





# Plate progressive distributor

# General aspects

Distributors from series VP20/D have been designed to be built on stacked plates and they are suitable for use in central lubrication systems with grease or oil.

They operate according to the progressive system dividing the lubricant delivered from the inlet to the outlets in relationship to the flow rate of each plate, which is directly proportional to the diameter of the internal piston: the greater the diameter the bigger the

This ration can be increased by combining outlets (plugging, bridging, etc.)

At its simplest level the distributor consists of:

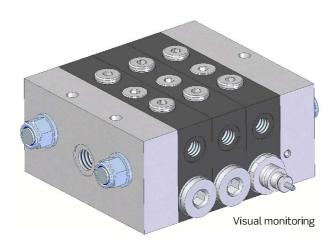
- -1 Initial plate with lubricant inlet hole.
- -3 Intermediate dosing plates.
- -1 Final plate.

The initial and final plates are common to all combinations. Intermediate plates vary according to flow and outlet combination.

All plates are attached to each other through two screw tie rods and the combinations are sealed with high resistance o-ring joints.

Options for monitoring:

- -visual check
- -electrical check with microswitch
- -electrical check with inductive sensor





Electrical monitoring with inductive sensor



Electrical monitoring with microswitch

# S

#### Technical data

Output flowcm3/stroke											
	0,6	1	1,5	2	2,5	3	3,5	4	4,5	6	
Materialsteel with treated surface Lubricants:											
-Oilfrom 30 cSt -Greaseup to NLGI 2											
Working pressure25÷200 bar											
Working temperature15°C÷ + 100°C											
Maximum N° plates10											
Maximun inlet flow4 litres/minut					te						

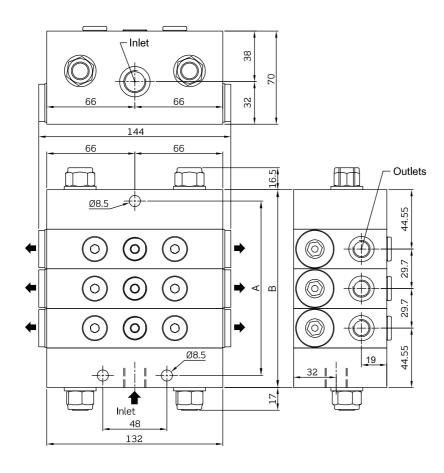
#### Working cycle

The cycle starts with the pressure delivery to P Each outlet gives the volume corresponding to the piston of its own dosing plate.

A cycle is complete when all the pistons have made their way to both sides and returning to the initial position, being ready for a next cycle.



VP20/D



#### Dimensions

А	В	
131	148.5	
160.7	178,2	
190.4	207,9	
220,1	237,6	
249,8	267,3	
279,5	297	
309,2	326,7	
338,9	356,4	
	131 160.7 190.4 220,1 249,8 279,5 309,2	

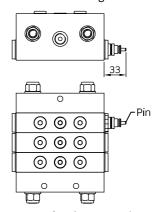
#### Connections

Inlet	Outlets
G3/8	G1/4

# **Monitoring Systems**

The monitoring system can be mounted on all dosing plates that you require

### Visual monitoring

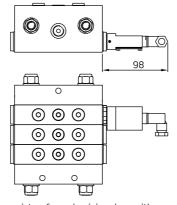


The movement of a pin connected to the internal piston, externalises the movements and enables to visually control the correct operation of the whole installation.

Important: the visual control is not an after-sales supply element, it must be incorporated in-house at source.

Working temperature..... -15°C ÷ +120°C

#### Electrical monitoring with microswitch

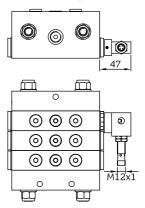


It consists of an aluminium box with a cover, with a microswitch inside which is driven by the movement of a pin connected to the internal piston.

Micro250V	5A (EN61058 / UL1054)
Temperature	15°C ÷ +120°C
Protection degr	eeIP65
Connection	DIN43650 3 poles PG7

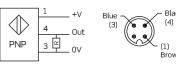


#### Electrical monitoring with inductive sensor



It consists of an anodized aluminium body that incorporates an inductive sensor and detects the motion of a pin connected to the internal piston opening and closing the contact.

Voltage / Function	on10 ÷ 30V / NO
Max. load admitte	ed 200 mA
Protection	IP65
Temperature	10°C ÷ +70°C
Connection	connector M12 4 poles



The inductive sensor is supplied without a connector: it needs to be ordered separately



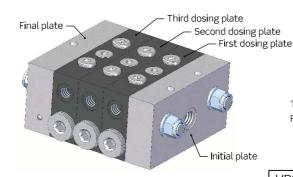
Second

plate

#### VP20/D Plate Progressive Distributor

Third

plate



The distributor must contain at least 3 dosing plates First dosing plate is the one next to the pressure inlet

First

plate

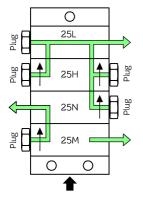
#### Outlets combination by internal bridges

#### Elements M-N-H-P-Q

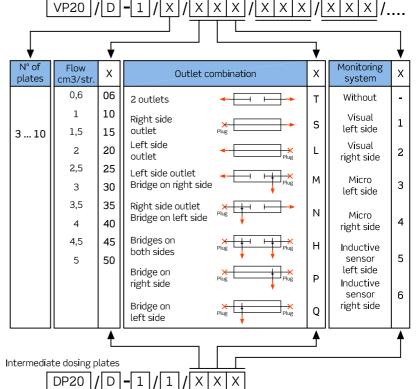
Depending on the required outlet combination this distributor can be supplied at source with in-house internal bridges (internal connection holes).

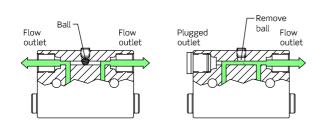
#### This combination system is not modifiable.

The last dosing plate cannot be bridged.



Ordering example for the distributor of the upper figure: VP20/D-1/4-25M/25N/25H/25L



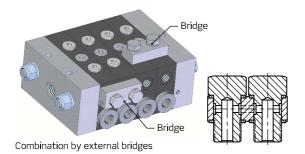


## Combination of outlets in the same dosing plate

To cancel an outlet by doubling the flow through the other outlet, proceed as follows:

- . -Plug the unwanted outlet
- -Remove the plug -Remove the ball
- -Mount the plug

Important: Do not plug any outlet without having removed the ball, otherwise the distributor will be blocked and will stop working.



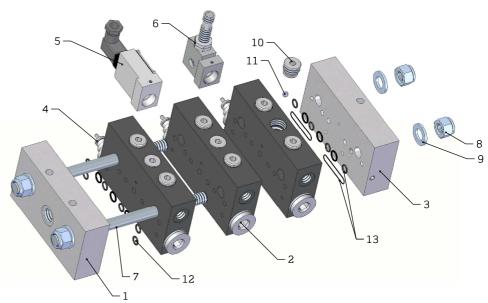
#### Combination of dosing plates by external bridges

Also you can request distributors without combined outputs and after you can use external bridges for communication and combination of outputs

See codes on page 4



# VP20/D Spare parts



# Components

Pos.	Descripción	Referencia
1	Initial plate	
2	Intermediate dosing plates	
3	Final plate	
4	Spare bracket for visual control	
5	Spare bracket with microswitch and connector	
5.1	Spare microswitch	
6.1	Bracket box without inductive sensor	
6.2	Bracket box with inductive sensor	
6.3	Inductive sensor	
7	Tie rod for distributor of 3 intermediate dosing plates	
	Tie rod for distributor of 4 intermediate dosing plates	
	Tie rod for distributor of 5 intermediate dosing plates	
	Tie rod for distributor of 6 intermediate dosing plates	
	Tie rod for distributor of 7 intermediate dosing plates	
	Tie rod for distributor of 8 intermediate dosing plates	
	Tie rod for distributor of 9 intermediate dosing plates	
	Tie rod for distributor of 10 intermediate dosing plates	
8	Self-locking nut	
9	Whaser	
10	Plug (outlets combination)	
11	Ball 8outlets combination)	
12	Seals kit for intial plate (9 seals each plate)	
13	Seals kit for dosing plate (9 seals each plate)	

# Bridges

Dual bridge	Triple bridge	Dual bridge	Triple bridge
without outlet	without outlet	with outlet G1/4	with outlet G1/4
ref. 956400254	ref. 956400354	ref. 956400275	ref. 956400275