ALLIED MACHINE & ENGINEERING

Holemaking Solutions for Today's Manufacturing

Drilling

Reaming

Burnishing

Threading

Specials

Wohlhaupter®

▶ *BORING*

Versatile Fine Boring

WOHLHAUPTER®

SECTION

B10-A

Versatile Fine Boring

Wohlhaupter® Versatile Fine Boring

VarioBore | 249 (248) | PrimeBore | Digital 511 (510) | DigiBore

- **Diameter Range:** 0.016" - 8.189" (0.40 mm - 208.00 mm)

NOTE: Imperial items pictured.

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

NOTE: Internal digital and vernier adjustment accuracy of 0.0001" or 0.002 mm on diameter.

WOHLHAUPTER®

Precision boring at its finest.

From high precision to high production, Wohlhaupter has the right solution for your hole finishing applications. With the most reliable digital readout displays, the Wohlhaupter versatile boring product line offers the most precise and flexible modular system on the market.

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.

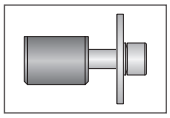
NOTICE means that failure to follow the precautions in this message could result in damage to the tool or machine but not result in personal injury.

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

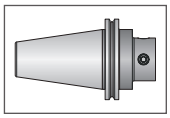
Visit www.alliedmachine.com for the most up-to-date information and procedures.

Applicable Industries

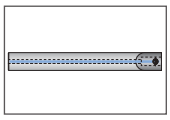
Reference Icons
The following icons will appear throughout the catalog to help you navigate between products.



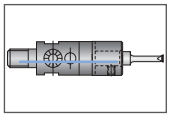
Clamping Elements
For use with insert holders and boring heads



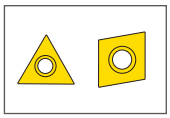
Shanks
A variety of shanks for different machines



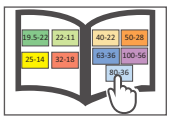
249 (248) Shanks
A variety of shanks for different machines



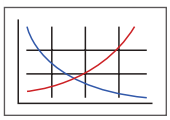
249 (248) Boring Head
249 (248) boring head that connects into the adapter shanks



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

Series	Diameter Range	
	Imperial (inch)	Metric (mm)
VarioBore 563 (536)	0.016 - 5.984	0.40 - 152.00
249 (248) Boring Head	0.118 - 1.189	3.00 - 30.20
PrimeBore 451 (450)	0.118 - 8.189	3.00 - 208.00
Digital 511 (510)	0.016 - 1.339	0.40 - 12.00
DigiBore 504 (501)	0.118 - 8.189	3.00 - 208.00

Versatile Fine Boring Contents

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PrimeBore

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VarioBore Product Overview

VarioBore with 3E^{TECH+}
VERSATILE FINE BORING

Need more versatility?

The Wohlhaupter® VarioBore head offers precision and versatility, and the 3E^{TECH+} docking port provides convenient and simple diameter adjustments.

Experience ***precision boring*** for yourself.

- Diameter range: 0.016" - 5.984" (0.40 mm - 152.00 mm).
- Offers outside turning capabilities: 0.079" - 2.598" (2.00 mm - 66.00 mm).
- Ease the stress of working on different. day-to-day projects with boring kits.
- 3E^{TECH+} module provides a simple digital readout.
- Max spindle speed: 27,500 RPM.

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

NOTE: Vernier 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**

VARIO BORE with 3E TECH+ Universal Digital Readout Module

3E[TECH+] Universal Digital Module

VarioBore Head

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

NOTE: Vernier adjustment accuracy of 0.0001" or 0.002 mm on diameter.

Coolant Delivery System

Insert Holder
Ø 2.047" - 4.016"
(Ø 52.00 mm - 102.00 mm)

Outside Turning
Ø 0.157" - 2.598"
(Ø 4.00 mm - 66.00 mm)

Serrated Tool Body

Serrated Tool Body

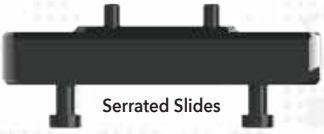
Carbide Boring Bar
Ø 0.394" - 0.787"
(Ø 10.00 mm - 20.00 mm)

Heavy Metal Boring Bar
Ø 0.236" - 0.394"
(Ø 6.00 mm - 10.00 mm)

Steel Boring Bar
Ø 0.236" - 1.063"
(Ø 6.00 mm - 27.00 mm)

Adapter

Reducing Sleeve



Serrated Slides

Insert Holder
Ø 1.142" - 2.087"
(Ø 29.00 mm - 53.00 mm)

Insert Holder
Ø 0.787" - 1.260"
(Ø 20.00 mm - 32.00 mm)

Mini Boring Bar
Ø 0.118" - 0.394"
(Ø 3.00 mm - 10.00 mm)

Coated Carbide Mini Boring Bar
Ø 0.016" - 0.118"
(Ø 0.40 mm - 3.00 mm)

Counter Weight

Outside Turning
Ø 0.079" - 2.283"
(Ø 2.00 mm - 58.00 mm)

Insert Holder
Ø 2.677" - 5.984"
(Ø 68.00 mm - 152.00 mm)

OPERATION **VERSATILITY**

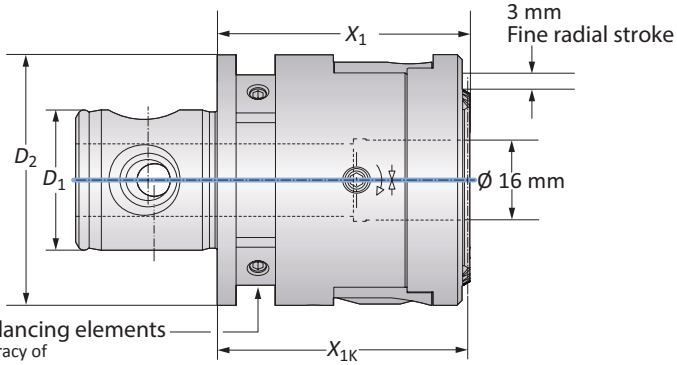
from **0.016"** to **5.984"** (**0.40 mm** to **152.00 mm**)
plus outside turning

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

NOTE: Vernier adjustment accuracy of 0.0001" or 0.002 mm on diameter.

Digital 3E^{TECH+} Boring Heads

Diameter Range: 0.016" - 5.984" (0.40 mm - 152.00 mm)



NOTE: Vernier adjustment accuracy of 0.0001" or 0.002 mm on diameter.

VarioBore Digital 3E^{TECH+} Boring Head

	MVS Connection D_2 | D_1	Boring Range	Boring Head X_1	Boring Head X_{1K}	Weight	Part No.
i	50 - 28	0.016 - 5.984	1.969	1.949	1.543 (lbs)	**563002**
m	50 - 28	0.40 - 152.00	50.00	49.50	0.70 (kg)	**536002**

NOTE: Balancing elements, 3E^{TECH+} digital readout module, and charging unit must be ordered separately.
NOTE: VarioBore heads are compatible with Kaiser® connection.

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.

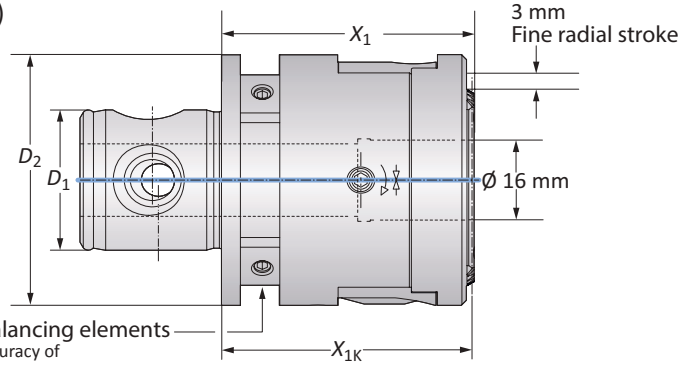
B10-M: 12-19
Key on B10-A:1
B10-F
B10: vi-vii

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

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**

Analog Boring Heads

Diameter Range: 0.016" - 5.984" (0.40 mm - 152.00 mm)



NOTE: Vernier adjustment accuracy of 0.0001" or 0.002 mm on diameter.

VarioBore Analog Boring Head

	MVS Connection D_2 | D_1	Boring Range	Boring Head X_1	Boring Head X_{1K}	Weight	Part No.
i	50 - 28	0.016 - 5.984	1.969	1.949	1.543 (lbs)	**563001***
m	50 - 28	0.40 - 152.00	50.00	49.50	0.70 (kg)	**536001***

***Not equipped with digital capabilities.**
NOTE: Balancing elements must be ordered separately.
NOTE: VarioBore heads are compatible with Kaiser® connection.

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

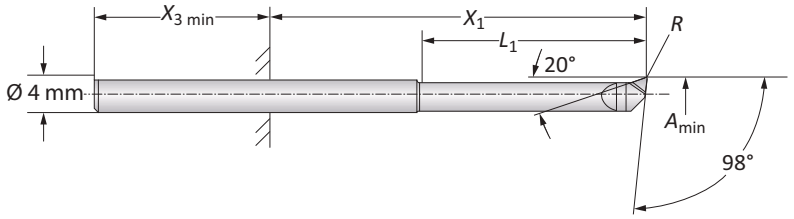
Key on B10-A:1

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

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**

Mini Boring Bars

WHC126 Coated Carbide | Diameter Range: 0.016" - 0.118" (0.40 mm - 3.00 mm)



Mini Boring Bars

	Boring Range	Boring Bar*				
	A_{min}	X_1	$X_{3\ min}$	L_1	R	Part No.
ⓘ	0.016	0.118 - 0.669	0.980	0.079	0.0010	**081401WHC126**
ⓘ	0.024	0.157 - 0.709	0.980	0.118	0.0020	**081402WHC126**
ⓘ	0.031	0.197 - 0.748	0.980	0.157	0.0020	**081403WHC126**
ⓘ	0.039	0.236 - 0.787	0.980	0.197	0.0025	**081404WHC126**
ⓘ	0.059	0.335 - 0.886	0.980	0.295	0.0025	**081405WHC126**
ⓘ	0.079	0.433 - 0.984	0.980	0.394	0.0025	**081406WHC126**
ⓘ	0.098	0.531 - 1.083	0.980	0.492	0.0025	**081407WHC126**
ⓘ	0.110	0.591 - 1.142	0.980	0.551	0.0030	**081408WHC126**
ⓜ	0.40	3.00 - 17.00	25.00	2.00	0.03	**081401WHC126**
ⓜ	0.60	4.00 - 18.00	25.00	3.00	0.04	**081402WHC126**
ⓜ	0.80	5.00 - 19.00	25.00	4.00	0.04	**081403WHC126**
ⓜ	1.00	6.00 - 20.00	25.00	5.00	0.05	**081404WHC126**
ⓜ	1.50	8.50 - 22.50	25.00	7.50	0.05	**081405WHC126**
ⓜ	2.00	11.00 - 25.00	25.00	10.00	0.05	**081406WHC126**
ⓜ	2.50	13.50 - 27.50	25.00	12.50	0.05	**081407WHC126**
ⓜ	2.80	15.00 - 28.00	25.00	14.00	0.07	**081408WHC126**

*Fixture-through reducing sleeve (B10-A: 17).

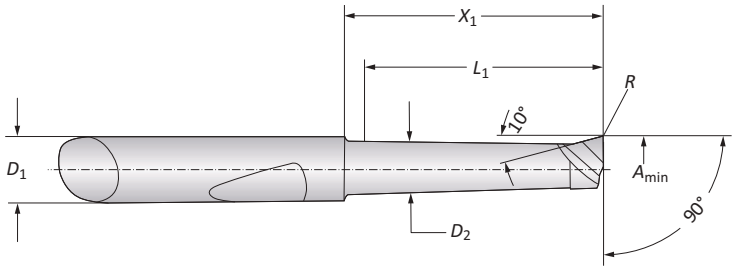
B10-M: 12-19
Key on B10-A: 1

B10: vi-vii

ⓘ = Imperial (in)
ⓜ = Metric (mm)

Mini Boring Bars

WHC05 | WHW04 | WBN150 | Diameter Range: 0.118" - 0.394" (3.00 mm - 10.00 mm)

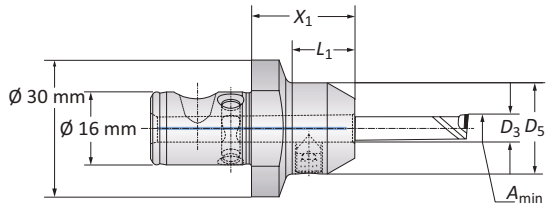


Mini Boring Bars

	Boring Range	Boring Bar					Part No.		
	A_{min}	D_1	D_2	X_1	L_1	R	Coated Carbide	Uncoated Carbide	CBN
	0.118	0.236	0.102	0.452	0.393	0.003	**081306WHC05**	–	**081322WBN150**
	0.118	0.236	0.102	0.649	0.590	0.003	**081307WHC05**	**081307WHW04**	–
	0.157	0.236	0.141	0.472	0.393	0.007	**081308WHC05**	–	**081317WBN150**
	0.157	0.236	0.141	0.669	0.590	0.007	**081309WHC05**	–	**081341WBN150**
	0.157	0.236	0.141	0.866	0.787	0.007	**081310WHC05**	**081310WHW04**	–
	0.196	0.236	0.181	0.472	0.393	0.007	**081311WHC05**	–	–
ⓘ	0.196	0.236	0.181	0.866	0.787	0.007	**081312WHC05**	–	**081319WBN150**
	0.196	0.236	0.181	1.259	1.181	0.007	**081313WHC05**	**081313WHW04**	–
	0.236	0.236	0.220	0.866	0.787	0.007	**081314WHC05**	–	**081320WBN150**
	0.236	0.236	0.220	1.259	1.181	0.007	**081315WHC05**	–	**081321WBN150**
	0.236	0.236	0.220	1.653	1.574	0.007	**081316WHC05**	**081316WHW04**	–
	0.315	0.315	0.229	0.984	0.905	0.007	**081323WHC05**	–	–
	0.315	0.315	0.229	1.968	1.889	0.007	**081324WHC05**	–	–
	3.00	6.00	2.60	11.50	10.00	0.10	**081306WHC05**	–	**081322WBN150**
	3.00	6.00	2.60	16.50	15.00	0.10	**081307WHC05**	**081307WHW04**	–
	4.00	6.00	3.60	12.00	10.00	0.20	**081308WHC05**	–	**081317WBN150**
	4.00	6.00	3.60	17.00	15.00	0.20	**081309WHC05**	–	**081341WBN150**
	4.00	6.00	3.60	22.00	20.00	0.20	**081310WHC05**	**081310WHW04**	–
	5.00	6.00	4.60	12.00	10.00	0.20	**081311WHC05**	–	–
ⓜ	5.00	6.00	4.60	22.00	20.00	0.20	**081312WHC05**	–	**081319WBN150**
	5.00	6.00	4.60	32.00	30.00	0.20	**081313WHC05**	**081313WHW04**	–
	6.00	6.00	5.60	22.00	20.00	0.20	**081314WHC05**	–	**081320WBN150**
	6.00	6.00	5.60	32.00	30.00	0.20	**081315WHC05**	–	**081321WBN150**
	6.00	6.00	5.60	42.00	40.00	0.20	**081316WHC05**	**081316WHW04**	–
	8.00	8.00	7.60	25.00	23.00	0.20	**081323WHC05**	–	–
	8.00	8.00	7.60	50.00	48.00	0.20	**081324WHC05**	–	–

Adapters

	Boring Range	Adapter				
	A_{min}	D_3	D_5	X_1	L_1	Part No.
ⓜ	3.00	6.00	20.00	22.50	14.00	**319010**
	8.00	8.00	22.00	22.50	14.00	**236071**



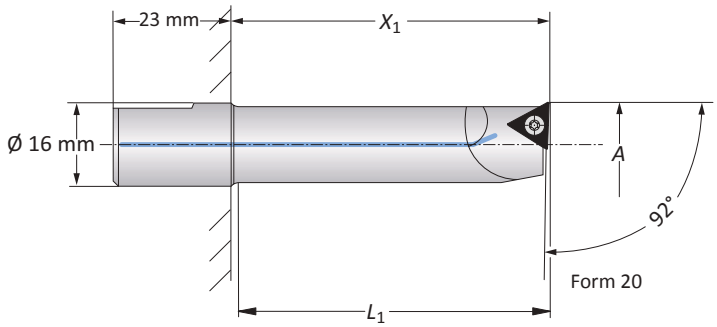
B10-M: 12-19
B10: vi-vii
Key on B10-A: 1

ⓘ = Imperial (in)
ⓜ = Metric (mm)

Boring Bars

Steel | Diameter Range: 0.236" - 1.063" (6.00 mm - 27.00 mm)

Form 101



Form 20

	Boring Range	Boring Bar						
	A	X_1	L_1	Weight	Insert Form	Part No.	Insert Form	Part No.
	0.236 - 0.315	0.866	0.748	0.070 (lbs)	–	–	211*	**081053**
	0.315 - 0.394	1.181	1.063	0.090 (lbs)	–	–	211*	**218071**
	0.394 - 0.472	1.772	1.654	0.110 (lbs)	–	–	20*	**081044**
	0.394 - 0.472	0.984	0.866	0.090 (lbs)	101	**218047**	20*	**218058**
	0.394 - 0.472	1.378	1.260	0.110 (lbs)	101	**218048**	20*	**218059**
	0.472 - 0.551	1.181	1.063	0.110 (lbs)	101	**218012**	20*	**218014**
	0.472 - 0.551	1.772	1.654	0.130 (lbs)	101	**218049**	20*	**218060**
	0.551 - 0.630	1.378	1.260	0.130 (lbs)	101	**218050**	20*	**218061**
ⓘ	0.551 - 0.630	1.969	1.850	0.180 (lbs)	101	**218051**	20*	**218062**
	0.591 - 0.669	1.457	1.339	0.130 (lbs)	–	–	20*	**081048**
	0.591 - 0.669	2.362	2.244	0.180 (lbs)	101	**081041**	20*	**081045**
	0.630 - 0.786	1.575	1.457	0.180 (lbs)	101	**218052**	20*	**218063**
	0.630 - 0.786	2.362	2.244	0.200 (lbs)	101	**218053**	20*	**218064**
	0.787 - 0.984	1.457	1.339	0.150 (lbs)	–	–	20*	**081049**
	0.787 - 0.984	2.756	2.638	0.240 (lbs)	101	**081042**	20*	**081046**
	0.984 - 1.063	1.457	1.339	0.150 (lbs)	–	–	20*	**081050**
	0.984 - 1.063	2.756	2.638	0.240 (lbs)	101	**081043**	20*	**081047**
	6.00 - 8.00	22.00	19.00	0.03 (kg)	–	–	211*	**081053**
	8.00 - 10.00	30.00	27.00	0.04 (kg)	–	–	211*	**218071**
	10.00 - 12.00	45.00	42.00	0.05 (kg)	–	–	20*	**081044**
	10.00 - 12.00	25.00	22.00	0.04 (kg)	101	**218047**	20*	**218058**
	10.00 - 12.00	35.00	32.00	0.05 (kg)	101	**218048**	20*	**218059**
	12.00 - 14.00	30.00	27.00	0.05 (kg)	101	**218012**	20*	**218014**
	12.00 - 14.00	45.00	42.00	0.06 (kg)	101	**218049**	20*	**218060**
	14.00 - 16.00	35.00	32.00	0.06 (kg)	101	**218050**	20*	**218061**
ⓜ	14.00 - 16.00	50.00	47.00	0.08 (kg)	101	**218051**	20*	**218062**
	15.00 - 17.00	37.00	34.00	0.06 (kg)	–	–	20*	**081048**
	15.00 - 17.00	60.00	57.00	0.08 (kg)	101	**081041**	20*	**081045**
	16.00 - 20.00	40.00	37.00	0.08 (kg)	101	**218052**	20*	**218063**
	16.00 - 20.00	60.00	57.00	0.09 (kg)	101	**218053**	20*	**218064**
	20.00 - 25.00	37.00	34.00	0.07 (kg)	–	–	20*	**081049**
	20.00 - 25.00	70.00	67.00	0.11 (kg)	101	**081042**	20*	**081046**
	25.00 - 27.00	37.00	34.00	0.07 (kg)	–	–	20*	**081050**
	25.00 - 27.00	70.00	67.00	0.11 (kg)	101	**081043**	20*	**081047**

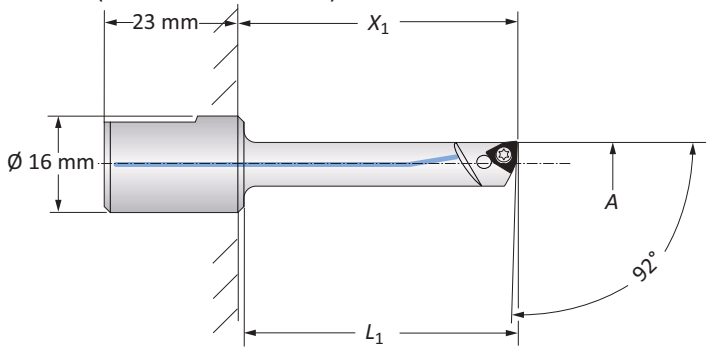
*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

B10-M: 12-19
Key on B10-A: 1
B10-H
B10: vi-vii

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

Boring Bars

Heavy Metal | Carbide | Diameter Range: 0.236" - 0.787" (6.00 mm - 20.00 mm)

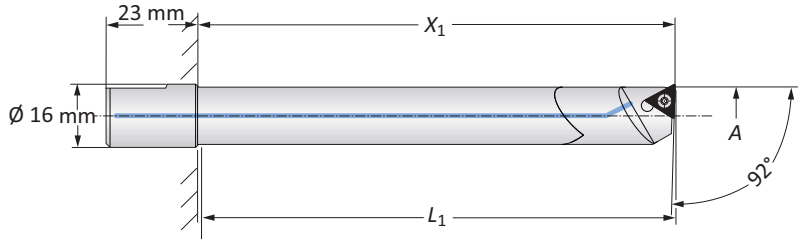


Heavy Metal Boring Bars | Diameter Range: 0.236" - 0.394" (6.00 mm - 10.00 mm)

	Boring Range	Boring Bar				
	A	X_1	L_1	Weight	Insert Form	Part No.
i	0.236 - 0.315	1.260	1.142	0.176 (lbs)	211*	**081055**
	0.315 - 0.394	1.772	1.654	0.198 (lbs)	211*	**218072**
m	6.00 - 8.00	32.00	29.00	0.08 (kg)	211*	**081055**
	8.00 - 10.00	45.00	42.00	0.09 (kg)	211*	**218072**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

Form 101



Form 20

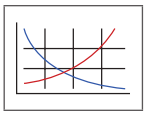
Carbide Boring Bars | Diameter Range: 0.394" - 0.787" (10.00 mm - 20.00 mm)

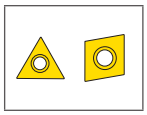
	Boring Range	Boring Bar						
	A	X_1	L_1	Weight	Insert Form	Part No.	Insert Form	Part No.
i	0.394 - 0.472	2.165	2.047	0.154 (lbs)	101	**218042**	20	**218037***
	0.394 - 0.472	2.953	2.835	0.198 (lbs)	101	**218032**	20	**218029***
	0.472 - 0.551	2.756	2.638	0.220 (lbs)	101	**218043**	20	**218038***
	0.472 - 0.551	3.543	3.425	0.331 (lbs)	101	**218033**	20	**218030***
	0.551 - 0.630	2.953	2.835	0.353 (lbs)	101	**218044**	20	**218039***
	0.551 - 0.630	3.937	3.819	0.441 (lbs)	101	**218045**	20	**218040***
	0.630 - 0.787	3.543	3.425	0.573 (lbs)	101	**218046**	20	**218041***
	0.630 - 0.787	4.724	4.606	0.728 (lbs)	101	**218034**	20	**218031***
m	10.00 - 12.00	55.00	52.00	0.07 (kg)	101	**218042**	20	**218037***
	10.00 - 12.00	75.00	72.00	0.09 (kg)	101	**218032**	20	**218029***
	12.00 - 14.00	70.00	67.00	0.10 (kg)	101	**218043**	20	**218038***
	12.00 - 14.00	90.00	87.00	0.15 (kg)	101	**218033**	20	**218030***
	14.00 - 16.00	75.00	72.00	0.16 (kg)	101	**218044**	20	**218039***
	14.00 - 16.00	100.00	97.00	0.20 (kg)	101	**218045**	20	**218040***
	16.00 - 20.00	90.00	87.00	0.26 (kg)	101	**218046**	20	**218041***
	16.00 - 20.00	120.00	117.00	0.33 (kg)	101	**218034**	20	**218031***

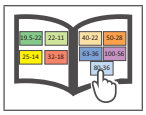
*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

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

Key on B10-A: 1





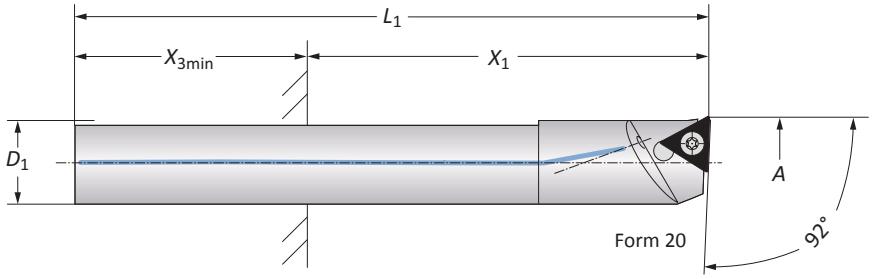


i = Imperial (in)
m = Metric (mm)
Inserts sold separately

Boring Bars

Steel | Carbide | Diameter Range: 0.236" - 0.787" (6.00 mm - 20.00 mm)

Form 101



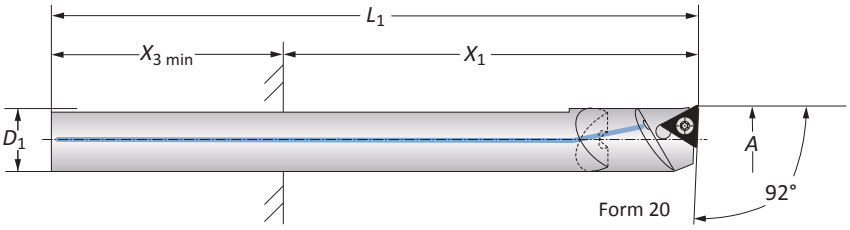
Form 20

Steel Boring Bars | Diameter Range: 0.236" - 0.787" (6.00 mm - 20.00 mm)

	Boring Range	Boring Bar								
	A	D_1	X_1	$X_{3\ min}$	L_1	Weight	Insert Form	Part No.	Insert Form	Part No.
	0.236 - 0.315	0.197*	0.492 - 0.984	0.984	2.756	0.022 (lbs)	211**	**514032**	–	–
	0.315 - 0.394	0.276*	0.689 - 1.378	0.984	3.189	0.044 (lbs)	211**	**514033**	–	–
	0.394 - 0.472	0.315*	0.787 - 1.575	0.984	3.346	0.066 (lbs)	101	**514003**	20**	**514004**
i	0.472 - 0.551	0.394*	0.984 - 1.969	0.984	3.937	0.110 (lbs)	101	**514005**	20**	**514006**
	0.551 - 0.630	0.472*	1.181 - 2.362	1.181	4.488	0.198 (lbs)	101	**514007**	20**	**514008**
	0.630 - 0.709	0.551*	2.205 - 2.756	1.181	4.764	0.287 (lbs)	101	**514009**	20**	**514010**
	0.709 - 0.787	0.551*	2.205 - 2.756	1.181	4.764	0.287 (lbs)	101	**514011**	20**	**514012**
	6.00 - 8.00	5.00*	12.50 - 25.00	25.00	70.00	0.01 (kg)	211**	**514032**	–	–
	8.00 - 10.00	7.00*	17.50 - 35.00	25.00	81.00	0.02 (kg)	211**	**514033**	–	–
	10.00 - 12.00	8.00*	20.00 - 40.00	25.00	85.00	0.03 (kg)	101	**514003**	20**	**514004**
m	12.00 - 14.00	10.00*	25.00 - 50.00	25.00	100.00	0.05 (kg)	101	**514005**	20**	**514006**
	14.00 - 16.00	12.00*	30.00 - 60.00	30.00	114.00	0.09 (kg)	101	**514007**	20**	**514008**
	16.00 -18.00	14.00*	56.00 - 70.00	30.00	121.00	0.13 (kg)	101	**514009**	20**	**514010**
	18.00 - 20.00	14.00*	56.00 - 70.00	30.00	121.00	0.13 (kg)	101	**514011**	20**	**514012**

*Fixture-through reducing sleeve required (B10-A: 17).
**Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

Form 101



Form 20

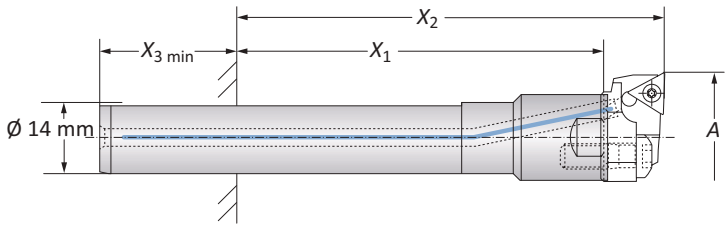
Carbide Boring Bars | Diameter Range: 0.236" - 0.787" (6.00 mm - 20.00 mm)

	Boring Range	Boring Bar								
	A	D_1	X_1	$X_{3\ min}$	L_1	Weight	Insert Form	Part No.	Insert Form	Part No.
	0.236 - 0.315	0.197*	0.492 - 1.575	0.984	3.543	0.044 (lbs)	211**	**514034**	–	–
	0.315 - 0.394	0.276*	0.827 - 2.205	0.984	4.291	0.110 (lbs)	211**	**514035**	–	–
	0.394 - 0.472	0.315*	0.866 - 2.520	0.984	4.606	0.154 (lbs)	101	**514015**	20**	**514016**
	0.472 - 0.551	0.394*	2.008 - 3.150	0.984	5.512	0.287(lbs)	101	**514017**	20**	**514018**
i	0.551 - 0.630	0.472*	2.677 - 3.780	1.181	6.378	0.485 (lbs)	101	**514019**	20**	**514020**
	0.630 - 0.709	0.551*	3.031 - 4.409	1.181	5.591	0.573 (lbs)	101	**514021**	20**	**514022**
	0.630 - 0.709	0.551*	4.409 - 5.787	1.181	6.969	0.728 (lbs)	101	**514023**	20**	**514024**
	0.709 - 0.787	0.551*	3.031 - 4.409	1.181	5.591	0.573 (lbs)	101	**514025**	20**	**514026**
	0.709 - 0.787	0.551*	4.409 - 5.787	1.181	6.969	0.728 (lbs)	101	**514027**	20**	**514028**
	6.00 - 8.00	5.00*	12.50 - 40.00	25.00	90.00	0.02 (kg)	211**	**514034**	–	–
	8.00 - 10.00	7.00*	21.00 - 56.00	25.00	109.00	0.05 (kg)	211**	**514035**	–	–
	10.00 - 12.00	8.00*	22.00 - 64.00	25.00	117.00	0.07 (kg)	101	**514015**	20**	**514016**
	12.00 - 14.00	10.00*	51.00 - 80.00	25.00	140.00	0.13 (kg)	101	**514017**	20**	**514018**
m	14.00 - 16.00	12.00*	68.00 - 96.00	30.00	162.00	0.22 (kg)	101	**514019**	20**	**514020**
	16.00 - 18.00	14.00*	77.00 - 112.00	30.00	142.00	0.26 (kg)	101	**514021**	20**	**514022**
	16.00 - 18.00	14.00*	112.00 - 147.00	30.00	177.00	0.33 (kg)	101	**514023**	20**	**514024**
	18.00 - 20.00	14.00*	77.00 - 112.00	30.00	142.00	0.26 (kg)	101	**514025**	20**	**514026**
	18.00 - 20.00	14.00*	112.00 - 147.00	30.00	177.00	0.33 (kg)	101	**514027**	20**	**514028**

*Fixture-through reducing sleeve required (B10-A: 17).
**Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

Serrated Tool Bodies | Insert Holders

Diameter Range: 0.787" - 1.260" (20.00 mm - 32.00 mm)

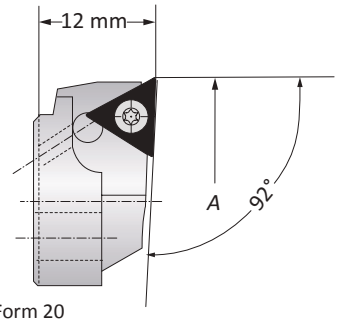


Serrated Tool Bodies

	Substrate	Boring Range A	Serrated Tool Body* X_1	X_2	$X_{3\ min}$	Weight	Part No.
i	Steel	0.787 - 1.260	1.457 - 2.835	1.929 - 3.307	1.181	0.287 (lbs)	**514029**
i	Carbide	0.787 - 1.260	2.550 - 3.937	3.031 - 4.409	1.181	0.551 (lbs)	**514030**
i	Carbide	0.787 - 1.260	3.937 - 5.315	4.409 - 5.787	1.181	0.728 (lbs)	**514031**
m	Steel	20.00 - 32.00	37.00 - 72.00	49.00 - 84.00	30.00	0.13 (kg)	**514029**
m	Carbide	20.00 - 32.00	65.00 - 100.00	77.00 - 112.00	30.00	0.25 (kg)	**514030**
m	Carbide	20.00 - 32.00	100.00 - 135.00	112.00 - 147.00	30.00	0.33 (kg)	**514031**

*Fixture-through reducing sleeeve (B10-A: 17).

Form 101



Form 20

Insert Holders

	Boring Range A	Weight	Insert Form	Part No.	Insert Form	Part No.
i	0.787 - 0.866	0.022 (lbs)	101	**502052**	20	**502046***
i	0.866 - 0.945	0.022 (lbs)	101	**502053**	20	**502047***
i	0.945 - 1.024	0.022 (lbs)	101	**502054**	20	**502048***
i	1.024 - 1.102	0.022 (lbs)	101	**502055**	20	**502049***
i	1.102 - 1.181	0.022 (lbs)	101	**502056**	20	**502050***
i	1.181 - 1.260	0.022 (lbs)	101	**502057**	20	**502051***
m	20.00 - 22.00	0.01 (kg)	101	**502052**	20	**502046***
m	22.00 - 24.00	0.01 (kg)	101	**502053**	20	**502047***
m	24.00 - 26.00	0.01 (kg)	101	**502054**	20	**502048***
m	26.00 - 28.00	0.01 (kg)	101	**502055**	20	**502049***
m	28.00 - 30.00	0.01 (kg)	101	**502056**	20	**502050***
m	30.00 - 32.00	0.01 (kg)	101	**502057**	20	**502051***

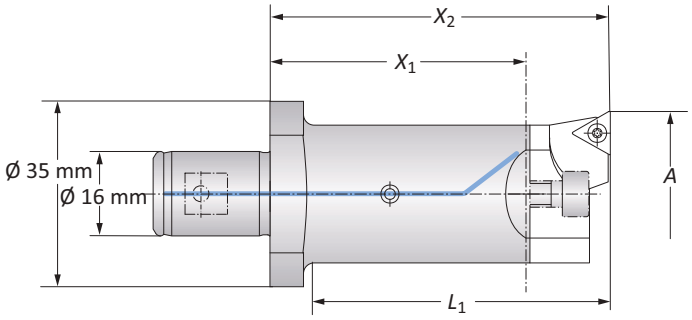
*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

B10-M: 12-19 | B10-A: 18 | B10-H | B10: vi-vii
Key on B10-A: 1

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

Serrated Tool Bodies | Insert Holders

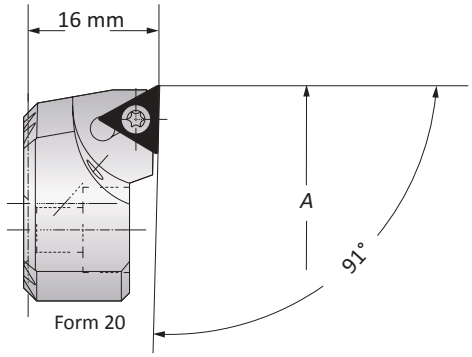
Diameter Range: 1.142" - 2.087" (29.00 mm - 53.00 mm)



Serrated Tool Bodies

	Boring Range *A*	Serrated Tool Body X_1	X_2	L_1	Weight	Part No.
i	1.142 - 2.087	1.890	2.520	2.205	0.441 (lbs)	**236021**
i	1.142 - 2.087	3.307	3.937	3.622	0.661 (lbs)	**236031**
m	29.00 - 53.00	48.00	64.00	56.00	0.20 (kg)	**236021**
m	29.00 - 53.00	84.00	100.00	92.00	0.30 (kg)	**236031**

Form 101



Form 20

Insert Holders

	Boring Range *A*	Weight	Insert Form	Part No.
i	1.142 - 1.614	0.088 (lbs)	101	**236023**
i	1.142 - 1.614	0.088 (lbs)	20*	**236022**
i	1.575 - 2.087	0.132 (lbs)	101	**236025**
i	1.575 - 2.087	0.132 (lbs)	20*	**236024**
m	29.00 - 41.00	0.04 (kg)	101	**236023**
m	29.00 - 41.00	0.04 (kg)	20*	**236022**
m	40.00 - 53.00	0.06 (kg)	101	**236025**
m	40.00 - 53.00	0.06 (kg)	20*	**236024**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

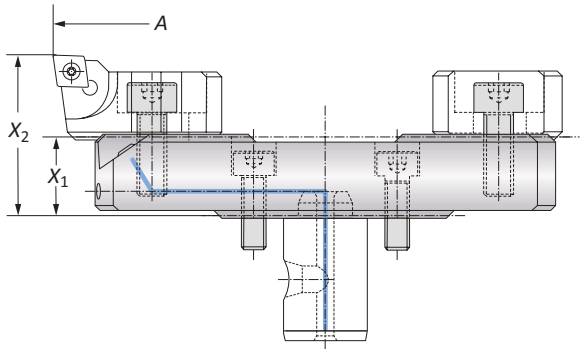
B10-M: 12-19 | B10-A: 18 | B10-H | B10: vi-vii

Key on B10-A: 1

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

Alu-Line Serrated Slides | Insert Holders

Diameter Range: 2.677" - 5.984" (68.00 mm - 152.00 mm)



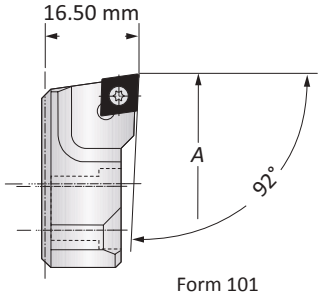
Alu-Line Serrated Slides

	Boring Range A	Serrated Slide X_1	Serrated Slide X_2	Weight	Part No.
i	2.677 - 3.780	0.630	1.279	0.220 (lbs)	**501054**
i	3.780 - 4.882	0.630	1.279	0.220 (lbs)	**501055**
i	4.882 - 5.984	0.630	1.279	0.440 (lbs)	**501056**
m	68.00 - 96.00	16.00	32.50	0.10 (kg)	**501054**
m	96.00 - 124.00	16.00	32.50	0.10 (kg)	**501055**
m	124.00 - 152.00	16.00	32.50	0.20 (kg)	**501056**

Insert Holders

	Boring Range A	Weight	Insert Form	Part No.
i	2.677 - 5.984	0.110 (lbs)	101	**502064**
i	2.677 - 5.984	0.110 (lbs)	20	**502069**
m	68.00 - 152.00	0.05 (kg)	101	**502064**
m	68.00 - 152.00	0.05 (kg)	20	**502069**

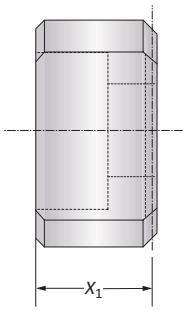
Form 20



Form 101

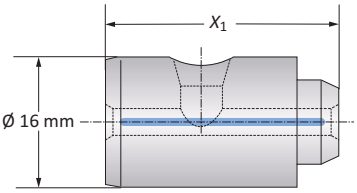
Counterweights

	Counterweight X_1	Weight	Part No.
i	0.528	0.110 (lbs)	**502165**
m	13.40	0.05 (kg)	**502165**



Alu-Line Coolant Delivery Sections

	Coolant Delivery X_1	Weight	Part No.
i	1.004	0.022 (lbs)	**450137**
m	25.50	0.01 (kg)	**450137**



B10-M: 12-19 | B10-A: 18 | B10-H | B10: vi-vii

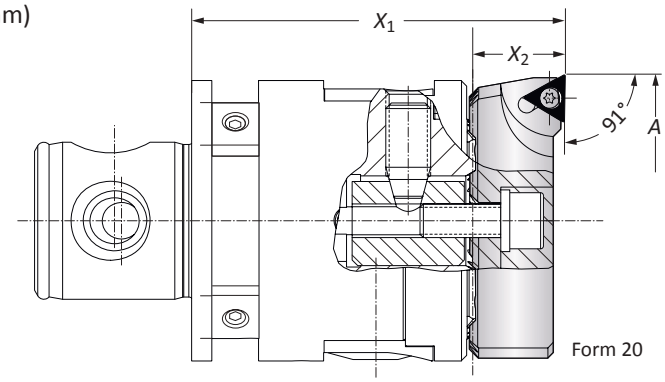
Key on B10-A: 1

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

Insert Holders for Boring Heads

Diameter Range: 2.047" - 4.016" (52.00 mm - 102.00 mm)

Form 101



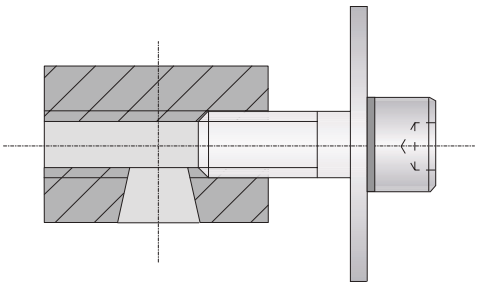
Form 20

Insert Holders for Boring Heads

	Boring Range *A*	Insert Holder X_1	X_2	Weight	Insert Form	Part No.
ⓘ	2.047 - 3.031	2.598	0.650	0.132 (lbs)	101	**236027**
ⓘ	2.047 - 3.031	2.598	0.650	0.132 (lbs)	20	**236026**
ⓘ	2.992 - 4.016	2.598	0.650	0.220 (lbs)	101	**236029**
ⓘ	2.992 - 4.016	2.598	0.650	0.220 (lbs)	20	**236028**
ⓜ	52.00 - 77.00	66.00	16.50	0.06 (kg)	101	**236027**
ⓜ	52.00 - 77.00	66.00	16.50	0.06 (kg)	20	**236026**
ⓜ	76.00 - 102.00	66.00	16.50	0.10 (kg)	101	**236029**
ⓜ	76.00 - 102.00	66.00	16.50	0.10 (kg)	20	**236028**

Clamping Piece for Insert Holder for Boring Heads

	Boring Range	Service Key	Complete Part No.
ⓜ	52.00 - 102.00	s5	**236020**

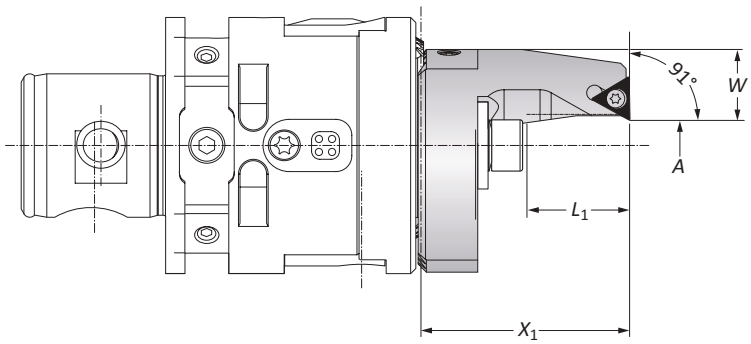


B10-M: 12-19 Key on B10-A: 1 | B10-A: 18 | B10-H | B10: vi-vii

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

Outside Turning Insert Holders for Boring Heads

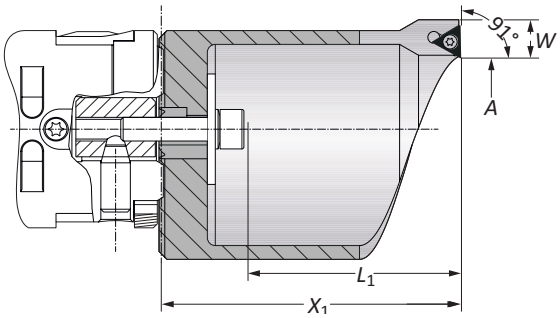
Outside Turning | Diameter Range: 0.157" - 2.598" (4.00 mm - 66.00 mm)



Type A Insert Holders

	Boring Range A	Insert Holder X_1	Insert Holder L_1	Insert Holder W	Weight	Type	Insert Form	Part No.
ⓘ	0.157 - 0.689	1.594	0.787	0.653	0.220	A	20*	**236081**
ⓘ	0.650 - 1.181	1.988	1.181	0.437	0.220	A	20*	**236082**
ⓜ	4.00 - 17.50	40.50	20.00	16.60	0.10	A	20*	**236081**
ⓜ	16.50 - 30.00	50.50	30.00	11.10	0.10	A	20*	**236082**

NOTE: Clockwise and neutral execution.
*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).



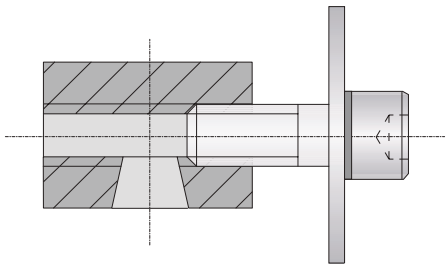
Type B Insert Holders

	Boring Range A	Insert Holder X_1	Insert Holder L_1	Insert Holder W	Weight	Type	Insert Form	Part No.
ⓘ	1.142 - 1.732	2.952	2.126	0.377	0.661 (lbs)	B	20*	**236083**
ⓘ	1.693 - 2.598	3.956	3.110	0.377	0.882 (lbs)	B	20*	**236084**
ⓜ	29.00 - 44.00	75.50	54.00	9.60	0.30 (kg)	B	20*	**236083**
ⓜ	43.00 - 66.00	100.50	79.00	9.60	0.40 (kg)	B	20*	**236084**

NOTE: Clockwise and neutral execution.
*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

Clamping Pieces for Outside Turning Insert Holders

	Insert Holder Type	Boring Range	Service Key	Complete Part No.
ⓜ	A	4.00 - 30.00	**s5**	**236088**
ⓜ	B	29.00 - 66.00	**s5**	**236089**



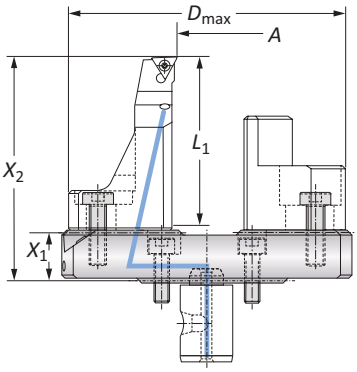
B10-M: 12-19 | B10-A: 18 | B10-H | B10: vi-vii

Key on B10-A: 1

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

Outside Turning Serrated Slides | Insert Holders

Diameter Range: 0.079" - 2.283" (2.00 mm - 58.00 mm)



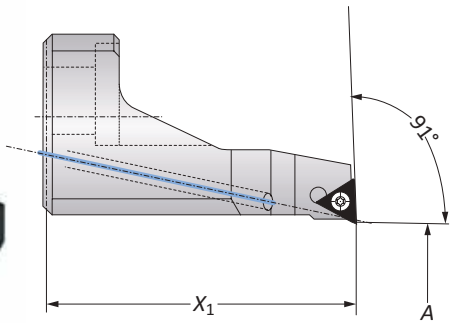
Serrated Slides

	Outside Turning Range A	Serrated Slide X_1	X_2	L_1	Weight	Interfering Diameter D_{max}	Part No.
i	0.079 - 1.181	0.630	2.874	2.165	0.771 (lbs)	3.976	**501064**
	1.181 - 2.283	0.630	2.874	2.165	0.970 (lbs)	5.079	**501065**
m	2.00 - 30.00	16.00	73.00	55.00	0.35 (kg)	101.00	**501064**
	30.00 - 58.00	16.00	73.00	55.00	0.44 (kg)	129.00	**501065**

Insert Holders

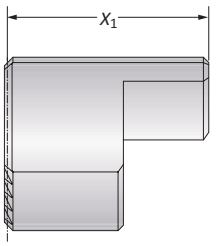
	Boring Range A	Insert Holder X_1	Weight	Insert Form	Part No.
i	0.079 - 2.283	2.244	0.331 (lbs)	20*	**502082**
m	2.00 - 58.00	57.00	0.15 (kg)	20*	**502082**

*Clockwise and neutral execution.



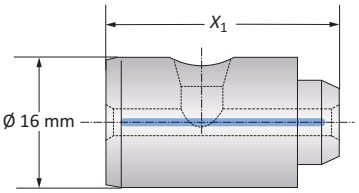
Counterweights

	Counterweight X_1	Weight	Part No.
i	1.486	0.352 (lbs)	**502183**
m	37.75	0.16 (kg)	**502183**



Alu-Line Coolant Delivery Sections

	Coolant Delivery Section X_1	Weight	Part No.
i	1.004	0.022 (lbs)	**450137**
m	25.50	0.01 (kg)	**450137**

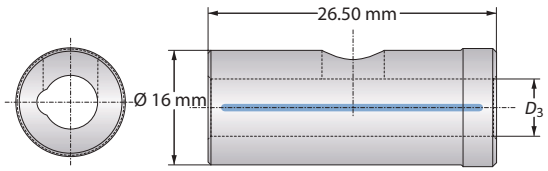


B10-M: 12-19 | B10-A: 18 | B10-H | B10: vi-vii
Key on B10-A: 1

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

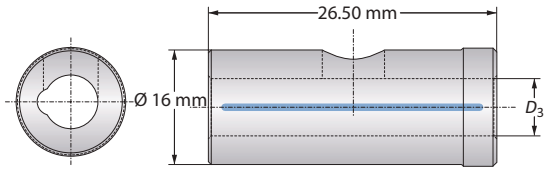
Accessories

Imperial Reducing Sleeves | Metric Reducing Sleeves



Reducing Sleeve

	Reducing Sleeve D_3	Weight	Part No.
	4.00	0.05 (kg)	**450129**
	5.00	0.04 (kg)	**450130**
	7.00	0.04 (kg)	**450132**
ⓜ	8.00	0.04 (kg)	**450133**
	10.00	0.03 (kg)	**450134**
	12.00	0.02 (kg)	**450135**
	14.00	0.01 (kg)	**450136**



Imperial Reducing Sleeves

	D_3	Weight	Part No.
	0.125	0.110 (lbs)	**450142**
	0.250	0.088 (lbs)	**450143**
ⓘ	0.312	0.088 (lbs)	**450144**
	0.375	0.088 (lbs)	**450145**
	0.500	0.088 (lbs)	**450146**

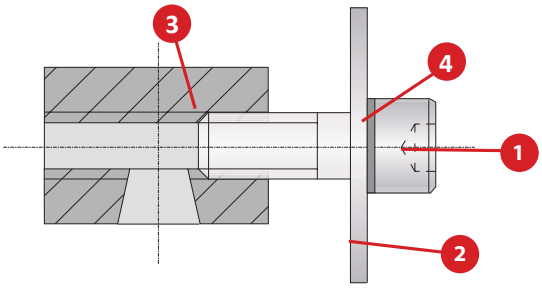
ⓘ = Imperial (in)
ⓜ = Metric (mm)

Accessories

Clamping Elements | Thread Pin | Balancing Element | 3E[TECH+] Charging Unit

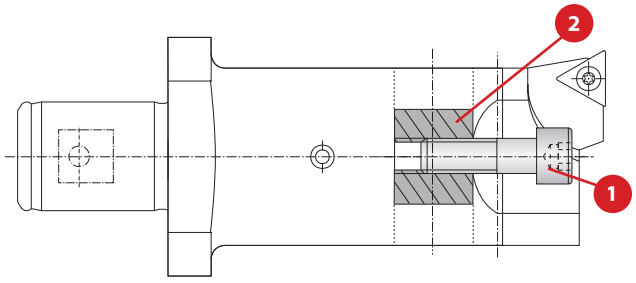
Clamping Elements for Insert Holders

	Boring Range	1 Cap Screw	Hex Size	2 Washer	3 Clamping Nut	4 Locking Washer	Complete Part No.
	4 - 30	**070153**	**s5**	**315155**	**236120**	**215254**	**236088**
Ⓜ	29 - 66	**070153**	**s5**	**315156**	**236120**	**215254**	**236089**
	52 - 102	**115147**	**s5**	**115725**	**236120**	-	**236020**



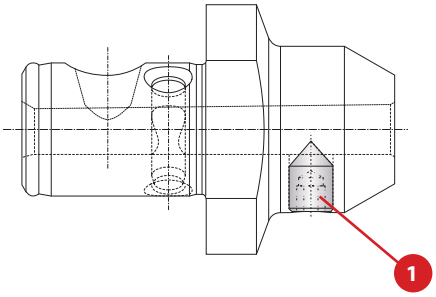
Clamping Elements for Serrated Tool Body

1 Cap Screw	Hex Size	2 Clamping Piece
027154	**s4**	**145184**



Thread Pin

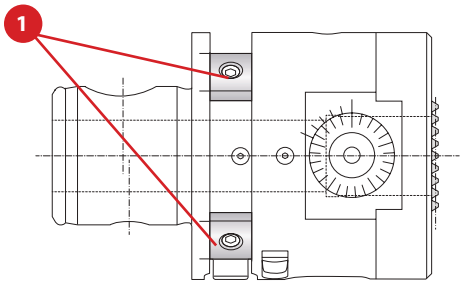
Service Key	1 Part No.
S3 / A	**415244**



Balancing Element with Screw

Nominal Size	Key Size / Type	1 Part No.
M8 x 1.25 x 8	s2 / A	**536005**

NOTE: Balancing elements sold separately.



3E[TECH+] Accessories

1 Charging Unit Part No.
536016

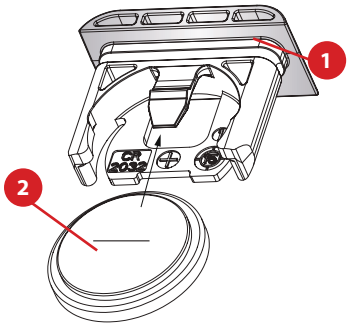
NOTE: Charging unit sold separately from 3E[TECH+].

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

3E[TECH] (Old Display) Accessories

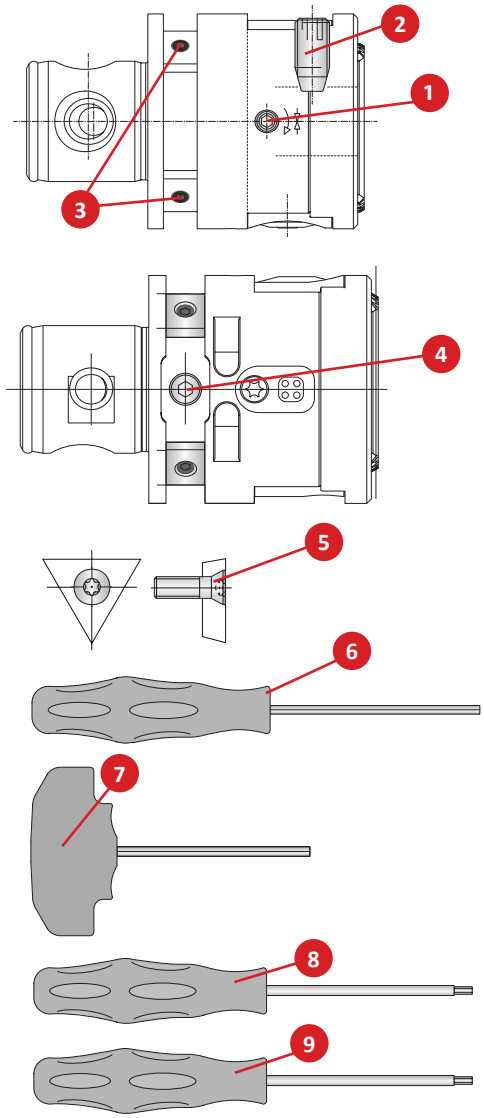
1 Sealing Ring Part No.	2 Battery CR2032 Part No.
215483	**515491**

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

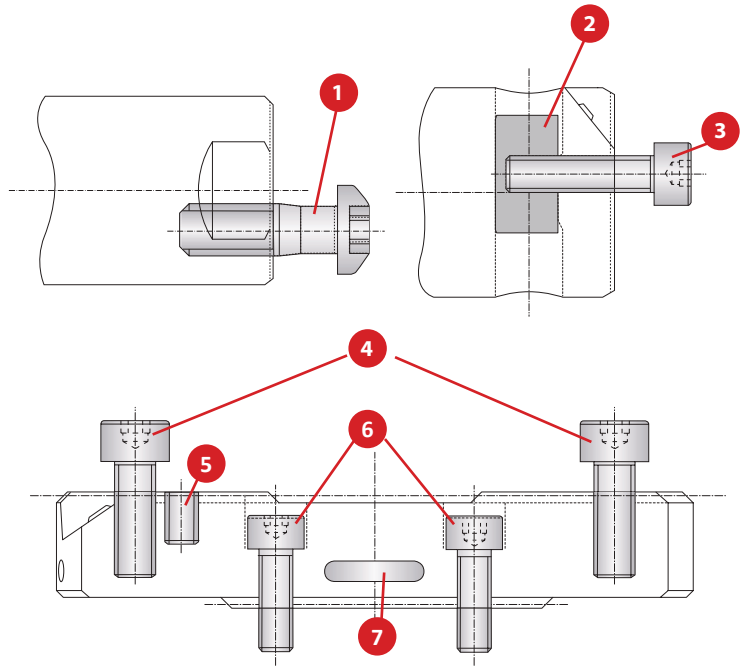


Accessories

No.	Part	Insert Form	Size	Part No.
1	Clamping screw	–	–	**070333**
2	Thread pin for tool clamping	–	–	**215674**
3	Clamping screw for balance weight	–	–	**115470**
4	Balancing screw plug	–	–	**115119**
5	Insert screws	Form 20 Form 101 Form 211	T7 T8 T6	**115535** **115676** **215377**
6	Hex wrench	–	s2.5 s2	**115575** **215473**
7	Hex wrench	–	s4	**115576**
8	Torx driver	–	T6 T7 T8	**115537** **115591** **115590**
9	Torx screwdriver	(0.6 Nm) Form 211 (0.9 Nm) Form 20 (1.2 Nm) Form 101	T6 T7 T8	**415507** **415508** **415514**

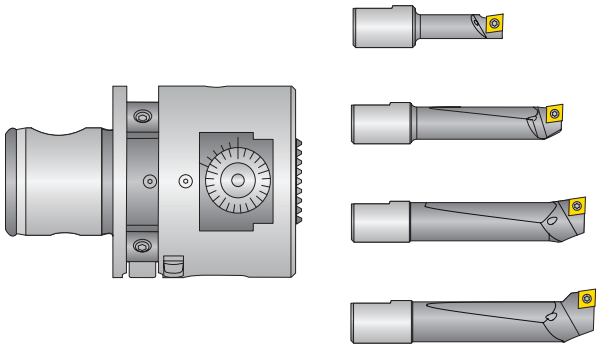


No.	Part	Size	Part No.
1	Screw for securing insert holder	T25	**415112**
2	Clamping piece	–	**145184**
3	Cap screw for securing insert holders	s4	**027154**
4	Cap screw for securing insert holder/ counterweight	s4	**315248**
5	Set screw - coolant	s1.5	**114224**
6	Cap screw for securing serrated slide	s3	**116289**
8	Sealing ring for coolant delivery	–	**415386**



Kit Components

3E[TECH+] | Insert Form 101 | Diameter Range: 0.393" - 1.181" (10.00 mm - 30.00 mm)



Diameter Range: 0.393" - 1.181" (10.00 mm - 30.00 mm)

	Kit Components				
	Boring Head	**Boring Bar Range**	**Boring Bars**	**Service Keys**	**Kit No.**
ⓘ	563002	0.393 - 0.590	218048	115575 (s2.5)	**104046**
		0.590 - 0.787	081041	215403 (s4)	
		0.787 - 0.984	081042	115590 (T8)	
		0.984 - 1.181	081043		
ⓜ	536002	10.00 - 15.00	218048	115575 (s2.5)	**103046**
		15.00 - 20.00	081041	215403 (s4)	
		20.00 - 25.00	081042	115590 (T8)	
		25.00 - 30.00	081043		

NOTE: Balancing elements and inserts sold separately.
NOTE: 3E[TECH+] digital readout module and charging station sold separately.

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-A: 18 | B10-H | B10: vi-vii

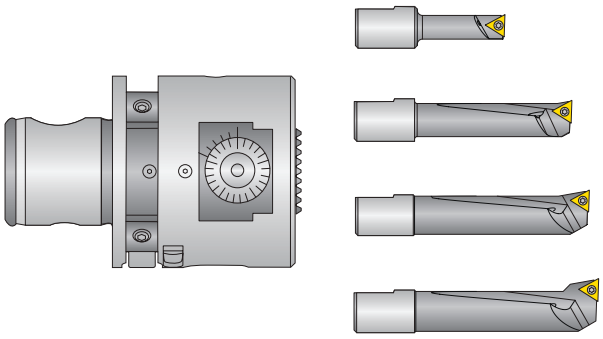
Key on B10-A: 1

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

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**

Kit Components

3E[TECH+] | Insert Form 20 | Diameter Range: 0.393" - 1.181" (10.00 mm - 30.00 mm)



Diameter Range: 0.393" - 1.181" (10.00 mm - 30.00 mm)

Kit Components					
	Boring Head	Boring Bar Range	Boring Bars	Service Keys	Kit No.
ⓘ	563002	0.393 - 0.590	218059	115575 (s2.5)	**104045**
		0.590 - 0.787	081045	215403 (s4)	
		0.787 - 0.984	081046	115591 (T7)	
		0.984 - 1.181	081047		
ⓜ	536002	10.00 - 15.00	218059	115575 (s2.5)	**103045**
		15.00 - 20.00	081045	215403 (s4)	
		20.00 - 25.00	081046	115591 (T7)	
		25.00 - 30.00	081047		

NOTE: Balancing elements and inserts sold separately.
NOTE: 3E[TECH+] digital readout module and charging station sold separately.

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-A: 18 | B10-H | B10: vi-vii

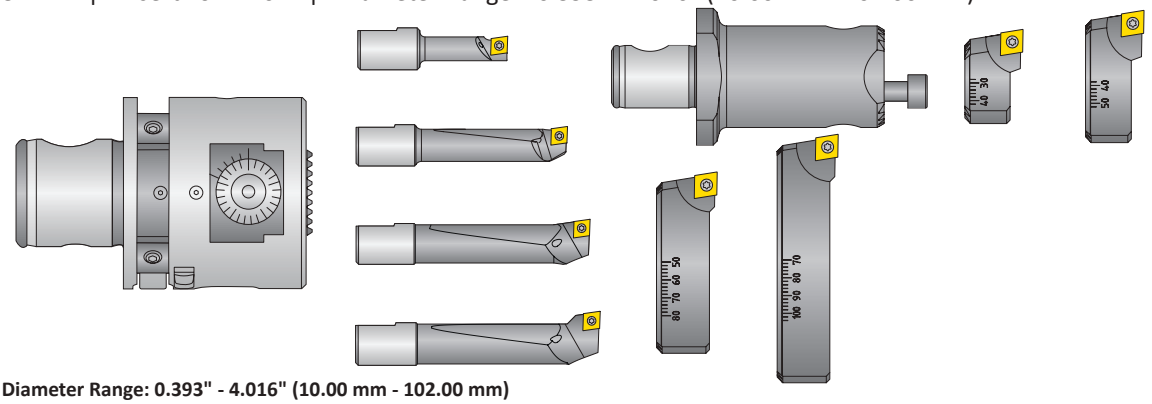
Key on B10-A: 1

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

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**

Kit Components

3E[TECH+] | Insert Form 101 | Diameter Range: 0.393" - 4.016" (10.00 mm - 102.00 mm)



Diameter Range: 0.393" - 4.016" (10.00 mm - 102.00 mm)

Kit Components

	Boring Head	Boring Bars: Boring Bar Range	Boring Bars: Part No.	Serrated Tool Body and Insert Holders: Serrated Tool Body	Serrated Tool Body and Insert Holders: Insert Holder Range	Serrated Tool Body and Insert Holders: Part No.	Insert Holders for Boring Head: Insert Holder Range	Insert Holders for Boring Head: Part No.	Insert Holders for Boring Head: Clamping Piece	Service Keys	Kit No.
ⓘ	563002	0.393 - 0.590	218048	236021	1.142 - 1.614	236023	2.047 - 3.031	236027	236020	115575 (s2.5)	**104048**
		0.590 - 0.787	081041		1.575 - 2.087	236025	2.992 - 4.016	236029		215403 (s4)	
		0.787 - 0.984	081042							215521 (s5)	
		0.984 - 1.181	081043							115590 (T8)	
ⓜ	536002	10.00 - 15.00	218048	236021	29.00 - 41.00	236023	52.00 - 77.00	236027	236020	115575 (s2.5)	**103048**
		15.00 - 20.00	081041		40.00 - 53.00	236025	76.00 - 102.00	236029		215403 (s4)	
		20.00 - 25.00	081042							215521 (s5)	
		25.00 - 30.00	081043							115590 (T8)	

NOTE: Balancing elements and inserts sold separately.
NOTE: 3E[TECH+] digital readout module and charging station sold separately.

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-A: 18 | B10-H | B10: vi-vii

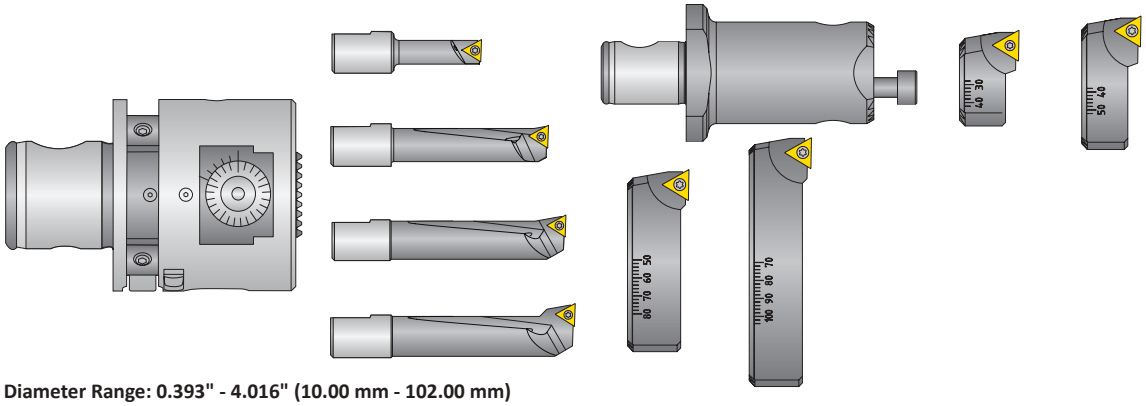
Key on B10-A: 1

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

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**

Kit Components

3E[TECH+] | Insert Form 20 | Diameter Range: 0.393" - 4.016" (10.00 mm - 102.00 mm)



Diameter Range: 0.393" - 4.016" (10.00 mm - 102.00 mm)

Kit Components

	Boring Head	Boring Bars: Boring Bar Range	Boring Bars: Part No.	Serrated Tool Body and Insert Holders: Serrated Tool Body	Serrated Tool Body and Insert Holders: Insert Holder Range	Serrated Tool Body and Insert Holders: Part No.	Insert Holders for Boring Head: Insert Holder Range	Insert Holders for Boring Head: Part No.	Insert Holders for Boring Head: Clamping Piece	Service Keys	Kit No.
ⓘ	563002	0.393 - 0.590	218059	236021	1.142 - 1.614	236026	2.047 - 3.031	236022	236020	115575 (s2.5)	**104047**
		0.590 - 0.787	081045		1.575 - 2.087	236028	2.992 - 4.016	236024		215403 (s4)	
		0.787 - 0.984	081046							215521 (s5)	
		0.984 - 1.181	081047							115591 (T7)	
ⓜ	536002	10.00 - 15.00	218059	236021	29.00 - 41.00	236026	52.00 - 77.00	236022	236020	115575 (s2.5)	**103047**
		15.00 - 20.00	081045		40.00 - 53.00	236028	76.00 - 102.00	236024		215403 (s4)	
		20.00 - 25.00	081046							215521 (s5)	
		25.00 - 30.00	081047							115591 (T7)	

NOTE: Balancing elements and inserts sold separately.
NOTE: 3E[TECH+] digital readout module and charging station sold separately.

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-A: 18 | B10-H | B10: vi-vii

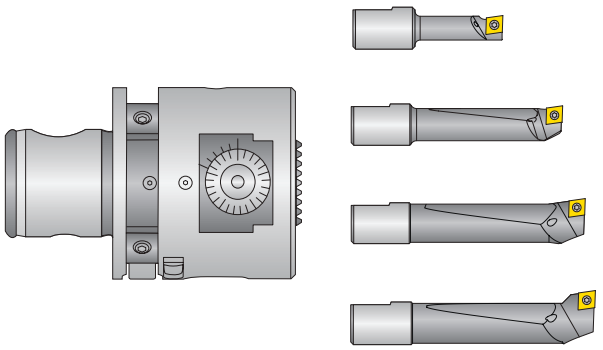
Key on B10-A: 1

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

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**

Kit Components

Nondigital | Insert Form 101 | Diameter Range: 0.393" - 1.181" (10.00 mm - 30.00 mm)



Diameter Range: 0.393" - 1.181" (10.00 mm - 30.00 mm)

	Kit Components				
	Boring Head	**Boring Bar Range**	**Boring Bars**	**Service Keys**	**Kit No.**
ⓘ	563001	0.393 - 0.590	218048	115575 (s2.5)	**104050**
		0.590 - 0.787	081041	215403 (s4)	
		0.787 - 0.984	081042	115590 (T8)	
		0.984 - 1.181	081043		
ⓜ	536001	10.00 - 15.00	218048	115575 (s2.5)	**103050**
		15.00 - 20.00	081041	215403 (s4)	
		20.00 - 25.00	081042	115590 (T8)	
		25.00 - 30.00	081043		

NOTE: Balancing elements and inserts sold separately.

B10-M: 12-19 | B10-A: 18 | B10-H | B10: vi-vii

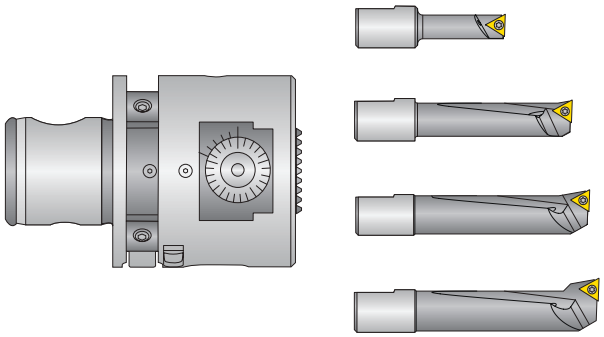
Key on B10-A: 1

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

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**

Kit Components

Nondigital | Insert Form 20 | Diameter Range: 0.393" - 1.181" (10.00 mm - 30.00 mm)



Diameter Range: 0.393" - 1.181" (10.00 mm - 30.00 mm)

	Kit Components				
	Boring Head	**Boring Bar Range**	**Boring Bars**	**Service Keys**	**Kit No.**
ⓘ	563001	0.393 - 0.590	218059	115575 (s2.5)	**104049**
		0.590 - 0.787	081045	215403 (s4)	
		0.787 - 0.984	081046	115591 (T7)	
		0.984 - 1.181	081047		
ⓜ	536001	10.00 - 15.00	218059	115575 (s2.5)	**103049**
		15.00 - 20.00	081045	215403 (s4)	
		20.00 - 25.00	081046	115591 (T7)	
		25.00 - 30.00	081047		

NOTE: Balancing elements and inserts sold separately.

B10-M: 12-19 | B10-A: 18 | B10-H | B10: vi-vii

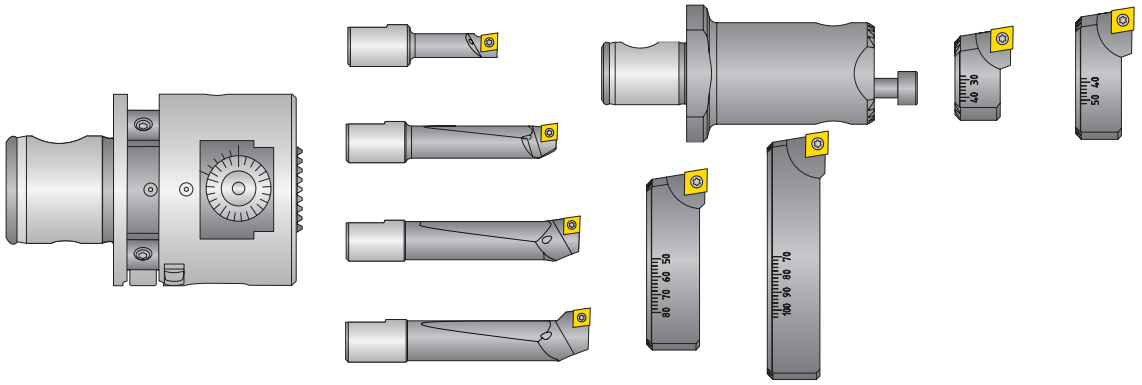
Key on B10-A: 1

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

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**

Kit Components

Nondigital | Insert Form 101 | Diameter Range: 0.393" - 4.016" (10.00 mm - 102.00 mm)



Diameter Range: 0.393" - 4.016" (10.00 mm - 102.00 mm)

	Kit Components											
		Boring Bars			Serrated Tool Body and Insert Holders			Insert Holders for Boring Head				
	Boring Head	Boring Bar Range	Part No.	Serrated Tool Body	Insert Holder Range	Part No.	Insert Holder Range	Part No.	Clamping Piece	Service Keys	Kit No.
ⓘ	563001	0.393 - 0.590	218048	236021	1.142 - 1.614	236023	2.047 - 3.031	236027	236020	115575 (s2.5)	**104052**
		0.590 - 0.787	081041		1.575 - 2.087	236025	2.992 - 4.016	236029		215403 (s4)	
		0.787 - 0.984	081042							215521 (s5)	
		0.984 - 1.181	081043							115590 (T8)	
ⓜ	536001	10.00 - 15.00	218048	236021	29.00 - 41.00	236023	52.00 - 77.00	236027	236020	115575 (s2.5)	**103052**
		15.00 - 20.00	081041		40.00 - 53.00	236025	76.00 - 102.00	236029		215403 (s4)	
		20.00 - 25.00	081042							215521 (s5)	
		25.00 - 30.00	081043							115590 (T8)	

NOTE: Balancing elements and inserts sold separately.

B10-M: 12-19 | B10-A: 18 | B10-H | B10: vi-vii

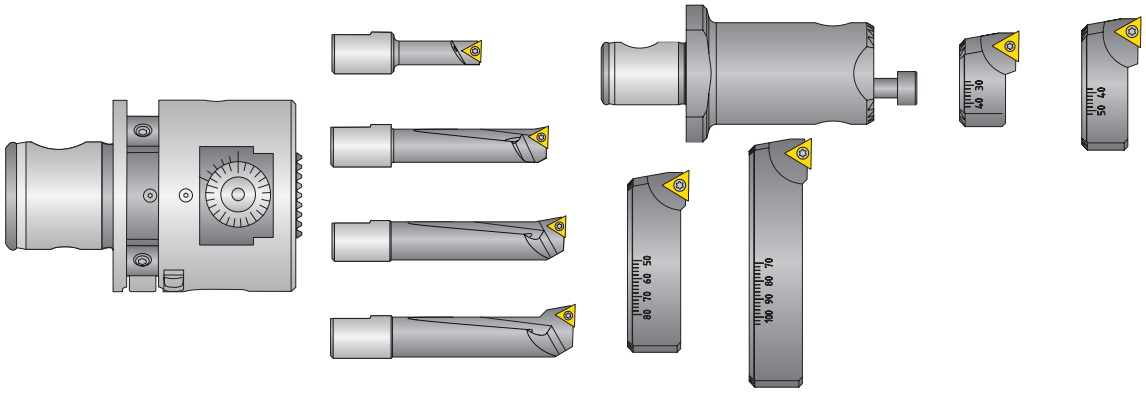
Key on B10-A: 1

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

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**

Kit Components

Nondigital | Insert Form 20 | Diameter Range: 0.393" - 4.016" (10.00 mm - 102.00 mm)



Diameter Range: 0.393" - 4.016" (10.00 mm - 102.00 mm)

Kit Components

	Boring Head	Boring Bars: Boring Bar Range	Boring Bars: Part No.	Serrated Tool Body and Insert Holders: Serrated Tool Body	Serrated Tool Body and Insert Holders: Insert Holder Range	Serrated Tool Body and Insert Holders: Part No.	Insert Holders for Boring Head: Insert Holder Range	Insert Holders for Boring Head: Part No.	Insert Holders for Boring Head: Clamping Piece	Service Keys	Kit No.
ⓘ	563001	0.393 - 0.590	218059	236021	1.142 - 1.614	236022	2.047 - 3.031	236026	236020	115575 (s2.5)	**104051**
		0.590 - 0.787	081045		1.575 - 2.087	236024	2.992 - 4.016	236028		215403 (s4)	
		0.787 - 0.984	081046							215521 (s5)	
		0.984 - 1.181	081047							115591 (T7)	
ⓜ	536001	10.00 - 15.00	218059	236021	29.00 - 41.00	236022	52.00 - 77.00	236026	236020	115575 (s2.5)	**103051**
		15.00 - 20.00	081045		40.00 - 53.00	236024	76.00 - 102.00	236028		215403 (s4)	
		20.00 - 25.00	081046							215521 (s5)	
		25.00 - 30.00	081047							115591 (T7)	

NOTE: Balancing elements and inserts sold separately.

B10-M: 12-19 | B10-A: 18 | B10-H | B10: vi-vii

Key on B10-A: 1

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

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**

249 (248) Product Overview

249 (248)
VERSATILE FINE BORING

Compact design. Precision boring.

The Wohlhaupter® 249 (248) compact boring head allows for higher spindle speeds and achieves long-reach boring jobs. Its cylindrical shank provides variable length adjustments up to 10xD.

Test this ***compact design*** for finish machining today.

- Diameter range: 0.118" - 1.189" (3.00 mm - 30.20 mm).
- Length adjustment up to 10xD.
- Coolant-through boring tool.
- 0.0005" (0.01 mm) adjust on diameter.
- Max spindle speed: 20,000 RPM.

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**

249 (248) Head

Insert Holder
Ø 0.626" - 1.189"
(Ø 15.90 mm - 30.20 mm)

Adapter

Boring Bar
Ø 0.146" - 0.630"
(Ø 3.70 mm - 16.00 mm)

Adapter

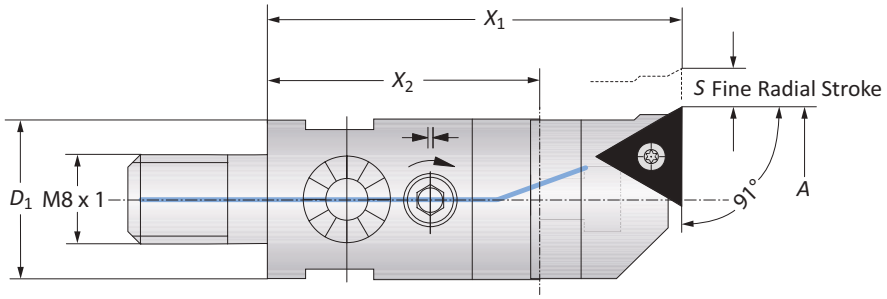
Mini Boring Bar
Ø 0.118" - 0.236"
(Ø 3.00 mm - 6.00 mm)

OPERATION **VERSATILITY**

from **0.118"** to **1.187"** (**3.00 mm** to **30.20 mm**)

Boring Heads

Diameter Range: 0.626" - 1.189" (15.90 mm - 30.20 mm)



	Boring Connection	Boring Range A	Boring Head X_1	X_2	D_1	S	Weight	Insert Form	Part No. Insert Holder	Boring Head
	M8 x 1	0.626 - 0.791	1.654	1.024	0.591	0.025	0.132 (lbs)	20*	**248051**	**249001**
	M8 x 1	0.626 - 0.791	1.654	1.024	0.591	0.055	0.132 (lbs)	101	**248054**	**249001**
ⓘ	M8 x 1	0.783 - 0.976	1.811	1.181	0.709	0.071	0.198 (lbs)	20*	**248052**	**249002**
	M8 x 1	0.783 - 0.976	1.811	1.181	0.709	0.071	0.198 (lbs)	101	**248055**	**249002**
	M8 x 1	0.965 - 1.189	1.811	1.181	0.906	0.091	0.287 (lbs)	20*	**248053**	**249003**
	M8 x 1	0.965 - 1.189	1.811	1.181	0.906	0.091	0.287 (lbs)	101	**248056**	**249003**
	M8 x 1	15.90 - 20.10	42.00	26.00	15.00	1.40	0.06 (kg)	20*	**248051**	**248001**
	M8 x 1	15.90 - 20.10	42.00	26.00	15.00	1.40	0.06 (kg)	101	**248054**	**248001**
ⓜ	M8 x 1	19.90 - 24.80	46.00	30.00	18.00	1.80	0.09 (kg)	20*	**248052**	**248002**
	M8 x 1	19.90 - 24.80	46.00	30.00	18.00	1.80	0.09 (kg)	101	**248055**	**248002**
	M8 x 1	24.50 - 30.20	46.00	30.00	23.00	2.30	0.13 (kg)	20*	**248053**	**248003**
	M8 x 1	24.50 - 30.20	46.00	30.00	23.00	2.30	0.13 (kg)	101	**248056**	**248003**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

B10-M: 12-19
Key on B10-A: 1
B10-A: 34
B10: vi-vii

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

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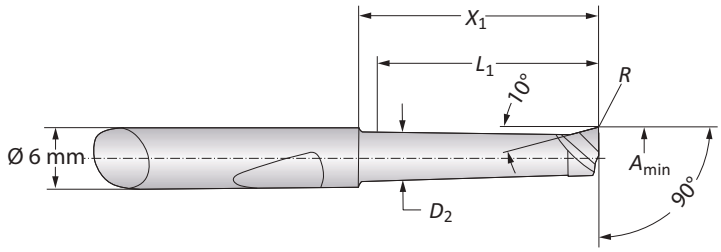
ext: **7611** | *email:* **appeng@alliedmachine.com**

Mini Boring Bars

WHC05 | WHW04 | WBN150 | Diameter Range: 0.118" - 0.236" (3.00 mm - 6.00 mm)

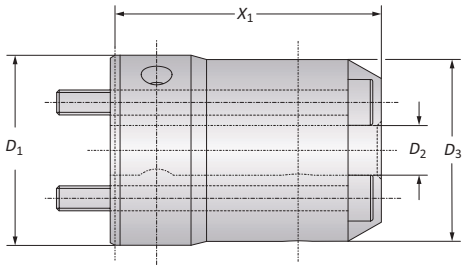


Mini Boring Bars

	Boring Range	Boring Bar					Part No.		
	A_{min}	D_1	D_2	X_1	L_1	R	Coated Carbide	Uncoated Carbide	CBN
	0.118	0.236	0.102	0.452	0.393	0.003	**081306WHC05**	–	**081322WBN150**
	0.118	0.236	0.102	0.649	0.590	0.003	**081307WHC05**	**081307WHW04**	–
	0.157	0.236	0.141	0.472	0.393	0.007	**081308WHC05**	–	**081317WBN150**
	0.157	0.236	0.141	0.669	0.590	0.007	**081309WHC05**	–	**081341WBN150**
	0.157	0.236	0.141	0.866	0.787	0.007	**081310WHC05**	**081310WHW04**	–
ⓘ	0.196	0.236	0.181	0.472	0.393	0.007	**081311WHC05**	–	–
	0.196	0.236	0.181	0.866	0.787	0.007	**081312WHC05**	–	**081319WBN150**
	0.196	0.236	0.181	1.259	1.181	0.007	**081313WHC05**	**081313WHW04**	–
	0.236	0.236	0.220	0.866	0.787	0.007	**081314WHC05**	–	**081320WBN150**
	0.236	0.236	0.220	1.259	1.181	0.007	**081315WHC05**	–	**081321WBN150**
	0.236	0.236	0.220	1.653	1.574	0.007	**081316WHC05**	**081316WHW04**	–
	3.00	6.00	2.60	11.50	10.00	0.10	**081306WHC05**	–	**081322WBN150**
	3.00	6.00	2.60	16.50	15.00	0.10	**081307WHC05**	**081307WHW04**	–
	4.00	6.00	3.60	12.00	10.00	0.20	**081308WHC05**	–	**081317WBN150**
	4.00	6.00	3.60	17.00	15.00	0.20	**081309WHC05**	–	**081341WBN150**
	4.00	6.00	3.60	22.00	20.00	0.20	**081310WHC05**	**081310WHW04**	–
ⓜ	5.00	6.00	4.60	12.00	10.00	0.20	**081311WHC05**	–	–
	5.00	6.00	4.60	22.00	20.00	0.20	**081312WHC05**	–	**081319WBN150**
	5.00	6.00	4.60	32.00	30.00	0.20	**081313WHC05**	**081313WHW04**	–
	6.00	6.00	5.60	22.00	20.00	0.20	**081314WHC05**	–	**081320WBN150**
	6.00	6.00	5.60	32.00	30.00	0.20	**081315WHC05**	–	**081321WBN150**
	6.00	6.00	5.60	42.00	40.00	0.20	**081316WHC05**	**081316WHW04**	–

Adapter

	Boring Head	Adapter				
		X_1	D_1	D_2	D_3	Part No.
ⓘ	249003	1.260	0.906	0.236	0.866	**248071**
ⓜ	248003	32.00	23.00	6.00	22.00	**248071**



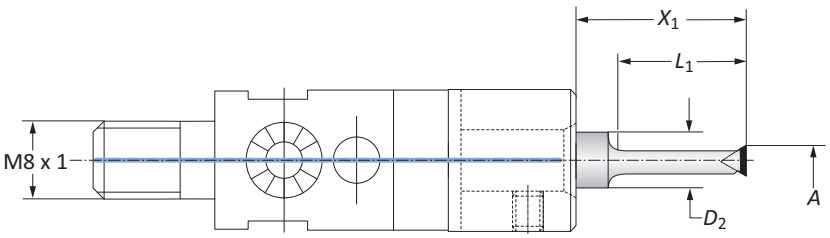
B10-M: 12-19 | B10-A: 34 | B10: vi-vii

Key on B10-A: 1

ⓘ = Imperial (in)
ⓜ = Metric (mm)

Boring Bars

Diameter Range: 0.146" - 0.630" (3.70 mm - 16.00 mm)



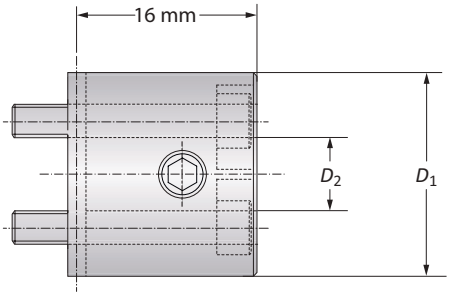
Boring Bars

	Boring Range	Boring Bar				
	A	D_2	X_1	L_1	Insert Form	Part No.
i	0.146 - 0.197	0.315	0.819	0.709	325*	**218074**
	0.193 - 0.236	0.315	1.024	0.906	47*	**218075**
	0.232 - 0.315	0.315	1.063	0.984	211*	**218076**
	0.311 - 0.394	0.315	1.201	1.181	211*	**218077**
	0.390 - 0.472	0.315	1.378	1.378	20*	**218079**
	0.390 - 0.472	0.315	1.378	1.378	101	**218082**
	0.469 - 0.551	0.394	1.772	1.772	20*	**218080**
	0.469 - 0.551	0.394	1.772	1.772	101	**218083**
	0.547 - 0.630	0.394	1.969	1.968	20*	**218081**
	0.547 - 0.630	0.394	1.969	1.968	101	**218084**
m	3.70 - 5.00	8.00	20.80	18.00	325*	**218074**
	4.90 - 6.00	8.00	26.00	23.00	47*	**218075**
	5.90 - 8.00	8.00	27.00	25.00	211*	**218076**
	7.90 - 10.00	8.00	30.50	30.00	211*	**218077**
	9.90 - 12.00	8.00	35.00	35.00	20*	**218079**
	9.90 - 12.00	8.00	35.00	35.00	101	**218082**
	11.90 - 14.00	10.00	45.00	45.00	20*	**218080**
	11.90 - 14.00	10.00	45.00	45.00	101	**218083**
	13.90 - 16.00	10.00	50.00	50.00	20*	**218081**
	13.90 - 16.00	10.00	50.00	50.00	101	**218084**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

Adapters

	Boring Head	Adapter		Part No.
		D_1	D_2	
i	249002	0.709	0.315	**248063**
	249003	0.906	0.315	**248064**
	249003	0.906	0.394	**248065**
m	248002	18.00	8.00	**248063**
	248003	23.00	8.00	**248064**
	248003	23.00	10.00	**248065**

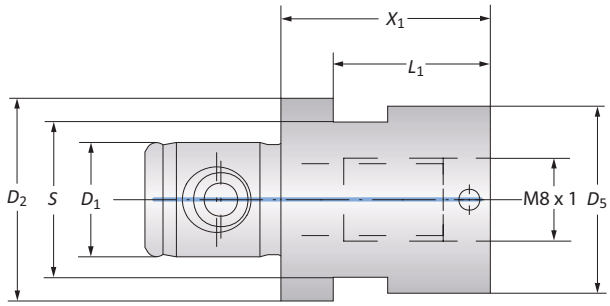


B10-M: 12-19 | B10-H | B10: vi-vii

Key on B10-A: 1

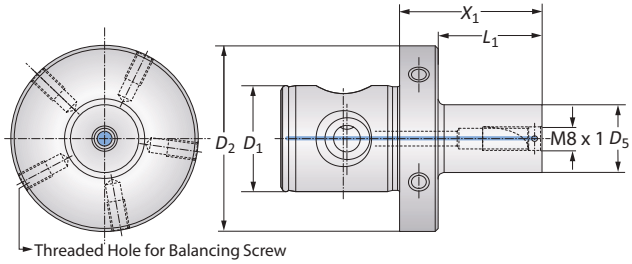
i = Imperial (in)
m = Metric (mm)
Inserts sold separately

Adapters



Adapters

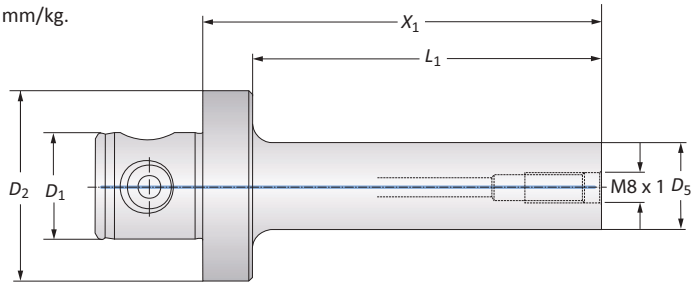
	MVS Connection $D_2 \mid D_1$	Boring Connection	Adapter X_1	L_1	S	D_5	Weight	Service Key	Part No.
i	19.5 - 11	M8 x 1	0.787	0.590	15/P	0.708	0.110 (lbs)	15 S / P	**219168**
	23 - 11	M8 x 1	0.787	–	19/P	0.905	0.154 (lbs)	19 S / P	**219169**
m	19.5 - 11	M8 x 1	20.00	15.00	15/P	18.00	0.05 (kg)	15 S / P	**219168**
	23 - 11	M8 x 1	20.00	–	19/P	23.00	0.07 (kg)	19 S / P	**219169**



Balanced Adapters

	MVS Connection $D_2 \mid D_1$	Boring Connection	Adapter X_1	L_1	D_5	Weight	Balancing Screw	Part No.
i	50 - 28	M8 x 1	1.259	0.748	0.590	0.771 (lbs)	M6 x 1 x 10	**219185**
	50 - 28	M8 x 1	1.890	1.377	0.708	0.881 (lbs)	M6 x 1 x 10	**219176**
	50 - 28	M8 x 1	1.890	1.377	0.905	0.992 (lbs)	M6 x 1 x 10	**219177**
m	50 - 28	M8 x 1	32.00	19.00	15.00	0.35 (kg)	M6 x 1 x 10	**219185**
	50 - 28	M8 x 1	48.00	35.00	18.00	0.40 (kg)	M6 x 1 x 10	**219176**
	50 - 28	M8 x 1	48.00	35.00	23.00	0.45 (kg)	M6 x 1 x 10	**219177**

NOTE: Balance refers to a specific residual imbalance of ≤ 10 g mm/kg.

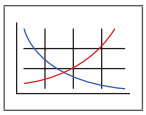


Vibration Reducing Heavy Metal Adapters

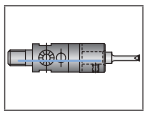
	MVS Connection $D_2 \mid D_1$	Boring Connection	Adapter X_1	L_1	D_5	Weight	Part No.
i	50 - 28	M8 x 1	2.677	2.165	0.590	1.763 (lbs)	**248147**
	50 - 28	M8 x 1	3.307	2.795	0.748	2.204 (lbs)	**248148**
	50 - 28	M8 x 1	4.094	3.582	0.905	2.866 (lbs)	**248149**
m	50 - 28	M8 x 1	68.00	55.00	15.00	0.80 (kg)	**248147**
	50 - 28	M8 x 1	84.00	71.00	19.00	1.00 (kg)	**248148**
	50 - 28	M8 x 1	104.00	91.00	23.00	1.30 (kg)	**248149**

Key on B10-A: 1

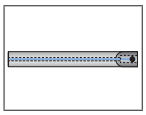
B10-M: 12-19



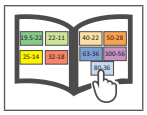
B10-A: 30



B10-A: 34



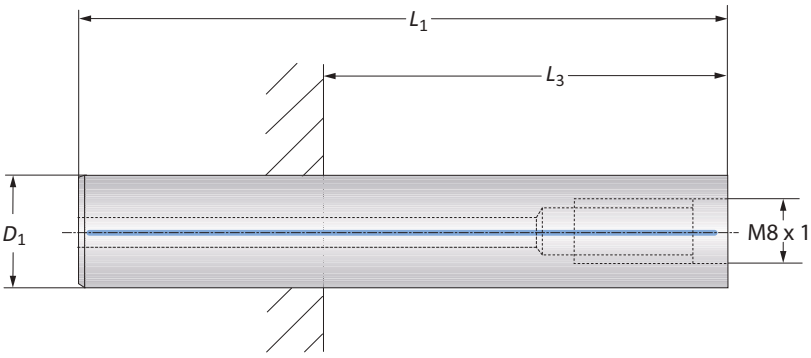
B10: vi-vii



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

Shanks

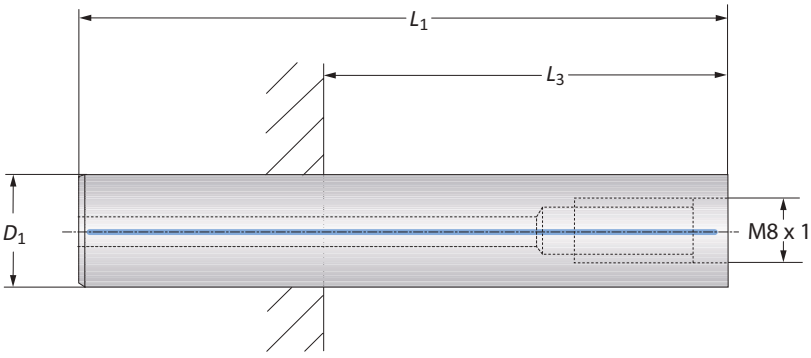
Steel | Carbide



Steel Shanks

	Connection	Shank D_1	Shank L_1	Shank $L_{3\ max}$*	$L_{3\ min}$* SK 40+50	$L_{3\ min}$* HSK-A 63	$L_{3\ min}$* HSK-A 100	Weight	Part No.
i	M8 x 1	0.591	3.346	1.456	–	–	–	0.220 (lbs)	**248136**
i	M8 x 1	0.709	3.937	2.047	–	0.196	0.472	0.440 (lbs)	**248137**
i	M8 x 1	0.906	4.606	2.716	–	0.866	1.141	0.881 (lbs)	**248138**
m	M8 x 1	15.00	85.00	37.00	–	–	–	0.10 (kg)	**248136**
m	M8 x 1	18.00	100.00	52.00	–	5.00	12.00	0.20 (kg)	**248137**
m	M8 x 1	23.00	117.00	69.00	–	22.00	29.00	0.40 (kg)	**248138**

*L_3 dimensions apply to collet chucks.

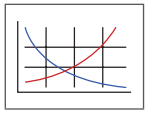


Carbide Shanks

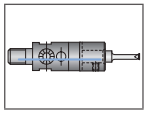
	Connection	Shank D_1	Shank L_1	Shank $L_{3\ max}$*	$L_{3\ min}$* SK 40	$L_{3\ min}$* SK 50	$L_{3\ min}$* HSK-A 63	$L_{3\ min}$* HSK-A 100	Weight	Part No.
i	M8 x 1	0.591	5.118	3.228	0.787	0.787	1.377	1.653	0.661 (lbs)	**248142**
i	M8 x 1	0.709	6.102	4.212	1.535	0.826	2.362	2.637	1.322 (lbs)	**248143**
i	M8 x 1	0.906	7.086	5.196	2.519	1.811	3.346	3.622	2.425 (lbs)	**248144**
i	M8 x 1	0.906	9.527	7.637	4.960	4.251	5.787	6.062	3.086 (lbs)	**248145**
m	M8 x 1	15.00	130.00	82.00	20.00	20.00	35.00	42.00	0.30 (kg)	**248142**
m	M8 x 1	18.00	155.00	107.00	39.00	21.00	60.00	67.00	0.60 (kg)	**248143**
m	M8 x 1	23.00	180.00	132.00	64.00	46.00	85.00	92.00	1.10 (kg)	**248144**
m	M8 x 1	23.00	242.00	194.00	126.00	108.00	147.00	154.00	1.40 (kg)	**248145**

*L_3 dimensions apply to collet chucks.

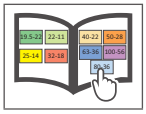
B10-M: 12-19
Key on B10-A: 1



B10-A: 30



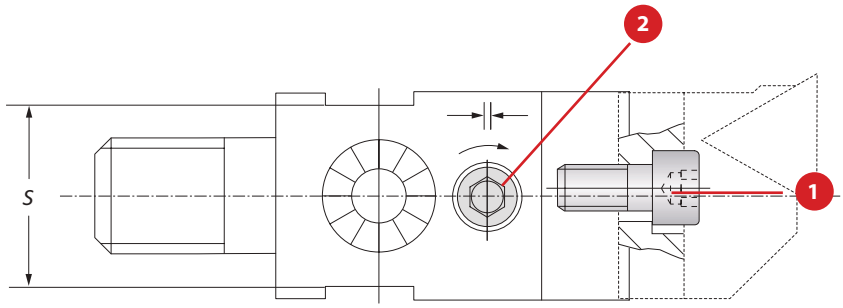
B10: vi-vii



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

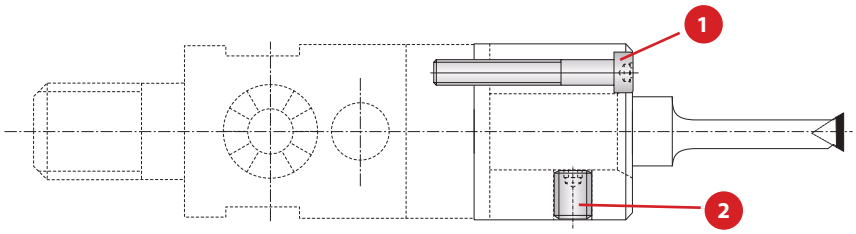
Accessories

Clamping Elements



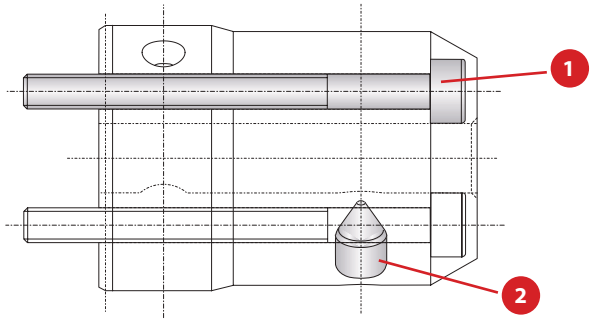
Clamping Elements for Boring Heads

	Boring Head	Service Key S / Type	1 Cap Screw Part No.	1 Cap Screw Service Key	2 Set Screw Part No.	2 Set Screw Service Key
ⓘ	249001	13 S / P	**315631**	s3 / A	**315629**	s2 / A
ⓘ	249002	15 S / P	**315631**	s3 / A	**315684**	s2 / A
ⓘ	249003	19 S / P	**315631**	s3 / A	**315687**	s2 / A
ⓜ	248001	13 S / P	**315631**	s3 / A	**315629**	s2 / A
ⓜ	248002	15 S / P	**315631**	s3 / A	**315684**	s2 / A
ⓜ	248003	19 S / P	**315631**	s3 / A	**315687**	s2 / A



Clamping Elements for Adapters

	Adapters	1 Cap Screw Part No.	1 Cap Screw Service Key	2 Set Screw Part No.	2 Set Screw Service Key
ⓜ	248063	**315801**	S 2.5 / A	**115136**	S 2.5 / A
ⓜ	248064	**315801**	S 2.5 / A	**031141**	S 2.5 / A
ⓜ	248065	**315801**	S 2.5 / A	**031141**	S 2.5 / A



Screws for Adapter

	Adapters	1 Cap Screw Part No.	Service Key	2 Set Screw Part No.	Service Key
ⓜ	248071	**515166**	S 2.5 / A	**415244**	S 3 / A

ⓘ = Imperial (in)
ⓜ = Metric (mm)

PrimeBore Product Overview

PrimeBore
VERSATILE FINE BORING

Advancing versatile technology.

With over 30 years of development, the Wohlhaupter® PrimeBore boring head offers versatility and precision. The PrimeBore head can bore multiple hole sizes ranging from 0.118" - 8.189" (3.00 mm - 208.00 mm) with our broad range of compatible boring bars.

Complete your boring job with ***technology that continues to advance***.

- Diameter range: 0.118" - 8.189" (3.00 mm - 208.00 mm).
- Ease the stress of working on different day-to-day projects with boring kits.
- 0.0001" (0.002 mm) adjust on diameter.
- Economical precision and versatility.
- Max spindle speed: 12,000 RPM.
- Coolant through.

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**

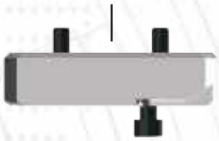
PRIME BORE

PrimeBore Head

Coolant Delivery System

Outside Turning
Ø 0.157" - 2.598"
(Ø 4.00 mm - 66.00 mm)

Coolant Delivery System



Serrated Slide

Serrated Tool Body

Carbide Boring Bar
Ø 0.394" - 0.787"
(Ø 10.00 mm - 20.00 mm)

Heavy Metal Boring Bar
Ø 0.236" - 0.394"
(Ø 6.00 mm - 10.00 mm)

Steel Boring Bar
Ø 0.236" - 0.945"
(Ø 6.00 mm - 24.00 mm)

Adapter

Mini Boring Bar
Ø 0.118" - 0.394"
(Ø 3.00 mm - 10.00 mm)

Serrated Slide

Counterweight

Insert Holder
Ø 0.945" - 5.039"
(Ø 24.00 mm - 128.00 mm)

Insert Holder
Ø 2.677" - 8.189"
(Ø 68.00 mm - 208.00 mm)

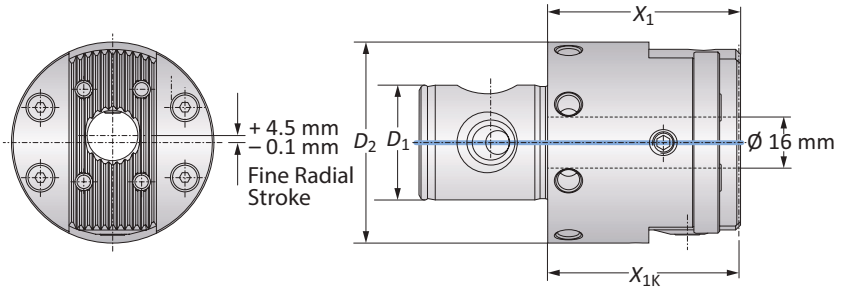
Outside Turning
Ø 0.157" - 2.598"
(Ø 4.00 mm - 66.00 mm)

OPERATION **VERSATILITY**

from **0.118"** to **8.189"** (**3.00 mm** to **208.00 mm**)
plus outside turning

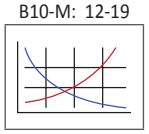
Boring Heads

Diameter Range: 0.118" - 8.189" (3.00 mm - 208.00 mm)

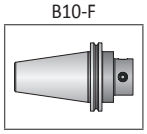


	MVS Connection D_2 | D_1	Boring Range	Boring Head X_1	Boring Head X_{1K}	Weight	Part No.
i	63 - 36	0.118 - 8.189	2.362	2.343	2.866 (lbs)	**451001**
m	63 - 36	3.00 - 208.00	60.00	59.50	1.30 (kg)	**450001**

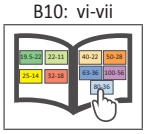
B10-M: 12-19
Key on B10-A: 1



B10-F



B10: vi-vii

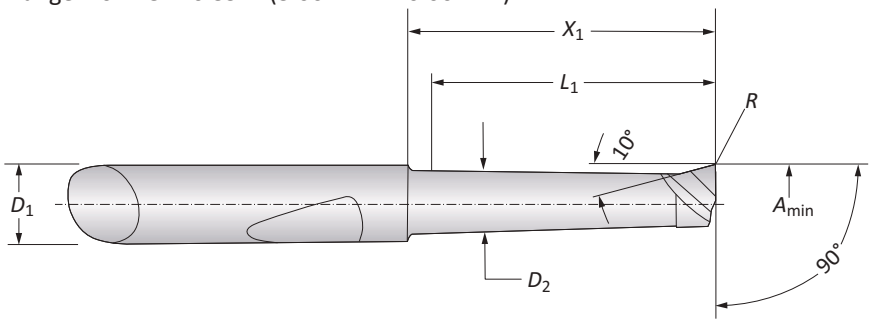


i = Imperial (in)
m = Metric (mm)

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**

Mini Boring Bars

WHC05 | WHW04 | WBN150 | Diameter Range: 0.118" - 0.394" (3.00 mm - 10.00 mm)

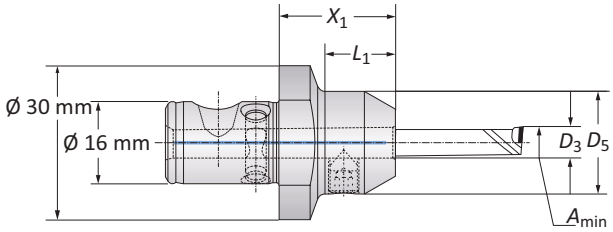


Mini Boring Bars

	Boring Range	Boring Bar					Part No.		
	A_{min}	D_1	D_2	X_1	L_1	R	Coated Carbide	Uncoated Carbide	CBN
	0.118	0.236	0.102	0.452	0.393	0.003	**081306WHC05**	–	**081322WBN150**
	0.118	0.236	0.102	0.649	0.590	0.003	**081307WHC05**	**081307WHW04**	–
	0.157	0.236	0.141	0.472	0.393	0.007	**081308WHC05**	–	**081317WBN150**
	0.157	0.236	0.141	0.669	0.590	0.007	**081309WHC05**	–	**081341WBN150**
	0.157	0.236	0.141	0.866	0.787	0.007	**081310WHC05**	**081310WHW04**	–
	0.196	0.236	0.181	0.472	0.393	0.007	**081311WHC05**	–	–
ⓘ	0.196	0.236	0.181	0.866	0.787	0.007	**081312WHC05**	–	**081319WBN150**
	0.196	0.236	0.181	1.259	1.181	0.007	**081313WHC05**	**081313WHW04**	–
	0.236	0.236	0.220	0.866	0.787	0.007	**081314WHC05**	–	**081320WBN150**
	0.236	0.236	0.220	1.259	1.181	0.007	**081315WHC05**	–	**081321WBN150**
	0.236	0.236	0.220	1.653	1.574	0.007	**081316WHC05**	**081316WHW04**	–
	0.315	0.315	0.229	0.984	0.905	0.007	**081323WHC05**	–	–
	0.315	0.315	0.229	1.968	1.889	0.007	**081324WHC05**	–	–
	3.00	6.00	2.60	11.50	10.00	0.10	**081306WHC05**	–	**081322WBN150**
	3.00	6.00	2.60	16.50	15.00	0.10	**081307WHC05**	**081307WHW04**	–
	4.00	6.00	3.60	12.00	10.00	0.20	**081308WHC05**	–	**081317WBN150**
	4.00	6.00	3.60	17.00	15.00	0.20	**081309WHC05**	–	**081341WBN150**
	4.00	6.00	3.60	22.00	20.00	0.20	**081310WHC05**	**081310WHW04**	–
	5.00	6.00	4.60	12.00	10.00	0.20	**081311WHC05**	–	–
ⓜ	5.00	6.00	4.60	22.00	20.00	0.20	**081312WHC05**	–	**081319WBN150**
	5.00	6.00	4.60	32.00	30.00	0.20	**081313WHC05**	**081313WHW04**	–
	6.00	6.00	5.60	22.00	20.00	0.20	**081314WHC05**	–	**081320WBN150**
	6.00	6.00	5.60	32.00	30.00	0.20	**081315WHC05**	–	**081321WBN150**
	6.00	6.00	5.60	42.00	40.00	0.20	**081316WHC05**	**081316WHW04**	–
	8.00	8.00	7.60	25.00	23.00	0.20	**081323WHC05**	–	–
	8.00	8.00	7.60	50.00	48.00	0.20	**081324WHC05**	–	–

Adapters

	Adapter				
	D_3	D_5	X_1	L_1	Part No.
ⓜ	6.00	20.00	22.50	14.00	**319010**
	8.00	22.00	22.50	14.00	**236071**



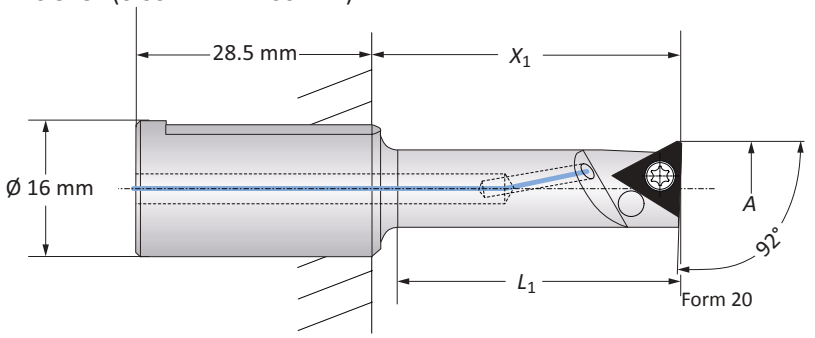
B10-M: 12-19
B10: vi-vii
Key on B10-A: 1

ⓘ = Imperial (in)
ⓜ = Metric (mm)

Boring Bars

Steel | Heavy Metal | Diameter Range: 0.236" - 0.945" (6.00 mm - 24.00 mm)

Form 101

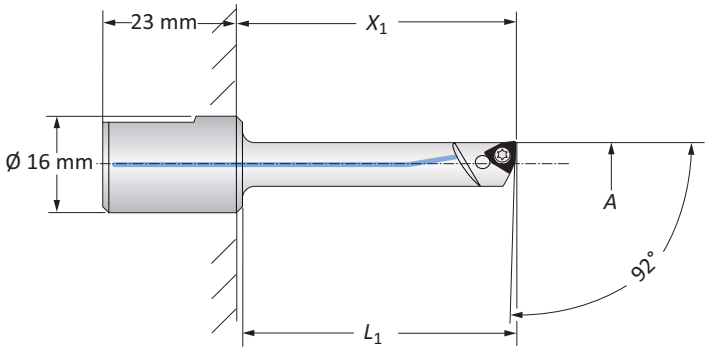


Form 20

Steel Boring Bars | Diameter Range: 0.236" - 0.945" (6.00 mm - 24.00 mm)

	Boring Range A	Boring Bar X_1	Boring Bar L_1	Weight	Insert Form	Part No.
	0.236 - 0.394	0.866 - 1.260	0.787	0.090 (lbs)	211*	**450026**
	0.394 - 0.630	1.378 - 1.772	1.299	0.130 (lbs)	101	**450027**
ⓘ	0.394 - 0.630	1.378 - 1.772	1.299	0.130 (lbs)	20*	**450038**
	0.630 - 0.945	2.362 - 2.756	2.283	0.220 (lbs)	101	**450028**
	0.630 - 0.945	2.362 - 2.756	2.283	0.220 (lbs)	20*	**450039**
	6.00 - 10.00	22.00 - 32.00	20.00	0.04 (kg)	211*	**450026**
	10.00 - 16.00	35.00 - 45.00	33.00	0.06 (kg)	101	**450027**
ⓜ	10.00 - 16.00	35.00 - 45.00	33.00	0.06 (kg)	20*	**450038**
	16.00 - 24.00	60.00 - 70.00	58.00	0.10 (kg)	101	**450028**
	16.00 - 24.00	60.00 - 70.00	58.00	0.10 (kg)	20*	**450039**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).



Heavy Metal Boring Bars | Diameter Range: 0.236" - 0.394" (6.00 mm - 10.00 mm)

	Boring Range A	Boring Bar X_1	Boring Bar L_1	Weight	Insert Form	Part No.
ⓘ	0.236 - 0.315	1.260	1.142	0.176 (lbs)	211*	**081055**
	0.315 - 0.394	1.772	1.654	0.198 (lbs)	211*	**218072**
ⓜ	6.00 - 8.00	32.00	29.00	0.08 (kg)	211*	**081055**
	8.00 - 10.00	45.00	42.00	0.09 (kg)	211*	**218072**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

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

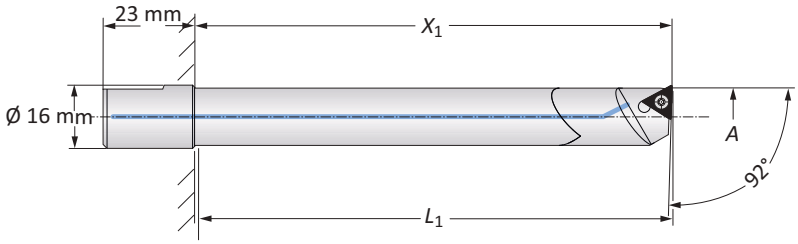
Key on B10-A: 1

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

Boring Bars

Carbide | Diameter Range: 0.393" - 0.787" (10.00 mm - 20.00 mm)

Form 101



Form 20

Carbide Boring Bars

	Boring Range	Boring Bar						
	A	X_1	L_1	Weight	Insert Form	Part No.	Insert Form	Part No.
	0.394 - 0.472	2.165	2.047	0.154 (lbs)	101	**218042**	20*	**218037**
	0.394 - 0.472	2.953	2.835	0.198 (lbs)	101	**218032**	20*	**218029**
	0.472 - 0.551	2.756	2.638	0.220 (lbs)	101	**218043**	20*	**218038**
ⓘ	0.472 - 0.551	3.543	3.425	0.331 (lbs)	101	**218033**	20*	**218030**
	0.551 - 0.630	2.953	2.835	0.353 (lbs)	101	**218044**	20*	**218039**
	0.551 - 0.630	3.937	3.819	0.441 (lbs)	101	**218045**	20*	**218040**
	0.630 - 0.787	3.543	3.425	0.573 (lbs)	101	**218046**	20*	**218041**
	0.630 - 0.787	4.724	4.606	0.728 (lbs)	101	**218034**	20*	**218031**
	10.00 - 12.00	55.00	52.00	0.07 (kg)	101	**218042**	20*	**218037**
	10.00 - 12.00	75.00	72.00	0.09 (kg)	101	**218032**	20*	**218029**
	12.00 - 14.00	70.00	67.00	0.10 (kg)	101	**218043**	20*	**218038**
ⓜ	12.00 - 14.00	90.00	87.00	0.15 (kg)	101	**218033**	20*	**218030**
	14.00 - 16.00	75.00	72.00	0.16 (kg)	101	**218044**	20*	**218039**
	14.00 - 16.00	100.00	97.00	0.20 (kg)	101	**218045**	20*	**218040**
	16.00 - 20.00	90.00	87.00	0.26 (kg)	101	**218046**	20*	**218041**
	16.00 - 20.00	120.00	117.00	0.33 (kg)	101	**218034**	20*	**218031**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

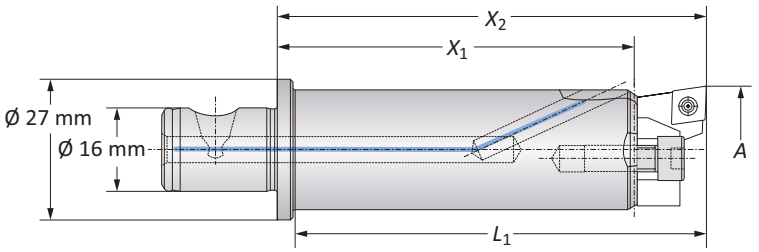
B10-M: 12-19 | B10-H | B10: vi-vii

Key on B10-A: 1

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

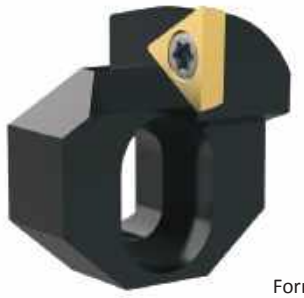
Serrated Tool Bodies | Insert Holders

Diameter Range: 0.945" - 2.559" (24.00 mm - 65.00 mm)

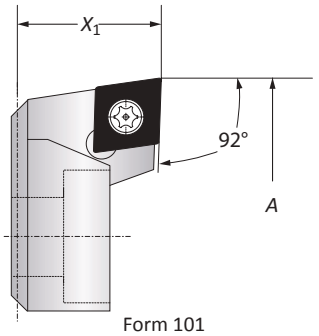


Serrated Tool Bodies

	Boring Range A	Serrated Tool Body X_1	X_2	L_1	Weight	Part No.
i	0.945 - 2.559	2.667	3.228	3.110	0.441 (lbs)	**450021**
m	24.00 - 65.00	68.00	82.00	79.00	0.20 (kg)	**450021**



Form 20



Form 101

Insert Holders

	Boring Range A	Insert Holder X_1	Weight	Insert Form	Part No.
i	0.945 - 1.575	0.551	0.044 (lbs)	101	**450022**
i	0.945 - 1.575	0.551	0.044 (lbs)	20*	**450040**
i	1.575 - 2.559	0.551	0.066 (lbs)	101	**450023**
i	1.575 - 2.559	0.551	0.066 (lbs)	20*	**450041**
m	24.00 - 40.00	14.00	0.02 (kg)	101	**450022**
m	24.00 - 40.00	14.00	0.02 (kg)	20*	**450040**
m	40.00 - 65.00	14.00	0.03 (kg)	101	**450023**
m	40.00 - 65.00	14.00	0.03 (kg)	20*	**450041**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

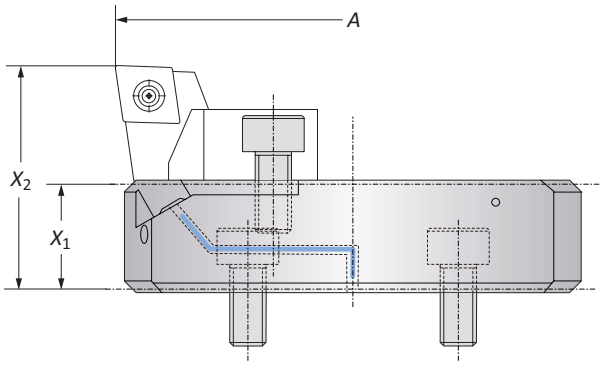
B10-M: 12-19 | B10-A: 47 | B10-H | B10: vi-vii

Key on B10-A: 1

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

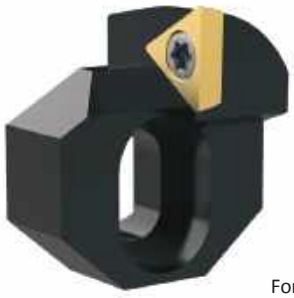
Serrated Slides | Insert Holders

Diameter Range: 2.559" - 5.039" (65.00 mm - 128.00 mm)

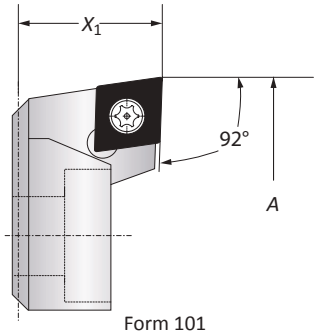


Serrated Slides

	Boring Range A	Serrated Slide X_1	X_2	Weight	Part No.
i	2.559 - 5.039	0.571	1.161	0.176 (lbs)	**450024**
m	65.00 - 128.00	14.50	29.50	0.08 (kg)	**450024**



Form 20



Form 101

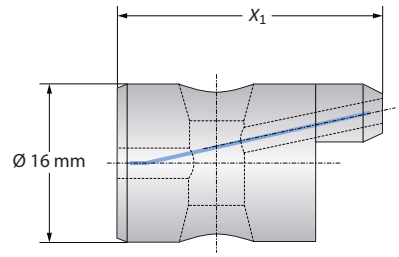
Insert Holders

	Boring Range A	Insert Holder X_1	Weight	Insert Form	Part No.
i	2.559 - 5.039	0.551	0.066 (lbs)	101	**450023**
	2.559 - 5.039	0.551	0.066 (lbs)	20*	**450041**
m	65.00 - 128.00	14.00	0.03 (kg)	101	**450023**
	65.00 - 128.00	14.00	0.03 (kg)	20*	**450041**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

Alu-Line Coolant Delivery Sections

	Coolant Delivery Section X_1	Weight	Part No.
m	26.75	0.01 (kg)	**450125**

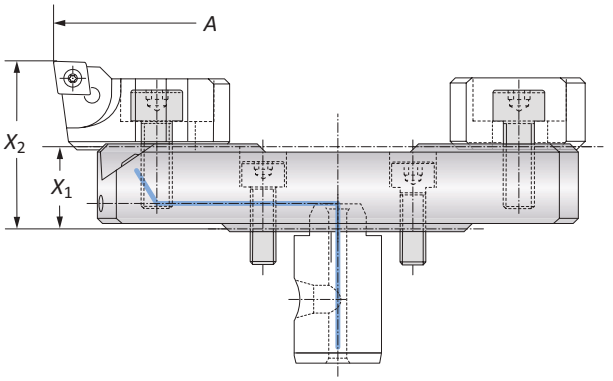


B10-M: 12-19 | B10-A: 47 | B10-H | B10: vi-vii
Key on B10-A: 1

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

Alu-Line Serrated Slides | Insert Holders

Diameter Range: 2.667" - 8.189" (68.00 mm - 208.00 mm)



Alu-Line Serrated Slides

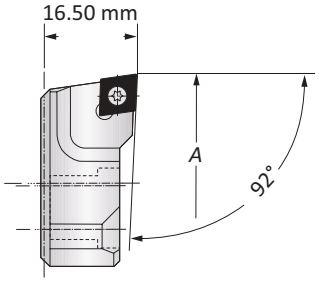
	Boring Range A	Serrated Slide X_1	Serrated Slide X_2	Weight	Part No.
i	2.667 - 3.780	0.630	1.280	0.220 (lbs)	**501054**
	3.780 - 4.882	0.630	1.280	0.220 (lbs)	**501055**
	4.882 - 5.984	0.630	1.280	0.441 (lbs)	**501056**
	5.984 - 7.087	0.866	1.516	0.551 (lbs)	**501058**
	7.087 - 8.189	0.866	1.516	0.661 (lbs)	**501059**
m	68.00 - 96.00	16.00	32.50	0.10 (kg)	**501054**
	96.00 - 124.00	16.00	32.50	0.10 (kg)	**501055**
	124.00 - 152.00	16.00	32.50	0.20 (kg)	**501056**
	152.00 - 180.00	22.00	38.50	0.25 (kg)	**501058**
	180.00 - 208.00	22.00	38.50	0.30 (kg)	**501059**

Insert Holders

	Boring Range A	Weight	Insert Form	Part No.
i	2.677 - 8.189	0.110 (lbs)	101	**502064**
	2.677 - 8.189	0.110 (lbs)	20	**502069**
m	68.00 - 208.00	0.05 (kg)	101	**502064**
	68.00 - 208.00	0.05 (kg)	20	**502069**

NOTE: Other insert holders available upon request.

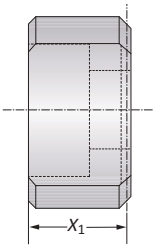
Form 20



Form 101

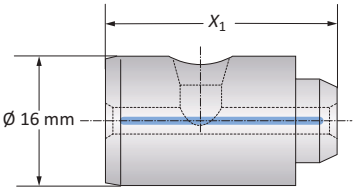
Counterweights

	Counterweights X_1	Weight	Part No.
i	0.528	0.110 (lbs)	**502165**
m	13.40	0.05 (kg)	**502165**



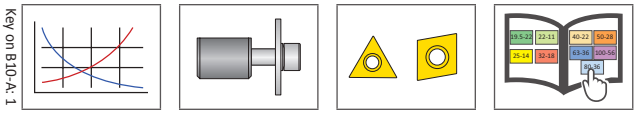
Alu-Line Coolant Delivery Sections

	Coolant Delivery Section X_1	Weight	Part No.
i	1.004	0.022 (lbs)	**450137**
m	25.50	0.01 (kg)	**450137**



B10-M: 12-19 | B10-A: 47 | B10-H | B10: vi-vii

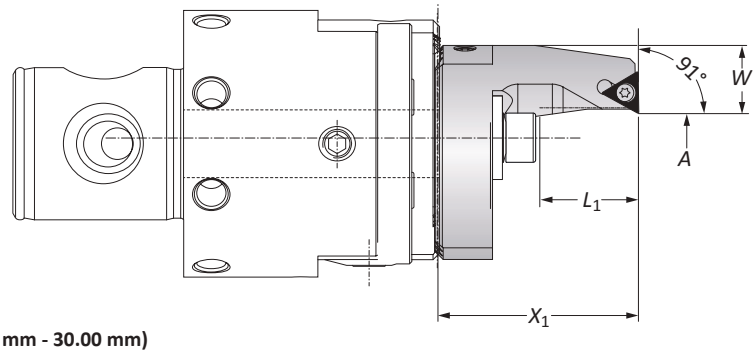
Key on B10-A: 1



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

Outside Turning Insert Holders for Boring Heads

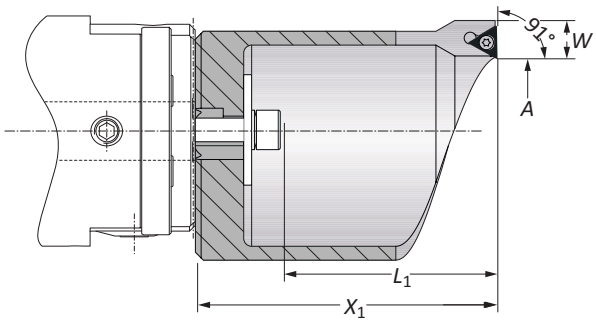
Diameter Range: 0.157" - 2.598" (4.00 mm - 66.00 mm)



Type A Insert Holders | Diameter Range: 0.157" - 1.181" (4.00 mm - 30.00 mm)

	Boring Range A	Insert Holder X_1	Insert Holder L_1	Insert Holder W	Weight	Type	Insert Form	Part No.
i	0.157 - 0.689	1.594	0.787	0.653	0.220 (lbs)	A	20*	**236081**
i	0.650 - 1.181	1.988	1.181	0.437	0.220 (lbs)	A	20*	**236082**
m	4.00 - 17.50	40.50	20.00	16.60	0.10 (kg)	A	20*	**236081**
m	16.50 - 30.00	50.50	30.00	11.10	0.10 (kg)	A	20*	**236082**

NOTE: Clockwise and neutral execution.
*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).



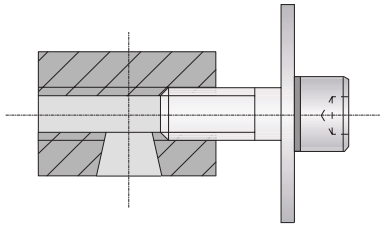
Type B Insert Holders | Diameter Range: 1.142" - 2.598" (29.00 mm - 66.00 mm)

	Boring Range A	Insert Holder X_1	Insert Holder L_1	Insert Holder W	Weight	Type	Insert Form	Part No.
i	1.142 - 1.732	2.952	2.126	0.377	0.661 (lbs)	B	20*	**236083**
i	1.693 - 2.598	3.956	3.110	0.377	0.882 (lbs)	B	20*	**236084**
m	29.00 - 44.00	75.50	54.00	9.60	0.30 (kg)	B	20*	**236083**
m	43.00 - 66.00	100.50	79.00	9.60	0.40 (kg)	B	20*	**236084**

NOTE: Clockwise and neutral execution.
*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

Clamping Pieces for Outside Turning Insert Holders

	Insert Holder Type	Boring Range	Service Key	Complete Part No.
m	A	4.00 - 30.00	**s5**	**236088**
m	B	29.00 - 66.00	**s5**	**236089**



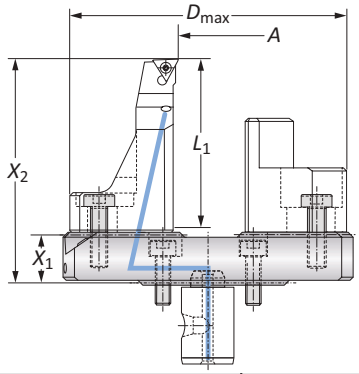
B10-M: 12-19 | B10-A: 47 | B10-H | B10: vi-vii

Key on B10-A: 1

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

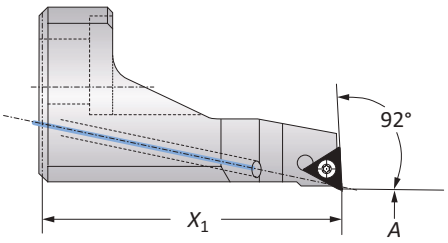
Outside Turning Serrated Slides | Insert Holders

Diameter Range: 0.078" - 4.488" (2.00 mm - 114.00 mm)



Outside Turning Serrated Slides

	Boring Range A	Serrated Slide X_1	X_2	L_1	D_{max}	Weight	Part No.
i	0.078 - 1.181	0.630	2.874	2.165	3.396	0.771 (lbs)	**501064**
	1.181 - 2.283	0.630	2.874	2.165	5.078	0.970 (lbs)	**501065**
	2.283 - 3.386	0.866	3.110	2.165	6.181	1.322 (lbs)	**501066**
	3.386 - 4.488	0.866	3.110	2.165	7.283	1.609 (lbs)	**501067**
m	2.00 - 30.00	16.00	73.00	55.00	101.00	0.35 (kg)	**501064**
	30.00 - 58.00	16.00	73.00	55.00	129.00	0.44 (kg)	**501065**
	58.00 - 86.00	22.00	79.00	55.00	157.00	0.60 (kg)	**501066**
	86.00 - 114.00	22.00	79.00	55.00	185.00	0.73 (kg)	**501067**



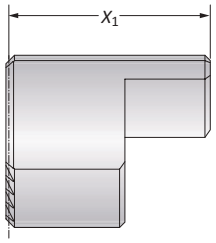
Insert Holders

	Outside Turning Range A	Insert Holder X_1	Weight	Insert Form	Part No.
i	0.079 - 4.488	2.244	0.331 (lbs)	20	**502082**
m	2.00 - 114.00	57.00	0.15 (kg)	20	**502082**

NOTE: Clockwise and neutral execution.

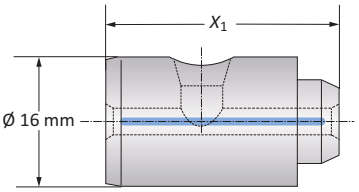
Counterweights

	Counterweight X_1	Weight	Part No.
i	1.486	0.350 (lbs)	**502183**
m	37.75	0.16 (kg)	**502183**



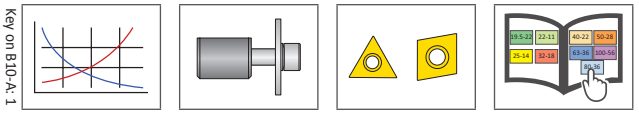
Coolant Delivery Sections

	Coolant Delivery Section X_1	Weight	Part No.
i	1.004	0.022 (lbs)	**450137**
m	25.50	0.01 (kg)	**450137**



B10-M: 12-19 | B10-A: 47 | B10-H | B10: vi-vii

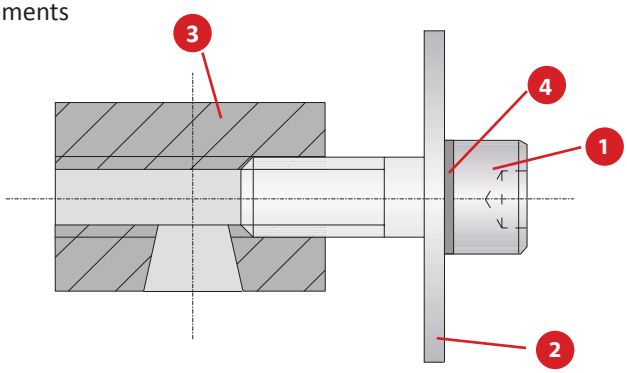
Key on B10-A: 1



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

Accessories

Clamping Elements

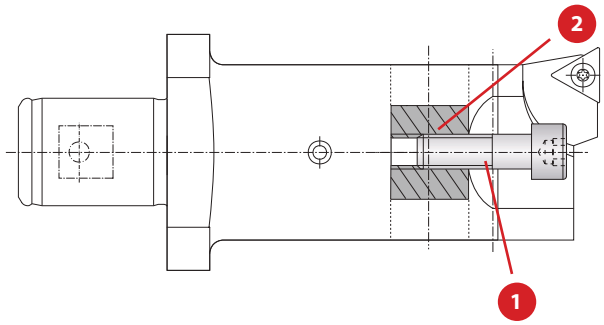


Clamping Elements for Insert Holders

	Boring Range	1 Cap Screw	Hex Size	2 Washer	3 Clamping Nut	4 Locking Washer	Complete Part No.
ⓜ	4.00 - 30.00	070153	s5	315155	236120	215254	236088
	29.00 - 66.00	070153	s5	315156	236120	215254	236089

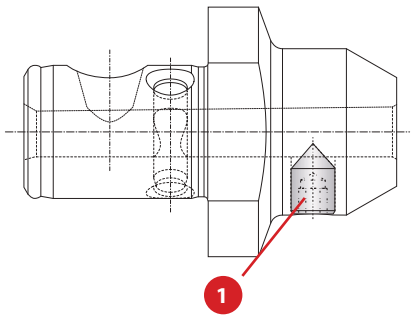
Clamping Elements for Serrated Tool Body

1 Cap Screw	Hex Size	2 Clamping Piece
027154	s4	145184



Thread Pin

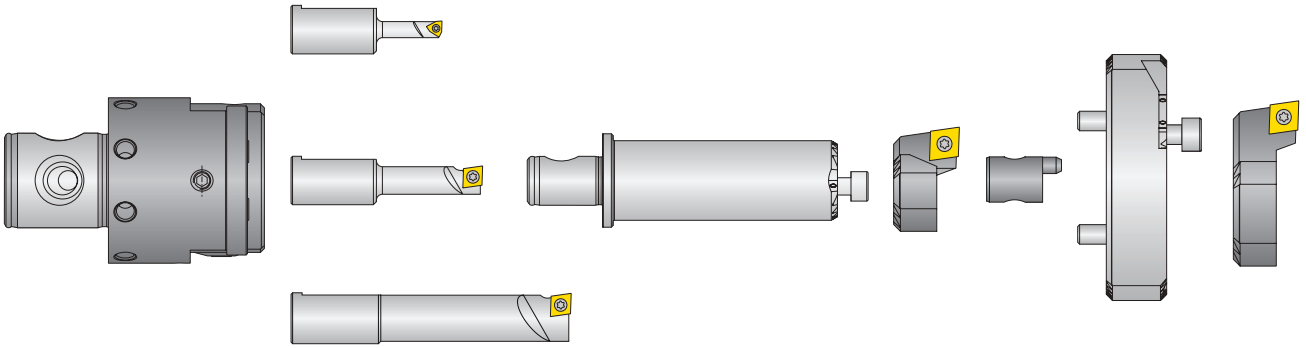
Service Key	1 Part No.
S3 / A	415244



ⓘ = Imperial (in)
ⓜ = Metric (mm)

Kit Components

Form 101 | Diameter Range: 0.236" - 5.039" (6.00 mm - 128.00 mm)



Diameter Range: 0.236" - 5.039" (6.00 mm - 128.00 mm)

Kit Components											
	Boring Head	Boring Bars		Insert Holders		Serrated Tool Body	Serrated Slide	Coolant Delivery Section	Service Keys	Kit No.
		Boring Range	Part No.	Boring Range	Part No.					
ⓘ	451001	0.236 - 0.394 0.394 - 0.630 0.630 - 0.945	450026 (Form 211) 450027 (Form 101) 450028 (Form 101)	0.945 - 1.575 1.575 - 2.559	450022 450023	450021	450024	450125	003195 (s4) 515451 (T6) 515452 (T8)	**104088**
ⓜ	450001	6.00 - 10.00 10.00 - 16.00 16.00 - 24.00	450026 (Form 211) 450027 (Form 101) 450028 (Form 101)	24.00 - 40.00 40.00 - 65.00	450022 450023	450021	450024	450125	003195 (s4) 515451 (T6) 515452 (T8)	**103088**

NOTE: Inserts sold separately.

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

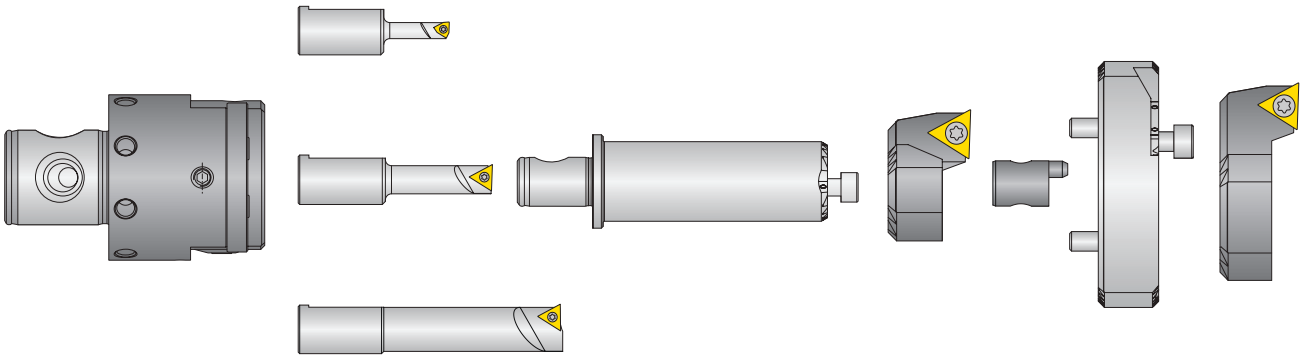
Key on B10-A: 1

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

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**

Kit Components

Form 20 | Diameter Range: 0.236" - 5.039" (6.00 mm - 128.00 mm)



Diameter Range: 0.236" - 5.039" (6.00 mm - 128.00 mm)

Kit Components											
		Boring Bars		Insert Holders						
	Boring Head	Boring Range	Part No.	Boring Range	Part No.	Serrated Tool Body	Serrated Slide	Coolant Delivery Section	Service Keys	Kit No.
ⓘ	451001	0.236 - 0.394 0.394 - 0.630 0.630 - 0.945	450026 (Form 211) 450038 (Form 20) 450039 (Form 20)	0.945 - 1.575 1.575 - 2.559	450040 450041	450021	450024	450125	003195 (s4) 515451 (T6) 515453 (T7)	**104089**
ⓜ	450001	6.00 - 10.00 10.00 - 16.00 16.00 - 24.00	450026 (Form 211) 450038 (Form 20) 450039 (Form 20)	24.00 - 40.00 40.00 - 65.00	450040 450041	450021	450024	450125	003195 (s4) 515451 (T6) 515453 (T7)	**103089**

NOTE: Inserts sold separately.

B10-M: 12-19 B10-H B10: vi-vii
Key on B10-A: 1

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

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**

Digital 511 (510) Product Overview

Digital *511 (510)*
VERSATILE FINE BORING

Improve your boring job with the Digital 511 (510) boring head.

The Wohlhaupter® Digital 511 (510) boring head offers precision, quality, and efficiency. Our integrated digital display makes the 511 (510) the smallest precision boring tool available and allows for easy optoelectronic adjusting.

Experience ***precision boring*** for yourself.

- Diameter range: 0.016" - 1.339" (0.40 mm - 12.00 mm).
- Easy-to-read digital display.
- Coolant through.
- External counterweight for balancing.
- Protected against coolant and dust according to IP65.
- Fine adjustments of 0.0001" (0.002 mm).
- Ideal for CAT40, BT30, HSK40.
- 511001 (510001) max spindle speed: 35,000 RPM.
- 511021 max spindle speed: 30,000 RPM.

NOTE: Imperial item 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**

DIGITAL

NOTE: Imperial item pictured.

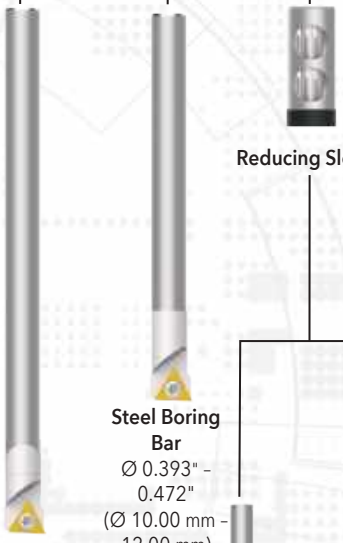
NOTE: Adjustment accuracy of 0.0001" or 0.002 mm on diameter.

Digital 511001 (510001) Boring Head
Ø 0.016" - 0.472" (0.40 mm - 12.00 mm)

NOTE: Imperial item pictured.

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

Digital 511021 Boring Head
Ø 0.016" - 1.339"



Carbide Boring Bar
Ø 0.393" - 0.472"
(Ø 10.00 mm - 12.00 mm)

Steel Boring Bar
Ø 0.393" - 0.472"
(Ø 10.00 mm - 12.00 mm)

Reducing Sleeve

Carbide Boring Bar
Ø 0.236" - 0.393"
(Ø 6.00 mm - 10.00 mm)

Steel Boring Bar
Ø 0.236" - 0.393"
(Ø 6.00 mm - 10.00 mm)

Mini Boring Bar
Ø 0.016" - 0.394"
(Ø 0.40 mm - 10.00 mm)

Serrated Tool Body

Insert Holder
Ø 0.787" - 1.339"

Carbide Boring Bar
Ø 0.630" - 0.787"

Steel Boring Bar
Ø 0.630" - 0.787"

Reducing Sleeve

Carbide Boring Bar
Ø 0.236" - 0.630"

Steel Boring Bar
Ø 0.236" - 0.630"

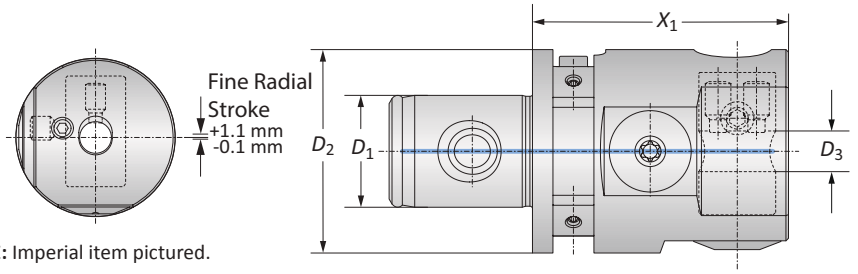
Mini Boring Bar
Ø 0.016" - 0.394"

OPERATION **VERSATILITY**

from **0.016"** to **1.339"** (**0.40 mm** to **12.00 mm**)

Boring Heads

Diameter Range: 0.016" - 1.339" (0.40 mm - 12.00 mm)



NOTE: Imperial item pictured.

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

Boring Heads

	MVS Connection D_2 | D_1	Boring Range	Boring Head D_3	Boring Head X_1	Weight	Part No.
ⓘ	40 - 22	0.016 - 0.472	0.315	1.969	0.926 (lbs)	**511001**
ⓘ	50 - 28	0.016 - 1.339	0.551	2.165	1.565 (lbs)	**511021**
ⓜ	40 - 22	0.40 - 12.00	8.00	50.00	0.42 (kg)	**510001**

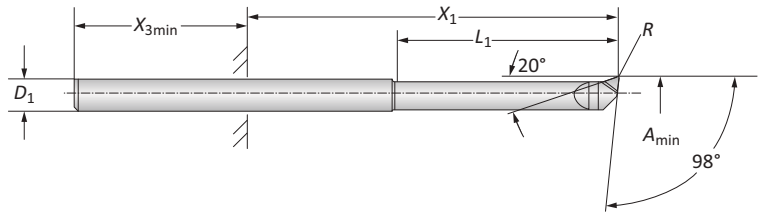
B10-M: 12-19
Key on B10-A: 1
B10-F
B10: vi-vii

ⓘ = Imperial (in)
ⓜ = Metric (mm)

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**

Mini Boring Bars

Diameter Range: 0.016" - 0.197" (0.40 mm - 5.00 mm)



Mini Boring Bars

	Boring Head	Boring Range A_{min}	Boring Bar D_1	X_1	$X_{3\,min}$	L_1	R	Part No.
	511001	0.016	0.157*	0.118 - 1.042	0.630	0.079	0.001	081401WHC126
		0.024	0.157*	0.157 - 1.063	0.630	0.118	0.002	081402WHC126
		0.031	0.157*	0.197 - 1.102	0.630	0.157	0.002	081403WHC126
		0.039	0.157*	0.236 - 1.142	0.630	0.197	0.002	081404WHC126
		0.059	0.157*	0.335 - 1.220	0.630	0.295	0.002	081405WHC126
		0.079	0.157*	0.433 - 1.339	0.630	0.394	0.002	081406WHC126
		0.098	0.157*	0.531 - 1.437	0.630	0.492	0.002	081407WHC126
ⓘ		0.110	0.157*	0.591 - 1.496	0.630	0.551	0.003	081408WHC126
	511021	0.016	0.157*	0.118 - 0.669	0.980	0.079	0.001	081401WHC126
		0.024	0.157*	0.157 - 0.709	0.980	0.118	0.002	081402WHC126
		0.031	0.157*	0.197 - 0.748	0.980	0.157	0.002	081403WHC126
		0.039	0.157*	0.236 - 0.787	0.980	0.197	0.002	081404WHC126
		0.059	0.157*	0.335 - 0.886	0.980	0.295	0.002	081405WHC126
		0.079	0.157*	0.433 - 0.984	0.980	0.394	0.002	081406WHC126
		0.098	0.157*	0.531 - 1.083	0.980	0.492	0.002	081407WHC126
		0.110	0.157*	0.591 - 1.142	0.980	0.551	0.003	081408WHC126
	510001	0.40	4.00*	3.00 - 26.00	16.00	2.00	0.03	081401WHC126
		0.60	4.00*	4.00 - 27.00	16.00	3.00	0.04	081402WHC126
		0.80	4.00*	5.00 - 28.00	16.00	4.00	0.04	081403WHC126
ⓜ		1.00	4.00*	6.00 - 29.00	16.00	5.00	0.05	081404WHC126
		1.50	4.00*	8.50 - 31.50	16.00	7.50	0.05	081405WHC126
		2.00	4.00*	11.00 - 34.00	16.00	10.00	0.05	081406WHC126
		2.50	4.00*	13.50 - 36.50	16.00	12.50	0.05	081407WHC126
		2.80	4.00*	15.00 - 38.00	16.00	14.00	0.07	081408WHC126

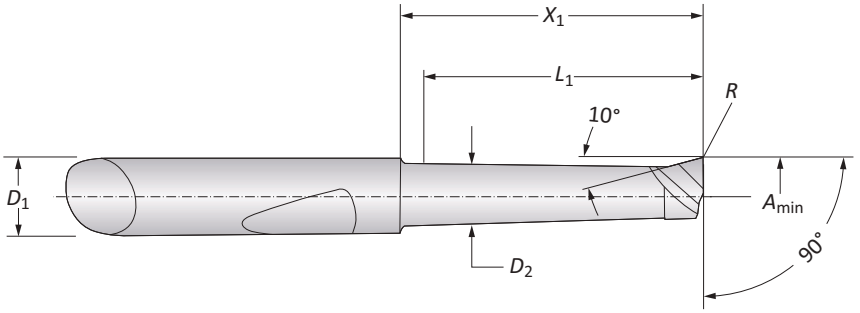
*Fixture-through reducing sleeve required (B10-A: 58).

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

ⓘ = Imperial (in)
ⓜ = Metric (mm)

Mini Boring Bars

WHC05 | WHW04 | WBN150 | Diameter Range: 0.118" - 0.394" (3.00 mm - 10.00 mm)



	Boring Range	Boring Bar					Part No.		
	A_{min}	D_1	D_2	X_1	L_1	R	Coated Carbide	Uncoated Carbide	CBN
	0.118	0.236*	0.102	0.452	0.393	0.003	**081306WHC05**	–	**081322WBN150**
	0.118	0.236*	0.102	0.649	0.590	0.003	**081307WHC05**	**081307WHW04**	–
	0.157	0.236*	0.141	0.472	0.393	0.007	**081308WHC05**	–	**081317WBN150**
	0.157	0.236*	0.141	0.669	0.590	0.007	**081309WHC05**	–	**081341WBN150**
	0.157	0.236*	0.141	0.866	0.787	0.007	**081310WHC05**	**081310WHW04**	–
	0.196	0.236*	0.181	0.472	0.393	0.007	**081311WHC05**	–	–
ⓘ	0.196	0.236*	0.181	0.866	0.787	0.007	**081312WHC05**	–	**081319WBN150**
	0.196	0.236*	0.181	1.259	1.181	0.007	**081313WHC05**	**081313WHW04**	–
	0.236	0.236*	0.220	0.866	0.787	0.007	**081314WHC05**	–	**081320WBN150**
	0.236	0.236*	0.220	1.259	1.181	0.007	**081315WHC05**	–	**081321WBN150**
	0.236	0.236*	0.220	1.653	1.574	0.007	**081316WHC05**	**081316WHW04**	–
	0.315	0.315**	0.229	0.984	0.905	0.007	**081323WHC05**	–	–
	0.315	0.315**	0.229	1.968	1.889	0.007	**081324WHC05**	–	–
	3.00	6.00*	2.60	11.50	10.00	0.10	**081306WHC05**	–	**081322WBN150**
	3.00	6.00*	2.60	16.50	15.00	0.10	**081307WHC05**	**081307WHW04**	–
	4.00	6.00*	3.60	12.00	10.00	0.20	**081308WHC05**	–	**081317WBN150**
	4.00	6.00*	3.60	17.00	15.00	0.20	**081309WHC05**	–	**081341WBN150**
	4.00	6.00*	3.60	22.00	20.00	0.20	**081310WHC05**	**081310WHW04**	–
	5.00	6.00*	4.60	12.00	10.00	0.20	**081311WHC05**	–	–
ⓜ	5.00	6.00*	4.60	22.00	20.00	0.20	**081312WHC05**	–	**081319WBN150**
	5.00	6.00*	4.60	32.00	30.00	0.20	**081313WHC05**	**081313WHW04**	–
	6.00	6.00*	5.60	22.00	20.00	0.20	**081314WHC05**	–	**081320WBN150**
	6.00	6.00*	5.60	32.00	30.00	0.20	**081315WHC05**	–	**081321WBN150**
	6.00	6.00*	5.60	42.00	40.00	0.20	**081316WHC05**	**081316WHW04**	–
	8.00	8.00**	7.60	25.00	23.00	0.20	**081323WHC05**	–	–
	8.00	8.00**	7.60	50.00	48.00	0.20	**081324WHC05**	–	–

*Fixture-through reducing sleeve required (B10-A: 58).
**For 511021 fixture-through reducing sleeve required.

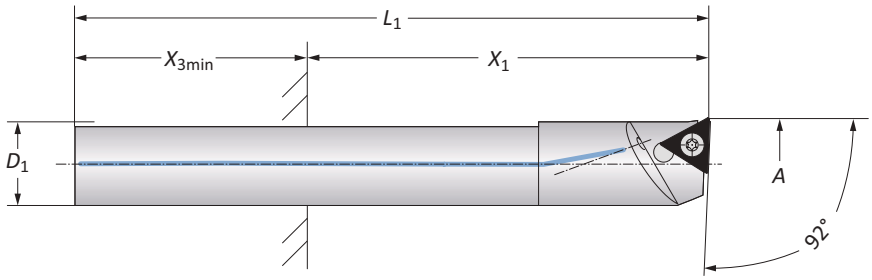
B10-M: 12-19
Key on B10-A: 1
B10: vi-vii

ⓘ = Imperial (in)
ⓜ = Metric (mm)

Boring Bars

Steel | Diameter Range: 0.236" - 0.787" (6.00 mm - 12.00 mm)

Form 101



Form 20

	Boring Head	Boring Range A	Boring Bar D_1	Boring Bar X_1	Boring Bar $X_{3\ min}$	Boring Bar L_1	Weight	Part No. Insert Form	Part No. Boring Bar	Part No. Insert Form	Part No. Boring Bar
	511001	0.236 - 0.315	0.197*	0.492 - 0.984	0.63	2.756	0.022 (lbs)	211**	**514032**	–	–
		0.315 - 0.394	0.276*	0.689 - 1.378	0.63	3.189	0.044 (lbs)	211**	**514033**	–	–
		0.394 - 0.472	0.315	0.787 - 1.575	0.748	3.346	0.066 (lbs)	101	**514003**	20**	**514004**
	511021	0.236 - 0.315	0.197*	0.492 - 0.984	0.984	2.756	0.022 (lbs)	211**	**514032**	–	–
		0.315 - 0.394	0.276*	0.689 - 1.378	0.984	3.189	0.044 (lbs)	211**	**514033**	–	–
		0.394 - 0.472	0.315*	0.787 - 1.575	0.984	3.346	0.066 (lbs)	101	**514003**	20**	**514004**
		0.472 - 0.551	0.394*	0.984 - 1.969	0.984	3.937	0.110 (lbs)	101	**514005**	20**	**514006**
		0.551 - 0.630	0.472*	1.181 - 2.362	1.181	4.488	0.198 (lbs)	101	**514007**	20**	**514008**
		0.630 - 0.709	0.551	2.205 - 2.756	1.181	4.764	0.287 (lbs)	101	**514009**	20**	**514010**
		0.709 - 0.787	0.551	2.205 - 2.756	1.181	4.764	0.287 (lbs)	101	**514011**	20**	**514012**
	510001	6.00 - 8.00	5.00*	12.50 - 25.00	16.00	70.00	0.01 (kg)	211**	**514032**	–	–
		8.00 - 10.00	7.00*	17.50 - 35.00	16.00	81.00	0.02 (kg)	211**	**514033**	–	–
		10.00 - 12.00	8.00	20.00 - 40.00	19.00	85.00	0.03 (kg)	101	**514003**	20**	**514004**

*Fixture-through reducing sleeve required (B10-A: 58).
**Not suitable for indexable inserts with a radius of 0.031" (0.8 mm).

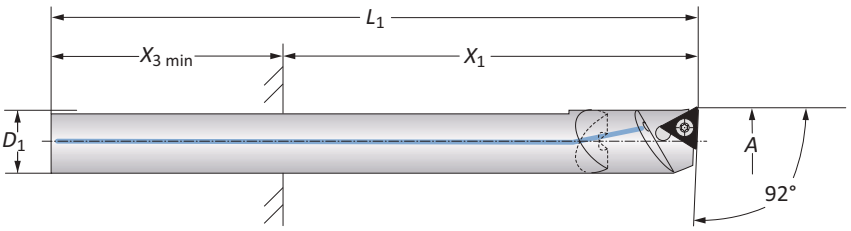
B10-M: 12-19
B10-A: 59
B10-H
B10: vi-vii
Key on B10-A: 1

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

Boring Bars

Carbide | Diameter Range: 0.236" - 0.787" (6.00 mm - 12.00 mm)

Form 101



Form 20

	Boring Head	Boring Range A	Boring Bar D_1	X_1	$X_{3\ min}$	L_1	Weight	Part No. Insert Form	Boring Bar	Insert Form	Boring Bar
i	511001	0.236 - 0.315	0.197*	0.492 - 1.575	0.63	3.543	0.044 (lbs)	211**	**514034**	–	–
		0.315 - 0.394	0.276*	0.827 - 2.205	0.63	4.291	0.110 (lbs)	211**	**514035**	–	–
		0.394 - 0.472	0.315	0.866 - 2.520	0.748	4.606	0.154 (lbs)	101	**514015**	20**	**514016**
	511021	0.236 - 0.315	0.197*	0.492 - 1.575	0.984	3.543	0.044 (lbs)	211**	**514034**	–	–
		0.315 - 0.394	0.276*	0.827 - 2.205	0.984	4.291	0.110 (lbs)	211**	**514035**	–	–
		0.394 - 0.472	0.315*	0.866 - 2.520	0.984	4.606	0.154 (lbs)	101	**514015**	20**	**514016**
		0.472 - 0.551	0.394*	2.008 - 3.150	1.181	5.512	0.287(lbs)	101	**514017**	20**	**514018**
		0.551 - 0.630	0.472*	2.677 - 3.780	1.181	6.378	0.485 (lbs)	101	**514019**	20**	**514020**
		0.630 - 0.709	0.551	3.031 - 4.409	1.181	5.591	0.573 (lbs)	101	**514021**	20**	**514022**
		0.630 - 0.709	0.551	4.409 - 5.787	1.181	6.969	0.728 (lbs)	101	**514023**	20**	**514024**
		0.709 - 0.787	0.551	3.031 - 4.409	1.181	5.591	0.573 (lbs)	101	**514025**	20**	**514026**
		0.709 - 0.787	0.551	4.409 - 5.787	1.181	6.969	0.728 (lbs)	101	**514027**	20**	**514028**
m	510001	6.00 - 8.00	5.00*	12.50 - 40.00	16.00	90.00	0.02 (kg)	211**	**514034**	–	–
		8.00 - 10.00	7.00*	21.00 - 56.00	16.00	109.00	0.05 (kg)	211**	**514035**	–	–
		10.00 - 12.00	8.00	22.00 - 64.00	19.00	117.00	0.07 (kg)	101	**514015**	20**	**514016**

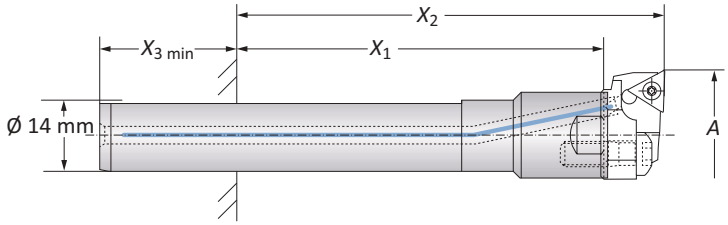
*Fixture-through reducing sleeve required (B10-A: 58).
**Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

B10-M: 12-19 | B10-A: 59 | B10-H | B10: vi-vii
Key on B10-A: 1

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

Serrated Tool Bodies | Insert Holders

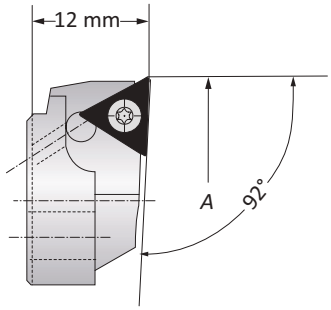
Diameter Range: 0.787" - 1.339"



Serrated Tool Bodies

	Substrate	Boring Range A	Serrated Tool Body X_1	X_2	$X_{3\ min}$	Weight	Part No.
	Steel	0.787 - 1.339	1.457 - 2.835	1.929 - 3.307	1.181	0.287 (lbs)	**514029**
ⓘ	Carbide	0.787 - 1.339	2.550 - 3.937	3.031 - 4.409	1.181	0.551 (lbs)	**514030**
	Carbide	0.787 - 1.339	3.937 - 5.315	4.409 - 5.787	1.181	0.728 (lbs)	**514031**

Form 101



Form 20

Insert Holders

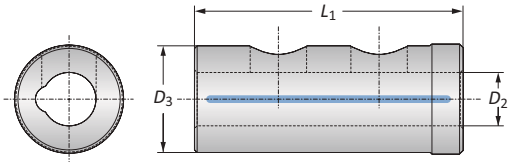
	Boring Range A	Weight	Insert Form	Part No.	Insert Form	Part No.
	0.787 - 0.866	0.022 (lbs)	101	**502052**	20*	**502046**
	0.866 - 0.945	0.022 (lbs)	101	**502053**	20*	**502047**
ⓘ	0.945 - 1.024	0.022 (lbs)	101	**502054**	20*	**502048**
	1.024 - 1.102	0.022 (lbs)	101	**502055**	20*	**502049**
	1.102 - 1.181	0.022 (lbs)	101	**502056**	20*	**502050**
	1.181 - 1.260	0.022 (lbs)	101	**502057**	20*	**502051**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

B10-M: 12-19 | B10-A: 59 | B10-H | B10: vi-vii
Key on B10-A: 1

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

Reducing Sleeves



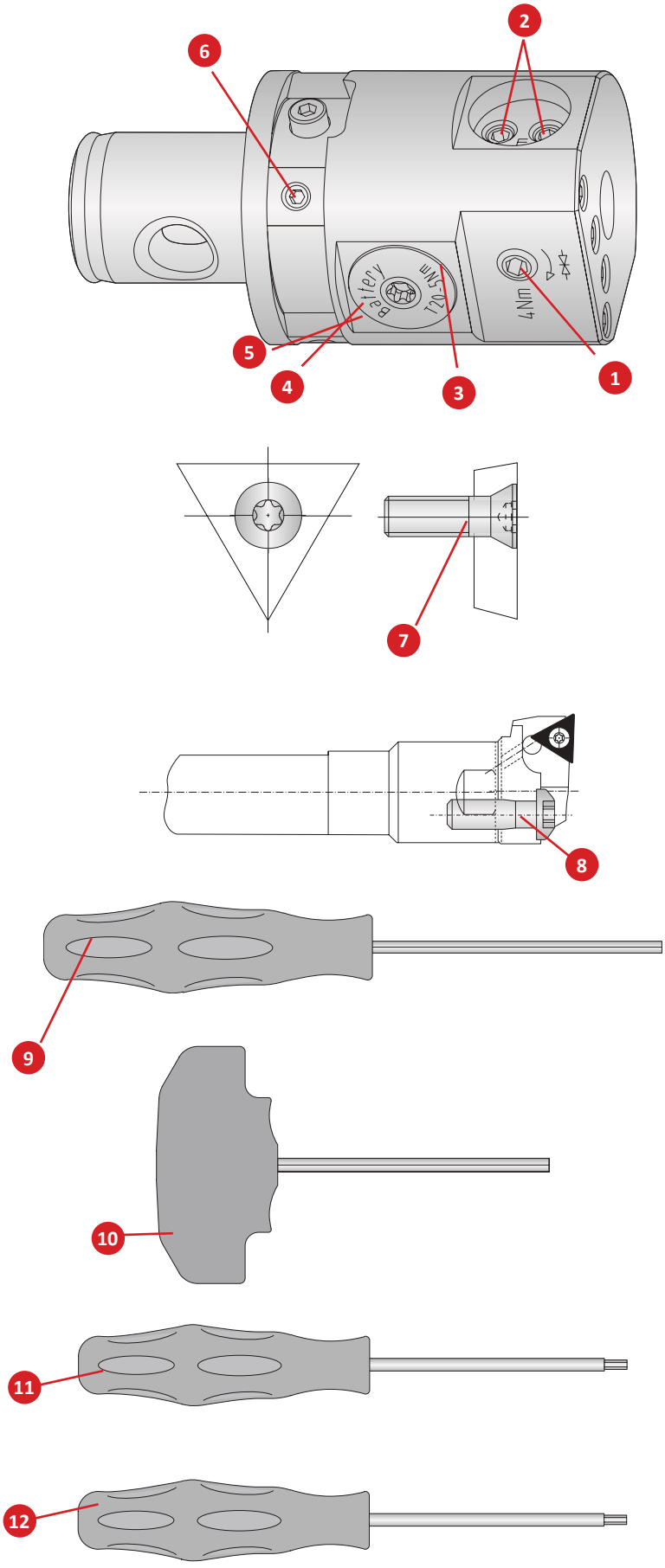
Metric Reducing Sleeves

	Reducing Sleeve			
	D_3	D_2	L_1	Part No.
	8.00	4.00	20.00	**514201**
	8.00	5.00	20.00	**514202**
	8.00	6.00	20.00	**514210**
	8.00	7.00	20.00	**514203**
	14.00	4.00	32.00	**514204**
(m)	14.00	5.00	32.00	**514205**
	14.00	6.00	32.00	**514211**
	14.00	7.00	32.00	**514206**
	14.00	8.00	32.00	**514207**
	14.00	10.00	32.00	**514208**
	14.00	12.00	32.00	**514209**

Boring Head Accessories

No.	Part	Insert Form	Size	Part No. 511001 (510001)	Part No. 511021
1	Clamping screw	-	-	**115985**	**315943**
2	Thread pin for tool clamping	-	-	**070333**	**115181**
3	Sealing ring for battery cover	-	-	**415895**	**415895**
4	Battery*	-	-	**415896**	**415896**
5	Battery cover with sealing ring	-	-	**501016**	**501016**
6	Thread pin	-	-	**510114**	**510114**
7	Insert screws	Form 20 Form 101 Form 211	T7 T8 T6	**115535** **115676** **515286**	**115535** **115676** **515286**
8	Clamping screw	-	T25	-	**415112**
9	Hex wrench	-	s2	**215473**	**215473**
10	Hex wrench	-	s2.5 s3.0 s4.0	**415577** **415578** **115576**	**415577** **415578** **115576**
11	Torx driver	-	T6 T7 T8 T20	**115537** **115591** **115590** **215150**	**115537** **115591** **115590** **215150**
12	Torx screwdriver	(0.6 Nm) Form 211 (0.9 Nm) Form 20 (1.2 Nm) Form 101	T6 T7 T8	**415507** **415508** **415514**	**415507** **415508** **415514**

*Always change two batteries.
NOTE: Please use VARTA batteries.



DigiBore
VERSATILE FINE BORING

Advanced versatile technology.

The Wohlhaupter® DigiBore boring head provides internal balancing, which makes this tool the stress-free choice to meet your required surface finish. Its digital display allows for quick and accurate diameter corrections at the machine.

Engineered with the ***future in mind***.

- Diameter range: 0.118" - 8.189" (3.00 mm - 208.00 mm).
- Offers outside turning capabilities: 0.157" - 4.488" (4.00 mm - 114.00 mm).
- Digital readout for simple 0.0001" (0.002 mm) diameter adjustments.
- Ease the stress of working on different day-to-day projects with boring kits.
- Automatic internal balancing improves surface finish, tool life, and accuracy.
- Max spindle speed: 16,000 RPM.
- Max coolant pressure: 580 PSI (40 bar).

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**

DIGI BORE

DigiBore Head

NOTE: Imperial items pictured.

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

Coolant Delivery System

Serrated Slide

Counterweight

Outside Turning
Ø 0.079" - 4.488"
(Ø 2.00 mm - 114.00 mm)

Insert Holder
Ø 2.677" - 8.189"
(Ø 68.00 mm - 208.00 mm)

Outside Turning
Ø 0.157" - 2.598"
(Ø 4.00 mm - 66.00 mm)

Serrated Tool Body

Insert Holder
Ø 1.260" - 2.677"
(Ø 32.00 mm - 68.00 mm)

Carbide Serrated Tool Body

Insert Holder
Ø 0.787" - 1.260"
(Ø 20.00 mm - 32.00 mm)

Serrated Tool Body

Carbide Boring Bar
Ø 0.394" - 0.787"
(Ø 10.00 mm - 20.00 mm)

Steel Boring Bar
Ø 0.236" - 0.787"
(Ø 6.00 mm - 20.00 mm)

Adapter

Mini Boring Bar
Ø 0.118" - 0.394"
(Ø 3.00 mm - 10.00 mm)

OPERATION **VERSATILITY**

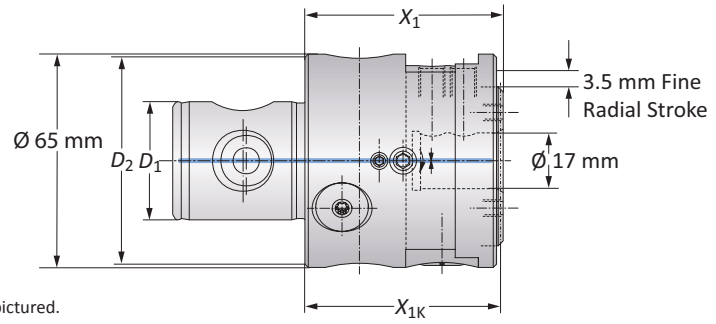
from **0.118"** to **8.189"** (**3.00 mm** to **208.00 mm**)
plus outside turning

NOTE: Imperial items pictured.

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

Boring Heads

Diameter Range: 0.118" - 8.189" (3.00 mm - 208.00 mm)

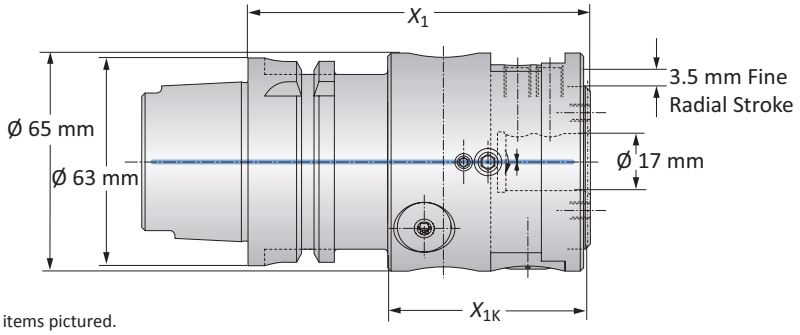


NOTE: Imperial items pictured.

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

DigiBore Boring Heads

	MVS Connection D_2 | D_1	Boring Range	Boring Head X_1	Boring Head X_{1K}	Weight	Part No.
i	50 - 28	0.118 - 8.189	2.362	2.342	2.866 (lbs)	**504003**
	63 - 36	0.118 - 8.189	2.362	2.342	3.307 (lbs)	**504001**
m	50 - 28	3.00 - 208.00	60.00	59.50	1.30 (kg)	**501005**
	63 - 36	3.00 - 208.00	60.00	59.50	1.50 (kg)	**501001**



NOTE: Imperial items pictured.

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

DigiBore Boring Heads

	Connection	Boring Range	Boring Head X_1	Boring Head X_{1K}	Weight	Part No.
i	HSK-A 63	0.118 - 8.189	4.015	2.342	4.630 (lbs)	**504004**
	PSC 63 (Polygon Shank)	0.118 - 8.189	4.015	2.342	4.630 (lbs)	**504019**
m	HSK-A 63	3.00 - 208.00	102.00	59.50	2.10 (kg)	**501004**
	PSC 63 (Polygon Shank)	3.00 - 208.00	102.00	59.50	2.10 (kg)	**501019**

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

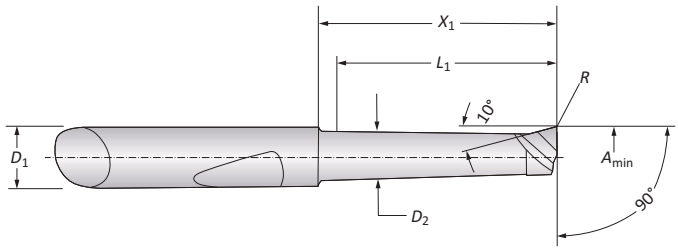
Key on B10-A: 1

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

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**

Mini Boring Bars

WHC05 | WHW04 | WBN150 | Diameter Range: 0.118" - 0.394" (3.00 mm - 10.00 mm)

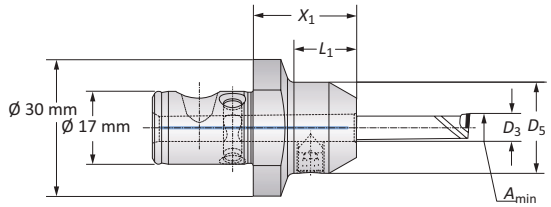


Mini Boring Bars

	Boring Range	Boring Bar					Part No.		
	A_{min}	D_1	D_2	X_1	L_1	R	Coated Carbide	Uncoated Carbide	CBN
	0.118	0.236	0.102	0.452	0.393	0.003	**081306WHC05**	–	**081322WBN150**
	0.118	0.236	0.102	0.649	0.590	0.003	**081307WHC05**	**081307WHW04**	–
	0.157	0.236	0.141	0.472	0.393	0.007	**081308WHC05**	–	**081317WBN150**
	0.157	0.236	0.141	0.669	0.590	0.007	**081309WHC05**	–	**081341WBN150**
	0.157	0.236	0.141	0.866	0.787	0.007	**081310WHC05**	**081310WHW04**	–
	0.196	0.236	0.181	0.472	0.393	0.007	**081311WHC05**	–	–
ⓘ	0.196	0.236	0.181	0.866	0.787	0.007	**081312WHC05**	–	**081319WBN150**
	0.196	0.236	0.181	1.259	1.181	0.007	**081313WHC05**	**081313WHW04**	–
	0.236	0.236	0.220	0.866	0.787	0.007	**081314WHC05**	–	**081320WBN150**
	0.236	0.236	0.220	1.259	1.181	0.007	**081315WHC05**	–	**081321WBN150**
	0.236	0.236	0.220	1.653	1.574	0.007	**081316WHC05**	**081316WHW04**	–
	0.315	0.315	0.229	0.984	0.905	0.007	**081323WHC05**	–	–
	0.315	0.315	0.229	1.968	1.889	0.007	**081324WHC05**	–	–
	3.00	6.00	2.60	11.50	10.00	0.10	**081306WHC05**	–	**081322WBN150**
	3.00	6.00	2.60	16.50	15.00	0.10	**081307WHC05**	**081307WHW04**	–
	4.00	6.00	3.60	12.00	10.00	0.20	**081308WHC05**	–	**081317WBN150**
	4.00	6.00	3.60	17.00	15.00	0.20	**081309WHC05**	–	**081341WBN150**
	4.00	6.00	3.60	22.00	20.00	0.20	**081310WHC05**	**081310WHW04**	–
	5.00	6.00	4.60	12.00	10.00	0.20	**081311WHC05**	–	–
ⓜ	5.00	6.00	4.60	22.00	20.00	0.20	**081312WHC05**	–	**081319WBN150**
	5.00	6.00	4.60	32.00	30.00	0.20	**081313WHC05**	**081313WHW04**	–
	6.00	6.00	5.60	22.00	20.00	0.20	**081314WHC05**	–	**081320WBN150**
	6.00	6.00	5.60	32.00	30.00	0.20	**081315WHC05**	–	**081321WBN150**
	6.00	6.00	5.60	42.00	40.00	0.20	**081316WHC05**	**081316WHW04**	–
	8.00	8.00	7.60	25.00	23.00	0.20	**081323WHC05**	–	–
	8.00	8.00	7.60	50.00	48.00	0.20	**081324WHC05**	–	–

Adapters

	Boring Range	Adapter					
	A_{min}	X_1	L_1	D_3	D_5	Weight	Part No.
ⓜ	3.00 - 8.00	22.50	14.00	6.00	20.00	0.04 (kg)	**501050**
	8.00 - 10.00	22.50	14.00	8.00	22.00	0.04 (kg)	**501051**



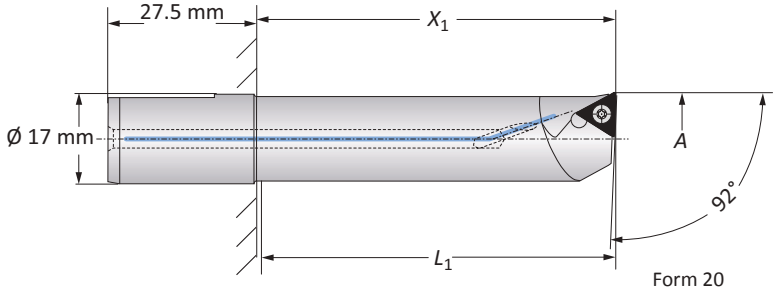
B10-M: 12-19
B10: vi-vii
Key on B10-A: 1

ⓘ = Imperial (in)
ⓜ = Metric (mm)

Boring Bars

Steel | Diameter Range: 0.236" - 0.787" (6.00 mm - 20.00 mm)

Form 101



Form 20

	Boring Range	Boring Bar						
	A	X_1	L_1	Weight	Insert Form	Part No.	Insert Form	Part No.
i	0.236 - 0.315	0.866	0.748	0.110 (lbs)	211*	**502068**	–	**–**
	0.315 - 0.394	1.181	1.063	0.110 (lbs)	211*	**502066**	–	**–**
	0.394 - 0.433	1.181	1.063	0.132 (lbs)	101	**502012**	20*	**502001**
	0.433 - 0.472	1.181	1.063	0.132 (lbs)	101	**502075**	20*	**502070**
	0.472 - 0.512	1.772	1.654	0.154 (lbs)	101	**502013**	20*	**502002**
	0.512 - 0.551	1.772	1.654	0.176 (lbs)	101	**502076**	20*	**502071**
	0.551 - 0.591	1.968	1.850	0.176 (lbs)	101	**502014**	20*	**502003**
	0.591 - 0.630	1.968	1.850	0.198 (lbs)	101	**502077**	20*	**502072**
	0.630 - 0.669	2.362	2.244	0.220 (lbs)	101	**502015**	20*	**502004**
	0.669 - 0.709	2.362	2.244	0.265 (lbs)	101	**502078**	20*	**502073**
	0.709 - 0.748	2.677	2.559	0.287 (lbs)	101	**502016**	20*	**502005**
	0.748 - 0.787	2.677	2.559	0.309 (lbs)	101	**502079**	20*	**502074**
m	6.00 - 8.00	22.00	19.00	0.05 (kg)	211*	**502068**	–	**–**
	8.00 - 10.00	30.00	27.00	0.05 (kg)	211*	**502066**	–	**–**
	10.00 - 11.00	30.00	27.00	0.06 (kg)	101	**502012**	20*	**502001**
	11.00 - 12.00	30.00	27.00	0.06 (kg)	101	**502075**	20*	**502070**
	12.00 - 13.00	45.00	42.00	0.07 (kg)	101	**502013**	20*	**502002**
	13.00 - 14.00	45.00	42.00	0.08 (kg)	101	**502076**	20*	**502071**
	14.00 - 15.00	50.00	47.00	0.08 (kg)	101	**502014**	20*	**502003**
	15.00 - 16.00	50.00	47.00	0.09 (kg)	101	**502077**	20*	**502072**
	16.00 - 17.00	60.00	57.00	0.10 (kg)	101	**502015**	20*	**502004**
	17.00 - 18.00	60.00	57.00	0.12 (kg)	101	**502078**	20*	**502073**
	18.00 - 19.00	68.00	65.00	0.13 (kg)	101	**502016**	20*	**502005**
	19.00 - 20.00	68.00	65.00	0.14 (kg)	101	**502079**	20*	**502074**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

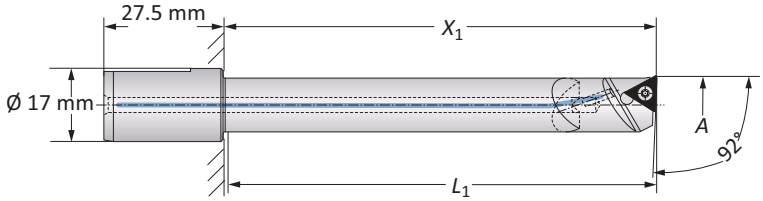
B10-M: 12-19
Key on B10-A: 1
B10-H
B10: vi-vii

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

Boring Bars

Carbide | Diameter Range: 0.394" - 0.787" (10.00 mm - 20.00 mm)

Form 101



Form 20

	Boring Range	Boring Bar						
	A	X_1	L_1	Weight	Insert Form	Part No.	Insert Form	Part No.
ⓘ	0.394 - 0.472	2.165	2.047	0.265 (lbs)	101	**502093**	20*	**502088**
	0.394 - 0.472	2.756	2.638	0.309 (lbs)	101	**502034**	20*	**502023**
	0.472 - 0.551	2.559	2.441	0.287 (lbs)	101	**502094**	20*	**502089**
	0.472 - 0.551	3.346	3.228	3.975 (lbs)	101	**502035**	20*	**502024**
	0.551 - 0.630	2.953	2.835	0.375 (lbs)	101	**502095**	20*	**502090**
	0.551 - 0.630	3.543	3.425	0.485 (lbs)	101	**502036**	20*	**502025**
	0.630 - 0.709	3.346	3.228	0.573 (lbs)	101	**502096**	20*	**502091**
	0.630 - 0.709	4.331	4.213	0.706 (lbs)	101	**502037**	20*	**502026**
	0.709 - 0.787	3.740	3.622	0.617 (lbs)	101	**502097**	20*	**502092**
	0.709 - 0.787	4.724	4.606	0.882 (lbs)	101	**502038**	20*	**502027**
ⓜ	10.00 - 12.00	55.00	52.00	0.12 (kg)	101	**502093**	20*	**502088**
	10.00 - 12.00	70.00	67.00	0.14 (kg)	101	**502034**	20*	**502023**
	12.00 - 14.00	65.00	62.00	0.13 (kg)	101	**502094**	20*	**502089**
	12.00 - 14.00	85.00	82.00	0.18 (kg)	101	**502035**	20*	**502024**
	14.00 - 16.00	75.00	72.00	0.17 (kg)	101	**502095**	20*	**502090**
	14.00 - 16.00	90.00	87.00	0.22 (kg)	101	**502036**	20*	**502025**
	16.00 - 18.00	85.00	82.00	0.26 (kg)	101	**502096**	20*	**502091**
	16.00 - 18.00	110.00	107.00	0.32 (kg)	101	**502037**	20*	**502026**
	18.00 - 20.00	95.00	92.00	0.28 (kg)	101	**502097**	20*	**502092**
	18.00 - 20.00	120.00	117.00	0.40 (kg)	101	**502038**	20*	**502027**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

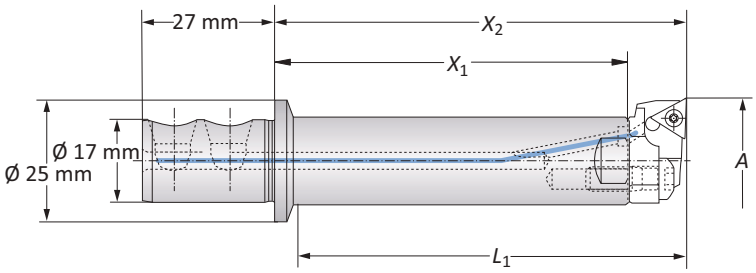
B10-M: 12-19 | B10-H | B10: vi-vii

Key on B10-A: 1

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

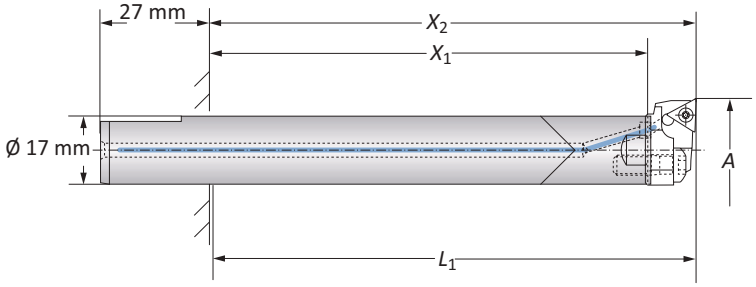
Serrated Tool Bodies | Insert Holders

Steel | Carbide | Diameter Range: 0.787" - 1.260" (20.00 mm - 32.00 mm)



Steel Serrated Tool Bodies

	Boring Range A	Serrated Tool Body X_1	X_2	L_1	Weight	Part No.
i	0.787 - 1.260	2.835	3.307	3.031	0.441 (lbs)	**502045**
m	20.00 - 32.00	72.00	84.00	77.00	0.20 (kg)	**502045**



Carbide Serrated Tool Bodies

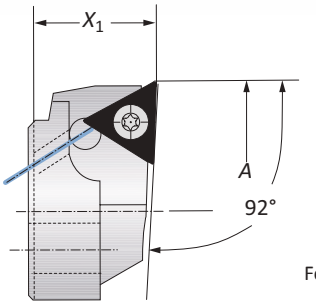
	Boring Range A	Serrated Tool Body X_1	X_2	L_1	Weight	Part No.
i	0.787 - 1.260	4.252	4.724	4.606	0.882 (lbs)	**502062**
m	20.00 - 32.00	108.00	120.00	117.00	0.40 (kg)	**502062**

Insert Holders

	Boring Range A	Insert Holder X_1	Weight	Insert Form	Part No.	Insert Form	Part No.
i	0.787 - 0.866	0.472	0.022 (lbs)	101	**502052**	20*	**502046**
	0.866 - 0.945	0.472	0.022 (lbs)	101	**502053**	20*	**502047**
	0.945 - 1.024	0.472	0.022 (lbs)	101	**502054**	20*	**502048**
	1.024 - 1.102	0.472	0.022 (lbs)	101	**502055**	20*	**502049**
	1.102 - 1.181	0.472	0.022 (lbs)	101	**502056**	20*	**502050**
	1.181 - 1.260	0.472	0.022 (lbs)	101	**502057**	20*	**502051**
m	20.00 - 22.00	12.00	0.01 (kg)	101	**502052**	20*	**502046**
	22.00 - 24.00	12.00	0.01 (kg)	101	**502053**	20*	**502047**
	24.00 - 26.00	12.00	0.01 (kg)	101	**502054**	20*	**502048**
	26.00 - 28.00	12.00	0.01 (kg)	101	**502055**	20*	**502049**
	28.00 - 30.00	12.00	0.01 (kg)	101	**502056**	20*	**502050**
	30.00 - 32.00	12.00	0.01 (kg)	101	**502057**	20*	**502051**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

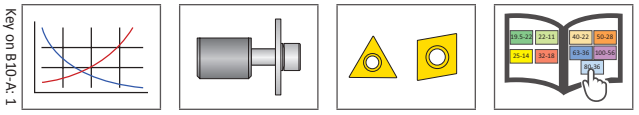
Form 101



Form 20

B10-M: 12-19 | B10-A: 71 | B10-H | B10: vi-vii

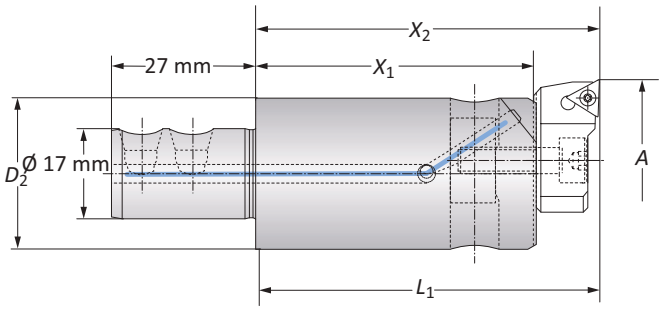
Key on B10-A: 1



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

Alu-Line Serrated Tool Bodies | Insert Holders

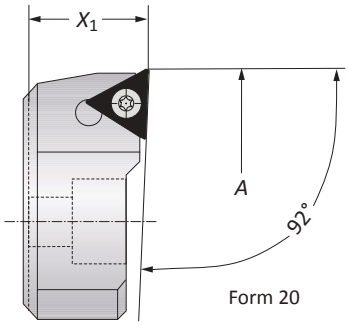
Diameter Range: 1.260" - 2.677" (32.00 mm - 68.00 mm)



Alu-Line Serrated Tool Bodies

	Boring Range	Serrated Tool Body					
	A	D_2	X_1	X_2	L_1	Weight	Part No.
ⓘ	1.260 - 1.968	1.122	2.047	2.598	2.480	0.220 (lbs)	**501052**
ⓘ	1.260 - 1.968	1.122	3.465	4.016	3.898	0.441 (lbs)	**501060**
ⓘ	1.968 - 2.677	1.811	2.402	2.953	2.835	0.441 (lbs)	**501053**
ⓘ	1.968 - 2.677	1.811	4.173	4.724	4.606	0.661 (lbs)	**501061**
ⓜ	32.00 - 50.00	28.50	52.00	66.00	63.00	0.10 (kg)	**501052**
ⓜ	32.00 - 50.00	28.50	88.00	102.00	99.00	0.20 (kg)	**501060**
ⓜ	50.00 - 68.00	46.00	61.00	75.00	72.00	0.20 (kg)	**501053**
ⓜ	50.00 - 68.00	46.00	106.00	120.00	117.00	0.30 (kg)	**501061**

Form 101



Form 20

Insert Holders

	Serrated Tool Body	Boring Range	Insert Holder			
		A	X_1	Weight	Insert Form	Part No.
ⓘ	**501052 / 501060**	1.260 - 1.614	0.551	0.066 (lbs)	20*	**502060**
ⓘ		1.614 - 1.968	0.551	0.088 (lbs)	20*	**502061**
ⓘ		1.260 - 1.614	0.551	0.066 (lbs)	101	**502058**
ⓘ		1.614 - 1.968	0.551	0.088 (lbs)	101	**502059**
ⓘ	**501053 / 501061**	1.968 - 2.323	0.551	0.066 (lbs)	20*	**502060**
ⓘ		2.323 - 2.677	0.551	0.088 (lbs)	20*	**502061**
ⓘ		1.968 - 2.323	0.551	0.066 (lbs)	101	**502058**
ⓘ		2.323 - 2.677	0.551	0.088 (lbs)	101	**502059**
ⓜ	**501052 / 501060**	32.00 - 41.00	14.00	0.03 (kg)	20*	**502060**
ⓜ		41.00 - 50.00	14.00	0.04 (kg)	20*	**502061**
ⓜ		32.00 - 41.00	14.00	0.03 (kg)	101	**502058**
ⓜ		41.00 - 50.00	14.00	0.04 (kg)	101	**502059**
ⓜ	**501053 / 501061**	50.00 - 59.00	14.00	0.03 (kg)	20*	**502060**
ⓜ		59.00 - 68.00	14.00	0.04 (kg)	20*	**502061**
ⓜ		50.00 - 59.00	14.00	0.03 (kg)	101	**502058**
ⓜ		59.00 - 68.00	14.00	0.04 (kg)	101	**502059**

*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

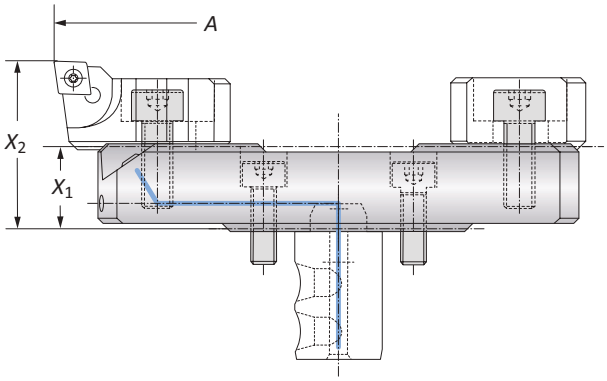
B10-M: 12-19 | B10-A: 71 | B10-H | B10: vi-vii

Key on B10-A: 1

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

Alu-Line Serrated Slides | Insert Holders

Diameter Range: 2.667" - 8.189" (68.00 mm - 208.00 mm)



Alu-Line Serrated Slides

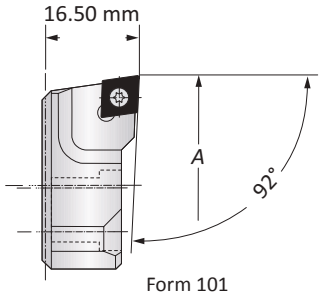
	Boring Range A	Serrated Slide X_1	Serrated Slide X_2	Weight	Part No.
i	2.667 - 3.780	0.630	1.280	0.220 (lbs)	**501054**
	3.780 - 4.881	0.630	1.280	0.220 (lbs)	**501055**
	4.881 - 5.984	0.630	1.280	0.441 (lbs)	**501056**
	5.984 - 7.088	0.866	1.516	0.551 (lbs)	**501058**
	7.088 - 8.189	0.866	1.516	0.661 (lbs)	**501059**
m	68.00 - 96.00	16.00	32.50	0.10 (kg)	**501054**
	96.00 - 124.00	16.00	32.50	0.10 (kg)	**501055**
	124.00 - 152.00	16.00	32.50	0.20 (kg)	**501056**
	152.00 - 180.00	22.00	38.50	0.25 (kg)	**501058**
	180.00 - 208.00	22.00	38.50	0.30 (kg)	**501059**

Insert Holders

	Boring Range A	Weight	Insert Form	Part No.
i	2.677 - 8.189	0.110 (lbs)	101	**502064**
	2.677 - 8.189	0.110 (lbs)	20	**502069**
m	68.00 - 208.00	0.05 (kg)	101	**502064**
	68.00 - 208.00	0.05 (kg)	20	**502069**

NOTE: Other insert holders available upon request.

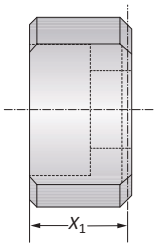
Form 20



Form 101

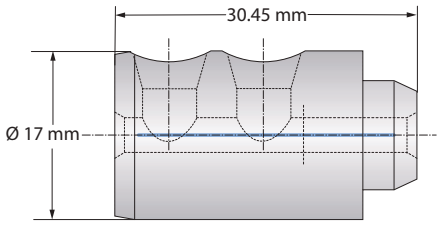
Counterweights

	Counterweight X_1	Weight	Part No.
i	0.528	0.110 (lbs)	**502165**
m	13.40	0.05 (kg)	**502165**



Coolant Delivery Systems

	Coolant Delivery System Weight	Part No.
i	0.044 (lbs)	**501157**
m	0.02 (kg)	**501157**



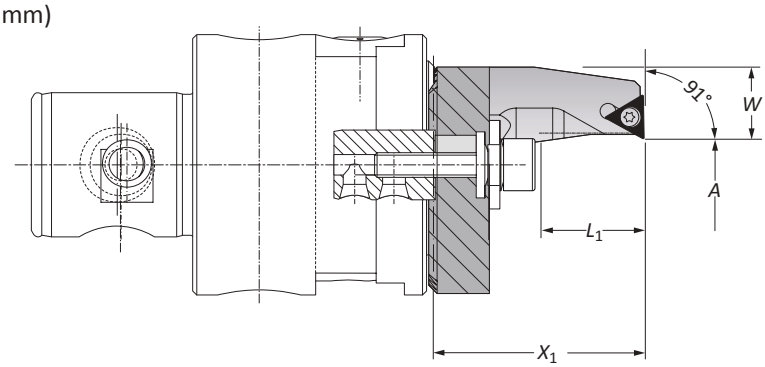
B10-M: 12-19 | B10-A: 71 | B10-H | B10: vi-vii

Key on B10-A: 1

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

Outside Turning Insert Holders for Boring Heads

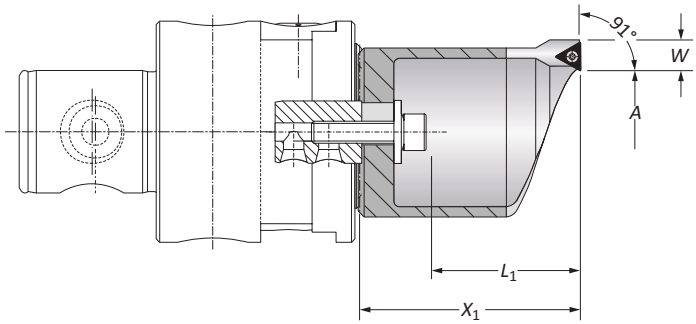
Diameter Range: 0.157" - 2.598" (4.00 mm - 66.00 mm)



Type A Insert Holders | Diameter Range: 0.157" - 1.181" (4.00 mm - 30.00 mm)

	Boring Range A	Insert Holder X_1	Insert Holder L_1	Insert Holder W	Weight	Insert Form	Part No.
ⓘ	0.157 - 0.689	1.594	0.787	0.653	0.220 (lbs)	20*	**236081**
ⓘ	0.650 - 1.181	1.988	1.181	0.437	0.220 (lbs)	20*	**236082**
ⓜ	4.00 - 17.50	40.50	20.00	16.60	0.10 (kg)	20*	**236081**
ⓜ	16.50 - 30.00	50.50	30.00	11.10	0.10 (kg)	20*	**236082**

NOTE: Clockwise and neutral execution.
*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).



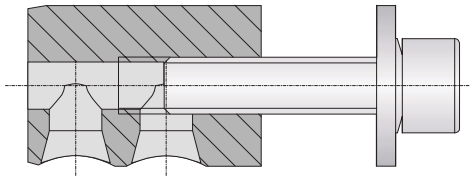
Type B Insert Holders | Diameter Range: 1.142" - 2.598" (29.00 mm - 66.00 mm)

	Boring Range A	Insert Holder X_1	Insert Holder L_1	Insert Holder W	Weight	Insert Form	Part No.
ⓘ	1.142 - 1.732	2.952	2.126	0.377	0.661 (lbs)	20*	**236083**
ⓘ	1.693 - 2.598	3.956	3.110	0.377	0.882 (lbs)	20*	**236084**
ⓜ	29.00 - 44.00	75.50	54.00	9.60	0.30 (kg)	20*	**236083**
ⓜ	43.00 - 66.00	100.50	79.00	9.60	0.40 (kg)	20*	**236084**

NOTE: Clockwise and neutral execution.
*Not suitable for indexable inserts with a radius of 0.031" (0.80 mm).

Clamping Pieces for Outside Turning Insert Holders

	Insert Holder Type	Boring Range	Service Key	Complete Part No.
ⓜ	A	4.00 - 30.00	s5	**502080**
ⓜ	B	29.00 - 66.00	s5	**502081**



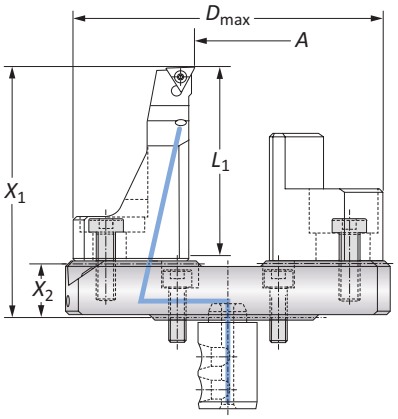
B10-M: 12-19 | B10-A: 71 | B10-H | B10: vi-vii

Key on B10-A: 1

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

Outside Turning Serrated Slides | Insert Holders

Diameter Range: 0.078" - 4.488" (2.00 mm - 114.00 mm)



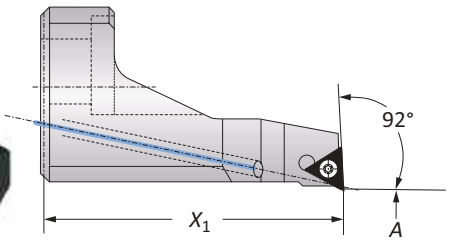
Outside Turning Serrated Slides

	Boring Range A	Serrated Slide X_1	X_2	L_1	D_{max}	Weight	Part No.
i	0.078 - 1.181	2.874	0.630	2.165	3.396	0.771 (lbs)	**501064**
	1.181 - 2.283	2.874	0.630	2.165	5.078	0.970 (lbs)	**501065**
	2.283 - 3.385	3.110	0.866	2.165	6.181	1.322 (lbs)	**501066**
	3.385 - 4.488	3.110	0.866	2.165	7.283	1.609 (lbs)	**501067**
m	2.00 - 30.00	73.00	16.00	55.00	101.00	0.35 (kg)	**501064**
	30.00 - 58.00	73.00	16.00	55.00	129.00	0.44 (kg)	**501065**
	58.00 - 86.00	79.00	22.00	55.00	157.00	0.60 (kg)	**501066**
	86.00 - 114.00	79.00	22.00	55.00	185.00	0.73 (kg)	**501067**

Outside Turning Insert Holders

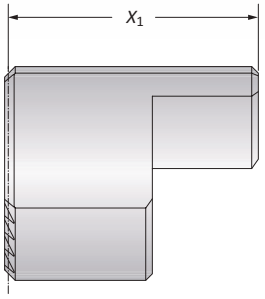
	Outside Turning Range A	Insert Holder X_1	Weight	Insert Form	Part No.
i	0.079 - 4.488	2.244	0.331 (lbs)	20	**502082**
m	2.00 - 114.00	57.00	0.15 (kg)	20	**502082**

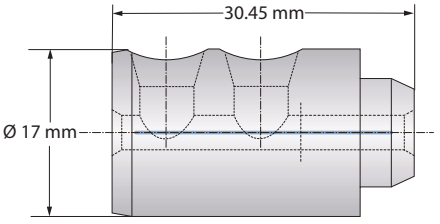
NOTE: Clockwise and neutral execution.



Counterweights

	Counterweight X_1	Weight	Part No.
i	1.486	0.352 (lbs)	**502183**
m	37.75	0.16 (kg)	**502183**





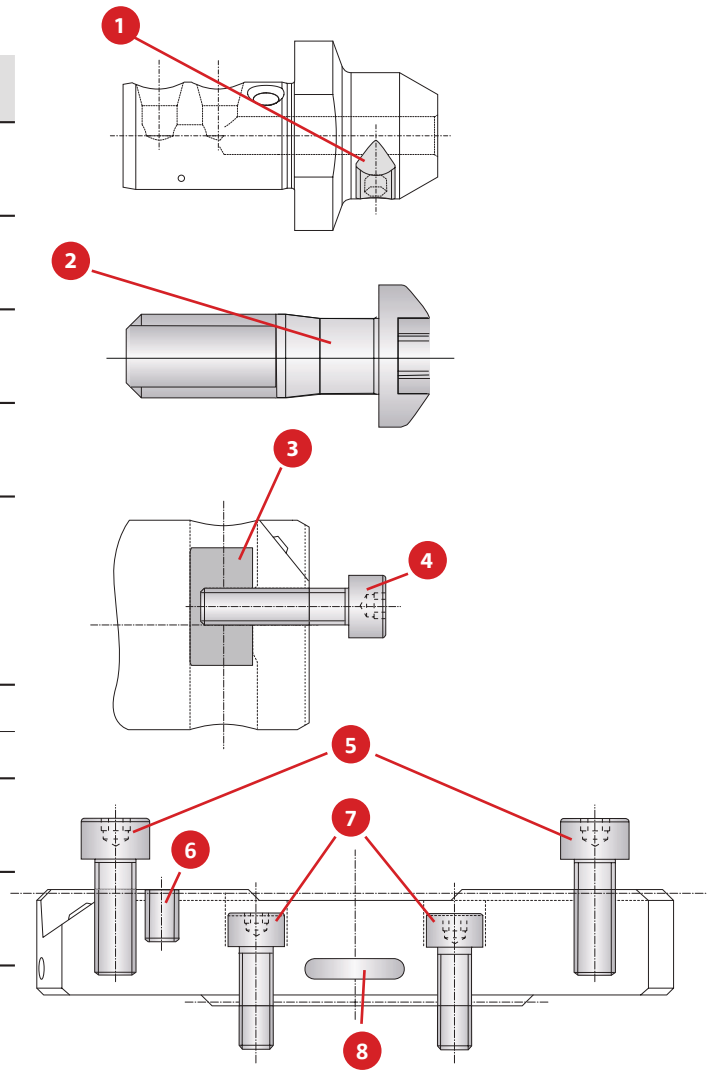
B10-M: 12-19 | B10-A: 71 | B10-H | B10: vi-vii

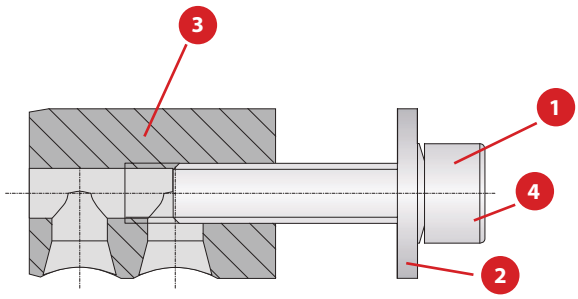
Key on B10-A: 1

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

Accessories

No.	Part		Size	Part No.
1	Set screw		s3	**415244**
2	Screw for securing insert holder		T25	**415112**
3	Clamping piece		–	**145184**
4	Cap screw for securing insert holders		s4	**027154**
5	Cap screw for securing insert holder/ counterweight		s4	**315248**
6	Set screw - coolant	501054, 501055, 501056	s1.5	**114224**
		501058, 501059	s1.5	**115303**
7	Cap screw for securing serrated slide		s4	**115166**
8	Sealing ring for coolant delivery		–	**415386**



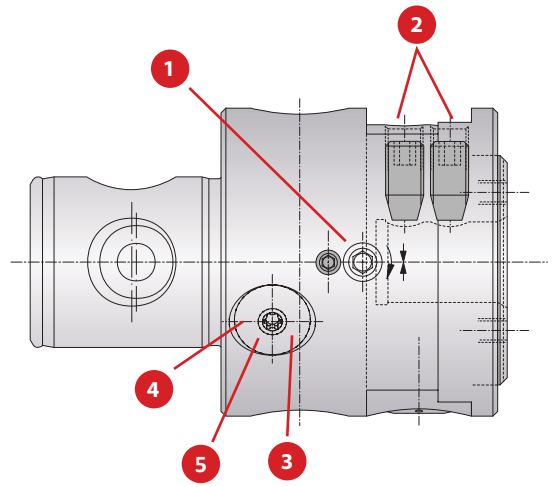


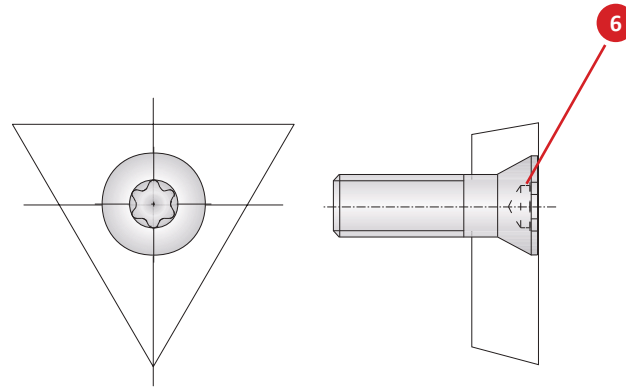
	Boring Range	Type	Hex Size	Clamping Screw Parts 1 Cap Screw	2 Washer	3 Clamping Piece	4 Locking Washer	Complete Part No.
ⓘ	0.157 - 1.181	A	s5	070153	315155	502180	215254	**502080**
	1.142 - 2.598	B	s5	070153	315156	502180	215254	**502081**
ⓜ	4.00 - 30.00	A	s5	070153	315155	502180	215254	**502080**
	29.00 - 66.00	B	s5	070153	315156	502180	215254	**502081**

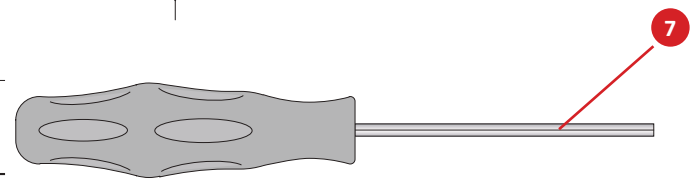
Accessories

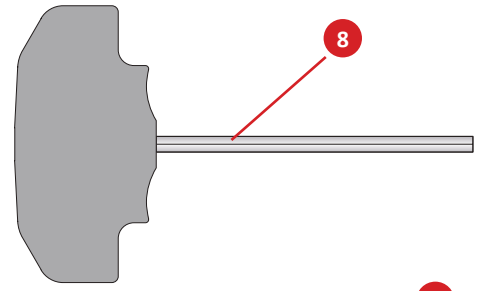
No.	Part	Insert Form	Size	Part No.
1	Clamping screw	–	–	**415353**
2	Set screw for clamping tool	–	–	**215674**
3	Battery cover	–	–	**415895**
4	Battery*	–	–	**415896**
5	Battery access cover with sealing ring	–	–	**501016**
6	Insert screws	Form 211 Form 20 Form 101	T6 T7 T8	**215377** **115535** **115676**
7	Hex driver	–	s1.5 s3	**215472** **115630**
8	Hex driver	–	s4	**115576**
9	Torx® driver	–	T6 T7 T8 T20	**115537** **115591** **115590** **215150**
10	Torque screwdriver, Torx	(0.6 Nm) Form 211 (0.9 Nm) Form 20 (1.2 Nm) Form 101	T6 T7 T8	**415507** **415508** **415514**

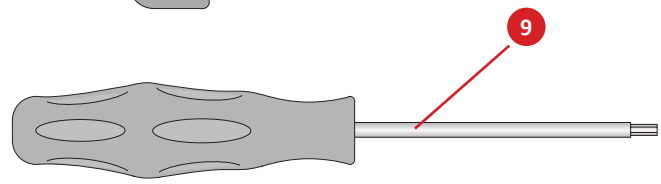
*Always change two batteries.
NOTE: Please use VARTA batteries (V392 SR41).

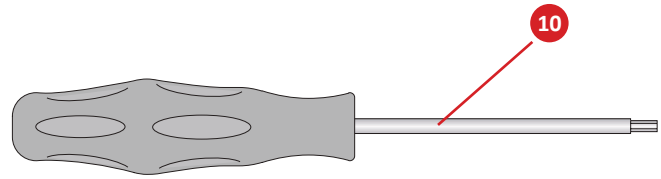






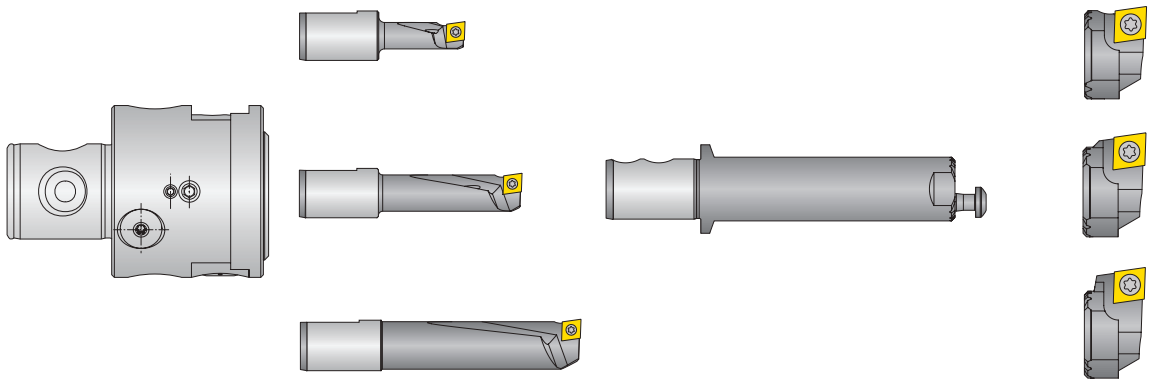






Kit Components

Insert Form 101 | Diameter Range: 0.394" - 1.260" (10.00 mm - 32.00 mm)



Diameter Range: 0.394" - 1.260" (10.00 mm - 32.00 mm)

	Boring Head	Kit Components: Boring Range	Boring Bars	Boring Range	Serrated Tool Body	Insert Holders	Service Keys	Kit No.
ⓘ	504001	0.394 - 0.433 0.551 - 0.591 0.709 - 0.748	502012 502014 502016	0.787 - 1.260	502045	502052 502054 502056	115576 (s4) 415121 (T25) 115590 (T8)	**104061**
ⓜ	501001	10.00 - 11.00 14.00 - 15.00 18.00 - 19.00	502012 502014 502016	20.00 - 32.00	502045	502052 502054 502056	115576 (s4) 415121 (T25) 115590 (T8)	**103061**

NOTE: Inserts sold separately.

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

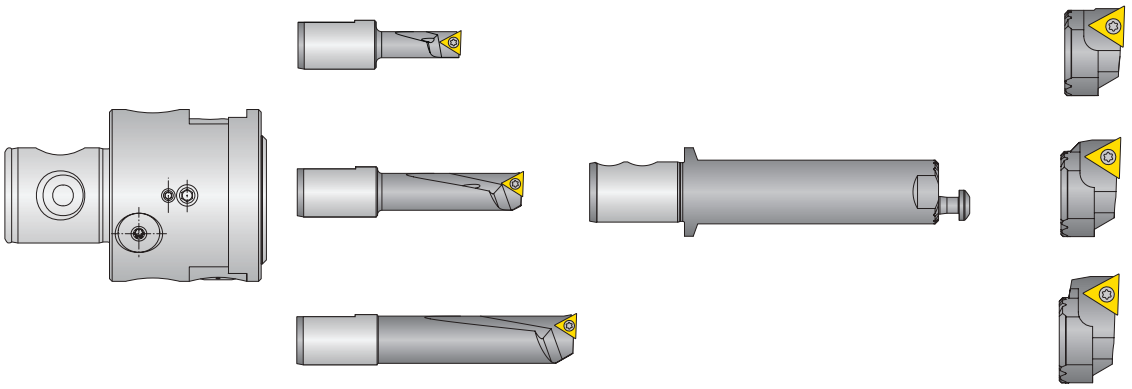
Key on B10-A:1

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

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**

Kit Components

Insert Form 20 | Diameter Range: 0.394" - 1.260" (10.00 mm - 32.00 mm)



Diameter Range: 0.394" - 1.260" (10.00 mm - 32.00 mm)

	Boring Head	Kit Components: Boring Range	Boring Bars	Boring Range	Serrated Tool Body	Insert Holders	Service Keys	Kit No.
ⓘ	504001	0.394 - 0.433 0.551 - 0.591 0.709 - 0.748	502001 502003 502005	0.787 - 1.260	502045	502046 502048 502050	115576 (s4) 415121 (T25) 115591 (T7)	**104062**
ⓜ	501001	10.00 - 11.00 14.00 - 15.00 18.00 - 19.00	502001 502003 502005	20.00 - 32.00	502045	502046 502048 502050	115576 (s4) 415121 (T25) 115591 (T7)	**103062**

NOTE: Inserts sold separately.

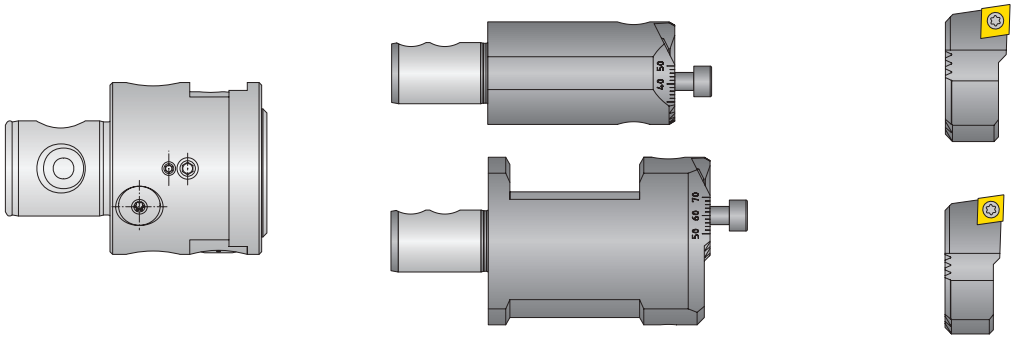
B10-M: 12-19
Key on B10-A: 1
B10-H
B10: vi-vii

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

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**

Kit Components

Insert Form 101 | Diameter Range: 1.260" - 2.677" (32.00 mm - 68.00 mm)



Diameter Range: 1.260" - 2.677" (32.00 mm - 68.00 mm)

	Boring Head	Kit Components: Boring Range	Serrated Tool Body	Insert Holders	Service Keys	Kit No.
ⓘ	504001	1.260 - 1.968 1.968 - 2.677	501052 501053	502058 502059	115576 (s4) 115590 (T8)	**104063**
ⓜ	501001	32.00 - 50.00 50.00 - 68.00	501052 501053	502058 502059	115576 (s4) 115590 (T8)	**103063**

NOTE: Inserts sold separately.

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

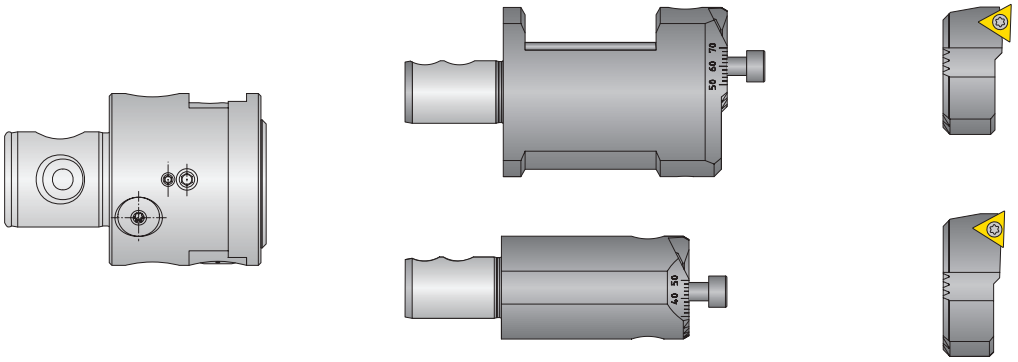
Key on B10-A:1

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

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**

Kit Components

Insert Form 20 | Diameter Range: 1.260" - 2.677" (32.00 mm - 68.00 mm)



Diameter Range: 1.260" - 2.677" (32.00 mm - 68.00 mm)

	Boring Head	Kit Components: Boring Range	Serrated Tool Body	Insert Holders	Service Keys	Kit No.
ⓘ	504001	1.260 - 1.968 1.968 - 2.677	501052 501053	502060 502061	115576 (s4) 115591 (T7)	**104064**
ⓜ	501001	32.00 - 50.00 50.00 - 68.00	501052 501053	502060 502061	115576 (s4) 115591 (T7)	**103064**

NOTE: Inserts sold separately.

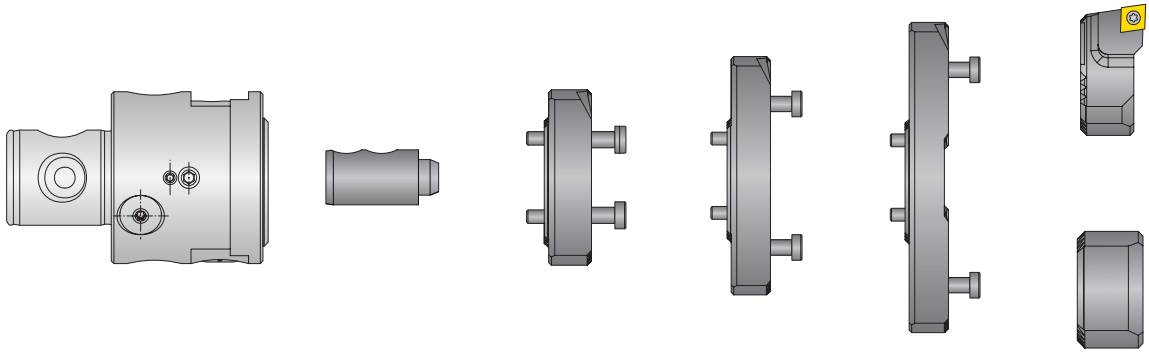
B10-M: 12-19 B10-H B10: vi-vii
Key on B10-A: 1

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

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**

Kit Components

Insert Form 101 | Diameter Range: 2.667" - 5.984" (68.00 mm - 152.00 mm)



Diameter Range: 2.667" - 5.984" (68.00 mm - 152.00 mm)

	Boring Head	Kit Components						
		Boring Range	Serrated Slides	Insert Holder	Counterweight	Coolant Delivery	Service Keys	Kit No.
ⓘ	504001	2.667 - 3.780 3.780 - 4.881 4.881 - 5.984	501054 501055 501056	502064	502165	501157	115576 (s4) 115590 (T8)	**104065**
ⓜ	501001	68.00 - 96.00 96.00 - 124.00 124.00 - 152.00	501054 501055 501056	502064	502165	501157	115576 (s4) 115590 (T8)	**103065**

NOTE: Inserts sold separately.

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

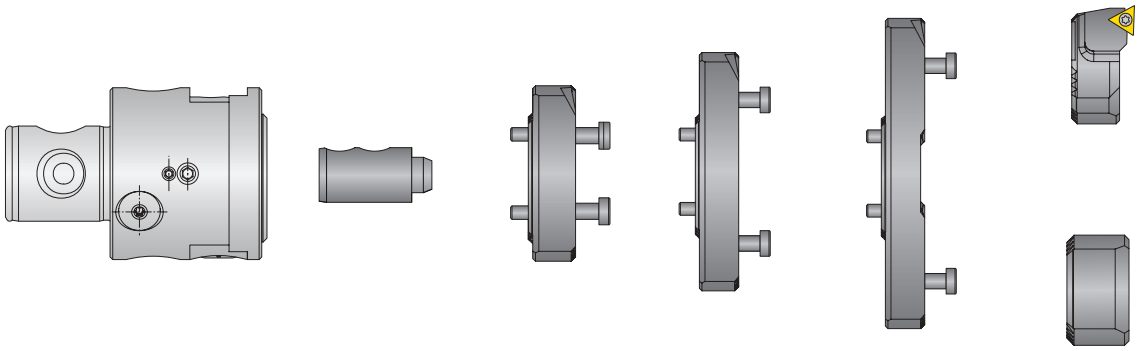
Key on B10-A:1

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

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**

Kit Components

Insert Form 20 | Diameter Range: 2.667" - 5.984" (68.00 mm - 152.00 mm)



Diameter Range: 2.667" - 5.984" (68.00 mm - 152.00 mm)

	Boring Head	Kit Components: Boring Range	Serrated Slides	Insert Holder	Counterweight	Coolant Delivery	Service Keys	Kit No.
ⓘ	504001	2.667 - 3.780 3.780 - 4.881 4.881 - 5.984	501054 501055 501056	502069	502165	501157	115576 (s4) 115591 (T7)	**104066**
ⓜ	501001	68.00 - 96.00 96.00 - 124.00 124.00 - 152.00	501054 501055 501056	502069	502165	501157	115576 (s4) 115591 (T7)	**103066**

NOTE: Inserts sold separately.

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

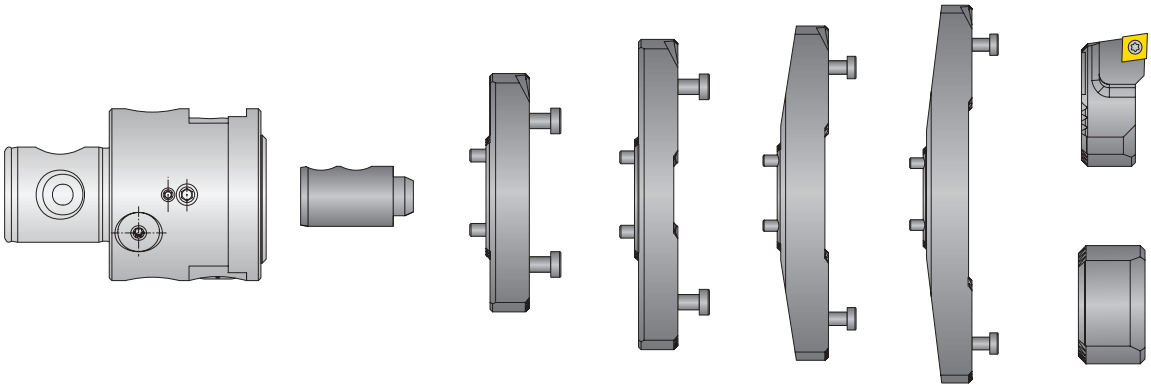
Key on B10-A: 1

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

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**

Kit Components

Insert Form 101 | Diameter Range: 3.780" - 8.189" (96.00 mm - 208.00 mm)



Diameter Range: 3.780" - 8.189" (96.00 mm - 208.00 mm)

	Boring Head	Kit Components						
		Boring Range	Serrated Slides	Insert Holder	Counterweight	Coolant Delivery	Service Keys	Kit No.
ⓘ	504001	3.780 - 4.881 4.881 - 5.984 5.984 - 7.088 7.088 - 8.189	501055 501056 501058 501059	502064	502165	501157	115576 (s4) 115590 (T8)	**104081**
ⓜ	501001	96.00 - 124.00 124.00 - 152.00 152.00 - 180.00 180.00 - 208.00	501055 501056 501058 501059	502064	502165	501157	115576 (s4) 115590 (T8)	**103081**

NOTE: Inserts sold separately.

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

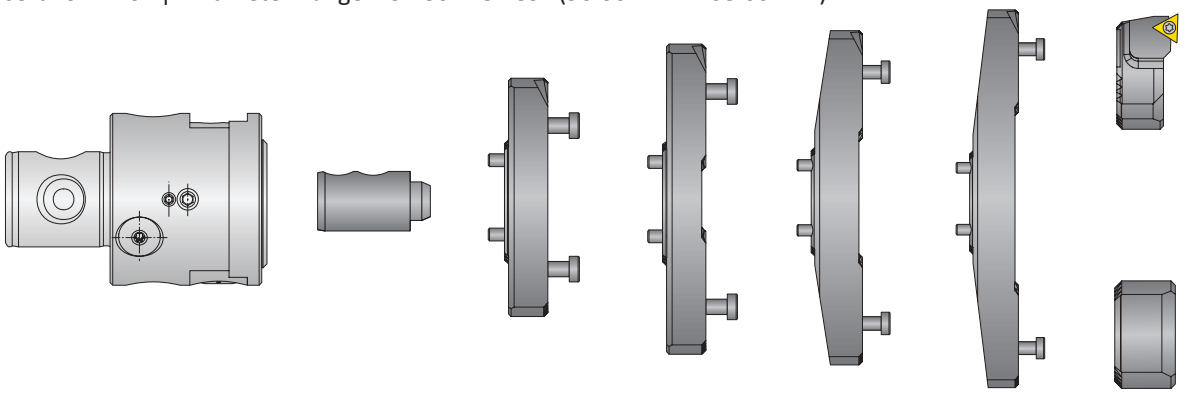
Key on B10-A:1

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

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**

Kit Components

Insert Form 20 | Diameter Range: 3.780" - 8.189" (96.00 mm - 208.00 mm)



Diameter Range: 3.780" - 8.189" (96.00 mm - 208.00 mm)

	Boring Head	Kit Components: Boring Range	Serrated Slides	Insert Holder	Counterweight	Coolant Delivery	Service Keys	Kit No.
ⓘ	504001	3.780 - 4.881 4.881 - 5.984 5.984 - 7.088 7.088 - 8.189	501055 501056 501058 501059	502069	502165	501157	115576 (s4) 115591 (T7)	**104080**
ⓜ	501001	96.00 - 124.00 124.00 - 152.00 152.00 - 180.00 180.00 - 208.00	501055 501056 501058 501059	502069	502165	501157	115576 (s4) 115591 (T7)	**103080**

NOTE: Inserts sold separately.

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

Key on B10-A: 1

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

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**

Notes

Notes

Notes

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

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ALLIED MACHINE & ENGINEERING

Warranty Information

Allied Machine & Engineering ("Allied Machine") warrants to original equipment manufacturers, distributors, industrial and commercial users of its products for one year from the original date of sale that each new product manufactured or supplied by Allied Machine shall be free from defects in material and workmanship.

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.

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Available Online Only: B10-A
Publish Date: June 2025