

Hair Pins / Cotter Pins / Scale Tapes

Angle Scales / Bubble Levels

Hair Pins

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

Type	Material	Surface Treatment
RNPN	SWRH6	Trivalent Chromate
JNPN	SWRH6	Trivalent Chromate
JNSPN	SUS304	-

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	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	25	2.9	3.2	6.4	5.8		
4		20	25	3.7	4	8	7.4		
5		35	46	4	10	9.2			

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

Scale Tapes

TMEF (Zero Left End) **TMEFL** (Zero Left End) **TMER** (Zero Right End) **TMERF** (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

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

Ordering Example: Part Number
TMEPL-2000

Ordering Example: Part Number
TMERF-2000

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

Angle Scales - Plate Type

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

Part Number	Type	Graduation Direction	D	V	H	X	Y	Unit Price
MEAA								
40		C	40	20		13.5	11.5	
60		C	60	30		20	17	
100		C	100	50	3	36	26	
140		C	140	80		48	40	
MEAB								
20		L	20	10		12	5	5
30		R	30	15		17	7	7
50		C	50	25	3	29	12	12
70		C	70	40		43	18	18

Material: SUS304 No Tape

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

Angle Scales - Double-Sided Adhesive Tape

MEAN

Part Number	Type	Graduation Direction	D	V Selection	Unit Price
MEAN					
40		L	40	10 12 16 20	
60		C	60	16 20 25 30	
100		R	100	30 35 40 50	
140		R	140	40 50 60 80	

Material: A1050P With Tape

Ordering Example: Part Number - V
MEANC60 - 25

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.

Bubble Levels (Mounting Type)

SMTD

Bubble Levels (Embedded Type)

SMH

Material: A5052B Glass
Surface Treatment: Black Anodize
Max. Operating Temperature: 55°C

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

Part Number	Type	D	A	B	h	h2	Mounting Hole (N)	Sensitivity	Unit Price
SMTD									
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		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
SMTD28