

December 2019

ONLY FOR
OKUMA

VELOCITY

SU-matic®

LB4000 M/MY

www.velocityproducts.com



A Complete Lineup of In-Stock Lathe Tooling for Okuma • Three Year Warranty

VELOCITY **SU-matic**[®]

Velocity Tooling: Only for Okuma

Velocity Products has the largest inventory of lathe tooling for **Okuma** in North America. Velocity is the OEM supplier of tooling startup kits for **Okuma** lathes. Velocity tooling is designed and manufactured by SU-matic – a worldwide leader in tooling technology headquartered in Switzerland. SU-matic has several **Okuma** machine tools in their manufacturing facility. SU-matic works closely with engineers from **Okuma America**, **Okuma Japan**, and **Okuma Europe** when designing tools. This engineering collaboration ensures flawless tooling performance on **Okuma** lathes, multitasking machines, and machining centers. Velocity/SU-matic tooling is available **Only for Okuma** machine tools.

Velocity Tooling Technology

Velocity tools are delivered ready to use; all live tools are run-in at the factory and internal coolant tools are pressure tested as a final quality check prior to shipment. Velocity tools are greased for life; no customer maintenance is required. Velocity/SU-matic tools are CMM inspected and serialized records are kept on file.

Three Year Warranty

Velocity/SU-matic Tooling is designed to give years of service under the most demanding applications. The build quality of our tool holders allows us to back them with an **UNMATCHED Three Year Factory Warranty**.



Contents

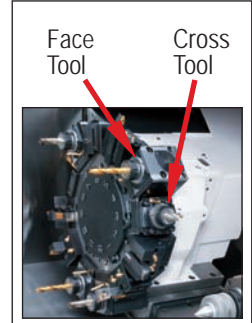
VELOCITY TOOLING MATRIX • ORDER FORM	3
TOOLING KITS	6
CROSS (RADIAL) TOOLS	7
FACE (AXIAL) TOOLS	8
ADJUSTABLE ANGLE TOOL	8
GEAR HOBBING TOOL	9
BORING BAR HOLDERS	9
OD-I LENGTH TURNING HOLDER	10
OD-II FACE TURNING HOLDER • CUT-OFF BLADE HOLDER	11
SU-MATIC CAPTO [®] OUTPUT LIVE TOOLS	12
SU-MATIC CAPTO [®] OUTPUT STATIC TOOLS	13
INTERFERENCE DIAGRAM	14




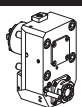
Tool Matrix • Order Form

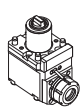
Company _____
 Contact _____
 Address _____
 City, State, Zip _____
 E-mail _____
 Phone/Fax # _____
 Dealer Location _____

Tool
 Description
 LB4000
 M Turret





Turret Plugs		
Machine Model	Part #	Quantity
LB4000	14.430.0.0087.0	

Cross Tools									
Tool Type	Tool #	Quantity	Page	Coolant (PSI)	Output	Ratio (In:Out)	Torque (Nm)	Maximum RPM	
Cross		14.101.0.0334.0 (14.101.0.0080.0)	7	External	ER-40	1:1	85	6,000	
		14.101.0.0333.0 (14.101.0.0079.0)	7	IC (1,000)	ER-40	1:1	85	6,000	
Offset Cross		14.101.0.0147.0	7	IC (1,000)	ER-32	1:1	85	6,000	



Face Tools									
Tool Type	Tool #	Quantity	Page	Coolant (PSI)	Output	Ratio (In:Out)	Torque (Nm)	Maximum RPM	
Face		14.800.0.0435.0 (14.800.0.0182.0)	8	External	ER-40	1:1	85	6,000	
		14.800.0.0434.0 (14.800.0.0216.0)	8	IC (1,450)	ER-40	1:1	85	6,000	

Tool Matrix • Order Form


Adjustable Angle Tool • Gear Hobbing Tool

Tool Type	Tool #	Quantity	Page	Coolant (PSI)	Output	Ratio (In:Out)	Torque (Nm)	Maximum RPM
Adj. 	14.826.0.0017.0		8	External	ERAX-25	1:1	25	6,000
Hobber 	14.800.0.0258.0		9	External	3/4" Arbor	2:1	80	3,000


Boring Bar Holders

Holder Type	Holder Style	Tool #	Quantity	Page	Bar Size (Inches)	Reversible	Coolant
Boring Bar Holders		LB4000	14.910.0.0220.0	9	1.5	-	IC & EXT
		LB4000 Full Depth	14.910.0.0472.0	10	2.0	-	IC & EXT

OD-I Length Turning Holder


Holder Type	Holder Style	Tool #	Quantity	Page	Stick Size (Inches)	Reversible	Coolant
OD-I 	LB4000 OD-I	14.910.0.0221.0		10	1.0	-	External

OD-II Length Turning Holder



Holder Type	Holder Style	Tool #	Quantity	Page	Stick Size (Inches)	Reversible	Coolant
OD-II 	LB4000 OD-II	14.910.0.0222.0		11	1.0	-	External

Tool Matrix • Order Form



Cut-Off Holder

Holder Type	Holder Style	Tool #	Quantity	Page	Blade Size (mm)	Reversible	Coolant	
Blade		Blade Holder	14.910.0.0033.1		11	32	-	External

SU-matic Capto® Live Tools

Tool Type	Tool #	Quantity	Page	Coolant (PSI)	Output	Ratio (In:Out)	Torque (Nm)	Maximum RPM	
Cross		14.101.0.0349.0 (14.101.0.0229.0)		12	IC (1,000)	C4	1:1	60	6,000
Face		14.800.0.0244.1		12	IC (1,450)	C4	1:1	85	6,000

SU-matic Capto® Static Tools

Holder Type	Holder Style	Tool #	Quantity	Page	Output	Reversible	Coolant	
C4 OD-I		OD-I	14.910.0.0045.0		13	C4	-	IC & EXT
C4 ID		Boring Bar	14.910.0.0046.0		13	C4	-	IC & EXT

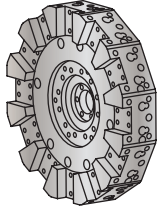


VELOCITY TOOLING FOR OKUMA LB4000 M/MY

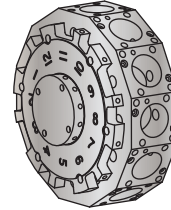
LB4000 Tooling Kits



LB4000 L • V12 Turret



LB4000 M / MY • V12 Multitasking Turret



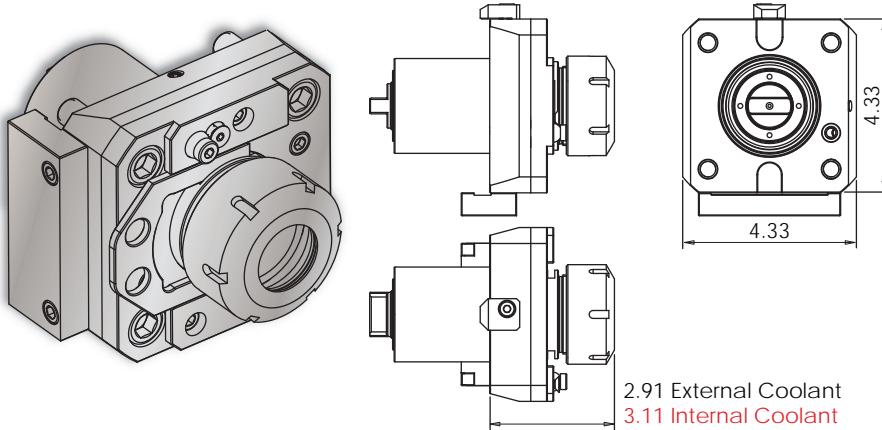
Description		Static Kit	Description		Static Tooling Kits	Live Tooling Kits		
Tool Type Tool Size Velocity #	Turret	L	Tool Type Tool Size Velocity #	Turret / Type	M / MY	External Coolant	Internal Coolant	
	Part # OAC	KUP-0942-00		Part # OAC	KUP-0944-00	KUP-0945-00	KUP-0946-00	
Part # Velocity		14.430.0.0110.0	Part # Velocity		14.430.0.0111.0	14.430.0.0112.0	14.430.0.0113.0	
OD-I 1" 14.910.0.0282.0		4	OD-I 1" 14.910.0.0221.0		3			
ID 1.5" 14.910.0.0284.0		5	OD-II 1" 14.910.0.0222.0		1			
<p>Call 256-258-5549 or email sales@velocityproducts.com to purchase Velocity Tooling Kits.</p> <p>All OD-I and OD-II holders use wedge clamping.</p> <p>"M" turret ID holders come with internal coolant plates standard.</p> <p>Live tools include wrenches standard.</p>			ID 1.5" 14.910.0.0220.0		2			
			Turret Plug 14.430.0.0087.0		6			
			Cross Tool ER-40 14.101.0.0334.0				2	
			Face Tool ER-40 14.800.0.0435.0				2	
			Cross Tool (IC) ER-40 14.101.0.0333.0					2
			Face Tool (IC) ER-40 14.800.0.0434.0					2

VELOCITY TOOLING FOR OKUMA LB4000 M/MY

Live Tools



LB4000 M Cross Tools • ER-40 Output



Notes

Wrenches Included with Tools

Maximum Drill Ø		Maximum Mill Ø	
EXT	1"	EXT	15/16"
IC	1"	IC	15/16"

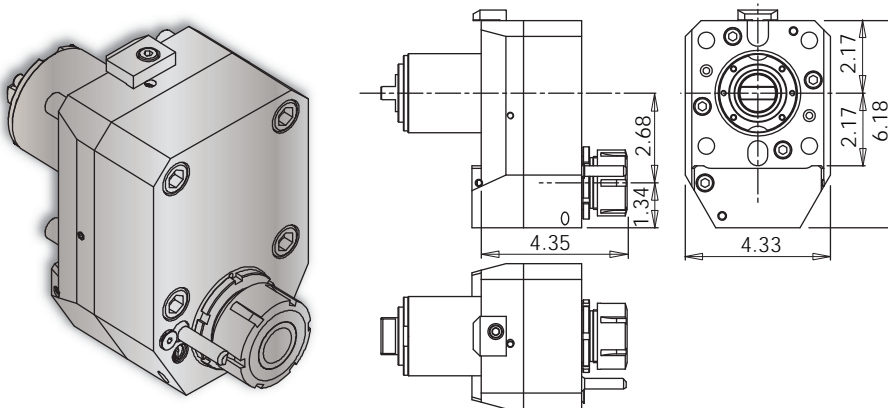
Turret Plugs 14.430.0.0087.0

* 1,000 psi internal coolant (IC) cross tool CANNOT be run without coolant.

All coolant thru tools require 30 micron coolant filtration nominal, 50 micron coolant filtration absolute.

Tool #	Coolant	Output	Rotation (In:Out)	Ratio (In:Out)	Max. RPM	Torque	Spindle Wrench	Collet Wrench
14.101.0.0334.0 (14.101.0.0080.0)	EXT	ER-40	CW:CW	1:1	6,000	85 Nm	1005100980	7111.40000
14.101.0.0333.0 (14.101.0.0079.0)	IC & EXT* 1,000 psi	ERC-40	CW:CW	1:1	6,000	85 Nm	1005100980	7111.40000

LB4000 M Offset Cross Tool • ER-32 Output



Notes

Wrenches Included with Tools

Maximum Drill Ø	Maximum Mill Ø
3/4"	23/32"

Turret Plugs 14.430.0.0087.0

* 1,000 psi internal coolant (IC) cross tool CANNOT be run without coolant.

All coolant thru tools require 30 micron coolant filtration nominal, 50 micron coolant filtration absolute.

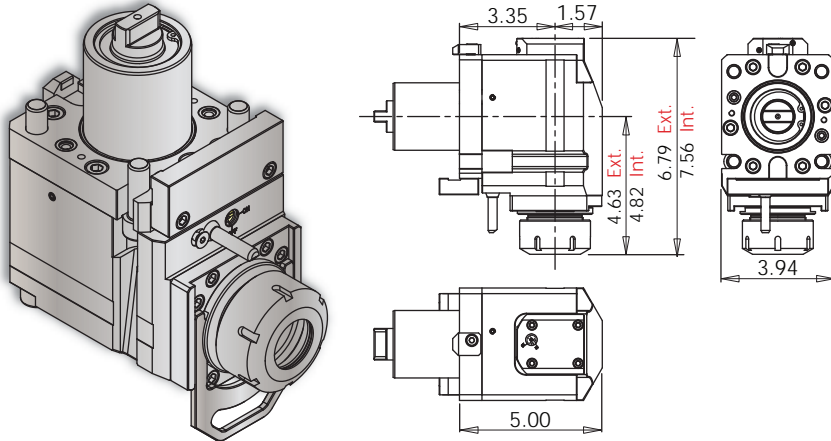
Tool #	Coolant	Output	Rotation (In:Out)	Ratio (In:Out)	Max. RPM	Torque	Spindle Wrench	Collet Wrench
14.101.0.0147.0	IC & EXT* 1,000 psi	ER-32	CW:CW	1:1	6,000	85 Nm	52-55 Hook	7111.32000

VELOCITY TOOLING FOR OKUMA LB4000 M/MY

Live Tools



LB4000 M Face Tools • ER-40 Output



Notes

Wrenches Included with Tools

Maximum Drill Ø		Maximum Mill Ø	
EXT	1"	EXT	15/16"
IC	1"	IC	15/16"

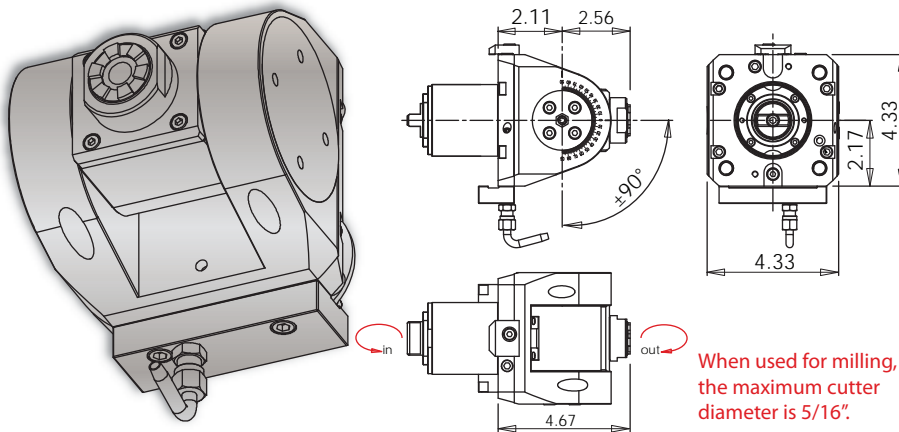
Turret Plugs 14.430.0.0087.0

* 1,450 psi internal coolant (IC) face tool **CAN** be run without coolant; the coolant sealing mechanism can be completely dis-engaged.

All coolant thru tools require 30 micron coolant filtration nominal, 50 micron coolant filtration absolute.

Tool #	Coolant	Output	Rotation (In:Out)	Ratio (In:Out)	Max. RPM	Torque	Spindle Wrench	Collet Wrench
14.800.0.0435.0 (14.800.0.0182.0)	EXT	ER-40	CW:CW	1:1	6,000	85 Nm	1005101120	7111.40000
14.800.0.0434.0 (14.800.0.0216.0)	IC & EXT* 1,450 psi	ERC-40	CW:CW	1:1	6,000	85 Nm	1005101120	7111.40000

LB4000 M ±90° Adjustable Angle Tool • ERAX-25 Output



Notes

Wrenches Included with Tools

Maximum Drill Ø	Maximum Mill Ø
5/8"	5/16"

Turret Plugs 14.430.0.0087.0

VELOCITY/SU-matic driven tools are greased for life and delivered ready to use - **no run-in required**. All driven tools are CMM inspected and internal coolant tools are pressure tested as a final quality check prior to shipment.

Tool #	Coolant	Output	Rotation (In:Out)	Ratio (In:Out)	Max. RPM	Torque	Spindle Wrench	Collet Wrench
14.826.0.0017.0	EXT	ERAX-25	CCW:CW	1:1	6,000	25 Nm	36 mm	7117.25000

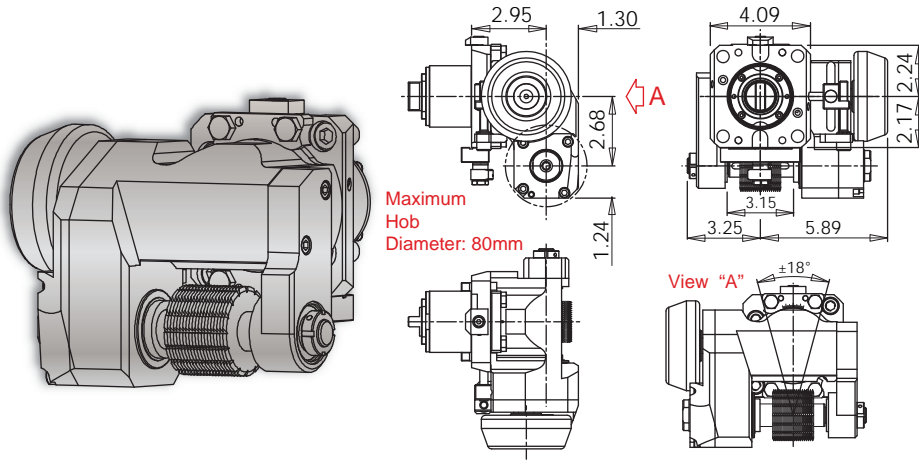
VELOCITY TOOLING FOR OKUMA LB4000 M/MY

Hobber • Static Tools



LB4000 M Gear Hobbing Tool • 3/4" Arbor

Notes



Wrenches Included with Tools

Maximum Hob Ø	Max. Gear Quality
---------------	-------------------

80 mm	AGMA 7
-------	--------

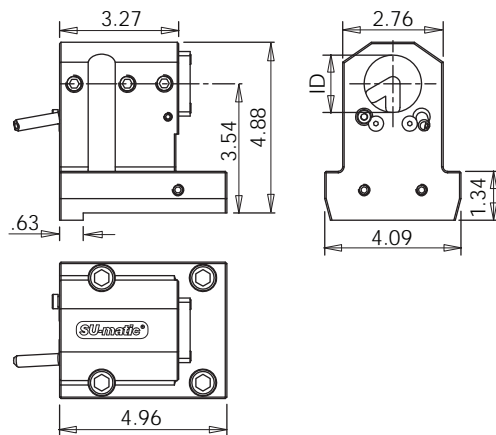
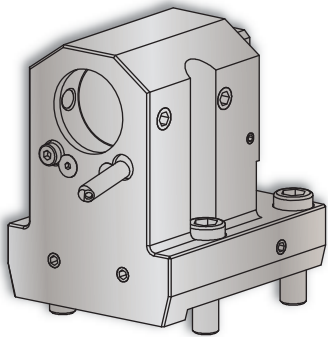
Turret Plugs	14.430.0.0087.0
--------------	-----------------

VELOCITY/SU-matic driven tools are greased for life and delivered ready to use - **no run-in required**. All driven tools are CMM inspected and internal coolant tools are pressure tested as a final quality check prior to shipment.

Tool #	Coolant	Arbor Diameter	Rotation (In:Out)	Ratio (In:Out)	Max. RPM	Torque	3/4" Arbor
14.800.0.0258.0	EXT	3/4"	CW:CCW	2:1	3,000	80 Nm	14.420.0.0127.0

LB4000 M Boring Bar Holder

Notes



VELOCITY/SU-matic ID holders can be used with both internal and external coolant. **Internal Coolant Plates** are included with all *VELOCITY/SU-matic* multitasking turret ID holders.

Turret Plugs	14.430.0.0087.0
--------------	-----------------

VELOCITY/SU-matic tooling for OKUMA is manufactured on OKUMA machine tools.

Coolant filtration is recommended when using ID holders with internal coolant plates.

Lathe Model	Tool #	Reversible (Main/Sub)	Coolant	ID	Height	Depth (Top)
LB4000 M	14.910.0.0220.0	Yes	IC/EXT	1.5"	4.88"	3.27"

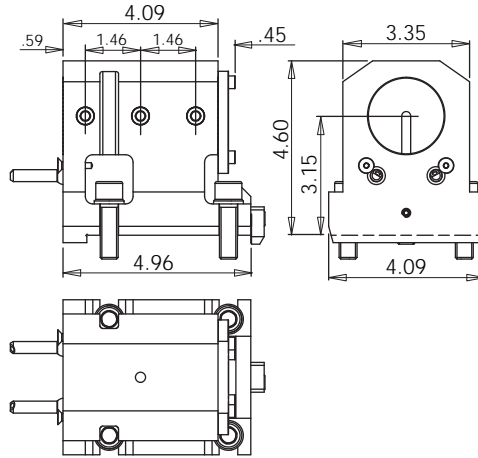
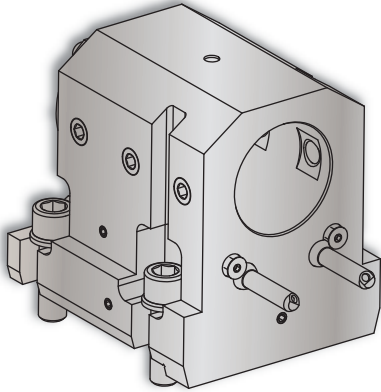
VELOCITY TOOLING FOR OKUMA LB4000 M/MY

Static Tools



LB4000 M 2" Full Depth Boring Bar Holder

Notes



VELOCITY/SU-matic ID holders can be used with both internal and external coolant. **Internal Coolant Plates** are included with all *VELOCITY/SU-matic* multitasking turret ID holders.

Turret Plugs	14.430.0.0087.0
--------------	-----------------

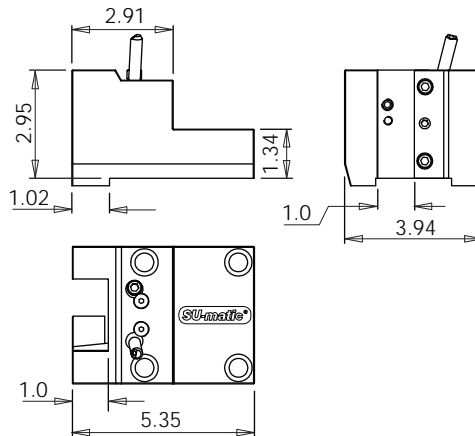
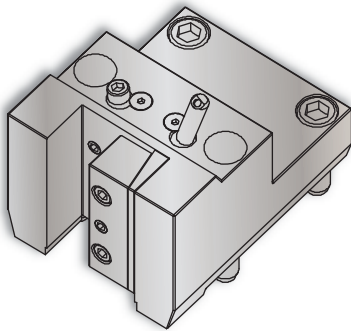
VELOCITY/SU-matic tooling for OKUMA is manufactured on OKUMA machine tools.

Coolant filtration is recommended when using ID holders with internal coolant plates.

Lathe Model	Tool #	Reversible (Main/Sub)	Coolant	ID	Height	Depth
LB4000 M	14.910.0.0472.0	-	IC/EXT	2"	4.60"	4.96"

LB4000 M OD-1 Length Turning Holder

Notes



3D Models (.stp) and CAS (.stl) files are available for all *VELOCITY/SU-matic* tool holders. Please contact Velocity: sales@velocityproducts.com.

Turret Plugs	14.430.0.0087.0
--------------	-----------------

VELOCITY/SU-matic tooling for OKUMA is manufactured on OKUMA machine tools.

VELOCITY has the most complete inventory of tooling for OKUMA machine tools in North America.

Lathe Model	Tool #	Reversible (Main/Sub)	Stick Size	Depth (Top)	Depth (Overall)	Height
LB4000 M	14.910.0.0221.0	Yes	1"	2.91"	5.35"	2.95"

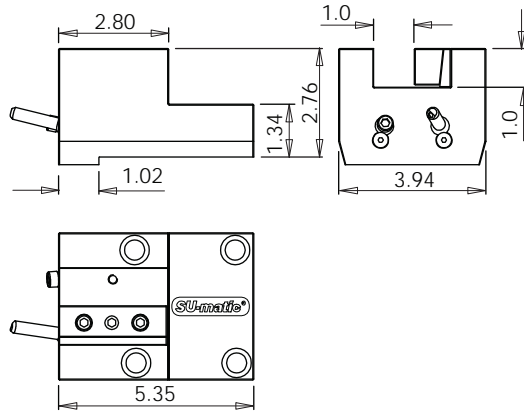
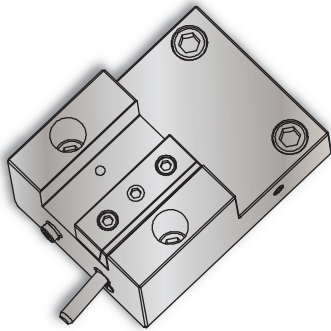
VELOCITY TOOLING FOR OKUMA LB4000 M/MY

Static Tools



LB4000 M OD-II Face Turning Holder

Notes



3D Models (.stp) and CAS (.stl) files are available for all *VELOCITY/SU-matic* tool holders. Please contact Velocity: sales@velocityproducts.com.

Turret Plugs 14.430.0.0087.0

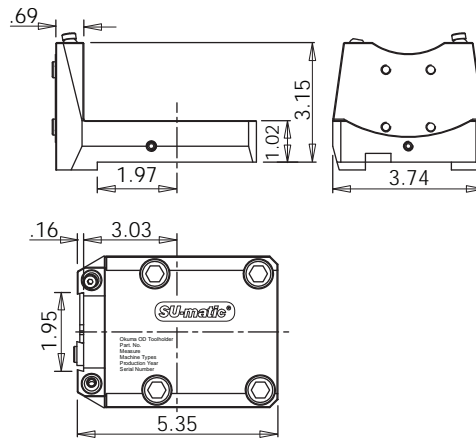
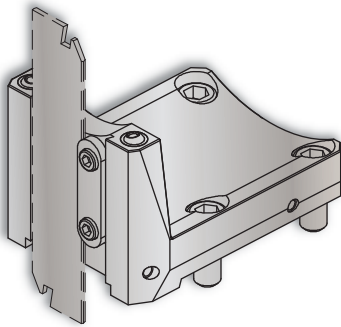
VELOCITY/SU-matic tooling for OKUMA is manufactured on OKUMA machine tools.

VELOCITY has the most complete inventory of tooling for OKUMA machine tools in North America.

Lathe Model	Tool #	Reversible (Main/Sub)	Stick Size	Depth (Top)	Depth (Overall)	Height
LB4000 M	14.910.0.0222.0	Yes	1"	2.80"	5.35"	2.76"

LB4000 M Cut-Off Blade Holder

Notes



3D Models (.stp) and CAS (.stl) files are available for all *VELOCITY/SU-matic* tool holders. Please contact Velocity: sales@velocityproducts.com.

Turret Plugs 14.430.0.0087.0

VELOCITY/SU-matic tooling for OKUMA is manufactured on OKUMA machine tools.

VELOCITY has the most complete inventory of tooling for OKUMA machine tools in North America.

Lathe Model	Tool #	Reversible (Main/Sub)	Blade Size	Depth	Width	Height
LB4000 M	14.910.0.0033.1	Yes	32 mm	5.35"	3.74"	3.15"

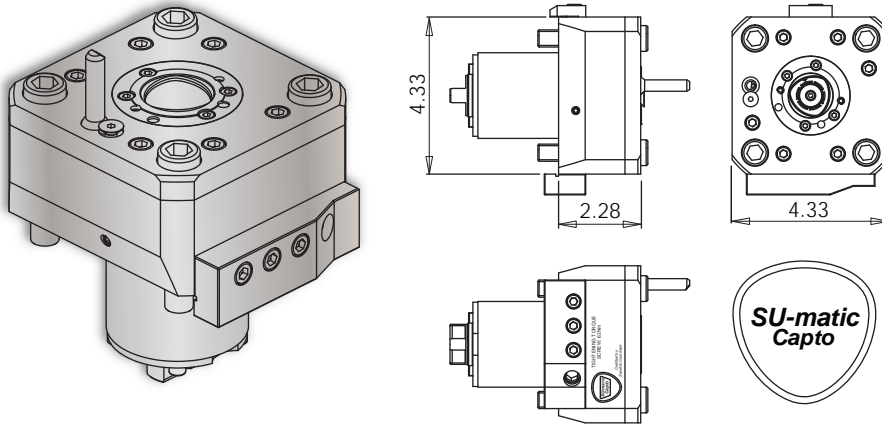
VELOCITY TOOLING FOR OKUMA LB4000 M/MY

SU-matic Capto® Tools



LB4000 M C4 Cross Tool

Notes



REGO-FIX® C4 Collet Chucks

ER Output	Rego-Fix Part #
ER-16	2804.11630
ER-20	2804.12010
ER-25	2804.12510
ER-32	2804.13210
Turret Plugs	14.430.0.0087.0

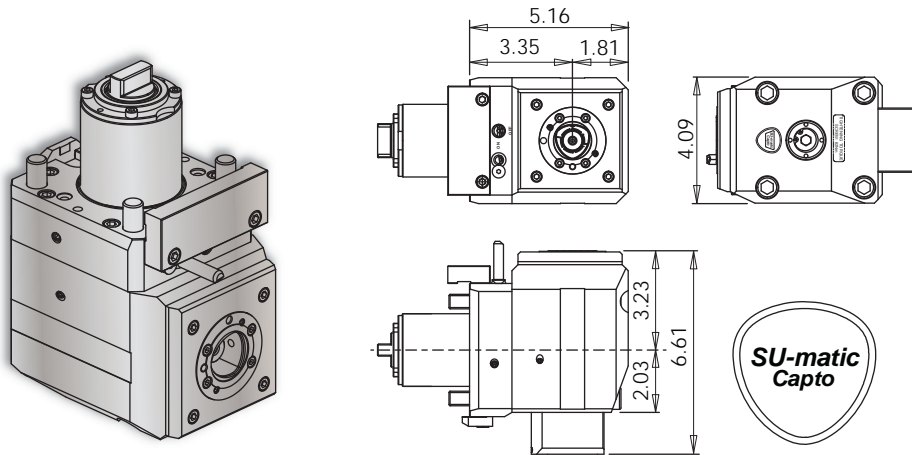
* 1,000 psi internal coolant (IC) cross tool CANNOT be run without coolant.

All coolant thru tools require 30 micron coolant filtration nominal, 50 micron coolant filtration absolute.

Tool #	Coolant	Output	Rotation (In:Out)	Ratio (In:Out)	Max. RPM	Torque	Hex Wrench	C4 Collet Chucks
14.101.0.0349.0 (14.101.0.0229.0)	IC & EXT* 1,000 psi	C4	CW:CW	1:1	6,000	60 Nm	10 mm	See Above

LB4000 M C4 Face Tool

Notes



REGO-FIX® C4 Collet Chucks

ER Output	Rego-Fix Part #
ER-16	2804.11630
ER-20	2804.12010
ER-25	2804.12510
ER-32	2804.13210
Turret Plugs	14.430.0.0087.0

* 1,450 psi internal coolant (IC) face tool CAN be run without coolant; the coolant sealing mechanism can be completely dis-engaged.

All coolant thru tools require 30 micron coolant filtration nominal, 50 micron coolant filtration absolute.

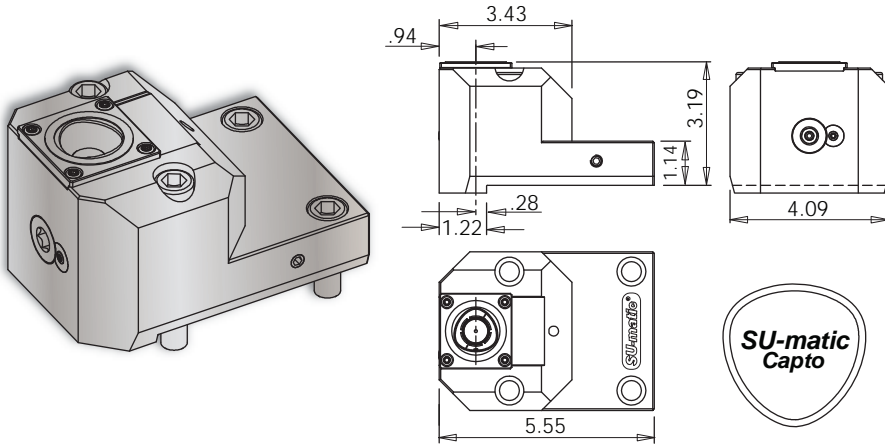
Tool #	Coolant	Output	Rotation (In:Out)	Ratio (In:Out)	Max. RPM	Torque	Hex Wrench	C4 Collet Chucks
14.800.0.0244.1	IC & EXT* 1,450 psi	C4	CW:CW	1:1	6,000	85 Nm	10 mm	See Above

VELOCITY TOOLING FOR OKUMA LB4000 M/MY

SU-matic Capto® Tools



LB4000 M C4 OD-I Length Turning Holder



Notes

REGO-FIX® C4 Collet Chucks

ER Output	Rego-Fix Part #
ER-16	2804.11630
ER-20	2804.12010
ER-25	2804.12510
ER-32	2804.13210

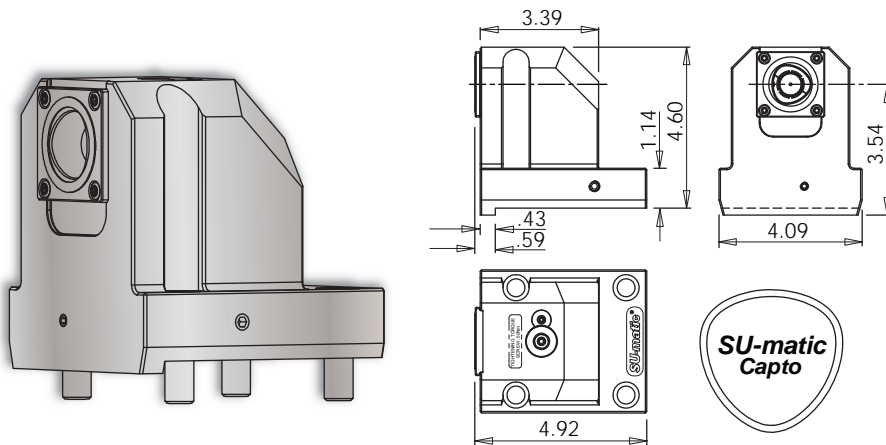
Turret Plugs 14.430.0.0087.0

VELOCITY/SU-matic tooling for OKUMA is manufactured on OKUMA machine tools.

SU-matic Capto® static tools are coolant thru. Coolant filtration is recommended.

Lathe Model	Tool #	Reversible (Main/Sub)	Coolant	Output	Hex Wrench	C4 Collet Chucks
LB4000 M	14.910.0.0045.0	No	IC/EXT	C4	10 mm	See Above

LB4000 M C4 Boring Bar Holder



Notes

REGO-FIX® C4 Collet Chucks

ER Output	Rego-Fix Part #
ER-16	2804.11630
ER-20	2804.12010
ER-25	2804.12510
ER-32	2804.13210

Turret Plugs 14.430.0.0087.0

VELOCITY/SU-matic tooling for OKUMA is manufactured on OKUMA machine tools.

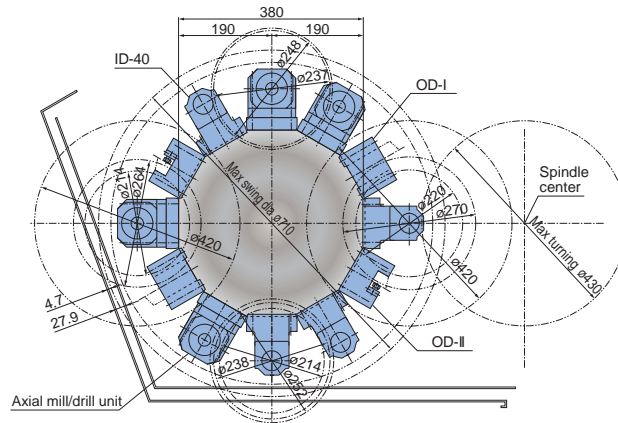
SU-matic Capto® static tools are coolant thru. Coolant filtration is recommended.

Lathe Model	Tool #	Reversible (Main/Sub)	Coolant	Output	Hex Wrench	C4 Collet Chucks
LB4000 M	14.910.0.0046.0	Yes	IC/EXT	C4	10 mm	See Above

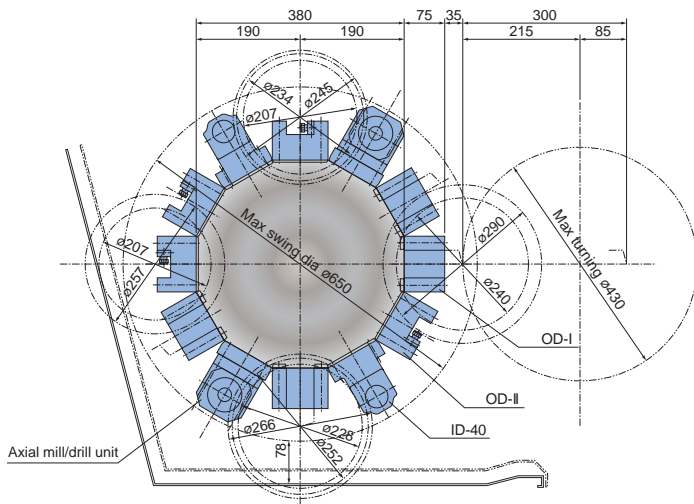
Interference Diagrams

LB4000 M/MY (12) Position Multitasking Turret Interference Diagrams

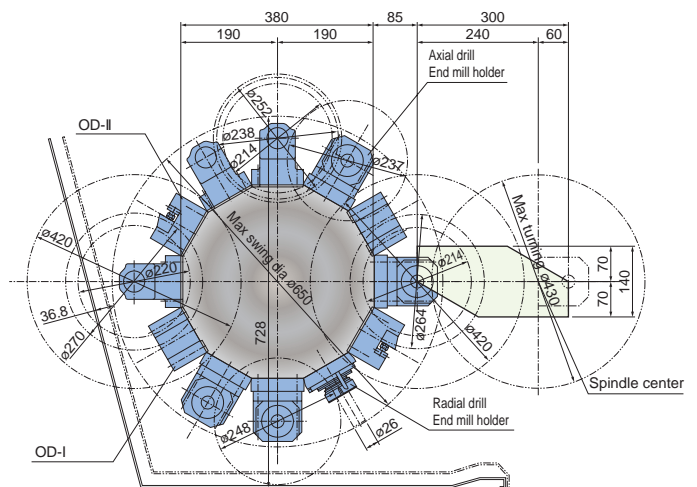
LB4000 M



LB4000 MY



LB4000 MY



ONLY FOR
OKUMA

VELOCITY
SU-matic®

LB4000 M/MY

www.velocityproducts.com



A Complete Lineup of In-Stock Lathe Tooling for Okuma • Three Year Warranty*

Velocity Products • 350 Electronics Boulevard, Huntsville, AL 35824 • 256-258-5549
www.velocityproducts.com • sales@velocityproducts.com

*Warranty voided if internal coolant tools are used without coolant and coolant filtration. Exceeding specified maximum cutting tool sizes voids warranty.

© Velocity Products • Specifications subject to change without notice • Velocity-Okuma LB4000 6.2018.17