



Mitutoyo
Nederland | België | Danmark

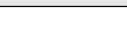
 CALIBRATION
RvA K 086

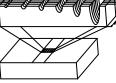
Price list, Calibration of references/standards/masters

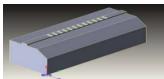
Shipping address:

Mitutoyo Nederland B.V.
CALIBRATION SERVICE
Storkstraat 30
3905 KX Veenendaal, Nederland

Contact via Customer Portal
info.mitutoyo.nl

Gauge blocks >100-1500mm	€ 158			U(k = 2)	Steel/Ceramic: 0,10 µm + 0,34.10 ⁻⁶ .I Zero glass: 0,10 µm + 0,20.10 ⁻⁶ .I
Micrometer standards (Setting Rods) ≤ 500mm	€ 42			U(k = 2)	Steel: 0,10 µm + 0,50.10 ⁻⁶ .I
Micrometer standards (Setting Rods) > 500mm ≤ 1500mm	€ 50			U(k = 2)	Diameter: 0,2 µm Roundness: 10nm + 2%.RONt Special request + roughness
Masterballs (0-30) diameter + roundness via double reversal	€ 198			U(k = 2)	Diameter: 0,2 µm Roundness: 40nm + 2%.RONt
Masterballs (0-30) diameter + roundness via double reversal + 2 x 45 degrees	€ 745			U(k = 2)	Diameter: 0,2 µm Roundness: 40nm + 2%.RONt
Masterballs (0-30) diameter + roundness + roughness	€ 309			U(k = 2)	Diameter: 0,2 µm Roundness: 40nm + 2%.RONt
Ring gauges (4-50) diameter	€ 193			U(k = 2)	Diameter: 0,2 µm Roundness: 40nm + 2%.RONt
Ring gauges (4-50) diameter + roundness	€ 289				
CMM					
Stepgauges 32 surfaces (310mm)	€ 672			U(k = 2)	0,16 µm + 0,34.10 ⁻⁶ .I 0,17 µm + 0,34.10 ⁻⁶ .I
Stepgauges 46 surfaces (450mm)	€ 966				0,19 µm + 0,34.10 ⁻⁶ .I 0,21 µm + 0,34.10 ⁻⁶ .I
Stepgauges 62 surfaces (610mm)	€ 1302				0,21 µm + 0,34.10 ⁻⁶ .I 0,21 µm + 0,34.10 ⁻⁶ .I
Stepgauges 76 surfaces (750mm)	€ 1596				0,24 µm + 0,34.10 ⁻⁶ .I 0,26 µm + 0,34.10 ⁻⁶ .I
Stepgauges 78 surfaces (770mm)	€ 1638				0,30 µm + 0,34.10 ⁻⁶ .I 0,16 µm + 0,34.10 ⁻⁶ .I
Stepgauges 102 surfaces (1010mm)	€ 2142				0,19 µm + 0,34.10 ⁻⁶ .I 0,16 µm + 0,34.10 ⁻⁶ .I
Stepgauges 116 surfaces (1150mm)	€ 2436				0,15 µm + 0,34.10 ⁻⁶ .I 0,16 µm + 0,34.10 ⁻⁶ .I
Stepgauges 152 surfaces (1510mm)	€ 3192				0,14 µm + 0,34.10 ⁻⁶ .I 0,14 µm + 0,34.10 ⁻⁶ .I
Stepgauges 18 surfaces (300mm) caliper checker 300	€ 378				0,14 µm + 0,34.10 ⁻⁶ .I 0,14 µm + 0,34.10 ⁻⁶ .I
Stepgauges 24 surfaces (600mm) caliper checker 600	€ 504				0,14 µm + 0,34.10 ⁻⁶ .I 0,14 µm + 0,34.10 ⁻⁶ .I
Stepgauges 26 surfaces (excl. 2 GB's) inside micrometer checker	€ 546				0,15 µm + 0,34.10 ⁻⁶ .I 0,15 µm + 0,34.10 ⁻⁶ .I
Stepgauges 50 surfaces (excl. 2 GB's) inside micrometer checker	€ 1050				0,16 µm + 0,34.10 ⁻⁶ .I 0,16 µm + 0,34.10 ⁻⁶ .I
Stepgauges 22 surfaces (250mm)	€ 462				0,16 µm + 0,34.10 ⁻⁶ .I 0,16 µm + 0,34.10 ⁻⁶ .I
Stepgauges 30 surfaces (320mm)	€ 630				0,17 µm + 0,34.10 ⁻⁶ .I 0,20 µm + 0,34.10 ⁻⁶ .I
Stepgauge 38 surfaces (147mm) Kogame	€ 798				0,17 µm + 0,34.10 ⁻⁶ .I 0,17 µm + 0,34.10 ⁻⁶ .I
Stepgauge 40 surfaces (155mm) Kogame	€ 840				0,17 µm + 0,34.10 ⁻⁶ .I 0,17 µm + 0,34.10 ⁻⁶ .I
Stepgauge 20 surfaces (190mm) QV-TP	€ 420				0,17 µm + 0,34.10 ⁻⁶ .I 0,17 µm + 0,34.10 ⁻⁶ .I
Stepgauge 26 surfaces (250mm) QV-TP	€ 546				0,17 µm + 0,34.10 ⁻⁶ .I 0,17 µm + 0,34.10 ⁻⁶ .I
Stepgauge 32 surfaces (310mm) QV-TP	€ 672				0,16 µm + 0,34.10 ⁻⁶ .I 0,16 µm + 0,34.10 ⁻⁶ .I
Stepgauge 46 surfaces (450mm) QV-TP	€ 966				0,17 µm + 0,34.10 ⁻⁶ .I 0,20 µm + 0,34.10 ⁻⁶ .I
Stepgauge 66 surfaces (650mm) QV-TP	€ 1386				0,17 µm + 0,34.10 ⁻⁶ .I 0,17 µm + 0,34.10 ⁻⁶ .I
Stepgauges 22 surfaces (210mm) KOBA (10 mm cylinders)	€ 462				0,17 µm + 0,34.10 ⁻⁶ .I 0,17 µm + 0,34.10 ⁻⁶ .I
Stepgauges 22 surfaces (420mm) KOBA	€ 462				0,17 µm + 0,34.10 ⁻⁶ .I 0,17 µm + 0,34.10 ⁻⁶ .I
Stepgauges 32 surfaces (620mm) KOBA	€ 672				0,19 µm + 0,34.10 ⁻⁶ .I 0,19 µm + 0,34.10 ⁻⁶ .I
Stepgauges 42 surfaces (820mm) KOBA	€ 882				0,21 µm + 0,34.10 ⁻⁶ .I 0,21 µm + 0,34.10 ⁻⁶ .I
Stepgauges 52 surfaces (1020mm) KOBA	€ 1092				0,24 µm + 0,34.10 ⁻⁶ .I
Straightedges till 300mm	€ 146			U(k = 2)	1,5 µm
Straightedges till 500mm	€ 169				
Straightedges till 750mm	€ 191				
Straightedges till 1000mm	€ 213				
Block square, longest leg till 300mm	€ 191			U(k = 2)	1,5 µm for the straightness of the legs (0,5 m/L)* for the angle deviation (=appr. 2,4µm/L)
Block square, longest leg till 500mm	€ 213				
Block square, longest leg till 750mm	€ 225				
Block square, longest leg till 1000mm	€ 247				
Quadrangle square	€ 370			U(k = 2)	1,5 µm for the straightness of the legs (0,5 m/L)* for the angle deviation (=appr. 2,4µm/L)
Cube square	€ 561			U(k = 2)	1,5 µm for the straightness of the legs (0,5 m/L)* for the angle deviation (=appr. 2,4µm/L)
Optical					
Glass Scale (Projector scale) 50 mm (11 stripes, pitch 5 mm)	€ 264			U(k = 2)	0,40 µm + 1,00.10 ⁻⁶ .I
Glass Scale (Projector scale) 80 mm (17 stripes, pitch 5 mm)	€ 408				
Glass Scale (Projector scale) 100 mm (11 stripes, pitch 10 mm)	€ 264				
Glass Scale (Projector scale) 150 mm (16 stripes, pitch 10 mm)	€ 384				
Glass Scale (Projector scale) 200 mm (21 stripes, pitch 10 mm)	€ 504				
Glass Scale (Projector scale) 250 mm (26 stripes, pitch 10 mm)	€ 624				
Glass Scale (Projector scale) 300 mm (31 stripes, pitch 10 mm)	€ 744				
Glass Scale (Projector scale) 400 mm (41 stripes, pitch 10 mm)	€ 984				

Glass Scale (Projector scale) 500 mm (51 stripes, pitch 10 mm)	€ 1224			U(k = 2)	0,40 µm + 1,00.10-6.l
Glass Scale (Projector scale) 600 mm (61 stripes, pitch 10 mm)	€ 1464				
Glass scale 250 mm, working standard (26 stripes, pitch 10 mm) low expansion	€ 624				
Glass scale 500 mm, working standard (51 stripes, pitch 10 mm) low expansion	€ 1224				
Motic calibration slide	€ 116			U(k = 2)	10 µm
VMM					
Line standard (Vision scale) QI 60 mm (13 stripes, pitch 5 mm)	€ 312			U(k = 2)	Normal glass: 0,08 µm + 1,00.10 ⁻⁵ .l Zero glass: 0,08 µm + 0,50.10 ⁻⁶ .l
Line standard (Vision scale) QI 80 mm (17 stripes, pitch 5 mm)	€ 408				
Line standard (Vision scale) QI 105 mm (22 stripes, pitch 5 mm)	€ 528				
Line standard (Vision scale) QI 180 mm (37 stripes, pitch 5 mm)	€ 888				
Line standard (Vision scale) QI 205 mm (42 stripes, pitch 5 mm)	€ 1008				
Line standard (Vision scale) QI 305 mm (62 stripes, pitch 5 mm)	€ 1488				
Line standard (Vision scale) QI 380 mm (77 stripes, pitch 5 mm)	€ 1848				
Line standard (Vision scale) QI 405 mm (82 stripes, pitch 5 mm)	€ 1968				
Line standard (Vision scale) QS/QV 200 mm (21 stripes, pitch 10 mm)	€ 504				
Line standard (Vision scale) QS/QV 250 mm (26 stripes, pitch 10 mm)	€ 624				
Line standard (Vision scale) QS/QV 300 mm (31 stripes, pitch 10 mm)	€ 744				
Line standard (Vision scale) QS/QV 330 mm (34 stripes, pitch 10 mm)	€ 816				
Line standard (Vision scale) QS/QV 400 mm (41 stripes, pitch 10 mm)	€ 984				
Line standard (Vision scale) QV 600 mm (61 stripes, pitch 10 mm)	€ 1464				
Line standard (Vision scale) HQV 200 mm (21 stripes, pitch 10 mm)	€ 504				
low expansion					
Line standard (Vision scale) HQV 300 mm (31 stripes, pitch 10 mm)	€ 744				
low expansion					
Line standard (Vision scale) HQV 400 mm (41 stripes, pitch 10 mm)	€ 984				
Line standard (Vision scale) HQV 200 mm (41 stripes, pitch 5 mm)	€ 984				
ISO 10360-7 low expansion					
Line standard (Vision scale) HQV 300 mm (61 stripes, pitch 5 mm)	€ 1464				
ISO 10360-7 low expansion					
Line standard (Vision scale) HQV 440 mm (89 stripes, pitch 5 mm)	€ 2136				
ISO 10360-7 low expansion					
Line standard (Vision scale) HQV 650 mm (131 stripes, pitch 5 mm)	€ 3144				
ISO 10360-7 low expansion					
2-D grids 200x200 mm pitch 10 mm (21 mp x-as, 21 mp, Y-as)	€ 1008			U(k = 2) -afstand tussen 2 punten -lineairteit -rechtheid -haaksheid -rotatie	0,8 µm + 0,5.10 ⁻⁶ .l 0,2 µm + 0,5.10 ⁻⁶ .l 0,2 µm 0,2" 0,4"
QV calibration chart 001	€ 535		like 02AKN020 	U(k = 2)	0,24 µm
QV calibration chart 009 ISO 10360-7	€ 2100		like 02AKX160 	U(k = 2)	0,24 µm + 2,0.10 ⁻⁶ .l / for scales 0,04 µm for RONt 0,24 µm for width
FMI					
Straightedges till 280mm on Roundtest with reversal method (low uncertainty)	€ 337			U(k = 2)	38nm + 3,5%.z
Straightedges till 1000 mm on CMM with autocollimator (low uncertainty)	€ 449			U(k = 2)	36 nm + 0,12·10 ⁻⁶ .l
Hemisphere with reversal or multi-step method	€ 449		like 211-016 	U(k = 2) RONt (0-1 µm)	10nm + 2%.RONt
Flick standard	€ 337			U(k = 2) RONt (0-100 µm)	150nm + 2%.RONt
Roughness specimen, depth standards	€ 225		Type A1 Step standards like 178-611 & 178-610 	Type A2 Groove Depth-setting standards like Halle standards 	
				U(k = 2)	d (0-20 µm): 10 nm + 2%.d Pt (0-20 µm): 10 nm + 2%.Pt

Roughness specimen, 1 profile	€ 284		Type B (tip control) & C (vertical / horizontal spacing & amplitude) sine waves or saw-tooth like Mitutoyo: 178-601 (mm) & 178-602 (inch/mm) Rubert: 178-605 (mm) & 178-606 (inch/mm)	Type D1 roughness standards fine, middle, large like Halle standards	
Roughness specimen, 2 profiles	€ 449		Type B & C sine waves like 178-604	U($k = 2$)	Ra (0-20 µm): 3 nm + 3%.Ra Rz (0-80 µm): 30 nm + 2%.Rz Rt (0-80 µm): 40 nm + 3%.Rt Rsm (10-250 µm): 0.1%.Rsm special request: Rsm (10-250 µm): 0.01%.Rsm
X-axis contour normaal	€ 337			U($k = 2$)	0,24 µm + 0,16.10 ⁻⁶ .I
Temperature					
Temperature sensors (calibration)	€ 112				0,03 K
Temperature per sensor (Calibration + Correction)	€ 180				0,03 K