

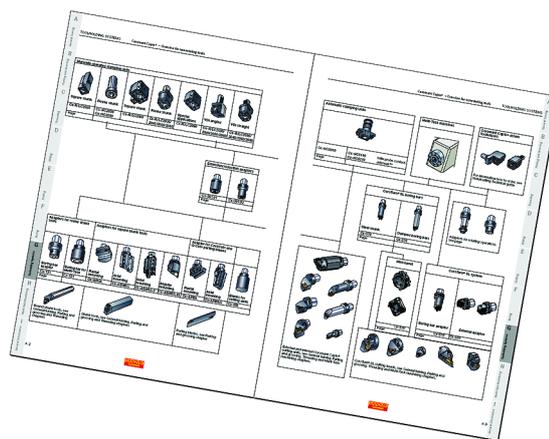
### How to select tool holding

**1** Select a coupling size

- Turn to the ordering page and select the right coupling size

**2** Select clamping unit

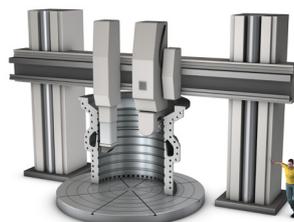
- Use the programme overview to choose a holder based on machine type.



**3** Choose modular SL-system or integrated cutting units

**4** Add extension if necessary

- Add extensions where needed to complete gauge length requirements. Use the programme overview to find suitable extension.



For more technical information, see our Metalcutting Technical guide

#### Symbols for page references:



How to choose tool, overview



Tool holding systems overview



Spare parts/accessories



Conversion table, formulas and definitions

# TOOLING SYSTEMS

## Tooling guide

Turning centres

G10

## Products

### For turning centres - non rotating tools

Coromant Capto®	G4
Tool holder overview	G6
Manual clamping units	G11
Automatic clamping units	G23
Boring bar adaptor	G26
Extension/reduction adaptors	G28
Coromant Capto® short adaptor for exchangeable head	G31
ER-collet chuck adaptor, short	G32
Tap adaptor	G33

## Spare parts and accessories

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### CoroTurn® SL flexible system

I1

### Tools for Multi-task machining

H1

### Tooling systems for rotating

See Main catalogue for milling, drilling and boring tools.

# Coromant Capto®

## Tooling system

Turning centre applications

Coromant Capto is widely used in turning centres with manual clamping via a CAM-shaft actuated clamp set. Quick changing of tools maximizes machine efficiency with an average of 25% more time for producing chips.

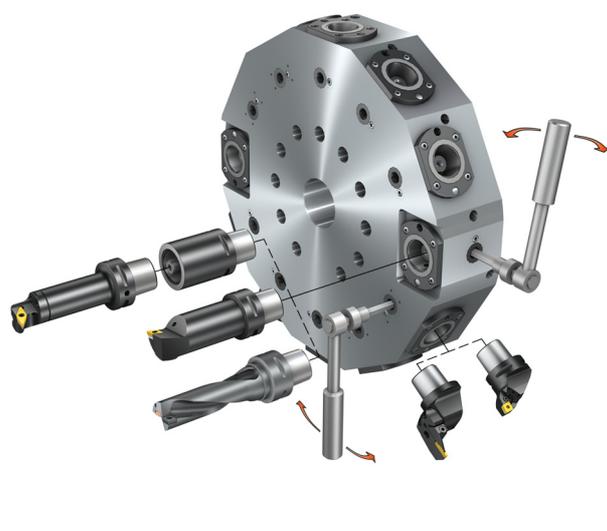
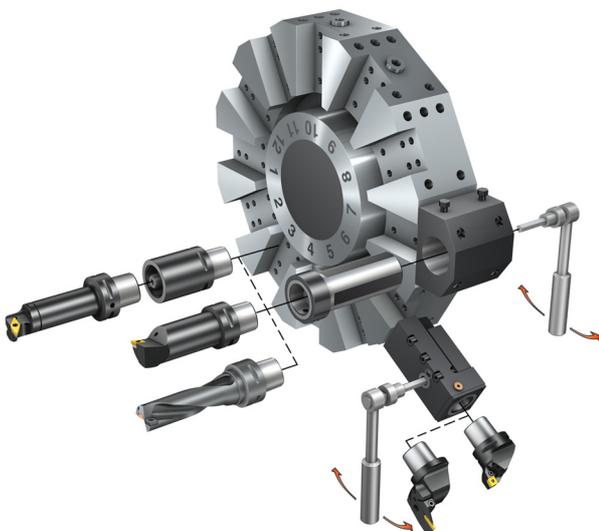
### Turret evolution

Turrets have evolved into two main groups where Coromant Capto applications are typical for both static and driven applications.



**CDI - Coromant Capto Disc Interface**  
 New solution to replace VDI turrets  
 Same adaptors fit multiple machine brands and models  
 Cam actuation screw inside turret

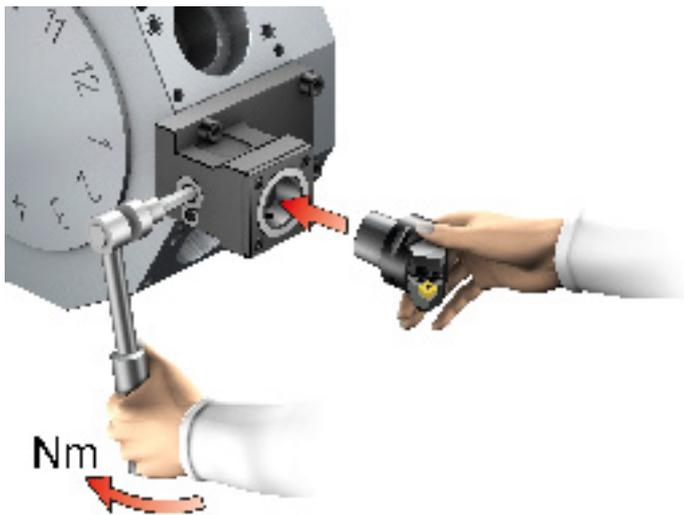
**CBI - Coromant Capto 'Bolt on' Interface**  
 'Bolt on' solution  
 Unique hole pattern for each machine brand  
 Cam actuation screw-in bolt on unit



Coromant Capto® can be integrated directly into the turret using the standard clamping mechanism.

Standard lathes can easily be converted to Coromant Capto® quick-change tools using standard clamping units.

## Coromant Capto® Quick Change



### A quick change system offers:

- Fast and efficient tool changing
- Insert changing outside the machine
- Pre-setting possibilities

### Less than 180° for clamping and unclamping

- Camshaft actuated

### The most economical system for:

- Small batch production, quicker set-up times
- Operations with frequent insert changes

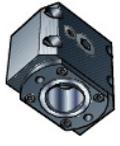
## Vertical automation

Large components dictate vertical ram solutions where tool capacity has long been a major challenge. But Coromant Capto either: hydraulic automatic tool change (ATC), or dedicated manual clamping units, is now most commonly used.



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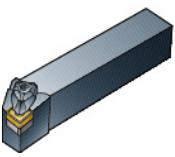
**Manually operated clamping units**

						
<b>Square shank</b>	<b>Round shank</b>	<b>Square shank</b>	<b>Round shank</b>	<b>Special applications</b>	<b>VDI angled</b>	<b>VDI straight</b>
<b>Cx-R/LC2085</b>	<b>Cx-NC2000 Cx-NC3000</b>	<b>Cx-R/LC2080</b>	<b>Cx-R/LC2035/ 2045/2055/2065</b>	<b>Cx-R/LC2090</b>	<b>Cx-R/LC2030/ 2040/2050/2060</b>	<b>Cx-R/LC2030/ 2040/2050/2060</b>
Page G13	G12	G14	G15	G16	G18	G18

<b>Manually operated clamping</b>	
	
<b>CDI angled</b>	<b>CDI straight</b>
<b>Cx-R/LC2085</b>	<b>Cx-R/LCE80- 040000/ 028082/</b>
Page G20	G21

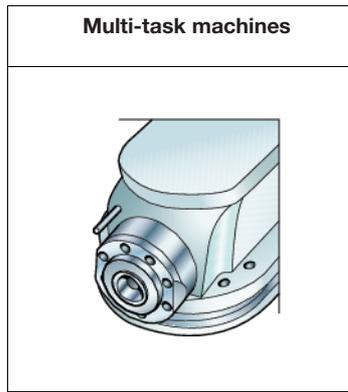
<b>Extension/reduction adaptors</b>	
	
<b>Cx-391.01</b>	<b>Cx-391.02</b>
Page G28	G29

<b>Adaptors for round shank tools</b>		<b>Adaptors for square shank tools</b>				<b>Adaptor for CoroCut® and T-Max Q-Cut® parting blades</b>		
								
<b>Boring bar adaptor</b>	<b>Boring bar for multi-task machines</b>	<b>Radial mounting</b>	<b>Axial mounting</b>	<b>Axial mounting</b>	<b>Angular mounting</b>	<b>Radial mounting</b>	<b>Axial mounting</b>	<b>Blanks for cutting units</b>
<b>Cx-131</b>	<b>Cx-131</b>	<b>Cx-ASHA</b>	<b>Cx-ASHR/L</b>	<b>Cx-ASHR/L3</b>	<b>Cx-ASHR/L45</b>	<b>Cx-APBA</b>	<b>Cx-APBR/L</b>	<b>Cx-NR</b>
Page G26	H33	H28	H29	H31	H30	B33	B33	G27

			
Round shank tools, see General turning, Parting and grooving and Threading chapters		Shank tools, see General turning, Parting and grooving and Threading chapters	Parting blades, see Parting and grooving chapter

1) For cylindrical bars EasyFix sleeve can be used, see page A304

Automatic clamping units		
		
<b>Cx-NC5010</b>	<b>Cx-NC5110</b> With probe contact	<b>Cx-NC5210</b> Jetbreak™
Page G24	G24	G25



Coromant Capto® driven tool holders

For information on how to order, please contact your local Sandvik Coromant office.

Extension/reduction adaptors	
	
<b>180° rotated polygon</b>	
<b>Cx-391.01R</b>	<b>Cx-391.02R</b>
Page G30	G30

CoroTurn® SL boring bars	
	
<b>Steel shank</b>	<b>Dampened boring bars</b>
<b>Cx-A570/Cx-570</b>	<b>Cx-A570/Cx-570</b>
Page I56	I57

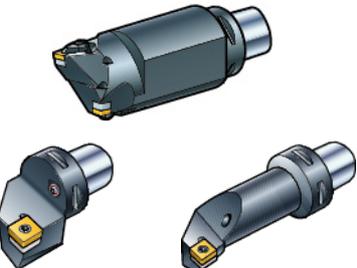
CoroTurn® SL70

<b>Cx-391.01R</b>
Page I98

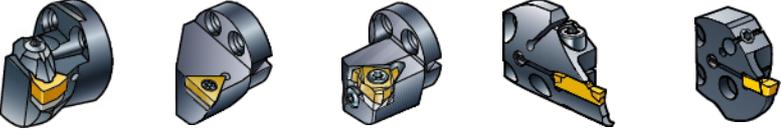
Mini-turret


<b>Cx-A570/Cx-570</b>
Page H14

CoroTurn® SL system	
	
<b>Boring bar adaptor</b>	<b>External adaptor</b>
<b>Cx-A570/Cx-570</b>	<b>Cx-A570/Cx-570</b>
Page I60	I68



External and internal Coromant Capto® cutting units, see General turning, Parting and grooving, Threading and Multi-task machining chapters.



CoroTurn® SL cutting heads, see General turning, Parting and grooving, Threading, CoroTurn SL and Multi-task machining chapters.

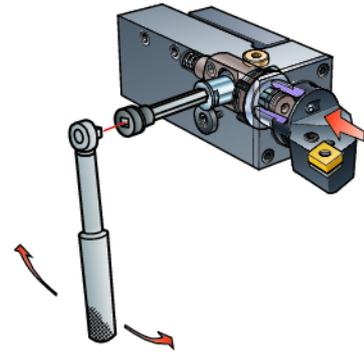
## The manual clamping units

On manually activated units both camshaft, drawbars and centre-bolt mechanisms are used. Always use a torque wrench when clamping

### Cam shaft activated drawbar

The movement of the drawbar is generated by a cam acting from the side of the unit which rotates in a slot in the drawbar.

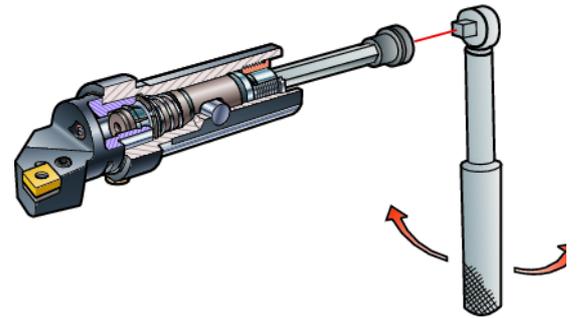
A hexagon key is used to lock/unlock the cutting head (less than a half turn is required).



### Screw activated drawbar

The movement of the drawbar is controlled by a screw acting from the rear of the unit.

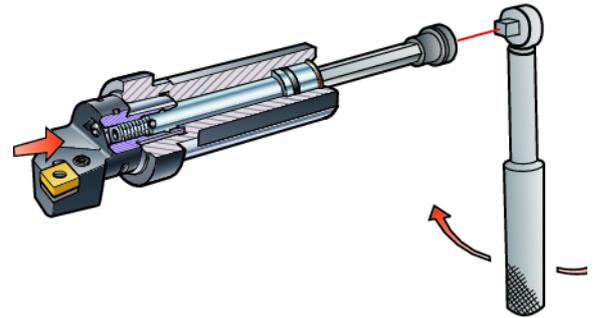
A hexagon key is used to lock/unlock the cutting head (one turn is required).



### Centre bolt clamping

A rear activated centre bolt is used to clamp/unclamp the cutting head.

A hexagon key is used to lock/unlock the cutting head (six turns are required).



## Shank type clamping units for conventional turrets

### Round shank units for internal operations:

#### The 2000 type features

- Expandable segmented bushing clamp design.
- Screw activated drawbar.
- Less than 180° for clamping and unclamping

#### The 3000 type features

- Centre bolt clamping
- 4-5 revs for clamping and unclamping

#### Installation is simple

- Both mount in the turret like a standard boring bar.

### Shank units for external operations:

Easily adaptable to most machines using 20, 25, 32 or 40 mm square shank tools.

#### The 2085 type features

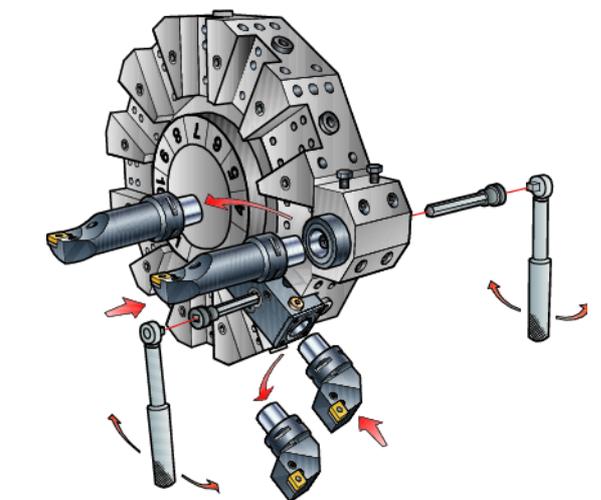
- The expandable segmented bushing
- Cam shaft activated drawbar.

#### Installation is simple

- Remove the square shank tool and machine wedge.
- Slide the Coromant Capto 2085 clamping unit into place and tighten the wedge.

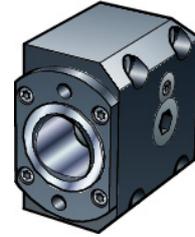
#### These tools feature

- No special adaptation to tool or turret.
- Through tool coolant.
- Minimum overhang allowing maximum working envelope.
- Same key for clamping external and internal units.
- Adjustable shank length (cut off if necessary).



## Manual clamping units for special applications

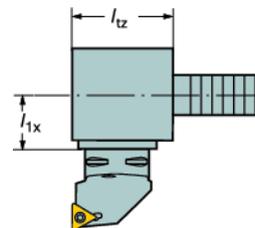
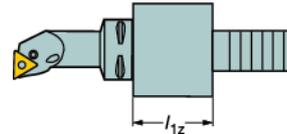
The 2090 type clamping unit is designed for special adaptation to the machine.  
Design instructions for the application of these units are shown on the ordering page.



## Clamping units for DIN 69880 (VDI) turrets

These tools feature:

- No special adaptation to tool or turret.
- Through tool coolant.
- Minimum overhang allowing maximum working envelope.
- Same key for clamping external and internal units.



### VDI clamping units for external and internal operations

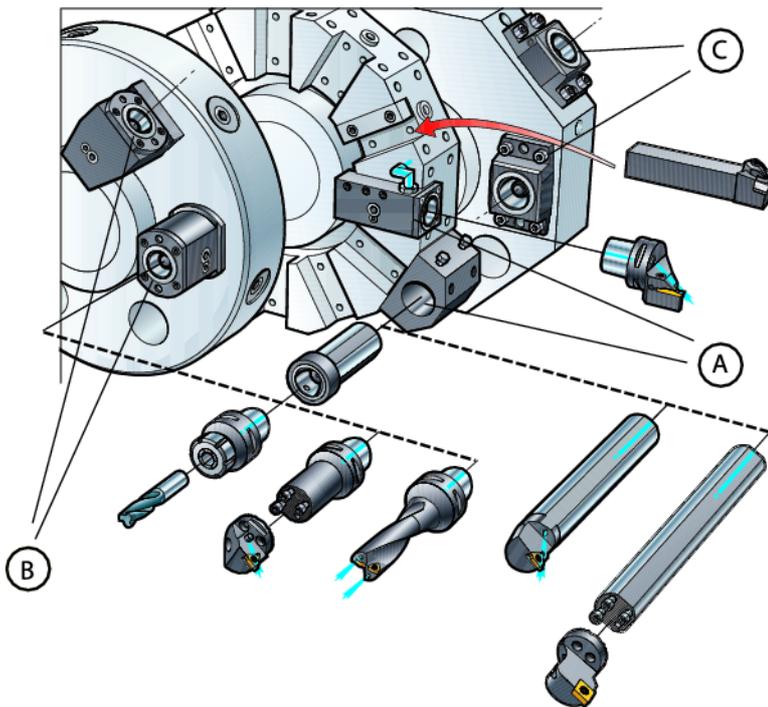
- Expandable segmented bushing clamp design.
- Quick change – 1/2 turn to lock/unlock.
- Same length dimension for corresponding angular  $l_{1z}$  and straight  $l_{1z}$  units to avoid risk of collision.
- Two different  $l_{1x}$  dimensions available on angular units.

### CDI - Coromant Capto Disc Interface

- New solution to replace VDI turrets
- Same adaptors fit multiple machine brands and models
- Cam actuation screw inside turret

## Tooling alternatives

### Conventional turrets



### Manually operated Coromant Capto® clamping units

- Camshaft activated
- Screw activated
- Centre bolt activated

### A Shank type clamping units

- Square and round shank tools as well as Coromant Capto units for external and internal operations

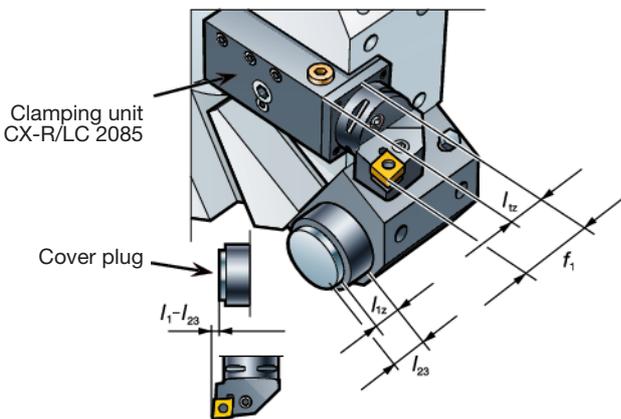
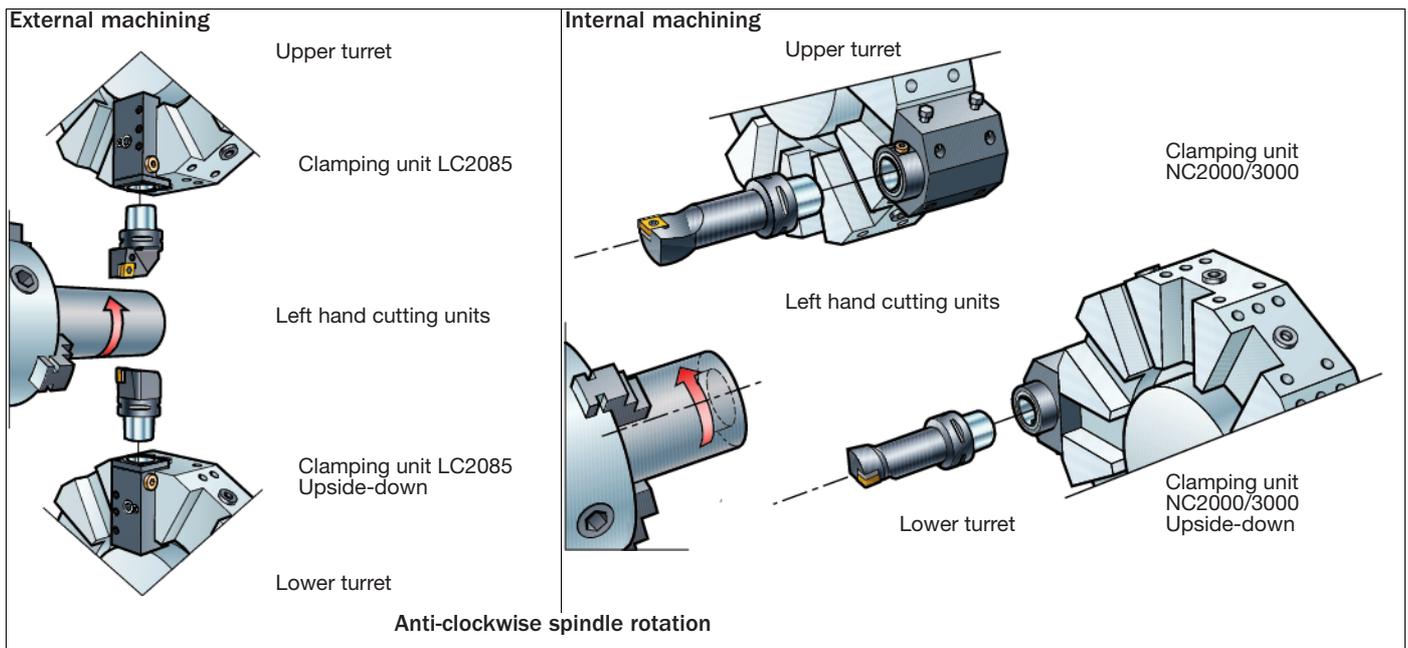
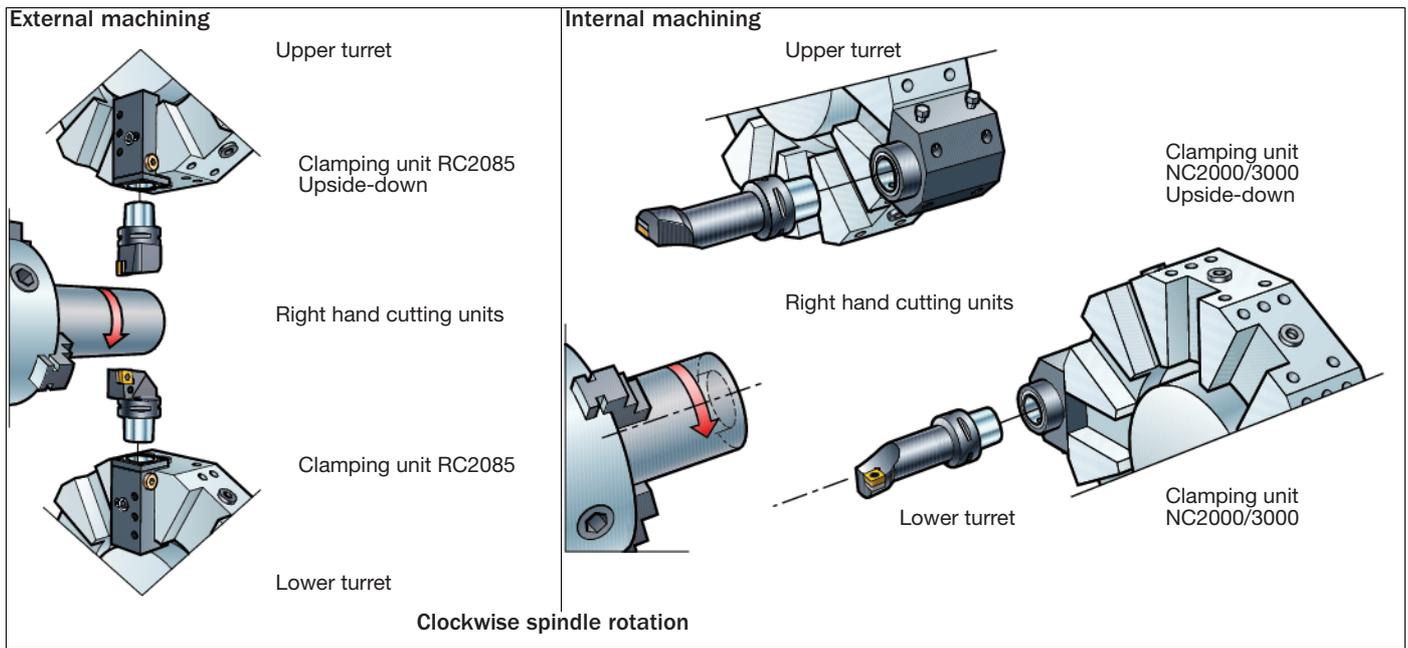
### B Coromant Capto® clamping units for DIN 69880 (VDI) turrets

- Angled and straight clamping units for external and internal operations

### C Hydraulically operated clamping units

- Manual push-button tool changing
- Fully automatic tool changing possible

## How to choose shank type clamping units 2000, 3000 and 2085



### Application guide for type 2000 and 3000

A cover plug (CX-CP-01) must be used in a clamping unit when no cutting unit is installed. As can be seen from the diagram and table there is no risk of collision between the workpiece and cover plug during facing operations using clamping unit CX-R/LC 2085.

Dimensions, mm (inch)	$f_1$	$l_{12}$	$l_{23}$	$l_{23}$
C3-R/LC 2085	22 (.87)	18 (.71)	-	-
C3-NC2000/3000	-	-	18 (.71)	21 (.83)
C4-R/LC 2085	27 (1.06)	23 (.91)	-	-
C4-NC2000/3000	-	-	20 (.79)	24 (.94)
C5-R/LC 2085	35 (1.38)	32 (1.26)	-	-
C5-NC2000/3000	-	-	24 (.94)	29 (1.14)

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# Manually operated clamping units

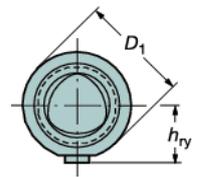
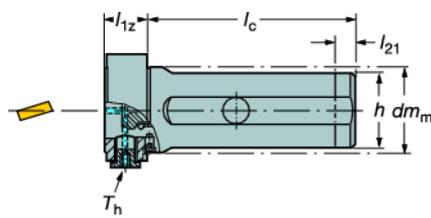
## Round shank

### Segment clamping

### Turret type



### Type 2000 Segment clamping



Note: Maximum coolant pressure is 80 bar (PSI 1160)

### Metric version

Turret type			Dimensions, mm						
$dm_m$ , size, mm	Coupling size	Ordering code	$D_1$	$h$	$h_{1y}$	$l_c$	$l_{12}$	$l_{21}$	$T_h$
32	C3	C3-NC2000-08018-32	45.5	30	26	80	18		G1/8
40	C4	C4-NC2000-10020-40	51.5	37	28	100	20	8	G1/8
50	C4	C4-NC2000-12020-50	51.5	47	28	120	20	28	G1/8
50	C5	C5-NC2000-12024-50	61.5	47	33	120	24		G1/8
60	C5	C5-NC2000-14024-60	61.5	57	33	140	24	20	G1/8

### Inch version

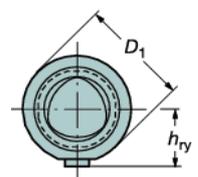
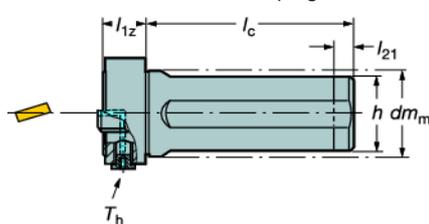
Turret type			Dimensions, inch						
$dm_m$ , size, inch	Coupling size	Ordering code	$D_1$	$h$	$h_{1y}$	$l_c$	$l_{12}$	$l_{21}$	$T_h$
1.250	C3	C3-NC2000-08018-A20	1.790	1.180	.930	3.150	.710		G1/8
1.500	C4	C4-NC2000-10020-A24	2.028	1.457	1.024	3.937	.787	.315	G1/8
2.000	C4	C4-NC2000-12020-A32	2.028	1.850	1.004	4.724	.787	1.102	G1/8
2.000	C5	C5-NC2000-12024-A32	2.421	1.850	1.220	4.724	.945		G1/8

### Centre bolt activated

### Turret type



### Type 3000 Centre bolt clamping



Note: Maximum coolant pressure is 80 bar (PSI 1160)

### Metric version

Turret type			Dimensions, mm						
$dm_m$ , size, mm	Coupling size	Ordering code	$D_1$	$h$	$h_{1y}$	$l_c$	$l_{12}$	$l_{21}$	$T_h$
32	C3	C3-NC3000-08018-32	45.5	30	26	80	18		G1/8
40	C3	C3-NC3000-10018-40	45.5	37	26	100	18	20	G1/8
40	C4	C4-NC3000-10020-40	51.5	37	28	100	20	10	G1/8
50	C5	C5-NC3000-12024-50	61.5	47	33	120	24	20	G1/8

### Inch version

Turret type			Dimensions, inch						
$dm_m$ , size, inch	Coupling size	Ordering code	$D_1$	$h$	$h_{1y}$	$l_c$	$l_{12}$	$l_{21}$	$T_h$
1.250	C3	C3-NC3000-08018-A20	1.791	1.181	.933	3.150	.709		G1/8
1.500	C4	C4-NC3000-10020-A24	2.028	1.378	1.024	3.937	.787	.394	G1/8
2.000	C4	C4-NC3000-12020-A32	2.028	1.850	1.004	4.724	.787	1.181	G1/8
2.000	C5	C5-NC3000-12024-A32	2.421	1.850	1.220	4.724	.945		G1/8

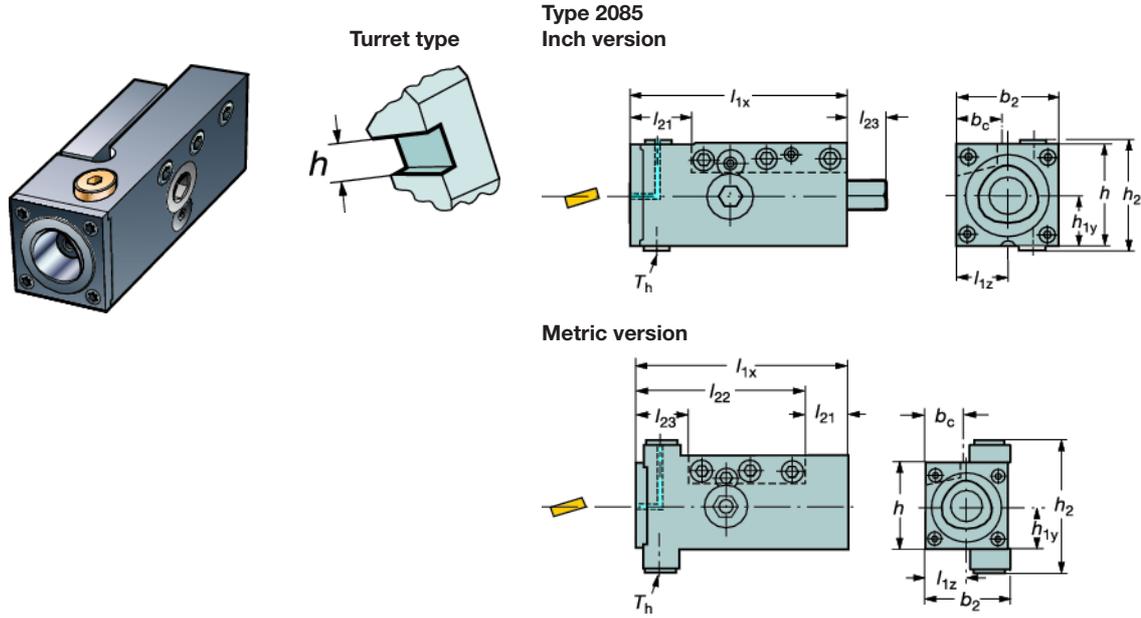


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# Manually operated clamping units

Square shank

Camshaft activated



Note: Maximum coolant pressure is 80 bar (PSI 1160)

## Metric version

Turret type		Coupling size	Ordering code	Dimensions, mm									
h, size, mm				bc	b2	h1y	h2	hx	hz	l21	l22	l23	Th
40	C3		C3-R/LC2085-4038M	20	38	20	62	95	19	16.5	78.5	25	G1/8
50	C4		C4-R/LC2085-5048	25	48	25	54	125	24	24	101	30.5	G1/8
64	C5		C5-R/LC2085-6464	32	64	32	68	145	32	27	118	36	G1/8

## Inch version

Turret type		Coupling size	Ordering code	Dimensions, inch									
h, size, inch				bc	b2	h1y	h2	hx	hz	l21	l22	l23	Th
2.000	C4		C4-R/LC2085-24102-16M	1.000	1.890	1.000	2.323	5.035	.945	1.000	4.035	1.201	G1/8
2.500	C5		C5-R/LC2085-32130-20M		2.520	1.250	2.835	5.138	1.260			1.472	G1/8

## Coromant Capto® tightening torque:

Manual clamping units and driven tool holders with camshaft mechanism

Coupling size	Torque (Nm)	ft-lbs
C3	35	25.8
C4	50	36.9
C5	70	51.2
C6	90	66.4
C8	130	95.9
C10	285	210

## Coromant Capto® tightening torque:

Manual clamping units type NC2000 and NC3000

Coupling size	Torque (Nm)	ft-lbs
C3	35	25.8
C4	50	36.9
C5	70	51.6

For torque wrenches, see page G39



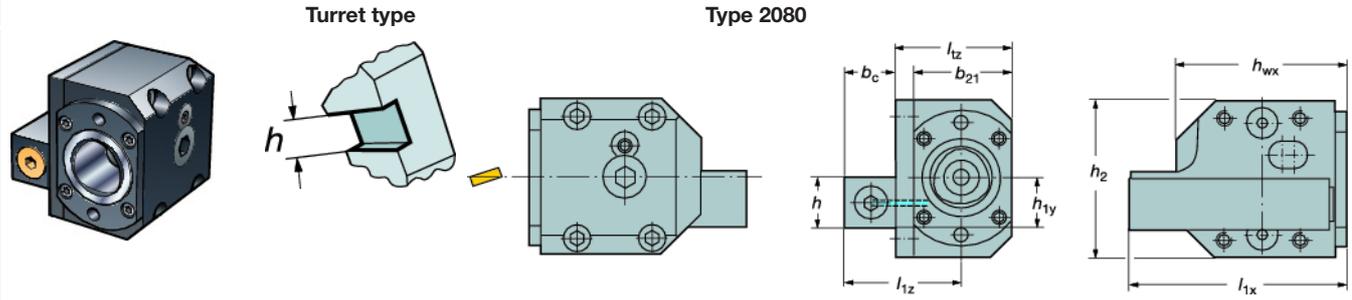
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## Manually operated clamping units

Square shank

Camshaft activated



Right hand style shown.

Note: Maximum coolant pressure is 80 bar (PSI 1160)

### Metric version

Turret type			Dimensions, mm							
<i>h</i> , size, mm	Coupling size	Ordering code	<i>b<sub>c</sub></i>	<i>b<sub>21</sub></i>	<i>h<sub>wx</sub></i>	<i>h<sub>1y</sub></i>	<i>h<sub>2</sub></i>	<i>l<sub>1x</sub></i>	<i>l<sub>z</sub></i>	<i>l<sub>z</sub></i>
25	C4	C4-R/LC2080-59110A	26	48	86	25	77	110	57	59
32	C5	C5-R/LC2080-77110A	33.5	64	100	32	92	110	75.5	77
40	C6	C6-R/LC2080-93140	40		122	40	105	140	95	93

### Inch version

Turret type			Dimensions, inch							
<i>h</i> , size, inch	Coupling size	Ordering code	<i>b<sub>c</sub></i>	<i>b<sub>21</sub></i>	<i>h<sub>wx</sub></i>	<i>h<sub>1y</sub></i>	<i>h<sub>2</sub></i>	<i>l<sub>1x</sub></i>	<i>l<sub>z</sub></i>	<i>l<sub>z</sub></i>
1.250	C5	C5-R/LC2080-76118-20A	1.310	2.520	3.940	1.250	3.230	4.640	2.990	2.940

### Coromant Capto® tightening torque:

Manual clamping units and driven tool holders with camshaft mechanism

Coupling size	Torque (Nm)	ft-lbs
C3	35	25.8
C4	50	36.9
C5	70	51.2
C6	90	66.4
C8	130	95.9
C10	285	210

For torque wrenches, see page G39



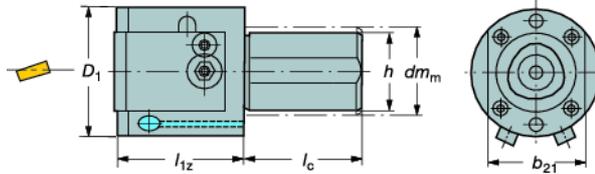
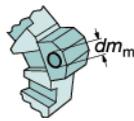
## Manually operated clamping units

Round shank

Camshaft activated



Turret type



Right hand style shown.

Note: Maximum coolant pressure is 80 bar (PSI 1160)

Left hand: hexagon clamping socket on opposite side of the tool.

### Metric version

Turret type			Dimensions, mm				
$dm_m$ , size, mm	Coupling size	Ordering code	$D_1$	$b_{21}$	$h$	$l_c$	$l_{1z}$
40	C4	C4-R/LC2045-00075M	67	48	37	81	75
50	C5	C5-R/LC2055-00085M	82	64	47	100	85
60	C6	C6-R/LC2065-00095	105	84	57	120	95

### Inch version

Turret type			Dimensions, inch				
$dm_m$ , size, inch	Coupling size	Ordering code	$D_1$	$b_{21}$	$h$	$l_c$	$l_{1z}$
2.500	C6	C6-LC2065-00095-40	4.130	3.310	2.360	4.720	3.740

### Coromant Capto® tightening torque:

Manual clamping units and driven tool holders with camshaft mechanism

Coupling size	Torque (Nm)	ft-lbs
C3	35	25.8
C4	50	36.9
C5	70	51.2
C6	90	66.4
C8	130	95.9
C10	285	210

For torque wrenches, see page G39

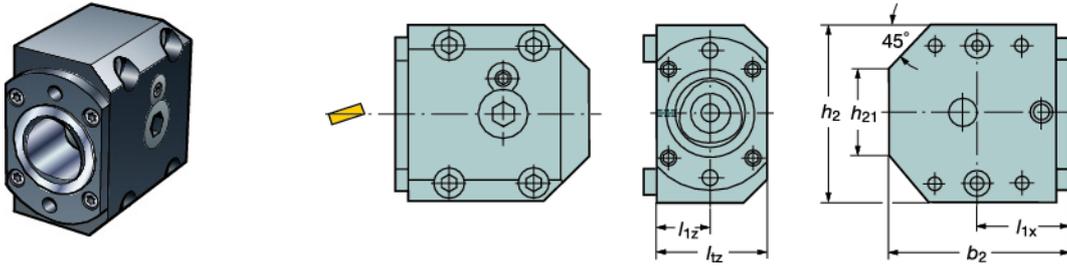


A  
General Turning  
B  
Parting and Grooving  
C  
Threading  
G  
Tooling systems  
H  
Multi-task machining  
I  
CoroTurn® SL  
J  
General information

# Manually operated clamping units

For special applications  
Camshaft activated

Type 2090



Note: Maximum coolant pressure is 80 bar (PSI 1160)

Right hand style shown.

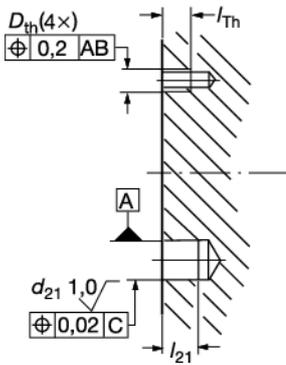
## Metric version

Coupling size	Ordering code	Dimensions, mm					
		$b_2$	$h_2$	$h_{21}$	$l_{1x}$	$l_z$	$l_{1z}$
C3	C3-R/LC2090-19039M	73	54	30	39	38	19
C4	C4-R/LC2090-24043A	86	77	38	43	48	24
C5	C5-R/LC2090-32048A	100	92	44	48	64	32
C6	C6-R/LC2090-42060	122	105	37	60	84	42
C8	C8-R/LC2090-50088	146	133	133	88	100	50

**Note!** Tighten the screw with a torque wrench. Information on page G39.

## Design instructions for application of clamping unit RC/LC 2090

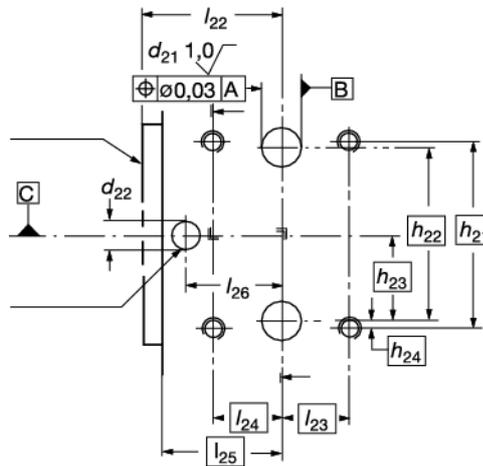
Material hardness min.  
270 HB



Front of clamping unit

Cutting height

Coolant outlet



Right hand style shown

Clamping unit	Dimensions, mm													
	$d_{21}$ H7	$d_{22}$	$h_{21}$	$h_{22}$	$h_{23}$	$h_{24}$	$l_{21}$ min	$l_{22}$	$l_{23}$	$l_{24}$	$l_{25}$	$l_{26}$	$l_{Th}$ min	$D_{Th}$
C3-R/LC2090-19039M	12	5	42	39	19.5	1.5	8.5	39	19	19	33.5	28	7.5	M6
C4-R/LC2090-24043A	16	7	60	55	27.5	2.5	11	43	19	19	36.5	30	11	M8
C5-R/LC2090-32048A	20	7	70	62	31	4	12	48	21	21	39.5	33	13	M10
C6-R/LC2090-42060	25	10	82	71	35.5	5.5	20	60	24.5	24.5	50.5	41	12	M10
C8-R/LC2090-50088	32	11	110	92	46	9	20	88	43	43	76	63	14.5	M12



## How to choose VDI clamping units

### External machining

**Clockwise spindle direction**

**Anti-clockwise spindle direction**

Note: Polygon sleeve must be turned 180°. See Metal cutting technical guide.

Note: Polygon sleeve must be turned 180°. See Metal cutting technical guide.

The diagrams illustrate the selection of VDI clamping units for external machining. For clockwise spindle rotation, the units are labeled -LC and -L. For anti-clockwise rotation, the units are labeled -LC and -R. The diagrams show the tool holder and tool bit in various orientations, with a 180-degree rotation of the polygon sleeve indicated for the anti-clockwise cases.

### Internal machining

**Clockwise spindle direction**

**Anti-clockwise spindle direction**

Note: Polygon sleeve must be turned 180°. See Metal cutting technical guide.

The diagrams illustrate the selection of VDI clamping units for internal machining. For clockwise spindle rotation, the units are labeled -L and -RC. For anti-clockwise rotation, the units are labeled -R and -RC. The diagrams show the tool holder and tool bit in various orientations, with a 180-degree rotation of the polygon sleeve indicated for the anti-clockwise cases.

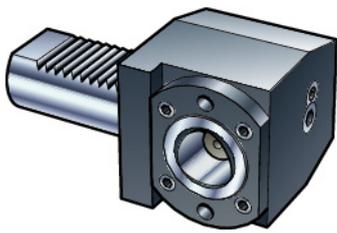
A  
General Turning  
B  
Parting and Grooving  
C  
Threading  
G  
Tooling systems  
H  
Multi-task machining  
I  
CoroTurn® SL  
J  
General information

## Manually operated clamping units

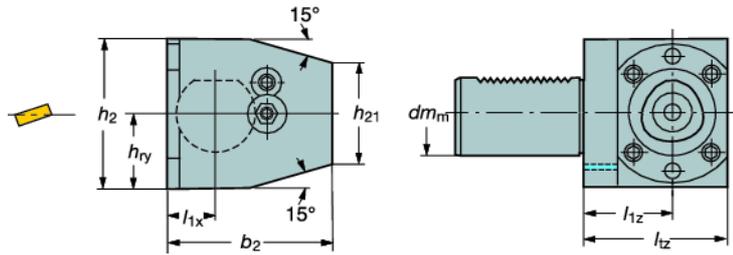
VDI angled

Camshaft activated

DIN 69880



Turret type



Right hand style shown.  
Left hand style reflected.

Note: Maximum coolant pressure is 80 bar (PSI 1160)

### Metric version

Turret type <i>dm<sub>m</sub></i> size, mm	Coupling size	Ordering code	Dimensions, mm						
			<i>b<sub>2</sub></i>	<i>h<sub>ry</sub></i>	<i>h<sub>2</sub></i>	<i>h<sub>21</sub></i>	<i>l<sub>1x</sub></i>	<i>l<sub>z</sub></i>	<i>l<sub>z</sub></i>
30	C3	C3-R/LC2030-41020M	74	30	57	38	20	60	41
	C3	C3-R/LC2030-41030M	73	30	57	41	30	60	41
40	C4	C4-R/LC2040-51030M	86	38	75	54	30	75	51
	C4	C4-R/LC2040-51040M	86	38	75	60	40	75	51
	C5	C5-R/LC2040-53030M	99	41	82	47	30	85	53
50	C5	C5-R/LC2040-53040M	99	41	82	53	40	85	53
	C5	C5-R/LC2050-53030M	99	43	86	59	30	85	53
60	C5	C5-R/LC2050-53040M	99	43	86	65	40	85	53
	C6	C6-R/LC2060-43040M	99	53	94	76	40	75	43
60	C6	C6-R/LC2060-53040	122	53	105	70	40	95	53

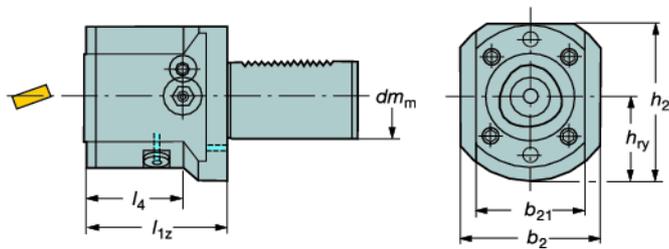
### VDI straight

Camshaft activated

DIN 69880



Turret type



Right hand style shown.  
Left hand: hexagon clamping socket on opposite side of the tool.

Note: Maximum coolant pressure is 80 bar (PSI 1160)

### Metric version

Turret type <i>dm<sub>m</sub></i> size, mm	Coupling size	Ordering code	Dimensions, mm					
			<i>b<sub>2</sub></i>	<i>b<sub>21</sub></i>	<i>h<sub>ry</sub></i>	<i>h<sub>2</sub></i>	<i>l<sub>z</sub></i>	<i>l<sub>4</sub></i>
30	C3	C3-R/LC2030-00060M	50	38	34	61	60	44
40	C4	C4-R/LC2040-00075M	75	48	41	75	75	53
	C5	C5-R/LC2040-00085M	75	64	41	82	85	72
50	C4	C4-LC2050-00065M	70	48	49	83	65	39
	C4	C4-RC2050-00065M	70	48	49	83	65	39
	C5	C5-LC2050-00085M	83	64	49	91	85	62
60	C5	C5-R/LC2060-00075M	80	64	58	100	75	16
	C6	C6-R/LC2060-00095	84	84	58	111	95	50

**Note!** Tighten the screw with a torque wrench. Information on page G39.



## Coromant Capto® Disc Interface

### High performance now as standard

The Coromant Capto disk interface (CDI) offers full quick-change tooling capabilities for turning centres. As a dedicated interface for driven and static turning tool holders, it enables many benefits over similar turret systems as an optimized method of fixing holders to the turret disk.

Quick-change tooling is more effective with CDI. It offers higher rigidity, faster set-ups and reduced machine downtime from secure clamping and Coromant Capto - the market-leading quick-change tooling solution.

### Machining benefits

#### Better cutting performance

The CDI carries larger loads (compared to VDI turrets) thanks to larger Coromant Capto sizes and shorter swing diameter.

#### Workpiece surface improved

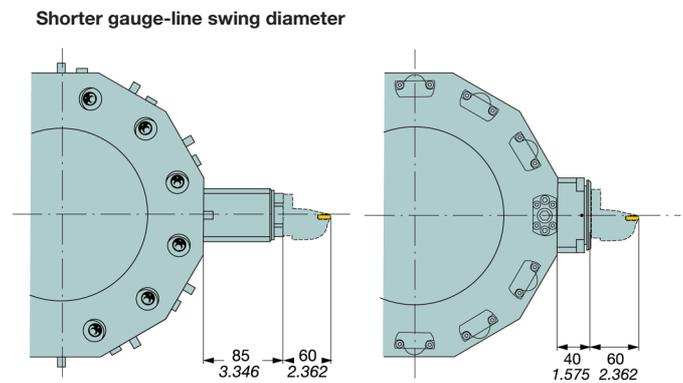
Increased stability reduces vibration and tool chatter to give higher component quality.

#### Longer tool life

Stable tooling increases tool life.

#### More cutting tool length

The clamping mechanism is built in to the turret, to provide more space for cutting tool length.



CDI is compatible mainly with European machine tools and follows the standard turret configuration of many lathe producers. CDI also fits multi-task machines having a lower turret with static and/or driven tools.

Note: For CDI version TN340 0001

#### Quicker tool changes

The CDI turret system is designed for Coromant Capto® quick change tooling systems.

#### Short tool holder projection

The design of CDI with short swing diameter provides added space for tool changing, longer tools, or bigger components.

#### Stable and rigid tooling

The CDI is securely bolt-on mounted to the turret to give secure positioning.

#### Flexible symmetric interface

Achieve more with fewer tools, as interchangeable tool holders can be mounted to face the main- or sub-spindle.

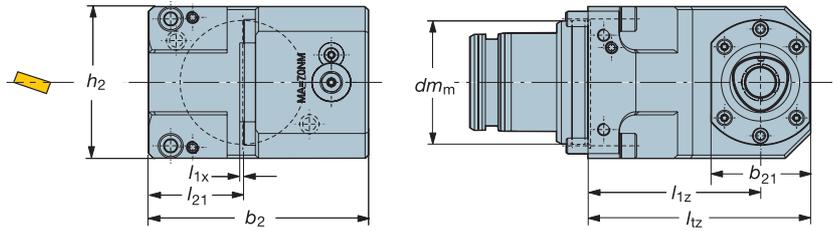
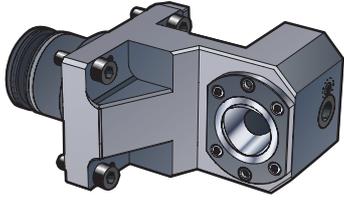
#### Fine adjustment possibility

All CDI tools can be fine-adjusted

## Manually operated clamping units

CDI angled

Camshaft activated



Note: Maximum coolant pressure is 80 bar (PSI 1160)

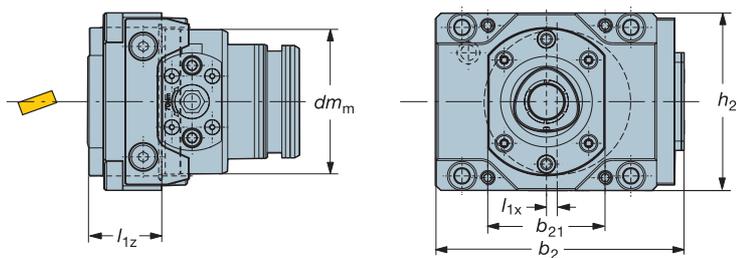
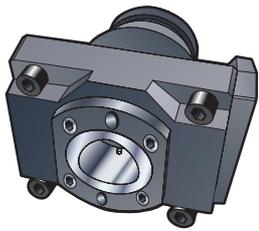
Right hand style shown.  
Left hand style reflected.

Metric version

$dm_m$ , size, mm	Coupling size	Ordering code	Dimensions, mm, inch						
			$b_2$	$b_{21}$	$h_2$	$l_{1z}$	$b_{21}$	$l_{2z}$	$l_{1x}$
80	C5	C5-R/LCI80-000110	140	64	98	110	60	142	0
			5.512	2.520	3.858	4.331	2.362	5.591	0

CDI straight

Camshaft activated



Note: Maximum coolant pressure is 80 bar (PSI 1160)

Right hand style shown.  
Left hand style reflected.

Metric version

$dm_m$ , size, mm	Coupling size	Ordering code	Dimensions, mm, inch				
			$b_2$	$b_{21}$	$h_2$	$l_{1x}$	$l_{1z}$
80	C5	C5-R/LCE80-040000	135	64	98	0	40
			5.315	2.520	3.858	.000	1.575

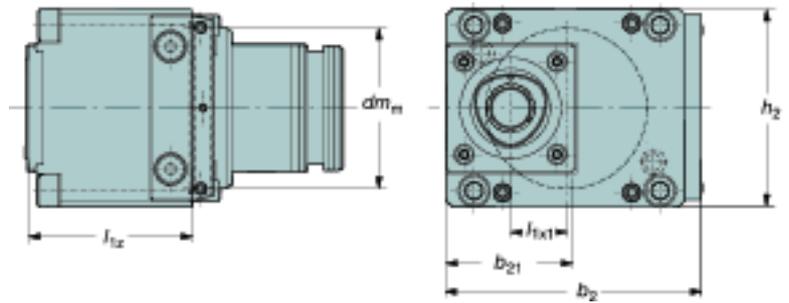
**Note!** Tighten the screw with a torque wrench. Information on page G39.



## Manually operated clamping units

CDI straight

Camshaft activated



Right hand style shown.  
Left hand style reflected.

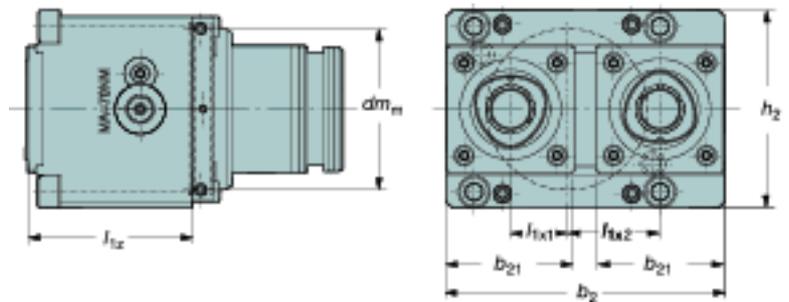
Note: Maximum coolant pressure is 80 bar (PSI 1160)

Metric version

$dm_m$ , size, mm	Coupling size	Ordering code	Dimensions, mm, inch				
			$b_2$	$b_{21}$	$h_2$	$h_x$	$h_z$
80	C5	C5-R/LCE80-028082	130	64	98	28	82
			5.118	2.520	3.858	1.102	3.228

CDI straight double

Camshaft activated



Right hand style shown.  
Left hand style reflected.

Note: Maximum coolant pressure is 80 bar (PSI 1160)

Metric version

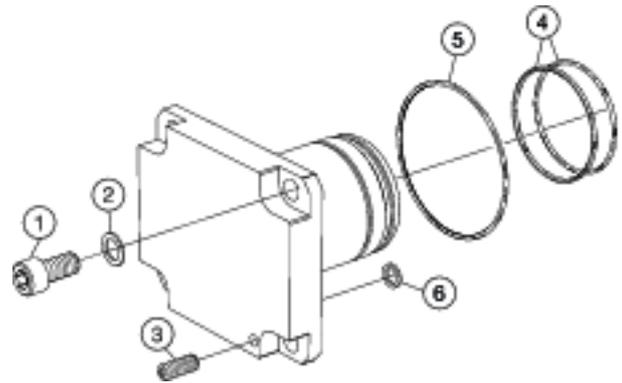
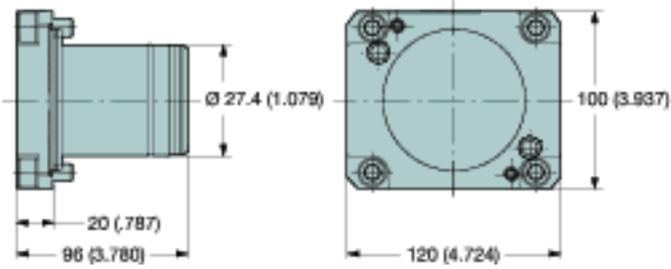
$dm_m$ , size, mm	Coupling size	Ordering code	Dimensions, mm, inch					
			$b_2$	$b_{21}$	$h_2$	$h_{x1}$	$h_{x2}$	$h_z$
80	C5	C5-R/LCE80-028082-2	138	64	98	28	46	82
			5.433	2.520	3.858	1.102	1.811	3.228

**Note!** Tighten the screw with a torque wrench. Information on page G39.



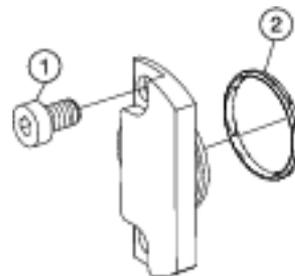
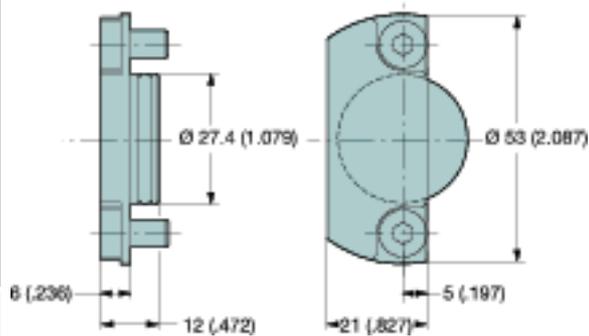
## Accessories

### Cover plug for clamping unit



	1.	2.	3.	4.	5.	6.
<b>Ordering code</b>	Screw (4x)	Locking washer (4x)	Set screw (2x)	O-ring	O-ring	Kantseal (2x)
CDI80-CP-01	3212 010-460	5541 041-02	3214 010-410	5641 005-104	5641 001-79	5641 070-04

### Cover plug for adaptor



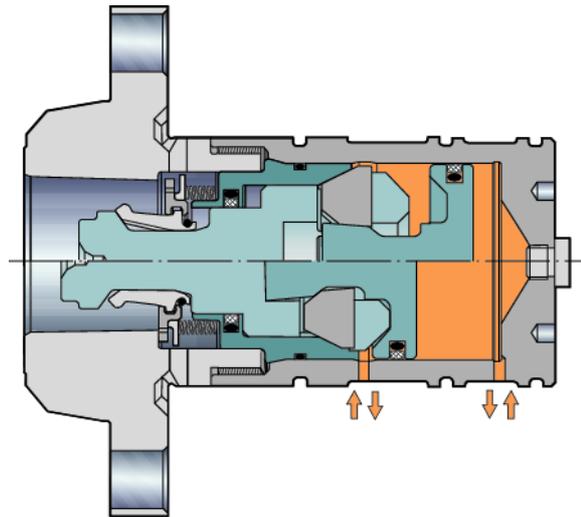
	1.	2.
<b>Ordering code</b>	Screw (2x)	O-ring
CDI80-CP-02	5512 060-23	5641 005-103

## Automatic clamping units

On automatic clamping units, hydraulic pressure is used to activate the forward and backwards movement of the drawbar. It also gives the cutting unit a “kick” to free it from the clamping unit when it is to be changed. The clamping mechanism is mechanically self-locking i.e., the oil pressure is not applied during the cutting process. The units operate with a hydraulic pressure of 100 bar for size C4, 80 bar for sizes C5, C6, C8 and C10.

All NC 5000 clamping units use segment clamping.

The 5000 type clamping unit is designed for special adaptation to the machine. It is used in connection with manual push-button tool changing and in fully automatic installations with magazines and tool changers.

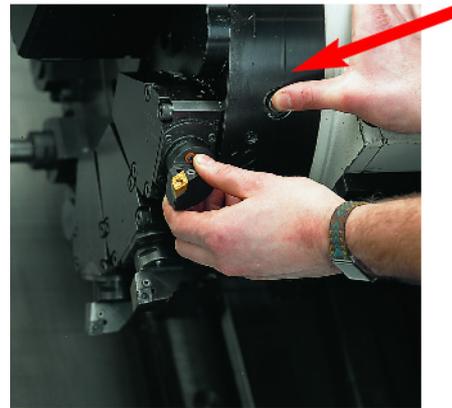


## Push button valve

The push button operated valve is delivered ready to be installed in pockets on turret discs or tool blocks designed for hydraulically operated clamping units.

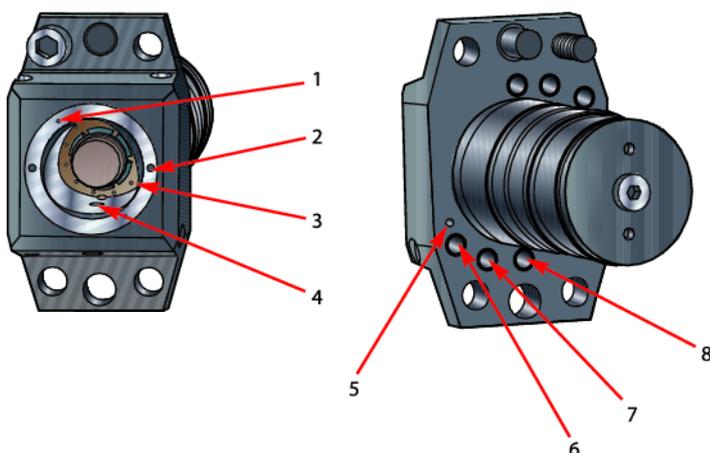
As the valve is produced as a cartridge in one size, it is possible to machine the pocket and simply assemble the valve and lock it with a screw.

For ordering, see spare parts and accessories.



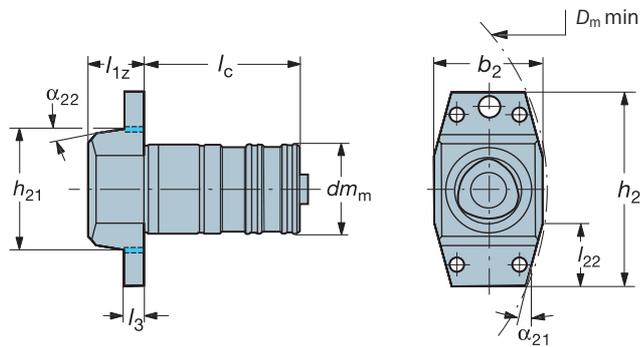
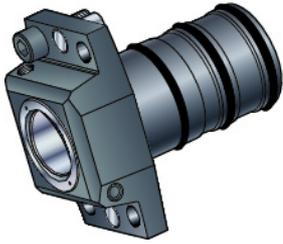
## Build-in instructions

Regarding detailed build-in instructions see the Metal cutting Technical guide, and/or contact your local Sandvik office.



1. Tool presence air
2. Probe contact
3. Air blast
4. Coolant
5. Probe contact
6. Coolant inlet
7. Air inlet tool presence system
8. Air blast inlet

## Hydraulically operated clamping units



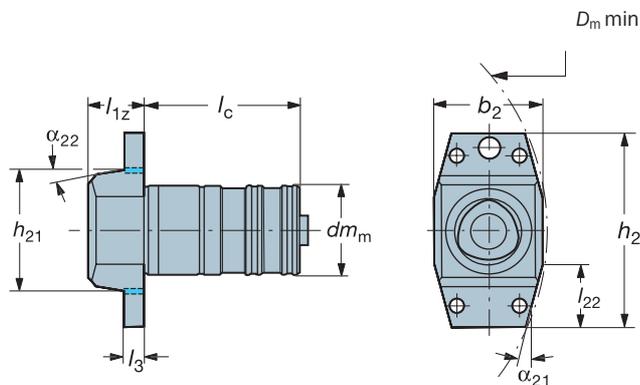
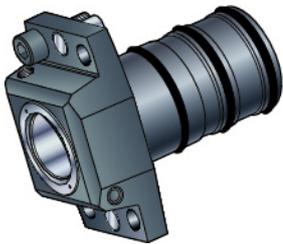
Neutral style shown.

Type NC5010 for coolant pressure up to 80 bar (1160 PSI).

### Metric version

Coupling size	Ordering code	Dimensions, mm											
		$b_2$	$dm_m$	$D_m \text{ min}$	$h_2$	$h_{21}$	$l_c$	$h_z$	$l_3$	$l_{22}$	$\alpha_{21}$	$\alpha_{22}$	
C4	C4-NC5010-00025	48	42	260	92	56	74	25	10	22	15°	11°	1.4
C5	C5-NC5010-00035	64	55	300	112	70	88	35	12	30	16°	10°	2.7
C6	C6-NC5010-00040	84	70	400	143	90	105	40	16	45	15°	10°	5.4
C8	C8-NC5010-00050	100	90	500	180	110	120	50	18	59	15°	10°	9.4
C10	C10-NC5010-00050	126	105	530	220	130	160	50	24	65	15°	15°	15.5

## Hydraulically operated clamping units with probe contact



Neutral style shown.

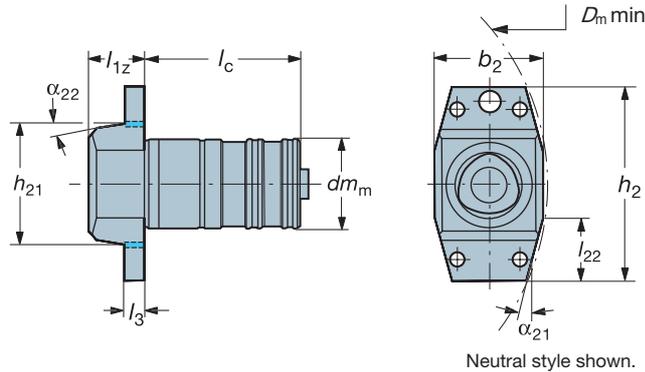
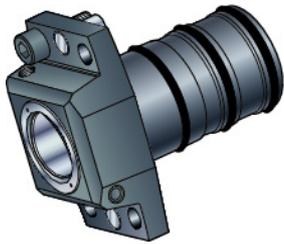
Type NC5110 for coolant pressure up to 80 bar (1160 PSI), and equipped with probe contacts

### Metric version

Coupling size	Ordering code	Dimensions, mm										
		$b_2$	$dm_m$	$D_m \text{ min}$	$h_2$	$h_{21}$	$l_c$	$h_z$	$l_3$	$l_{22}$	$\alpha_{21}$	$\alpha_{22}$
C4	C4-NC5110-00025	48	42	260	92	56	74	25	10	22	15°	11°
C5	C5-NC5110-00035	64	55	300	112	70	88	35	12	30	16°	10°
C6	C6-NC5110-00040	84	70	400	143	90	105	39.5	16	45	15°	10°
C8	C8-NC5110-00050	100	90	500	180	110	120	50	18	59	15°	10°



## Hydraulically operated clamping units with Jetbreak™



Type NC5210 for coolant pressure over 100 bar (1450 PSI).

### Metric version

Coupling size	Ordering code	Dimensions, mm										
		$b_2$	$dm_m$	$D_m \text{ min}$	$h_2$	$h_{21}$	$l_c$	$l_{1z}$	$b$	$l_{22}$	$\alpha_{21}$	$\alpha_{22}$
C6	C6-NC5210-00040	84	70	400	143	90	105	40	16	45	15°	10°
C8	C8-NC5210-00050	100	90	500	180	110	120	50	18	59	15°	10°

Coromant Capto® required pressure:

### Hydro-mechanical clamping units type 5000

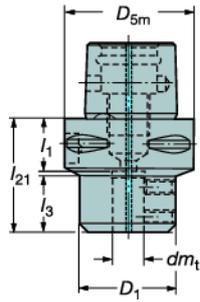
Coupling size	Clamping pressure	
	Bar	PSI
C4	100	1450
C5	80	1160
C6	80	1160
C8	80	1160
C10	80	1160

Required oil flow in all cases: 6 l/min (1.6 gal/min)



# Adaptors for solid boring bars

131



$l_1$  = programming length

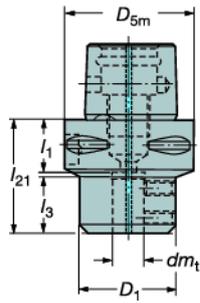
## Metric pilot

Coupling size	Ordering code	Coolant <sup>1)</sup>	Dimensions, mm					
			$dm_1$	$D_{5m}$	$D_1$	$l_1$	$l_3$	$l_{21}$
C3	C3-131-00035-10	1	10	32	36	15	20	35
	C3-131-00040-12	1	12	32	36	16	24	40
C4	C4-131-00040-10	1	10	40	36	20	19	40
	C4-131-00045-12	1	12	40	36	21	24	45
	C4-131-00050-16	1	16	40	36	18	29	50
C5	C5-131-00045-10	1	10	50	36	25	21	45
	C5-131-00045-12	1	12	50	36	25	22.5	45
	C5-131-00055-16	1	16	50	36	23	31	55

1) 1 = coolant through centre

2) Tolerance = H8

131



$l_1$  = programming length

## Inch pilot

Coupling size	Ordering code	Coolant <sup>1)</sup>	Dimensions, inch					
			$dm_1$	$D_{5m}$	$D_1$	$l_1$	$l_3$	$l_{21}$
C3	C3-131-00050-250	1	.250	1.260	1.180	.901	.790	1.970
	C3-131-00050-500	1	.500	1.260	1.420	.591	1.020	1.970
	C3-131-00050-625	1	.625	1.260	1.420	.591	1.260	1.970
C4	C4-131-00050-250	1	.250	1.575	1.420	1.181	1.070	1.970
	C4-131-00050-375	1	.375	1.575	1.420	1.181	1.130	1.970
	C4-131-00050-500	1	.500	1.575	1.420	95.000	1.130	1.970
	C4-131-00050-625	1	.625	1.575	1.420	.709	1.130	1.970
	C4-131-00060-750	1	.750	1.575	1.420	.830	1.420	2.360
C5	C4-131-00091-1000	1	1.000	1.575	2.284	.772	2.811	3.583
	C5-131-00060-375	1	.375	1.968	1.420	1.575	1.575	2.360
	C5-131-00060-500	1	.500	1.968	1.420	1.340	1.575	2.360
	C5-131-00060-625	1	.625	1.968	1.420	1.100	1.575	2.360
	C5-131-00060-750	1	.750	1.968	1.420	.830	1.575	2.360
	C5-131-00070-1000	1	1.000	1.968	2.130	.790	1.970	2.760
C6	C5-131-00115-1500	1	1.500	1.968	2.870	1.090	3.440	4.528
	C6-131-00065-375	1	.375	2.480	1.420	1.170	.790	2.560
	C6-131-00065-500	1	.500	2.480	1.420	1.170	1.020	2.560
	C6-131-00065-625	1	.625	2.480	1.420	1.170	1.260	2.560
	C6-131-00065-750	1	.750	2.480	1.420	1.270	1.540	2.660
	C6-131-00075-1000	1	1.000	2.480	2.130	.950	2.040	2.950
	C6-131-00105-1500	1	1.500	2.480	2.870	.690	3.440	4.130

1) 1 = coolant through centre

2) Tolerance = H8



A General Turning  
B Parting and Grooving  
C Threading  
G Tooling systems  
H Multi-task machining  
I CoroTurn® SL  
J General information

## Adaptors for solid boring bars

131

## Blanks for production of cutting units



Coromant Capto blanks have a "soft" front, which allows machining of special shapes.

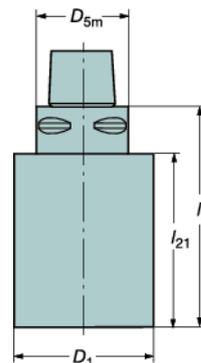
The material is 25 CR MoS 4, low alloy steel.

Equilibrium temperature: 840–870°C

Cooling medium: Polymer

Tempering: 1 hour 200°C

Note: If localized hardening is required, induction type hardening is to be used. Max. hardness which can be attained with this material  $\approx$  50 HRC.



Coupling size	Ordering code	Dimensions, millimeter, inch (mm, in.)							
		$D_{5m}$ mm	$D_{5m}$ in.	$D_1$ mm	$D_1$ in.	$h$ mm	$h$ in.	$l_{21}$ mm	$l_{21}$ in.
C3	C3-NR-040110-B	32	1.260	40	1.575	110	4.331	95	3.740
	C3-NR-050125-B	32	1.260	50	1.968	125	4.921	110	4.331
	C3-NR-070060-B	32	1.260	70	2.756	60	2.362	45	1.772
	C3-NR-090070-B	32	1.260	90	3.543	70	2.756	55	2.165
C4	C4-NR-040095-B	40	1.575	41	1.614	95	3.740	75	2.953
	C4-NR-060165-B	40	1.575	60	2.362	165	6.496	145	5.709
	C4-NR-080075-B	40	1.575	80	3.150	75	2.953	55	2.165
	C4-NR-100085-B	40	1.575	100	3.937	85	3.346	65	2.559
C5	C5-NR-050125-B	50	1.968	50	1.968	125	4.921	105	4.134
	C5-NR-075175-B	50	1.968	75	2.953	175	6.890	155	6.102
	C5-NR-090080-B	50	1.968	90	3.543	80	3.150	60	2.362
	C5-NR-110090-B	50	1.968	110	4.331	90	3.543	70	2.756
C6	C6-NR-075195-B	63	2.480	75	2.953	195	7.677	173	6.811
	C6-NR-110085-B	63	2.480	110	4.331	85	3.346	63	2.480
C8	C8-NR-080200-B	80	3.150	80	3.150	200	7.874	170	6.693
	C8-NR-120160-B	80	3.150	120	4.724	160	6.299	130	5.118
	C8-NR-130090-B	80	3.150	130	5.118	90	3.543	60	2.362
C10	C10-NR-100200-B	100	3.937	100	3.937	200	7.874	64	2.520
	C10-NR-160120-B	100	3.937	160	6.299	120	4.724	84	3.307



G6



G2

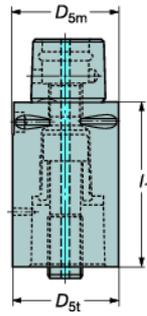


J2

A  
General Turning  
B  
Parting and Grooving  
C  
Threading  
G  
Tooling systems  
H  
Multi-task machining  
I  
CoroTurn® SL  
J  
General information

## Extension adaptor

391.01



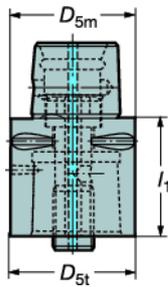
$l_1$  = programming length

Coupling size		Ordering code	Coolant <sup>1)</sup>	Dimensions, millimeter, inch (mm, in.)						
Machine side	Tool side			$D_{sm}$ mm	$D_{sm}$ in.	$D_{st}$ mm	$D_{st}$ in.	$l_1$ mm	$l_1$ in.	
C3	C3	C3-391.01-32 060A	1	32	1.260	32	1.260	60	2.362	0.4
		C3-391.01-32 080A	1	32	1.260	32	1.260	80	3.150	0.5
C4	C4	C4-391.01-40 060A	1	40	1.575	40	1.575	60	2.362	0.5
		C4-391.01-40 080A	1	40	1.575	40	1.575	80	3.150	0.7
C5	C5	C5-391.01-50 080A	1	50	1.968	50	1.968	80	3.150	1.1
		C5-391.01-50 100A	1	50	1.968	50	1.968	100	3.937	1.4
C6	C6	C6-391.01-63 100A	1	63	2.480	63	2.480	100	3.937	2.2
		C6-391.01-63 140A	1	63	2.480	63	2.480	140	5.512	3.1
C8	C8	C8-391.01-80 100A	1	80	3.150	80	3.150	100	3.937	3.6
		C8-391.01-80 125A	1	80	3.150	80	3.150	125	4.921	4.6
C10	C10	C10-391.01-100 140	1	100	3.937	100	3.937	140	5.512	8.5

<sup>1)</sup> 1 = coolant through centre

## Short version, for segment clamping only

391.01



**Note!**

Not possible to use together with basic holders using centre bolt clamping.

$l_1$  = programming length

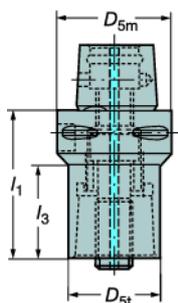
Coupling size		Ordering code	Coolant <sup>1)</sup>	Dimensions, millimeter, inch (mm, in.)						
Machine side	Tool side			$D_{sm}$ mm	$D_{sm}$ in.	$D_{st}$ mm	$D_{st}$ in.	$l_1$ mm	$l_1$ in.	
C3	C3	C3-391.01-32 035	1	32	1.260	32	1.260	35	1.378	0.2
C4	C4	C4-391.01-40 040	1	40	1.575	40	1.575	40	1.575	0.4
C5	C5	C5-391.01-50 050	1	50	1.968	50	1.968	50	1.968	0.9
C6	C6	C6-391.01-63 060	1	63	2.480	63	2.480	60	2.262	1.3
C8	C8	C8-391.01-80 065	1	80	3.150	80	3.150	65	2.559	2.3

<sup>1)</sup> 1 = coolant through centre

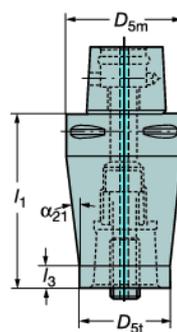


# Reduction adaptor

391.02



Design 1



Design 2

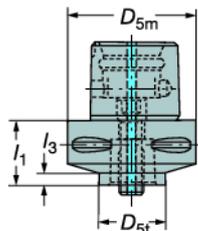
l<sub>1</sub> = programming length

Coupling size				Dimensions, millimeter, inch (mm, in.)										
Design	Machine side	Tool side	Ordering code	Coolant <sup>1)</sup>	D <sub>5m</sub> mm	D <sub>5m</sub> in.	D <sub>5t</sub> mm	D <sub>5t</sub> in.	l <sub>1</sub> mm	l <sub>1</sub> in.	l <sub>3</sub> mm	l <sub>3</sub> in.	α <sub>21</sub>	⊕ kg
1	C4	C3	C4-391.02-32 055A	1	40	1.575	32	1.260	55	2.165	31	1.220		0.5
2			C4-391.02-32 070A	1	40	1.575	32	1.260	70	2.756	12	.472	6.0°	0.6
1	C5	C3	C5-391.02-32 060A	1	50	1.968	32	1.260	60	2.362	34.8	1.370		0.6
1		C4	C5-391.02-40 065A	1	50	1.968	40	1.575	65	2.559	40	1.575		0.8
2			C5-391.02-40 085A	1	50	1.968	40	1.575	85	3.346	12	.472	5.4°	1.1
1	C6	C3	C6-391.02-32 070A	1	63	2.480	32	1.260	70	2.756	39	1.535		1.1
1		C4	C6-391.02-40 080A	1	63	2.480	40	1.575	80	3.150	51.4	2.024		1.2
1		C5	C6-391.02-50 080A	1	63	2.480	50	1.968	80	3.150	51.5	2.028		1.5
2			C6-391.02-50 110A	1	63	2.480	50	1.968	110	4.331	12	.472	4.9°	2.2
1	C8	C3	C8-391.02-32 060A	1	80	3.150	32	1.260	60	2.362	29.3	1.154		1.7
1		C4	C8-391.02-40 070A	1	80	3.150	40	1.575	70	2.756	36.5	1.437		1.9
1		C5	C8-391.02-50 080A	1	80	3.150	50	1.968	80	3.150	49.3	1.941		2.2
1		C6	C8-391.02-63 080A	1	80	3.150	63	2.480	80	3.150	53.1	2.091		2.5
1			C8-391.02-63 120A	1	80	3.150	63	2.480	120	4.724	12	.472		4.0
1	C10	C6	C10-391.02-63 095	1	100	3.937	63	2.480	95	3.740	48.3	1.902		4.5
1		C8	C10-391.02-80 100	1	100	3.937	80	3.150	100	3.937	58.2	2.291		5.1

1) 1 = coolant through centre

## Short version, for segment clamping only

391.02



**Note!** Not possible to use together with basic holders using centre bolt clamping.

l<sub>1</sub> = programming length

Coupling size				Dimensions, millimeter, inch (mm, in.)										
Machine side	Tool side	Ordering code	Coolant <sup>1)</sup>	D <sub>5m</sub> mm	D <sub>5m</sub> in.	D <sub>5t</sub> mm	D <sub>5t</sub> in.	l <sub>1</sub> mm	l <sub>1</sub> in.	l <sub>3</sub> mm	l <sub>3</sub> in.	⊕ kg		
C5	C3	C5-391.02-32 033	1	50	1.968	32	1.260	33	1.299	10	.394	0.5		
	C4	C5-391.02-40 040	1	50	1.968	40	1.575	40	1.575	18	.709	0.6		
C6	C3	C6-391.02-32 032	1	63	2.480	32	1.260	32	1.260	6	.236	0.8		
	C4	C6-391.02-40 040	1	63	2.480	40	1.575	40	1.575	11	.433	0.9		
	C5	C6-391.02-50 050	1	63	2.480	50	1.968	50	1.968	26.5	1.043	1.0		
C8	C5	C8-391.02-50 045	1	80	3.150	50	1.968	45	1.772	10	.394	1.8		
	C6	C8-391.02-63 055	1	80	3.150	63	2.480	55	2.165	20	.787	2.0		
C10	C6	C10-391.02-63 055	1	100	3.937	63	2.480	55	2.165	14	.551	3.2		
	C8	C10-391.02-80 065	1	100	3.937	80	3.150	65	2.559	25.4	1.000	3.5		

1) 1 = coolant through centre

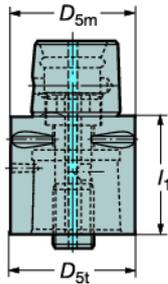


## Reduction adaptor

180° rotated polygon

Short version, for segment clamping only

391.01R



### Note!

Not possible to use together with basic holders using centre bolt clamping.

$l_1$  = programming length

Coupling size		Ordering code	Coolant <sup>1)</sup>	Dimensions, mm, inch			
Machine side	Tool side			$D_{5m}$	$D_{5t}$	$l_1$	
C5	C5	C5-391.01R-50 050	1	50 <i>1.968</i>	50 <i>1.968</i>	50 <i>1.968</i>	0.9
C6	C6	C6-391.01R-63 060	1	63 <i>2.480</i>	63 <i>2.480</i>	60 <i>2.362</i>	1.3
C8	C8	C8-391.01R-80 065	1	80 <i>3.150</i>	80 <i>3.150</i>	65 <i>2.559</i>	2.3

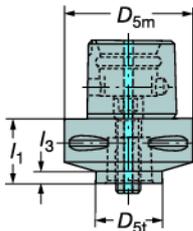
1) 1 = coolant through centre

## Reduction adaptor

180° rotated polygon

Short version, for segment clamping only

391.02R



### Note!

Not possible to use together with basic holders using centre bolt clamping.

$l_1$  = programming length

Coupling size		Ordering code	Coolant <sup>1)</sup>	Dimensions, mm, inch				
Machine side	Tool side			$D_{5m}$	$D_{5t}$	$l_1$	$l_3$	
C8	C6	C8-391.02R-63 055	1	80 <i>3.150</i>	63 <i>2.480</i>	55 <i>2.165</i>	20 <i>.787</i>	2.0

1) 1 = coolant through centre

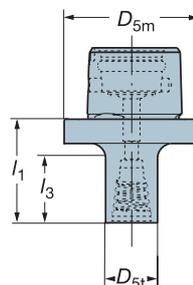


G 30

## Coromant Capto® short adaptor for exchangeable head

Without gripper grooves for manual tool change in turning centres

Cx-391.EH  
Cx-A391.EH



$l_1$  = programming length

### Metric version

Coromant Capto size	Coupling size	Ordering code	Coolant <sup>1)</sup>	Dimensions, mm				
				$D_{5m}$	$D_{5t}$	$l_1$	$l_3$	$\frac{kg}{lb}$
C3	E10	C3-391.EH-10 026	1	32	9.6	26	13	0.1
	E12	C3-391.EH-12 029	1	32	11.6	29	16	0.1
C4	E10	C4-391.EH-10 026	1	40	9.6	26	13	0.2
	E12	C4-391.EH-12 029	1	40	11.6	29	16	0.2
	E16	C4-391.EH-16 035	1	40	15.4	35	22	0.2
C5	E10	C5-391.EH-10 026	1	50	9.6	26	13	0.3
	E12	C5-391.EH-12 029	1	50	11.6	29	16	0.3
	E16	C5-391.EH-16 035	1	50	15.4	35	22	0.3

### Inch version

Coromant Capto size	Coupling size	Ordering code	Coolant <sup>1)</sup>	Dimensions, inch				
				$D_{5m}$	$D_{5t}$	$l_1$	$l_3$	$\frac{kg}{lb}$
C3	E10	C3-A391.EH-10 025	1	1.260	.360	.984	.472	0.2
	E12	C3-A391.EH-12 031	1	1.260	.480	1.220	.709	0.2
C4	E10	C4-A391.EH-10 025	1	1.575	.360	.984	.472	0.4
	E12	C4-A391.EH-12 031	1	1.575	.480	1.220	.709	0.4
	E16	C4-A391.EH-16 034	1	1.575	.606	1.339	.827	0.4
C5	E10	C5-A391.EH-10 025	1	1.968	.360	.984	.472	0.6
	E12	C5-A391.EH-12 031	1	1.968	.480	1.220	.709	0.6

<sup>1)</sup> 1 = coolant through centre

For complete assortment of adaptors and cutting heads for CoroMill® 316, see chapter D and G in Main catalogue for milling, drilling and boring tools.

### Main spare parts

Coupling size	Key	Torque wrench head <sup>1)</sup>	Torque value		Torque wrench <sup>1)</sup>	Torque range	
			Nm	In-lbs		Nm	In-lbs
E10	5680 093-01	5680 089-01	12	106	5680 088-01	10-20	88-177
E12	5680 093-02	5680 089-02	15	132	5680 088-01	10-20	88-177
E16	5680 093-03	5680 089-03	30	265	5680 088-02	25-65	221-575
E20	5680 093-04	5680 089-04	50	442	5680 088-02	25-65	221-575
E25	5680 093-05	5680 089-05	65	575	5680 088-02	25-65	221-575

<sup>1)</sup> Accessories, must be ordered separately



G6



G2



J2

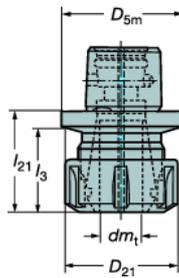
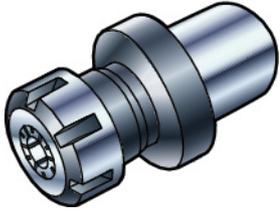
## ER-collet chuck adaptor, short

For driven tool holders

No gripper grooves

DIN 6499/ 391.14

⊙ Balanced by design



Short design

Accessories

393.14

Not delivered with the tool, must be ordered separately.



See Main catalogue for milling, drilling and boring tools.

Note: For segment clamping only. Can't be used in basic holders and extensions/reductions.

Not for automatic tool change as have no gripper grooves

Coromant Capto® short (for manual tool change in turning centres)

Coupling size	Ordering code	Coolant <sup>1)</sup>	Dimensions, millimeter, inch (mm, in.)														Collet size	Balanced by design
			$D_{5m}$ mm	$D_{5m}$ in.	$dm_1$ min mm	$dm_1$ min in.	$dm_1$ max mm	$dm_1$ max in.	$D_{21}$ mm	$D_{21}$ in.	$l_3$ mm	$l_3$ in.	$l_{21}$ mm	$l_{21}$ in.	$\frac{\phi}{H9/g8}$			
C3	C3-391.14-20 036	1	32	1.260	1	.039	13	.512	35	1.378			36	1.417	0.3	ER 20	⊙	
C4	C4-391.14-20 035	1	40	1.575	1	.039	13	.512	35	1.378	27	1.063	35	1.378	0.2	ER 20	⊙	
	C4-391.14-25 038	1	40	1.575	1	.039	16	.630	42	1.654			38	1.496	0.3	ER 25	⊙	
C5	C5-391.14-32 045	1	50	1.968	2	.079	20	.787	50	1.968			45	1.772	0.5	ER 32	⊙	

1) 1 = coolant through centre



G61



G6



G2



J2

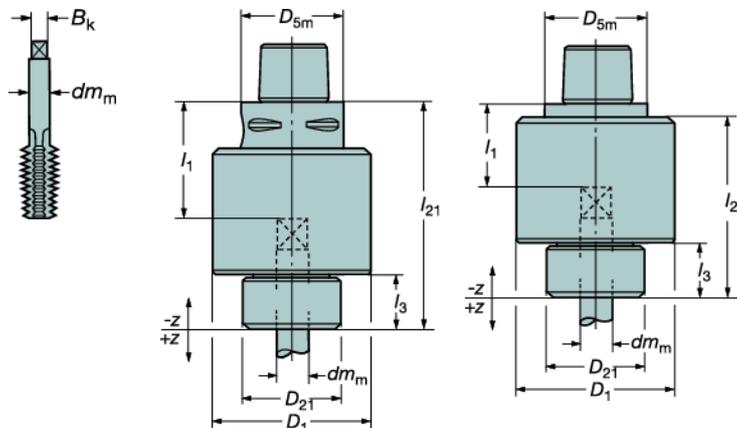
# Tap adaptors

Collet type with external coolant supply

391.60B

Short design, floating for turning centres

Without gripper grooves for manual tool change



Note: Only for segment clamping.

l<sub>1</sub> = programming length

Tap range		Coupling size	Ordering code	Coolant <sup>3)</sup>	Tap shank dimensions, mm, inch				Dimensions, mm, inch							Torque Nm <sup>2)</sup>		
min	max				dm <sub>m</sub> min	dm <sub>m</sub> max	B <sub>k</sub> min	B <sub>k</sub> max	D <sub>5m</sub>	D <sub>1</sub>	D <sub>21</sub>	l <sub>1</sub>	l <sub>21</sub>	l <sub>3</sub>	- z		+ z	⊖ <sub>RG</sub>
M4	M12	C3	C3-391.60B-01 062A <sup>1)</sup>	0	3.5	10	2	8	32	50	31	25.5	18	62	2	10	0.7	35
M4	M12			0	.138	.394	.079	.315	1.260	1.968	1.220	1.004	.709	2.441	.079	.394		35
M4	M12	C4	C4-391.60B-01 062A <sup>1)</sup>	0	3.5	10	2	8	40	50	31	25.5	18	62	2	10	0.9	35
M4	M12			0	.138	.394	.079	.315	1.575	1.968	1.220	1.004	.709	2.441	.079	.394		35
M4	M12		C4-391.60B-01 079A	0	3.5	10	2	8	40	50	31	42	18	79	2	10	0.7	35
M4	M12			0	.138	.394	.079	.315	1.575	1.968	1.220	1.654	.709	3.110	.079	.394		35
M5	M16	C5	C5-391.60B-02 062A <sup>1)</sup>	0	2.8	13	2	10	50	50	40	22	19	62	2	10	1	60
M5	M16			0	.110	.512	.079	.394	1.968	1.968	1.575	.866	.748	2.441	.079	.394		60
M5	M16		C5-391.60B-02 074A	0	2.8	13	2	10	50	50	40	34	19	74	2	10	1	60
M5	M16			0	.110	.512	.079	.394	1.968	1.968	1.575	1.339	.748	2.913	.079	.394		60

1) For Driven Tool Holders. Without slots for gripper.

2) Max allowed tightening torque

3) 0 = no coolant

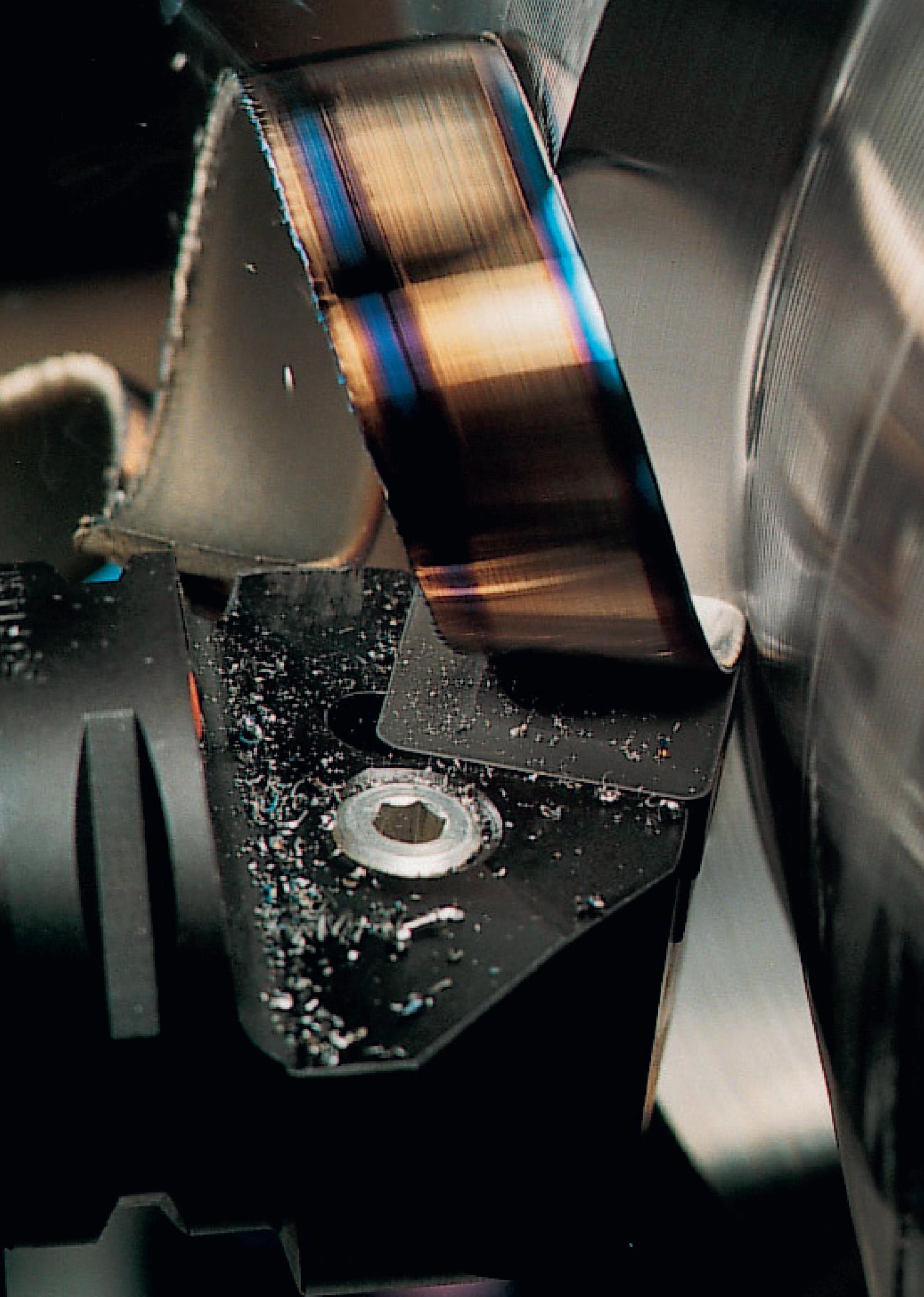
Collets must be ordered separately, see below.

## Collets

dm <sub>m</sub> mm (inch)	Ordering code	Shank <sup>1)</sup> DIN 374	Suitable for:
3.5-6.5 (.138-.256)	391.60A-OZ J421	M4-M8 (0-1/4)	Cx-391.60B -..01 xxxA
6.5-10 (.256-.394)	391.60A-OZ J422	M6-M12 (1/4-9/16)	...01 xxxA
2.8-7 (.110-.276)	391.60A-OZ J440	M5-M10 (0-1/4)	...02 xxxA
7-13 (.276-.512)	391.60A-OZ J443	M7-M16 (5/16-5/8)	...02 xxxA
10-16 (.394-.630)	391.60A-OZ J461	M10-M16 (9/16-3/4)	...03 xxxA
16-23 (.630-.906)	391.60A-OZ J462	M20-M30 (13/16-1 1/8)	...03 xxxA

1) For other standards, check shank dimensions B<sub>k</sub> and dm<sub>m</sub>





**Accessories**

	Page		Page
Fixtures	G36	Pre-measuring fixture	G45
Grease nipple	G38	Master setting gauges	G46
Push button operated valve	G38	Alignment tool	G46
Assembly tool	G38		
Hexagon key	G38		
Torque wrench for tool changing	G39		
Tightening torque recommendations	G40		
Extracting tool for clamping units	G41		
Tools for disassembling polygon socket	G41		
Cover plug	G41		
Cassettes with tapered polygon seating	G43		
Coolant tubes for Coromant Capto®	G42		

**Spare parts**

	Page
<b>Manually operated clamping units</b>	
Type 2085	G47
Type 2000	G48
Type 3000	G48
Type 2080	G48
Type 2090	G50
Round shank type	G51
VDI Angled design, DIN 69880	G52
VDI Straight design, DIN 69880	G53
CDI straight	G54
CDI angled	G55
<b>Hydraulically operated clamping units</b>	
Type 5010	G56
Type 5110	G58
Type 5210	G57
<b>Coromant Capto® adaptors</b>	
Coromant Capto® adaptor for solid boring bar	G59
Extension/reduction adaptors	G60
Collet chuck adaptors	G61
Tap adaptors	G62

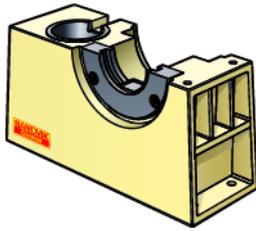
For spare parts for Coromant Capto® multi-task machining tools, see chapter H

A  
General Turning  
B  
Parting and Grooving  
C  
Threading  
G  
Tooling systems  
H  
Multi-task machining  
I  
CoroTurn® SL  
J  
General information

## Assembly fixture

for mounting and dismounting of modular tools

391.500



Fixture body

Ordering code: 391.500

391.501



Fixture body

Ordering code: 391.501

### Ordering code



Sleeve	For holder type, size
391.540-C3	Coromant Capto Size C3
391.540-C4	Coromant Capto Size C4
391.540-C5	Coromant Capto Size C5
391.540-C6	Coromant Capto Size C6
391.540-C8	Coromant Capto Size C8
391.540-C10	Coromant Capto Size C10
391.540-HA05	HSK 50 Form A/C
391.540-HA06	HSK 63 Form A/C
391.540-HA08	HSK 80 Form A/C
391.540-HA10	HSK 100 Form A/C
391.540-50	MAS-BT 50/CAT/ISO
391.540-30	MAS-BT 30/CAT/ISO
391.540-40	MAS-BT 40/CAT/ISO

### Ordering code

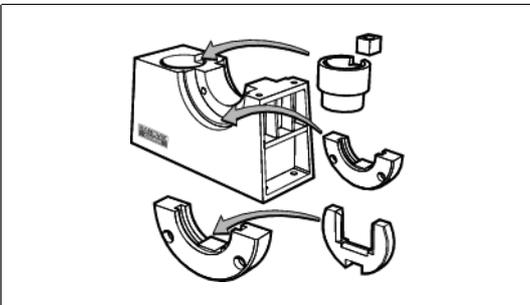


Flange	Collar	For holder type, size
391.510-140 50	391.530-C3	Coromant Capto Size C3
391.510-140 50	391.530-C4	Coromant Capto Size C4
391.510-140 50	391.530-C5	Coromant Capto Size C5
391.510-140 50	391.530-C6	Coromant Capto Size C6
391.510-140 50	391.530-C8	Coromant Capto Size C8
	391.530-C10*	Coromant Capto Size C10 and C8X
391.510-HA05	391.530-50	HSK 50 Form A
391.510-HA06	391.530-63	HSK 63 Form A
391.510-HA08	391.530-80	HSK 80 Form A
391.510-HA10		HSK 100 Form A
391.510-HA13		HSK 125 Form A
391.510-55 30		MAS-BT 30
391.510-55 40		MAS-BT 40
391.510-55 50		MAS-BT 50
391.510-562-40		BIG PLUS, MAS BT 40
391.510-562-50		BIG PLUS, MAS BT 50
391.510-140 40		DIN 69871/40, ANSIB 5.50-40. ISO7388/1-40, CAT 40
391.510-140 50		DIN 69871/50, ANSIB 5.50-40. ISO7388/1-50, CAT 50
391.510-540 40		BIG PLUS DIN69871/1-40, BIG PLUS 7388/1-40
391.510-540 50		BIG PLUS DIN69871/1-50, BIG PLUS 7388/1-50
391.510-00 40		DIN 2080-40
391.510-00 50		DIN 2080-50
391.510-140 50		Varilock size 50
391.510-140 50		Varilock size 63
391.510-140 50		Varilock size 80

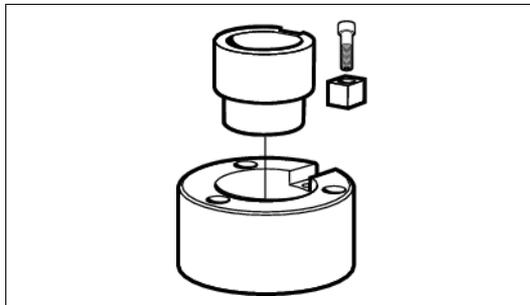
\* Combined collar/flange for C10 and C8X

Note: Key is delivered with the sleeve.  
Assembly fixture 391.500

Fixture 391.501 for maintenance of tools with Coromant Capto® and HSK couplings



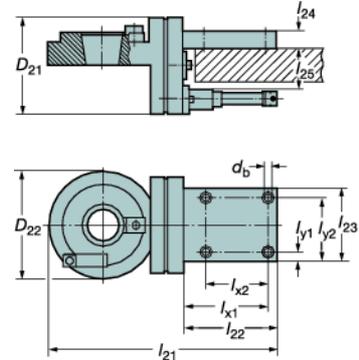
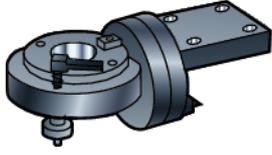
Choose flange, collar and sleeve to suit tool to be assembled.



Choose sleeve to suit coupling.  
The fixture should be fastened to the bench with three socket head screws (not delivered with fixture)

## Assembly fixture

For assembling and dismantling basic holders  
Pneumatically operated  
391.200



### Note!

Assembly fixture 391.200-xx includes foot pedal.

Instructions are enclosed with fixture.

Air supply of 6 bar (85 lbs/in<sup>2</sup>) is required.

Size		Ordering code	Dimensions, mm, inch												Weight																																																																						
Taper	HSK		$d_b$	$D_{21}$	$D_{22}$	$l_{21}$	$l_{22}$	$l_{23}$	$l_{24}$	$l_{25}$	$l_{26}$	$l_{27}$	$l_{28}$	$l_{29}$		$l_{30}$	$l_{31}$	$l_{32}$	$l_{33}$	$l_{34}$	$l_{35}$	$l_{36}$	$l_{37}$	$l_{38}$	$l_{39}$	$l_{40}$	$l_{41}$	$l_{42}$	$l_{43}$	$l_{44}$	$l_{45}$	$l_{46}$	$l_{47}$	$l_{48}$	$l_{49}$	$l_{50}$	$l_{51}$	$l_{52}$	$l_{53}$	$l_{54}$	$l_{55}$	$l_{56}$	$l_{57}$	$l_{58}$	$l_{59}$	$l_{60}$	$l_{61}$	$l_{62}$	$l_{63}$	$l_{64}$	$l_{65}$	$l_{66}$	$l_{67}$	$l_{68}$	$l_{69}$	$l_{70}$	$l_{71}$	$l_{72}$	$l_{73}$	$l_{74}$	$l_{75}$	$l_{76}$	$l_{77}$	$l_{78}$	$l_{79}$	$l_{80}$	$l_{81}$	$l_{82}$	$l_{83}$	$l_{84}$	$l_{85}$	$l_{86}$	$l_{87}$	$l_{88}$	$l_{89}$	$l_{90}$	$l_{91}$	$l_{92}$	$l_{93}$	$l_{94}$	$l_{95}$	$l_{96}$	$l_{97}$	$l_{98}$	$l_{99}$
40	–	391.200-40	11	160	180	370	150	120	30	67	135	100	15	105	20	.433	6.299	7.087	14.567	5.906	4.724	1.181	2.637	5.315	3.737	.590	4.134	44																																																									
45	–	391.200-45	11	160	180	370	150	120	30	67	135	100	15	105	20	.433	6.299	7.087	14.567	5.906	4.724	1.181	2.637	5.315	3.737	.590	4.134	44																																																									
50	–	391.200-50	11	160	180	370	150	120	30	67	135	100	15	105	20	.433	6.299	7.087	14.567	5.906	4.724	1.181	2.637	5.315	3.737	.590	4.134	44																																																									
–	50	391.200-H050	11	160	180	370	150	120	30	67	135	100	15	105	20	.433	6.299	7.087	14.567	5.906	4.724	1.181	2.637	5.315	3.737	.590	4.134	44																																																									
–	63	391.200-H063	11	160	180	370	150	120	30	67	135	100	15	105	20	.433	6.299	7.087	14.567	5.906	4.724	1.181	2.637	5.315	3.737	.590	4.134	44																																																									
–	100	391.200-H100	11	160	180	370	150	120	30	67	135	100	15	105	20	.433	6.299	7.087	14.567	5.906	4.724	1.181	2.637	5.315	3.737	.590	4.134	44																																																									

## Grease nipple



Size

Ordering code

C3 – C8

5692 012-01

## Push button operated valve

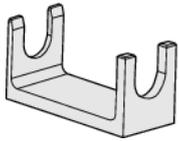


Requirement specifications:  
Working pressure: max. 100 bar

For information about pocket dimensions, see Metalcutting Technical guide or contact your nearest Sandvik Coromant representative.

Ordering code: C-PBOV-01

## Assembly tool



Tool for assembly/disassembly of clamping mechanism for clamping unit type NC2000

Coromant Capto® size

Ordering code

C3 C3-AT2000-01

C4 C4-AT2000-01

C5 C5-AT2000-01

## Assembly tools

All these accessories are supplied to separate order, and we recommend that they are ordered with the first Coromant Capto parts.



Coupling size

Retaining nut spanner

Extension key

Torque wrench

C3

5680 065-13

5680 015-05

C-TK-02

C4

5680 065-10

5680 015-05

C-TK-02

C5

5680 065-11

5680 015-01

C-TK-02

C6-C8

5680 065-12

5680 015-02

C-TK-02

C10

5680 065-14

5680 015-06

C-TK-04

## Extension key, Centre bolt clamping

C-TK-04



Coupling size	Nm		ft-lbs		Ordering code	Spare parts	
					Torque wrench	Length, mm (inch)	Size mm
C10	280	207			C-TK-04	683 (26.9)	17
							5680 015-06

## Torque wrench for tool changing

### C-TK-01

20-100Nm  
15-74 ft-lbs



### C-TK-02

40-200Nm  
30-148 ft-lbs



### C-TK-03



Coupling size	Nm		ft-lbs		Ordering code Torque wrench	Spare parts	
						Length	Size mm
C3	50	37	BT-TK-02			10	5680 035-05
C4	50	37	C-TK-01		345	10	5680 035-06
C5	70	52	C-TK-01		345	12	5680 035-07
C6	90	66	C-TK-01		345	12	5680 035-07
C8	130	96	C-TK-02		440	12	5680 035-07
C10	285	210	C-TK-03		548	17	5680 035-10

To be calibrated according to ISO 6789, accuracy within 4%

## Tightening torque recommendations

### Coromant Capto® tightening torque:

#### Manual clamping units type NC2000 and NC3000

Coupling size	Torque Nm	ft-lbs
C3	35	26
C4	50	37
C5	70	52

### Coromant Capto® tightening torque:

#### Manual clamping units and driven tool holders with camshaft

Coupling size	Torque Nm	ft-lbs
C3	35	26
C4	50	37
C5	70	52
C6	90	66
C8	130	96
C10	285	210

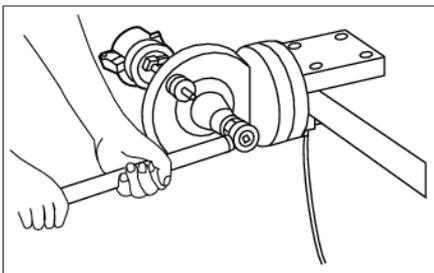
### Coromant Capto® required pressure:

#### Hydro-mechanical clamping units type 5000

Coupling size	Clamping Pressure bar (PSI)	Ejecting Pressure bar (PSI)
C4	100 (1450)	100 (1450)
C5	80 (1160)	80 (1160)
C6	80 (1160)	80 (1160)
C8	80 (1160)	80 (1160)
C10	80 (1160)	80 (1160)

Required oil flow in all cases: 6 l/min

### Coromant Capto® basic holders

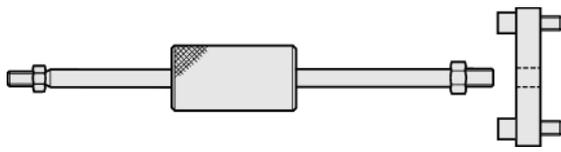


#### Centre bolt clamping

Coupling size	Torque Nm	ft-lbs
C3	45	33
C4	55	40
C5	95	70
C6	170	125
C8	170	125
C10	380	277

## Extracting tool

for disassembling the polygon socket on manual and automatic clamping units



Extracting tool

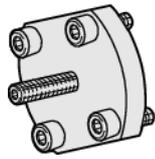
Withdrawal tool

Note: Withdrawal tool to be ordered separately.

Coupling size	Ordering
C3	CC-ET-01
C4	CC-ET-01
C5	CC-ET-02
C6	CC-ET-02
C8	CC-ET-02

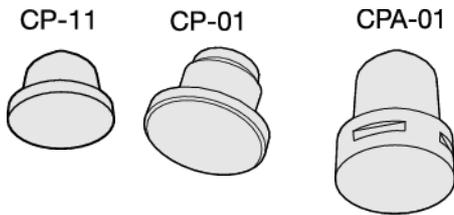
## Withdrawal tool

To remove polygone sleeve from clamping units can be used together with CC-ET-01/02



Coupling size	Ordering code	Spare parts	
		Centre screw	Peripheral screw
C3	C3-WDT-01M	3214 030-463	5512 040-03
C4	C4-WDT-01M	3214 030-464	5512 040-04
C5	C5-WDT-01M	3214 030-516	5512 040-05
C6	C6-WDT-01M	3214 030-516	5512 040-06
C8	C8-WDT-01	3214 030-516	5512 072-01

## Cover plug



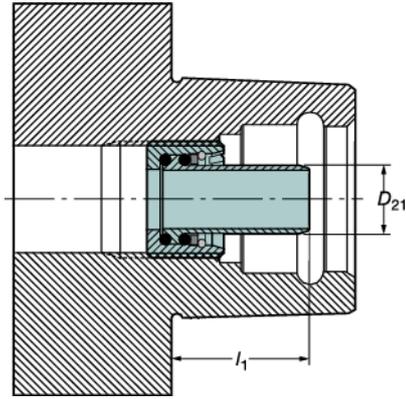
Coupling size	Ordering code		
	Manual unit	Automatic unit	Type 3000
C3	C3-CP-01	-	C3-CP-11
C4	C4-CP-01	C4-CPA-01	C4-CP-11
C5	C5-CP-01	C5-CPA-01	C5-CP-11
C6	C6-CP-01	C6-CPA-01	-
C8	C8-CP-01	C8-CPA-01	-
C10	-	C10-CPA-01	-

## Balancing tool

	Coupling size	Ordering code
Cx-BAT-01	C3	C3 - BAT - 01
	C4	C4 - BAT - 01
	C5	C5 - BAT - 01
	C6	C6 - BAT - 01
	C8	C8 - BAT - 01
	C10	C10 - BAT - 01

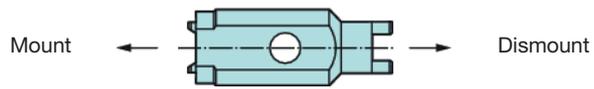
## Coolant tubes for Coromant Capto®

### Cx-CT for Coromant Capto®



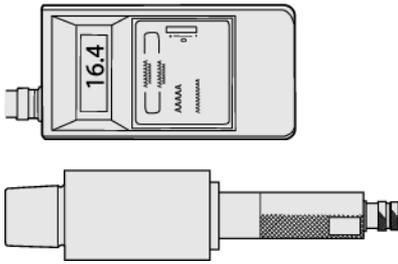
The requirement for use of coolant tubes is machine related, see machine information before installing.

Ensure the clamping device and/or machine is able to accept/handle the coolant tube before using.



Please refer to M/C manual

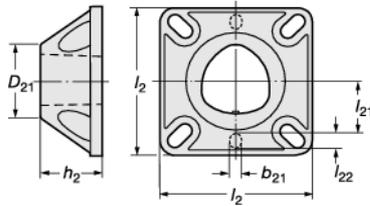
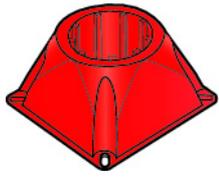
## Safe control



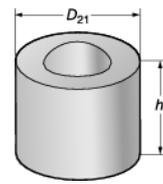
The safe control is used for measuring the clamping force of a machine's clamping system. If the clamping force is too low, the dynamic reaction between spindle and tool deteriorates.

Contact your local Sandvik representative for more information.

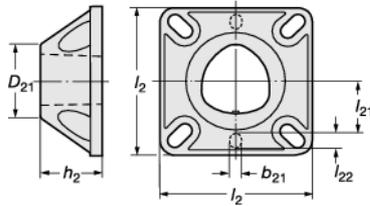
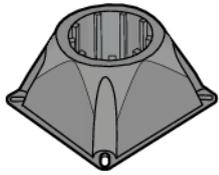
## Cassettes with tapered polygon seating



**-4000**  
Plastic storage cassettes (red)

**-6000-B**

**Aluminium cassette blanks**



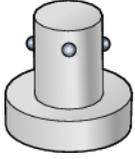
**-5000**  
High grade plastic in-machine tool storage (black)

Coupling size	Ordering code	Dimensions, mm, inch						All plastic cassettes conforming to hole pattern 17 mm, 20 mm, 25 mm and 1". High grade plastic. Red colour. To be used: – alone for upright storage – with mechanism type PL-01 for horizontal or upright position.
		$b_{21}$	$D_{21}$	$h_2$	$l_2$	$l_{21}$	$l_{22}$	
C3	C3-C-4000	-	32	26	65	-	-	High grade re-inforced black plastic. For in-machine tool storage with mechanism AL-01.
C4	C4-C-4000	6	50	39	74	26	8	
C5	C5-C-4000	6	50	39	74	26	8	
C6	C6-C-4000	8	80	63	116	41	10	
C8	C8-C-4000	8	80	63	116	41	10	
C4	C4-C-5000	6	50	39	74	26	8	
C5	C5-C-5000	6	50	39	74	26	8	
C6	C6-C-5000	8	80	63	116	41	10	
C8	C8-C-5000	8	80	63	116	41	10	Aluminium cassette blanks for individual adaptation. To be used with AL-01.
C10	C10-C-5000	8	100	80	150	60	68	
C6	C6-C-6000-B	-	120	63	-	-	-	
C8	C8-C-6000-B	-	120	63	-	-	-	
C10	C10-C-6000-B	-	138	80	-	-	-	
			5.433	3.150				

A  
General Turning  
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General information

## Locking mechanism for cassettes

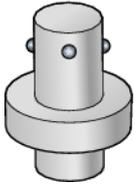
**-PL-01**



**Passive locking mechanism**

For vertical upwards and horizontal storage. NEVER upside down storage.

**-AL-01**

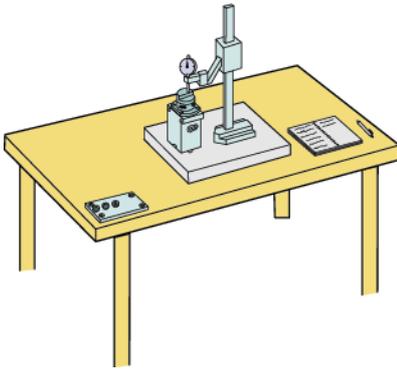


**Active locking mechanism**

For storage at all angles: vertical upwards and downwards or horizontal.

Coupling size	Ordering code	Pull action force, N	Pull action force, lbs	
C4	C4-PL-01	55	12.36	Central passive locking mechanism. Spring loaded clamping. Fits directly into all cassettes type 4000.
C5	C5-PL-01	120	26.98	
C6	C6-PL-01	150	33.72	
C8	C8-PL-01	240	53.95	
Coupling size	Ordering code	Rec. max. tool weight, kg	Rec. max. tool weight, lbs	
C4	C4-AL-01	40	88	Active locking mechanism – mechanical push action. Fits directly into all cassettes type 5000/6000.
C5	C5-AL-01	60	132	
C6	C6-AL-01	75	165	
C8	C8-AL-01	110	243	
C10	C10-AL-01	150	330.7	

## Pre-measuring fixture for Coromant Capto® cutting units



The precision of the Coromant Capto coupling ensures excellent repeatability when changing the same tool unit. This accuracy can be utilized in many ways, for example, in manual changing, the cutting edge indexing takes place outside the machine, where the edge positions can be checked in two co-ordinates on Sandvik's new pre-measuring fixture.

When the pre-measured unit is returned to the clamping unit in the turret, the edge deviation is compensated for through the machine control offset.

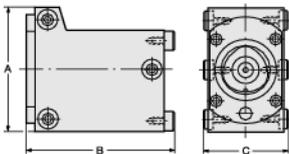
The fixture can be used with any dial indicator and preferably, a surface plate, but Sandvik recommend an indicator with a zero-set switch and a contact stylus.

### Basic package

You may already have the required measuring equipment in your shop – all you need is the measuring kit:

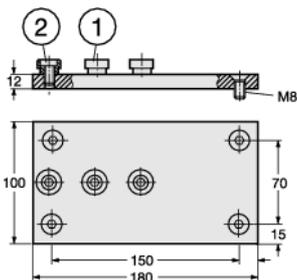
- Pre-measuring unit
- Holding plate (anchor for tightening)
- Master

### Pre-measuring unit



Coupling size	Ordering code	Dimensions, mm (inch)		
		A	B	C
C3	C3-PMU-01M	65 (2.56)	85 (3.35)	44 (1.79)
C4	C4-PMU-01M	77 (3.03)	94 (3.70)	54 (2.13)
C5	C5-PMU-01M	94 (3.70)	130 (5.12)	70 (2.76)
C6	C6-PMU-01	114 (4.40)	135 (5.31)	90 (3.54)
C8	C8-PMU-01	133 (5.24)	150 (5.91)	106 (4.17)

### Holding plate

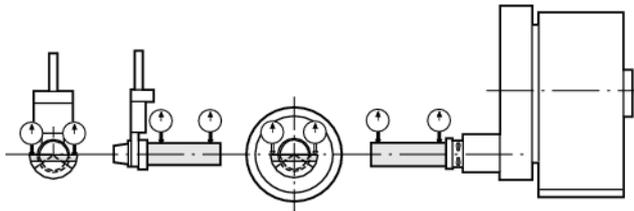


Coupling size	Ordering code	Spare parts	
		1	2
C3 – C8	C-HP-01	Stud	Screw
		5638 060-01	3212 020-409

A General Turning  
 B Parting and Grooving  
 C Threading  
 G Tooling systems  
 H Multi-task machining  
 I CoroTurn® SL  
 J General information

# Master setting gauges

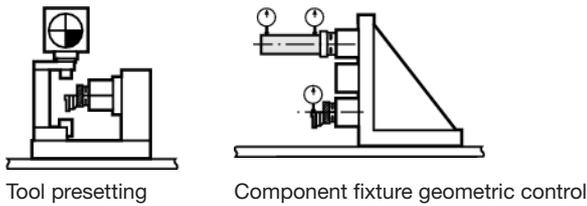
Checking position for grippers  
 Spindle orientation



The Coromant Capto system guarantees exceptional, repeatable accuracy but this is of little use unless the various other components in the total machining process are correctly and accurately positioned. Sandvik Coromant offers a range of axial and centre height master setting gauges for the various coupling sizes which are strongly recommended for setting important parameters such as:

- The centre line of the tool post
- Spindle orientation
- The position of the tool for grippers
- Tool centre height and cutting edge position ( $f_1$  and  $l_1$  dimensions). Gauges can be used in a pre-measuring fixture
- Component fixtures

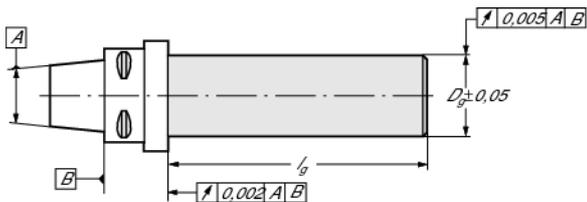
Tool post centre line



Tool post centre line  
 Tool presetting  
 Component fixture geometric control

## Axial gauge

### Master setting gauges MAS-11

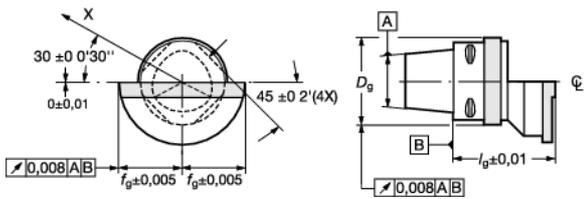


Coupling size	Ordering code	Dimensions, mm (inch)	
		$D_g$	$l_g$
C3	C3-MAS-11	25 (.98)	160 (6.30)
C4	C4-MAS-11	25 (.98)	160 (6.30)
C5	C5-MAS-11	32 (1.26)	210 (8.27)
C6	C6-MAS-11	40 (1.57)	315 (12.40)
C8	C8-MAS-11	40 (1.57)	315 (12.40)
C10	C10-MAS-11	60 (2.362)	420 (16.535)

## Centre height gauge

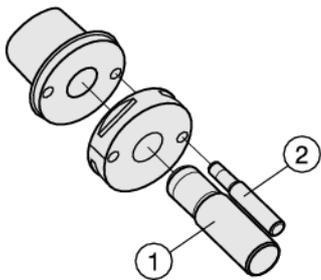
### Master setting gauges MAS-01

(Polygon) Gripper groove



Coupling size	Ordering code	Dimensions, mm (inch)		
		$f_g$	$l_g$	$D_g$
C3	C3-MAS-01	22 (.87)	40 (1.57)	34 (1.34)
C4	C4-MAS-01	27 (1.06)	50 (1.97)	42 (1.65)
C5	C5-MAS-01	35 (1.38)	60 (2.36)	52 (2.05)
C6	C6-MAS-01	45 (1.77)	65 (2.56)	65 (2.56)
C8	C8-MAS-01	55 (2.17)	80 (3.15)	82 (3.23)
C10	C10-MAS-01	65 (2.559)	10 (3.937)	10 (4.016)

## Alignment tool



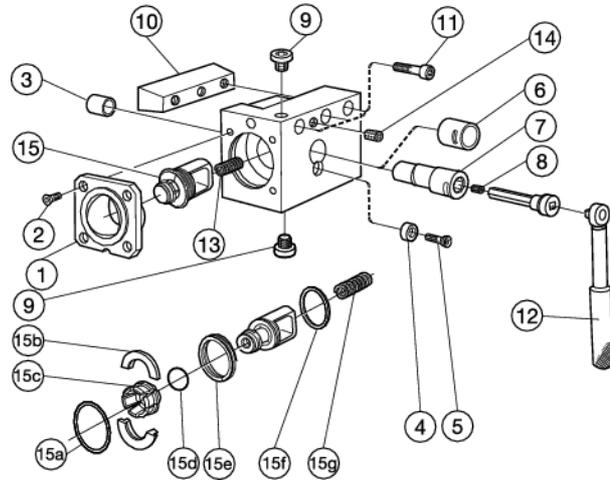
This tool is used to check the Automatic Tool Change positioning tolerance between the gripper arm and magazine and the clamping unit/spindle. If the tolerance is not achieved the result can be abnormal wear on cutting tool or Coromant Capto interface, wrong clamping, dropped tools, personal injuries etc. Instructions and tolerances are available in the box together with the tool.

Coupling size	Ordering code	Spare parts	
		1 Gauge pin	2 Gauge pin
C4	C4-AMT-01	5552 069-03	5552 069-01
C5	C5-AMT-01	5552 069-04	5552 069-01
C6	C6-AMT-01	5552 069-05	5552 069-02
C8	C8-AMT-01	5552 069-05	5552 069-02
C10	C10-AMT-01	5552 069-09	5552 069-08

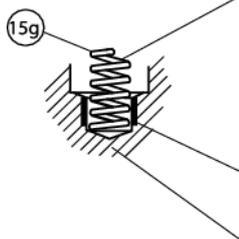
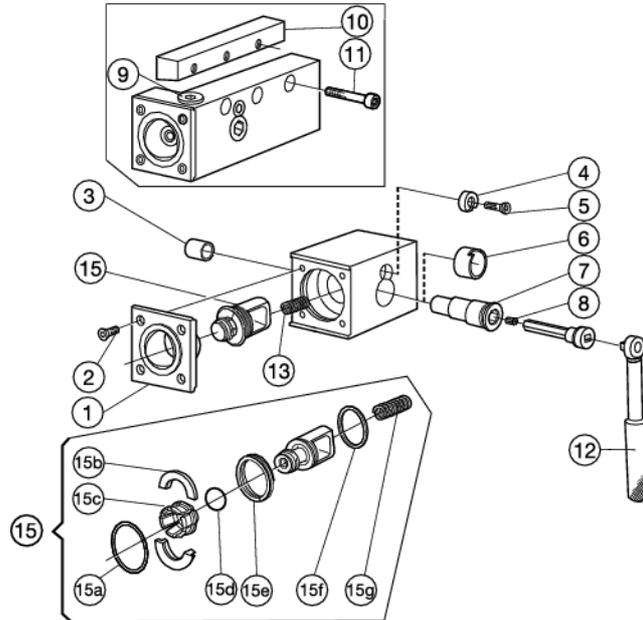
# Manually operated clamping units

Type 2085

Inch version



Metric version



The spring, item 15g, should be used only when mounting draw bar set in old design clamping units, where the spring must be placed inside the plain bearing as shown on the picture.

Plain bearing

Draw bar hole, old design

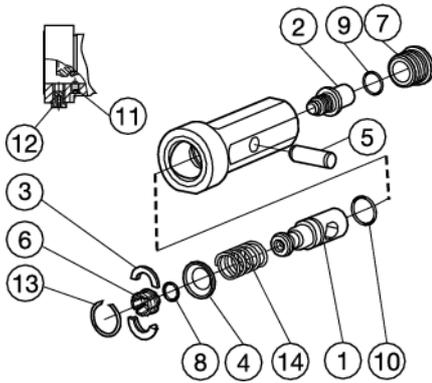
	1	2	3	4	5	6	7
Coupling size	Sleeve	Screw (4 x)	Plain bearing	Locking washer	Screw	Plain bearing	Cam shaft
C3	5252 015-01	416.1-834	3823 010-101	5541 030-01	416.1-834	5638 022-01	5333 025-01
C4	5252 015-02	5513 020-26	3823 010-122	5541 030-02	416.1-834	5638 022-02	5333 025-02
C5	5252 015-03	5513 020-14	3823 010-162	5541 030-03	5513 020-14	5638 022-03	5333 025-03
	8	9	10	10	11	11	
Coupling size	Screw	Plug	Wedge inch version	Wedge metric version	Screw inch version	Screw metric version	
C3	3214 010-355	3611 005-180	5431 100-03	5431 115-01	3212 010-362	3212 010-362	
C4	3214 010-355	3611 005-180	5431 100-01	5431 115-02	3212 010-363	3212 010-364	
C5	3214 010-355	3611 005-180	5431 100-02	5431 115-03	3212 010-415	3212 010-416	
	12	13	14		15		
Coupling size	Torque wrench <sup>2)</sup>	Compression spring	Lock screw inch	Rest button <sup>1)</sup> inch version	Draw bar set		
C3	BT-TK-02	5561 001-71	3214 010-360	-	5461 100-101		
C4	C-TK-01	5561 001-41	3214 010-360	5511 052-01	5461 100-111		
C5	C-TK-01	5561 001-41	3214 010-360	-	5461 100-121		
	<b>Draw bar set parts</b>						
	15a	15b	15c	15d	15e	15f	15g
Coupling size	Spiral retaining ring	Holder set (set of 2)	Segment (set of 6)	O-ring	Flat wire spring	O-ring	Compression spring
C3	5545 039-01	5546 001-16	5549 120-08	5641 005-01	5561 015-02	5641 005-15	5561 001-81
C4	5545 039-03	5546 001-20	5549 120-06	5641 005-05	5561 015-03	5641 005-19	5561 001-82
C5	5545 039-02	5546 001-17	5549 120-07	5641 005-06	5561 015-04	5641 005-16	5561 001-83

<sup>1)</sup> Not shown on picture.

<sup>2)</sup> Accessories, must be ordered separately

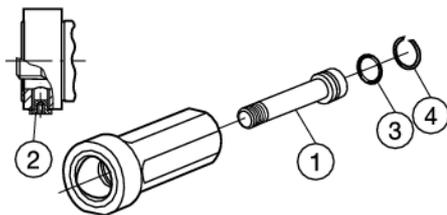
## Manually operated clamping units

### Type 2000



	1	2	3	4	5	6	7	8
Size	Drawbar	Clamping screw	Holder set (set of 2)	Ring	Support pin	Segment (set of 6)	Thread ring	O-ring
C3	5461 105-01	5519 105-01	5546 002-01	5541 028-01	5552 032-01	5549 120-08	5512 091-03	5641 005-01
C4	5461 105-02	5519 105-02	5546 002-02	5541 028-02	5552 032-02	5549 120-06	5512 091-01	5641 005-05
C5	5461 105-03	5519 105-03	5546 002-03	5541 028-03	5552 032-03	5549 120-07	5512 091-02	5641 005-06
	9	10	11	12	13	14		
Size	O-ring	O-ring	Screw	Blind plug	Circlip width	Spring	Key for clamping screw (mm)	
C3	3671 010-118	3671 010-124	3214 020-204	3611 005-180	5545 042-01	5561 001-52	3021 013-080 (8.0)	
C4	3671 010-120	3671 010-126	3214 020-255	3611 005-180	3421 105-026	5561 001-53	5680 010-03 (10.0)	
C5	3671 010-124	3671 010-128	3214 020-255	3611 005-180	3421 105-032	5561 001-54	5680 010-04 (12.0)	

### Type 3000

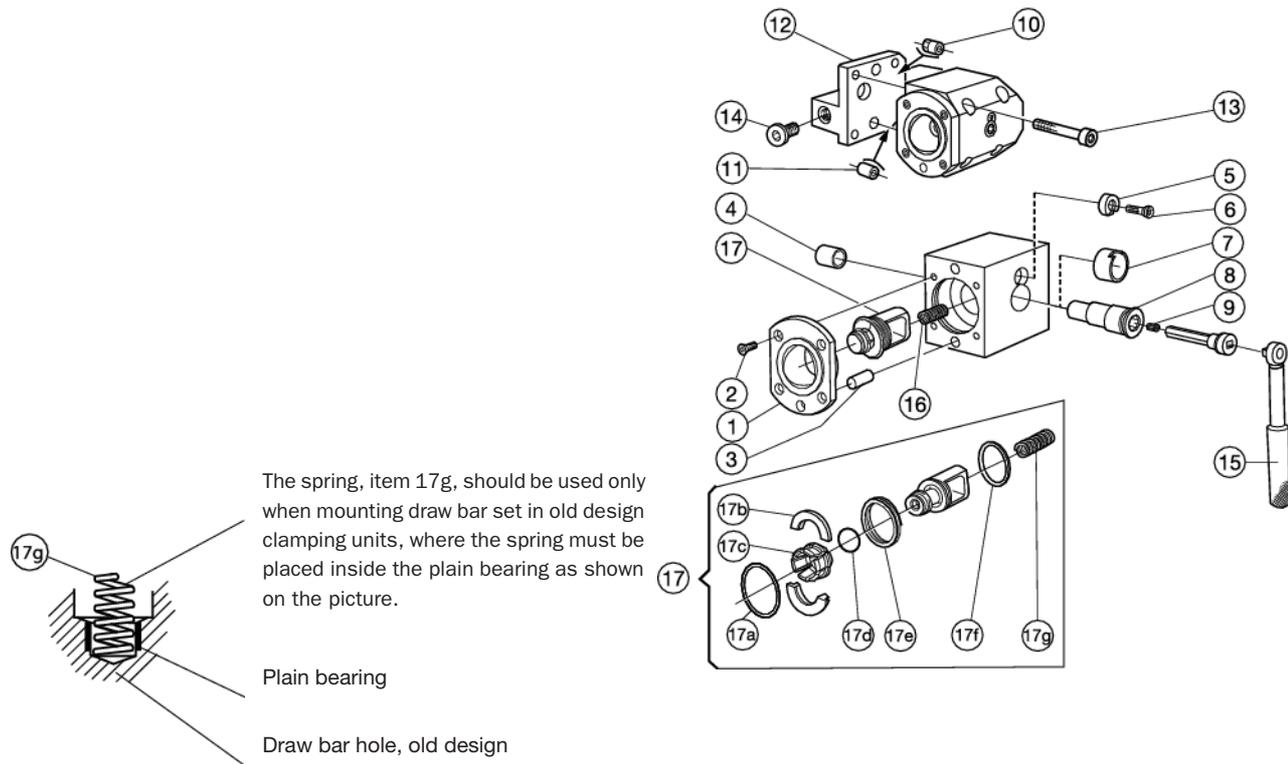


	1	2	3	4	
Size	Shank code	Clamping screw	Plug	O-ring	Retaining ring
C3		5512 096-01	3611 005-180	3671 010-020	5545 040-03
C4	-10020	5512 096-02	3611 005-180	3671 010-022	5545 040-05
C4	-12020	5512 096-04 <sup>1)</sup>	3611 005-180	3671 010-022	5545 040-05
C5		5512 096-03	3611 005-180	3671 010-024	5545 040-06
					Key for clamping screw (mm)
					3021 013-080 (8.0)
					5680 010-03 (10.0)
					5680 010-03 (10.0)
					5680 010-04 (12.0)

<sup>1)</sup> If you shorten the clamping unit C4-12020-50 use clamping screw 5512 096-02

# Manually operated clamping units

Type 2080



The spring, item 17g, should be used only when mounting draw bar set in old design clamping units, where the spring must be placed inside the plain bearing as shown on the picture.

Plain bearing

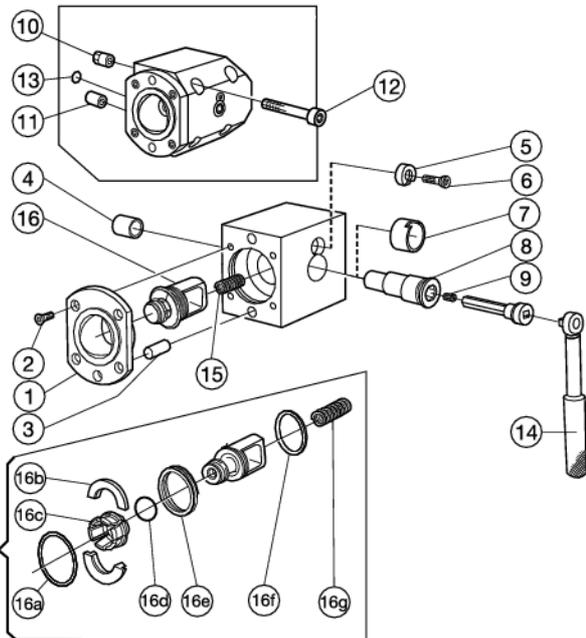
Draw bar hole, old design

	1	2	3	4	5	6	7	8	
Size	Sleeve	Screw (4 x)	Parallel pin	Plain bearing	Locking washer	Screw	Plain bearing	Cam shaft	
C3	5252 010-01	416.1-834	3111 050-558	3823 010-101	5541 030-01	416.1-834	5638 022-01	5333 025-01	
C4	5252 010-02	5513 020-26	3111 050-610	3823 010-122	5541 030-02	416.1-834	5638 022-02	5333 025-02	
C5	5252 010-03	5513 020-14	3111 050-661	3823 010-162	5541 030-03	5513 020-14	5638 022-03	5333 025-03	
C6	5252 010-04	3213 010-410	3111 050-715	3823 010-183	5541 030-04	5513 020-14	5638 022-04	5333 025-04	
	9	10	11	12 <b>Inch clamping unit</b>					
Size	Screw	Locating pin	Dowel pin	(Right hand clamping unit)	Adaptor	(Left hand clamping unit)	Adaptor		
C3	3214 010-355	5552 063-05	5552 061-07	RC 2080-47074-12M	5253 105-09	LC 2080-47074-12M	5253 105-10		
C4	3214 010-355	5552 063-07	5552 061-09	RC 2080-59102-16A	5253 105-19	LC 2080-59102-16A	5253 105-20		
C5	3214 010-355	5552 063-06	5552 061-08	RC 2080-66102-20A	5253 105-21	LC 2080-66102-20A	5253 105-22		
C6	3214 010-355	-	-	RC 2080-77118-20A	5253 105-15	LC 2080-77118-20A	5253 105-17		
				RC 2080-85118-24A	5253 105-15	LC 2080-85118-24A	5253 105-18		
				-	-	-	-		
	12 <b>Metric clamping unit</b>				13	14	15	16	
Size	(Right hand clamping unit)	Adaptor	(Left hand clamping unit)	Adaptor	Screw	Plug	Torque wrench <sup>1)</sup>	Compression spring	
C3	RC 2080-48090	5253 005-01	LC 2080-48090	5253 005-02	3212 010-363	3611 005-180	BT-TK-02	5561 001-71	
C4	RC 2080-59110A	5253 005-15	LC 2080-59110A	5253 005-16	3212 010-414	3611 005-140	C-TK-01	5561 001-41	
C5	RC 2080-77110A	5253 005-11	LC 2080-77110A	5253 005-12	3212 010-466	3611 005-140	C-TK-01	5561 001-41	
C6	RC 2080-93140	-	LC 2080-93140	-	-	3611 005-140	C-TK-01	5561 001-41	
	17	17 <b>Draw bar set parts</b>							
Size	Draw bar set	Spiral retaining ring	Holder set (set of 2)	Segment (set of 6)	O-ring	Flat wire spring	O-ring	Compression spring	
C3	5461 100-101	5545 039-01	5546 001-16	5549 120-08	5641 005-01	5561 015-02	5641 005-15	5561 001-81	
C4	5461 100-111	5545 039-03	5546 001-20	5549 120-06	5641 005-05	5561 015-03	5641 005-19	5561 001-82	
C5	5461 100-121	5545 039-02	5546 001-17	5549 120-07	5641 005-06	5561 015-04	5641 005-16	5561 001-83	
C6	5461 100-131	5545 039-04	5546 001-18	5549 120-04	5641 005-04	5561 015-05	5641 005-17	5561 001-83	

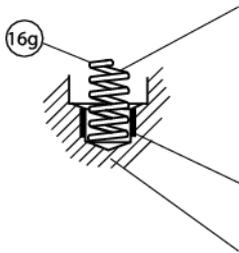
<sup>1)</sup> Accessories, must be ordered separately

## Manually operated clamping units

Type 2090



The spring, item 16g, should be used only when mounting draw bar set in old design clamping units, where the spring must be placed inside the plain bearing as shown on the picture.



Plain bearing

Draw bar hole, old design

	1	2	3	4	5	6	7
Size	Sleeve	Screw (4 x)	Parallel pin	Plain bearing	Locking washer	Screw	Plain bearing
C3	5252 010-01	416.1-834	3111 050-558	3823 010-101	5541 030-01	416.1-834	5638 022-01
C4	5252 010-02	5513 020-26	3111 050-610	3823 010-122	5541 030-02	416.1-834	5638 022-02
C5	5252 010-03	5513 020-14	3111 050-661	3823 010-162	5541 030-03	5513 020-14	5638 022-03
C6	5252 010-04	3213 010-410	3111 050-715	3823 010-183	5541 030-04	5513 020-14	5638 022-04
C8	5252 010-05	3213 010-462	3111 050-769	3823 010-225	5541 030-05	5513 020-14	5638 022-05
	8	9	10	11	12	13	14
Size	Cam shaft	Screw	Locating pin	Dowel pin	Screw	O-ring	Torque wrench <sup>1)</sup>
C3	5333 025-01	3214 010-355	5552 063-05	5552 061-07	3212 010-363	5641 001-22	BT-TK-02
C4	5333 025-02	3214 010-355	5552 063-07	5552 061-09	3212 010-414	3671 010-114	C-TK-01
C5	5333 025-03	3214 010-355	5552 063-06	5552 061-08	3212 010-466	3671 010-114	C-TK-01
C6	5333 025-04	3214 010-355	5552 063-03	5552 061-05	3212 010-469	3671 010-119	C-TK-01
C8	5333 025-05	3214 010-355	5552 063-04	5552 061-06	3212 010-521	3671 010-119	C-TK-02
	15	16					
Size	Compression spring	Draw bar set					
C3	5561 001-71	5461 100-101					
C4	5561 001-41	5461 100-111					
C5	5561 001-41	5461 100-121					
C6	5561 001-41	5461 100-131					
C8	5561 001-43	5461 100-141					
	<b>Draw bar set parts</b>						
	16a	16b	16c	16d	16e	16f	16g
Size	Spiral retaining ring	Holder set (set of 2)	Segment (set of 6)	O-ring	Flat wire spring	O-ring	Compression spring
C3	5545 039-01	5546 001-16	5549 120-08	5641 005-01	5561 015-02	5641 005-15	5561 001-81
C4	5545 039-03	5546 001-20	5549 120-06	5641 005-05	5561 015-03	5641 005-19	5561 001-82
C5	5545 039-02	5546 001-17	5549 120-07	5641 005-06	5561 015-04	5641 005-16	5561 001-83
C6	5545 039-04	5546 001-18	5549 120-04	5641 005-04	5561 015-05	5641 005-17	5561 001-83
C8	5545 039-05	5546 001-19	5549 120-05	5641 005-07	5561 015-06	5641 005-18	5561 001-84

<sup>1)</sup> Accessories, must be ordered separately

# Manually operated clamping units

Round shank

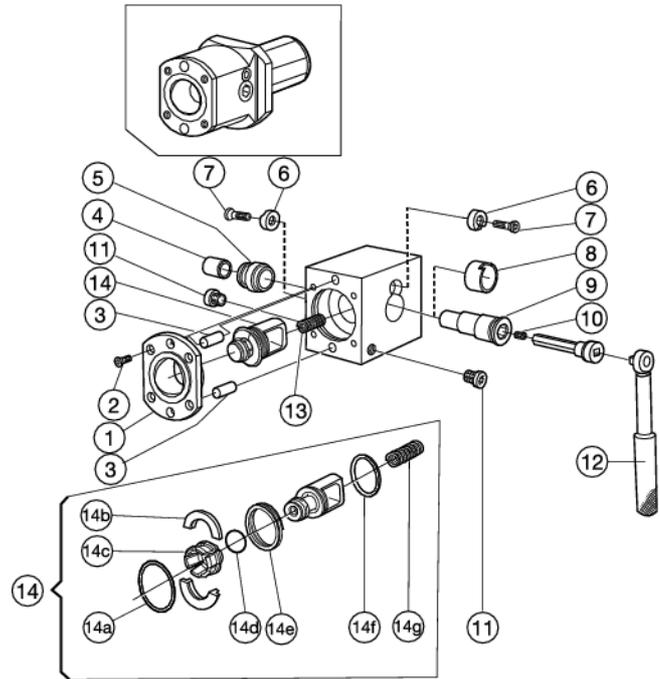
Type 2035/ 2045/ 2055/ 2065



The spring, item 14g, should be used only when mounting draw bar set in old design clamping units, where the spring must be placed inside the plain bearing as shown on the picture.

Plain bearing

Draw bar hole, old design



	1	2	3	4	5	6	7
Size	Sleeve	Screw (4 x)	Parallel pin	Plain bearing	Bush	Locking washer	Screw
C3	5252 010-01	416.1-834	3111 050-558	3823 010-101	5638 024-01	5541 030-01	416.1-834
C4	5252 010-02	5513 020-26	3111 050-610	3823 010-122	5638 024-02	5541 030-02	416.1-834
C5	5252 010-03	5513 020-14	3111 050-661	3823 010-162	5638 024-03	5541 030-03	5513 020-14
C6	5252 010-04	3213 010-410	3111 050-715	3823 010-183	5638 024-04	5541 030-04	5513 020-14
	8	9	10	11	12	13	14
Size	Plain bearing	Cam shaft	Screw	Plug	Torque wrench <sup>1)</sup>	Compression spring	Draw bar set
C3	5638 022-01	5333 025-01	3214 010-355	3611 005-180	BT-TK-02	5561 001-71	5461 100-101
C4	5638 022-02	5333 025-02	3214 010-355	3611 005-180	C-TK-01	5561 001-41	5461 100-111
C5	5638 022-03	5333 025-03	3214 010-355	3611 005-180	C-TK-01	5561 001-41	5461 100-121
C6	5638 022-04	5333 025-04	3214 010-355	3611 005-140	C-TK-01	5561 001-41	5461 100-131
Draw bar set parts							
	14a	14b	14c	14d	14e	14f	14g
Size	Spiral retaining ring	Holder set (set of 2)	Segment (set of 6)	O-ring	Flat wire spring	O-ring	Compression spring
C3	5545 039-01	5546 001-16	5549 120-08	5641 005-01	5561 015-02	5641 005-15	5561 001-81
C4	5545 039-03	5546 001-20	5549 120-06	5641 005-05	5561 015-03	5641 005-19	5561 001-82
C5	5545 039-02	5546 001-17	5549 120-07	5641 005-06	5561 015-04	5641 005-16	5561 001-83
C6	5545 039-04	5546 001-18	5549 120-04	5641 005-04	5561 015-05	5641 005-17	5561 001-83

<sup>1)</sup> Accessories, must be ordered separately

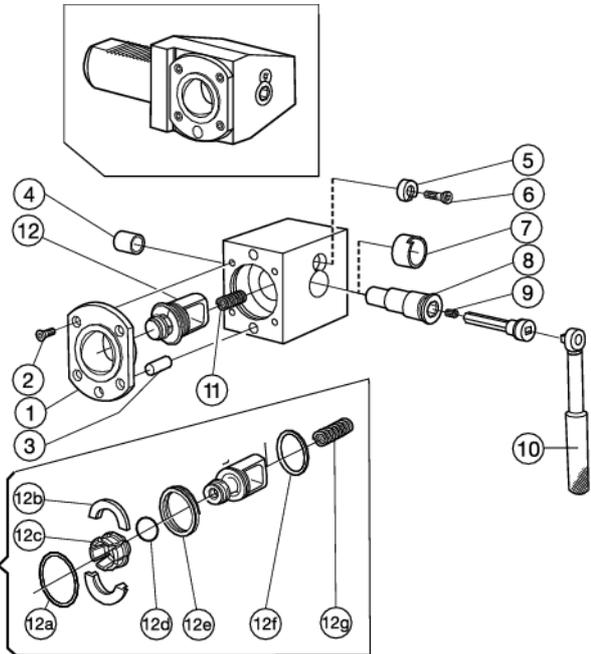
A General Turning  
 B Parting and Grooving  
 C Threading  
 G Tooling systems  
 H Multi-task machining  
 I  
 J General information

# Manually operated clamping units

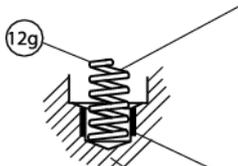
VDI Angled design

DIN 69880

Type 2030/ 2040/ 2050/ 2060



The spring, item 12g, should be used only when mounting draw bar set in old design clamping units, where the spring must be placed inside the plain bearing as shown on the picture.



Plain bearing

Draw bar hole, old design

	1	2	3	4	5	6	
Size	Sleeve	Screw (4 x)	Parallel pin	Plain bearing	Locking washer	Screw	
C3	5252 010-01	416.1-834	3111 050-558	3823 010-101	5541 030-01	416.1-834	
C4	5252 010-02	5513 020-26	3111 050-610	3823 010-122	5541 030-02	416.1-834	
C5	5252 010-03	5513 020-14	3111 050-661	3823 010-162	5541 030-03	5513 020-14	
C6	5252 010-04	3213 010-410	3111 050-715	3823 010-183	5541 030-04	5513 020-14	
	7	8	9	10	11	12	
Size	Plain bearing	Cam shaft	Screw	Torque wrench <sup>1)</sup>	Compression spring	Draw bar set	
C3	5638 022-01	5333 025-01	3214 010-355	BT-TK-02	5561 001-71	5461 100-101	
C4	5638 022-02	5333 025-02	3214 010-355	C-TK-01	5561 001-41	5461 100-111	
C5	5638 022-03	5333 025-03	3214 010-355	C-TK-01	5561 001-41	5461 100-121	
C6	5638 022-04	5333 025-04	3214 010-355	C-TK-01	5561 001-41	5461 100-131	
Draw bar set parts							
	12a	12b	12c	12d	12e	12f	12g
Size	Spiral retaining ring	Holder set (set of 2)	Segment (set of 6)	O-ring	Flat wire spring	O-ring	Compression spring
C3	5545 039-01	5546 001-16	5549 120-08	5641 005-01	5561 015-02	5641 005-15	5561 001-81
C4	5545 039-02	5546 001-20	5549 120-06	5641 005-05	5561 015-03	5641 005-19	5561 001-82
C5	5545 039-03	5546 001-17	5549 120-07	5641 005-06	5561 015-04	5641 005-16	5561 001-83
C6	5545 039-04	5546 001-18	5549 120-04	5641 005-04	5561 015-05	5641 005-17	5561 001-83

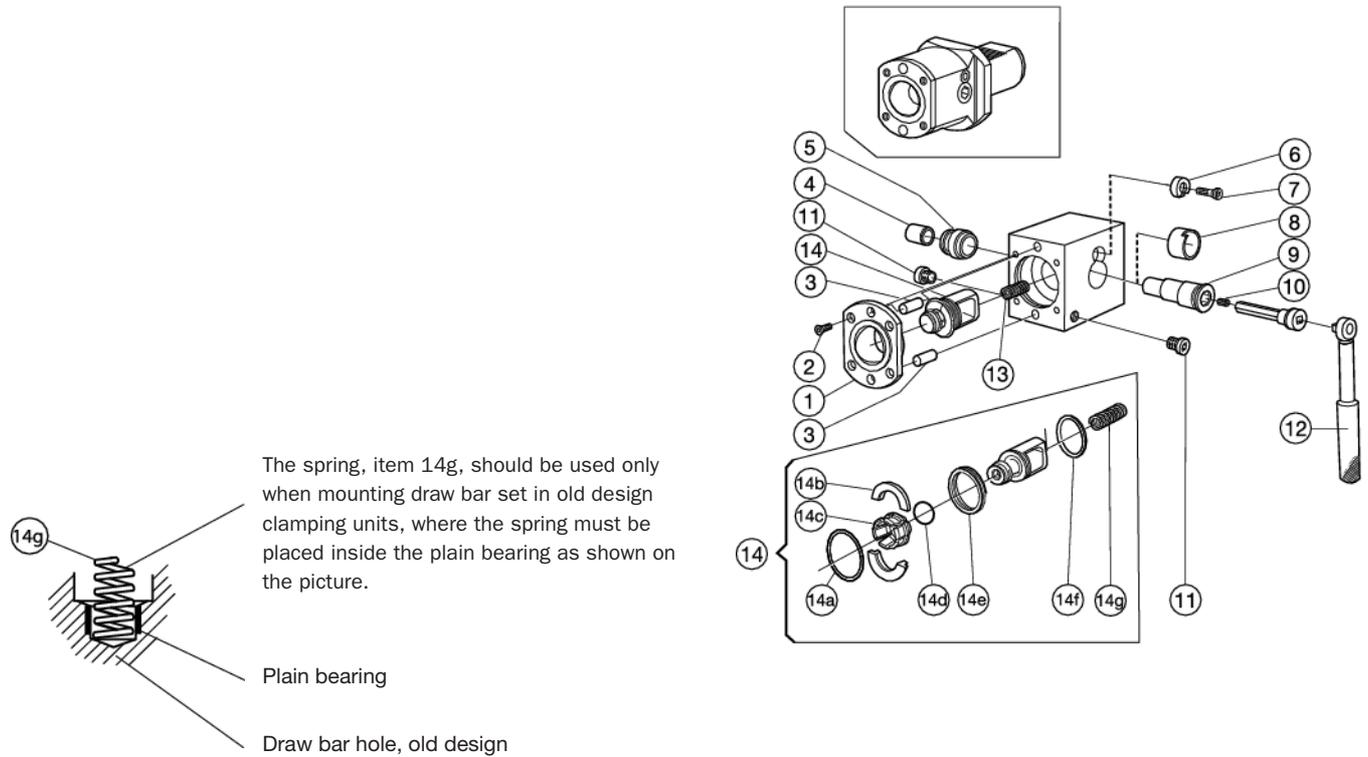
<sup>1)</sup> Accessories, must be ordered separately

# Manually operated clamping units

VDI Straight design

DIN 69880

Type 2030/ 2040/ 2050/ 2060



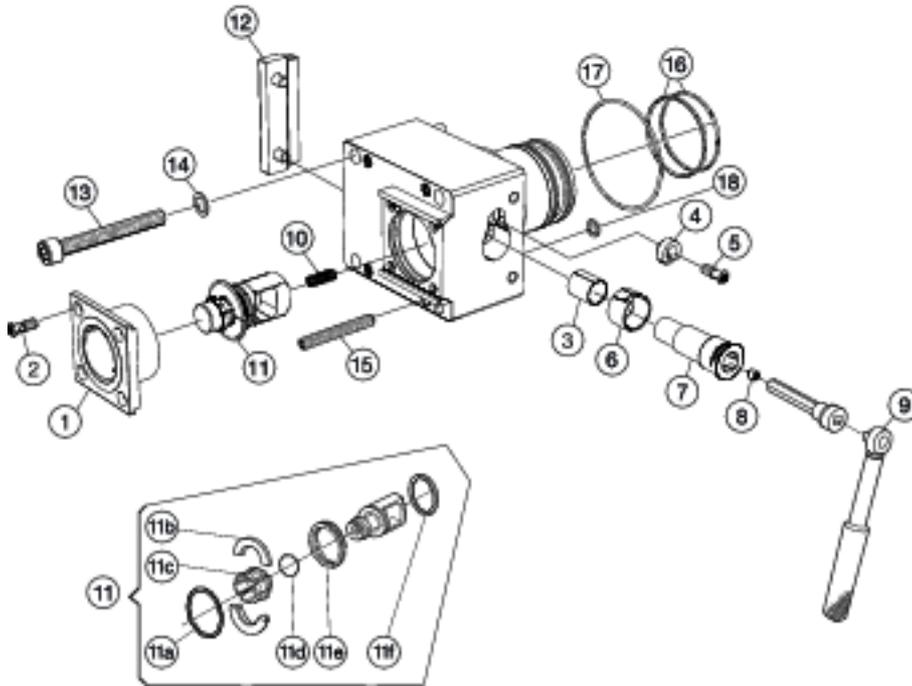
	1	2	3	4	5	6	7
Size	Sleeve	Screw (4 x)	Parallel pin	Plain bearing	Bush	Locking washer	Screw
C3	5252 010-01	416.1-834	3111 050-558	3823 010-101	5638 024-01	5541 030-01	416.1-834
C4	5252 010-02	5513 020-26	3111 050-610	3823 010-122	5638 024-02	5541 030-02	416.1-834
C5	5252 010-03	5513 020-14	3111 050-661	3823 010-162	5638 024-03	5541 030-03	5513 020-14
C6	5252 010-04	3213 010-410	3111 050-715	3823 010-183	5638 024-04	5541 030-04	5513 020-14
	8	9	10	11	12	13	14
Size	Plain bearing	Cam shaft	Screw	Plug	Torque wrench <sup>1)</sup>	Compression spring	Draw bar set
C3	5638 022-01	5333 025-01	3214 010-355	3611 005-180	BT-TK-02	5561 001-71	5461 100-101
C4	5638 022-02	5333 025-02	3214 010-355	3611 005-180	C-TK-01	5561 001-41	5461 100-111
C5	5638 022-03	5333 025-03	3214 010-355	3611 005-180	C-TK-01	5561 001-41	5461 100-121
C6	5638 022-04	5333 025-04	3214 010-355	3611 005-140	C-TK-01	5561 001-41	5461 100-131
Draw bar set parts							
	14a	14b	14c	14d	14e	14f	14g
Size	Spiral retaining ring	Holder set (set of 2)	Segment (set of 6)	O-ring	Flat wire spring	O-ring	Compression spring
C3	5545 039-01	5546 001-16	5549 120-08	5641 005-01	5561 015-02	5641 005-15	5561 001-81
C4	5545 039-03	5546 001-20	5549 120-06	5641 005-05	5561 015-03	5641 005-19	5561 001-82
C5	5545 039-02	5546 001-17	5549 120-07	5641 005-06	5561 015-04	5641 005-16	5561 001-83
C6	5545 039-04	5546 001-18	5549 120-04	5641 005-04	5561 015-05	5641 005-17	5561 001-83

<sup>1)</sup> Accessories, must be ordered separately

## Manually operated clamping units

CDI straight  
R/LCE80-028 082

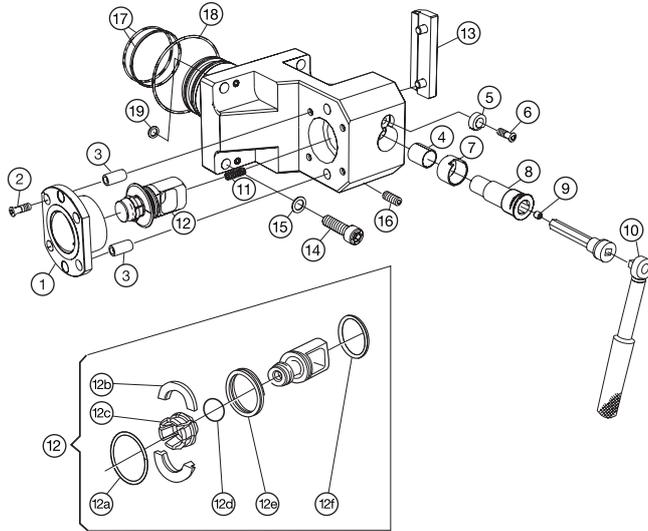
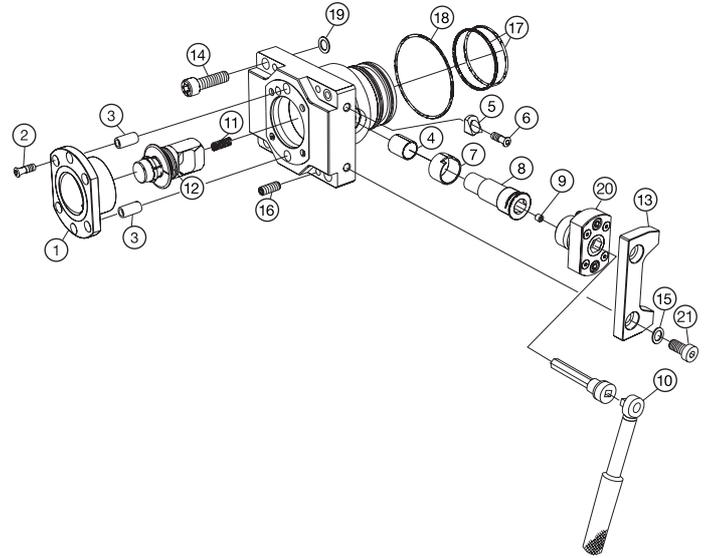
CDI straight double  
R/LCE80-028 082-2



	1	2	3	4	5	6	7
Type	Sleeve	Screw (4 x)	Plain bearing	Locking washer	Screw	Plain bearing	Cam shaft
C5-R/LCE80-028082	5252 015-03	5513 020-14	3823 010-162	5541 030-03	5513 020-14	5638 022-03	5333 025-03
C5-R/LCE80-028082-2	5252 015-03	5513 020-14	3823 010-162	5541 030-03	5513 020-14	5638 022-03	5333 025-03
	8	9	10	11			
Type	Screw	Torque wrench <sup>1)</sup>	Compression spring	Draw bar set			
C5-R/LCE80-028082	3214 010-355	C-TK-01	5561 001-41	5461 100-121 (1x)			
C5-R/LCE80-028082-2	3214 010-355	C-TK-01	5561 001-41	5461 100-121 (2x)			
	Draw bar set parts						
	11a	11b	11c	11d	11e	11f	
Type	Spiral retaining ring	Holder set (set of 2)	Segment (set of 6)	O-ring	Flat wire spring	O-ring	
C5-R/LCE80-028082	5545 039-02	5546 001-17	5549 120-07	5641 005-06	5561 015-04	5641 005-16	
C5-R/LCE80-028082-2	5545 039-02	5546 001-17	5549 120-07	5641 005-06	5561 015-04	5641 005-16	
	12	13	14	15			
Type	Adjustment plate	Cap screw (4x)	Locking washer (4x)	Set screw (4x)			
C5-R/LCE80-028082	5336 002-02	3212 010-471	5541 041-02	3214 010-418			
C5-R/LCE80-028082-2	5336 002-01	3212 010-471	5541 041-02	3214 010-418			
	16	17	18				
Type	O-ring	O-ring	Kantseal (2x)				
C5-R/LCE80-028082	5641 005-104	5641 001-79	5641 070-04				
C5-R/LCE80-028082-2	5641 005-104	5641 001-79	5641 070-04				

<sup>1)</sup> Accessories, must be ordered separately

## Manually operated clamping units

**CDI angled**  
**R/LCI80-000110**

**CDI straight**  
**R/LCE040000**


	1	2	3	4	5	6
Type	Sleeve	Screw (4 x)	Parallel pin	Plain bearing	Locking washer	Screw
C5-R/LCI80-000110	5252 010-03	5513 020-14	3111 050-661	3823 010-162	5541 030-03	5513 020-14
C5-R/LCE80-040000	5252 010-03	5513 020-14	3111 050-661	3823 010-162	5541 030-10	5513 020-14
	7	8	9	10	11	12
Type	Plain bearing	Cam shaft	Screw	Torque wrench <sup>1)</sup>	Compression spring	Draw bar set
C5-R/LCI80-000110	5638 022-03	5333 025-03	3214 010-355	C-TK-01	5561 001-41	5461 100-121
C5-R/LCE80-040000	5638 022-03	5333 025-03	3214 010-355	C-TK-01	5561 001-41	5461 100-121
	Draw bar set parts					
	12a	12b	12c	12d	12e	12f
Type	Spiral retaining ring	Holder set (set of 2)	Segment (set of 6)	O-ring	Flat wire spring	O-ring
C5-R/LCI80-000110	5545 039-02	5546 001-17	5549 120-07	5641 005-06	5561 015-04	5641 005-16
C5-R/LCE80-040000	5545 039-02	5546 001-17	5549 120-07	5641 005-06	5561 015-04	5641 005-16
	13	14	15	16		
Type	Adjustment plate	Cap screw (4x)	Locking washer	Set screw (4x)		
C5-R/LCI80-000110	5336 002-02	3212 010-463	5541 041-02 (4x)	3214 010-410		
C5-R/LCE80-040000	5336 001-01	3212 010-463	5541 041-01 (2x)	3214 010-410		
	17	18	19	20	21	
Type	O-ring	O-ring	Kantseal (2x)	Adaptor	Screw (2x)	
C5-R/LCI80-000110	5641 005-104	5641 001-79	5641 070-04	-	-	
C5-R/LCE80-040000	5641 005-104	5641 001-79	5641 070-04	5253 006-03	5512 060-24	

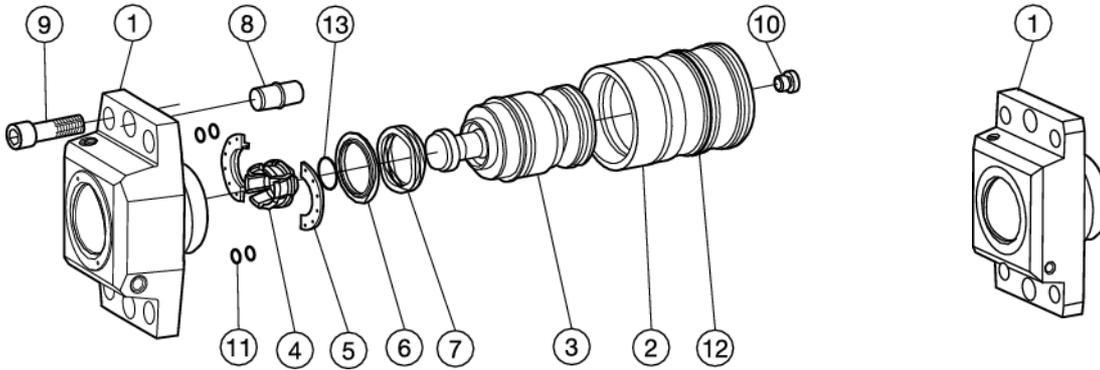
<sup>1)</sup> Accessories, must be ordered separately

A  
General Turning  
B  
Parting and Grooving  
C  
Threading  
G  
Tooling systems  
H  
Multi-task machining  
I  
CoroTurn® SL  
J  
General information

# Hydraulically operated clamping units

Type 5010

Straight design



NC5010

NC5000

### Clamping unit NC5010

To be able to maintain the min. bore, the new clamping unit has a modified front and hole pattern, which means that NC5010 and NC5000 not are interchangeable.

Spare parts for NC5000 are the same as for NC5010 except for part 1, the front.

### Straight design

	1 NC5010	2 NC5010/NC5000	3	4	5	6	7
Size	Front	Barrel	Clamping mechanism	Segment (set of 6)	Holder set (set of 2)	Ring	Flat wire spring
C4	5252 033-11	5257 001-01	5651 065-01	5549 120-06	5546 001-14	5541 024-01	5561 012-01
C5	5252 033-12	5257 001-02	5651 065-02	5549 120-07	5546 001-11	5541 024-02	5561 012-02
C6	5252 033-13	5257 001-03	5651 065-03	5549 120-04	5546 001-09	5541 024-03	5561 012-03
C8	5252 033-14	5257 001-04	5651 065-04	5549 120-05	5546 001-10	5541 024-04	5561 012-04
C8X	5252 033-15	5257 001-04	5651 065-04	5549 120-05	5546 001-10	5541 024-04	5561 012-04
C10	5252 033-16	5257 001-05	5651 065-05	5549 120-09	5546 001-13	5541 025-04	5561 012-04
	8	9	10	11	12	13	1 NC5000
Size	Dowel	Screw (4 x)	Plug	O-ring (6 x)	O-ring (3 x)	O-ring	Front
C4	5552 055-02	3212 010-411	3611 007-180	3671 010-112	5641 001-21	5641 005-05	5252 030-11
C5	5552 055-03	3212 010-462	3611 007-180	3671 010-112	3671 010-134	5641 005-06	5252 030-12
C6	5552 055-04	3212 010-514	3611 007-180	3671 010-114	3671 010-137	5641 005-04	5252 030-13
C8	5552 055-05	3212 010-514	3611 007-180	3671 010-116	3671 010-141	5641 005-04	5252 030-14
C8X	5552 055-05	3212 010-514	3611 007-180	3671 010-116	3671 010-141	5641 005-04	
C10	5552 055-07	3212 010-616	3611 007-180	3671 010-019	5641 010-141	5641 005-95	

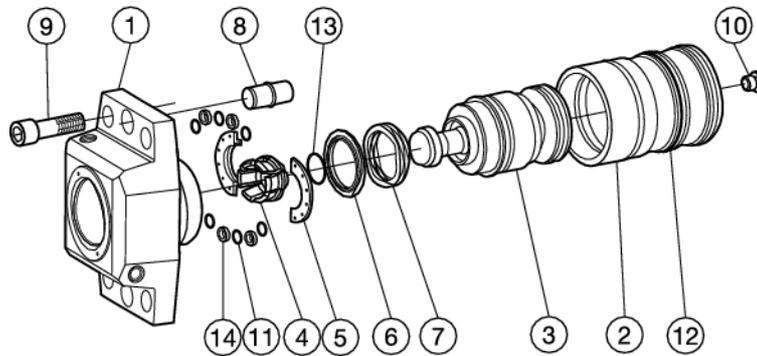
NC5000 units can be ordered as specials. Contact your local Sandvik Coromant representative

## Hydraulically operated clamping units with probe contact

Jetbreak™

Type 5210

Straight design



Straight design

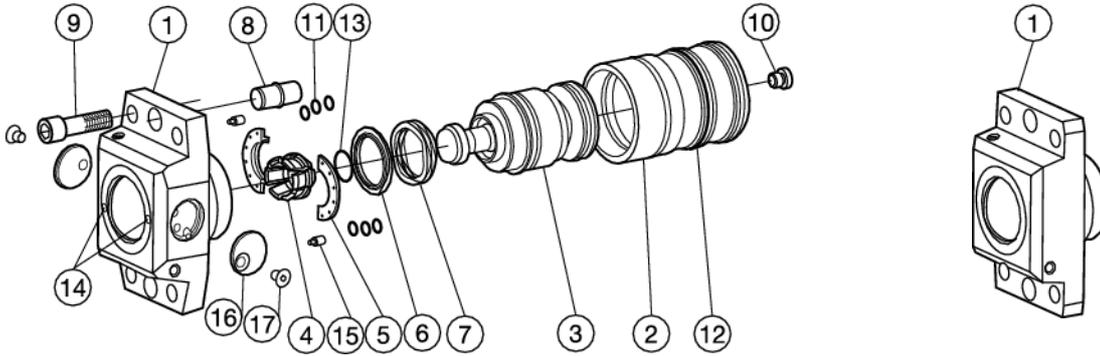
	1	2	3	4	5	6	7
Size	Front	Barrel	Clamping mechanism	Segment (set of 6)	Holder set (set of 2)	Ring	Flat wire spring
C5	5252 034-12	5257 001-02	5651 065-02	5549 120-07	5546 001-11	5541 024-02	5561 012-02
C6	5252 034-13	5257 001-03	5651 065-03	5549 120-04	5546 001-09	5541 024-03	5561 012-03
C8	5252 034-14	5257 001-04	5651 065-04	5549 120-05	5546 001-10	5541 024-04	5561 012-04

	8	9	10	11	12	13	14
Size	Dowel	Screw (4 x)	Plug	O-ring (6 x)	O-ring (3 x)	O-ring	Sealing (4 x)
C5	5552 055-03	3212 010-462	3611 007-180	3671 010-112	3671 010-134	5641 005-06	5641 070-01
C6	5552 055-04	3212 010-514	3611 007-180	3671 010-114	3671 010-137	5641 005-04	5641 070-04
C8	5552 055-05	3212 010-514	3611 007-180	3671 010-116	3671 010-141	5641 005-04	5641 070-03

# Hydraulically operated clamping units with probe contact

## Type 5110



NC5110

NC5100

### Clamping unit NC5110

To be able to maintain the min. bore, the new clamping unit has a modified front and hole pattern, which means that NC5110 and NC5100 not are interchangeable.

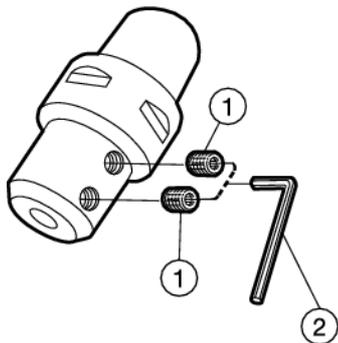
Spare parts for NC5100 are the same as for NC5110 except for part 1, the front.

	1 NC5110	2 NC5110/NC5100	3	4	5	6	7
Size	Front	Barrel	Clamping mechanism	Segment (set of 6)	Holder set (set of 2)	Ring	Flat wire spring
C4	5252 035-11	5257 001-01	5651 065-01	5549 120-06	5546 001-14	5541 024-01	5561 012-01
C5	5252 035-12	5257 001-02	5651 065-02	5549 120-07	5546 001-11	5541 024-02	5561 012-02
C6	5252 035-13	5257 001-03	5651 065-03	5549 120-04	5546 001-09	5541 024-03	5561 012-03
C8	5252 035-14	5257 001-04	5651 065-04	5549 120-05	5546 001-10	5541 024-04	5561 012-04
	8	9	10	11	12	13	14
Size	Dowel	Screw (4 x)	Plug	O-ring (6 x)	O-ring (3 x)	O-ring	Static contact
C4	5252 055-02	3212 010-411	3611 007-180	3671 010-112	5641 001-21	5641 005-05	BT-CS-01
C5	5252 055-03	3212 010-462	3611 007-180	3671 010-112	3671 010-134	5641 005-06	BT-CS-01
C6	5252 055-04	3212 010-514	3611 007-180	3671 010-114	3671 010-137	5641 005-04	BT-CS-01
C8	5252 055-05	3212 010-514	3611 007-180	3671 010-116	3671 010-141	5641 005-04	BT-CS-01
	15	16	17	1 NC5100 Front			
Size	Static contact	Cover	Screw				
C4	BT-SCU-01	5643 021-01	3213 011-255	5252 031-11			
C5	BT-SCU-01	-	-	5252 031-12			
C6	BT-SCU-01	-	-	5252 031-13			
C8	BT-SCU-01	-	-	5252 031-14			

A General Turning  
 B Parting and Grooving  
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 G Tooling systems  
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 I CoroTurn® SL  
 J General information

## Adaptor for solid boring bars

Cx-131

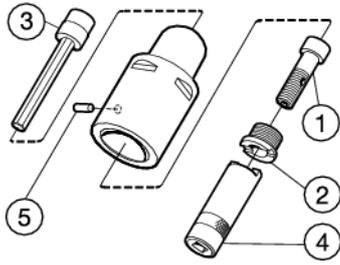


	1	2	
	Screw	Key inch/mm	
<b>Metric</b>	Screw codes		
C3-131-00035-10	5514 020-04	174.1-864	3.0
C3-131-00040-12	5514 020-04	174.1-864	3.0
C4-131-00040-10	5514 020-04	174.1-864	3.0
C4-131-00045-12	5514 020-04	174.1-864	3.0
C4-131-00050-16	5514 020-02	3021 010-040	4.0
C5-131-00045-10	5514 020-04	174.1-864	3.0
C5-131-00045-12	5514 020-04	174.1-864	3.0
C5-131-00055-16	5514 020-02	3021 010-040	4.0
<b>Inch</b>	Screw specification <sup>1)</sup>		
C3-131-00050-250	10-32UNF x .500	265.2-818	3/32
C3-131-00050-500	1/4-2832UNF x .500	174.1-871	1/8
C3-131-00050-625	3/8-2432UNF x .500	174.1-872	3/16
C4-131-00050-250	10-32UNF x .500	265.2-818	3/32
C4-131-00050-375	1/4-28UNF x .500	174.1-871	1/8
C4-131-00050-500	1/4-28UNF x .500	174.1-871	1/8
C4-131-00050-625	3/8-24UNF x .500	174.1-872	3/16
C4-131-00060-750	3/8-24UNF x .500	174.1-872	3/16
C4-131-00091-1000	M10-1.5 x 25	3021 010-050	5.0
C5-131-00060-375	1/4-28UNF x .500	174.1-871	1/8
C5-131-00060-500	1/4-28UNF x .500	174.1-871	1/8
C5-131-00060-625	3/8-24UNF x .500	174.1-872	3/16
C5-131-00060-750	3/8-24UNF x .500	174.1-872	3/16
C5-131-00070-1000	1/2-20UNF x .500	174.1-873	1/4
C5-131-00115-1500	M10-1.5 x 25	3021 010-050	5.0
C6-131-00065-375	1/4-28UNF x .500	174.1-871	1/8
C6-131-00065-500	1/4-28UNF x .500	174.1-871	1/8
C6-131-00065-625	3/8-24UNF x .500	174.1-872	3/16
C6-131-00065-750	3/8-24UNF x .500	174.1-872	3/16
C6-131-00075-1000	1/2-20UNF x .500	174.1-873	1/4
C6-131-00105-1500	M10-1.5 x 25	3021 010-050	5.0

<sup>1)</sup> Standard screws to be purchased from outside vendor.

## Extension/reduction adaptors

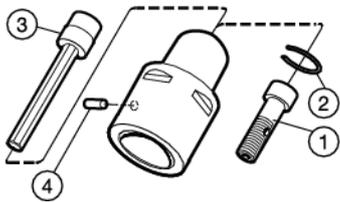
Cx-391.01A/ Cx-391.01HD  
Cx-391.02/ Cx-391.02HD



	1	2	3 <sup>1)</sup>	4 <sup>1)</sup>	5
	Centre screw	Retaining ring	Extension key (mm)	Key	Pin
C3-391.01-32 xxxA	5512 067-01	5512 091-04	5680 015-05 (8.0)	5680 065-13	3113 020-304
C4-391.01-40 xxxA	5512 067-02	5512 091-03	5680 015-05 (8.0)	5680 065-10	3113 020-355
C5-391.01-50 xxxA	5512 067-03	5512 091-01	5680 015-01 (10.0)	5680 065-11	3113 020-406
C6-391.01-63 xxxA	5512 067-04	5512 091-02	5680 015-02 (14.0)	5680 065-12	3113 020-457
C8-391.01-80 xxxA	5512 067-04	5512 091-02	5680 015-02 (14.0)	5680 065-12	3113 020-509
C8x-391.01-100 xxx	5512 067-04	5512 091-02	5680 015-02 (14.0)	5680 065-12	3113 020-509
C4-391.02-32 055A	5512 067-01	5512 091-04	5680 015-05 (8.0)	5680 065-13	3113 020-304
C4-391.02-32 070A	5512 067-01	5512 091-04	5680 015-05 (8.0)	5680 065-13	3113 020-304
C5-391.02-32 060A	5512 067-01	5512 091-04	5680 015-05 (8.0)	5680 065-13	3113 020-304
C5-391.02-40 065A	5512 067-02	5512 091-03	5680 015-05 (8.0)	5680 065-10	3113 020-355
C5-391.02-40 085A	5512 067-02	5512 091-03	5680 015-05 (8.0)	5680 065-10	3113 020-355
C6-391.02-32 070A	5512 067-01	5512 091-04	5680 015-05 (8.0)	5680 065-13	3113 020-304
C6-391.02-40 080A	5512 067-02	5512 091-03	5680 015-05 (8.0)	5680 065-10	3113 020-355
C6-391.02-50 080A	5512 067-03	5512 091-01	5680 015-01 (10.0)	5680 065-11	3113 020-406
C6-391.02-50 110A	5512 067-03	5512 091-01	5680 015-01 (10.0)	5680 065-11	3113 020-406
C8-391.02-32 060A	5512 067-01	5512 091-04	5680 015-05 (8.0)	5680 065-13	3113 020-304
C8-391.02-40 070A	5512 067-02	5512 091-03	5680 015-05 (8.0)	5680 065-10	3113 020-355
C8-391.02-50 080A	5512 067-03	5512 091-01	5680 015-01 (10.0)	5680 065-11	3113 020-406
C8-391.02-63 080A	5512 067-04	5512 091-02	5680 015-02 (14.0)	5680 065-12	3113 020-457
C8-391.02-63 120A	5512 067-04	5512 091-02	5680 015-02 (14.0)	5680 065-12	3113 020-457
C8X-391.02-63 080	5512 067-04	5512 091-02	5680 015-02 (14.0)	5680 065-12	3113 020-457
C8X-391.02-63 100	5512 067-04	5512 091-02	5680 015-02 (14.0)	5680 065-12	3113 020-509
C8X-391.02-80 150	5512 067-04	5512 091-02	5680 015-02 (14.0)	5680 065-12	3113 020-509
C10-391.01-100 140	5512 063- 14	5512 091-05	5680 015-06 (17)	5680 065-14	3113 020-561
C10-391.02- 63 095	5512 067- 04	5512 091-02	5680 015-02 (14.0)	5680 065-12	3113 020-457
C10-391.01-80 100	5512 067- 04	5512 091-02	5680 015-02 (14.0)	5680 065-12	3113 020-509

<sup>1)</sup> Accessories, must be ordered separately

Short version  
Cx-391.01/ Cx-391.02  
Cx-391.01R/Cx-391.02R

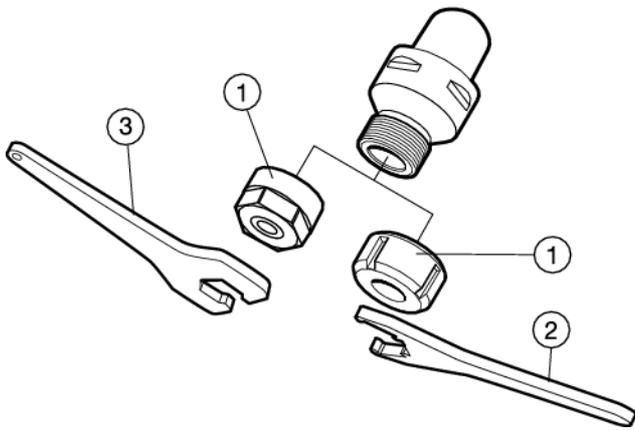


	1	2	3 <sup>1)</sup>	4
	Centre screw	Retaining ring	Extension key (mm)	Pin
C3-391.01-32 035	5512 068-01	5545 040-02	5680 015-05 ( 8.0)	3113 020-304
C4-391.01-40 040	5512 068-02	5545 040-03	5680 015-05 ( 8.0)	3113 020-355
C5-391.01-50 050	5512 068-03	5545 040-07	5680 015-05 ( 8.0)	3113 020-406
C6-391.01-63 060	5512 068-04	5545 040-08	5680 015-02 (14.0)	3113 020-457
C8-391.01-80 065	5512 068-05	5545 040-08	5680 015-02 (14.0)	3113 020-509
C5-391.02-32 033	5512 068-01	5545 040-02	5680 015-05 ( 8.0)	-
C5-391.02-40 040	5512 068-06	5545 040-07	5680 015-05 ( 8.0)	-
C6-391.02-32 032	5512 068-01	5545 040-02	5680 015-05 ( 8.0)	-
C6-391.02-40 040	5512 068-02	5545 040-03	5680 015-05 ( 8.0)	-
C6-391.02-50 050	5512 068-07	5545 040-08	5680 015-01 (10.0)	-
C8-391.02-50 045	5512 068-08	5545 040-08	5680 015-01 (10.0)	-
C8-391.02-63 055	5512 068-05	5545 040-08	5680 015-02 (14.0)	-
C8X-391.02-63 055	5512 068-05	5545 040-08	5680 015-02 (14.0)	-
C8X-391.02-80 065	5512 068-05	5545 040-08	5680 015-02 (14.0)	-
C10-391.02-63 055	5512 068-05	5545 040-08	5680 015-02 (14.0)	3113 020-457
C10-391.02-80 065	5512 068-05	5545 040-08	5680 015-05 (8.0)	3113 020-509
C5-391.01R-50 050	5512 068-03	5545 040-07	5680 015-02 (14.0)	3113 020-409
C8-391.01R-63 060	5512 068-04	5545 040-08	5680 015-02 (14.0)	3113 020-457
C8-391.01R-80 065	5512 068-05	5545 040-08	5680 015-02 (14.0)	3113 020-509
C8-391.02R-63 055	5512 068-05	5545 040-08	5680 015-02 (14.0)	-

<sup>1)</sup> Accessories, must be ordered separately

## Collet chuck adaptors

Cx-391.14



	1	2 <sup>1)</sup>	3 <sup>1)</sup>
	Locking nut	Wrench	Wrench
Cx-391.14-16 xxx	5533 050-06	-	5680 091-01
Cx-391.14-20 xxx	5533 050-08	-	5680 091-02
Cx-391.14-25 xxx	5533 050-02	5680 096-02	-
Cx-391.14-32 xxx	5533 050-03	5680 096-03	-
Cx-391.14-40 xxx	5533 050-04	5680 096-04	-
Cx-391.14-50 xxx	5533 050-05	5680 096-05	-

<sup>1)</sup> Accessories, must be ordered separately

A

General Turning

B

Parting and Grooving

C

Threading

G

Tooling systems

H

Multi-task machining

I

CoroTurn® SL

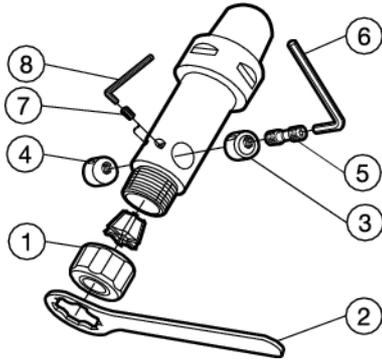
J

General information

## Tap adaptors

Cx-391.60A

Cx-391.60B

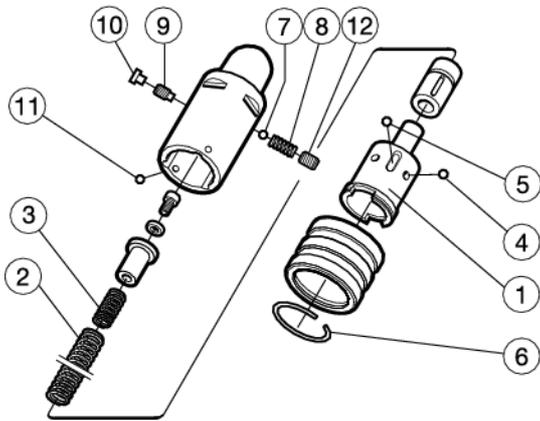


	1	2 <sup>1)</sup>	3	4
Cx-391.60A- Cx-391.60B-	Locking nut	Wrench	Jaw right	Jaw left
01 xxx	391.60A-OZ 3158	5680 090-01	5412 093-01	5412 093-02
02 xxx	391.60A-OZ 3159	5680 090-02	5412 093-01	5412 093-02
03 xxx	391.60A-OZ N460	5680 092-01	5412 093-03	5412 093-04
	5	6 <sup>1)</sup>	7	8 <sup>1)</sup>
Cx-391.60A- Cx-391.60B-	Adjusting screw	Key for jaws (mm)	Socket screw	Key (mm)
01 xxx	5516 050-01	3021 010-040 (4.0)	3214 020-255	174.1-870 (2.0)
02 xxx	5516 050-01	3021 010-040 (4.0)	3214 020-255	174.1-870 (2.0)
03 xxx	5516 050-02	3021 010-050 (5.0)	3214 020-305	174.1-863 (2.5)

1) Accessories, must be ordered separately

## Set of spare parts

391.60/392.41060/393.2060



- |                       |                         |
|-----------------------|-------------------------|
| 1. Barrel             | 7. Ball                 |
| 2. Compression spring | 8. Compression spring   |
| 3. Compression spring | 9. Stop screw           |
| 4. Ball               | 10. Plastic plug        |
| 5. Ball               | 11. Clamp ring (size 1) |
| 6. Circlip            | 12. Screw               |

	Adaptor size		
	393.2060-xx01	393.2060-xx02	393.2060-xx03
	392.41060-xx01	392.41060-xx02	392.41060-xx03
	Cx-391.60/61-01	Cx-391.60/61-02	Cx-391.60/61-03
Barrel	5638 055-01	5638 055-02	5638 055-03
Complete spare part set items 2-12	5471 020-01	5471 020-02	5471 020-03

For technical information, see Metalcutting Technical guide.