ALLIED MACHINE & ENGINEERING

Holemaking Solutions for Today's Manufacturing

Drilling

Reaming

Burnishing

Threading

Specials

Wohlhaupter®

▶ *BORING*

Large Diameter Boring Tools

WOHLHAUPTER®

SECTION

B10-G

Large Diameter Boring

Wohlhaupter® Large Diameter Boring

Basic D 40 | Basic D 60 | Eco D 60 | Flex D 60

- Diameter Range: 7.874" - 128.150" (200.00 mm - 3255.00 mm)

Boring Big?

Wohlhaupter has continued to expand our large diameter boring capabilities with Alu-Line. Our Alu-Line serrated slides and tool bodies are made of lightweight aluminum alloy to minimize the weight while still getting the heavy boring job done. The versatile serrated slides and serrated tool bodies allow for boring 7.874" (200.00 mm) up to 128.150" (3255.00 mm), offering the most powerful and versatile tool ranges to our customers.

Your safety and the safety of others is very important. This catalog contains important safety messages. Always read and follow all safety precautions.

This triangle is a safety hazard symbol. It alerts you to potential safety hazards that can cause tool failure and serious injury.

When you see this symbol in the catalog, look for a related safety message that may be near this triangle or referred to in the nearby text.

There are safety signal words also used in the catalog. Safety messages follow these words.

⚠ WARNING

WARNING (shown above) means that failure to follow the precautions in this message could result in tool failure and serious injury.

NOTICE means that failure to follow the precautions in this message could result in damage to the tool or machine but not result in personal injury.

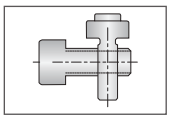
NOTE and **IMPORTANT** are also used. These are important that you read and follow but are not safety-related.

Visit www.alliedmachine.com for the most up-to-date information and procedures.

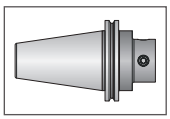
Applicable Industries

Aerospace | Agriculture | Automotive | Firearms | General Machining | Oil & Gas | Renewable Energy

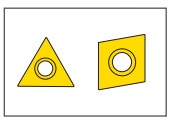
Reference Icons
The following icons will appear throughout the catalog to help you navigate between products.



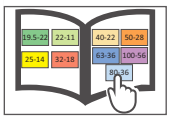
Clamping Elements
For use with insert holders and boring heads



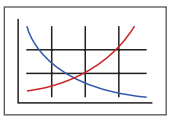
Shanks
A variety of shanks for different machines



Inserts
For use with insert holder boring heads and boring bars using indexable inserts



MVS Connection Color Guide
Detailed instructions and information regarding the MVS connection(s)



Recommended Cutting Data
Speed and feed recommendations for optimum and safe boring

Coolant-Through Option
Indicates that the product is coolant through

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Series	Diameter Range	
	Imperial (inch)	Metric (mm)
Basic D 40 Slides	7.874 - 20.472	200.00 - 520.00
Basic D 60 Slides	7.874 - 19.882	200.00 - 505.00
Eco D 60 Slides	18.307 - 40.157	465.00 - 1020.00
Flex D 60 Slides	19.685 - 128.150	500.00 - 3255.00

Large Diameter Boring Product Overview

Large Diameter
BORING

Boring big? We've got you covered.

Our versatile tooling system can provide the power and precision your large diameter boring jobs demand. The large diameter boring system offers four different Alu-Line serrated slides, a wide range of rough and finish boring insert holders, vernier and digital cassettes, and combined rough and finish insert holders.

- Diameter range: 7.874" - 128.150" (200.00 mm - 3255.00 mm).
- Basic, Eco, and Flex serrated slides.
- Roughing, finishing, or combined roughing and finishing can be achieved in one pass.
- Digital readout cassettes available for quick and easy adjustments.
- Alu-Line serrated slides and tool bodies are made of lightweight aluminum.

Basic D 40 Serrated Slides for Finish Boring

350021 (349021)
Ø 7.874" - 11.023"
(Ø 200.00 mm – 280.00 mm)

350023 (349023)
Ø 14.173" - 17.322"
(Ø 360.00 mm – 440.00 mm)

350022 (349022)
Ø 11.023" - 14.173"
(Ø 280.00 mm – 360.00 mm)

350024 (349024)
Ø 17.322" - 20.472"
(Ø 440.00 mm – 520.00 mm)

Basic D 60 Serrated Slides for Rough and Finish Boring

350051 (349051)
Ø 7.874" - 11.023"
(Ø 200.00 mm – 280.00 mm)

350053 (349053)
Ø 13.779" - 16.929"
(Ø 350.00 mm – 430.00 mm)

350052 (349052)
Ø 10.826" - 13.976"
(Ø 275.00 mm – 355.00 mm)

350054 (349054)
Ø 16.732" - 19.881"
(Ø 425.00 mm – 505.00 mm)

Eco D 60 Serrated Slides for Rough and Finish Boring

350005 (349005)
Ø 18.307" - 29.330"
(Ø 465.00 mm – 745.00 mm)

350014 (349014) / 350015 (350015)
Serrated slide for base slides
350005 (349005) / 350006 (349006)

350006 (349006)
Ø 29.133" - 40.157"
(Ø 740.00 mm – 1020.00 mm)

Flex D 60 Serrated Slides for Rough and Finish Boring

350031 (349031)
Ø 19.685" - 41.535"
(Ø 500.00 mm – 1055.00 mm)

350035 (349035)
Serrated slide for base slides
350031 (349031) | 350032 (349032)
350033 (349033) | 350034 (349034)

350032 (349032)
Ø 29.724" - 63.188"
(Ø 755.00 mm – 1605.00 mm)

350036 (349036)
Serrated slide for base slides
350031 (349031) | 350032 (349032)
350033 (349033) | 350034 (349034)

350033 (349033)
Ø 52.165" - 95.669"
(Ø 1325.00 mm – 2430.00 mm)

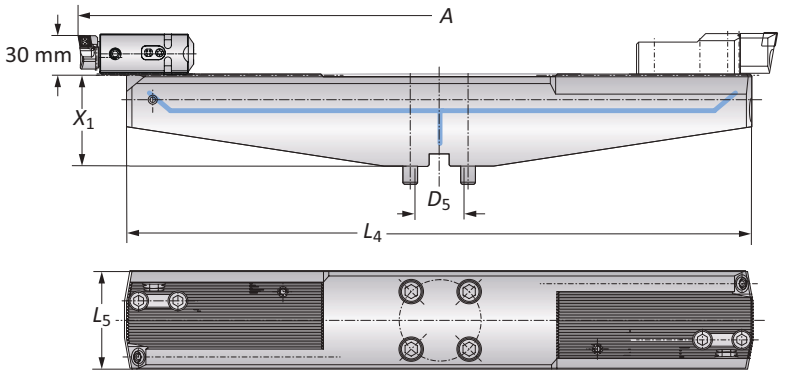
350037 (349037)
Serrated slide for base slides
350032 (349032) | 350033 (349033)
350034 (349034)

350034 (349034)
Ø 84.645" - 128.149"
(Ø 2150.00 mm – 3255.00 mm)

350038 (349038)
Serrated slide for base slides
350033 (349033) | 350034 (349034)

Alu-Line Basic D 40 Serrated Slides

Diameter Range: 7.874" - 20.472" (200.00 mm - 520.00 mm)



	Connection D_5	Boring Range A	Serrated Slide X_1	Serrated Slide L_4	Serrated Slide L_5	Weight	Part No.
ⓘ	D 40	7.874 - 11.024	2.953	7.480	3.149	6.173 (lbs)	**350021**
ⓘ	D 40	11.024 - 14.173	2.953	10.620	3.149	8.377 (lbs)	**350022**
ⓘ	D 40	14.173 - 17.323	2.953	13.770	3.149	11.023 (lbs)	**350023**
ⓘ	D 40	17.323 - 20.472	2.953	16.320	3.149	13.228 (lbs)	**350024**
ⓜ	D 40	200.00 - 280.00	75.00	190.00	80.00	2.80 (kg)	**349021**
ⓜ	D 40	280.00 - 360.00	75.00	270.00	80.00	3.80 (kg)	**349022**
ⓜ	D 40	360.00 - 440.00	75.00	350.00	80.00	5.00 (kg)	**349023**
ⓜ	D 40	440.00 - 520.00	75.00	430.00	80.00	6.00 (kg)	**349024**

B10-M: 12-19 | B10-G: 22 | B10-G: 16-19 | B10-H | B10: vi-vii

Key on B10-G: 1

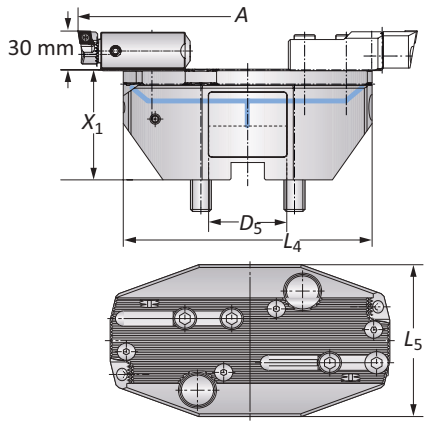
ⓘ = Imperial (in)
ⓜ = Metric (mm)

⚠ WARNING **Exceeding weight capacity for machine tool spindle and tool changer can cause machine damage and/or serious injury. To prevent:**
-Consult machine tool builder for machine's weight limitations.
-Refer to example on page B10-M: 11 for calculating tool assembly weight.
Factory technical assistance is also available for specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

⚠ WARNING **Tool failure can cause serious injury. To prevent:**
-Do not exceed recommended 10xD length-to-diameter ratio or exceed 4 total components (including shank).
-When using Alu-Line components, do not exceed recommended 5xD length-to-diameter ratio.
-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI[TECH®] module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
Factory technical assistance is available for your specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

Alu-Line Basic D 60 Serrated Slides

Diameter Range: 7.874" - 19.882" (200.00 mm - 505.00 mm)



	Connection	Boring Range	Serrated Slide				
	D_5	A	X_1	L_4	L_5	Weight	Part No.
ⓘ	D 60	7.874 - 11.024	3.346	7.520	4.330	9.038 (lbs)	**350051**
ⓘ	D 60	10.827 - 13.976	3.346	10.394	4.330	11.464 (lbs)	**350052**
ⓘ	D 60	13.780 - 16.929	3.346	13.346	4.921	15.211 (lbs)	**350053**
ⓘ	D 60	16.732 - 19.882	3.346	16.299	4.921	17.637 (lbs)	**350054**
ⓜ	D 60	200.00 - 280.00	85.00	191.00	110.00	4.10 (kg)	**349051**
ⓜ	D 60	275.00 - 355.00	85.00	264.00	110.00	5.20 (kg)	**349052**
ⓜ	D 60	350.00 - 430.00	85.00	339.00	125.00	6.90 (kg)	**349053**
ⓜ	D 60	425.00 - 505.00	85.00	414.00	125.00	8.00 (kg)	**349054**

B10-M: 12-19 | B10-G: 23 | B10-G: 16-19 | B10-H | B10: vi-vii

Key on B10-G: 1

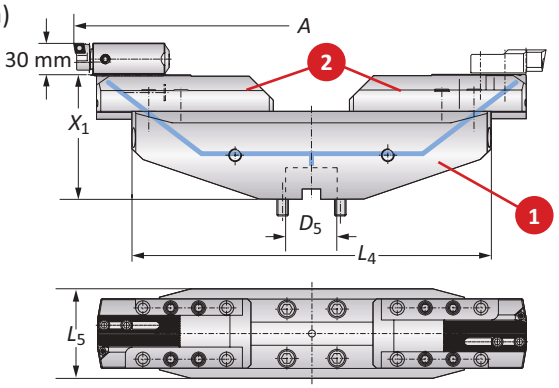
ⓘ = Imperial (in)
ⓜ = Metric (mm)

⚠ WARNING **Exceeding weight capacity for machine tool spindle and tool changer can cause machine damage and/or serious injury. To prevent:**
-Consult machine tool builder for machine's weight limitations.
-Refer to example on page B10-M: 11 for calculating tool assembly weight.
Factory technical assistance is also available for specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

⚠ WARNING **Tool failure can cause serious injury. To prevent:**
-Do not exceed recommended 10xD length-to-diameter ratio or exceed 4 total components (including shank).
-When using Alu-Line components, do not exceed recommended 5xD length-to-diameter ratio.
-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI$^{TECH®}$ module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
Factory technical assistance is available for your specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

Alu-Line Eco D 60 Serrated Slides

Diameter Range: 18.307" - 40.157" (465.00 mm - 1020.00 mm)



	Connection	Boring Range	Serrated Slide			1 Base Slide		2 Serrated Slide (Alu-Line)*		2 Serrated Slide (steel)**	
	D_5	A	X_1	L_4	L_5	Weight	Part No.	Weight	Part No.	Weight	Part No.
ⓘ	D 60	18.307 - 29.331	6.102	17.590	5.078	26.010 (lbs)	**350005**	4.850 (lbs)	**350015**	12.560 (lbs)	**350014**
	D 60	29.134 - 40.157	6.102	28.420	5.078	39.680 (lbs)	**350006**	4.850 (lbs)	**350015**	12.560 (lbs)	**350014**
ⓜ	D 60	465.00 - 745.00	155.00	447.00	129.00	11.80 (kg)	**349005**	2.20 (kg)	**349015**	5.70 (kg)	**349014**
	D 60	740.00 - 1020.00	155.00	722.00	129.00	18.00 (kg)	**349006**	2.20 (kg)	**349015**	5.70 (kg)	**349014**

*Finish boring: serrated slide in Alu-Line.
**Rough boring: serrated slide in steel.

B10-M: 12-19 | B10-G: 24 | B10-G: 16-19 | B10-H | B10: vi-vii

Key on B10-G: 1

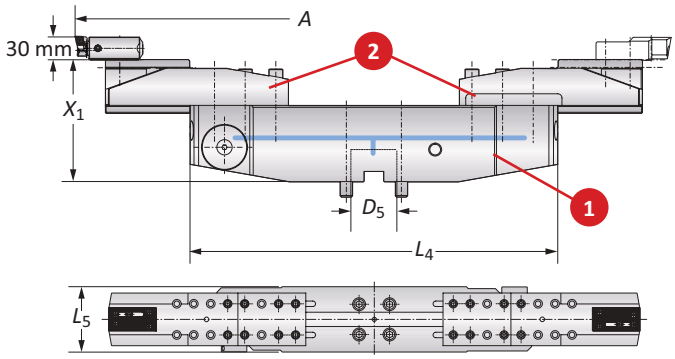
ⓘ = Imperial (in)
ⓜ = Metric (mm)

⚠ WARNING **Exceeding weight capacity for machine tool spindle and tool changer can cause machine damage and/or serious injury. To prevent:**
-Consult machine tool builder for machine's weight limitations.
-Refer to example on page B10-M: 11 for calculating tool assembly weight.
Factory technical assistance is also available for specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

⚠ WARNING **Tool failure can cause serious injury. To prevent:**
-Do not exceed recommended 10xD length-to-diameter ratio or exceed 4 total components (including shank).
-When using Alu-Line components, do not exceed recommended 5xD length-to-diameter ratio.
-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI[TECH®] module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
Factory technical assistance is available for your specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

Alu-Line Flex D 60 Serrated Slides

Diameter Range: 19.685" - 128.150" (500.00 mm - 3255.00 mm)



	Connection	Boring Range	Serrated Slide				Part No.	
	D_5	A	X_1	L_4	L_5	Weight (1 + 2)	1 Base Slide	2 Serrated Slide
	D 60	19.685 - 30.709	6.299	18.898	5.118	53.360 (lbs)	**350031**	**350035**
	D 60	37.402 - 41.535	7.283	18.898	5.118	91.060 (lbs)	**350031**	**350036**
	D 60	30.512 - 41.535	7.283	29.724	6.102	93.710 (lbs)	**350032**	**350035**
	D 60	41.339 - 52.362	8.268	29.724	6.102	131.400 (lbs)	**350032**	**350036**
	D 60	56.772 - 63.189	8.858	29.724	6.102	190.200 (lbs)	**350032**	**350037**
	D 60	52.165 - 63.189	8.268	51.378	7.283	194.400 (lbs)	**350033**	**350035**
ⓘ	D 60	52.165 - 74.016	9.252	51.378	7.283	232.100 (lbs)	**350033**	**350036**
	D 60	62.992 - 84.843	9.843	51.378	7.283	291.000 (lbs)	**350033**	**350037**
	D 60	78.346 - 95.669	10.039	51.378	7.283	374.400 (lbs)	**350033**	**350038**
	D 60	84.646 - 95.669	9.252	83.858	8.858	424.400 (lbs)	**350034**	**350035**
	D 60	84.646 - 106.496	10.236	83.858	8.858	462.100 (lbs)	**350034**	**350036**
	D 60	84.646 - 117.323	10.827	83.858	8.858	520.300 (lbs)	**350034**	**350037**
	D 60	84.646 - 128.150	11.024	83.858	8.858	604.100 (lbs)	**350034**	**350038**
	D 60	500.00 - 780.00	160.00	480.00	130.00	24.20 (kg)	**349031**	**349035**
	D 60	950.00 - 1055.00	185.00	480.00	130.00	41.30 (kg)	**349031**	**349036**
	D 60	775.00 - 1055.00	185.00	755.00	155.00	42.50 (kg)	**349032**	**349035**
	D 60	1050.00 - 1330.00	210.00	755.00	155.00	59.60 (kg)	**349032**	**349036**
	D 60	1442.00 - 1605.00	225.00	755.00	155.00	86.30 (kg)	**349032**	**349037**
	D 60	1325.00 - 1605.00	210.00	1305.00	185.00	88.20 (kg)	**349033**	**349035**
ⓜ	D 60	1325.00 - 1880.00	235.00	1305.00	185.00	105.30 (kg)	**349033**	**349036**
	D 60	1600.00 - 2155.00	250.00	1305.00	185.00	132.00 (kg)	**349033**	**349037**
	D 60	1990.00 - 2430.00	255.00	1305.00	185.00	169.80 (kg)	**349033**	**349038**
	D 60	2150.00 - 2430.00	235.00	2130.00	225.00	192.50 (kg)	**349034**	**349035**
	D 60	2150.00 - 2705.00	260.00	2130.00	225.00	209.60 (kg)	**349034**	**349036**
	D 60	2150.00 - 2980.00	275.00	2130.00	225.00	236.00 (kg)	**349034**	**349037**
	D 60	2150.00 - 3255.00	280.00	2130.00	225.00	274.00 (kg)	**349034**	**349038**

B10-M: 12-19 | B10-G: 25 | B10-G: 16-19 | B10-H | B10: vi-vii

Key on B10-G: 1

ⓘ = Imperial (in)
ⓜ = Metric (mm)

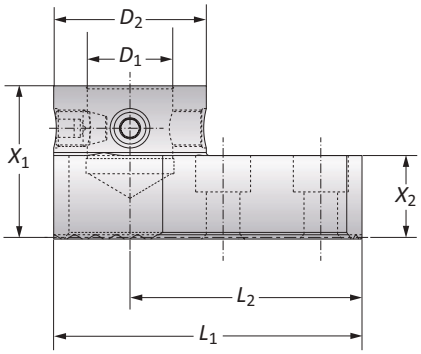
⚠ WARNING **Exceeding weight capacity for machine tool spindle and tool changer can cause machine damage and/or serious injury. To prevent:**
-Consult machine tool builder for machine's weight limitations.
-Refer to example on page B10-M: 11 for calculating tool assembly weight.
Factory technical assistance is also available for specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

⚠ WARNING **Tool failure can cause serious injury. To prevent:**
-Do not exceed recommended 10xD length-to-diameter ratio or exceed 4 total components (including shank).
-When using Alu-Line components, do not exceed recommended 5xD length-to-diameter ratio.
-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI$^{TECH®}$ module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
Factory technical assistance is available for your specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

Serrated Adapter with MVS Connection

Mounting Adapter

MVS Connection	Mounting Adapters					
D_2 | D_1	X_1	X_2	L_1	L_2	Weight	Part No.
50 - 28	1.969	1.063	3.976	2.992	2.866 (lbs)	**349046**
50 - 28	50.00	27.00	101.00	76.00	1.30 (kg)	**349046**



Inside Boring

Slide	Boring Heads	ID Bore Range	
		inch	mm
349/350051	320005/465006/565045	8.465 - 12.323	215.00 - 313.00
349/350052	320005/465006/565045	11.417 - 15.276	290.00 - 388.00
349/350053	320005/465006/565045	14.370 - 18.228	365.00 - 463.00
349/350054	320005/465006/565045	17.323 - 21.181	440.00 - 538.00
349/350005 with 349/350015	320005/465006/565045	18.898 - 30.630	480.00 - 778.00

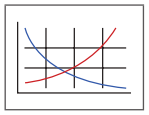
Outside Boring

Slide	Boring Heads	OD Bore Range	
		inch	mm
349/350051	320005/465006/565045	2.638 - 6.496	67.00 - 165.00
349/350052	320005/465006/565045	5.591 - 9.449	142.00 - 240.00
349/350053	320005/465006/565045	8.543 - 12.402	217.00 - 315.00
349/350054	320005/465006/565045	11.496 - 15.354	292.00 - 390.00
349/350005 with 349/350015	320005/465006/565045	13.071 - 24.803	332.00 - 630.00

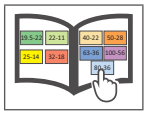
NOTE: LH only spindle rotation.

B10-M: 12-19

Key on B10-G: 1



B10: vi-vii



ⓘ = Imperial (in)
ⓜ = Metric (mm)

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-Consult machine tool builder for machine's weight limitations.
-Refer to example on page B10-M: 11 for calculating tool assembly weight.
Factory technical assistance is also available for specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

⚠ WARNING **Tool failure can cause serious injury. To prevent:**
-Do not exceed recommended 10xD length-to-diameter ratio or exceed 4 total components (including shank).
-When using Alu-Line components, do not exceed recommended 5xD length-to-diameter ratio.
-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI$^{TECH®}$ module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
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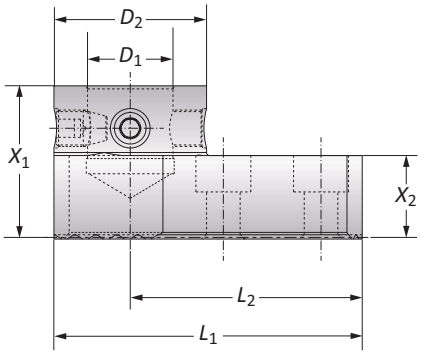
Serrated Adapter with MVS Connection

Mounting Adapter

	MVS Connection	Mounting Adapters					
	D_2 | D_1	X_1	X_2	L_1	L_2	Weight	Part No.
ⓘ	50 - 28	1.969	1.063	3.976	2.992	2.866 (lbs)	**349046**
ⓜ	50 - 28	50.00	27.00	101.00	76.00	1.30 (kg)	**349046**



Inside Boring

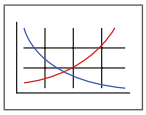
Slide	Boring Heads	ID Bore Range	
		inch	mm
349/350051	320005/465006/565045	2.559 - 5.039	65.00 -128.00
349/350052	320005/465006/565045	4.134 - 7.992	105.00 - 203.00
349/350053	320005/465006/565045	7.087 - 10.945	180.00 - 278.00
349/350054	320005/465006/565045	10.039 - 13.898	255.00 - 353.00
349/350005 with 349/350015	320005/465006/565045	11.614 - 23.346	295.00 - 593.00

Outside Boring

Slide	Boring Heads	OD Bore Range	
		inch	mm
349/350051	320005/465006/565045	–	–
349/350052	320005/465006/565045	0.000 - 2.165	0.00 - 55.00
349/350053	320005/465006/565045	1.260 - 5.118	32.00 - 130.00
349/350054	320005/465006/565045	4.213 - 8.071	107.00 - 205.00
349/350005 with 349/350015	320005/465006/565045	5.787 - 17.520	147.00 - 445.00

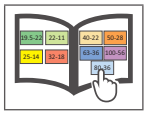
NOTE: LH only spindle rotation.

B10-M: 12-19



Key on B10-G: 1

B10: vi-vii



ⓘ = Imperial (in)
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-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI$^{TECH®}$ module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
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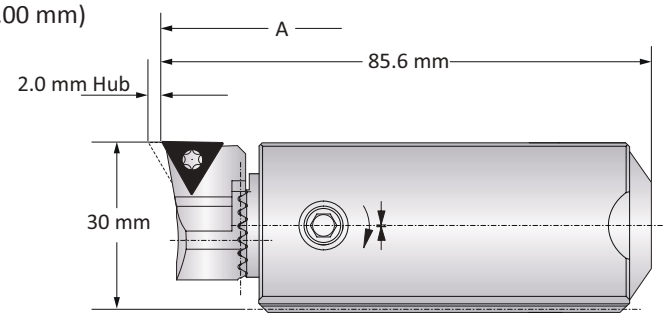
538 (537) Analog Cassettes

Diameter Range: 3.937" - 128.150" (100.00 mm - 3255.00 mm)

Form 101



Form 20

	Slide Type	Boring Range A	Weight	Insert Form	Part No. Insert Holder	Clamping Piece	Cassette
	Serrated Tool Bodies	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**
ⓘ	Basic / Eco Slides	7.874 - 40.157	1.323 (lbs)	20	**210020**	**137027**	**538051**
ⓘ		7.874 - 40.157	1.323 (lbs)	101	**210063**	**137027**	**538051**
ⓘ		7.874 - 40.157	1.323 (lbs)	103	**210064**	**137027**	**538051**
	Flex Slides	19.685 - 128.150	1.323 (lbs)	20	**210020**	**137019**	**538051**
		19.685 - 128.150	1.323 (lbs)	101	**210063**	**137019**	**538051**
		19.685 - 128.150	1.323 (lbs)	103	**210064**	**137019**	**538051**
	Serrated Tool Bodies	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**
ⓜ	Basic / Eco Slides	200.00 - 1020.00	0.60 (kg)	20	**210020**	**137027**	**537051**
ⓜ		200.00 - 1020.00	0.60 (kg)	101	**210063**	**137027**	**537051**
ⓜ		200.00 - 1020.00	0.60 (kg)	103	**210064**	**137027**	**537051**
	Flex Slides	500.00 - 3255.00	0.60 (kg)	20	**210020**	**137019**	**537051**
		500.00 - 3255.00	0.60 (kg)	101	**210063**	**137019**	**537051**
		500.00 - 3255.00	0.60 (kg)	103	**210064**	**137019**	**537051**

B10-M: 12-19 | B10-G: 20-21 | B10-G: 16-19 | B10-H | B10: vi-vii

Key on B10-G: 1

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

⚠ WARNING **Exceeding weight capacity for machine tool spindle and tool changer can cause machine damage and/or serious injury. To prevent:**
-Consult machine tool builder for machine's weight limitations.
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-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI[TECH®] module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
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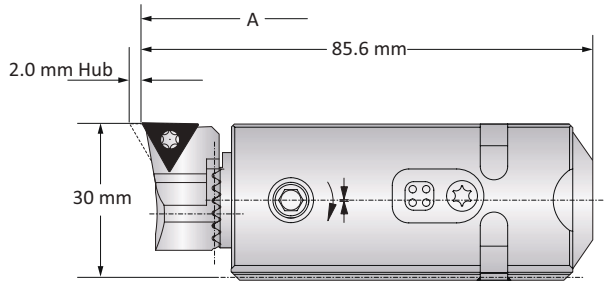
538 (537) Cassettes with 3E^{TECH+}

Diameter Range: 3.937" - 128.150" (100.00 mm - 3255.00 mm)

Form 101



Form 20

	Slide Type	Boring Range A	Weight	Insert Form	Part No. Insert Holder	Clamping Pieces	Cassette
	Serrated Tool Bodies	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**
	Basic / Eco Slides	7.874 - 40.157	1.323 (lbs)	20	**210020**	**137027**	**538052**
ⓘ		7.874 - 40.157	1.323 (lbs)	101	**210063**	**137027**	**538052**
		7.874 - 40.157	1.323 (lbs)	103	**210064**	**137027**	**538052**
	Flex Slides	19.685 - 128.150	1.323 (lbs)	20	**210020**	**137019**	**538052**
		19.685 - 128.150	1.323 (lbs)	101	**210063**	**137019**	**538052**
		19.685 - 128.150	1.323 (lbs)	103	**210064**	**137019**	**538052**
	Serrated Tool Bodies	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**
	Basic / Eco Slides	200.00 - 1020.00	0.60 (kg)	20	**210020**	**137027**	**537052**
ⓜ		200.00 - 1020.00	0.60 (kg)	101	**210063**	**137027**	**537052**
		200.00 - 1020.00	0.60 (kg)	103	**210064**	**137027**	**537052**
	Flex Slides	500.00 - 3255.00	0.60 (kg)	20	**210020**	**137019**	**537052**
		500.00 - 3255.00	0.60 (kg)	101	**210063**	**137019**	**537052**
		500.00 - 3255.00	0.60 (kg)	103	**210064**	**137019**	**537052**

3E^{TECH+} Digital Readout Module

Part No.	Charging Unit*
536015	**536016**

NOTE: WEEE-Reg.-Nr. DE 15820388
*Charging unit sold separately.

NOTE: 3E^{TECH+} adjustment accuracy of 0.00005" or 0.001 mm on diameter.

B10-M: 12-19 | B10-G: 20-21 | B10-G: 16-19 | B10-H | B10: vi-vii

Key on B10-G: 1

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Inserts sold separately

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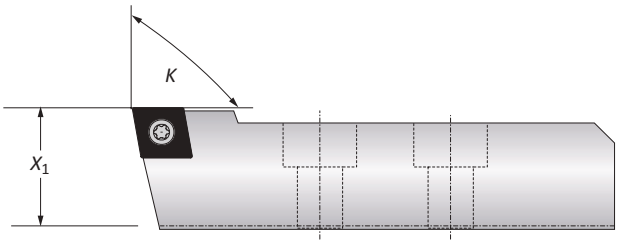
Insert Holders for Rough Machining

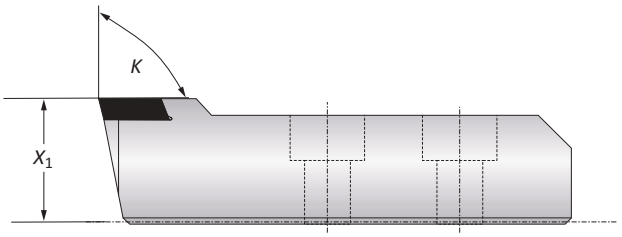
90° Insert Holders

	Insert Holder K	Insert Holder X_1	Weight	ISO Code	Insert Form	Part No.
i	90°	1.180	1.322 (lbs)	CC..09T3..	103	**149090**
i	90°	1.180	1.322 (lbs)	CC..1204..	104	**149099**
i	90°	1.150	1.322 (lbs)	CC..1204..	104	**149083**
i	90°	1.180	1.322 (lbs)	CC..1605..	105	**149093**
m	90°	30.00	0.60 (kg)	CC..09T3..	103	**149090**
m	90°	30.00	0.60 (kg)	CC..1204..	104	**149099**
m	90°	29.30	0.60 (kg)	CC..1204..	104	**149083**
m	90°	30.00	0.60 (kg)	CC..1605..	105	**149093**



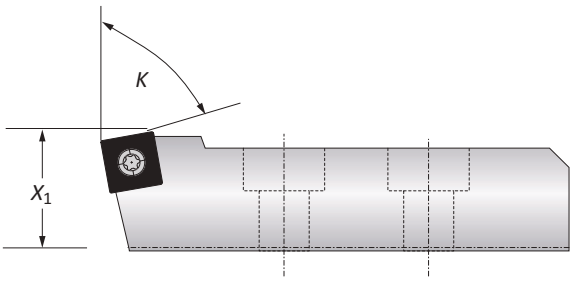
90° Tangential Insert Holders

	Insert Holder K	Insert Holder X_1	Weight	ISO Code	Insert Form	Part No.
i	90°	1.180	1.322 (lbs)	Tangential	05	**149010**
i	90°	1.150	1.322 (lbs)	Tangential	05	**149020**
m	90°	30.00	0.60 (kg)	Tangential	05	**149010**
m	90°	29.30	0.60 (kg)	Tangential	05	**149020**

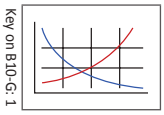


80° Insert Holders

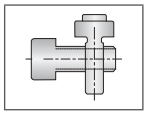
	Insert Holder K	Insert Holder X_1	Weight	ISO Code	Insert Form	Part No.
i	80°	1.180	1.322 (lbs)	SC..1204..	113	**149089**
i	80°	1.180	1.322 (lbs)	SC..150512	114	**149094**
i	80°	1.180	1.322 (lbs)	SN..1506..	134	**149096**
m	80°	30.00	0.60 (kg)	SC..1204..	113	**149089**
m	80°	30.00	0.60 (kg)	SC..150512	114	**149094**
m	80°	30.00	0.60 (kg)	SN..1506..	134	**149096**



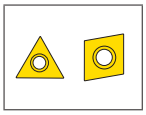
B10-M: 12-19



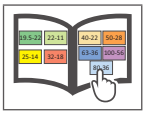
B10-G: 22-25



B10-H



B10: vi-vii



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

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-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI[TECH®] module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
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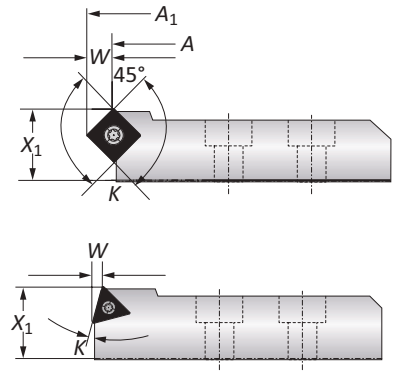
Insert Holders for Rough Machining | Boring Range Example

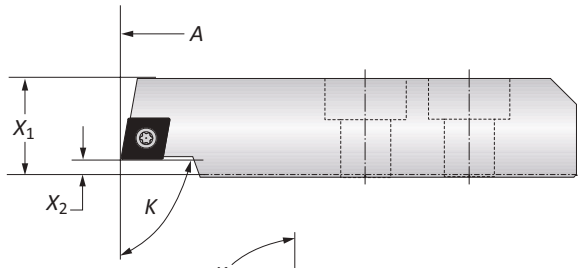
Chamfering Insert Holders

	Insert Holder K	X_1	A / A_1	W	Weight	ISO Code	Insert Form	Part No.
i	15°	1.180	+0.275	0.157	1.322 (lbs)	TC..16T3..	163	**201065**
	20°	1.180	+0.354	0.208	1.322 (lbs)	TC..16T3..	163	**201025**
	30°	1.180	+0.551	0.303	1.322 (lbs)	TC..16T3..	163	**201075**
	45°	1.180	+0.787	0.389	1.322 (lbs)	SC..1505..	114	**201015**
m	15°	30.00	+7.00	4.00	0.60 (kg)	TC..16T3..	163	**201065**
	20°	30.00	+9.00	5.30	0.60 (kg)	TC..16T3..	163	**201025**
	30°	30.00	+14.00	7.70	0.60 (kg)	TC..16T3..	163	**201075**
	45°	30.00	+20.00	9.90	0.60 (kg)	SC..1505..	114	**201015**



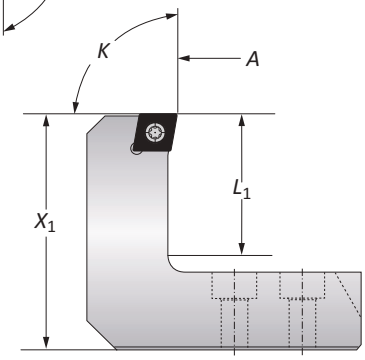
Back-Boring Insert Holders

	Insert Holder K	X_1	X_2	A	Weight	ISO Code	Insert Form	Part No.
i	90°	1.181	0.196	+1.574	1.763 (lbs)	CC..1204..	104	**251010**
	90°	1.181	0.196	+2.952	1.984 (lbs)	CC..1204..	104	**251011**
m	90°	30.00	5.00	+40.00	0.80 (kg)	CC..1204..	104	**251010**
	90°	30.00	5.00	+75.00	0.90 (kg)	CC..1204..	104	**251011**



OD Turning Insert Holders

	Insert Holder K	X_1	L_1	A	Weight	ISO Code	Insert Form	Part No.
i	90°	3.543	2.440	-1.968	2.204 (lbs)	CC..1204..	104	**149040**
m	90°	90.00	62.00	-50.00	1.00 (kg)	CC..1204..	104	**149040**



Boring Range Example

	Serrated Slide Part No.	Bore Range	Insert Holder Part No.	Modified Bore Range	Total Bore Range
i	350051	7.874 - 11.023	201065	+0.280	8.150 - 11.300
	350051	7.874 - 11.023	251010	+1.600	9.450 - 12.600
	350051	7.874 - 11.023	149040	-2.000	5.900 - 9.055
m	349051	200.00 - 280.00	201065	+7.00	207.00 - 287.00
	349051	200.00 - 280.00	251010	+40.00	240.00 - 320.00
	349051	200.00 - 280.00	149040	-50.00	150.00 - 230.00

NOTE: Boring range for serrated slides or base slides are found on pg. B10-G: 4 - 7.
NOTE: Additional insert holders available upon request.

B10-M: 12-19 | B10-G: 22-25 | B10-H | B10: vi-vii

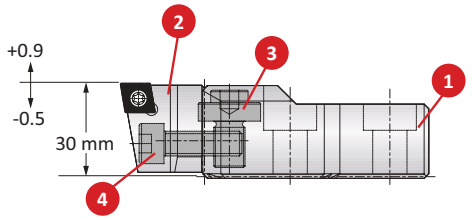
Key on B10-G: 1

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

⚠ WARNING **Exceeding weight capacity for machine tool spindle and tool changer can cause machine damage and/or serious injury. To prevent:**
-Consult machine tool builder for machine's weight limitations.
-Refer to example on page B10-M: 11 for calculating tool assembly weight.
Factory technical assistance is also available for specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

⚠ WARNING **Tool failure can cause serious injury. To prevent:**
-Do not exceed recommended 10xD length-to-diameter ratio or exceed 4 total components (including shank).
-When using Alu-Line components, do not exceed recommended 5xD length-to-diameter ratio.
-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI[TECH®] module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
Factory technical assistance is available for your specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

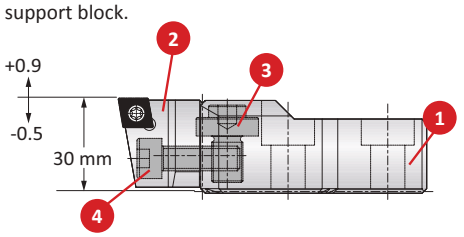
Insert Holders for Height Adjustments and Axial Grooving



Insert Form 103

	Boring Range	1. Support Part No.	2 Insert Holder Insert Form	2 Insert Holder Part No.	3 Adjusting Screw Part No.	3 Adjusting Screw Service Key	4 Fixing Screw Part No.	4 Fixing Screw Service Key
ⓘ	7.874 - 128.150	**149055**	103	**149058**	**315355**	s6 / B	**070369**	s6 / B
ⓜ	200.00 - 3255.00	**149055**	103	**149058**	**315355**	s6 / B	**070369**	s6 / B

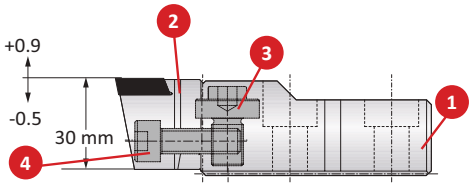
NOTE: Adjusting and fixing screws will be received with support block.



Insert Form 104

	Boring Range	1 Support Part No.	2 Insert Holder Insert Form	2 Insert Holder Part No.	3 Adjusting Screw Part No.	3 Adjusting Screw Service Key	4 Fixing Screw Part No.	4 Fixing Screw Service Key
ⓘ	7.874 - 128.150	**149055**	104	**149056**	**315355**	s6 / B	**070369**	s6 / B
ⓜ	200.00 - 3255.00	**149055**	104	**149056**	**315355**	s6 / B	**070369**	s6 / B

NOTE: Adjusting and fixing screws will be received with support block.



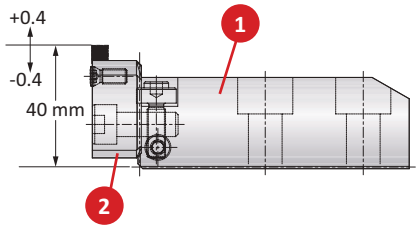
Insert Form 05

	Boring Range	1 Support Part No.	2 Insert Holder Insert Form	2 Insert Holder Part No.	3 Adjusting Screw Part No.	3 Adjusting Screw Service Key	4 Fixing Screw Part No.	4 Fixing Screw Service Key
ⓘ	7.874 - 128.150	**149055**	05	**149085**	**315355**	s6 / B	**070369**	s6 / B
ⓜ	200.00 - 3255.00	**149055**	05	**149085**	**315355**	s6 / B	**070369**	s6 / B

NOTE: Adjusting and fixing screws will be received with support block.

Insert Holders for Axial Grooving

	Insert Holder	1 Support Part No.	2 Insert Holder Part No.	Weight	Insert Form
ⓘ	1.574	**226014**	**226031**	0.661 (lbs)	304
ⓜ	40.00	**226014**	**226031**	0.30 (kg)	304



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

⚠ WARNING **Exceeding weight capacity for machine tool spindle and tool changer can cause machine damage and/or serious injury. To prevent:**
-Consult machine tool builder for machine's weight limitations.
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-Do not exceed recommended 10xD length-to-diameter ratio or exceed 4 total components (including shank).
-When using Alu-Line components, do not exceed recommended 5xD length-to-diameter ratio.
-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI[TECH®] module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
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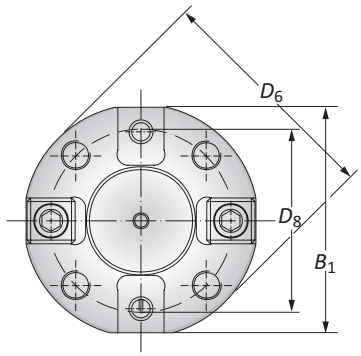
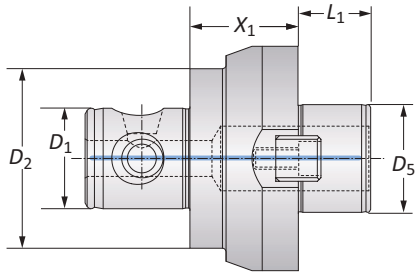
MVS Holding Arbors

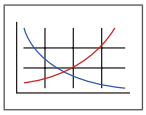




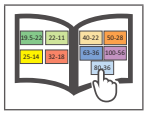
	MVS Connection D_2 | D_1	Holding Arbor Connection	Holding Arbor X_1	L_1	D_5	D_6	D_8	B_1	Weight	Part No.
	80 - 36	D 40 Alu-Line	0.748	1.181	1.575	3.503	2.625	3.150	1.102 (lbs)	**309001**(1)(2)
	80 - 36	D 60	2.362	1.574	2.362	5.082	4.000	4.921	9.038 (lbs)	**209060**(1)
ⓘ	100 - 56	D 40 Alu-Line	1.181	1.181	1.575	3.503	2.625	3.149	2.204 (lbs)	**309041**(2)
	100 - 56	D 60	2.362	1.575	2.362	5.082	4.000	4.921	13.880 (lbs)	**209043**
	100 - 56	D 60 Alu-Line	2.362	1.575	2.362	5.082	4.000	4.921	4.850 (lbs)	**309043**(2)
	80 - 36	D 40 Alu-Line	19.00	30.00	40.00	89.00	66.70	80.00	0.50 (kg)	**309001**(1)(2)
	80 - 36	D 60	60.00	40.00	60.00	129.10	101.60	125.00	4.10 (kg)	**209060**(1)
ⓜ	100 - 56	D 40 Alu-Line	30.00	30.00	40.00	89.00	66.70	80.00	1.00 (kg)	**309041**(2)
	100 - 56	D 60	60.00	40.00	60.00	129.10	101.60	125.00	6.30 (kg)	**209043**
	100 - 56	D 60 Alu-Line	60.00	40.00	60.00	129.10	101.60	125.00	2.20 (kg)	**309043**(2)

(1) For light machining only.
(2) Lightweight aluminum construction only in connection with our serrated slides:
Basic D 40 Serrated Slides: Ø 7.874" - 20.472" (200.00 mm - 520.00 mm) (Page B10-G: 4).
Basic D 60 Serrated Slides: Ø 7.874" - 19.882" (200.00 mm - 505.00 mm) (Page B10-G: 5).

B10-M: 12-19
Key on B10-G: 1



B10: vi-vii



ⓘ = Imperial (in)
ⓜ = Metric (mm)

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-When using Alu-Line components, do not exceed recommended 5xD length-to-diameter ratio.
-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI$^{TECH®}$ module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
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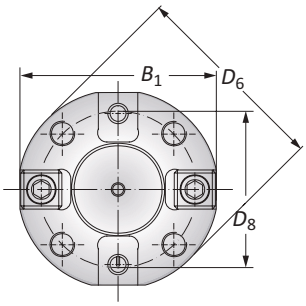
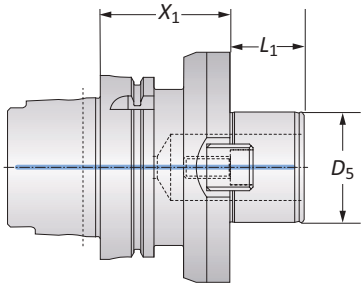
Master Shanks D 40 / D 60

HSK-A (DIN 69 893) Shanks



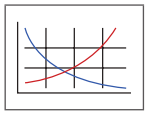


HSK-A (DIN 69 893) Shanks

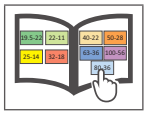
	Taper Size	Connection	Shank X_1	Shank L_1	Shank D_5	Shank D_6	Shank D_8	Shank B_1	Weight	Part No.
ⓘ	63	D 40	2.362	1.181	1.575	3.504	2.626	3.150	4.200 (lbs)	**358015**
ⓘ	100	D 40	2.362	1.181	1.575	3.504	2.626	3.150	7.900 (lbs)	**258021**
ⓘ	100	D 60	2.756	1.575	2.362	5.083	4.000	4.921	11.500 (lbs)	**258061**
ⓘ	100	D 60	2.756	1.575	2.362	5.083	4.000	4.331	11.000 (lbs)	**258098**
ⓜ	63	D 40	60.00	30.00	40.00	89.00	66.70	80.00	1.90 (kg)	**358015**
ⓜ	100	D 40	60.00	30.00	40.00	89.00	66.70	80.00	3.60 (kg)	**258021**
ⓜ	100	D 60	70.00	40.00	60.00	129.10	101.60	125.00	5.20 (kg)	**258061**
ⓜ	100	D 60	70.00	40.00	60.00	129.10	101.60	110.00	5.00 (kg)	**258098**

B10-M: 12-19

Key on B10-G: 1



B10: vi-vii



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-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI$^{TECH®}$ module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
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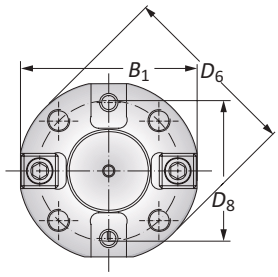
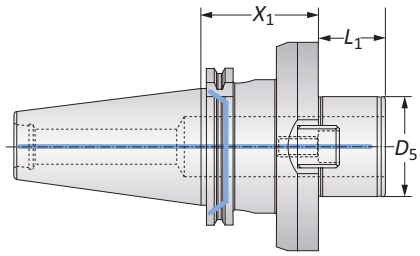
Master Shanks D 40 / D 60

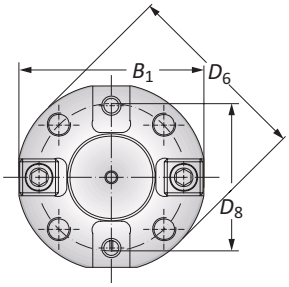
CAT 40 / 50 Shanks with Imperial Threads | CAT 50 Shank with Metric Threads

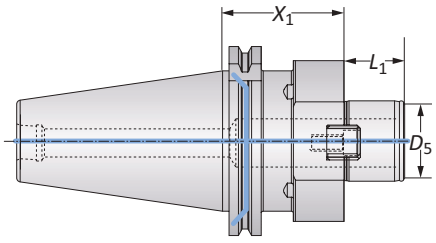




CAT 40 / 50 Shanks with Imperial Threads

	Taper Size	Connection	Shank X_1	L_1	D_5	D_6	D_8	B_1	Weight	Part No.
	40	D 40	1.970	1.181	1.575	3.504	2.626	3.150	4.000 (lbs)	**357004**
ⓘ	50	D 40	1.970	1.181	1.575	3.504	2.626	3.150	8.400 (lbs)	**357001**
	50	D 60	2.756	1.575	2.362	5.083	4.000	4.331	11.700 (lbs)	**357002**
	50	D 60	2.756	1.575	2.362	5.083	4.000	4.921	12.100 (lbs)	**357003**

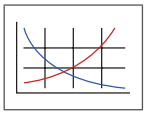




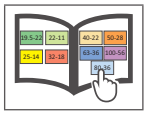
CAT 50 Shanks with Metric Threads

	Taper Size	Connection	Shank X_1	L_1	D_5	D_6	D_8	B_1	Weight	Part No.
ⓜ	50	D 40	60.00	30.00	40.00	89.00	66.70	80.00	4.60 (kg)	**326083**

B10-M: 12-19
Key on B10-G: 1



B10: vi-vii



ⓘ = Imperial (in)
ⓜ = Metric (mm)

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-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI$^{TECH®}$ module, do not exceed recommended 10xD length-to-diameter ratio.
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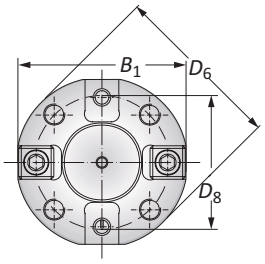
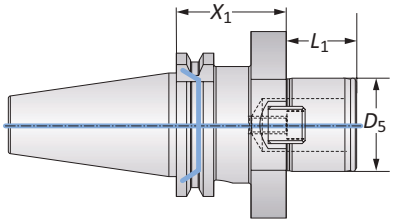
Master Shanks D 40 / D 60

SK (DIN 69 871-AD/B) | BT / JIS B 6339 Shanks

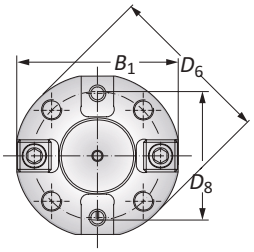


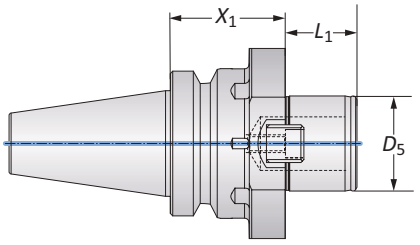


SK (DIN 69 871-AD/B) Shanks

	Taper Size	Connection	Shank X_1	L_1	D_5	D_6	D_8	B_1	Weight	Part No.
i	40	D 40	1.969	1.181	1.575	3.504	2.626	3.150	4.190 (lbs)	**326080***
	50	D 40	1.969	1.181	1.575	3.504	2.626	3.150	9.040 (lbs)	**K42796**
	50	D 60	2.756	1.575	2.362	5.083	4.000	4.921	12.790 (lbs)	**326087**
	50	D 60	2.756	1.575	2.362	5.083	4.000	4.331	12.130 (lbs)	**326088**
m	40	D 40	50.00	30.00	40.00	89.00	66.70	80.00	1.90 (kg)	**326080***
	50	D 40	50.00	30.00	40.00	89.00	66.70	80.00	4.10 (kg)	**K42796**
	50	D 60	70.00	40.00	60.00	129.10	101.60	125.00	5.80 (kg)	**326087**
	50	D 60	70.00	40.00	60.00	129.10	101.60	110.00	5.50 (kg)	**326088**

*For light machining only

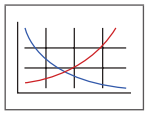




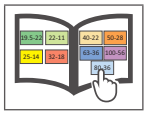
BT / JIS B 6339 Shanks

	Taper Size	Connection	Shank X_1	L_1	D_5	D_6	D_8	B_1	Weight	Part No.
i	40	D 40	1.969	1.181	1.575	3.504	2.626	3.150	4.000 (lbs)	**326084**
	50	D 40	2.165	1.181	1.575	3.504	2.626	3.150	9.900 (lbs)	**326082**
	50	D 60	3.150	1.575	2.362	5.083	4.000	–	17.600 (lbs)	**326062**
m	40	D 40	50.00	30.00	40.00	89.00	66.70	80.00	1.80 (kg)	**326084**
	50	D 40	55.00	30.00	40.00	89.00	66.70	80.00	4.50 (kg)	**326082**
	50	D 60	80.00	40.00	60.00	19.10	101.60	–	8.00 (kg)	**326062**

B10-M: 12-19
Key on B10-G: 1



B10: vi-vii



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

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Factory technical assistance is also available for specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

⚠ WARNING **Tool failure can cause serious injury. To prevent:**
-Do not exceed recommended 10xD length-to-diameter ratio or exceed 4 total components (including shank).
-When using Alu-Line components, do not exceed recommended 5xD length-to-diameter ratio.
-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI[TECH®] module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
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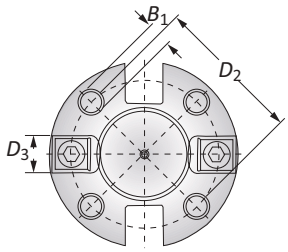
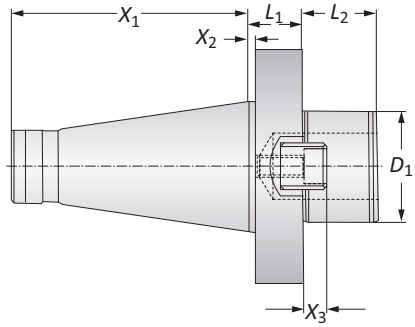
Master Shanks D 40 / D 60

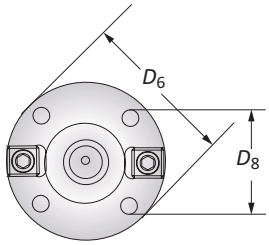
NMTB Shanks | DIN 2080 Shanks

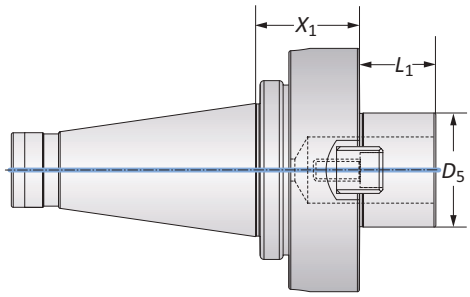




NMTB Shanks

	Taper Size	Connection	Shank X_1	X_2	L_1	L_2	D_1	X_3	D_2	D_3	B_1	Weight	Part No.
i	50	D 60	4.992	0.126	1.142	1.575	2.362	0.492	4.000	1.000	M16	17.637 (lbs)	**198051T004480**
m	50	D 60	126.80	3.20	29.00	40.00	60.00	12.50	101.60	25.40	M16	8.00 (kg)	**198051T004480**





DIN 2080 Shanks

	Taper Size	Connection	Shank X_1	L_1	D_5	D_6	D_8	B_1	Weight	Part No.
i	50	D 60	2.165	1.575	2.362	5.039	4.000	–	14.991 (lbs)	**326035**
m	50	D 60	55.00	40.00	60.00	128.00	101.60	–	6.80 (kg)	**326035**

B10-M: 12-19
B10: vi-vii
Key on B10-G: 1

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

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-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI$^{TECH®}$ module, do not exceed recommended 10xD length-to-diameter ratio.
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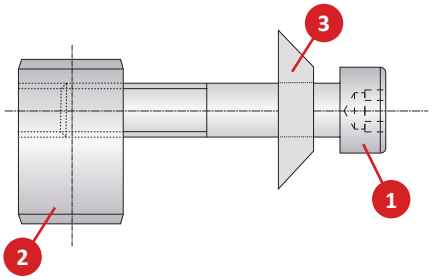
538 (537) Accessories

Clamping Pieces | Counterweights | Insert Holders for Abrasive Materials

538 (537) Clamping Pieces

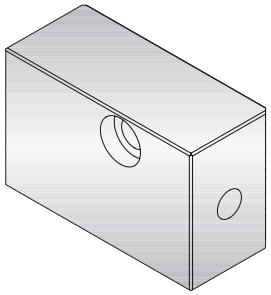
Slide Type	Complete Part No.	Service Key		Replacement Components 1 Cap Screw	2 Clamping Nut	3 Disk Spring
Serrated Tool Bodies	**137026**	115578	s6 / B	**215101**	**140118**	**337105**
Basic and Eco Slides	**137027**			**215102**	**215105**	**337105**
Flex Slides	**137019**			**415900**	**215105**	**337105**



538 (537) Counterweights

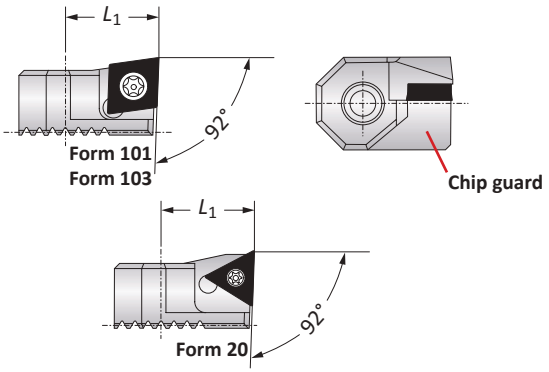
	Boring Range	Part No.
i	3.937 - 128.15	**538055**
m	100.00 - 3255.00	**537055**

NOTE: Clamping piece sold separately.



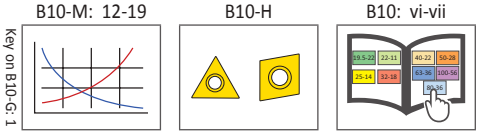
Insert Holders for Abrasive Materials

	Boring Range	L_1	Weight	Insert Form	Part No.
i	3.937 - 128.150	0.708	0.066 (lbs)	20	**211061**
	3.937 - 128.150	0.708	0.066 (lbs)	101	**211063**
	3.937 - 128.150	0.708	0.066 (lbs)	103	**211065**
m	100.00 - 3255.00	18.00	0.03 (kg)	20	**211061**
	100.00 - 3255.00	18.00	0.03 (kg)	101	**211063**
	100.00 - 3255.00	18.00	0.03 (kg)	103	**211065**



B10-M: 12-19 | B10-H | B10: vi-vii

Key on B10-G: 1



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

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-When using a NOVI[TECH®] module, do not exceed recommended 10xD length-to-diameter ratio.
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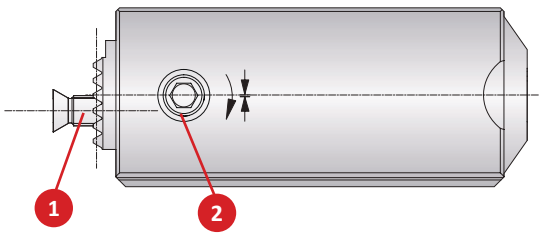
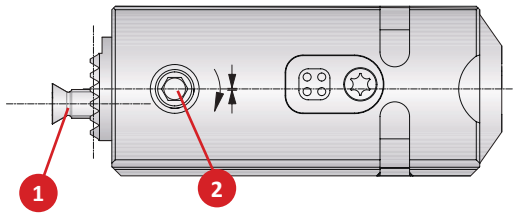
538 (537) Accessories | 3E[TECH+] Accessories

Accessories



538 (537) Analog Cassette



538 (537) Cassette

538 (537) Accessories

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

3E[TECH+] Accessories

1 Charging Unit Part No.
536016

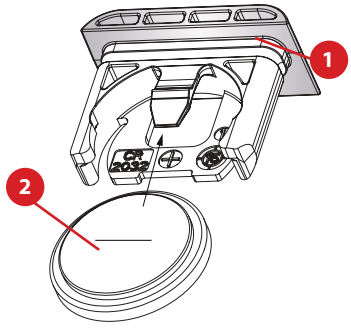
NOTE: Charging unit sold separately from 3E[TECH+].

NOTE: 3E[TECH+] adjustment accuracy of 0.00005" or 0.001 mm on diameter.

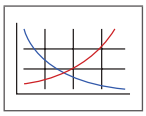
3E[TECH] (Old Display) Accessories

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

NOTE: Not required for 3E[TECH+] (new display).

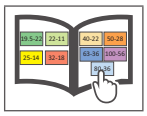


B10-M: 12-19



Key on B10-G: 1

B10: vi-vii



ⓘ = Imperial (in)
ⓜ = Metric (mm)

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-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
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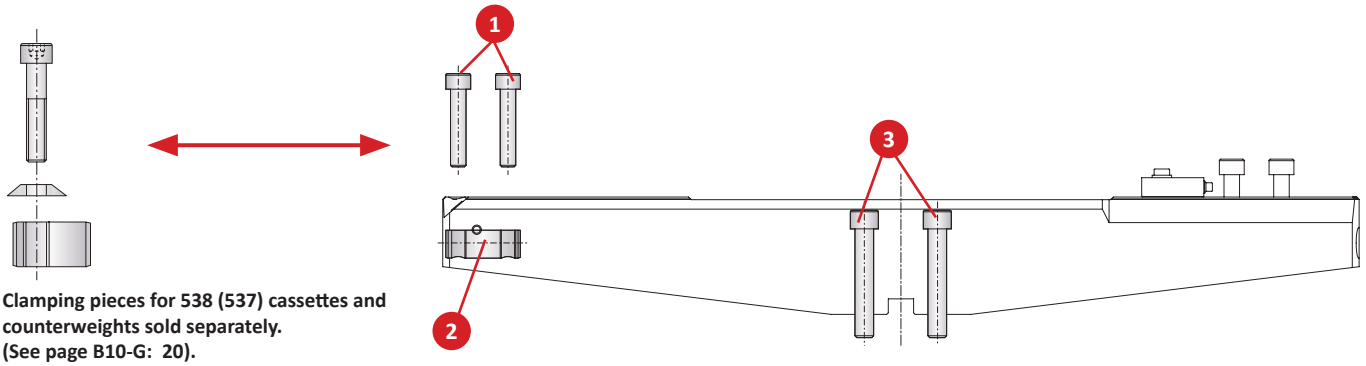
Serrated Slide Basic D 40 Accessories

Clamping Pieces

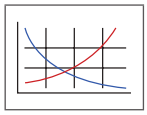


Clamping pieces for 538 (537) cassettes and counterweights sold separately.
(See page B10-G: 20).

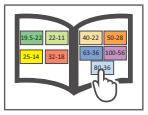
Clamping Pieces

	Connection	Serrated Slide Part No.	1 Cap Screw Part No.	1 Cap Screw Service Key	2 Clamping Nut Part No.	3 Thread Pin Part No.	3 Thread Pin Service Key	Cap Screw Part No.	Cap Screw Service Key
ⓘ	D 40	350021	**115118**	s8 / B	**115669**	**349010**	s4 / F	**315186**	s10 / C
	D 40	350022	**115118**	s8 / B	**115669**	**349011**	s4 / F	**315186**	s10 / C
	D 40	350023	**115118**	s8 / B	**115669**	**349012**	s4 / F	**315186**	s10 / C
	D 40	350024	**115118**	s8 / B	**115669**	**349013**	s4 / F	**315186**	s10 / C
ⓜ	D 40	349021	**115118**	s8 / B	**115669**	**349010**	s4 / F	**315186**	s10 / C
	D 40	349022	**115118**	s8 / B	**115669**	**349011**	s4 / F	**315186**	s10 / C
	D 40	349023	**115118**	s8 / B	**115669**	**349012**	s4 / F	**315186**	s10 / C
	D 40	349024	**115118**	s8 / B	**115669**	**349013**	s4 / F	**315186**	s10 / C

B10-M: 12-19
Key on B10-G: 1



B10: vi-vii



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-When using a NOVI$^{TECH®}$ module, do not exceed recommended 10xD length-to-diameter ratio.
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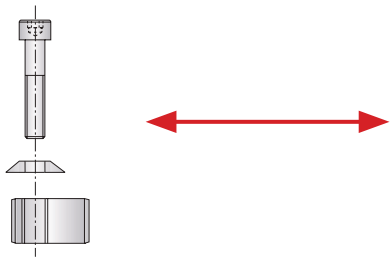
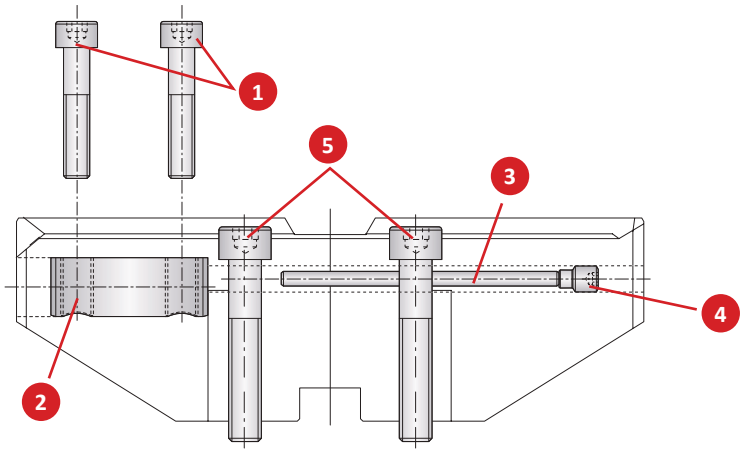
Serrated Slide Basic D 60 Accessories

Clamping Pieces | Cover Plates



Clamping pieces for 538 (537) cassettes and counterweights sold separately. (See page B10-G: 20).

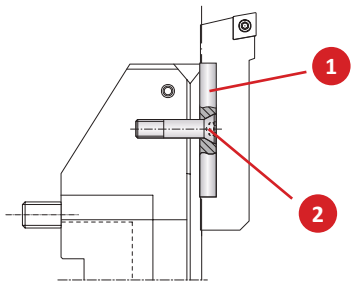


Clamping Pieces

	Connection	Serrated Slide Part No.	1 Cap Screw Part No.	1 Cap Screw Service Key	2 Clamping Nut Part No.	3 Adjustment Pin Part No.	4 Thread Pin Part No.	4 Thread Pin Service Key	5 Cap Screw Part No.	5 Cap Screw Service Key
ⓘ	D 60	350051	**115118**	s8 / B	**115669**	**141112**	**115196**	s4 / F	**115170**	s14 / C
	D 60	350052	**115118**	s8 / B	**115669**	**141113**	**115196**	s4 / F	**115170**	s14 / C
	D 60	350053	**115118**	s8 / B	**115669**	**141114**	**115196**	s4 / F	**115170**	s14 / C
	D 60	350054	**115118**	s8 / B	**115669**	**141115**	**115196**	s4 / F	**115170**	s14 / C
ⓜ	D 60	349051	**115118**	s8 / B	**115669**	**141112**	**115196**	s4 / F	**115170**	s14 / C
	D 60	349052	**115118**	s8 / B	**115669**	**141113**	**115196**	s4 / F	**115170**	s14 / C
	D 60	349053	**115118**	s8 / B	**115669**	**141114**	**115196**	s4 / F	**115170**	s14 / C
	D 60	349054	**115118**	s8 / B	**115669**	**141115**	**115196**	s4 / F	**115170**	s14 / C

Cover Plates for Basic D 60 Serrated Slides

	Connection	Serrated Slide Part No.	1 Cover Plate Part No.	2 Countersunk Screw Part No.	Service Key
ⓘ	D 60	350051	**349016**	**063106**	s4 / B
	D 60	350052	**349017**	**063106**	s4 / B
	D 60	350053	**349017**	**063106**	s4 / B
	D 60	350054	**349017**	**063106**	s4 / B
ⓜ	D 60	349051	**349016**	**063106**	s4 / B
	D 60	349052	**349017**	**063106**	s4 / B
	D 60	349053	**349017**	**063106**	s4 / B
	D 60	349054	**349017**	**063106**	s4 / B



B10-M: 12-19
Key on B10-G: 1
B10: vi-vii

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ⓜ = Metric (mm)

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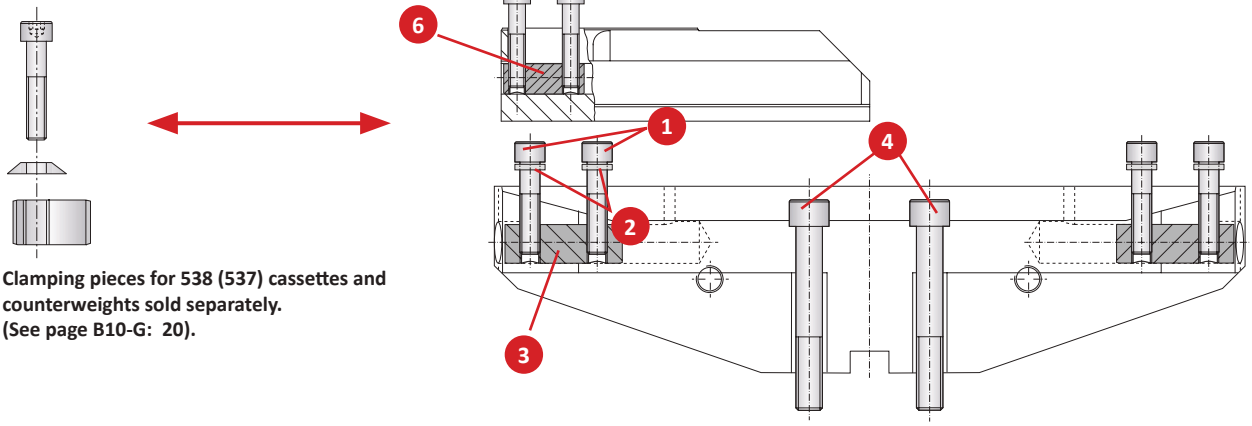
Serrated Slide Eco D 60 Accessories

Clamping Pieces



Clamping pieces for 538 (537) cassettes and counterweights sold separately.
(See page B10-G: 20).

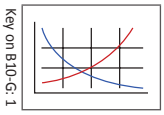
Base Slide Clamping Pieces

	Connection	Base Slide Part No.	1 Cap Screw Part No.	1 Cap Screw Service Key	2 Disc Part No.	3 Clamping Nut Part No.	4 Cap Screw Part No.	4 Cap Screw Service Key
ⓘ	D 60	350005	**115771**	s10 / C	**115737**	**415181**	**077128**	s14 / C
	D 60	350006	**115771**	s10 / C	**115737**	**415181**	**077128**	s14 / C
ⓜ	D 60	349005	**115771**	s10 / C	**115737**	**415181**	**077128**	s14 / C
	D 60	349006	**115771**	s10 / C	**115737**	**415181**	**077128**	s14 / C

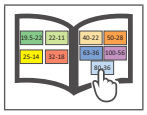
Serrated Slide Clamping Pieces

	Serrated Slide Part No.	5 Cap Screw Part No.	5 Cap Screw Service Key	6 Clamping Nut Part No.
ⓘ	350014	**115118**	s8 / B	**115669**
	350015	**115118**	s8 / B	**115669**
ⓜ	349014	**115118**	s8 / B	**115669**
	349015	**115118**	s8 / B	**115669**

B10-M: 12-19



B10: vi-vii



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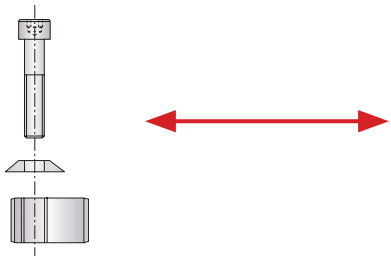
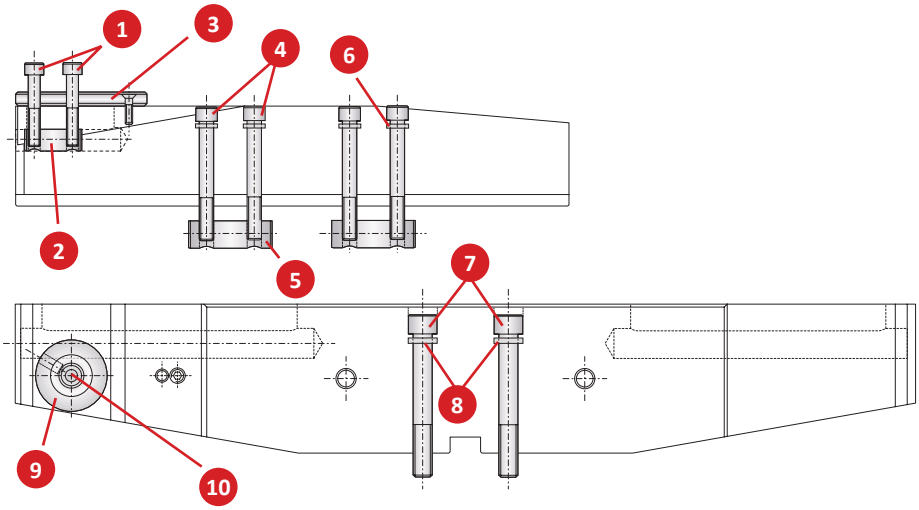
-Do not exceed recommended 10xD length-to-diameter ratio or exceed 4 total components (including shank).
-When using Alu-Line components, do not exceed recommended 5xD length-to-diameter ratio.
-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI$^{TECH®}$ module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
Factory technical assistance is available for your specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

Serrated Slide Flex D 60 Accessories

Clamping Pieces



Clamping pieces for 538 (537) cassettes and counterweights sold separately
(See page B10-G: 20).



Serrated Slide Clamping Pieces

	Serrated Slide	1 Cap Screw		2 Clamping Nut	3 Adapter		4 Cap Screw		5 Clamping Nut	6 Disk
	Part No.	Part No.	Service Key	Part No.	Part No.	Service Key	Part No.	Service Key	Part No.	Part No.
ⓘ	350035	**115307**	s8 / B	**115669**	**349043**	s4 / B	**315186**	s10 / C	**349202**	**115737**
ⓘ	350036	**115307**	s8 / B	**115669**	**349043**	s4 / B	**077110**	s10 / C	**415181**	**115737**
ⓘ	350037	**115307**	s8 / B	**115669**	**349043**	s4 / B	**315403**	s10 / C	**415181**	**115737**
ⓘ	350038	**115307**	s8 / B	**115669**	**349043**	s4 / B	**315415**	s10 / C	**415181**	**115737**
ⓜ	349035	**115307**	s8 / B	**115669**	**349043**	s4 / B	**315186**	s10 / C	**349202**	**115737**
ⓜ	349036	**115307**	s8 / B	**115669**	**349043**	s4 / B	**077110**	s10 / C	**415181**	**115737**
ⓜ	349037	**115307**	s8 / B	**115669**	**349043**	s4 / B	**315403**	s10 / C	**415181**	**115737**
ⓜ	349038	**115307**	s8 / B	**115669**	**349043**	s4 / B	**315415**	s10 / C	**415181**	**115737**

Base Slide Clamping Pieces

	Connection	Base Slide	7 Cap Screw		8 Disk	9 Injector	10 Countersunk Screw	
		Part No.	Part No.	Service Key	Part No.	Part No.	Part No.	Service Key
ⓘ	D 60	350031	**115736**	s14 / C	**068168**	**349201**	**415898**	s6 / B
ⓘ	D 60	350032	**415913**	s14 / C	**068168**	**349201**	**415898**	s6 / B
ⓘ	D 60	350033	**215509**	s14 / C	**068168**	**349201**	**415898**	s6 / B
ⓘ	D 60	350034	**415636**	s14 / C	**068168**	**349201**	**415898**	s6 / B
ⓜ	D 60	349031	**115736**	s14 / C	**068168**	**349201**	**415898**	s6 / B
ⓜ	D 60	349032	**415913**	s14 / C	**068168**	**349201**	**415898**	s6 / B
ⓜ	D 60	349033	**215509**	s14 / C	**068168**	**349201**	**415898**	s6 / B
ⓜ	D 60	349034	**415636**	s14 / C	**068168**	**349201**	**415898**	s6 / B

B10-M: 12-19
Key on B10-G: 1
B10: vi-vii

ⓘ = Imperial (in)
ⓜ = Metric (mm)

⚠ WARNING **Exceeding weight capacity for machine tool spindle and tool changer can cause machine damage and/or serious injury. To prevent:**
-Consult machine tool builder for machine's weight limitations.
-Refer to example on page B10-M: 11 for calculating tool assembly weight.
Factory technical assistance is also available for specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

⚠ WARNING **Tool failure can cause serious injury. To prevent:**
-Do not exceed recommended 10xD length-to-diameter ratio or exceed 4 total components (including shank).
-When using Alu-Line components, do not exceed recommended 5xD length-to-diameter ratio.
-When using tool steel components, do not exceed recommended 6xD length-to-diameter ratio.
-When using heavy metal components, do not exceed recommended 8xD length-to-diameter ratio.
-When using a carbide shank, do not exceed recommended 9xD length-to-diameter ratio.
-When using a NOVI$^{TECH®}$ module, do not exceed recommended 10xD length-to-diameter ratio.
-Refer to examples on pages B10-M: 8-10 for calculating length-to-diameter ratio.
Factory technical assistance is available for your specific applications through our Application Engineering department. *ext:* **7611** | *email:* **appeng@alliedmachine.com**

Guaranteed Test / Demo Application Form

Distributor PO #	

The following must be filled out completely before your test will be considered.

IMPORTANT: For processing, send purchase order to your Allied Field Sales Engineer (FSE). Please clearly mark the paperwork as "Test Order."

Distributor Information

Company Name: _____
Contact: _____
Account Number: _____
Phone: _____
Email: _____

End User Information

Company Name: _____
Contact: _____
Industry: _____
Phone: _____
Email: _____

Current Process

List all tooling, coatings, substrates, speeds and feeds, tool life, and any problems you are experiencing.

_____

_____

Test Objective

List what would make this a successful test (i.e. penetration rate, finish, tool life, hole size, etc.).

_____

_____

Application Information

Hole Diameter: _____ in/mm
Tolerance: _____
Material: _____ (4150, A36, cast iron, etc.)
Preexisting Diameter: _____ in/mm
Depth of Cut: _____ in/mm
Hardness: _____ (BHN, Rc)
Required Finish: _____ RMS
State: _____ (Casting, hot rolled, forging)

Machine Information

Machine Type: _____ (Lathe, screw machine, machine center, etc.)
Builder: _____ (Haas, Mori Seiki, etc.)
Model #: _____
Shank Required: _____ (CAT50, Morse taper, etc.)
Power: _____ HP/KW
Thrust: _____ lbs/N

Rigidity:
- ☐ Excellent
- ☐ Good
- ☐ Poor

Orientation:
- ☐ Vertical
- ☐ Horizontal

Tool Rotating:
- ☐ Yes
- ☐ No

Coolant Information

Coolant Delivery: _____ (Through tool, flood)
Coolant Pressure: _____ PSI / bar
Coolant Type: _____ (Air mist, oil, synthetic, water soluble, etc.)
Coolant Volume: _____ GPM / LPM

Requested Tooling

QTY	Item Number

QTY	Item Number

ALLIED MACHINE & ENGINEERING

Allied Machine & Engineering
120 Deeds Drive
Dover, OH 44622

Telephone: (330) 343-4283
Toll Free USA & Canada: (800) 321-5537
Email: info@alliedmachine.com

ALLIED MACHINE & ENGINEERING

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Allied Machine's sole and exclusive obligation under this warranty is limited to, at its option, without additional charge, replacing or repairing this product or issuing a credit. For this warranty to be applied, the product must be returned freight prepaid to the plant designated by an Allied Machine representative and which, upon inspection, is determined by Allied Machine to be defective in material and workmanship.

Complete information as to operating conditions, machine, setup, and the application of cutting fluid should accompany any product returned for inspection. This warranty shall not apply to any Allied Machine products which have been subjected to misuse, abuse, improper operating conditions, improper machine setup or improper application of cutting fluid or which have been repaired or altered if such repair or alteration, in the judgement of Allied Machine, would adversely affect the performance of the product.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Allied Machine shall have no liability or responsibility for any claim, whether in contract, tort or otherwise, for any loss or damage arising out of, connected with, or resulting from the manufacture, sale, delivery or use of any product sold hereunder, in excess of the cost of replacement or repair as provided herein.

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United States

Allied Machine & Engineering
120 Deeds Drive
Dover OH 44622
United States

Phone:
+1.330.343.4283

Toll Free USA and Canada:
800.321.5537

Toll Free USA and Canada:
800.223.5140

Allied Machine & Engineering
485 W Third Street
Dover OH 44622
United States

Phone:
+1.330.343.4283

Toll Free USA and Canada:
800.321.5537

Europe

Allied Machine & Engineering Co. (Europe) Ltd
93 Vantage Point
Pensnett Estate
Kingswinford
West Midlands
DY6 7FR England

Phone:
+44 (0) 1384 400 900

Wohlhaupter® GmbH
Maybachstrasse 4
Postfach 1264
72636 Frickenhausen
Germany

Phone:
+49 (0) 7022 408-0

Asia

Wohlhaupter® India Pvt. Ltd.
B-23, 3rd Floor
B Block Community Centre
Janakpuri, New Delhi - 110058
India

Phone:
+91 (0) 11.41827044

Your local Allied Machine representative:

www.alliedmachine.com

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