

■ 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-025D-WYR1 (H)

Max operating pressure (NOTE 1)

- 1: 10 MPa
- 3: 25 MPa
- 5: 35 MPa

Switching function

- 3W : Spring center type
- 2WD: No spring detent type
- 2S : Spring offset type

Spool type

Refer to the SPOOL TYPES table.

Nominal size

025: Conforming to ISO4401-03-02-0-94

Model code

Option functions

① M12-4 pin connector type
(only for HD1*-*-025D-WYD2 type)

Refer 'HD1E' catalogue

C: Load side +COMMON right side

D: Load side +COMMON left side

② Quick return function (NOTE 2)

(only for HD*-*-025D-WYR*)

H: Quick return

③ With diode

(only for HD*-*-025D-WYD2)

S: Load side -COMMON

T: Load side +COMMON

Voltage indication

D2: DC 24 V

R1: AC100V

R3: AC110V

R2: AC200V

R4: AC220V

Wiring method

WY: Cable connection to the side of the terminal box

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-WYD2	○		○	CR + Varistor			
	HD1-WYD2 (A~D)	○						○
	HD1-WYD2 (SorT)	○		○	Diode			○
	HD1-WYR*		○	○	Rectifier			
	HD1-WYR*H		○	○	Rectifier		○	
High-pressure Type	HD3-5-WYD2	○			CR + Varistor			
	HD3-5-WYD2 (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	
Permissible back pressure at T port (NOTE 6) (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 ² /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		
Overseas safety standards	Conforming to CE marking		

NOTE 5: For details, refer to the operation limit.
 NOTE 6: Values in parentheses are for the detent type.

Solenoid specifications

● HD1 Series

Solenoid model	SLH1-025D-D2	SLH1-025D-R1	SLH1-025D-R2	SLH1-025D-R3	SLH1-025D-R4
Rated voltage	DC24V	AC100V	AC200V	AC110V	AC220V
Frequency	50/60Hz				
Holding current	Refer 'HD1E' catalog	0.07A	0.04A	0.06A	0.035A
Power consumption	4.8W	6.5W	7.1W	6.1W	6.9W
Voltage variation range	±10%V				

● HD3 / HD5 Series

Solenoid model	SLH5-025D-D2	SLH5-025D-R1	SLH5-025D-R2	SLH5-025D-R3	SLH5-025D-R4
Rated voltage	DC24V	AC100V	AC200V	AC110V	AC220V
Frequency	50/60Hz				
Holding current	1.2A	0.35A	0.19A	0.32A	0.16A
Power consumption	29W	31W	33W	31W	32W
Voltage variation range	±10%V				

Terminal box

● Size 025D AC type

Solenoid	Rated Voltage	Terminal Box	
		Double Solenoid Type	Single Solenoid Type
1 HD3-***-***-025D-WY 5	R1 AC100V R2 AC200V R3 AC110V R4 AC220V	TBH3-025B-R1W	TBH3-025B-R1S
1 HD3-***-***-025D-WY 5	R1 AC100V R2 AC200V R3 AC110V R4 AC220V	TBH3-025B-R1W-HA	TBH3-025B-R1S-HA

● Size 025D DC type

Solenoid	Rated Voltage	Terminal Box	
		Double Solenoid Type	Single Solenoid Type
HD ₃ ³ -***-***-025D-WYD2 5	DC24V	TBH3-025B-D1W	TBH3-025B-D1S
HD ₃ ³ -***-***-025D-WYD2S 5	DC24V	TBH3-025B-D1W-S	TBH3-025B-D1S-S
HD ₃ ³ -***-***-025D-WYD2T 5	DC24V	TBH3-025B-D1W-T	TBH3-025B-D1S-T

● Size 025D type

Solenoid	Rated Voltage	Terminal Box	
		Double Solenoid Type	Single Solenoid Type
HD1-***-***-025D-WYD2C	DC24V	TBH3-025C-D1W-MC	TBH3-025C-D1S-MC
HD1-***-***-025D-WYD2D	DC24V	TBH3-025C-D1W-MD	TBH3-025C-D1S-MD

Spool types

Type	Spring Center	No Spring Detent	Spring Offset
Model	HD*-3W-*-*D-WY*	HD*-2WD-*-*D-WY*	HD*-2S-*-*D-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.

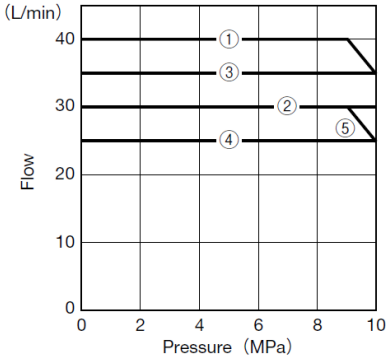
Valve performance

Operation Limit (Dynamic Viscosity: 33 mm²/sec)

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

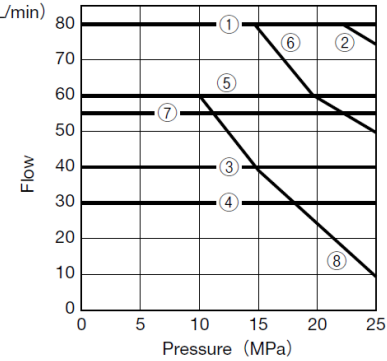
The flow rate value in the performance graphs includes surge flow.

HD1-025D Series



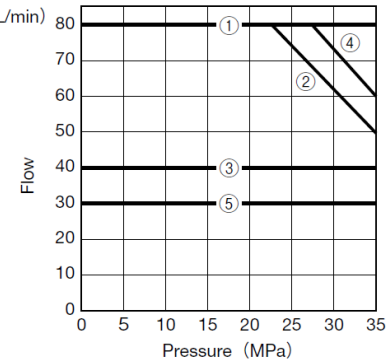
Circuit	Cylinder circuit	A port blocked	B port blocked
Spool Type			
3W-BCA	①	②	②
3W-BDA	②	②	②
3W-BGA	①	②	②
2WD-BcA	②	①	①
2S-BcA	③	③	④
2S-KcP		⑤	①

HD3-025D Series

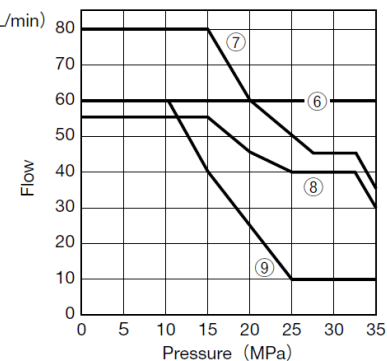


Circuit	Cylinder circuit	A port blocked	B port blocked
Spool Type			
3W-BCA	①	②	②
3W-BDA	③	③	③
3W-BGA	①	②	②
3W-AEB	④	④	④
2WD-BcA	⑤	③	③
2S-BcA	⑤	⑥	⑦
2S-KcP		⑥	⑧

HD5-025D 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

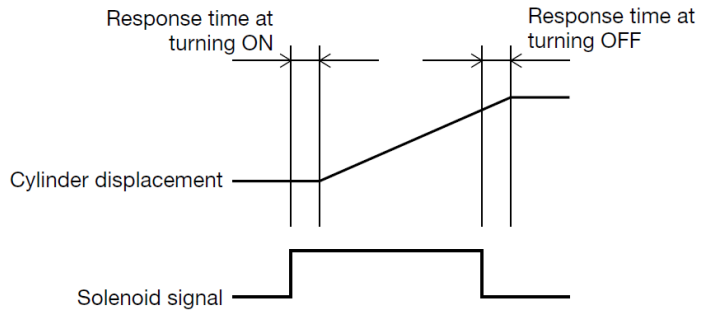


Switching Response Time (Dynamic Viscosity: 33 mm²/sec)

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

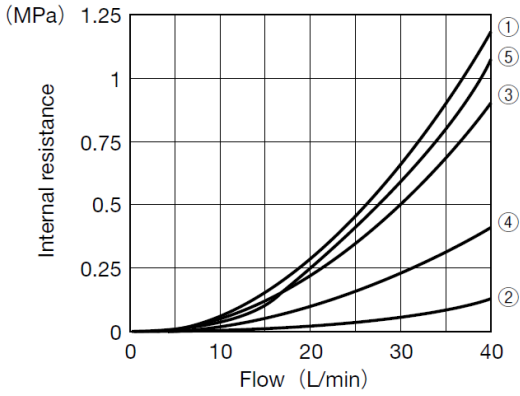
● 025 Series

Spool Type	Solenoid Signal	HD1		HD3·HD5	
		WYD2 WYR*H	WYD2(S·T) WYR* [†]	WYD2 WYR*H	WYD2(A·B·C·D) WYD2(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				

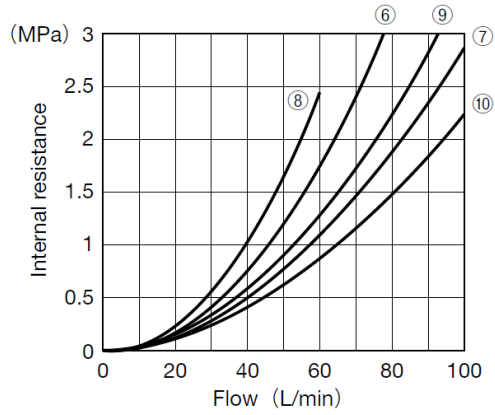


SOLENOID VALVES / DIRECTIONAL CONTROL VALVES

●HD1-025D Series



●HD3/5-025D Series



●HD1-025D 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				

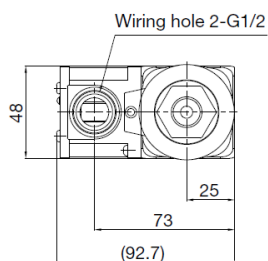
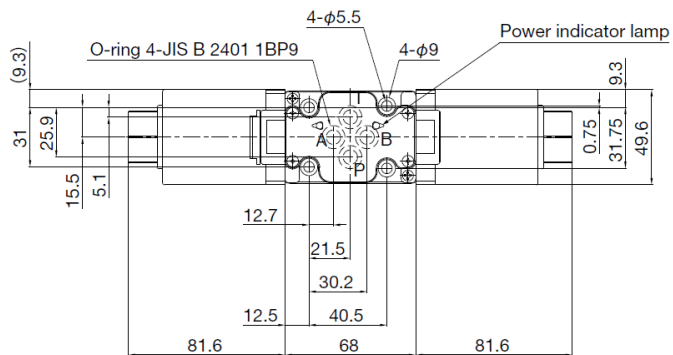
●HD3/5-025D Series

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

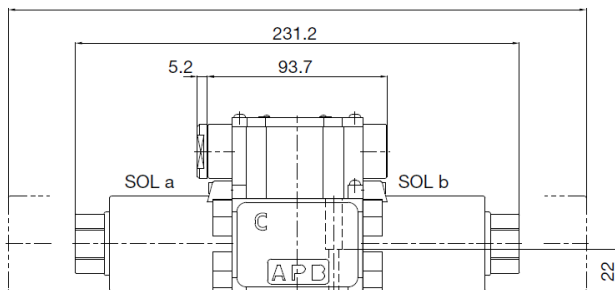


Outside dimensions

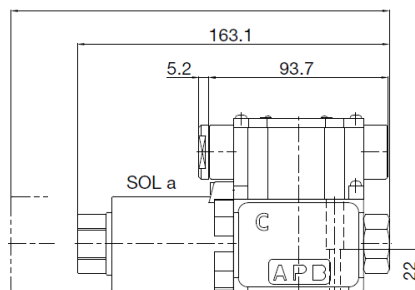
Type 025D (Terminal box type)



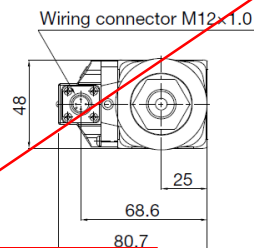
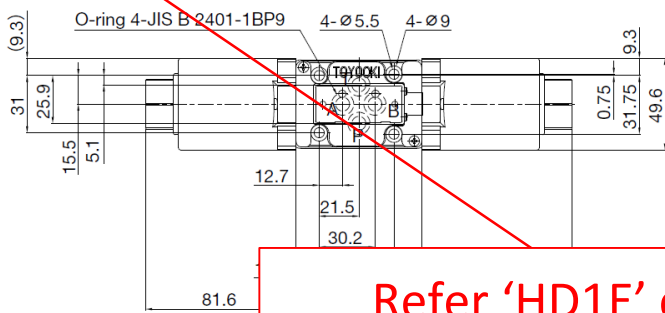
Solenoid installation/removal dimension 359



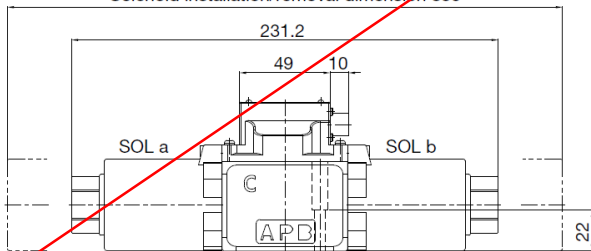
Solenoid installation/removal dimension 227



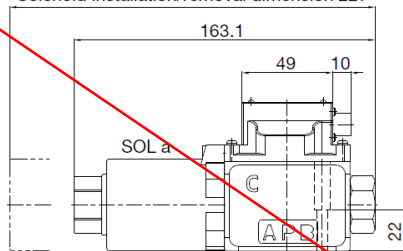
Type 025D (M12-4 pin connector type)



Solenoid installation/removal dimension 359

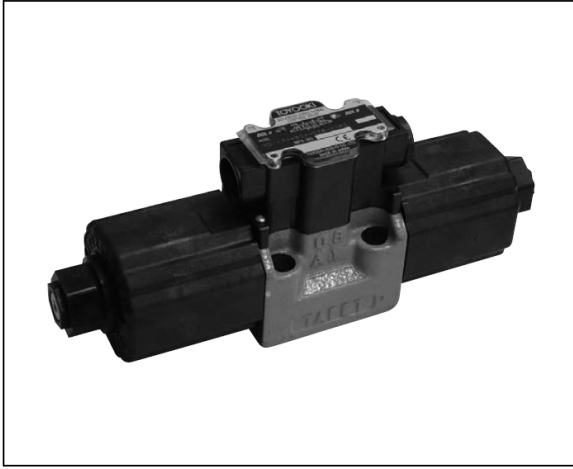


Solenoid installation/removal dimension 227



Refer 'HD1E' cataloge

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



Features

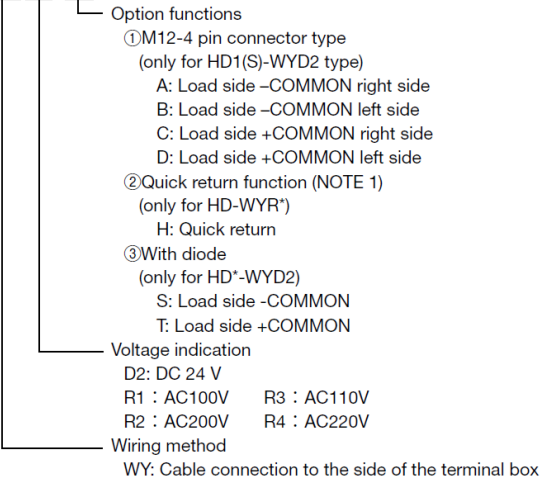
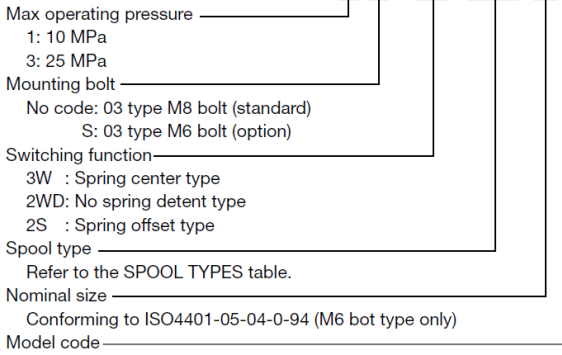
- HD3 Series (for 25 MPa)
 1. Compact
 2. High pressure and large capacity
 3. Increased rated flow rate
 4. Increased permissible back pressure
 5. Dust- and water-proof to IEC IP65
 6. Lamp and grounding terminal are standard equipment.
 7. Surge killer is standard equipment.
- HD1 Series (for 10 MPa)
 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

HD3(S)-3W-BCA-03B-WYR1(H)



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)-WYD2	○		○	CR + Varistor			
	HD1(S)-WYD2(A~D)	○		○	Diode	○		○
	HD1(S)-WYD2(SorT)	○		○	Diode			○
	HD1(S)-WYR*		○	○	Rectifier			
	HD1(S)-WYR'H		○	○	Rectifier		○	
High-pressure Type	HD3(S)-WYD2	○			CR + Varistor			
	HD3(S)-WYD2(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 ² /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	
Overseas safety standards	Conforming to CE marking	

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	SLH1-03B-R3	SLH1-03B-R4
Rated voltage	DC24V	AC100V	AC200V	AC110V	AC220V
Frequency	50/60Hz				
Holding current	0.2A	0.06A	0.03A	0.06A	0.03A
Power consumption	4.8W	5.8W	6.6W	6.1W	6.6W
Voltage variation range	±10%V				

● HD3 Series

Solenoid model	SLH5-03B-D2	SLH5-03B-R1	SLH5-03B-R2	SLH5-03B-R3	SLH5-03B-R4
Rated voltage	DC24V	AC100V	AC200V	AC110V	AC220V
Frequency	50/60Hz				
Holding current	1.5A	0.46A	0.25A	0.41A	0.23A
Power consumption	36W	40W	44W	40W	45W
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-WYD2	DC24V	TBH3-03B-D1W	TBH3-03B-D1S
HD $\frac{1}{3}$ (S) -***-***-03B-WYD2S	DC24V	TBH3-03B-D1W-S	TBH3-03B-D1S-S
HD $\frac{1}{3}$ (S) -***-***-03B-WYD2T	DC24V	TBH3-03B-D1W-T	TBH3-03B-D1S-T
HD1 (S) -***-***-03B-WYD2A	DC24V	TBH3-03B-D1W-001A	TBH3-03B-D1S-001A
HD1 (S) -***-***-03B-WYD2B	DC24V	TBH3-03B-D1W-001B	TBH3-03B-D1S-001B
HD1 (S) -***-***-03B-WYD2C	DC24V	TBH3-03B-D1W-001C	TBH3-03B-D1S-001C
HD1 (S) -***-***-03B-WYD2D	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 R3 R4	AC100V AC200V AC110V AC220V	TBH3-03B-R1W	TBH3-03B-R1S
HD $\frac{1}{3}$ (S) -***-***-03B-WY R1 R2 R3 H R4	AC100V AC200V AC110V AC220V	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)		

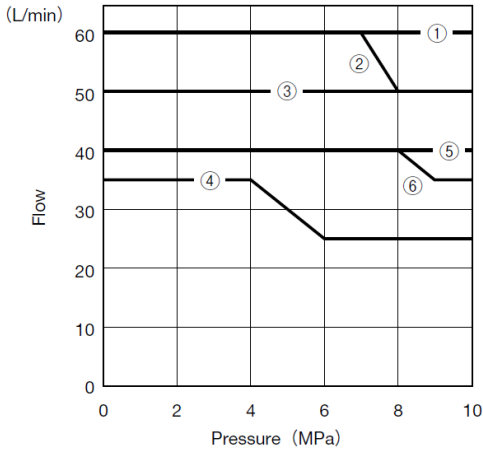
NOTE 5: Spool type 3W-AEB is available only for the HD3 series.
NOTE 6: For spool types not shown above, please consult us.

Valve performance

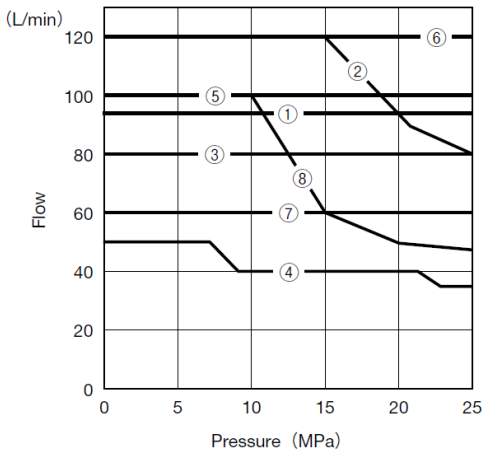
Operation Limit (Dynamic Viscosity: 33 mm²/sec)

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

●HD1-03B Series



●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	①	②	②
2WD-BcA	⑤ (③)	③	⑤
2S-BcA	③	①	⑥
2S-KcP		②	④

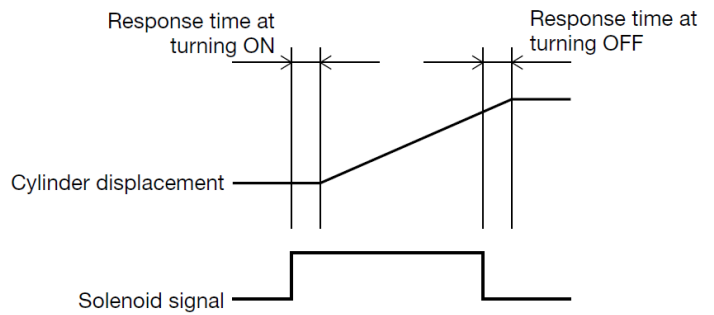
NOTE: (): Indicates the operation limit when used at the cylinder stroke end.

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.

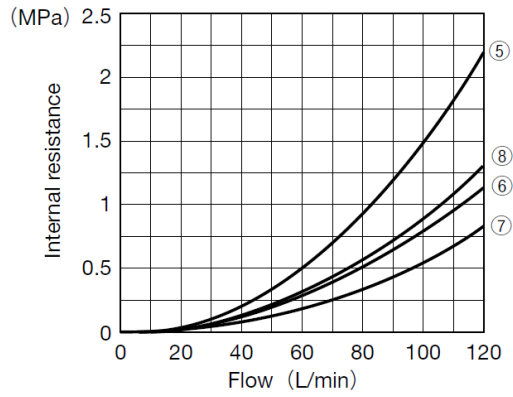
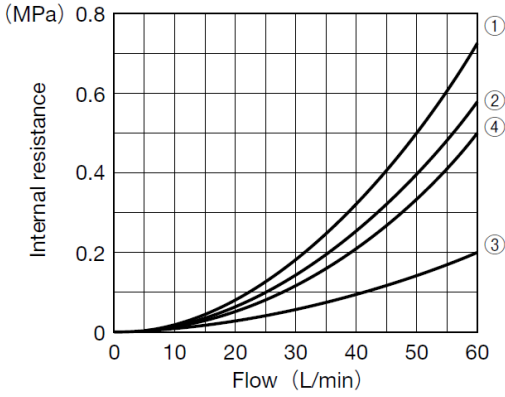
●03B Series

Spool Type	Solenoid Signal	HD1		HD3	
		WYD2 WYR*H	WYD2 (A·B·C·D) WYD2 (S·T) WYR*	WYD2 WYR*H	WYD2 (A·B·C·D) WYD2 (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				



●HD1-03B Series

●HD3-03B Series



●HD1-03B Series

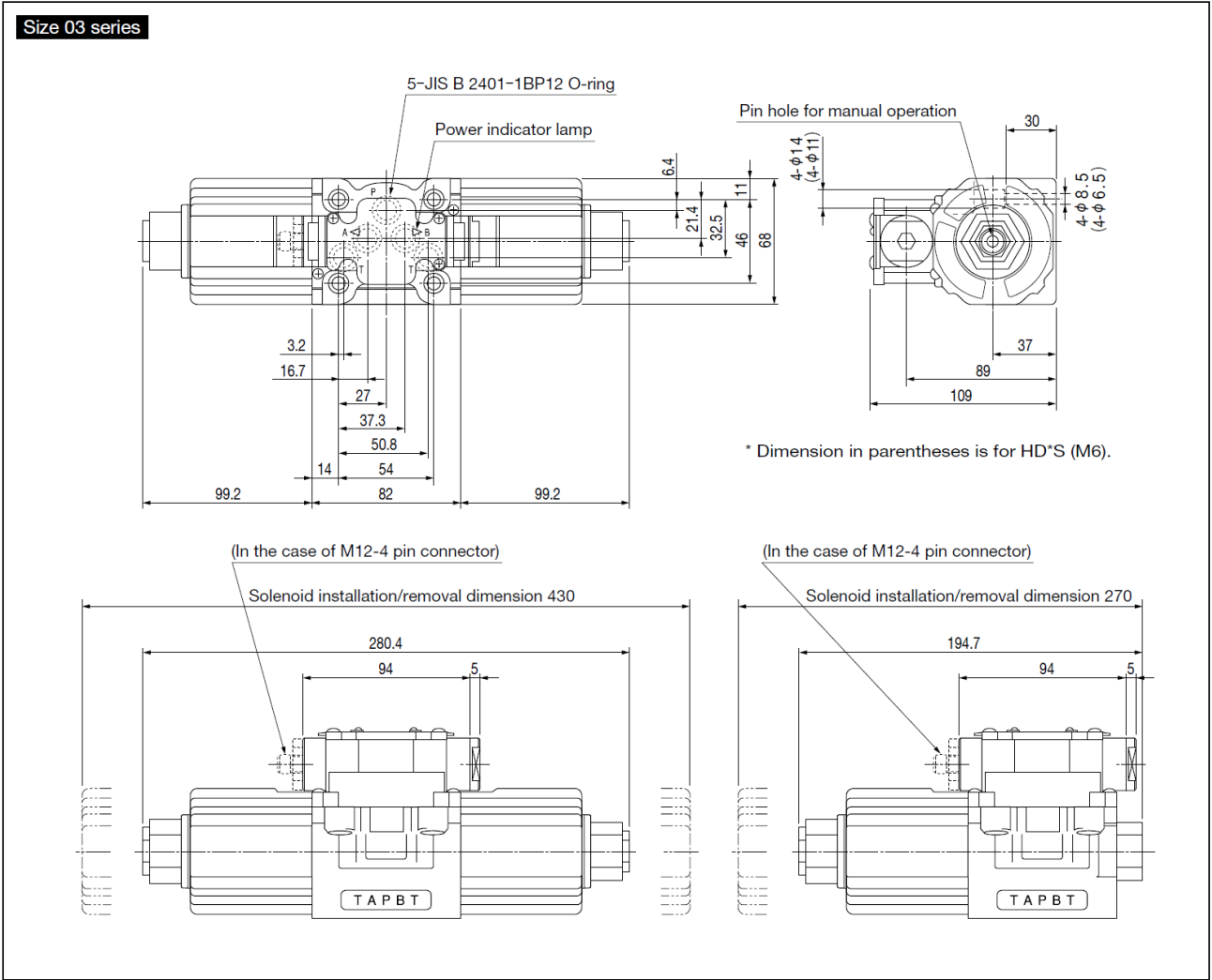
Direction Of Flow \ Spool Type	3W			2WD	2S	
	BCA	BDA	BGA	BcA	BcA	KcP
P→A or B	①	②	①	①	①	①
A or B→T	①	③	④	②	①	
P→T		④				

●HD3-03B Series

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

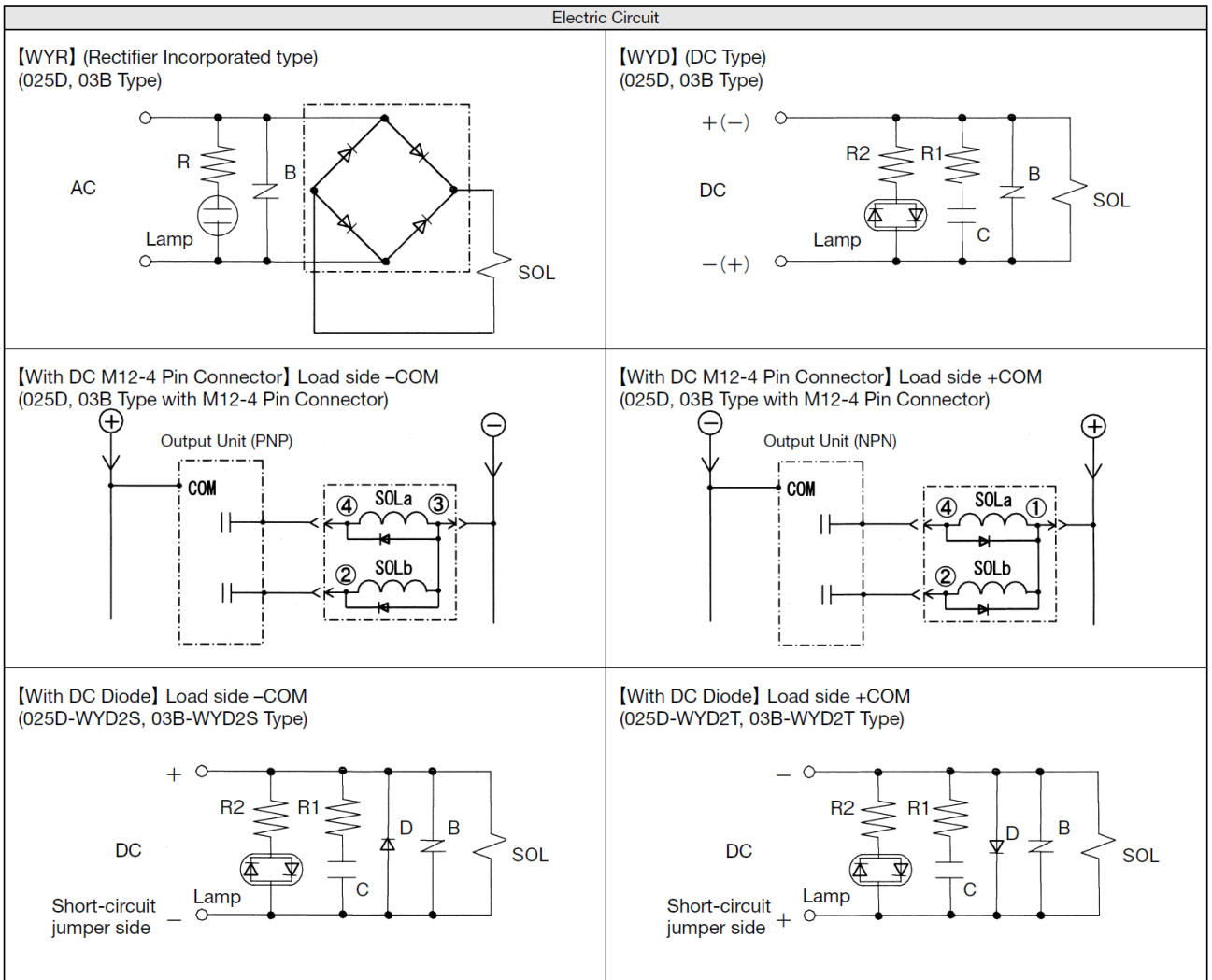
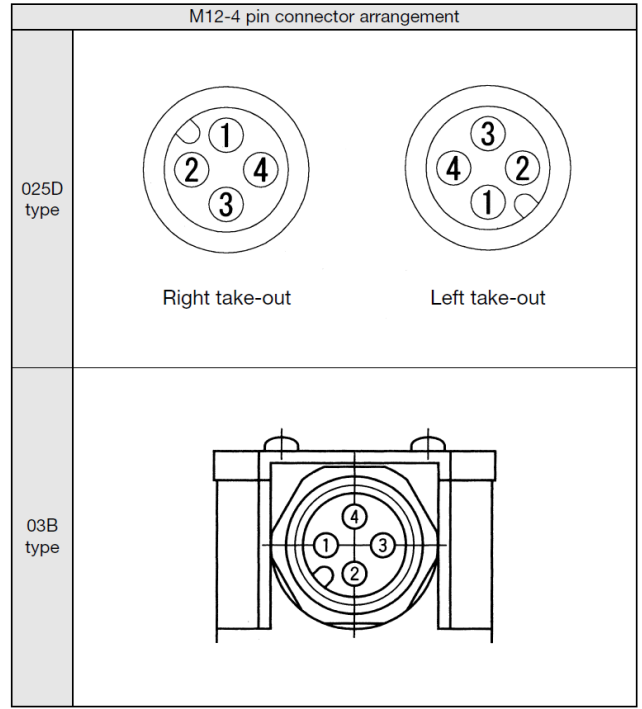
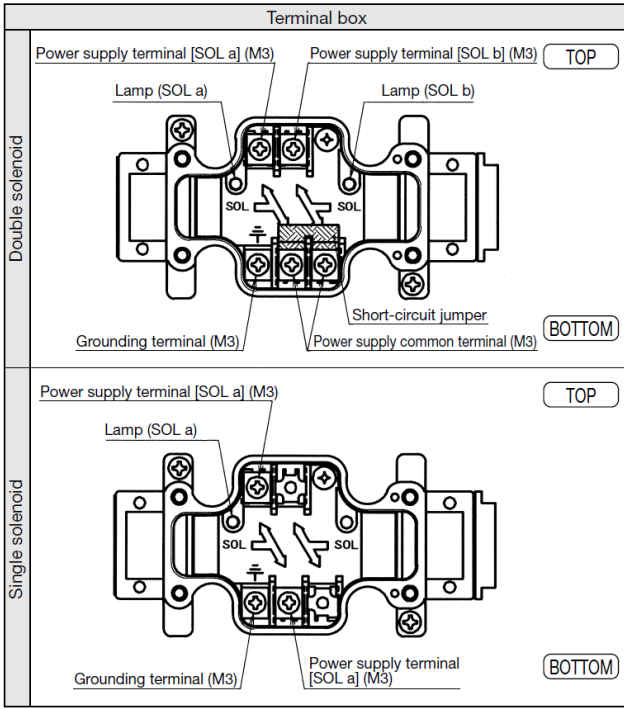


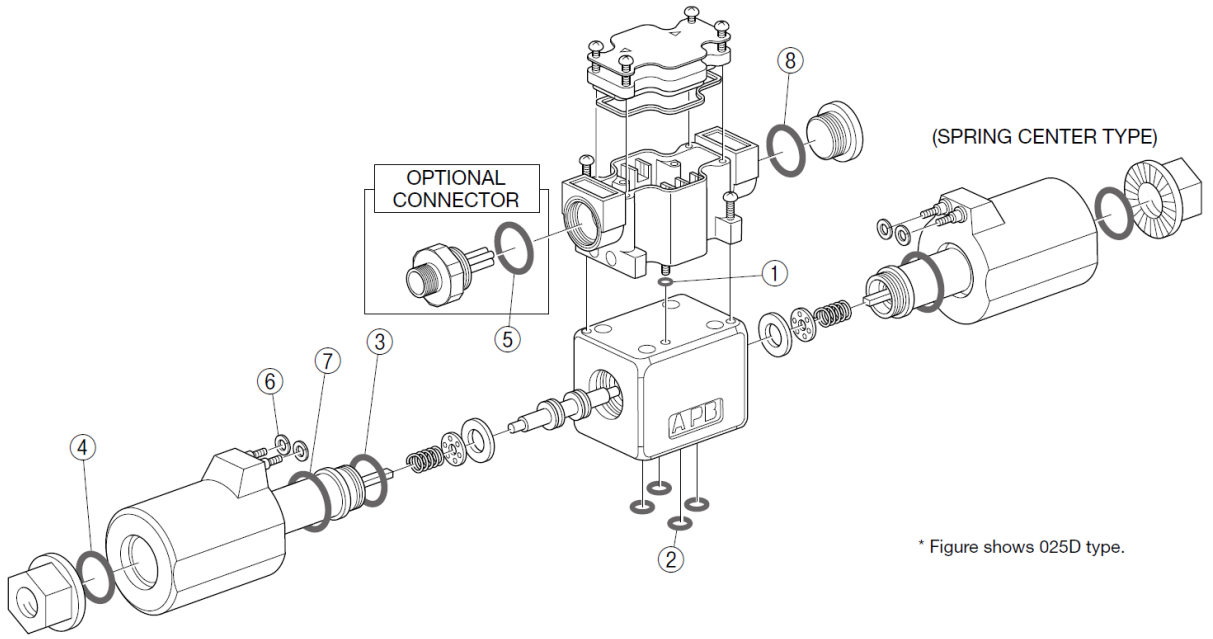
■ Outside dimensions



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

■ Connecting method





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 025D 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

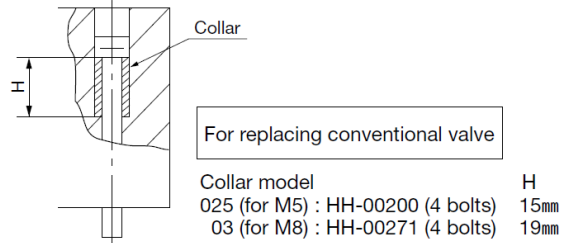
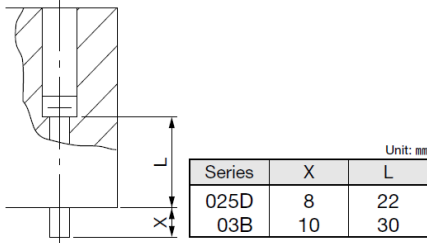
NOTE: () : The number of O-rings used in a spring-offset type valve

■ 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. (This is not necessary when changing from 025B series to 025D series.)

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



025D 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 M6×30
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" 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

Type	Max. operation pressure	Voltage	Previous valve model (025B, 025C)	New valve model (025D)	Remark			
Terminal Box	10MPa	For AC	HD1-2S-***-025B-WYR*	HD1-2S-***-025D-WYR*				
			HD1-2S-***-025B-WYR*H	HD1-2S-***-025D-WYR*H	Quick return			
			HD1-2WD-***-025B-WYR*	HD1-2WD-***-025D-WYR*				
			HD1-2WD-***-025B-WYR*H	HD1-2WD-***-025D-WYR*H	Quick return			
			HD1-3W-***-025B-WYR*	HD1-3W-***-025D-WYR*				
			HD1-3W-***-025B-WYR*H	HD1-3W-***-025D-WYR*H	Quick return			
		For DC	HD1-2S-***-025B-WYD2	HD1E-2S-***-025-WYD2				
			HD1-2S-***-025B-WYD2S	HD1E-2S-***-025-WYD2S	Diode	Load side -COMMON		
			HD1-2S-***-025B-WYD2T	HD1E-2S-***-025-WYD2T	Diode	Load side +COMMON		
			HD1-2WD-***-025B-WYD2	HD1E-2WD-***-025-WYD2				
			HD1-2WD-***-025B-WYD2S	HD1E-2WD-***-025-WYD2S	Diode	Load side -COMMON		
			HD1-2WD-***-025B-WYD2T	HD1E-2WD-***-025-WYD2T	Diode	Load side +COMMON		
			HD1-3W-***-025B-WYD2	HD1E-3W-***-025-WYD2				
			HD1-3W-***-025B-WYD2S	HD1E-3W-***-025-WYD2S	Diode	Load side -COMMON		
			HD1-3W-***-025B-WYD2T	HD1E-3W-***-025-WYD2T	Diode	Load side +COMMON		
			25MPa	For AC	HD3-2S-***-025B-WYR*	HD3-2S-***-025D-WYR*		
					HD3-2S-***-025B-WYR*H	HD3-2S-***-025D-WYR*H	Quick return	
					HD3-2WD-***-025B-WYR*	HD3-2WD-***-025D-WYR*		
	HD3-2WD-***-025B-WYR*H	HD3-2WD-***-025D-WYR*H			Quick return			
	HD3-3W-***-025B-WYR*	HD3-3W-***-025D-WYR*						
	HD3-3W-***-025B-WYR*H	HD3-3W-***-025D-WYR*H			Quick return			
	For DC	HD3-2S-***-025B-WYD2		HD3-2S-***-025D-WYD2				
		HD3-2S-***-025B-WYD2S		HD3-2S-***-025D-WYD2S	Diode	Load side -COMMON		
		HD3-2S-***-025B-WYD2T		HD3-2S-***-025D-WYD2T	Diode	Load side +COMMON		
		HD3-2WD-***-025B-WYD2		HD3-2WD-***-025D-WYD2				
		HD3-2WD-***-025B-WYD2S		HD3-2WD-***-025D-WYD2S	Diode	Load side -COMMON		
		HD3-2WD-***-025B-WYD2T		HD3-2WD-***-025D-WYD2T	Diode	Load side +COMMON		
		HD3-3W-***-025B-WYD2		HD3-3W-***-025D-WYD2				
		HD3-3W-***-025B-WYD2S		HD3-3W-***-025D-WYD2S	Diode	Load side -COMMON		
		HD3-3W-***-025B-WYD2T		HD3-3W-***-025D-WYD2T	Diode	Load side +COMMON		
		35MPa		For AC	HD5-2S-***-025B-WYR*	HD5-2S-***-025D-WYR*		
					HD5-2S-***-025B-WYR*H	HD5-2S-***-025D-WYR*H	Quick return	
					HD5-2WD-***-025B-WYR*	HD5-2WD-***-025D-WYR*		
	HD5-2WD-***-025B-WYR*H		HD5-2WD-***-025D-WYR*H		Quick return			
	HD5-3W-***-025B-WYR*		HD5-3W-***-025D-WYR*					
	HD5-3W-***-025B-WYR*H		HD5-3W-***-025D-WYR*H		Quick return			
	For DC		HD5-2S-***-025B-WYD2	HD5-2S-***-025D-WYD2				
			HD5-2S-***-025B-WYD2S	HD5-2S-***-025D-WYD2S	Diode	Load side -COMMON		
			HD5-2S-***-025B-WYD2T	HD5-2S-***-025D-WYD2T	Diode	Load side +COMMON		
			HD5-2WD-***-025B-WYD2	HD5-2WD-***-025D-WYD2				
			HD5-2WD-***-025B-WYD2S	HD5-2WD-***-025D-WYD2S	Diode	Load side -COMMON		
			HD5-2WD-***-025B-WYD2T	HD5-2WD-***-025D-WYD2T	Diode	Load side +COMMON		
HD5-3W-***-025B-WYD2			HD5-3W-***-025D-WYD2					
HD5-3W-***-025B-WYD2S			HD5-3W-***-025D-WYD2S	Diode	Load side -COMMON			
HD5-3W-***-025B-WYD2T			HD5-3W-***-025D-WYD2T	Diode	Load side +COMMON			
M12 4-pin connector			10MPa	For DC	HD1-2S-***-025C-WYD2A	HD1E-2S-***-025-WYD2A	M12 4-pin connector	Load side -COMMON right side
					HD1-2S-***-025C-WYD2B	HD1E-2S-***-025-WYD2B	M12 4-pin connector	Load side -COMMON left side
					HD1-2S-***-025C-WYD2C	HD1E-2S-***-025-WYD2C	M12 4-pin connector	Load side +COMMON right side
	HD1-2S-***-025C-WYD2D	HD1E-2S-***-025-WYD2D			M12 4-pin connector	Load side +COMMON left side		
	HD1-2WD-***-025C-WYD2A	HD1E-2WD-***-025-WYD2A			M12 4-pin connector	Load side -COMMON right side		
	HD1-2WD-***-025C-WYD2B	HD1E-2WD-***-025-WYD2B			M12 4-pin connector	Load side -COMMON left side		
	HD1-2WD-***-025C-WYD2C	HD1E-2WD-***-025-WYD2C			M12 4-pin connector	Load side +COMMON right side		
	HD1-2WD-***-025C-WYD2D	HD1E-2WD-***-025-WYD2D			M12 4-pin connector	Load side +COMMON left side		
	HD1-3W-***-025C-WYD2A	HD1E-3W-***-025-WYD2A			M12 4-pin connector	Load side -COMMON right side		
	HD1-3W-***-025C-WYD2B	HD1E-3W-***-025-WYD2B			M12 4-pin connector	Load side -COMMON left side		
	HD1-3W-***-025C-WYD2C	HD1E-3W-***-025-WYD2C			M12 4-pin connector	Load side +COMMON right side		
	HD1-3W-***-025C-WYD2D	HD1E-3W-***-025-WYD2D			M12 4-pin connector	Load side +COMMON left side		