14. Construction Tools





78574

Packaging S Shrink package B Box W Vinyl package + header card C Card 

✓ No package

# Stud Finder Smart

Needle : Wall thickness up to  ${\bf 25}~{\rm mm}$ 

78585

Needle : Wall thickness up to  $\bf 35 \ mm$ 

78586 PRINTED BY BY BY

> Needle: Wall thickness up to 35 mm Magnet: Wall thickness up to 13 mm / ceiling thickness up to 12 mm

78592

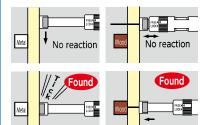
\*When finding steel material behind plaster board, the usable area of magnet can vary depending on conditions.

Needle : Wall thickness up to  ${\bf 45}~{\rm mm}$ 

Item Code	Description	Body Size (mm)	Weight (g)	JAN Code	Packing Unit	Packaging
78585	25 mm	113×21×17.5	18	4 960910 785854		
78586	35 mm	133×21×17.5	20	4 960910 785861	10	(SP)
78592	35 mm with Magnet	161.5×21×17.5	28	4 960910 785922	] '	<b>©</b>
78574	45 mm	153×21×17.5	22	4 960910 785748		

- ●Needle-type stud finder for plasterboard
- Handy carrying size
- •Finds studs behind wall panel easily and accurately
- •Graduations to measure the thickness of the wall material approximately
- ●Includes two replacement needles inside
- •Safety lock feature prevents needle from coming out accidentally
- ●Keeps clean with Antibacterial body
- ■Magnetic model
- ●Can detect location of both metal and wooden studs
- ●Can detect location of nails or metal studs (steel) under the cross without scratching the wall

Detection with magnet Detection with needle Metal studs can be found Wooden studs can be from sounds without needle found by using needle



•For finding studs behind plaster board

Body: ABS resin (with antibacterial agent) Material Movable Needle Cover: Polycarbonate resin Needle: Stainless steel

JIS JIS mark 🔞 With red numbers 🔤 cm/shaku (Lower side (in Forth Imerica) side (short) magnet 🕷 Vial with luminous sheet . Thermometer 🖫 Double-sided tape . Letters in Japanese 🐨 With stopper 🚳 Oil . 🖜 Glass lens 🔳 With edge 🔟 Japanese zodiac signs 📺 With battery 🔤 shaku/cm (loves side for front shaku) 2 With non-slip pad 🚳 Thermometer/Hygrometer 🚳 Hygrometer 🕒 Withingrighte 🖪 Letters in English 🖈 With direction arrow. 🗐 With gird scale 🝩 Plastic lens

Measures

Scales

Construction Tools

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Scales

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# Replacement Needle for Stud Finder Smart

Item Code	Description	Body Size (mm)	Weight (g)	JAN Code	Pack ng Unit	Packaging
78594	10 pc-pack for Stud Finder Smart 25 mm	φ0.7×70	-	4 960910 785946		
78595	10 pc-pack for Stud Finder Smart 35/45 mm	φ0.7×80	-	4 960910 785953	10	(SP)

## Use

●For Stud Finder Smart series only (Not compatible with Stud Finder series)





Item Code	Description	Body Size (mm)	Weight (g)	JAN Code	Pack ng Unit	Packaging
78575	Basic	136×56×35	101	4 960910 785755		
78576	Super	153×61×42	134	4 960910 785762		
78577	HG 🖽	169×71×45	159	4 960910 785779	5	(SP)
78578	HG-Center Finder	159×78×34	155	4 960910 785786		
78657	EX	160×80×30	230	4 960910 786578		

### Features

- •Detects metal, wood, plastic, and rebar in concrete (only 78657) with light and alarm
- Sensor mode can be changed depending on material and thickness of wall (78577/ 78578/78657)
- ●Easy-to-hold and non-slip rubber grip (78577/78578/78657)

•For finding studs behind walls

Object	Material Model	Veneer + Plaster Board	ALC Board	Concrete	Mortar	Metal
Wood	Basic Super HG HG-Center EX	0 *	×	×	×	×
Metal	Basic Super HG HG-Center	O *	×	×	×	×
	EX	0	0	0	0	X

\*It is not possible to determine the metal and wood.

	78575 78576		78577			
Material	Body: ABS resin					
Power Source	1 x 9 (Battery included is t					
Object Detection Depth (approximate)	19 mm	19 mm	Shallow 19 mm Deep 35 mm			
Wire Detection Alarm	×	0	0			
Center Detection	×	×	×			

	78578	78657
Material	Body: A	BS resin
Power Source		line battery e only and may not last as long)
Object Detection Depth (approximate)	Regular 19 mm Deep 25 mm	Wood 25 mm Metal 40 mm
Wire Detection Alarm	0	0
Center Detection	0	×

■Stud sensor's mechanism

Rebar

Metal

•Detects changes in electrostatic capacity



Plaster board

Inside the stud sensor are two electrodes, shown above as ① and ①, and the sensor detects changes in electrostatic capacity among each electrode when an object with higher density than the wall comes between them, as shown in 2.

Stud

●Concept of electrostatic capacity Electrostatic capacity refers to the amount of electric charge that is stored in the two electrodes when a DC current is run between them, and this electrostatic capacity changes when an object approaches one of the electrodes.

\*Not available in certain areas. Please contact us for details.

JIS JIS mark 🔞 With red numbers 🔤 cm/shaku (Lipor side (or Front) metric/ ) 📭 With magnet 🗶 Vial with luminous sheet . Thermometer 🚻 Double-sided tape 🔹 Letters in Japanese 📂 With stopper . 🚳 Oil . Glass lens . 🖬 With edge 🔟 Japanese zodiac signs 📶 With battery 🚟 shaku/cm ( where size for Front Stew) 2 With non-slip pad 🚳 Thermometer/Hygrometer 🤡 Hygrometer 🕒 I/it-harging to: 🛍 Letters in English 🖈 With direction arrow 📗 With grid scale 🗢 Plastic lens

Scales

Description

Wall thickness up to 15 m 78674

Packaging S Shrink package B Box W Vinyl package + header card C Card

✓ No package

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up to <b>15</b> mr	n	門門門	À		Sp
Body Size (mm)	Weight (g)	JAN Code	Packing Unit	Packaging	
30×30×31.5	13	4 960910 786745	10	(SP)	

- Strong magnetic pendulum helps to find metal studs behind a wall or the position of nails or screws without scratching the wallpaper
- ●Easily detects with magnetic reaction
- ●Compact and lightweight. Great portability
- ●Reacts to magnetic pull from any direction with 360° rolling system



●For detecting metal studs behind a wall

Material	Body: ABS resin Windshield Cover: Acrylic resin Magnet: Neodymium
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## Tile Percussion Hammer

78674 Mini



Item Code	Description	Body Size (mm)	Weight (g)	JAN Code	Packing Unit	Padkag ng
74102	A-1	130×18×18	71	4 960910 741027		
74103	A-2	165×18×18	90	4 960910 741034		
74104	A-3	220×18×18	111	4 960910 741041	5	(SP)
74105	A-4	300×18×18	126	4 960910 741058		
74106	B-1	147×17.5×17.5	61	4 960910 741065		

●Contracts to pocket size for great portability

●For inspecting integrity of tiles



	74102	74103	74104		
Material		less steel Grip Tool steel St			
Size	Min - Max 130 - 435 mm	Min - Max 165 - 725 mm	Min - Max 220 - 1,170 mm		
Globe Part	φ17.5 mm				

	74105	74106
Material	Shaft: Stainless steel Globe Part: Tool steel Grip: Rubber Strap: Nylon	Shaft: Stainless steel Globe Part: Tool steel
Size	Min - Max 300 - 990 mm	Min - Max 147 - 605 mm
Globe Part	φ17.5	5 mm

# Digital Moisture Meter for Wood NEW





78636





Know at a glance the numerical value's increase or decrease on the moisture content bar graph

Item Code	Description		Body Size (mm)	Weight (g)	JAN Code	Packing Unit	Packaging
78636	with Maximum and Minimum Hold Function	<b>©</b>	130×55×29	144	4 960910 786363	1	В

- •Can easily measure the moisture of wood, and supports a wide variety from building materials to firewood
- ●Backlight function to make LCD screen easy to see even in dark places
- Holds the measured value so the numerical value can be checked even when the LCD screen is hard to see
- ●Can display the highest/lowest moisture content during measurement



•For measuring the moisture content of wood

pecit	icat	mr	
POUL	rout	IVIII	

Measurement Method	Electrical resistance
	Moisture content: 6.8 - 60%
Measurement Range	Temperature: -10 - 50°C*1 Humidity: 10 - 90%*1
Accuracy	Moisture Content: ±2%
Use Temperature	<b>−</b> 10 - 50°C
Storage Temperature	<b>-</b> 40 - 60°C
Resolution	Moisture Content: 0.1% Temperature: 0.1°C Humidity: 0.1%
Auto Power Off	Approx. 10 min.*2
Power Source	2x AAA batteries (Batteries included are for trial use only and may not last as long)
Material	Body: ABS resin, elastomer resin Measuring Probes: Stainless steel Button: Silicone rubber
Accessory	Storage case, 2x AAA batteries

\*1 Since the accuracy of the temperature/humidity measurement function cannot be guaranteed, please use as an approximation. \*2 When the device turns off due to the Auto Power Off function, the power button must be pressed twice to turn it on again.

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🔟 Japanese zodiac signs 📹 With battery 🔤 shaku/cm ( Upper side (or Food shaku/cm ( Lower side (or Book) ments: ) 🖾 With non-slip pad 🚳 Thermometer/Hygrometer 🚷 Hygrometer 🕒 Withhagi'g tole 🐚 Letters in	in English 🖈 With direction arrow 🧮 With grid scale 🔷 Plastic lens

Scales

## Fabric Safety Cord



Item Code	Description	Body Size (mm)	Weight (g)	JAN Code	Packing Unit	Packaging
80858	A Black	660×12×15	42	4 960910 808584		
80859	A Orange	660×12×15	42	4 960910 808591		
80860	B Black	680×15×17	72	4 960910 808607	10	C
80861	B Orange	680×15×17	72	4 960910 808614		

- ●Cloth-made bellows structure resists tangling

  Swivel rotates 360°
- Resists spreading out when worn on the waist for greater comfort during work



●To prevent dropping and losing various tools

_					
		80858	80859	80860	80861
Material		Cord: Nylon Swivel: Zinc alloy			alloy
CI	Natural Length	Approx. 660 mm		Approx. 680 mm	
Cord Size	Stretched Length	Approx. 1,430 mm		Approx. 1,450 mm	
	Width	12	mm	15	mm
Wo	rking Load	Under 1 kg		Unde	r 3 kg

# Safety Cord



ltem Code	Description	Body Size (mm)	Weight (g)	JAN Code	Packing Unit	Packaging
80890	А	340×22×10	25	4 960910 808904	10	
80891	В	500×30×11	73	4 960910 808911	10	(B)

Stainless steel wire is used as a core material for better durability, and polyurethane resin provides flexibility



●Comes with wire and ring-attaching tool

**ESS** 





●To prevent tools falling

## Specifications

/	/	80890	80891
	Diameter	φ1.65 mm	φ4.0 mm
Cord	Core Diameter	φ0.6 mm	φ1.0 mm
Size	Length	Approx. 340 mm	Approx. 500 mm
	Maximum Extension	Approx. 1,200 mm	Approx. 1,400 mm
Wo	orking Load	Under 500 g	Under 1 kg
٨	Лaterial	Cord: Stainless steel Wire-attaching Tool Stainless steel (nylor Saddle Snap: Zinc al Ring: Iron	: ˈ n coating), brass

Scales

Levels



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Item Code	Description	Body Size (mm)	Weight (g)	JAN Code	Packing Unit	<sup>2</sup> ackaging
77840	1.8 m	1,823×80×20 (excluding legs)	4,300 (Including Legs)		1	В

Refer to P. 2 about the shaku scale

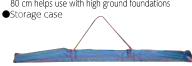
### Features

✓ No package

•Angle and gradient graduations. Convenient for setting and reading of angle (gradient)



•Detachable legs allow use for layout of leading frames with legs and for marking on foundations or as a bevel without legs. The leg expansion from 50cm to 80 cm helps use with high ground foundations



- ●For layout of leading frames and getting a right angle when marking on foundations
- ●For marking angle and gradient as a sliding bevel

Sp	ecilications	
	Accuracy	90°: Less than 1 mm per 1.000 mm (±1.8 mm at 1.800 mm) Other than 90°: No guaranteed accuracy. Please use as a guide.
	Graduation	Angle: 30 - 90°, Gradient: 0 - 9/10 (9 sun gradient) Flat Gradient: 6/10 - 9/10 (6 sun - 9 sun gradient)
	Material	Body: Aluminum Legs: Aluminum, stainless steel
	Body Size	At 90 degrees: 1,823 × 1,823 × 20 mm

# Welding Guide Rule



## 77888

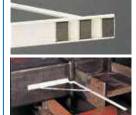
Item Code	Description	Body Size (mm)	Weight (g)	JAN Code	Packing Unit	Packaging
77888	1 m with Magnet	1,010×550×54 (at 90°degree)	1,500	4 960910 778887	1	[B]

Refer to P. 2 about the shaku scale

- •Insulating coating on the rule surface. This prevents sparks even if welding rods touch it.
- ●Body is made out of aluminum for light weight and easy use
- •Angles can be changed easily. Angle/gradient graduations eliminate the need to make a mold for each building.



 Strong magnet fixes it tightly on a surface With strong magnet



- ●For tack welding
- •For measuring and setting of angle and gradient

	Accuracy	Perpendicular: 1 mm or less per 1,000 mm
	Graduation	Angle: 45 - 135° Gradient: Up to 5/10 (5 sun gradient)
	Material	Body: Aluminum Rivet: Stainless steel

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