

### **VP20/A**



# Plate assembly progressive distributor

M10x1 - 308.000.000

### General aspects

Distributors from series VP20/A 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 flow.

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.
- -2 Intermediate dosing plates.
- -1 Final dosing plate.

The initial plate is common to all combinations. The final and intermediate plates vary according to flow.

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

Different options for monitoring can be incorporated:

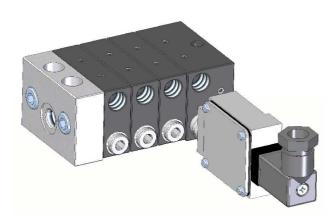
- -visual check
- -electrical check with microswitch
- -electrical check with inductive sensor

### Technical data

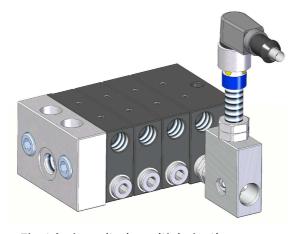
| Output flow24 - 45 - 75 - | 110 mm3/stroke |
|---------------------------|----------------|
| Material steel wit        |                |
|                           | AISI 316       |
| Lubricants:               |                |
| -Oil                      | from 30 cSt    |
| -Grease                   |                |
| Working pressure          | 15÷300 bar     |
| Working temperature       | 15°C÷ + 120°C  |
| Maximum input flow:       |                |
| -Oil                      | 500 cm3/minute |
| -Grease                   | 10 cm3/minute  |
| Maximum number of outlets | 24             |



Visual monitoring



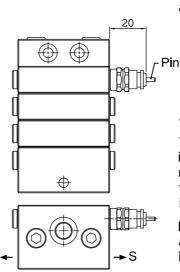
Electrical monitoring with microswitch



Electrical monitoring with inductive sensor



# 



### **Monitoring Systems**

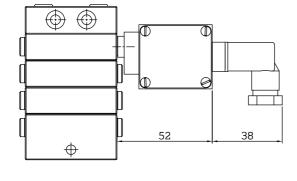
The monitoring system can be mounted on all dosing plates that you require

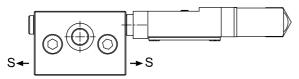
### Visual monitoring

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  $\div$  +120°C



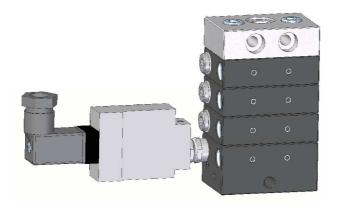


### **Electrical monitoring with micro (IP65)**

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.



Micro........ 250V 5A (EN61058 / UL1054) Temperature.......-15°C  $\div$  +120°C Protection degree......... IP65 Connection......... DIN43650 3 polos PG7 Max. number of cycles.......100/minute

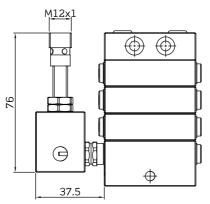


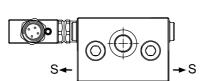


### **Electrical monitoring with inductive sensor**

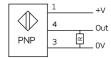
It consists of an anodized aluminium body that incorporates an inductive sensor and detects the motion of a pin connected to the internal piston opening and closing the contact.







| Function              | NO             |
|-----------------------|----------------|
| Voltage               | 10 ÷ 30V       |
| Max. load admitted    | 200 mA         |
| Protection            | IP65           |
| Temperature           | -10°C ÷ +70°C  |
| Connection M12 4 pc   | oles connector |
| Max. number of cycles | 500/minute     |

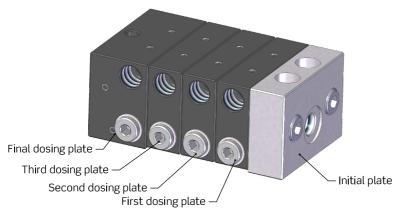


The inductive sensor is supplied without a connector: it needs to be ordered separately

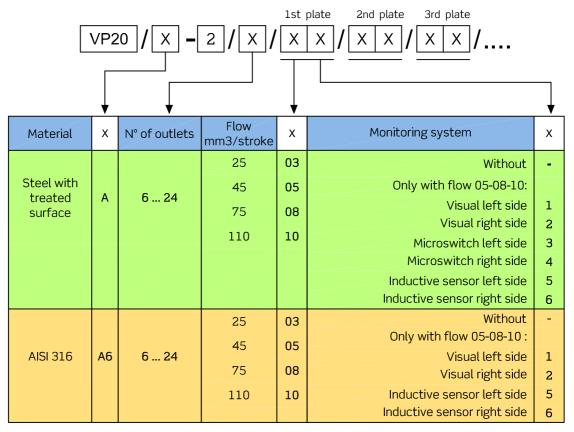




VP20/A Progressive distributor on plates fully assembled



The distributor must contain at least 3 dosing plates



Distributors that are requested with in-house factory assembled bridges and plugged outlets they need to be ordered adding the outlets combination at the end of the reference:

0 = Plugged outlet

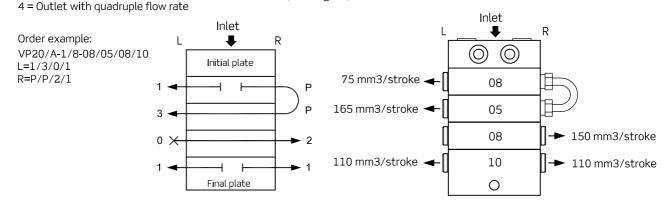
P = Outlet with bridge

1 = Simple outlet

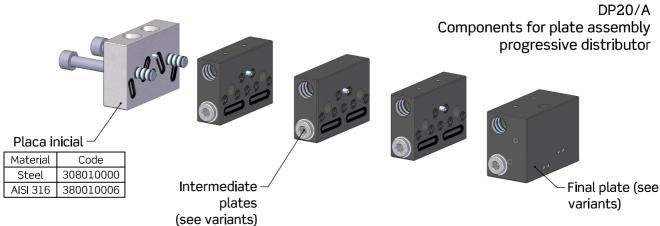
2 = Outlet with double flow rate

3 = Outlet with triple flow rate

We identify right side outlets as "R" and left side outlets as "L" (see diagram).

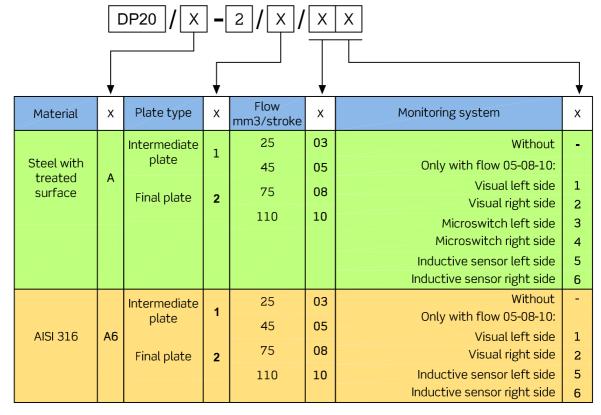




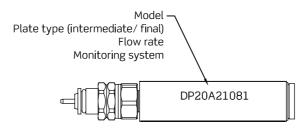


Plugge outlet

### Intermediate and final plates:

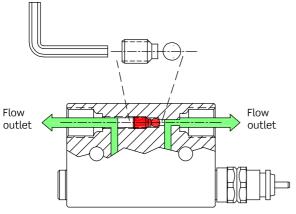


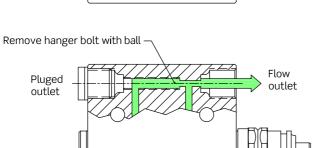
### Component identification:





### VP20/A



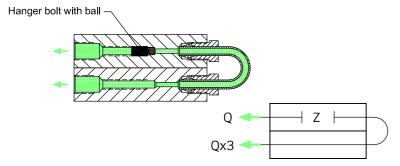


### Outlet combination

Before plugging any outlet the hanger bolt and its ball accommodated inside the conduit that matches the outlet have to be released and removed.

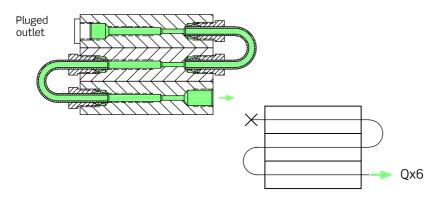
### Important:

Do not plug any outlet without having removed the hanger bolt with its ball, otherwise the distributor will be <u>blocked</u> and will stop working.



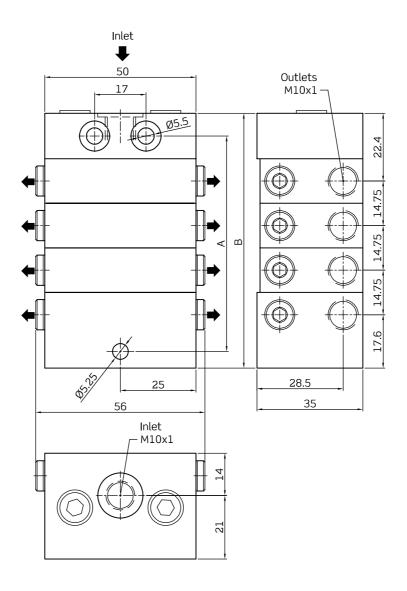
### **Bridges**

Flows can be combined and added up using external bridges threaded on the outlets of the plates.





### VP20/A Dimensions



### Dimensions

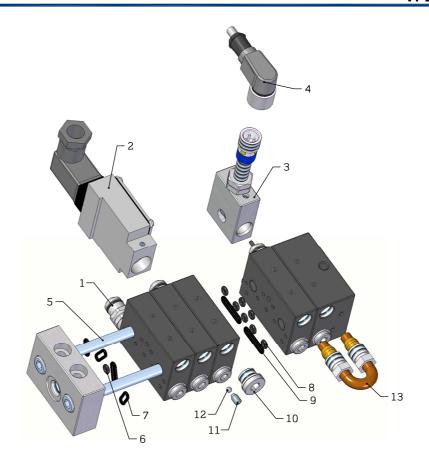
| N° of outlets | А      | В      |  |
|---------------|--------|--------|--|
| 6             | 56,50  | 69,50  |  |
| 8             | 71,25  | 84,25  |  |
| 10            | 86,00  | 99,00  |  |
| 12            | 100,75 | 113,75 |  |
| 14            | 115,00 | 128,50 |  |
| 16            | 129,75 | 143,25 |  |
| 18            | 144,50 | 158,00 |  |
| 20            | 159,25 | 172,75 |  |
| 22            | 174,00 | 185,50 |  |
| 24            | 188,75 | 202,25 |  |

### Threads

| Model    | Inlet             | Outlets           |  |
|----------|-------------------|-------------------|--|
| VP20/A-2 | M10x1<br>DIN 2367 | M10x1<br>DIN 2367 |  |



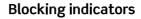
VP20/A Spares



| Pos. | Descripción                                     | For VP20/A  | For VP20/A6 |
|------|---|-------------|-------------|
| 1    | Bracket for visual control                      | 341 020 000 | 341 020 006 |
| 2    | Bracket with microswitch and connector          | 341 120 000 |             |
| 2.1  | Spare microswitch                               | 943 401 001 |             |
| 3.1  | Bracket without inductive sensor                | 341 210 000 | 341 210 006 |
| 3.2  | Bracket with inductive sensor                   | 341 225 000 | 341 225 006 |
| 3.3  | Inductive sensor                                | 913 901 040 | 913 901 040 |
| 4    | M12x1 elbow connector with cable                | 913 806 607 | 913 806 607 |
| 5    | Screw tie rod for distributor with 6 outlets    | 800 912 262 | 800 912 662 |
|      | Screw tie rod for distributor with 8 outlets    | 800 912 265 | 800 912 665 |
|      | Screw tie rod for distributor with 10 outlets   | 800 912 267 | 800 912 667 |
|      | Screw tie rod for distributor with 12 outlets   | 800 912 269 | 800 912 669 |
|      | Screw tie rod for distributor with 14 outlets   | 800 912 271 | 800 912 671 |
|      | Screw tie rod for distributor with 16 outlets   | 800 912 272 | 800 912 672 |
|      | Screw tie rod for distributor with 18 outlets   | 800 912 274 | 800 912 674 |
|      | Screw tie rod for distributor with 20 outlets   | 800 912 275 | 800 912 675 |
|      | Screw tie rod for distributor with 22 outlets   | 800 912 276 | 800 912 676 |
|      | Screw tie rod for distributor with 24 outlets   | 800 912 277 | 800 912 677 |
| 6    | O-ring for initial plate (1 unit x plate)       | 915 200 004 | 915 200 004 |
| 7    | O-ring for initial plate (4 units x plate)      | 915 200 076 | 915 200 076 |
| 8    | O-ring for intermediate plate (7 units x plate) | 915 200 004 | 915 200 004 |
| 9    | O-ring for intermediate plate (2 units x plate) | 915 200 141 | 915 200 141 |
| 10   | Outlet sealing plug unit                        | 955 702 222 | 955 706 222 |
| 11   | Hanger bolt                                     | 800 914 023 | 800 914 023 |
| 12   | Ball  | 805 401 005 | 805 401 005 |
| 13   | Bridge  | 956 400 020 | 956 406 020 |



## VP20/A Accesories

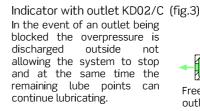


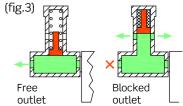
Indicator without memory KD02/A (fig.2)

In the event of an outlet being blocked the resulting overpressure moves a pin outwards indicating visually the blockage. The pin returns to its original position after the distributor is unblocked.

### Indicator with memory KD02/B (fig.1)

In this indicator a fork holds the pin outside so that the pin keeps indicating the outlet that has been blocked even if the distributor has been unblocked.





In those installations where in the event of a blockage the lubrication system needs to stop, hermetic indicators should be used (fig.1 y 2). If the system needs to keep running despite the blockage indicators with outlets need to be used. They can be assembled on both master and secondary distributors.

See our catalogue of indicators with threads an characteristiques



