

CERAMIC PIN GAUGE SET CAA·CAG series

LAPPED FINISH (except for custom made item) *Individual pin gauges are also available*

Light weight and easy to maintain after use.

Features of ceramic

- Strong against abrasion.
- Free from rust and corrosion, and easy maintenance
- Ceramic material is less susceptible to abrasion and age deterioration than steel
- Material has substantially the same coefficient of thermal expansion as steel.
- Non-magnetic

[Comparison between carbide and steel materials]

Item	Material	Ceramics		Cemented Carbide (G2)	Steel (SKH)
		φ0.50-φ2.49	φ2.50-φ10.00		
Specific Gravity		5.5-6.0	3.6-3.9	14.8	7.8
Hardness	HV	1,200	1,800	1,200	730(Harden)
Bending strength	GPa	2.4-7.9	3.1-3.5	22	110-180
Young's Modulus	GPa	180-240	310-370	610	205
Coefficient of thermal expansion	10 ⁻⁶ K ⁻¹	10.5	8	5	11
Heat conductivity	W/m·K	2	20-30	80	76

- For above 1.50mm, Nominal size is laser marked on gauge.
- LAPPED FINISH

MATERIAL Ceramic

CAA series

JCSS Calibration available



SPECIFICATIONS

Nominal size (mm)	Step (mm)	Length (mm)	Tolerance (μm)	Out of Roundness (μm)	Cylindricity (μm)
0.50...2.49	0.01 step	38	±1	0.8	0.8
2.50...2.99		50			
3.00...3.49					
3.50...9.99					
10.00					

※Length can be changed without any prior notice due to improvement of product.

0.01mm step

Model No.	Nominal size (mm)	Pins per set
CAA-0B	0.50 · 0.51 · 0.52... 1.00	51
CAA-1A	1.00 · 1.01 · 1.02... 1.50	51
CAA-1B	1.50 · 1.51 · 1.52... 2.00	51
CAA-2A	2.00 · 2.01 · 2.02... 2.50	51
CAA-2B	2.50 · 2.51 · 2.52... 3.00	51
CAA-3A	3.00 · 3.01 · 3.02... 3.50	51
CAA-3B	3.50 · 3.51 · 3.52... 4.00	51
CAA-4A	4.00 · 4.01 · 4.02... 4.50	51
CAA-4B	4.50 · 4.51 · 4.52... 5.00	51
CAA-5A	5.00 · 5.01 · 5.02... 5.50	51
CAA-5B	5.50 · 5.51 · 5.52... 6.00	51
CAA-6A	6.00 · 6.01 · 6.02... 6.50	51
CAA-6B	6.50 · 6.51 · 6.52... 7.00	51
CAA-7A	7.00 · 7.01 · 7.02... 7.50	51
CAA-7B	7.50 · 7.51 · 7.52... 8.00	51
CAA-8A	8.00 · 8.01 · 8.02... 8.50	51
CAA-8B	8.50 · 8.51 · 8.52... 9.00	51
CAA-9A	9.00 · 9.01 · 9.02... 9.50	51
CAA-9B	9.50 · 9.51 · 9.52...10.00	51

CAG series (with Handle)

CAA series Pin Gauge with plastic handle.



SPECIFICATIONS

Nominal size (mm)	Step (mm)	Length (mm)		Tolerance (μm)	Out of Roundness (μm)	Cylindricity (μm)
		Gauge Length	Overall Length			
0.50... 0.99	0.01 step	28	66	±1	0.8	0.8
1.00... 3.49		28	69			
3.50... 4.99		30	71			
5.00...10.00		30	76			

0.01mm step

Model No.	Nominal size (mm)	Pins per set
CAG-3A	3.00 · 3.01 · 3.02... 3.50	51
CAG-3B	3.50 · 3.51 · 3.52... 4.00	51
CAG-4A	4.00 · 4.01 · 4.02... 4.50	51
CAG-4B	4.50 · 4.51 · 4.52... 5.00	51
CAG-5A	5.00 · 5.01 · 5.02... 5.50	51
CAG-5B	5.50 · 5.51 · 5.52... 6.00	51
CAG-6A	6.00 · 6.01 · 6.02... 6.50	51
CAG-6B	6.50 · 6.51 · 6.52... 7.00	51
CAG-7A	7.00 · 7.01 · 7.02... 7.50	51
CAG-7B	7.50 · 7.51 · 7.52... 8.00	51
CAG-8A	8.00 · 8.01 · 8.02... 8.50	51
CAG-8B	8.50 · 8.51 · 8.52... 9.00	51
CAG-9A	9.00 · 9.01 · 9.02... 9.50	51
CAG-9B	9.50 · 9.51 · 9.52...10.00	51