

SERVING THE GAS INDUSTRY WORLDWIDE

OPERATING AND MAINTENANCE INSTRUCTIONS / SPARE PARTS

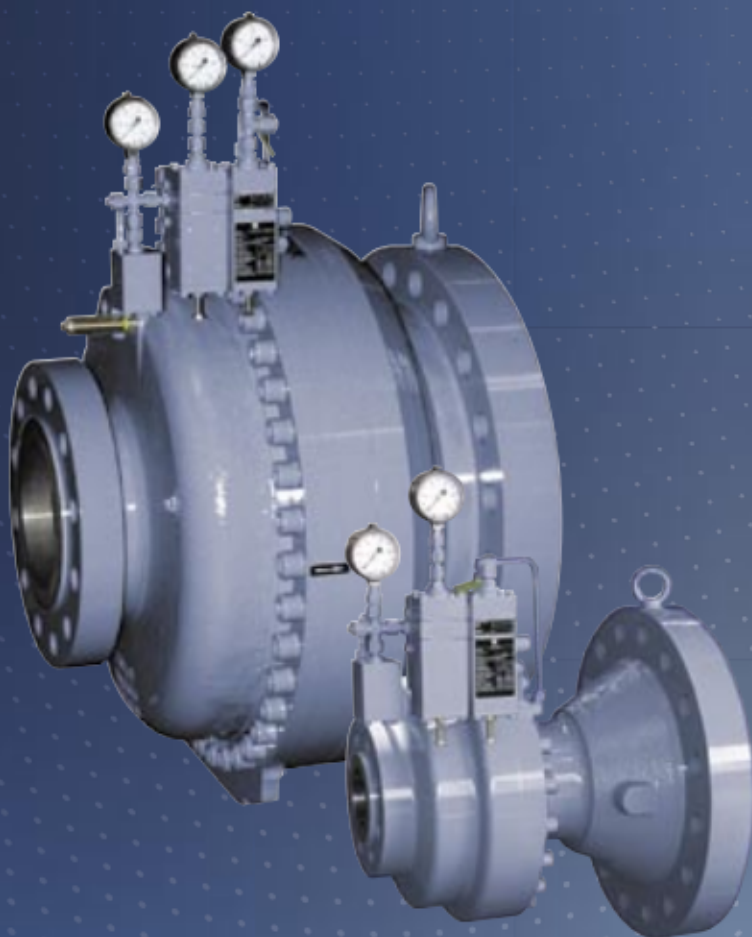
GAS PRESSURE REGULATOR RMG 512

512.20

RMG 512b DN 25 to DN 100

Edition 08/2007

RMG 512c DN 150 and DN 250



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1. General information

All persons involved with the assembly, operation and/or maintenance of the RMG 512 gas pressure regulator must read and understand all of the following documents:

- **Technical product information 512.00** – it contains the equipment's technical data and dimensions as well as instructions concerning set-up and mode of operation.
- **General operating manual for gas pressure regulators and safety devices** – this RMG document contains information on assembly and operation as well as general information on troubleshooting.
- **Operating and maintenance instructions / spare parts 512.20** – this document contains more detailed information on assembly and operation of the RMG 512 gas pressure regulator.
- The **various components** and units are described in separate booklets "Operating and Maintenance Instructions, spare parts":

Pilot:	RMG 650	650.20
Filter	RMG 905	905.20
Distance sensor	RMG 970	970.20

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.

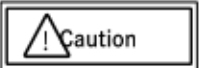
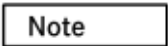
During maintenance, components must be cleaned and then checked thoroughly. This is necessary even if there have not been any unusual observations during operation and/or functional testing. Checks must focus, in particular, on diaphragms and seals and all movable parts and their respective bearings. 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

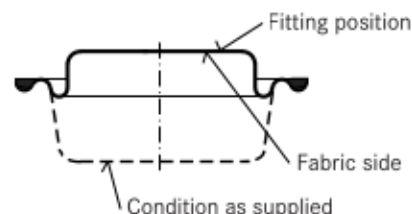
3. Specific maintenance instructions



Before disassembly, chambers filled with gas must be evacuated.

3.1 for RMG 512b and RMG 512c

- Roll diaphragm (31/131)
Grease roll of roll diaphragm slightly over. Position for fitting as shown in drawing. Push over diaphragm disk (11/111). The fabric side (marked with a stamp) must be toward the diaphragm disk. Push fold of roll between disk and housing (15/115).



Note

Do not use pointed tools.

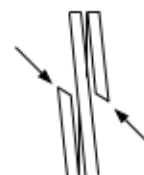
- Grease chambers (45/145)
Fill grease chambers in front of the two guide rings (46/146) completely with silicone grease (45/145).

3.2 for RMG 512b only

- Support ring (43) for DN 25 and DN 50
Take good note of the position of the wire ends of the support rings.

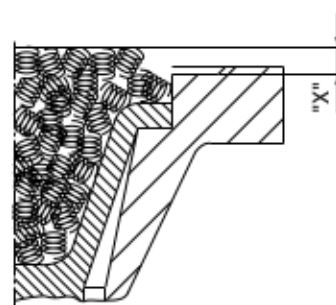
Note

The chamfers of the wire ends must be toward each other, as shown in the sketch.

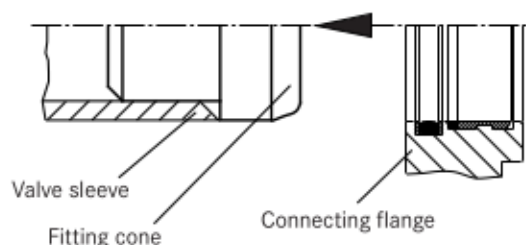


- Coil (99) for device with outlet expansion piece
The sound-dampening outlet part usually does not require maintenance. However, if the relief plates (88/89) have been removed from the relief housing (81), it is important to pre-tension the coils (99) before re-assembly. To accomplish that, place coils in relief housing (81) with a certain overmeasure "X" (see table).

Nominal output width	"X" in mm
DN 100	8
DN 150	10
DN 200	12
DN 250	16
DN 300	16

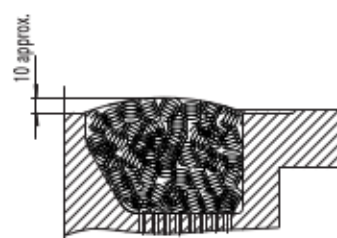


- Device with reverse flow protection
When pushing connecting flange (34) on to valve sleeve (65), be sure to use a fitting cone to protect the seal and guide elements (43, 44, 46) – see 3.6.



3.3 for RMG 512c only

- Valve cone (167) and perforated flow restrictor (171).
Assemble and disassemble using a temporary bolt (see 3.6).
- Coil (199) for DN 250/500 and DN 250/600
The sound-dampening outlet part usually does not require maintenance. However, if the relief plates (188/189) have been removed from the relief housing (181), it is important to pre-tension the coils (199) before re-assembly. To accomplish that, place coils in relief housing (181) with 10 mm overmeasure.



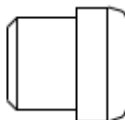
3.4 Tightening torques MA in Nm

Item no.	Nominal width									
RMG 512b	25/25	25/100	25/150	50/50	50/150	50/200	80/80	80/250	100/100	100/300
12		4			8		8		15	
32		100			250		250		500	
41		30			100		160		250	
91	-	30	55	-	55	55	-	100	-	100
RMG 512c	150/150	150/300	150/400	200/200	200/400	200/500	250/250	250/500	250/600	
112		15			15			15		
132		500			1150			1150		

3.5 Lubricants

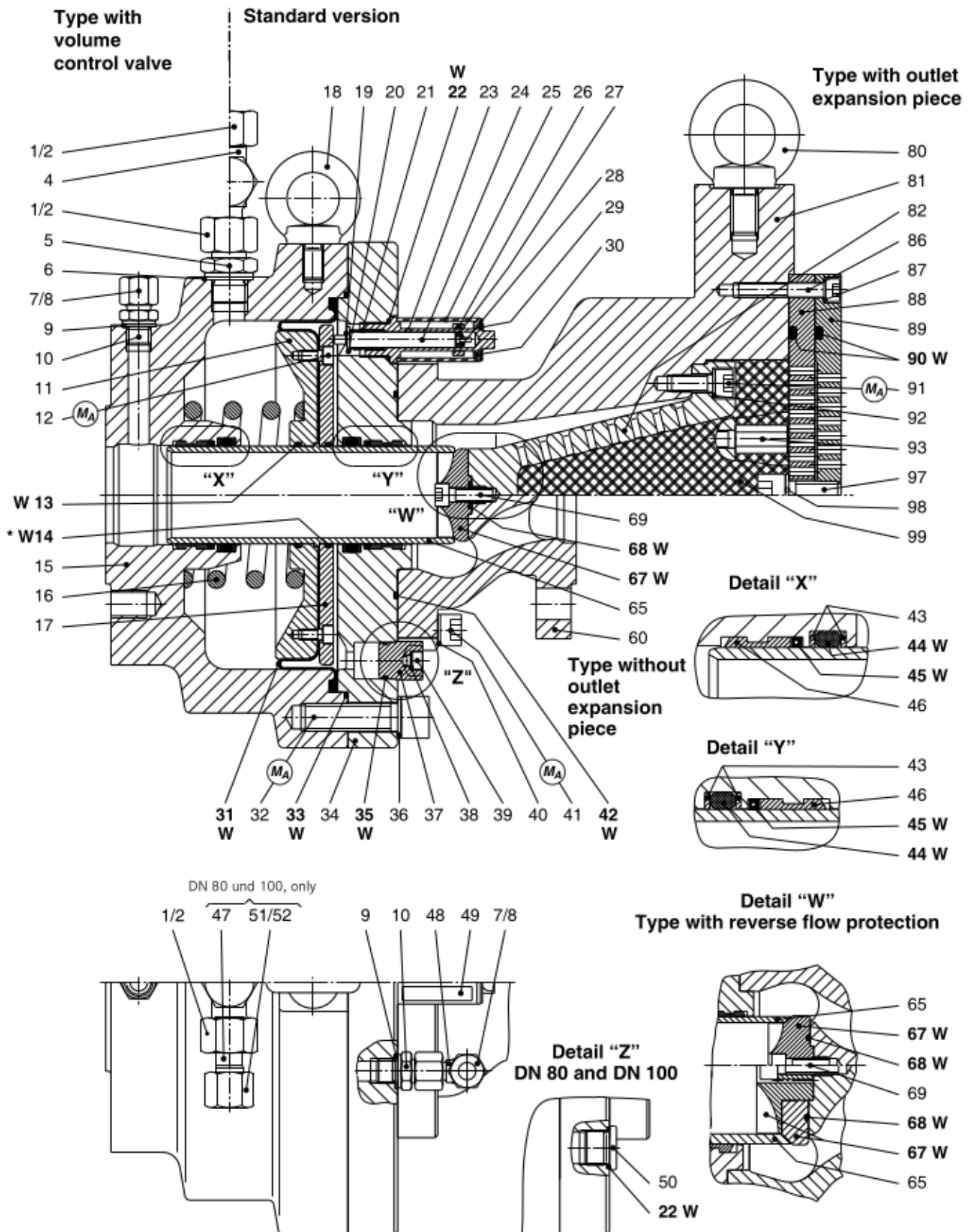
Components	Lubricant	RMG part no.
All O rings Fitting roll of roll diaphragm Grease chambers, Slip faces of valve sleeve Valve sleeve seals	Silicone grease	27052
All fastening screws and bolts and pipe connections	Assembly grease	27091

3.6 Assembly tools

Item no.							TOOL			
RMG512b				RMG512c						
DN25	DN50	DN80	DN100	DN150	DN200	DN 250				
							Torque wrench			
							Torque	Part no.		
12	12	12	12	112	112	112	4 - 20 Nm	12132313		
32, 41, 91							20 - 100 Nm	26192		
	32, 41, 91	32, 41, 91					38 - 407 Nm	26569		
			32, 41, 91	132			100 - 600 Nm	26316		
					132	132	750 - 2000 Nm	28397		
							Hex socket for torque wrench			
							Width of wrench	Part no.		
12							SW 4	12132314		
	12	12					SW 5	12132315		
41			12	112	112	112	SW 6	26195		
32	41						SW 10	26197		
		41					SW 12	26904		
	32	32	41				SW 14	26571		
			32				SW 17	26572		
				132			SW 19	27000		
					132	132	SW 22	28398		
										
							Special fitting	Model	Part no.	
91(DN100)								SW 6-7/16	27077	
91(DN150)								SHD-S-8	26706	
								SW 10-7/16	27078	
									Part no.	
65									10002218	
									10013547	
									19081843	
									10013647	
							Temporary bolt		Part no. 10000725	

4.1 RMG 512b – spare parts

4.1.1 Spare parts drawing



- *) Type with volume control valve DN 25 and DN 50, only
M_A Be sure to comply with tightening torques in table on page 5.
W Parts should be held in stock for maintenance purposes.

4.1.2 RMG 512b – spare parts

Item no.	Denomination	No.	W	Material	Part no.			
					DN 25	DN 50	DN 80	DN 100
1	Union nut	1		St			30807	30807
1	Union nut	2		St	30804	30804		
2	Cutting ring	1		St			30906	30906
2	Cutting ring	2		St	30904	30904		
4	Connection pipe	1		St	30608	30608	30615	30615
5	Screwed socket	1		St	30113	30113	30112	30112
6	Sealing ring	1		LM	18694	18694	18787	18787
7	Union nut	3		St	30803	30803	30803	30803
8	Cutting ring	3		St	30903	30903	30903	30903
9	Sealing ring	2		LM	18842	18842	18842	18842
10	Screwed socket	2		St	30111	30111	30111	30111
11	Diaphragm disk	1		LM	10013484	10013534	10013584	10013634
12	Cheese head screw	6		St	10318			
12	Cheese head screw	12		St		10596		
12	Cheese head screw	16		St			10596	10355
13	O ring	1	W	KG	20430	20413	20414	21016
14	O ring	1	W	KG	20430	20413		
15	Housing, at optic	www.ittcontrols.com		contact@ittcontrols.com				
15	PN 25 and PN 40	1		GS	10013472	10013522	10013572	10013622
15	ANSI 300 RF	1		GS	10013475	10013525	10013575	10013625
15	ANSI 300 RJ	1		GS	10013478	10013526	10013576	10013626
15	ANSI 600 RF	1		GS	10013477	10013527	10013577	10013627
15	ANSI 600 RJ	1		GS	10013478	10013528	10013578	10013628
16	Pressure spring	1		FSt	10013287	10013387	10013587	10013637
17	Mounting plate	1		LM	10013486			
17	Mounting plate w/ pan head			LM/St		10013539	10013590	10013640
18	Eye bolt	1		St	10487	10021	10003	10003
19	Lock washer	1		FSt	19140	19140	19140	19140
20	Washer	1		St	14082	14082	14082	14082
21	Pressure spring	1		FSt	10013284	10013384	19081838	19081838
22	O ring	1	W	KG	20382	20382		
22	O ring	2	W	KG			20382	20382
23	Housing for cycle counter	1		Ms	10013280	10013380	10013639	10013639
24	Display pin	1		Ms	10013491	10013541	10013641	10013641
25	Inspection glass	1		PGL	10013283	10013383	10013642	10013642
26	Magnet	1		Oxit	27043	27043	27043	27043

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 ... gummous synthetic materials
Cu ... copper	GLM ... cast light metal	SSt ... foamed materials

Item no.	Denomination	No.	W	Material	Part no.			
					DN 25	DN 50	DN 80	DN 100
27	Magnet	1		Oxit	27 044	27044	27044	27044
28	Seeger clamping disc	1		FSt	27063	27063	27063	27063
29	Seeger grip ring	1		FSt	19172	19172	19172	19172
30	Lock ring	1		LM	10013286	10013286	10013286	10013286
31	Roll diaphragm	1	W	KG	10013485	10013535	10013585	10013635
32	Cheese head screw	11		St	10330			
32	Cheese head screw	12		St		10332		
32	Cheese head screw	20		St			10345	10354
33	O ring	1	W	KG	20827	20843	20838	20866
34	Connecting flange	1		St	10013480	10013530	10013580	10013630
35	O ring	1	W	KG	20415	20415		
36	Lock washer	11		FSt	14114			
36	Lock washer	12		FSt		14116		
36	Lock washer	20		FSt			14116	14124
37	Drain plug	1		Ms	10013549	10013549		
38	Lock washer	2		FSt	14123	14123		
39	Cheese head screw	2		St	10055	10055		
40	Lock washer	8		FSt	14112	14114	14115	14116
41	Cheese head screw	8		St	10324	10330	10331	10332
42	O ring	1	W	KG	20246	20335	20249	20262
43	Support ring	4		K	21024	21025	21019	21017
44	O ring	2	W	KG	20252	20596	20976	21016
45	Silicone grease		W		27052	27052	27052	27052
46	Guide ring	2		K	21014	21009	21018	21015
47	Reducer	1		St			31809	31809
48	Connection pipe	1		St	31207	31207	31207	31207
49	Valve scale	1		K	10013285	10013385	10013594	10013644
50	Sealing cap	1		St			10539	10539
51	Union nut	1		St			30805	30805
52	Cutting ring	1		St			30904	30904
	Type without outlet expansion piece							
60	Valve housing, at option:							
60	PN 25 and PN 40	1		GS	10013242	10013342	10000434	10000534
60	ANSI 300 RF	1		GS	10013245	10013345	10000444	10000544
60	ANSI 300 RJ	1		GS	10013246	10013346	10000446	10000546
60	ANSI 600 RF	1		GS	10013247	10013347	10000448	10000548
60	ANSI 600RJ	1		GS	10013248	10013348	10000450	10000550
	Type without reverse flow protection							
65	Valve sleeve	1		St	10013481	10013531	10013581	10013631
67	Valve cone	1	W	K	10013483	10013533	10013583	10013633
68	O ring	1	W	KG	20231	20234	20235	20236
69	Cheese head screw	1		St	10361	10324	10325	10328
	Type with reverse flow protection							
65	Valve sleeve	1		St	10013496	10013546	10013596	10013646
67	Valve cone	1	W	K	10013457	10013507	10013557	10013607
68	O ring	1	W	KG	20310	20237	20425	20246
69	Cheese head screw	1		St	10318	10324	10441	10556

Item no.	Denomination	No.	W	Material	Part no.					
					DN 25/100	DN 25/150	DN 50/150	DN 50/200	DN 80/250	DN 100/300
	Type with outlet expansion piece									
80	Eye bolt	1		St	10003	10003	10003	10003	10003	10003
81	Relief housing	1		GS (St)	10013251	10013250	10006830	10013350	10006445	10006505
82	Relief cone	1		GS (St)	10006791	10006345	10006841	10006405	10006471	10006531
86	Cheese head screw	4		St	10389	10389	10389	10389	10389	
86	Cheese head screw	8		St						10389
87	Lock washer	4		FSt	14112	14112	14112	14112	14112	
87	Lock washer	8		FSt						14112
88	Relief plate 1	1		St	10006782	10006329	10006329	10006389	10006449	10006509
89	Relief plate 2	1		St	10006783	10006331	10006331	10006391	10006451	10006511
90	O ring	2	W	KG	20261	20433	20433	20314	20397	20339
91	Cheese head screw	4		St	10324	10325				
91	Cheese head screw	6		St			10325	10325	10393	
91	Cheese head screw	8		St						10393
92	Lock washer	4		FSt	14112	14113				
92	Lock washer	6		FSt			14113	14113	14114	
92	Lock washer	8		FSt						14114
93	Distance bolt	2		St	10006452	10006452				
93	Distance bolt	3		St			10006452			
93	Distance bolt	4		St				10006452	10006452	10006452
97	Cheese head screw	1		St	10394	10394	10394	10394	10394	10394
98	Lock washer	1		FSt	14116	14116	14116	14116	14116	14116
99	Coil	0.5kg		FSt	26415					
99	Coil	1.1kg		FSt		26415				
99	Coil	1.3kg		FSt			26415			
99	Coil	1.8kg		FSt				26361		
99	Coil	3.4kg		FSt					26361	
99	Coil	5.3kg		FSt						26361
99	Coil, stainless			NFSt	26725	26725	26725	26362	26362	26362

4.1.3 Parts for maintenance purposes

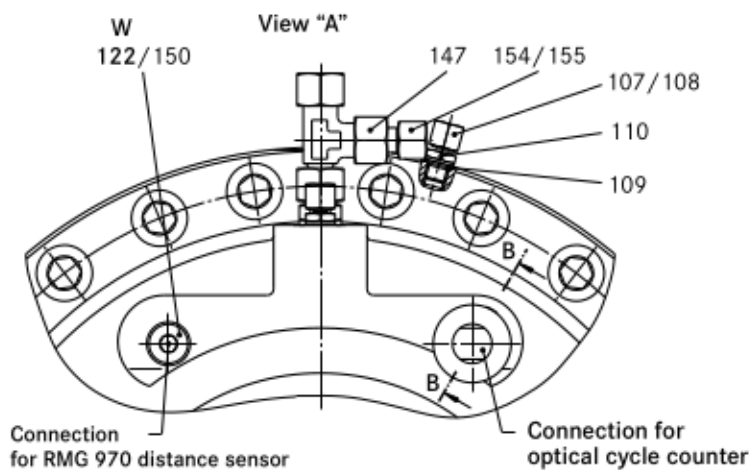
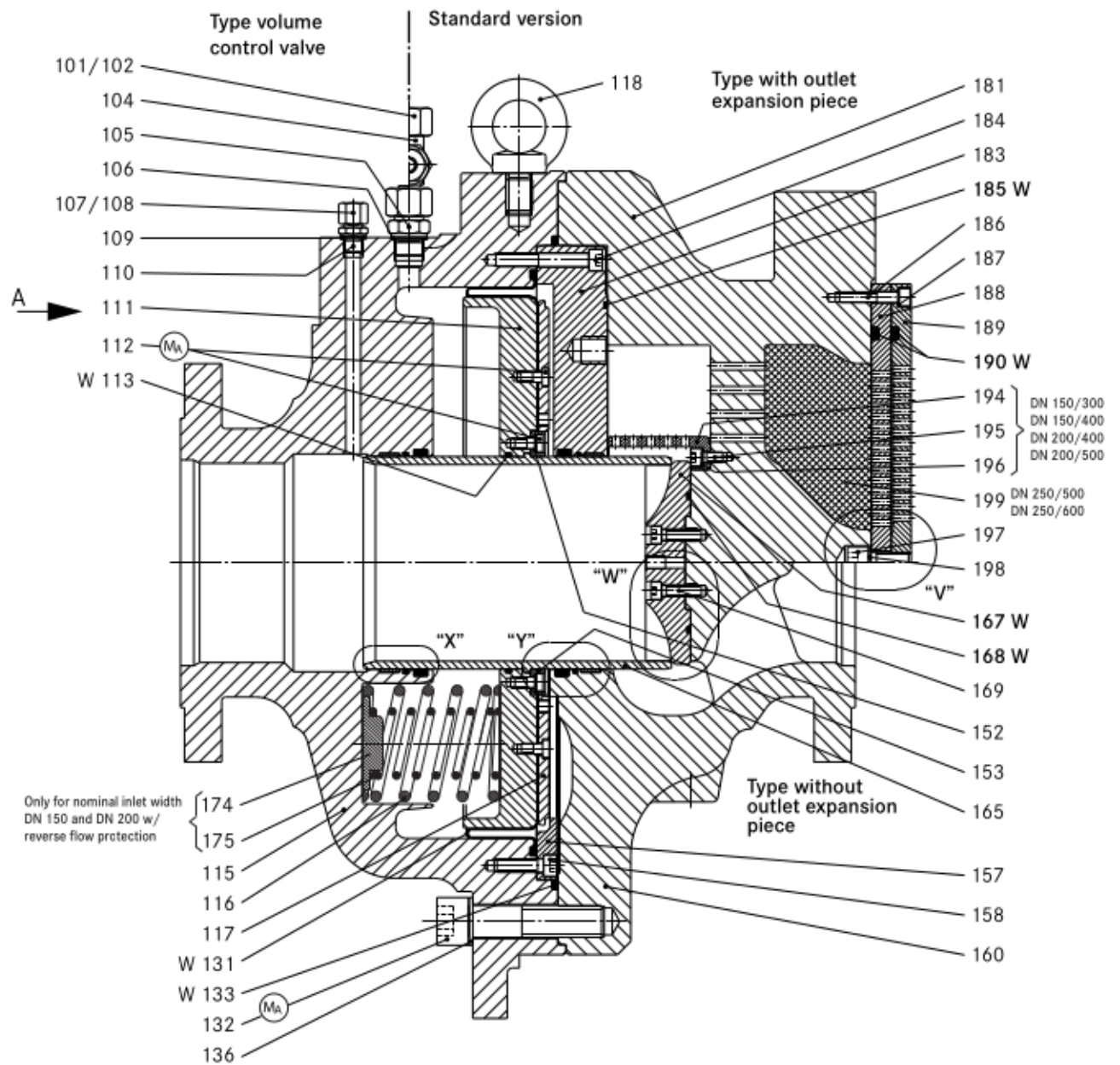
Item no.	Denomination	No.	Part no.			
			DNE 25	DNE 50	DNE 80	DNE 100
13	O ring	1	20430	20413	20414	21016
14	O ring (only for type w/ volume control valve)	1	20430	20413		
22	O ring	1	20382	20382		
22	O ring	2	20382	20382		
31	Roll diaphragm	1	10013485	10013535	10013585	10013635
33	O ring	1	20827	20843	20838	20866
35	O ring	1	20415	20415		
42	O ring	1	20246	20335	20249	20262
44	O ring	2	20252	20596	20976	21016
45	Silicone grease		27052	27052	27052	27052
	Type without reverse flow protection					
67	Valve cone	1	10013483	10013533	10013583	10013633
68	O ring	1	20231	20234	20235	20236
	Type with reverse flow protection					
67	Valve cone	1	10013457	10013507	10013557	10013607
68	O ring	1	20310	20237	20425	20246

Type with outlet expansion piece

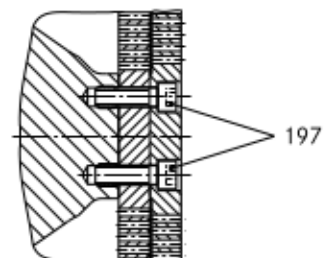
Item no.	Denomination	No.	Part no.					
			DN 25/100	DN 25/150	DN 50/150	DN 50/200	DN 80/250	DN 100/300
90	O ring	2	20261	20433	20433	20314	20397	20339

4.2 RMG 512c – spare parts

4.2.1 Spare parts drawing

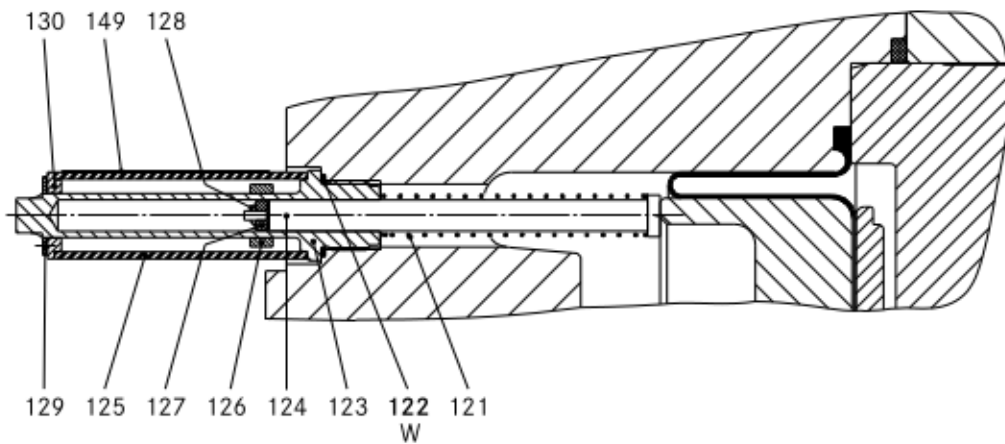


Detail “V”
Nominal outlet width DN 500 and DN 600



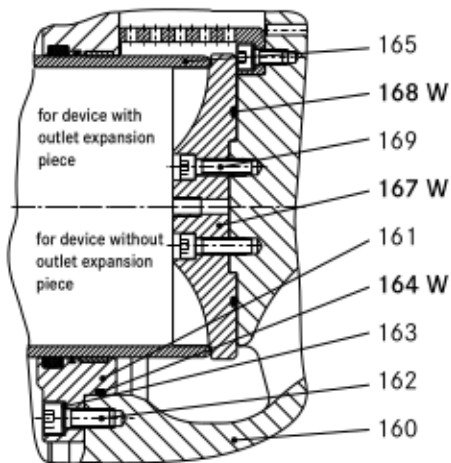
M_A Be sure to comply with tightening torques in table on page 5.
 W Parts should be held in stock for maintenance purposes.

View B - B, rotated by 30° degrees
 Optical cycle counter

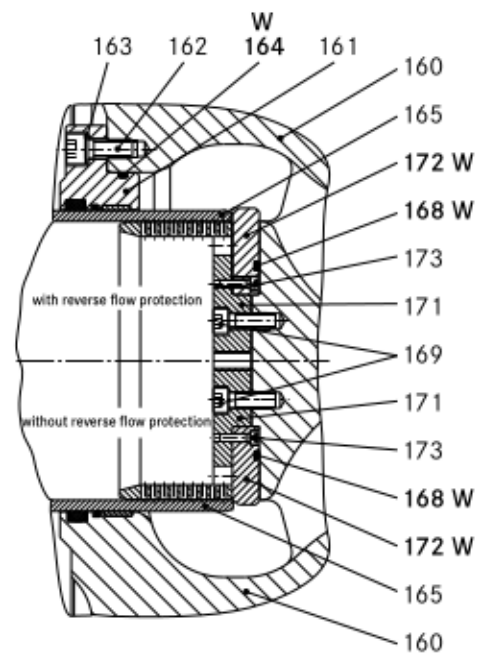


Detail "W"

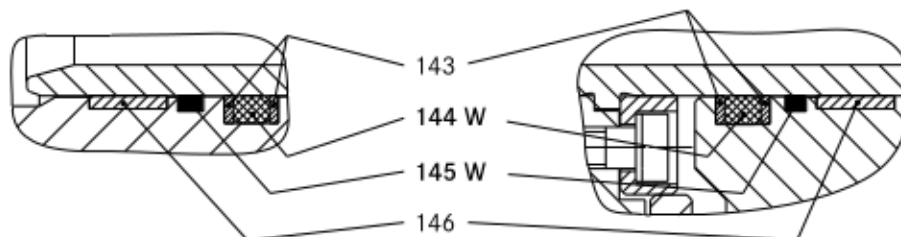
Type with reverse flow protection



Type with perforated flow restrictor



Detail "X"



M_A Be sure to comply with tightening torques in table on page 5.
W Parts should be held in stock for maintenance purposes.

4.2.2 RMG 512c – spare parts

Item no.	Denomination	No.	W	Material	Part no.		
					DN 150	DN 200	DN 250
101	Union nut	1		St	30807	30807	30807
102	Cutting ring	1		St	30906	30906	30906
104	Connection pipe	1		St	30615	31434	31434
105	Screwed socket	1		St	30112	30112	30112
106	Sealing ring	1		LM	18787	18787	18787
107	Union nut	2		St	30803	30803	30803
108	Cutting ring	2		St	30903	30903	30903
109	Sealing ring	2		LM	18842	18842	18842
110	Screwed socket	2		St	30111	30111	30111
111	Diaphragm disk	1		LM	10026872	10026972	10030557
112	Cheese head screw	32		St	10355	10355	
112	Cheese head screw	42		St			10067
113	O ring	1	W	KG	20514	20329	100700
115	Housing, at option:						
115	PN 25	1		GS		10026930	10030523
115	PN 40	1		GS	10026831	10026931	10030524
115	ANSI 300 RF	1		GS	10026832	10026932	10030525
115	ANSI 300 RJ	1		GS	10026833	10026933	10030526
115	ANSI 600 RF	1		GS	10026834	10026934	10030527
115	ANSI 600 RJ	1		GS	10026835	10026935	10030528
116	Pressure spring	5		NFSt	27894		
116	Pressure spring	6		NFSt		10013887	
116	Pressure spring	8		FSt			10030561
117	Mounting plate	1		LM	10026874	10026974	10030559
118	Eye bolt	1		St	10590	10047	28049
121	Pressure spring	1		FSt	19081973	10013893	
121	Pressure spring	2		FSt			19081838
122	O ring	2	W	KG	20382	20382	20382
123	Housing for cycle counter	1		Ms	10013689	10013889	10030569
124	Display pin	1		Ms	10013691	10013891	10030570
125	Inspection glass	1		PGL	19081972	10013892	10030571
126	Magnet	1		Oxit	27043	27043	27043
127	Magnet	1		Oxit	27044	27044	27044
128	Seeger clamping disc	1		FSt	27063	27063	27063
129	Seeger grip ring	1		FSt	19172	19172	19172
130	Lock ring	1		LM	10013286	10013286	10013286
131	Roll diaphragm	1	W	KG	10000688	10013885	10030558
132	Cheese head screw	24		St	10665		
132	Cheese head screw	29		St		10664	
132	Pa head screw	39		St			100703
133	O ring	1	W	KG	21354	21349	100699

Item no.	Denomination	No.	W	Material	Part no.		
					DN 150	DN 200	DN 250
136	Lock washer	24		FSt	10129		
136	Lock washer	29		FSt		14140	
136	Lock washer	39		FSt			14140
143	Support ring	4		K	21217	21235	100701
144	O ring	2	W	KG	21215	20542	100700
145	Silicone grease		W		27052	27052	27052
146	Guide ring	2		K	21353	21348	100702
147	Reducer	1		St	31809	31809	31809
149	Valve scale	1		K	10013694	10013894	10030573
150	Sealing cap	1		St	10539	10539	10539
152	Lock washer	8		FSt	14112	14112	
152	Lock washer	12		FSt			14112
153	Fastening ring	1		LM	10026875	10026975	10030560
154	Union nut	1		St	30805	30805	30805
155	Cutting ring	1		St	30904	30904	30904
	Type without outlet expansion piece						
157	Tensioning ring	1		St	10026869	10026969	10030555
158	Cheese head screw	8		St	10441	10441	
158	Cheese head screw	12		St			10441
160	Valve housing, at option:						
160	PN 25	1		GS		10026940	10030531
160	PN 40	1		GS	10026841	10026941	10030532
160	ANSI 300 RF	1		GS	10026842	10026942	10030533
160	ANSI 300 RJ	1		GS	10026843	10026943	10030534
160	ANSI 600 RF	1		GS	10026844	10026944	10030535
160	ANSI 600 RJ	1		GS	10026845	10026945	10030536
	Type with reverse flow protection without outlet expansion piece						
157	Tensioning ring	1		St	10026869	10026969	10030555
158	Cheese head screw	8		St	10441	10441	
158	Cheese head screw	12		St			10441
160	Valve housing, at option:						
160	PN 25	1		GS		10026950	10030539
160	PN 40	1		GS	10026851	10026951	10030540
160	ANSI 300 RF	1		GS	10026852	10026952	10030541
160	ANSI 300 RJ	1		GS	10026853	10026953	10030542
160	ANSI 600 RF	1		GS	10026854	10026954	10030543
160	ANSI 600 RJ	1		GS	10026855	10026955	10030544
161	Guide ring	1		St	10026871	10026971	10030556
162	Cheese head screw	8		St	10207		
162	Cheese head screw	10		St		10328	
162	Cheese head screw	12		St			10328
163	Lock washer	8		FSt	14113		
163	Lock washer	10		FSt		14114	
163	Lock washer	12		FSt			14114
164	O ring	1	W	KG	20625	21193	21311

Item no.	Denomination	No.	W	Material	Part no.		
					DN 150	DN 200	DN 250
	Valve seat variant w/ valve cone without reverse flow protection						
165	Valve sleeve	1		St	10026876	10026976	10030562
167	Valve cone	1	W	K	10026878	10026978	10030564
168	O ring	1	W	KG	21356	21351	20329
169	Cheese head screw	4		St	10098		
169	Cheese head screw	10		St		10441	
169	Cheese head screw	12		St			10441
	Valve seat variant with valve cone and reverse flow protection						
165	Valve sleeve	1		St	18360046	10030269	
167	Valve cone	1	W	K	18360047	10030271	
168	O ring	1	W	KG	21356	21351	
169	Cheese head screw	4		St	10098		
169	Cheese head screw	10		St		10441	
174	Spring plate	5		LM	18360048		
174	Spring plate	6		LM		10030272	
175	Pressure spring	5		FSt	10014961		
175	Pressure spring	6		NFSt		100151	
	Valve seat variant w/ perforated flow restrictor without reverse flow protection						
165	Valve sleeve	1		St	10026876	10026976	10030562
168	O ring	1	W	KG	21356	21351	10329
169	Cheese head screw	4		St	10551		
169	Cheese head screw	10		St		10207	
169	Cheese head screw	12		St			10207
171	Perforated flow restrictor	1		NSt	10026881	10026981	10030566
172	Sealing ring	1	W	K	10026882	10026982	10030567
173	Cheese head screw	4		St	10382	10602	10591
	Valve seat variant w/ perforated flow restrictor and reverse flow protection						
165	Valve sleeve	1		St	18360046	10030269	
168	O ring	1	W	KG	21356	21351	
169	Cheese head screw	4		St	10551		
169	Cheese head screw	10		St		10207	
171	Perforated flow restrictor	1		NSt	10026881	10026981	
172	Sealing ring	1	W	K	10030266	10030270	
173	Cheese head screw	4		St	10382	10602	
174	Spring plate	5		LM	18360048		
174	Spring plate	6		LM		10030272	
175	Pressure spring	5		FSt	10014961		
175	Pressure spring	6		NFSt		100151	

Type with outlet expansion piece

Item no.	Denomination	No.	W	Material	Part no.			
					DN 150/300	DN 150/400	DN 200/400	DN 200/500
181	Relief housing	1		GS	10 026 860	10 026 865	10 026 960	10 026 965
183	Guide flange	1		St	10 026 859	10 026 859	10 026 959	10 026 959
184	Cheese head screw	8		St	10 610	10 610	10 386	10 386
185	O ring	1	W	KG	21 355	21 355	21 350	21 350
186	Cheese head screw	8		St	10 433	10 433	10 433	
186	Cheese head screw	12		St				10 428
187	Lock washer	8		FSt	14 112	14 112	14 112	
187	Lock washer	12		FSt				14 112
188	Relief plate 1	1		St	10 026 862	10 006 569	10 026 962	10 026 967
189	Relief plate 2	1		St	10 026 863	10 006 571	10 026 963	10 026 968
190	O ring	2	W	KG	20 339	20 424	20 424	21 243
194	Relief bushing	1		NSt	10 026 864	10 026 864	10 026 964	10 026 964
195	Cheese head screw	8		St	8 176	8 176		
195	Cheese head screw	10		St			08 176	8 176
196	Lock washer	8		FSt	14 112	14 112		
196	Lock washer	10		FSt			14 112	14 112
197	Cheese head screw	1		St	10 394	10 394	10 394	
197	Cheese head screw	4		St				10 556
198	Lock washer	1		FSt	14 116	14 116	14 116	

Item No.	Denomination	No.	W	Material	Part no.			
					DN 250/500	DN 250/600		
181	Relief housing	1		GS	10030547	10030551		
183	Guide flange	1		St	10030546	10030546		
184	Cheese head screw	12		St	10386	10386		
185	O ring	1	W	KG	21349	21349		
186	Cheese head screw	12		St	10428	10428		
187	Lock washer	12		FSt	14112	14112		
188	Relief plate 1	1		St	10030549	10030553		
189	Relief plate 2	1		St	10030550	10030554		
190	O ring	2	W	KG	21243	21365		
197	Cheese head screw	4		St	10556	10556		
199	Coil	21.4kg		FSt	26361			
199	Coil	28.5kg		FSt		26361		

4.2.3 Parts for maintenance purposes

Item no.	Denomination	Number	Part no.		
			DN 150	DN 200	DN 250
113	O ring	1	20514	20329	100700
122	O ring	2	20382	20382	20382
131	Roll diaphragm	1	10000688	10013885	10030558
133	O ring	1	21354	21349	100699
144	O ring	2	21215	20542	100700
145	Silicone grease		27052	27052	27052
Type with reverse flow protection without outlet expansion piece					
164	O ring	1	20625	21193	21311
Valve seat variant w/ valve cone without reverse flow protection					
167	Valve cone	1	10026878	10026978	10030564
168	O ring	1	21356	21351	20329
Valve seat variant with valve cone and reverse flow protection					
167	Valve cone	1	18360047	10030271	
168	O ring	1	21356	21351	
Valve seat variant w/ perforated flow restrictor without reverse flow protection					
168	O ring	1	21356	21351	10329
172	Sealing ring	1	10026882	10026982	10030567
Valve seat variant w/ perforated flow restrictor and reverse flow protection					
168	O ring	1	21356	21351	
172	Sealing ring	1	10030266	10030270	

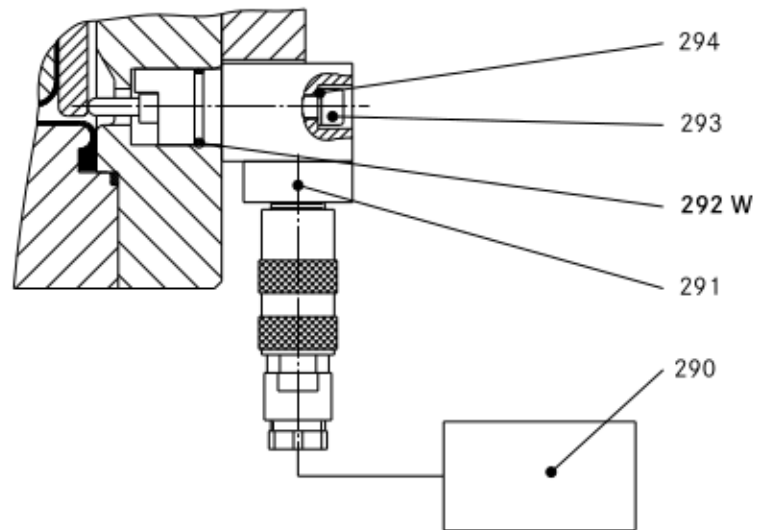
Type with outlet expansion piece

Item no.	Denomination	No.	Part no.					
			DN 150/300	DN 150/400	DN 200/400	DN 200/500	DN 250/500	DN 250/600
185	O ring	1	21 355	21 355	21 350	21 350	21349	21349
190	O ring	2	20 339	20 424	20 424	21 243	21243	21365

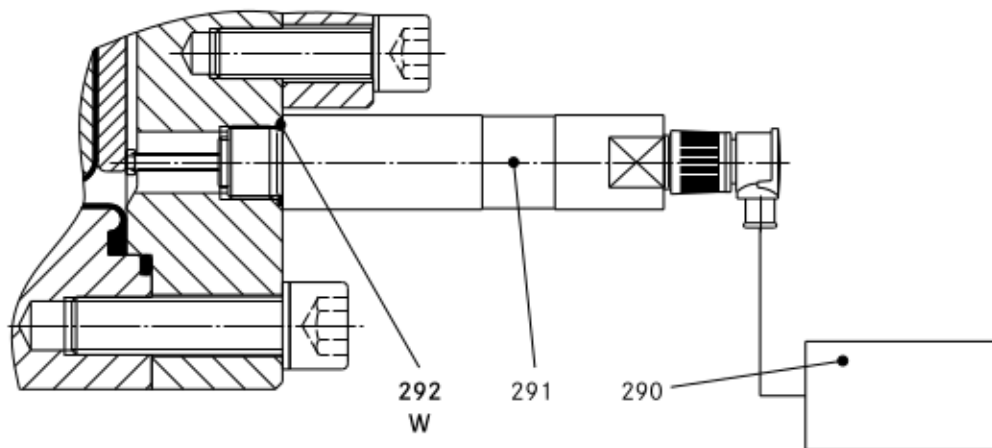
4.3 Accessories – spare parts

4.3.1 Spare parts drawing

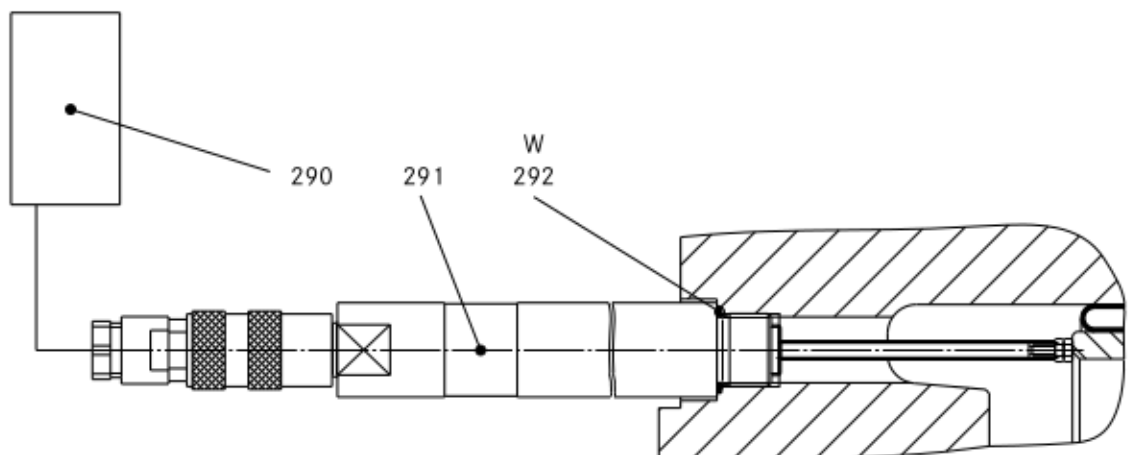
RMG 512b DN 25 and DN 50 with RMG 970 distance sensor



RMG 512b DN 80 and DN 100 with RMG 970 distance sensor



RMG 512c DN 150 thru DN 250 with RMG 970 distance sensor



W Parts should be held in stock for maintenance purposes.

4.3.2 Accessories – spare parts

Item no.	Denomination	No.	W	Material	Part no.					
					DN _E 25	DN _E 50	DN _E 80 DN _E 100	DN _E 150	DN _E 200	DN _E 250
290	Measuring transducer	1		24333	24333	24333	24333	24333	24333	
291	RMG 970 distance sensor	1			18353620	18353702	10021332	19082676	18357032	10030700
292	O ring	1	W	KG	20415	20415	20382	20382	20382	20382
293	Cheese head screw	2		St	10349	10343				
294	Lock washer	2		FSt	14123	14123				

4.3.3 Parts for maintenance purposes

292	O ring	1			20 415	20 415	20 382	20 382	20 382	20382
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