

CHARACTERISTICS

- PREVENT THE CORROSION
- OPERATES UP TO 200 BARS (2900 PSI)
- DIVIDES OIL OR GREASE
- TOP OR SIDE OUTPUTS AS STANDARD
- SINGLE OR DUAL OUTLET SETTABLE BY CENTRAL PLUG
- FULL RANGE OF PRESSURE AND SPOOL MONITORING ACCESSORIES INTERCHANGEABLE WITH SMO PRODUCT LINE
- THE TWO OUTPUTS ARE COMBINED BY REPLACING THE ADAPTER. JUST TAKE ONE ITEM OF STOCK
- SIMPLE AND FLEXIBLE ASSEMBLY WITH LOW MAINTENANCE COSTS
- BRIGHT LEFT/RIGHT/BOTH ELEMENTS ELIMINATE THE NEED FOR EXTERNAL CROSS PORTING

METERING DIVIDER ELEMENTS FOR THE VOLUMETRIC DISTRIBUTION OF OILS AND GREASE

Aluminium nano-Progressive (nP-Al) dividers are designed to resist rust formation due to water and oxygen.

Oxidation resistance makes the Aluminium **nano-Progressive (nP-Al)** the perfect solution for use in the food industry, such as canning sector, which is often subject to a massive presence of water.



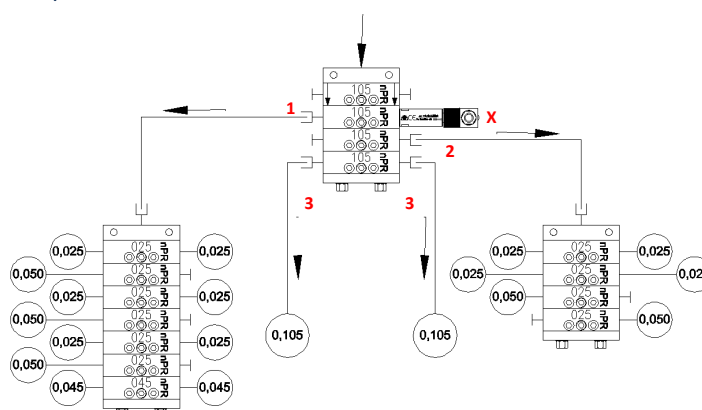
Dropsa's **nano-Progressive (nP)** thanks to their compact and solid design are the ideal solution for grease lubrication applications that require small and accurately dispensed quantity of lubricant in a confined space.

Thanks to a patented **RigidLock, nano-Progressive (nP)** novel interlocking mechanism between the elements it has the rigidity of a mono-block divider but the flexibility of a modular segmented unit.

The **nP-Al** is a distributor that allows the distribution of the feed flow rate in very precise quantities the precise quantities into the various available outputs. The lubrication cycle can be controlled by a single sensor including the Dropsa solid state Ultrasensor product.

OPERATING PRINCIPLE

The system can be easily extended and the modular concept provides low cost replacement of component.

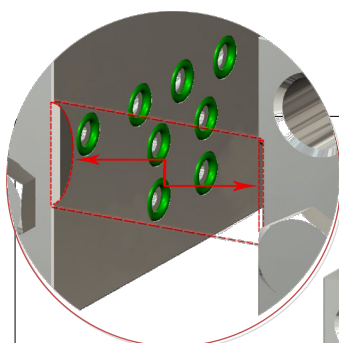


The **nP105** metering element (1) pilots a block of 6 metering 0,025 nP delivering elements and one 0,045 nP.

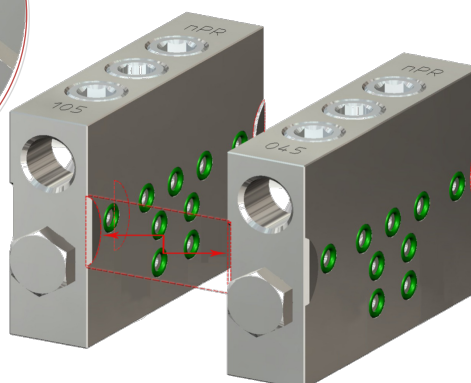
The **nP105** metering element (2) pilots a block of 4 0,025 nP delivering elements.

The **nP105** metering element (3) directly lubricates two point of the machine.

The cycle is controlled by the Ultrasensor cycle indicator (X).



RIGIDLOCK



THE RIGIDLOCK SYSTEMS
CREATES A RIGID
INTERLOCKING
MECHANISM BETWEEN
THE ELEMENTS
ALLOWING FOR THE
QUICK REPLACEMENT
AND CORRECT
REPOSITIONING OF THE
ELEMENT

APPLICATIONS

- MACHINE TOOLS
- TEXTILES
- ANY SMALL-MEDIUM OIL AND GREASE SYSTEMS
- CANNING INDUSTRY

ADVANTAGES

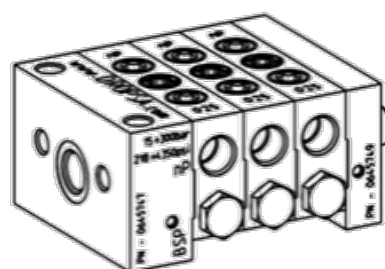
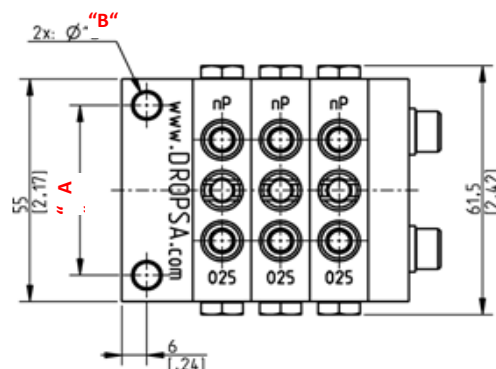
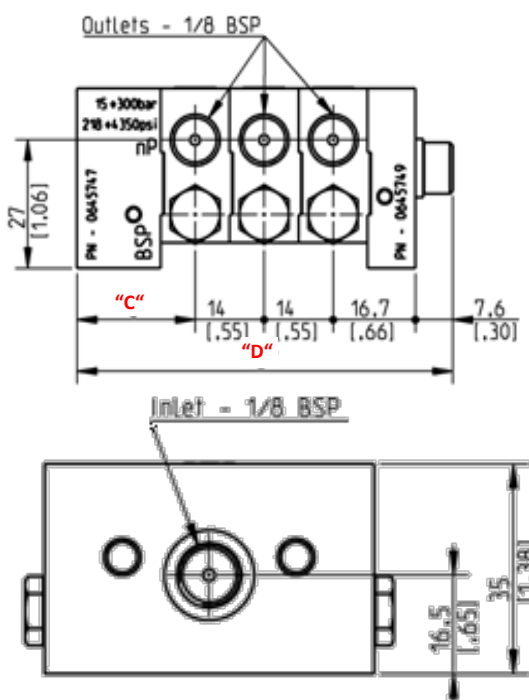
- By combining a reduced space-envelope and maintaining modularity in a single package the nano-Progressive dividers offer many of the features found in top-of-line dividers at a fraction of the cost.
- The RigidLock Systems creates a rigid interlocking mechanism between the elements allowing for the quick replacement and correct repositing of the element;
- A full range of accessories and bridge elements allows for flexible engineering choices.

TECHNICAL INFORMATION

GENERAL CHARACTERISTICS	
Singular outlet Flowrate	0.0015 cu.inch – 0.0027 cu.inch – 0.0045 cu.inch - 0.0064 cu.inch (0,025cm ³ - 0,045cm ³ - 0,075cm ³ - 0,105cm ³)
Number of Dividers elements	3 ÷ 12
Working pressure	15bar (218psi) ÷ 200bar (2900psi)
Working temperature	-20°C ÷ +80°C
Material	Aluminium
Number of inversion at minute	200 max (according to pressure and viscosity)
Inlet thread	1/8" BSP
Outlet thread	1/8" BSP
Lubricants	Min. Oil. 32 cSt –max. 2 NLGI grease

N.B.: The pressure drop is directly proportional to the number of cycles.
The oil and grease viscosity values always refer to the operating temperature.

DIMENSIONS



N° elements	INLET nP – standard version mm [inch]				INLET nP -S 20mm reduced hole centers mm [inch]			
	"A"	"B"	"C"	"D"	"A"	"B"	"C"	"D"
3	42 [1.65]	6.2 [0.24]	24 [0.94]	76.3 [3]	20 [0.79]	5.5 [0.22]	30.5 [1.2]	82.8 [3.26]
4				90.3 [3.55]				96.8 [3.82]
5				104.3 [4.11]				110.8 [4.36]
6				118.3 [4.66]				124.8 [4.91]
7				132.3 [5.21]				138.8 [5.46]
8				146.3 [5.76]				152.8 [6.02]
9				160.3 [6.31]				166.8 [6.57]
10				174.3 [6.86]				180.8 [7.12]
11				188.3 [7.41]				194.8 [7.67]
12				202.3 [7.96]				208.8 [8.22]

CONFIGURATION INFORMATION

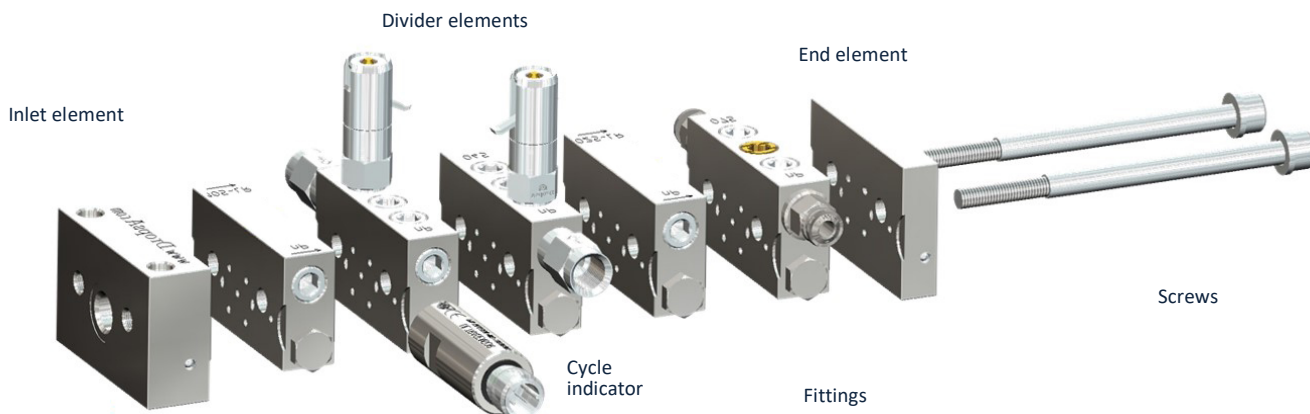
IN FEW STEPS YOU CAN COMPOSE DIFFERENT KIND OF MODULES AS YOU NEED:

1. INLET ELEMENT

2. DIVIDER ELEMENT (REPEAT FOR NUMBER OF ELEMENTS)

3. END ELEMENT

STANDARD ELEMENT	-S 20mm reduced	FLOWRATE Q.cm ³	STANDARD ELEMENT	ELEMENT WITH INDICATOR	BRIDGE ELEMENT			PART NO.
					LEFT	RIGHT	LEFT/RIGHT	
0645847	0645848	0.025	0645850	0645878	0645854	0645858	0645862	0645849+ 0675234 (ø6 washer)
		0.045	0645851	0645879	0645855	0645859	0645863	
		0.075	0645852	0645880	0645856	0645860	0645864	
		0.105	0645853	0645881	0645857	0645861	0645865	

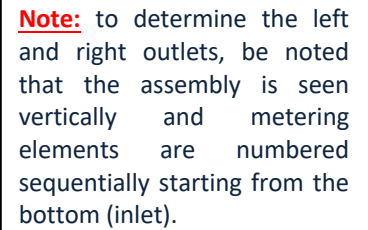


4. FITTINGS

ITEM	DESCRIPTION	PART N.	ITEM	DESCRIPTION	PART N.			
PRESSURE INDICATOR	30bar with memory pin	3290000	FITTINGS	1/8" valved fitting for OUTLET	0092335			
	50bar with memory pin	3290001		1/8" valved fitting for INLET	0092555			
	75bar with memory pin	3290022		Ø6 double-tapered terminal (150bar)	0092080			
	100bar with memory pin	3290002		Ø4 double-tapered terminal (150bar)	0092069			
	150bar with memory pin	3290003		Ø4 ring fitting (250bar)	0091942			
	200bar with memory pin	3290004		Push-in Ø4 (65bar)	3084577			
	250bar with memory pin	3290005		Push-in Ø6 (65bar)	3084578			
	300bar with memory pin	3290021		Swivel Push-in 90° Ø6 (150bar)	3084695			
	20bar with pin	3290019		Swivel Push-in 90° Ø4 (150bar)	3084696			
	30bar with pin	3290006	TUBING	Ø6x1 Drawn steel tube (400bar)	5119812			
	50bar with pin	3290007		Ø4x1 Drawn steel tube (500bar)	5119832			
	100bar with pin	3290008		ASTM Ø6x0,71 Copper steel tube	5118001			
	150bar with pin	3290009		ASTM Ø4x0,71 Copper steel tube	5118000			
	200bar with pin	3290010		Ø4x0,5 Annealed copper tube (133bar)	5501201			
	250bar with pin	3290011		Ø6x1 Annealed copper tube (200bar)	5501203			
		PA Ø4xØ2,5 Tube (60bar)		5717202				
		PA Ø6xØ4 Tube (50bar)		5717203				
CYCLE INDICATOR	ULTRASENSOR + (M12 Connector)	1655308 + 0039999		SCREWS order 2 per assembly	3 elements	0014403		
Each kit includes 2 screws, 2 washers, plugs and single outlet adaptors according to the number of elements.			4 elements		0014404			
			5 elements		0014405			
			6 elements		0014406			
			7 elements		0014407			
			8 elements		0014408			
			9 elements		0014409			
			10 elements		0014410			
			11 elements		0014411			
			12 elements		0014412			
			DESCRIPTION		PART N.			
			Assembly Kit 3 elements		3140826			
			Assembly Kit 4 elements		3140827			
			Assembly Kit 5 elements		3140828			
Assembly Kit 6 elements		3140829						
Assembly Kit 7 elements		3140830						
Assembly Kit 8 elements		3140831						
Assembly Kit 9 elements		3140832						
Assembly Kit 10 elements		3140833						
Assembly Kit 11 elements		3140834						
Assembly Kit 12 elements		3140835						

DESCRIPTION	PART N.
JUNCTION-DOSER - nP ALUMINIUM	0641260
BRIDGE JOINT WITH OUTPUT G1/8 - nP ALUMINIUM	0641261

ITEM	DESCRIPTION	PART N.
Washer (order 2 per assembly)	Ø6 washer	0675234
Plug and Adaptor	Single outlet adaptor	0646250
	Plug 1/8 BSP	3232064



nP 5 105 BLR – 105 SR USL M 75 UR OC8BK – 045 SL M 100 UL OC8BK – 025OR6D – 075 OP4S
1° 2° 3° 4° 5°

4/5



SINGLE AND DOUBLE OUTLET CONVERSION

It is possible to add the flow rates of a single divider element by substituting the yellow adapter, Part Number **0646251** with the white one, Part Number **0646250**. Once the adapter **0646251** is unscrewed, it is necessary to remove the sealing disc located under the same adapter, Part Number **0641791**. This disc has a central hole for easy extraction. Use a small flat head screwdriver being careful not to damage the thread of the hole.

Once the yellow adapter and the sealing disc are extracted and the new adapter for a single outlet is inserted (without a disc!), screw in the plug, Part Number **3232064**, onto the outlet of the element that you want to plug.

This way, the opposite outlet will receive double the amount of lubricant.

