

# Spline Micrometers

## Series 111

This Spline Micrometer makes it easy for you to measure grooves and shaped parts.

It offers you the following benefits:

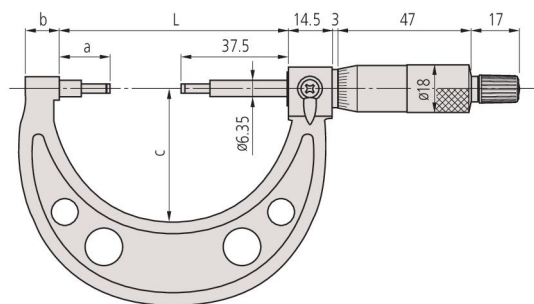
- Stepped measuring surfaces.
- Suitable for measuring grooves, splined shafts, recesses, shaped parts, etc.



111-115

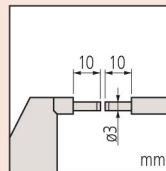
### Metric

| No.     | Range [mm] | Flatness | Parallelism | Maximum Permissible Error J MPE | Graduation | Measuring force [N] | Mass [g] | L [mm] | a [mm] | b [mm] | c [mm] |
|---------|------------|----------|-------------|---------------------------------|------------|---------------------|----------|--------|--------|--------|--------|
| 111-115 | 0 - 25     | 0,3 µm   | 2 µm        | ±3 µm                           | 0,01 mm    | 5-10                | 205      | 54,5   | 17,5   | 10     | 38     |
| 111-215 | 0 - 25     | 0,3 µm   | 2 µm        | ±3 µm                           | 0,01 mm    | 5-10                | 205      | 54,5   | 17,8   | 10     | 38     |
| 111-116 | 25 - 50    | 0,3 µm   | 2 µm        | ±3 µm                           | 0,01 mm    | 5-10                | 305      | 79,5   | 17,8   | 12     | 49     |
| 111-117 | 50 - 75    | 0,3 µm   | 2 µm        | ±3 µm                           | 0,01 mm    | 5-10                | 370      | 104,5  | 17,8   | 14     | 60     |
| 111-118 | 75 - 100   | 0,3 µm   | 3 µm        | ±4 µm                           | 0,01 mm    | 5-10                | 500      | 132,3  | 20,3   | 16,7   | 79     |
| 111-119 | 100 - 125  | 0,3 µm   | 3 µm        | ±4 µm                           | 0,01 mm    | 5-10                | 655      | 157,7  | 20,7   | 18,8   | 94     |
| 111-120 | 125 - 150  | 0,3 µm   | 3 µm        | ±4 µm                           | 0,01 mm    | 5-10                | 710      | 183,1  | 21,1   | 19,1   | 106    |
| 111-121 | 150 - 175  | 0,3 µm   | 3 µm        | ±5 µm                           | 0,01 mm    | 5-10                | 900      | 208,3  | 21,3   | 18,2   | 118    |
| 111-122 | 175 - 200  | 0,3 µm   | 4 µm        | ±5 µm                           | 0,01 mm    | 5-10                | 1040     | 233,7  | 21,7   | 16,8   | 130    |
| 111-123 | 200 - 225  | 0,3 µm   | 4 µm        | ±5 µm                           | 0,01 mm    | 5-10                | 1245     | 257,5  | 20,5   | 18     | 143    |
| 111-124 | 225 - 250  | 0,3 µm   | 4 µm        | ±6 µm                           | 0,01 mm    | 5-10                | 1395     | 283,5  | 21,5   | 18     | 156    |
| 111-125 | 250 - 275  | 0,3 µm   | 4 µm        | ±6 µm                           | 0,01 mm    | 5-10                | 1555     | 308,5  | 21,5   | 18     | 169    |
| 111-126 | 275 - 300  | 0,3 µm   | 5 µm        | ±6 µm                           | 0,01 mm    | 5-10                | 1975     | 333,5  | 21,5   | 18     | 181    |

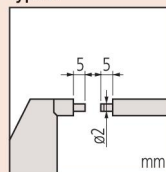


### Specifications

|                   |                                                          |
|-------------------|----------------------------------------------------------|
| Measuring face    | Carbide-tipped, micro-lap finish, stepped                |
| Anvil / Spindle   | Type A, D=3 mm L=10 mm/ D=3 mm L=10 mm                   |
| Measuring spindle | With spindle lock, ø 6,35 mm, spindle pitch 0,5 mm       |
| Delivered         | Including box, setting standard (from 25 mm upward), key |



Type A



Type B