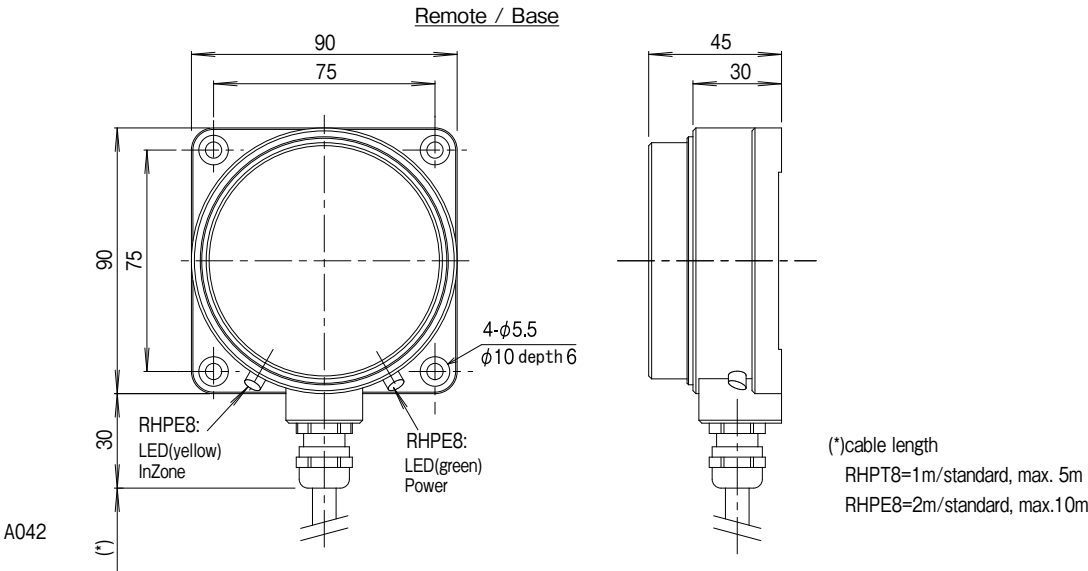


4 + 4 switch signal / Size : 90 x 90

Operating distance
3...10mm

Remote and Base
shared dimension



Wiring C019/P.122

Remote		
Type	NPN input	RHPT8-8010N-C3-PU-01
Code	PNP input	RHPT8-8010P-C3-PU-01
Drive voltage	24V ± 1.5V DC	
Drive current	max.300mA	
No. of signal	input : 4 + output : 4	
Operating distance	3...10mm	
Center offset	± 7mm	
Drive current	≤ 300mA	
Operating temperature	0...+50°C	
Protection class	IP67	
Cable	PUR / Ø7.7 , 2x0.5mm ² +9x0.18mm ²	
Material	Housing	Aluminum + alumite processing (metal part)
	Active face	ABS + PBT (resin part)
Weight	Body 620 g + cable 75 g x 1 m	
Remarks		

Base		
Type	NPN output	RHPE8-8010N-C3-PU-02
Code	PNP output	RHPE8-8010P-C3-PU-02
Operational voltage	24V DC ± 10% (incl. ripple)	
Current consumption	≤ 1.5A	
No. of signal	input : 4 + output : 4	
Load current	max.50mA per output	
Frequency of operation	40Hz	
LED	InZone/Power	
Operating temperature	0...+50°C	
Protection class	IP67	
Cable	PUR / Ø7.7 , 2x0.5mm ² +9x0.18mm ²	
Material	Housing	Aluminum + alumite processing (metal part)
	Active face	ABS + PBT (resin part)
Weight	Body 620 g + cable 75 g x 2 m	
Remarks		

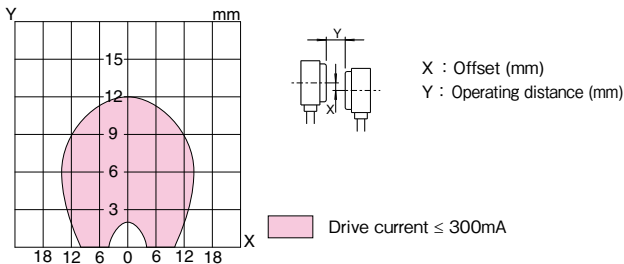
Applicable sensor and actuator

■ Remote can be connected up to 4 sensors and 4 actuators.

Supply voltage	24V DC	- Sensors and actuators should have 24V DC rating.
Total current consumption	300mA 以下	- The total current consumption of detectors and driving units must not exceed the rated drive current.
Residual voltage	---	
Load current	---	

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

RHPT8-8010 □ -C3-PU-__ / RHPE8-8010 □ -C3-PU-__



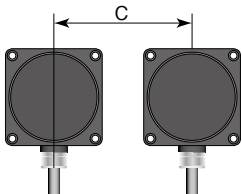
Installation notes

In order to avoid influence of surrounding metal, or to avoid mutual influence between parallel-mounted Remote or Base, keep the minimum distances as described below.

Surrounding metal



Parallel installation



Type Code	A(mm)	B(mm)	C(mm)
RHPT8-8010 □ -C3-PU-__	50	45	300
RHPE8-8010 □ -C3-PU-__			

Remote Coupler System
Switch Signal

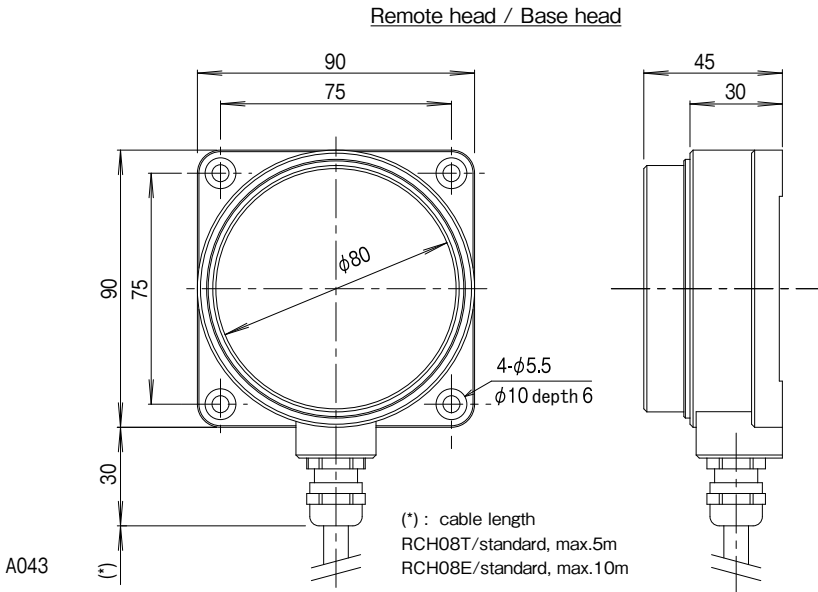
8+8 Switch Signal type / Remote • Base
64+32 Switch Signal type / Remote head • Base head

8+8
64+32 signal

8+8 switch signal and 64+32 switch signal / Size : 90 x 90

Operating distance
4...9mm

Remote head
and Base head
shared dimension



Remote head:RCH08T-211 and
Base head:RCH08E-211 are
used for both 8+8 and 64+32
transmission system as a head.

Wiring 8+8	C020/P.122
Wiring 64+32	C023/P.123

Remote / Remote head	
Type code	RCH08T-211-PU-01
Applicable	8+8 RC08T-011_-000
Remote amplifier	64+32 RL64T-344_-000, RL64T-345_-000
Drive voltage	24V ± 1.5V DC
Drive current	max.2A
Operating distance	4...9mm 6...8mm
Center offset	± 5mm ± 3mm
Drive current	≤ 1A ≤ 2A
Operating temperature	0...+50°C
Protection class	IP67
Cable	PUR / Ø7.8, 2x1.25mm ² +2x0.2mm ² with shield
Material	Housing Aluminum + alumite processing (metal part)
	Active face ABS + PBT (resin part)
Weight	Body 600 g + cable 120 g x 1 m
Remarks	

BaseBase head	
Type Code	RCH08E-211-PU-02
Applicable	8+8 RC08E-011_-000
Base amplifier	64+32 RL64E-333_-000, RL64EA-355DN-000, RL64E-366CL-000, RL64E-366EI-000
Operational voltage	24V DC ± 5% (incl. ripple)
Current consumption	≤ 4A
Load current	---
Frequency of operation	---
LED	---
Operating temperature	0...+50°C
Protection class	IP67
Cable	PUR / Ø7.8, 2x1.25mm ² +2x0.2mm ² with shield
Material	Housing Aluminum + alumite processing (metal part)
	Active face ABS + PBT (resin part)
Weight	Body 620 g + cable 120 g x 2 m
Remarks	

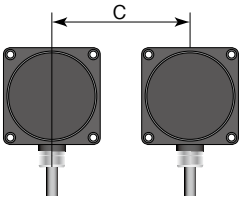
The Remote head in 8+8 signal transmission type can not work with the Base head in 64+32 signal transmission type, and vice versa, though these heads are shared in both transmission type.

Installation notes

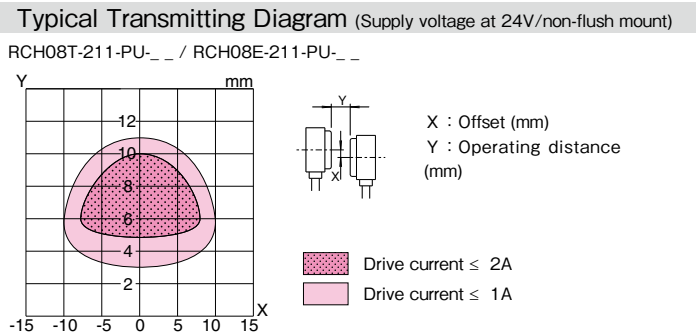
In order to avoid influence of surrounding metal, or to avoid mutual influence between parallel-mounted Remote and Base, keep the minimum distances as described below.

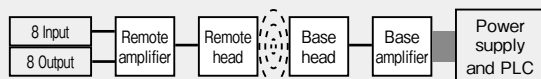
Surrounding metal

Parallel installation



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





RCH08T
RCH08E

RC08T
RC08E

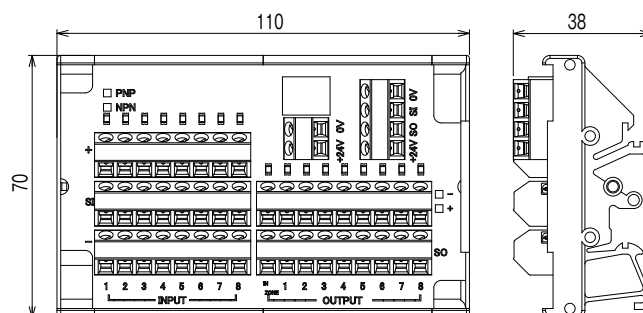
8+8

signal

8+8 switch signal / Size : 110x70

Remote amplifier / Base amplifier

Remote amplifier
and Base amplifier
shared dimension



A044a

Wiring C020/P.122

Remote amplifier		
Type	NPN	RC08T-011N-000
Code	PNP	RC08T-011P-000
Applicable Remote head	RCH08T-211-PU	
Operational voltage	24V DC \pm 10% (from Remote head)	
Current consumption	\leq 150mA	
Input ¹⁾	No. of signal	8 (SI1...8)
	Input logic	NPN or PNP
	Load current	7 mA per input
Output ²⁾	No. of signal	8 (SO1...8) + 1 (InZone)
	Output logic	NPN or PNP
	Load current	max. 300mA per output
	Frequency of operation	100Hz
LED	input and output signal, InZone	
Operating temperature	0...+50°C	
Protection class	IP67	
Mounting	DIN rail 32/35mm	
Material	Body	Nylon
Weight	130 g	
Remarks		

Base amplifier		
Type	NPN	RC08E-011N-000
Code	PNP	RC08E-011P-000
Applicable Base head	RCH08E-211-PU	
Operational voltage	24V DC \pm 10% (incl. ripple)	
Current consumption	\leq 150mA	
Input ³⁾	No. of signal	8 (SI1...8)
	Input logic	NPN or PNP
	Load current	7 mA per input
Output ⁴⁾	No. of signal	8 (SO1...8) + 1 (InZone)
	Output logic	NPN or PNP
	Load current	max. 300mA per output
	Frequency of operation	100Hz
LED	input and output signal, InZone	
Operating temperature	0...+50°C	
Protection class	IP67	
Mounting	DIN rail 32/35mm	
Material	Body	Nylon
Weight	130 g	
Remarks		

Applicable sensor and actuator

- Remote amplifier can connect up to 8 sensors and 8 actuators.
- The total current consumption of Remote amplifier, sensors and actuators must not exceed 2A the drive current which is supplied by the Remote head.

Supply voltage	24V DC
Total current consumption	\leq 2A
Residual voltage	---
Load current	---

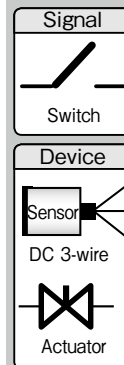
Base amplifier with Enable signal

The Base amplifier with an enable signal is also available. It stops the output of detection signals from Base amplifier to controller and control signals from Remote amplifier to actuators.

Enable signal type : RC08EA-011N-000
RC08EA-011P-000

Since the input signal No. 8 is assigned for Enable signal, the usable control signal from the controller is up to 7.

- 1) Input from sensor to Remote amplifier
- 2) Output from Remote amplifier to actuators
- 3) Input from the controller to Base amplifier
- 4) Output from Base amplifier to the controller



Remote
Coupler

4+4
Switch Signal

8+8
Switch Signal

64+32
Switch Signal

RS-232C

CC-Link

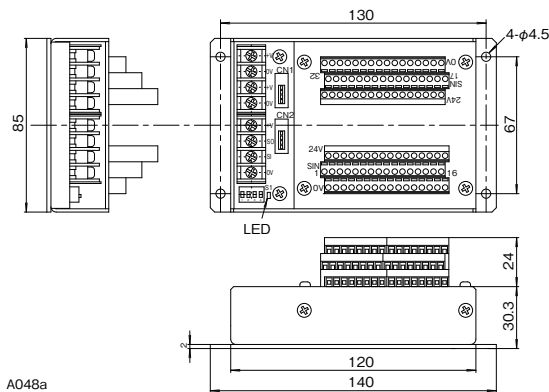
DeviceNet

Exclusive
Sensor

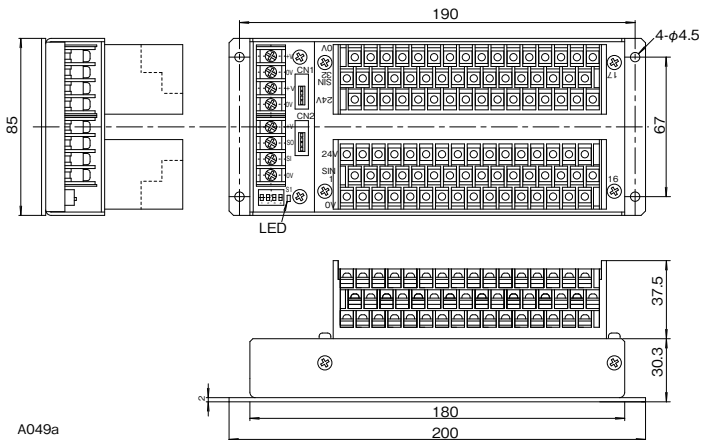
Wiring

64+32 switch signal

Remote amplifier
(Pin terminal)



Remote amplifier
(Ring terminal)



Wiring Please refer to the User's Guide.

		Remote amplifier (Pin terminal)	Remote amplifier (Ring terminal)
Type Code	NPN	RL64T-344N-000	RL64T-345N-000
	PNP	RL64T-344P-000	RL64T-345P-000
Applicable Remote head	RCH08T-211-PU		
Applicable Base amplifier	RL64E-333_-000, RL64EA-355DN-000, RL64E-366CL-000, RL64E-366EI-000		
Input logic	NPN or PNP		
No. of input signal	32		
Load current	7mA per input		
Frequency of operation	20Hz		
Current consumption	≤ 70mA		
LED	Ready		
Material	Housing	SPCC-SD, Glass-epoxy	SPCC-SD, Glass-epoxy
	Cover plate	---	---
Connection	Sensor	Terminal block : 3 pole x 32	Terminal block : 3 pole x 32
	Remote head	Terminal block : 4 pole x 1	Terminal block : 4 pole x 1
	Input/Output unit	Connector: e-con , 4-pin x 2	Connector: e-con , 4-pin x 2
Operating temperature	0...+50°C		
Weight	620 g		
Remarks			

Applicable sensor and actuator

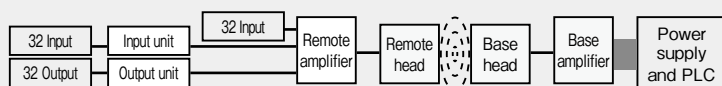
- Remote amplifier RL64T-344/345 can connect up to 32 detectors directly without Input unit.
- Please use a sensor which works definitely in the condition described below.

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

Notes

- Prepare the cable, 4 conductors and outer diameter phi 1.35 ... 1.6 mm to connect an input unit and an output unit.
An insulation displacement connector is attached to each unit.

- The total of the current consumption of all units being connected to Remote head - Remote amplifier, an input and output unit, sensors and actuators - must not exceed 2A the drive current which is supplied by the Remote head.

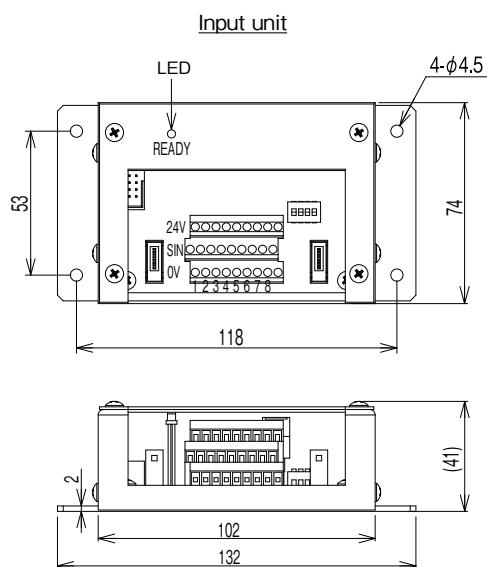


RL64T

RLX08
RLY04

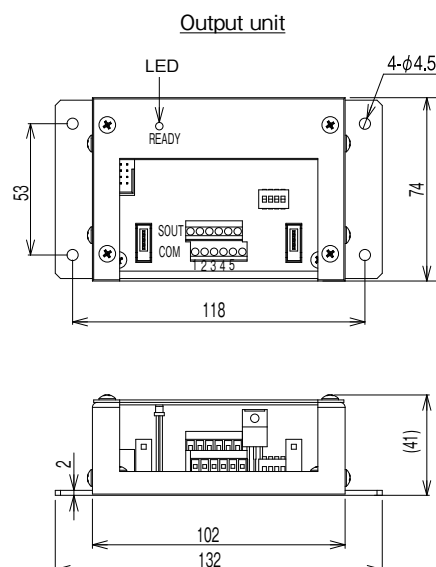
64+32
signal

64+32 switch signal



A052

Wiring Please refer to the User's Guide.

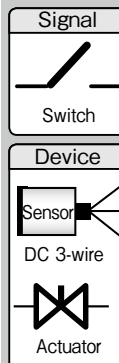


A053

Wiring Please refer to the User's Guide.

Input unit	
Type Code	NPN RLX08-322N
	PNP RLX08-322P
Input logic	NPN or PNP
No. of input signal	8
Load current	7mA per input
Current consumption	≤ 40mA
Frequency of operation	20Hz
LED	Ready
Material Housing	SPCC-SD
Cover plate	Acrylic resin
Connect Sensor	Terminal block : 3 x 8 pole
Actuator	- - -
Input/Output unit	Connector : e-con, 4-pin x 2
Operating temperature	0...+50°C
Weight	350 g
Remarks	

Output unit	
Type Code	NPN RLY04-322N
	PNP RLY04-322P
Output logic	NPN or PNP
No. of output signal	5 (data : 4, Data valid : 1)
Load current	max.200mA per output
Current consumption	≤ 40mA
Frequency of operation	20Hz
LED	Ready
Material Housing	SPCC-SD
Cover plate	Acrylic resin
Connection Sensor	- - -
Actuator	Terminal block : 3 x 4 pole
Input/Output unit	Connector : e-con, 4-pin x 2
Operating temperature	0...+50°C
Weight	350 g
Remarks	



Remote Coupler

4+4
Switch Signal

8+8
Switch Signal

64+32
Switch Signal

RS-232C

CC-Link

DeviceNet

Exclusive
Sensor

Applicable sensor and actuator

- Please use a sensor which works definitely in the condition described below.

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

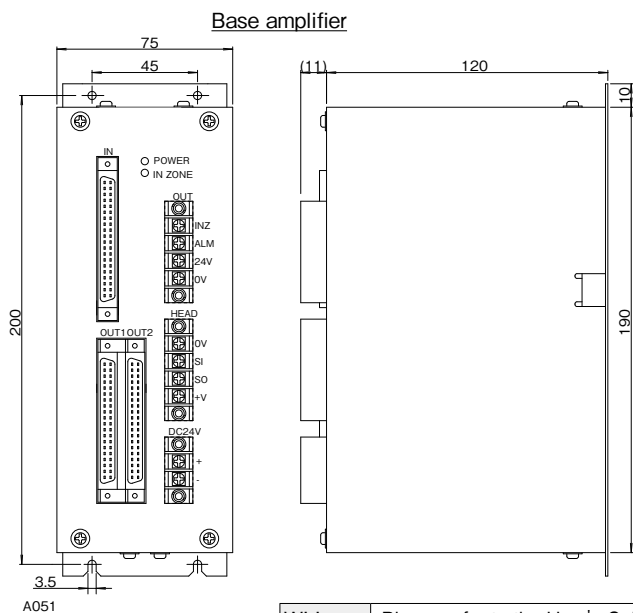
- The total of the current consumption of all units being connected to Remote head - Remote amplifier, an input and output unit, sensors and actuators - must not exceed 2A the drive current which is supplied by the Remote head.
- The input unit connects up to 8 sensors. It can connect up to 4. (Max 64 sensors can be connected to the amplifier and input units.)
- The output unit connects up to 4 actuators. It can connect up to 8

Notes

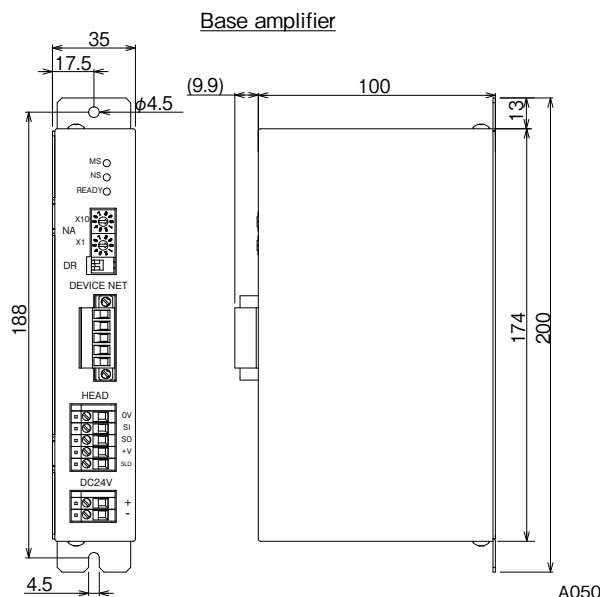
- Prepare the cable, 4 conductors and outer diameter phi 1.35 ... 1.6 mm to connect an input unit and an output unit. An insulation displacement connector is attached to each unit.

Wiring

64+32 switch signal



Wiring Please refer to the User's Guide.



Wiring Please refer to the User's Guide.

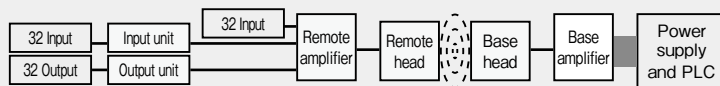
Base amplifier (Parallel I/O)		
Type	NPN	RL64E-333N-000
Code	PNP	RL64E-333P-000
Applicable Base head	RCH08E-211-PU	
Applicable Remote amplifier	RL64T-344_-000 RL64T-345_-000	
Input logic	NPN (current sink), PNP (current source)	
No. of input signal ²⁾	32	
Load current	7mA per input	
Output logic	NPN (current sink), PNP (current source)	
No. of output signal ¹⁾	67 (sensor: 64, InZone: 2, Short detection:1)	
Load current	max.20mA per output	
Operational voltage	24VDC \pm 5%	
Current consumption	\leq 150mA	
Frequency of operation	20Hz	
LED	Power(Green), Ready(Yellow)	
Material	Housing: SPCC-SD (steel plate)	
Connection	Power supply	Terminal block : 2 pole x 1
	Head	Terminal block : 4 pole x 1
	Input	Square connector : 40-pin x 1
	Output	Square connector : 40-pin x 2
Operating temperature	0...+50°C	
Weight	1,300 g	
Remarks	Connectors are supplied with Base amplifier	

Base amplifier (DeviceNet)		
Type	DeviceNet	RL64EA-355DN-000
Code		
Applicable Base head	RCH08E-211-PU	
Applicable Remote amplifier	RL64T-344_-000 RL64T-345_-000	
Communication function	Remotel/O (Poll)	
Baudrate	500k/250k/125k Baud Set up by DIP switch	
Node address	0 ~ 63 Set up by rotary switch	
No. of input signal ¹⁾	64+1 Ready (9 byte)	
No. of output signal ²⁾	32 (4 byte)	
Operational voltage	24VDC \pm 5%	
Current consumption	\leq 150mA	
LED	MS:Red/Green,NS:Red/Green,Ready : Yellow	
Material	Housing : SPCC-SD (steel plate)	
Connection	Power supply	Terminal block : 2 pole x 1
	Head	Terminal block : 5 pole x 1
	DeviceNet	OpenConnector
Operating temperature	0...+50°C	
Weight	550 g	
Remarks		

1) No. of output signal from Remote system

2) No. of input signal to Remote system

Please refer to the manual for more information.

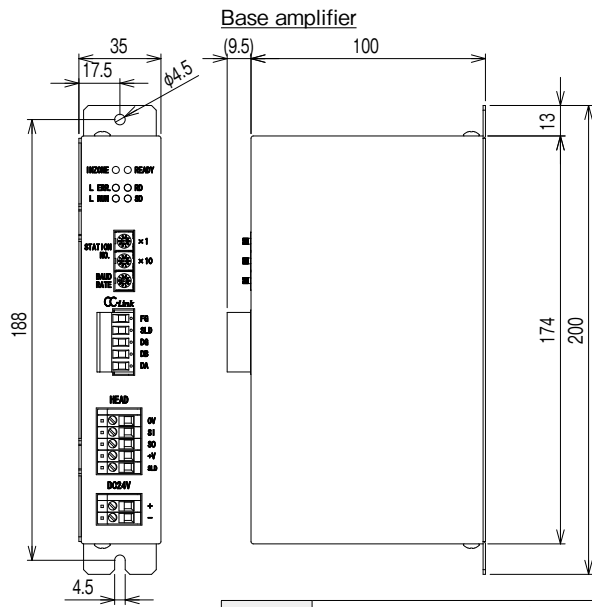


RL64E-333
RL64EA-355

RL64E-366

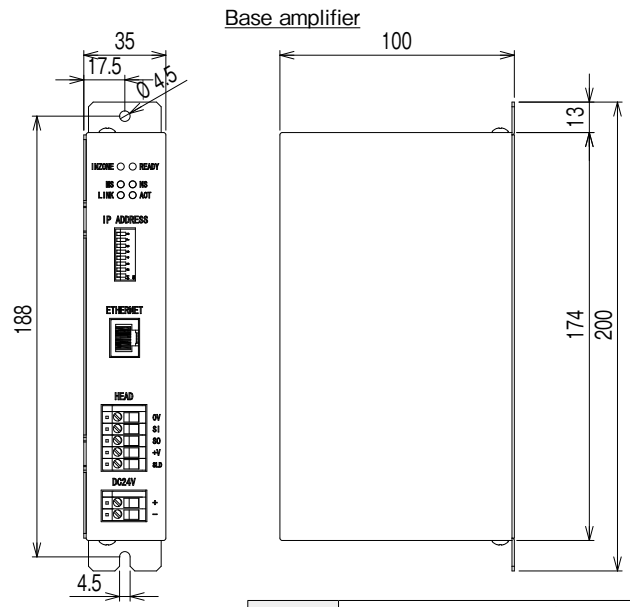
64+32
signal

64+32 switch signal



A063

Wiring Please refer to the User's Guide.



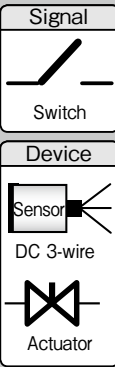
A068

Wiring Please refer to the User's Guide.

Base amplifier (CC-Link)	
Type	CC-Link
Code	RL64E-366CL-000
Applicable Base head	RCH08E-211-PU
Applicable Remote amplifier	RL64T-344_-000 RL64T-345_-000
Protocol	CC-Link (Ver. 1.10)
Station type	Remote device
No. of stations occupied	3 stations (RX/Ry 96 each bits, RWr/RWw each 12 words)
Baudrate	156k/625k/2.5M/5M/10M bps (Set up by rotary switch)
Station Number	1 ... 62 (Set up by rotary switch)
No. of input signal ¹⁾	64 (RXn0 ... RX(n+3)F) + 1 INZONE
No. of output signal ²⁾	32 (RYn0 ... RX(n+1)F) *1
Operational voltage	24VDC ± 5% (Ripple less than 1V)
Current consumption	≤ 150 mA
Material	Housing : SPCC-SD (steel plate)
Connection	Power supply
	Terminal block : 2 pole x 1
	Head
	Terminal block : 5 pole x 1
	CC-Link
	2 piece terminal block : 5 pole x 1
Operating temperature	0...+50°C
Weight	570 g
Remarks	

*1 n : The address which is allocated for the master station by setting of station number.

Base amplifier (EtherNet/IP)	
Type	EtherNet/IP
Code	RL64E-366EI-000
Applicable Base head	RCH08E-211-PU
Applicable Remote amplifier	RL64T-344_-000 RL64T-345_-000
Protocol	EtherNet/IP
Communication Function	Remote I/O function (Cyclic)
Communication method	Full duplex / half duplex (Automatic negotiation)
Baudrate	100Mbps/10Mbps (Automatic negotiation)
IP address	Set by DIP switch, DHCP and other
No. of input signal ¹⁾	64 + 1 INZONE (9 byte)
No. of output signal ²⁾	32 (4 byte)
Operational voltage	24V DC ± 5% (Ripple less than 1V)
Current consumption	≤ 150 mA
Material	Housing : SPCC-SD (steel plate)
Connection	Power supply
	Terminal block : 2 pole x 1
	Head
	Terminal block : 5 pole x 1
	Ethernet
	RJ 45 female Connector x 1
Operating temperature	0...+50°C
Weight	560 g
Remarks	



Remote Coupler

4+4
Switch Signal

8+8
Switch Signal

64+32
Switch Signal

RS-232C

CC-Link

DeviceNet

Exclusive Sensor

Wiring