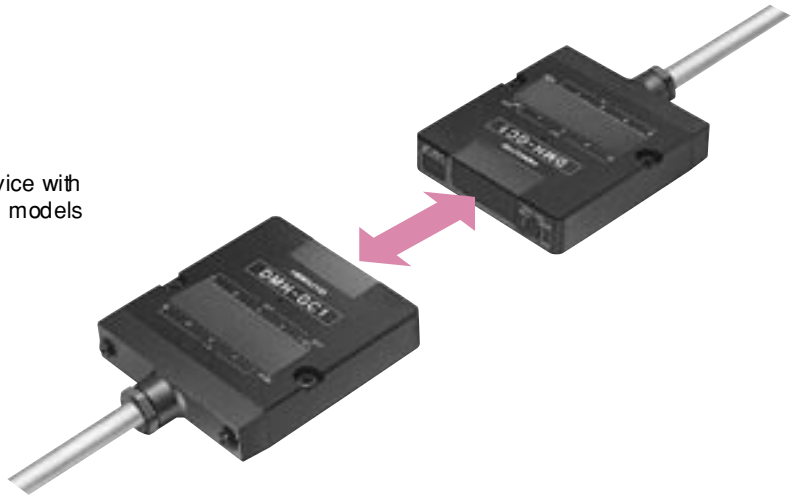
Optical Data Transmission Device

DMH-GC/HC

DMH-GC/H C is a high speed type data transmission device with 16 bit. This is smaller size and lighter weight than usual models and also, adjuster for beam amount is provided.

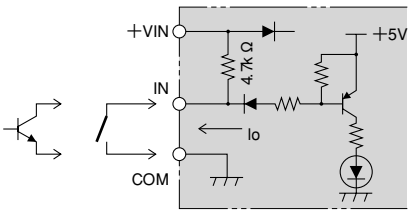


■ Specifications

Type	Parallel type	
Model	**DMH-GC1**	**DMH-HC1**
Direction	Head-on	Side-on
Transmission distance	0 to 3m(Setting distance can be changed by adjuster)	
Directional angle	±13°	
Transmission capacity	16BIT	
Transmission method	Half duplex two-way transmission	
Transmission time	15msec	
Modulation method	FSK modulation	
Detection method	Bit-reverse comparing system	
Power source	18V to 30VDC (ripple 10% or less)	
Current consumption	150mA or less	
Ambient illuminance	10,000lux or less	
Ambient temperature/humidity	-10℃ to +50℃, 85%RH or less	
Connection	Lead wire (0.125mm² 40 cores shield wire in 2m)	
Protective structure	IP64 (IEC Standard)	
Case material	Cover: Polycarbonate, base/cable cover: ABS resin	
Weight	Approx. 400g	

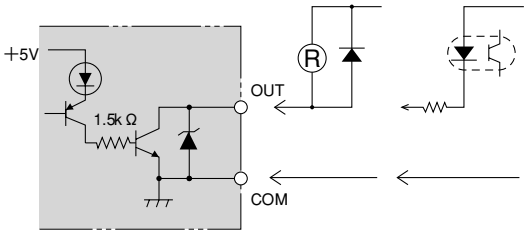
■ Input/Output circuit

Input section



Flow current(Io) when ON: approx. 5mA (when 24VDC)
ON voltage: 2V or less, OFF voltage: 8V or more.

Output section

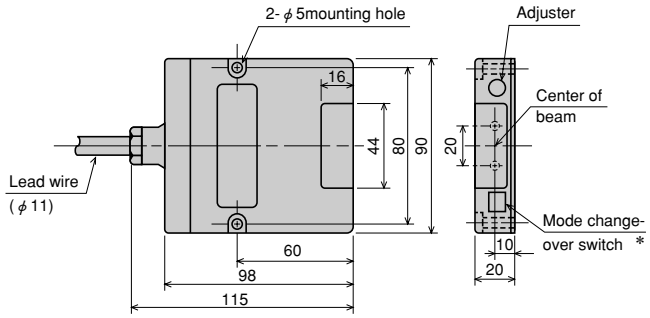


NPN open-collector output.
35 VDC 50m A Residual voltage 0.9V or less.

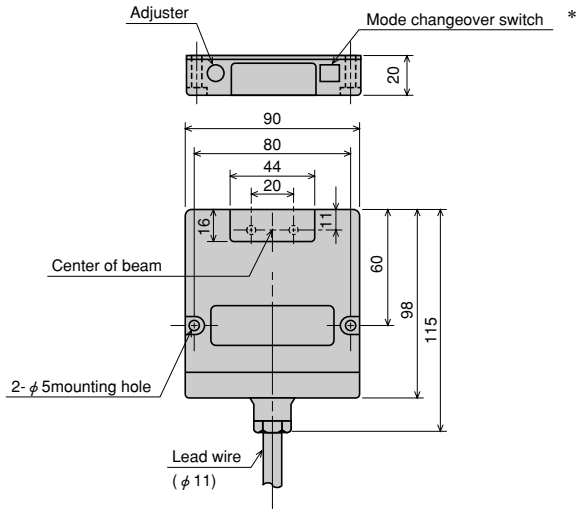
★D-sub connector type is lined-up too.

External dimensions

Head-on type

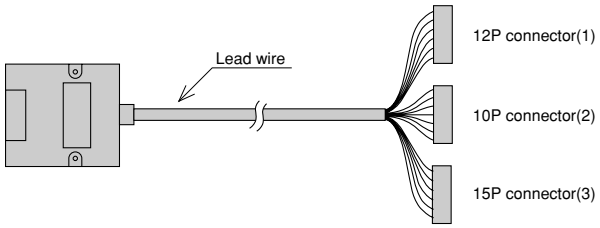


Side-on type



*Mode changeover switch: If one is set to T side(transmission pr iority mode), other one have to be set to R side(reception prio rity mdoe).

Connection



Connector(1)		
Lead wire(Mark)	Pin No.	Spec.
Pink(Red1)	1	Power +V
Pink(Red2)	2	Power -V(COM)
Pink(Red3)	3	OUT16
Pink(Red4)	4	IN1
Pink(Black1)	5	OUT15
Pink(Black2)	6	IN15
Pink(Black3)	7	OUT14
Pink(Black4)	8	IN14
Light blue(Red1)	9	OUT13
Light blue(Red2)	10	IN13
Light blue(Red3)	11	OUT12
Light blue(Red4)	12	IN12

Connector(2)		
Lead wire(Mark)	Pin No.	Spec.
Light blue(Black1)	1	OUT11
Light blue(Black2)	2	IN11
Light blue(Black3)	3	OUT10
Gray(Red1)	4	IN10
Gray(Red2)	5	OUT9
Gray(Red3)	6	IN9
Gray(Red4)	7	IN8
Gray(Black1)	8	OUT8
Gray(Black2)	9	IN7
Gray(Black3)	10	OUT7

Connector(3)		
Lead wire(Mark)	Pin No.	Spec.
Orange(Red1)	1	IN6
Orange(Red2)	2	OUT6
Orange(Red3)	3	IN5
Orange(Red4)	4	OUT5
Orange(Black1)	5	IN4
Orange(Black2)	6	OUT4
Orange(Black3)	7	IN3
Orange(Black4)	8	OUT3
Green(Red1)	9	IN2
Green(Red2)	10	OUT2
Green(Red3)	11	IN1
Green(Red4)	12	OUT1
Green(Black1)	13	SELECT*1
Green(Black2)	14	GO*2
Green(Black3)	15	Strobe*3

Note) Don't use light blue(Black4), gray(black4) and green(blac k4). If cable is cut on the way, cut it at the base.
Note) The connector attached can't be used as relay terminals.

*1. Select input
This is designed to arbitrarily stop transmission and reception by outside signal.
- It operates when it is opened between Select and GND.
- It stops the operation when it is shorted between Select and GN D.

*2. GO output
This is designed to check for correct reception of optical sign al.
- It is getting ON when optical signal is received.
- It is getting OFF when optical signal is interrupted(non-receiv ing state).

*3. Strobe
It is getting ON when data is fixed.