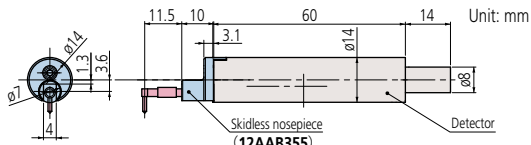
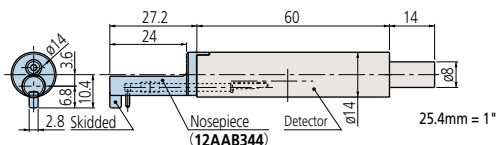


Detectors

Skidless



Skidded

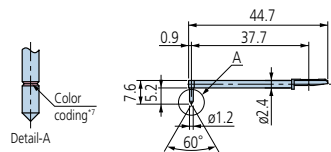


Unit: mm
25.4mm = 1"

Standard stylus

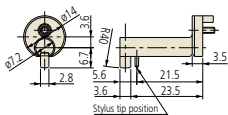
- 12AAE882 (1 μm)
- 12AAE924 (1 μm)^{*5}
- 12AAC731 (2 μm)
- 12AAB403 (5 μm)^{*5}
- 12AAB415 (10 μm)^{*5}
- 12AAE883 (250 μm)^{*8}

(): Tip radius

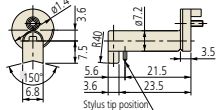


Nosepiece

For standard
12AAB344
Remarks $\phi 2$ to 20



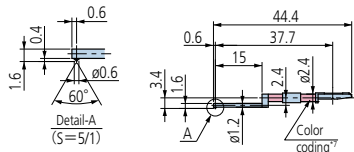
For round bar
12AAB345



For small hole

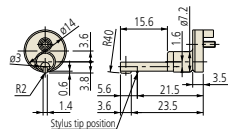
- 12AAC732 (2 μm)
- 12AAB404 (5 μm)^{*5}
- 12AAB416 (10 μm)^{*5}

(): Tip radius



Nosepiece

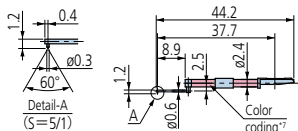
For small hole
12AAB346
Remarks
Hole diameter: $\phi 4$ or more
Hole depth: 15 or less



For extra-small hole

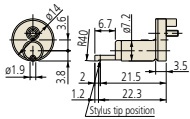
- 12AAC733 (2 μm)
- 12AAB405 (5 μm)^{*5}
- 12AAB417 (10 μm)^{*5}

(): Tip radius



Nosepiece

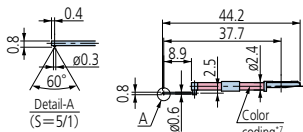
For ultra-small hole
12AAB347
Remarks
Hole diameter: $\phi 2.3$ or more
Hole depth: 6.5 or less



For ultra-small hole

- 12AAC734 (2 μm)
- 12AAB406 (5 μm)^{*5}
- 12AAB418 (10 μm)^{*5}

(): Tip radius



Order No.	Measuring force	
178-396-2 ^{*1,3}	0.75 mN	'97ISO and '01JIS compliant detectors
178-397-2 ^{*1,4}	4 mN	Detectors that comply with previous standards, for general use, etc.
178-396 ^{*2,3}	0.75 mN	'97ISO and '01JIS compliant detectors
178-397 ^{*2,4}	4 mN	Detectors that comply with previous standards, for general use, etc.

*1 The skidless nosepiece (12AAB355) is a standard accessory.

*2 The skidless nosepiece (12AAB355) and the nosepiece (12AAB344) are standard accessories.

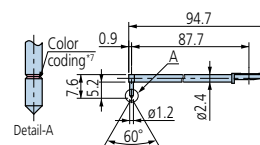
*3 The standard stylus (12AAC731) is a standard accessory.

*4 The standard stylus (12AAB403) is a standard accessory.

For deep hole^{*6}

- 2X stylus
- 12AAC740 (2 μm)
- 12AAB413 (5 μm)^{*5}
- 12AAB425 (10 μm)^{*5}

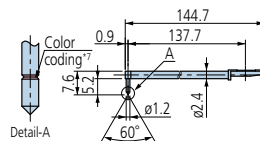
(): Tip radius



3X stylus

- 12AAC741 (2 μm)
- 12AAB414 (5 μm)^{*5}
- 12AAB426 (10 μm)^{*5}

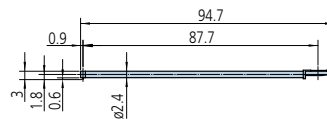
(): Tip radius



Double-length for deep hole^{*6}

- 12AAE898 (2 μm)
- 12AAE914 (5 μm)^{*5}

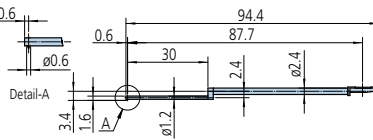
(): Tip radius



For small hole/ Double-length for deep hole^{*6}

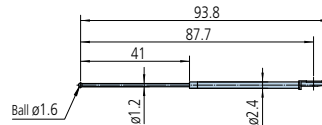
- 12AAE892 (2 μm)
- 12AAE908 (5 μm)^{*5}

(): Tip radius



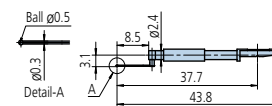
For small hole^{*6,*8}

- 12AAE884
($\phi 1.6$ mm)



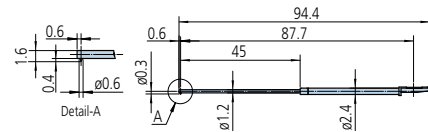
For ultra-small hole^{*8}

- 12AAJ662
($\phi 0.5$ mm)



For small slotted hole^{*6}

- 12AAE938 (2 μm)
- 12AAE940 (5 μm)^{*5}



*5 Tip angle 90°

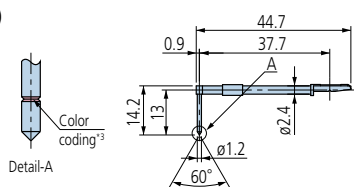
*6 For downward-facing measurement only.

	1 μm	2 μm	5 μm	10 μm	250 μm
Tip radius	1 μm	2 μm	5 μm	10 μm	250 μm
Color coding	White	Black	No Color	Yellow	No notch or color

*8 Used for calibration, a standard step gauge (178-611, option) is also required

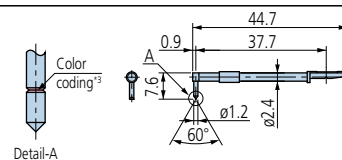
For deep groove (10 mm)

- 12AAC735 (2 μm)
- 12AAB409 (5 μm)*1
- 12AAB421 (10 μm)*1
- (): Tip radius



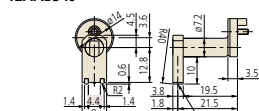
For knife-edge*4

- 12AAC738 (2 μm)
- 12AAB411 (5 μm)*1
- 12AAB423 (10 μm)*1
- (): Tip radius



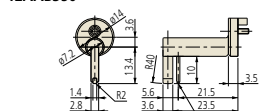
Nosepiece

- For deep groove 10
- 12AAB349



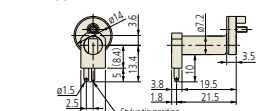
Remarks
Depth: 10 or less, Width: 9.5 or more

- For narrow groove
- 12AAB350



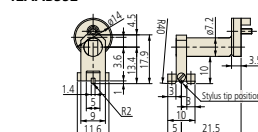
Remarks
Depth: 10 or less, Width: 3 or more

- For R-Surface
- 12AAB351



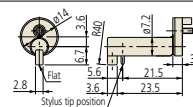
Remarks
Convex: R1.5 or more
Concave: R3 or more

- For vibration
- 12AAB352



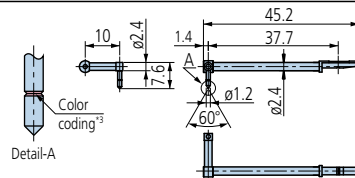
Nosepiece

- For knife-edge
- 12AAB354



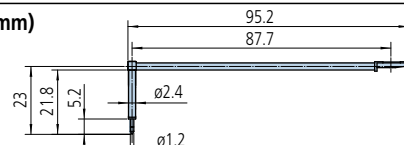
For eccentric arm*2

- 12AAC739 (2 μm)
- 12AAB412 (5 μm)*1
- 12AAB424 (10 μm)*1
- (): Tip radius



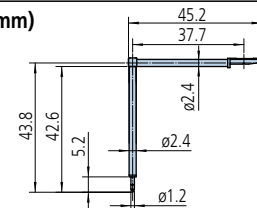
For deep groove*2 (20 mm)

- 12AAE893 (2 μm)*1
- 12AAE909 (5 μm)
- (): Tip radius



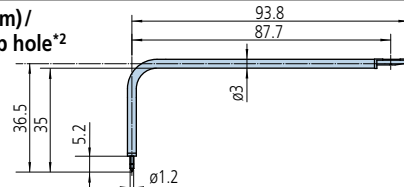
For deep groove*2 (40 mm)

- 12AAE895 (2 μm)*1
- 12AAE911 (5 μm)
- (): Tip radius



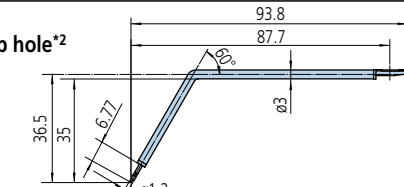
**For deep groove (30 mm)/
Double-length for deep hole*2**

- 12AAE894 (2 μm)*1
- 12AAE910 (5 μm)
- (): Tip radius



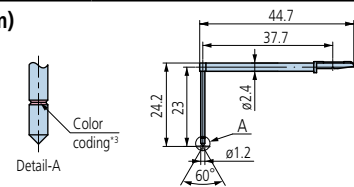
**For gear tooth/
Double-length for deep hole*2**

- 12AAE896 (2 μm)*1
- 12AAE912 (5 μm)*1
- (): Tip radius



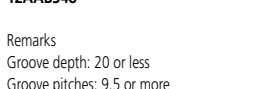
For deep groove*2 (20 mm)

- 12AAC736 (2 μm)
- 12AAB408 (5 μm)*1
- 12AAB420 (10 μm)*1
- (): Tip radius



Nosepiece

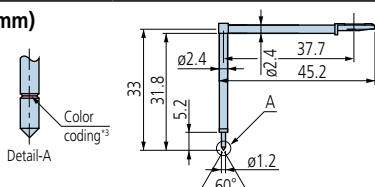
- For deep groove 20
- 12AAB348



Remarks
Groove depth: 20 or less
Groove pitches: 9.5 or more

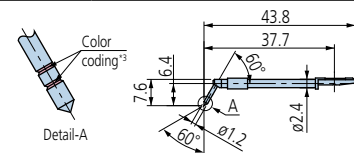
For deep groove*2 (30 mm)

- 12AAC737 (2 μm)
- 12AAB407 (5 μm)*1
- 12AAB419 (10 μm)*1
- (): Tip radius



For gear tooth

- 12AAB339 (2 μm)
- 12AAB410 (5 μm)
- 12AAB422 (10 μm)
- (): Tip radius



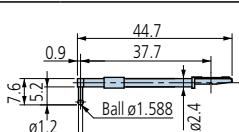
Nosepiece

- For corner
- 12AAB353



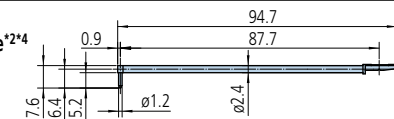
For rolling circle waviness surface*4

- 12AAB338 (ø1.588)
- (): Tip radius



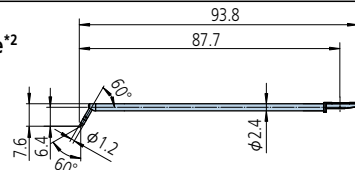
**For rolling circle waviness/
Double-length for deep hole*2*4**

- 12AAE886 (250 μm)
- (): Tip radius



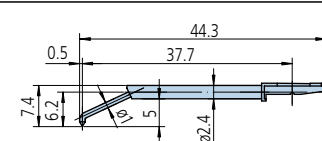
**For corner hole/
Double-length for deep hole*2**

- 12AAM601 (2 μm)
- 12AAM603 (5 μm)
- (): Tip radius



Hole-bottom cone stylus

- 12AAE899 (2 μm)
- 12AAE915 (5 μm)*1
- (): Tip radius



*1 Tip angle 90°

*2 For downward-facing measurement only.

*3

Tip radius	2 μm	5 μm	10 μm
Color coding	Black	No color	Yellow

*4 Used for calibration, a standard step gauge (178-611, option) is also required

Note: Customized special interchangeable styli are available on request. Please contact any Mitutoyo sales office for more information.