



OPERATING AND MAINTENANCE INSTRUCTIONS/
SPARE PARTS

EDITION 01/2017

Serving the Gas Industry Worldwide



CONTROLS SUPPLY CHAIN
VALVES ACTUATORS INSTRUMENTATIONS

Operation and Maintenance Spare Parts

200.20

Edition 07/96



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VALVES ACTUATORS INSTRUMENTATIONS

1. General

The "General description 200.00" for the gas pressure regulator of series HON 200 contains technical data, versions and dimensions.

The spare parts are described in the following brochures:

Pilot:	RS 10d	General description	610.00
		Operation and maintenance, Spare parts	610.20
	HON 650	General description	650.00
		Operation and maintenance, Spare parts	650.20
Filter:	HON 905	General description	905.00
		Operation and maintenance, Spare parts	905.20

Our brochure "General Operating Instructions for Gas Pressure Regulators and Safety Devices" will be useful to fit the valve into the line, put into 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 to be foreseen for the gas pressure regulator HON 200 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

Throttling valve (51)

The throttling valve (51) should be fully open (for quick reaction). In case of lack of stability of the pilot HON 650 or RS 10d which cannot be eliminated through load limiting pressure adjustment, regulating stability can be obtained by turning the throttling valve (51) clockwise.

3. Special Maintenance Instructions

Valve stem (23)

By taking the nut (22, 27, 58, 60) out, the valve stem (23) can be maintained with an hexagonal screw driver SW 4. This could be also made when mounting of the actuator with the screw connection (29).

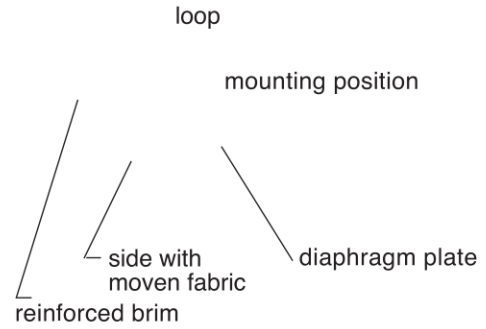
Diaphragm (7)

Lubricate the reinforced brim of the diaphragm (7) with o-ring grease taken into account of the table of lubricant and put into the right position (see scheme).

The side with woven fabric and with imprint "Gewebeeseite" should lie on the diaphragm plate (8).

Correct loop formation is achieved by pushing the diaphragm down past the diaphragm plate with a blunt object (between the diaphragm plate (8) and the actuator (5)).

Beware : do not use any pointed objects.



Distance ring (16)

The distance ring which is necessary for the compensation of tolerances must be changed with a new one when replacing one or the several following parts:

- main valve body (25)
- valve stem guide (24)
- actuator body (5)
- valve seat (20)

Valve plate (with valve seat Ø 5 and 6 mm)

In the last series of the gas pressure regulator HON 200 with a valve seat with Ø 5 and 6 mm, a connection thread relatively small is used between the valve stem and the valve plate.

To avoid function problems when damages occur on the connection (due to an inadmissible opening moment, inadmissible test pressure, etc.), the valve plate contained an additional spring suspension. We recommend to install this spring suspension (see page 5) also for the previous parts with a valve seat ø 5 and 6 mm. The equipment set (part nr. 19 082 918) can be installed with the gas pressure regulator without any problems.

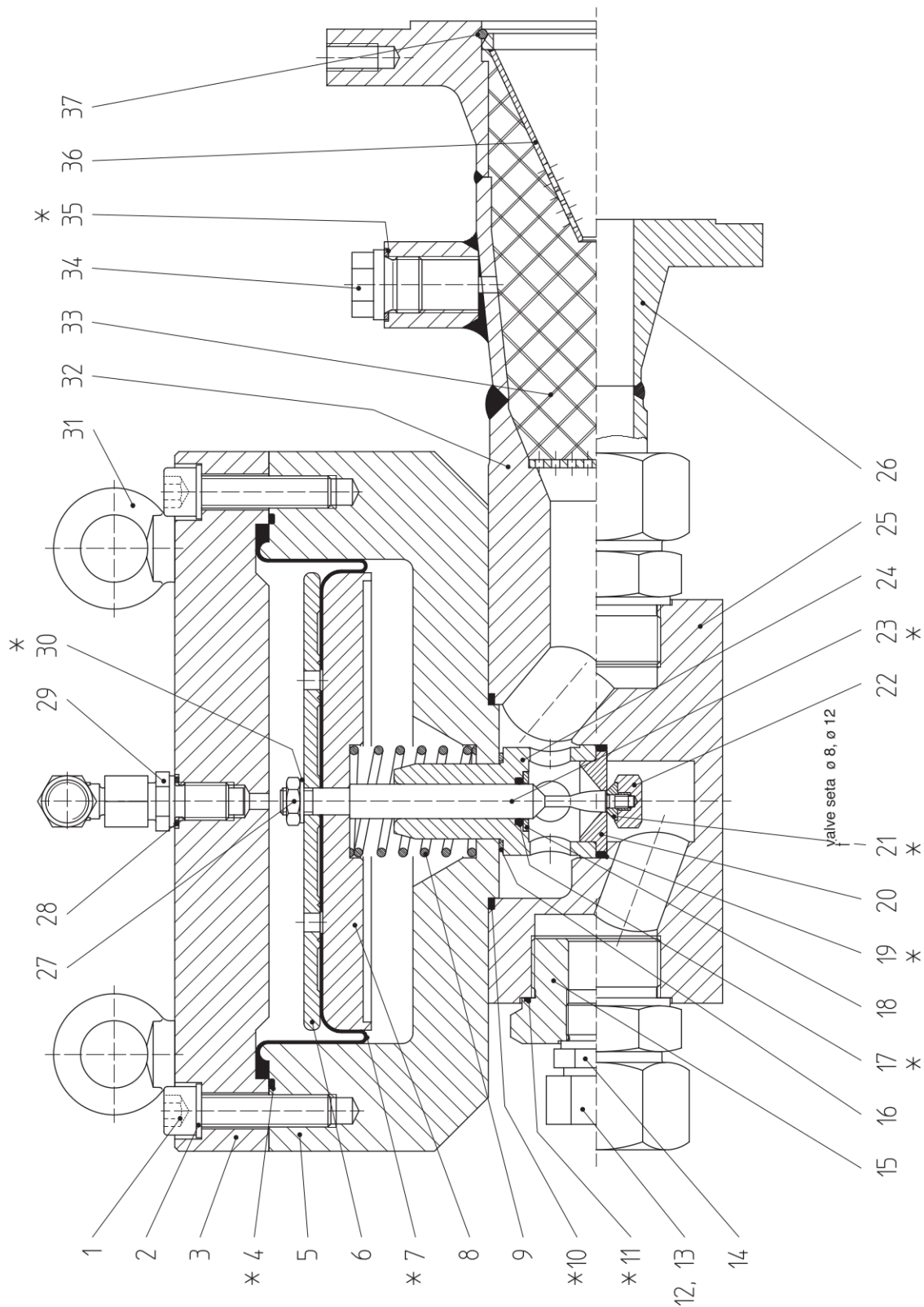
Torque

pos. no.	torque in Nm
1	80
45	80
22	4
58	9
60	3

Lubricants

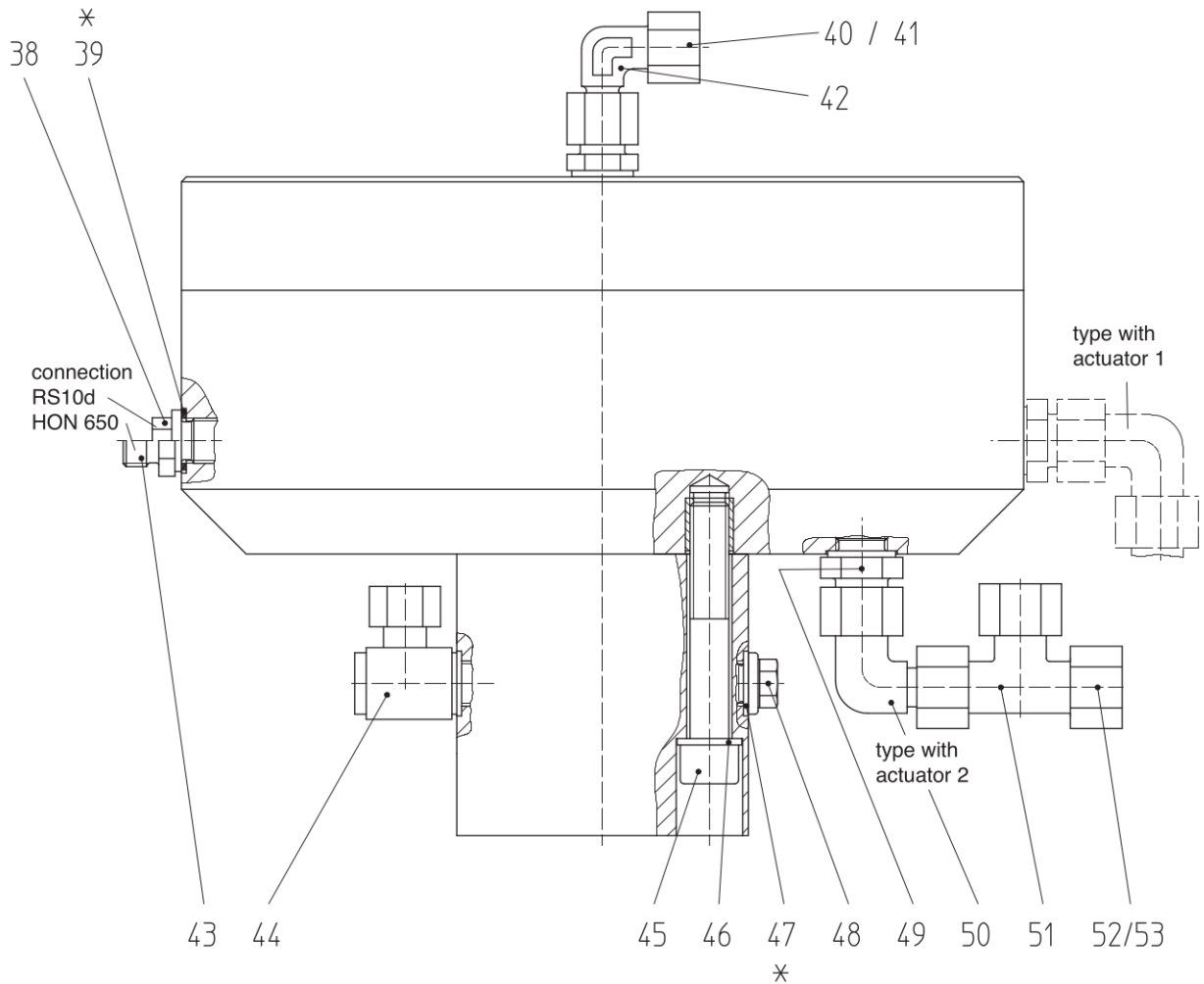
part (to be greased slightly)	lubricant	part no.
all o-rings, insertion plate of diaphragm (7), all sliding surfaces (23) and closing valve (60)	silicone grease	00 027 081
all fastening and pipe screws	high duty grease	00 027 058

4. Spare Parts
4.1 Spare Parts Drawing HON 200



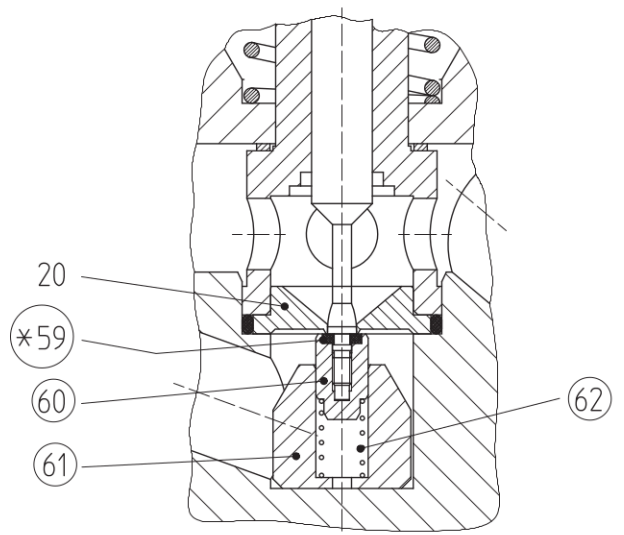
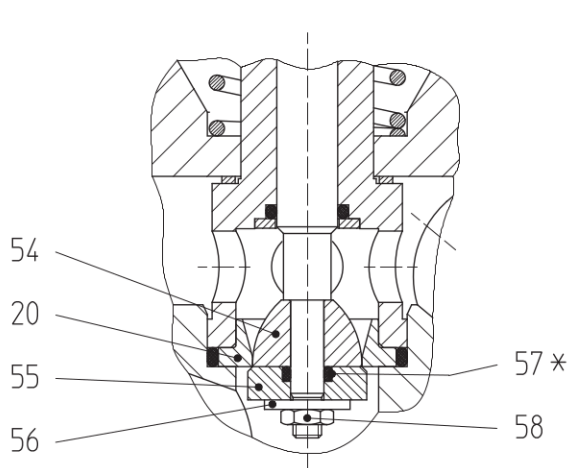
* Parts marked by an asterisk (*) to be kept in stock for maintenance

Spare Parts Drawing HON 200



Valve seat Ø 18, Ø 23

Valve seat Ø 5, Ø 6



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

○ set for valve spring



4.2 Spare parts list HON 200

pos. no.	description	material	part no.
1	cylinder screw	St	00 010 373
2	disc	St	00 014 136
3	cap of the actuator body, alternatively:		
-	actuator 1	LM	10 009 465
-	actuator 2	LM	10 009 475
4*	o-ring, alternatively:		
-	actuator 1	KG	00 020 324
-	actuator 2	KG	00 020 396
5	cap of the actuator body, alternatively:		
-	actuator 1	LM	10 009 464
-	actuator 2	LM	10 009 474
6	fastening plate alternatively:		
-	actuator 1	LM	10 002 290
-	actuator 2	LM	10 002 390
7*	pre-formed diaphragm, alternatively:		
-	actuator 1	KG	10 002 288
-	actuator 2	KG	10 002 388
8	main diaphragm plate, alternatively:		
-	actuator 2	LM	10 009 466
-	pressure spring, alternatively:	LM	10 009 476
9	for valve seat Ø 5 and 6 mm £ 100 mbar		
-	for valve seat Ø 5 and 6 mm >100 mbar	FSt	10 000 866
-	for valve seat Ø 8, 12, 18 and 23 mm	FSt	10 011 024
-	o-ring	FSt	10 009 485
10*	o-ring	KG	00 020 435
11*	cap nut (Inlet and Outlet), alternatively:	KG	00 020 375
12	for tube: Ø18 mm		
-	Ø 22 mm	St	00 030 808
-	Ø 25 mm	St	00 030 810
-	Ø 28 mm	St	00 030 811
-	Ø 38mm	St	00 030 812
-	Ø 42mm	St	00 030 814
-	compression joint (Inlet and Outlet), alternatively:	St	00 030 815
13	for tube: Ø18 mm		
-	Ø 22 mm	St	00 030 097
-	Ø 25 mm	St	00 030 909
-	Ø 28 mm	St	00 030 910
-	Ø 38 mm	St	00 030 911
-	Ø 42 mm	St	00 030 913
-		St	00 030 914

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

Material - key :

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



Spare Part List HON 200

pos. nn.	description	material	part no.
14	nozzle (Inlet and Outlet), alternatively:		
-	for tube: Ø18 mm	St	00 030 157
-	Ø 22 mm	St	00 030 158
-	Ø 25 mm	St	00 030 159
-	Ø 28 mm	St	00 030 160
-	Ø 38 mm	St	00 030 161
-	Ø 42 mm	St	00 030 162
15	reduction piece (Inlet and Outlet), alternatively:		
-	for tube: Ø18 mm	St	10 005 922
-	Ø 22 mm	St	10 005 923
-	Ø 25 mm and Ø 28 mm	St	10 005 924
16*	distance ring	LM	00 018 687
17*	o-ring	KG	00 020 482
18	closing plate	Ms	10 009 483
19*	o-ring	KG	00 020 434
20	valve seat, alternatively:		
-	for valve: Ø 5 mm	NSt	10 022 680
-	Ø 6 mm	NSt	10 022 681
-	Ø 8 mm	NSt	10 009 494
-	Ø 12 mm	NSt	10 009 504
-	Ø 18 mm	NSt	10 009 514
-	Ø 23 mm	NSt	10 009 524
21*	valve plate, alternatively:		
-	for valve: Ø 8 mm	K	10 009 493
-	Ø 12 mm	K	10 009 503
22	hexagon nut	St	10 009 526
23*	valve stem, alternatively:		
-	for valve: Ø 5 mm	NSt	10 009 479
-	Ø 6 mm	NSt	10 009 497
-	Ø 8 mm	NSt	10 009 436
-	Ø 12 mm	NSt	10 009 435
-	Ø 18 et 23 mm	NSt	10 009 511
24	valve stem conduction	Ms	10 009 484
25	body without reducing outlet duct		
-	body in aluminium	Al	10 009 461
-	body in steel	St	10 009 470
26	flange (Inlet and Outlet), alternatively:		
-	DN 25, PN 25 and PN 40	St	10 009 536
-	DN 25, ANSI 300 RF	St	10 009 445
-	DN 25, ANSI 300 RJ	St	10 009 442
-	DN 25, ANSI 600 RF	St	10 009 537
-	DN 25, ANSI 600 RJ	St	10 009 538

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

Material - key:

St	... steel	Ms	... brass	KG	... rubber-like plastic material
FSt	... spring steel	Al	... aluminium	K	... plastic material
NSt	... stainless steel				



Spare Parts Lists HON 200

pos. no.	description	material	part no.
-	DN 40, PN 25 and PN 40	St	10 009 538
-	DN 40, ANSI 300 RF	St	10 009 539
-	DN 40, ANSI 300 RJ	St	10 009 447
-	DN 40, ANSI 600 RF	St	10 009 448
-	DN 40, ANSI 600 RJ	St	10 009 540
-	DN 50, PN 25 and PN 40	St	10 009 542
-	DN 50, ANSI 300 RF	St	10 009 449
-	DN 50, ANSI 300 RJ	St	10 009 444
-	DN 50, ANSI 600 RF	St	10 009 543
-	DN 50, ANSI 600 RJ	St	10 009 544
27	hexagonal nut	St	00 013 005
28*	sealing ring	LM	00 018 689
29	straight threaded union piece	NSt	10 009 468
30*	safety ring	FSt	00 014 121
31	disc screw	St	00 010 487
32	body, noise reducing outlet duct		
-	DN 80, PN 40	St	10 010 214
-	DN 80, ANSI 600 RF	St	10 010 220
-	DN 100, PN 40	St	10 010 224
-	DN 100, ANSI 600 RF	St	10 010 222
33	filling body	FSt	00 026 415
34	closing screw	St	00 025 578
35*	sealing ring	LM	00 018 684
36	rectifying cone, alternatively:		
-	DN 80	St	10 012 085
-	DN 100	St	10 012 036
37	circlip, alternatively:		
-	DN 80	FSt	00 019 128
-	DN 100	FSt	00 019 174
38	closing screw	St	00 026 175
39*	sealing ring	LM	00 018 689
40	cap nut	St	00 030 803
41	compression joint	St	00 030 903
42	nozzle	St	00 031 207
43	nozzle	St	00 030 111
44	union piece	St	00 031 930
45	cylinder screw	St	00 010 372
46	disc	St	00 014 136
47*	sealing ring	LM	00 018 842
48	closing screw	St	00 026 175
49	nozzle	St	00 030 038
50	nozzle	St	00 031 213

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

Material - key:

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



Spare Parts List HON 200

pos. no.	description	material	part no.
51	throttling valve	St/KG/Ms	10 004 060
52	cap nut	St	00 030 804
53	compression ring	St	00 030 904
54	valve cone, alternatively:		
-	for valve Ø 18 mm	NSt	10 009 515
-	for valve Ø 23 mm	NSt	10 009 525
55	valve plate, alternatively:		
-	for valve Ø 18 mm	K	10 009 513
-	for valve Ø 23 mm	K	10 009 523
56	disc	St	00 014 137
57*	o-ring	KG	00 020 225
58	safety nut	St	00 013 132
59*	sealing ring	KG	10 009 481
60	closing valve	LM	10 009 582
61	guide piece	K	10 009 587
62	pressure spring	NFSt	00 027 215
	equipment set for suspension with valve spring valve seat Ø 5 and 6 mm (pos. nr. : 59, 60, 61, 62)		19 082 918

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

Material - key:

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