

Serial Type Optical Data Transmission Device Long Distance Type

BWF SERIES

High performance in compact and light weight of handy size, 44 x 84 x 130.3mm!

Long distance, 100m and 200m!

400m type is also available in the same size !



Actual transmission distance is 2 times or more than rated value and data transmission with high reliability is realized.

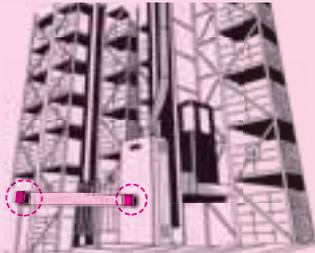
Many kinds of interface are lined up, RS-232C, RS-422, current-loop and RS-422/RS-485 multi-drop, etc.

Level lowering warning output are provided due to prevent some troubles such as displacement of optical axis or dirty lens surface.

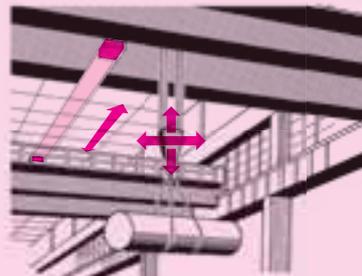
It can be easy to check optical axis adjustment with optical checker or checking terminal.

Applications

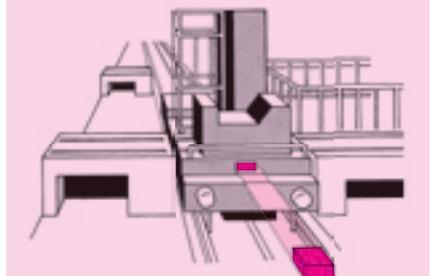
Control of stacker crane for Automated Storage Systems
(Instruction of address, main power ON/OFF, traveling and upturn/downturn etc.)



Control of overhead traveling crane
(Instruction of advance, reverse, sideways traveling, hoisting up, winding down etc.)



Control of track type A.G.V.
(Instruction of address, main power ON/OFF, traveling and etc.)



Type/Models

Type	Interface	Model No.	Transmission distance	Power source
Serial type	RS-232C/RS-422	BWF-11A/BWF-11B	100m	10 to 30VDC
		BWF-21A/BWF-21B	200m	
		BWF-31A/BWF-31B	100m	85 to 110VAC
		BWF-41A/BWF-41B	200m	
	Current loop/RS-232 C	BWF-12A/BWF-12 B	100m	10 to 30VDC
		BWF-22A/BWF-22 B	200m	
		BWF-32A/BWF-32 B	100m	85 to 110VAC
		BWF-42A/BWF-42 B	200m	
	RS-422/RS-485 Multi-drop	BWF-13A/BWF-13B	100m	10 to 30VDC
		BWF-23A/BWF-23B	200m	
	RS-232C/RS-422 Multi-channel type	BWF-110	100m	18 to 30VDC
		BWF-210	200m	
	CC-Link	BWF-17A/BWF-17B	100m	24VDC
		BWF-27A/BWF-27B	200m	
DeviceNet	BWF-1DA/BWF-1DB	70m	24VDC	
Ethernet	BWF-1EA/BWF-1EB	50m		
Controller Link	BWF-1FA-Z/BWF-1FB-Z	70m		
SafetyBUS p	BWF-1SA/BWF-1SB	70m		

Note) Make sure to use Type A and Type B in pair because transmission system is full-duplex two-way transmission. BWF-110/210 have provided 6 kinds of frequency.

BWF with CE mark and low temperature types are lined-up.

BWF-17/27

Direct connection to CC-Link

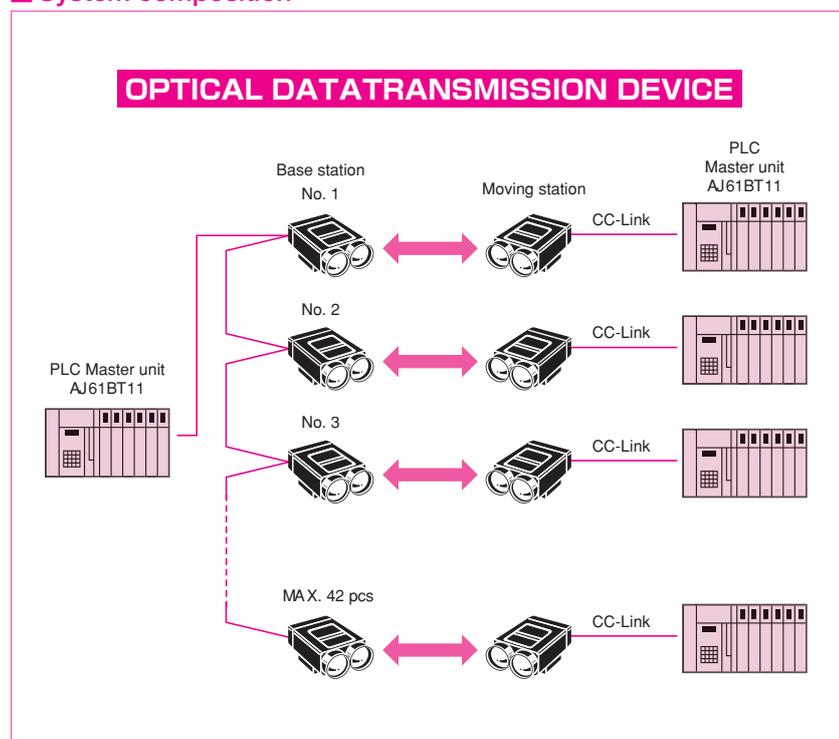
- Max. 42 pcs unit can be connected to one master unit.
- Large information(Max. 112 points, 16 words) can be transmitted

Specifications

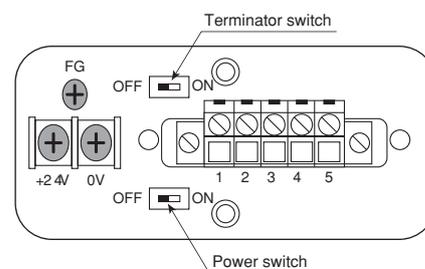
Type	Serial type	
Model No.	BWF-17A/17B	BWF-27A/27B
Power source	24VDC(18 to 30VDC)	
Current consumption	100mA or less(Input voltage 24VDC)	
BWF	Transmission distance	100m / 200m
	Directional angle	±2° / ±1°
	Transmission method	Full duplex two-way transmission
	Transmission speed	19,200bps
	Modulation method	FSK modulation
	Modulation frequency	Type A(transmission 5.5MHz, reception 6.0MHz), Type B(transmission 6.0MHz, reception 5.5MHz)
CC-Link	Transmission speed	10Mbps /5Mbps/2.5Mbps/625kbps/156kbps(Changeover by switch)
	Transmission path	RS-485 BUS
	Remote station number	1 to 64
	Connecting cable	CC-Link exclusive cable
	Total extending distance	Communication speed: 10Mbps, 5Mbps, 2.5Mbps, 625kbps, 156kbps Total extending distance:100m, 150m, 200m, 600m, 1,200m
	Terminator*	110Ω (Connected between DA and DB of both ends unit)Changeover by switch
Connection	Connector type(Terminal for DC power and FG)	
Ambient illuminance	20,000lux or less	
Case	ABS resin	
Weight	Approx. 500g	

*In case of using the cable with impedance, 130Ω, make sure to be off for terminator switch on BWF and connect terminator with 130Ω between DA and DB.

System composition



Connection



CC-Link unit connector	
1	FG
2	SLD
3	DG
4	DB
5	DA

Note) Don't make a wiring with main circuit, high voltage cable or load cable because of noise or surge induction.