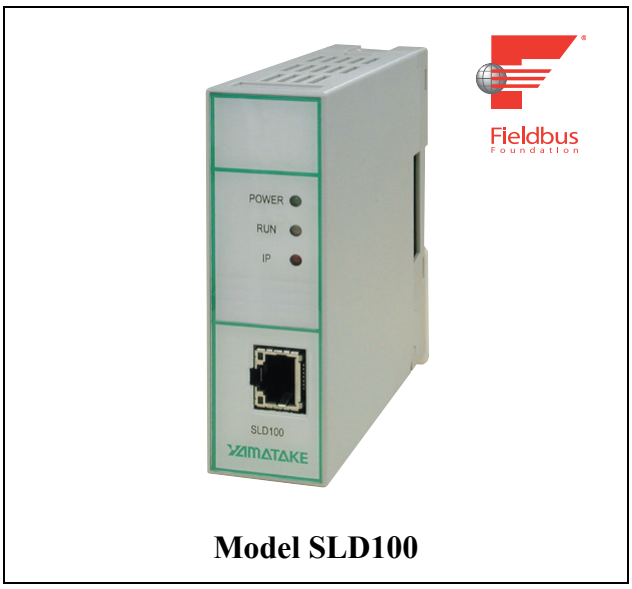
Smart Linking Device
H1 Fieldbus / Ethernet Converter
Model SLD100

OVERVIEW

The smart linking device Model SLD100 is a protocol converter corresponding to the H1 fieldbus specifications of the FOUNDATION™ fieldbus standard. One SLD is inserted into the H1 fieldbus 1 segment to convert variables and data of the Model AVP with FOUNDATION™ fieldbus to be handled in the segment into data that can be handled in Ethernet.
Model SLD100 is one product constituting the Valstaff system.



Model SLD100

FEATURES

Conversion of H1 fieldbus into Ethernet

Allows Valstaff application installed in a PC in Ethernet to access field device corresponding to the H1 fieldbus. This enables acquiring process variables handled in the Model AVP with FOUNDATION™ fieldbus, sending and receiving configuration/ calibration commands of the positioner performed by the Valstaff application applications, and downloading software for the positioner.

Operation in combination with OPC server

Provides communication via the OPC server.

Implementation of functions necessary for H1 fieldbus network

Has LAS (Link Active Scheduler) function and PID function block.

Simple installation

DIN rail or screw mounts are available for installation.

Compact and light-weight

A large space is unnecessary for installation.

System Configuration

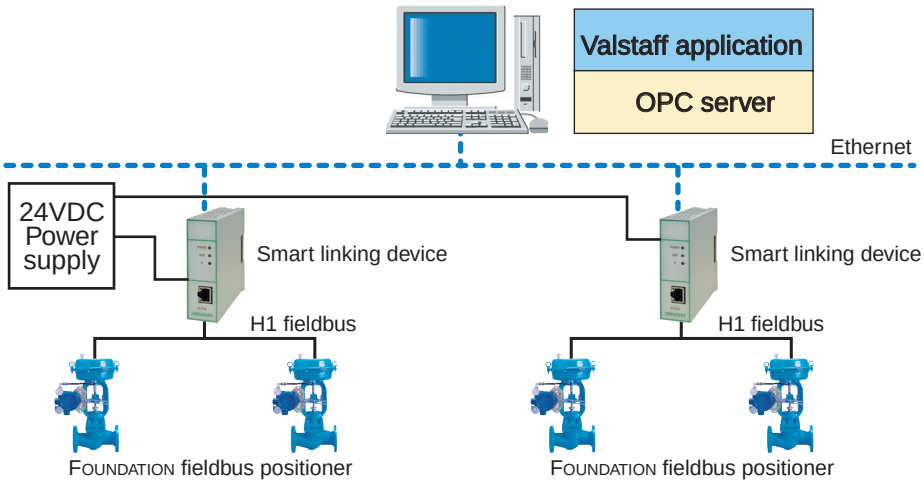


Figure 1 FOUNDATION fieldbus system

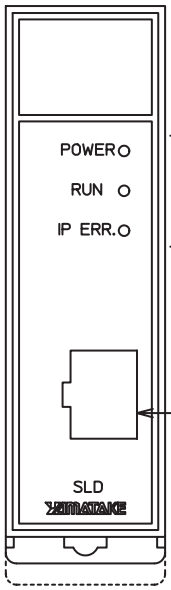
SPECIFICATIONS

Communication specification	**FOUNDATION fieldbus specification**		H1 fieldbus	
			Equipment class: Basic Device (default) or Link Master is switchable.	
			Network parameter	
			- Slot time V (ST): 5-100	
			- Max Response Delay V (MRD): V (ST) × V (MRD) is 20 or more, and V (MRD) is 11 or less.	
			- Min Inter-Pdu delay V (MID): 10 or more (V (MRD) - 1) × V (ST) or less and V (MID) is 120 or less.	
	Ethernet specification		Communication port: 10 BASE-T	
General specification	**Power specification**	**Rated voltage**	24V DC	
		Operating voltage	20.0V DC to 26.5V DC	
	Power consumption		1.5 W	
	Insulation resistance		**Terminals**	**Regulation of performance**
			Ethernet - Ground	100 MΩ or more with 500V DC
			FB - Ground	20 MΩ or more with 25V DC
			Power - Ground	
			Ethernet - FB	100 MΩ or more with 500V DC
			Ethernet - Power	
			FB - Power	
	Dielectric strength		**Terminals**	**Regulations of performance**
			Ethernet - Ground	Leakage current of 1 mA or less with 500V AC applied for a minute
			FB - Ground	Leakage current of 2 mA or less with 50V AC applied for a minute
			Power - Ground	
			Ethernet - FB	Leakage current of 1 mA or less with 500V AC applied for a minute
			Ethernet - Power	
			FB - Power	
	Electro Magnetic Compatibility		CE approved for emissions and immunity, EN 61326-1	
	Operating condition	**Ambient temperature**	0 to 50°C	
		Humidity	5 to 95% RH	
		Vibration	1 m/s² or less	
	Transportation and storage conditions	**Ambient temperature**	-40 to 70°C	
		Humidity	5 to 95% RH	
		Vibration	5 m/s² or less	
	Material of case		Polycarbonate	
	Mass		140 g	
	External dimensions (mm)		100 (H) × 30 (W) × 105 (D)	
Certification			Fieldbus Foundation / H1 fieldbus interoperability test ITK4.5	
			OPC Foundation / OPC server	

MODEL SELECTION

Basic model no.

SLD100	-	X	X	X



Indicator light

POWER

Comes on when power is turned on.

RUN

Indicates LAS status.

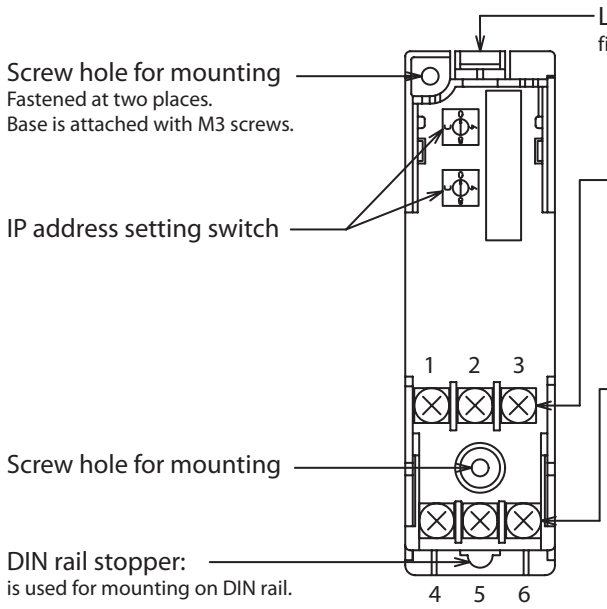
IP ERR.

Indicates the IP address status.

Ethernet

Connection terminal
(10 BASE-T)

Figure 2 Overall body



No.	Signal name
1	24V DC (+)
2	24V DC (-)
3	Ground

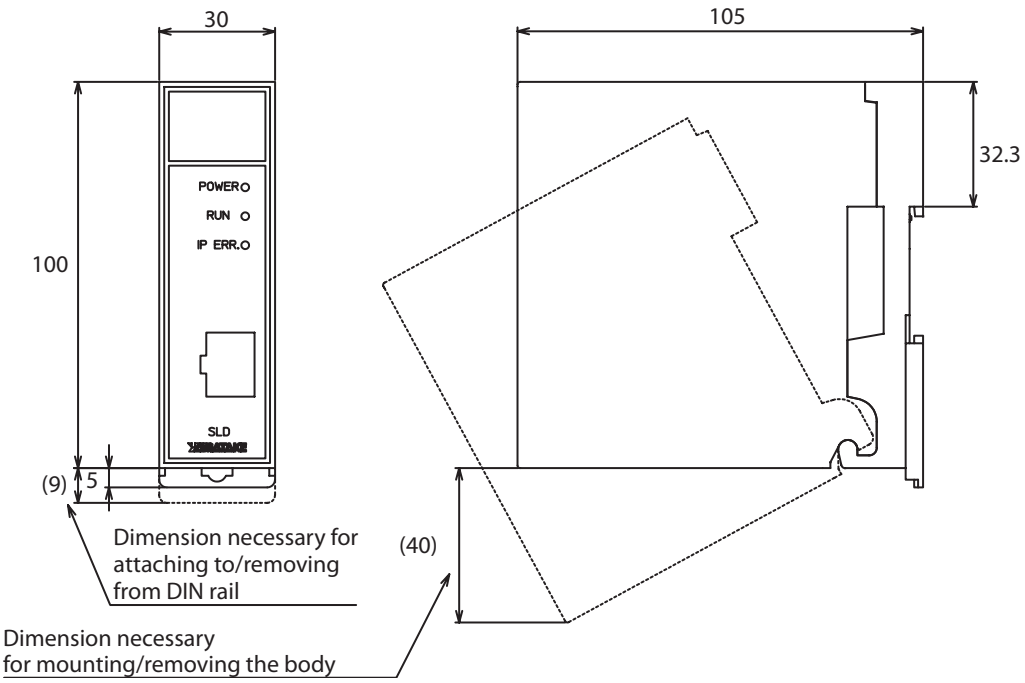
No.	Signal name
4	Do not use.
5	FB +
6	FB -

Figure 3 Base

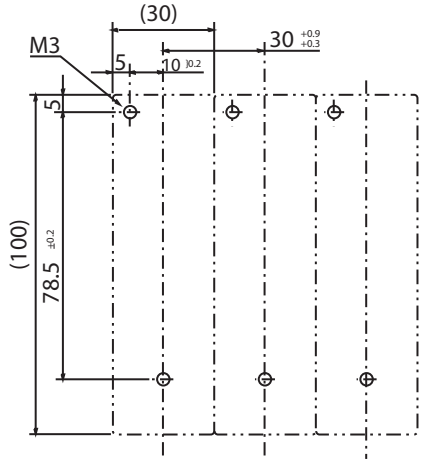
DIMENSIONS

Body / base

[Unit: mm]



For installation with screws



Attach the base to two screw hole places with M3 screws.

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