

800-843-8801 WWW.HARDINGE.COM







STYLE D — PULL-BACK WITH THRU-HOLE

42mm* Style D Spindle Mount:

Pull-back style with thru-hole

Spindle Style	Part Number	D¹ - Diameter	D - Diameter	L ^I - Length	L - Length	Price
A2-5	V42 5D00300	4.016" (102)	5.512" (140)	.846" (21.5)	3.543" (90)	\$2000
A2-6	V42 6D00400	4.016" (102)	6.496" (165)	.846" (21.5)	3.543" (90)	\$2000
I40mm	V42 140D01700	4.016" (102)	5.906" (150)	.846" (21.5)	3.543" (90)	\$2000

^{*} Limited to machine capacity. (millimeters in parentheses)

65mm* Style D Spindle Mount

Pull-back style with thru-hole

Spindle Style	Part Number	D¹ - Diameter	D - Diameter	L ¹ - Length	L - Length	Price
A2-5	V65 5D00500	4.736" (120.3)	6.102" (155)	1.043" (26.5)	3.740" (95)	\$2300
A2-6	V65 6D00600	4.736" (120.3)	6.496" (165)	1.043" (26.5)	3.740" (95)	\$2300
A2-8	V65 8D00700	4.736" (120.3)	8.268" (210)	1.043" (26.5)	3.858" (98)	\$2300
I40mm	V65 140D01900	4.736" (120.3)	6.299" (160)	1.043" (26.5)	3.937" (100)	\$2300

^{*} Limited to machine capacity. Additional lengths available. (millimeters in parentheses)





WHY YOU SHOULD CHOOSE FLEXC® PULL BACK CHUCKS

MAIN SPINDLE APPLICATIONS

 Used on main spindle applications where the collet is pulled into the chuck sleeve to close on your part.

ULTIMATE FLEXIBILITY

 Capable of accepting Hardinge Quick Change Adapters. (see page 8)

COMPACT DESIGN

 Compact design allows for optimal tool clearances and maximum machining workspace.

BETTER PART FINISH

• Collet chucks allow for higher RPMs than traditional 3-jaw chucks.

OUALITY ASSURANCE

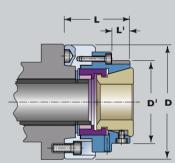
 Manufactured and assembled in the USA with top grade materials and inspection processes.

ACCURACY IMPROVEMENTS

• .0002"TIR on the closing angle of the chuck.

IOX THE GRIP RANGE

• Grip range of +/- .020" allowing for part size variation.



42 and 65mm systems

BAR WORK

STYLE A — PULL-BACK DESIGN WITH A DEAD-LENGTH® WORKSTOP



42mm* Style A Spindle Mount: Pull-back style with removable dead-length work stop

Spindle Style	Part Number	D ^I - Diameter	D - Diameter	L ¹ - Length	L - Length	Price
A2-5	V42 5A01000	4.016" (102)	5.512" (140)	.610" (15.5)	4.764" (121)	\$3100
A2-6	V42 6A01100	4.016" (102)	6.496" (165)	.610" (15.5)	4.764" (121)	\$3100
140mm	V42 140A01600	4.016" (102)	5.906" (150)	.610" (15.5)	4.961" (126)	\$3100

^{*} Limited to machine capacity. (millimeters in parentheses)

BAR SLUG WORK

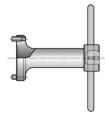
	<u>V42 5A01006</u> (M12 X 1.75)
Dead Stop Included	<u>V65 6A01206</u> (M12 X 1.75)
	<u>V80 6A06407</u> (1'' - 20)



65mm* Style A Spindle Mount: Pull-back style with removable dead-length work stop

Spindle Style	Part Number	D ^I - Diameter	D - Diameter	L ^I - Length	L - Length	Price
A2-5	V65 5A01200	4.736" (120.3)	6.102" (155)	.728" (18.5)	5.118" (130)	\$3600
A2-6	V65 6A01300	4.736" (120.3)	6.496" (165)	.728" (18.5)	5.118" (130)	\$3600
A2-8	V65 8A01400	4.736" (120.3)	8.268" (210)	.728" (18.5)	5.315" (135)	\$3600
I40mm	V65 140A02300	4.736" (120.3)	6.299" (160)	.728" (18.5)	5.248" (133)	\$3600
170mm	V65 170A01800	4.736" (120.3)	6.299" (160)	.728" (18.5)	5.118" (130)	\$3600

^{*} Limited to machine capacity. Additional lengths available. (millimeters in parentheses)

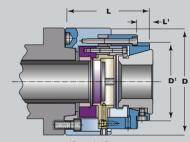


Work stop wrench V65-6DL05810 (65mm) is included with the 80mm spindle mount assembly to remove or install the work stop.

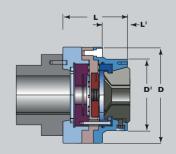
80mm* Style A Spindle Mount: Pull-back style with removable dead-length work stop

Spindle Style	Part Number	D¹ - Diameter	D - Diameter	L ¹ - Length	L - Length	Price
A2-5	V80 5A06600	5.750" (146.1)	7.700" (195.6)	2.000" (50.8)	5.174" (131.4)	\$3800
A2-6	V80 6A06400	5.750" (146.1)	7.700" (195.6)	2.000" (50.8)	5.174" (131.4)	\$3800
A2-8	V80 8A06500	5.750" (146.1)	8.000" (203.2)	2.000" (50.8)	5.174" (131.4)	\$3800

^{*} Limited to machine capacity. (millimeters in parentheses)



42 and 65mm systems



80mm systems

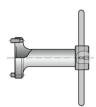
STYLE DL — PUSH-TO-CLOSE DESIGN WITH A DEAD-LENGTH® WORKSTOP



42mm* Style DL Spindle Mount: Push-to-Close with work stop

Spindle Style	Part Number	D¹ - Dia.	D - Dia.	L' - Length	L - Length	Price
A2-5 (I)	V42 5DL05400	_	5.315" (135)	_	4.724" (120)	\$3400
A2-6 (2)	V42 6DL05500	5.315" (135)	6.299" (160)	2.953" (75)	4.724" (120)	\$3400
140mm (2)	V42 140DL04400	5.315" (135)	5.906 (150)	3.944 (100)	4.724" (120)	\$3400

^{*} Limited to machine capacity. (millimeters in parentheses)



Work stop wrench V42-5DL05410 (42mm) is included with the spindle mount assembly to remove or install the work stop.

65mm* Style DL Low Profile Spindle Mount: Push-to-Close with work stop

Spindle Style	Part Number	D¹ - Dia.	D - Dia.	L ^I - Length	L - Length	Price
A2-5	<u>V65 5DL05740</u>	5.404'' (137.3)	6.299" (160)	1.448" (36.8)	4.845" (123)	\$3800
A2-6	V65 6DL05940	5.404" (137.3)	6.299" (160)	1.448" (36.8)	4.845" (123)	\$3800
A2-8	V65 8DL06040	5.404" (137.3)	8.268" (210)	1.448" (36.8)	5.345" (135.8)	\$3800
I40mm	V65 140DL02440	5.404'' (137.3)	6.299" (160)	1.448" (36.8)	4.908" (124.6)	\$3800

^{*} Limited to machine capacity. (millimeters in parentheses)

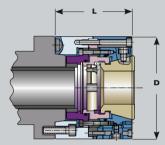


80mm* Style DL Spindle Mount: Push-to-Close with work stop

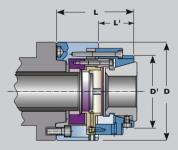
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Spindle Style	Part Number	D¹ - Dia.	D - Dia.	L ¹ - Length	L - Length	Price
A2-5	V80 5DL06100	5.950" (151.2)	7.700" (195.6)	1.354" (34.4)	4.957" (125.9)	\$4400
A2-6	V80 6DL06200	5.950" (151.2)	7.700" (195.6)	1.354" (34.4)	4.957" (125.9)	\$4400
A2-8	V80 8DL06300	5.950" (151.2)	8.250" (209.6)	1.354" (34.4)	5.207" (132.3)	\$4400
I40mm	V80 140DL06400	5.950" (151.2)	7.700'' (195.6)	1.354'' (34.4)	5.357" (136.1)	\$4400

^{*} Limited to machine capacity. (millimeters in parentheses)

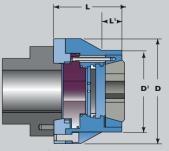
BAR SLUG WORK



Spindle Style I



Spindle Style 2



65/80mm systems

QUALITY

Hardinge guarantees a collet head concentricity of .0002" (.005mm) TIR for round sizes after the segments are joined in the vulcanization process. Hardinge test results from repeated cycles of collet actuation assure long life of the Hardinge vulcanization process.

FlexC Capacity	Changing Wrench	Price
42mm	C 4200000-WREN	\$495
65mm	C 65000-00-WREN	\$495
80mm	C 80000-00-WREN	\$550







FAST DELIVERY

Hardinge stocks an extensive inventory of finished collets for all common sizes. Semi-Finished inventory is also available allowing for decimal sized collets to be delivered in 5 days or less.

	Rated Capacity	Round Smooth/ Serrated	Price	Hexagon Smooth/ Serrated	Price	Square Smooth	Price
42mm	fractional	$^{7}/_{32}$ to $1^{5}/_{8}$ "	\$242.25	⁵ / ₁₆ to ³ / ₈ "	\$350	⁵ / ₁₆ to 1 ⁹ / ₆₄ "	\$350
	metric	5 to 42mm		8 to 36	i e	8 to 29	
65mm	fractional	1/4 to 29/16"	\$297	$^{5}/_{16}$ to $2^{1}/_{8}$ "	\$425	⁵ / ₁₆ to 1 ¹³ / ₁₆ "	\$425
05111111	metric	5 to 65mm	ΨΖ//	8 to 56	Ψ 123	8 to 46	Ψ 123
80mm	fractional	¹⁵ / ₃₂ to 3 ¹ / ₄ "	\$414	¹⁵ / ₃₂ to 2 ³ / ₄ "	\$545	¹⁵ / ₃₂ to 2 ¹ / ₄ "	\$545
00111111	metric	12 to 82.5mm	ΨΙΙΙ	12 to 69.9	Ψ5 15	12 to 57.2	ΨΟΙΟ



CUSTOM MANUFACTURING

Hardinge's custom engineering department can design and manufacture special FlexC collets for any application. Sample applications include stepped holes, special shapes, off-center and more.









EMERGENCY COLLETS

	Size / Pilot Hole	Part Number	Price	Boring Ring	Price
42mm	5mm Pilot	C0420000000005			
	15mm Pilot	C0420000000015	\$231	C042000000RING	\$100
	30mm Pilot	C0420000000030			
65mm	8mm Pilot	C0650000000008			
	20mm Pilot	C06500000000020	\$287	C065000000RING	\$150
	40mm Pilot	C06500000000040			
80mm	12mm Pilot	C080000000012			
	25mm Pilot	C08000000000025	\$400	C080000000RING	\$200
	40mm Pilot	C0800000000040			



NEW

ULTIMATE QUICK CHANGE FLEXIBILITY

FlexC 65 Adapters are ideal for shops looking for ultimate flexibility! Now in one setup a customer can use multiple workholding options, eliminating costly and time consuming changeovers! In one setup you can use:

- FlexC Quick Change Collets
- 5C Collets
- Sure-Grip Expanding Collets
- 5C Step Chucks & Closers

SINGLE SETUP

FOR CNC LATHES



MANUAL COLLET BLOCK



FLEXC® COLLETS



When accuracy, grip range and grip strength is needed, FlexC collets are a perfect option. FlexC collets have .0002"TIR and +/- .020" grip range.

Capacity	Price
42mm	\$242
65mm	\$297
80mm	\$414



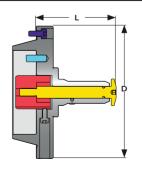
STANDARD SURE-GRIP EXPANDING ADAPTERS



You can now utilize Hardinge's Sure-Grip expanding system in our FlexC 65 products! Hardinge® Sure-Grip® Expanding Collet Systems offer solutions to difficult machining problems where ID gripping is required. Sure-Grip collets have .015" expansion range and .0002"TIR.

Part Number*	Grip Range	D - Diameter	L - Length	Price
V65 2001000	1/2" to 3/4"	4.891" (124.23)	2.087" (53.01)	\$600
V65 2501000	3/4" to 1"	4.891" (124.23)	2.483" (63.07)	\$625
V65 3001000	I" to 1 1/2"	4.891" (124.23)	2.947" (74.85)	\$650
V65 4001000	1 1/2" to 2 1/4"	5.25" (133.35)	3.536" (89.81)	\$675
V65 5001000	2 1/4" to 3"	5.25" (133.35)	4.274" (108.56)	\$700
V65 6001000	3" to 4"	5.25" (133.35)	4.337" (110.16)	\$725

^{*} requires part number V65 5C01000 for use.



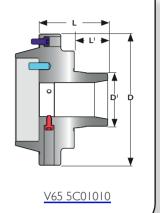
Sure-Grip Expanding Collet

5C COLLET ADAPTER



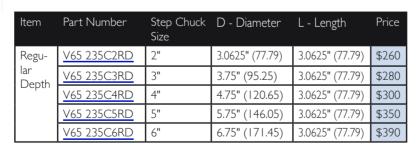
Hardinge's 5C Spindle tooling has been an industry standard for over 100 years. Customers can now utilize their 5C spindle tooling in our FlexC 65 system for applications that are ideally suited for these style collets. Ideal applications include extended nose, small hole, special shapes, Internal Gripping and more!

ltem	Part Number	D ^I Diameter	D Diameter	L ^I Length	L Length	Price
5C Collet Adapter	V65 5C01010S	1.984" (50.39)	4.891" (124.23)	1.25" (31.75)	2.5625" (65.09)	\$1600

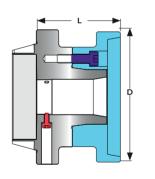


STANDARD 5C STEP CHUCKS & A2-3 CLOSERS

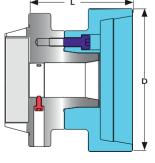
Don't limit your machine setup to the capacity of the FlexC 65. With our 5C adapter, customers can now use Hardinge's Step Chucks and Closers allowing for part sizes of up to 6". Castings, moldings, stampings and machined parts are held rigidly and accurately. Tubing can be held without crushing or distorting. Accurate gripping, the same as with collets, is yours when you use regular and extra depth capacity step chucks for holding larger diameters.



ltem	Part Number	A2-3 Closer Size	D - Diameter	L - Length	Price
Extra	V65 235C2ED	2"	3.625" (92.08)	3.8125" (96.84)	\$290
Depth	V65 235C3ED	3"	4.25" (107.95)	3.8125" (96.84)	\$310
	V65 235C4ED	4"	5.25" (133.35)	3.8125" (96.84)	\$330
	V65 235C5ED	5"	6.25" (158.75)	3.8125" (96.84)	\$380
	V65 235C6ED	6"	7.25" (184.15)	3.8125" (96.84)	\$420



A2-3 5C Adapter with 4 Closer



A2-3 5C Adapter with 4 ED Closer



MASTER COLLET & PADS

lexC Style-S Vaster Collets	Part Number	Price	"S" Pad*	Round Smooth	Round Serrated	Hexagon Smooth	Square	Emergency	Semi-Hard
	C0650S16MASTER	\$275	SI6	\$59.50	\$63	\$73.50	\$73.50	\$53.50	\$56.50
nm	C0650S20MASTER	\$297	S20	\$79	\$83	\$102.50	\$102.50	\$74	\$76
	C0650S22MASTER	\$320	S22	\$87	\$91.50	\$118	\$118	\$81	\$84
	C0800S26MASTER	\$414	S26	\$97.50	\$102	\$130	\$130	\$90.50	\$94.50
mm	C0800S30MASTER	\$437	S30	\$131.50	\$144.50	\$163	\$163	\$125	\$128

	Part Number	Price
\$16, \$20 and \$26		
B Clamp assy	<u>7619</u>	\$7.20
B wrench	<u>7637</u>	\$1.35
S22 and S30		
C Clamp assy	7627	\$7.60
C wrench	7639	\$2.30

EJECTORS

Hardinge Spring Part Ejectors

Hardinge's standard spring ejectors are used to push a part into the parts catcher or conveyor when finished. These standard spring ejectors have a limited amount of stroke and apply consistent force, regardless of part size.



Part Number	Chuck Model	Price		
1057000000042A	42A	\$250		
105700000042DL	42DL	\$250		
1057000000065A	65A	\$300		
327300000065DL	65DL	\$300		
3273000000080A	80A	\$350		
327300000080DL	80DL	\$350		
A= Pull back w/stop; DL= Dead length				

Long Stroke, Variable Speed Part Ejector

The Hardinge JL-Series Variable Speed Part Ejector is used when maximum stroke and flexibility is needed. This part ejector has 4.4" of stroke and allows users to adjust the rate of speed at which the ejection rod will push the part out, making sure the part is ejected exactly how you want every time!



Part Number	Chuck Model	Price	
Long Stroke, Variable Sp	eed		
<u>JL 000100065A</u>	65A	\$1200	
JL 000100065DL	65DL	\$1200	
<u>JL 000100080A</u>	80A	\$1200	
JL 000100080DL	80DL	\$1200	
A= Pull back w/stop; DL= Dead length			

Patent Pending

FlexC Part Stops

A part stop is used to accurately locate z-axis positioning of slug work within a collet. These easy to install stops are adjustable for desired part length. The rigid design of these part stops allows peace of mind knowing that your part length will remain consistent part to part.





Part Number	Chuck Model	Price		
Solid Stops				
V42 5A01011	42A	\$150		
V42 5DL05411	42DL	\$150		
V65 6A01211	65A	\$175		
V65 6DL05836	65DL	\$175		
V80 6A06408	80A	\$200		
<u>V80 6DL06213</u>	80DL	\$200		
A= Pull back w/stop; DL= Dead length				

SAME-DAY SHIPPING

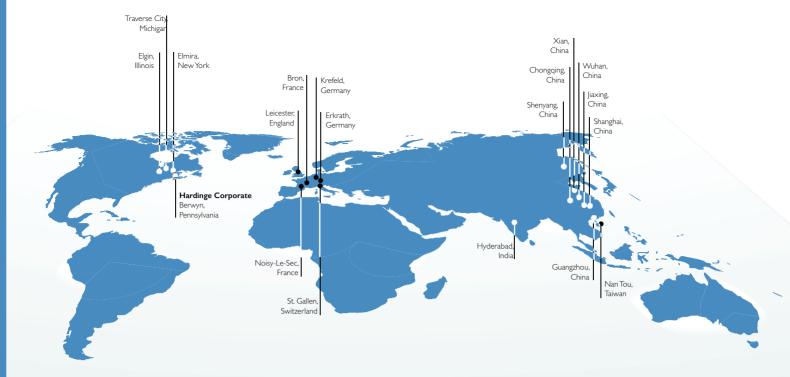
- Hardinge holds to a strict 95% same day ship rate for all standard Workholding products.
 Serving our customer requests quickly is our goal.
- Hardinge stocks more than 15,000
 Workholding SKUs in our in-house inventory.
 We ship every day, all day, to serve our customers.

CUSTOMER SUPPORT

- Our fully staffed team of experienced customer service representatives will help you from product identification to shipment.
- Accomplished Engineers, averaging over 20 years of service to the industry, making that special application easy for you.

SHOPHARDINGE.COM





HARDINGE COMPANIES WORLDWIDE

Hardinge is a leading international provider of advanced metalcutting solutions. We provide a full spectrum of highly reliable CNC turning, milling, and grinding machines as well as technologically advanced workholding accessories.

The diverse products we offer enable us to support a variety of market applications in industries including aerospace, agricultural, automotive, construction, consumer products, defense, energy, medical, technology, transportation and more.

We've developed a strong global presence with manufacturing operations in North America, Europe, and Asia. Hardinge applies its engineering and applications expertise to provide your company with the right machine tool solution and support every time.

AMERICAS

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