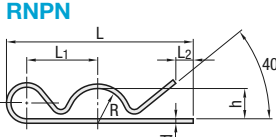
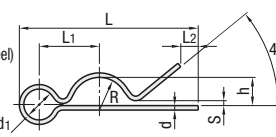


Hair Pins / Cotter Pins / Scale Tapes

Angle Scales / Bubble Levels

Hair Pins

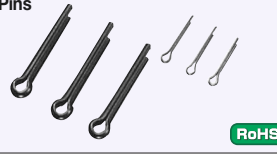
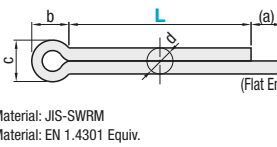
RNPN  **JNPN** **JNSPN** (Stainless Steel) 

Type	Material	Surface Treatment
RNPN	JIS-SWRH6	Trivalent Chromate
JNPN	JIS-SWRH6	Trivalent Chromate
JNSPN	EN 1.4301 Equiv.	-

RoHS

Part Number	Type	No.	d (Wire Dia.)	L	L1	L2	R	h	D1 (Applicable Shaft Dia.)	D2 (Shaft Bore Dia.)	Unit Price	Volume Discount Rate
RNPN												
6		6	1.2	25.2	9.7	3.9	3	1.4	6	1.5		
8		8	1.6	33.8	13.1	5.3	4	2.1	8	1.9		
10		10	1.8	40.2	15.7	5.7	5	3	10	2.2		
12		12	2	46	17.5	6	6	4	12	2.4		
JNPN												
4		4	1	3	16.3	6	2	1	4	1.2		
5		5	1.2	3.6	17.9	6.5	2.5	1.5	5			
6		6	1.2	3.6	21.2	7.8	3	1.8	6	1.5		
8		8	1.6	4.8	27.7	10.4	4	2.4	8	1.9		
10		10	1.8	5.4	32.6	12.2	5	3.2	10			
12		12	1.8	5.4	35.8	13.2	6	4.2	12	2.2		

Cotter Pins

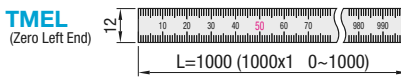
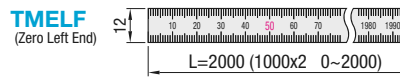
NPN  **NSPN** (Stainless Steel) 

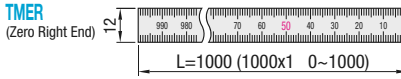
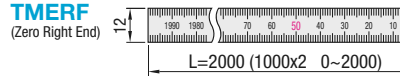
Part Number	Type	No.	L	d	a (Approx.)	b	c	Unit Price	Volume Discount Rate
NPN									
0.8		8	10	0.7	1.6	2.4	1.4		
1		10	12	0.9	3	3	1.8		
1.2		10	12	1	3	2			
1.6		10	12	1.4	3.2	2.8			
2		12	15	1.8	4	3.6			
NSPN									
2.5		15	20	2.3	5	4.6			
3.2		20		2.9	3.2	6.4	5.8		
4		20	25	3.7	8	7.4			
5		35	4.6	4	10	9.2			

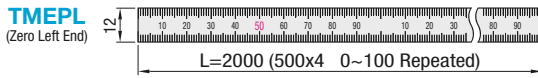
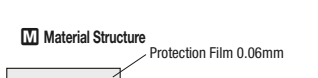
Ordering Example: Part Number - L
RPN6
NSPN3.2 - 20

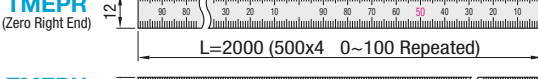
Material: NPN JIS-SWRM, NSPN EN 1.4301 Equiv.

Scale Tapes

TMEF (Zero Left End)  **TMEF** (Zero Left End) 

TMER (Zero Right End)  **TMER** (Zero Right End) 

TMEPL (Zero Left End)  **TMEPR** (Zero Right End) 

TMEPN (No Number) 

Material Structure

- Protection Film 0.06mm
- PET Film 0.10mm
- Aluminum Foil 0.05mm
- Adhesive Layer (Acrylic) 0.03mm
- Backing Paper 0.08mm

RoHS

Zero Point Position (Graduation)	Part Number	Type	L	Thickness	Scale Increment	Unit Price
Left End (0 ~ 1000)	TMEF	1000		0.18	1mm	
Right End (0 ~ 1000)	TMER					
Left End (0 ~ 100)	TMEPL					
Right End (0 ~ 100)	TMEPR					
-	TMEPN					
Left End (0~1000, 1000~2000)	TMEF	2000				
Right End (0~1000, 1000~2000)	TMER					


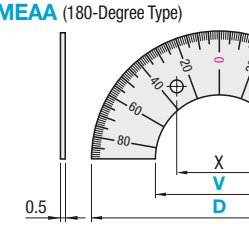
Ordering Example: Part Number
TMEPL-2000

Ordering Example: Part Number
TMERF-2000

Peel off the surface protection film before use.
Wipe the dirt off the surface.

* Use as measuring tool for adjustment of machines and equipment.

Angle Scales - Plate Type


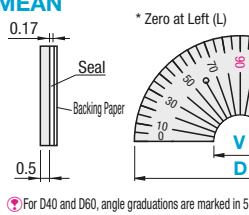
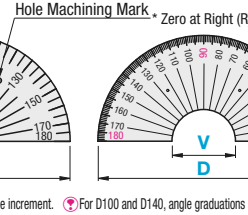
MEAA (180-Degree Type)  **MEAB** (90-Degree Type) 

Ordering Example: Part Number - V - H
MEABC50 - 25 - 3

Part Number	Type	Graduation Direction	D	V	H	X	Y	Unit Price
MEAA 180 Degree Type								
		C (Zero at Center)	40	20		13.5	11.5	
			60	30		20	17	
			100	50		36	26	
			140	80		48	40	
MEAB 90-Degree Type								
		L (Zero at Left)	20	10		12	5	5
		R (Zero at Right)	30	15		17	7	7
		C (Zero at Center)	50	25		29	12	12
			70	40		43	18	18

Material: EN 1.4301 Equiv. No Tape

Angle Scales - Double-Sided Adhesive Tape

MEAN   

Ordering Example: Part Number - V
MEANC60 - 25

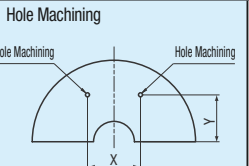
Material: EN AW-1050 Equiv. With Tape

Part Number	Type	Graduation Direction	D	V Selection	Unit Price
MEAN					
		L (Zero at Left)	40	10 12 16 20	
		C (Zero at Center)	60	16 20 25 30	
		R (Zero at Right)	100	30 35 40 50	
			140	40 50 60 80	

Zero position changes depending on the scale direction.
Similar products are available. For Adjusting Collars P.1155

Alterations: Part Number - V - (HC)
MEANC140 - 60 - HC

Alterations

Hole Machining 

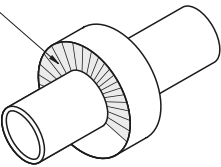
Code HC

Spec.


Adds mounting holes at hole machining marks.
MEAN: Ø3.5x2 places.
Adhesive tape is affixed to the back.
(Mounting Hole Dimension Diagram)

D	X	Y
40	13.5	11.5
60	20	17
100	36	26
140	51	36

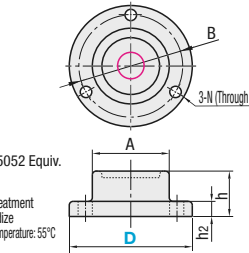
Available for MEAN only.

Example: MEAN 

Bubble Levels (Mounting Type)

SMTF  **Material** EN AW-5052 Equiv. Glass. **Surface Treatment** Black Anodize. Max. Operating Temperature: 55°C.

Bubble Levels (Embedded Type)

SMH  **Material** ABS Plastic Glass. Max. Operating Temperature: 55°C.

Part Number	Type	D	A	B	h	h2	Mounting Hole (N)	Sensitivity	Unit Price
SMTF									
		28	16	22	10.5	3.5	2	38'12" (R-180)	
		32	20	27	12.0	4.0	3	38'12" (R-180)	
SMH									
		20	16.7		11	9.5		38'12" (R-180)	

Bubble Levels

Level the surface to be mounted prior to placing the bubble level, then mount while adjusting the bubble level so the air bubble stays within the red circle in the center.
When the bubble moves 2mm away from the center, the mounting surface is inclined approximately 0.5 degrees.
Mounting interface of these bubble levels have no accuracies built-in. Upon installation, customer adjustment required.

Ordering Example: Part Number
SMTF28