

General Specifications

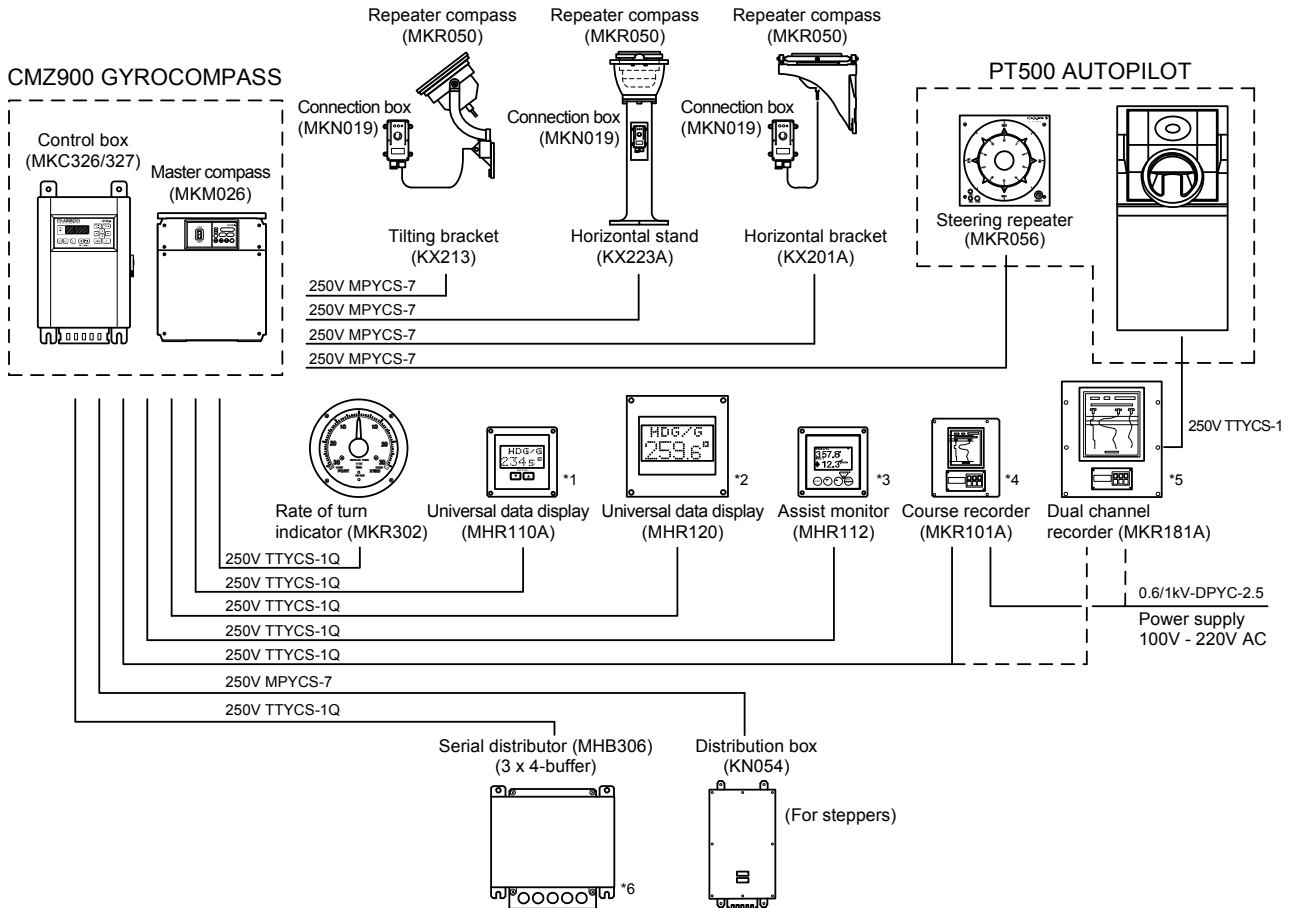
CMZ900 series

CMZ900

GS 80B11K03E 2nd

System components and accessories

System configuration diagram



System components and accessories

Model	Nomenclature	Remarks	Model	Nomenclature	Remarks	Model	Nomenclature	Remarks
(Repeater compasses)			(Digital repeaters)			(Rate of turn indicators)		
MKR050	Repeater compass		MHR110A	Universal data display	*1	MKR302	ROT indicator	
MKN019	Connection box		MHR120	Universal data display	*2	MKD002	Dimmer box	
KX605	Shading circle		MKD002	Dimmer box	*1, *2	(Signal distributors)		
KX607	Repeater cover		MHR112	Assist monitor	*3	KN054	Distribution box	
MKX617	Azimuth circle		(Recorders)			MHB306	Serial distributor	*6
MKR056	Steering repeater		KR101A	Course recorder	*4			
(Repeater brackets)			KR181A	Dual channel recorder	*5			
KX201A	Horizontal bracket							
KX213	Tilting bracket							
KX223A	Horizontal stand							
KX610A	Horizontal stand cover							

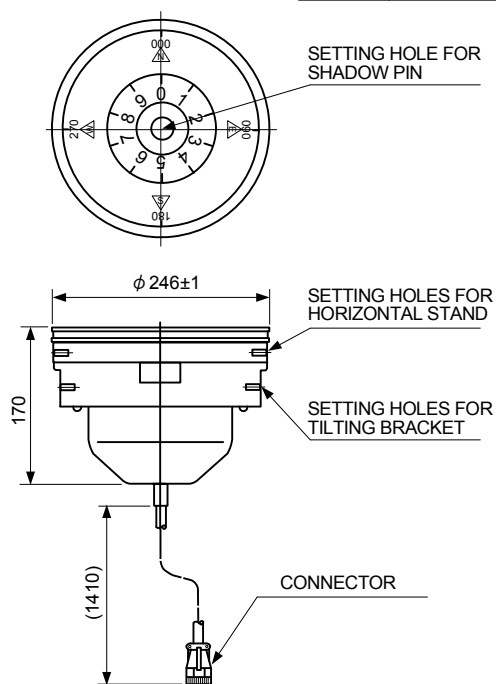
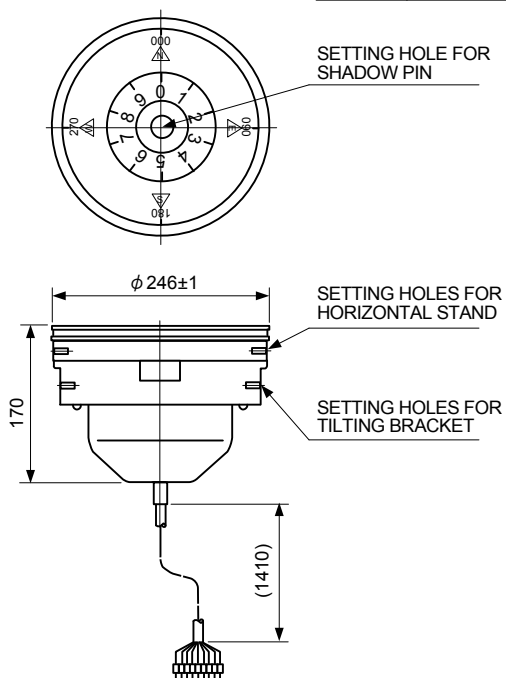
For the General Specifications of the equipment with index *1 through *6 on the above table, Please refer to the appropriate document listed below.

- *1) MHR110A Universal data display/MKD002 Dimmer box: GS80B12H01-03E
- *2) MHR120 Universal data display/MKD002 Dimmer box: GS80B12H01-04E
- *3) MHR112 Assist monitor: GS80B92R01E
- *4) MKR101A Course recorder: GS80B12R06E
- *5) MKR181A Dual channel recorder: GS80B12R07E
- *6) MHB306 Serial distributor: GS80B32B01

MKR050 Repeater compass

MODEL	MKR050-G
MASS	5.8 kg

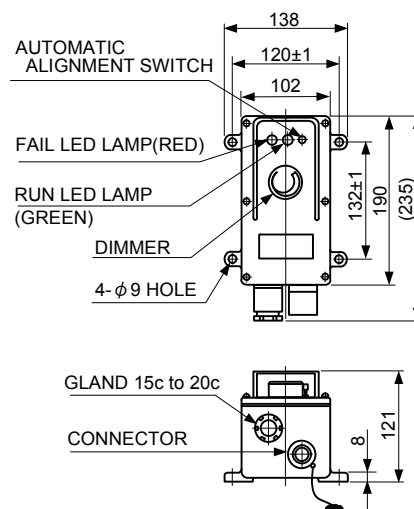
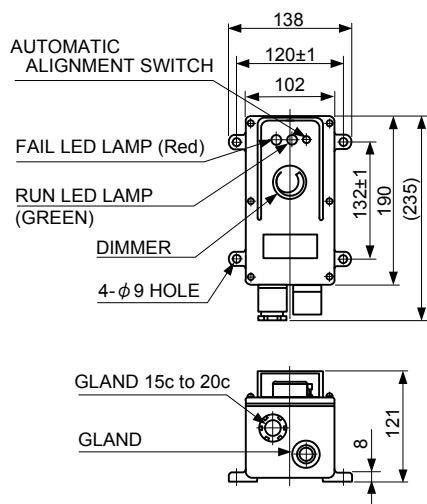
MODEL	MKR050-P
MASS	5.8 kg



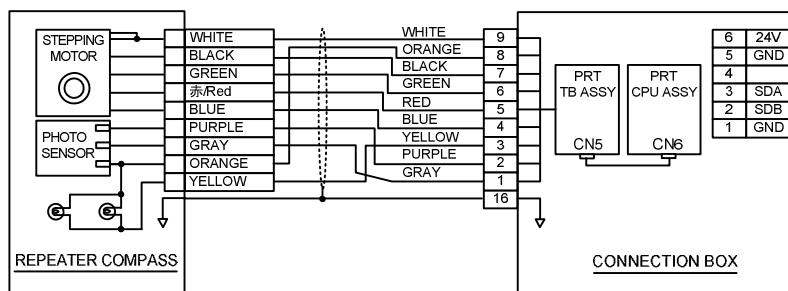
MKN019 Connection box

MODEL	MKN019-G
MASS	1.8 kg

MODEL	MKN019-P
MASS	1.8 kg



Connection diagram



Repeater compass MKR050-X1 ... X5/Option

Model	Suffix	Specification
MKR050	.....	Repeater compass
Conection X1	-G	Gland type
	-P	Plug type
Logo mark X2	Y	Yokogawa Denshi Kiki
Paint color X3	1	Munsell 2.5G7/2
	2	Munsell 7.5BG7/2
Standards X4	0	Not applicable
	1	JG
	2	MED
Name plate X5	1	Japanese & English
	2	English
Option	/C	Chinese name plate

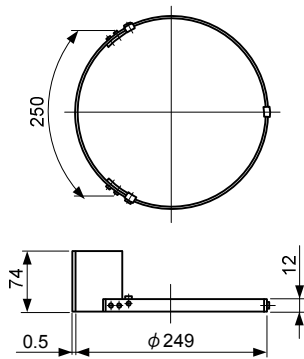
Connection box MKN019-X1 ... X5/Option

Model	Suffix	Specification
MKN019	.....	Connection box (For MKR050)
Connection X1	-G15F	Gland type size 15f (15a to 15c)
	-G20F	Gland type size 20f (20a to 20c)
	-G25F	Gland type size 25f (25a to 25c)
	-P15F	Plug type size 15f (15a to 15c)
	-P20F	Plug type size 20f (20a to 20c)
Paint color X2	2	Munsell 2.5G7/2
	3	Munsell 7.5BG7/2
Standards X3	0	Not applicable
	1	JG
	2	MED
Name plate X4	1	Japanese & English
	2	English
Applied to X5	-HB	Horizontal bracket
	-HS	Horizontal stand
	-TB	Tilting bracket
Option	/48	Signaling rate 4800bps (else 9600bps)
	/C	Chinese name plate
	/M	Metal Gland

Note: Plastic Gland is commonly used. Option /M must be selected if Metal Gland is required.

KX605 Shading circle

MODEL	KX605
MASS	0.3 kg

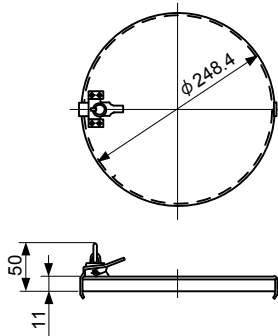


Shading circle KX605

Model	Suffix	Specification
MKX605	Shading circle (For MKR050)

KX607 Repeater cover

MODEL	KX607
MASS	0.5 kg

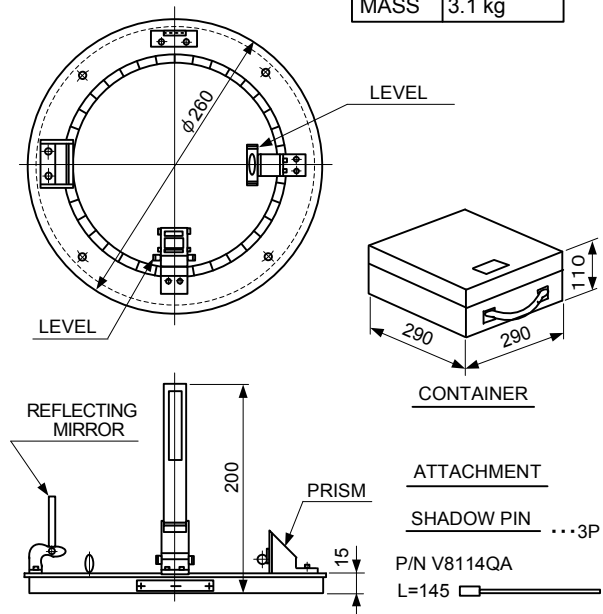


Repeater cover KX607

Model	Suffix	Specification
MKX607	Repeater cover (For MKR050)

MKX617 Azimuth circle

MODEL	MKX617
MASS	3.1 kg



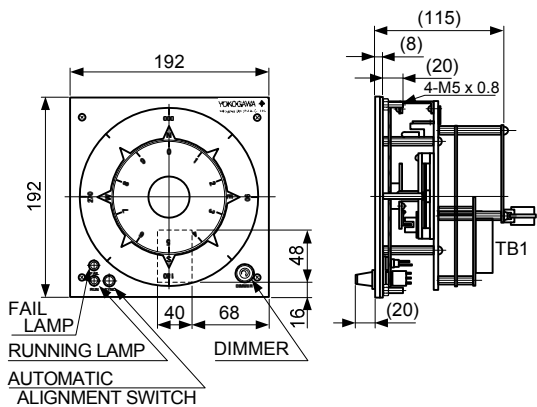
Azimuth circle MKX617-X1/Option

Model	Suffix	Specification
MKX617	.....	Azimuth circle
Name plate X1	-1	Japanese & English
	-2	English
Option	/C	Chinese name plate

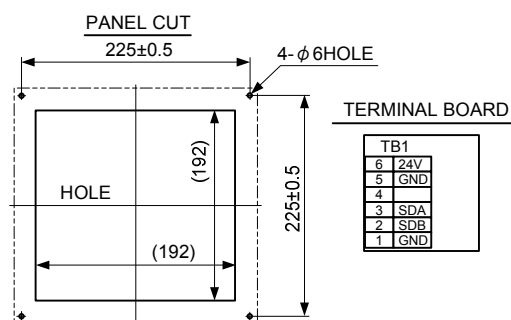
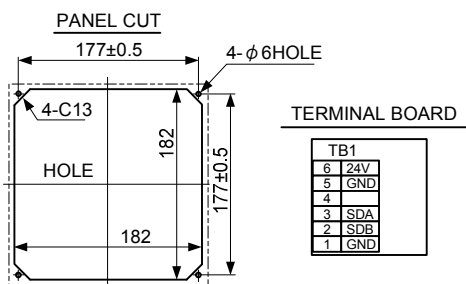
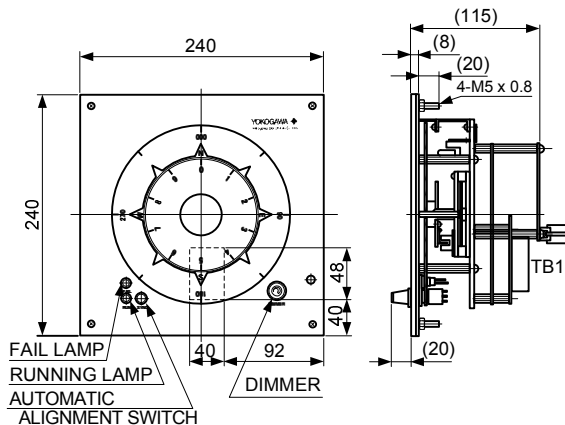
Note: Storage box and 3 pieces of shadow pin (V8114QA) are included.

MKR056 Steering repeater

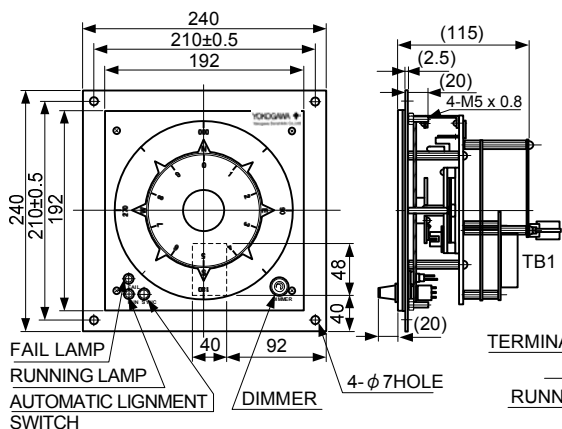
MODEL	MKR056-F1
MASS	3.2 kg



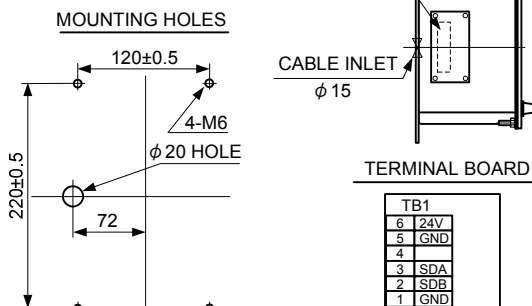
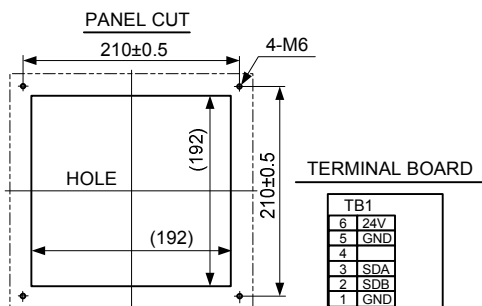
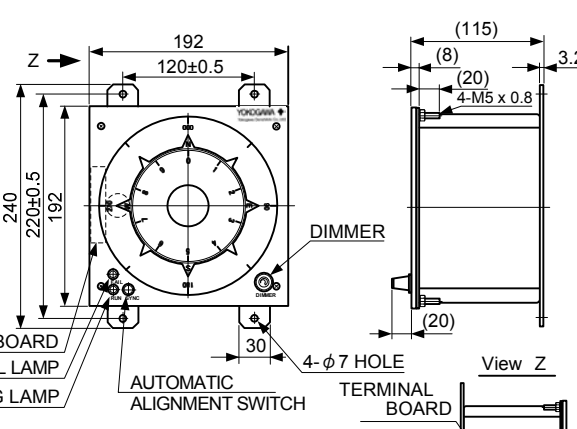
MODEL	MKR056-S/F2
MASS	3.8 kg



MODEL	MKR056-P
MASS	4.0 kg



MODEL	MKR056-W
MASS	5.0 kg



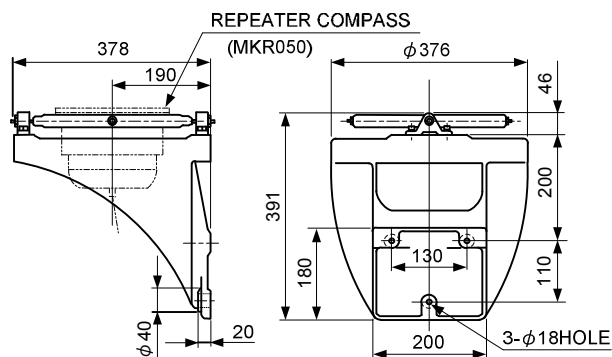
Steering repeater MKR056-X1 ... X8/Option

Model	Suffix	Specification
MKR056	.....	Steering repeater
Style	-F	Console mount type
	-P	Flash mount type (Surface mounting)
	-S	Pilot stand built-in type
	-W	Wall mount type
Size	1	192 x 192 (X1 = F, W only)
X2	2	240 x 240 (X1 = F, P, S only)
Logo mark	X3 | 1	Yokogawa Denshi Kiki
Paint color	X4 | 1	Munsell 0.8Y2.50.4 (LAMP BLACK)
Standards	-0	Not applicable
	-1	JG
	-2	MED
X5		
Name plate	1	Japanese & English
X6	2	English
Cable length	-15	1.5m
	-30	3.0m
	-50	5.0m
	-NN	Without cable
	-SN	Built-in Pilot stand
Color of Character	1	Black in white background
	2	White in black background
X8		
Option	/48	Signaling rate 4800bps (else 9600bps)
	/C	Chinese name plate
	/D	With cover

Note: Option /D is only available when Suffix X1=F is selected.

KX201A Horizontal bracket

MODEL	KX201A
MASS	6.5 kg



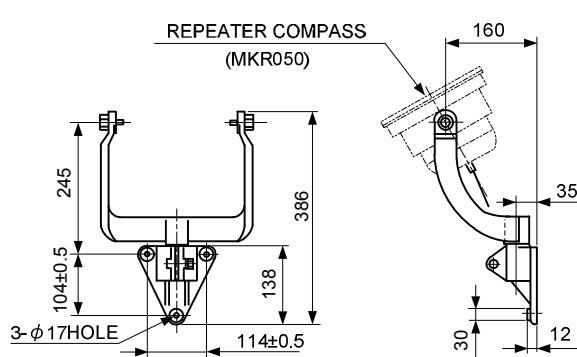
Horizontal bracket KX201A-X1 ... X3/Option

Model	Suffix	Specification
KX201A	.....	Horizontal bracket (For MKR050)
Standards	-0	Not applicable
	-1	JG
	-2	MED
X1		
Paint color	-1	Munsell 2.5G7/2
X2	-2	Munsell 7.5BG7/2
Name plate	-1	Japanese & English
X3	-2	English
Option	/C	Chinese name plate

Note: Repeater compass MKR050 is not included.

KX213 Tilting bracket

MODEL	KX213
MASS	4.5 kg



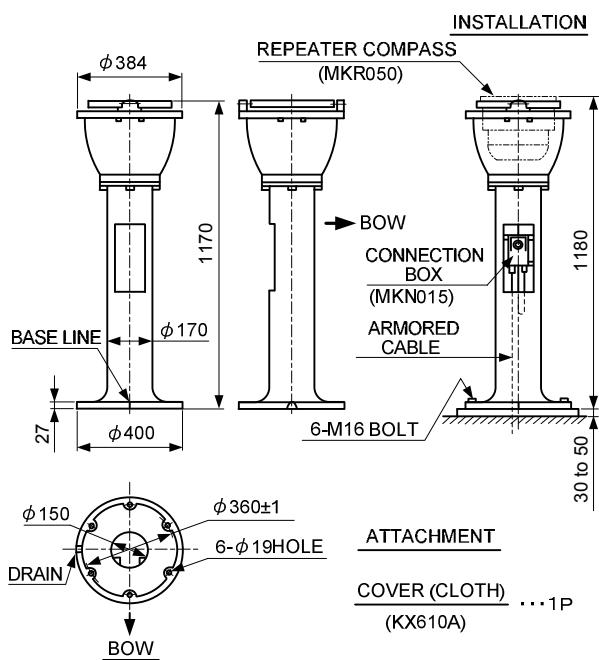
Tilting bracket KX213-X1 ... X3/Option

Model	Suffix	Specification
KX213	.....	Tilting bracket (For MKR050)
Standards	-0	Not applicable
	-1	JG
	-2	MED
X1		
Paint color	-1	Munsell 2.5G7/2
X2	-2	Munsell 7.5BG7/2
Name plate	-1	Japanese & English
X3	-2	English
Option	/C	Chinese name plate

Note: Repeater compass MKR050 is not included.

KX223A Horizontal stand

MODEL	KX223A
MASS	21.5 kg



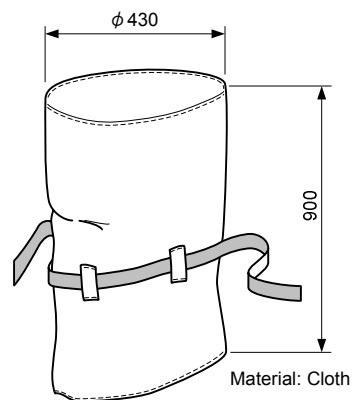
Horizontal stand KX223A-X1 ... X3/Option

Model	Suffix	Specification
KX223A	.....	Horizontal stand (For MKR050)
Standards	-0	Not applicable
	-1	JG
	-2	MED
X1		
Paint color	1	Munsell 2.5G7/2
X2	2	Munsell 7.5BG7/2
Name plate	-1	Japanese & English
	-2	English
Option	/C	Chinese name plate

Note: Repeater compass MKR050 is not included.

KX610A Horizontal stand cover

MODEL	KX610A
MASS	-

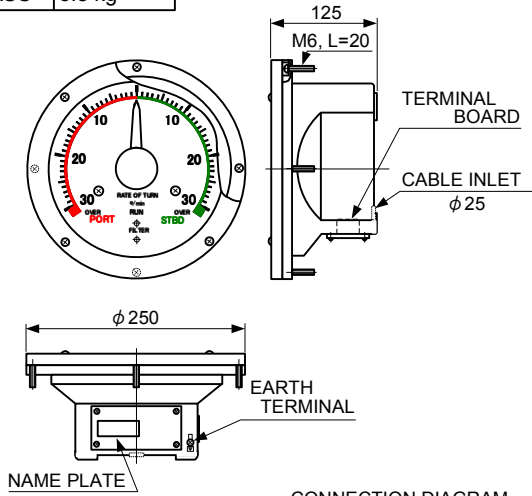


Horizontal stand cover KX610A

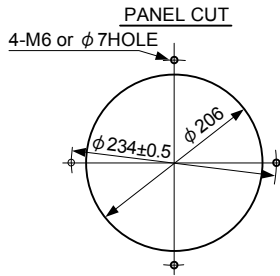
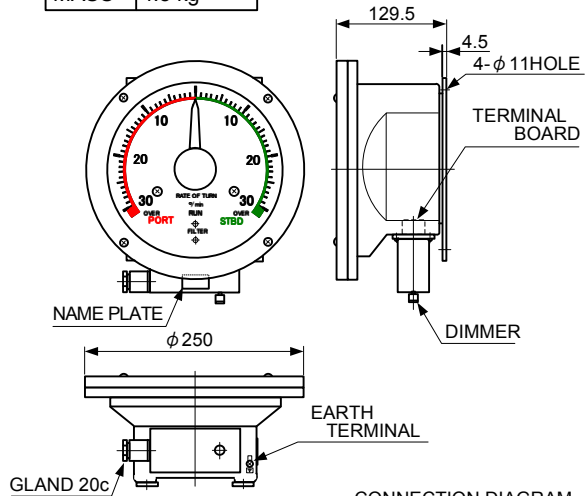
Model	Suffix	Specification
KX610A	Cover (cloth) for KX223A

MKR302 Rate of turn indicator

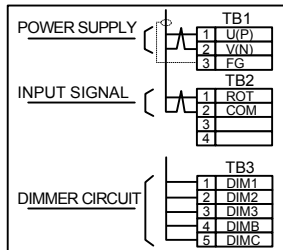
MODEL	MKR302-F
MASS	3.8 kg



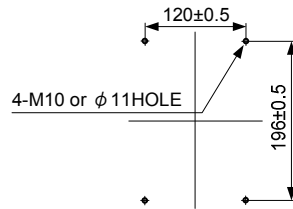
MODEL	MKR302-W
MASS	4.8 kg



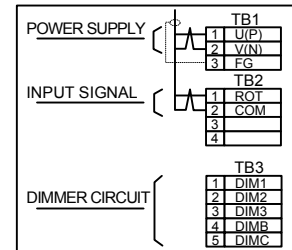
CONNECTION DIAGRAM



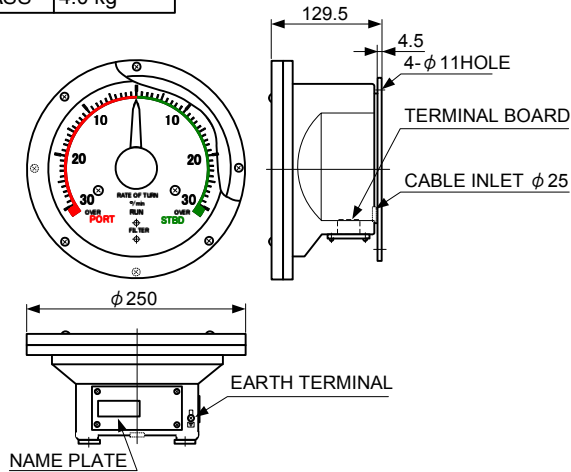
MOUNTING HOLES



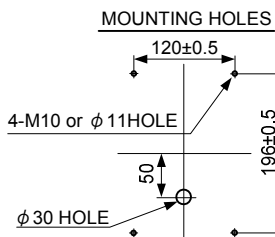
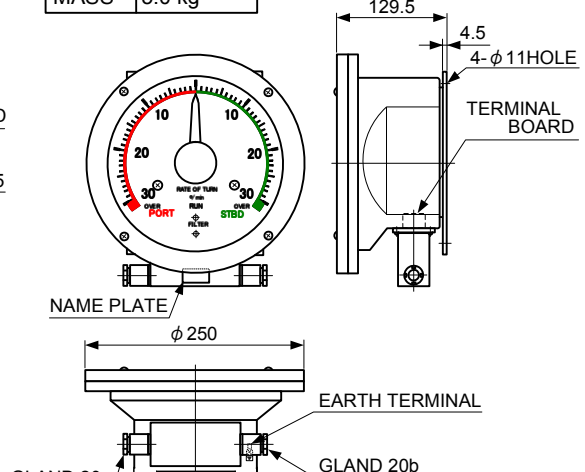
CONNECTION DIAGRAM



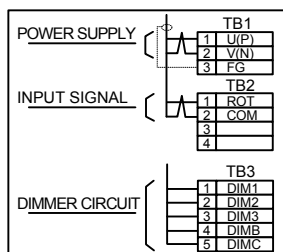
MODEL	MKR302-W
MASS	4.0 kg



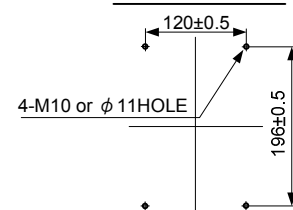
MODEL	MKR302-W
MASS	5.0 kg



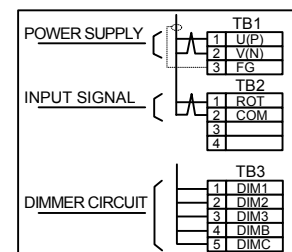
CONNECTION DIAGRAM



MOUNTING HOLES



CONNECTION DIAGRAM

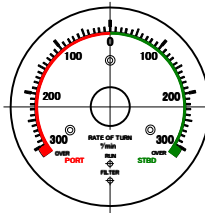
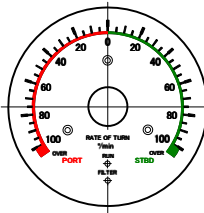
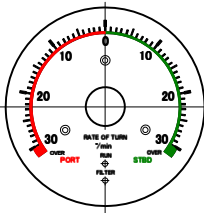


Graduation

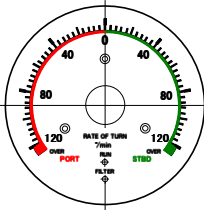
X8 = A (30°/min)

X8 = B (100°/min)

X8 = C (300°/min)



X8 = D (120°/min)



Note: Graduation 30°/min is adapted to JG & MED standards.

Note: Graduation 120°/min, 300°/min is adapted to MED standards.

COLOR SCHEME(色区分)		
GROUND(板面地色)		WHITE(白色)
LETTERING (文字)	STBD(右回頭)	GREEN(緑色)
	PORT(左回頭)	RED(赤色)
	OTHER(その他)	BRACK(黒色)
GRADUATION(目盛り)		BRACK(黒色)
BASE LINE (基線) : STBD		GREEN(緑色)
BASE LINE (基線) : PORT		RED(赤色)
LED		ORANGE or GREEN (橙色または緑色)

Rate of turn indicator MKR302-X1 ... X10/Option

Model	Suffix	Specification
MKR302	.....	Φ250
Style	-F	Flash mount
X1	-W	Wall mount
Cable inlet	1	Through hole
X2	2	Gland
Power supply	1	100V AC to 220V AC 50/60Hz 1 φ
X3	2	24V DC
Illumination	-1	Orange
X4	-2	Green
Dimmer	1	Built-in
	2	Separate (Maker supply)
X5	3	Separate (YARD supply)
Color of Character	1	Black in white background
X6	2	White in black background
Standards	-0	Not applicable
	-1	JG
	-2	MED
X7		
Output range	A	30°/min (JG, MED)
	B	100°/min
	C	300°/min
X8	D	120°/min
Name plate	1	Japanese & English
X9	2	English
Paint color	-1	Munsell 0.8Y2.5/0.4 (LAMP BLACK)
	-2	Munsell 2.5G7/2
X10	-3	Munsell 7.5BG7/2
Option	/C	Chinese name plate

Note 1) It is possible to use the AC power supplied from Control box MKC326/327.
 Note 2) Possible combination of Suffix X1, X2, X5 and MKD002 Dimmer box must follow the manner listed below.

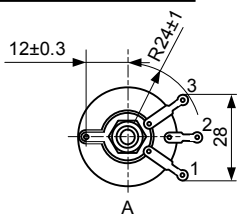
X1	X2	X5	Gland size	KD002 Dimmer box
F	1	2	-	Necessary to use
F	1	3	-	No use
W	1	2	-	Necessary to use
W	1	3	-	No use
W	2	1	20c	No use
W	2	2	20b, 20c	Necessary to use
W	2	3	20b, 20c	No use

Note 3) Suffix X3 must be selected as below.

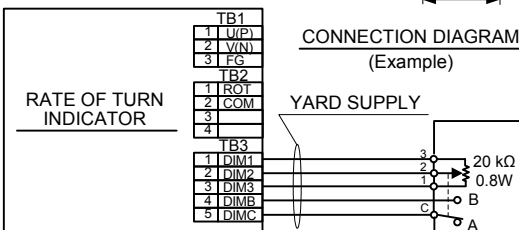
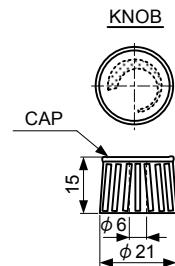
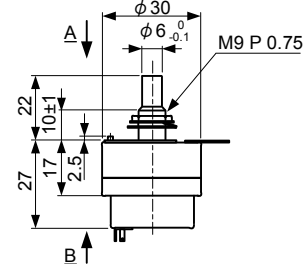
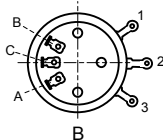
X3	CMZ900B	CMMZ900S/D
-1	-	Available
-2	Available	Available

MKD002 Dimmer box

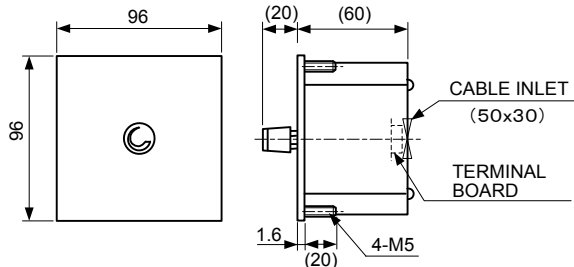
VARIABLE RESISTOR



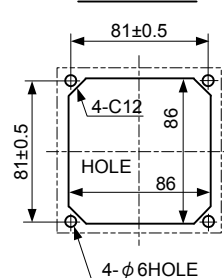
MODEL	MKD002-N
MASS	0.1 kg



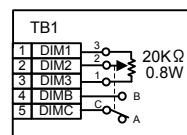
MODEL	MKD002-F
MASS	0.5 kg



PANEL CUT



CONNECTION DIAGRAM



Dimmer box MKD002-X1 ... X6/Option

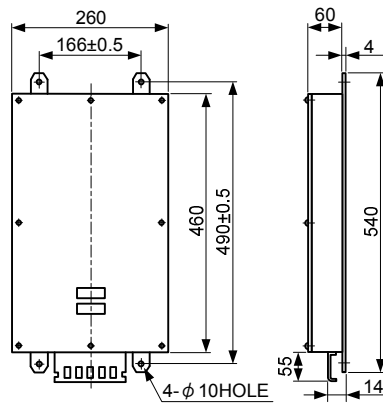
Model	Suffix	Specification
MKD002	.....	Dimmer box
Style	-F	Flash mount (96 x 96)
X1	-N	Variable resistor
Connection	1	Through hole (Flash mount only)
X2	N	None (Variable resistor only)
Applied to	1	MKR302
X3	2	MHR110A
Standards	X4 0	None
Name plate	-0	None (Variable resistor only)
	-1	Japanese & English
X5	-2	English
Paint color	1	Munsell 0.8Y2.5/0.4 (LAMP BLACK)
	2	Munsell 2.5G7/2
	3	Munsell 7.5BG7/2
X6	5	None (Variable resistor only)
Option	/C	Chinese name plate

Note 1) Possible combination of Suffix X1, X2, X3, X5 and X6 must be as follow.

X1	X2	X3	X5	X6
-N	N	1 or 2	-0	5
-F	1	1 or 2	-1 or -2	Anyone of 1 - 3

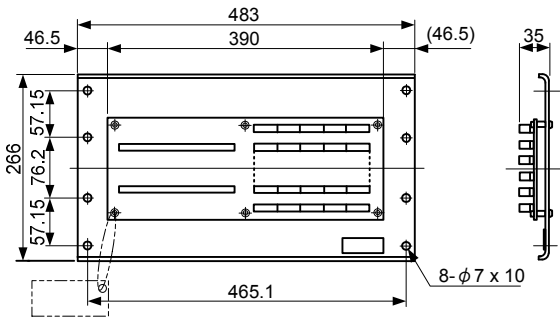
Note 2) Resistance value: Rate of turn indicator MKR302: 20kΩ 0.8W
 Universal data indicator MHR110A: 1kΩ 0.8W

MODEL	KN054-W
MASS	7.0 kg

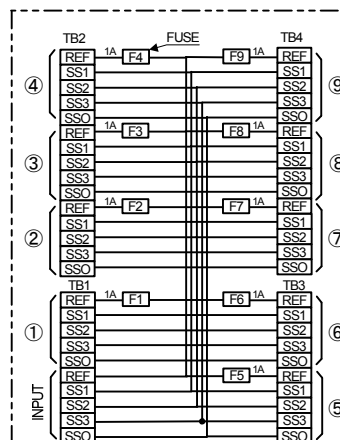
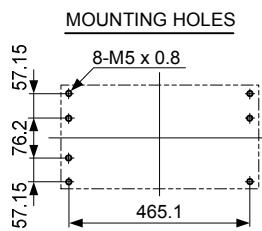


KN054 Distribution box

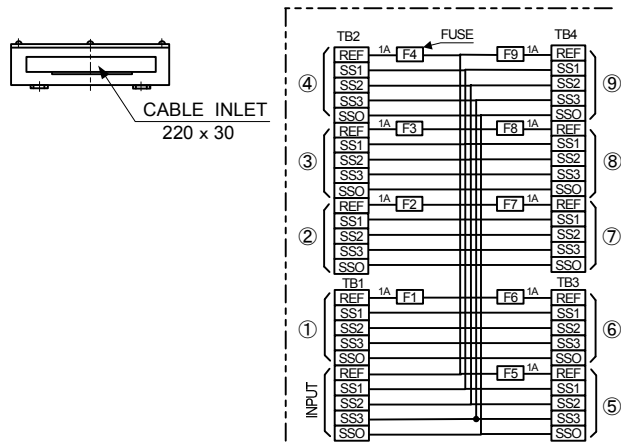
MODEL	KN054-P
MASS	2.0 kg



CONNECTION DIAGRAM



CONNECTION DIAGRAM



Distribution box KN054-X1 ... X3/Option

Model	Suffix	Specification
KN054	.....	Distribution box (For Stepper)
Style	-P	Board only (For panel mount)
X1	-W	Wall mount
Paint color	1	Munsell 2.5G7/2
	2	Munsell 7.5BG7/2
X2	N	In case of X1=P
Name plate	1	Japanese & English
X3	2	English
Option	/CH	Chinese name plate
	/WM	MED

End