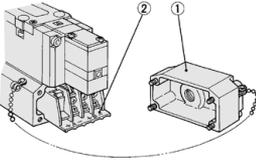


## Lead Wire Connection

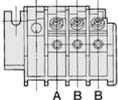
### Plug-in type (With terminal block)

#### VFR2000/3000/4000 Series

- If you remove the junction cover ① on the sub-plate, you will see the plug-in terminal block ② attached to the inside of sub-plate.



- The following markings are on the terminal block. Connect with corresponding power side.

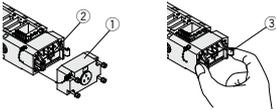


A B B  
 --- B side solenoid  
 --- Common (COM) terminal  
 --- A side solenoid

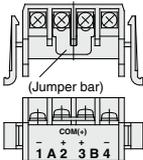
- Although "A-", "B-" and "B-" marks are indicated on the terminal block, this can be used as either "+COM" or "-COM".
- Applicable terminal:  
VFR2000, VFR3000: 1.25-3, 1.25-3S,  
1.25Y-3N, 1.25Y-3S  
VFR4000: 1.25-3.5M, 1.25Y-3L, 1.25Y-3M

#### VFR5000 Series

- Remove junction cover for sub-plate ①, depress levers ③ of terminal block assembly ②, pull out terminal block assembly.



- Terminal block assembly is marked as below. Connect it to power supply side.

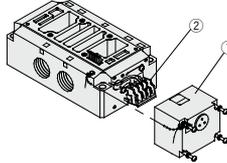


Model	Terminal block marking	A- (1)	B+ (3)	B- (4)
VFR510□		A side	COM	
VFR520□		A side	COM	B side
VFR540□		A side	COM	B side

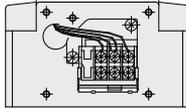
- Terminal block assembly can be used as "+" and "-" common regardless of markings. Do not remove jumper bar because it is used for common connection.
- Applicable terminal:  
1.25-4, 1.25-4M

#### VFR6000 Series

- If you remove the junction cover ① on the sub-plate, you will see the plug-in terminal block ② attached to the inside of sub-plate.



- Terminal block assembly is wired like the following figure. Connect it to each power supply side.



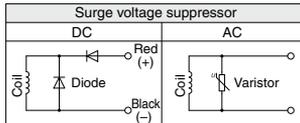
Model	Position	Left	Center	Right
VFR610□		A side	COM	
VFR620□		A side	COM	B side
VFR640□		A side	COM	B side

- Can be used as either "+COM" or "-COM".
- Applicable terminal:  
1.25-4, 1.25-4M

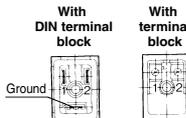
### Non plug-in type

#### VFR3000/4000 Series (VFR3□10/4□40)

- Type G: Lead wire comes directly from the solenoid part. Connect it with the power source. Grommet with DC voltage surge voltage suppressor has polarity. Connect red lead wire to + (positive) side and black to - (negative) side.



- Type E, T, D, Y: In the case of DIN terminal block and terminal block, there is no polarity of positive [+] and negative [-]. Connect no. 1 and no. 2 terminals with corresponding power side.



- Applicable cable O.D.  
Type T: ø6 to ø8 mm  
Type E: ø2.3 to ø2.8 mm  
Type D (VFR2000 series): ø6 to ø8 mm  
Type D (VFR3000/4000 series): ø4.5 to ø7 mm  
Type Y: ø4.5 to ø7 mm
- Applicable crimp terminal  
Type E, T: 1.25-3, 1.25-3S, 1.25Y-3N, 1.25Y-3S (Round shape or Y shape crimp terminal cannot be used for Type D.)

#### VFR3000/4000/5000/6000 Series (VFR3□10/4□10)

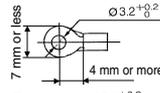
##### DIN terminal block type

- Male pin terminal of DIN terminal block of solenoid valves are wired as shown below. Connect to corresponding terminal on the connector.

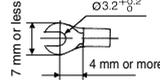


Terminal no.	Internal wiring
1	SOL. A side
2	SOL. B side
3	COM
	Ground

- Can be used as either "+COM" or "-COM".
- Applicable cable  
Cross section of the wire: 0.5 to 1.5 mm<sup>2</sup>  
Cable O.D.: ø8 to ø10
- Applicable crimp terminal shown below.



Corresponding to R1.25-3 of JIS C 2805

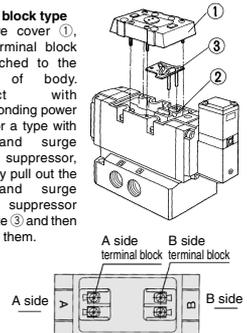


J.S.T. Mfg. Co., Ltd.  
Equivalent to R1.25-3

- Proper tightening torque of the connector  
Connector set screw 0.5 to 0.6 N·m  
Terminal screw 0.5 to 0.6 N·m
- Incorrect connection of "COM terminal" (DIN terminal no. 3) can cause damage on power source circuit.

##### Terminal block type

- Remove cover ①, over terminal block ② attached to the inside of body. Connect with corresponding power side. For a type with light and surge voltage suppressor, straightly pull out the light and surge voltage suppressor substrate ③ and then connect them.



- Applicable terminal:  
VFR3000: 1.25-3, 1.25-3S, 1.25Y-3N, 1.25Y-3S  
VFR4000: 1.25-3.5M, 1.25Y-3L, 1.25Y-3M  
VFR5000/6000: 1.25-3.5M, 1.25-3L, 1.25-3M