



M2000 Progressive Divider Valve

Operating and Instructions

Nanjing BIJUR Machinery Products, Ltd



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1. DESCRIPTION

Progressive divider valve are designed for big equipment and big lubricating systems. The progressive divider valves can be used heavy dusty industries where temperature is various and high pumping volumes may be expected. Ideal for machine tool, plastic machine or similar applications.

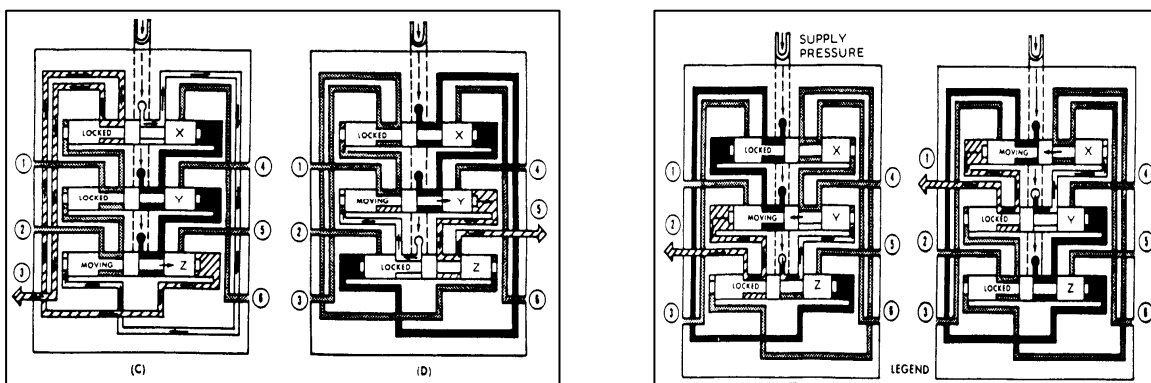
Progressive divider valve consists of an inlet section, end section and three to ten valve sections. The basic progressive divider valve assembly will serve between three and twenty lube points. Progressive divider valve sections are available in various out put per piston cycle size, referring to below. Each twin (T means twins outlets) section has 2 outlets located at each end of the assembly. Each single (S means single outlet) section has 1 outlet on either side, but one outlet must be plugged to operate properly. Please pay attention, outlets can not be plugged avoid to over pressure damage to the progressive divider valve.

FEATURES

- ★ Metered amount of lubricant delivered.
- ★ Easy to calculate discharge and design system.
- ★ Economical and compact design.
- ★ Built-in outlet check valves.
- ★ Hone-fitted metering pistons.

2. PRINCIPLE

Individual valve blocks operate in a “progressive” sequence. During operation, the piston within the block must complete a full discharge cycle before another piston beings operation. As long as lubricant is supplied under pressure to the inlet section of the divider, manifold valve blocks will continue to operate in a progressive manner. When lubricant flow is interrupted to the inlet block, piston movement stops. When flow resume, piston movement commences at the same point in the discharge cycle. Feed lines deliver lubricant from the block to individual lube points. Should a discharge line become blocked, it will stop all the valves operating. Indicators are available to alert a blockage.



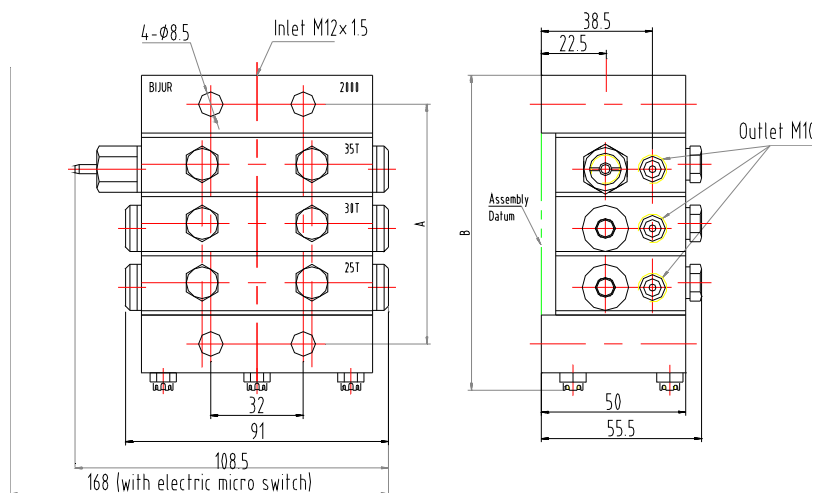
Principle drawing

3. TECHNICAL DATASHEET

1) . Delivery of progressive divider valve

Segment Size	Delivery (ml/cyc)	
	Dual Outlet	Single Outlet
10	0.16	0.32
15	0.24	0.48
20	0.32	0.64
25	0.40	0.80
30	0.48	0.96
35	0.56	1.12

2) Outline

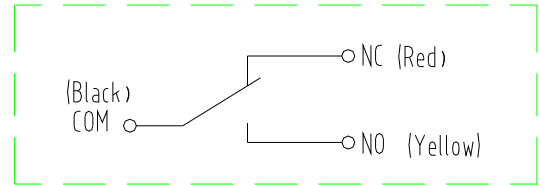
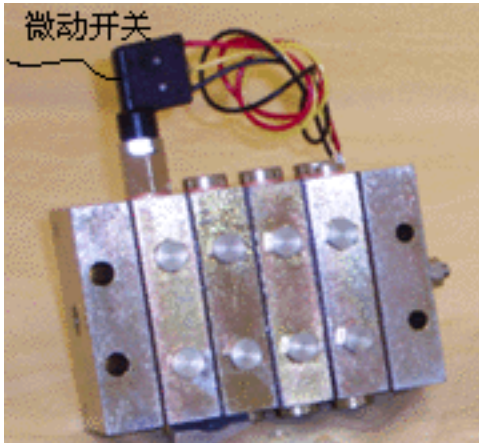


2000 progressive divider valve install dimensions

Number of Segments	A (mm)	B (mm)	Number of Segments	A (mm)	B (mm)
3	89.4	113	7	171.8	195
4	110	133.5	8	192.4	215.5
5	130.6	154	9	213	236
6	151.2	174.5	10	233.6	256.5

Mark: Dimension A and B is the academic dimension. Please machine assembly hole when assembly.

4. How to Fix and Test



Wire Connect Drawing

M2000 with electric micron switch

- 1). When the progressive divider valve with electric micron switch type cycle indicator switch, please connect the electric line per the upper drawing.
- 2). In order to keep veracity of assembly, please machine reserve two fixed holes of the inlet section (or end section) on the machine. Because progressive divider valve the distance between the fixed holes will changed within a little range. Machining two holes per the progressive divider valve actual dimension when fixing the progressive divider valve.
- 3). The progressive divider valve should be installed on the place where operators can check easily. Then operators can observe the progressive divider valve conveniently.
- 4). The progressive divider valve should be installed on flatness. Because it will leak if there is a large distortion in progressive divider valve.
- 5). Inlet should be on the top when be fixed in order to exhaust air in the line.
- 6). All the pipes in the system must be clean. Must used high pressure air to blow the pipe line before lubricating system work.
- 7). The filter should be used before the inlet because Hone-fitted metering pistons.
- 8). Progressive type lubricating system must use clean oil or grease because piston pairs are very precise.

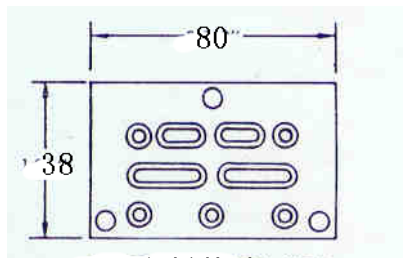
Notes:

- ★The delivery is the delivery which piston finished a complete action.
- ★ Work pressure MAX: 25Mpa
- ★ Lubricating points:1-20

- ★ Lubricant: suitable for oil of above N68 viscosity and grease penetration not lower than 265(25°C,150g) 1/10mm.
- ★ Work temperature: -20°C~~+90°C
- ★ The progressive divide valve which assembly cycle indicator the fastest work rate is 60cyc/min.

5. Maintenance

- 1). Must use clean lubricant in progressive divide valve.
- 2). Check the filter element periodic. Change the filter element immediately when find it is blocked.
- 3). The place where progressive divide valve installed temperature no higher than 90°C.
- 4). Piston and valve hole are whetted together one by one, so the piston and the valve can not be interchange. (please see part which is about how to deal with trouble)
- 5). Spare part



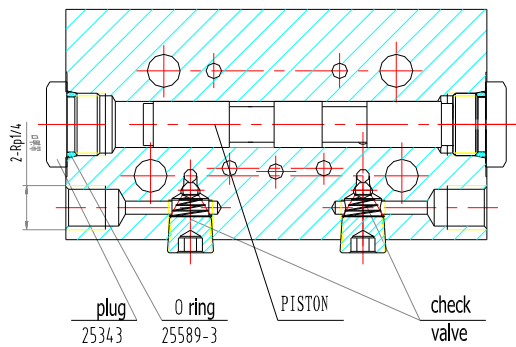
Washer of 2000 series (25341)

The list of the spare

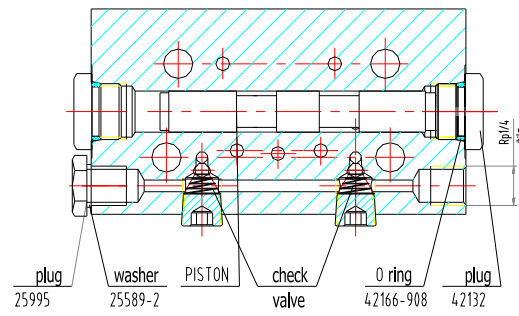
Type	Part Number	Describe	QTY/Segment	Used place
2000	25341	Washer	n+1	Between segment and inlet section; Between segment and end section
2000	25998	Y Type washer	1	Cycle indicator cover

6. How to Deal With Trouble

- ★ Disassemble the progressive divider valve from the system and put on a clean worktable.
- ★ Disassemble all inlet adapters and outlet adapters.
- ★ Disassemble plugs which is plugged the piston with a spanner (The plug used in M2000 is used S16 inner hexagon spanner.).



2000 double outlet porting plug assembly

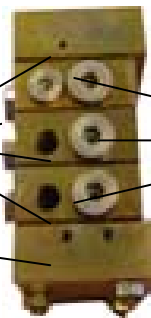


2000 single outlet porting plug assembly

Inlet Section

Washer 25341

End Section



Plugs on Two End of Piston

- ★ Push the piston in the one side of the block hole with a soft mandril.
- ★ Wash the manifold and piston and blow them with clean pressure air.
- ★ Paint a little oil on the piston. Reassemble the progressive divider valve. Please pay attention, the copper washer must be changed.
- ★ Check the progressive divider valve with a manual pump. Assemble the progressive divider valve into the system again if it works well.



Product Quality Feedback Sheet

Customer			
Contact No.			
Atten		Tel	
Address			
Part Name			
Type		Quantity	
Produce date		Install date	
Satisfaction	1.Satisfied	2.Commen	3.Dissatisfied
Quality Problems			
	1.Installing	2.Debugging	3.Precision
	4.Performance	5.Ustility	6.Reliability
	7.Life	8.Maintenance	9.Enviroment
	10.Other		
Requirement	1.Fax	2.Repairing	3.Assistant to debug
	4.Send to repair	5.Replace	6.Rejectiong
	7. Compensation	8.Others	
Suggestion			
Other Requirement			

Customer name

Date

Instruction (1) The table is written by customer as gist to improving product

(2)Quality problems will be chose by customer

(3)Please send this table to NANJING BIJUR MACHINERY PRODUCTS, LTD

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