

# **MEASURING & PRECISION**

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- Market leading range of trade quality stainless steel rules, famous for their long history and superior quality
- Photographically etched markings provide the highest precision and accuracy
- Black chrome plated graduations ensure long term visibility and protection against scuff marks and damage
- Fully heat treated and hardened Japanese stainless steel
- Satin chromed for quick and easy reading
- Accurate to Japanese Industrial Standard B7516 grade one specifications
- The only rules that are certified by both JIS (Japan Industrial Standards) and JCSS (Japan Calibration Service System)
- Individually supplied in protective vinyl storage sleeve
- Made in Japan



#### METAL RULES GRADE 1 OF JIS B7516 - 2005 (ABSTRACT)

Standard	Grade 1 of JIS B7516-2005							
Material	SUS420 J2 of JIS G 4305 or that	equivalent or superio	r to this in quality	1				
Hardness of Material	Hv400 min							
	Nominal Size	Overall Length (L)		Thickness (T)		Width (W)		
Size	Nonlina Size	Size	Tolerance	Size	Tolerance	Size	Tolerance	
<u> </u>	150mm	175mm		0.5mm		15mm		
	300mm	335mm		1.0mm		25mm		
	600mm	640mm	+/-5mm	1.2mm	+/-10%	30mm	+/-2%	
T	1000mm	1050mm	17 311111	1.5mm	+/-10%	35mm	<b>+</b> /- <b>2</b> 70	
	1500mm	1565mm		2.0mm		40mm		
	2000mm	2065mm		2.0mm		40mm		
Flatness of scale face	The scale face shall be flat to a	level of no hindrance	to measurements					
	Nominal Size Straightness			Nominal Size		Straightness		
Ctunishtmass of scale side force	150mm	max 0.23mm		1000mm		max 0.40mm		
Straightness of scale side face	300mm	max 0.26mm		1500mm		max 0.50mm		
	600mm	max 0.32mm		2000mm		max 0.60mm		
Straightness of scale side face	The squareness of the scale en	d face of a rule in resp	ect of its scale sid	e shall be 0.035mm	n max per 10mm	length of the end fa	ce	
	Length			Tolerance				
	max 500mm			+/- 0.15mm				
Tolerance of length Temperature at 20°C	over 500mm - max 1000 mm			+/- 0.20mm				
	over 1000 mm - max 1500mm	l		+/- 0.25mm				
	over 1500mm - max 2000mm			+/- 0.30mm				



150BN



300M

#### SINGLE SIDED RULES

METRIC

- Graduations on both upper and lower edges with numerical markings in centre only
- One square end and one round end with hanging hole
- Manufactured from stainless steel
- Made in Japan



Part No.	Longth	Width	Thickness	Graduations	
Part NO.	Length	wiatii	THICKNESS	Upper Edge	Lower Edge
150BM	150mm	15mm	0.5mm	1mm	0.5mm
300M	300mm	25mm	1.0mm	1mm	0.5mm
600M	600mm	30mm	1.2mm	1mm	0.5mm
1000M	1000mm	35mm	1.5mm	1mm	0.5mm



2000M

1	0	20	30	40	50	60	70	80	90	100	10	20	30	40	50	60	70	80	90	200	10	20	30	40	50	60	70	80	90 300	2	0	30	40	50	60	70	80	<sup>90</sup> 40	0 10
. 1	0	20	30	40	50	60	70	8.0	90	100	10	2,0	30	40	50	60	70	80	90	200	10	20	30	40	50	60	70	0.5	90 300	2	0 .	30	40	50	60	70	0.5	90 40	0 10

#### **SINGLE SIDED RULES**

**METRIC** 

- Graduations and numerical markings on both upper and lower edges
- One square end and one round end with hanging hole
- Manufactured from stainless steel
- Made in Japan

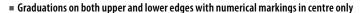


Part No.	Longth	Width	Thickness	Graduations					
raitivo.	Length	Width	HillCkiless	Upper Edge	Lower Edge				
1500M	1500mm	40mm	2.0mm	0 – 100: 0.5mm, 100 – 1500: 1mm	1mm				
2000M	2000mm	40mm	2.0mm	0 – 100: 0.5mm, 100 – 2000: 1mm	1mm				
3000M	3000mm	40mm	3.0mm	0 – 100: 0.5mm, 100 – 3000: 1mm	1mm				
4000M	4000mm	40mm	3.0mm	0 – 100: 0.5mm, 100 – 4000: 1mm	1mm				



### **SINGLE SIDED EASY PICK-UP RULES**

**METRIC** 



- Easy pick-up rules feature a bent edge at one end to enable easy pick-up off flat surfaces
- One square end and one round end with hanging hole
- Manufactured from stainless steel
- Made in Japan





Part No.	Length Width Thickness		Graduations			
Fait No.	Length	Wiutii	HIICKHESS	Upper Edge	Lower Edge	
301956	150mm	15mm	0.5mm	1mm	0.5mm	
301957	300mm	25mm	1.0mm	1mm	0.5mm	



321900

#### SINGLE SIDED FLEXIBLE RULES

METRIC

- Graduations on both upper and lower edges with numerical markings in centre only
- Toledo flexible rules are thinner in width and thickness to allow for damage free bending
- One square end and one round end with hanging hole
- Manufactured from stainless steel
- Made in Japan



Part No.	Longth	Width	Thickness	Graduations				
rait NO.	Length	Width	HIICKHESS	Upper Edge	Lower Edge			
321900	300mm	15mm	0.5mm	1mm	0.5mm			
321901	600mm	15mm	0.5mm	1mm	0.5mm			
321059	1000mm	15mm	0.5mm	1mm	1mm			
321060	2000mm	15mm	0.5mm	1mm	1mm			



150MSE Back

#### **DOUBLE SIDED RULES**

**METRIC** 

- $\blacksquare \ \, \textbf{Front \& Back: Graduations on both upper and lower edges with numerical markings in centre only}$
- No quiet space complete rule is graduated, two square ends
- Manufactured from stainless steel
- Made in Japan



Daut Na	Louath	Width	Thickness	Graduations Front		Graduations Back	
Part No.	Length	Width	HIICKHESS	Upper Edge	Lower Edge	Upper Edge	Lower Edge
150MSE	150mm	20mm	1.0mm	0.5mm	1mm	0.5mm	1mm
300MSE	300mm	28mm	1.0mm	0.5mm	1mm	0.5mm	1mm





ST150M Front

ST150M Back

#### **DOUBLE SIDED RULES METRIC**

Front & Back: Graduations and numerical markings on both upper and lower edges. Numerical markings on lower edge counting left to right and upper edge counting right to left

- No quiet space complete rule is graduated, two square ends
- Manufactured from stainless steel
- Made in Japan



Part No.	Langth	Width	Thickness	Graduations Front		Graduations Back		
	Length	Width	IIIICKIIESS	Upper Edge	Lower Edge	Upper Edge	Lower Edge	
ST150M	150mm	20mm	1.0mm	1mm	0.5mm	1mm	0.5mm	
ST300M	300mm	28mm	1.0mm	1mm	0.5mm	1mm	0.5mm	



150SP Front

## **DOUBLE SIDED RULES**

**METRIC** 



- Front & Back: Graduations on both upper and lower edges
- Numerical markings on front side in centre counting from left to right
- Numerical markings on back in centre beginning in middle and counting outwards
- One square end and one round end with hanging hole
- Manufactured from stainless steel
- Made in Japan

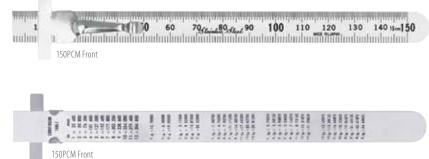


Part No.	Longth	Width	Thickness	Graduations Front		Graduations Back		
Part No.	Length	Width	Inickness	Upper Edge	Lower Edge	Upper Edge	Lower Edge	
150SP	150mm	15mm	0.5mm	1mm	0.5mm	1mm	0.5mm	
300SP	300mm	25mm	1.0mm	1mm	0.5mm	1mm	0.5mm	

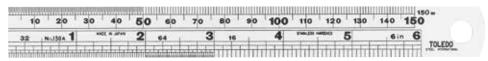
#### **DOUBLE SIDED POCKET CLIP RULE METRIC**

■ Front: Graduations on both upper and lower edges with numerical markings in centre only

- Back: 'Inch' to 'mm' conversion table
- Rule with pocket clip for easy storage
- One square end and one round end
- Manufactured from stainless steel
- Made in Japan



Davt No.	Longth	Wideh	Thislenge	Graduations Front	Dagle	
Part No.	Length	Width Thickness		Upper Edge	Lower Edge	Back
150PCM	150mm	20mm	0.5mm	0.5mm	1mm	Conversion table



150A6



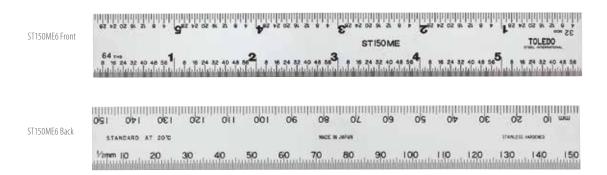
150060

#### **SINGLE SIDED RULES**

METRIC & IMPERIAL

- Graduations and numerical markings on both upper and lower edges
- One square end and one round end with hanging hole
- Manufactured from stainless steel
- Made in Japan

Part No.	Longth	Width	Thickness	Graduations	
rait NO.	Length	Width		Upper Edge	Lower Edge
150A6	150mm/6"	19mm	0.8mm	0 - 50: 0.5mm , 50 - 150: 1mm	0 - 2": 1/32", 2 - 3": 1/64", 3 - 6": 1/16"
150060	1500mm/60"	40mm	2.0mm	1mm	1/16"
200078	2000mm/78"	40mm	2.0mm	1mm	1/16"
3000118	3000mm/118"	40mm	3.0mm	1mm	1/16"

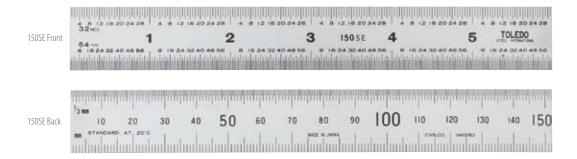


#### **DOUBLE SIDED RULES**

METRIC & IMPERIAL

- Imperial Front & Metric Back: Graduations on both upper and lower edges. Numerical markings in transverse order with lower edge counting left to right and upper edge counting right to left
- Two square ends
- No quiet space complete rule is graduated
- See images for further explanation of markings and graduations
- Manufactured from stainless steel
- Made in Japan

Dayt No. Langth		Width Thi	Thickness	Graduations Front		Graduations Back	
Part No. Length	THICKHESS		Upper Edge	Lower Edge	Upper Edge	Lower Edge	
ST150ME6	150mm/6"	20mm	1.0mm	1/32"	1/64"	1mm	0.5mm
ST300ME12	300mm/12"	28mm	1.0mm	1/32"	1/64"	1mm	0.5mm

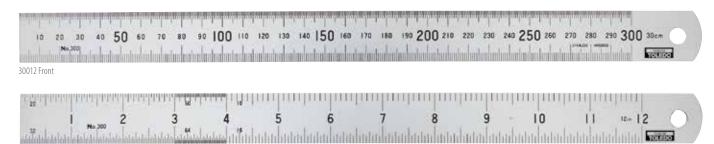


#### **DOUBLE SIDED RULES**

METRIC & IMPERIAL

- Imperial Front: Graduations on both upper and lower edges. Numerical markings on both upper and lower edge and in centre
- Metric Back: Graduations on both upper and lower edges with numerical markings in centre only
- Two square ends
- No quiet space complete rule is graduated
- See images for further explanation of markings and graduations
- Manufactured from stainless steel
- Made in Japan

Part No. Length		Width	Thickness Graduations Front			Graduations Back	
Part No.	Part No. Length	wiatn	INICKNESS	Upper Edge	Lower Edge	Upper Edge	Lower Edge
150SE	150mm/6"	20mm	1.0mm	1/32"	1/64"	0.5mm	1mm
300MESE	300mm/12"	28mm	1.0mm	1/32"	1/64"	0.5mm	1mm



#### 30012 Back

#### **DOUBLE SIDED RULES**

METRIC & IMPERIAL

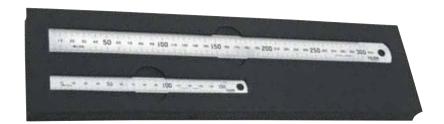
- Metric Front & Imperial Back: Graduations on both upper and lower edges with numerical markings in centre only
- One square end and one rounded end with hanging hole
- Manufactured from stainless steel
- Made in Japan



Part No.	Langth	Width	Thickness	Graduations Front		Graduations Back		
Part NO.	Length	Width	THICKHESS	Upper Edge	Lower Edge	Upper Edge	Lower Edge	
150B6	150mm/6"	15mm	0.5mm	0.5mm	1mm	0 - 2": 1/20", 2 - 3": 1/50", 3 - 6": 1/10"	0 - 2": 1/32", 2 - 3": 1/64", 3 - 6": 1/16"	
30012	300mm/12"	25mm	1.0mm	0.5mm	1mm	0 - 3": 1/20", 3 - 4": 1/50",4 - 12": 1/10"	0 - 3": 1/32", 3 - 4": 1/64", 4 - 12": 1/16"	
60024	600mm/24"	30mm	1.2mm	0.5mm	1mm	0 - 3": 1/20", 3 - 4": 1/50", 4 - 24": 1/10"	0 - 3": 1/32", 3 - 4": 1/64", 4 - 24": 1/16"	
100036	1000mm/36"	35mm	1.5mm	0.5mm	1mm	0 - 3": 1/20", 3 - 4": 1/50", 4 - 36": 1/10"	0 - 3": 1/32", 3 - 4": 1/64", 4 - 36": 1/16"	

#### **RULE SET**

- Contains two popular 150mm and 300mm rules
- Manufactured from stainless steel
- Supplied in foam storage tray suitable for all tool boxes
- Made in Japan



David Ma	rt No. Contents Length V		Wistala This	This land	Graduations Fro	ont	Graduations Back	
Part No.			Width Thickness		Upper Edge	Lower Edge	Upper Edge	Lower Edge
<b>TDC04</b>	150BM	150mm	15mm	0.5mm	1/2mm	1mm	Blank	Blank
TRS01	30012	300mm	25mm	1.0mm	1/2mm	1mm	0 - 3": 1/20", 3 - 4": 1/50", 4 - 12": 1/10"	0 - 3": 1/32", 3 - 4": 1/64", 4 - 12": 1/16"





#### **PROFESSIONAL MEASURING SETS**

- Professional measuring sets for ultimate precision and accuracy
- Heat treated and hardened Japanese stainless steel with photographically etched markings
- Satin chromed for easy reading and identification
- Accurate to Japanese Industrial Standard B 7516 Grade 1 specifications
- Supplied in foam storage trays suitable for all tool boxes
- Made in Japan

Part No.	Contents	Description	Size
321903	150B6	Rule - Metric & Imperial	150mm/6"
	301959	Square - Metric	150 x 75mm
	700A	Taper Gauge - Metric	0 - 15mm

Part No.	Contents	Description	Size
321904	301955	Protractor with Rule	180° / 100mm
	300M	Rule - Metric	300mm
	50150	Spring Divider - Solid Nut	150mm
	321015	Square - Metric	300 x 150mm
	700A	Taper Gauge - Metric	0 - 15mm
	-	Scriber - Pen Style with Pocket Clip	135mm

#### **RULE STOPS**

- Handy tool increases the practicality of Toledo stainless steel rules
- Provides an easy way to make repeated accurate measurements
- Attaches to rule with locking screw to enable easier measurement work and additional applications such as depth taking, drafting and lay out work
- Precision machined jaws allow for complete accuracy
- Note: Suitable only for Toledo rules with one square and one round end (not suitable for dual square end rules)
- Made in Japan











Part No.	Suits Rules	Rule Part No.
321061	150mm	150A6, 150B6, 150BM, 150SP, 301956
321062	300mm & Flexible rules	300M, 300SP, 30012, 301957, 321059, 321060, 321900, 321901,
321063	600mm	600M, 60024
321064	1000mm	1000M, 100036
321065	1500 - 4000mm	1500M, 2000M, 3000M, 4000M, 150060, 200078, 3000118



## **ALUMINIUM CUTTING RULES**



#### **SINGLE SIDED CUTTING RULES**

#### METRIC

- Inbuilt handle provides ease of use and maximum safety when cutting
- Lightweight aluminium construction
- Handy for all drafting and marking out applications on walls, ceilings and floors
- Wear resistant UV cured screen printing
- Accuracy: 0.7mm per metre





Part No.	Longth	Width	Thickness	Thickness		Graduations Back	
raitino.	Length	Width	Blade Only	Overall with Handle	Upper Edge	Lower Edge	
322001	500mm	60mm	6.5mm	46mm	1mm	1mm	
322002	600mm	60mm	6.5mm	46mm	1mm	1mm	
322003	800mm	60mm	6.5mm	46mm	1mm	1mm	
322004	1000mm	60mm	6.5mm	46mm	1mm	1mm	
322005	1200mm	60mm	6.5mm	46mm	1mm	1mm	

## **ALUMINIUM CUTTING RULES**

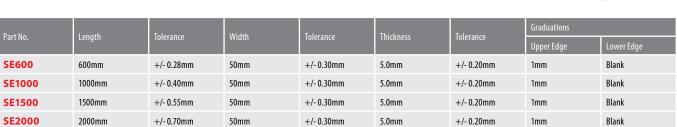


SE600

#### SINGLE SIDED STRAIGHT EDGE RULES

**METRIC** 

- Features one straight edge and one graduated edge
- Two square ends with one hanging hole
- Manufactured from aluminium
- Made in Japan



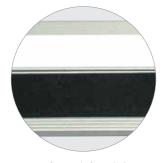


AR300

#### SINGLE SIDED STRAIGHT EDGE RULES - SPONGE BACK

METRIC

- Sponge back provides anti-slip performance making measuring and alignment drawing easy and accurate. Sponge back also protects against possible damage to the work surface
- Features one straight edge and one graduated edge
- Two square ends with one hanging hole
- Manufactured from aluminium
- Made in Japan



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PRECISION STRAIGH

Reverse side. Sponge back

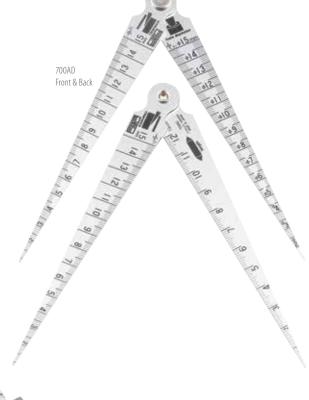
Part No. Length	Longth	Width	Thickness	Graduations		
	Length	Width		Upper Edge	Lower Edge	
AR300	300mm	35mm	5.0mm	1mm	Blank	
AR600	600mm	35mm	5.0mm	1mm	Blank	
AR1000	1000mm	35mm	5.0mm	1mm	Blank	

## **TAPER GAUGES**

#### **TAPER GAUGES**

- Used to measure internal diameters
- Ideal for measuring gaps, slot widths, hole or bore sizes and flange face to face dimensions
- Photographically etched markings ensure the greatest precision and accuracy
- Satin chrome for easy reading and identification
- Accuracy: -/+ 0.05mm
- Manufactured from stainless steel















Part No.	Size Range	Description
700A	1 - 15mm	Taper gauge with hanger hole
700B	15 - 30mm	Taper gauge with hanger hole
700C	30 - 45mm	Taper gauge with hang hole
700D	45 - 60mm	Taper gauge with hang hole
700AD	1 - 15mm	Taper gauge with 150mm rule & clearance gauge
700AM	1 - 15mm	Taper gauge with hanger hole, metal case & pocket clip
700AR	1 - 15mm	Taper gauge with 150mm rule







## **SQUARES**

- Squares are important for setting and performing accurate measurements and cuts as well as checking the square fit of glue joins and frames
- Also essential for ensuring tool faces, blades, fences and sanding blocks are accurately square
- Complete range available including carpenter's, combination, engineer's and mini squares



#### **CARPENTER'S MITRE SQUARES**

METRIC & IMPERIAL

- Used for producing right angles in carpentry
- Stainless steel blade with reinforced plastic handle
- Graduated blade with metric and imperial markings
- Features hanger hole in blade for easy storage
- Suitable for use as inner or outer try square, mitre square, horizontal and 45° marking gauge and rule
- Manufactured from stainless steel
- Made in Japan

Part No.	Longth	Thickness	Graduations		
Part No.	Length	THICKHESS	Upper Edge	Lower Edge	
MS150	150mm/6"	1.0mm	1mm	1/16"	
MS200	200mm/8"	1.0mm	1mm	1/16"	
MS250	250mm/10"	1.0mm	1mm	1/16"	
MS300	300mm/12"	1.0mm	1mm	1/16"	



## CARPENTER'S/ FRAMING SQUARE 600X400MM

METRIC

- Heavy duty carbon steel frame with black painted coating
- Durable high visibility easy-read silkscreen printing
- Single punch easy hang hole
- Double sided markings

Part No.	Dimonione	Graduations Front		
Part No.	Dimensions	Upper Edge	Lower Edge	
322453	600 x 400mm	1mm	1mm	



#### **T-BEVEL WITH LEVEL**

- Two in one tool handy level in handle and graduated stainless steel bevel
- Easy-to-read vial in handle
- Built-in 3/16" (5mm) trim gauge on side and bottom
- Angle markings on handle (15°, 30°, 45°, 60°)
- Double sided, etched stainless steel blade and bolt with metric and imperial graduations

Part No.	Blade Graduations	Blade Thickness	Overall Thickness	Overall Length (Open)
322016	180mm x 7"	1.2mm	27mm	335mm



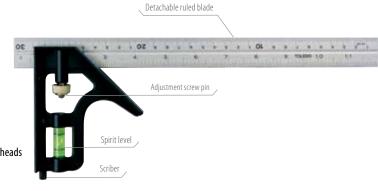


## **SQUARES**

#### **COMBINATION SQUARE**

METRIC & IMPERIAL

- Popular multi-application tool with versatile functionality
- Suitable for use as inner or outer try square, mitre square, horizontal, 45° and plumb level, depth and marking gauge and rule
- Detachable ruled blade (300mm / 12")
- Spirit level for checking level and plumb
- Lidded scriber for marking work
- Suitable for multiple interchangeable heads including protractor and centring heads
- Useful tool for transferring duplicate measurements



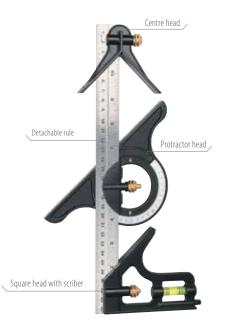
Part No.	Graduations Front		Graduations Back		
	Upper Edge	Lower Edge	Upper Edge	Lower Edge	
CS30012	1mm	1/16"	1mm	1/32"	

## **COMBINATION SQUARE SET**

METRIC & IMPERIAL

- Versatile and useful multi-application set for a wide range of measuring and lay out jobs
- Suitable for use as a rule, spirit level, plumb level, 45° level, try square (internal and external), height/depth gauge, marking gauge and scriber
- Common applications include jobs in woodworking, metal working and stonemasonry
- Black baked enamel finish (except rule)
- Stainless steel graduated rule
- Supplied in high grade EVA foam storage tray

Do no No	Graduations			
Part No.	Rule	Square	Protractor	
322210	300mm/12"	45° & 90°	180°	











#### **FEATURES & APPLICATIONS**

#### **Detachable Rule**

- All traditional length and dimension measurements
- Hardened stainless steel with precision milled edges
- Double sided metric and imperial 300mm/12"
- Metric graduation: 1mm
- Imperial graduation: 1/32" & 1/16"

#### Square Head with Scriber & Spirit Level

- Lay out and checking of 45° and 90° angles
- Checking level and plumb
- Locking bolt for firm attachment to blade
- Detachable scriber for marking

#### **Protractor Head with Spirit Level**

- Setting, measuring and checking of angles
- Double 180° scale
- Locking bolt for firm attachment to blade

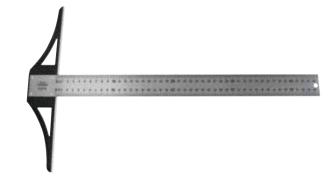
#### **Centre Head**

- Allows centre lines to be obtained
- Checking the centre of round jobs
- Enables depth measurement
- Locking bolt for firm attachment to blade

#### **T-SQUARES**

- Ideal tool for all measuring and technical drawings
- Ideal for applications requiring accurate horizontal or vertical lines
- Aluminium construction with special UV resistant ink printed graduations and durable powder coated T-head

Dayt No.	Lawash	Width	Thistoness	Graduations	
Part No.	Length		Thickness	Upper Edge	Lower Edge
322215	450mm	38mm	1.2mm	1mm	1mm
322216	900mm	38mm	1.2mm	1mm	1mm



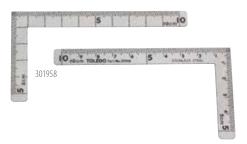


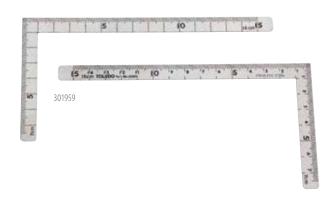
## **SQUARES**

#### **MINI SQUARES**

**METRIC** 

- Handy mini-squares for various small and medium measuring jobs
- Simple and light "L" squares
- Double sided photographically etched markings for ultimate accuracy and precision
- Manufactured from quality stainless steel to the strict standards of all Toledo rules





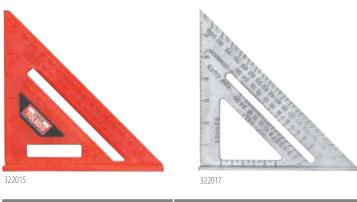
Part No.	Size Width		Thickness	Graduations Front		Graduations Back	
	Size	width	THICKHESS	Upper Edge	Lower Edge	Upper Edge	Lower Edge
301958	100 x 50mm	10mm	1.2mm	1mm	Blank	1mm	10mm
301959	150 x 75mm	10mm	1.2mm	1mm	10mm	1mm	10mm
321015	300 x 150mm	15mm	1.2mm	1mm	5mm	1mm	5mm

#### **RAFTER SQUARES 7"**

- Ideal for marking and cutting of rafters, stairs or any basic angle
- Tri-square, mitre square, protractor, line scriber and saw guide all in one tool
- Moulded-in conversion tables that never fade or rub off
- Marked with degree graduations for fast, easy layout
- Square body has a flat base on one side for easy 90° vertical measuring
- Commonly used in carpentry applications







Part No.	Material
322015	'Ergocast' plastic
322017	Aluminium

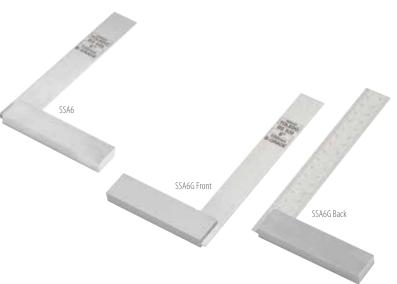
#### **ENGINEERING SQUARES**

• Used for producing right angles in carpentry and engineering applications

■ Available with blade lengths of 50mm/2 inch to 300mm/12 inch

■ Spring steel blade and handle

Part No.	Style	Blade Length	
SSA2	Non-Graduated	50mm	
SSA3	Non-Graduated	75mm	
SSA4	Non-Graduated	100mm	
SSA6	Non-Graduated	150mm	
SSA8	Non-Graduated	200mm	
SSA10	Non-Graduated	250mm	
SSA12	Non-Graduated	300mm	
SSA4G	Graduated	100mm	
SSA6G	Graduated	150mm	



#### **ENGINEERING SQUARES - HIGH PRECISION**

JIS PRECISION CLASS 2

- High precision squares are manufactured to strict Japanese Industrial Standards (JIS)
- The professionals choice for their high quality, precision and accuracy
- Manufactured from high grade Japanese carbon steel (S50C)
- Manufactured to JIS B 7526:1995
- Made in Japan

Part No.	Style	Blade Length
321115	Non-Graduated	50mm
321116	Non-Graduated	75mm
321117	Non-Graduated	100mm
321118	Non-Graduated	150mm
321119	Non-Graduated	200mm
321120	Non-Graduated	250mm
321121	Non-Graduated	300mm



## **MEASURING WHEELS**

#### **MEASURING WHEEL**

10,000M

- Small and compact unit with aluminium telescopic handle is easy to transport and ideal for "on the go" use
- Easy to read 5 digit counter with 10cm and 1m increments
- Column 1 (white) gives 10cm read outs, while the others (black) give 1m increment read outs
- High traction dual tyres (small and large) for steady and firm glide measurement
- Heavy duty ABS plastic housing
- Ideal for construction, plumbing works, engineering works, measurement of properties, measurement of interior works and landscaping



Part No.	Wheel Diameter	Range	Telescopic Handle	Accuracy	Weight	
322551	Ø 100mm	10,000m	450 - 950mm	±1cm per 100cm	0.345kg	



#### **DIGITAL MEASURING WHEEL**

10,000M

- The most innovative and precise measuring wheel with digital read out in increments of 1cm
- Displays metric (Centimetre/Metre) or imperial measurements (Inches/Feet)
- Six key control functions with five memory data storage
- Large dust and splash proof backlit LCD display with ergonomic design and easily placed buttons for one handed operation
- Dual component ABS and TPR moulded pistol handle is ergonomic and strong
- Patented with locking fold design and carry handle to allow compact storage and easy transportation
- Heavy duty wheel design is ideal for movement through rough surfaces
- Operated with a 9v battery (supplied)
- Supplied in heavy duty nylon bag

Part No.	Wheel Diameter	Range	Overall Length	Weight
322552	13"(330mm)	10,000m	980mm	1.8kg













#### **MEASURING TAPES**

#### **TAPE MEASURE**

METRIC & IMPERIAL 2 METRE SINGLE SIDED

- Graduations and numerical on both upper and lower edges
- Mini tape measure is very handy to keep on hand at all times
- Strong and robust design with ABS and TPE shock-proof casing
- Ergonomic design with handy keychain ring
- High visibility nylon coated blade
- Shock absorbing bumper to dampen down recall





Dent No.	Length Blade Thickness		Diada Widel	O    Dii	Graduations	
Part No.	Length	Blade Inickness	Blade Width	Overall Dimension	Upper	Lower
321922	2 metres / 6 feet	0.5mm	12.2mm	45mm x 45mm	1/32"	1mm

#### **TAPE MEASURE**

METRIC 10 METRE DOUBLE SIDED

- Heavy duty tape measure designed for heavy use with extra long non-kink blade stand out
- Strong and robust design with ABS and TPE shock-proof casing
- Double sided metric graduations
- Automatic blade lock function provides easy set up allowing one person operation
- Ergonomic design with belt clip and hanging tether
- High visibility nylon coated blade with long stand out
- Shock absorbing bumper to dampen down recall















Hanger te

d Belt clip

Auto blade locking

ower hooks Shockproof casing

David No.	Longoth	Die de Thisteres	Blade Width Overall Dimension Graduations Front & Back			
Part No.	Length	Blade Thickness	Riade Width	Overall Dimension	Upper	Lower
321910	10 metres	0.5mm	27mm	91mm x 42mm	1mm	1mm

#### **MEASURING TAPE STEEL LONG**

METRIC 30 METRE SINGLE SIDED

- Extra heavy duty steel tape option is designed for heavy duty industrial use
- Strong and robust design with ABS and TPE shock-proof casing
- Robust rewind function is designed to last
- Nylon coated blade features a fold out hook and D ring anchor
- Belt clip for easy transportation and storage













Part No.	Length	Tape Thickness	Tape Width	Overall Dimension	Graduations
322018	30 metres	0.15mm	9.4mm	110mm x 25mm	1mm

## **MEASURING TAPES**

#### **MEASURING TAPE FIBREGLASS LONG**

METRIC & IMPERIAL DOUBLE SIDED

Reinforced, double coated fibreglass tape resistant to markings and abrasions

- Flat lay 13mm wide blade ensures ease of use
- Heavy duty fibreglass will not rot, corrode or distort
- Non-conductive/sparking fibreglass protects user against electrical shock and is suitable for any worksite
- Quick rewind function for fast and easy tape retraction
- Double sided graduation markings





Part No. Description	Description	Longth	Width	Thickness	Graduations	
	Description	cription Length			Upper Edge	Lower Edge
TF30M	Metric	30mm	13mm	0.5mm	2mm	2mm
322220	Metric & Imperial	50mm	13mm	0.5mm	2mm	1/8"

## **FOLDING RULES**

## **DOUBLE SIDED FOLDING RULE FIBREGLASS**

**METRIC** 

- Front & Back: Graduations in millimetres on lower and upper edges with numerical markings in centre only
- Broken into 220mm segments connected via a reliable and sturdy fix joint mechanism which enables extensions of 90° or 180° to firmly lock into place
- Manufactured from light, durable and insulating fibreglass
- Ideal for electrical work
- Made in Switzerland

Part No.	Overall Length
321902	2000mm



#### SINGLE SIDED FOLDING RULE

METRIC

- Graduations on both upper and lower edges with numerical markings in centre only
- $\blacksquare \ \ \text{Folding rules are precisely manufactured to maximise reliability and smooth operation}$
- Blades are locked into place when straightened via an accurately machined rivet function
- Blades straighten and align perfectly to maintain accurate graduations and measurements
- One square end and one round end when not fully extended. Square end to square end at full extension
- Manufactured from stainless steel
- Made in Japan



	Part No. Description	December	escription Overall Length	Width	Thickness	Graduations	
		Description				Upper Edge	Lower Edge
	600FM	2 blade/1 fold	600mm	20mm	0.7mm	1mm	0.5mm

## **CALIPERS & DIVIDERS**

#### **CALIPERS & DIVIDERS**

- Spring calipers and dividers designed for reliable, quick and accurate measurements during layout procedures and jobs
- Manufactured in Japan to strict standards to ensure accuracy and precision
- Legs pivot on a roller and are tensioned via bow spring
- Manufactured from stainless steel and feature a spring joint via a solid screw nut
- Solid nut requires progressive twisting to wind in and out via the threaded tension bar









#### **INSIDE CALIPERS**

Part No.	Length	Jaw Opening (Max)
51100	100mm	100mm
51150	150mm	150mm
51200	200mm	200mm
51250	250mm	250mm
51300	300mm	300mm
51350	350mm	350mm
51400	400mm	400mm
51450	450mm	450mm

#### **OUTSIDE CALIPERS**

Part No.	Length	Jaw Opening (Max)
52100	100mm	100mm
52150	150mm	150mm
52200	200mm	200mm
52250	250mm	250mm
52300	300mm	300mm
52350	350mm	350mm
52400	400mm	400mm
52450	450mm	450mm

#### DIVIDERS

Part No.	Length	Jaw Opening (Max)
50100	100mm	100mm
50150	150mm	150mm
50200	200mm	200mm
50250	250mm	250mm
50300	300mm	300mm
50350	350mm	350mm
50400	400mm	400mm
50450	450mm	450mm

### **FIRM JOINT CALIPERS**

- Precision measuring tools for obtaining quick and accurate measurements during layout procedures and jobs
- Firm joint allows for quick and efficient measuring
- Firm joint is stable and stiff to hold measurements
- Manufactured from hardened Japanese carbon steel







#### **INSIDE CALIPERS**

Part No.	Length	Jaw Opening (Max)
321070	165mm	150mm
321071	210mm	200mm

#### **OUTSIDE CALIPERS**

Part No.	Length	Jaw Opening (Max)	
321072	160mm	150mm	
321073	210mm	200mm	

## **CALIPERS & DIVIDERS**

#### **FIXED JOINT CALIPER (JENNY)**

- Fixed joint caliper also known as a 'Jenny' caliper
- Used to locate the centre of a round or square section of steel
- Suitable for setting a constant distance from an edge
- One leg holds an adjustable point and the other end a locating lug
- Made in Japan

Part No.	Size
321074	150mm



## **LEVELS**

#### **BOX LEVELS MAGNETIC**

- Reinforced aluminium frame
- Epoxy locked shockproof vials
- Precision milled surfaces for accuracy (up to 1200mm)
- Enlarged easy read horizontal vial (33% bigger)
- Unique side-view vial provides accurate plumb reading
- Removable shockproof end caps
- Powerful rare earth magnets
- V-groove for pipes and curved surfaces
- Non-scratching wall grab tabs
- High accuracy of 0.5mm/m





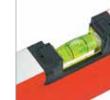


Merchandiser 9Pc.









Enlarged Vial











## **LEVELS**

#### **BOX LEVELS DIGITAL**

MAGNETIC

- Precision angle measurement to 0.05 degrees
- Individually calibrated high accuracy vials 0.5mm/m
- Hold function
- Memory store and recall (9 measurements)
- Mode selection: Degree/Percentage/Pitch
- Easy user-recalibration
- Flip screen for upright read out
- Buzzer at 0°, 45°, 90°
- Rainproof and dust resistant
- Battery indicator
- Tilted LCD screen with LED backlight
- Auto-Off (10 minutes)
- Battery operated: 9V (not included)















Accuracy



\_\_\_\_



Shockproof





Magnetic

**Battery Operated** 





Shockproof Vial

Conforms to CE safety regulations





Part No.	Length	Resolution	Width	Height
322050	600mm	0.05°	25mm	60mm
322051	1200mm	0.05°	25mm	60mm

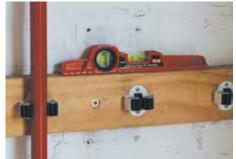


#### **TORPEDO LEVEL**

MAGNETIC

- Handy portable lightweight level ideal for all big and small measuring jobs
- Features two solid shockproof horizontal and vertical acrylic vials
- UV resistant material that endures the effects of direct sunlight
- Small portable size fits perfectly into tool boxes, belts, drawers and pockets
- Precision milled flat surface with dual magnets
- Accuracy: < 0.5mm/m (0.0005 in/in.)</p>





Part No.	Length	Width	Thickness
322010	250mm	45mm	22mm

#### **PIPE LEVEL SET**

5 PIECE

- Handy five piece pipe level set suitable for standard metal, copper and plastic PVC pipes
- Perfect for all plumbing and electrical pipe/conduit work
- Features a spring loaded design for easy click on attachment
- Flexible polymer construction ensures the tool maintains shape and provides a tight and secure fit every time
- Two easy to read injection moulded acrylic vials
- one horizontal and one vertical
- Covers pipe sizes 1/2" to 2"







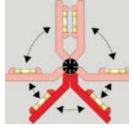
1 4111101		3.203	3.263					
322011		1/2", 3/4", 1	1/2", 3/4", 1", 11/4"-11/2", 2"					
Nominal Sizes	IPS Steel Stainless Steel PVC Plastic		CTS Copper	PP Plastic				
	Inches	mm	Inches	mm	mm			
1/2"	1/2"	15	3/4"	20	25			
3/4"	3/4"	20	1"	25	32			
1"	1″	25	1 <sup>1</sup> /4"-1 <sup>1</sup> /2"	32-40	40			
1 <sup>1</sup> /4" - 1 <sup>1</sup> /2"	1 <sup>1</sup> /4"-1 <sup>1</sup> /2"	32-40	-	-	50			
2"	2"	50	_	_	63			

## **EXACTA POST LEVEL** MAGNETIC & ELASTIC STRAP

- Handy tool designed to check the level for all posts, pipes and signs
- Folds closed and opens flat with a click-lock every 15°
- Four powerful magnets for metal surfaces
- Inbuilt adjustable elastic strap for all non-magnetic surfaces















Part No.	Length	Width	Thickness
322012	130mm	190mm	30mm

## **LEVELS**

#### **MINI LEVEL**

MAGNETIC

- Small, lightweight and durable magnetic level perfect for a wide range of applications
- Shockproof solid acrylic vial enables quick and accurate reading
- Lightweight aluminium box profile fits easily into any tool belt or pocket
- Rubber shockproof end caps
- Rare earth magnets
- Accuracy: 0.5mm/m







Part No.	Length	Width	Thickness
322013	20mm	100mm	7mm

#### **CROSS LEVEL MINI**

**MAGNETIC** 

- Handy multi-purpose magnetic level for various applications
- Solid acrylic horizontal and vertical vials
- Pre-cast holes for easy attachment to anything
- Sensitivity: 30arc/min.





Part No.	Height	Width	Thickness
322014	60mm	53mm	15mm

#### **BULLS-EYE LEVEL MINI**

- Multi-purpose general level provides measurement in all directions
- Pre-cast holes for easy attachment to a range of various objects
- Lightweight easy to use with clear vial
- Useful for many applications including home appliances
   E.g. desk, fridge, washer, dryer etc.



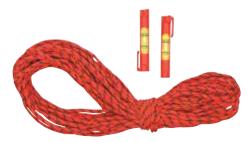


Part No.	Diameter	Thickness	Sensitivity
322451	42mm	12mm	30 arc/min

## **LINE LEVEL**

20 METRES

- Includes two line levels with pocket clips and 20 metre line
- Lightweight levels eliminate sag
- V-groove for pipe work



Part No.	Line Length	Line Thickness
322455	20m	3.5mm

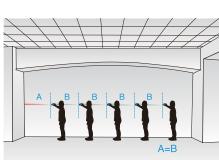


## LASER DISTANCE MEASURER DIGITAL

- Professional distance measurer for simple, quick and precise distance reading with the push of a button
- Capable of measuring distance up to 70 metres
- Calculates volume/area, tracking and indirect height measurements
- Small, compact and lightweight design for easy transportation and storage
- Includes carry pouch with velcro
- Measures in metres, inches and feet
- Precision Class II laser is accurate to ±1.5mm
- Bright backlit LCD screen increases visibility and allows easy reading
- Easy to follow and concise user guide clearly explains all functions and features for easy operation

Part No.	Description
322053	Laser Distance Measurer
Specification	
Accuracy	±1.5mm
Auto Off	Laser - 30 sec.
AULOUII	Unit - 180 sec.
Backlight	Yes
Battery Life	10,000 Measurements
Battery Type	2 x AA
Beam Size	25mm @ 30m
Dimensions	114 x 47 x 32mm
Laser Type	650Nm, Class II <1mW
Measure Units	Metres / Inches / Feet
Measuring Speed	0.5 Seconds
Operation Temperature	-5°C to 40°C
Range	0.05 - 70 Metres
Resolution	0.001 Metres
Storage Temperature	-20°C - 60°C





Tracking Measurement

## **KEY FEATURES & FUNCTIONS**

- 6 measuring applications
- Auto-Off
- Backlight
- LCD digital screen
- Variable measurement units
- Countdown mode
- Indirect measurements
- Velcro carry case
- Safety strap
- Batteries included



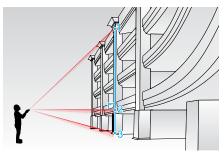


Includes marking crayon

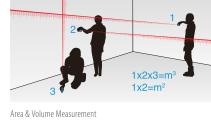


Includes carry pouch

Hang cell packaging



Indirect Height Measurement





## **LASERS**

#### **CROSS LASER DIGITAL**

WITH TRIPOD & CASE

- Suitable for all measuring and marking out work
- $\blacksquare$  Intersecting horizontal and vertical lines at  $90^{\circ}$
- "Tilt" mode for angular layout/marking
- Strong folding legs for angle mounting and height adjustment up to 120cm
- Visual and audible "out of level" warning
- Legs fold closed against the unit to protect the laser while not in use
- Shock resistant rubber casing
- Includes protective belt pouch for laser and protective bag for tripod
- Suitable for: Hanging shelves, pictures and cabinets Aligning tiles, borders, mouldings and trims Building decks and other construction jobs

Specification	
Accuracy	0.2mm/m
Batteries Included	No
Beam Angle	120° ±5°
Laser Carry Case Included	Yes
Laser Line Width	2mm ±0.5mm/5m
Laser Range Indoor	30m
Laser Range Outdoor	50m (with detector)
Laser Type	Class II
Number of Laser Beams	2
Power Supply	3 AA Batteries
Self-Levelling Range	±5°
Tripod Carry Case Included	Yes
User Guide Included	Yes
Water & Dust Proof	IP54
Wavelength	635 ±5nm

















322055

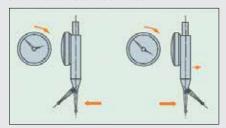


į		1		
	Tripod	Laser	Output Power	Wavelength
	Up to 1200mm	Class II	<1 mW	630 - 660mm

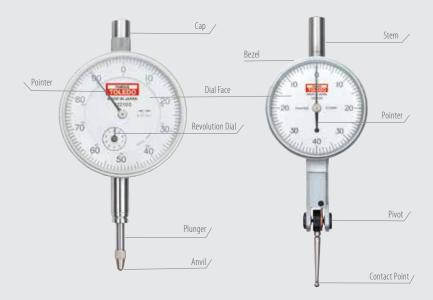
- Expert range of professional quality, function and accuracy
- 100% made in Japan using superior Japanese materials and workmanship
- Provided with calibration certificates and user guides
- Manufactured to Japanese Industrial Standard B 7503 (Metric Only)
- Made in Japan



#### **Dial Indicator Automatic Inverse**



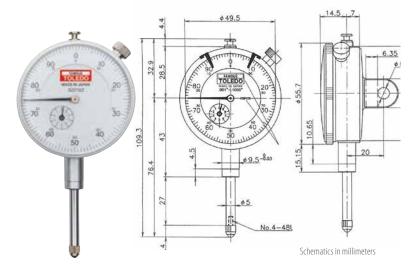
No change lever required. Automatic inverse function provides constant clock-wise read out



#### **DIAL GAUGE**

**IMPERIAL** 

- High precision expert dial gauge for precision measuring work
- Waterproof and dustproof dial face featuresO-ring and additional internal housing sealing
- Shock-proof mechanism prevents damage to the internal gears if the spindle is pushed abruptly
- Hardened SK quenched steel stem is specially fastened to eliminate failure
- Superior quality spindle rack, pinions and gear trains ensure longevity
- Easy read design incorporates white dial face with black graduations and pointer needle
- Knurled bezel provides a firm and secure grip
- Meets applicable US federal specifications and conforms to American Gauge Design #2 (AGD #2) Specifications
- Made in Japan





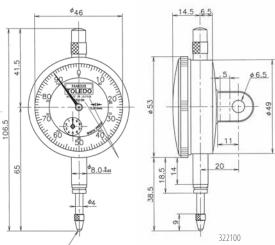
Part No.	Туре	Graduation x Range	Reading	Wide Range Forward Accuracy	Retrace Error	Measuring Force
322102	Imperial	0.001 x 1"	±0-50-100	0.002"	0.0004"	< 2.0 N

#### **DIAL GAUGES**

**METRIC** 

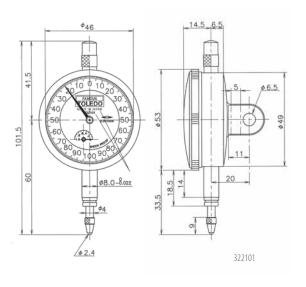
- High precision expert dial gauges for precision measuring work
- Dial face with 0-ring and internal housing sealing ensures unit is waterproof and dustproof
- Shock-proof mechanism prevents damage to the internal gears if the spindle is pushed abruptly
- Hardened SK quenched steel stem with specialty fastening to eliminate failure
- Superior quality spindle rack, pinions and gear trains ensure longevity
- Easy read design incorporates white dial face with black graduations and pointer needle
- Knurled bezel provides a firm and secure grip
- Securely fitted back cover with four locking screws enables lug to rotate at 90° angles
- Manufactured to JIS B 7503
- Made in Japan





Schematics in millimeters







Schematics in millimeters

Part No. Type Graduation x			Indication err	or							
	Graduation x Range	Reading	Revolutions			Full Measuring Retrace Error	Retrace Error	Repeatability	Measuring Force		
				1/10	1/2	One	Two	Range			
322100	Metric	0.01 x 10mm	±0-50-100	6 μm	±7 μm	±8 μm	±10 μm	±10 μm	4	5 μm	< 1.4 N
322101	Metric	0.001 x 1mm	0 - 100 - 0	2 μm	±2 μm	±3 μm	±3 μm	±3 μm	2	0.5 μm	< 1.5 N

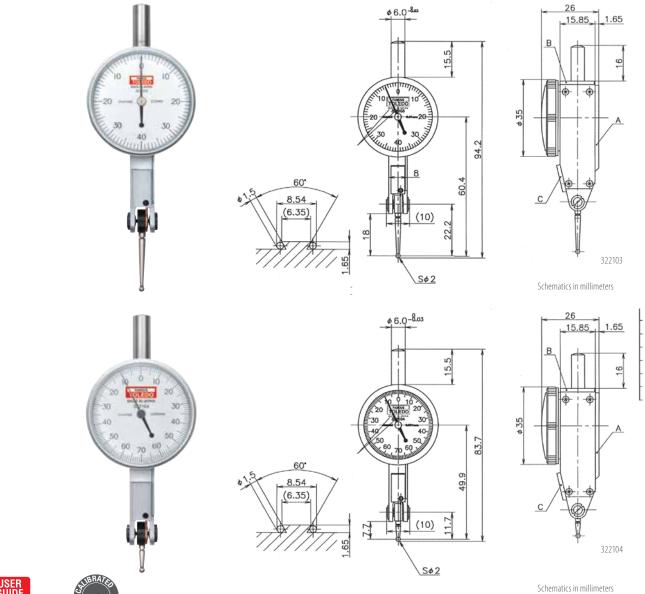


#### **DIAL TEST INDICATORS**

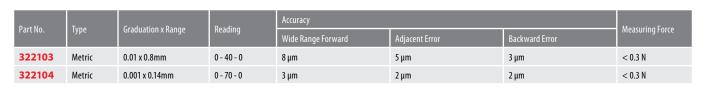
#### **METRIC**

- High precision expert dial test indicators for precision measuring work
- Automatic needle pointer inverts automatically with change of direction of the contact point to provide constant clock-wise readings and measuring efficiency and accuracy
- Miniature bearing at the pivot point optimises accuracy of micro adjustments and eliminates any rod play
- Waterproof and dustproof dial face features O-ring and additional internal housing sealing
- Superior quality spindle rack, pinions and gear trains ensure longevity
- Easy read design incorporates white dial face with black graduations and pointer needle
- Knurled bezel provides a firm and secure grip
- Manufactured to JIS B 7503
- Made in Japan







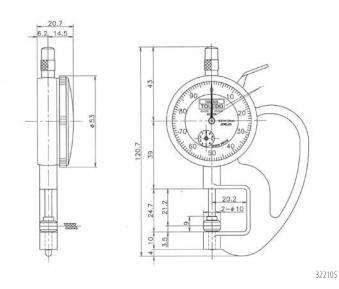


#### THICKNESS GAUGES LEVER TYPE

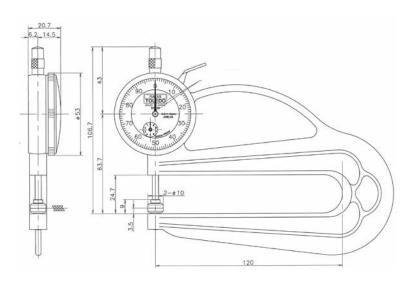
**METRIC** 

- High precision expert thickness gauges for precision measuring work
- Quick and accurate measurement of small dimensions
- Simple lever operation used to clamp onto object to be measured
- Ideal for measuring the thickness of small parts, metal, glass, plastic, rubber, vinyl, foil and other sheet material
- Ceramic body available in standard and deep throat depth
- Made in Japan





Schematics in millimeters



322108

Schematics in millimeters





Part No. Type						Contact Point	
	Туре	Graduation x Range	Throat Depth	Accuracy	Diameter	Parallelism	Measuring Force
322105	Metric - Standard	0.01 x 10mm	20mm	± 20 μm	10mm	5 μm	< 1.8 N
322108	Metric - Deep	0.01 x 10mm	120mm	± 20 μm	10mm	5 μm	< 1.8 N

#### **VERNIER CALIPER 150MM**

METRIC & IMPERIAL

- High precision expert vernier caliper features metric and imperial graduations
- Ideal for taking precise Outer Diameter (0.D.), Inner Diameter (I.D.), Depth and Step measurements
- Features locking screw for firm fixation and micro adjustment sliding carriage
- Angled carriage is easy to read
- Hardened stainless steel with satin chrome finish
- Supplied in custom moulded EVA foam tray and wooden storage box













Part No.	Туре	Range	Graduation
322201	Metric & Imperial	0 - 150mm/0 - 6"	0.05mm/ ½128"

#### **VERNIER CALIPER DIGITAL 150MM**

METRIC & IMPERIAL

- High precision expert digital vernier caliper provides metric and imperial read outs
- Ideal for taking precise Outer Diameter (0.D.), Inner Diameter (I.D.), Depth and Step measurements
- Features locking screw for firm fixation and micro adjustment sliding carriage
- Hardened stainless steel with satin chrome finish
- Includes mini screwdriver for battery replacement
- Factory calibrated unit ready to use
- Supplied in custom moulded EVA foam tray and wooden storage box
- Battery included





Part No.	Туре	Range	Graduation
322200	Digital Metric & Imperial	0 - 150mm/0 - 6"	0.01mm/0.0005"

#### **MICROMETERS**

- High precision micrometers for precision measuring work
- Robust C/U-Frame design with carbide tipped measuring faces and knurled thimble and ratchet knob
- Features positive locking level and ratchet stop
- Satin chromed sleeve and thimble for easy glare free reading
- Includes micro-spanner for fine adjustment
- Part No. 322206 supplied with calibrated 25mm gauge block
- Manufactured to GB/T 1216
- Supplied in custom moulded EVA foam tray in plastic hard case





















Part No.	Graduation x Range	Force
322205	0.01 x 0 - 25mm	5 - 10 N
322206	0.01 x 25 - 50mm	5 - 10 N

#### **MAGNETIC BASE**

8MM

- $\blacksquare \ \, \text{Traditional piece of measuring equipment with 8mm diameter indicator/gauge mount hole}$
- Cast iron base with ON/OFF permanent magnetic function to provide shock free and vibration free measurement
- Dual pivot joints provide good versatility and functionality
- Fine adjustment clamp for micro measurement work
- Attach to flat or round surfaces and keep work in perfect alignment
- Ideal for use with milling machines, lathes etc.

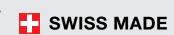
Part No.	Mounting Hole Diameter
322110	8.1mm



- Premium high precision range with **Bluetooth**® wireless technology features built-in Bluetooth® Smart Data Transmission to enable direct data transfer to synchronised devices e.g. PC, Smart Phone, Tablet
- Eliminate human data taking errors with direct data transfer at the click of a button
- Increase productivity by reducing manual data taking
- Patented inductive measuring system is insensitive to magnetic fields and liquids on the sensor or on the measuring scale
- Patented software enables up to 16 individual instruments to be simultaneously synchronised with the same device. This enables multiple units to be set up on one project and deliver data simultaneously
- Toledo software provides a platform to store, view and analyse data as well as export results into excel
- Toledo software and license is supplied on the USB key dongle.
   This dongle provides set up details and directions for use
- Manufactured entirely in Switzerland







For further information use the QR codes or consult the Toledo website.

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#### **DEFINITIONS**



Protected against liquids



Smart Inductive Sensor (S.I.S.) with an extremely low power sleeping mode, which keeps it's origin (last zero setting) and automatically wakes up when a movement is detected



Protected against liquids. The IPXX degree defines the protection rating according to IEC 60529. IP54: Protected against dust. Protected against water spray from all directions

IP65 : Completely sealed against dust, protected against water jets from all directions IP67 : Completely sealed against dust, protected against temporary total immersion

#### **TOLEDO BLUETOOTH® SOFTWARE**

- To enable Bluetooth® wireless connectivity between instrument and device, software installation and receiving dongle is required. The basic version enables one precision tool to be connected at one time, the full version enables 16 unique precision tools to be connected.
- Note one dongle is required per 8 precision tools. To use 16 precision tools simultaneously with the full software version it will require two dongles (2 x 322404)
- Compatible with precision instruments 322400, 322401, 322402, 322403

#### 322404 Receiving dongle & CD

- Includes dongle and free software installation CD
- Enables 1 instrument to be synchronised

#### 322405 Full Version Software (also requires purchase of 322404)

- Enables up to 16 instruments to be synchronised simultaneously
- Includes security protected USB Key with full software version
- Does not include receiving dongle (Part No. 322404 required)
- One dongle per 8 instruments

Part No.	Description
322404	Basic version - receiving dongle & software CD
322405	Full version - installation USB key with software











#### **VERNIER CALIPER DIGITAL 150MM**

METRIC & IMPERIAL

- Integrated Bluetooth® Smart Data Transmission (Built in Bluetooth® v4.0 Transmitter)
- Extra-large and bright digital display
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529
- Automatic wake-up by moving carriage
- Sleeping mode after 20 min. of no use
- Position memorised in sleeping mode
- Maximum speed of displacement : 2.5 m/sec
- Hardened and ground, stainless steel frame
- Ergonomically designed for maximum comfort
- Supplied in heavy duty storage case with foam insert and firm locking clip
- Bluetooth® software sold separately
- Made in Switzerland

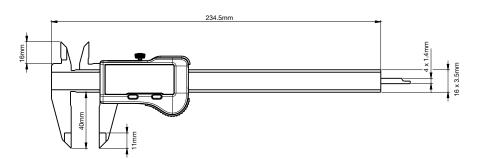




information







Specifications	
Max Error	0-100: 20 μm >100: 30 μm (DIN 862)
Depth Rod	4 x 1.4mm
Protection rating (IEC 60529)	IP 67
Connection: Built-In Bluetooth®	Version 4.0
Smart Inductive Sensor (S.I.S.)	Yes









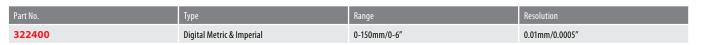












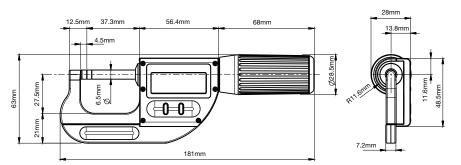


#### **MICROMETER DIGITAL 0-30MM**

METRIC & IMPERIAL

- Integrated Bluetooth® Smart Data Transmission (Built in Bluetooth® v4.0 Transmitter)
- Automatic wake-up by moving the measuring spindle
- Sleeping mode after 20 min. of no use
- Position memorised in sleeping mode
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529
- Quick displacement of the measuring spindle 12 mm / rotation
- Adjustable measuring force 5N / 10N
- Thimble in polyacetal-copolymer
- Supplied in heavy duty storage case with foam insert and firm locking clip
- Bluetooth® software sold separately
- Made in Switzerland







information







Specifications	
Max Error	3 μm (DIN 863)
Repeatability	1 μm
Anvils	Ø 6.5 mm
Protection rating (IEC 60529)	IP 67
Connection: Built-In Bluetooth®	Version 4.0
Smart Inductive Sensor (S.I.S.)	Yes
Adjustable Measuring Force	5N/10N
Setting by PC	Yes
Non-Rotating Spindle	Yes
Fast Movement	Yes
Tust movement	103



















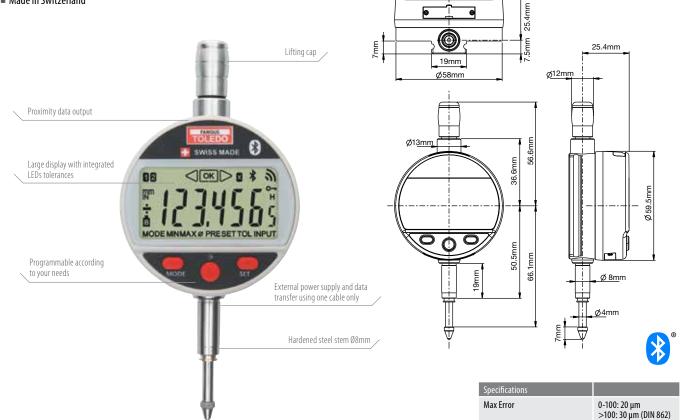
Part No.	Туре	Range	Resolution
322401	Digital Metric & Imperial	0-30mm/0.1-2"	0.01mm/0.0001"

#### **DIAL INDICATORS DIGITAL**

METRIC & IMPERIAL

- Integrated Bluetooth® Smart Data Transmission (Built in Bluetooth® v4.0 Transmitter)
- Robust construction
- Water and coolant resistant
- New technology with configurable menus
- Broad choice of functions (MIN/MAX/DELTA, TOL, Factor, PRESET, AUTO OFF, etc.)
- Automatic wake-up and sleeping mode
- Maximum error of 3 µm
- Supplied in heavy duty storage case with foam insert and firm locking clip
- Bluetooth® software sold separately









4 x 1.4mm

IP 67

v4.0













Depth Rod

Protection rating (IEC 60529)

Connection: Built-In Bluetooth®

Smart Inductive Sensor (S.I.S.)



Part No.	Туре	Range	Resolution
322402	Digital Metric & Imperial	0-12.5mm/0-1/2"	0.001mm/0.0001"
322403	Digital Metric & Imperial	0-12.5mm/0-1/2"	0.0001mm/0.00001"



#### **DIAL INDICATOR LUG BACK**

- Lug back to suit Toledo Bluetooth® dial indicators only (Part No. 322402, 322403)
- Required when mounting to magnetic base (Part No. 322110)
- Manufactured from high grade industrial aluminium
- Made in Switzerland





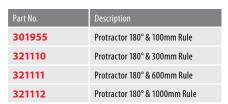


Part No.	Size	Weight
322410	16 x 16mm	6g

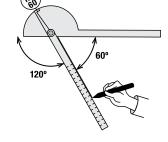
## **SPECIALTY MEASURING**

#### **PROTRACTOR 180°**

- For accurate angle, depth and length measurements
- Photographically etched markings for ultimate precision and accuracy
- Deep etched with black chrome plating for long term visibility and service life
- Stainless steel with satin chrome finish which is non-glare and easy to read
- Made in Japan











#### **RADIUS & DIAMETER SCALES**

- Unique precision tools designed to measure the radius and diameter of objects
- Centre cut out to measure diameter, side cuts to measure radius and 150mm metric rule for length
- Pocket size available in two different size ranges
- Manufactured from hardened Japanese stainless steel
- Made in Japan







Part No.	Radius Range	Radius Graduations	Diameter Range	Diameter Graduations	Rule Range	Rule Graduations	Overall Thickness	Overall Width	Overall Length
321068	0.5 - 7mm	1mm	0.5 - 6mm	0.1mm	0 - 150mm	0.5mm	0.5mm	15mm	175mm
321069	8 - 15mm	1mm	0.5 - 6mm	0.1mm	0 - 150mm	0.5mm	0.5mm	15mm	175mm

## **SPECIALTY MEASURING**

#### **POCKET BALANCES/SPRING SCALES**

- Traditional spring balance design
- Manufactured in Germany they represent premium quality for the professional
- Protective coated brass face and glossy nickel plated hook and ring ensures corrosion resistance and long service life
- Dual scale readings in kilograms and pounds
- Made in Germany

Part No.	Capacity	Scale
100A	12.5kg (25Lbs)	250g (0.5Lbs)
100B	23.0kg (50Lbs)	500g (1.0Lbs)
100C	46.0kg (100Lbs)	500g (1.0Lbs)





#### **MULTI-SCAN STUD FINDER**

#### DIGITAL

- Ideal tool for all electrical, plumbing, building and DIY household work
- Powerful inbuilt electronic sensors detect live AC wires, metal, studs and wood located behind gyprock and other common wall materials
- Differentiates between wood, metal and live wires
- Easy to read back lit LCD screen marks exact position
- Inbuilt detection buzzer
- Automatic scan function







Part No.	Length	Width	Thickness	Detection Depth Range				
				Live AC wires	Metal	Wood	Metal pipes	Copper pipes
322054	160mm	68mm	30mm	75mm	75mm	18mm	38mm	30mm

#### **CRACK MEASURE GAUGE**

- Handy tool designed to check the width of cracks in concrete walls and foundations
- Small pocket size allows easy portability
- Built in 80mm rule
- Manufactured from hardened stainless steel
- Made in Japan

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-0.45 -0.45	- 0.45	29
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Part No.	Crack Width Range	Rule Length	Rule Graduation	Overall Width	Overall Thickness
321066	0.1 - 1.4mm	80mm	0.5mm	55mm	0.3mm

#### **RULE & CRACK MEASURE**

METRIC DOUBLE SIDED

- High grade stainless steel metric rule with crack scale on reverse side
- Front: Upper and lower graduations with numeric measurement in centre
- Back: Crack scale is suitable for measuring cracks on walls, wood and plastic etc
- One Square edge with round edge hanging hole
- Photographically etched markings for ultimate precision and accuracy
- Made in Japan

Part No.	Rule Length	Crack Width Range	Width	Thickness
321079	150mm	0.10 - 2.20mm	15mm	0.2mm

