Optical Data Transmission Device



1-GB/HB

DMH series is a DMS-G/H series with high-speed communcation. This is approx. 5 times faster than DMS-G/H series and can communicate more data in specific time.



Specifications

Туре	Parallel type				
Model	DMH-GB1	DMH-GB2	DMH-HB1	DMH-HB2	
Direction	Head-on		Side-on	Side-on	
Transmission distance(Max.)	0.6 m	3m	0.5 m	3m	
Direc tional angle	± 15°	± 5°	± 15°	± 5°	
Transmission capacity	8BIT				
Transmission method	Half duplex two-way transmission				
Transmission time	7mse c				
Modulation method	FSK modulation				
Detection method	bit-reverse comparing system				
Power source	18V to 30VDC (ripple 10 % or less)				
Current consumption	100mA or less				
Ambient illuminance	10,000lux or less				
Ambient temperature/humidity	-10 to +50 , 85%RH or less				
Connection	Lead wire (0.2m m ² 26 cores shield wire in 2m)				
Protective structure	IP64 (IEC Standard)				
Case material	ABS resin(Display: acryl resin)				
Weight	Approx. 250 g				

Head-ON type

Input/Output circuit

Input section



Flow current(I o) when ON : approx. 5mA(When 24 VD C) Allowable residual voltage: Use with 1. 8V or less.

Output section



NPN open-co llector output 35V DC 50m A R esidual voltage 1. 5V or less.

External dimensions



Connection



O COM. and I/O COM.

Connector(1)					
Lead wire	Pin No.	Spec.			
Light blue	1	Power 0V			
Pink	2	Power +V			
White	3	IN1			
White/Black	4	IN2			
Brown	5	IN3			
Brown/Black	6	IN4			
Red	7	IN5			
Red/Black	8	IN6			
Orange	9	IN7			
Orange/Black	10	IN8			
Yellow	11	IN4			
Yellow/Black	12	MODE*1			
Green	13	SELECT*2			

Connector(2)					
Lead wire	Pin No.	Spec.			
Green/Black	1	GO*3			
Blue	2	Strobe*4			
Blue/Black	3	(BSY)			
Purple	4	OUT8			
Purple/Black	5	OUT7			
Gray	6	OUT6			
Gray/Black	7	OUT5			
Pink/Black	8	OUT4			
Light blue/Black	9	OUT3			
Pink/Red	10	OUT2			
Yellow/Red	11	OUT1			
Light blue/Red	12	(M/S)			
White/Red	13	(RDY)			
Shield	Shield				

Note) Don't use (BSY), (M/S)and(RDY).

- Note) The connector attached can't be used as relay terminal.
- *1. Mode input
 - This is designed to select standby transmission and reception m ode.
 - Transmission standby mode when it is opened between MODE and I/
 Reception standby mode when it is short circuited between MODE
- *2. Select input
 This is designed to arbitrarily stop transmission and reception
 Operates when it is opened between SELECT and I/O COM. operation by outside signal.
- Stops operation when it is short curcuited between SELECT and I /O COM.
- *3. GO output This is designed to check for correct reception of optical sign
- al.
- it is ON when optical signal is received.
 it is OFF when optical signal is interrupted(or non-receiving s tate). *4. Strobe
 - It is getting ON when data is fixed.

Sensitivity adjuster

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6 Center of beam

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