace, if necessary.
Dismantle as follows:
 - Close SSV.
 - Relax the coil springs (83).
 - Remove the hand wheel (33) and both rectangular casings (43, 49).
 - Remove the screws (84) from all six coil springs (83).
 - Pull every single coil spring (83) to the front and across the bearing block (32) and



Danger

The coil spring is biased.

- O ring (55)
To check the valve sealing (O ring (55)), first remove the valve flap (57). To do that, relax the coil springs (83) (see above) and remove the screws (44).
Lubricate a new O ring (55) and push it into the groove of the valve flap (57) at four points along the circumference. Only then push it completely into the groove.

- Screw locking devices

Make sure all screws and threads of valve flaps are locked properly.

- Valve flap support (359)
- Locking split pin (63)
- Screws (350)
- Loctite (56)
- Hex screw (44)
- Tab washer (45)

- Valve flap lever

Note The settings of the valve flap lever are device-specific. Therefore, the lever cannot be easily exchanged. If you need a new lever, be sure to talk to Honeywell.

3.2 Switch device

- Dismounting the switchable mount (166)

Remove the valve cone (175) from the switch housing (169). Next, pull the T-handle (160) up until the switchable mount can be taken out.

- Mounting the switchable mount (166)

Proceed as before, but in reverse order. When you push the mount across the balls (165), you must pull up the T-handle (160) again, just as you did during dismounting.

Observe proper fitting position (see spare parts drawing for switching device, p. 14).

Note The manual release (176) and switching rod of the control unit / solenoid must not touch the switchable mount.

3.3 Tightening torques M_A in Nm

Screws & bolts - item no.	30	44	65	84	133
Tightening torques M_A in Nm	40	180	340	8	40

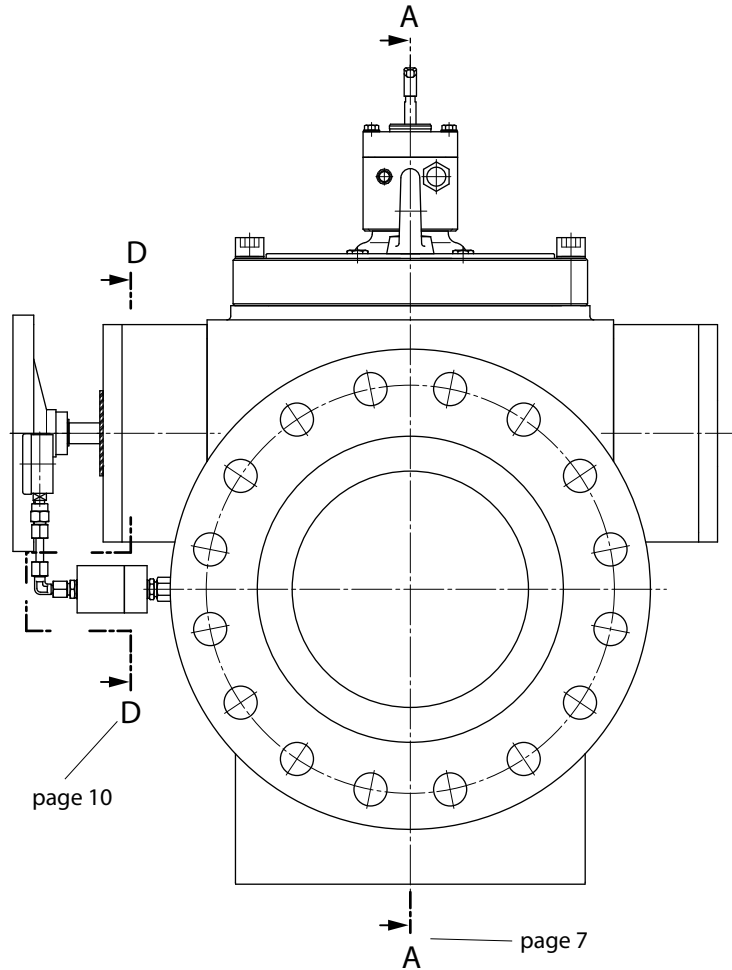
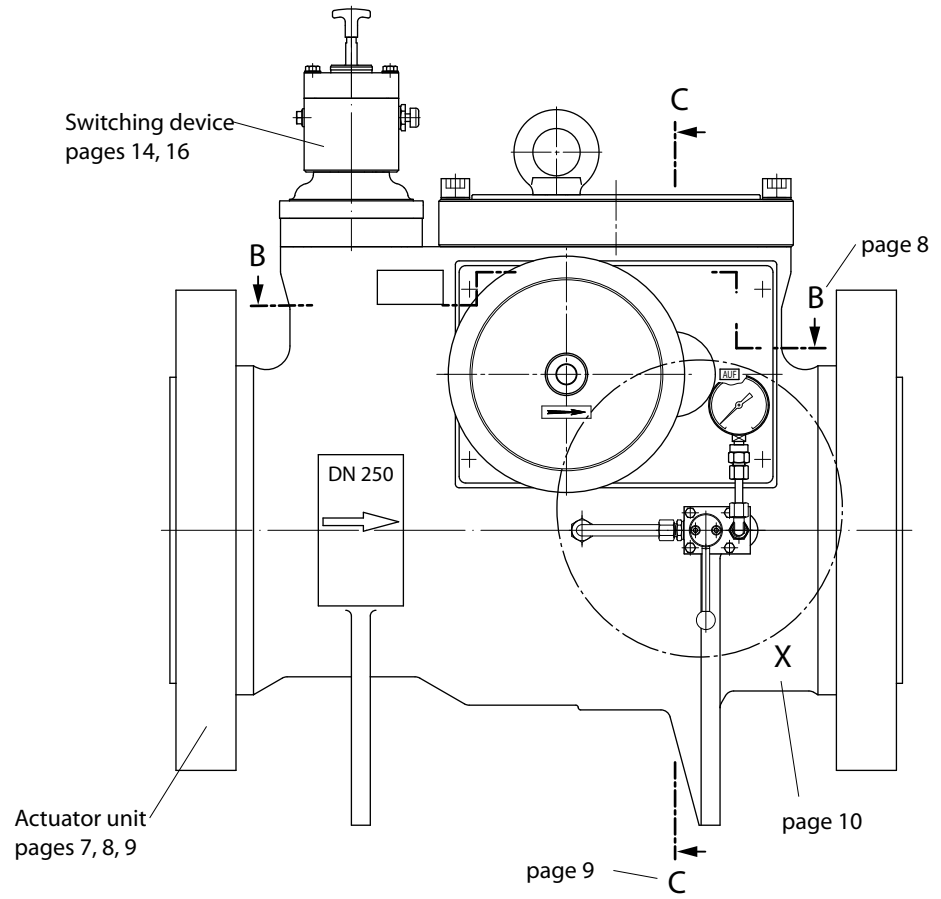
3.4 Lubricants

Components (cover with thin layer)	Lubricant	HON part no.
All O rings, slip guides, slip faces and switching elements	Silicone grease	27 081
Thread of manual release (150)	Assembly paste	27 091
All fastening screws and screwed pipe connections	Assembly grease	27 058

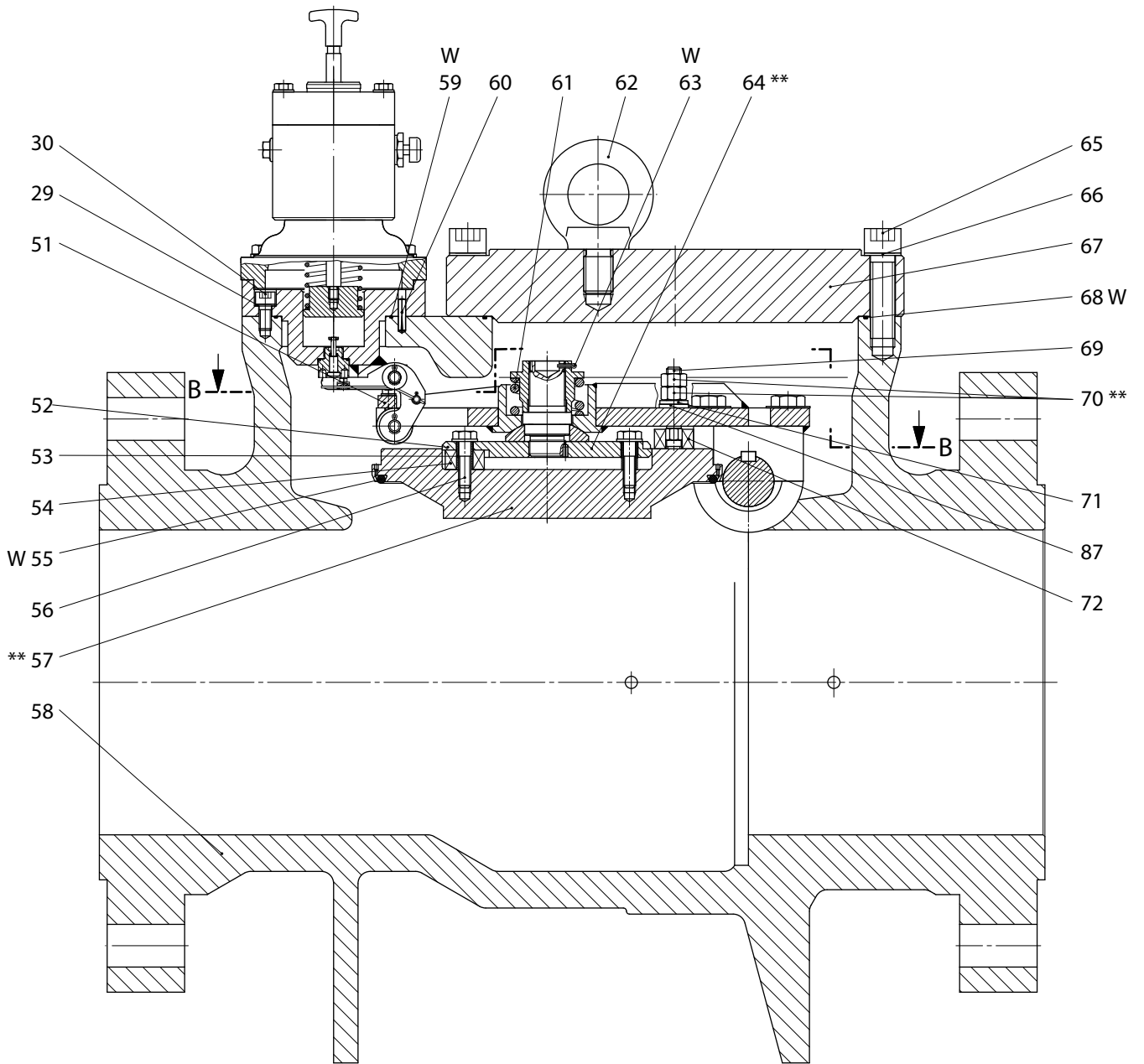
4.1 Spare parts drawing HON 711

4.1.1 Actuator unit

Sections



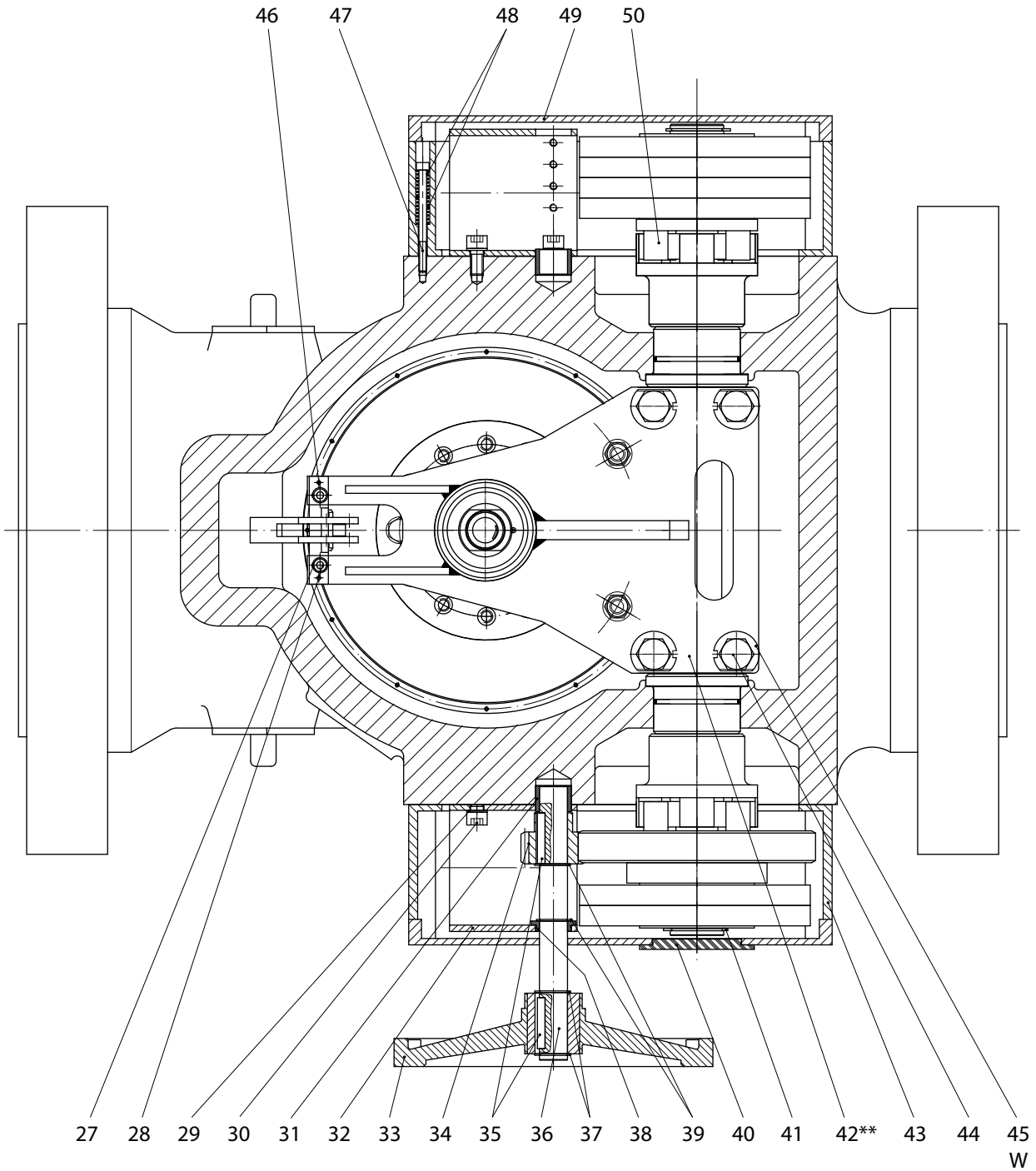
Section A-A



** Before you exchange any parts of the valve flap, be sure to talk to HON.

W Parts should be held in stock for maintenance purposes.

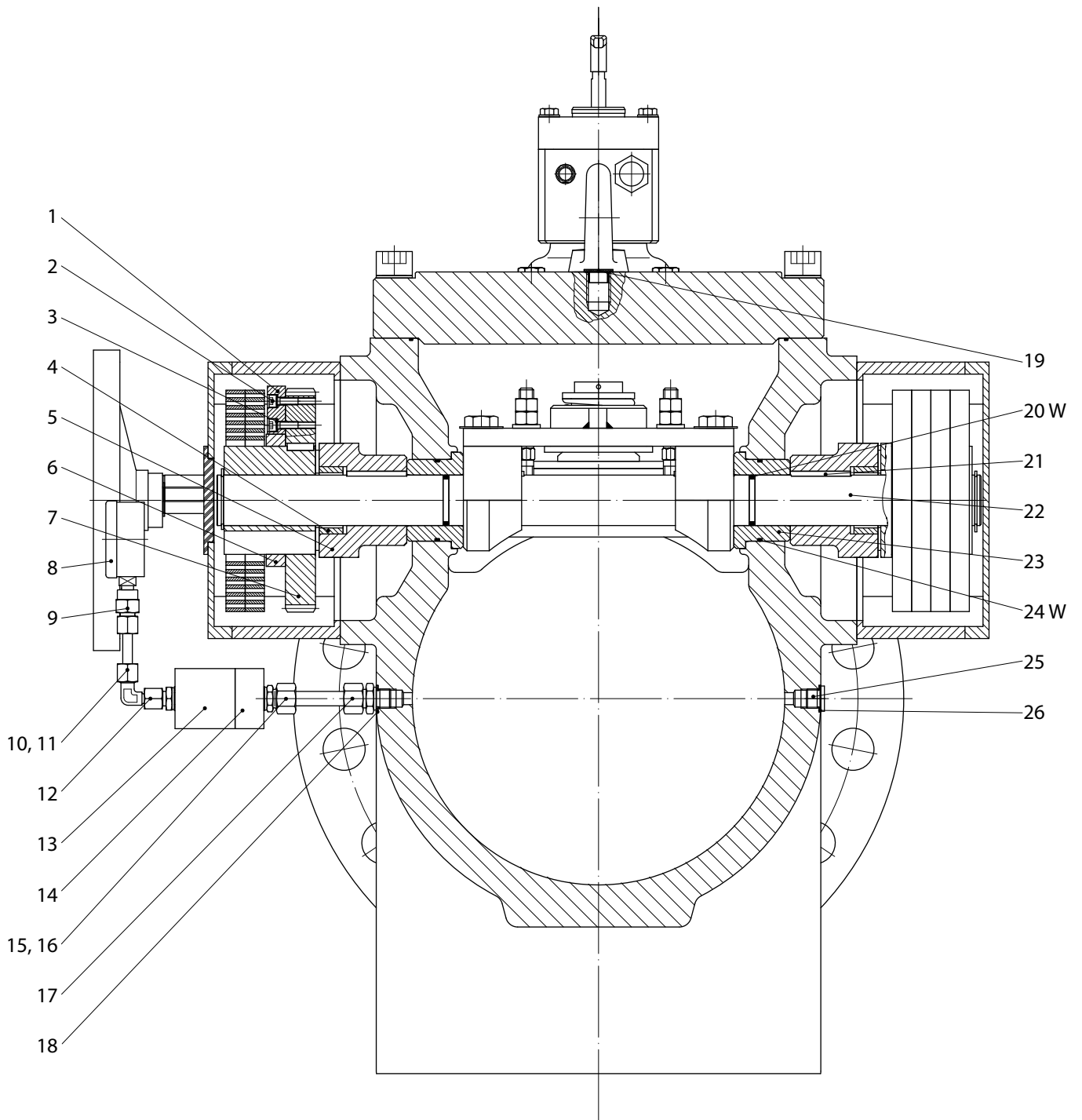
Section B - B



** Before you exchange any parts of the valve flap, be sure to talk to HON.

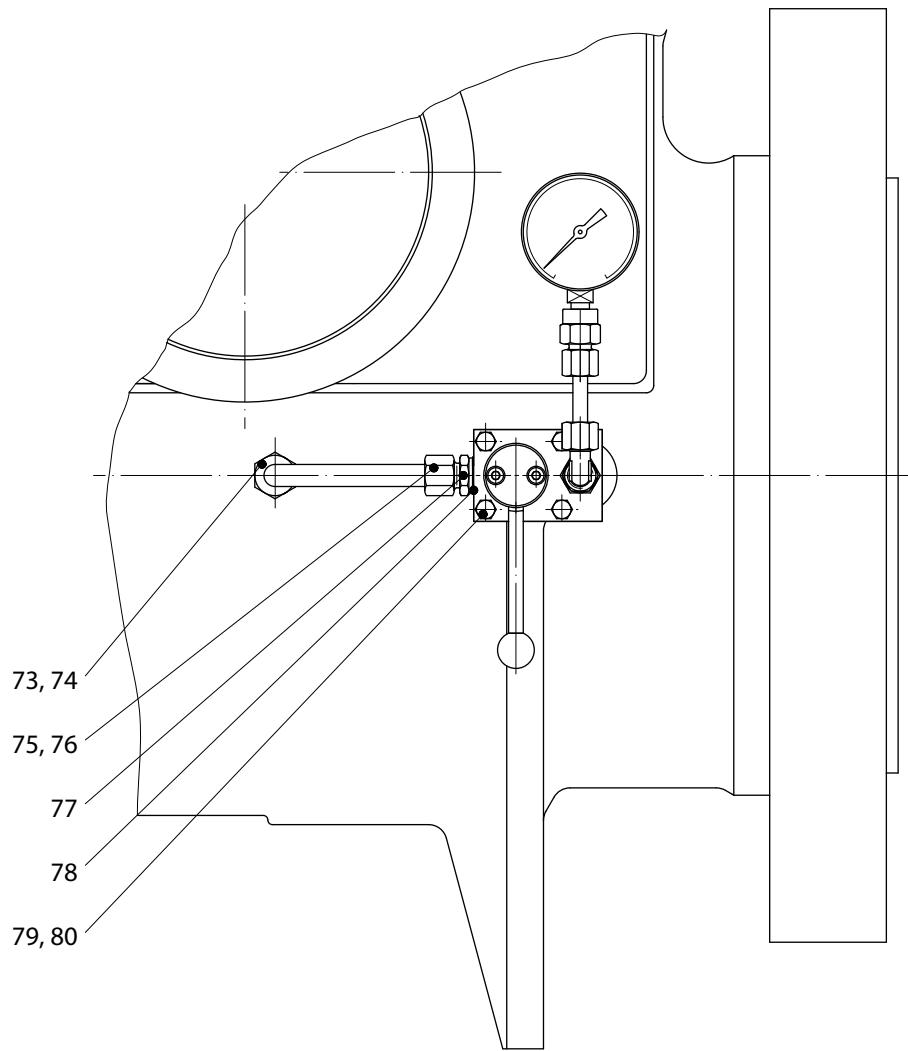
W Parts should be held in stock for maintenance purposes.

Section C – C

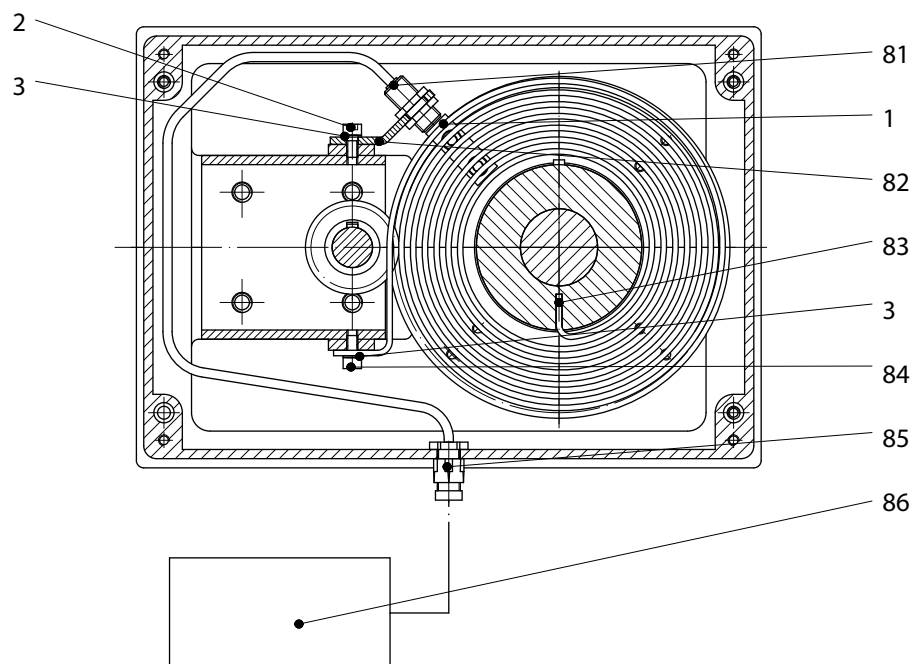


W Parts should be held in stock for maintenance purposes.

Detail "X"



Section D - D



W Parts should be held in stock for maintenance purposes.

4.1.2 Spare parts list – actuator

Item no.	Denomination	Number	W	Material	Part no.		
					DN 200	DN 250	DN 300
1	Switching rod	1		St	10011502	10011502	10011502
2	Cheese head screw	3		St	10055	10055	10055
3	Lock washer	9		St	14111	14111	14111
4	Sprocket	2		K	26910	26910	26910
5	Standard hub	2		St	10011438	10011438	10011438
6	Ring	1		LM	10011444	10011444	10011444
7	Spur gear, complete	1		St/FSst	10011498	10011498	10011498
8	Pressure gauge, at option:						
8	up to 25 bar	1		Ms	26284	26284	26284
8	up to 40 bar	1		Ms	26282	26282	26282
8	up to 60 bar	1		Ms	26283	26283	26283
8	up to 100 bar	1		Ms	26285	26285	26285
9	Screwed connection	1		St	30811	30811	30811
10	Union nut	1		St	30801	30801	30801
11	Cutting ring	1		St	30912	30912	30912
12	Connection pipe	1		St	31206	31206	31206
13	Sensing valve HON 910a	1			10005223	10005223	10005223
14	Adapter, plate	1		LM	10024649	10024649	10024649
15	Union nut	2		St	30804	30804	30804
16	Cutting ring	2		St	30904	30904	30904
17	Connection pipe	2		St	30113	30113	30113
18	Sealing ring	2		LM	18694	18694	18694
19	Drain plug	1		K	27075	27075	27075
20	O ring	2	W	KG	20818	20818	20818
21	Feather key	4		FSt	26761	26761	26761
22	Valve cap shaft	1		NSt	10011445	10011445	10011445
23	Bushing	2		AlBz	10011437	10011437	10011437
24	O ring	2	W	KG	20513	20513	20513
25	Sealing cap	2		St	10381	10381	10381
26	Sealing ring	2		LM	18694	18694	18694
27	Washer	2		St	8279	8279	8279
28	Cheese head screw	2		St	10150	10150	10150
29	Lock washer	21		St	14113	14113	14113
30	Cheese head screw	21		St	8174	8174	8174

W Parts should be held in stock for maintenance purposes

German abbreviations stand for the following materials:

St...	steel	LM	... light metal / alloy	GMs	... cast brass
NSt	... stainless steel	Ms	... brass	GZn	... cast zinc
FSt	... spring steel	GS	... cast steel	AlBz	... aluminium bronze
NFSt	... stainless spring steel	GGG	... spheroidal graphite cast iron	K	... synthetic materials
Bz	... bronze	GBz	... cast bronze	KG	... gummosus synthetic materials
Cu	... copper	GLM	... cast light metal	SSt	... foamed materials

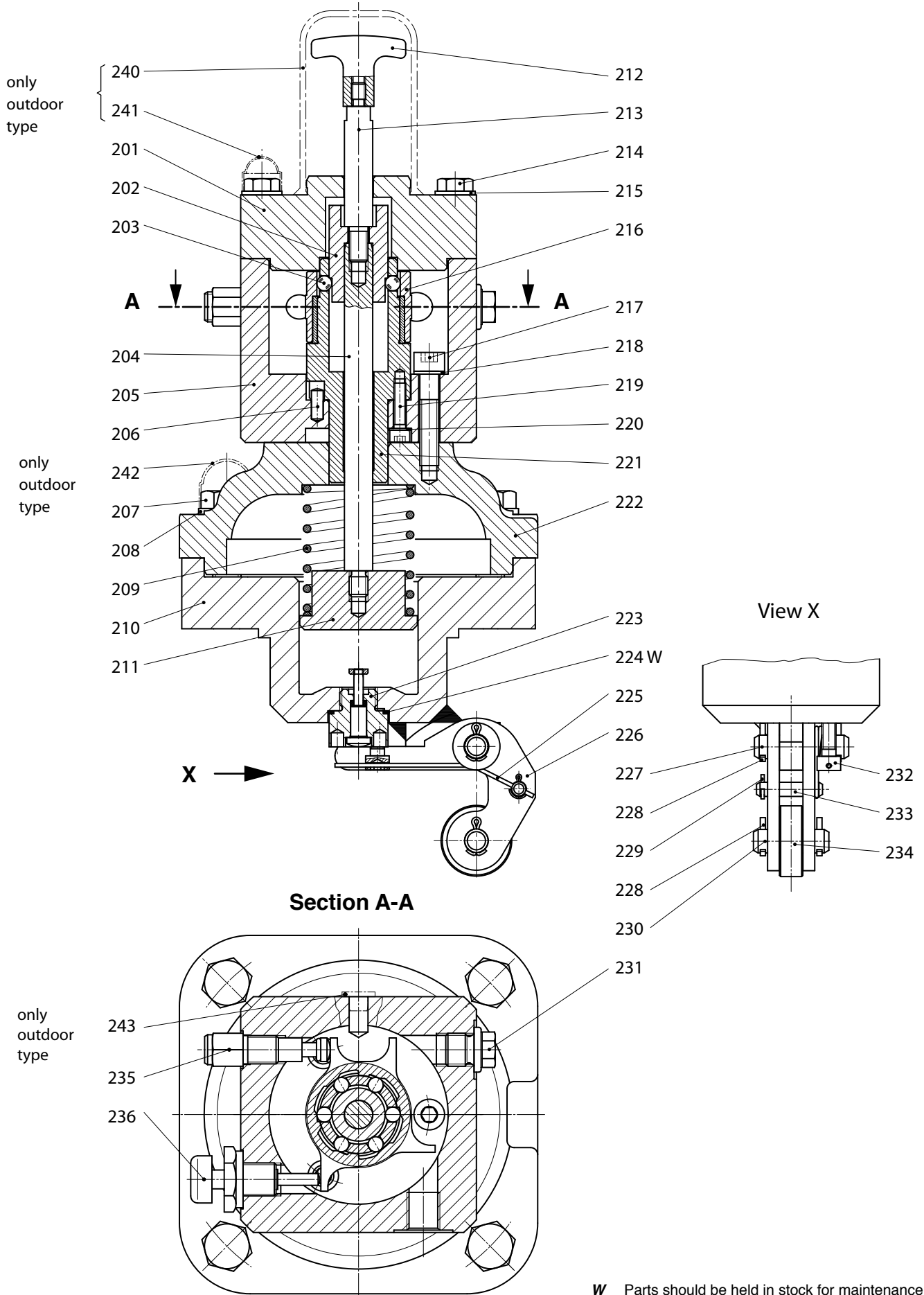
Item no.	Denomination	Number	W	Material	Part no.		
					DN 200	DN 250	DN 300
31	Bushing	2		Ms	10011477	10011477	10011477
32	Bearing block	2		St	10011476	10011476	10011476
33	Safety hand wheel	1		LM/St	26906	26906	26906
34	Pinion	1		St	10011441	10011441	10011441
35	Feather key	2		FSt	26240	26240	26240
36	Shaft	1		NSt	10011479	10011479	10011479
37	Sealing ring	2		St	19118	19118	19118
38	Bushing	1		Ms	10011478	10011478	10011478
39	Sealing ring	2		St	19118	19118	19118
40	Inspection glass	1		K	10011460	10011460	10011460
41	Sealing ring	2		St	19157	19157	19157
**42	Valve flap lever	1		St	10011562	10011542	10011542
43	Casing	1		LM	10011459	10011459	10011459
44	Hex screw	4		St	10295	10295	10295
45	Washer	4	W	St	19005	19005	19005
46	Tapered dowel pin	2		St	17020	17020	17020
47	Cheese head screw	8		St	10550	10550	10550
48	Pressure spring	16		FSt	10014077	100014077	10014077
49	Casing	1		LM	10011458	10011458	10011458
50	Big hub, reworked	2		St	10011439	10011439	10011439
51	Trunnion	1		NSt	10011469	10011469	10011469
52	Washer	12		St	5748	5748	5748
53	Pipe	12		NSt	10011599	10011599	10011599
54	Spring, reworked	6		KG	10011598	10011598	10011598
55	O ring	1	W	KG	20973	20819	20819
56	Hex screw	12		St	10054	10054	10054
57	Valve cap	1		NSt	10011591	10011516	10011516
58	Body, optional:						
58	PN 25	1		GS	10011572	10011422	10011522
58	PN 40	1		GS	10011573	10011423	10011523
58	ANSI 300 RF	1		GS	10011576	10011426	10011526
58	ANSI 300 RJ	1		GS	10011577	10011427	10011527
58	ANSI 600 RF	1		GS	10011578	10011428	10011528
58	ANSI 600 RJ	1		GS	10011579	10011429	10011529
59	O ring	1	W	KG	20519	20519	20519
60	Tapered dowel pin	1		St	17001	17001	17001
61	Pressure spring	1		FSt	10000260	10000260	10000260
62	Eye bolt	1		St	10047	10047	10047
63	Split pin	1	W	St	15005	15005	15005

** Exchange only at the factory

Item no.	Denomination	Number	W	Material	Part no.		
					DN 200	DN 250	DN 300
64	Valve flap support, pre-assembled	1		NSt/FSt	10011596	10011596	10011596
65	Cheese head screw	20		St	10557		
65	Cheese head screw	24		St		10557	10557
66	Lock washer	20		St	14124		
66	Lock washer	24		St		14124	14124
67	Cap	1		St	10011582	10011449	10011449
68	O ring	1	W	KG	20627	10002098	10002098
69	Locking screw	2		NSt	10011509	10011509	10011509
70	Hex nut	4		St	13120	13120	13120
71	Sealing ring	2		KG	18207	18207	18207
72	Spring, reworked	2		KG	10011598	10011598	10011598
73	Sealing ring	2		LM	18694	18694	18694
74	Connection pipe	2		St	30113	30113	30113
75	Union nut	2		St	30804	30804	30804
76	Cutting ring	2		St	30904	30904	30904
77	Connection pipe	1		St	30074	30074	30074
78	Sealing ring	1		LM	18842	18842	18842
79	Hex screw	4		St	10181	10181	10181
80	Lock washer	4		St	14111	14111	14111
81	Proximity sensor	1		-	24144	24144	24144
82	Mounting bracket	1		St	10011501	10011501	10011501
83	Coil spring	6		FSt	10011443	10011443	10011443
84	Cheese head screw	6		St	8177	8177	8177
85	Cable gland	1		K	24052	24052	24052
86	Isolation & switch unit	1		-	24047	24047	24047
87	Washer	2		St	8271	8271	8271

4.2.1 Spare parts drawing – switching device

Versions starting with series # 060240496

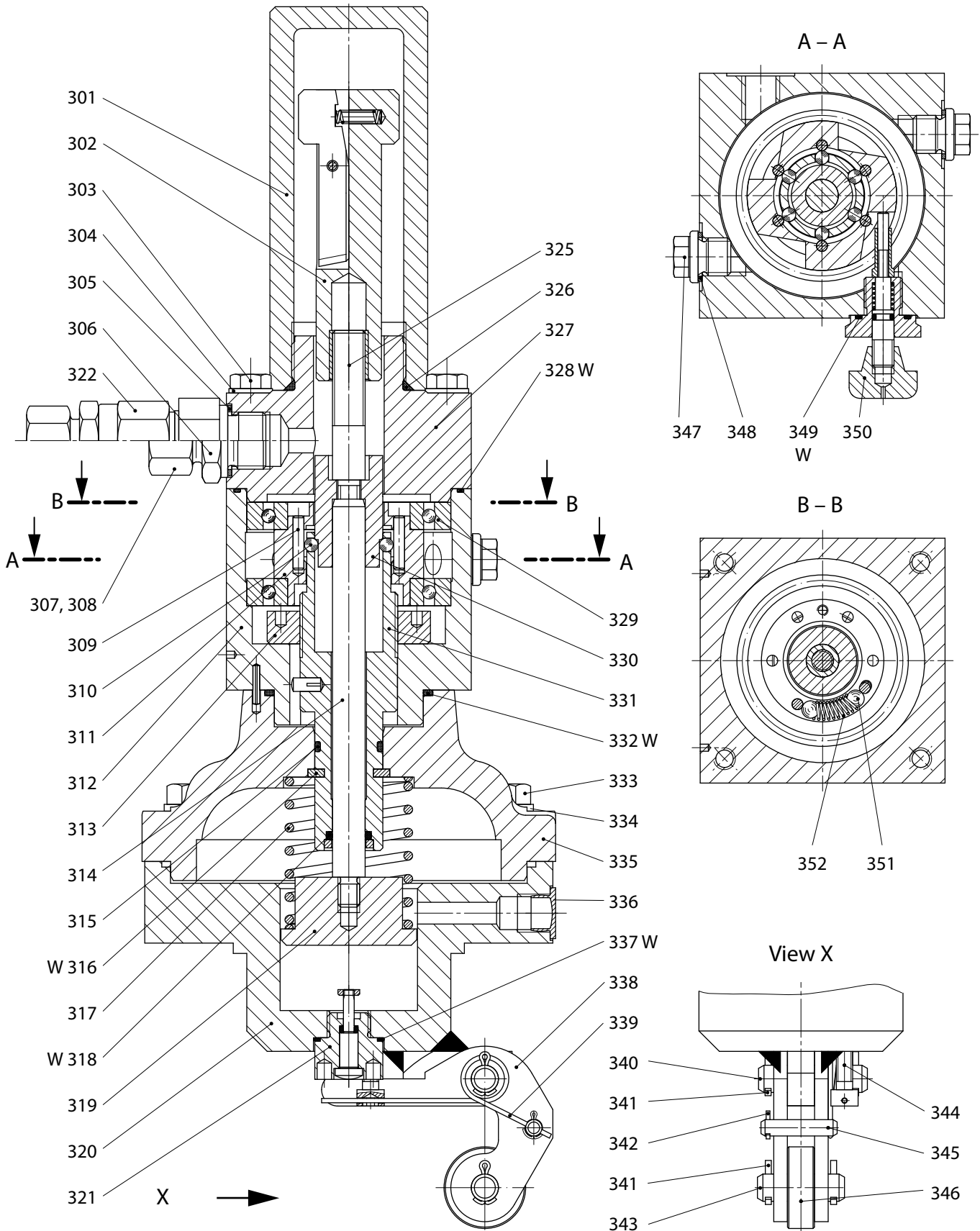


W Parts should be held in stock for maintenance purposes.

4.2.2 Spare parts list – switching device
 Versions starting with series # 060240496

Item no.	Denomination	Number	W	Material	Part no.
201	Switch housing cover	1		LM	10030169
202	Lock bushing	1		St	10008765
203	Sphere	6		St	3055
204	Valve rod	1		NSt	10011435
205	Switch housing	1		LM	10030168
206	Straight pin	1		St	17007
207	Hex screw	4		St	10109
208	Washer	4		St	8271
209	Pressure spring	1		FSt	10008577
210	Intermediate flange	1		St	10011493
211	Spring plate	1		NSt	10011436
212	T-handle	1		K	100021
213	Threaded bolt	1		NSt	10030175
214	Hex screw	4		St	10011
215	Washer	4		St	8281
216	Switch bearing, complete	1		NSt/K	19084566
217	Cheese head screw	3		St	10425
218	Lock washer	3		FSt	14112
219	Cheese head screw	3		St	10030355
220	Lock washer	3		FSt	14118
221	Guide cylinder	1		AlBz	10030171
222	SSV connection flange	1		St	10030170
223	Screwed connection, complete	1	W	NSt/KG	10011487
224	O ring	1	W	KG	20382
225	Cylindrical helical coiled spring	1		FSt	10011486
226	Setting lever	1		St	10011484
227	Bolt	1		NSt	17033
228	Split pin	2	W	St	15005
229	Split pin	1	W	NSt	15031
230	Bolt	1		Ms	17092
231	Sealing cap	1		St	26175
232	Cheese head screw	1		St	10010431
233	Bolt	1		NSt	17149
234	Roller	1		NSt	10011482
235	Valve cone, spring-loaded	1		Ms/NSt	18355446
236	Manual release button, complete	1		LM/NSt	10030387
	for outdoor type only				
240	Protective cap	1		K	100105
241	Cap	4		K	23336
242	Cap	4		K	26414
243	Plug	1		K	26134

4.3.1 Spare parts drawing – switching device
 (versions through series # 060240495)

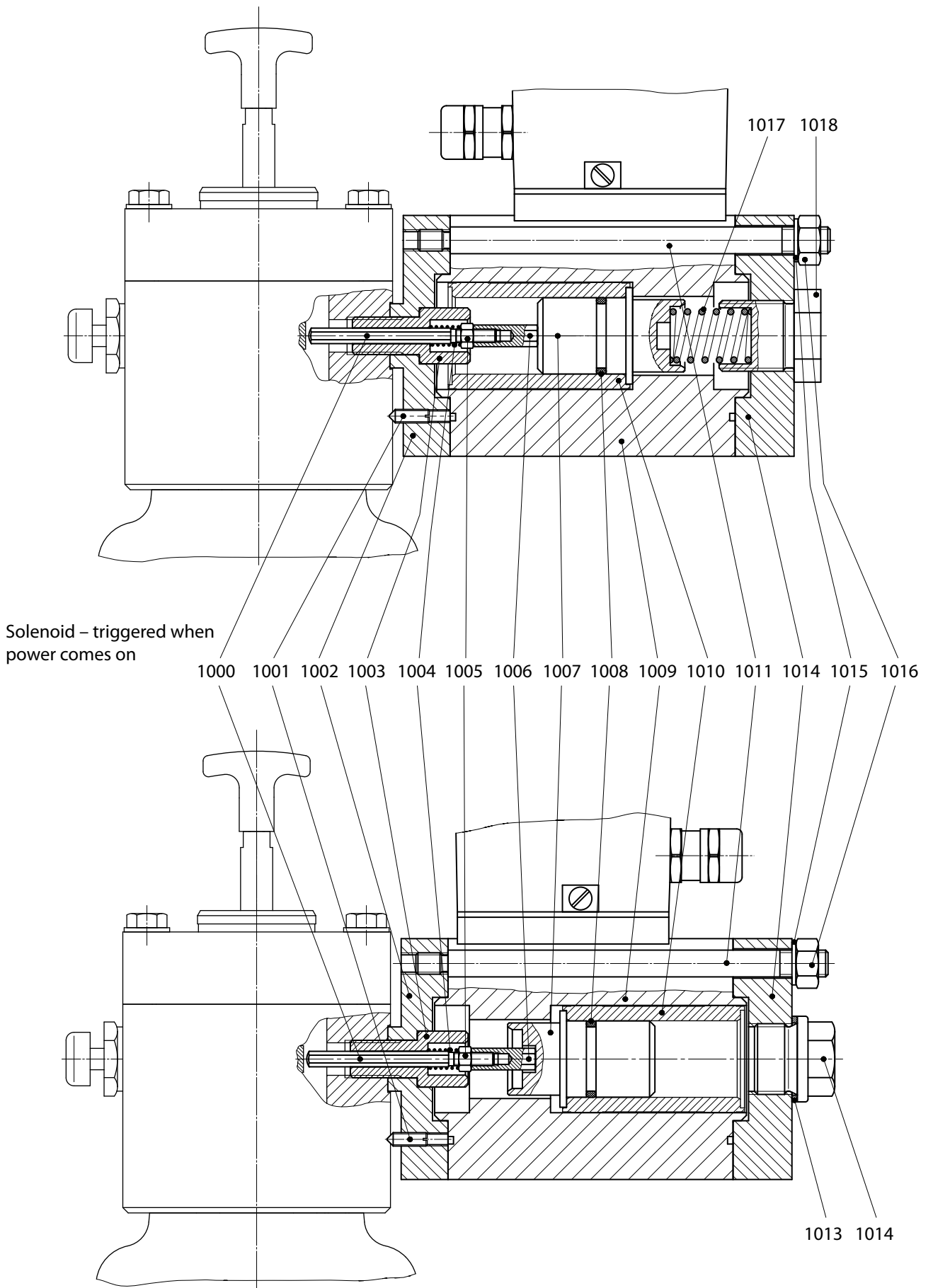


4.3.2 Spare parts list – switching device
(versions through series # 060240495)

Item no.	Denomination	Number	W	Material	Part no.
301	Cap	1			10025110
302	Handle, complete	1			10025106
303	Hex screw	4		St	8271
304	Washer	4		St	8281
305	Sealing ring	1		LM	18684
306	Nozzle (for K 16, K 17, K 18, K 19)	1		St	30142
307	Union nut	1		St	30804
308	Cutting ring	1		St	30904
309	Needle roller			St	26370
310	Sphere	6		St	5108
311	Switch bearing, pre-assembled	1		LM/St	10008771
312	Switch housing, pre-assembled	1		LM/St	10008749
313	Round nut with drilled holes in one face	1		St	10008761
314	Valve rod	1		NSt	10011435
315	O ring	1	W	KG	20383
316	Ring segment	2		St	10007589
317	Pressure spring	1		FSt	10008577
318	O ring	1	W	KG	20752
319	Spring plate	1		St	10011436
320	Intermediate flange	1		St	10011493
321	Screwed connection, complete	1		NSt/KG	10011487
322	HON 912-2 (for K10a, K 12, K 13)	1		–	10022949
325	Threaded bolt	1		St	10025109
326	Sealing ring	1	W	KG	20434
327	Cover, complete	1			10025111
328	O ring	1	W	KG	20320
329	Deep-groove ball thrust bearing	1		St	26236
330	Lock bushing	1		St	10008765
331	Guide cylinder, pre-assembled	1			10008756
332	O ring	1	W	KG	20413
333	Hex screw	4		St	10109
334	Washer	4		St	8271
335	SSV connection flange	1		St	10008502
336					
337	O ring	1	W	KG	20382
338	Setting lever	1		St	10011484
339	Cylindrical helical coiled spring	1		FSt	10011486

Item no.	Denomination	Number	W	Material	Part no.
340	Bolt	1		NSt	17033
341	Split pin	2	W	St	15005
342	Split pin	1	W	NSt	15031
343	Bolt	1		Ms	17092
344	Cheese head screw	1		St	10010431
345	Bolt	1		NSt	17149
346	Roller	1		NSt	10011482
347	Sealing cap	2		St	26175
348	Sealing ring	2		LM	18689
349	O ring	1	W	KG	20310
350	Manual release button, complete	1			10001179
351	Sphere	2		St	3055
352	Pressure spring	1		FSt	10001187

4.4.1 Spare parts drawing – accessories
Solenoid – triggered in case of power failure



4.4.2 Spare parts list – accessories

Item no.	Denomination	Number	W	Material	Part no.
1000	Switching rod	1		NSt	10025568
1001	Threaded pin (setscrew)	1		St	8486
1002	Connecting flange	1		LM	10022582
1003	Guide screw	1		NSt	10001811
1004	Pressure spring	1		SF	18355195
1005	Hex nut	1		St	3020
1006	Adjusting nut	1		Ms	1001864
1007	Bushing	1		LM	10022584
1008	O ring	1		KG	20327
1009	Magnet	1			100223
1010	Anchor	1			10030390
1011	Threaded bolt	4		NSt	10022585
1012	Cap	1		LM	10022583
1013	Sealing ring	1		LM	18706
1014	Sealing cap	1		St	26523
1015	Lock washer	4		SF	14113
1016	Hex nut	4		St	5692
1017	Pressure spring	1		SF	28067
1018	Sealing cap	1		Ms	10022586

4.5 Parts for maintenance purposes

Actuator unit

Item no.	Denomination	Number	Part no.		
			DN 200	DN 250	DN 300
20	O ring	2	20818	20818	20818
24	O ring	2	20513	20513	20513
45	Washer	4	19005	19005	19005
55	O ring	1	20973	20819	20819
59	O ring	1	20519	20519	20519
63	Split pin	1	15005	15005	15005
68	O ring	1	20627	10002098	10002098

Switch device

Item no.	Denomination	Number	Part no.
Version ex works no. 060240496			
223	Screwed connection, complete	1	10011487
224	O ring	1	20382
228	Split pin	2	15005
229	Split pin	1	15031
(versions through series # 060240495)			
315	O ring	1	20383
318	O ring	1	20752
326	Sealing ring	1	20434
328	O ring	1	20320
332	O ring	1	20413
337	O ring	1	20382
341	Split pin	2	15005
342	Split pin	1	15031
349	O ring	1	20310

For More Information

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