



OPERATING AND MAINTENANCE INSTRUCTIONS/
SPARE PARTS

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Honeywell

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1. General information

All persons involved with the assembly, operation and/or maintenance of the pressure reducer HON 213 must read and understand all of the following documents:

- Technical product information 213.00 – 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 213.20 – this Honeywell document contains more detailed information on assembly and operation of the pressure reducer HON 213.

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.

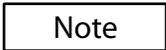
Do not use any spare/wear parts and/or oils & lubricants not specifically recommended in the Honeywell operating and maintenance instructions for spare parts. In the event spare/wear parts and/or lubricants & oils other than those specifically recommended are used, Honeywell shall not be held liable for any defects and/or consecutive damages attributable to such use of illegal parts, lubricants, oils etc.

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 signal words 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

- Control deviations

Admissible control deviations/offsets are design-related and may be due to the

- effect of the inlet pressure (see table in 213.00 or Honeywell booklet)
- spring's dependence on the flow rate (see table 213.00 or Honeywell booklet)
- flow resistance inside outlet channels - which increases with higher volumes.

- Bubble-tight shut-off

The devices are equipped with shut-offs with plastic seals. That means they close at zero flow.

3. Specific maintenance instructions

- Piston (15)

The shut-off piston (157) can be removed by removing the upper shut-off screw (11).

- Internal parts

- Internal parts are accessible by removing the cap (6) on the bottom side of the device.
- Internal parts must not be damaged and must move easily. The measuring diaphragm must not be damaged/bulged due to the effect of the gas.

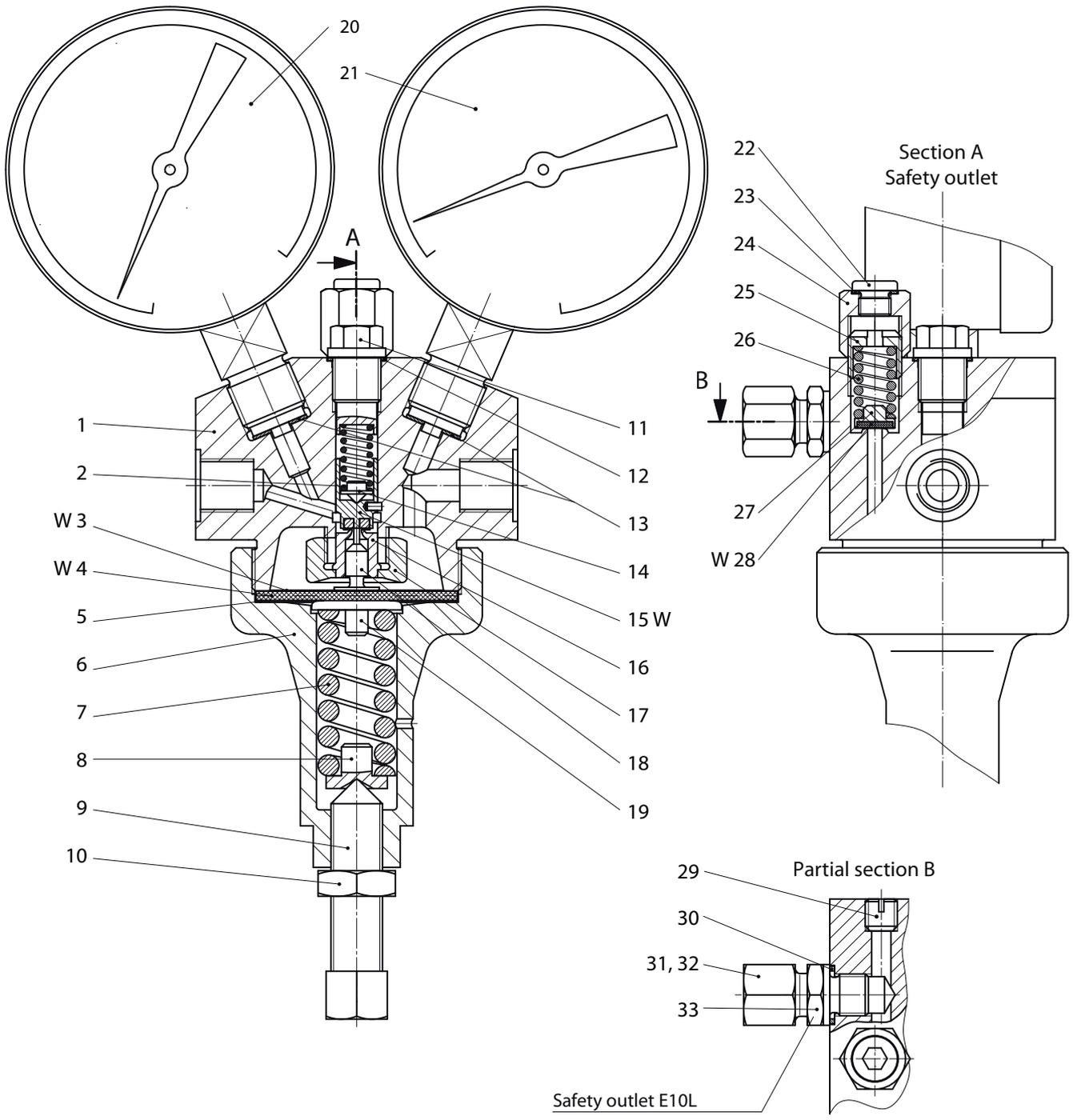
Note

When you re-install the cap, be sure not to tighten too much. The diaphragm must not be squeezed more than about a millimetre. That's perfectly sufficient to prevent leaks.

3.1 Lubricants

Components	Lubricants	HON part no.
All fastening screws and screwed pipe connections	Assembly paste	27091

4.1 Spare parts drawing



W Parts should be held in stock for maintenance purposes.

4.2 Spare parts list HON 213

Item no.	Denomination	Number	W	Materials	Part no.		
					Measuring unit M	Measuring unit H	Measuring unit S
1	Casing	1			10016570	10016570	10016570
2	Pressure spring	1		NFSt	10016863	10016863	10016863
3	Sheet steel diaphragm	1	W	FSt			2807
4	Diaphragm (3 mm thick)	1	W	KG	10016583	10016583	10016583
5	Fibreglass ring	1		Fibreglass	3085	3085	3085
6	Cap	1		Ms	10016526	10016548	10016555
7	Control spring, optional:						
7	Control spring F1 Ø 3.8 W _{ds} 0.2 to 4 bar	1		FSt	10016535		
7	Control spring F2 Ø 4.75 W _{ds} 1.0 to 10 bar	1		FSt	10016536		
7	Control spring F3 Ø 5.5 W _{ds} 1.0 to 20 bar	1		FSt		10015117	
7	Control spring F4 Ø 6.0 W _{ds} 2.0 to 30 bar	1		FSt		10016554	
7	Control spring F5 Ø 6.5 W _{ds} 3.0 to 70 bar	1		FSt			10016545
8	Spring-loaded valve cone	1		St	10016531	10016550	10016550
9	Adjusting screw	1		NSt	10016580	10016580	10016580
10	Hex nut	1		St	13100	13100	13100
11	Shut-off screw	1		NSt	10016844	10016844	10016844
12	Sealing ring	1		LM	18819	18819	18819
13	Sealing ring, at option:						
13	Sealing ring, 0.5 mm thick	2		LM	18788	18788	18788
13	Sealing ring, 1.0 mm thick	2		LM	18323	18323	18323
14	Compensation piece	1		Ms	10016865	10016865	10016865
15	Piston, complete	1	W	NSt/K	10016926	10016926	10016926
16	Nozzle	1		Ms	10016868	10016868	10016868
17	Nozzle nut	1		NSt	10016848	10016848	10016848
18	Guiding piece	1		NSt	10018066	10018066	10018066
19	Diaphragm disc	1		LM	10016527		
19	Diaphragm disc	1		Ms		10016549	
19	Diaphragm disc	1		St			10016556
20	Pressure gauge, 0 to 400 bar	1		Ms	26772	26772	26772
21	Pressure gauge, at option:						
21	Pressure gauge, 0 to 6 bar	1		Ms	26474		
21	Pressure gauge, 0 to 16 bar	1		Ms	26476		
21	Pressure gauge, 0 to 25 bar	1		Ms		26477	
21	Pressure gauge, 0 to 60 bar	1		Ms		26478	
21	Pressure gauge, 0 to 100 bar	1		Ms			26479

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	Number	W	Materials	Part no.		
					Measuring unit M	Measuring unit H	Measuring unit S
22	Locking screw	1		St	10547	10547	10547
23	Sealing ring	1		Cu	18586	18586	18586
24	Cap nut	1		NSt	10009248	10009248	10009248
25	Setting screw	1		Ms	10016828	10016828	10016828
26	Control spring, optional:						
26	Control spring Ø 1.5 W _{ds} up to 4 bar	1		FSt	10014334		
26	Control spring Ø 2.0 W _{ds} up to 10 bar	1		FSt	10014335		
26	Control spring Ø 2.25 W _{ds} up to 30 bar	1		FSt		10014336	
26	Control spring Ø 2.8 W _{ds} up to 70 bar	1		FSt			10014337
27	Valve cone	1		Ms	10016831	10016831	10016831
28	Sealing washer	1	W	KG	10014082	10014083	10014083
29	Threaded pin	1		Ms	12471	12471	12471
30	Sealing ring	1		LM	18819	18819	18819
31	Union nut	1		St	30803	30803	30803
32	Cutting ring	1		St	30903	30903	30903
33	Connection pipe	1		St	30110	30110	30110

4.3 Parts for maintenance purposes

Item no.	Denomination	Number	Part no.		
			Measuring unit M	Measuring unit H	Measuring unit S
3	Sheet steel diaphragm	1			2807
4	Diaphragm (3 mm thick)	1	10016583	10016583	10016583
15	Piston, complete	1	10016926	10016926	10016926
28	Sealing washer	1	10014082	10014083	10014083

For More Information

To learn more about Honeywell's
Advanced Gas Solutions, visit
www.honeywellprocess.com or contact
your Honeywell account manager

GERMANY

Honeywell Process Solutions

Honeywell Gas Technologies GmbH
Osterholzstrasse 45
34123 Kassel, Germany
Tel: +49 (0)561 5007-0
Fax: +49 (0)561 5007-107

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