

### Switch Signal Transmission

System Configuration	Characteristics	Number of
	<p>-Remote Link System which corresponds to ON/OFF signal of interactive 64 detecting signals and 32 control signals.</p> <p>-available for regular switch</p> <p>-Solenoid valve and motor are also possible to connect to drive or control</p> <p>- Connect the Sensor or driving unit to the exclusive I/O unit. Link connection is made by 4W cable between each I/O unit.</p> <p>-Maximum 2A (24VDC) can be supplied</p>	<b>64 + 32</b>

Drive voltage/current	Number of signals	Operating distance max.	Type code				Page
			Remote Remote Amplifier	Remote head	Base Base head	Base Amplifier	
24V DC / 2A	64+32	9mm	<b>RL64T-344</b> □ -000 <b>RL64T-345</b> □ -000	<b>RCH08T-211-PU-__</b>	<b>RCH08E-211-PU-__</b>	<b>RL64E-333</b> □ -000 <b>RL64EA-355DN-000</b>	90...92

#### I/O Unit (connect with Remote amplifier)

Unit	Number of Signals (per a unit)	Type code	Note	Page
Input Unit	8	<b>RLX08-322</b> □	<b>max.4</b>	93
Output Unit	4	<b>RLY04-322</b> □	<b>max.8</b>	93

#### Type code

□ : N → NPN, P → PNP  
'\_\_' at the end means cable length(m).  
Examples are showed below.

Remote head  
**RCH08T-211-PU-01**  
└─ cable length(m)  
01=1m  
02=2m  
03=3m

Standard cable length: 1m

Base head  
**RCH08E-211-PU-02**  
└─ cable length(m)  
02=2m  
03=3m  
05=5m

Standard cable length: 2m

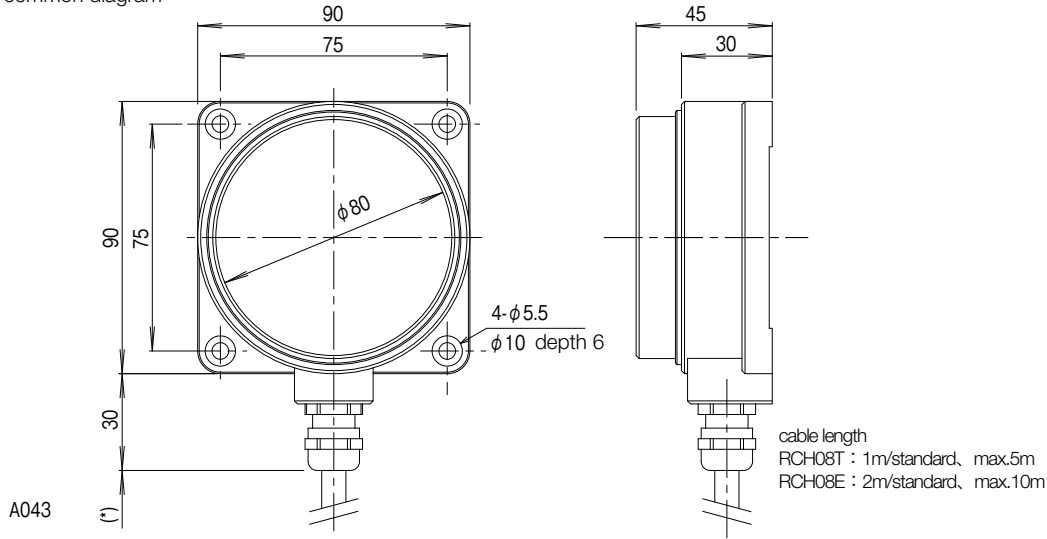
Remote Amplifier  
**RL64T-344N-000**  
└─ N=NPN  
P=PNP

Base Amplifier  
**RL64T-333N-000**  
└─ N=NPN  
P=PNP

Switch Signal Transmission/ Input 64+Output 32

Remote head/Base head  
common diagram

Size <b>90x90</b>	Operating distance <b>3...9mm</b>
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Wiring C023/P.112

Remote head	
Type code	<b>RCH08T-211-PU-01</b>
Drive voltage	24V ± 1.5V DC
Drive current	max.2A
Operating distance	3...9mm
Center offset	±5mm
Drive current	≤ 1A
Operating Temperature	0...+50°C
Protection class	IP67
Cable	PUR / φ 7.6 , 4x0.75mm <sup>2</sup> shielded
Material	Housing: Aluminum+alumite treated (metal) Active surface: ABS + PBT (resin)
Note	

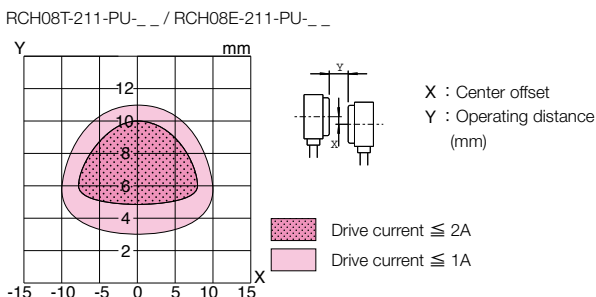
Base head	
Type code	<b>RCH08E-211-PU-02</b>
Operational voltage	24V DC ± 5% (incl. ripple)
Current Consumption	≤ 4A
Load capacity	---
Frequency of operation	---
LED	---
Operating Temperature	0...+50°C
Protection class	IP67
Cable	PUR / φ 7.6 , 4x0.75mm <sup>2</sup> shielded
Material	Housing: Aluminum+alumite treated (metal) Active surface: ABS + PBT (resin)
Note	

Applicable device

A Remote can be connected up to 64 detectors and driving units such as solenoid valves. The maximum numbers of control signal for driving units are 32.

Supply voltage	24V DC	-The total current consumption of connecting switch and driving units must not exceed the value of Drive current.
Current consumption	≤ 2A	
Residual voltage	---	
Load capacity	---	

Typical Transmitting Diagram (Supply voltage at 24V /non-flush mount)

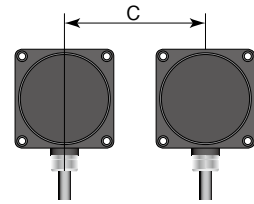


Mounting

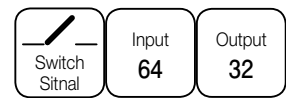
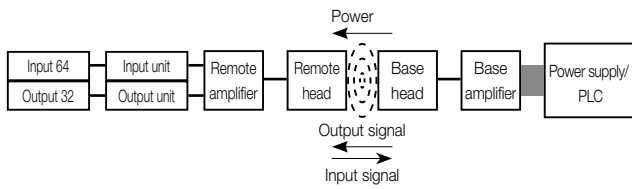
In order to avoid influence of surrounding metal, or to avoid mutual influence between parallel-mounted sensors, keep the minimum free zone as described below.

Influence of surrounding metal

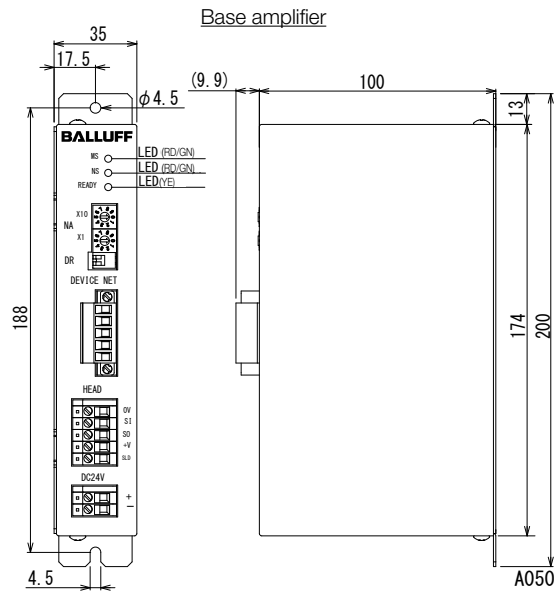
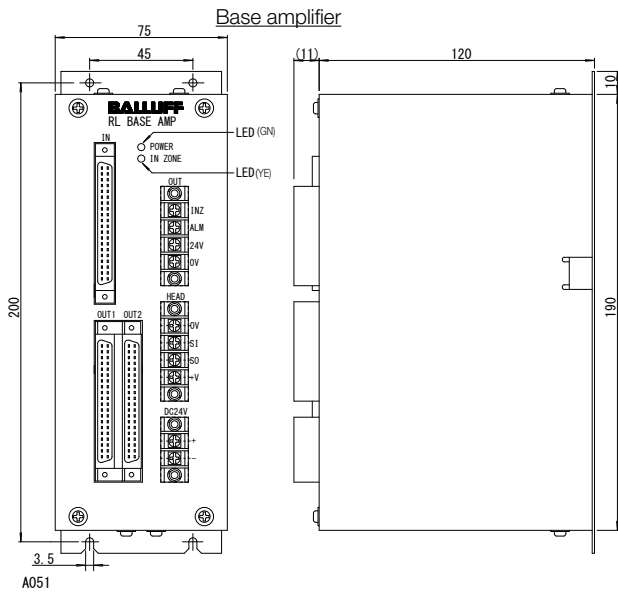
Mutual interference



Type code	A(mm)	B(mm)	C(mm)
RCH08T-211-PU-__	50	45	300
RCH08E-211-PU-__			



Switch Signal Transmission/Input 64+Output 32



Wiring refer to the attached users'guide

		Base Amplifier (parallel I/O)
Type	NPN	<b>RL64E-333N-000</b>
code	PNP	<b>RL64E-333P-000</b>
Applicable remote amplifier		RL64T-344 □ -000 RL64T-345 □ -000
Input logic		NPN (current sink), PNP (current source)
Input signal		32
Load capacity		7mA/1Input
Output logic		NPN (current sink), PNP (current source)
Output signal		67(data:64, inzone:2, detecting short circuit:1)
Load capacity		max.20mA/ 1 output type
Operational voltage		24VDC ± 5%
Current consumption		≤ 150mA
Frequency of operation		20Hz
LED		Power indication(GN), READY(YE)
Material		Housing:SPCC-SD(steel plate)
Connection	Power	Terminal block : 2pole x 1
	Head	Terminal block : 4pole x 1
	Input	Square connector : 40P x 1
	Output	Square connector : 40P x 2
Operating temperature		0...+50°C
Note		connectors are attached

		Base Amplifier (DeviceNet)
Type	DeviceNet	<b>RL64EA-355DN-000</b>
code		
Applicable remote amplifier		RL64T-344 □ -000 RL64T-345 □ -000
Function		Remote I/O(Poll)
Speed		500k/250k/125k Baud Set by Dip SW
Naud address		0 ~ 63 Set by rotary SW
Input signal <sup>1)</sup>		64+1 Ready signal (9byte)
Output signal <sup>2)</sup>		32(4byte)
Operational voltage		24VDC ± 5%
Current consumption		≤ 150mA
LED		MS:RD/GN,NS:RD/GN,READY : YE
Material		Housing : SPCC-SD(steel plate)
	Power	Terminal block : 2pole x 1
	Head	Terminal block : 5pole x 1
	DeviceNet	Open connector
Operating temperature		0...+50°C
Note		

- 1) Output signals from Remote system
- 2) Input signals to Remote system

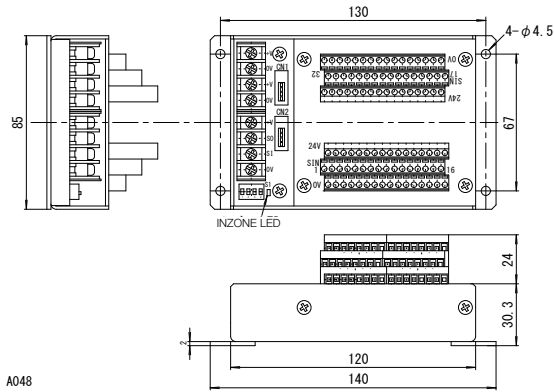
Remote Link

Products table

Switch Signal Transmission

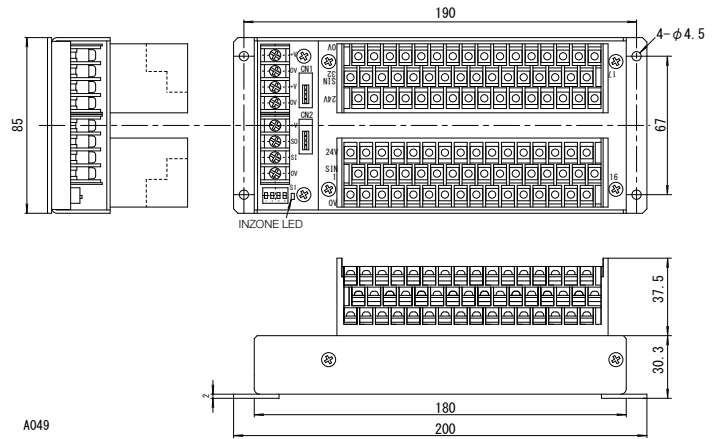
Switch Signal Transmission/ Input 64+Output 32

Remote amplifier



A048

Remote amplifier



A049

Wiring refer to the users' guide

		Remote amplifier (Pin terminal)	Remote amplifier (Ring terminal)
Type code	NPN	<b>RL64T-344N-000</b>	<b>RL64T-345N-000</b>
	PNP	<b>RL64T-344P-000</b>	<b>RL64T-345P-000</b>
Applicable base amplifier		RL64E-333N-000、RL64E-333P-000 RL64EA-355DN-000	RL64E-333N-000、RL64E-333P-000 RL64EA-355DN-000
Input logic		NPN or PNP	NPN or PNP
Input signals		32	32
Load capacity		7mA/1Input	7mA/1Input
Frequency of operation		20Hz	20Hz
Current consumption		≤ 70mA	≤ 70mA
LED		READY	READY
Material	Housing	SPCC-SD、Glass-epoxy	SPCC-SD、Glass-epoxy
	Cover plate	---	---
Connection	Detector SW	Terminal block: 3pole x 32	Terminal block: 3pole x 32
	Remote head	Terminal block: 4pole x 1	Terminal block: 4pole x 1
	Link	Connector: e-con , 4P x 2	Connector: e-con , 4P x 2
Operating temperature		0...+50°C	0...+50°C
Note			

Applicable device

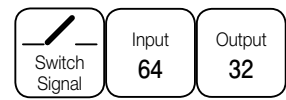
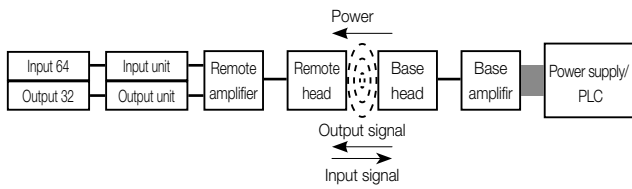
- A Remote can be connected up to 64 detectors and driving units such as solenoid valves. The maximum numbers of control signal for driving units are 32.

- Remote amplifier RL64T-344/345 can connect up to 32 detectors directly.

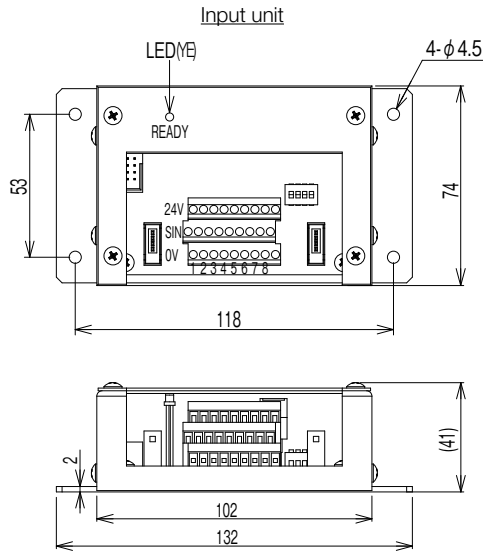
Note

- Prepare the cable, 4 conductors and outer diameter phi1.35 ...1.6mm for link system. Insulation displacement connector is attached to I/O unit.

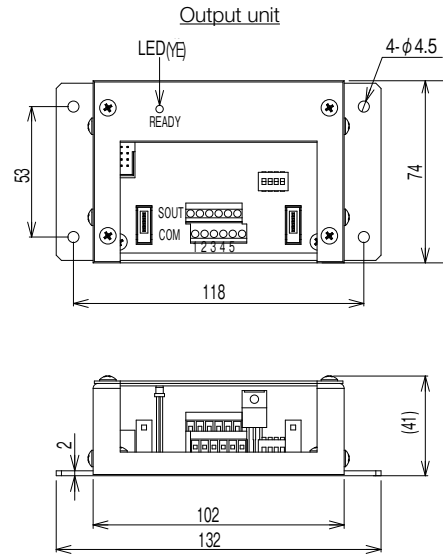
Supply voltage	24V DC	-Please use the switch which correctly operates under left-hand specification.
Total current consumption	≤ 2A	
Residual voltage	≤ 6V	-The total current consumption of connecting switch and driving units must not exceed the value of Drive current.
Residual current	≤ 1mA	



Switch Signal Transmission/Input 64+Output 32



A052



A053

Wiring refer to the users' guide

Input unit		Output unit
Type code	NPN PNP	RLX08-322N RLX08-322P
Input logic	NPN or PNP	---
Input signals	8	---
Load capacity	7mA/1Input	---
Output logic	---	NPN or PNP
Output signals	---	5 (Data: 4, Data valid : 1)
Load capacity	---	max.200mA/ 1 output type
Current consumption	≤ 40mA	≤ 40mA
Frequency of operation	20Hz	20Hz
LED	READY	READY
Material	Housing: SPCC-SD Cover plate: acrylic resin	Housing: SPCC-SD Cover plate: acrylic resin
Connection	Detector SW: Terminal block: 3 x 8 pole Cover plate: acrylic resin	---
Driving unit	---	Terminal block: 3 x 4 pole
Link	Connector : e-con , 4P x 2	Connector : e-con , 4P x 2
Operating temperature	0...+50°C	0...+50°C
Note		

Applicable device

- A Remote can be connected up to 64 detectors and driving units such as solenoid valves. The maximum numbers of control signal for driving units are 32.

Supply voltage	24V DC
Current consumption	≤ 2A
Residual voltage	≤ 6V
Residual current	≤ 1mA

Note

-Prepare the cable, 4 conductors and outer diameter phi1.35 ...1.6mm for link system.  
Insulation displacement connector is attached to I/O unit.

Remote Link

Products table

Switch Signal Transmission

