

EXTRACTS OF MANUFACTURING STANDARDS FOR METRIC DIAL GAUGES

Manufacturing standard	Field of application	Span of error	Range	Maximum value
0.0500.9.0004	Dial Gauges with 0.1 mm reading	Span of error $\frac{1}{10}$ revolution	1 mm	30 μm
		Span of error f_e	up to 30 mm	50 μm
			50 mm	80 μm
			80 mm	100 μm
			100 mm	100 μm
Hysteresis f_u	up to 30 mm	15 μm		
Repeatability f_w		15 μm		
Some values may differ on Large Dial Gauges				
0.0500.9.0006	Dial Gauges with 0.01 mm reading and back plunger	Span of error $\frac{1}{10}$ revolution	0.05 or 0.1 mm	5 μm
		Span of error f_e	up to 3 mm	10 μm
			5 mm	15 μm
			5 mm	8 μm
		Hysteresis f_u	up to 3 mm	5 μm
Repeatability f_w		5 μm		
0.0500.9.0001	High Precision Dial Gauges with 0.001 mm reading and 0.002 mm reading	Span of error $\frac{1}{10}$ revolution	0.02 mm	1.5 – 3 μm
		Span of error f_e	0.16 mm	3 μm
			1 mm	5 μm
			5 mm	10 μm
			5 mm	3 μm
		Hysteresis f_u		3 μm
		Repeatability f_w		0.5 μm
Some values may differ on Large Dial Gauges				
0.0500.9.0010	High Precision Dial Gauges FEINIKA with 0.001 mm reading and 0.002 mm reading	Span of error $\frac{1}{10}$ revolution	0.01 mm	1 μm
		Span of error f_e	0.08 mm	2 μm
			0.16 mm	2 μm
			1 mm	3 μm
		Hysteresis f_u		1.5 μm
Repeatability f_w		0.5 μm		
1.0200.9.0002	Dial Gauges with 0.01 mm reading and range > 30 mm	Span of error $\frac{1}{10}$ revolution	0.1 mm	5 μm
		Span of error f_e	50 mm	25 μm
			80 mm	30 μm
			100 mm	50 μm
			100 mm	3 μm
		Span of error f_w	up to 80 mm	3 μm
		100 mm	5 μm	
Some values may differ on Large Dial Gauges				
1.0200.9.0014	Dial Gauges with 0.01 mm reading and ranges 20 – 30 mm	Span of error $\frac{1}{10}$ revolution	0.1 mm	5 μm
		Span of error f_e		20 μm
		Hysteresis f_u		5 μm
		Repeatability f_w		3 μm
		Some values may differ on Large Dial Gauges		

Manufacturing standards for Dial Gauges MU 28 (4.0000.9.0012) and SI-18 (0.4223.9.0008) and for Inch Dial Gauges on request. Data sheets to DIN EN ISO 463: www.kaefer-messuhren.de