

# Mechanical Force Gauges

## PSM



PSM set

### Precision Model

Its high-resolution scale has more calibration points than other models. It helps you to avoid misreading. Covers the measurements of low to medium force between 20N-500N.

Model	Capacity	Resolution	Thread
PSM-20N	20N	0.1N	M6
PSM-30N	30N	0.2N	
PSM-50N	50N	0.25N	
PSM-100N	100N	0.5N	
PSM-200N	200N	1N	
PSM-300N	300N	2N	M6
PSM-500N	500N	2.5N	

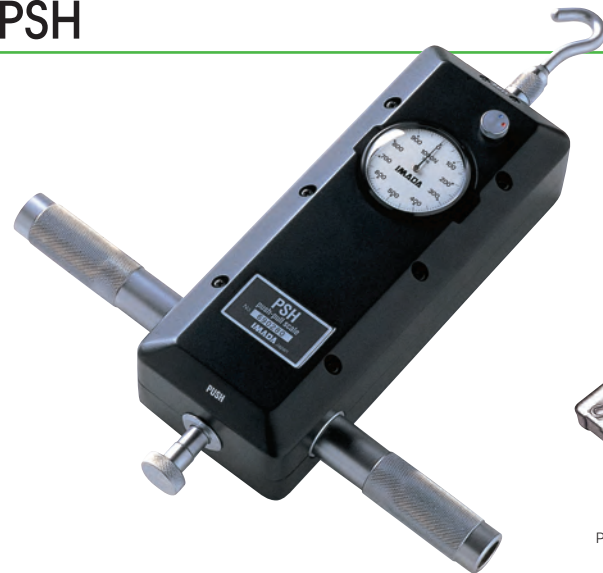
Model	Capacity	Resolution	Thread
PSM-2K	2kgf	10gf	M6
PSM-3K	3kgf	20gf	
PSM-5K	5kgf	25gf	
PSM-10K	10kgf	50gf	
PSM-20K	20kgf	100gf	
PSM-30K	30kgf	200gf	M6
PSM-50K	50kgf	250gf	

Specifications
Accuracy: $\pm 0.1\% \text{F.S.}$
Att.: 6/8
Thread: M6/M10
Test Direction: Push/Pull
Division: 100lines/200lines
Peak Hold: Yes/No

**Specifications**  
 • Stroke: 10mm • Graduation: 200lines (150 lines for 30N, 300N, 3K, 30K) • Measurement mode: Track and peak mode(selectable)  
 • Accessory: Attachments 8pcs (to page 21), Carrying Case, Operation Manual, Inspection Certificate  
 • Environment: 0~+40°C • Weight: Approx. 660 g (PSM-300N) \*differ from model numbers • Dimension: W67×D48×H232.5mm

**Applications**  
 • Measuring of the contact pressure for touch panel or keyboard.  
 • Measuring of the bonding strength of adhesive tapes and the peel strength of adhesive sheets.  
 \*Digital force gauges are appropriate for measurements with sudden force change.

## PSH



PSH set

### High Capacity Standard Model

Extra strong body supports high load range with best reliability. Covers the measurements of high force between 500N-3000N.

Model	Capacity	Resolution	Thread
PSH-500N	500N	5N	M10
PSH-1000N	1000N	10N	
PSH-2000N	2000N	20N	
PSH-3000N	3000N	25N	

Model	Capacity	Resolution	Thread
PSH-50K	50kgf	500gf	M10
PSH-100K	100kgf	1kgf	
PSH-200K	200kgf	2kgf	
PSH-300K	300kgf	2.5kgf	

Model	Capacity	Resolution	Thread
PSH-200lb	200lb	2lb	M10
PSH-300lb	300lb	2.5lb	
PSH-500lb	500lb	5lb	

Specifications
Accuracy: $\pm 0.1\% \text{F.S.}$
Att.: 6/8
Thread: M6/M10
Test Direction: Push/Pull
Division: 100lines/200lines
Peak Hold: Yes/No

**Specifications**  
 • Stroke: 10mm • Graduation: 100lines (120 lines for 3000N, 300K, 300lb) • Measurement mode: Track and peak mode(selectable)  
 • Accessory: Attachments 6pcs (to page 21), 2 exclusive handles, 4 installation bolts, Carrying Case, Operation Manual, Inspection Certificate  
 • Environment: 0~+40°C • Weight: Approx. 2.8kg (PSH-2000N) \*differ from model numbers  
 • Dimension: W95×D63.5×H290mm

**Applications**  
 • Strength test for various materials (tension test, compression test, shearing test, etc.)  
 • Measuring of attraction/repulsion force of solenoid or magnet.  
 • Adhesion test of laminated tubes.  
 \*Digital force gauges are appropriate for measurements with sudden force change.

## UKT/UKK



### Compact Model (for tension / for compression)

The smallest in dimension among all mechanical gauges. Ideal for built in narrow space. Measuring direction is specialized: UKT for tension and UKK for compression.

Model		Capacity	Resolution	Thread
Tension	Compression			M6
UKT-20N	UKK-20N	20N	0.2N	
UKT-30N	UKK-30N	30N	0.25N	
UKT-50N	UKK-50N	50N	0.5N	
UKT-100N	UKK-100N	100N	1.0N	
UKT-200N	UKK-200N	200N	2.0N	
UKT-300N	UKK-300N	300N	2.5N	

Model		Capacity	Resolution	Thread
Tension	Compression			M6
UKT-2K	UKK-2K	2kgf	20gf	
UKT-3K	UKK-3K	3kgf	25gf	
UKT-5K	UKK-5K	5kgf	50gf	
UKT-10K	UKK-10K	10kgf	100gf	
UKT-20K	UKK-20K	20kgf	200gf	
UKT-30K	UKK-30K	30kgf	250gf	

Model		Capacity	Resolution	Thread
Tension	Compression			M6
UKT-5lb	UKK-5lb	5lb	0.05lb	
UKT-10lb	UKK-10lb	10lb	0.1lb	
UKT-20lb	UKK-20lb	20lb	0.2lb	
UKT-30lb	UKK-30lb	30lb	0.25lb	
UKT-50lb	UKK-50lb	50lb	0.5lb	

Specifications	UKT	UKK	UKT	UKK	UKT	UKK	UKT	UKK
Accuracy	$\pm 0.3\% \text{F.S.}$							
Att.	4/5	4/5						
Thread	M6/M10							
Test Direction	Push/Pull							
Test Direction		Push/Pull						
Division	100lines/200lines							
Peak Hold	Yes/No							

**Specifications**  
 • Stroke: 10mm • Graduation: 100lines (120 lines for 30N, 300N, 3K, 30K, 30lb) • Measurement mode: Track and peak mode(selectable)  
 • Peak hold function • Environment: 0~+40°C • Weight: Approx. 300 g • Dimension: W60×D40×H156mm  
 • Included: UKT=4 tension attachments (Small Hook, Extension Shaft, Large Hook, Y Hook), UKK=5 compression attachments (Flat Tip, Conical Tip, Chisel Tip, Notched Tip, Extension Shaft), Carrying Case, Instruction Manual, Inspection Certificate

**Applications**  
 • Measuring of the contact pressure for touch panel or keyboard.  
 • Measuring of the bonding strength of adhesive tapes and the peel strength of adhesive sheets.  
 \*Digital force gauges are appropriate for measurements with sudden force change.

## Selection of suitable force gauge

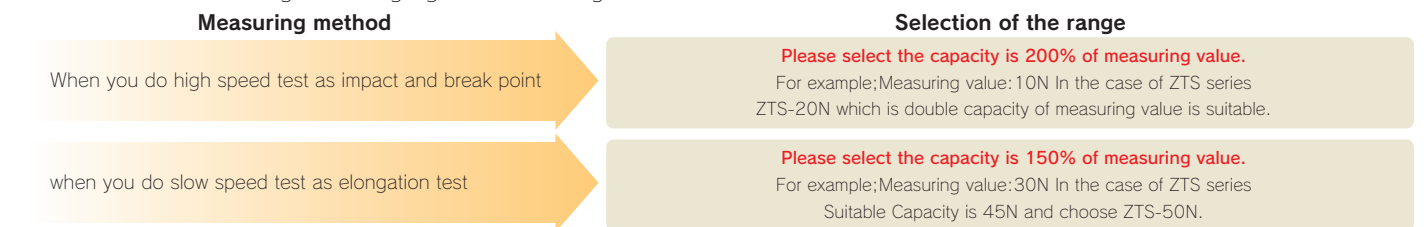
We classify force gauges into two groups: mechanical and digital. Each model has specific features and functions. Suitable force gauge must be chosen according to measuring purpose.

### Comparison of mechanical and digital force gauges

	Digital Force Gauge	Mechanical Force Gauge
<b>Advantage</b>	<ul style="list-style-type: none"> <li>• Less reading error</li> <li>• Connectable to PC, and other equipment</li> <li>• Various functions as digital instrument</li> <li>• Suitable for impact and break point test</li> </ul>	<ul style="list-style-type: none"> <li>• No electricity is required</li> <li>• Durable</li> <li>• Possible to read force transition</li> </ul>
<b>Weakness</b>	<ul style="list-style-type: none"> <li>• Difficult to read force transition without software</li> <li>• Necessary to charge a battery</li> </ul>	<ul style="list-style-type: none"> <li>• Unsuitable for impact and break point test</li> <li>• Reading error might occur by individual difference</li> </ul>

### Selection of suitable range

Please choose suitable range of force gauge as the following method.



⚠ Please note that force gauges are easily broken if force exceeding capacity is applied, regardless power on/off.

⚠ **We recommend attachments whose weight is less than 10% of gauge capacity.**  
Please be careful to select an attachment when you use small range gauge.