

Progressive distributor MX-F

The progressive piston distributors 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 excess pressure 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.

Technical data:

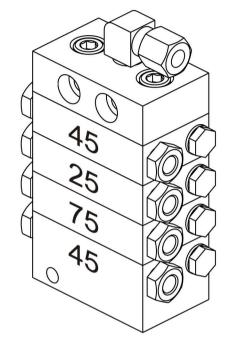
Operating pressure - Inlet: max, 300 bar Temperature range: -35°C to +80°C Carrier vehicle: Oil - viscous oil - grease

Number of elements:

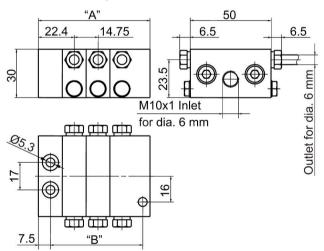
MX-F 3/6 (3 piston elements) Min. MX-F 12/24 Max.: (12 piston elements)

Element	Deliver	Piston	
designation	per outlet	per element	dia.
MX-F 25	25 mm ³	50 mm³	3 mm
MX-F 45	45 mm ³	90 mm³	4 mm
MX-F 75	75 mm ³	150 mm³	5 mm
MX-F 105	105 mm ³	210 mm ³	6 mm

Progressive distributor MX-F with four output elements and eight outlets:



Dimension drawing:



ō													
terat	Outlets Dimension"A"	2	4	6	8	10	12	14	16	18	20	22	24
to a	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
pject	Dimension"B"	57.2	57.2	57.2	72.0	86.7	101.5	116.2	131	145.7	160.5	175.2	190

POSTFACH 1320









Progressive distributor MX-F **Functional description**

The progressive distributors consist of the individual components inlet element IE (without piston), middle element ME and end element EE, all of which are assembled in distributor blocks using tension rods (hexagon socket screws) with lock washers. The individual elements are sealed with O-rings.

The lubricant flows via the inlet of the distributor through all distributor disks to the piston (I) (illustration A). The piston (I) is shifted to the left and the lubricant is pressed from the left pressure range of the delivery piston to the outlet 1 (illustration B).

After that, the proportioning pistons (II) and (III) are progressively shifted and the lubricant is primed to the outlets 2 and 3. After the piston (III) has been shifted, the lubricant is directed to the left side of the delivery piston (I) (illustration C) and primed from the right pressure range of the delivery piston to the outlet 4.

Subsequently, the delivery pistons (II) and (III) are shifted and lubricant is pressed to the outlets 5 and 6.

After the delivery piston (III) has been shifted, the lubricant is once more directed to the right side of the delivery piston (illustration A) and a new cycle of the progressive piston distributor is initiated. The described function is repeated as long as lubricant is fed to the progressive distributor.

Illustration A

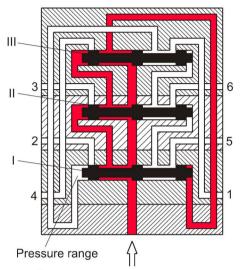


Illustration B:

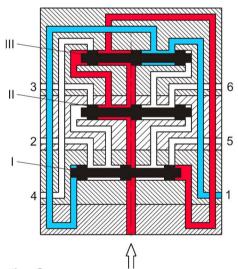
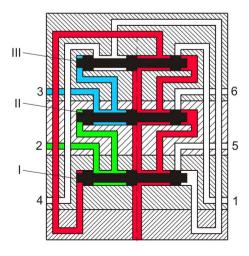


Illustration C:











Progressive distributor MX-F Assembling 2 outlets:

For larger lubrication points the assembly of two or more outlets at the progressive distributor may be required. The individual disks of the progressive distributor have two outlets.

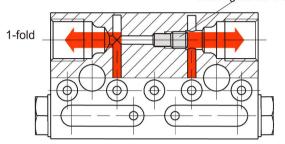
When assembling two outlets at the progressive distributor the two outlets of one disk are connected. To achieve this, the sealing screw separating the two sides is removed and a lock screw screwed in to the side, which is to be closed. The output of the closed side is now escaping on the other side, i. e. the output of the open side is doubled.

Lock screws are generally required for the assembly of outlets:

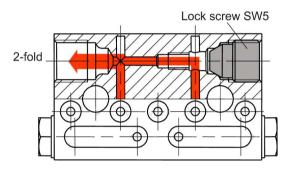
To separate assembled outlets on progressive distributors the sealing screw must ne screwed back in:

2 outlets per distributor element (standard type)

Sealing screw SW2



1 outlet per distributor element



Lock screw for progressive distributor MX-F:



Order-no: 4010 960050000

Sealing screw for separation of outlets on progressive distributors MX-F:



Order-no: 4010 9600 60000









Progressive distributor MX-F Assembling several outlets

Assembling outlets with a pipe or distributor bridge without outlet:

If the total output of the outlets assembled in one disk of the progressive distributor is not sufficient, e. g. in the case of large bearing points or main distributors, there is the possibility of assembling the outlets of several distributor disks.

To achieve this, tow distributor disks are connected with a pipe or distributor bridge as described here. Depending on which element the sealing screw separating the two sides of a distributor disk is removed from, in this way three outlets are connected. Subsequently, the output of the closed outlets escaped at one outlet.

The dosage is calculated on the basis of the output value of all assembled piston sides.

A pipe bridge or a distributor bridge can also be used for the assembly of four outlets. To achieve this, the sealing screw must be removed from both distributor disks and one of the two outlets must be closed off opposite the pipe bridge or distributor bridge with a lock screw.

Pipe bridge:

Cap screw ÜS4 M10x1 Order-no: 0802000312

and

Double cone olive DKR 4 Order-no: 09038620013

and

Reducer ring dia. 6 to dia. 4

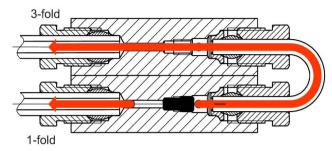
Order-no: 0802000310



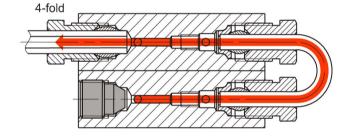
Order-no: F0409/14-00 001

Order-no collective: 4010 9600 10011

3 assembled outlets



4 assembled outlets









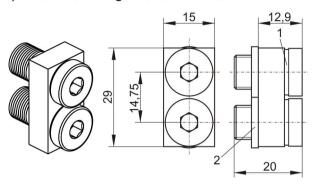




Progressive distributor MX-F Assembling several outlets

Distributor bridge without outlet:

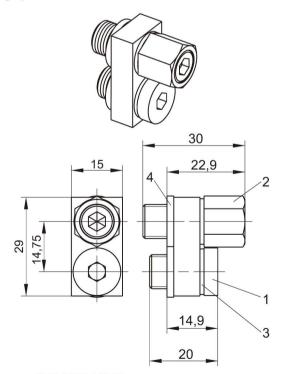
a) Distributor bridge without non-teturn valve:



Order-no: 4010 9600 10013

b) Distributor bridge with integrated non-return valve:

To ensure the proper working order of a progressive distributor with three delivery elements but only two outlets with integrated check valve must be used (see example on the right).



Order-no: 4010 9600 10016

Subject to alterations!

Comprising:

1 piece link unit

Order-no: F0409/32-00

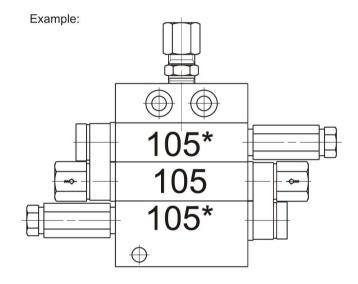
2 piece hollow bolt without outlet

Order-no: 0802 000 313

2 piece sealing ring A10x13,5x1,5 (1)

Order-no: 09 07603 05121 2 piece sealing ring A10x15x2 (2)

Order-no: 09 07603 01911



Comprising:

1 piece link unit

Order-no: F0409/32-00

1 piece hollow bolt without outlet (1)

Order-no: F0409/31-00

1 piece hollow bolt with non-return valve (2)

Order-no: 4010 9600 10017

2 piece sealing ring A10x13,5x1,5 (3)

Order-no: 090760305121 2 piece sealing ring A10x15x2 (4) Order-no: 090760301911









Progressive distributor MX-F Assembling of 2 and more outlets

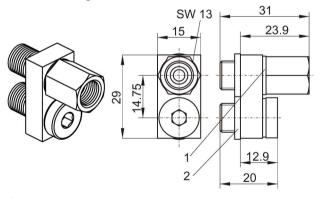
Assembling outlets with distributor bridges with outlet:

For the connection of two outlets (on different adjacent distributor disks) the sealing screw may not be removed from either of the two concerned distributor disks. As a result, the output of both the outlets escapes at the outlet of the distributor bridge.

For the connection of three outlets the sealing screw must be removed from one of the two concerned distributor disks. A lock screw must be fastened in the free outlet of this distributor disk. As a result, the output of all three outlets escapes at the outlet of the distributor bridge.

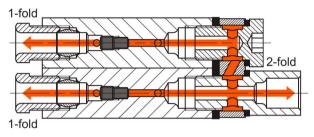
For the connection of four outlets the sealing screw must be removed from both distributor disks and a lock screw must be screwed into the outlets situated opposite the distributor bridge. As a result, the output of all four outlets escapes at the outlet of the distributor bridge.

Distributor bridge with outlet:

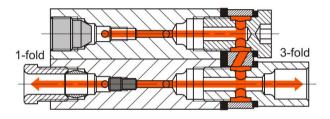


Order-no: 4010 9600 10012

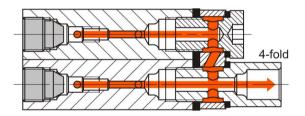
2 outlets per distributor element



3 outlets per distributor element



4 outlets per distributor element



Comprising:

1 Piece link unit

Order-no: F0409/32-00 1 Piece hollow bolt with outlet Order-no: F0409/33-00

1 Piece hollow bolt without outlet

Order-no: 0802 000 313

2 Piece sealing ring A 10 x 13.5 x 1.5 (1)

Order-no: 09 07603 05121

2 Piece sealing ring A 10 x 15 x 2 (2)

Order-no: 09 07603 01911









Progressive distributor MX-F Input screw connections

The MX-F progressive distributor can be used both as a main distributor and secondary distributor.

When used as a main distributor, the pump is connected by means of a high-pressure hose. Also when used as a secondary distributor, the connection from the main distributor generally requires a high-pressure hose. This hose must be connected by means of a insert and a treaded ferrule. The connection diameter of the insert can be dia. 6 ordia.8.

All screw connections with M10x1k threads or M10x1 threads and a sealing edge can be used for the input connection of the MX-F progressive distributor.

Three different couplings are available with the above pipe diameters.

A) Angular coupling:

Order-no:

WE6LLM10x1k 04012200306 WE8LLM10x1k 04012220306

Pipe-dia. D	М	L1	L2	approx. L3	S1	S2
6	M10x1k	8	14.5	26	11	12
8	M10x1k	8	16.5	28	12	14

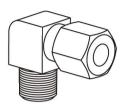
B) Straight coupling:

Order-no:

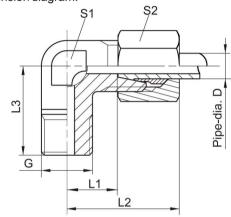
GE6LLM10x1k 04012000306 GE8LLM10x1k 04012020306

Pipe-dia. D	М	L1	L2	approx. L3	S1	S2
6	M10x1k	8	14.5	26	11	12
8	M10x1k	8	16.5	28	12	14

Angular coupling:



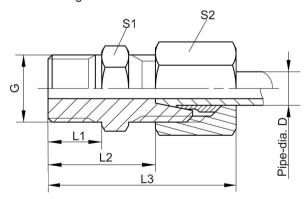
Dimension diagram:



Straight coupling:



Dimension diagram:













Progressive distributor MX-F Input screw connections

C) Swivel angular coupling:

Order-no:

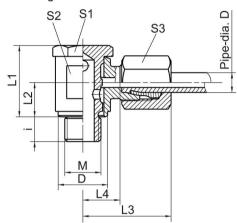
WS6LLM10x1 04013200206LL WS8LLM10x1 04013220206LL

Pipe-dia. D	М	L1	L2	appox. L3	L4	i	S1	S2	S3	D
6	M10x1	20	9.5	22	10	6	14	14	12	13
8	M10x1	21.5	10	23	11	6	14	14	14	13

Swivel angular coupling:



Dimension diagram:











Progressive distributor MX-F Screw fittings for outlet

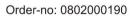
Screw connections:

Polyamide pipe with a diameter 6x1.5 or steel pipe with a diameter 6x1 is generally screwed to the distributor with a cap screw US 6 M10x1 and a double cone olive DKR 6.

The connecting sleeve used for connecting to the highpressure hose can also be fastened directly to the distributor with the cap screw US 6 M10x1 and the corresponding double cone olive.

The polyamide pipe dia. 4x0.85 hard or the steel pipe dia. 4x0.7 is connected to the distributor with a reducer from dia. 6 to dia. 4, a double cone olive DKR 4 and a cap screw US 4 M10x1.



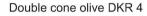


US4 M10x1

Cap screw

Order-no: 0802000311

Double cone olive DKR 6





Order-no: 09038620023



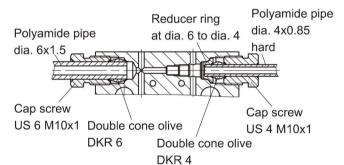
Order-no: 09038620013

Reducer ring at dia. 6 to dia. 4



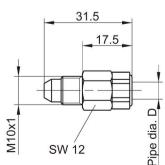
Order-no: 0802000310

Polyamide pipe screwed onto a distributor disk MX-F:



Straight pin-and-socket connector for MX-F distributor:





Plug connections:

The polyamide pipe dia. 6 and polyamide pipe dia. 4 hard can also be connected to the distributor by means of a plug connection. For this purpose, straight pin-and-socket connectors for the MX-F distributor are screwed into the distributors outlets. These straight pin-and-socket connectors are available for pipe dia. 6 and for pipe dia. 4. The turned conical form on the front eliminates the need for an additional double conical ring.

To connect a high-pressure hose to a plug-and-socket connector, use a pipe socket for plug-and-socket connections (ref. no: 1001 21 191) with groove. In this case, the pipe connection dia. is dia. 6.

Pipe dia. D Order-No 4 mm FAZ03605-01 6 mm FAZ03605-00











Progressive distributor MX-F Screw fittings for outlets

Non-return valve for progressive distributors MX-F

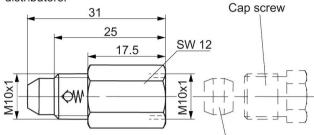
The non-return valves are generally used in connection with the high-pressure hose, e. g. for lubrication points with increased back pressure or in main distributors.

Two types of non-return valves are available.

The polyamide tube and high-pressure hose are screwed onto the non-return valve of the progressive distributor MX-F with a cap screw and a double cone olive.

Non-return valves with cap nut and cutting olive require no additional union piece.

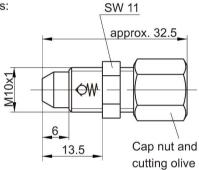
Non-return valve for progressive distributors MX-F for main distributors:



Order-no: 4010 9600 40000

Double cone olive

Non-return valve with cap nut and cutting olive for auxiliary distributors:



Order-no: 0438 000 179





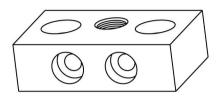


Progressive distributor MX-F **Elements**

Progressive distributors MX-F consist of one initial element (without delivery piston), two to eleven middle elements and one end element each.

Initial elements are available with or without inlet union piece.

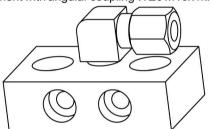
Initial element without inlet union piece:



Order-no: 4010 94 001

All union pieces with a threaded connection of M10x1 can be screwed into an initial element without inlet union piece.

Initial element with angular coupling WE6 M10x1k:



Order-no: 4010 94 002

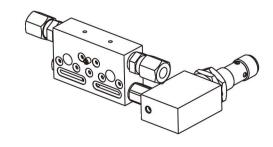
Middle elements are available with four different outputs.

MX-F 25	=	25 mm³/stroke
MX-F 45	=	45 mm³/stroke
MX-F 75	=	75 mm³/stroke
MX-F 105	(=)	105 mm³/stroke

The middle elements MX-F 75 and MX-F 105 are available with attached proximity switch to the function control of the device. The cable must be order separately (refer to page 13).

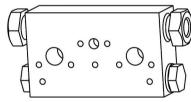
End elements are also available with four different outputs (see above) and with attached proximity switch (see table). The cable must be order separately (refer to page 13).

Middle and end elements with proximity switches must always be equipped with check valves on the distributor outlets, to ensure that these elements work properly.



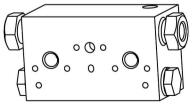
Subject to alterations!

Middle element for progressive distributor MX-F:



Description	Proximity switch	Order-no
MX-F 25	without	4010 95 101
MX-F 45	without	4010 95 102
MX-F 75	without	4010 95 103
MX-F 105	without	4010 95 104
MX-F 75	with	4010 95 123 022
MX-F 105	with	4010 95 124 022

End element for progressive distributor MX-F:



Description	Proximity switch	Order-no
MX-F 25	without	4010 96 101
MX-F 45	without	4010 96 102
MX-F 75	without	4010 96 103
MX-F 105	without	4010 96 104
MX-F 75	with	4010 96 123 022
MX-F 105	with	4010 96 124 022











Progressive distributor MX-F Elements with proximity switch

MX-F progressive distributors are available with proximity switches installed on the middle elements MX-F 75 and MX-F 105 and the end elements MX-F 75 and MX-F 105. The position of the middle elements and of the proximity switch can be chosen freely.

Distributors with proximity switch are used for the monitoring of the device or in the case of stroke control for the counting of the piston strokes of the distributor.

Middle and end elements with a proximity switch must be indicated at the time of ordering; retrofitting of an existing middle or end element with a proximity switch is not possible.

Progressive distributors can be upgraded by exchanging the respective distributor disk (see page 11 and 14)

The proximity switch is delivered without a plug and cable, which must be ordered separately (see page 13).

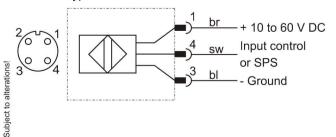
Since the terminal housing of the proximity switch protrudes beyond the distributor (see dimension diagram below), a mounting plate must be used under distributors that are installed without a weld-on plate or mounting frame (see drawing above).

Functional description:

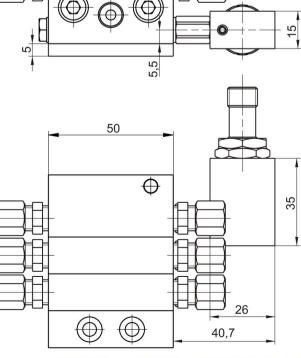
A pin (2) is attached to the piston (1) of the distributor disk. At every piston stroke this pin approaches the proximity switch (3) and triggers off a signal. This signal is processed in different ways according to control type or nature of application.

Technical data of the proximity switch:

Connection: 4 pol. / M12x1 plug-in PNP contact Connecting method: Power rating: 200 mA 10 to 60 V DC Voltage: -40°C to +85°C Temperature range: Function display: LED yellow stainless steel Housing material: Protection type: **IP67**



Progressive distributor with attached proximity switch: Mounting plate Order-no: 0800800929 Proximity switch M12x1 Order-no: 100091865 0 Proximity switch attached to a disk of a progressive distributor:





Installation dimensions:







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Progressive distributor MX-F Plug and cable for proximity switch

Middle and end elements with proximity switches are delivered without a socket and cable.

Various sockets with different cable lengths are available. They must be ordered separately.

For connecting the proximity switch to external control units or for connection to a control with a Hirschmann plug, connection cables no 1 with straight sockets M12x1 for the proximity switch are available in lengths of 2 m, 5 m and 10 m. The connecting diagrams can be found in the description of the respective control unit.

For the connection to the integrated controls BEKA-troniX1 and EP-tronic with bayonet connector, a connection cable no 2 with lengths of 2 m and 5 m is available, with a straight socket M12x1 on one end for the proximity switch and a straight or angular plug M12x1 on the other end for connecting to the control unit. The connection cables can also be combined.

In order to connect existing proximity switches with M8x1 connecting threads to the integrated controls BEKA-troniX1 and EP-tronic with bayonet connector, an adapter is available with a straight socket M8x1 for the proximity switch and a straight plug M12x1. The plug and socket are connected by a cable with a length of 30 cm.

This adapter can be used to connect a connection cable no 1 and no 2.

If a proximity switch M12x1 must be connected to an existing system via a cable for a proximity switch M8x1, e.g. if the proximity switch had to be replaced previously, an adapter cable of 30 cm length with a straight socket M12x1 for the proximity switch and a straight plug M8x1 for connection to the existing cable can be ordered.

Plug M12x1 for connecting to the connecting cable no 1 and no 2

Socket M8x1 for connecting to the proximity switch

Order-no: 1000 91 2495

Socket M12x1 for connecting to the proximity switch



Plug M8x1 for connecting to the connecting cable of the existing device Order-no: 1000 91 2496

Connection cable no 1 for connection to external control units or for connection to a control with a Hirschmann plug:



Socket M12x1 for connecting to the proximity switch

Cable length	Order-no
2 m	1000 91 2458
5 m	1000 91 1237
10 m	1000 91 2457

Connection cable no 2 for connection to the integrated controls BEKA-troniX1 and EP-tronic with bayonet connectors:



connecting to the integrated control units BEKA-troniX1 and EP-tronic with

bayonet connector



Angular plug M12x1 for connecting to the integrated control units BEKA-troniX1 and EP-tronic with bayonet connector

Socket M12x1 for
connecting to the
proximity switch

Cable length	Plug type	Order-no
2 m	straight	1000 91 2464
5 m	straight	1000 91 2465
2 m	angular	1000 91 2467
5 m	angular	1000 91 2468











Progressive distributor MX-F

Elements with optical stroke pin control or control pin indication

Elements of progressive distributor MX-F can also be fitted with an optical stroke pin control. This functional test element does not supply any electrical data. However, a distributor can be upgraded any time with an optical stroke pin control by removing the piston lock screw (1) and screwing in the optical stroke pin control (2). This is only possible for the middle or end elements MX-F 75 and MX-F 105.

Warning: This process must be carried out paying attention to utmost cleanness.

Functional description:

The plunger (3) is shifted towards the outside (in the example shown to the right) when the piston (4) is operated and the control pin (5) becomes visible. Control pin and plunger are moved back into their starting position by the spring (6), as soon as the piston is shifted to the other side by the grease (see functional description for MX-F distributors on page 2).

4350 00 105 Order-no for optical stroke pin control:

Contrary to the optical stroke pin control the control pin indication cannot be subsequently installed and it can only be installed in the middle elements MX-F 75 and MX-F 105 as well as in end elements MX-F 75 and MX-F 105.

The installation must be indicated when ordering. Progressive distributors can be upgraded with a control pin indication by exchanging the respective distributor disk.

An upgrade with a proximity switch is also possible if required.

Order-no for proximity switch

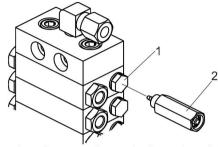
for the subsequent installation: 4010 9600 90017

Functional description:

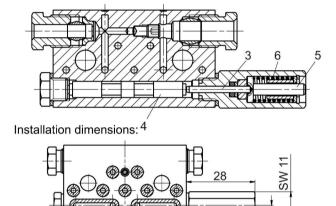
In the case of control pin indication the plunger (7) is directly connected with the piston of the progressive distributor (8). At every stroke the plunger (7) is forcibly extracted or retracted.

	Name	Output per outlet	Outlet dia.	Order-no
	Middle element MX-F 75	75 mm³	6 mm	401095153
ations!	Middle element MX-F 105	105 mm³	6 mm	401095154
Subject to alterations!	End element MX-F 75	75 mm³	6 mm	401096153
Subje	End element MX-F 105	105 mm³	6 mm	401096154

MX-F distributor and optical stroke pin control:



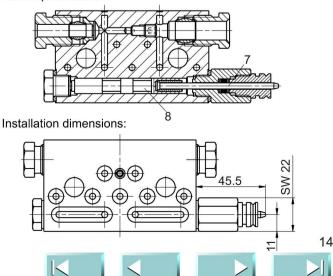
Optical stroke pin control attached to the disk of a progressive distributor:



MX-F distributor with attached control pin indication

(primed):

Element of a progressive distributor MX-F with a attached control pin indication:





Progressive distributor MX-F Elements with pressure indicator

The outlets or the distributor inlet of the progressive distributor MX-F can be equipped with a pressure indicator, i. e. excess pressure is optically indicated. This display element does not supply any electronic data. The pressure indicator can be upgraded at any time, as it is simply screwed into the distributor outlets between the distributor element and the cap screw or into the distributor inlet between the screw connection and the initial element of the progressive distributor.

Warning: This process must be carried out paying attention to utmost cleanness!

Functional description:

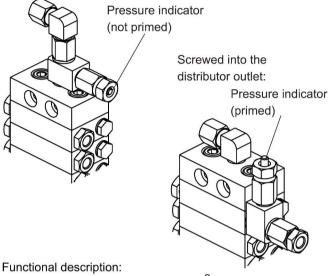
In case of excess pressure the pin (2) is primed and the bolt (3) is visibly lifted against the spring force. In the case of decompression the spring (1) presses the bolt (3) and the pin (2) back into the starting position.

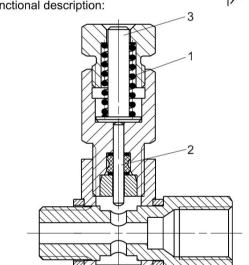
Pressure indicators can be ordered for different pressure ranges (see table). The pressure range is set by the spring (1).

Order-no:

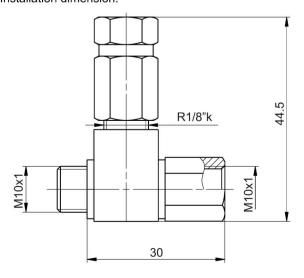
Pressure (bar)	Color	Pressure indicator according to FAZ03209-00
30	silver	4045 00 01 00 03
50	red	4045 00 02 00 03
70	white	4045 00 03 00 03
100	yellow	4045 00 04 00 03
150	black	4045 00 05 00 03
200	green	4045 00 06 00 03
250	blue	4045 00 07 00 03

Pressure indicator attached to an MX-F distributor Screwed into the distributor inlet:





Installation dimension:















Progressive distributor MX-F Extension or shortening of distributors

Due to the disk construction of the progressive distributors MX-F they can be adapted to different operating conditions at any time. If lubrication areas need to be added or become unnecessary, the distributor can be extended or shortened by addition or removal of distributor disks.

Description:

- Remove the tension rods (1), which hold the distributor together
- Separate the distributor at the required place
- Add or remove the respective distributor disks
- Screw the distributor together with the respective tension rods and one toothed disk each (see table)

Warning: Utmost cleanness is essential for this work.

Note: An MX-F distributor must always consist of a minimum of three and a maximum of 12 outlet elements.

If one of the O-rings used for the sealing of the distributor between the individual elements is damaged and the sealing is no longer sufficient a set of O-rings can be ordered containing all O-rings fitted in MX-F distributors.

Sealing set for initial elements:

Order-no: 4010960030002 Sealing set for middle elements: Order-no: 4010960030001

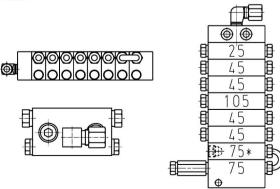
Warning: When mounting the distributors back in, it must be ensured that the pistons of the distributors are in a horizontal position.

The mounting area must be level and obstruction-free.

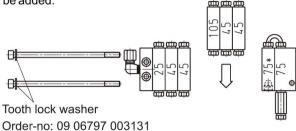
To facilitate the drilling of the mounting holes for the distributor a drilling template is available, Order-no: 4010 9600 20000.

Mounting position of the distributors:

Correct:



MX-F distributor 5/7, to which three distributor disks should be added:



MX-F distributor, view from above:

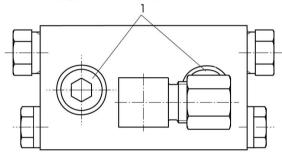
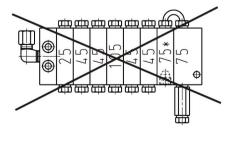


Table of tension rods:

Dimension of distributor	Dimension of tension rod	Order-no
MX-F 3/6	M6 x 50	09 06912 01913
MX-F 4/8	M6 x 65	09 06912 02213
MX-F 5/10	M6 x 80	09 06912 02413
MX-F 6/12	M6 x 95	09 06912 02613
MX-F 7/14	M6 x 110	09 06912 02813
MX-F 8/16	M6 x 125	09 00912 04823
MX-F 9/18	M6 x 140	09 00912 05023
MX-F 10/20	M6 x 155	09 00912 05123
MX-F 11/22	M6 x 170	09 00912 11223
MX-F 12/24	M6 x 185	09 00912 12223

Incorrect:











Progressive distributor MX-F Ordering key

Distributor input:

The progressive distributor MX-F is available with three different types of input connections or without connection at the distributor input.

The screw connection type must be indicated before the diameter when ordering:

- M10x1 without screw connecting (in this case the indication of diameter is not necessary)
- WE for angular coupling
- · GE for straight coupling
- · WS for swivel angular coupling

If no coupling type is indicated, then an angular coupling dia. 6 will be delivered.

Distributor outlet:

The distributor outlet is available with cap screws, plug-in connections and two types of non-return valves.

The screw connection type must be indicated before the diameter when ordering:

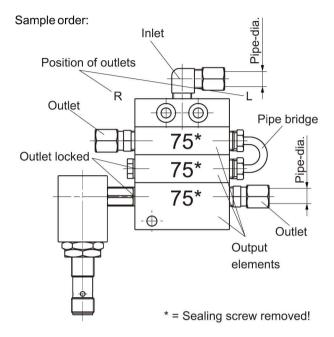
- M10x1 without screw connecting (in this case the indication of diameter is not necessary)
- · US for cap screws
- GS for plug-in connections
- RVA for non-return valves with DKR and US
- RVB for non-return valves with SR and UM

If no screw connection type is indicated, cap screws dia. 6 or in case of installation of a proximity switch a RVB06 will be delivered.

Dosing quantities:

The dosing quantities must be indicated on each side of the distributor inlet in the direction of the distributor end.

The dosing quantities are indicated with the names on page 11. For combined outlets, the dosing quantities names are added (see page 3). For the installation of distributor bridges or a pipe bridge, a plus (+) has to be indicated instead of the slash.



Lock screws and outlets sealed by distributor bridges are indicated by a dash (-). For distributor bridges, the sealing screw to be removed must be indicated by an asterisk (*). Distributor disks on which a proximity switch shall be

installed must be indicated with NS after the name of the dosing quantity. Proximity switches can be installed either to the left and to the right of MX-F distributors.

After the note NS, the proximity switch variant must be indicated:

- NS A for NS M8x1 with 6m cable (not plug-in)
- NS 08 for NS M8x1 plug-in
- NS 12 for NS M12x1 plug-in (standard) (see pages 12 and 13)









