

This is an assembly of a solenoid valve and a directional control valve to operate the directional control valve (main valve) by means of the pilot pressure that is controlled by the solenoid valve, thereby switching the direction of flow of the fluid in the main circuit.

**■ Features**

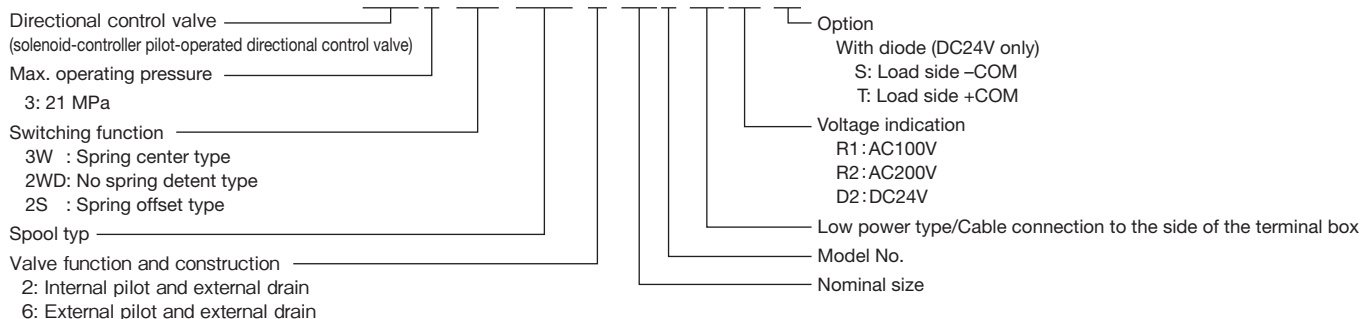
1. Mounting dimensions are ISO compatible.
2. A 025 series solenoid valve is used for a pilot valve to reduce the size and weight of the solenoid-controlled pilot-operated directional control valve.
3. Surge killer is standard equipment.

**⚠ Cautions on use** Please read the Operating Manual carefully to ensure correct usage.

- For an internal-pilot type valve, in which the R and P ports are connected when the solenoid is in the neutral position (BDA, AEB), a back pressure of at least the pilot pressure must be applied to the R port.
- The switching frequency must be within 1 time/sec.
- For the solenoid characteristics, refer to HD1 series solenoid valve size 025 (page C-6).
- All of this type use the external drain.
- Finish the mounting faces to the same quality as the valve faces (3.2 μmRz).

**■ Description of the model designation**

**HDD3-3W-BCA-2-04B-LYR1 (S)**



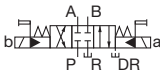
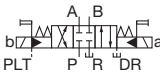
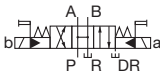
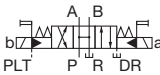

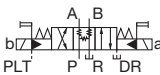



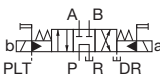






**■ Specifications**

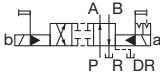

Nominal Size	Rated Flow (L/min)	Max. Flow (L/min)	Max. Operating Pressure (MPa)	Permissible Back Pressure (MPa)	Pilot Pressure (MPa)		Voltage Range (V)	Type	Model
					At Rated Flow	At Maximum Flow			
04	75	120			0.4 or more	0.5 or more	±10% or rated voltage	Double solenoid, spring centered	HDD3- <u>3W-***-*</u> -04B-LY**(*)
								Double solenoid, no spring	HDD3- <u>2WD-***-*</u> -04B-LY**(*)
								Double solenoid, spring offset	HDD3- <u>2S-***-*</u> -04B-LY**(*)
06	120	190	21	21	0.35 (0.4) or more *NOTE	0.4 or more	±10% or rated voltage	Double solenoid, spring centered	HDD3- <u>3W-***-*</u> -06B-LY**(*)
								Double solenoid, no spring	HDD3- <u>2WD-***-*</u> -06B-LY**(*)
								Double solenoid, spring offset	HDD3- <u>2S-***-*</u> -06B-LY**(*)
10	320	500			0.4 (0.5) or more *NOTE	0.4 (0.5) or more *NOTE	±10% or rated voltage	Double solenoid, spring centered	HDD3- <u>3W-***-*</u> -10B-LY**(*)
								Double solenoid, no spring	HDD3- <u>2WD-***-*</u> -10B-LY**(*)
								Double solenoid, spring offset	HDD3- <u>2S-***-*</u> -10B-LY**(*)

\*NOTE: Values in parentheses are the specifications of HDD3-3W-AEB-\*\*\*B-LY\*\*.

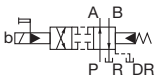
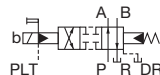
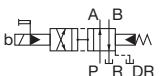
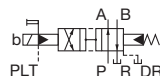
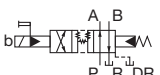
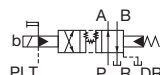
For \*\*\*-\*, refer to each spool type on next page.

■ Spool types

Function	Spring Center Type (3W)	
Model	HDD3-3W-***-*B-****	
Construction	Internal Pilot/External Drain	External Pilot/External Drain
Spool type	 BCA-2	 BCA-6
	 BDA-2	 BDA-6
	 BD1A-2	 BD1A-6
	 BGA-2	 BGA-6
	 AEB-2	 AEB-6
	 BHA-2	 BHA-6
	 BMA-2	 BMA-6
	 BNA-2	 BNA-6

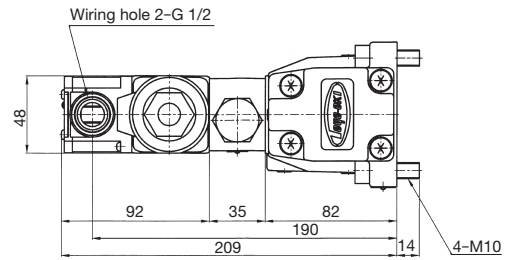
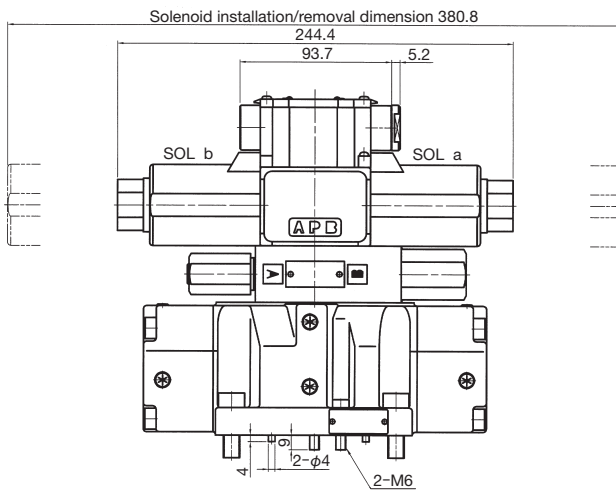
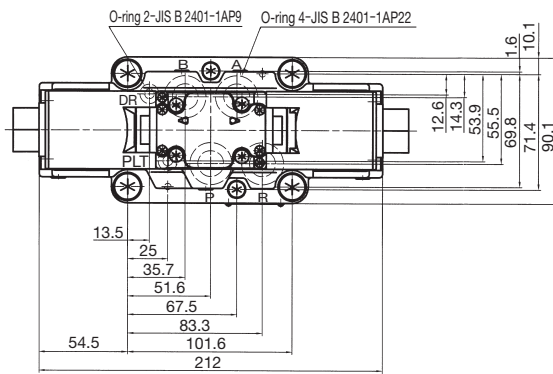
Function	No Spring Detent Type (2WD)	
Model	HDD3-2WD-***-*B-****	
Construction	Internal Pilot/External Drain	External Pilot/External Drain
Spool type	 BcA-2	 BcA-6

NOTE: No-spring detent type valves have the switchover position holding function in the pilot valve.

Function	Spring Offset Type (2S)	
Model	HDD3-2S-***-*B-****	
Construction	Internal Pilot/External Drain	External Pilot/External Drain
Spool type	 BcA-2	 BcA-6
	 BdA-2	 BdA-6
	 Bd1A-2	 Bd1A-6

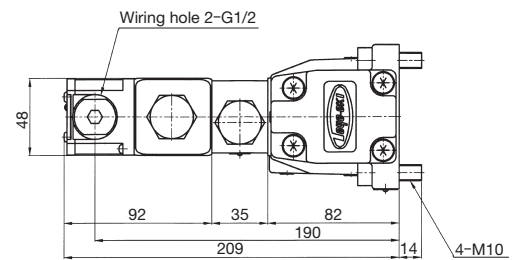
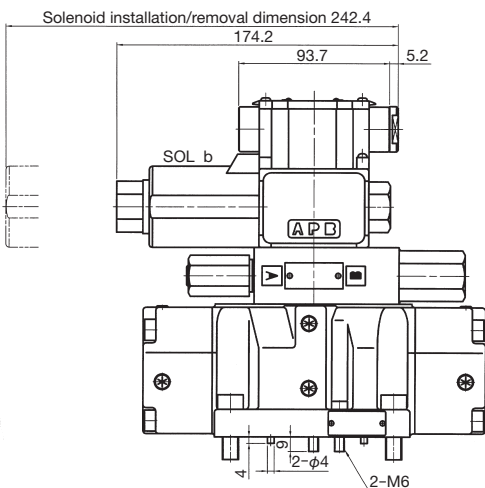
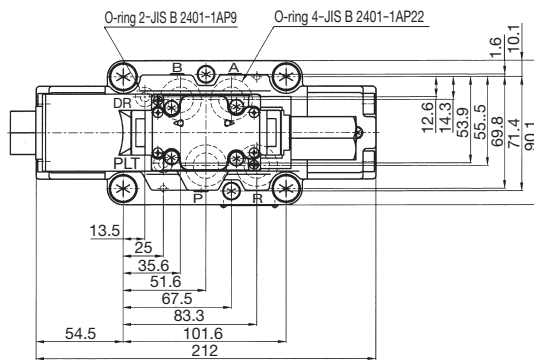
Outside dimensions

HDD3-3W-2WD-\*\*\*-\*-04B-LY\*\*



Mass: 11.4kg

HDD3-2S-\*\*\*-\*-04B-LY\*\*

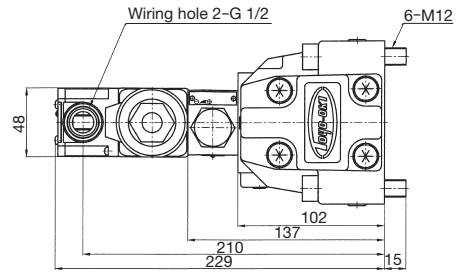
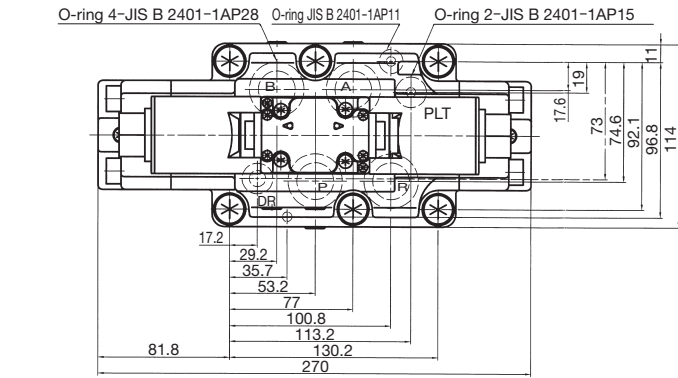


Mass: 9.7kg

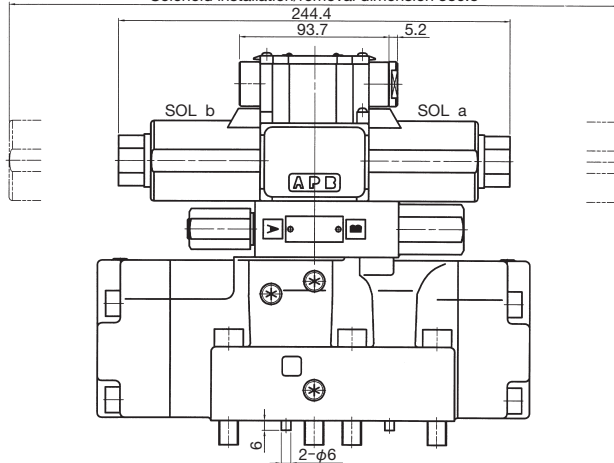
● For the sub-plate SHD04-\*\*T1, refer to page L-3.  
SHD04-\*\*T3, refer to page L-7.

Outside dimensions

HDD3-3W  
2WD -\*\*\*-\*-06B-LY\*\*

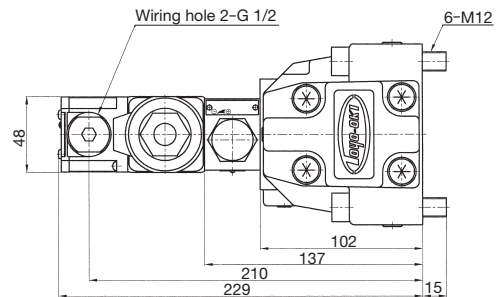
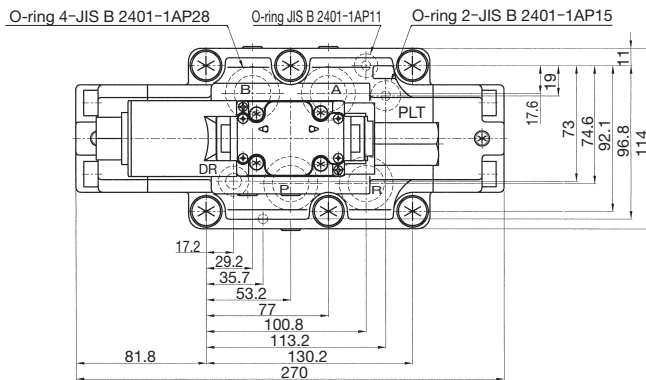


Solenoid installation/removal dimension 380.8

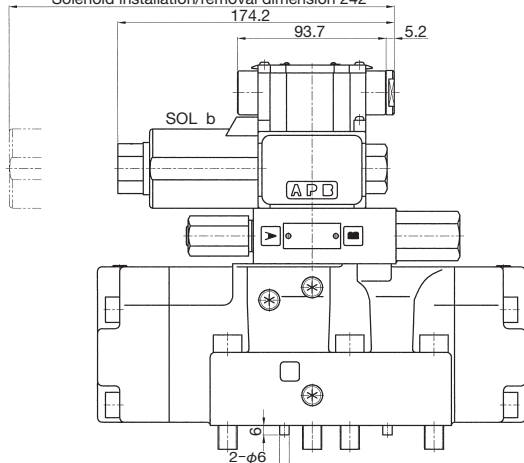


Mass: 17.4kg

HDD3-2S-\*\*\*-\*-06B-LY\*\*



Solenoid installation/removal dimension 242

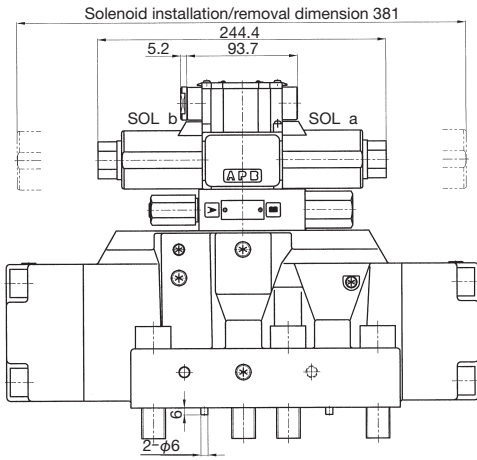
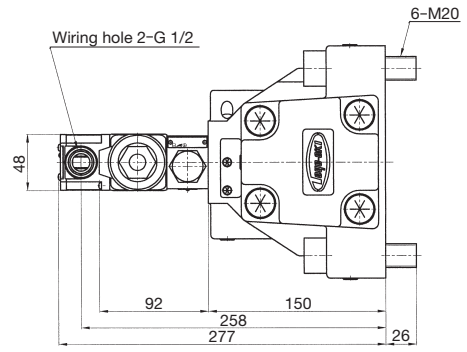
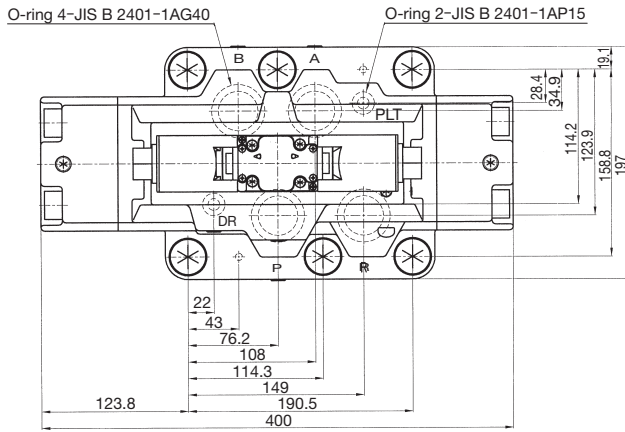


Mass: 16.7kg

● For the sub-plate SHD06-\*\*T1(A), refer to page L-3.  
SHD06-\*\*T3, refer to page L-7.

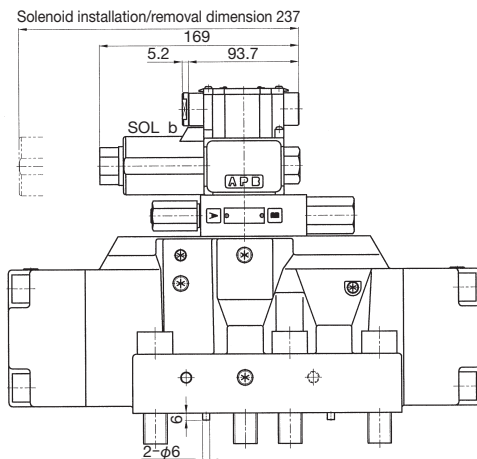
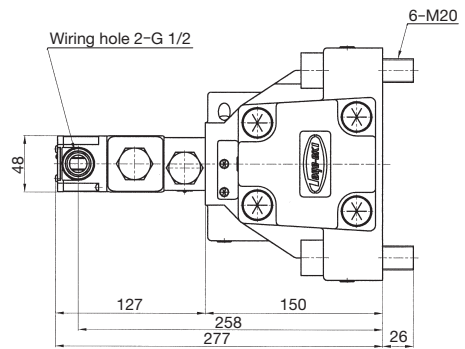
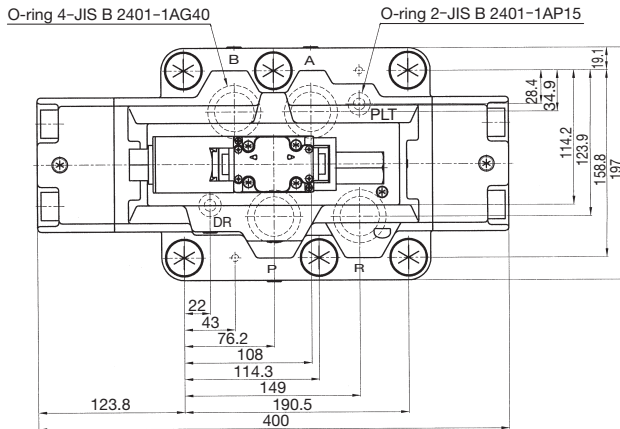
■ Outside dimensions

HDD3-3W-\*\*\*-\*--10B-LY\*\*  
HDD3-2WD-\*\*\*-\*--10B-LY\*\*



Mass: 45.9kg

HDD3-2S-\*\*\*-\*--10B-LY\*\*



Mass: 45.2kg