

## CHARACTERISTICS

- THE TWO OUTPUTS ARE COMBINED BY REPLACING THE ADAPTER
- AVAILABLE WITH SINGLE AND DOUBLE OUTLETS
- AIR EXHAUST VALVES INCORPORATED IN BOTH SIDES OF THE BASE
- AVAILABLE WITH THREAD: BSP
- OPERATING PRESSURE: UP TO 500 BAR
- OIL AND GREASE FUNCTION
- SAFE AND CONTROLLED LUBRICATION
- EASY AND FLEXIBLE ASSEMBLY WITH LOW MAINTENANCE COSTS
- POSSIBILITY OF SUBSTITUTING THE METERING ELEMENTS WITHOUT BLOCKING THE PIPEWORK

## APPLICATIONS

- ANY OIL AND GREASE LUBRICATION SYSTEM

## SMX PROGRESSIVE MODULAR DIVIDERS MADE OF AISI 316 STAINLESS STEEL

The SMX INOX AISI 316 modular dividers are capable of guaranteeing precise lubrication while maximising the efficiency of lubrication systems.

The divider consists of two main parts:

- **THE BASE** (consisting of a minimum of three elements)
- **METERING VALVES**

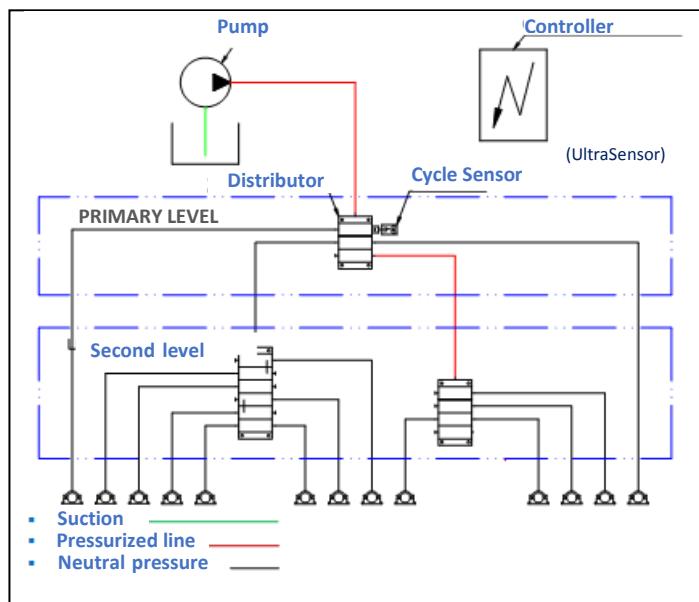


To maximize the performance of the system, it is crucial to use **electrical monitoring elements** that detect malfunctioning or system blockage.

Thanks to its **modularity**, the system can be easily expanded and replacement of metering elements can occur without removing the pipework, thereby guaranteeing low maintenance costs. The modularity of the dividers furthermore allows you to bundle lubrication points according to system requirements.

The SMX INOX AISI 316 dividers have been designed to be used in environments where a high risk of metal parts oxidising exists, typical in the food or maritime sectors.

## OPERATING PRINCIPLE



The system is easily expandable and the modular concept permits its replacement at low cost.

The diagram shows a progressive system, where the lubricant is pumped into a single input of a "progressive divider" (master divider), and is divided by volume into a number of points through the progressive movement of the pistons arranged in sequence.

The cycle is controlled by the UltraSensor monitoring element.

## TECHNICAL CHARACTERISTICS

Inlet thread	1/4 BSP
Outlet thread	1/8 BSP
Max. pressure	500 bar
Permitted lubricants	Grease and oil

## THE BASICS

THE BASE CONSISTS OF A MINIMUM OF **THREE ELEMENTS**.  
INITIAL, INTERMEDIATE AND FINAL BASE

For assembling, it is essential to know the number of outlets required to lubricate the system in order to identify the number of useful items.

An unlimited number of elements can be added to the bases.

The assembly and the replacement of the metering elements is very simple:

- Position the valve on its base.
- Insert fastening screws.
- Tighten them.

The elements can be assembled simply, without having to remove the pipework.

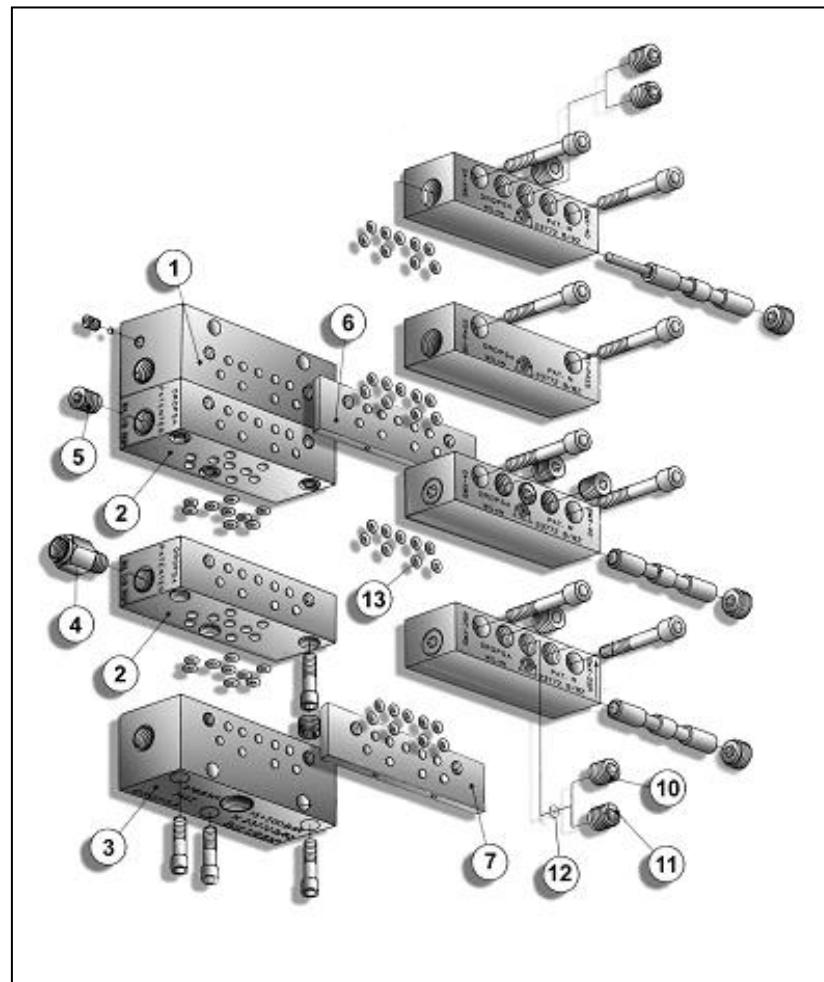
During assembly, pay attention to the O-rings situated on the side of the base.

Thanks to the bridge plates, it is possible to transfer the flow rate of one metering valve to the next one.

They must be ordered at the base on the side of the outlet that you want to add, for example, a right bridge, left bridge or left/right bridge for both.

The side of the bridge element is indicated directly on the piece by an arrow that indicates the outlet connected to the following one.

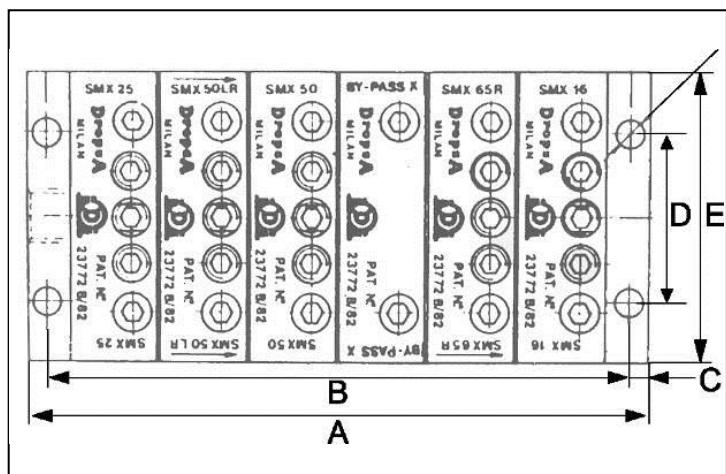
For assembly, position the bridge plate on the base; connect the metering valve and used two fastening screws supplied with the bridge element to fasten everything.



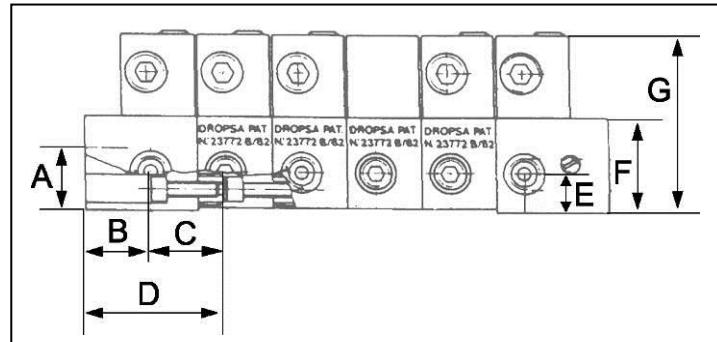
POSITION	DESCRIPTION	PART NUMBERS
1	End base	0646515
2	Intermediate base	0646513
3	Initial base	0646512
4	Check valve	0519335
5	Plug	0646254
6	Sx-Dx bridge element	0646223
7	Sx bridge element	0646221
8	Dx bridge element	0646220
9	Bridge element, single outlet	0646222
10	White adapter for single outlet	0646250
11	Yellow adapter for two separate outlets	0646251
12	Sealing disc	0641791
13	Viton® O-ring gasket	0018887

**METERING VALVES - FLOW RATES AND SIZES**

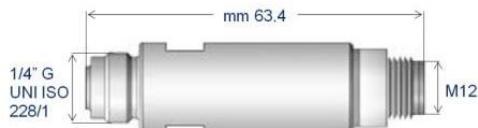
FLOW RATE FOR OUTLET			
FLOW RATE FOR OUTLET		1 OR 2 OUTLETS	
CC.	cu. in	PART NUMBER	SYMBOL
0.04	.0024	<b>646524</b>	SMX 04
0.08	.005	<b>646516</b>	SMX 08
0.16	.010	<b>646517</b>	SMX 16
0.25	.015	<b>646518</b>	SMX 25
0.35	.021	<b>646519</b>	SMX 35
0.40	.025	<b>646520</b>	SMX 40
0.50	.030	<b>646521</b>	SMX 50
0.60	.036	<b>646522</b>	SMX 60
0.65	.040	<b>646523</b>	SMX 65


**BASIC DIMENSIONS OF ASSEMBLIES**

No.	A		B	
	mm	in	mm	in
3	93.02	3.6	83.02	3.2
4	116.44	4.5	106.44	4.1
5	139.86	5.4	129.86	5.1
6	163.28	6.4	153.28	6.1
7	186.70	7.2	176.70	6.9
8	210.12	8.2	200.12	7.8
9	233.53	9.1	223.53	8.7
10	256.95	10.1	246.95	9.6
11	280.37	10.9	270.37	10.5
12	303.79	11.8	293.79	11.4
13	327.21	12.8	317.21	12.4
14	350.63	13.7	340.63	13.3
15	374.05	14.6	364.05	14.2
16	397.47	15.5	387.47	15.1
17	420.89	16.4	410.89	16.1
18	444.30	17.3	434.30	16.9
19	467.72	18.2	457.72	17.8
20	491.14	19.1	481.14	18.8


**DIMENSIONS OF INDIVIDUAL ELEMENTS**

A		B		C		D	
mm	in	mm	in	mm	in	mm	in
20	0.78	20.2	0.78	23.42	0.91	35	1.36
E		F		G			
mm	in	mm	in	mm	in		
12.5	0.72	30	1.17	56	2.2		

**MONITORING DEVICE**


To complete the system, it is recommended to use of a controller device capable of verifying the proper operation of the divider package.

The suggested devices are electric (UltraSensor).

**TECHNICAL CHARACTERISTICS**

Material	AISI 316
Max. cycles per minute	1000
Power Supply	8 ÷ 28 V DC
Short circuit protection	✓
Viewer LED	✓
Operating temperature	- 10 °C ÷ + 60
Protection degree	IP 67
Outlet sign	NPN 2A N.O. - PNP 0.7A N.O.

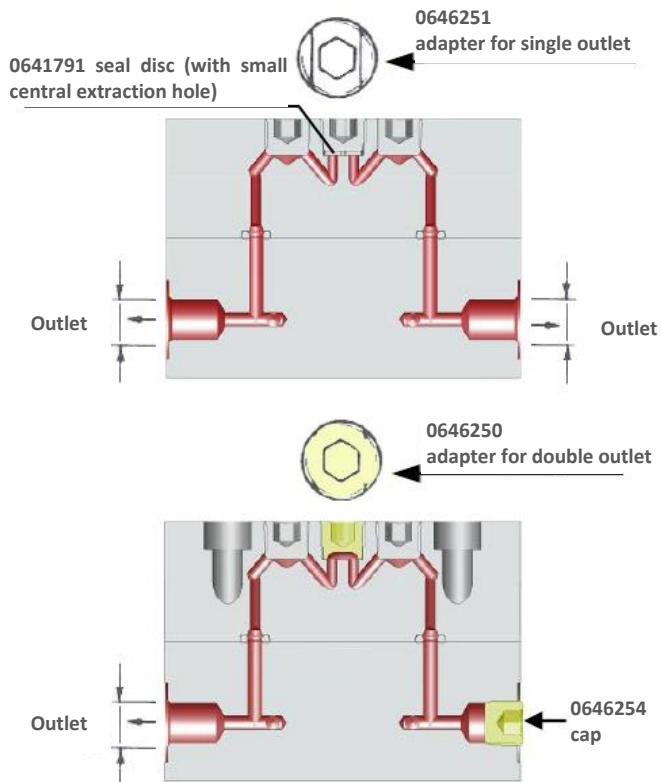
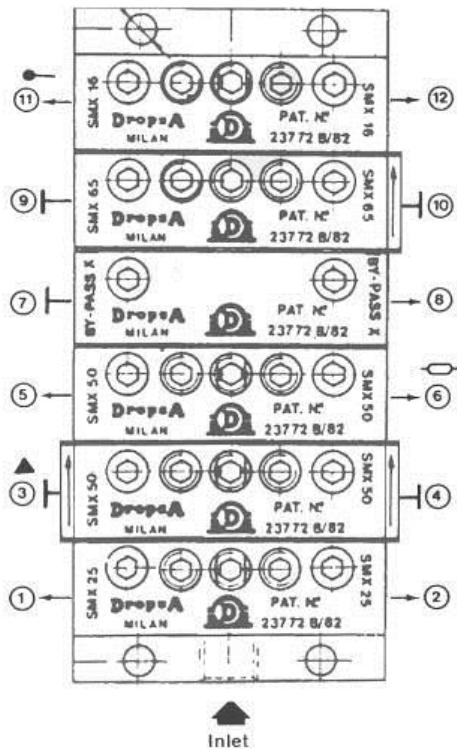
**ULTRASENSOR (ELECTRIC)**

DESCRIPTION	PART NUMBER
Ultrasensor, stainless steel, AISI 316	<b>1655340</b>

**ORDER INFORMATION**
**DEVICE TO MERGE OR TO SEPARATE OUTLETS**

**WARNING:** to determine the outlets, take note that the assembly is seen vertically and the outlets are numbered sequentially starting from the bottom (inlet) from left to right.

It is possible to add the two flow rates of a single element by substituting the white adapter, Part Number **0646251**, with the yellow adapter, Part Number **0646250**, as illustrated in the drawing below. When the two outlets are connected, remember to close off the one that is not being used with a plug.



Distributor info: