AFS Series

Interface Terminal Block (screw type)

▣ 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.
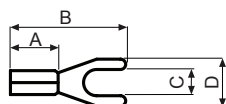 Please refer to 'I/O cable' in the I/O terminal block catalogue.

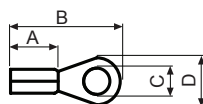⚠ **Please read "Safety Considerations" in instruction manual before using.**

CE c(UL)US LISTED

▣ Ordering Information

Model	Item	Terminal type	Connector type	The number of connector pin
AFS-H20	Interface terminal block	Screw	Hirose connector	20-pin
AFS-H40				40-pin
AFS-H50				50-pin

▣ Terminal Specifications

<Spade terminal>   <Ring terminal>

(unit: mm)

	A	B	C	D	Applicable wire
Spade terminal	≥4.1	≥16.0	≥3.0	≤5.9	AWG 22-16 (0.30 to 1.25mm²)
Ring terminal	≥4.1	≥16.0	≥3.0	≤5.9	

※ Please use UL certified terminals.

▣ Specifications

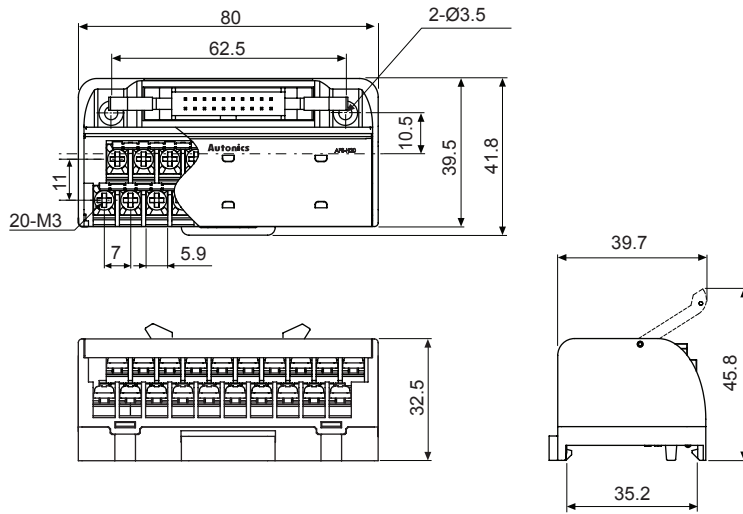| Model	AFS-H20	AFS-H40	AFS-H50
Power supply	≤125VDC⎓, 125VAC～ 50/60Hz		
Rated current	≤1A		
The number of connector pin	20-pin	40-pin	50-pin
The number of terminal	20	40	50
Terminal pitch	7.0mm		
Applicable wire	AWG22-16 (0.30 to 1.25mm²)		
Insulation resistance	≥1,000MΩ (at 500VDC megger)		
Dielectric strength	600VAC 50/60Hz for 1 min		
V bration	0.75mm amplitude at frequency of 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 2 hours		
Shock	150m/s² (approx. 15G)in each X, Y, Z direction for 3 times		
Environ-ment	Ambient temperature	-15 to 55℃, storage: -25 to 65℃		
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH		
Material	Case: MPPO, terminal pin: Brass		
Tightening torque	0.5 to 0.6 N·m		
Approval	CE c(UL)US LISTED		
Weight[1]	Approx. 103g (approx. 71g)	Approx. 175g (approx. 133g)	Approx. 211g (approx. 163g)

※1: The weight includes packaging. The weight in parenthesis is for unit only.
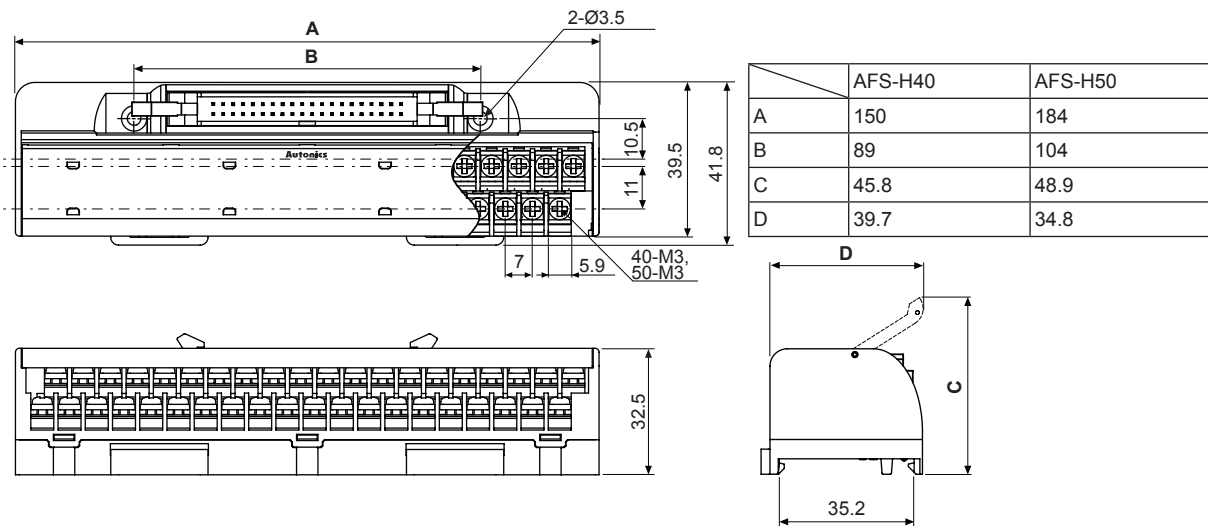※Environment resistance is rated at no freezing or condensation.

▣ Dimensions

● AFS-H20

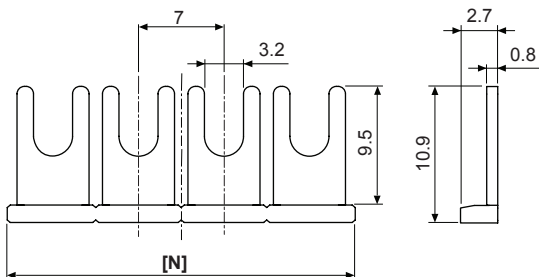(unit: mm)

● AFS-H40 / AFS-H50

	AFS-H40	AFS-H50
A	150	184
B	89	104
C	45.8	48.9
D	39.7	34.8

● Jumper bar (sold separately)

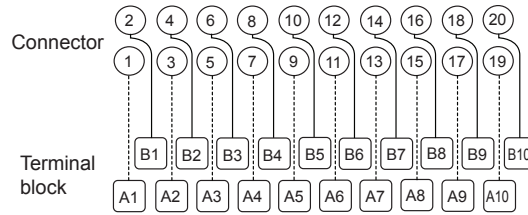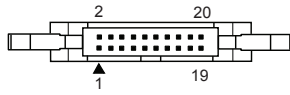| Model	JB-7-04	JB-7-10
The number of Jumper bar pin	4	10
[N] size	27.5	69.5

AFS Series

▣ Wire Connections

• AFS-H20

※Hirose connector
: HIF3BA-20PA-2.54DSA

Connector

2	4	6	8	10	12	14	16	18	20
1	3	5	7	9	11	13	15	17	19

Terminal block

B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
A1	A2	A3	A4	A5	A6	A7	A8	A9	A10

• AFS-H40 / AFS-H50

※Hirose connector
: HIF3BA-40PA-2.54DSA
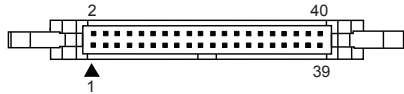
※Hirose connector model
: HIF3BA-50PA-2.54DSA

Connector

2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49

Terminal block

| B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23	B24	B25
A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20	A21	A22	A23	A24	A25
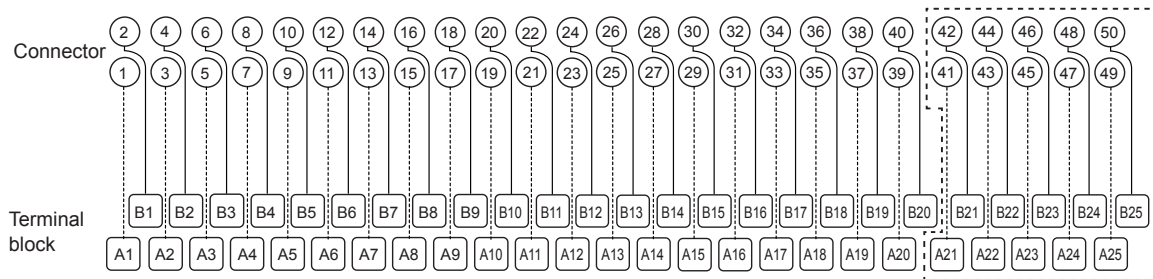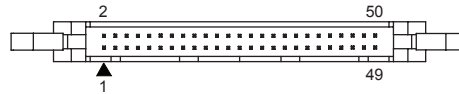
※Dot line part is only for AFS-H50 model.

▣ Installation

◎ Mounting and removal at DIN rail
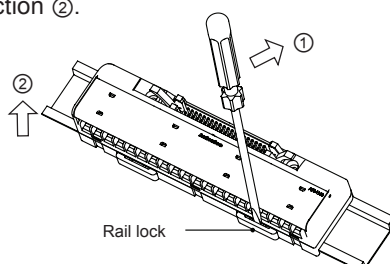
• Mounting

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.

DIN rail connection part

DIN rail
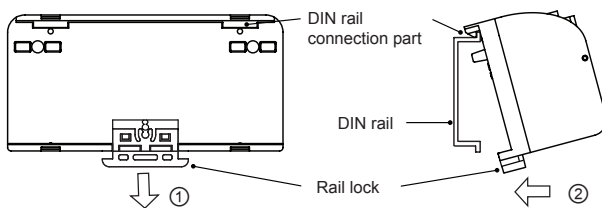
Rail lock

• 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.

Rail lock

◎ 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 from 0.5 to 0.7 N·m.
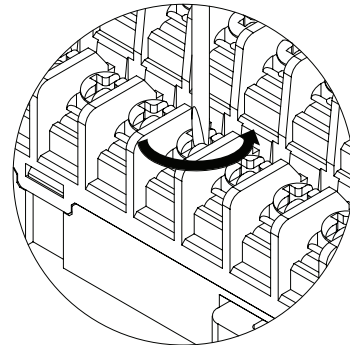

Mounting holes
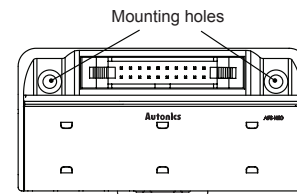
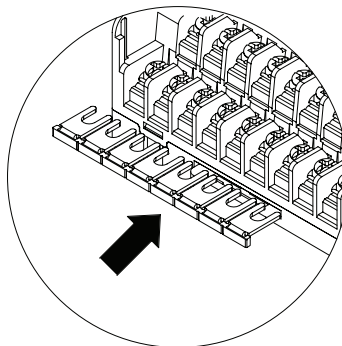## ▣ Installing Jumper Bars

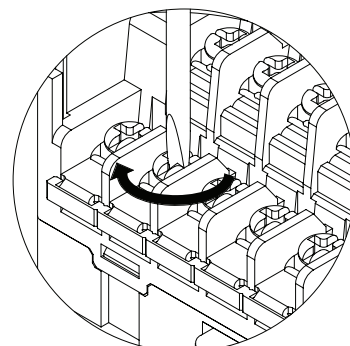1)Cut the jumper bar to the user's desired length by cutting at the V dent using a nipper.

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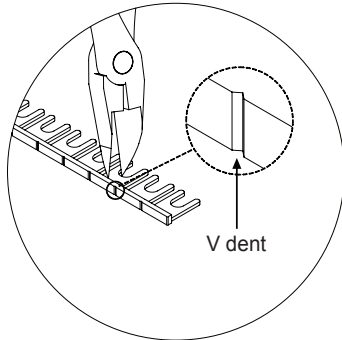
2)Unfasten all the screws of the terminals you wish to commonize.

3)Insert the jumper bar below the unfastened screws.

4)Tighten all the screws above the jumper bar.

▣ Cautions 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^2) wire and use appropriate 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 Indoors
   ② Altitude max. 2,000m
   ③ Pollution degree 2
   ④ Installation category II