

ACCESSORY

The only active scanning probe that the measuring force is controllable

VAST XT gold



VAST XT probe head combines the two probing technology: point-to-point measurement and high-speed scanning measurement. This enables dimension measurement as well as profile inspections and position inspections.

Probe Model		VAST XT gold
Single point		○
Active scanning		○
Measuring force		Min. 50 mN
Measurement time	Point measurement	2 sec/point
	Scanning measurement	200 point/sec
Applicable stylus	Stylus length	Max. 500 mm
	Stylus weight	Max. 500 g
	Minimum ball diameter	Φ 0.5 mm
Navigator function		○

Features

An adapter plate is equipped to VAST XT probe head.
A reference plate is marked with a red ring.



It is possible to attach a stylus to an adapter plate using an extension shaft, adapter or joint. The available lengths of extensions are 40 mm to 600 mm.



A rack for stylus automatic change system can store several adapter plates with various styli. Automatic exchange of styli as needed improves measuring efficiency.



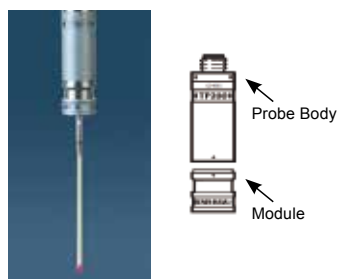
■Touch-TriggerProbes

PH10T



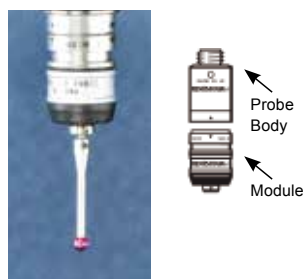
TP200

Probe corresponding to stylus automatic change system. Sensing mechanism is integrated in probe body.



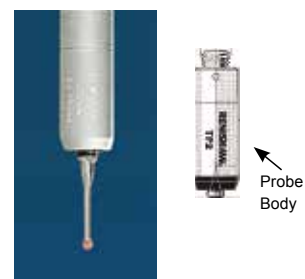
TP20

Probe corresponding to stylus automatic change system. Sensing mechanism is integrated in module.



TP2

Basic type probe of TP200 and TP20.



Model		TP200	TP20	TP2
Measuring direction		$\pm X, \pm Y, \pm Z$	$\pm X, \pm Y, +Z$	$\pm X, \pm Y, +Z$
Repeatability (2 σ)		0.4 μm or less (at 50 mm of stylus length)	0.35 μm or less (at 10 mm of stylus length)	0.35 μm or less (at 10 mm of stylus length)
Measuring force (SF module)	Vertical direction	About 0.02 N (2 gf)	About 0.08 N (8 gf)	About 0.07 to 0.15 N (7 to 15 gf)
	Horizontal direction	About 0.07 N (7 gf)	About 0.75 N (75 gf)	About 0.4 N (40 gf)
Module change repeatability	Auto change	$\pm 0.5 \mu\text{m}$	$\pm 0.5 \mu\text{m}$	-
	Manual change	$\pm 1.0 \mu\text{m}$	$\pm 1.0 \mu\text{m}$	
Stylus change rack model		SCR200	MCR20	

PTS-30

Tokyo Seimitsu's high-accuracy probe. Measuring force is 0.01 N with high-sensitivity sensing method. It can be used in combination with a stylus, which max. length is 20 mm and max. weight is 300 g.



MH20i

Probe with manual vertical and horizontal axes rotating mechanism, which is reproducible in positioning.



PH1-TP2

Probe with manual vertical and horizontal axes rotating mechanism, which is widely used for manual coordinate measuring machine.



TP1

Basic probe used widely for manual coordinate measuring machine. Photo shows a probe with swing mechanism.



Model		PTS-30	MH20i	PH1-TP2	TP1
Measuring direction		$\pm X, \pm Y, \pm Z$	$\pm X, \pm Y, +Z$	$\pm X, \pm Y, +Z$	$\pm X, \pm Y, +Z$
Repeatability (2 σ)		0.5 μm or less (at 50 mm of stylus length)	0.35 μm or less (at 10 mm of stylus length)	0.35 μm or less (at 10 mm of stylus length)	0.5 μm or less (at 31 mm of stylus length)
Measuring force	Vertical direction	About 0.01 N (1 gf)	About 0.08 N (8 gf)	About 0.07 to 0.15 N (7 to 15 gf)	About 0.1 to 0.5 N (10 to 50 gf)
	Horizontal direction	About 0.01 N (1 gf)	About 0.75 N (75 gf)	About 0.4 N (40 gf)	About 0.4 to 2.5 N (40 to 250 gf)
Rotation mechanism	Vertical direction	-	0 to 90° (15°steps) $\pm 180^\circ$ (15°steps)	$\pm 115^\circ$ 360° (15°steps)	-