


## Interface Terminal Block

### ■ Features

- Compact interface terminal blocks with 7mm terminal pitch
- Optimized for connector type PLCs and input/output of dedicated controllers
- Compact, space-saving design
- 2 mounting methods (DIN rail, screw mount)

※Autonics I/O cable CJ Series is recommended.  
Please refer to page B-2.

 Please read "Caution for your safety" in operation manual before using.



### ■ Model

Model	Item	Terminal type	Connector type	No. of connector pins
AFS-H20	Interface terminal block	Screw	Hirose connector	20-pin
AFS-H40				40-pin
AFS-H50				50-pin

### ■ Terminal Specifications



(unit: mm)

	A	B	C	D	Applicable wire
Spade terminal	Min. 4.1	Min. 16.0	Min. 3.0	Max. 5.9	AWG 22-16 (0.30 to 1.25mm <sup>2</sup> )
Ring terminal	Min. 4.1	Min. 16.0	Min. 3.0	Max. 5.9	

※ Please use UL certified terminals.

### ■ Specifications

Model	AFS-H20	AFS-H40	AFS-H50
Power supply	Max. 125VDC, 125VAC 50/60Hz		
Rated current	Max. 1A		
No. of connector pins	20-pin	40-pin	50-pin
No. of terminals	20 EA	40 EA	50 EA
Terminal pitch	7.0mm		
Applicable wire	AWG22-16 (0.30 to 1.25mm <sup>2</sup> )		
Insulation resistance	Min. 1,000MΩ (at 500VDC megger)		
Dielectric strength	600VAC 50/60Hz for 1 min.		
Vibration	0.75mm amplitude at frequency of 10 to 55 Hz (for 1 min.) in each X, Y, Z direction for 2 hours		
Shock	150m/s <sup>2</sup> (15G)in each X, Y, Z direction for 3 times		
Environment	Ambient temperature	-15 to 55°C, storage: -25 to 65°C	
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH	
Material	CASE: MPPO, TERMINAL PIN: Brass		
Tightening torque	5.1 to 6.1 kgf·cm (0.5 to 0.6 N·m)		
Approval			
Weight <sup>※1</sup>	Approx. 103g (approx. 71g)	Approx. 175g (approx. 133g)	Approx. 211g (approx. 163g)

※1: The weight includes packaging. The weight in parentheses is for unit only.

※Environment resistance is rated at no freezing or condensation.

#### I/O Terminal Blocks

- AFS(Interface Terminal Block)
- AFJ/AFR(Interface Terminal Block)
- ACS(Common Terminal Block)
- AFE(Sensor Connector Terminal Block)
- ABS(Relay Terminal Block)
- ABL(Relay Terminal Block)
- Power Relay

#### I/O Cables

- mitsubishi
- LSIS
- Autonics
- RS Automation
- YOKOGAWA
- FUJI
- KDT
- OMRON
- TELEMECANIQUE
- For SERVO
- Open Type Cables
- Cable Appearance

#### Remote I/O

- ARD(DeviceNet Digital Standard Terminal Type)
- ARD(DeviceNet Digital Sensor Connector Type)
- ARD(DeviceNet Analog Standard Terminal Type)
- ARM(Modbus Digital Sensor Connector Type)

#### Others

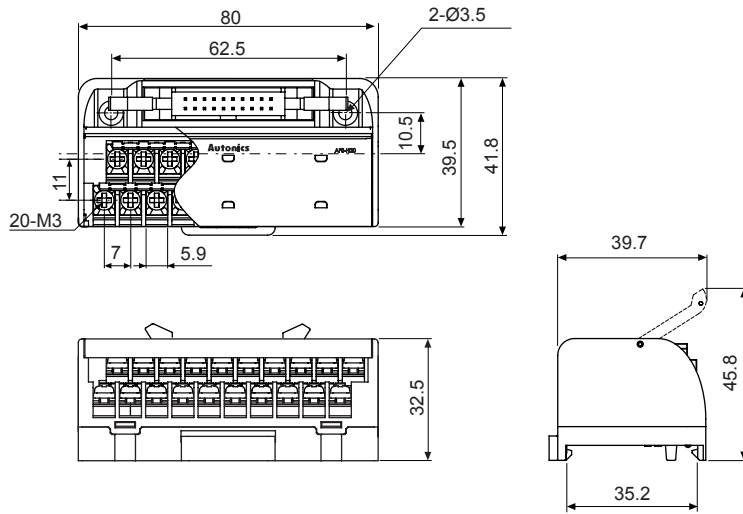
- Sensor Connectors
- Sockets
- Sensor Distribution Boxes
- Valve Plugs
- Thumbwheel Switches

# AFS Series

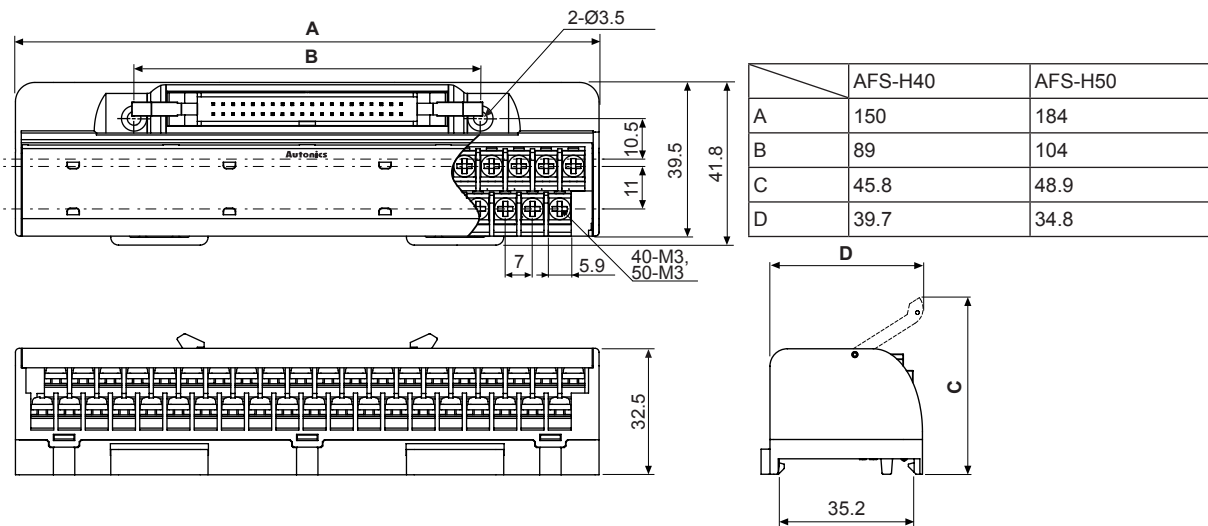
## Dimensions

### • AFS-H20

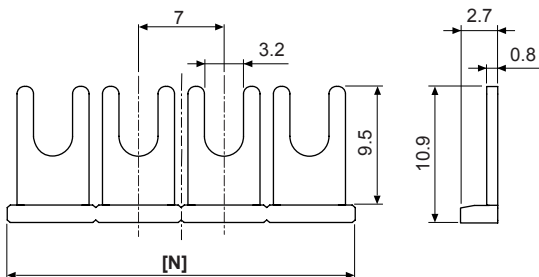
(unit: mm)



### • AFS-H40 / AFS-H50



### • Jumper bar (sold separately)

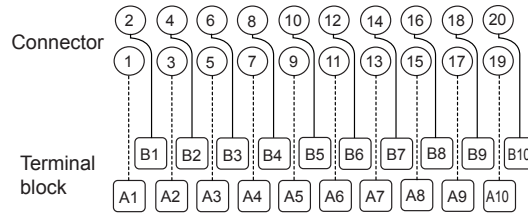
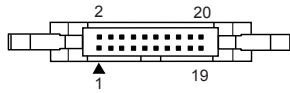


Model	JB-7-04	JB-7-10
No. of jumper bar pins	4EA	10EA
[ N ] size	27.5	69.5

## Connections

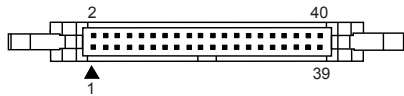
### • AFS-H20

※Hirose connector  
: HIF3BA-20PA-2.54DSA

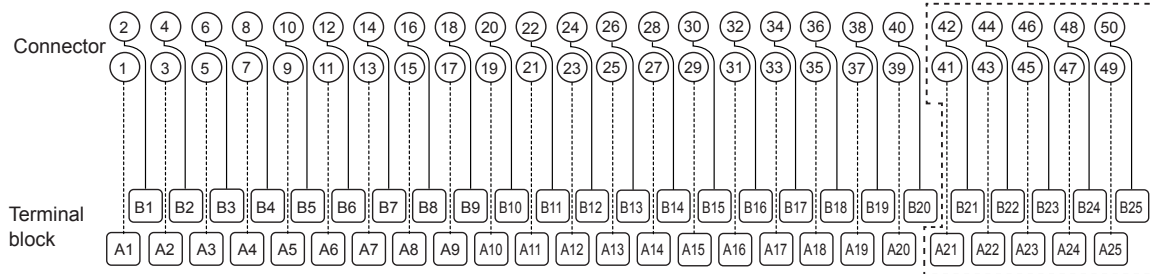
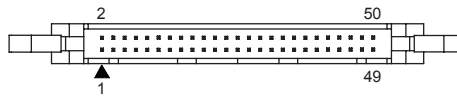


### • AFS-H40 / AFS-H50

※Hirose connector  
: HIF3BA-40PA-2.54DSA



※Hirose connector Model  
: HIF3BA-50PA-2.54DSA



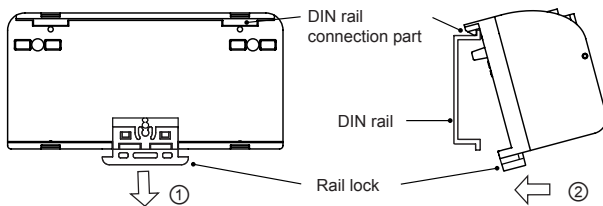
※Dot line part is only for AFS-H50 model.

## Installation

### ○ Mounting and removal at DIN rail

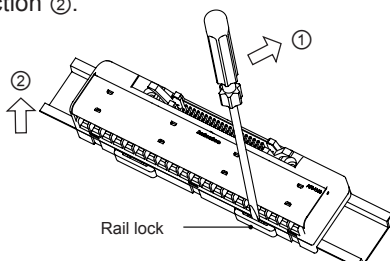
#### • Mounting

- 1) Pull the rail lock towards direction ①.
- 2) Attach the DIN rail connection hook onto the DIN rail.
- 3) Push the unit towards direction ②, then push the rail lock in to lock into position.



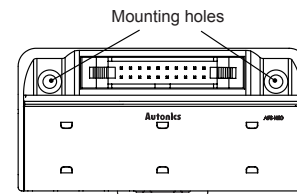
#### • Removal

- 1) Insert a screwdriver into the rail lock hole and pull it towards direction ①.
- 2) Remove the unit by pulling the unit towards direction ②.



### ○ Mounting with screws

- 1) The unit can be mounted on panels using the mounting holes next to the Hirose connector.
- 2) M3 × 30mm spring washer screws are recommended for installation. When using flat washers, use Ø6mm diameter washers. The tightening torque should be between 5.1 and 7.14kgf·cm (0.5 to 0.7 N·m).



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Power Relay

## I/O Cables

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For SERVO
Open Type Cables
Cable Appearance

## Remote I/O

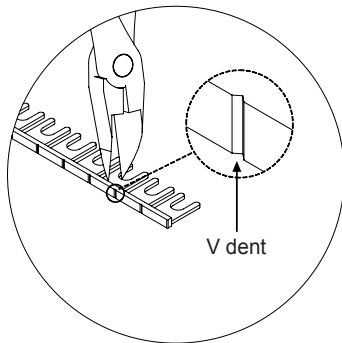
ARD(DeviceNet Digital Standard Terminal Type)
ARD(DeviceNet Digital Sensor Connector Type)
ARD(DeviceNet Analog Standard Terminal Type)
ARM(Modbus Digital Sensor Connector Type)

## Others

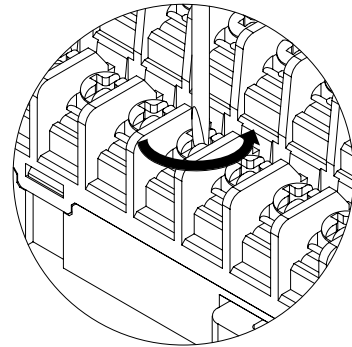
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Thumbwheel Switches

## ■ Installing Jumper Bars

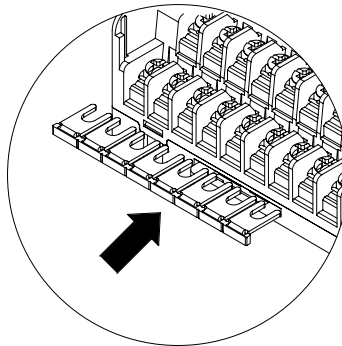
1) Cut the jumper bar to the user's desired length by cutting at the V dent using a nipper.



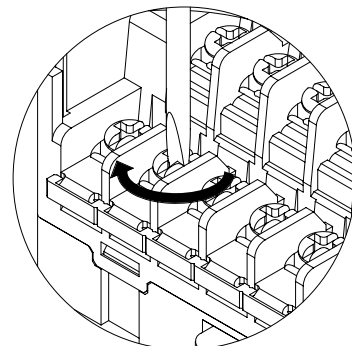
2) Unfasten all the screws of the terminals you wish to commonize.



3) Insert the jumper bar below the unfastened screws.



4) Tighten all the screws above the jumper bar.



## ■ Caution During Use

1. Do not use the product outside of rated temperature and humidity.
2. Check to make sure that voltage fluctuation in the power supply is within the rated range.
3. When connecting PLC or other controllers, check the power polarity before wiring.
4. Use AWG 16 (1.25mm<sup>2</sup>) wire for power and use appropriate crimp connectors for the terminals.
5. Do not connect or disconnect the connector or perform any wiring work while supplied with power.
6. Do not use the unit in the following environments.
  - ① Environments with high vibration or shock.
  - ② Environments where strong alkalis or acids are used.
  - ③ Environments with exposure to direct sunlight.
  - ④ Near machinery which produce strong magnetic force or electric noise.
7. This unit may be used in the following environments.
  - ① It shall be used indoor.
  - ② Altitude up to 2,000m
  - ③ Pollution degree 2
  - ④ Installation category II