

PULCOM Super Σ

Ultra Precision Measuring Head



Configurations

- ▶ DELCOM 120A
- ▶ PULCOM U600
- ▶ PULCOM V4
- ▶ PULCOM V7
- ▶ PULCOM V8
- ▶ PULCOM V10

Features

0.1 μm In-Line Precision

The PULCOM Super Σ achieves measuring repeatability of 0.1 μm (25 times).

Resistant to Temperature Change

The change in the measured value is 0.5 μm or less when the ambient temperature varies by 10°C.

Extended Idling Not Required

The change in the measured values 10 minutes after the power is turned on is 0.1 μm or less.

Specifications

●Outer Diameter/Outer Width

Model			Super Σ	Super Σ -OD-AR	Super Σ -ID-AR
Main applications			Cylindrical outer diameter	Cylindrical outer diameter, outer width	Cylindrical outer diameter, outer width
Model	Vertical surface	$\ell = 42\text{mm}$	E-TS-7151	E-TS-7161	E-TS-7181
		$\ell = 82\text{mm}$	E-TS-7152	E-TS-7162	E-TS-7182
	Horizontal surface	$\ell = 42\text{mm}$	E-TS-7155	E-TS-7165	E-TS-7185
		$\ell = 82\text{mm}$	E-TS-7156	E-TS-7166	E-TS-7186
Measuring range	(Post in parentheses)		$\phi 8 - \phi 65\text{mm}$	$\phi 88 - \phi 65 (\phi 18 - \phi 65)\text{mm}$	$\phi 3 - \phi 65\text{mm}$
Stroke	Finger length	$\ell = 42\text{mm}$	1.5 mm (one side)		1.5 mm (one side)
	Finger length	$\ell = 82\text{mm}$	2.4 mm (one side)		2.4 mm (one side)
Front travel	Finger length	$\ell = 42\text{mm}$	0.12 – 0.15 mm		0.12 – 0.15 mm
	Finger length	$\ell = 82\text{mm}$	0.19 – 0.24 mm		0.19 – 0.24 mm
Measuring accuracy			0.1 μm	0.2 μm	0.2 μm
Measuring force			0.75 \pm 0.15 N		0.75 \pm 0.15 N
Retract air source			–	0.3 – 0.5 MPa	0.3 – 0.5 MPa
Waterproof standard			IP67 compliant		

Abbreviations ℓ : Finger length, Vertical surface: Vertical surface used as standard for mounting, Horizontal surface: Horizontal surface used as standard for mounting (horizontally oriented), Post: Post process measurements

