



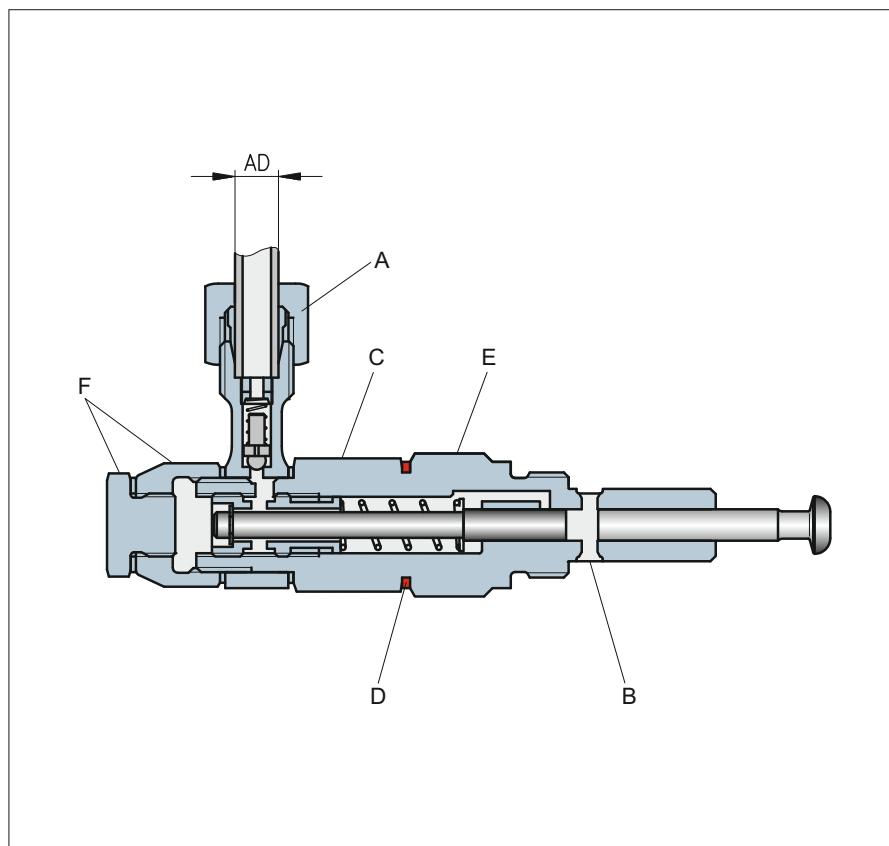
Pump element DMF-A

- for piston pump GMF, PMW, GMA, GMZ
- adjustable

A = Connector

| Order design | Connection | Screw connection |
|--------------|------------|----------------------|
| 6 | ø6 | EO |
| 8 | ø8 | EO |
| 10 | ø10 | EO |
| A | ø1/4" | Ferulok |
| B | ø5/16" | Ferulok |
| C | ø3/8" | Ferulok |
| 8S | ø8 | EO heavy series |
| 8T | ø8 | Triple Lok 6 JIC 37° |
| 14 | G 1/4" | Internal thread |

- Subject to modifications -



B = Sieve

Mesh width: 400 µm
Material: 1.4301
Order no.: 913.300-21

C = Tolerance quality marking
(no marking in case of fit quality I)

D = Ring / marking the elements

Pump element 6 without
Pump element 8 red
Pump element 22 black

Minimum delivery volume at the maximum adjustment:

Pump element 6: 0,08 cm³
Pump element 8: 0,15 cm³
Pump element 22: 0,22 cm³

E = Tightening torque
for pump element 30 Nm

F = Tightening torque
for locking screw/pressure control valve/manometer connector
25 Nm

Pump element DMF-A

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Data sheet

Replaces

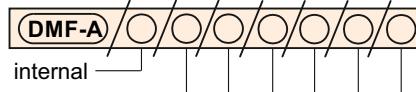
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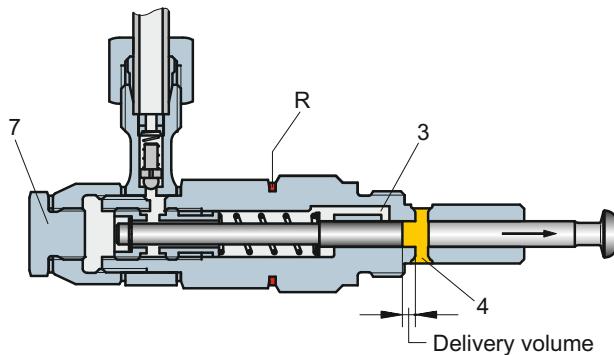
Order designation:



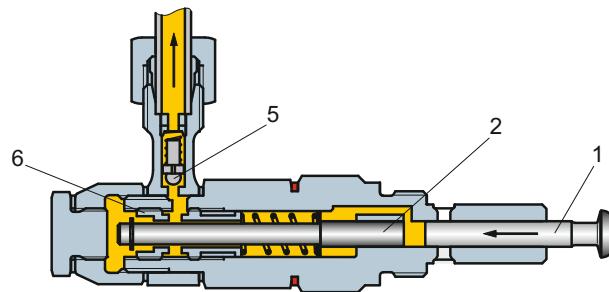
| Pump element see page 1 + 2 | Connector A see page 1 | Sieve | Fit | Version | Delivery volume |
|--------------------------------|---------------------------|-------------|--------------------------------|--------------------------------|--|
| 6 | (6) (8) (10) (14) | with (S) | Quality I (1) | Standard (1) | max. volume (standard) (0) |
| 8 | (A) (B) (C) (8S) | without (0) | (Special version upon request) | (Special version upon request) | adjusted (please denote delivery volume) (E) |
| 22 | (8T) (0) | | | | |

- Subject to modifications -

Suction stroke



Pressure stroke



Pump elements mode of operation:

Suction stroke is accomplished by delivery piston 1 and control piston 2. In this process, delivery piston 1 is actuated by the eccentric shaft, whilst the spring actuates control piston 2. The control piston closes pressure hole 3 and is kept in a certain position as determined by the preset delivery volume. The delivery piston moves on, causing a vacuum to be built up in the proportioning space. When the delivery piston has opened suction hole 4, lubricant starts to be sucked from the reservoir.

In case of **pressure stroke**, delivery piston 1 moves to the left. In this motion, suction hole 4 is closed and control piston 2 displaced by virtue of the lubricant being avail-

able in between the delivery and control pistons until it releases pressure hole 3 and the lubricant is delivered through the delivery piston to the outlet. The pump elements are delivered with maximum delivery volume, i. e. they are set to full stroke.

The **delivery volume** can be reduced to a minimum of $\leq 25\%$ ($\leq 50\%$ for "22er") of the rated one. After having removed lock screw 7, the stroke is to be changed by means of the enclosed spanner through adjustment nipple 6. When turning the nipple to the right, delivery volume will decrease. At the adjustment nipple, there is a hexagon against which a spring loaded piston is pressing radially. Thus, any independent

change of the delivery volume will be prevented. At the same time, the latching serves as a measure for setting the delivery volume. Six latches equal one rotation of the adjustment nipple and a reduction of the nominal delivery volume by appr. 33% (22,5% for "22er"). Precise setting to a specific delivery volume per stroke must ensue, based on volumetric measurements.

Element 8 is marked with a red ring "R" and element 22 with a black ring "R".



Accessories: (please order no. specify)

Pressure control valve:

| Order no. | Opening pressure | Depiction | Mounting place | Use |
|------------|--|-----------|---|-----------------------------------|
| 110.566-64 | 70 bar | | | |
| 110.569-64 | 80 bar | | | |
| 110.565-64 | 100 bar | | | |
| 110.564-64 | 150 bar | | | |
| 110.563-64 | 250 bar | | | |
| 110.570-64 | 350 bar | | | |
| 110.560-64 | 400 bar | | | |
| | preset as per customer's specification: from 50 ... 160 bar from 160 ... 250 bar | | After removal of the locking screw at the pump element, the pressure control valve can be screwed in. | To limit max. operating pressure. |
| 110.568-65 | | | | |
| 110.562-65 | | | | |

Manometer connector:

| Order no. | Depiction | Mounting place | Use |
|-------------|-----------|--|---|
| 110.068-65K | | After removal of the locking cap at the pump element, the manometer connector can be screwed in. | To connect a manometer with G 1/4" male thread. |

- Subject to modifications -

Adjustment spanner:

| Order no. | Depiction | Use |
|------------|-----------|---|
| 110.004-65 | | After removal of the locking cap at the pump element, the delivery volume of the pump element can be adjusted by using the adjustment spanner (included in scope of delivery = i. e. 1 piece per pump each) |

Connector A:

| Order no. | Order designation |
|------------|-------------------|
| 110.070-64 | 6 |
| 110.080-64 | 8 |
| 110.090-64 | 10 |
| 110.102-64 | A |
| 110.103-64 | B |

| Order no. | Order designation |
|------------|-------------------|
| 110.104-64 | C |
| 110.088-64 | 8S |
| 110.095-64 | 8T |
| 110.070-61 | 14 |

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- Subject to modifications -

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