



BEKA

Service-manual for grease progressive central lubrication

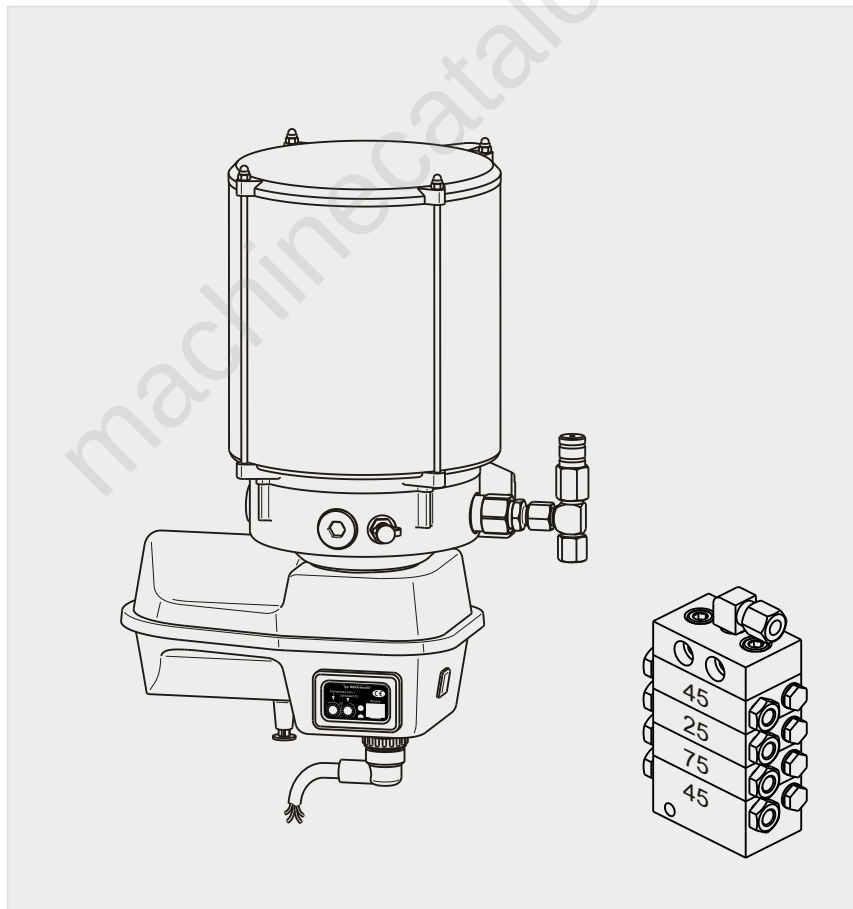


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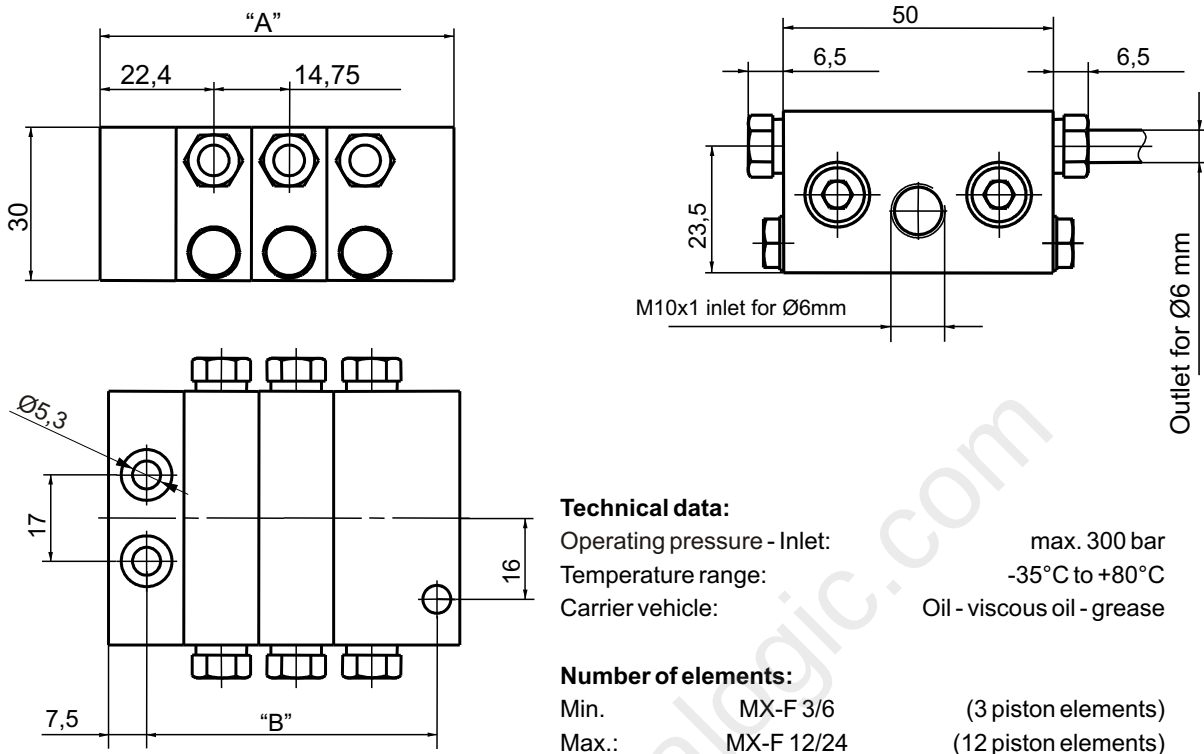
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KIT-set for central lubrication set

Fault - Cause - Remedy

Functional description of progressive distributor MX-F:



Element designation	Delivery quantity		Piston dia.
	per outlet	per element	
MX-F 25	25 mm ³	50 mm ³	3 mm
MX-F 45	45 mm ³	90 mm ³	4 mm
MX-F 75	75 mm ³	150 mm ³	5 mm
MX-F 105	105 mm ³	210 mm ³	6 mm

Outlets	2	4	6	8	10	12	14	16	18	20	22	24
Dimension "A"	69.2	69.2	69.2	83.95	98.7	113.45	128.2	142.95	157.7	172.45	187.2	201.95
Dimension "B"	57.2	57.2	57.2	72.0	86.7	101.5	116.2	131	145.7	160.5	175.2	190

The progressive piston distributors MX-F are distributor devices with a hydraulic sequence control, the pistons of which are regulated by the supplied lubricant in a way that the lubricant inevitably and successively escapes at the individual outlets. In the case of malfunction during the flow of lubricant, e. g. clogging of lubricating line or lubricating points, the distributor will block up. This blockage is used for the monitoring of the distributors. In the case of manually operated pumps a virtually insurmountable counter pressure occurs during the blockage. In the case of automatic pumps such as e. g. the electropump EP-1 the lubricant escapes at the pressure limiting valve.

The progressive distributors are manufactured in a variable disk construction, which offers the advantage that the distributor can be extended or shortened at random according to the amount of lubrication points. Due to this disk construction there is also the possibility of constructing an overall progressive distributor from individual distributor disks with different outputs per piston stroke.

The difference in output per piston stroke is achieved by different piston diameters.

To ensure the proper functioning of a progressive distributor a minimum of three pistons, i. e. a minimum of three output elements is required.

Line types and laying

Line types

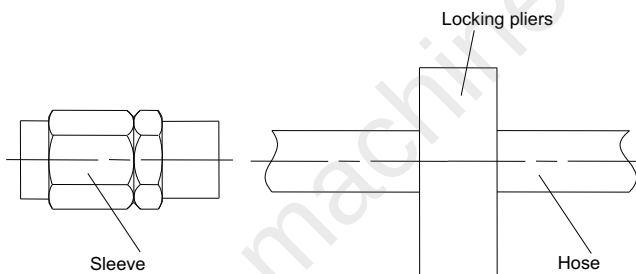
A plastic pipe made out of polyamide PA12 from the progressive distributor to the lube point is used. The diameter at the BEKA-MAX progressive system is 6mm in general. The wall thickness of the polyamide pipe is 1.5 mm, hence there is no need for tube sleeves.



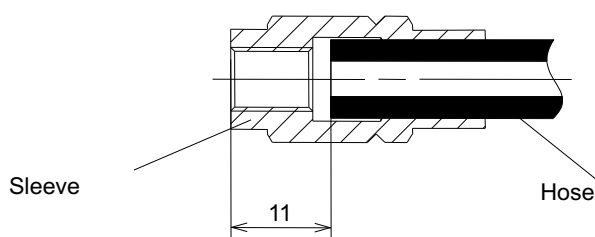
A high pressure hose (nominal width 4 mm) is used at main distributor, main distributor to secondary distributor or at a movable lube point. The hose has an outer diameter of 8.6 mm and is screwed in connection with sleeves and pipe sockets (outer diameter 6 mm).

Assembly of the sleeves

Hold up the hose with locking pliers and grease or oil the hose ending well.

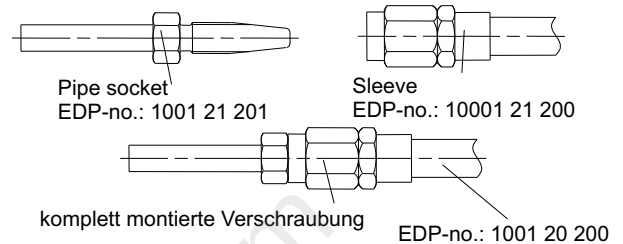


Put the sleeve onto the hose until the dimensions in the figure (11 mm) are reached.



Assembly of the pipe socket:

Grease the conical ending of the pipe socket well and screw it into the assembled sleeve until stop.



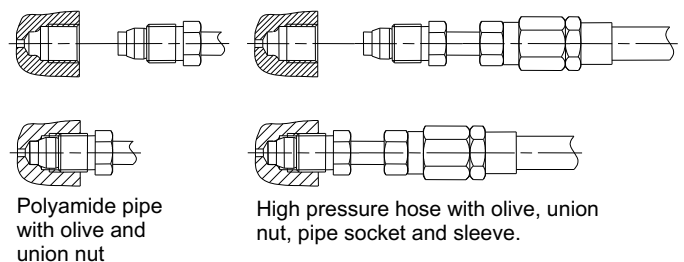
Important:

The hoses can have small, manufacturing related deviations in their diameter. When the diameter is smaller, the sleeve can be put on the hose without effort or turning movement.

Remedy:

Push the sleeve at the hose side 1 to 2 mm into oval form that the hose is not pushed out when the pipe socket is screwed in.

Der Rohrstopfen und das Polyamidrohr können mit einer Überwurfschraube und einem Doppelkegelring direkt mit dem Verteiler verschraubt werden.

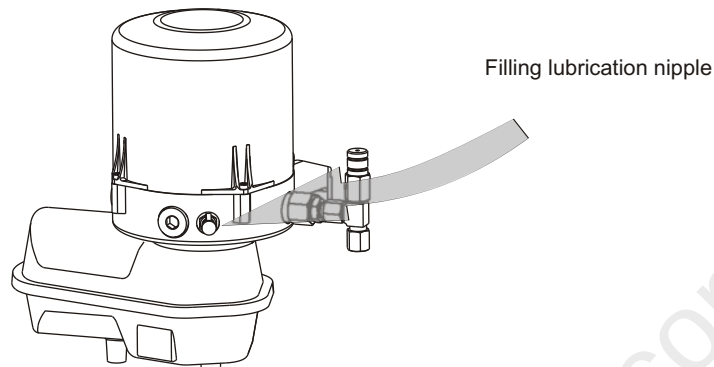


Notes for layout:

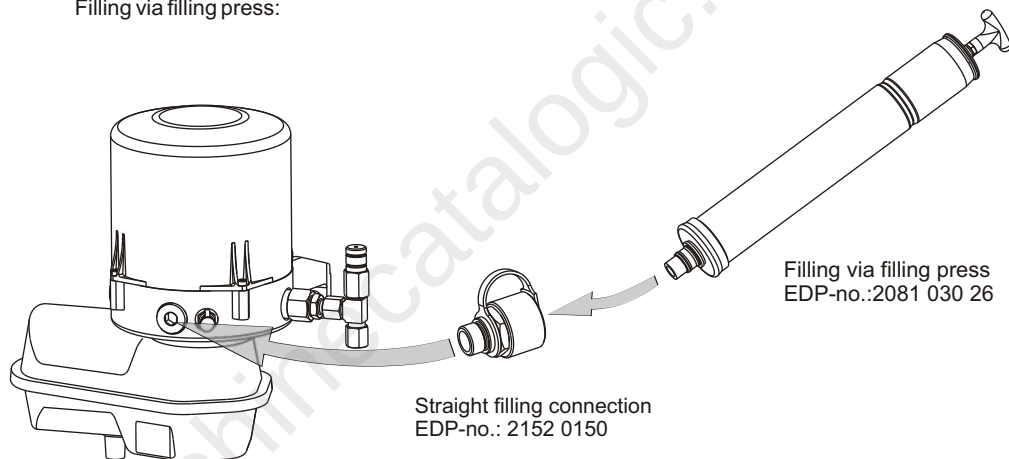
- Avoid chafe marks with other vehicle parts
- Layout the lines away from hot sources (e.g. exhaust, motor), use a steel pipe 6x1 if necessary.
- Lay out the lubrication lines very carefully at moving parts like superstructures, hoist axis, cranes etc. (take care of point of rotation).

Filling of the pump

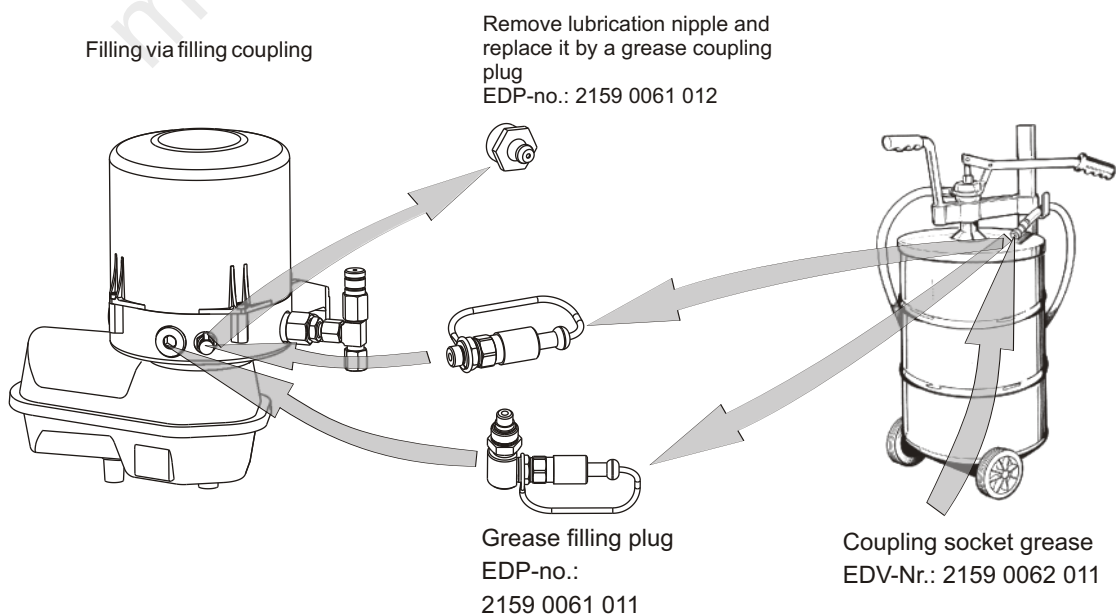
Standard filling via conical lubrication nipple with manual or pneumatic grease press:



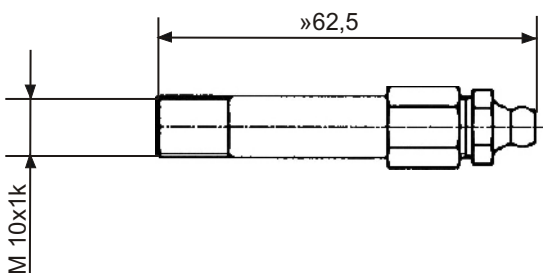
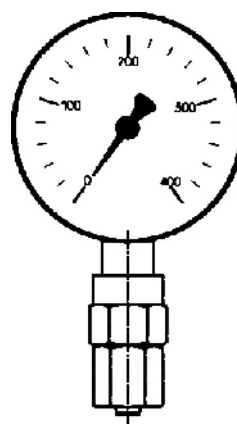
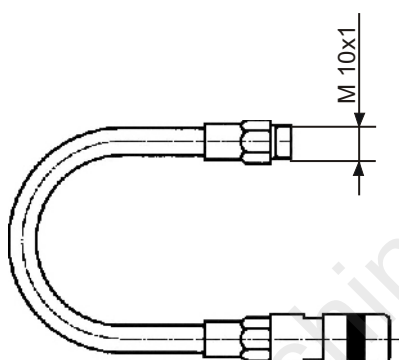
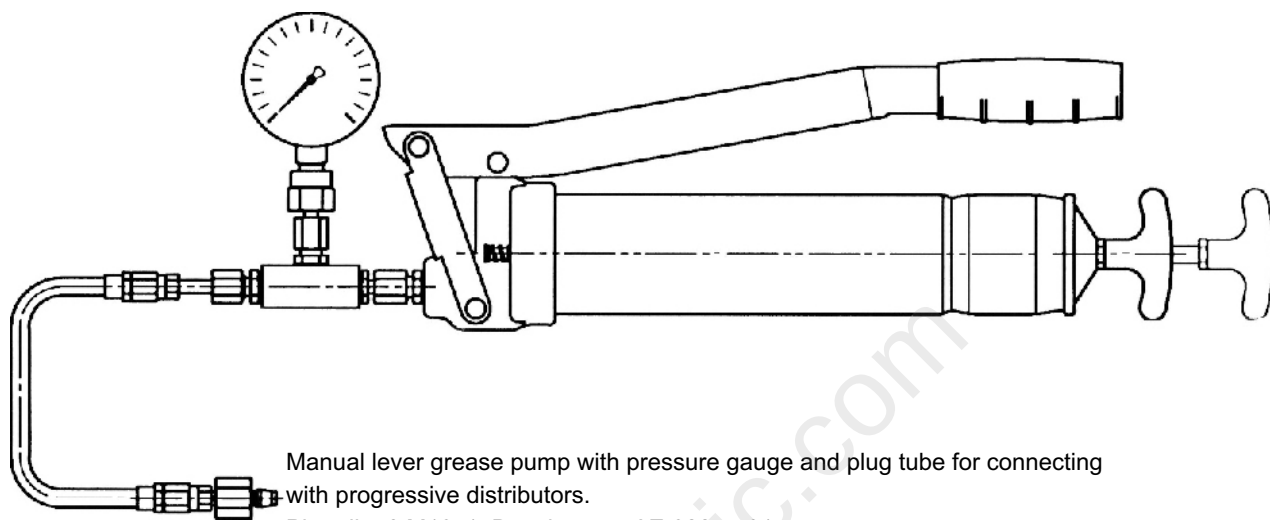
Filling via filling press:



Filling via filling coupling



KIT for checking central lubrication systems:



Full Version Available

BEKA-MAX Service Manual

BEKA BEKA-MAX component service manual covering repair, adjustment and fault tracing for the grease lubrication system. Instant PDF download.

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