Operation and Maintenance Instructions

for

M1000 progressive divider valve

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Before installing or operating this product, please read this manual carefully. Failure to follow instructions can result in damage to the product and/or serious bodily injury.

Before performing service to product, always turn off and disconnect electrical power.

When connecting product, make sure that unit is securely and adequately grounded. Failure to ground properly may cause serious injury.

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1. GENERAL

Progressive divider valve are designed for heavy equipment and lubricating systems. The progressive divider valves can apply to heavy industries where temperature change in a large range and high lubricating pressure is expected. It is ideal for machine tool, plastic machine or similar applications.
Progressive divider valve consists of an inlet section, end section and 3 to 8 valve sections. One set of progressive divider valve can serve 3 to 16 lube points. See Technical datasheet for detail of various output volume. 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. Caution, outlets cannot be plugged otherwise will cause damage to the progressive divider valve.

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

2. PRINCIPLE

The valve blocks work in a ‘progressive’ sequence. During operation, the piston within the block must complete a full discharge cycle before another piston begins 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 mode. When lubricant flow is interrupted at 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.

3. TECHNICAL DATASHEET

Divider spec	Standard output（ml/cyc）		PN of divider assembly			
	Twin outlet	Single outlet	Twin outlet	Twin outlet with indicator on right side	Single outlet on right side	Single outlet on right side with indicator
05	0.08	0.16	33134-05TBSP	—	33134-05SBSP	—
10	0.16	0.32	33134-10TB	—	33134-10SBSP	—

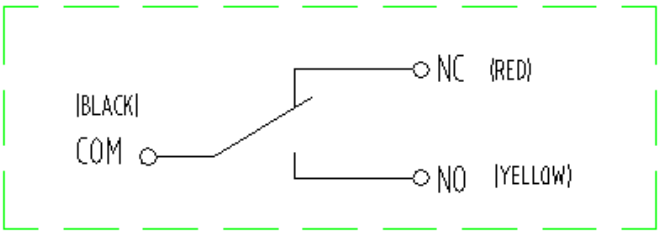
			SP			
15	0.24	0.48	33134-15TB SP	33134-157RTBSP	33134-15SBSP	33134-157RS BSP

Notes:

1. The output means how much lubricant delivered at one outlet after a whole cycle.
2. Thread specification of outlet is Rp1/8
3. Max working pressure: 10Mpa
4. Lube points: 1-16
5. Lubricant viscosity: suitable for oil of above N68 and grease penetration not lower than 265(25℃,150g) 1/10mm.
6. Ambient temperature: -20℃～+90℃
7. Thread specification of inlet (optional): Rp1/8 or 1/8-27NPSF
8. Tighten torque parameter: tie rod screw assemble torque: 11-12.5N.M.
   Hex socket screw at the two ends of valve: 11-12.5N.M
   Adapter or plug at outlet: 8.5-10.5.M
   Crossport screws assemble torque: 9-10.5N.M

4. INSTALLATION & TEST

1. When the thread specification of inlet and outlet are Rp1/8 or 1/8-NPSF, use R1/8 or 1/8-27 NPT adapter to assemble.
2. Connect wires according to the wiring diagram if electric cycle indicator is needed.



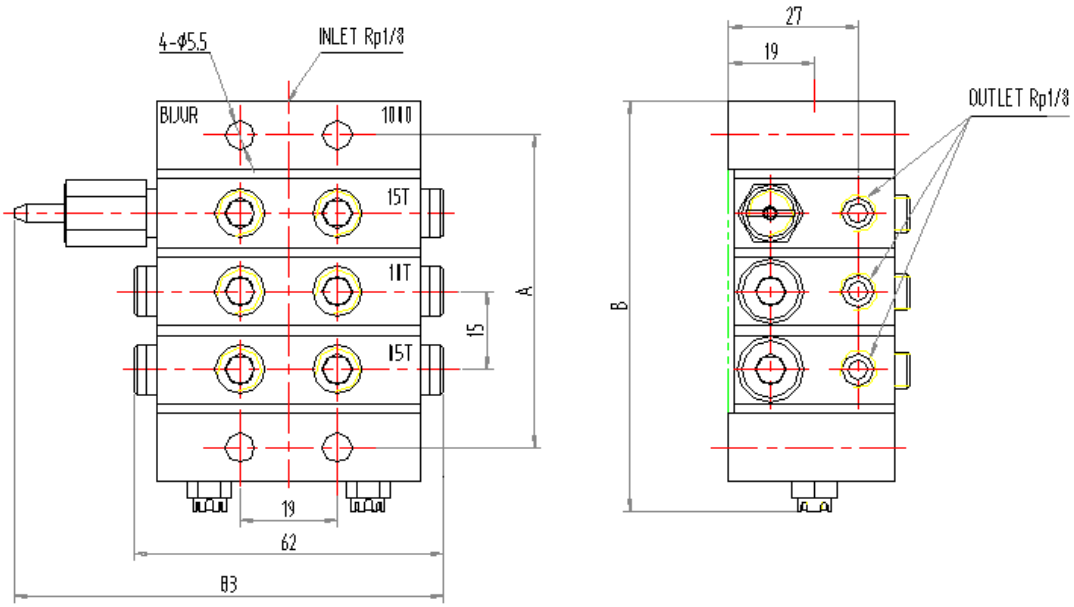
3. In order to install the divider correctly, please reserve two mounting hole space for the divider where it will be located.
4. The progressive divider valve should be installed where it is easy to observe and maintain.
5. The divider valve must be installed on flat bracket, for this can avoid leakage and piston clog cause by serious distortion.
6. It is better to keep the inlet upward after installation, because it easier to exhaust air in valves.
7. Clear pipe lines before installation
8. The divider is precise piston kit, to avoid clog please install filter at pump outlet from Bijur.
9. Fill the pipe line with lubricant first and then install the dividers, this will exhaust air in pipe line.

5. MAINTENACE

1. Be sure the lubricant is clean.
2. Check the filter termly, replace it if need.
3. Ambient temperature not more than 90˚C
4. Observe divider working situation termly, deal with any abnormal situation.
5. The piston and valve hole are grinded together, therefore, the piston cannot exchange.
6. If the divider valve need maintenace, take down the valve from divider assembly first, then take down the hex socket plugs and the piston, clean and dry the piston and valve. Smear a little lubricant before assemble the piston into the valve, this made it easier. Assemble all plugs in term of tighten torque parameter in item **3.** When assembling finished, do not install the valve into system directly, check with a pump and see if it works correctly.
7. Rapid wear seal:

Item	PN	Description	qty	Remark
1	1009C	Cushion	1	Use between valves
2	25998	Y-ring	1	Used in cycle indicator

6. OVERALL DIMENSIONS



Bijur Lubricating Corporation
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Valve qty	A	B	Valve qty	A	B
3	59.3	80	6	104.6	125
4	74.7	95	7	119.6	141
5	89.5	110	8	134.7	156

NOTES: the dimensions in the datasheet are for your reference only, they will change a little because of tolerance accumulation.

Product Quality Feedback Sheet

Customer			
Order No.			
Contact		Tel	
Address			
Part No.			
Model No.		Quantity	
Date Code		Installation data	
Satisfaction Level	1.Satisfied 2.Commen 3.Dissatisfied		
Quality Problems			
Affection	1.Installation 2.Debug 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.Return to repair 6.Reject 7. Compensation 8.Others		
Suggestion or Other Requirements			

Signature Date

Instruction (1) The sheet is written by customer as one of bases to improve product quality or dispose product quality problem.

(2) Please select from column of 'Affection' and 'Requirement'

(3) Please send the sheet to NANJING BIJUR MACHINERY PRODUCTS, LTD QUALITY DEAPARTMENT

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