

Adjusting Device With Magnetically Operated Indication Of Function

Subject to change without notice

Owner Manual
Operating Instructions and Service Parts List

for two-line lubricant metering devices types VSKH, VSKV

- Patent Pending -

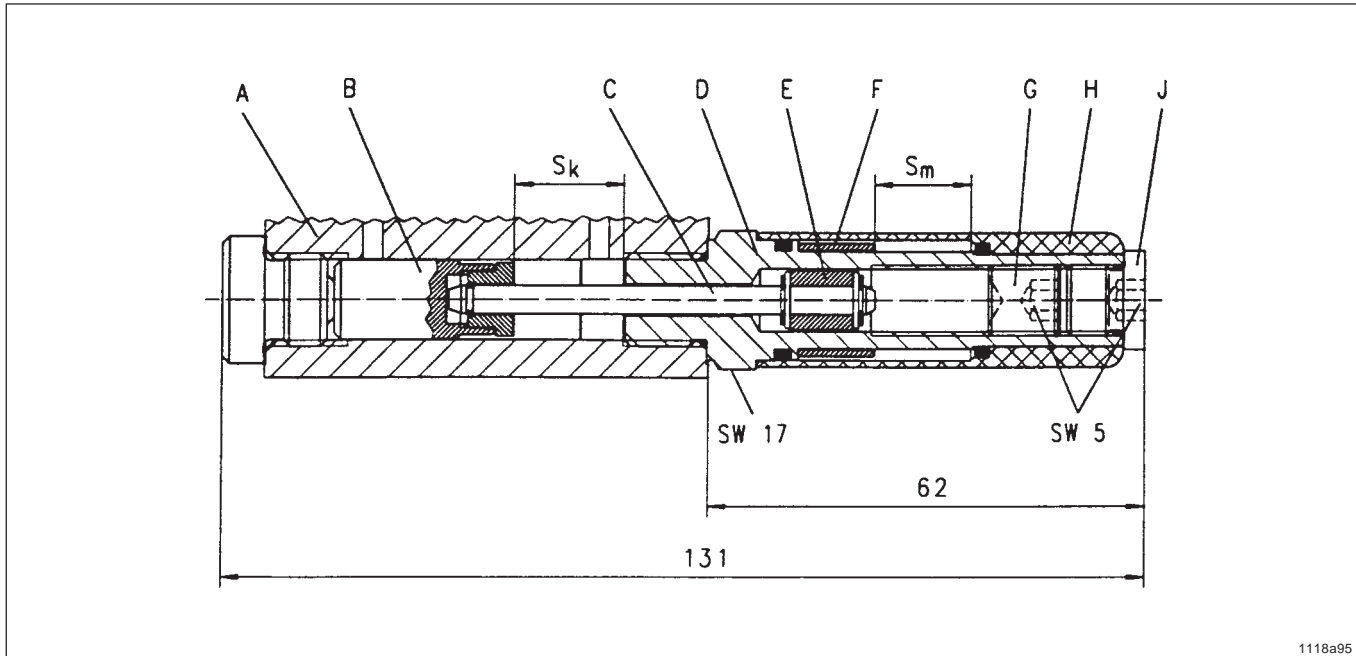


Fig.: Adjusting device with magnetically operated indication of function

- | | | |
|-----------------------------|---------------------|----------------------|
| A: metering device body VSK | D: adjusting sleeve | G: adjusting screw |
| B: Piston | E: magnet | H: protective sleeve |
| C: Piston pin | F: control ring | J: closure plug |

1 Theory of operation (Figure)

- The piston movement is transferred to the magnet (E) via piston pin (C)
- The magnetic field acts on the control ring (F) with the result that its strike indicates the movement of the piston $s_k = s_m$
- The lubricant output is adjusted by changing the piston stroke s_k by means of adjusting screw (G)

2 Field of application

- In all two-line lubricant metering devices types VSKH and VSKV
- Specially suitable for being used under severe conditions, such as
 - high temperature
 - aggressive dispensing materials
 - adverse ambient influences

3 Benefits vs conventional adjusting devices

- free of maintenance
- design without dynamic seals
- suitable for high temperature ranges (up to 120 °C)
- insensitive to aggressive dispensing materials
- high operating reliability under extremely adverse ambient conditions
- water and dust proof
- control ring is protected against contamination while the lubricant output is adjusted

4 Technical Data

Lubricant output: $Q = 0 - 1,5 \text{ cm}^3 / \text{stroke}$ infinitely stable (see Operating Instruction)
 Operating pressure: $p_{\text{max}} = 400 \text{ bar}$
 Operating temperature: $t_{\text{max}} = 120 \text{ °C}$

5 Adjustment of lubricant output

Before the lubricant output is adjusted, the following instructions have to be noted:

- Adjustment of the lubricant output only while the system is relieved
- When the closure plug is disassembled, the protective sleeve remains in its position
- General factory setting:
 lubricant output $Q=Q_{\max} = 1.5 \text{ cm}^3 / \text{stroke}$

- Remove the closure plug
 - Adjust the lubricant output by turning the adjusting screw
- Adjusting parameter:
 1 revolution \Leftrightarrow changing the piston stroke by 1 mm \Leftrightarrow
 changing the lubricant output by 0.1 cm³

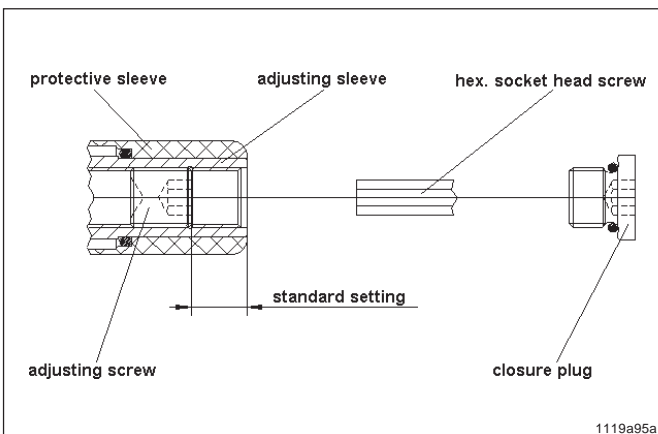


Fig: Adjustment of the lubricant output

Adjustment of the lubricant output according to the following chart:

Setting [mm] see Fig.	Lubricant output [cm ³]	Number of revolutions (clockwise, starting from the factory standard setting of 9 mm)
9 (factory setting)	1,5	0
10 (idle motion)	1,5	1
11 (idle motion)	1,5	2
12	1,4	3
13	1,3	4
14	1,2	5
15	1,1	6
16	1,0	7
17	0,9	8
18	0,8	9
19	0,7	10
20	0,6	11
21	0,5	12
22	0,4	13
23	0,3	14
24	0,2	15
25	0,1	16
stop	0	stop

Chart: adjustment of the lubricant output

6 Maintenance

The adjusting device with magnetically operated function indication is generally free of maintenance.

If the control ring fails to move, there may be the following faults which can be put right as follows:

- Blockage in the bearing or malfunction in the two-line system, e.g. pump does not deliver, broken line
- Blockage in the metering device or line system

Remedy:

Inspect the bearing and the two-line system (see Description of Lubrication System)

- Adjusting screw is set to the lubricant output of 0 cm³

Remedy:

check the setting of the adjusting screw (see Figure and Chart)

- Defective adjusting device

Note: In the case of a defective adjusting device, the operation of the lubricant metering device will not be affected

Remedy:

Check the adjusting device, control ring, protective sleeve and o-rings for damages.
Replace parts, if necessary. Dirty parts must be thoroughly cleaned.

7 Spare Parts List

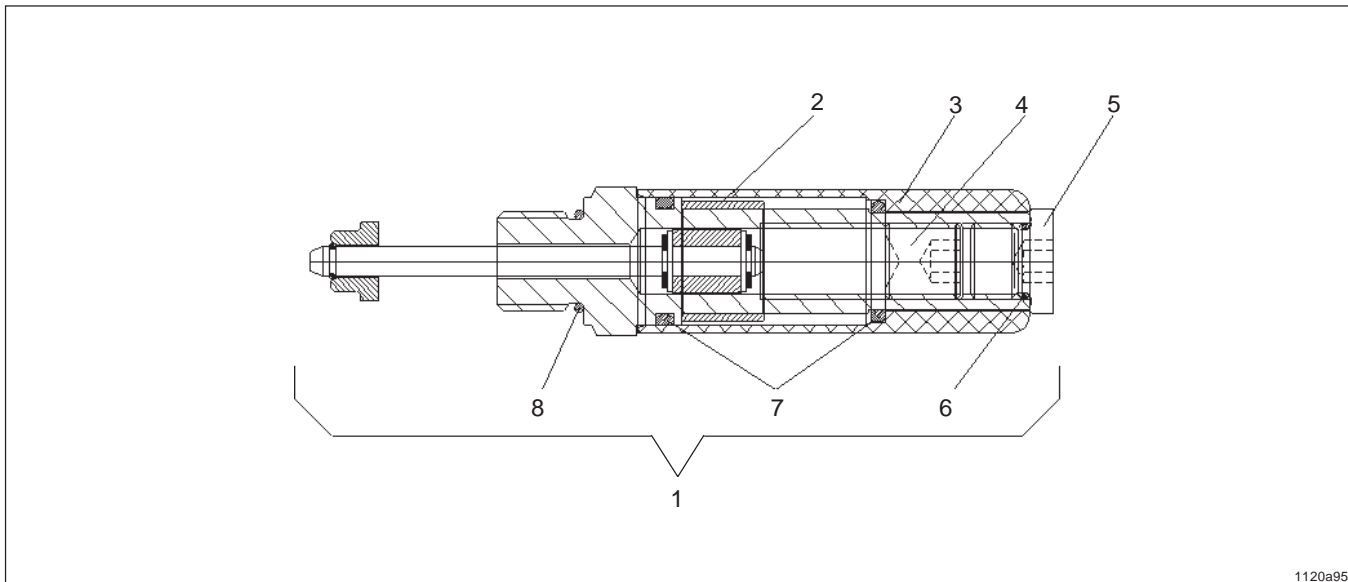


Fig. : Spare Parts

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Item	Description	Qty	Part Number
1	adjusting device MR, assy	1	520-31889-1
2	control ring	1	420-24184-1
3	protective sleeve	1	420-24178-1
4	adjusting screw	1	420-24192-1
5	closure plug	1	203-13606-2
6	O-ring	1	219-12222-4
7	O-ring	2	219-12223-6
8	O-ring	1	219-13053-3

Note: Before the protective sleeve is assembled, the outer O-ring (Item 7) must be inserted into the protective sleeve.