

**Features**

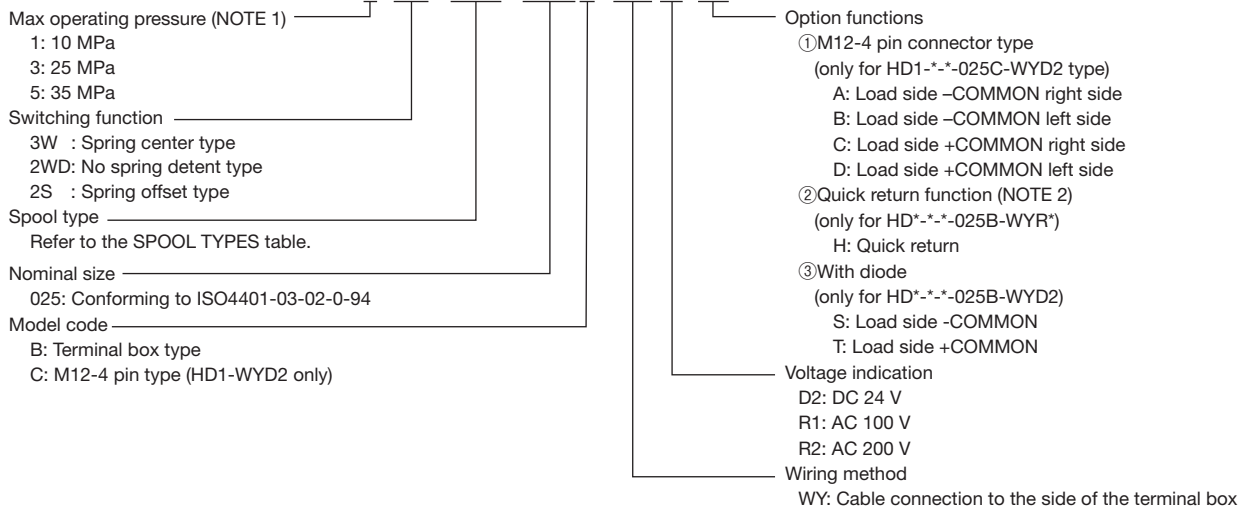
- HD3 Series (for 25 MPa)
  1. Compact
  2. High pressure and large capacity
  3. Increased rated flow rate
  4. Increased permissible back pressure
  5. Dust- and water-proof to IEC IP65 (IP 67 for M12-4 pin type)
  6. Lamp and grounding terminal are standard equipment.
  7. Surge killer is standard equipment.
- HD1 Series (for 10 MPa)
  1. Directly controllable by a programmable controller since the valve operates at low power. (Refer to the solenoid characteristics).

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

- The piping must be arranged so that the R port is always filled with fluid to make the most of the features of the oil-immersed type valve.
- When installing a no-spring type valve, install it so as to set the spool horizontally.
- Finish the mounting faces to the same quality as the valve faces (3.2 μmRz).
- Using a valve with the R port plugged can cause operation failure.
- For valves with detent, to hold the spool position without supplying power to the solenoid the back pressure must be 5 MPa or lower for the HD3 series or 2 MPa or lower for the HD1 series.
- Where a PLC is connected directly, select a type with the diode or M12 -4 pin connector type to protect the PLC output card.

**Description of the model designation**

**HD3-3W-BCA-025B-WYR1 (H)**



NOTE 1: A solenoid valve of 35 (MPa) operating pressure is available only for the 025B series.  
 NOTE 2: The valve with quick return function provides faster response for switching to OFF.  
 NOTE 3: Mounting bolt is M5 bolt.

**Series selection table**

	Series	Power Source		Low Voltage	Surge Absorber	M12 4-pin Connector	Quick Return	Compatibility to DeviceNet
		DC	AC					
Low-pressure Type	HD1-WYD*	○		○	CR + Varistor			
	HD1-WYD* (A~D)	○		○	Diode	○		○
	HD1-WYD* (SorT)	○		○	Diode			○
	HD1-WYR*		○	○	Rectifier			
	HD1-WYR*H		○	○	Rectifier		○	
High-pressure Type	HD3·5-WYD*	○			CR + Varistor			
	HD3·5-WYD* (SorT)	○			Diode			○ (NOTE 4)
	HD3·5-WYR*		○		Rectifier			
	HD3·5-WYR*H		○		Rectifier		○	

NOTE4: Select the slave unit carefully since the solenoid current value is high.



**Valve specifications**

Series	HD1	HD3	HD5
Max. operating pressure (MPa)	10	25	35
Max. flow (NOTE 5) (L/min)	40	80	80
Permissible back pressure at T port (NOTE 6) (MPa)	10 (2)	16 (5)	16 (5)
Switching frequency (CYCLE/s)	2 or lower		
Permissible voltage variation range	Rated voltage $\pm 10\%$ V		
Protection structure class	IEC529 IP65 (IP67) (NOTE 7)		
Hydraulic fluid cleanliness	Complying with ISO11218-Class 12 (NAS1638-Class 12)		
Operating fluid (recommendation)	ISO VG22, 32, 46		
Viscosity (mm <sup>2</sup> /s)	15 to 400		
Fluid temperature (°C)	0 to 65		
Ambient temperature (°C)	-10 to 50		
Tightening torque (N·m)	6 to 8	8 to 9	
Mass (kg)	3W, 2WD: 2.5 2S: 1.8		

NOTE 5: For details, refer to the operation limit.

NOTE 6: Values in parentheses are for the detent type.

NOTE 7: Protective structure class (IP67) is applicable to M12-4 pin type connector.

**Solenoid specifications**

● HD1 Series

Solenoid model	SLH1-025B-D2	SLH1-025B-R1	SLH1-025B-R2
Rated voltage	DC24V	AC100V	AC200V
Frequency	-	50/60Hz	50/60Hz
Holding current	0.2A	0.07A	0.04A
Power consumption	4.8W	6.5W	7.1W
Voltage variation range	$\pm 10\%$ V		

● HD3 / HD5 Series

Solenoid model	SLH5-025B-D2	SLH5-025B-R1	SLH5-025B-R2
Rated voltage	DC24V	AC100V	AC200V
Frequency	-	50/60Hz	50/60Hz
Holding current	1.2A	0.35A	0.19A
Power consumption	29W	31W	33W
Voltage variation range	$\pm 10\%$ V		

**Terminal box**

● Size 025B AC type

Solenoid	Rated Voltage	Terminal Box	
		Double Solenoid Type	Single Solenoid Type
HD $\frac{1}{3}$ $\frac{5}{5}$ -***-025B-WY R1 R2	AC100V AC200V	TBH3-025B-R1W	TBH3-025B-R1S
HD $\frac{1}{3}$ $\frac{5}{5}$ -***-025B-WY R1 R2 H	AC100V AC200V	TBH3-025B-R1W-HA	TBH3-025B-R1S-HA

● Size 025B DC type

Solenoid	Rated Voltage	Terminal Box	
		Double Solenoid Type	Single Solenoid Type
HD $\frac{1}{3}$ $\frac{5}{5}$ -***-025B-WY D2	DC24V	TBH3-025B-D1W	TBH3-025B-D1S
HD $\frac{1}{3}$ $\frac{5}{5}$ -***-025B-WY D2 S	DC24V	TBH3-025B-D1W-S	TBH3-025B-D1S-S
HD $\frac{1}{3}$ $\frac{5}{5}$ -***-025B-WY D2 T	DC24V	TBH3-025B-D1W-T	TBH3-025B-D1S-T

● Size 025C type

Solenoid	Rated Voltage	Terminal Box	
		Double Solenoid Type	Single Solenoid Type
HD1 -***-025C-WY D2 A	DC24V	TBH3-025C-D1W-MA	TBH3-025C-D1S-MA
HD1 -***-025C-WY D2 B	DC24V	TBH3-025C-D1W-MB	TBH3-025C-D1S-MB
HD1 -***-025C-WY D2 C	DC24V	TBH3-025C-D1W-MC	TBH3-025C-D1S-MC
HD1 -***-025C-WY D2 D	DC24V	TBH3-025C-D1W-MD	TBH3-025C-D1S-MD

**Spool types**

Type	Spring Center	No Spring Detent	Spring Offset
Model	HD*-3W-* $\frac{B}{C}$ -WY*	HD*-2WD-* $\frac{B}{C}$ -WY*	HD*-2S-* $\frac{B}{C}$ -WY*
Spool Type (NOTE 9)	3W-BCA	2WD-BcA	2S-BcA
	3W-BDA		2S-KcP
	3W-BGA		
	3W-AEB (NOTE 8)		

NOTE 8: Spool type 3W-AEB is available only for the HD3 and HD5 series.

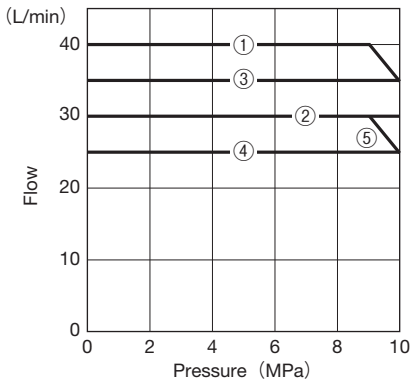
NOTE 9: For spool types not shown above, please consult us.

## Valve performance

### Operation Limit (Dynamic Viscosity: 33 mm<sup>2</sup>/sec)

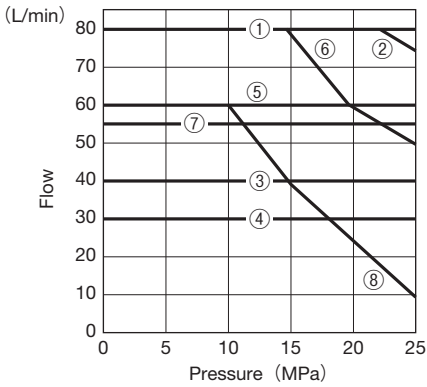
The performance will vary slightly depending on the circuit conditions and the operation conditions (voltage, pressure, flow, viscosity, etc.). The flow rate value in the performance graphs includes surge flow.

#### ● HD1-025<sup>B</sup>C Series



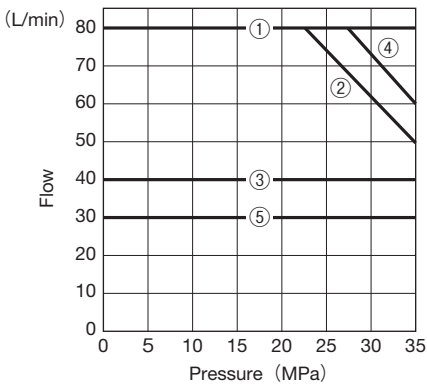
Circuit	Cylinder circuit	A port blocked	B port blocked
Spool Type			
3W-BCA	①	②	②
3W-BDA	②	②	②
3W-BGA	①	②	②
2WD-BcA	②	①	①
2S-BcA	③	③	④
2S-KcP		⑤	①

#### ● HD3-025B Series

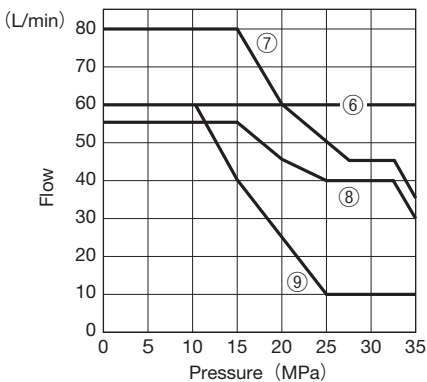


Circuit	Cylinder circuit	A port blocked	B port blocked
Spool Type			
3W-BCA	①	②	②
3W-BDA	③	③	③
3W-BGA	①	②	②
3W-AEB	④	④	④
2WD-BcA	⑤	③	③
2S-BcA	⑤	⑥	⑦
2S-KcP		⑥	⑧

#### ● HD5-025B Series



Circuit	Cylinder circuit	A port blocked	B port blocked
Spool Type			
3W-BCA	①	②	②
3W-BDA	③	③	③
3W-BGA	④	②	②
3W-AEB	⑤	⑤	⑤
2WD-BcA	⑥	③	③
2S-BcA	⑥	⑦	⑧
2S-KcP		⑦	⑨

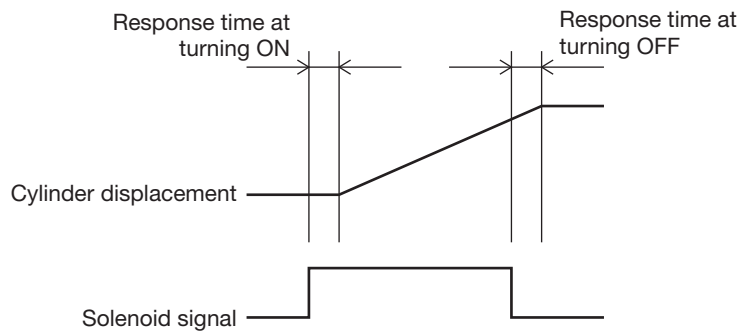


**Switching Response Time (Dynamic Viscosity: 33 mm<sup>2</sup>/sec)**

The switching response time will vary slightly depending on the circuit conditions and the operation conditions (voltage, pressure, flow, viscosity, etc.).

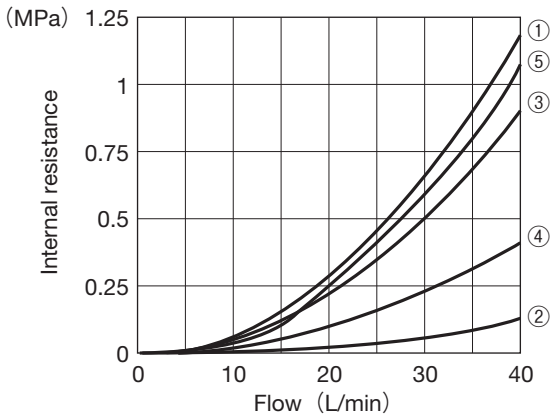
●025 Series

Spool Type	Solenoid Signal	HD1		HD3·HD5	
		WYD* WYR*H	WYD*(A·B·C·D) WYD*(S·T) WYR*	WYD* WYR*H	WYD*(A·B·C·D) WYD*(S·T) WYR*
3W-BCA	ON	0.05(sec)	0.05(sec)	0.015(sec)	0.015(sec)
	OFF	0.02(sec)	0.11(sec)	0.02(sec)	0.11(sec)
3W-BDA	ON	0.03(sec)	0.03(sec)	0.03(sec)	0.03(sec)
	OFF	0.03(sec)	0.13(sec)	0.03(sec)	0.13(sec)
3W-BGA	ON	0.07(sec)	0.07(sec)	0.04(sec)	0.04(sec)
	OFF	0.03(sec)	0.13(sec)	0.04(sec)	0.13(sec)
3W-AEB	ON			0.025(sec)	0.025(sec)
	OFF			0.02(sec)	0.08(sec)
2WD-BcA	ON	0.09(sec)	0.09(sec)	0.04(sec)	0.04(sec)
	OFF				
2S-BcA	ON	0.11(sec)	0.11(sec)	0.02(sec)	0.02(sec)
	OFF	0.03(sec)	0.11(sec)	0.02(sec)	0.08(sec)
2S-KcP	ON				
	OFF				

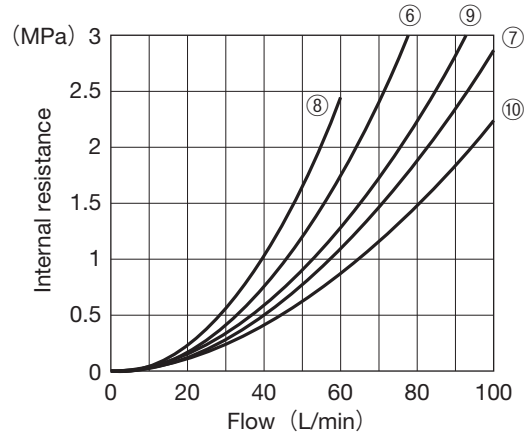


Internal Resistance (Dynamic Viscosity: 33 mm<sup>2</sup>/sec)

●HD1-025<sup>B</sup><sub>C</sub> Series



●HD3/5-025B Series



●HD1-025<sup>B</sup><sub>C</sub> Series

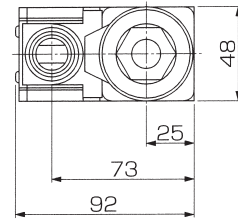
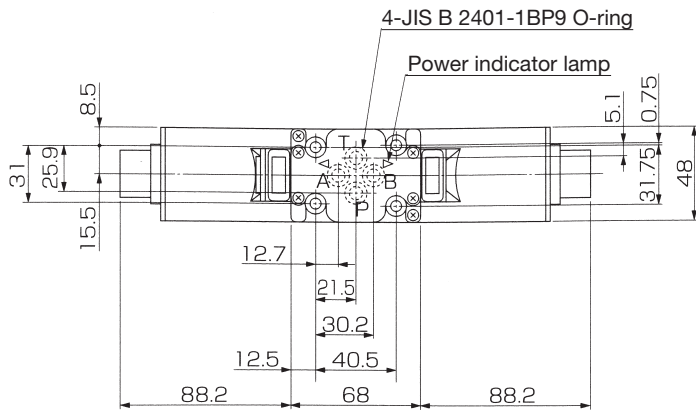
Direction Of Flow	Spool Type	3W			2WD	2S	
		BCA	BDA	BGA	BcA	BcA	KcP
P→A or B		①	②	①	①	①	①
A or B→T		③	②	④	③	⑤	
P→T			②				

●HD3/5-025B Series

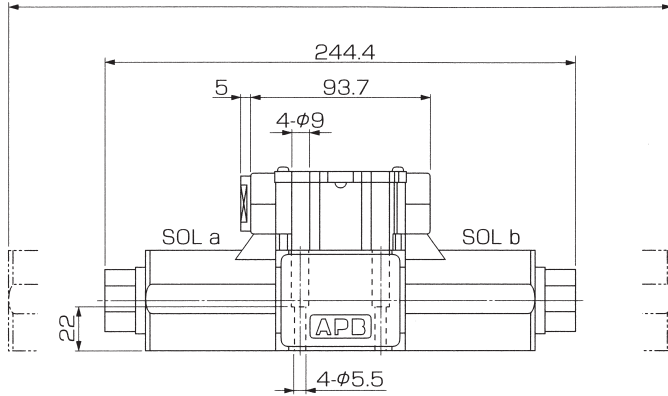
Direction Of Flow	Spool Type	3W			2WD	2S	
		BCA	BDA	BGA	AEB	BcA	KcP
P→A or B		⑥	⑦	⑥	⑦	⑧	⑥
A or B→T		⑨	⑦	⑩	⑦	⑧	⑥
P→T			⑨		⑥		

Outside dimensions

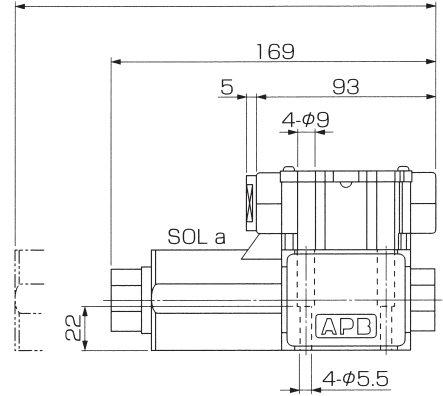
Type 025B (Terminal box type)



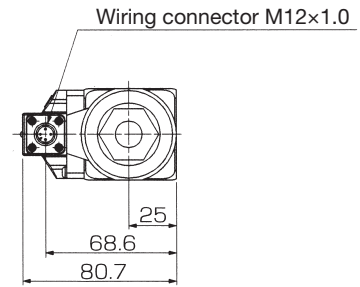
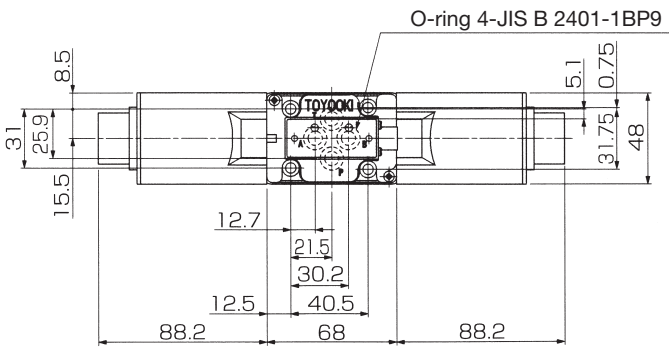
Solenoid installation/removal dimension 381



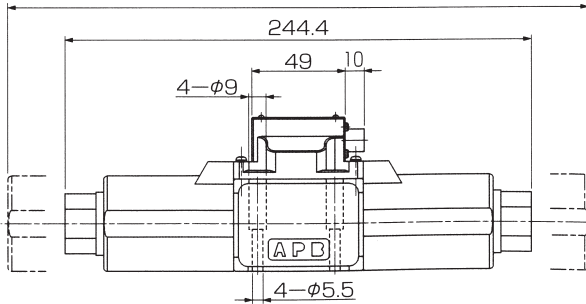
Solenoid installation/removal dimension 237



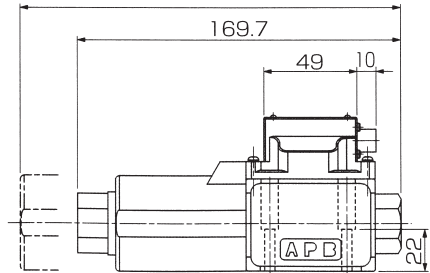
Type 025C (M12-4 pin connector type)



Solenoid installation/removal dimension 381



Solenoid installation/removal dimension 237.7



●For the sub-plate SHD025-\*\*T1A, refer to page L-2.  
SHD025-\*\*T3A, refer to page L-6.



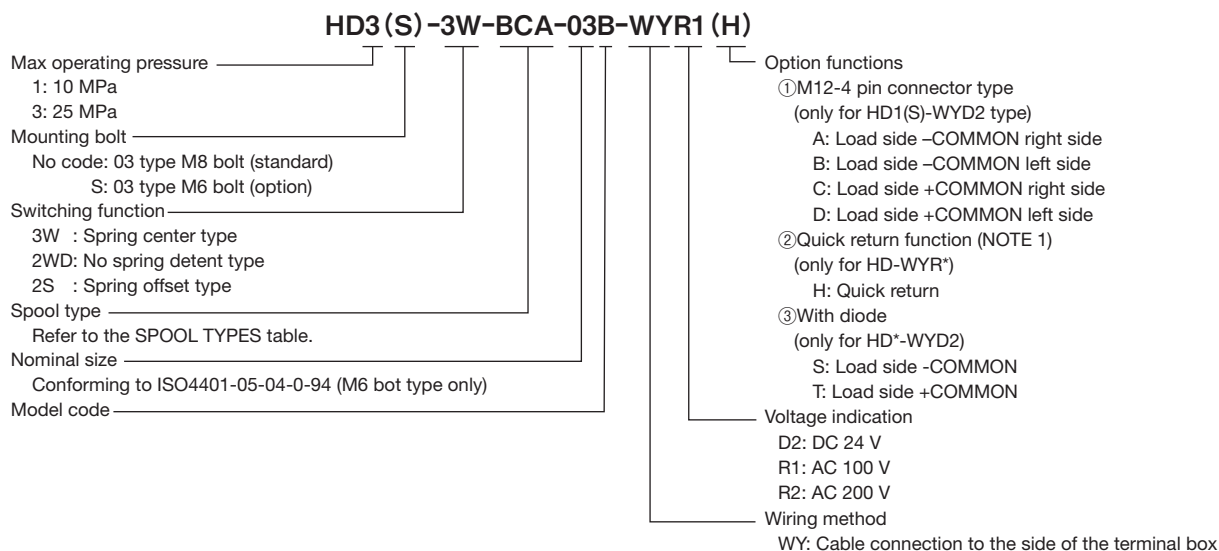
**Features**

- HD3 Series (for 25 MPa)
  1. Compact
  2. High pressure and large capacity
  3. Increased rated flow rate
  4. Increased permissible back pressure
  5. Dust- and water-proof to IEC IP65
  6. Lamp and grounding terminal are standard equipment.
  7. Surge killer is standard equipment.
- HD1 Series (for 10 MPa)
  1. Directly controllable by a programmable controller since the valve operates at low power. (Refer to the solenoid characteristics).

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

- The piping must be arranged so that the R port is always filled with fluid to make the most of the features of the oil-immersed type valve.
- When installing a no-spring type valve, install it so as to set the spool horizontally.
- Finish the mounting faces to the same quality as the valve faces (3.2 μmRz).
- Using a valve with the R port plugged can cause operation failure.
- For valves with detent, to hold the spool position without supplying power to the solenoid the back pressure must be 5 MPa or lower for the HD3 series or 2 MPa or lower for the HD1 series.
- Where a PLC is connected directly, select a type with the diode or M12 -4 pin connector type to protect the PLC output card.

**Description of the model designation**



NOTE 1: The valve with quick return function provides faster response for switching to OFF

**Series selection table**

Series		Power Source		Low Voltage	Surge Absorber	M12 4-pin Connector	Quick Return	Compatibility to DeviceNet
		DC	AC					
Low-pressure Type	HD1 (S) -WYD*	○		○	CR + Varistor			
	HD1 (S) -WYD* (A~D)	○		○	Diode	○		○
	HD1 (S) -WYD* (SorT)	○		○	Diode			○
	HD1 (S) -WYR*		○	○	Rectifier			
	HD1 (S) -WYR*H		○	○	Rectifier		○	
High-pressure Type	HD3 (S) -WYD*	○			CR + Varistor			
	HD3 (S) -WYD* (SorT)	○			Diode			○ (NOTE 2)
	HD3 (S) -WYR*		○		Rectifier			
	HD3 (S) -WYR*H		○		Rectifier		○	

NOTE2: Select the slave unit carefully since the solenoid current value is high.

**Valve specifications**

Series		HD1	HD3
Max. operating pressure	(MPa)	10	25
Max. flow (NOTE 3)	(L/min)	60	120
Permissible back pressure at T port (NOTE 4)	(MPa)	10 (2)	16 (5)
Switching frequency	(CYCLE/s)	2 or lower	
Permissible voltage variation range		Rated voltage ±10% V	
Protection structure class		IEC529 IP65	
Hydraulic fluid cleanliness		Complying with ISO11218-Class 12 (NAS1638-Class 12)	
Operating fluid (recommendation)		ISO VG22, 32, 46	
Viscosity	(mm <sup>2</sup> /s)	15 to 400	
Fluid temperature	(°C)	0 to 65	
Ambient temperature	(°C)	-10 to 50	
Tightening torque	(N·m)	M6: 10 to 12 M8: 13 to 15	
Mass	(kg)	3W, 2WD: 4.8 2S: 3.5	

NOTE 3: For details, refer to the operation limit.  
NOTE 4: Values in parentheses are for the detent type.

**Solenoid specifications**

● HD1 Series

Solenoid model	SLH1-03B-D2	SLH1-03B-R1	SLH1-03B-R2
Rated voltage	DC24V	AC100V	AC200V
Frequency	-	50/60Hz	50/60Hz
Holding current	0.2A	0.06A	0.03A
Power consumption	4.8W	5.8W	6.6W
Voltage variation range	±10%V		

● HD3 Series

Solenoid model	SLH5-03B-D2	SLH5-03B-R1	SLH5-03B-R2
Rated voltage	DC24V	AC100V	AC200V
Frequency	-	50/60Hz	50/60Hz
Holding current	1.5A	0.46A	0.25A
Power consumption	36W	40W	44W
Voltage variation range	±10%V		

**Terminal box**

● Size 03B DC type

Solenoid	Rated Voltage	Terminal Box	
		Double Solenoid Type	Single Solenoid Type
HD $\frac{1}{3}$ (S) -***-***-03B-WY D2	DC24V	TBH3-03B-D1W	TBH3-03B-D1S
HD $\frac{1}{3}$ (S) -***-***-03B-WY D2 S	DC24V	TBH3-03B-D1W-S	TBH3-03B-D1S-S
HD $\frac{1}{3}$ (S) -***-***-03B-WY D2 T	DC24V	TBH3-03B-D1W-T	TBH3-03B-D1S-T
HD1 (S) -***-***-03B-WY D2 A	DC24V	TBH3-03B-D1W-001A	TBH3-03B-D1S-001A
HD1 (S) -***-***-03B-WY D2 B	DC24V	TBH3-03B-D1W-001B	TBH3-03B-D1S-001B
HD1 (S) -***-***-03B-WY D2 C	DC24V	TBH3-03B-D1W-001C	TBH3-03B-D1S-001C
HD1 (S) -***-***-03B-WY D2 D	DC24V	TBH3-03B-D1W-001D	TBH3-03B-D1S-001D

● Size 03B AC type

Solenoid	Rated Voltage	Terminal Box	
		Double Solenoid Type	Single Solenoid Type
HD $\frac{1}{3}$ (S) -***-***-03B-WY R1 R2	AC100V AC200V	TBH3-03B-R1W	TBH3-03B-R1S
HD $\frac{1}{3}$ (S) -***-***-03B-WY R1 R2 H	AC100V AC200V	TBH3-03B-R1W-H	TBH3-03B-R1S-H

**Spool types**

Type	Spring Center	No Spring Detent	Spring Offset
Model	HD*-3W-*-*B-WY*	HD*-2WD-*-*B-WY*	HD*-2S-*-*B-WY*
Spool Type (NOTE 6)	3W-BCA	2WD-BcA	2S-BcA
	3W-BDA		2S-KcP
	3W-BGA		
	3W-AEB (NOTE 5)		

NOTE 5: Spool type 3W-AEB is available only for the HD3 series.  
NOTE 6: For spool types not shown above, please consult us.

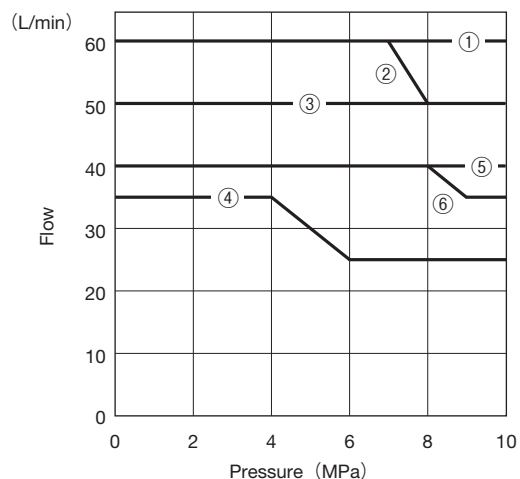


## Valve performance

Operation Limit (Dynamic Viscosity: 33 mm<sup>2</sup>/sec)

The performance will vary slightly depending on the circuit conditions and the operation conditions (voltage, pressure, flow, viscosity, etc.).

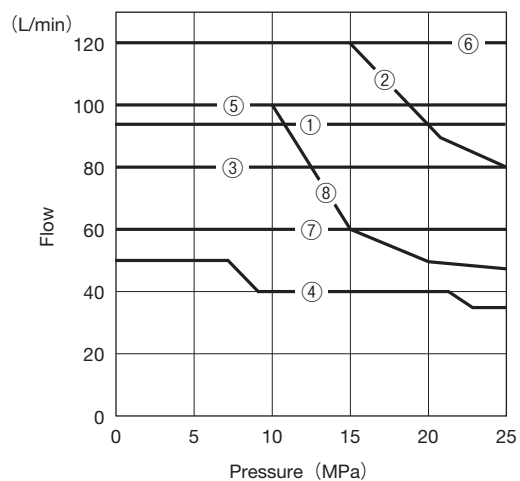
### HD1-03B Series



Circuit	Cylinder circuit	A port blocked	B port blocked
Spool Type			
3W-BCA	①	②	②
3W-BDA	③	③	④
3W-BGA	①	②	②
2WD-BcA	⑤ (③)	③	⑤
2S-BcA	③	①	⑥
2S-KcP		②	④

NOTE: ( ): Indicates the operation limit when used at the cylinder stroke end.

### HD3-03B Series

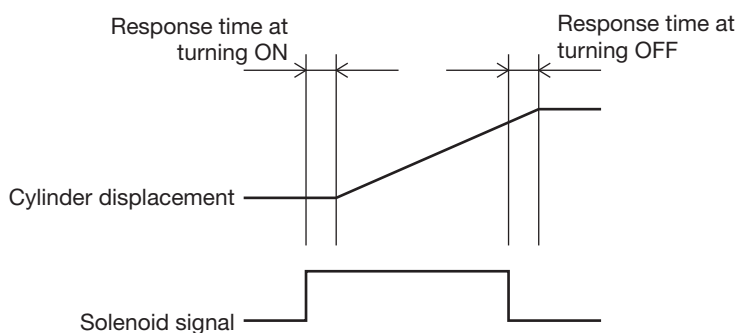


Circuit	Cylinder circuit	A port blocked	B port blocked
Spool Type			
3W-BCA	①	②	②
3W-BDA	③	③	④
3W-BGA	⑤	②	②
3W-AEB	⑦	⑦	⑦
2WD-BcA	① (⑤)	③	③
2S-BcA	③	⑥	⑦
2S-KcP		①	⑧

NOTE: ( ): Indicates the operation limit when used at the cylinder stroke end.

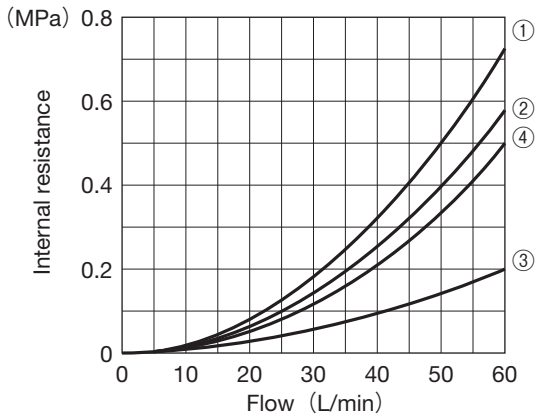
●03B Series

Spool Type	Solenoid Signal	HD1		HD3	
		WYD* WYR*H	WYD*(A·B·C·D) WYD*(S·T) WYR*	WYD* WYR*H	WYD*(A·B·C·D) WYD*(S·T) WYR*
3W-BCA	ON	0.09(sec)	0.09(sec)	0.04(sec)	0.04(sec)
	OFF	0.06(sec)	0.23(sec)	0.02(sec)	0.18(sec)
3W-BDA	ON	0.07(sec)	0.07(sec)	0.04(sec)	0.04(sec)
	OFF	0.05(sec)	0.22(sec)	0.03(sec)	0.16(sec)
3W-BGA	ON	0.10(sec)	0.10(sec)	0.05(sec)	0.05(sec)
	OFF	0.06(sec)	0.25(sec)	0.03(sec)	0.15(sec)
3W-AEB	ON			0.05(sec)	0.05(sec)
	OFF			0.02(sec)	0.10(sec)
2WD-BcA	ON	0.13(sec)	0.13(sec)	0.06(sec)	0.06(sec)
	OFF				
2S-BcA	ON	0.07(sec)	0.07(sec)	0.04(sec)	0.04(sec)
	OFF	0.06(sec)	0.21(sec)	0.04(sec)	0.16(sec)
2S-KcP	ON				
	OFF				

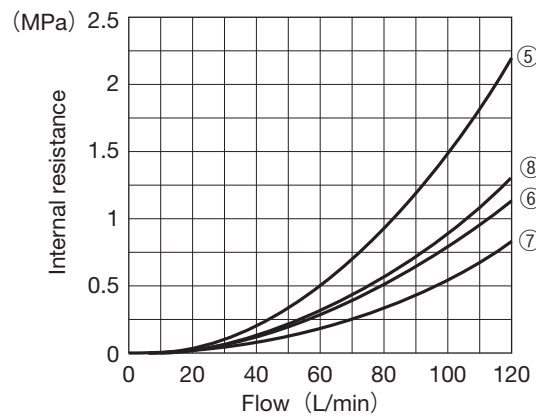


Internal Resistance (Dynamic Viscosity: 33 mm<sup>2</sup>/sec)

●HD1-03B Series



●HD3-03B Series



●HD1-03B Series

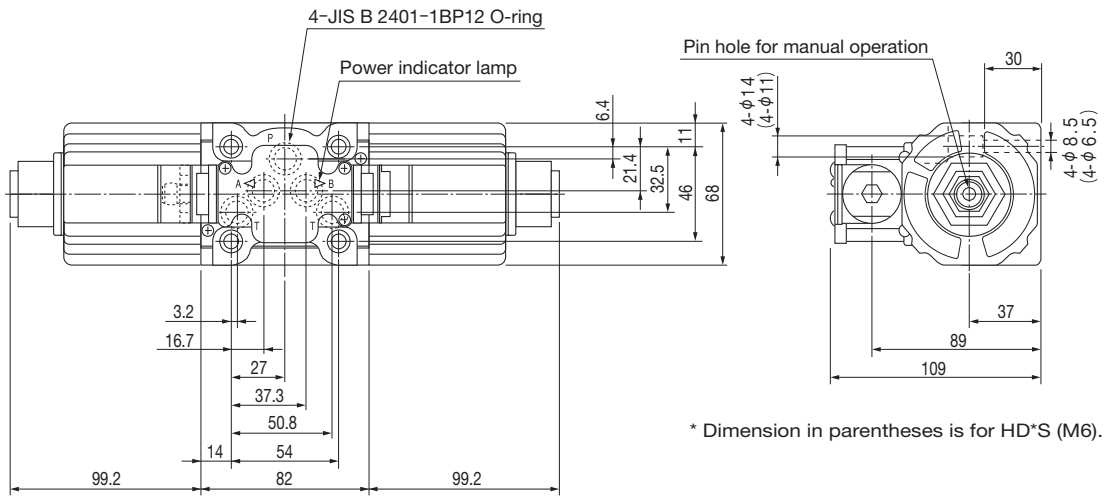
Direction Of Flow	Spool Type	3W			2WD	2S	
		BCA	BDA	BGA	BcA	BcA	KcP
P→A or B		①	②	①	①	①	①
A or B→T		①	③	④	②	①	
P→T			④				

●HD3-03B Series

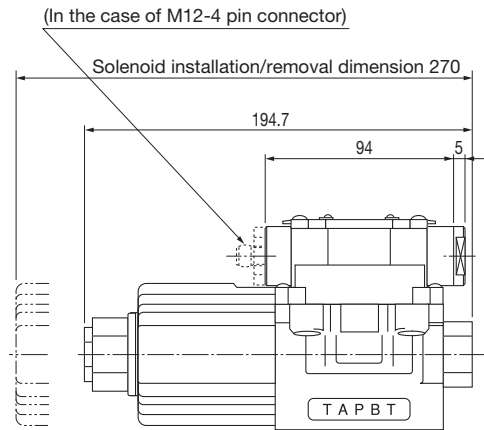
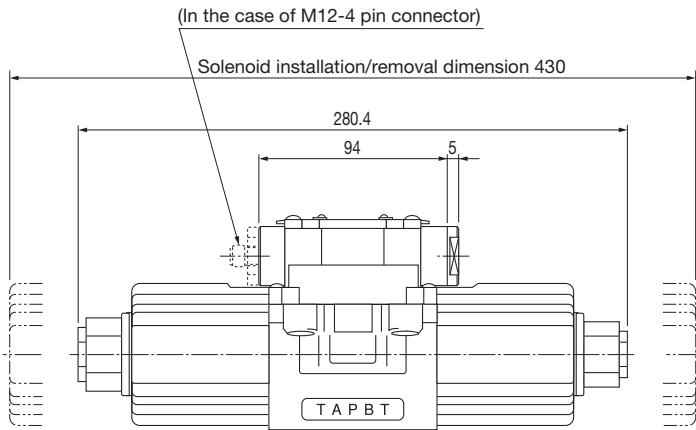
Direction Of Flow	Spool Type	3W			2WD	2S	
		BCA	BDA	BGA	AEB	BcA	KcP
P→A or B		⑤	⑤	⑤	⑤	⑤	⑤
A or B→T		⑥	⑦	⑦	⑤	⑥	⑤
P→T			⑤		⑧		

Outside dimensions

Size 03 series

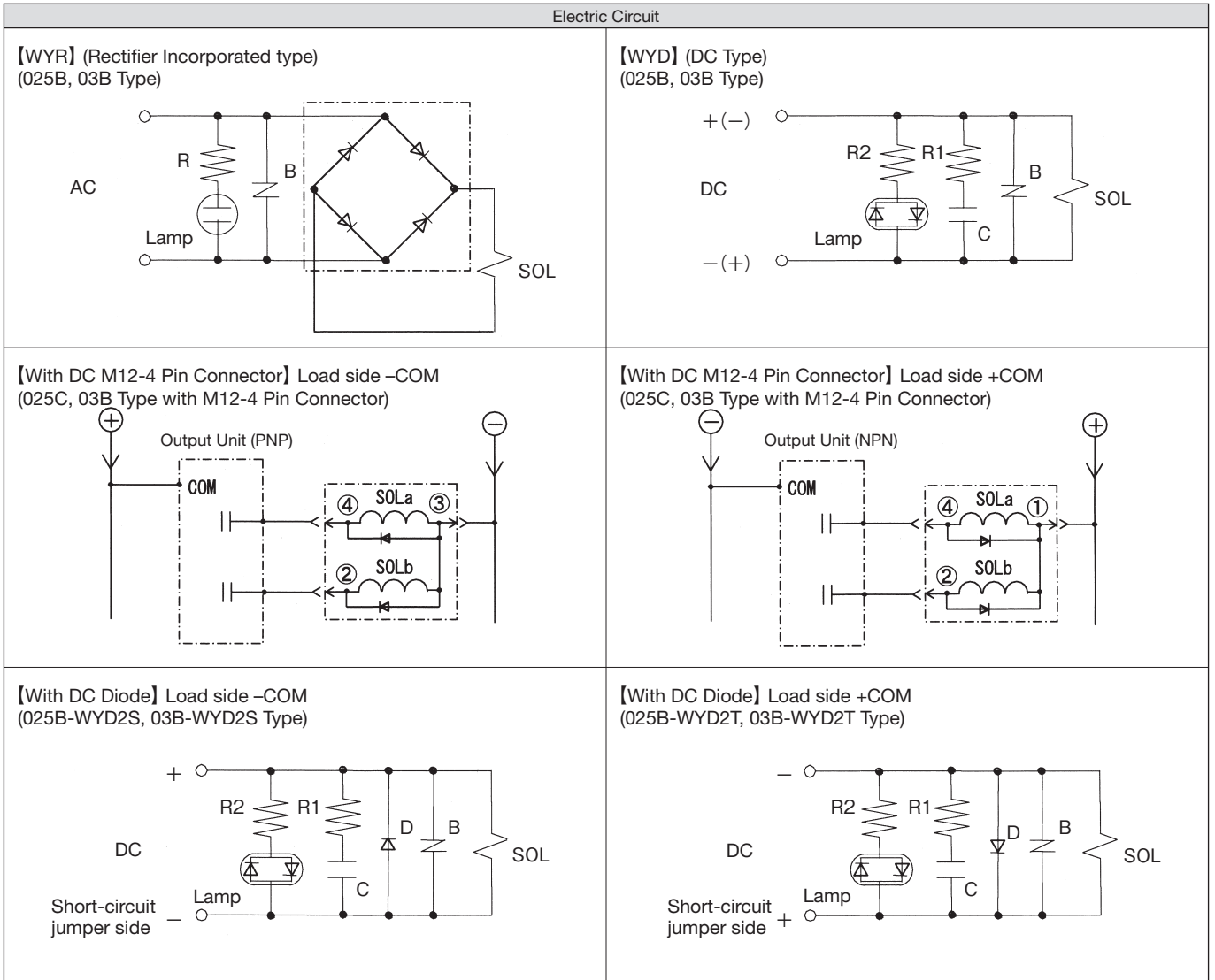
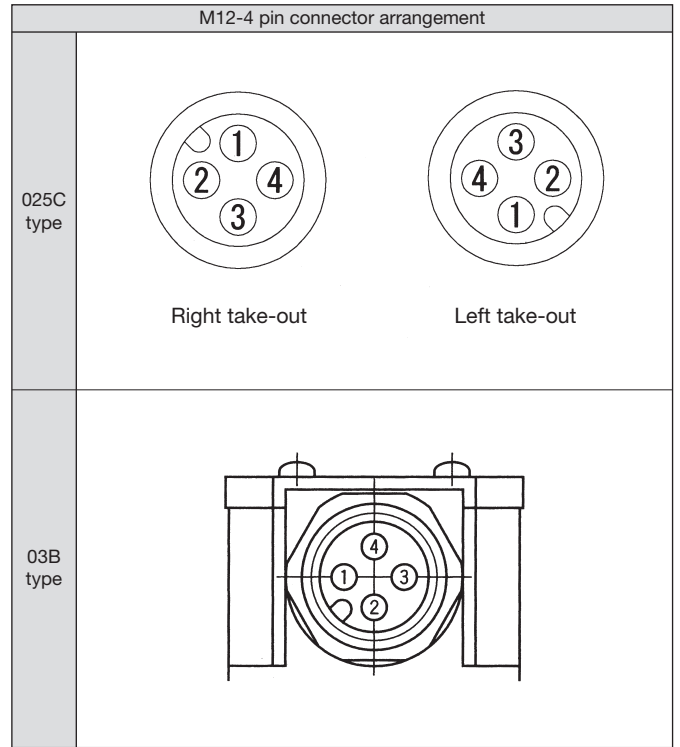
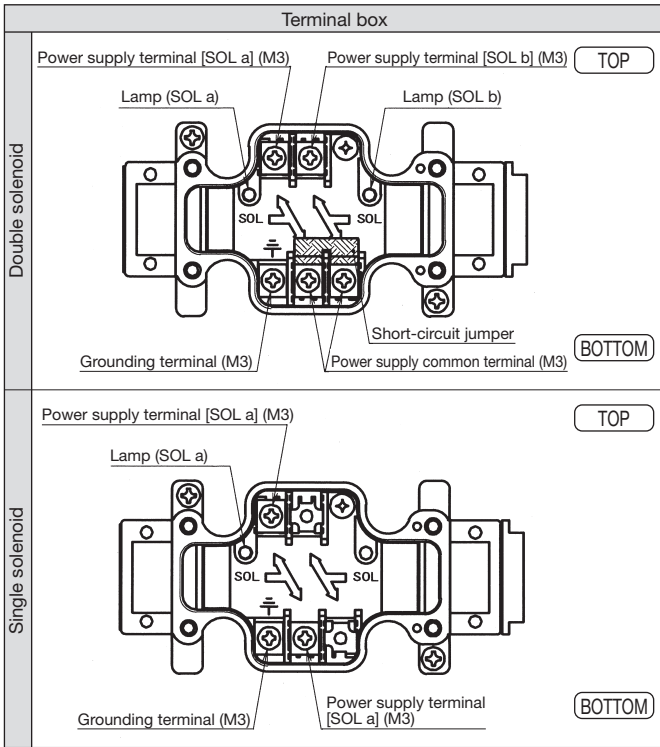


\* Dimension in parentheses is for HD\*S (M6).

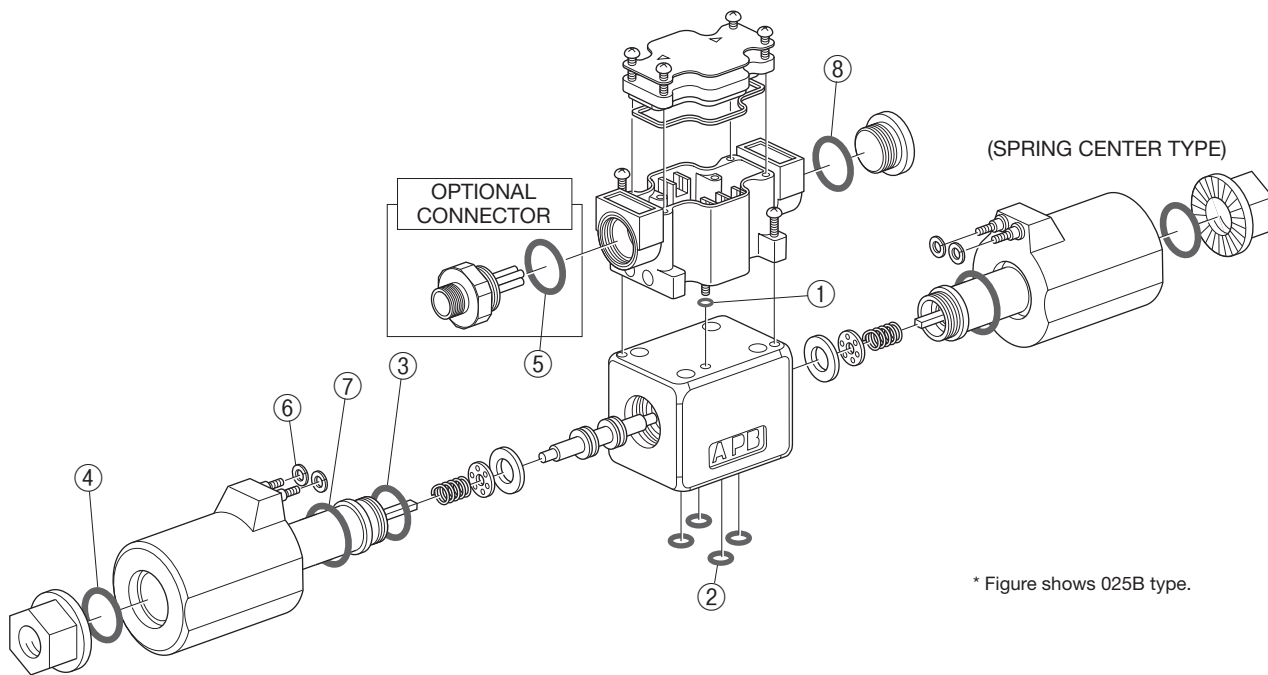


● For the sub-plate SHD03-\*\*T1A, refer to page L-2.  
SHD03-\*\*T3, refer to page L-6.

## ■ Connecting method



■ Packing list



Size 025 Series

No.	Part No.	Name	Q'ty
①	JIS B 2401-1A P4	O-ring	1
②	JIS B 2401-1B P9	O-ring	4
③	JIS B 2401-1B P18	O-ring	2
④	JIS B 2401-1A P20	O-ring	2(1)

No.	Part No.	Name	Q'ty
⑤	JIS B 2401-1A P21	O-ring	1
⑥	S 4	O-ring	4(2)
⑦	S 26	O-ring	2(1)
⑧	AS568-019	O-ring	1

NOTE: ( ): The number of O-rings used in a spring-offset type valve 025C type (M12-4 pin connector type) does not need ①, ⑤ and ⑧.

Size 03 Series

No.	Part No.	Name	Q'ty
①	JIS B 2401-1A P4	O-ring	1
②	JIS B 2401-1B P12	O-ring	5
③	JIS B 2401-1B P18	O-ring	2
④	-	-	-

No.	Part No.	Name	Q'ty
⑤	JIS B 2401-1A P21	O-ring	1
⑥	JIS B 2401-1A P3	O-ring	4(2)
⑦	-	-	-
⑧	AS568-019	O-ring	1

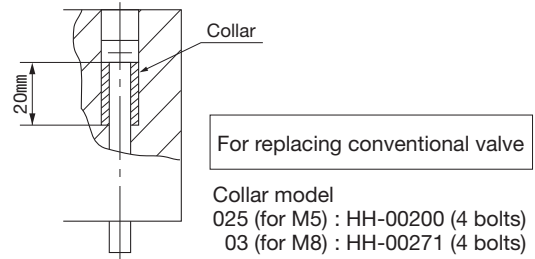
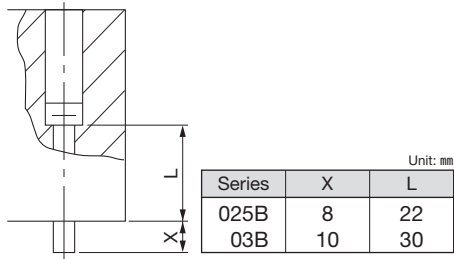
NOTE: ( ): The number of O-rings used in a spring-offset type valve

## ■ Mounting bolts

Mounting bolts are not supplied with valves and should be ordered separately.

Since the mounting bolt seat height of new type valves differs from that of conventional valves, please order the adjusting collars or mounting bolts for a new type valve when replacing a valve in a circuit where stack valves are used.

For the 03B series with M6 type mounting bolts, please order the mounting bolts for a new type valve.



### 025B Series Mounting Bolts for the HY-TEGRA System

Hexagon socket head bolt

No. of Stack Levels	Bolt Type
1	JIS B 1176 M5×30
2	HKS-NA-5×65
3	HKS-NA-5×100
4	HKS-NA-5×135
5	HKS-NA-5×170

Stud bolt

No. of Stack Levels	Bolt Type
1	
2	HKS-NC-5×71
3	HKS-NC-5×106
4	HKS-NC-5×141
5	HKS-NC-5×176

### 023B Series Mounting Bolts for the HY-TEGRA System

M6 hexagon socket head bolt

No. of Stack Levels	Bolt Type
1	JIS B 1176 M6×40
2	HKS-NA-6× 95
3	HKS-NA-6×150
4	HKS-NA-6×205
5	HKS-NA-6×260

M6 stud bolt

No. of Stack Levels	Bolt Type
1	
2	HKS-NC-6×106
3	HKS-NC-6×161
4	HKS-NC-6×216
5	HKS-NC-6×271

M8 hexagon socket head bolt

No. of Stack Levels	Bolt Type
1	JIS B 1176 M8×40
2	HKS-NA-8× 95
3	HKS-NA-8×150
4	HKS-NA-8×205
5	HKS-NA-8×260

M8 stud bolt

No. of Stack Levels	Bolt Type
1	
2	HKS-NC-8×106
3	HKS-NC-8×161
4	HKS-NC-8×216
5	HKS-NC-8×271

- ① Use mounting bolts of the strength category class 12.9.
- ② Stud bolts are supplied with nuts.
- ③ If an M6 type solenoid valve is used for the 03B series, also use an M6 type (H\*3HS) HY-TEGRA valve.

## ■ Compatibility with standards

### CE

All types of valves in the catalogs conform to “CE marking” directives.  
 Directive: 73/23EEC, 93/68/EEC Low Voltage Directive (VDE 0580:200)

### UL

Please consult us.

■ New and previous solenoid valve model compatibility table

Previous valve model	New valve model	Remark	
Solenoid valve (low pressure) HD1-**-**A-WYD2 Low-noise solenoid valve HD1-4**-**B-DC	HD1-**-**B-WYD2	Equivalent to previous valve	
	HD1-**- <sup>025C</sup> <sub>03B</sub> -WYD2A	M12 4-pin connector + Diode (back electromotive force prevention)	
	HD1-**- <sup>025C</sup> <sub>03B</sub> -WYD2B		
	HD1-**- <sup>025C</sup> <sub>03B</sub> -WYD2C		
	HD1-**- <sup>025C</sup> <sub>03B</sub> -WYD2D		
	HD1-**-**B-WYD2S	With diode (back electromotive force prevention)	
	HD1-**-**B-WYD2T		
Solenoid valve (low pressure) HD1-**-**A-WYA*	HD1-**-**B-WYR*	Equivalent to previous valve	
	HD1-**-**B-WYR*H	Equivalent to previous valve (quick return)	
Compact solenoid valve HD1-4**-**025A-WY (DC24V)	HD1N-**-**025-D2	Equivalent to previous valve	
	HD1N-**-**025-D2A	M12 4-pin connector + Diode (back electromotive force prevention)	
	HD1N-**-**025-D2B		
	HD1N-**-**025-D2C		
	HD1N-**-**025-D2D		
	HD1N-**-**025-D2S	With diode (back electromotive force prevention)	
	HD1N-**-**025-D2T		
Compact solenoid valve HD1-4**-**025A-WY (AC* V)	HD1N-**-**025-A*	Equivalent to previous valve	
	HD1-**-**B-WYR*H	Equivalent to previous valve (quick return)	
Low-noise, low-shock solenoid valve HD1C-**-**03C-D* -R*	EHD3-D-**-03A-S*	Changed to current control type Please consult us.	
Low power consumption type solenoid valve HD3-**-**A-LYD2 Solenoid valve (high pressure) HD3-**-**A-WYD2 Solenoid valve (DIN terminal) HD3-**-**A-WDD2	HD1-**-**B-WYD2	For a maximum operating pressure of 10 MPa or lower	Equivalent to previous valve
	HD1-**- <sup>025C</sup> <sub>03B</sub> -WYD2A		M12 4-pin connector + Diode (back electromotive force prevention)
	HD1-**- <sup>025C</sup> <sub>03B</sub> -WYD2B		
	HD1-**- <sup>025C</sup> <sub>03B</sub> -WYD2C		With diode (back electromotive force prevention)
	HD1-**- <sup>025C</sup> <sub>03B</sub> -WYD2D		
	HD1-**-**B-WYD2S		
	HD1-**-**B-WYD2T		
	HD3-**-**B-WYD2	For a maximum operating pressure higher than 10 MPa	Equivalent to previous valve
	HD3-**-**B-WYD2S		With diode (back electromotive force prevention)
	HD3-**-**B-WYD2T		
Low power consumption type solenoid valve HD3-**-**A-LYA* Solenoid valve (high pressure) HD3-**-**A-WYA* Solenoid valve (DIN terminal) HD3-**-**A-WDA*	HD1-**-**B-WYR*	For a maximum operating pressure of 10 MPa or lower	Equivalent to previous valve
	HD1-**-**B-WYR*H		
	HD3-**-**B-WYR*	For a maximum operating pressure higher than 10 MPa	Equivalent to previous valve
	HD3-**-**B-WYR*H		
Solenoid valve HD3-**-**A-WYR* Low power consumption type solenoid valve HD3-4**-**A-RF	HD1-**-**B-WYR*	For a maximum operating pressure of 10 MPa or lower	Equivalent to previous valve
	HD3-**-**B-WYR*	For a maximum operating pressure higher than 10 MPa	Equivalent to previous valve
Low-noise, low-shock solenoid valve HD3C-**-**C-D* -R*	EHD3A-D-**-03A-S*	Changed to current control type Please consult us.	
Solenoid valve (low pressure) HD1-**-**025B-WYD2 <sub>A B C D</sub>	HD1-**-**025C-WYD2 <sub>A B C D</sub>	M12 4-pin connector + Diode (back electromotive force prevention)	

