

OPERATING AND MAINTENANCE INSTRUCTIONS/
SPARE PARTS

EDITION 01/2017

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Worldwide**

Honeywell

1. General

The "General description 300.00" for the gas pressure regulator of series HON 300 contains technical data, versions and dimensions. The spare parts are described in the following brochures:

| | | |
|------------------------|--|--------|
| Safety shut-off valve: | General description | 720.00 |
| | Operation and maintenance, Spare parts | 673.20 |

Our brochure "General Operating Instructions for Gas Pressure Regulators and Safety Devices" will be useful to fit the valve into the line, put into the line, put into service and find faults that might disturb the operation.

The construction, set-up, supervision and maintenance of gas pressure stations are subject to special technical rules which should be strictly observed, in particular those given by the DVGW-Worksheets G 490, G 491 and G 495.

The frequency of periodical maintenance of gas pressure regulator HON 300 should be determined according to the prevailing conditions and the type and composition of the gaseous medium. We, therefore, abstain from imposing any fixed intervals and would rather refer to the recommendations given by the DVGW-Worksheets G 495.

For maintenance all parts are to be cleaned and subjected to a thorough visual inspection. A visual inspection should not be omitted when the course of operation or functional tests have shown lack of regulating accuracy.

Particular care should be given to the checking of sealings and diaphragms, as well as carrying and moving parts. Damaged parts should be replaced by new ones.

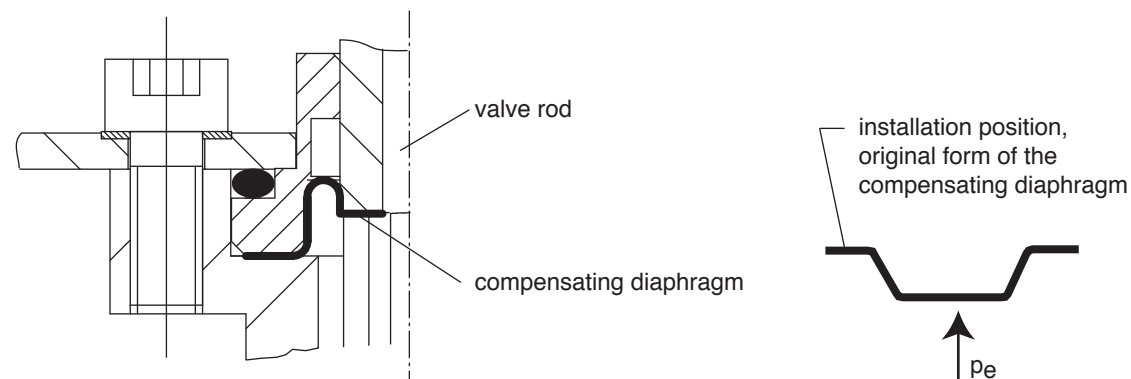
The item numbers referred to in the maintenance instructions are identical with those of spare parts drawings and spare parts lists.

We recommend to keep all parts that are specially marked in the spare parts lists in stock for prompt maintenance availability.

2. Special Operating Instructions

Compensating Diaphragm (114)

By assembling, we should pay attention to the correct position of the compensating diaphragm.



Valve rod (130, 167)

In order to prevent from disforming of the compensating diaphragm, by releasing or fastening of the screw (117) or the nut (166, 127), the valve rod must not be distorted. Moreover, the valve rod (130, 167) must be equipped with a key head.

3.8 Spare Parts List HON 300

Diaphragm assembly 2

| pos. no. | description | material | item no. |
|-------------|---------------------------------|----------|------------|
| 201 | pressure spring, alternatively: | | |
| - | Wh 500 mbar to 800 mbar | FSt | 10 004 339 |
| - | Wh 600 mbar to 2000 mbar | FSt | 10 004 340 |
| 202 | diaphragm plate | LM | 10 004 386 |
| 203* | form diaphragm | KG | 10 004 713 |
| 204 | guide piece | LM | 10 004 385 |

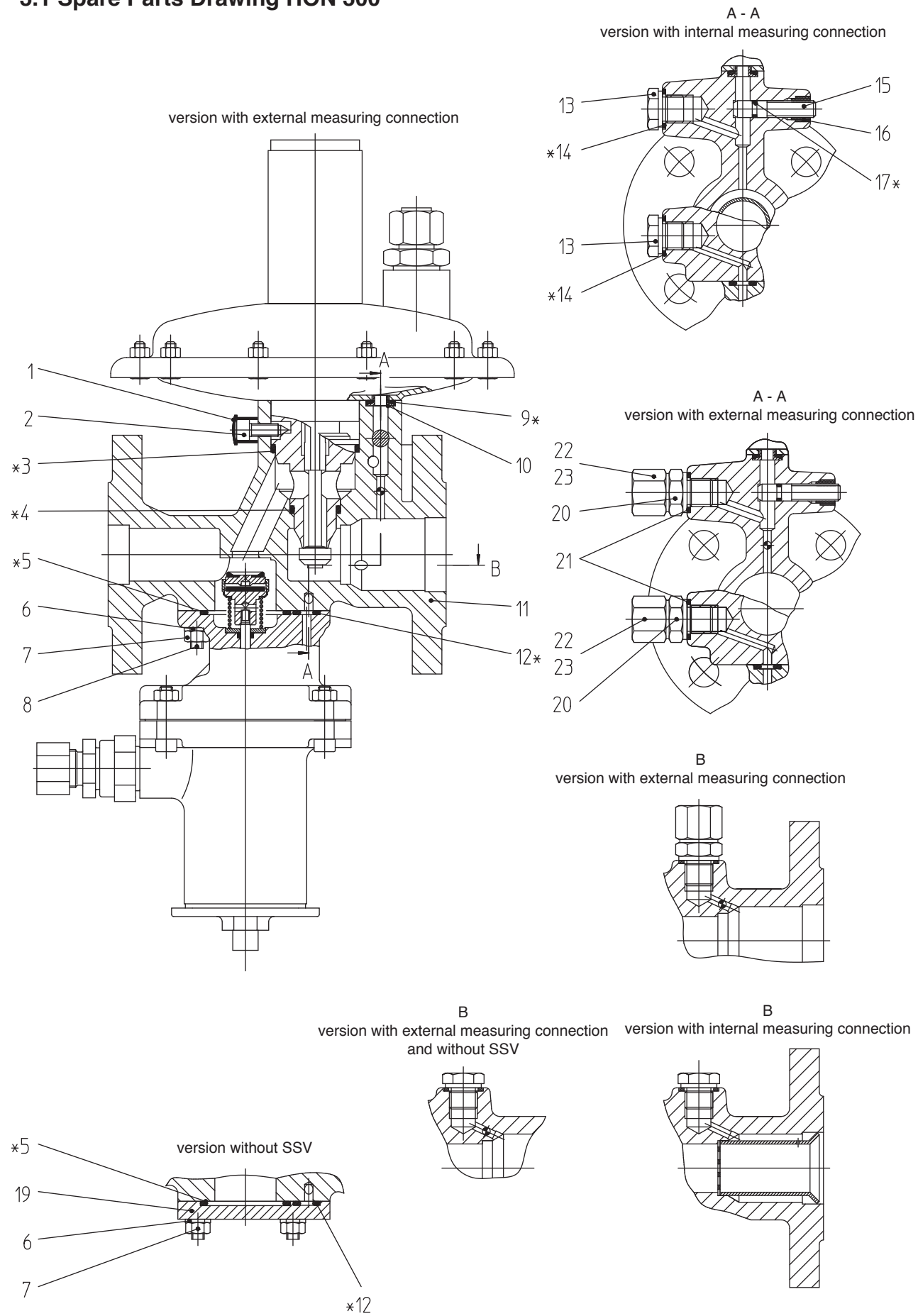
Parts marked by an asterisk * to be kept in stock for maintenance

Material-key:

| | | | | | |
|-----|------------------|----|----------------|----|----------------------------------|
| FSt | ... spring steel | LM | ...light metal | KG | ... rubber-like plastic material |
|-----|------------------|----|----------------|----|----------------------------------|

3. Spare Parts

3.1 Spare Parts Drawing HON 300



*Parts to be kept in stock for maintenance

3.6 Spare Parts List HON 300

Diaphragm assembly 1 with safety diaphragm

| pos. no. | description | material | item no. |
|----------|---------------------|-----------|------------|
| 160 | diaphragm cover | St | 10 004 706 |
| 161 | hexagon nut | St | 00 003 399 |
| 162 | spring plate | LM | 10 004 360 |
| 163 | safety diaphragm | KG | 10 004 367 |
| 164 | hexagon screw | St | 00 010 008 |
| 165 | fixing screw | NSt | 10 004 361 |
| 166 | distance piece | LM | 10 004 366 |
| 167 | valve rod, complete | NSt/St/LM | 10 004 363 |
| 168 | sealing ring | LM | 00 018 740 |
| 169 | threaded pin | St | 00 012 405 |
| 170 | closing cap | LM | 10 004 368 |

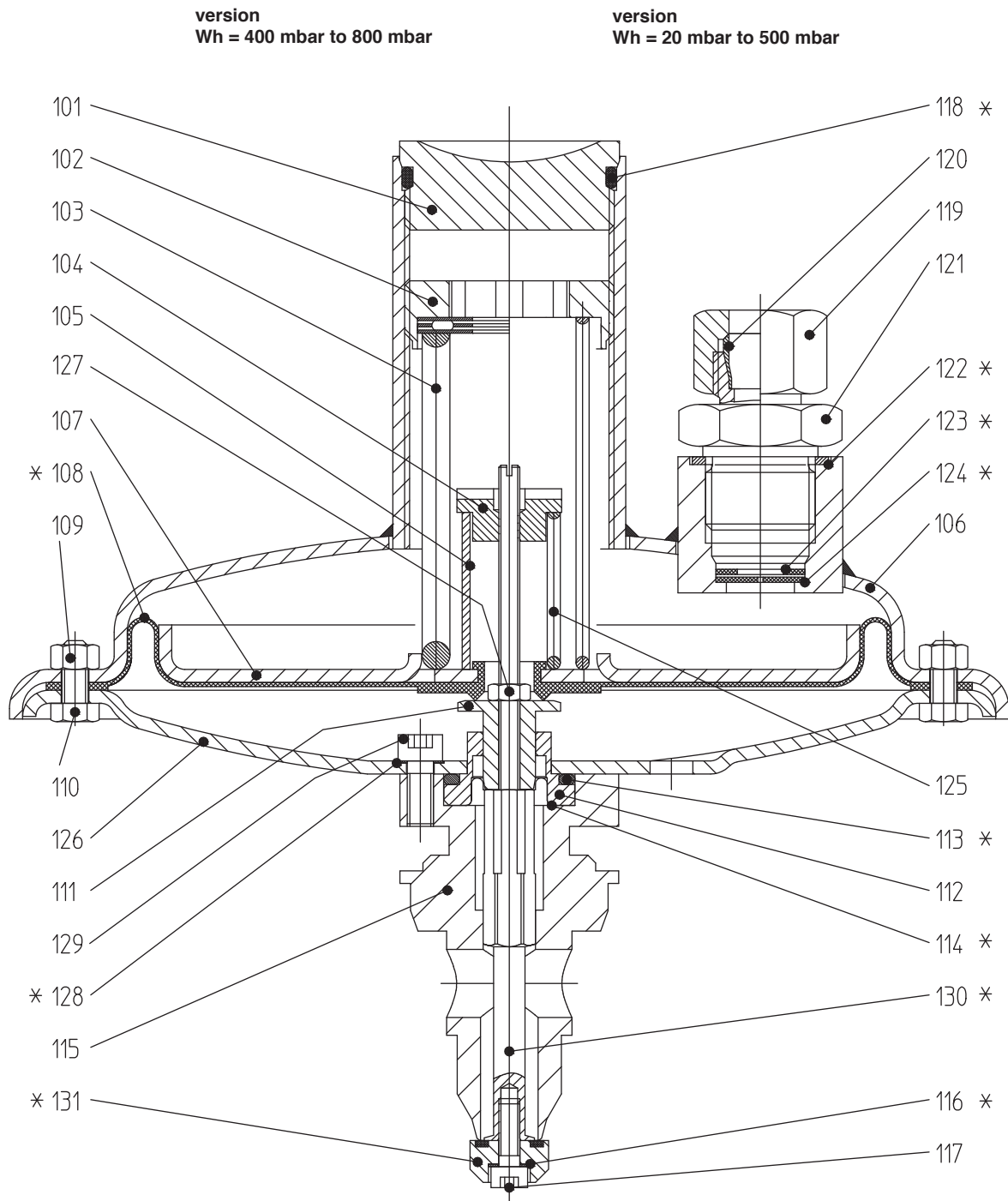
Parts marked by an asterisk * to be kept in stock for maintenance

Material-key:

| | | | | | |
|-----|---------------------|----|----------------|----|----------------------------------|
| St | ... steel | LM | ...light metal | KG | ... rubber-like plastic material |
| NSt | ... stainless steel | | | | |
| FSt | ... spring steel | | | | |

3.3 Spare Parts Drawing HON 300

Diaphragm assembly 1



* Parts to be kept in stock for maintenance

3.4 Spare Parts List HON 300

Diaphragm assembly 1

| pos. no. | description | material | item no. |
|-------------|----------------------------------|-----------|------------|
| 101 | closing cap | St | 10 004 327 |
| 102 | adjusting screw, alternatively: | | |
| - | Wh 20 mbar to 500 mbar | LM | 10 004 326 |
| - | Wh 400 mbar to 800 mbar | LM/St | 10 004 194 |
| 103 | pressure spring, alternatively: | | |
| - | Wh 20 mbar to 45 mbar | FSt | 10 004 334 |
| - | Wh 35 mbar to 100 mbar | FSt | 10 004 335 |
| - | Wh 80 mbar to 200 mbar | FSt | 10 004 336 |
| - | Wh 150 mbar to 300 mbar | FSt | 10 004 337 |
| - | Wh 250 mbar to 400 mbar | FSt | 10 004 338 |
| - | Wh 300 mbar to 500 mbar | FSt | 10 004 339 |
| - | Wh 400 mbar to 800 mbar | FSt | 10 004 340 |
| 104 | ring plate | LM | 10 004 325 |
| 105 | block tube | St | 18 354 788 |
| 106 | diaphragm cover, complete | St | 10 004 271 |
| 107 | diaphragm plate | LM | 10 004 323 |
| 108* | rolling diaphragm | KG | 10 004 320 |
| 109 | hexagon nut | St | 00 003 020 |
| 110 | hexagon screw | St | 00 008 163 |
| 111 | guide piece | LM | 10 004 196 |
| 112 | diaphragm ring | NSt | 10 004 195 |
| 113* | o-ring | KG | 00 020 383 |
| 114* | compensating diaphragm | KG | 10 004 316 |
| 115 | jet, Ø 11mm | LM | 10 004 197 |
| 116* | sealing ring | LM | 00 018 701 |
| 117 | cylinder screw | St | 00 010 391 |
| 118* | o-ring | KG | 00 020 305 |
| 119 | cap nut | St | 00 030 804 |
| 120 | compression joint | St | 00 030 904 |
| 121 | threaded adapter R 1/2" / E 12 L | St | 00 030 142 |
| 122* | sealing ring | LM | 00 018 684 |
| 123* | safety ring | FSt | 00 019 135 |
| 124* | plastic material slotted disc | KG | 10 003 607 |
| 125 | pressure spring to Wh 500 mbar | FSt | 10 004 344 |
| 126 | diaphragm casing | St | 10 004 305 |
| 127 | hexagon nut | St | 00 005 414 |
| 128* | sealing ring | LM | 00 018 807 |
| 129 | cylinder screw | St | 00 010 318 |
| 130* | valve rod, complete | NSt/St/LM | 10 004 268 |
| 131* | valve plate | LM/KG | 10 004 313 |

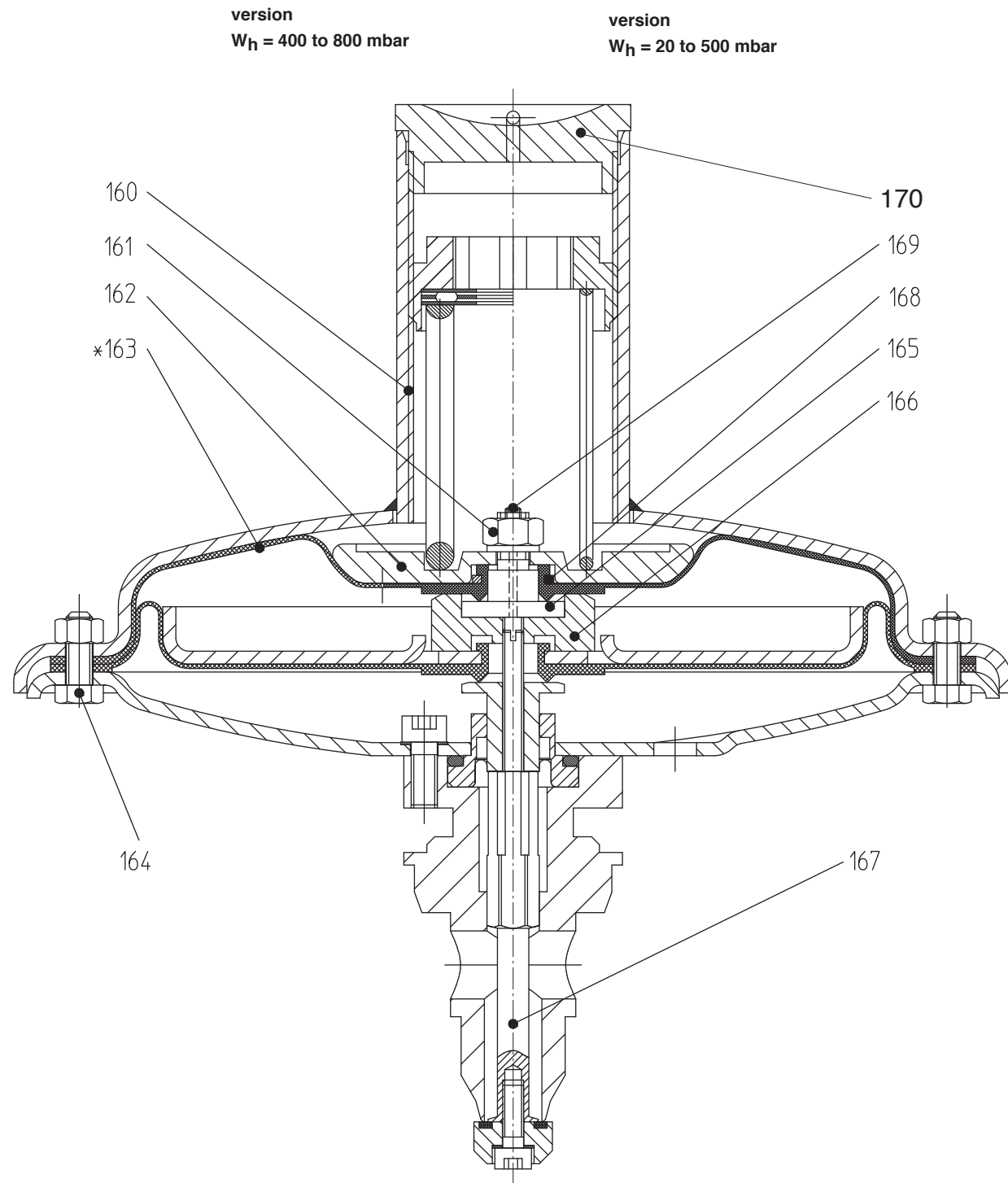
Parts marked by an asterisk * to be kept in stock for maintenance

Material-key:

| | | | | | |
|-----|---------------------|----|----------------|----|----------------------------------|
| St | ... steel | LM | ...light metal | KG | ... rubber-like plastic material |
| NSt | ... stainless steel | | | | |
| FSt | ... spring steel | | | | |

3.5 Spare Parts Drawing HON 300

Diaphragm assembly 1 with safety diaphragm



* Parts to be kept in stock for maintenance

Parts without item pos. see p. 6

3.2 Spare Parts List HON 300

| pos. no. | description | material | item no. |
|----------|---|-----------------|------------|
| 1 | plug | K | 00 026 066 |
| 2 | internal hexagonal screw | St | 10 004 895 |
| 3* | o-ring | KG | 00 020 239 |
| 4* | o-ring | KG | 00 020 227 |
| 5* | o-ring | KG | 00 020 239 |
| 6 | disc | St | 00 008 279 |
| 7 | hexagonal screw | St | 00 003 399 |
| 8 | locking screw | St | 00 012 218 |
| 9* | o-ring | KG | 00 020 419 |
| 10 | sealing plate | LM | 10 004 278 |
| 11 | casing, premounted, alternatively with: | | |
| - | - external measuring connection | GLM/LM/St/Ms/KG | 10 004 275 |
| - | - internal measuring connection | GLM/LM/St/Ms/KG | 10 004 276 |
| 12* | o-ring | KG | 00 020 521 |
| 13 | closing screw | St | 10 014 009 |
| 14* | sealing ring | LM | 00 018 689 |
| 15 | adjusting screw | NSt | 10 004 067 |
| 16 | insert | Ms | 18 352 376 |
| 17* | o-ring | KG | 00 020 309 |
| 19 | closing plate | St | 10 010 992 |
| 20 | nozzle R 1/4" / E 10 L | St | 00 030 110 |
| 21* | sealing ring | LM | 00 018 689 |
| 22 | compression joint | St | 00 030 903 |
| 23 | cap nut | St | 00 030 803 |

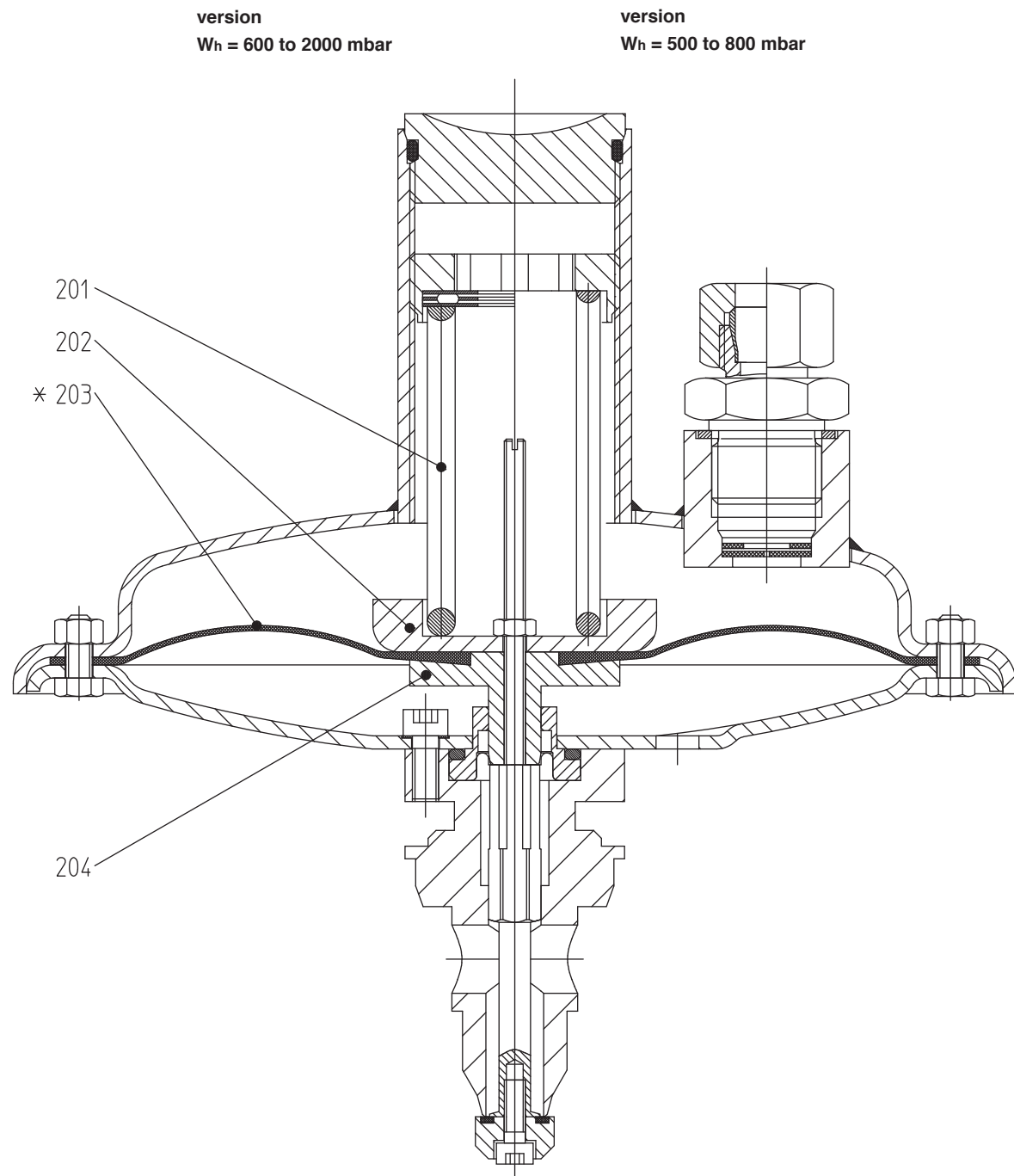
Parts marked by an asterisk * to be kept in stock for maintenance

Material-key:

| | | | | | |
|-----|----------------------|----|----------------|----|----------------------------------|
| St | ... steel | LM | ...light metal | K | ... plastic material |
| NSt | ... spring steel | Ms | ... brass | KG | ... rubber-like plastic material |
| GLM | ... light metal cast | | | | |

3.7 Spare Parts Drawing

Diaphragm assembly 2



* Parts to be kept in stock for maintenance

Parts without item pos. see p. 6

Torques

| pos.no. | torque M_A in Nm |
|---------|--------------------|
| 127 | 2 |
| 117 | 2,5 |
| 109 | 5 |
| 129 | 8 |

Lubricants

| part (grease slightly) | lubricant | HON - part.no. |
|---|------------------|----------------|
| all o-rings | silikon grease | 00 027 081 |
| all sliding surfaces | | |
| fixed and loop areas of working diaphragm (108, 203, 163) | | |
| all fastening and pipe screws | high duty grease | 00 027 058 |

Screw locking

| part | screw locking I | HON - part.no. |
|--------------------|-----------------|----------------|
| threaded pin (169) | LOCTITE | 00 026 690 |

Adjusting Tools

| regulator diaphragm assy. | adjusting tool | | |
|-------------------------------|------------------------------|-----------------------|----------------|
| | for setpoint adjusting screw | description | HON - part.no. |
| size 1 size 1 SM size 2 | 102 | p_a - adjusting key | 10 004 254 |

For More Information

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

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HON 300.20
2017-01
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