



FOR MORE INFORMATION PLEASE VISIT OUR WEBSITE

www.kvsengineer.com

(click the link to direct to the site)

02-214-0101

นับเลขแบบกระตุก

MECHANICAL COUNTERS

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

Small Type

Medium Type



RS -207-5 (RS-5)



RS -303-4

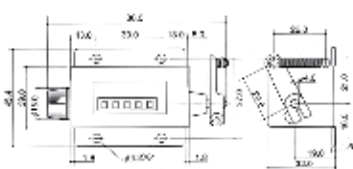


RS -907

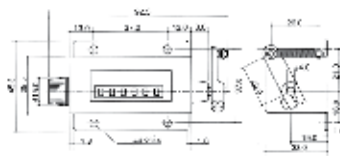


RS - 606-5

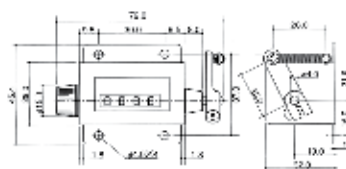
● Dimensional drawing



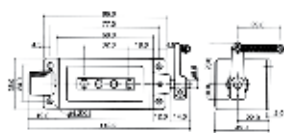
RS-207-4



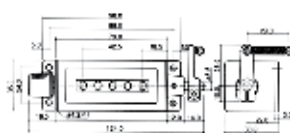
RS-207-5 / RS-207-5 (2)



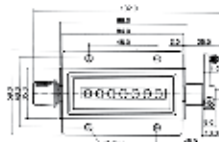
RS-207-6



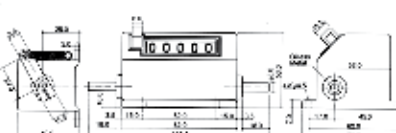
RS-303-4



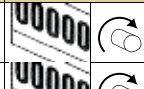


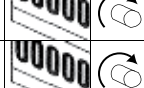
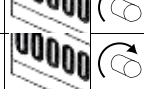
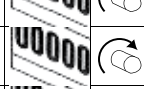
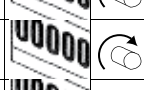

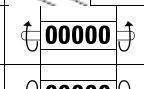
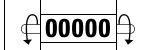
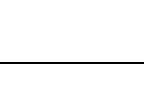
RS-303-5 / RS-303-6



RS-906 / RS-907



RS-606-5 / RS-606-5(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	Figure size mm	Counting speed (maximum) cpm	Torque (maximum) N.m	Weight g	Shaft position and Direction of rotation drawing
						Front and back X right and left X bore mm					
RS-207-4 (RS-4)	4	Right hand shaft positive rotation	Knob	19	Ø 4	37 x 30 x Ø 4.2	3.8 x 5	600	0.049	97	
RS-207-5 (RS-5)	5	Right hand shaft positive rotation	Knob	19	Ø 4	37 x 30 x Ø 4.2	3.8 x 5	600	0.049	105	
RS-207-6 (RS-6)	6	Right hand shaft positive rotation	Knob	19	Ø 4	37 x 37 x Ø 4.2	3.8 x 5	600	0.049	115	
RS-303-4	4	Right hand shaft positive rotation	Knob	19	Ø 5.5	37 x 77 x Ø 4.2	4.5 x 6.5	500	0.058	186	
RS-303-5	5	Right hand shaft positive rotation	Knob	19	Ø 5.5	24 x 88 x Ø 4.2	4.5 x 6.5	500	0.058	205	
RS-303-6	6	Right hand shaft positive rotation	Knob	19	Ø 5.5	24 x 88 x Ø 4.2	4.5 x 6.5	500	0.058	205	
RS-906	6	Right hand shaft positive rotation	Knob	25	Ø 5.5	48 x 48 x Ø 5.5	4.5 x 6.5	500	0.058	225	
RS-907	7	Right hand shaft positive rotation	Knob	25	Ø 5.5	48 x 48 x Ø 5.5	4.5 x 6.5	500	0.058	225	
RS-606-4	4	Two shaft reverse rotation	Push button	16	Ø 6.0	62 x 52 x Ø 4.5	4.5 x 6.5	600	0.098	320	
RS-606-5	5	Two shaft positive rotation	Push button	16	Ø 6.0	62 x 52 x Ø 4.5	4.5 x 6.5	600	0.098	320	
RS-606-5 (2)	5	Two shaft reverse rotation	Push button	16	Ø 6.0	62 x 52 x Ø 4.5	4.5 x 6.5	600	0.098	320	

นับเลขแบบหมุนรอบ

MECHANICAL COUNTERS

Ratchet Counter (LB)

360° rotation of the drive shaft ▶ one count
Reverse the drive shaft ▶ Subtracted

Small Type

Medium Type



LB-207-5 (LB-5)



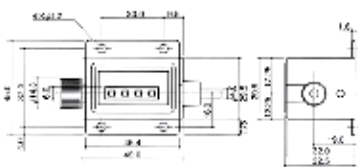
LB-219-4



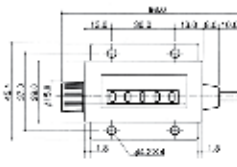
LB-907



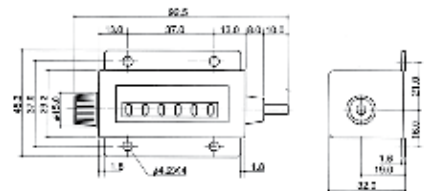
LB-606-5



LB-207-4

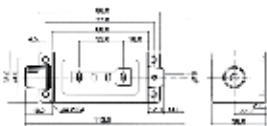


LB-207-5

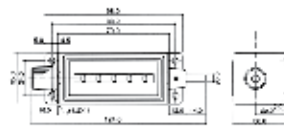


LB-207-6

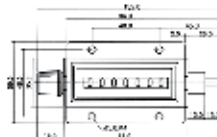
• Medium drawing



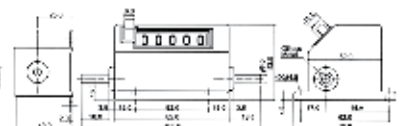
LB-219-4 / LB-219-4 (2)



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



LB-906 / LB-907



LB-606-5 / LB-606-5 (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	Shaft position and Direction of rotation drawing
LB-207-4 (LB-4)	4	Right hand shaft positive rotation	Knob	19	Ø 4	37 x 30 x Ø 4.2	3.8 x 5	4,000	0.002	94	
LB-207-5 (LB-5)	5	Right hand shaft positive rotation	Knob	19	Ø 4	37 x 30 x Ø 4.2	3.8 x 5	4,000	0.002	102	
LB-207-6 (LB-6)	6	Right hand shaft positive rotation	Knob	19	Ø 4	37 x 37 x Ø 4.2	3.8 x 5	4,000	0.002	110	
LB-219-4	4	Right hand shaft positive rotation	Knob	22	Ø 5.5	24 x 77 x Ø 4.2	4.5 x 6.5	3,000	0.003	180	
LB-219-5	5	Right hand shaft positive rotation	Knob	22	Ø 5.5	24 x 88 x Ø 4.2	4.5 x 6.5	3,000	0.003	200	
LB-906	6	Right hand shaft positive rotation	Knob	25	Ø 5.5	48 x 48 x Ø 5.0	4.5 x 6.5	3,000	0.005	220	
LB-907	7	Right hand shaft positive rotation	Knob	25	Ø 5.5	48 x 48 x Ø 5.0	4.5 x 6.5	3,000	0.005	220	
LB-606-5	5	Two shaft positive rotation	Push button	16	Ø 6.0	62 x 52 x Ø 4.5	4.5 x 6.5	5,000	0.01	290	
LB-606-5 (2)	5	Two shaft reverse rotation	Push button	16	Ø 6.0	62 x 52 x Ø 4.5	4.5 x 6.5	5,000	0.01	310	

AUTO COUNTERS

This Auto counters can be used for control production lines etc. You can present the number whatever you want. Then, when the count reach the preset number a micro-switch which is built-in works automatically by electrical operation (stop of rotation / motor - switch, buzzer / bell or flashing signal etc.) Also, you take Zero-set you can do same works. If you take timer, you can do same works automatically and repeatedly.

■ Auto counter product number system

Ex

PK - 3 - 4 (2)

Model PK styleTwo shafts on right and left sidess
KS styleRight hand shaft
KSL style ...Left hand shaft
AFS style ...Bottom shaft

Type 1...LB (360° rotation of the drive shaft, One count)
2...RL (360° rotation of the drive shaft, Ten counts)
3...RS (One count per ratchet drive of 40-50°)

Number of digits 4...4-digits
5...5-digits

Direction of digits Blank...Positive rotation
(2) ...Reverse rotation

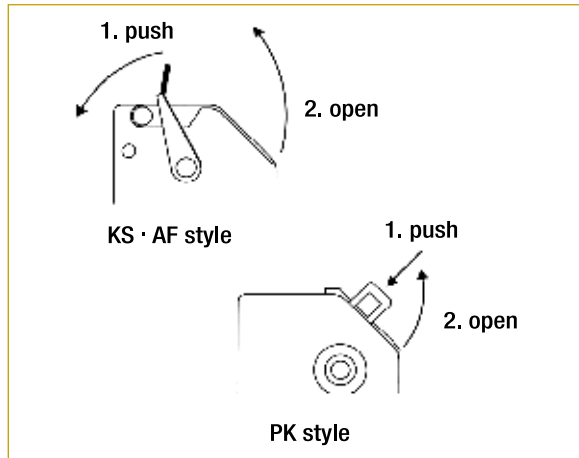
■ Resetting to zero

Lever type (KS · AFS style)
Zero-reset can be taken by lever operation by 60°

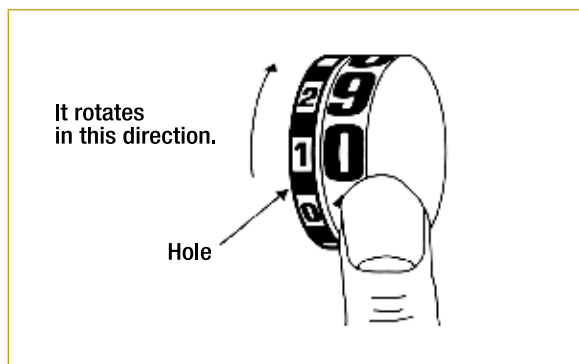
Boutton type (PK style)
Zero-reset can be taken by lever operation by 60°

■ Setting method

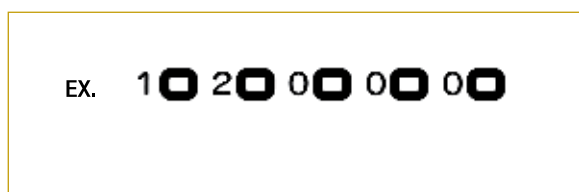
1. Switch off the mechanical power supply and reset
2. A lid is lifted.



3. A small number is added to the of the request in O of a big number. Hold the number wheel a big number has printed by a finger, put a pin of an accessory in a square hole of a number wheel of a small number and make them revolve to the top. (It can not be turned to an opposite direction.) Further at this time, please turn it until you hear sound with a click.

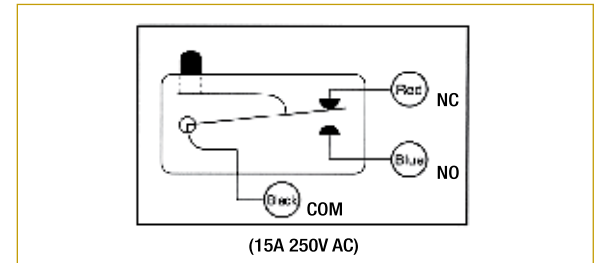


4. Close a lid and reset once again. Confirm all big numbers are O. Also confirm a small number is the number you wish.



5. Repeat in case of the same numerical value is just reset, and how many times can be counted.

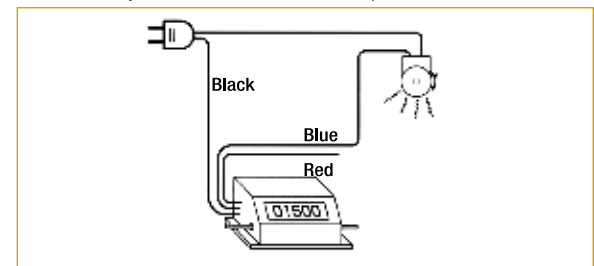
■ The Inner cross-line part (macro switch having within)



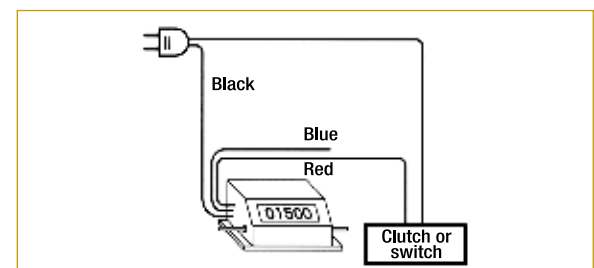
A point of arrangement equipped in the interior is connected to three colors of the color another cord from the container body back by a micro switch (1.5A and 250V AC). A figure is a connection diagram in set value before. When a count reaches the set value, blue and black will be on, and black and red become off. Unless you resets even if a count passes the set value, oneself preserves it just as it is. When you reset and return the character of the big way to the counter to O, a micro switch also returns to the original location automatically.

■ Wiring diagram in a counter

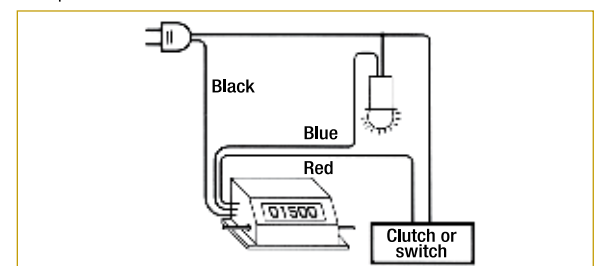
- When you make a bell, a lump or other machines move.



- When a machine is controlled.



- When a machine is stopped. and makes a bell. a lump or other machines move.



นับเลขไฟฟ้าแบบกระตุก

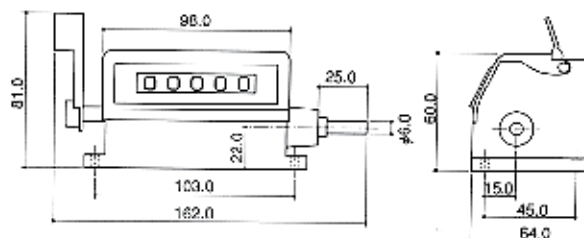
AUTO COUNTERS

Ratchet Counter

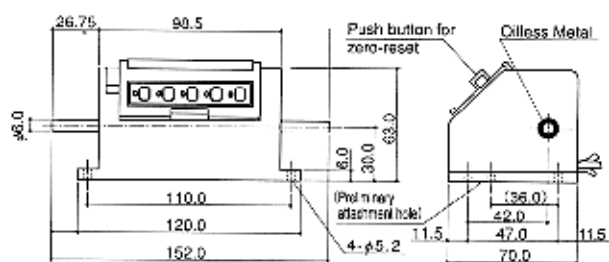
One (1) count per ratchet drive of 40-45°



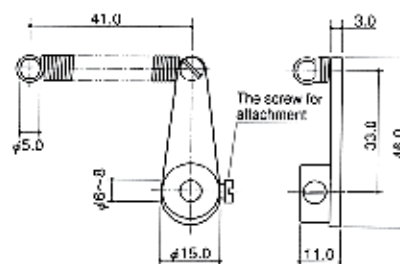
KS-3-5






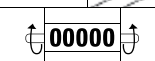
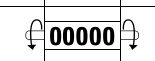
KS-3-4 / KS-3-5



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	Figure size mm	Counting speed (maximum) cpm	Torque (maximum) N.m	Weight g	Shaft position and Direction of rotation drawing
						Front and back X right and left X bore mm					
KS-3-5	5	Right hand shaft positive rotation	Lever	22	Ø 6.0	45 x 103 x Ø 5.0	4.5 x 6.5	500	0.175	600	
KS-3-5 (2)	5	Right hand shaft positive rotation	Lever	22	Ø 6.0	45 x 103 x Ø 5.0	4.5 x 6.5	500	0.175	600	
KSL-3-5	5	Right hand shaft positive rotation	Lever	22	Ø 6.0	45 x 103 x Ø 5.0	4.5 x 6.5	500	0.175	600	
PK-3-5	5	Two shaft positive rotation	Push button	30	Ø 6.0	47 x 110 x Ø 4.2	4.5 x 6.5	600	0.175	520	
PK-3-5 (2)	5	Two shaft positive rotation	Push button	30	Ø 6.0	47 x 110 x Ø 4.2	4.5 x 6.5	600	0.175	520	

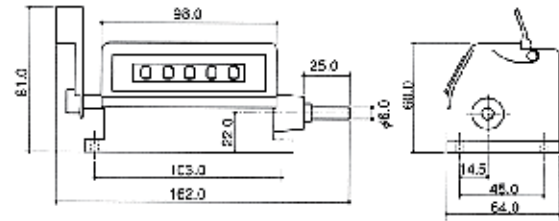
นับเลขไฟฟ้าแบบหมุนรอบ

AUTO COUNTERS Revolution Counter

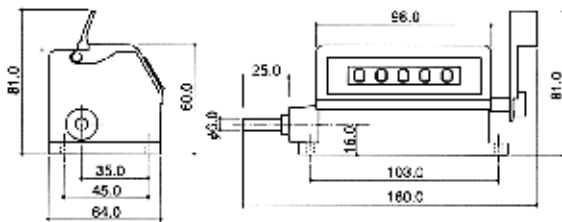
360° rotation of the drive shaft ▶ one count
Reverse the drive shaft ▶ Subtracted



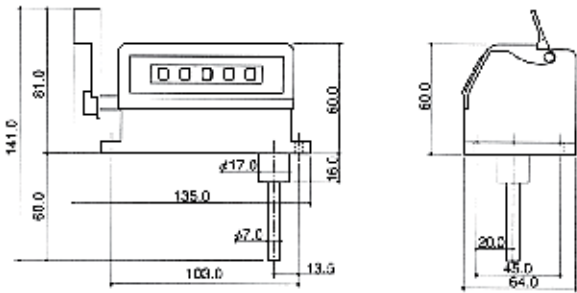
KS-1-4



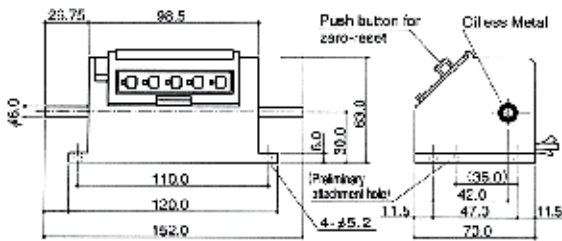
KS-1-4 / KS-1-5 / KS-1-4 (2) / KS-1-5 (2)



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	Figure size mm	Counting speed (maximum) cpm	Torque (maximum) N.m	Weight g	Shaft position and Direction of rotation drawing
						Front and back X right and left X bore mm					
KS-1-5	5	Right hand shaft positive rotation	Lever	22	ø 0.6	45 x 103 x ø 5.0	4.5 x 6.5	6,000	0.03	580	
KS-1-5 (2)	5	Right hand shaft positive rotation	Lever	22	ø 0.6	45 x 103 x ø 5.0	4.5 x 6.5	6,000	0.03	580	
KSL-1-5	5	Left hand shaft positive rotation	Lever	16	ø 0.6	45 x 103 x ø 5.0	4.5 x 6.5	6,000	0.03	620	
AFS-1-5	5	Bottom shaft positive rotation	Lever	16	ø 0.7	45 x 103 x ø 5.0	4.5 x 6.5	6,000	0.015	580	
AFS-1-5 (2)	5	Bottom shaft reverse rotation	Lever	16	ø 0.7	45 x 103 x ø 5.0	4.5 x 6.5	6,000	0.015	580	
PK-1-5	5	Two shaft reverse rotation	Push button	30	ø 0.6	47 x 110 x ø 5.2	4.5 x 6.5	6,000	0.03	500	
PK-1-5 (2)	5	Two shaft reverse rotation	Push button	30	ø 0.6	47 x 110 x ø 5.2	4.5 x 6.5	6,000	0.03	500	

เครื่องนับเลขมือกด-แบบตั้งโต๊ะ 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, park, sight-seeing spots, amusement parks and other pleasure resort ; 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.

■ Disk-tally Counter H-102B

The H-102B Disk-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.

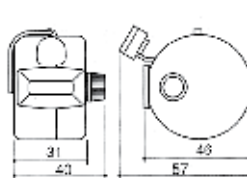
- Chrome plated finish ; weight : abt.80g
- Counter display in four digits ; resetting to zero by a control provided on a side face of the meter.



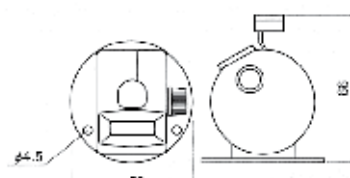
H-102



H-102B



KH-102



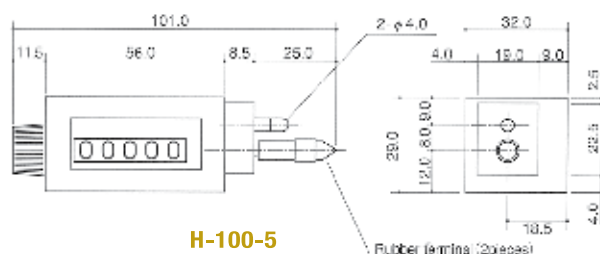
KH-102B

● Hand - Disk-tally Counter

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

เครื่องวัดความเร็วแบบจับ Record type counters

This 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 counter.



H-100-5



H-100-5

Model	Number of digits	Figure size	Rotating speed (maximum) m/min.	Rotating torque N.m	Weight g	Finish
H-100-4	4	3x4.5	4,000	0.004	75	Black
H-100-5	5			0.005	85	

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 an 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 wheel
(standard)

White rubber wheel

Special rubber wheel
(Chemical resistance)

Urethane rubber wheel
(Abrasion resistance)

Line pulley
(V-Grooved wheels)

Iron wheel (non slip)

■ Measuring counter kind

MS series

4p16

Standard measuring counter

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

MS series

4p17

One-touch measuring counter

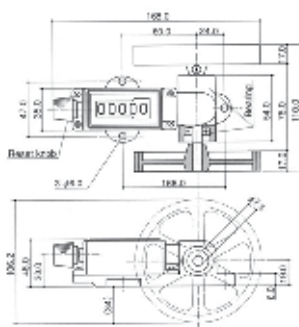
The Measuring counter of a legible capital letter.
Reset is a one-touch type and is best for measurement of grading frame etc.

เครื่องวัดความยาว เมตร-หลา

MEASURING COUNTERS MS series (Standard type)

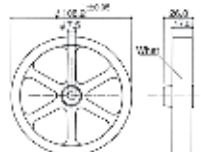


MS3 : 1-5

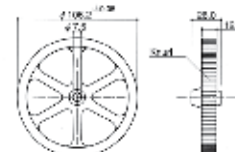


With the rubber wheel
for meter

Wheels for Measuring counter (Optional)







Black rubber wheels for meter
wheels rubber for meter
Special rubber wheels for meter
Urethane rubber wheels for meter



Iron wheels for meter
or yard

(Weight : With the standard rubber wheel for meter)

Model	Number of digits	Direction of rotation	Maximum unit	Maximum instruction value	Resetting to zero	Mounting dimensions	Figure size mm	Maximum speed m-min	Torque (maximum) cpm	Weight g	Shaft position and Direction of rotation drawing
						Front and back X right and left X bore mm					
MS3 : 1-5 M,Y	5	Positive rotation	1m	99,999m	Knob	47x84x Ø 6 (3pieces)	4.5 x 6.5	2,000	0.003	620	
MS3 : 10-5 M,Y	5	Positive rotation	10cm	9,999m90cm	Knob	47x84x Ø 6 (3pieces)	4.5 x 6.5	200	0.005	620	
MS3 : 1-5 (2) M,Y	5	reverse rotation	1m	99,999m	Knob	47x84x Ø 6 (3pieces)	4.5 x 6.5	2,000	0.003	620	
MS3 : 10-5 (2) M,Y	5	reverse rotation	10cm	9,999m90cm	Knob	47x84x Ø 6 (3pieces)	4.5 x 6.5	200	0.005	620	

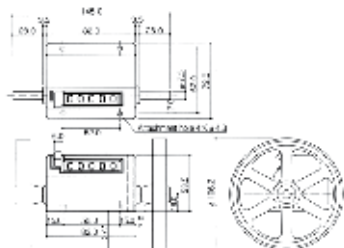
m = measuring in meter. y = measuring in yard

เครื่องวัดความยาว เมตร-หลา

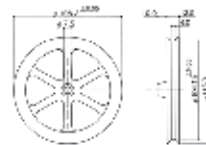
MEASURING COUNTERS BM series (one-Touch Type)



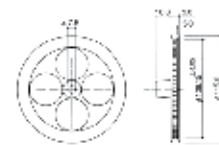
BM3 : 10-5



With the rubber wheel
for meter or yard





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



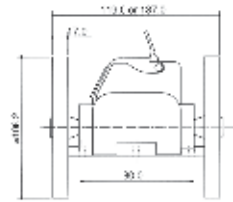
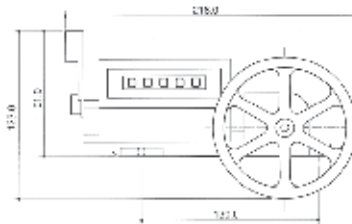
V-Grooved wheels P type
(special plastic)
(Optional)

(Weight : With the standard rubber wheel for meter)

Model	Number of digits	Direction of rotation	Maximum unit	Maximum instruction value	Resetting to zero	Mounting dimensions	Figure size mm	Maximum speed m-min	Torque (maximum) cpm	Weight g	Shaft position and Direction of rotation drawing
						Front and back X right and left X bore mm					
BM3 : 10-5 M,Y	5	Positive rotation	10cm	9,999m90cm	Push button	62 x 52 x Ø 4.3	4.5 x 6.5	200	0.005	580	
BM3 : 10-5 (2) M,Y	5	reverse rotation	10cm	9,999m90cm	Push button	62 x 52 x Ø 4.3	4.5 x 6.5	200	0.005	580	

เครื่องวัดความยาวไฟฟ้า เมตร-หลา


AUTO MEASURING COUNTERS KSY style



With the rubber wheel for meter

KSY : 10-5 (2)

(Weight : With the standard rubber wheel for meter)

Model	Number of digits	Direction of rotation	Maximum unit	Resetting to zero	Mounting dimensions	Figure size mm	Maximum speed m-min	Torque (maximum) cpm	Weight g	Shaft position and Direction of rotation drawing
					Front and back X right and left X bore mm					
KSY : 10-5 M,Y	5	Positive rotation	10cm	Lever	80 x 130 x Ø 6 (3pieces)	4.5 x 6.5	200	0.039	1340	

เกจวัดความหนาแบบดิจิตอล 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 : 0.01 mm/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.



DA

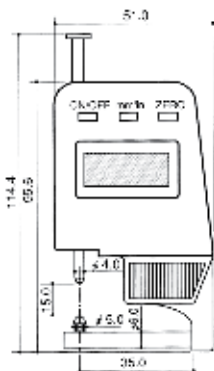
- 6) Working temperature : 0~+400°C
- 7) Storage temperature : -100°C~+600°C
- Relative humidity : 80% or less

■ Functions

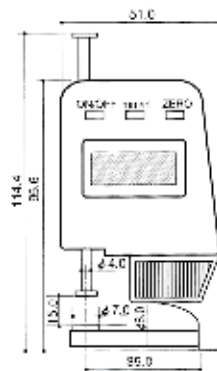
- 1) Zero setting at any location for differential measurement.
- 2) mm/in system conversion at any location.

■ Replacement of the battery

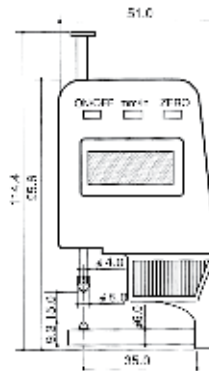
Remove the small round battery cover on the back of the Caliper and replace the battery.
Mind that the positive pole must face out.



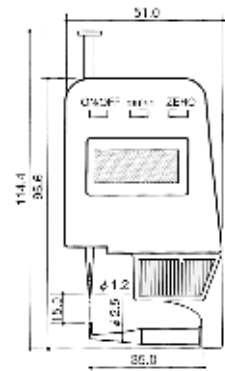
Model : DA
Main objections to be measured :
Lenses



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

ไดอัลเกจวัดความหนาแบบมือกด

Dial Thickness Calipers

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

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

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

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

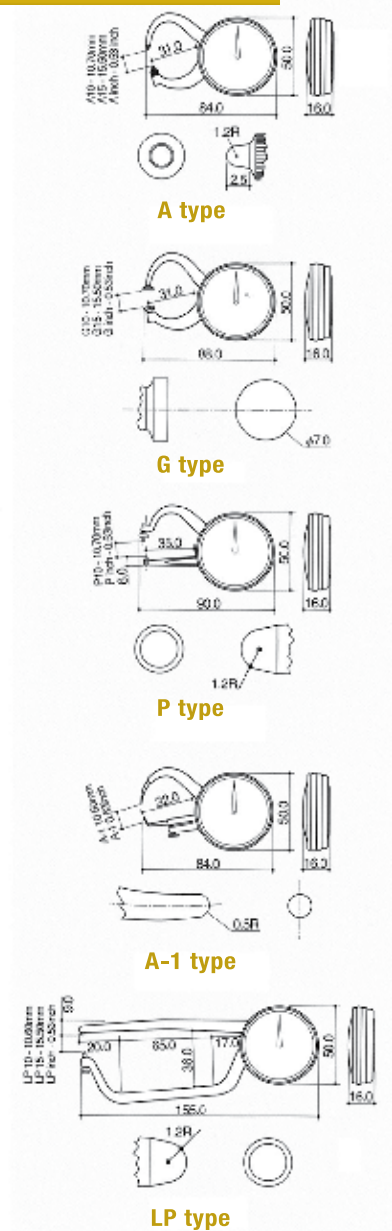
A-1 type : It is suitable for the measurement of a detailed thing.



A type



G type



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

เกจวัดความแข็งของยางแบบ 1 เข็มและ 2 เข็ม

Durometers



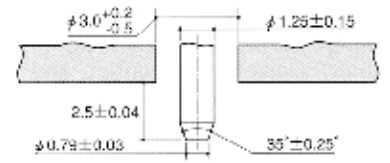
KR-14A

Comparison Between Various Hardness Data

JIS K 6253	TYPE A										
ISO K 7215	0	10	20	30	40	50	60	70	80	90	100
JIS K 6301		10	20	30	40	50	60	70	80	90	
JIS K 6253		20	30	40	50	60	70	80	90		
SRIS 0101		20	30	40	50	60	70	80	90		
JIS K 6253	TYPE D										
JIS K 7215						10	20	30	40	50	
ASTMD 2240					10	20	30	40	50	60	70 80

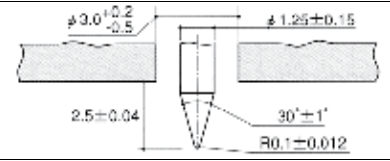
TYPE A

KR-14A
KR-24A



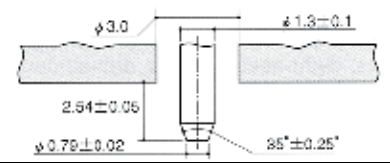
TYPE D

KR-15D
KR-25D



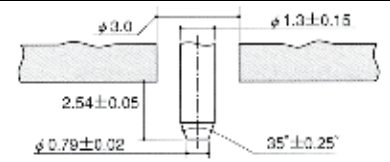
TYPE KA

KR-12KA
KR-22KA



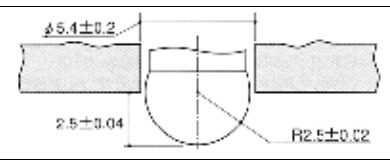
TYPE KC

KR-16KC
KR-26KC



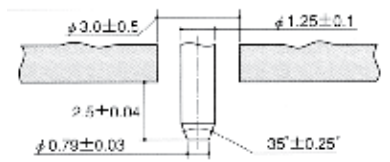
TYPE E

KR-17E
KR-27E



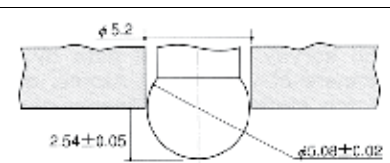
TYPE 7A

KR-137A
KR-237A



TYPE SA

KR-11SA
KR-21SA



Model	Applicable Standard	use	Weight applicable
KR-14A: Standard type KR-24A: With Two-hands type	JIS K 6253 ISO 7619 ASTM D 2240	Ordinary rubber	55-8,050mN (56.1-821.1gf)
KR-15D: Standard type KR-25D: With Two-hands type	JIS K 6253 ISO 7619 ASTM D 2240	Hard rubber	0-44,450mN (0-4,533gf)
KR-12KA: Standard type KR-22KA: With Two-hands type	JIS K 6301	Ordinary rubber	539-8,379mN (55-855gf)
KR-16KC: Standard type KR-26KC: With Two-hands type	JIS K 6301	Hard rubber	980-44100mN (100-4500gf)
KR-17E: Standard type KR-27E: With Two-hands type	JIS K 6253	Soft rubber	550-8050mN (56.1-821.1gf)
KR-137A: Standard type KR-237A: With Two-hands type	JIS K 7215 ISO R 868A ASTM D 2240A	Plastic	549,8061mN (56-822gf)
KR-11SA: Standard type KR-21SA: With Two-hands type	SRIS 0101 JIS S 6050	Soft rubber	539-8,385mN (55-855gf)

