

538 (537) Product Overview



538 (537) Cassettes FINE BORING

Engineered for easy precision.

538 (537) fine boring cassettes offer high accuracy and are available in an easy-to-use digital or analog version. The digital version features a docking port to attach the 3E^{TECH} digital readout module for μ -accurate diameter adjustments while the analog cassettes provide highly accurate adjustments through the vernier scale. 538 (537) cassettes are made of hardened steel and can be used on serrated tool bodies and slides from 3.937" - 128.150" (100.00 mm - 3255.00 mm). The insert holder can be rotated easily for reverse machining applications.

Experience **digital precision boring** for yourself.

- Diameter range: 3.937" - 8.071" (100.00 mm - 205.00 mm)
- Cassette can be used on large diameter serrated slides (pg. B10-G: 8): 7.874" - 128.150" (200.00 mm - 3255.00 mm)
- Coolant through
- 3E^{TECH} module provides a simple digital readout
- Analog version with a vernier scale
- Max cutting speed: 2,953 SFM (900 m/min)

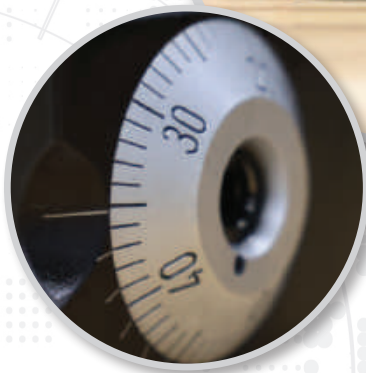


NOTE: Imperial items pictured

NOTE: Adjustment accuracy of 0.0001" or 0.002 mm on diameter

IMPORTANT: Max spindle speed refers to maximum possible speed for an individual boring head and is not a recommended parameter. Refer to page B10-M: 12 for recommended application-specific parameters. Factory technical assistance is available for your specific applications through our Application Engineering department.
ext: 7611 | email: appeng@alliedmachine.com

538 (537) BORING CASSETTES



NEW vernier scale
on both analog
and digital cassettes

NEW digital 538 (537)
cassettes with 3E^{TECH}
docking port

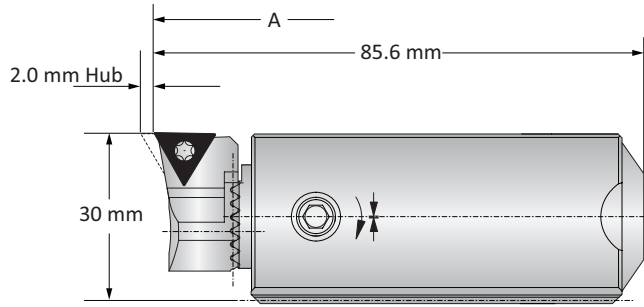
- ✓ Convenient tool handling
- ✓ Large range of applications
- ✓ Hardened steel bodies

538 (537) Analog Cassettes

Diameter Range: 3.937" - 8.071" (100.00 mm - 205.00 mm)



Form 101 / 103



Form 20

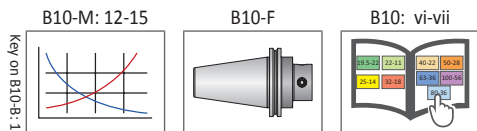
Analog 538 (537) Cassettes

| | Boring Range | Weight | Insert Form | Part No. | | |
|---|-----------------|-------------|-------------|---------------|----------------|-----------|
| | | | | Insert Holder | Clamping Piece | Cassette* |
| i | 3.937 - 8.071 | 1.323 (lbs) | 20 | 210020 | 137026 | 538051 |
| | 3.937 - 8.071 | 1.323 (lbs) | 101 | 210063 | 137026 | 538051 |
| | 3.937 - 8.071 | 1.323 (lbs) | 103 | 210064 | 137026 | 538051 |
| m | 100.00 - 205.00 | 0.60 (kg) | 20 | 210020 | 137026 | 537051 |
| | 100.00 - 205.00 | 0.60 (kg) | 101 | 210063 | 137026 | 537051 |
| | 100.00 - 205.00 | 0.60 (kg) | 103 | 210064 | 137026 | 537051 |

*Required serrated tool body sold separately

NOTE: Cassette and insert holder can be used on large diameter serrated slides (B10-G: 8)

NOTE: Insert holders, inserts, and clamping pieces **sold separately**



i = Imperial (in)
m = Metric (mm)

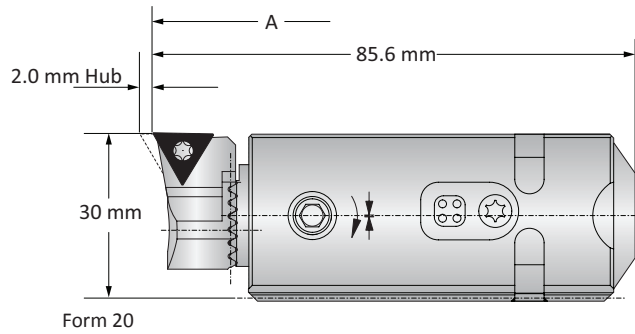
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538 (537) Cassettes with 3E^{TECH}

Diameter Range: 3.937" - 8.071" (100.00 mm - 205.00 mm)



Form 101 / 103



Digital 538 (537) Cassettes

| | Boring Range | Weight | Insert Form | Insert Holder | Part No. | |
|----------|-----------------|-------------|-------------|---------------|----------------|---------------|
| | | | | | Clamping Piece | Cassette* |
| i | 3.937 - 8.071 | 1.323 (lbs) | 20 | 210020 | 137026 | 538052 |
| | 3.937 - 8.071 | 1.323 (lbs) | 101 | 210063 | 137026 | 538052 |
| | 3.937 - 8.071 | 1.323 (lbs) | 103 | 210064 | 137026 | 538052 |
| m | 100.00 - 205.00 | 0.60 (kg) | 20 | 210020 | 137026 | 537052 |
| | 100.00 - 205.00 | 0.60 (kg) | 101 | 210063 | 137026 | 537052 |
| | 100.00 - 205.00 | 0.60 (kg) | 103 | 210064 | 137026 | 537052 |

*Required serrated tool body sold separately

NOTE: Cassette and insert holder can be used on large diameter serrated slides (B10-G: 8)

NOTE: 3E^{TECH} digital readout module, insert holders, inserts, and clamping pieces **sold separately**



3E^{TECH} Digital Readout Module

| | Part No. |
|----------|---------------|
| i | 563010 |
| m | 536010 |

NOTE: WEEE-Reg.-Nr. DE 15820388

NOTE: 3E^{TECH} sold separately

NOTE: Imperial item pictured
NOTE: Adjustment accuracy of 0.0001" or 0.002 mm on diameter

B10-M: 12-15

Key on B10-B: 1

B10-F

B10: vi-vii

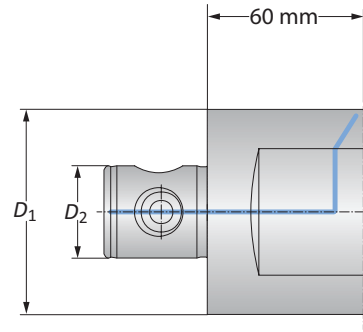
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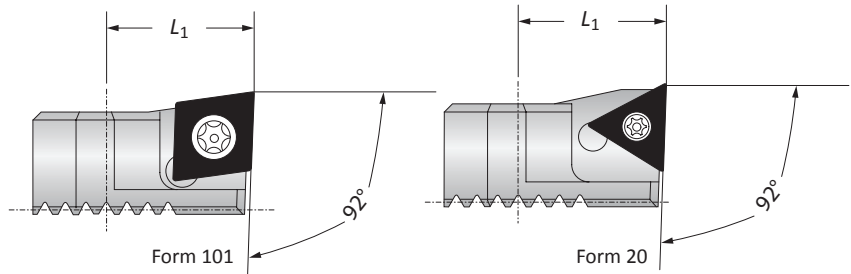
Serrated Tool Bodies | Insert Holders for Abrasive Materials

Diameter Range: 3.937" - 8.071" (100.00 mm - 205.00 mm)



Serrated Tool Bodies

| MVS Connection | | Serrated Tool Body | |
|----------------|-------------|--------------------|----------|
| | $D_2 D_1$ | Boring Range | Part No. |
| i | 80 - 36 | 3.937 - 6.102 | 148007 |
| | 80 - 36 | 5.906 - 8.071 | 148009 |
| m | 80 - 36 | 100.00 - 155.00 | 148007 |
| | 80 - 36 | 150.00 - 205.00 | 148009 |



Insert Holders for Abrasive Materials

| Insert Holder | | Insert Form | | Part No. | |
|---------------|-----------------|-------------|-------------|----------|----------|
| Boring Range | L_1 | Weight | Insert Form | Part No. | Part No. |
| i | 3.937 - 8.071 | 0.709 | 20 | 211061 | |
| | 3.937 - 8.071 | 0.709 | 101 | 211063 | |
| | 3.937 - 8.071 | 0.709 | 103 | 211065 | |
| m | 100.00 - 205.00 | 0.03 (kg) | 20 | 211061 | |
| | 100.00 - 205.00 | 0.03 (kg) | 101 | 211063 | |
| | 100.00 - 205.00 | 0.03 (kg) | 103 | 211065 | |

NOTE: Insert holders used for abrasive materials to protect boring head against chip wash

NOTE: When machining grey cast iron, we recommend using insert holders for abrasive materials with CBN inserts for optimized chip removal.

B10-M: 12-15

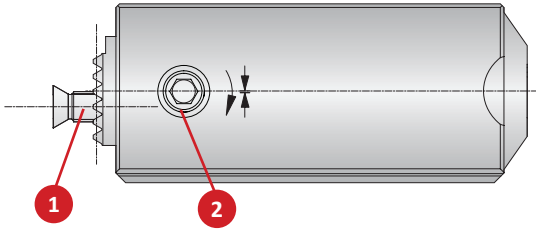
Key on B10-B: 1

B10-H

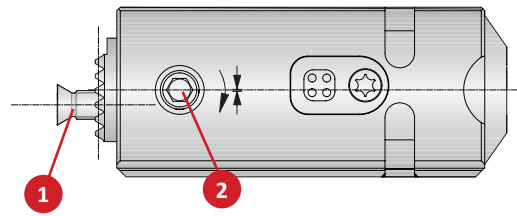
B10: vi-vii

i = Imperial (in)
m = Metric (mm)

538 (537) Accessories | 3E^{TECH} Accessories | Clamping Pieces



538 (537) Analog Cassette



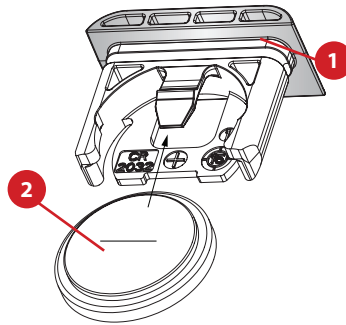
538 (537) Cassette

538 (537) Accessories

| Cassette Part No. | 1 Countersunk Screw | | 2 Clamping Screw | |
|--------------------|---------------------|-------------|------------------|-------------|
| | Part No. | Service Key | Part No. | Service Key |
| i 538051 538052 | 215462 | T20 / H | 115249 | s4 / F |
| | 215462 | T20 / H | 315789 | s4 / F |
| m 537051 537052 | 215462 | T20 / H | 115249 | s4 / F |
| | 215462 | T20 / H | 315789 | s4 / F |

3E^{TECH} Accessories

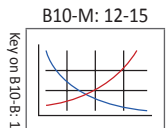
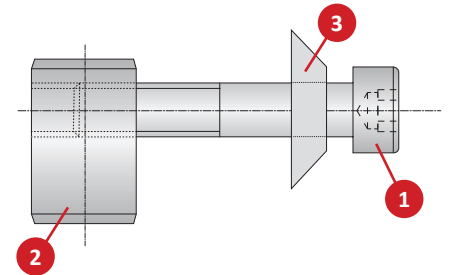
| 1 Sealing Ring | 2 Battery CR2032 |
|----------------|------------------|
| Part No. | Part No. |
| 215483 | 515491 |



538 (537) Clamping Pieces

| Slide Type | Complete Part No. | Service Key | Replacement Components | | |
|----------------------|-------------------|---------------|------------------------|----------------|---------------|
| | | | 1 Cap Screw | 2 Clamping Nut | 3 Disk Spring |
| Serrated Tool Bodies | 137026 | 115578 s6 / B | 215101 | 140118 | 337105 |
| Basic and Eco Slides | 137027 | | 215102 | 215105 | 337105 |
| Flex Slides | 137019 | | 415900 | 215105 | 337105 |

NOTE: Clamping pieces sold separately



i = Imperial (in)
m = Metric (mm)
Inserts sold separately

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