

MECHANICAL COUNTERS

Ratchet counter (RS)

One (1) count per ratchet drive of 40-45°

Small type



RS-204-5



RS-207-5 (RS-5)



RSL-207-5 (RS-5 (3))



RS-50

Model	Number of digits	Shaft Position and Direction of rotation	Resetting to zero	Height of shaft mm	Outside diameter in shaft mm	Mounting dimensions Front and back X right and left X bore mm	Figure size mm	Counting speed (maximum) cpm	Torque (maxi-mum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
RS-204-5	5	Right hand shaft positive rotation	Knob	21	φ4	31×21×φ3.1	2.8×4.5	500	0.039	77	Black		A
RS-205-5	5	Right hand shaft positive rotation	Knob	21	φ4	30.5×20.5×φ3.2	2.4×4.8	1,000	0.049	58	Black		B
RS-205-5 (2)	5	Right hand shaft reverse rotation	Knob	21	φ4	30.5×20.5×φ3.2	2.4×4.8	1,000	0.049	58	Black		B
RSL-205-5	5	Left hand shaft positive rotation	Knob	21	φ4	30.5×20.5×φ3.2	2.4×4.8	1,000	0.049	58	Black		B
RSL-205-5 (2)	5	Left hand shaft reverse rotation	Knob	21	φ4	30.5×20.5×φ3.2	2.4×4.8	1,000	0.049	58	Black		B
RS-207-4 (RS-4)	4	Right hand shaft positive rotation	Knob	19	φ4	37×30×φ4.2	3.8×5	600	0.049	97	Black		A
RS-207-5 (RS-5)	5	Right hand shaft positive rotation	Knob	19	φ4	37×30×φ4.2	3.8×5	600	0.049	105	Black		A
RS-207-6 (RS-6)	6	Right hand shaft positive rotation	Knob	19	φ4	37×37×φ4.2	3.8×5	600	0.049	115	Black		A
RS-207-5 (2) (RS-5 (2))	5	Right hand shaft reverse rotation	Knob	19	φ4	37×30×φ4.2	3.8×5	600	0.049	105	Black		B
RSL-207-5 (RS-5 (3))	5	Left hand shaft positive rotation	Knob	19	φ4	37×30×φ4.2	3.8×5	600	0.049	108	Black		B
RSL-207-5 (2) (RS-5 (4))	5	Left hand shaft reverse rotation	Knob	19	φ4	37×30×φ4.2	3.8×5	600	0.049	108	Black		C
RS-40	4	Right hand shaft positive rotation	Push button	23	φ4	39×30×φ4.2	3×4.5	700	0.039	110	Black		A
RS-50	5	Right hand shaft positive rotation	Push button	23	φ4	39×30×φ4.2	3×4.5	700	0.039	111	Black		A

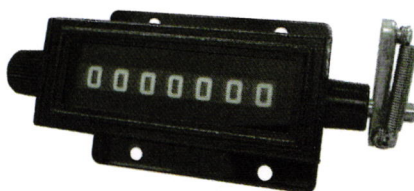
MECHANICAL COUNTERS

Ratchet counter (RS) One (1) count per ratchet drive of 40-50°

Medium type



RS-303-4



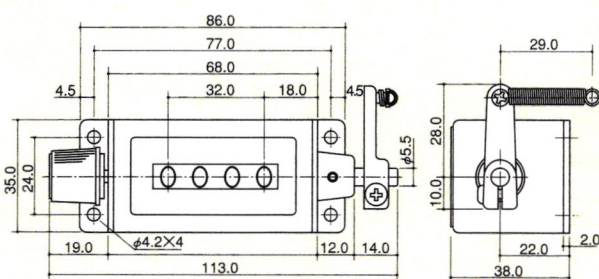
RS-907



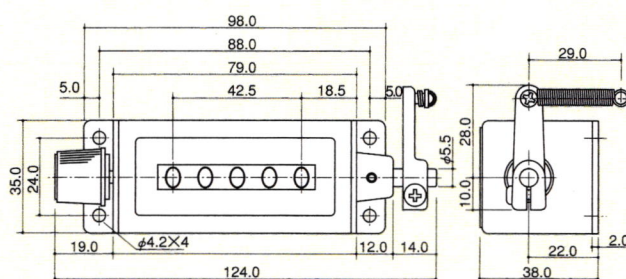
RS-606-5

Model	Number of digits	Shaft Position and Direction of rotation	Resetting to zero	Height of shaft mm	Outside diameter in shaft mm	Mounting dimensions Front and back X right and left X bore mm	Figure size mm	Counting speed (maximum) cpm	Torque (maximum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
RS-303-4	4	Right hand shaft positive rotation	Knob	22	φ5.5	24×77×φ4.2	4.5×6.5	500	0.058	186	Black		A
RS-303-5	5	Right hand shaft positive rotation	Knob	22	φ5.5	24×88×φ4.2	4.5×6.5	500	0.058	205	Black		A
RS-303-6	6	Right hand shaft positive rotation	Knob	22	φ5.5	24×88×φ4.2	4.5×6.5	500	0.058	205	Black		B
RS-907	7	Right hand shaft positive rotation	Knob	25	φ5.5	48×48×φ5.0	4.5×6.5	500	0.058	225	Black		A
RS-606-5	5	Two shafts positive rotation	Push button	16	φ6.0	62×52×φ4.5	4.5×6.5	600	0.098	320	Light blue		A
RS-606-5 (2)	5	Two shafts reverse rotation	Push button	16	φ6.0	62×52×φ4.5	4.5×6.5	600	0.098	320			B

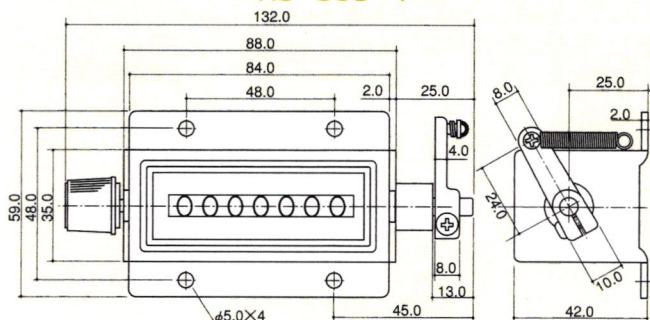
● Dimensional drawing



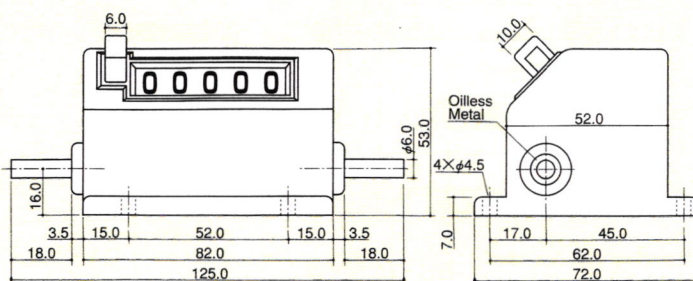
RS-303-4



RS-303-5/RS-303-6



RS-907



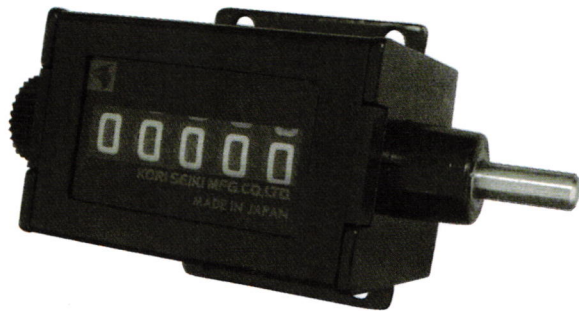
RS-606-5/RS-606-5 (2)

MECHANICAL COUNTERS

Revolution counter (LB) 360° rotation of the drive shaft ▶ One count Reverse the drive shaft ▶ Subtracted



Small type



LB-204-5



LB-207-5 (LB-5)



LBL-207-5 (LB-5 (3))



LB-40

Model	Number of digits	Shaft Position and Direction of rotation	Resetting to zero	Height of shaft mm	Outside diameter in shaft mm	Mounting dimensions Front and back X right and left X bore mm	Figure size mm	Counting speed (maximum) cpm	Torque (maximum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
LB-204-5	5	Right hand shaft positive rotation	Knob	21	φ4.0	31×21×φ3.5	2.8×4.5	3,000	0.002	73	Black		B
LB-207-4 (LB-4)	4	Right hand shaft positive rotation	Knob	19	φ4.0	37×30×φ4.2	3.8×5	4,000	0.002	94	Black		A
LB-207-5 (LB-5)	5	Right hand shaft positive rotation	Knob	19	φ4.0	37×30×φ4.2	3.8×5	4,000	0.002	102	Black		A
LB-207-6 (LB-6)	6	Right hand shaft positive rotation	Knob	19	φ4.0	37×37×φ4.2	3.8×5	4,000	0.002	110	Black		C
LB-207-5 (2) (LB-5 (2))	5	Right hand shaft reverse rotation	Knob	19	φ4.0	37×30×φ4.2	3.8×5	4,000	0.002	102	Black		C
LBL-207-5 (LB-5 (3))	5	Left hand shaft positive rotation	Knob	19	φ4.0	37×30×φ4.2	3.8×5	4,000	0.002	106	Black		C
LBL-207-5 (2) (LB-5 (4))	5	Left hand shaft reverse rotation	Knob	19	φ4.0	37×30×φ4.2	3.8×5	4,000	0.002	106	Black		C
LB-40	4	Right hand shaft positive rotation	Push button	23	φ4.0	39×30×φ4.2	3×4.5	4,000	0.002	108	Black		A
LB-50	5	Right hand shaft positive rotation	Push button	23	φ4.0	39×30×φ4.2	3×4.5	4,000	0.002	108	Black		A

*Remarks column A...Standard product B...Lot manufacture C...Order manufacture

MECHANICAL COUNTERS

Rotary counter (RL)

360° rotation of the drive shaft ▶ Ten counts
Reverse the drive shaft ▶ Subtracted

Small type



RL-204-5



RL-207-4 (RL-4)

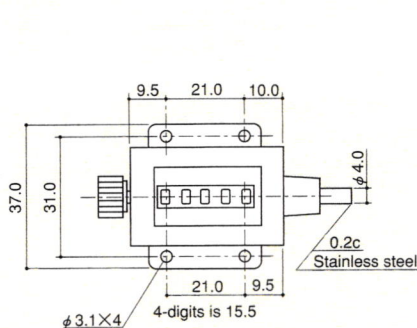


RL-40

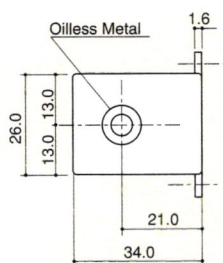
Model	Number of digits	Shaft Position and Direction of rotation	Resetting to zero	Height of shaft mm	Outside diameter in shaft mm	Mounting dimensions Front and back×right and left×bore mm	Figure size mm	Counting speed (maximum) cpm	Torque (maximum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
RL-204-5	5	Right hand shaft positive rotation	Knob	21	φ4.0	31×21×φ3.1	2.8×4.5	3,000	0.005	73	Black		C
RL-207-4 (RL-4)	4	Right hand shaft positive rotation	Knob	19	φ4.0	37×30×φ4.2	3.8×5	4,000	0.003	94	Black		A
RL-207-5 (RL-5)	5	Right hand shaft positive rotation	Knob	19	φ4.0	37×30×φ4.2	3.8×5	4,000	0.003	102	Black		A
RL-207-6 (RL-6)	6	Right hand shaft positive rotation	Knob	19	φ4.0	37×37×φ4.2	3.8×5	4,000	0.003	110	Black		C
RL-40	4	Right hand shaft positive rotation	Push button	23	φ4.0	39×30×φ4.2	3×4.5	5,000	0.005	108	Black		A
RL-50	5	Right hand shaft positive rotation	Push button	23	φ4.0	39×30×φ4.2	3×4.5	5,000	0.005	108	Black		A

* Refer to RS-40/RS-50 on page 3 for the dimensional drawing of RL-40/RL-50

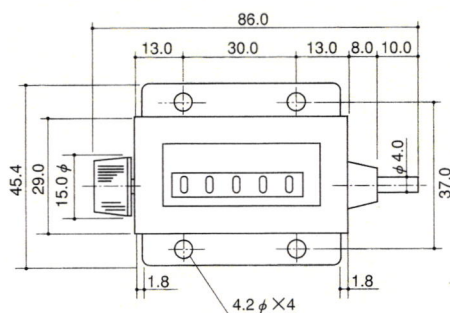
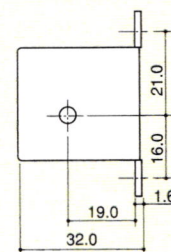
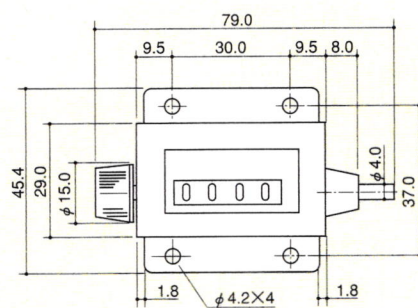
● Dimensional drawing



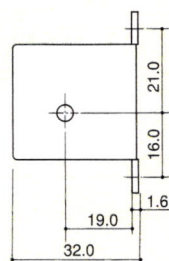
RL-204-5



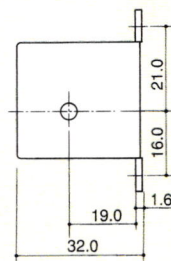
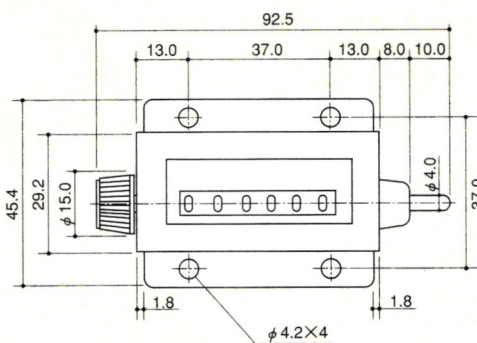
RL-207-4



RL-207-5



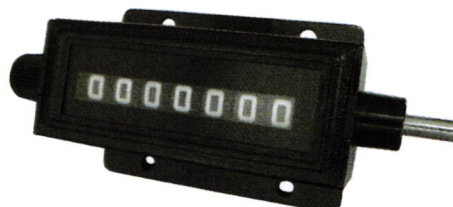
RL-207-6



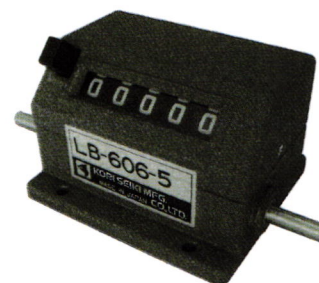
Medium type



LB-219-4



LB-907

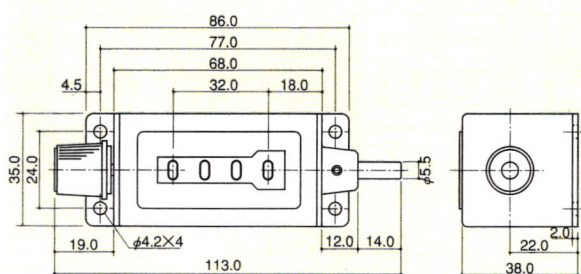


LB-606-5

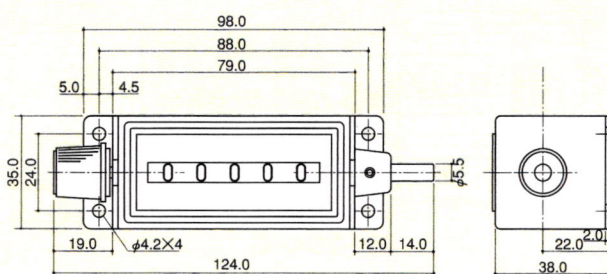
*It is the same also at the counting speed rpm.

Model	Number of digits	Shaft Position and Direction of rotation	Resetting to zero	Height of shaft mm	Outside diameter in shaft mm	Mounting dimensions Front and back×right and left×bore mm	Figure size mm	Counting speed (maximum) cpm	Torque (maximum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
LB-219-4	4	Right hand shaft positive rotation	Knob	22	φ5.5	24×77×φ4.2	4.5×6.5	3,000	0.003	180	Black		C
LB-219-5	5	Right hand shaft positive rotation	Knob	22	φ5.5	24×88×φ4.2	4.5×6.5	3,000	0.003	200	Black		C
LB-219-4(2)	4	Right hand shaft reverse rotation	Knob	22	φ5.5	24×77×φ4.2	4.5×6.5	3,000	0.003	180	Black		C
LB-219-5(2)	5	Right hand shaft reverse rotation	Knob	22	φ5.5	24×88×φ4.2	4.5×6.5	3,000	0.003	200	Black		C
LB-907	7	Right hand shaft positive rotation	Knob	25	φ5.5	48×48×φ5.0	4.5×6.5	3,000	0.005	220	Black		C
LB-606-5	5	Two shafts positive rotation	Push button	16	φ6.0	62×52×φ4.5	4.5×6.5	5,000	0.01	290	Light blue		C
LB-606-5(2)	5	Two shafts reverse rotation	Push button	16	φ6.0	62×52×φ4.5	4.5×6.5	5,000	0.01	310	Light blue		C

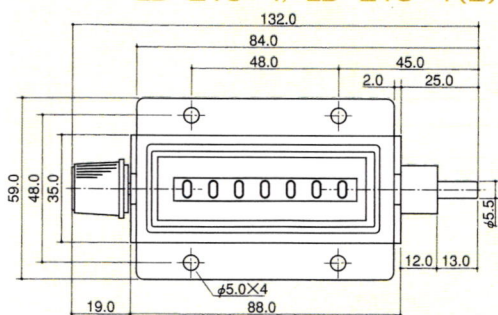
●Dimensional drawing



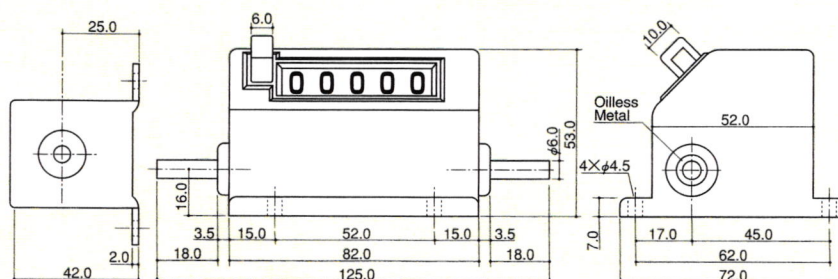
LB-219-4/LB-219-4(2)



LB-219-5/LB-219-5(2)



LB-907



LB-606-5/LB-606-5(2)

MECHANICAL COUNTERS

Rotary counter (RL)

360° rotation of the drive shaft ▶ Ten counts
Reverse the drive shaft ▶ Subtracted

Small type



RL-204-5



RL-207-4 (RL-4)

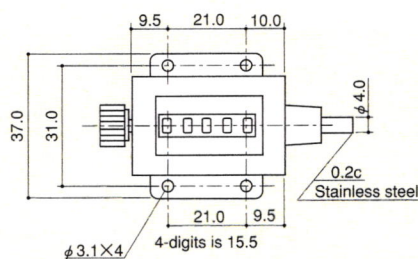


RL-40

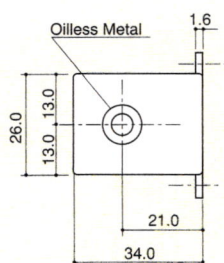
Model	Number of digits	Shaft Position and Direction of rotation	Resetting to zero	Height of shaft mm	Outside diameter in shaft mm	Mounting dimensions Front and back× right and left×bore mm	Figure size mm	Counting speed (maximum) cpm	Torque (maxi- -mum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
RL-204-5	5	Right hand shaft positive rotation	Knob	21	φ4.0	31×21×φ3.1	2.8×4.5	3,000	0.005	73	Black		C
RL-207-4 (RL-4)	4	Right hand shaft positive rotation	Knob	19	φ4.0	37×30×φ4.2	3.8×5	4,000	0.003	94	Black		A
RL-207-5 (RL-5)	5	Right hand shaft positive rotation	Knob	19	φ4.0	37×30×φ4.2	3.8×5	4,000	0.003	102	Black		A
RL-207-6 (RL-6)	6	Right hand shaft positive rotation	Knob	19	φ4.0	37×37×φ4.2	3.8×5	4,000	0.003	110	Black		C
RL-40	4	Right hand shaft positive rotation	Push button	23	φ4.0	39×30×φ4.2	3×4.5	5,000	0.005	108	Black		A
RL-50	5	Right hand shaft positive rotation	Push button	23	φ4.0	39×30×φ4.2	3×4.5	5,000	0.005	108	Black		A

* Refer to RS-40/RS-50 on page 3 for the dimensional drawing of RL-40/RL-50

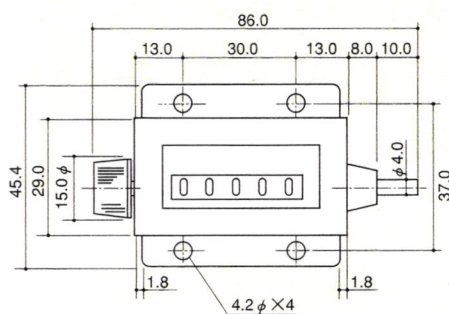
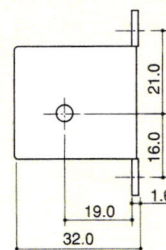
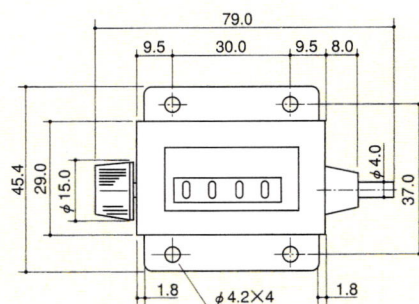
● Dimensional drawing



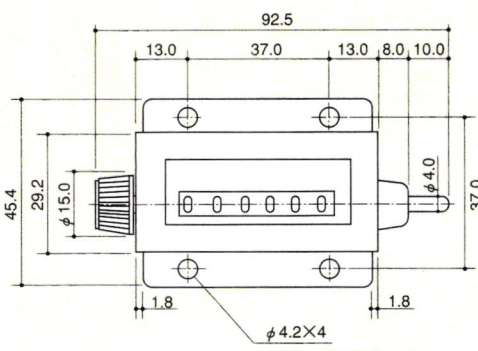
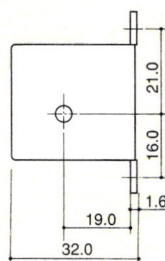
RL-204-5



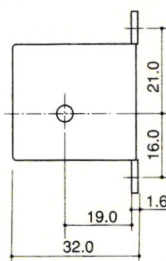
RL-207-4



RL-207-5



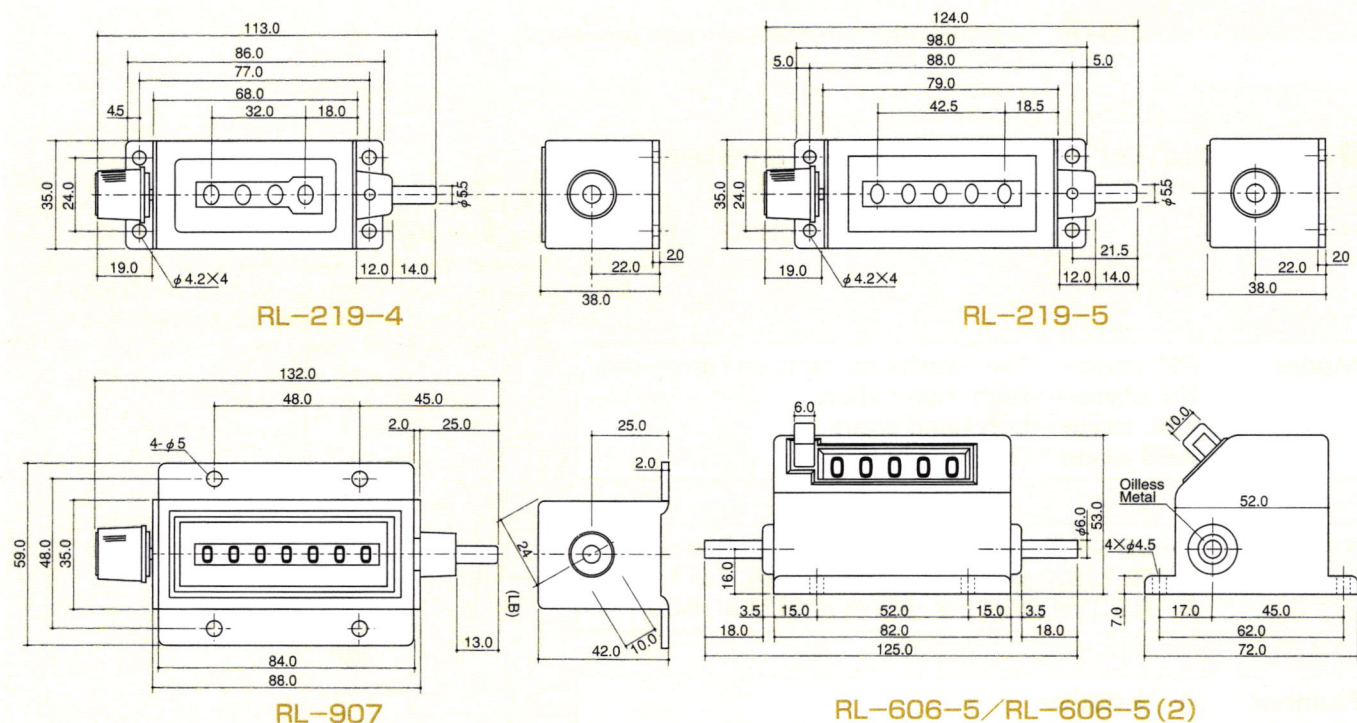
RL-207-6



Medium type

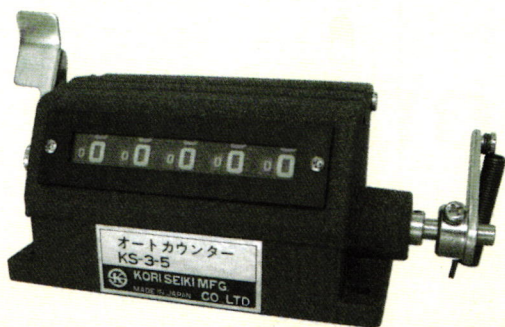
Model	Number of digits	Shaft Position and Direction of rotation	Resetting to zero	Height of shaft mm	Outside diameter in shaft mm	Mounting dimensions Front and back X positive and left X bore mm	Figure size mm	Counting speed (maximum) cpm	Torque (maximum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
RL-219-4	4	Right hand shaft positive rotation	Knob	22	φ5.5	24×77×φ4.2	4.5×6.5	3,000	0.005	180	Black		B
RL-219-5	5	Right hand shaft positive rotation	Knob	22	φ5.5	24×88×φ4.2	4.5×6.5	3,000	0.005	200	Black		B
RL-907	7	Right hand shaft positive rotation	Knob	25	φ5.5	48×48×φ5.0	4.5×6.5	3,000	0.005	210	Black		C
RL-606-5	5	Two shafts positive rotation	Push button	16	φ6.0	62×52×φ4.5	4.5×6.5	5,000	0.039	290	Light blue		B
RL-606-5 (2)	5	Two shafts reverse rotation	Push button	16	φ6.0	62×52×φ4.5	4.5×6.5	5,000	0.039	290	Light blue		B

● Dimensional drawing

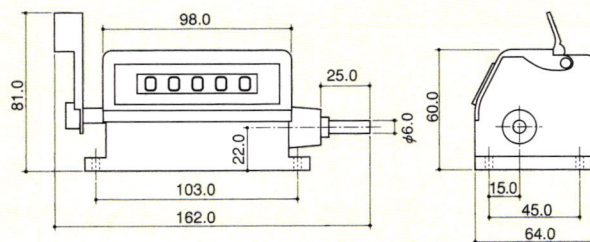


AUTO COUNTERS

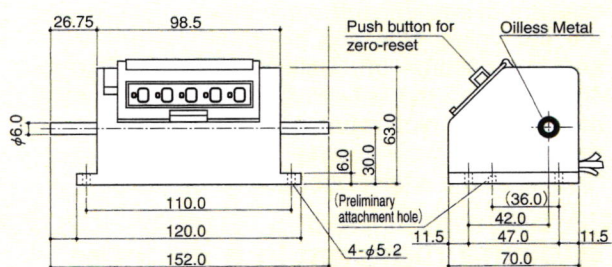
Ratchet counter One (1) count per ratchet drive of 40-45°



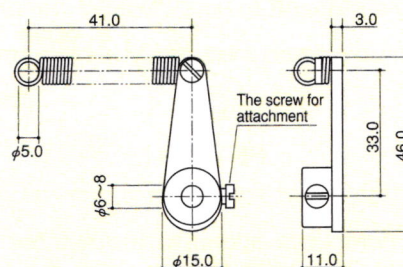
KS-3-5



KS-3-4/KS-3-5



PK-3-4/PK-3-5/PK-3-5 (2)

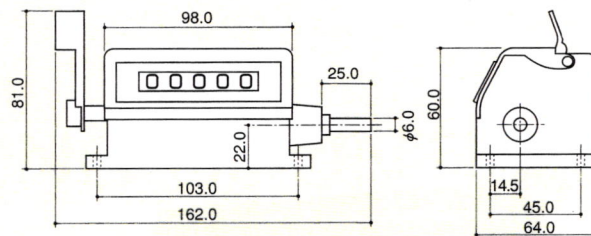


Ratchet counter sending lever

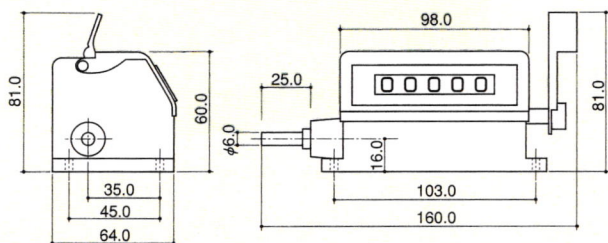
Model	Number of digits	Shaft Position and Direction of rotation	Resetting to zero	Height of shaft mm	Outside diameter in shaft mm	Mounting dimensions Front and back X right and left X bore mm	Figure size mm	Counting speed (maximum) cpm	Torque (maximum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
KS-3-4	4	Right hand shaft positive rotation	Lever	22	φ6.0	45×103×φ5.0	4.5×6.5	500	0.175	590	Gray		B
KS-3-5	5	Right hand shaft positive rotation	Lever	22	φ6.0	45×103×φ5.0	4.5×6.5	500	0.175	600	Gray		B
PK-3-4	4	Two shafts positive rotation	Push button	30	φ6.0	47×110×φ5.2	4.5×6.5	600	0.175	520	Light blue		B
PK-3-5	5	Two shafts positive rotation	Push button	30	φ6.0	47×110×φ5.2	4.5×6.5	600	0.175	520	Light blue		B
PK-3-5 (2)	5	Two shafts reverse rotation	Push button	30	φ6.0	47×110×φ5.2	4.5×6.5	600	0.175	520	Light blue		B



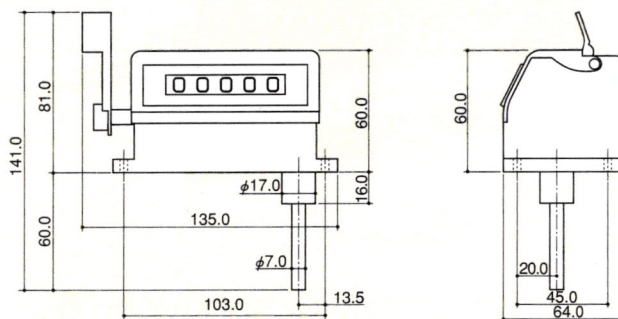
KS-1-4



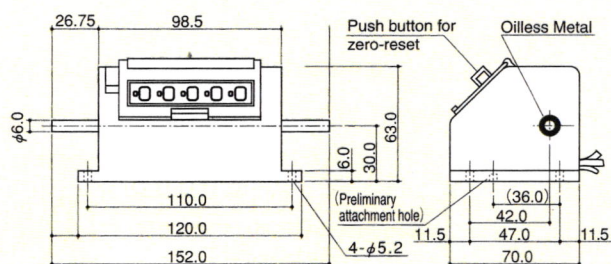
KS-1-4/KS-1-5/KS-1-4(2)/KS-1-5(2)



KSL-1-4/KSL-1-5/KSL-1-4(2)/KSL-1-5(2)



AFS-1-4/AFS-1-5/AFS-1-4(2)/AFS-1-5(2)



PK-1-5/PK-1-5(2)

Model	Number of digits	Shaft Position and Direction of rotation	Resetting to zero	Height of shaft mm	Outside diameter in shaft mm	Mounting dimensions Front and back X right and left X bore mm	Figure size mm	Counting speed (maximum) cpm	Torque (maximum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
KS-1-4	4	Right hand shaft positive rotation	Lever	22	φ6.0	45×103×φ5.0	4.5×6.5	6,000	0.03	570	Gray		B
KS-1-5	5	Right hand shaft positive rotation	Lever	22	φ6.0	45×103×φ5.0	4.5×6.5	6,000	0.03	580	Gray		B
KS-1-4(2)	4	Right hand shaft reverse rotation	Lever	22	φ6.0	45×103×φ5.0	4.5×6.5	6,000	0.03	570	Gray		B
KS-1-5(2)	5	Right hand shaft reverse rotation	Lever	22	φ6.0	45×103×φ5.0	4.5×6.5	6,000	0.03	580	Gray		B
KSL-1-4	4	Left hand shaft positive rotation	Lever	16	φ6.0	45×103×φ5.0	4.5×6.5	6,000	0.03	620	Gray		B
KSL-1-5	5	Left hand shaft positive rotation	Lever	16	φ6.0	45×103×φ5.0	4.5×6.5	6,000	0.03	620	Gray		B
KSL-1-4(2)	4	Left hand shaft reverse rotation	Lever	16	φ6.0	45×103×φ5.0	4.5×6.5	6,000	0.03	620	Gray		B
KSL-1-5(2)	5	Left hand shaft reverse rotation	Lever	16	φ6.0	45×103×φ5.0	4.5×6.5	6,000	0.03	620	Gray		B
AFS-1-4	4	Bottom shaft positive rotation	Lever	16	φ7.0	45×103×φ5.0	4.5×6.5	6,000	0.015	580	Gray		B
AFS-1-5	5	Bottom shaft positive rotation	Lever	16	φ7.0	45×103×φ5.0	4.5×6.5	6,000	0.015	580	Gray		B
AFS-1-4(2)	4	Bottom shaft reverse rotation	Lever	16	φ7.0	45×103×φ5.0	4.5×6.5	6,000	0.015	580	Gray		B
AFS-1-5(2)	5	Bottom shaft reverse rotation	Lever	16	φ7.0	45×103×φ5.0	4.5×6.5	6,000	0.015	580	Gray		B
PK-1-5	5	Two shafts positive rotation	Push button	30	φ6.0	47×110×φ5.2	4.5×6.5	6,000	0.03	500	Light blue		B
PK-1-5(2)	5	Two shafts reverse rotation	Push button	30	φ6.0	47×110×φ5.2	4.5×6.5	6,000	0.03	500	Light blue		B

AUTO COUNTERS

Rotary counter

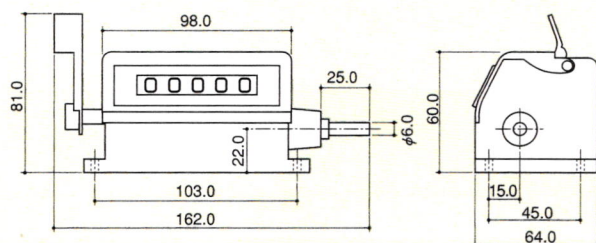
360° rotation of the drive shaft ▶ Ten counts
Reverse the drive shaft ▶ Subtracted



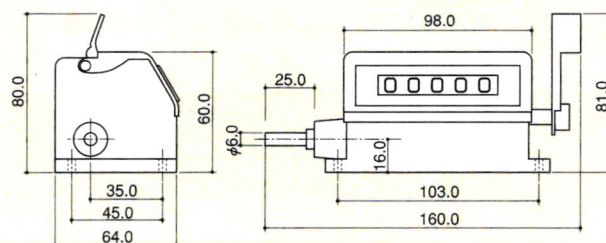
KS-2-5



PK-2-5



KS-2-5



PK-2-5

The counting speed becomes 1/10 in rpm

Model	Number of digits	Shaft Position and Direction of rotation	Resetting to zero	Height of shaft mm	Outside diameter in shaft mm	Mounting dimensions	Figure size mm	Counting speed (maximum) cpm	Torque (maximum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
						Front and back X right and left X bore mm							
KS-2-5	5	Right hand shaft positive rotation	Lever	22	φ6.0	45×103×φ5.0	4.5×6.5	6,000	0.039	580	Gray		C
PK-2-5	5	Two shafts positive rotation	Push button	30	φ6.0	47×110×φ5.2	4.5×6.5	6,000	0.039	500	Light blue		C

MEASURING COUNTERS

Length measure is the counter where cloth, vinyl and an iron plate measure the length of all ones. It's a counter necessary to automation work to indicate the length by a number. It's chosen as 3 revolution of wheel for meters and yard, and 1 meter and 1 yard are indicated. It's chosen as 1 revolution of wheel for feet, and 1 foot is indicated.

■Pulley kind

The standard type wheel has coated the hard rubber to the aluminum die-casting.

(The rubber wheel is one set in two pieces. But, V-Grooved wheel is one piece.)

Black rubber wheels
(Standard)

White rubber wheels

Special rubber wheels
(Chemical resistance)

Urethane rubber wheels
(Abrasion resistance)

Line pulley
(V-Grooved wheels)

Iron wheels (non-slip)

■Measuring counter kind

MS series

▶ p16

Standard measuring counter

It is the standard type Measuring counter which adopted the knob system as resetting to zero.

BM series

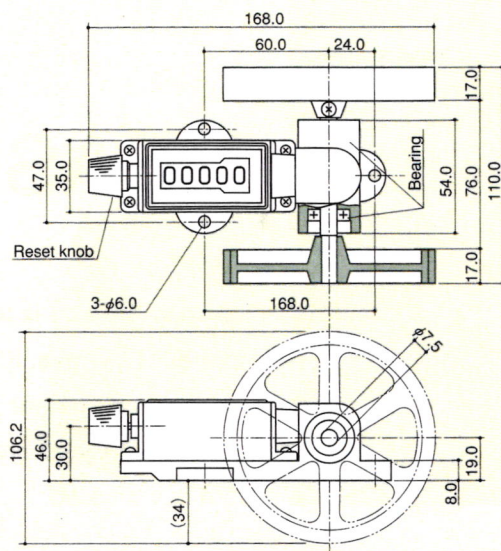
▶ p17

One-touch measuring counter

The Measuring counter of a legible capital letter. Reset is a one-touch type and is the best for measurement of grading frame etc.

MEASURING COUNTERS

MS series (Standard type)



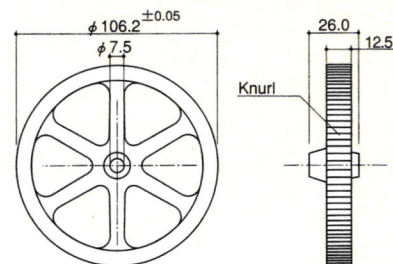
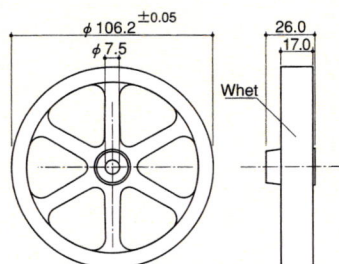
With the rubber wheel for meter

MS3 : 1-5

(Weight: with the standard rubber wheel for meter)

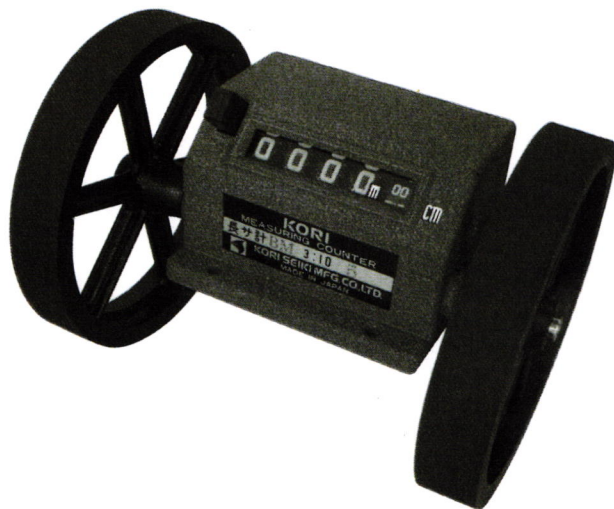
Model	Number of digits	Direction of rotation	Minimum unit	Maximum instruction value	Resetting to zero	Mounting dimensions Front and back X right and left X bore mm	Figure size mm	Maximum speed m-min.	Torque (maxi- -mum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
MS3 : 1-4	4	Positive rotation	1m	9,999m	Knob	47X84Xφ6 (3pieces)	4.5X6.5	2,000	0.003	620	Black		A
MS3 : 1-5	5	Positive rotation	1m	99,999m	Knob	47X84Xφ6 (3pieces)	4.5X6.5	2,000	0.003	620	Black		A
MS3 : 1-6	6	Positive rotation	1m	999,999m	Knob	47X84Xφ6 (3pieces)	4.5X6.5	2,000	0.003	620	Black		B
MS3 : 10-4	4	Positive rotation	10cm	999m90cm	Knob	47X84Xφ6 (3pieces)	4.5X6.5	200	0.005	620	Black		A
MS3 : 10-5	5	Positive rotation	10cm	9,999m90cm	Knob	47X84Xφ6 (3pieces)	4.5X6.5	200	0.005	620	Black		A
MS3 : 10-6	6	Positive rotation	10cm	99,999m90cm	Knob	47X84Xφ6 (3pieces)	4.5X6.5	200	0.005	620	Black		B
MS3 : 100-4	4	Positive rotation	1cm	99m99cm	Knob	47X84Xφ6 (3pieces)	4.5X6.5	20	0.039	620	Black		C
MS3 : 100-5	5	Positive rotation	1cm	999m99cm	Knob	47X84Xφ6 (3pieces)	4.5X6.5	20	0.039	620	Black		C
MS3 : 1-4 (2)	4	Reverse rotation	1m	9,999m	Knob	47X84Xφ6 (3pieces)	4.5X6.5	2,000	0.003	620	Black		A
MS3 : 1-5 (2)	5	Reverse rotation	1m	99,999m	Knob	47X84Xφ6 (3pieces)	4.5X6.5	2,000	0.003	620	Black		A
MS3 : 1-6 (2)	6	Reverse rotation	1m	999,999m	Knob	47X84Xφ6 (3pieces)	4.5X6.5	2,000	0.003	620	Black		C
MS3 : 10-4 (2)	4	Reverse rotation	10cm	999m90cm	Knob	47X84Xφ6 (3pieces)	4.5X6.5	200	0.005	620	Black		A
MS3 : 10-5 (2)	5	Reverse rotation	10cm	9,999m90cm	Knob	47X84Xφ6 (3pieces)	4.5X6.5	200	0.005	620	Black		A
MS3 : 10-6 (2)	6	Reverse rotation	10cm	99,999m90cm	Knob	47X84Xφ6 (3pieces)	4.5X6.5	200	0.005	620	Black		C
MS3 : 100-4 (2)	4	Reverse rotation	1cm	99m99cm	Knob	47X84Xφ6 (3pieces)	4.5X6.5	20	0.039	620	Black		C
MS3 : 100-5 (2)	5	Reverse rotation	1cm	999m99cm	Knob	47X84Xφ6 (3pieces)	4.5X6.5	20	0.039	620	Black		C

Wheels for Measuring counter

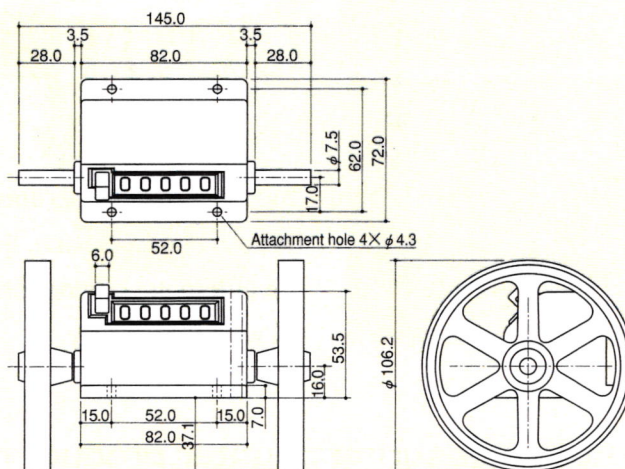


Black rubber wheels for meter/White rubber wheels for meter
Special rubber wheels for meter/Urethane rubber wheels for meter

Iron wheels for meter



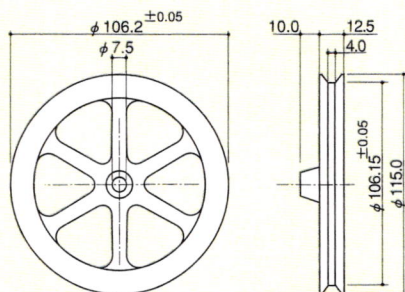
BM3 : 10-5



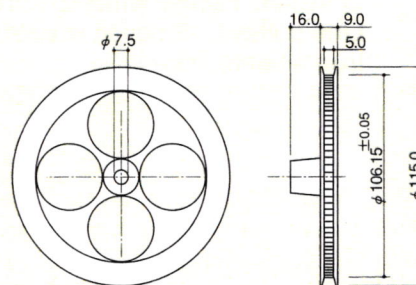
With the rubber wheel for meter

(Weight: with the standard rubber wheel for meter)

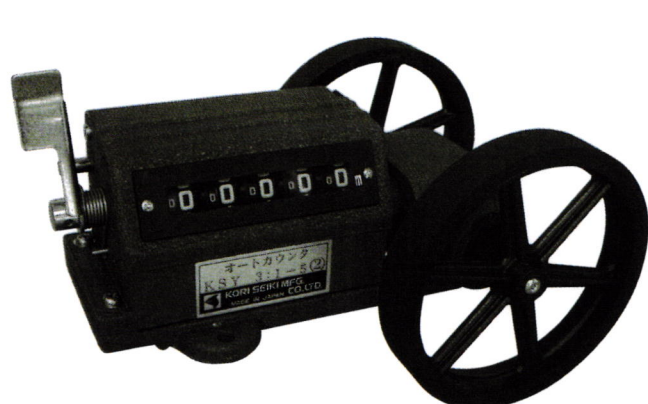
Model	Number of digits	Direction of rotation	Minimum unit	Maximum instruction value	Resetting to zero	Mounting dimensions Front and back X right and left X bore mm	Figure size mm	Maximum speed m-min.	Torque (maximum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
BM3 : 1-4	4	Positive rotation	1m	9,999m	Push button	62X52Xφ4.3	4.5X6.5	2,000	0.03	580	Light blue		A
BM3 : 1-5	5	Positive rotation	1m	99,999m	Push button	62X52Xφ4.3	4.5X6.5	2,000	0.03	580	Light blue		A
BM3 : 10-4	4	Positive rotation	10cm	999m90cm	Push button	62X52Xφ4.3	4.5X6.5	200	0.03	580	Light blue		A
BM3 : 10-5	5	Positive rotation	10cm	9,999m90cm	Push button	62X52Xφ4.3	4.5X6.5	200	0.03	580	Light blue		A
BM3 : 100-4	4	Positive rotation	1cm	99m99cm	Push button	62X52Xφ4.3	4.5X6.5	20	0.039	580	Light blue		C
BM3 : 100-5	5	Positive rotation	1cm	999m99cm	Push button	62X52Xφ4.3	4.5X6.5	20	0.039	580	Light blue		C
BM3 : 1-4 (2)	4	Reverse rotation	1m	9,999m	Push button	62X52Xφ4.3	4.5X6.5	2,000	0.03	580	Light blue		B
BM3 : 1-5 (2)	5	Reverse rotation	1m	99,999m	Push button	62X52Xφ4.3	4.5X6.5	2,000	0.03	580	Light blue		B
BM3 : 10-4 (2)	4	Reverse rotation	10cm	999m90cm	Push button	62X52Xφ4.3	4.5X6.5	200	0.03	580	Light blue		B
BM3 : 10-5 (2)	5	Reverse rotation	10cm	9,999m90cm	Push button	62X52Xφ4.3	4.5X6.5	200	0.03	580	Light blue		B
BM3 : 100-4 (2)	4	Reverse rotation	1cm	99m99cm	Push button	62X52Xφ4.3	4.5X6.5	20	0.039	580	Light blue		C
BM3 : 100-5 (2)	5	Reverse rotation	1cm	999m99cm	Push button	62X52Xφ4.3	4.5X6.5	20	0.039	580	Light blue		C



V-Grooved wheels A type(aluminum die-casting)



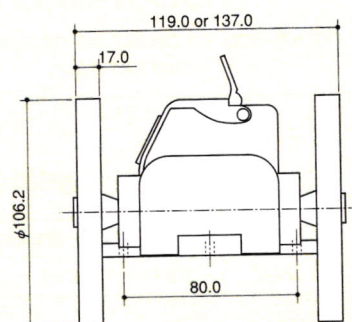
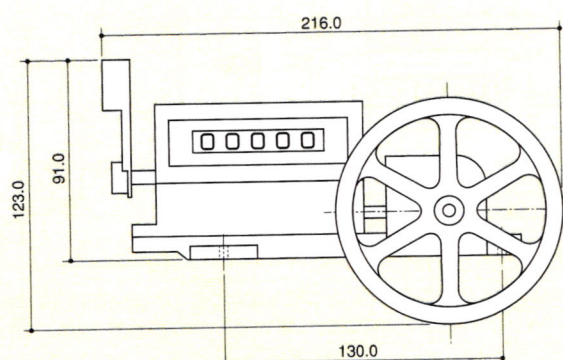
V-Grooved wheels P type(special plastic)



KSY3 : 1-5(2)



KSY3 : 10-5(2)



With the rubber wheel for meter

(Weight: with the standard rubber wheel for meter)

Model	Number of digits	Direction of rotation	Minimum unit	Resetting to zero	Mounting dimensions	Figure size mm	Maximum speed m-min.	Torque (maxi- -mum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
					Front and back× right and left×bore mm							
KSY3 : 1-4	4	Positive rotation	1m	Lever	80×130×φ6 (3pieces)	4.5×6.5	2,000	0.039	1340	Gray		B
KSY3 : 1-5	5	Positive rotation	1m	Lever	80×130×φ6 (3pieces)	4.5×6.5	2,000	0.039	1340	Gray		B
KSY3 : 10-4	4	Positive rotation	10cm	Lever	80×130×φ6 (3pieces)	4.5×6.5	200	0.039	1340	Gray		B
KSY3 : 10-5	5	Positive rotation	10cm	Lever	80×130×φ6 (3pieces)	4.5×6.5	200	0.039	1340	Gray		B
KSY3 : 100-5	5	Positive rotation	1cm	Lever	80×130×φ6 (3pieces)	4.5×6.5	20	0.098	1340	Gray		C
KSY3 : 1-4(2)	4	Reverse rotation	1m	Lever	80×130×φ6 (3pieces)	4.5×6.5	2,000	0.039	1330	Gray		C
KSY3 : 1-5(2)	5	Reverse rotation	1m	Lever	80×130×φ6 (3pieces)	4.5×6.5	2,000	0.039	1330	Gray		C
KSY3 : 10-4(2)	4	Reverse rotation	10cm	Lever	80×130×φ6 (3pieces)	4.5×6.5	200	0.039	1330	Gray		C
KSY3 : 10-5(2)	5	Reverse rotation	10cm	Lever	80×130×φ6 (3pieces)	4.5×6.5	200	0.039	1330	Gray		C
KSY3 : 100-5(2)	5	Reverse rotation	1cm	Lever	80×130×φ6 (3pieces)	4.5×6.5	20	0.098	1330	Gray		C

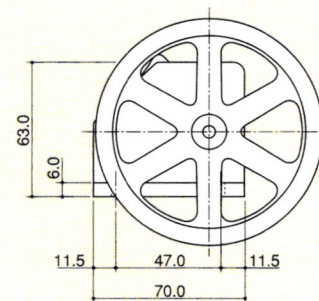
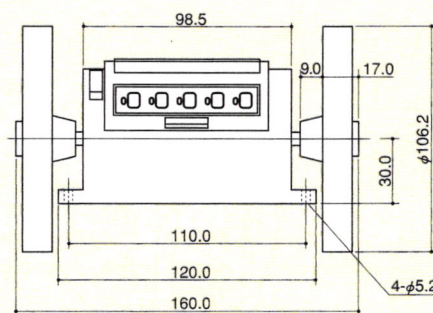
PKM style



PKM3 : 1-4



PKM3 : 10-5



With the rubber wheel for meter

(Weight: with the standard rubber wheel for meter)

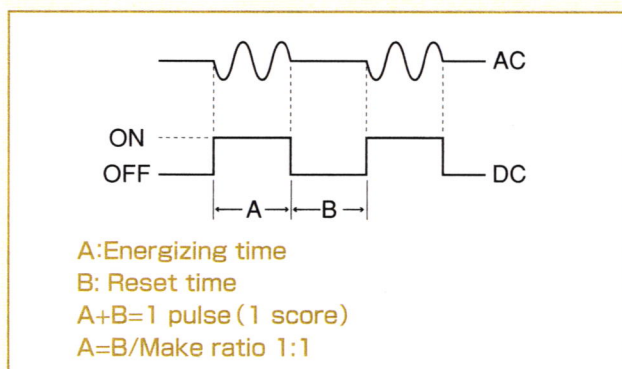
Model	Number of digits	Direction of rotation	Minimum unit	Resetting to zero	Mounting dimensions	Figure size mm	Maximum speed m-min.	Torque (maxi-mum) N.m	Weight g	Finish	Shaft position and Direction of rotation drawing	note
					Front and back×right and left×bore mm							
PKM3 : 1-4	4	Positive rotation	1m	Push button	47×110×φ5.2	4.5×6.5	2,000	0.019	800	Light blue		B
PKM3 : 1-5	5	Positive rotation	1m	Push button	47×110×φ5.2	4.5×6.5	2,000	0.019	800	Light blue		B
PKM3 : 10-4	4	Positive rotation	10cm	Push button	47×110×φ5.2	4.5×6.5	200	0.019	800	Light blue		B
PKM3 : 10-5	5	Positive rotation	10cm	Push button	47×110×φ5.2	4.5×6.5	200	0.019	800	Light blue		B
PKM3 : 1-4 (2)	4	Reverse rotation	1m	Push button	47×110×φ5.2	4.5×6.5	2,000	0.019	800	Light blue		B
PKM3 : 1-5 (2)	5	Reverse rotation	1m	Push button	47×110×φ5.2	4.5×6.5	2,000	0.019	800	Light blue		B
PKM3 : 10-4 (2)	4	Reverse rotation	10cm	Push button	47×110×φ5.2	4.5×6.5	200	0.019	800	Light blue		B
PKM3 : 10-5 (2)	5	Reverse rotation	10cm	Push button	47×110×φ5.2	4.5×6.5	200	0.019	800	Light blue		B

*There is also ER type with electromagnetic Zero-reset device.

ELECTROMAGNETIC COUNTERS

An electromagnetic counter makes an electromagnet operate by an intermittence pulse of the electric current which is being sent from outside, and 1 score is the counter where a number is being added every 1 pulse. A calculation can use a micro-switch, a relay or the various switches and do a remote calculation.

■ Pulse shape



When downtime is generally equal to Activity time, it can be calculated early. For example at the rated voltage, that it's made a counter of the 20CPS, by 1 score, $1 \text{ second} / 20 = 0.05 \text{ seconds}$. Downtime is equal to Activity time, so $0.05 \text{ seconds} / 2 = 0.025 \text{ seconds}$. The A and the B are needed for more than 0.025 seconds. Measurement speed is indicated with the number which can be measured for 1 second and an indication symbol is indicated by the CPS.

■ The circuit from which a point of arrangement is protected

When an electromagnet in a counter blocks driving current in a counter off for lagging load, the voltage which reaches about 1000V in both ends of a coil forms. When this voltage is applied during a point of arrangement, discharge is caused, and a change in point of tact metal and consumption are caused, and there is a fear that contacts failure is caused. In case of Semiconductor switch, it causes electric strength destruction.

Therefore the circuit from which a point of arrangement is protected on the drive side is generally needed.

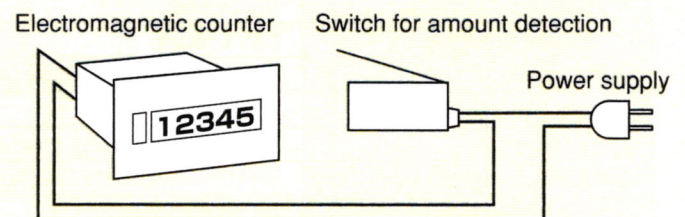
■ Resetting to zero

Pushing button type (One-touch)

Zero-reset can be taken by one-touch push button.

■ Rated voltage

Voltage	AC (Standard)		DC (Order)	
	100V	200V	12V	24V



SCM Miniature Electromagnetic Counters

It corresponds to wide usage, Micro and Low electric power counter.

Features

The SCM series are compact, lightweight and low power consumption Non-reset counters. The SCM counters are also applicable for wide range of use with four mounting types. According to high accuracy and reliability, the maximum counting speed is 15cps. And also have long cycle life.

Use

Automobile area.
Vending machines.
Office supplies (Copy and Printing machines, Computer, etc.)
Game machines (Slot machines, Pachinko, etc.)
And any other machines for Maintenance.

Specifications

Models	SCM-□□□□SA	SCM-□□□□PA	SCM-□□□□BA	SCM-□□□□BB
Mountings	Panel mount (Snap-in)	Front screw down	Bottom screw down	PCB mount
Connections	Lead wire 200mm UL 1007, AWG#26, black			Pin terminal for soldering $\phi 0.7$
Weight	23gf	20gf	18gf	16gf

Number of digits: 6 or 7

Figures : Size: 2.2×1.3 with magnifying window, white letters on black base

Casing: Black, ABS resin

Operating: Additional

Counting input: Voltage input one pulse for one count

Operating voltage: 5VDC, 6VDC, 12VDC, 24VDC

Power consumption: Under 1W

Allowable variable voltage: $\pm 10\%$ of rated operating voltage

Voltage ripple: Under 10%

Maximum counting speed: 15cps at make ratio of 1:1

Minimum On-time: 33.3msec

Maximum On-time: Continuous

Operating temperature : $-10\sim 60^{\circ}\text{C}$, no freezing

Operating humidity: 10~95% RH

Withstand voltage: 1min or longer at 1500VAC

Insulation resistance: 100M Ω or more / 500VDC

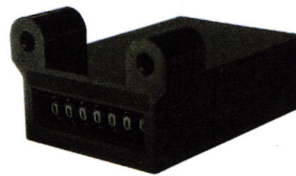
Vibration resistance: JIS-C4555 (16.7Hz, 4mm, one hour in the X, Y, Z directions, respectively)

Impact resistance: JIS-C4555 (300m/S², five times in the X, Y, Z directions, respectively)

Life: Over 10,000,000 counts



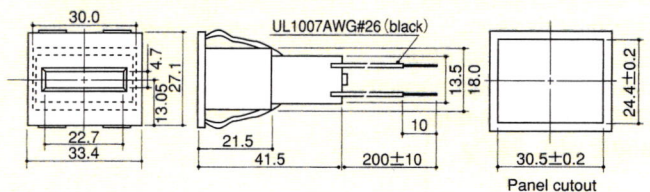
SCM-□□□□SA



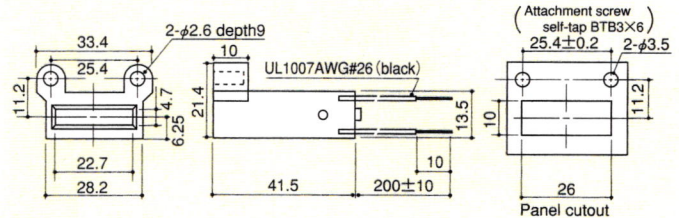
SCM-□□□□PA



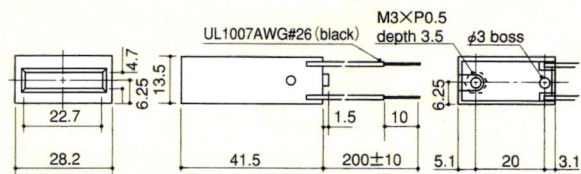
SCM-□□□□BA/BB



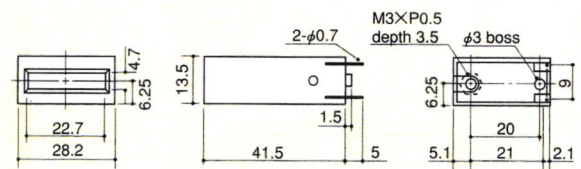
SCM-□□□□SA



SCM-□□□□PA



SCM-□□□□BA



SCM-□□□□BB

Indication of model

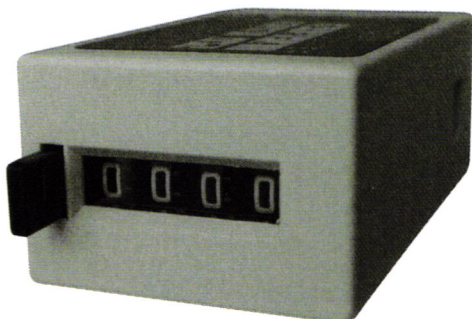
SCM-□□□□□□

Mountings (SA, PA, BA or BB)
Enter "0"
Digit (6 or 7)
Operating voltage (05, 06, 12 or 24)

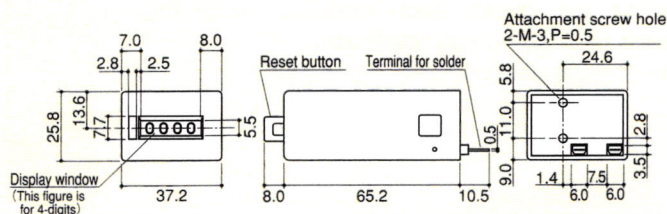
EX. 5VDC, 7digits, Type SA: SCM-0570SA

[B type] Base mounting

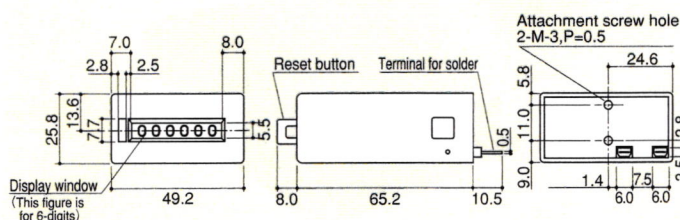
B type is all Base mounting type.
And, inside of airframe can be built in.
There is no reset, and various becoming
complete of push-button reset etc.
Please choose according to the usage.



S-BF4



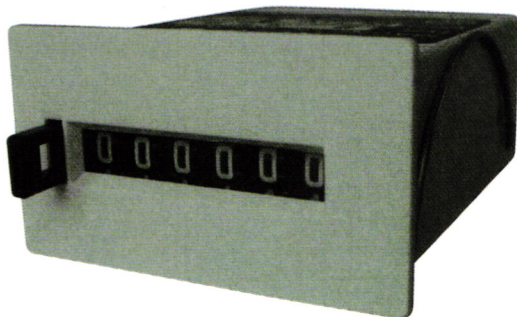
S-BF4



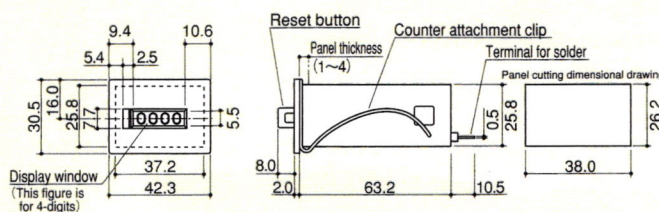
S-BF6

[S type] Panel clip

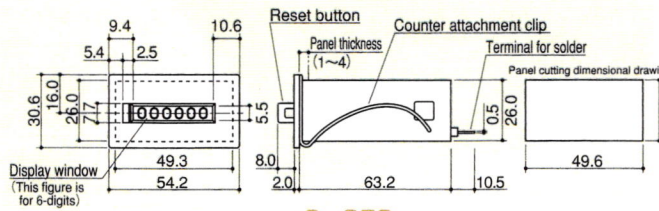
S type is a clip type the installation and is very
convenient only easily.
There is no reset, and various becoming
complete of push-button rest etc.
Please choose according to the usage.



S-SF4



S-SF4



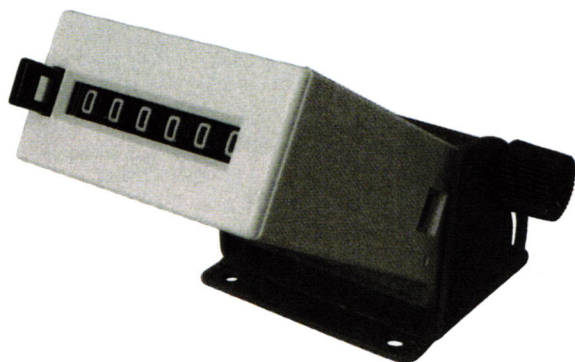
S-SF6

ELECTROMAGNETIC COUNTERS

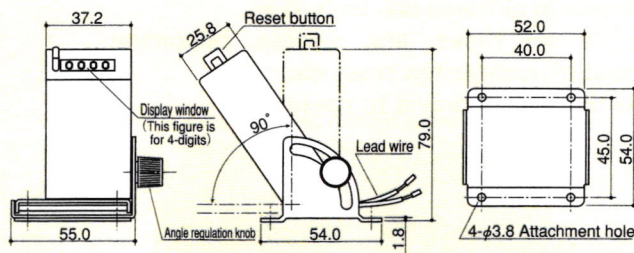
S-series

[C type] Stand mounting

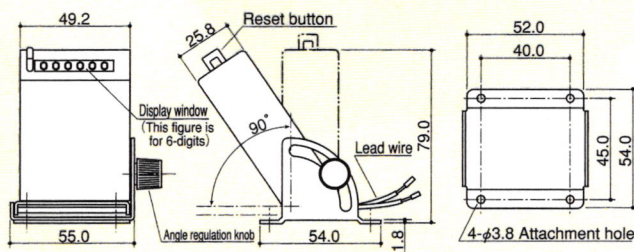
C type is all Stand mounting type.
Moreover, the angle can be freely changed and it is very convenient.
There is no reset, and various becoming complete of push-button reset etc.
Please choose according to the usage.



S-CF6



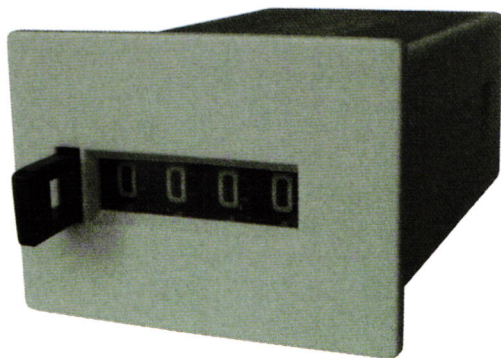
S-CF4



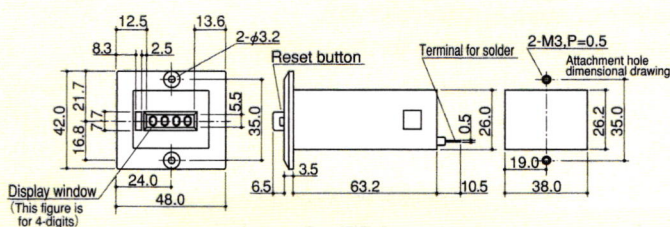
S-CF6

[P type] Front panel screw fixing

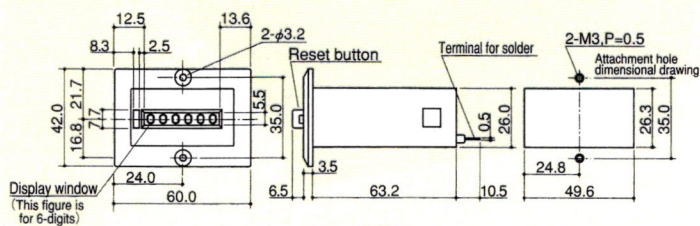
P type is the panel installation all type.
The panel frame can do the surface installation.
There is no reset, and various becoming complete of push-button rest etc.
Please choose according to the usage.



S-PF4



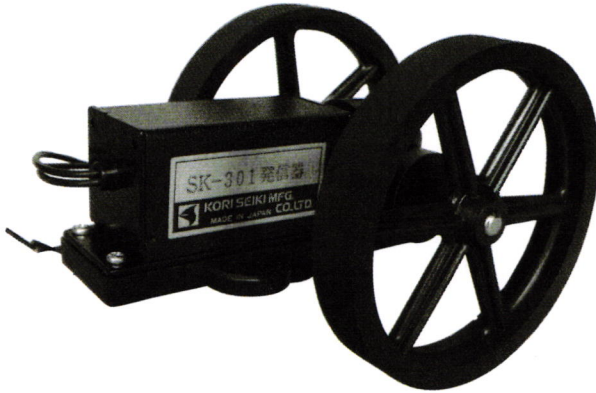
S-PF4



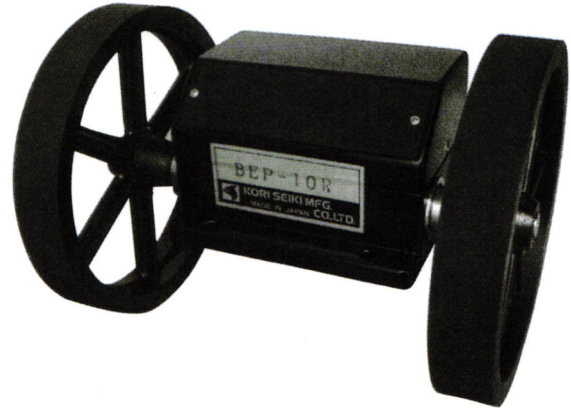
S-PF6

Electric Impulse Generators

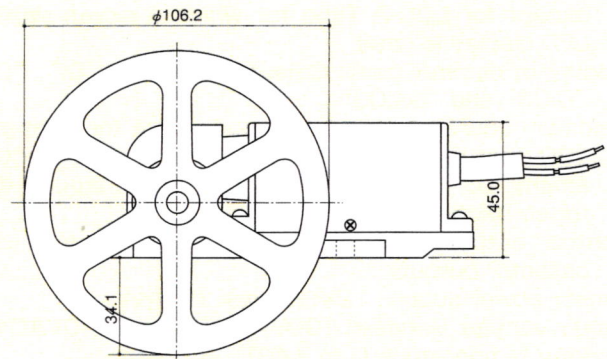
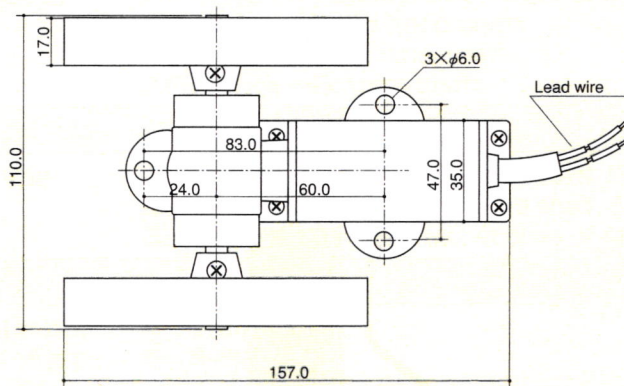
A transmitter for measurements of length is combined with an electromagnetic counter or an electronic counter, and the length, remote, you can measure. This transmitter makes the switch of the having within function every 1 meter or 10 centimeters (1 yard or 1/10 yard), and makes the counterpart indicate the length. You can also have chosen with Ditch of type V for lines and thread.



SK-301



BEP-10R



SK-301/SK-311
With the rubber wheel for meter

Model	Minimum unit	Mounting dimensions	Maximum speed m/min.	Torque (maximum) N.m	Weight g	Finish	note
		Front and back× right and left×bore mm					
SK-301	1m or 1yard	47×84×φ6 (3places)	300	0.01	600	Black	A
SK-311	10cm or 1/10 yard	47×84×φ6 (3places)	30	0.0005	600	Black	C
BEP-100A	10cm	61×52×φ6 (4places)	1,000	0.0005	550	Black	B
BEP-10A	1cm	61×52×φ6 (4places)	500	0.0005	550	Black	B
BEP-1A	1mm	61×52×φ6 (4places)	50	0.0005	550	Black	B
BEP-100R	10cm	61×52×φ6 (4places)	1,000	0.0005	550	Black	B
BEP-10R	1cm	61×52×φ6 (4places)	500	0.0005	550	Black	B
BEP-1R	1mm	61×52×φ6 (4places)	50	0.0005	550	Black	B

Hand-operated counters

The H-102 Hand-operated Counters are mainly used to count the number of persons or materials for research purposes. Its line-up includes Hand-tally Counter, Desk-tally Counter, and Multi Desk-tally Counter. The Multi Desk-tally Counter includes eight types, ranging from two-counter type to eight-counter type, and ten-counter type. This diverse line-up enables the user to choose the most appropriate H-102 according to the intended use.

■ Hand-tally Counter H-102

The H-102 Hand-tally Counter lines up one-counter and two-counter types.

The one-counter type is compact and light weight (abt.60g).

[Use] Count of the number of persons in schools, parks, sight-seeing spots, amusement parks and other pleasure resorts; inspection of shipping / unloading number of lumbars, logs and other materials.

● Chrome plated finish

● Counter display in four digits; resetting to zero by a control provided on a side face of the meter.

■ Desk-tally Counter H-102B

The H-102B Desk-tally Counter can be installed in an entrance / reception counter or mounted onto a wall.

[Use] Count of attendance at theaters, cinemas, exhibitions; count of customers at restaurants; count for medical researches and other scientific / marketing research purposes, etc.

● Chrome plated finish; weight: abt.80g

● Count display in four digits; resetting to zero by a control provided on the side face of the meter.

■ Multi Desk-tally Counter H-102M

The H-102M Multi Desk-tally Counter consists of two or more Desk-tally Counters connected, and lines up eight types, ranging from two-counter type to eight-counter type, and ten-counter type. These Multi Desk-tally Counters can provide itemized tabulation of the counted data when required.

[Use] Acquisition of statistical data by car type for traffic survey, statistical data by age and sex of customers of department stores, etc. for marketing research; statistical investigation of visitors to events or expositions by job classification, etc.

● Chrome plated finish

● Resetting to zero can be made for all linked meters at one time by a control provided on the side face of the link.

● Hand · Desk-tally Counter

Model	Number of digits	Specifications and Resetting to zero	note
H-102	4	Hand-tally, knob	A
H-102B	4	Desk-tally, knob	A

● Multi Desk-tally Counter

Model	Number of digits	Specifications and Resetting to zero	note
H-102M-2	4	Stand Mounting two-counter, knob	B
H-102M-3	4	Stand Mounting three-counter, knob	B
H-102M-4	4	Stand Mounting four-counter, knob	B
H-102M-5	4	Stand Mounting five-counter, knob	B
H-102M-6	4	Stand Mounting six-counter, knob	B
H-102M-7	4	Stand Mounting seven-counter, knob	B
H-102M-8	4	Stand Mounting eight-counter, knob	B
H-102M-10	4	Stand Mounting ten-counter, knob	B



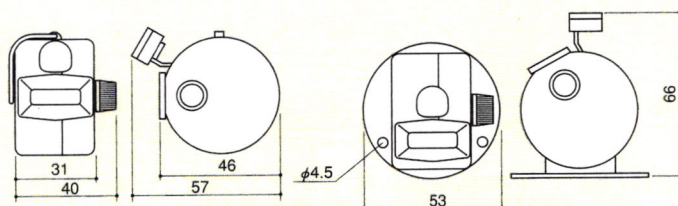
H-102



H-102B

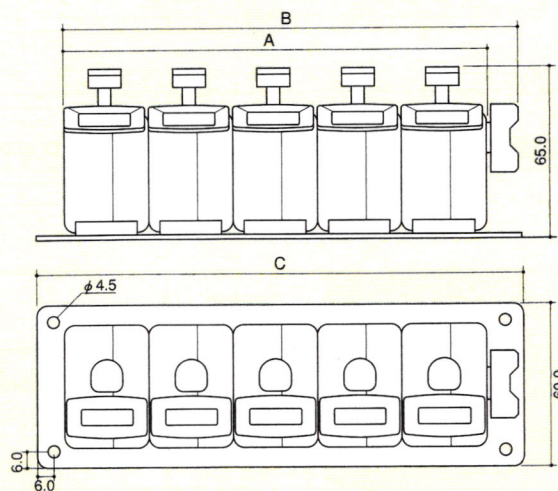


H-102M-5



H-102

H-102B



H-102M-5

Type	No. of Counters	A	B	C	Weight
H-102M-2	2	62	72	87	220 g
H-102M-3	3	92	102	117	310 g
H-102M-4	4	123	133	148	410 g
H-102M-5	5	154	164	179	510 g
H-102M-6	6	185	195	210	620 g
H-102M-7	7	216	226	240	720 g
H-102M-8	8	247	257	240	820 g
H-102M-10	10	310	320	333	1,000 g

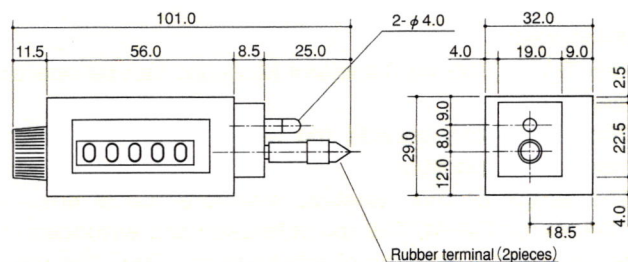
(mm)

Record type counters

This is portable; it's used to measure the number of rotations of the rotary shaft by non-electrical machinery. An attachment of an accessory is installed in the point. It's also freer with a revolution of left and right to replace, you can measure. An axis is to do 1 revolution, and 1 number is also counted.



H-100-5



H-100-5

Model	Number of digits	Figure size	Rotating speed (maximum) m/min.	Rotating torque N.m	Weight g	Finish	note
H-100-4	4	3×4.5	4,000	0.004	75	Black	B
H-100-5	5			0.005	85		

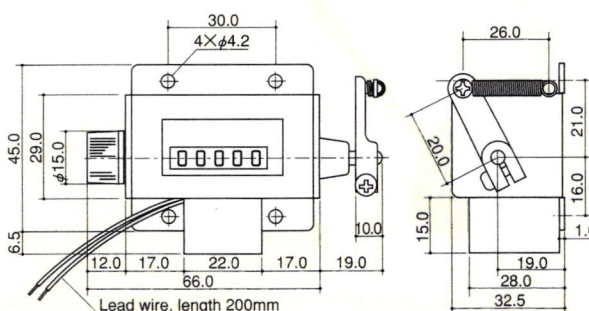
Counter with Fixed pre-set

When it's to install a point of arrangement of fixing in the standard size ratchet counter and reaches the fixed number, it's possible to turn a buzzer and a lump on. Point of tact 90 is a counter necessary to a calculation of 100 units.

When it'll be estimated and be 90, the switches inside the counter enter, the switch is designed, and when it'll be 100, is turned off. It'll be this repeat.



RS-207-5 (90S)



■Point of contact operation

0~89 OFF
90~99 ON
100~189 OFF
190~199 ON
200~289 OFF
290~299 ON.....It is similar as follows

Model	Number of digits	Shaft Position and Direction of rotation	Specifications	note
RS-207-5 (90) Small type	5	Right hand shaft positive rotation	Follow P2, RS-207-5	B
RS-303-5 (90) Medium type	5	Right hand shaft positive rotation	Follow P4, RS-303-5	C

Tapeless measures

The TM-3 and SM-300-3 Tapeless Measures are new distance measuring apparatus. The user can measure distance by simply turning the wheels around while walking. Being light weight, either type can be operated by one hand to measure both rectilinear and curved distances freely.

Features

- The TM-3 (TM-4) Tapeless Measure can be operated by one hand and the measured values are automatically displayed.
- These features provide the surveyor or any other measurement operator with more safety during distance measuring operation.
- The length of the Tapeless Measure rod is adjustable between 27cm and 95cm for TM-3, and 26cm and 104cm for TM-4. The rod is housed and extended by a simple touch because of the pin-lock mechanism.
- Measurement is taken at intervals of 10cm. The maximum measurable length is 999.90m (TM-3).
- Measurement is taken at intervals of 1cm. The maximum measurable length is 999.99m (TM-4).
- The counter is housed in a hermetic waterproof case.

[Use]

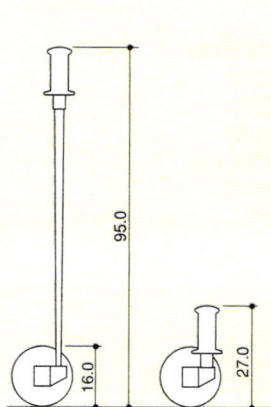
Civil engineering and road construction works, landscaping and gardening, real estate works, recreation facilities, land surveying, educational material, etc.



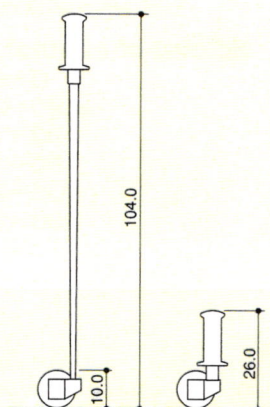
TM-3



TM-4



TM-3



TM-4

Type	Number of digits	Minimum unit cm	Maximum instruction value	Diameter of wheel cm	Resetting to zero	Weight g
TM-3	4	10	999m90cm	16	Push button	660
TM-4	5	1	999m99cm	10	Push button	450

*With a storage bag

Dial Thickness Calipers

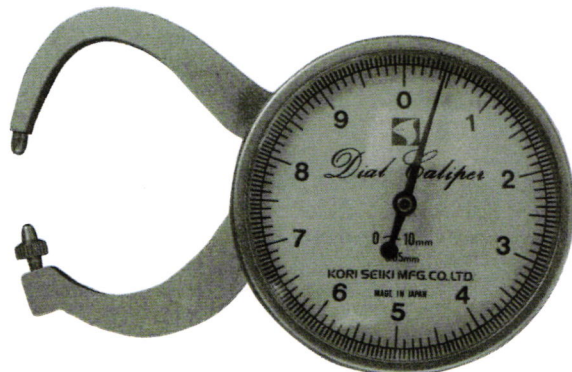
This pocket type dial caliper is very useful for rapid measurements of thickness and making very good use in all fields.

A type: Spherical contact points are ideal for measuring the central thickness of lenses.

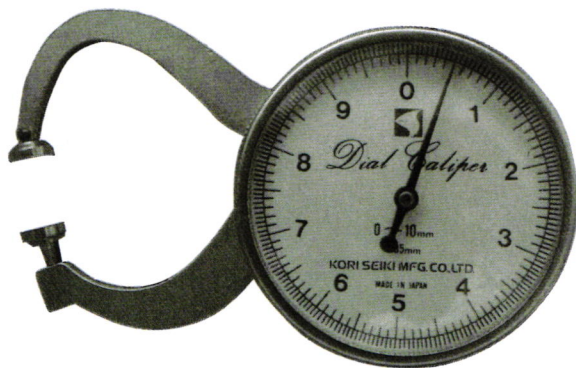
G type: Flat contacts are ideal for measuring metal sheets, paper, vinyl and rubber.

P type: Make easy measurement of the wall thickness of Pipes.
Measurable minimum inside diameter of pipes is 6mm.

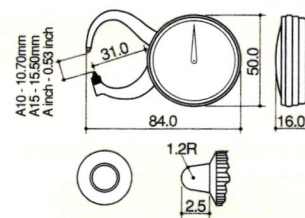
A-1 type: It is suitable for the measurement of a detailed thing.



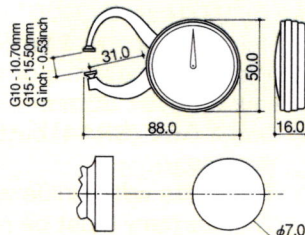
A type



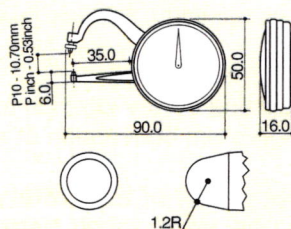
G type



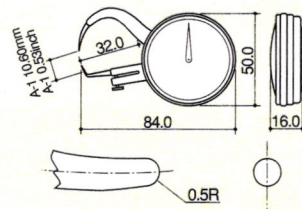
A type



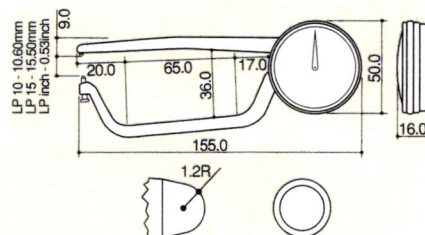
G type



P type



A-1 type



LP type

Type	Minimum measurement unit mm	Measurement range mm	Measurement terminal	Outside diameter of dial mm	Use	note
A type	0.05	0~10 0~15	Ball ϕ 2.5mm	50	Lens etc.	A
G type	0.05	0~10 0~15	Circle plate type	50	Metal sheets, Paper, Vinyl, Rubber etc.	A
P type	0.05	0~10	Ball ϕ 2.5mm	50	Pipe etc.	A
LP type	0.05	0~10 0~15	Ball ϕ 2.5mm	50	Pipe etc.	C
A-1 type	0.05	0~10	Ball ϕ 1mm	50	Artificial tooth, Ore etc.	B

Digital Calipers

Features

These Digital Calipers can measure the thickness at easy way.
The specification and the using method are as follows.

Diagram

- 1) Power on/Zero-setting button
- 2) mm/in conversion button
- 3) Power off button

Specifications

- 1) Resolution: 0.01mm/0.0005"
- 2) Measurement range: 0-15mm/-0.6"
- 3) Error of indication: 0.03mm or less
- 4) Measurement depth: 35mm
- 5) Power: One 1.55V (SR44) button cell which lasts 8~12 months.
The digits will twinkle when the Power is used up.
Then battery must be replaced.
- 6) Working temperature: 0~+40°C
- 7) Storage temperature: -10°C~+60°C
Relative humidity: 80% or less

Functions

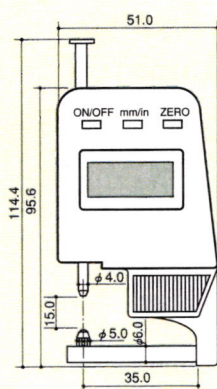
- 1) Zero setting at any location for differential measurement.
- 2) mm/in system conversion at any location.

Replacement of the battery

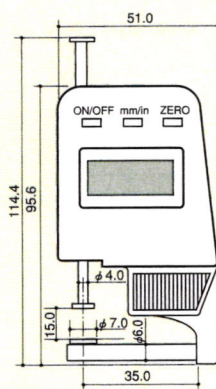
Remove the small round battery cover on the back of the Caliper and replace the battery. Mind that the positive pole must face out.



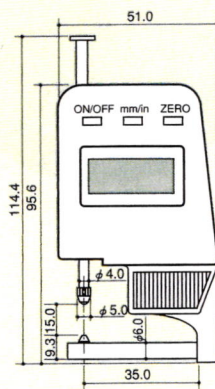
DA



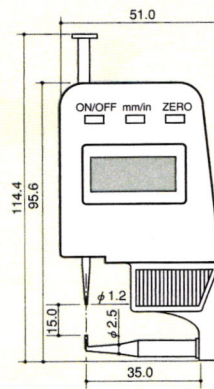
Model: DA
Main objections
to be measured:
Lenses



Model: DG
Main objections
to be measured:
Papers, Vinyl, Rubbers,
Plate of metals



Model: DP
Main objections
to be measured:
Thickness of pipes



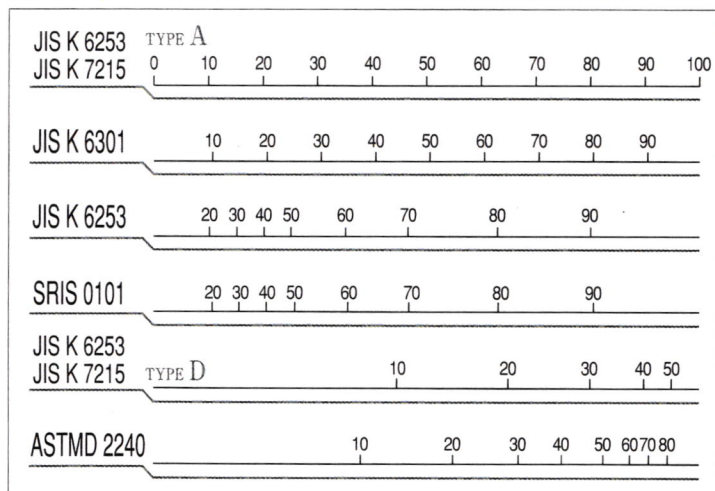
Model: DA-1
Main objections
to be measured:
Ores, Artificial tooth

Durometers



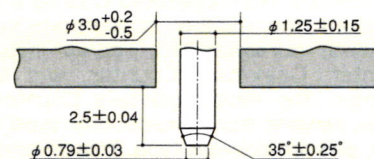
KR-14A

Comparison Between Various Hardness Data



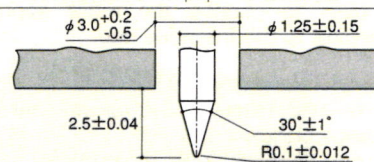
TYPE A

KR-14A
KR-24A



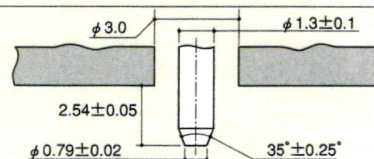
TYPE D

KR-15D
KR-25D



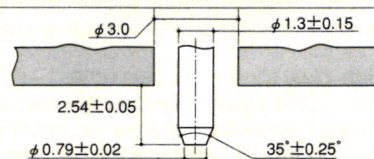
TYPE KA

KR-12KA
KR-22KA



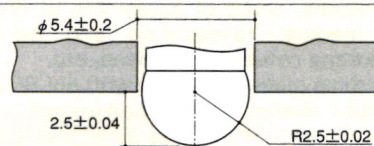
TYPE KC

KR-16KC
KR-26KC



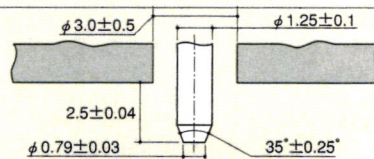
TYPE E

KR-17E
KR-27E



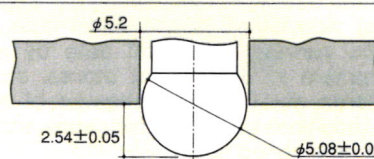
TYPE 7A

KR-137A
KR-237A



TYPE SA

KR-11SA
KR-21SA



Model	Applicable Standard	use	Weight applicable	note
KR-14A: Standard type	JIS K 6253	Ordinary rubber	550-8,050mN (56.1-821.1gf)	A
KR-24A: With Two-hands type	ISO 7619 ASTM D 2240			
KR-15D: Standard type	JIS K 6253	Hard rubber	0-44,450mN (0-4,533gf)	A
KR-25D: With Two-hands type	ISO 7619 ASTM D 2240			
KR-12KA: Standard type	JIS K 6301	Ordinary rubber	539-8,379mN (55-855gf)	B
KR-22KA: With Two-hands type	JIS K 6301			
KR-16KC: Standard type	JIS K 6301	Hard rubber	980-44100mN (100-4500gf)	B
KR-26KC: With Two-hands type	JIS K 6301			
KR-17E: Standard type	JIS K 6253	Soft rubber	550-8050mN (56.1-821.1gf)	A
KR-27E: With Two-hands type	JIS K 6253			
KR-137A: Standard type	JIS K 7215	Plastic	549-8,061mN (56-822gf)	B
KR-237A: With Two-hands type	ISO R 868A ASTM D 2240A			
KR-11SA: Standard type	SRIS 0101	Soft rubber	539-8,385mN (55-855gf)	B
KR-21SA: With Two-hands type	JIS S 6050			

