DW type distributing valve

DW- * * H

Saving space by double-discharge

Overview

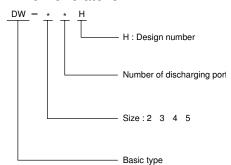
DW type distributing valve is used for dual line system. The ports are doubled in number from single discharging type (1 port/element) to dual discharging type (2 ports/element) for saving space.

Feature

- ; Discharging ports doubled in number. Distributing valves can be reduced half in number with reference to required number of lubricating ports. which simplifies installation and piping.
- Can be changed easily to odd number of ports.
 - Double discharging can be changed easily to single discharging just by reassembling the cross port hexagonal socket head flat plug on the right end to the discharging port. (See the changing procedure below.)
- Maximum working pressure 21MPa Application of high pressure improves reliability of lubrication and enables lubrication in a broader range.
- Installation dimension is the same. DW-30, 40, and 50 type all have the same installation dimension, so that distributing valve can be connected with each other and size can be changed easily.
- Robust and highly endurable.



Nomenclature



Specification

Distributing valve size	20	30	40	50					
Maximum working pressure (MPa)	21								
Proof pressure (MPa)	31.5								
Applicable grease	Applicable grease NLGI consistency number #0 - #2 for centralized lubrication								
Minimum operation pressure (MPa)	1.2	1	1	1					
Discharging quantity (cm³/stroke MAX)	0.6	1.2	2.5	5.0					
(cm³/stroke MIN)	0.15	0.2	0.6	1.2					
Adjustment per rotation of adjusting screw (cm³)	0.04	0.06	0.10	0.15					
Loss amount (cm ³)	0.17	0.20	0.20	0.20					

Note) · Loss amount means the amount of lubricant on operating the pilot piston.

· When using the valve for oil, set the pressure below 10MPa.

Mass

					32	34	36	38
Type	DW-22	DW-24	DW-26	DW-28	DW-42	DW-44	DW-46	DW-48
					52	54	56	58
Mass (kg)	0.5	0.8	1.1	1.4	1.4	2.4	3.4	4.4

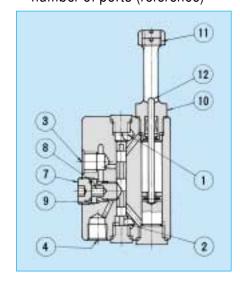
Cross-recessed pan head machine screw M6× 60 ,Spring washer and hexagonal nut DW-30,40,50 Cross-recessed pan head machine screw M8× 75,Spring washer and hexagonal nut

Handling

<Installing>

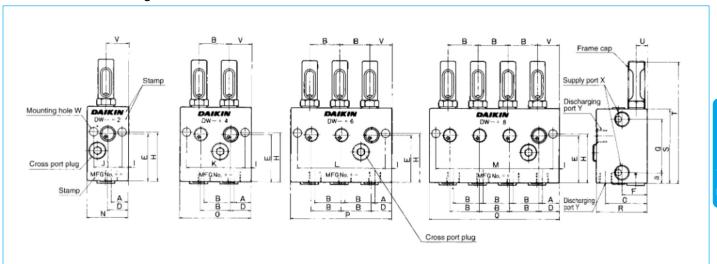
- ; Connect the two supply lines to the supply port.
- Install a dustproof cover for protecting against dust, radiant heat, etc.
- <Adjustment of discharging amount>
- ; Adjust the discharging amount as necessary with the adjusting screw at the top of the frame. (See the adjusting amount per rotation 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.
- <Change of ports in number>
- Be sure to follow this procedure (reference) in changing to odd number of ports.

Procedure for changing to odd number of ports (reference)



- 1. The left figure shows the status of double discharging of cross port distribution element on the right end of the valve, where the cross port plug 7 protrudes from the surface of the body.
- 2. When making the number of discharging ports odd, detach the cross port plug (7), detach the hexagonal socket head flat plug (8) inside, and plug the discharging port (3). Seal the cross port plug unit with the cross port plug (7) and the packing (9). Then the cross port plug is flush with the main body. (Description of operation in the drawing B)
- 3. Adjust the discharging amount of distributing valve with the adjusting screw (11) of the indicator (10) (Reduce discharge to 1/2 for single discharging.)
- 4. Double discharging distribution element except for the right end (Description of operation in the drawing A)
- 5. Check lubrication by sight with the indicator

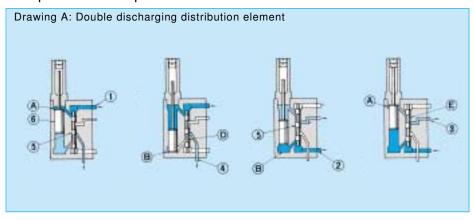
Dimension drawing



Dimension table

Torre											[Dimen	sion (mm)												
Туре	Α	В	С	D	Е	F	G	Н	ı	J	K	L	М	N	0	Р	Q	R	S	Т	U	٧	W	а	Х	Υ
DW-22, 24, 26, 28	18	17	32.5	18	33	21	37	34	6	24	41	58	75	36	53	70	87	40	54	81	8	18	7	8.5	Rc 1/4	Rc 1/8
DW-32, 34, 36, 38																				120						
DW-42, 44, 46, 48	18	32	44	22	47	27	57	52	7	30	62	94	126	44	76	108	140	54	79	127	12	24	9	11	Rc 3/8	Rc 1/4
DW-52, 54, 56, 58																				137						

Explanation of operation



Drawing B: Cross port distribution element (right end of body)

(Double discharging)

(Single discharging)

- 1.When the supply line ①is pressurized, the pilot piston ⑤is pushed down, and lubricant moves into the chamber ♠ above the main piston ⑥, which is pushed down.
- 2.When the main piston is pushed down, lubricant in the chamber & below is discharged from the discharging port 4 to the discharge line through the small bore tube D of the pilot piston.
- 3.Then, when the supply line ②is pressurized, the pilot piston ⑤is pushed up, and lubricant moves into the chamber & below the main piston ⑥, which is pushed down.
- 4.When the main piston is pushed up, lubricant in the chamber ♠ above is discharged from the discharging port ③ to the discharge line through the small bore tube € of the pilot piston.
- Discharging port 3 and 4 are cut off by the hexagonal socket head flat plug 8 and lubricant is discharged individually from each discharging port.
- Move the cross port hexagon socket head flat plug (a) to the discharging port (a). Lubricant is collected and discharged from one discharging port through the cross port unit & ...