



OPERATING AND MAINTENANCE INSTRUCTIONS/  
SPARE PARTS

EDITION 03/2021

**Serving the Gas Industry Worldwide**

**Honeywell**

## 1. General

Our leaflet 721.00 gives full information with technical data, different versions and dimensions of the safety shut-off valve (SAV) HON 721.

Please observe our particular maintenance instructions and spare parts lists for the measuring units of this valve, i.e.  
measuring units HON 672 (K10a/K12/K13) leaflet 672.20  
measuring units HON 670 (K16/K17) leaflet 670.20

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

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

The frequency of periodical maintenance to be foreseen for the safety shut-off valve HON 711 should be determined according to the prevailing service conditions and the type and composition of the gaseous medium. We, therefore, abstain from imposing any fixed intervals and would rather refer you to the recommendations given by the DVGW Worksheet 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 performance tests have shown lack of response accuracy. Particular care should be given to the checking of sealings and diaphragms, as well as of all carrying and movable parts, engagement and release systems of the tripping and measuring devices and of closing springs. Damaged parts should be replaced by new ones.

The item numbers referred to in the maintenance instructions are identical with those of the 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

### Variation of the adjustment range

To change the adjusted setpoint values for overpressure and/or under pressure release, the force of the setpoint spring is changed with an adjusting screw.

The permissible adjusted ranges of the set spring are to be cared about.

### **Opening the safety shut-off valve (SAV)**

If the SAV is equipped with a switch for pressure loss, it can only be released if the pressure corresponds to the operation pressure  $p_a$  at the measuring point.

The necessary pressure compensation is produced by an automatically opening over the pressure compensation valve which is integrated in the valve plate.

Moreover, the electromagnets possibly closed must be in the corresponding position for "SAV open".

### **Beware!**

***By releasing the version HON 721 with the control device HON 672 / K10a, the control device must be first released with a closing cap by pulling, later the SAV can be opened.***

### Mounting units for HON 721 DN 50 to DN 100

Push the valve rod in direction to the main valve body.  
Moreover, a cap (31) and the corresponding auxiliary tool (screwpull)  
can be used as lever.

Push **SLOWLY**, and wait for the pressure compensation, put the valve rod  
until the stop and let it slowly glide.

The SAV is opened and released (drawing 1)

### Mounting units for HON 721 DN 150

Put the manual wheel (126) into the valve rod line (125)

By turning the manual wheel slowly left (wait for the pressure compensation),  
put the valve rod (105) until the stop and let it slowly glide. The SAV is opened  
and released.

#### **Beware!**

To assure the function of the SAV and to avoid  
damages of the valve rod, the manual wheel must be **absolutely** taken out  
of the valve rode line after the  
opening procedure and hung onto the lever (111).  
(see p. 9)

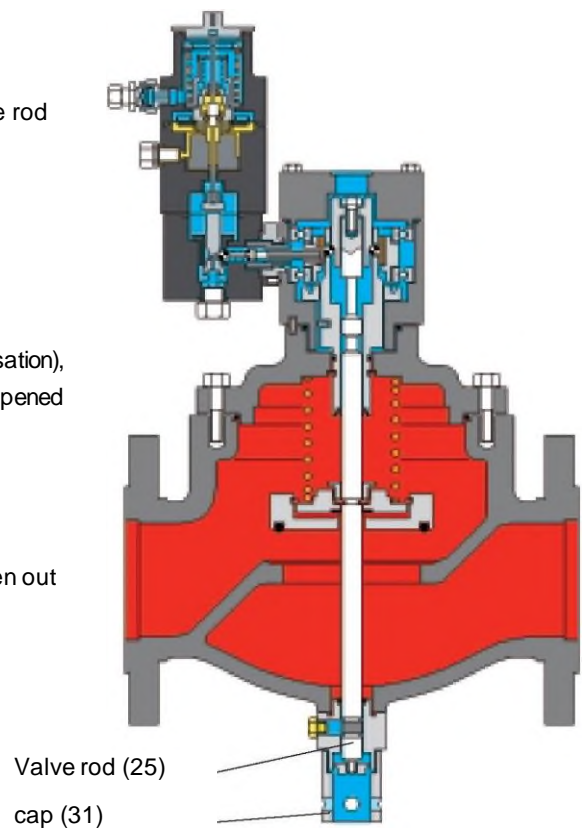
### Mounting unit for HON 402

By turning the sleeve slowly left (50), the valve  
pressure compensation of the SAV is activated.  
Pull the sleeve until the stop and let it slowly  
glide.

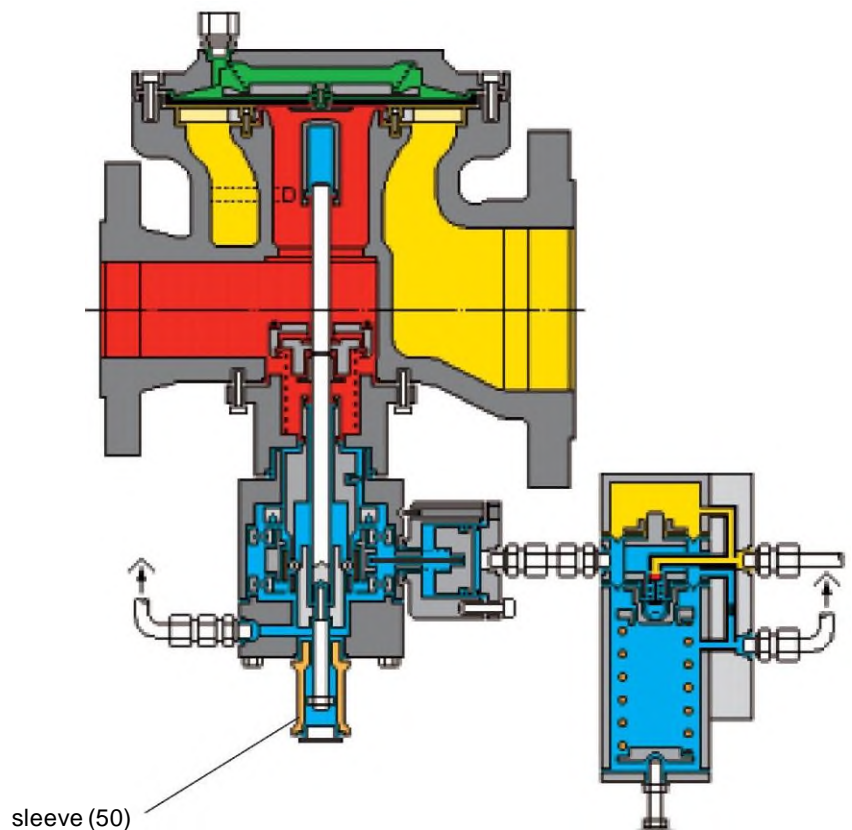
The SAV is opened and released (drawing 2).

#### **Beware!**

To assure the function of the SAV and to avoid  
damages, the sleeve must absolutely screwed  
in the threaded line after the opening  
procedure.



**Drawing 1:** HON 721 DN 50 - DN 100



**Drawing 2:** HON 402 with SAV-System HON 721

### 3. Special Maintenance Instructions

- **Control devices**

The SAV must be unreleased when dismantling. The release works automatically for devices with pressure loss release (normal type).

- **Valve rode (25, 90, 105)**

The valve rod must be easily moved. When damages occur (f.i. material break or formation of acute corners), the valve rod must be changed.

- **Engaging socket (46, 75, 102)**

With damages on the switch side (f.i. material break) this mounting unit must be changed.

- **Valve plate (24, 68, 119)**

By setting the o-ring (23, 83, 117) in the groove of the valve plate please do as following:

- put the greased o-ring on the seat groove and press it regularly in several places of the ring.
- then press the o-ring completely into the groove.

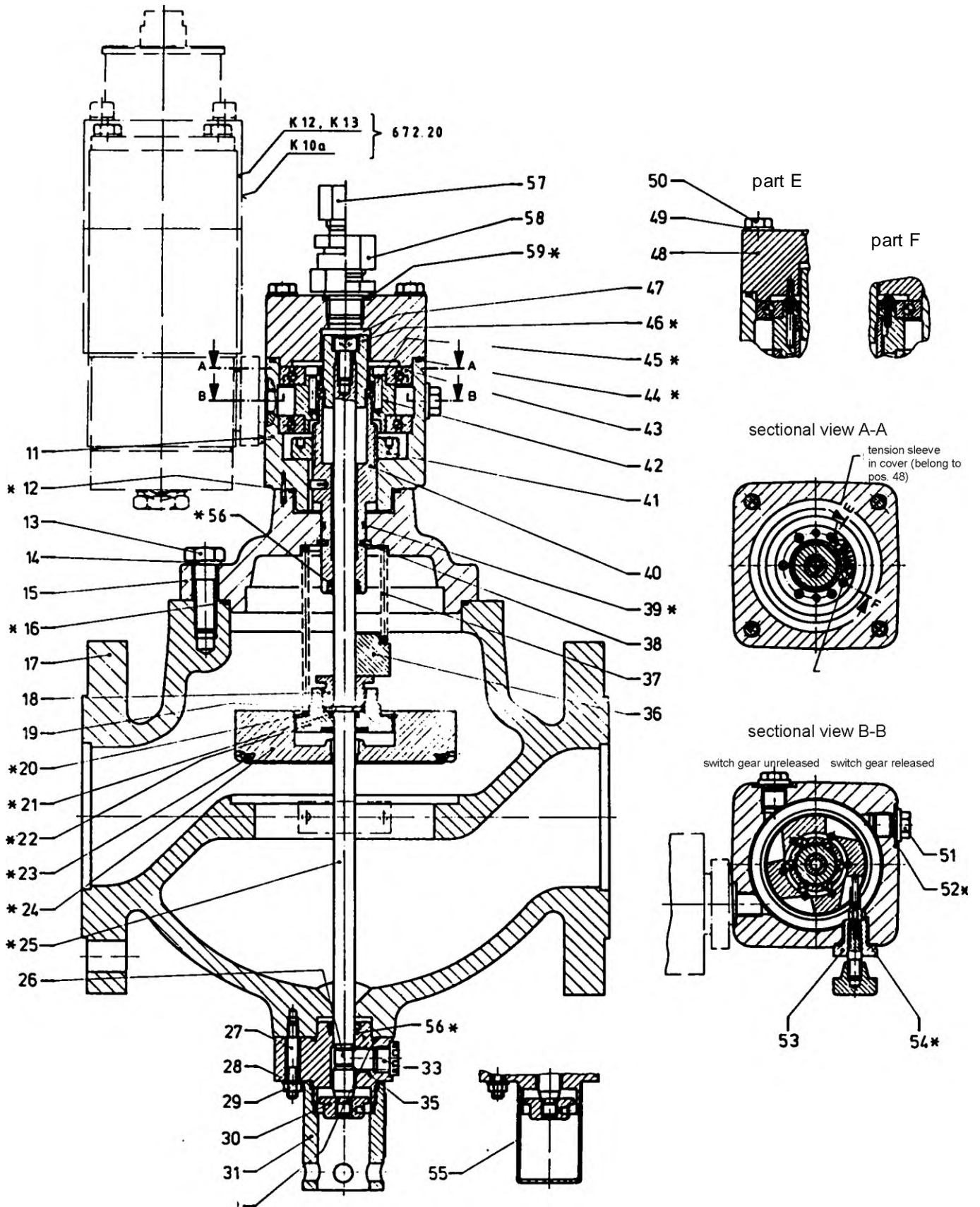
#### Torque

pos.no.	torque $M_A$ in Nm pipe size DN			
	50	80	100	150
13 110	44	120	120	30

#### Lubricants

use (grease slightly the parts)	lubricants	part no.
o-rings (all) guiding range of the valve rod engaging balls and sockets	silicone grease	103991-RMK (tub)
screw connection and fastening screws	high pessure grease	27091

4. Spare Parts  
 4.1 Spare Parts Drawing HON 721 DN 50 - DN 100



\*) to be kept in stock for maintenance

## 4.2 Spare Parts List HON 721 DN 50 - DN 100

pos. no.	description	material	part no.		
			DN 50	DN 80	DN 100
11	switch body premounted	LM/FSt	10008749	10008749	10008749
<b>12*</b>	<b>o-ring</b>	KG	20413	20413	20413
13	hexagonal screw	St	10032	10445	10445
14	safety ring	FSt	14113	14115-RMK	14115-RMK
15	SAV connection flange	GGG	10008500	10008502	10008502
<b>16*</b>	<b>o-ring</b>	KG	20246-RMK	-	-
-	<b>o-ring</b>	KG	-	20427	20427
17	body alternatively:				
-	PN 40	GS	10008462	10008465	10008468
-	PN 40	GGG	-	10008427	-
-	PN 40	GGG	-	-	10008429
-	PN 25	GS	10008462	10008465	10008468
-	PN 16	GS	1000 462	10008465	10008467
-	PN 16	GGG	-	-	10008437
-	ANSI 150	GS	10008463	10008466	10008469
-	ANSI 300	GS	10023430	10023431	10023433
18	hexagonal nut	NSt	10008614	10008614	10008614
19	ring segment	St	10008612	10 008 612	10008612
<b>20*</b>	<b>Seeger circlip</b>	FSt	19127	19127	19127
<b>21*</b>	<b>o-ring</b>	KG	20412	20412	20412
<b>22*</b>	<b>valve plate (vulcanized)</b>	LM/KG	10008606	10008606	10008606
<b>23*</b>	<b>o-ring</b>	KG	20596-RMK	-	-
-	<b>o-ring</b>	KG	-	20268-RMK	-
-	<b>o-ring</b>	KG	-	-	20268-RMK
<b>24*</b>	<b>valve plate with discharge jet</b>	LM	10008599	10008601	10008601
<b>25*</b>	<b>valve rod</b>	NSt	10008494	10008497	10008497
26	tube ring	KG	10 008 620	10 008 620	10 008 620
27	rod screw	St	12324	12324	12324
28	safety screw	St	14123-RMK	14123-RMK	14123-RMK
29	hexagonal nut	St	3399-RMK	3399-RMK	3399-RMK
30	cap for valve rod	LM	10008579	10008579	10008579
31	cap	LM	10008581	10008581	10008581
<b>32*</b>	<b>o-ring</b>	KG	20281	20281	20281
33	KAPSTO screw stopper	K	26550	26550	26550
34	receiving cap for test release	Ms	10008580	10008580	10008580
35	valve cap guide premounted	St/LM/KG	10008572	10008572	10008572
36	spring auxiliary piece	LM	-	10 008 641	10008641
37	pressure spring	FSt	10008577	10008577	10008577
38	ring segment	St	10007589	10007589	10007589
<b>39*</b>	<b>o-ring</b>	KG	20383	20383	20383
40	guide cylinder premounted	ALBz/Ms/KG	10008756	10008756	10008756
41	two-hole nut	St	10008761	10008761	10008761

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

### Material - key:

St	steel	LM .	light metal	K.	plastic material
NSt	stainless steel	Ms .	brass	KG .	rubber-like plastic material
FSt	spring steel	Al .	aluminium	ALBz .	aluminium bronze
GS	cast steel	GGG .	spheroidal graphite cast iron		

Spare Parts List HON 721 DN 50 - DN 100

pos. no.	description	material	part no.		
			DN 50	DN 80	DN 100
42	switch bearing for prem. ball bearing	LM/St/FSt	10008771	10008771	10008771
43	grooved ball bearing	St	26236	26236	26236
<b>44*</b>	<b>o-ring</b>	KG	20320	20320	20320
45	ball	St	5108	5108	5108
46	engaging socket	St	10008765	10008765	10008765
47	cylinder screw	St	8176	8176	8176
48	cover, complete	LM/ FSt	10008763	10008763	10008763
49	disc	St	8281-RMK	8281-RMK	8281-RMK
50	hexagonal disc	St	10398-RMK	10398-RMK	10398-RMK
51	closing screw	St	26175-RMK	26175-RMK	26175-RMK
52	sealing ring	St	18689	18689	18689
53	manual releaser, complete	LM/FSt NSt/Ms	10001179	10001179	10001179
<b>54*</b>	<b>o-ring</b>	KG	20310-RMK	20310-RMK	20310-RMK
55	tube protection cap	K	26363	26363	26363
<b>56*</b>	<b>o-ring</b>	KG	20432-RMK	20432-RMK	20432-RMK
57	HON 919		10022947	10022947	10022947
58	union piece for construction of K10a, K12 and K13 only superior response pressure (special feature without protection against diaphragm rupture)	St	30142	30142	30142
<b>59*</b>	<b>sealing ring</b>	LM	18684-RMK	18684-RMK	18684-RMK

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

**Material - key:**

St	steel	LM	light metal	K	plastic material
NSt	stainless steel	Ms	brass	KG	rubber-like plastic materail
FSt	spring steel				

4.3 Spare Parts List HON 721, Mounting unit HON 408 DN 50/100, DN 80/150, DN 100/200

pos. no.	description	material	part no.		
			DN 50/100	DN 80/100	DN 100/200
13	hexagonal screw	St	5692	13120-RMK	13120-RMK
14	safety disc	FSt	14113	14114	14114
23	o-ring	KG	-	20226-RMK	-
24	valve plate with discharge jet	LM	-	10008600	-
25	valve rod	NSt	10008494	10008495	10008496
55	tube protection cap	KG	26363	26363	26363

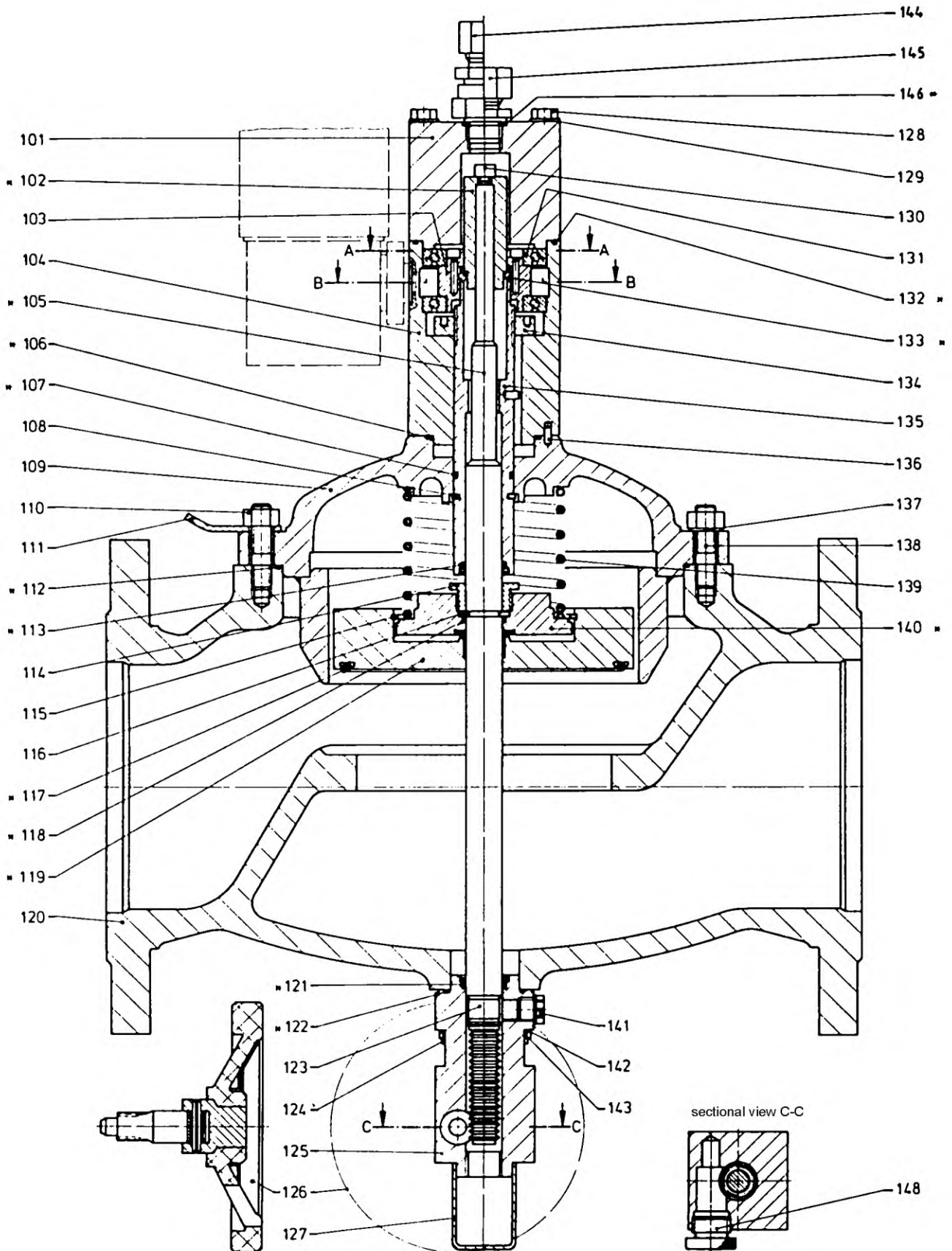
Parts marked by an asterisk \* to be kept in stock for maintenance

**Material - key:**

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



4.4 Spare Parts Drawing 721 DN 150



\*) to be kept in stock for maintenance

#### 4.5 Spare Part List HON 721 DN 150

pos. no.	description	material	part no.
101	cover, complete	LM/FSt	10008784
<b>102*</b>	<b>engaging socket for 2 ball bearing, premounted</b>	St	10008787
103	switch bearing	LM/St/FSt	10008771
104	switch gear	LM	10008778
<b>105*</b>	<b>valve rod</b>	NSt	10008780
<b>106*</b>	<b>o-ring</b>	KG	20513
<b>107*</b>	<b>o-ring</b>	KG	20238-RMK
108	ring segment	St	10008570
109	SAV connection flange	St	10008506
110	hexagonal nut	St	13120-RMK
111	huke for manual wheel	St	10008668
<b>112*</b>	<b>o-ring</b>	KG	20541
<b>113*</b>	<b>o-ring</b>	KG	20380
114	nut	NSt	10 008 615
115	circlip	FSt	19137
116	ring segment	St	10007589
<b>117*</b>	<b>o-ring</b>	KG	20539
<b>118*</b>	<b>o-ring</b>	KG	20323
<b>119*</b>	<b>valve plate with discharge jet</b>	LM	10008602
120	body, alternatively:		
-	PN 16	GS	10008473
-	PN 40 (25)	GS	10008476
-	ANSI 150	GS	10008478
-	ANSI 300	GS	10023435
<b>121*</b>	<b>o-ring</b>	KG	20380
<b>122*</b>	<b>o-ring</b>	KG	20293-RMK
123	tube ring	KG	10008617
124	threaded screw	St	12324
125	valve rod guide, premounted	LM/KG/St	10008516
126	engaging manual wheel, complete	St	10008681
127	cap	K	26363
128	hexagonal screw	St	10112-RMK
129	disc	St	8281-RMK
130	cylinder screw	St	8176
131	grooved ball bearing	St	26236
<b>132*</b>	<b>o-ring</b>	KG	20320
<b>133*</b>	<b>ball</b>	St	5108
134	two-hole nut	St	10008761
135	guide cylinder, premounted	AIBz	10008781
136	cylinder dowel pin	St	17101
137	safety disc	St	14114
138	pin screw	St	12212

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

#### Material - key:

St	steel	LM	light metal	K	plastic material
NSt	stainless steel	Ms	brass	KG	rubber-like plastic material
FSt	spring steel	AIBz	bronze aluminium	GS	cast steel

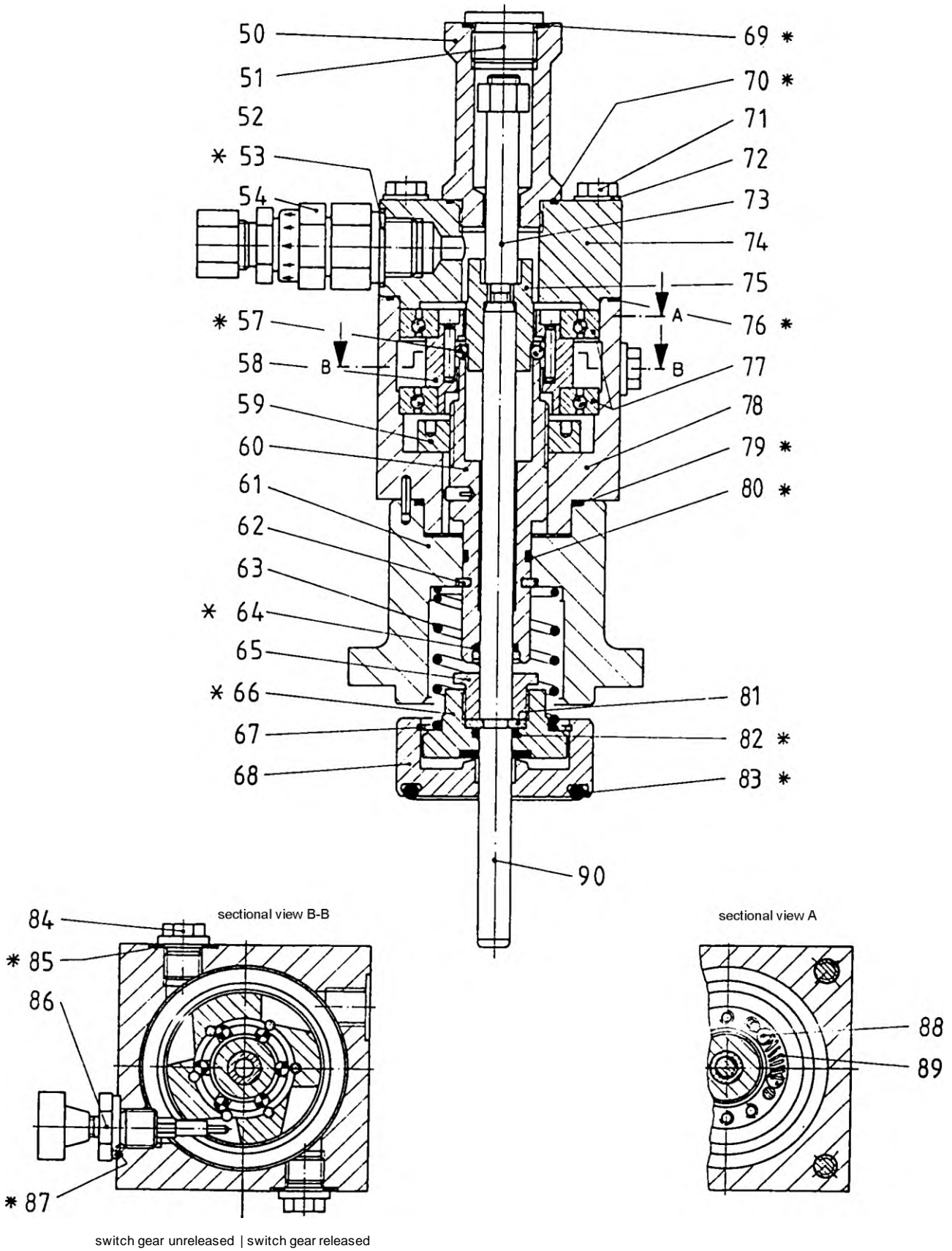
Spare Parts List HON 721 DN 150

<b>pos. no.</b>	<b>description</b>	<b>material</b>	<b>part no.</b>
139	pressure spring	FSt	10008575
<b>140*</b>	<b>valve plate</b>	LM/KG	10008609
141	stopper	K	26550
142	disc	St	8279
143	hexagonal nut	St	3399-RMK
144*	HON 919		10022947
145	union piece for installation of K 10a, K 12 and K 13 only for superior response pressure (special feature without safety against diaphragm rupture)	St	30142
<b>146*</b>	<b>sealing ring</b>	LM	18684-RMK
148	closing screw	Ms	10008604

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

**Material - key:**

St	... steel	LM	...light metal	K	... plastic material
FSt	... spring steel	Ms	... brass	KG	... rubber-like plastic material



\*) Parts to be kept in stock for maintenance

#### 4.7 Spare Parts List HON 721 Mounting unit for HON 402

pos. no.	description	material	part no.		
			DN 50, DN 50/100	DN 80 DN80/150	DN 100 DN 100/200
50	sleeve	Ms	18352362	18352362	18352362
51	closing screw	St	26914	26914	26914
<b>53*</b>	<b>sealing ring</b>	LM	18684-RMK	18684-RMK	18684-RMK
54	switch valve HON 919		10022947	10022947	10022947
<b>57*</b>	<b>ball 0 5 mm</b>	NSt	5108	5108	5108
58	switch gear for 2 ball bearing	LM/St/FSt	10008771	10008771	10008771
59	two-hole nut	St	10008761	10008761	10008761
60	guide cylinder, premounted	Ms/St	10008756	10008756	10008756
61	SAV connection flange	St	10008500	10008502	10008502
62	ring segment	St	10007589	10007589	10007589
63	pressure spring	FSt	10008577	10008577	10008577
<b>64*</b>	<b>o-ring</b>	KG	20432-RMK	20432-RMK	20432-RMK
65	nut	St	10008614	10008614	10008614
<b>66*</b>	<b>valve plate, vulcanized</b>	LM/KG	10008606	10008606	10008606
67	circlip	FSt	19127	19127	19127
68	valve plate with discharge jet	LM	10008599	1000 600	10008601
<b>69*</b>	<b>sealing ring</b>	LM	18735-RMK	18735-RMK	18735-RMK
<b>70*</b>	<b>o-ring</b>	KG	20281	20281	20281
71	hexagonal screw	St	10398-RMK	10398-RMK	10398-RMK
72	disc	St	8281-RMK	8281-RMK	8281-RMK
73	pulling rod	NSt	10 024 012	10 024 013	10 024 013
74	cover, complete	LM/St	18 352 364	18 352 364	18 352 364
75	engaging socket	NSt	10 008 765	10 008 765	10 008 765
<b>76*</b>	<b>o-ring</b>	KG	20320	20320	20320
77	grooved ball bearing	St	26236	26236	26236
78	switch body, premounted	LM/St	10008749	10008749	10008749
<b>79*</b>	<b>o-ring</b>	KG	20413	20413	20413
<b>80*</b>	<b>o-ring</b>	KG	20383	20383	20383
81	ring segment	St	10008612	10008612	10008612
<b>82*</b>	<b>o-ring</b>	KG	20412	20412	20412
<b>83*</b>	<b>o-ring</b>	KG	20596-RMK	00 020 266	20268-RMK
84	closing screw	St	26175-RMK	26175-RMK	26175-RMK
<b>85*</b>	<b>sealing ring</b>	LM	18589	18589	18589
86	manual releaser	LM/NSt/Ms/	10001179	10001179	10001179
<b>87*</b>	<b>o-ring</b>	KG	20310-RMK	20310-RMK	20310-RMK
<b>88*</b>	<b>ball bearing</b>	NSt	3055	3055	3055
89	pressure spring	FSt	10001187	10001187	10001187
90	valve rod	NSt	10021926	10021926	10021926

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

#### Material - key:

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

For More Information

To learn more about Honeywell's

Advanced Gas Solutions, visit

[www.honeywellprocess.com](http://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

**HON 721.20**  
**2021-03**  
**© 2017 Honeywell**  
**International Inc.**

**Honeywell**