

# Equipment

## DV type distributing valve

DV— \* \* H

Good durability and improved reliability of lubrication

### Overview

DV type distributing valve is used in dual line system, and lubricant is supplied appropriately to each lubricating point by the pressure of lubricant transferred in turn from main supply line.

Operation of distributing valve is checked by indicator. Further, amount of grease can be adjusted as desired by the adjusting screw.

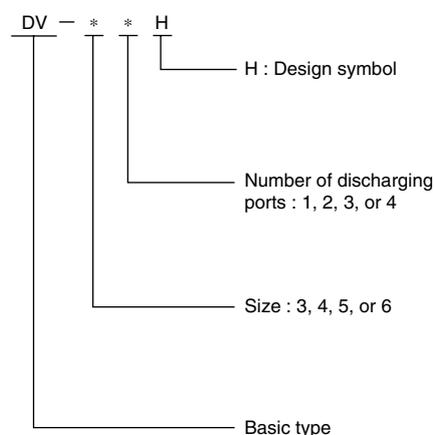
### Feature

- Accurate lubrication  
Sliding unit is finished in high precision, which enables accurate weighing and lubricating.
- Robust and highly durable
- Maximum working pressure 21MPa  
Application of high pressure improves reliability of lubrication and enables lubrication in a broad range.
- Lubricating amount can be adjusted and operation checked for each discharging port.



DV-54H

### Nomenclature



### Specification

Distributing valve size	30	40	50	60
Maximum working pressure (MPa)	21			
Proof pressure (MPa)	31.5			
Applicable grease	Centralized lubricating grease NLGI consistency number #0 to #2			
Lowest operating pressure (MPa)	1	1	1	1
Discharging quantity (cm <sup>3</sup> /stroke MAX)	1.2	2.5	5.0	14.0
	(cm <sup>3</sup> /stroke MIN)	0.2	0.6	1.2
Adjusting amount per rotation of adjusting screw (cm <sup>3</sup> )	0.06	0.10	0.15	0.68
Loss amount (cm <sup>3</sup> )	0.50	0.55	0.63	0.63
Attachment	Cross-recessed pan head machine screw, hexagonal nut, and spring washer			
	M8×60	M8×60	M8×65	M8×75

Note) • Loss amount means the amount of lubricant on operating the pilot piston.  
• When using the valve for oil, set the pressure below 10MPa.

### Handling

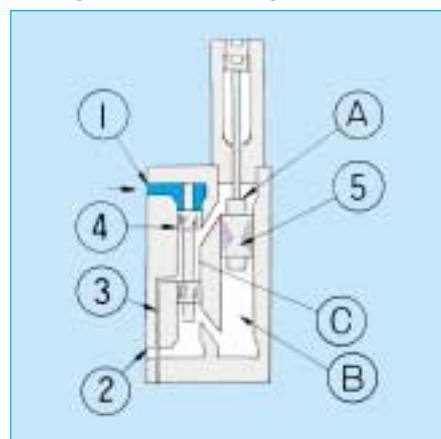
<Installation>

- Connect the two supply lines to the supply port.
- Apply a plug (R1/4) to unused discharging ports.
- Install a dustproof cover for protecting against dust, radiant heat, etc.

<Adjustment of discharging amount>

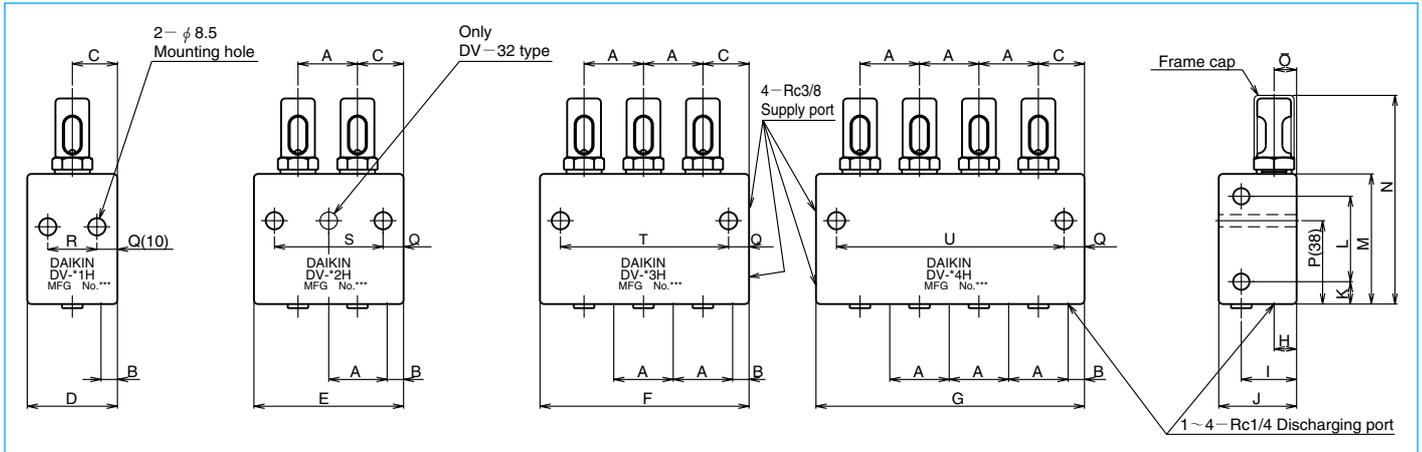
- Adjust the discharging amount as necessary with the adjusting screw at the top of the frame. (See the adjusting amount per rotation in the specification column.)
- In adjusting, set the position of adjusting screw with the indicator bar placed below, and secure with a locking screw finally.

### Explanation of operation



1. Transfer of lubricant from the supply line ② is finished, and supply line is switched, then lubricant is transferred from the supply line ①, and the supply line ② is opened to the tank.

## Dimension drawing



Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Ø	P	Q	R	S	T	U
DV-31, 32, 33, 34	29	8	22.5	44	73	102	131	11	27	38	11	42	64	104	11	*41	*36.5	24	—	29	58
DV-41, 42, 43, 44	31	9.5	25	50	81	112	143	11	29	40	11	54	76	125	11	48	10	30	61	92	123
DV-51, 52, 53, 54	37	9.5	28	53	90	127	164	14	34	45	13	57	83	138	14	53	10	33	70	107	144
DV-61, 62	46	10	33	62	108	—	—	29	45	57	16	57	89	149	20	56	10	42	88	—	—

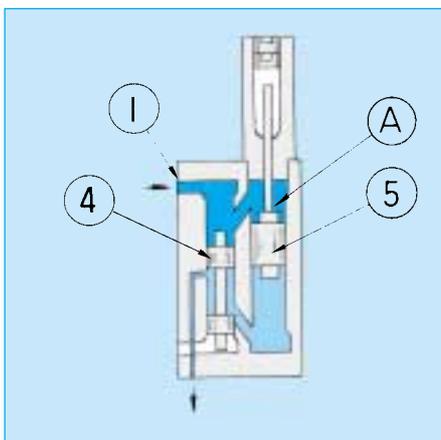
Note) • As for DV-31 type, the dimension marked with \* is different. See the dimension ( ) in the dimension drawing.

• As for DV-32 type, mounting hole is at one position as shown.

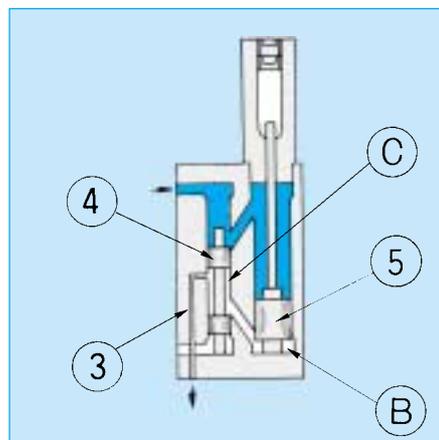
• The frame of each distributing valve is equipped with frame cap (material, soft vinyl chloride, transparent white) for dust control.

## Mass

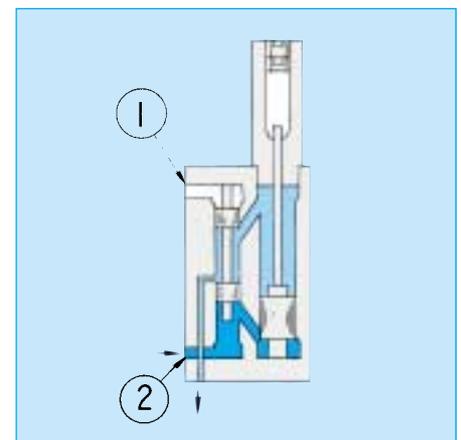
Type	DV-31	DV-32	DV-33	DV-34	DV-41	DV-42	DV-43	DV-44	DV-51	DV-52	DV-53	DV-54	DV-61	DV-62
Mass (kg)	0.8	1.4	1.8	2.3	1.0	1.9	2.7	3.2	1.4	2.4	3.5	4.6	2.4	4.2



2. When the supply line ① is pressurized, the pilot piston ④ is pushed down, and lubricant moves into the chamber ④ above the main piston ⑤, which is pushed down.



3. When the main piston ⑤ is pushed down, lubricant in the chamber ⑥ below is discharged from the discharging port ③ to the supply line through the small bore tube ④ of the pilot piston ④.



4. Then the supply line is switched, the supply line ② is pressurized, and the supply line ① is opened to the tank; lubricant is discharged to the supply line in the same sequence as the operation described before.