



nPR+

NANO- PROGRESSIVE REPLACEABLE

CHARACTERISTICS

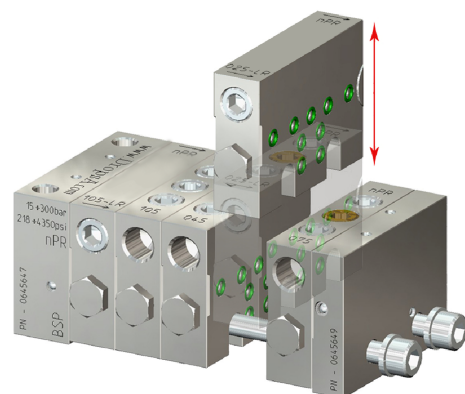
- OPERATES UP TO 300 BAR (4350 PSI)
- THE DROPSA nPR +- REPLACEABLE RAIL MOUNT SYSTEM PATENT ALLOWS FOR EASY MOUNTING AND REPLACING AN ITEM WITHOUT COMPLETE DISASSEMBLY BEING REQUIRED.
- OPERATION WITH OIL AND GREASE
- TOP OR SIDE OUTPUT AS STANDARD
- SINGLE OR DUAL OUTLET SETTABLE BY CENTRAL PLUG
- FULL RANGE OF PRESSURE AND SPOOL MONITORING ACCESSORIES ARE INTERCHANGEABLE WITH SMO PRODUCT LINE
- THE TWO OUTPUTS ARE COMBINED BY REPLACING THE ADAPTER. IT ENOUGH TO KEEP ONE ITEM IN STOCK
- SAFE AND CONTROLLED LUBRICATION
- ASSEMBLING IS SIMPLE AND FLEXIBLE WITH LOW MAINTENANCE COSTS.
- THE RIGHT/BOTH ELEMENTS BOTH ELIMINATE THE NEED FOR EXTERNAL BRIDGES
- TWO TYPES OF INPUT MODULES WITH DIFFERENT CENTRAL BORES FOR EASY INTERCHANGEABILITY
- SURFACE TREATMENT WITH A ZINC-NICKEL ALLOY

DIVIDER ELEMENTS FOR THE VOLUMETRIC DISTRIBUTION OF OILS AND GREASE

Dropsa's **nano-Progressive Replaceable + (nPR+)** dividers are the ideal solution for grease lubrication applications that require small and accurately dispensed quantities of lubricant with a compact and solid design. Thanks to the interlocking mechanism between the elements, **nano-Progressive Replaceable + (nPR+)** has the rigidity of a mono-block divider, but the flexibility of a modular segmented unit.

nPR+ is a distributor that allows, by means of the progressive movement of pistons coupled with micrometric gears inside the running hole, 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 (**nPR+** is arranged to use various types of sensors) mounted on one of the divider elements.

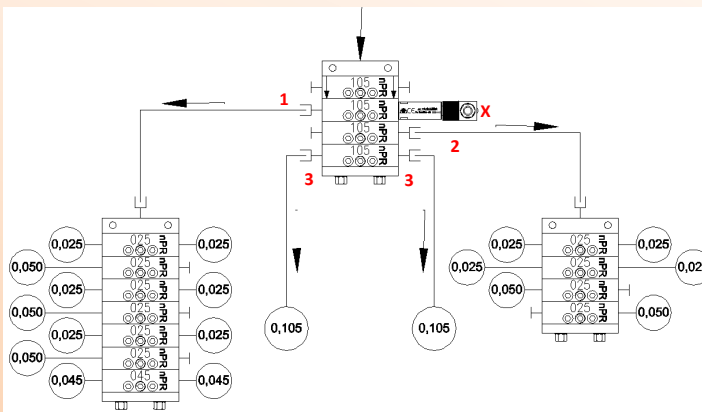


nPr+ uses an innovative "rail & lock" concept to allow the element to be replaced or moved without the need to completely dismantle the assembly. This is an industry first for segmented progressive dividers allowing quick easy modification or replacement of an assembly element without the cost of separating from the base.

These dividers may be used in a variety of system and operating configurations, making them flexible for use in multiple applications as a result. The compactness makes them particularly suitable for use in tight spaces.

OPERATING PRINCIPLE

The system can be easily expanded and the modular concept allows for it to be replaced at low cost.

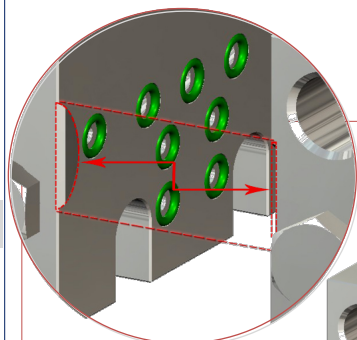


The master divider element **nPr105 (1)** controls a group of 6 divider elements with a flow rate of 0.025cm³/cycle and one with 0.045 cm³/cycle.

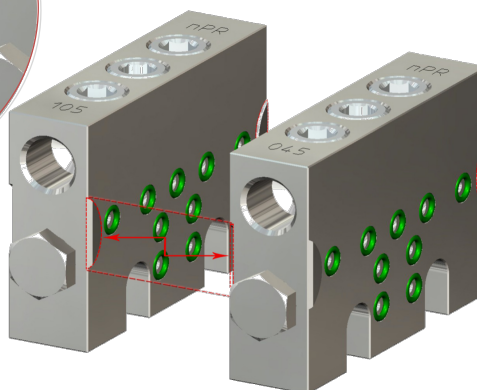
The master divider element **nPr105 (2)** controls a group of four divider elements with a flow rate of 0.025.

The master divider element **nPr105 (3)** directly lubricates two points of the machine.

The cycle is controlled by contact (X).



RIGIDLOCK system



THE PATENTED RIGIDLOCK SYSTEM CREATES AN INTERLOCKING MECHANISM BETWEEN THE ELEMENTS, ALLOWING FOR EASY REPLACEMENT AND CORRECT REPOSITIONING OF THE ELEMENT.

APPLICATIONS

- TOOL MACHINES
- TEXTILES
- ANY SMALL-MEDIUM OIL AND GREASE SYSTEMS



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ADVANTAGES

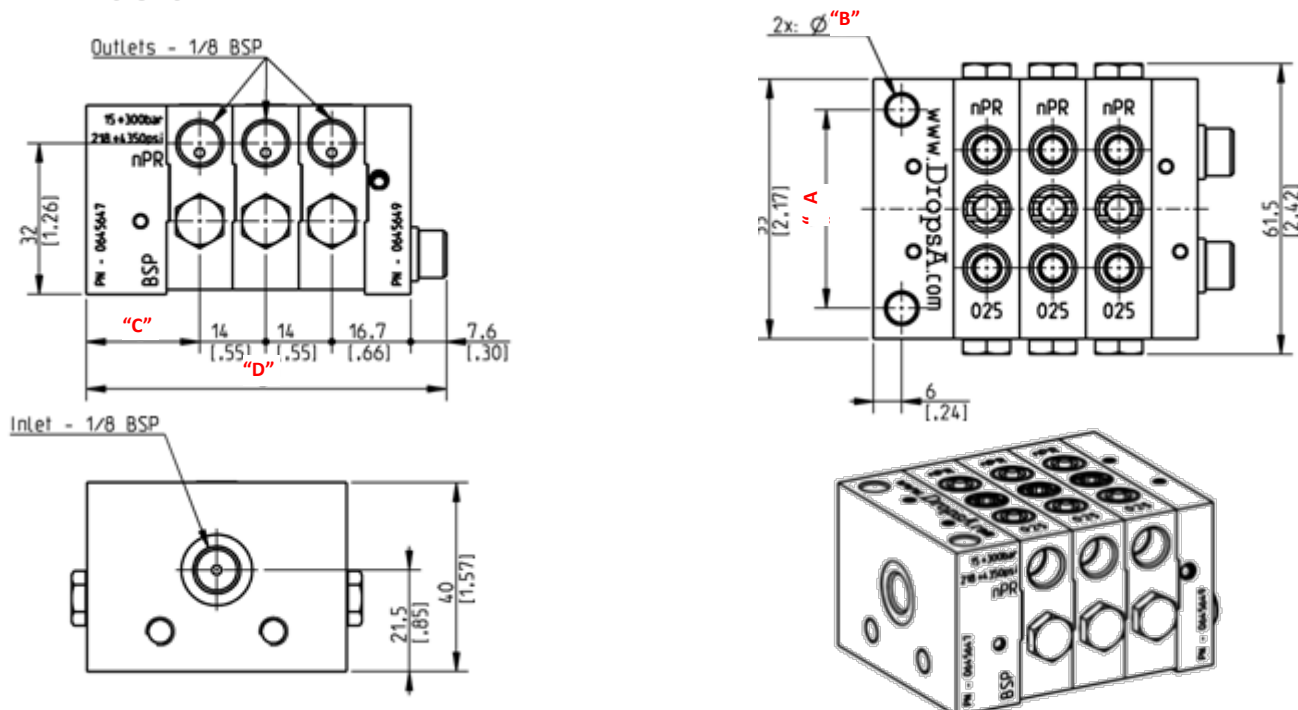
- By combining a reduced space-envelope and maintaining modularity in a single package, the nano-Progressive dividers offer many of the features found in top-of-line dividers at a fraction of the cost;
- The **RigidLock** Systems creates an interlocking mechanism between the elements, allowing for the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

TECHNICAL INFORMATION

GENERAL SPECIFICATIONS	
Singular outlet flow rate	0.025cm ³ - 0.045 cm ³ - 0.075 cm ³ - 0.105cm ³
Number of Divider elements	3 ÷ 12
Working pressure	15bar (218psi) ÷ 300bar (4350psi)
Operating temperature	-20°C ÷ +80°C
Material	Zinc-nickel plated steel
Number of inversions per minute	200 max.
Inlet threaded connection	G1/8" UNI-ISO 228/1
Outlet thread	G1/8" UNI-ISO 228/1
Lubricants	Min. Oil. 32 cSt –max. 2 NLGI grease

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

DIMENSIONS



Number of elements	nP-INIZIALE – standard version mm [inch]				nP-INIZIALE -S reduced diameter holes 20mm mm [inch]			
	"A"	"B"	"C"	"D"	"A"	"B"	"C"	"D"
3				76.3 [3]				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	42 [1.65]	6.2 [24]	24 [94]	146.3 [5.76]	20 [.79]	5.5 [.22]	30.5 [1.2]	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

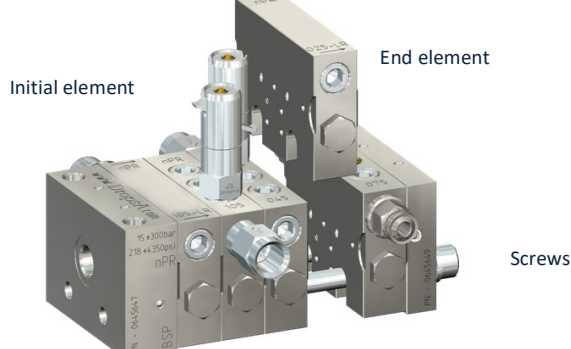
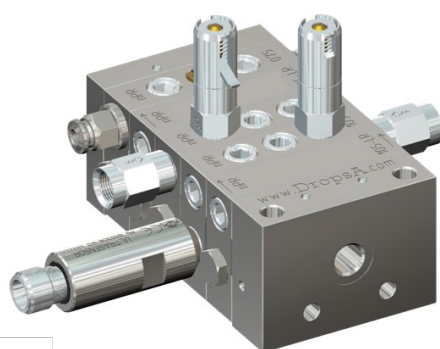
IN A FEW STEPS YOU CAN COMPOSE DIFFERENT KINDS OF MODULES AS NEEDED :

1. INITIAL ELEMENT

2. DIVIDER ELEMENT

3. END ELEMENT

STANDARD ELEMENT	-S reduced diameter holes 20mm	CAPACITY Q. cm ³	DIVIDER ELEMENT	Element with a visual cycle indicator	DIVIDER BRIDGE ELEMENT			PART NUMBERS
					LEFT	RIGHT	LEFT/ RIGHT	
0645647	0645648	0.025	0645650	0645678	0645654	0645658	0645662	0645649 + 0016050 (Ø6 washer)
		0.045	0645651	0645679	0645655	0645659	0645663	
		0.075	0645652	0645680	0645656	0645660	0645664	
		0.105	0645653	0645681	0645657	0645661	0645665	

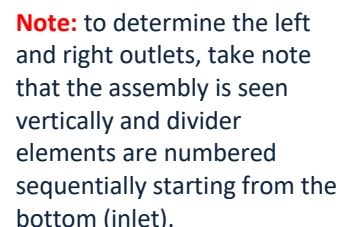


4. FITTINGS

ITEM	DESCRIPTION	PART	ITEM	DESCRIPTION	PART
PRESSURE INDICATOR	30bar with memory pin	3290000	FITTINGS	1/8" valved fitting for OUTLETS	0092335
	50bar with memory pin	3290001		1/8" valved fitting for INLET	0092555
	75bar with memory pin	3290022		Double cone terminal Ø6 (150 bar)	0092080
	100bar with memory pin	3290002		Double cone terminal Ø4 (150 bar)	0092069
	150bar with memory pin	3290003		Ø4 ring fitting (250 bar)	0091942
	200bar with memory pin	3290004		Push-in Ø4 (65 bar)	3084577
	250bar with memory pin	3290005		Push-in Ø6 (65 bar)	3084578
	300bar with memory pin	3290021		90° Swivel Push-in Ø6 (150 bar)	3084695
	20bar with pin	3290019		Swivel Push-in 90° Ø4 (150 bar)	3084696
	30bar with pin	3290006	Pipes	Ø6x1 Drawn steel tube (400 bar)	5119812
	50bar with pin	3290007		Ø4x1 Drawn steel tube (500 bar)	5119832
	100bar with pin	3290008		ASTM Ø6x0,71 Copper steel tube (310 bar)	5118001
	150bar with pin	3290009		ASTM Ø4x0,71 Copper steel tube (500 bar)	5118000
	200bar with pin	3290010		Ø4x0,5 Annealed copper tube (133 bar)	5501201
	250bar with pin	3290011		Ø6x1 Annealed copper tube (200 bar)	5501203
	30 bar with membrane	3290012		PA Ø4xØ2,5 Tube (60 bar)	5717202
	50 bar with membrane	3290013		PA Ø6xØ4 Tube (50 bar)	5717203
	100 bar with membrane	3290014		3 elements	0014396
	150 bar with membrane	3290015	4 elements	0014181	
	200 bar with membrane	3290016	5 elements	0014397	
	250 bar with membrane	3290017	6 elements	0014182	
CYCLE INDICATOR	ULTRASENSOR + (M12 Connector)	1655308 + 0039999	SCREWS	7 elements	0014191
				8 elements	0014398

DESCRIPTION	PART NUMBER	Each kit contains 2 bolts, 2 washers, adaptors and many caps depending on the number of modules
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	

ITEM	DESCRIPTION	PART
Washer (2 pieces for each assembled)	Ø6 washer	0016047
Plug and adapter	Single-output adapter	0641708
	Grub screw 1/8 BSP	3232098



nPr5 105 BLR – 105 SR USL M 75 R OC8BK – 045 SL M 100 L OC8BK – 025 BLR – 075 OP4
1° 2° 3° 4° 5°

SINGLE AND DOUBLE OUTLET CONVERSION

Distributor Info: