

## BLOCK LUBRICATION SYSTEM



**USE:** A block lubrication system is used for manual lubrication when the lubrication points are difficult to access and centralised lubrication is not responsible because of minor lubrication intervals.

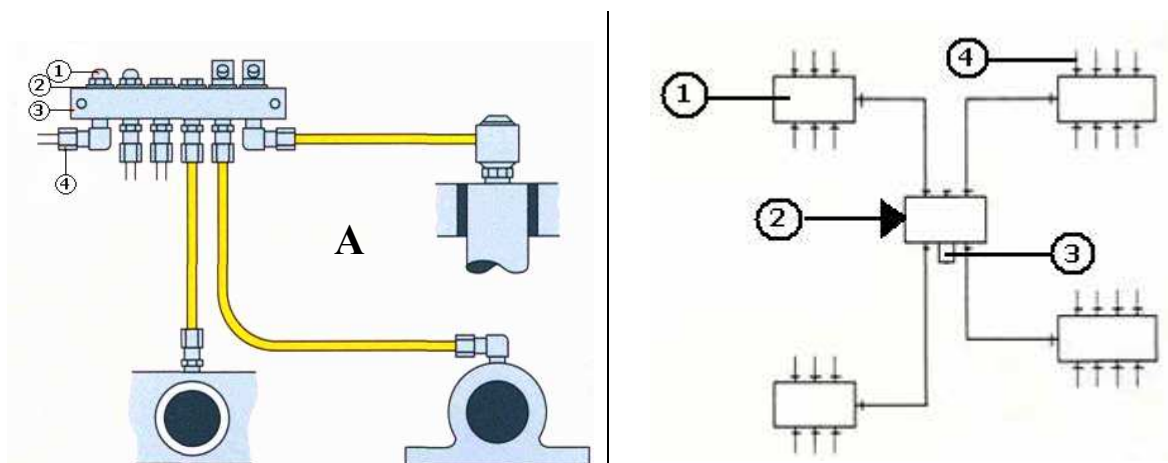
**MATERIAL:** Steel, phosphated or galvanised

**ACCESSORIES:** pipes: alu, steel, nylon, high pressure pipe, ...

### EXECUTION:

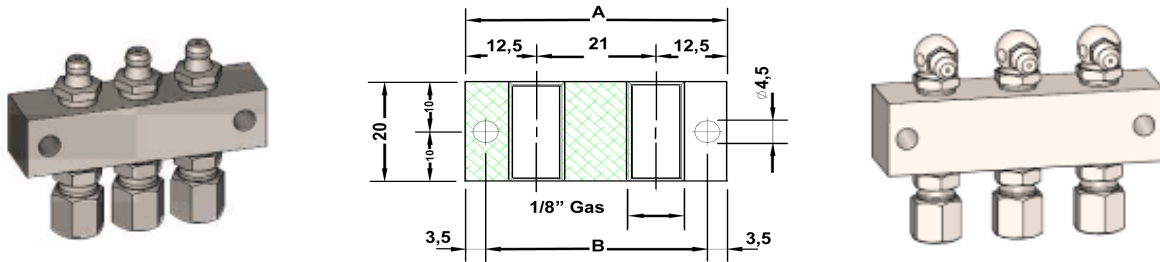
- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. grease nipple</li> <li>2. Ring mark to indicate what should be lubricated when</li> <li>3. grease block</li> <li>4. pipe couplings</li> </ol> | <ol style="list-style-type: none"> <li>1. progressive divider</li> <li>2. grease nipple</li> <li>3. optical control</li> <li>4. pipe couplings</li> </ol> |
|---|---|

There are 2 possibilities:



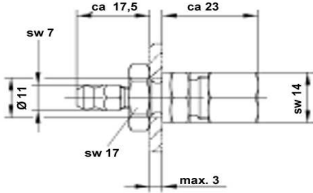
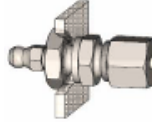
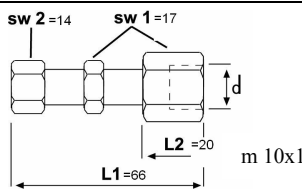

Subject to change







## BLOCK LUBRICATION SYSTEM + ACCESSORIES



Below we give a 3 page resume of all the components that your application needs for a complete centralized manual lubrication system.

Pos	Amount	Order No.	Connections	Dimensions			Unit price	Total
				Thread	A	B		
1		SNB.ILC.01xR02	1	R 1/8"	25	18	01.110.1	
2		SNB.ILC.02xR02	2	R 1/8"	46	39	01.110.2	
3		SNB.ILC.03xR02	3	R 1/8"	67	60	01.110.3	
4		SNB.ILC.04xR02	4	R 1/8"	88	81	01.110.4	
5		SNB.ILC.05xR02	5	R 1/8"	109	102	01.110.5	
6		SNB.ILC.06xR02	6	R 1/8"	130	123	01.110.6	
7		SNB.ILC.07xR02	7	R 1/8"	151	144	01.110.7	
8		SNB.ILC.08xR02	8	R 1/8"	172	165	01.110.8	



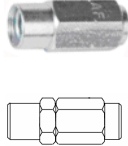
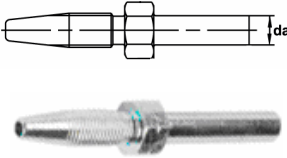
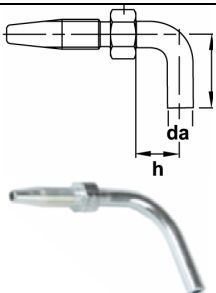




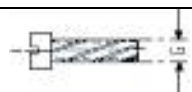
Chassis clutch wit hor without grease nipple					
9	SNB.SV.06LL		with grease nipple H1	 Ø 6 mm	
10	SNB.SV06LM10x1	 m 10x1	Grease nipple at your choice	 d = 10 x 1	

		Article	Accessories for grease block		
11	CK.GE.06LLR02	straight screw-in fitting conic	Ø 6 mm  1/8		
12	CK.SWVE.6R02	right-angled screw-in fitting rotatable	Ø 6 mm  1/8		
13	SN.H1.11-02	Lubricating nipple H1-1/8" BSP straight	 1/8		
14	SN.H2.11-02	Lubricating nipple H2-1/8" BSP 45°	 1/8		
15	SN.H3.11-02	Lubricating nipple H3-1/8" BSP 90°	 1/8		
16	VBM.BV.M04X30	Bolt galvanized M4 x 30 mm			
<b>Total:</b>					



## ACCESSORIES FOR GREASE BLOCKS FOR CENTRALISED MANUAL LUBRICATION

### PIPES, COUPLINGS AND ACCESSORIES BETWEEN GREASE BLOCKS

Pos.	Amount	Order No.	Article		Unit price	Total
17		LME.ST-G.06/04	Steel pipe galvanised 6/4, 389 bar, DIN 2391 C	per length of 3 m		
18		LME.CU.06/04	Copper tube Ø 6/4	on a roll, length at your choice		
19		LPA.HSW.06-03	PA-hose black 6 x 1,5 - 75 bar at +20°C	on a roll, length at your choice		
20		LPA.E.05-6/3	Plug sleeve (required for coupling with PA)			
21		LPA.AF4.DN4	High pressure hose, AF4 370 bar at 20°C, on a roll, length at your choice			
22		LK.SH.HAF-04	Sleeve for high pressure hose AF4			
23		LK.FD.41255642	Stud for high pressure hose AF4, Ø 6 mm			
24		LK.FD.D6-90°38	90° stud for high pressure hose AF4, Ø 6 mm			
25		LB.LK.01X06	Pipe clip, galvanised, 1 x 6 mm			
26		LB.LK.02X06	Pipe clip, galvanised, 2 x 6 mm			
27		LB.LK.03X06	Pipe clip, galvanised, 3 x 6 mm			
28		LB.LK.04X06	Pipe clip, galvanised, 4 x 6 mm			
29		LB.LK.RS-06-12	Galvanised pipe clips with rubber, D = 6 mm			
30		LB.LK.RS-08-12	Galvanised pipe clips with rubber D = 8 mm. For high pressure hose AF4			
31		LB.LK.TF4	Cable ties max. bundle Ø 31.4 mm			
32		LB.LK.TF5	Cable ties max.bundle Ø 44.4 mm			
33		LB.LK.TF7	Cable ties max. bundle Ø 88.9 mm			
34		VBM. ZTV.BM04X08	Self-tapping screw for clips M 4 x 8 mm (3.5 mm bore)			

Subject to change



## ACCESSORIES FOR GREASE BLOCKS FOR CENTRALISED MANUAL LUBRICATION

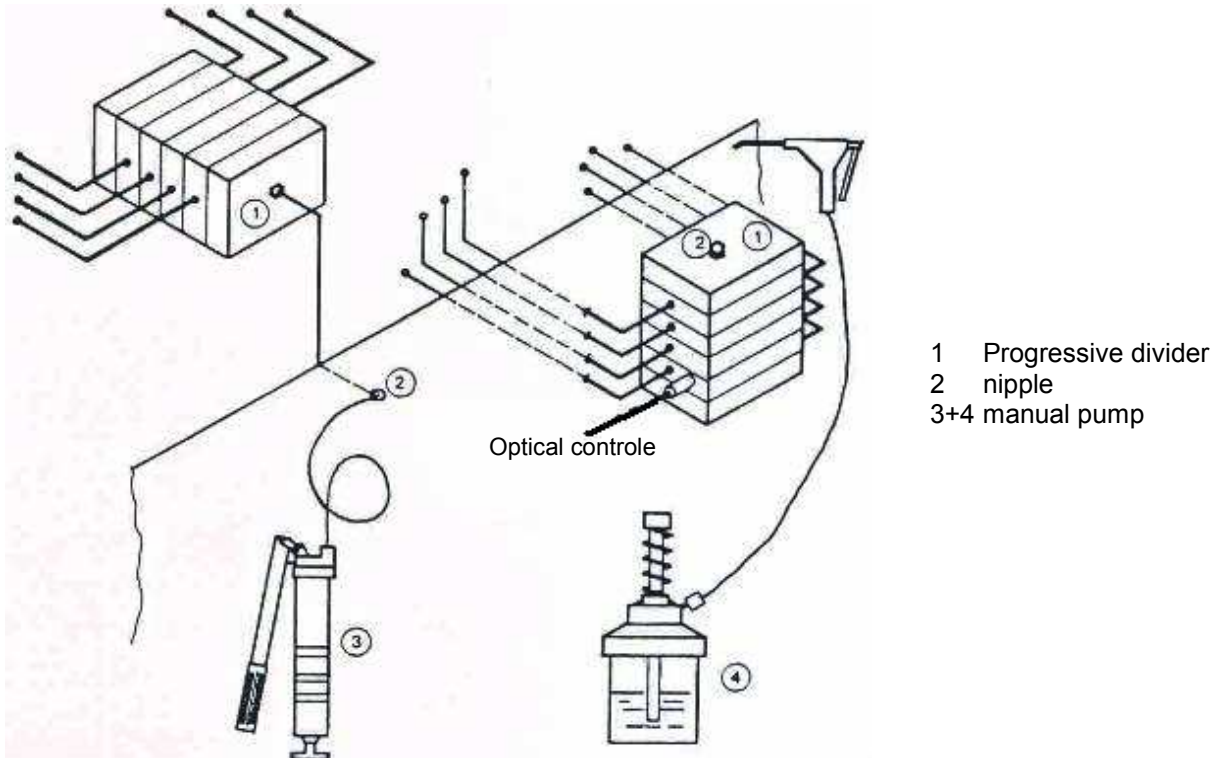
PIPES, COUPLINGS AND ACCESSORIES BETWEEN GREASE BLOCKS

Straight connectors conic thread						
35		CK.GE.06LLM06X1	d1= 6x1 D=6mm			
36		CK.GE.06LLM08X1	d1= 8x1 D=6mm			
37		CK.GE.06LLM10X1	d1= 10x1 D=6mm			
38		CK.GE.06LLR02	d1= 1/8" D=6mm			
39		CK.GE.06LR04	d1= 1/4" D=6mm			
Elbow connector conic thread						
40		CK.WE.06LLM06X1	d1= 6x1 D=6mm			
41		CK.WE.06LLM08X1	d1= 8x1 D=6mm			
42		CK.WE.06LLM10X1	d1= 10x1 D=6mm			
43		CK.WE.06LLR02	d1= 1/8" D=6mm			
44		CK.WE.06LR04	d1= 1/4" D=6mm			
Other connectors: <a href="http://www.pomac.be/koppelingen.html">http://www.pomac.be/koppelingen.html</a>						
45		CK.SR.06LL	Cone drive steel light (LL) D Ø 6 mm (for connectors LL)			
46		CK.SR.06S	Conde drive steel heavy (S) D Ø 6 mm (for connectors LR)			
47		LK.KR.ME-06	Double cone drive brass. D Ø 6 mm for connectors LL (at your choice: cone or double cone drive)			

	<p>You can also replace the connectors pos 35-44 by plug connectors. Link: <a href="http://www.pomac.be/koppelingen2..pdf">http://www.pomac.be/koppelingen2..pdf</a></p>
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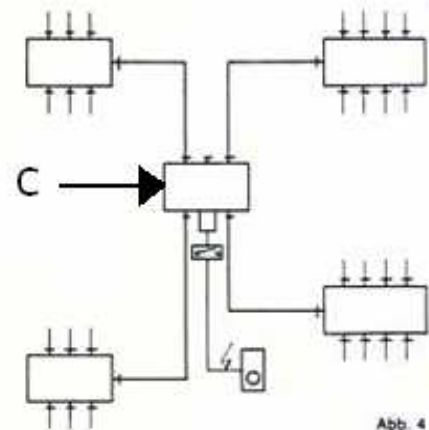
**Note:** Main metal parts are available in stainless steel as well

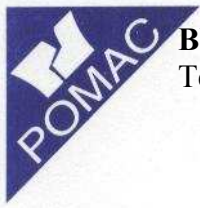
## CENTRALIZING OF NIPPLES WITH PROGRESSIVE DIVIDERS



To facilitate the accessibility of lubrication points which are difficult to reach, the nipples can be moved. Two possibilities are used to do so:

- a) Nipples are replaced by pipes which are joined in nippleblocs, which are easier to access. In this case, each nipple is lubricated separately.
- b) Ditto (a) but instead of nippleblocs, progressive dividers are used from minimum 6 to maximum 24 lubrication points. There is only one nipple for one progressive divider and the lubricant is distributed equally towards each lubrication point or distributed to each lubrication point according to the desired flow. Another possibility is to connect different progressive dividers, which enables you to lubricate even more lubrication points with only one nipple. It is also possible to use an optical controle which indicates if each lubrication point was lubricated.
- c) Improvement 1 grease nipple for serveral distributors.
- d) Afterwards, (b and c) can also be automated by an automatic pump.





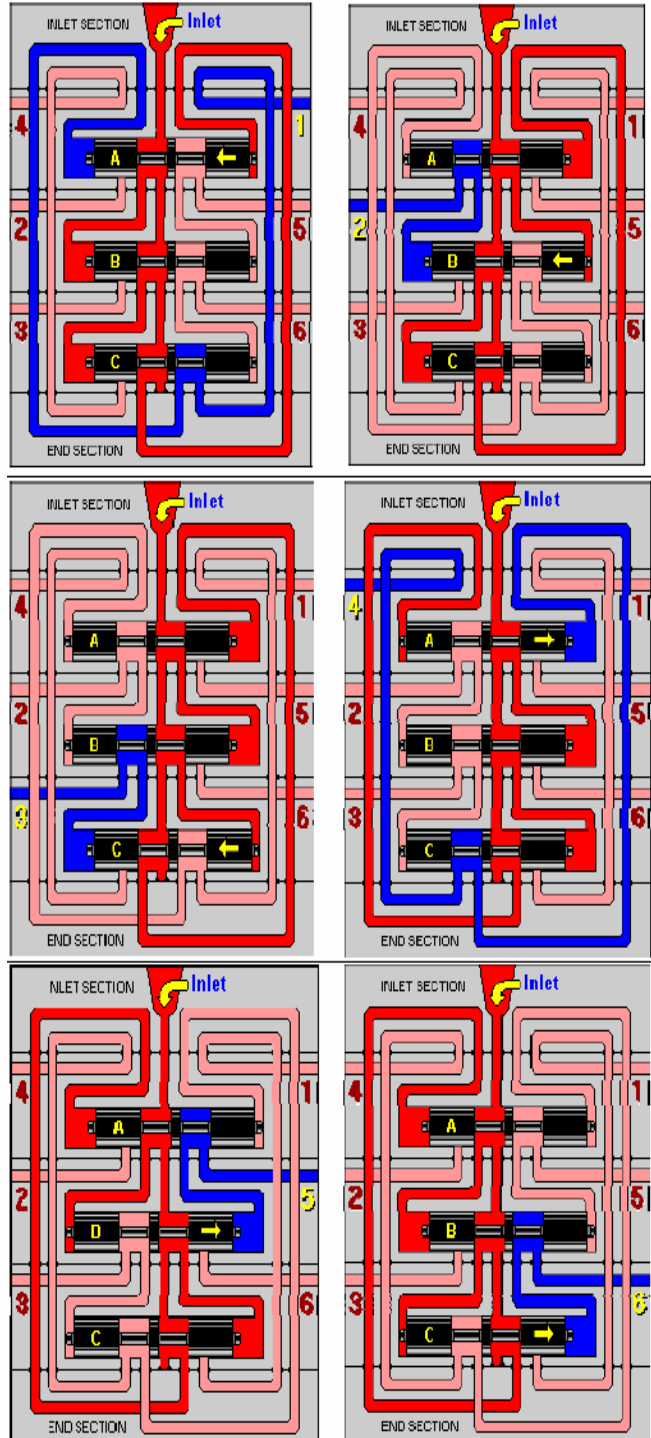
## PROGRESSIVE DIVIDER DPX OPERATING SEQUENCE

1. Supply pressure through internal passages moves piston "a" left while holding pistons "b" and "c" fixed. A measured dose of lube discharges from port 4.

2. Piston "a" bottoms. It opens internal passages directing supply pressure to right end of piston "b". Lube discharges from port 1.

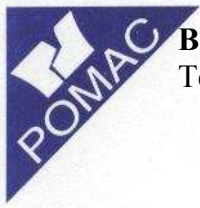
3. Piston "b" bottoms. It opens internal passages directing supply pressure to right end of piston "c". Lube discharges from port 2.

4. Piston "c" bottoms. It opens internal passages directing supply pressure to left end of piston "a" which returns on its initial position as lube discharges from port 3.



Subject to changes

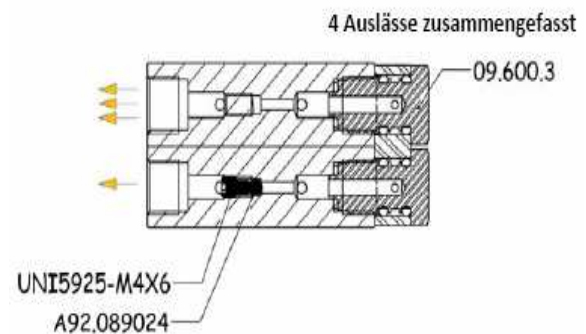
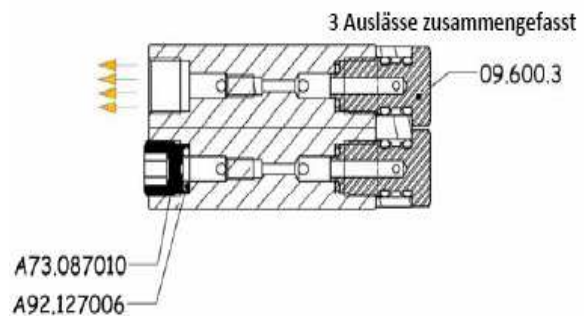
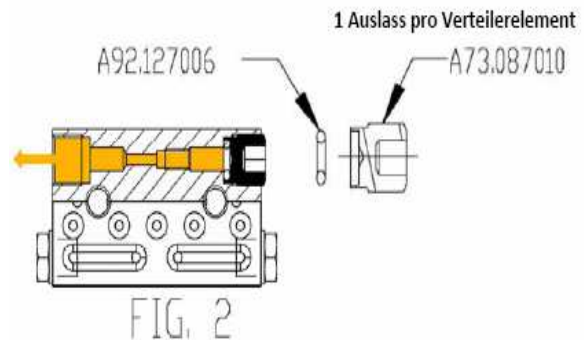
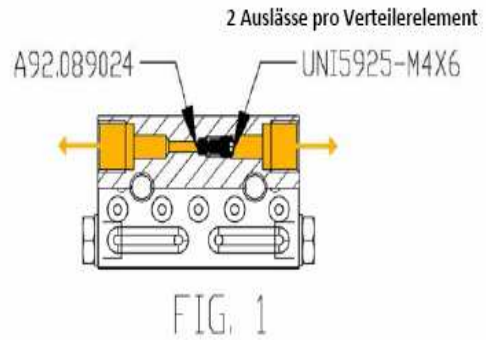


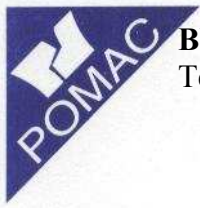


## PROGRESSIVE DIVIDERS DPX OUTLETS USE

Each divider piston is arranged in order to feed 1 or 2 outlets. When the separation dowel is inserted (see Fig.1), the discharge is carried out in both sides. When the dowel is not inserted (see Fig. 2), the double discharge is carried out in one of the two available outlets. If it is necessary to use one outlet extract the sphere (A92.087015), besides the separation dowel (A92.089002) and insert a plug (A73.087010 + A73.127039) in the outlet no more used. The dividers are supplied with the separation dowel inserted and the two outlets open as standard.

**IMPORTANT: IT IS NOT POSSIBLE TO CLOSE BOTH THE OUTLETS OF A SAME PISTON. ALL THE WORK HAVE TO BE MADE IN A CLEAN ENVIRONMENT**





## PROGRESSIVE DIVIDER DPX

Progressive dividers care for distribution and dosing with a progressive movement of pistons that are controlled one by the other in an interdependent sequence.

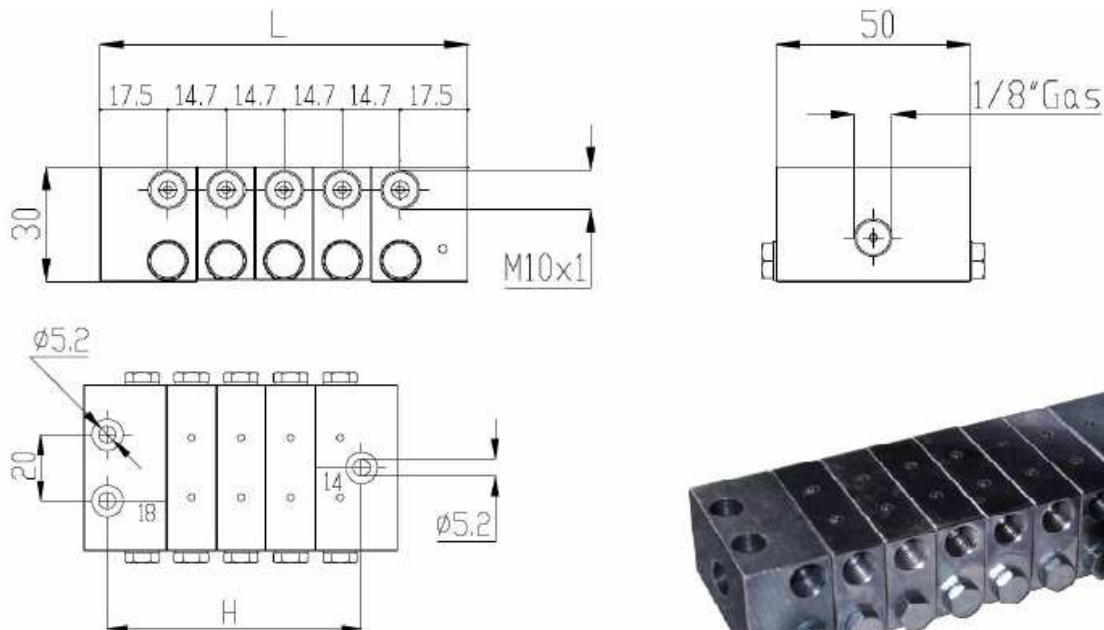
This is obtained by only one delivery flow. This system is highly qualified for dosing oil and grease to one or more journals or bearing. Each piston is in series with the component before or the one after it and therefore malfunctioning of one of these causes stopping of the sequence and consequently inhibiting of the system. This inhibition occurs also during any external clogging or when outlet not being utilized anymore might be plugged. The application of only one component, which is provided with visual or electrical control, is sufficient for an efficient and complete checking of the entire distribution. In system with off-flowing oil, which operates intermittently, the pump discharge is determined by the sum of the deliveries of all dosing elements. In circulation system, the quantity of delivery during a certain time is less strict. However in this case any overpressure, which is not justified for the pumps and components, shall be avoided. The rate of flow for the pump is fractionable when the doser blocks are arranged in cascade. Through a doser block, the so-called master, it is possible to supply another block of dosers by uniting one or more outlets and from there another and from there another. Theoretically this may be continued infinitely more, however for reasons of compressibility and aerations of lubricants, is not suitable to have more than two cascades after the master, since beyond this there might be irregular running especially with grease as lubricant or at minimum rates of flow.

### TECHNICAL DETAILS

Working pressure = FROM 15 BAR TO 300 BAR  
 Temperature range = FROM -20°C TO 100 °C  
 Lubricants = OIL – SOFT GREASE – GREASE

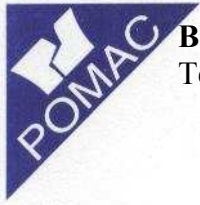
### Codes for order

Code	No. of outlets	H	L	Code	No. of outlets	H	L		
2.1N.03	DPX-3	3	46.7	64.4	2.1N.08	DPX-8	8	120.2	137.9
2.1N.04	DPX-4	4	61.4	79.1	2.1N.09	DPX-9	9	134.9	152.6
2.1N.05	DPX-5	5	76.1	93.8	2.1N.10	DPX-10	10	149.6	167.3
2.1N.06	DPX-6	6	90.8	108.5	2.1N.11	DPX-11	11	164.3	182
2.1N.07	DPX-7	7	105.5	123.2	2.1N.12	DPX-11	12	179	196.7



Subject to change



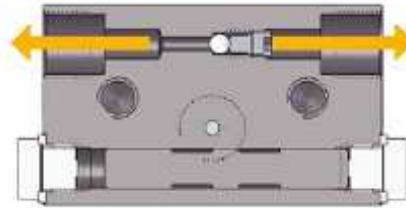


## PROGRESSIVE DIVIDER DPX ELEMENTS

DPX progressive distributors consist of an inlet valve section, valve section and an outlet valve section

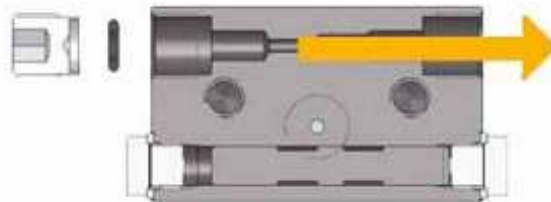
2 outlets per divider element

Discharge	Inlet valve section	Valve section	Outlet valve section
25 mm <sup>3</sup> /cycle	2.A.025.D.1N	2.B.025.D.1N	2.C.025.D.1N
45 mm <sup>3</sup> /cycle	2.A.045.D.1N	2.B.045.D.1N	2.C.045.D.1N
75 mm <sup>3</sup> /cycle	2.A.075.D.1N	2.B.075.D.1N	2.C.075.D.1N
105 mm <sup>3</sup> /cycle	2.A.105.D.1N	2.B.105.D.1N	2.C.105.D.1N



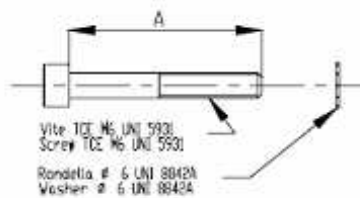
1 outlet per divider element

Discharge	Inlet valve section	Valve section	Outlet valve section
50 mm <sup>3</sup>	2.A.025.S.1N	2.B.025.S.1N	2.C.025.S.1N
90 mm <sup>3</sup>	2.A.045.S.1N	2.B.045.S.1N	2.C.045.S.1N
150 mm <sup>3</sup>	2.A.075.S.1N	2.B.075.S.1N	2.C.075.S.1N
210 mm <sup>3</sup>	2.A.105.S.1N	2.B.105.S.1N	2.C.105.S.1N



Tie rods

No. of elements	A (mm)	Code
3	45	2.TR.03
4	60	2.TR.04
5	75	2.TR.05
6	90	2.TR.06
7	105	2.TR.07
8	120	2.TR.08
9	135	2.TR.09
10	150	2.TR.10
11	165	2.TR.11
12	180	2.TR.12



Be tydikker uses No. 2 as tie rod!

Subject to changes



## MOST USED COUPLINGS, TUBES, CLIPS, ETC. FOR CENTRAL LUBCRICATION WITH PROGRESSIVE DIVIDER

Pos.	Amount	Order No.	Description	
1		LPA.WNF.04-02 *	PA-hose transparent 4 x 1 - 45 bar at +20°C	
2		LPA.WSW.04-02 *	PA-hose black 4 x 1 - 45 bar at +20°C	
3		LPA.HNF.06-04	PA-hose transparent 6 x 1 - 45 bar at +20°C	
4		LPA.HSW.06-04	PA-hose black 6 x 1 - 75 bar at +20°C	
5		LPA.HSW.06-03 **	PA-hose black 6 x 1,5 - 75 bar at +20°C	
6		LPA.E.04-2 *	Plug sleeve (Required for PA tubes)	
7		LPA.E.05-6/3	Plug sleeve (Required for PA tubes)	
8		LPA.E.05-6/4	Plug sleeve (Required for PA tubes)	
9		LPA.AF4.DN4 ***	High ressure hose 370 bar at 20°C outer Ø 8,1 mm inner Ø 4 mm	
10		LPA.BF6,3.DN6 ***	High pressure hose 455 bar at 20°C outer Ø 13 mm inner Ø 6,3 mm	
11		LK.SH.HAF-04	Connector for HP hose AF4	
12		LK.SH.HAF-06,3	Connector for HP hose BF6.3	
13		LK.FD.41255642	Straight stud for HP hose Ø 6 mm AF4	
14		LK.FD.41263241	Straight stud for HP hose Ø 6 mm BF6.3	
15		LK.FD.D6-90°38	Stud for HP hose 90° Ø 6 mm	
16		LME.ST-G.06-04	Steel tube - yellow galvanised Ø 6/4	
17		LME.ST-G.08-06	Steel tube - yellow galvanised Ø 8/6	
18		LME.CU.04-02 *	Copper tube Ø 4/2	
19		LME.CU.06-04	Copper tube Ø 6/4	
20		LB.LK.01X04 *	Pipe clip galvanised	
21		LB.LK.01X06	Pipe clip galvanised	
22		LB.LK.01X08	Pipe clip galvanised	
23		LB.LK.02X04 *	Pipe clip galvanised	
24		LB.LK.02X06	Pipe clip galvanised	
25		LB.LK.02X08	Pipe clip galvanised	
26		LB.LK.03X04 *	Pipe clip galvanised	
27		LB.LK.03X06	Pipe clip galvanised	
28		LB.LK.03X08	Pipe clip galvanised	
29		LB.LK.04X04 *	Pipe clip galvanised	
30		LB.LK.04X06	Pipe clip galvanised	
31		LB.LK.04X08	Pipe clip galvanised	
32		LB.LK.05X04 *	Pipe clip galvanised	
33		LB.LK.05X06	Pipe clip galvanised	
34		LB.LK.05X08	Pipe clip galvanised	
35		LB.LK.06X04 *	Pipe clip galvanised	
36		LB.LK.06X06	Pipe clip galvanised	
37		LB.LK.06X08	Pipe clip galvanised	
38		LB.LK.RS-06-12	Galvanised pipe clips with rubber D=6 mm	
39		LB.LK.RS-08-12	Galvanised pipe clips with rubber D=8 mm	
40		LB.LK.RS-15-12	Galvanised pipe clips with rubber D=15 mm	

Subject to change



41		LB.LK.TF4	Plastic cable ties max. Ø 31.4 mm	
42		LB.LK.TF5	Plastic cable ties max. Ø 44.4 mm	
43		LB.LK.TF7	Plastic cable ties max. Ø 88.9 mm	
44		VBM.ZTV.BM04X08	Self-tapping screw for pipe clips M 4 x 8 mm	
45		CK.GE.04BSF04 *	Straight male connector steel conic	
46		CK.GE.04M04X075 *	Straight male connector steel conic	
47		CK.GE.04M06X100 *	Straight male connector steel conic	
48		CK.GE.04M08X100 *	Straight male connector steel conic	
49		CK.GE.04M08X125 *	Straight male connector steel conic	
50		CK.GE.04M10X100 *	Straight male connector steel conic	
51		CK.GE.04R02 *	Straight male connector steel conic	
52		CK.GE.06LLM06X1	Straight male connector conic	
53		CK.GE.06LLM08X1	Straight male connector conic	
54		CK.GE.06LLM10X1	Straight male connector conic	
55		CK.GE.06LLR02	Straight male connector conic	
56		CK.GE.06LM10X1B *	Straight male connector cylindric	
57		CK.GE.06LR04 *	Straight male connector conic	
58		CK.GE.08LL10X1B *	Straight male connector cylindric	
59		CK.GE.08LLR02 *	Straight male connector conic	
60		CK.GE.08LLR04 *	Straight male connector conic	
61		CK.WE.04M06X100 *	Elbow lubricating nipple connector steel conic	
62		CK.WE.04M08X100 *	Elbow lubricating nipple connector steel conic	
63		CK.WE.04M08X125 *	Elbow lubricating nipple connector steel conic	
64		CK.WE.04M10X100 *	Elbow lubricating nipple connector steel conic	
65		CK.WE.04R02 *	Elbow lubricating nipple connector steel conic	
66		CK.WE.06LLM06X1	Elbow lubricating nipple connector steel conic	
67		CK.WE.06LLM08X1	Elbow connector conic	
68		CK.WE.06LLM10X1 *	Elbow connector conic	
69		CK.WE.06LLR02 *	Elbow connector conic	
70		CK.WE.06LR04 *	Elbow connector conic	
71		CK.WE.08LLM10X1 *	Elbow connector conic	
72		CK.WE.08LLR02 *	Elbow connector conic	
73		CK.WE.08LR04 *	Elbow connector conic BSPT	
74		CK.G.06L	Straight connector	
75		CK.G.08L	Straight connector	
76		CK.WSV.06L	Elbow chassis clutch	
77		CK.WSV.08L	Elbow chassis clutch	
78		CK.SV.06L	Straight chassis clutch	
79		CK.SV.08L	Straight chassis clutch	
80		CK.SR.04LL *	Cone drive steel Ø 4 mm L= 6 mm	
81		CK.SR.06LL	Cone drive steel Ø 6 mm L= 7 mm	
82		CK.SR.06L-S	Cone drive steel Ø 6 mm L= 9.5 mm	
83		CK.SR.08LL	Cone drive steel Ø 8 mm L= 7 mm	
84		CK.SR.08L-S	Cone drive steel Ø 8 mm L= 9.5 mm	
85		LK.KR.ME-04 *	Double cone drive brass for tube Ø 4 mm L= 5.5 mm	
86		LK.KR.ME-06	Double cone drive brass for tube Ø 6 mm L= 6.5 mm	
87		LK.KR.ME-08	Double cone drive brass for tube Ø 8 mm L= 6.5 mm	

\* = connectors and tubes of 4 mm are only used in case of lack of space and when little lubricant is necessary

\*\* = always used at pressures > 40 bar

\*\*\* = always used at pressures >70 bar

Most pieces are also available in stainless steel, some connectors are available in brass.

Subject to change

## TUBE CONNECTORS WITH PLUG CONNECTION

### Function

Tube connectors with plug connection are used to connect the tubes to the divider and grease nipples easily, fast and toolless.

### Technical details

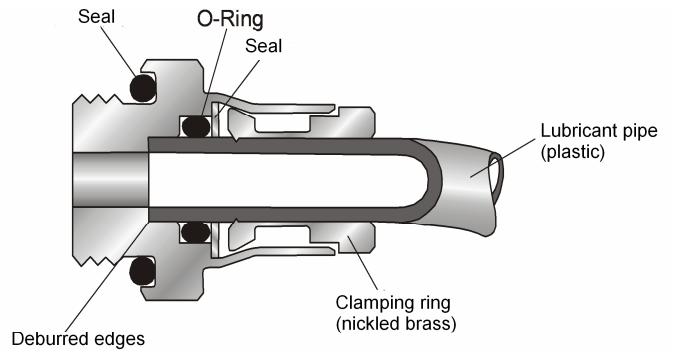
Working pressure: max. 40 bar\*  
 Temperature range: 0°C to +70°C\*  
 Lubricant: Oil\*  
 Liquid grease NLGI Kl. 000-00

### Material

Housing: nickled brass  
 superb phosphor FDA  
 O-Ring: Viton  
 Dichtring: Viton

### Tightening torque

G1/8", M6x1, M8x1, M10x1 8 Nm  
 G1/4" 12 Nm  
 G3/8" 30 Nm

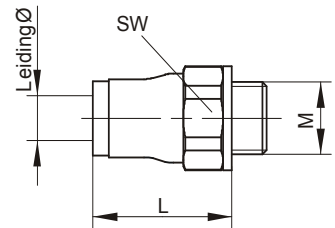
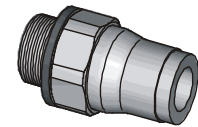


Disassembly: press tension ring until end and pull out tube

\* according to the used plastic tubes!

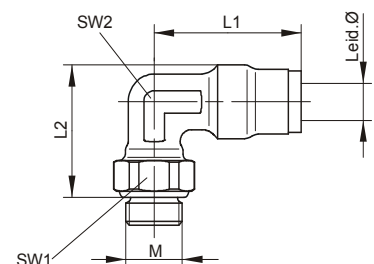
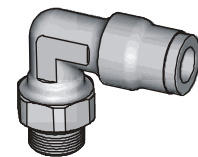
### STRAIGHT TUBE CONNECTORS WITH PLUG CONNECTION AND STRAIGHT OR CONIC THREAD

Order No.	Tube Ø	M	L	SW
CK.SK.GE-04M6X1	4	M6X1	16,0	10
CK.SK.GE-04M8X1	4	M8X1	14,5	11
CK.SK.GE-04M10X1k	4	M10X1k	18,8	22
CK.SK.GE-04R02	4	G1/8"	14,5	13
CK.SK.GE-04R04	4	G1/4"	14,5	16
CK.SK.GE-06M6X1k	6	M6X1k	28,0	12
CK.SK.GE-06M8X1k	6	M8X1k	28,0	12
CK.SK.GE-06M10X1k	6	M10X1k	22,5	22
CK.SK.GE-06R02	6	G1/8"	17,5	13
CK.SK.GE-06R04	6	G1/4"	17,0	16
CK.SK.GE-08R02	8	G1/8"	20,0	15
CK.SK.GE-08R04	8	G1/4"	18,0	16
CK.SK.GE-10R04	10	G1/4"	25,0	18
CK.SK.GE-12R04	12	G1/4"	26,5	20



### RIGHT-ANGLED TUBE CONNECTORS WITH PLUG CONNECTION, REVOLVING

Order No.	Tube Ø	M	L1	L2	SW1	SW2
CK.SK.WE-04M6X1	4	M6X1	18,0	18,0	10	
CK.SK.WE-04M8X1	4	M8X1	18,0	18,0	11	
CK.SK.WE-04M10X1k	4	M10X1k	20,0	14,0	12	9
CK.SK.WE-04R02	4	G1/8"	18,0	17,0	13	
CK.SK.WE-06M6X1k	6	M6X1k	22,0		14	
CK.SK.WE-06M8X1k	6	M8X1k	22,0		14	
CK.SK.WE-06M10X1k	6	M10X1k	24,0	14	12	10
CK.SK.WE-06R02	6	G1/8"	21,5	19,0	13	
CK.SK.WE-06R02k	6	G1/8"	24,0	12,5	12	10
CK.SK.WE-06R04	6	G1/4"	21,5	19,5	16	
CK.SK.WE-08R02k	8	G1/8"	23,5	20,5	13	
CK.SK.WE-08R04	8	G1/4"	23,5	21,5	16	
CK.SK.WE-10R04	10	G1/4"	29,0	27,0	16	
CK.SK.WE-12R04	12	G1/4"	31,0	29,5	16	
CK.SK.WE-12R06	12	G3/8"	31,0	28,5	20	



Subject to change