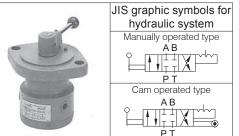
Internet

http://www.daikinpmc.com/en/ For latest information, PDF catalogs and operation manuals

# **Rotary Directional Control Valve**



- Features
- These are compact directional control valves using a rotary spool available in two models, one dedicated to manual operation and the other with a dog for cam operation (manual operation also possible).
- The structure has a high level of pressure balance, which suppresses the variation in the force required to operate the handle according to the pressure change.

### Nomenclature

*       -       DRO       *       4       -       3       T       O2       -       2       N         1       2       3       4       -       5       6       7       8       9					
1 Applicable fluid code	5 Number of positions				
No designation: Petroleum-based hydraulic fluid, water-glycol hydraulic fluid	3: 3-position valve				
F: Phosphate ester hydraulic fluid	6 Connections				
2 Basic method	T: Screw connection type				
DRO: D series rotary directional control valve	7 Nominal diameter				
3 Connection method B: With dog for cam operation	02: ¼ 8 Spool type				
H: Manually operated type (without dog)	2: All ports blocked				
<ul> <li>4 Number of directions</li> <li>4: 4-way valve</li> </ul>	<ul> <li>9 Spool operating method N: No-spring type (with detent)</li> </ul>				

## Specifications

Model code	Nominal	Maximum operating pressure	Maximum flow rate	Permissible back pressure	Mass
	diameter	MPa {kgf/cm²}	L/min	MPa {kgf/cm²}	kg
DRO*4	1⁄4	7 {70}	11.5	0.5 {5}	1.2

## Handling

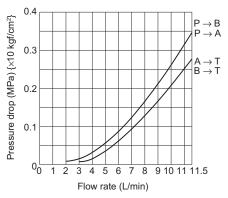
#### Dead angle

 $\odot$  From the neutral position to start of flow: 7°20'

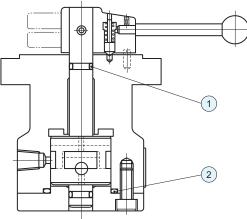
 $\bigcirc$  From the start of flow to the stroke end:  $22^{\circ}30' - 7^{\circ}20' = 15^{\circ}10'$ 

## Performance curves (viscosity: 32 mm<sup>2</sup>/s {cSt})

#### Pressure drop characteristics



# Sectional structural diagram



#### Sealing part table

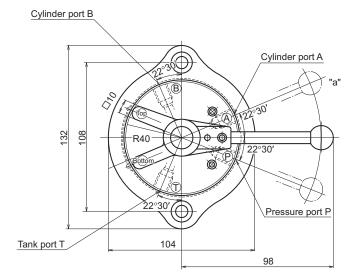
Part No.	Name	Part specifications	Quantity
1	O-ring	JIS B 2401 1A P11	2
2	O-ring	JIS B 2401 1A P40	1

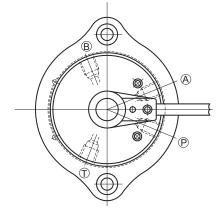
Internet http://www.daikinpmc.com/en/ For latest information, PDF catalogs and operation manuals

## External dimension diagram

#### DROB4-3T02-2N (with dog)

#### DROH4-3T02-2N (without dog)





The flow switches between P → A and B → T at handle position "a".

