

Difference between "0.75 mN type" and "4 mN type" of Surface
Roughness Tester
[Target Model: SJ-201/301/210/310]

The measuring force of the detector unit of the surface roughness tester is available in two types: 0.75 mN (0.75 milli-Newton) and 4 mN (4 milli-Newton).

178シリーズ サーフェスト(現場形表面粗さ測定機)

SJ-210シリーズ

MeasurLinkTM ENABLED

Data Management Software by Mitutoyo



Standard drive type

SJ-210
(0.75 mN type)

SJ-210
(4 mN type)

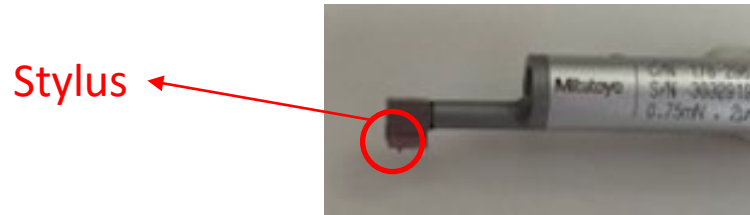
178-560-11

178-560-12

仕様

符号	標準駆動タイプ		検出部駆動タイプ		検出部タイプ	
	SJ-210 (0.75 mNタイプ)	SJ-210 (4 mNタイプ)	SJ-210 (0.75 mNタイプ)	SJ-210 (4 mNタイプ)	SJ-210 (0.75 mNタイプ)	SJ-210 (4 mNタイプ)
コードNo.	178-560-11	178-560-12	178-562-11	178-562-12	178-564-11	178-564-12
X軸	360 mm		360 mm		360 mm	
測定範囲	360 μm (-200 μm ~ +160 μm)		360 μm (-200 μm ~ +160 μm)		360 μm (-200 μm ~ +160 μm)	
検出部	360 μm/0.02 μm, 100 μm/0.005 μm, 25 μm/0.002 μm		360 μm/0.02 μm, 100 μm/0.005 μm, 25 μm/0.002 μm		360 μm/0.02 μm, 100 μm/0.005 μm, 25 μm/0.002 μm	
測定力/スタイラス先端形状	コードNo末尾が・11の場合: 0.75 mN/2 μm R 60°, コードNo末尾が・12の場合: 4 mN/5 μm R 90°		コードNo末尾が・11の場合: 0.75 mN/2 μm R 60°, コードNo末尾が・12の場合: 4 mN/5 μm R 90°		コードNo末尾が・11の場合: 0.75 mN/2 μm R 60°, コードNo末尾が・12の場合: 4 mN/5 μm R 90°	
対応規格	JIS B 7715/JIS 9415/DIN 15017/ISO 1357/ANSI NDA		JIS B 7715/JIS 9415/DIN 15017/ISO 1357/ANSI NDA		JIS B 7715/JIS 9415/DIN 15017/ISO 1357/ANSI NDA	
評価曲線	断面曲線、粗さ曲線、DF曲線、粗さモチーフ曲線		断面曲線、粗さ曲線、DF曲線、粗さモチーフ曲線		断面曲線、粗さ曲線、DF曲線、粗さモチーフ曲線	
標準価格	220,000円	220,000円	245,000円	245,000円	320,000円	320,000円

The JIS (JIS B 0651) specifies "stylus tip shape" and "measuring force" and provides different instructions depending on the year of revision. Therefore, we provide different types so you can select one depending on your use.



	JIS B0651:1976		JIS B0651:1996		JIS B0651:2001	
Tip shape	Conical shape or square pyramid 60°or 90°		Conical shape 60°or 90°		Conical shape 60°or 90° Use 60° unless otherwise indicated	
Stylus tip radius and measuring force	Tip radius (μm)	Measuring force (mN)	Tip radius (μm)	Measuring force (mN)	Tip radius (μm)	Measuring force (mN)
	2	0.7	2	0.7	2	0.75
	5	4	5	4	5	
	10	16	10	16	10	
	Any		Use 10 μm only when specifically required		Define the relationship between stylus tip radius and cutoff values λc and λs	

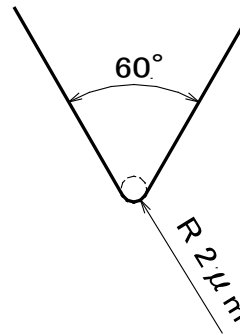
[Difference between detector units]

- "0.75 mN type" detector unit:

Currently mainstream, in accordance with current standards (ISO 1997, JIS 2001)

Stylus tip shape: 2 μ R, 60°

Measuring force: 0.75 mN

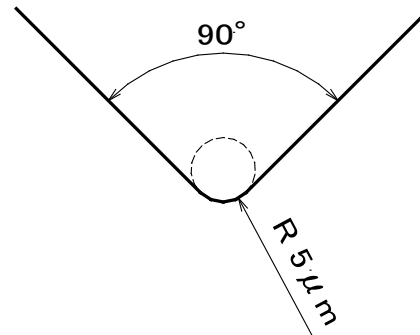


- "4 mN type" detector unit:

Previously mainstream, in accordance with conventional standards (JIS 1996, 1976)

Stylus tip shape: 5 μ R, 90°

Measuring force: 4 mN



⇒ Please check the drawing instructions, etc., and make your selection.