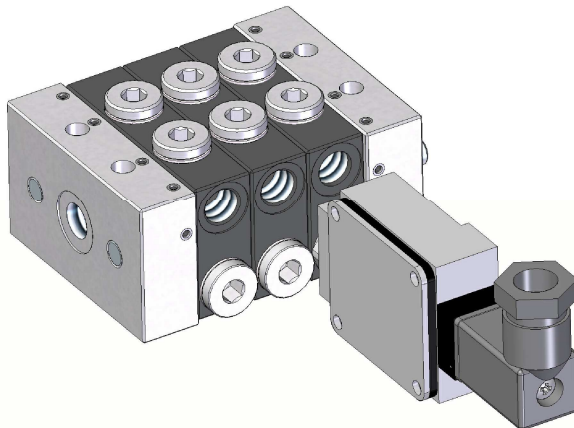
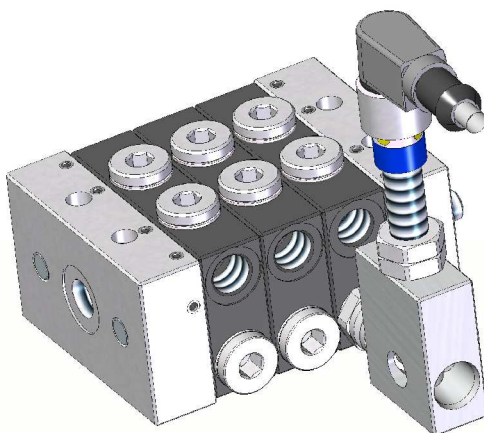


Visual monitoring



Electrical monitoring with microswitch



Electrical monitoring with inductive sensor

VP20/B

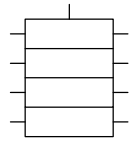


Plate assembly progressive distributor

G1/8 - 310.000.000
 M10x1 - 310.300.000

General aspects

Distributors from series VP20/B 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.
- 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.

Each outlet has its own internal non-return. Surveillance elements or blocking indicators can also be incorporated.

Options for monitoring:

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

Technical data

Output flow..... 0,08 - 0,16 - 0,24 cm³/stroke
 Material..... steel with treated surface
AISI 316

Lubricants:

-Oil..... from 30 cSt
 -Grease..... up to NLGI 2

Working pressure..... 15÷300 bar

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

Maximum input flow:

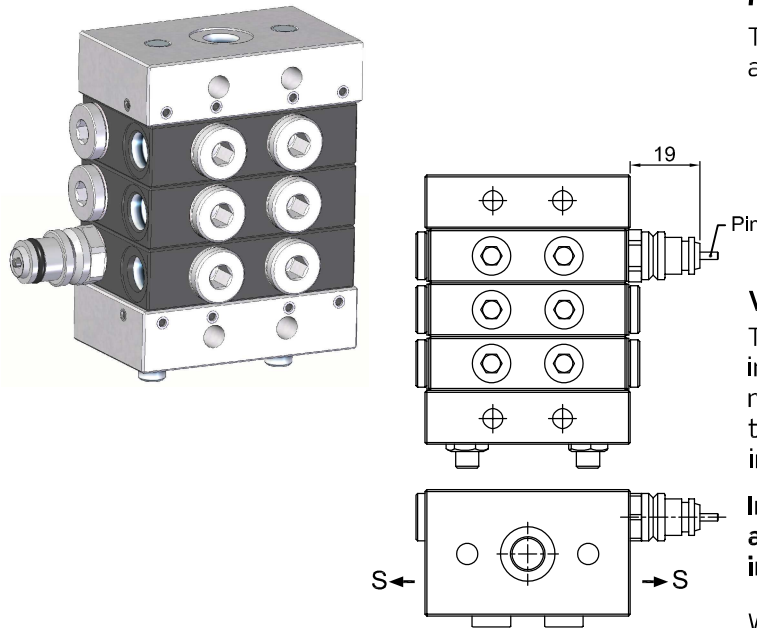
-Oil..... 500 cm³/minute

-Grease..... 10 cm³/minute

Maximum N° plates..... 10

Monitoring Systems

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

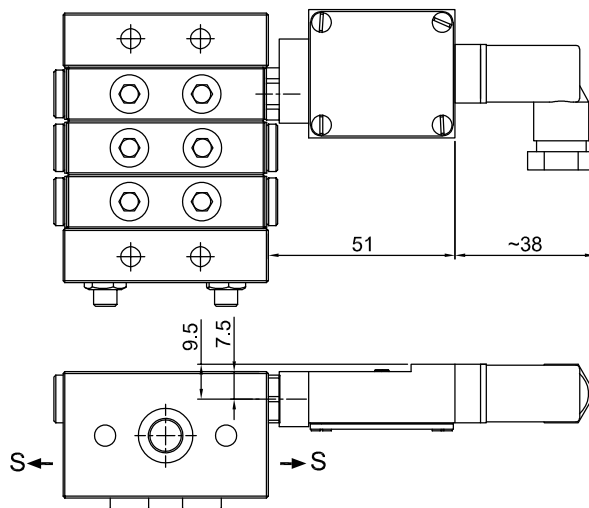


Visual monitoring

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.

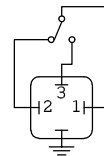
Important: the visual control is not an after-sales supply element, it must be incorporated in-house at source.

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

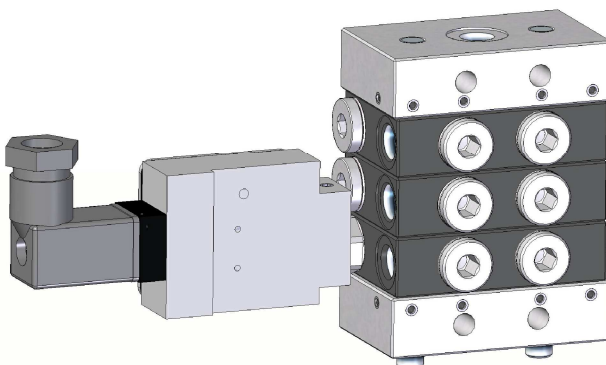


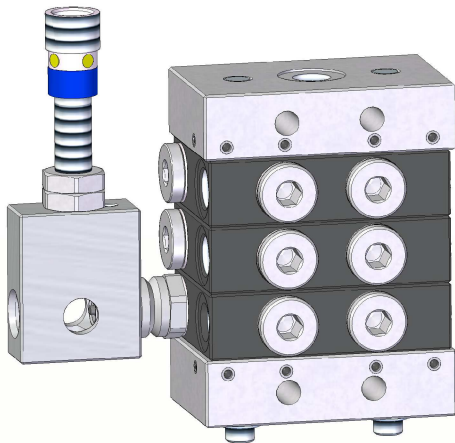
Electrical monitoring with micro (IP65)

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 ÷ +120°C
 Protection degree..... IP65
 Connection..... DIN43650 3 polos PG7
 Max. number of cycles.....100/minute

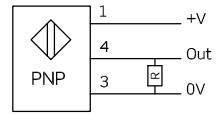
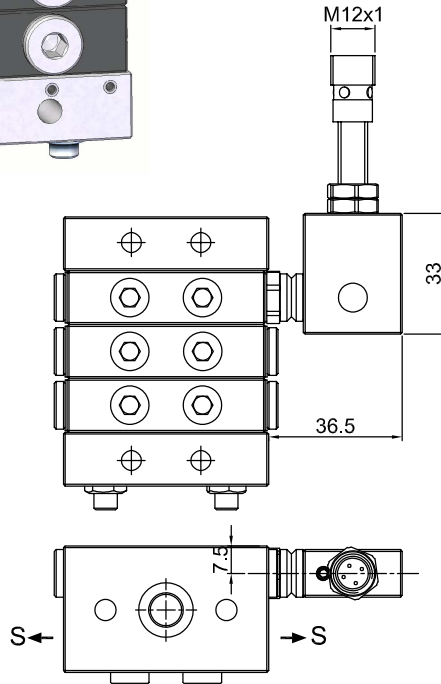




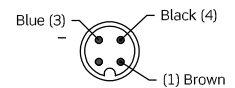
Electrical monitoring with inductive sensor

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.

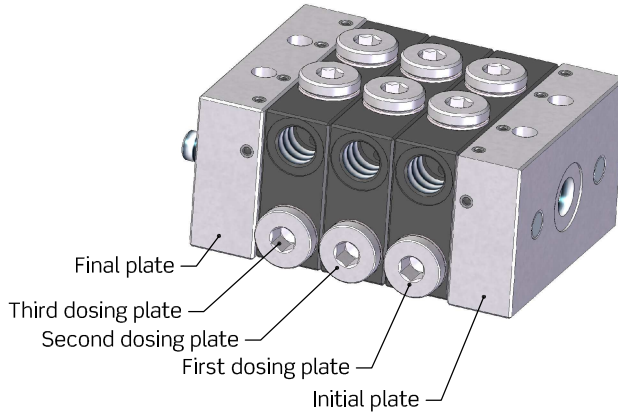
Function.....NO
 Voltage.....10 ÷ 30V
 Max. load admitted..... 200 mA
 Protection.....IP65
 Temperature..... -10°C ÷ +70°C
 Connection..... M12 4 poles connector
 Max. number of cycles..... 500/minute



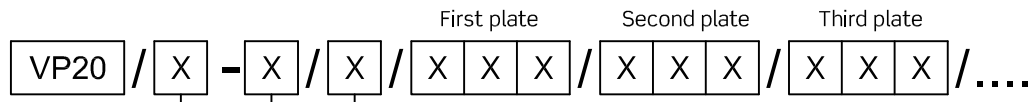
The inductive sensor is supplied without a connector: it needs to be ordered separately



VP20/B
 Progressive distributor on plates
 fully assembled



The distributor must contain at least 3 dosing plates

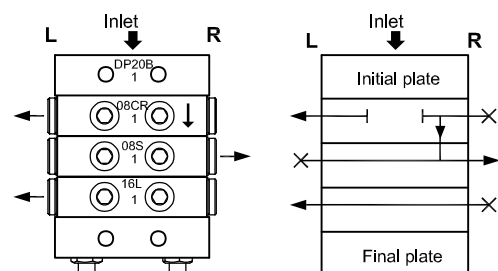


Material	X	Threads in/out	X	N° of plates	Flow cm3/str.	X	Outlet combination	X	Monitoring system	X	
Steel with treated surface	B	G1/8	1	3 ... 10	0,08	08	2 outlets	T	Without	-	
			2		0,16	16	Right side outlet	S	Only in plates with flow index 16 and 24		
		M10x1	2	3 ... 10	0,24	24	Left side outlet	L	Visual left side	1	
							Left side outlet - Bridge on right side	CR	Visual right side	2	
		M10x1	2	3 ... 10	3 ... 10	0,24	24	Right side outlet - Bridge on left side	CL	Micro left side	3
								Bridges on both sides	CB	Micro right side	4
AISI 316	B6	G1/8	1	3 ... 10	0,08	08	Left side outlet - Bridge on left side	SCL	Sensor left side	5	
			2		0,16	16	Bridge on right side	SCR	Sensor right side	6	
		M10x1	2	3 ... 10	0,24	24	Bridge on left side	SCL	Without	-	
							Without	CB	Only in plates with flow index 16 and 24		
		M10x1	2	3 ... 10	3 ... 10	0,24	24	Visual left side	SCR	Visual left side	1
								Visual right side	SCR	Visual right side	2
M10x1	2	3 ... 10	3 ... 10	0,24	24	Sensor left side	SCL	Sensor left side	5		
						Sensor right side	SCL	Sensor right side	6		

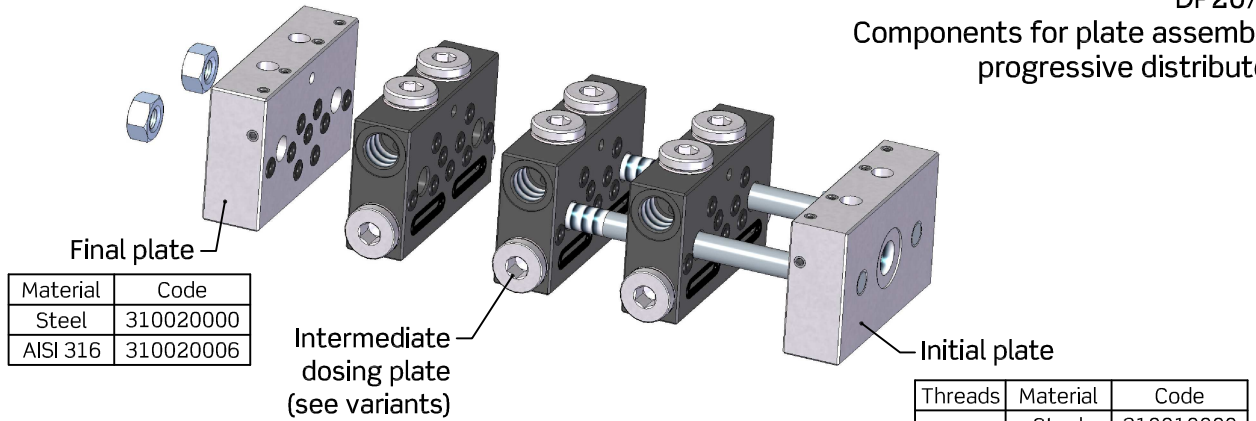
Example for ordering: VP20/B-1/3-08CR/08S/16S

First dosing plate is the one next to the pressure inlet.

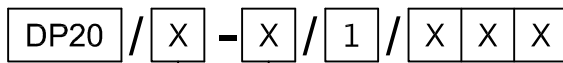
Bridges: the bridge is identified by an arrow marked on the body. The corresponding outlet is supplied plugged and the flow is diverted to the next outlet. The last dosing plate cannot be bridged.



DP20/B
Components for plate assembly
progressive distributor

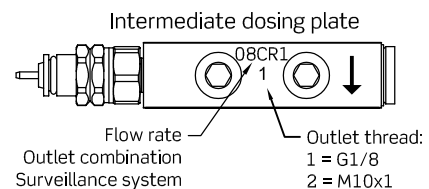
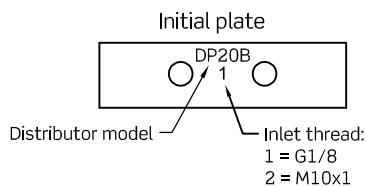


Intermediate plates:

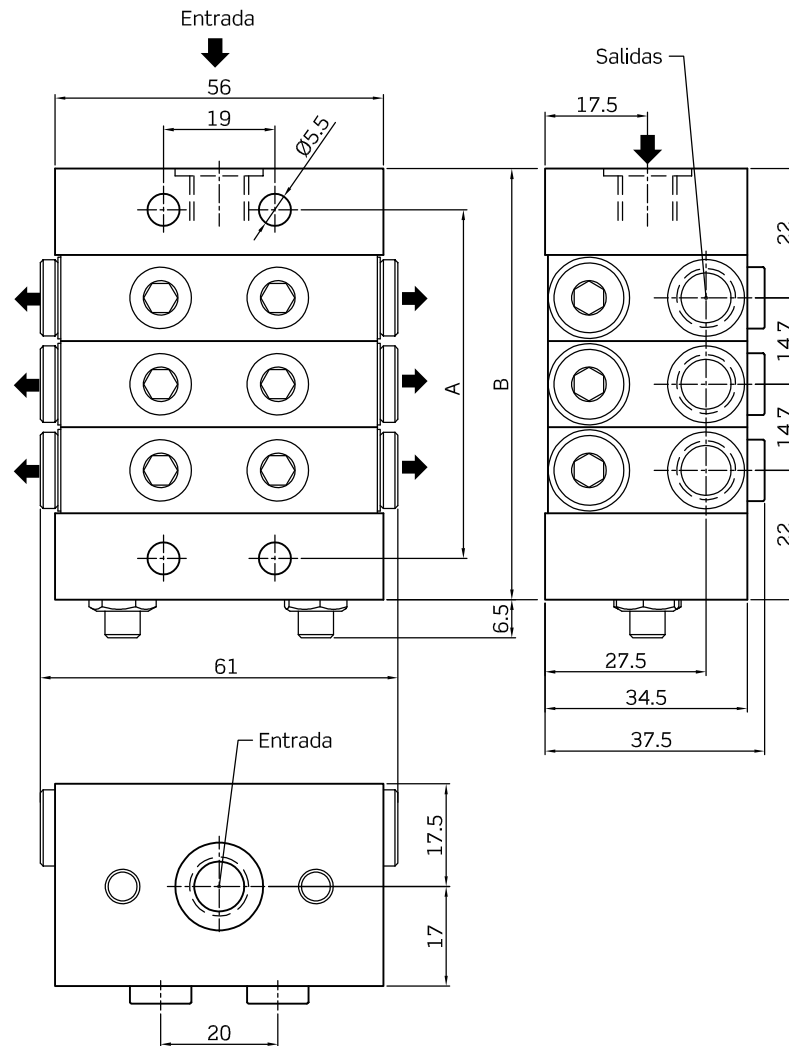


Material	X	Threads in/out	X	Flow cm3/str.	X	Outlet combination	X	Monitoring system	X
Steel with treated surface	B	G1/8	1	0,08	08	2 outlets	T	Without	-
			2	0,16	16	Right side outlet	S	Only in plates with flow index 16 and 24	
		M10x1	2	0,24	24	Left side outlet	L	Visual left side	1
			2	0,24	24	Left side outlet - Bridge on right side	CR	Visual right side	2
			2	0,24	24	Right side outlet - Bridge on left side	CL	Micro left side	3
			2	0,24	24	Bridges on both sides	CB	Micro right side	4
AISI 316	B6	G1/8	1	0,08	08	Left side outlet - Bridge on right side	CR	Sensor left side	5
			2	0,16	16	Right side outlet - Bridge on left side	CL	Sensor right side	6
		M10x1	2	0,24	24	Bridges on both sides	CB	Without	-
			2	0,24	24	Bridge on right side	SCR	Only in plates with flow index 16 and 24	
			2	0,24	24	Bridge on left side	SCL	Visual left side	1
			2	0,24	24	Bridges on both sides	CB	Visual right side	2
M10x1	2	0,24	24	Bridge on right side	SCR	Sensor left side	5		
	2	0,24	24	Bridge on left side	SCL	Sensor right side	6		

Component identification:



VP20/B Dimensions



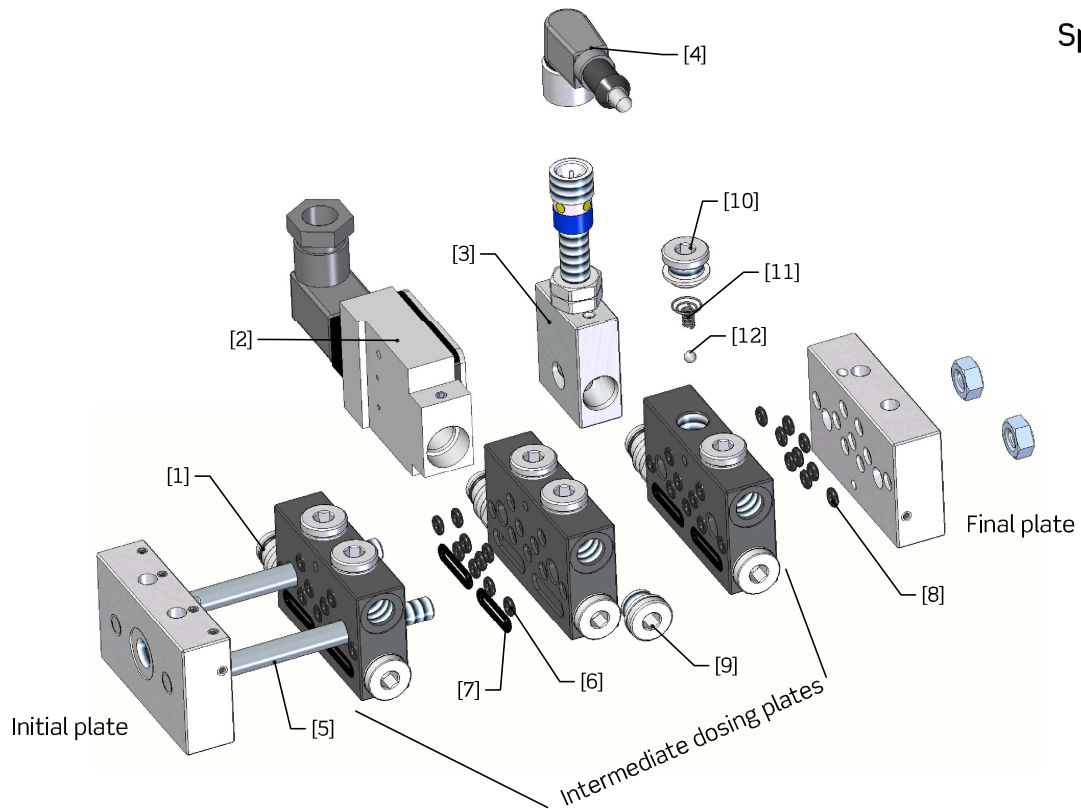
Dimensions

N° od plates	A	B
3	59,5	73,5
4	74,2	88,2
5	88,9	102,9
6	103,6	117,6
7	118,3	132,3
8	133	147
9	147,7	161,7
10	162,4	176,4

Connection threads

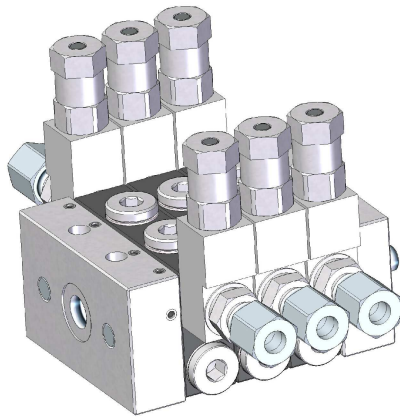
Model	Inlet	Outlets
VP20/B-1	G1/8	G1/8
VP20/B-2	M10x1	M10x1

VP20/B
Spare parts



Pos.	Descripción	For VP20/B	For VP20/B6
1	Spare bracket for visual control	341 030 000	341 030 006
2	Spare bracket with microswitch and connector	341 120 000	
2.1	Spare microswitch	943 401 001	
3.1	Bracket box without inductive sensor	341 210 000	341 210 006
3.2	Bracket box with inductive sensor	341 225 000	341 225 006
3.3	Inductive sensor	913 901 040	913 901 040
4	Elbow connector M12 with cable	913 806 607	913 806 607
5	Tie rod for distributor of 3 intermediate dosing plates	340 511 455	340 511 456
	Tie rod for distributor of 4 intermediate dosing plates	340 512 455	340 512 456
	Tie rod for distributor of 5 intermediate dosing plates	340 513 455	340 513 456
	Tie rod for distributor of 6 intermediate dosing plates	340 514 455	340 514 456
	Tie rod for distributor of 7 intermediate dosing plates	340 516 455	340 516 456
	Tie rod for distributor of 8 intermediate dosing plates	340 517 455	340 517 456
	Tie rod for distributor of 9 intermediate dosing plates	340 518 455	340 518 456
	Tie rod for distributor of 10 intermediate dosing plates	340 519 455	340 519 456
6	O-ring for dosing plate (7 units x plate)	915 200 007	915 200 007
7	O-ring for dosing plate (2 units x plate)	915 200 141	915 200 141
8	O-ring for final plate (9 units x plate)	915 200 007	915 200 007
9	Outlet plug unit G1/8	955 702 102	955 762 102
	Outlet plug unit M10x1	955 702 222	955 762 222
10	Check-valve plug unit G1/8	955 702 102	955 762 102
	Check-valve plug unit M10x1	955 702 221	955 762 221
11	Check valve spring	911 202 070	911 202 070
12	Steel ball	805 401 006	805 401 006

VP20/B Accessories



Blocking indicators

Indicator without memory KD02/A (fig.2)

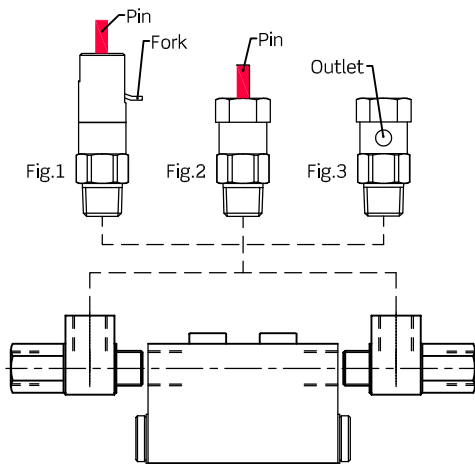
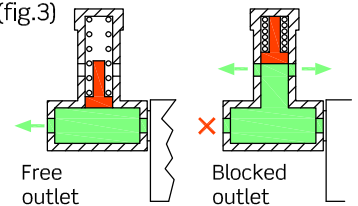
In the event of an outlet being blocked the resulting overpressure moves a pin outwards indicating visually the blockage. The pin returns to its original position after the distributor is unblocked.

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.

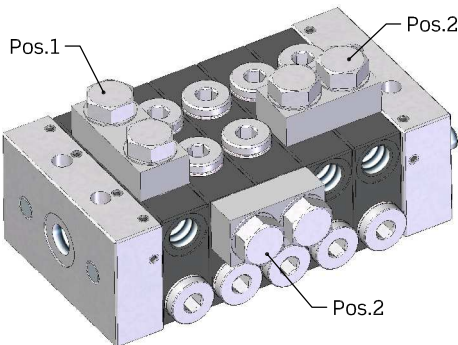
Indicator with outlet KD02/C (fig.3)

In the event of an outlet being blocked the overpressure is discharged outside not allowing the system to stop and at the same time the remaining lube points can continue lubricating.



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 and characteristics



External bridges

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

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

There are 2 models:

- Unit fitting bridge without outlet (Fig.4)
- Unit fitting bridge with outlet (Fig.5)

They can have the following uses:

-To connect outlets within the same plate: conversion of a "T" element into a "S" element (pos.1).

-To connect adjacent plates (pos.2) following the direction of the flow (through lateral or upper holes), bearing in mind that the last plate cannot be bridged.

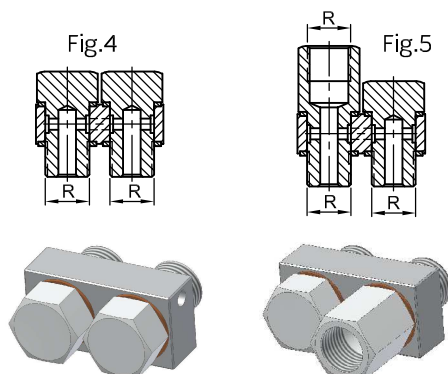


Fig.	R	Connection within the same plate Pos.1	Connection between adjacent plates Pos.2
4	G1/8	956.400.221	956.400.201
	M10x1	956.400.222	956.400.202
5	G1/8	956.400.421	956.400.401
	M10x1	956.400.422	956.400.402

The units are fully supplied with fitting, screws and washers.