



Illustration shows example

Pumpelement 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

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

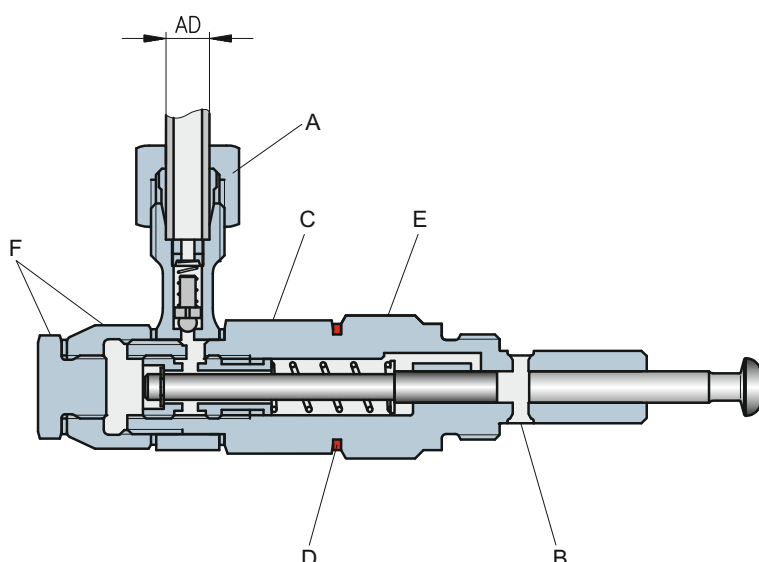
Pump element 6 without
Pump element 8 red
Pump element 22 black

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

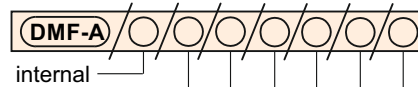
E = Tightening torque
for pump element 30 Nm

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



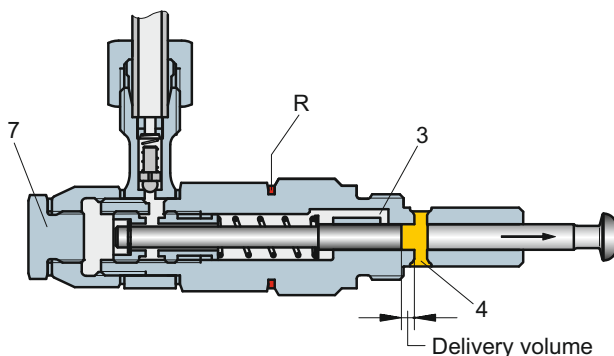


Order designation:

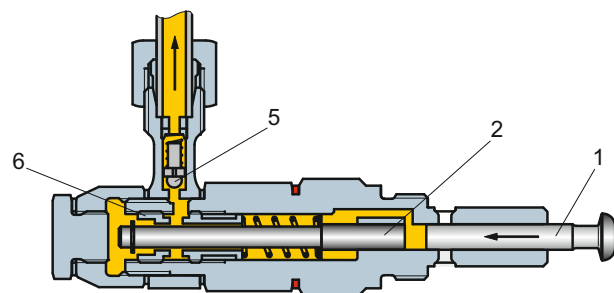


Pump element see page 1 + 2	Connector A see page 1		Sieve	Fit	Version	Delivery volume
6	6	8	with S	Quality I 1	Standard 1	max. volume (standard) 0
8	10	14				
	A	B	without 0	(Special version upon request)	(Special version upon request)	adjusted (please denote delivery volume) E
22	C	8S				
	8T	0				

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

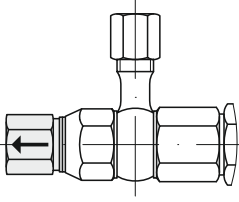
change of the delivery volume will be prevented. At the same time, the latching serves as a measure for setting the delivery volume. Six latches equal one rotation of the adjustment nipple and a reduction of the nominal delivery volume by appr. 33% (22,5% for "22er"). Precise setting to a specific delivery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

- Subject to modifications -

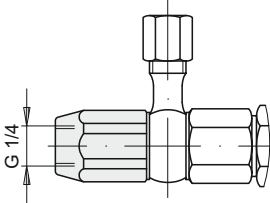


Accessories: (please order no. specify)

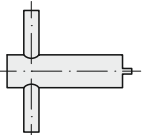
Pressure control valve:

Order no.	Opening pressure	Depiction	Mounting place	Use
110.566-64 110.569-64 110.565-64 110.564-64 110.563-64 110.570-64 110.560-64	70 bar 80 bar 100 bar 150 bar 250 bar 350 bar 400 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	preset as per customer's specification: from 50 ... 160 bar from 160 ... 250 bar			

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.

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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