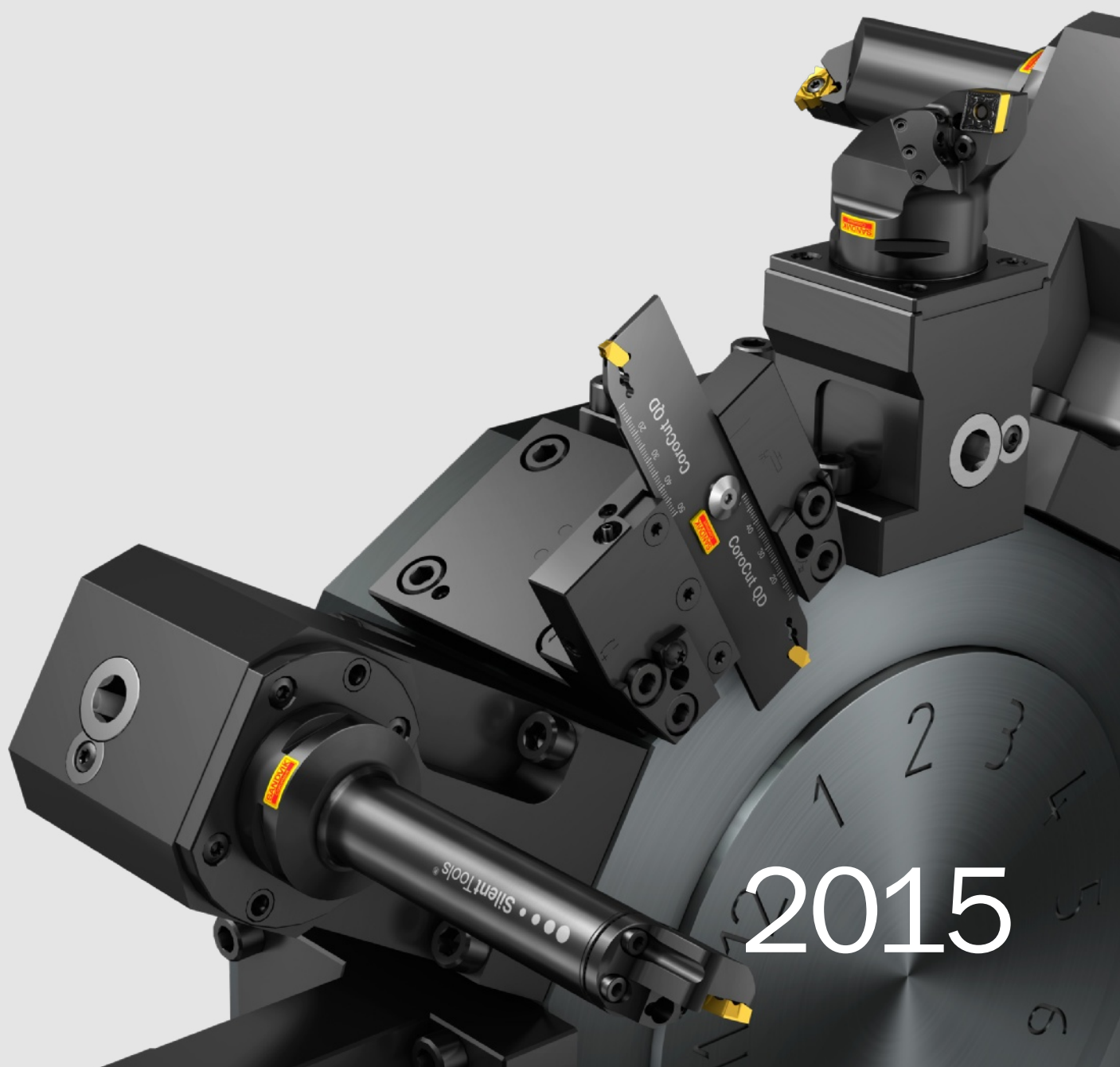


Turning tools

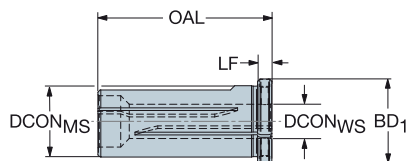
GENERAL TURNING
PARTING AND GROOVING
THREAD TURNING
MULTIFUNCTIONAL TOOLS
TOOL HOLDING
TURNING TOOL ADAPTORS



Cylindrical sleeve with Easy-Fix positioning

ISO 9766

Metallic sealed for high pressure coolant through tool



Metric version

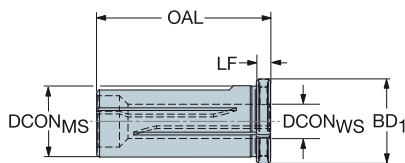
		Dimensions, mm					
CZC _{MS}	CZC _{WS}	Ordering code	DCON _{MS}	DCON _{WS}	LF	OAL	BD ₁
20	5	EF-20-05	20	5	5	55	25
	6	EF-20-06	20	6	5	55	25
	8	EF-20-08	20	8	5	55	25
	10	EF-20-10	20	10	5	55	25
	12	EF-20-12	20	12	5	55	25
25	5	EF-25-05	25	5	5	61	30
	6	EF-25-06	25	6	5	61	30
	8	EF-25-08	25	8	5	61	30
	10	EF-25-10	25	10	5	61	30
	12	EF-25-12	25	12	5	61	30
32	16	EF-25-16	25	16	5	61	30
	5	EF-32-05	32	5	5	65	36
	6	EF-32-06	32	6	5	65	36
	8	EF-32-08	32	8	5	65	36
	10	EF-32-10	32	10	5	65	36
40	12	EF-32-12	32	12	5	65	36
	16	EF-32-16	32	16	5	65	36
	20	EF-32-20	32	20	5	65	36
	5	EF-40-05	40	5	5	75	44
	6	EF-40-06	40	6	5	75	44
	8	EF-40-08	40	8	5	75	44
	10	EF-40-10	40	10	5	75	44
	12	EF-40-12	40	12	5	75	44
	16	EF-40-16	40	16	5	75	44
	20	EF-40-20	40	20	5	75	44
	25	EF-40-25	40	25	5	75	44

To be used with ISO 9766 adaptors, see rotating catalogue.

Cylindrical sleeve with Easy-Fix positioning

ISO 9766

Metallic sealed for high pressure coolant through tool



Inch version

			Dimensions, inch				
CZC _{MS}	CZC _{WS}	Ordering code	DCON _{MS}	DCON _{WS}	LF	OAL	BD ₁
1	1/4	EF-A16-A04	1.000	.250	.197	2.401	1.181
	5/16	EF-A16-A05	1.000	.312	.197	2.401	1.181
	3/8	EF-A16-A06	1.000	.375	.197	2.401	1.181
	1/2	EF-A16-A08	1.000	.500	.197	2.401	1.181
	5/8	EF-A16-A10	1.000	.625	.197	2.401	1.181
1 1/4	1/4	EF-A20-A04	1.250	.250	.197	2.559	1.417
	5/16	EF-A20-A05	1.250	.312	.197	2.559	1.417
	3/8	EF-A20-A06	1.250	.375	.197	2.559	1.417
	1/2	EF-A20-A08	1.250	.500	.197	2.559	1.417
	5/8	EF-A20-A10	1.250	.625	.197	2.559	1.417
1 1/2	3/4	EF-A20-A12	1.250	.750	.197	2.559	1.417
	1/4	EF-A24-A04	1.500	.250	.197	2.952	1.732
	5/16	EF-A24-A05	1.500	.312	.197	2.952	1.732
	3/8	EF-A24-A06	1.500	.375	.197	2.952	1.732
	1/2	EF-A24-A08	1.500	.500	.197	2.952	1.732
	5/8	EF-A24-A10	1.500	.625	.197	2.952	1.732
	3/4	EF-A24-A12	1.500	.750	.197	2.952	1.732
	1	EF-A24-A16	1.500	1.000	.197	2.952	1.732

To be used with ISO 9766 adaptors, see rotating catalogue.

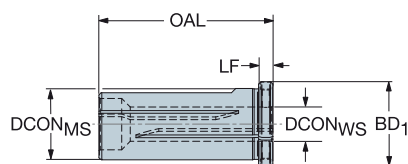


I1

Cylindrical sleeve with Easy-Fix positioning

Cylindrical sleeves for metric bars

132L...-B



CZC_{MS} metric - CZC_{WS} metric

			Dimensions, mm					
CZC _{MS}	CZC _{WS}	Ordering code	DCON _{MS}	DCON _{WS}	LF	OAL	BD ₁	
12	5	132L-1205050-B	12	5	5	55	25	
16	5	132L-1605050-B	16	5	5	55	31	
20	5	132L-2005050-B	20	5	5	55	26	
	6	132L-2006050-B	20	6	5	55	26	
	8	132L-2008050-B	20	8	5	55	26	
	10	132L-2010050-B	20	10	5	55	26	
22	12	132L-2012050-B	20	12	5	55	26	
	5	132L-2205050-B	22	5	5	55	28	
	6	132L-2206050-B	22	6	5	55	28	
	8	132L-2208050-B	22	8	5	55	28	
	10	132L-2210050-B	22	10	5	55	28	
25	12	132L-2212050-B	22	12	5	55	28	
	5	132L-2505085-B	25	5	5	85	31	
32	5	132L-3205085-B	32	5	5	85	38	
	6	132L-3206085-B	32	6	5	85	38	
	8	132L-3208085-B	32	8	5	85	38	
	10	132L-3210085-B	32	10	5	85	38	
	12	132L-3212085-B	32	12	5	85	38	
	16	132L-3216085-B	32	16	5	85	38	
40	20	132L-3220085-B	32	20	5	85	38	
	6	132L-4006105-B	40	6	5	105	46	
	8	132L-4008105-B	40	8	5	105	46	
	10	132L-4010105-B	40	10	5	105	46	
	12	132L-4012105-B	40	12	5	105	46	
	16	132L-4016105-B	40	16	5	105	46	
50	20	132L-4020105-B	40	20	5	105	46	
	25	132L-4025105-B	40	25	5	105	46	
	12	132L-5012125-B	50	12	5	125	56	
	16	132L-5016125-B	50	16	5	125	56	
	20	132L-5020125-B	50	20	5	125	56	
	25	132L-5025125-B	50	25	5	125	56	

CZC_{MS} metric - CZC_{WS} metric

ISO 9766

			Dimensions, mm					
CZC _{MS}	CZC _{WS}	Ordering code	DCON _{MS}	DCON _{WS}	LF	OAL	BD ₁	
25	6	132L-2506-B	25	6	5	61	31	
	8	132L-2508-B	25	8	5	61	31	
	10	132L-2510-B	25	10	5	61	31	
	12	132L-2512-B	25	12	5	61	31	
40	16	132L-2516-B	25	16	5	61	31	
	20	132L-4020-B	40	20	5	75	46	
	25	132L-4025-B	40	25	5	75	46	

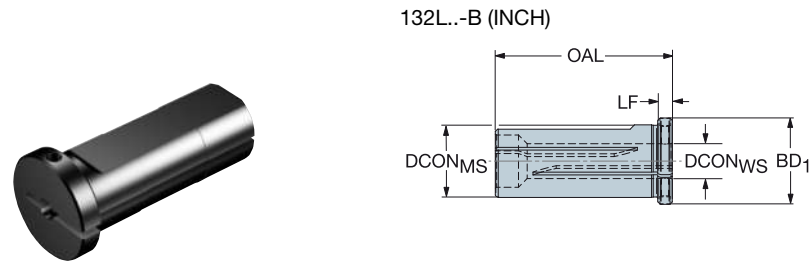
Groove for EasyFix sleeve is available on all cylindrical boring bars in diameter 5-25 mm (.197-1.000 inch)



I1

Cylindrical sleeve with Easy-Fix positioning

Cylindrical sleeves for metric bars



CZC_{MS} inch - CZC_{WS} metric

			Dimensions, inch					
CZC _{MS}	CZC _{WS}	Ordering code	DCON _{MS}	DCON _{WS}	LF	OAL	BD ₁	
1	6	132L-1606050-B	1.000	.236	.197	2.165	1.236	
	8	132L-1608050-B	1.000	.315	.197	2.165	1.236	
	10	132L-1610050-B	1.000	.394	.197	2.165	1.236	
	12	132L-1612050-B	1.000	.472	.197	2.165	1.236	
3/4	16	132L-1616050-B	1.000	.630	.197	2.165	1.236	
	6	132L-1206050-B	.750	.236	.197	2.165	.984	
	8	132L-1208050-B	.750	.315	.197	2.165	.984	
	10	132L-1210050-B	.750	.394	.197	2.165	.984	
	12	132L-1212050-B	.750	.472	.197	2.165	.984	

Groove for EasyFix sleeve is available on all cylindrical boring bars in diameter 5-25 mm (.197-1.000 inch)

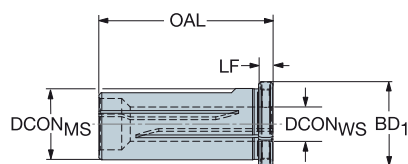


I1

Cylindrical sleeve with Easy-Fix positioning

Cylindrical sleeves for inch bars

132P.-B



CZC_{MS} inch - CZC_{WS} inch

			Dimensions, inch				
CZC _{MS}	CZC _{WS}	Ordering code	DCON _{MS}	DCON _{WS}	LF	OAL	BD ₁
1	3/16	132P-160333-B	1.000	.187	.197	3.346	1.236
	1/4	132P-160433-B	1.000	.250	.197	3.346	1.236
	5/16	132P-160533-B	1.000	.313	.197	3.346	1.236
	3/8	132P-160633-B	1.000	.375	.197	3.346	1.236
	1/2	132P-160833-B	1.000	.500	.197	3.346	1.236
	5/8	132P-161033-B	1.000	.625	.197	3.346	1.236
1 1/2	3/8	132P-240641-B	1.500	.375	.197	4.134	1.736
	1/2	132P-240841-B	1.500	.500	.197	4.134	1.736
	5/8	132P-241041-B	1.500	.625	.197	4.134	1.736
	3/4	132P-241241-B	1.500	.750	.197	4.134	1.736
	1	132P-241641-B	1.500	1.000	.197	4.134	1.736
1 1/4	5/16	132P-200533-B	1.250	.313	.197	3.346	1.488
	3/8	132P-200633-B	1.250	.375	.197	3.346	1.488
	1/2	132P-200833-B	1.250	.500	.197	3.346	1.488
	5/8	132P-201033-B	1.250	.625	.197	3.346	1.488
	3/4	132P-201233-B	1.250	.750	.197	3.346	1.488
2	1/2	132P-320849-B	2.000	.500	.197	4.921	2.236
	5/8	132P-321049-B	2.000	.625	.197	4.921	2.236
	3/4	132P-321249-B	2.000	.750	.197	4.921	2.236
	1	132P-321649-B	2.000	1.000	.197	4.921	2.236

CZC_{MS} metric - CZC_{WS} inch

ISO 9766

			Dimensions, mm				
CZC _{MS}	CZC _{WS}	Ordering code	DCON _{MS}	DCON _{WS}	LF	OAL	BD ₁
25	3/16	132P-25A03-B	25	4	5	61	31
	1/4	132P-25A04-B	25	6	5	61	31
	5/16	132P-25A05-B	25	7	5	61	31
	3/8	132P-25A06-B	25	9	5	61	31
	1/2	132P-25A08-B	25	12	5	61	31
	5/8	132P-25A10-B	25	15	5	61	31
32	5/16	132P-32A05-B	32	7	5	65	38
	3/8	132P-32A06-B	32	9	5	65	38
	1/2	132P-32A08-B	32	12	5	65	38
	5/8	132P-32A10-B	32	15	5	65	38
	3/4	132P-32A12-B	32	19	5	65	38

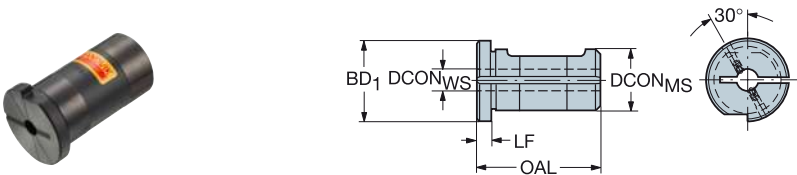
Groove for EasyFix sleeve is available on all cylindrical boring bars in diameter 5-25 mm (.197-1.000 inch)



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Cylindrical sleeve with Easy-Fix positioning

132W- (Whistle Notch) for metric bars
EasyFix



Metric version

			Dimensions, mm					
CZC _{MS}	CZC _{WS}	Ordering code	DCON _{MS}	DCON _{WS}	LF	OAL	BD ₁	
25	5	132W-2505-B	25	5	5	50	31	
	6	132W-2506-B	25	6	5	50	31	
	8	132W-2508-B	25	8	5	50	31	
	10	132W-2510-B	25	10	5	50	31	
	12	132W-2512-B	25	12	5	50	31	
40	16	132W-2516-B	25	16	5	50	31	
	20	132W-4020-B	40	20	5	75	46	
	25	132W-4025-B	40	25	5	75	46	

Groove for EasyFix sleeve is available on all cylindrical boring bars in diameter 5-25 mm (.197-1.000 inch)

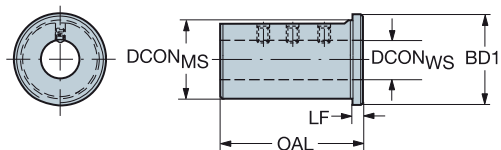
Sleeves for boring bars, 132N, can be used for all cylindrical Sandvik Coromant boring bars in diameter range 5-32 mm (.197-1.250 inch)



I1

Cylindrical sleeve

Screw down (No EasyFix)



Metric version

			Dimensions, mm				
CZC _{MS}	CZC _{WS}	Ordering code	DCON _{MS}	DCON _{WS}	LF	OAL	BD ₁
25	6	132N-2506	25	6	5	61	31
	8	132N-2508	25	8	5	61	31
	10	132N-2510	25	10	5	61	31
	12	132N-2512	25	12	5	61	31
	16	132N-2516	25	16	5	61	31
40	20	132N-2520	25	20	5	61	31
	20	132N-4020	40	20	5	75	46
	25	132N-4025	40	25	5	75	46
	32	132N-4032	40	32	5	75	46

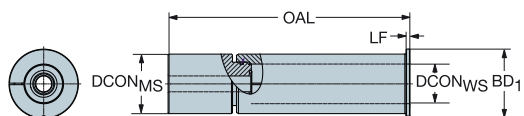
Inch version

			Dimensions, inch				
CZC _{MS}	CZC _{WS}	Ordering code	DCON _{MS}	DCON _{WS}	LF	OAL	BD ₁ "
25	1/4	132N-25A04	.984	.250	.197	2.401	1.220
	5/16	132N-25A05	.984	.312	.197	2.401	1.220
	3/8	132N-25A06	.984	.375	.197	2.401	1.220
	1/2	132N-25A08	.984	.500	.197	2.401	1.220
	5/8	132N-25A10	.984	.625	.197	2.401	1.220
40	3/4	132N-25A12	.984	.750	.197	2.401	1.220
	3/4	132N-40A12	1.575	.750	.197	2.952	1.811
	1	132N-40A16	1.575	1.000	.197	2.952	1.811
	1 1/4	132N-40A20	1.575	1.250	.197	2.952	1.811

Screw down (No EasyFix)

Cylindrical sleeve

Split boring bar holder



Metric version

			Dimensions, mm, inch					
CZC _{MS}	CZC _{WS}	Ordering code	DCON _{MS}	DCON _{WS}	LF	OAL	BD	
60	32	393.SBB-060 032	60	32	4	244	70	
	40	393.SBB-060 040	60	40	4	244	70	
	50	393.SBB-060 050	60	50	4	244	70	

Inch version

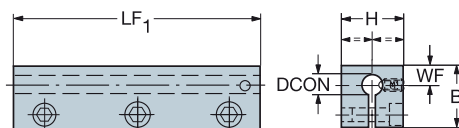
			Dimensions, inch					
CZC _{MS}	CZC _{WS}	Ordering code	DCON _{MS}	DCON _{WS}	LF	OAL	BD	
2 1/2	1 1/2	A393.SBB-250150	2.500	1.500	.157	10.157	2.913	
	1 3/4	A393.SBB-250175	2.500	1.750	.157	10.157	2.913	
	2	A393.SBB-250200	2.500	2.000	.157	10.157	2.913	



I1

Square sleeve with Easy-Fix positioning

Square sleeves



Metric version

			Dimensions, mm				
CZC _{MS}	CZC _{WS}	Ordering code	B	H	DCON	LF ₁	WF
20 x 20	5	131-2005-B	20	20	5	80	5
	6	131-2006-B	20	20	6	80	6
	8	131-2008-B	20	20	8	80	7
25 x 25	10	131-2010-B	20	20	10	80	7
	12	131-2512-B	25	25	12	80	9
32 x 40	16	131-2516-B	25	25	16	80	10
	20	131-3220-B	40	32	20	100	12
	25	131-3225-B	40	32	25	100	14

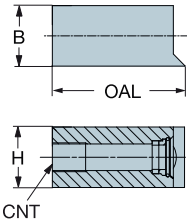
Inch version

			Dimensions, inch				
CZC _{MS}	CZC _{WS}	Ordering code	B	H	DCON	LF ₁	WF
3/4 x 3/4	3/16	131-A1203-B	.750	.750	.187	3.150	.217
	1/4	131-A1204-B	.750	.750	.250	3.150	.236
	5/16	131-A1205-B	.750	.750	.313	3.150	.276
1 x 1	3/8	131-A1206-B	.750	.750	.375	3.150	.295
	1/2	131-A1608-B	1.000	1.000	.500	3.150	.354
1 1/4 x 1 1/4	5/8	131-A1610-B	1.000	1.000	.625	3.150	.394
	3/4	131-A2012-B	1.250	1.250	.750	3.937	.453



l1

Stop for QS™ holding system



Metric version

		Dimensions, mm, inch			
CZC _{MS}	Ordering code	B	H	OAL	CNSC
10 x 10	QS-1010	10	10.0	51	0
		.394	.394	2.008	
12 x 12	QS-1212	12	12.0	51	0
		.472	.472	2.008	
16 x 16	QS-1616	16	16.0	51	0
		.630	.630	2.008	
8 x 8	QS-0808	8	8.0	40	0
		.315	.315	1.575	

CZC_{MS} to correspond with CZC_{WS} on holder



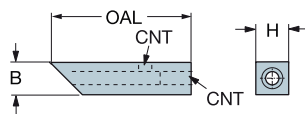
I1



I38

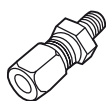
Stop for high precision coolant QST™ holding system

Citizen/Star/Nexturn

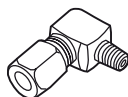


		Dimensions, mm, inch			
Ordering code	CZC _{MS}	B	H	OAL	CNT
Metric					
QS-1010HP-M	10 x 10, 10 x 12	10	10	51	M6
QS-1212HP-M	12 x 12	12	12	51	M6
QS-1616HP-M	16 x 16	16	16	51	M6
Inch					
QS-A06HP-M	3/8 x 1/2	.375	.375	2.000	M6
QS-A08HP-M	1/2 x 1/2	.500	.500	2.000	M6
QS-A10HP-M	5/8 x 5/8	.625	.625	2.000	M6

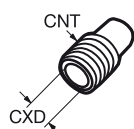
New tube connectors M6 intended for 6 mm tube diameters are introduced and to be ordered separately.



Code	Coupling
5696 001-01	Straight



5696 020-01	90°
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Optional nozzles (to be ordered separately)

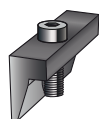
Ordering code	CXD mm	CNT
5691 026-11	0.6	M6
5691 026-12	0.8	M6
5691 026-13	1.0	M6
5691 026-14	1.2	M6
5691 026-15	1.4	M6



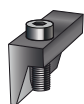
I1

Wedge for QS™ holding system

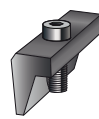
Citizen/Star/Nexturn



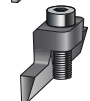
QS-10



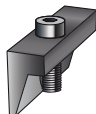
QS-351



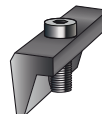
QS-230, QS230A



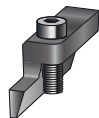
QS-20



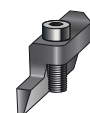
QS-352



QS-240



QS-30, QS-31,
QS-30A, QS-31A



QS-40, QS-40A

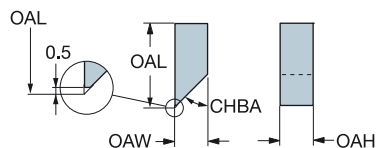


Machine type	Ordering code	Dimensions, mm, inch		
		OAL	OAW	CHBA
Citizen	Metric			
	QS-10	20	7	17°
	QS-20	37	9.9	22°
	QS-30	32	12	22°
	QS-31	32	11.3	22°
	QS-40	29	13.5	22°
	Inch			
	QS-30A	1.260	.472	22°
	QS-31A	1.260	.445	22°
	QS-40A	1.142	.531	22°
Star	Metric			
	QS-351	30	13.5	24°20'
	QS-352	35	13.5	24°20'
Nexturn	QS-230 ¹⁾	28	12.5	14°40'
	QS-240	28	13.7	14°40'
	Inch			
	QS-230A	1.102	.465	14°40'

1) Will also work on 5/8" machines.

Stop for QS™ holding system

Citizen/Star/Nexturn



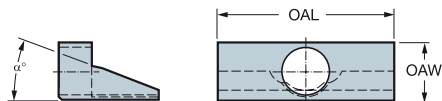
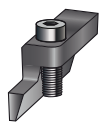
Ordering code	For shank size mm, inch	Dimensions, mm, inch		
		OAW	OAH	OAL
Metric				
QS-0808	0808	8	8	40
QS-1010	1010	10	10	51
QS-1212	1212	12	12	51
QS-1616	1616	16	16	51
Inch				
QS-A06	3/8	.375	.375	2.000
QS-A08	1/2	.500	.500	2.000
QS-A10	5/8	.625	.625	2.000



I1

Wedge for QS™ holding system

Tsugami/Hanwa



For Tsugami machines

Ordering code	Dimensions, mm, inch		
	OAL	OAW	α
QS-140HP	35	11.9	15°
QS-140	29	11.9	15°
QS-150	30	17.3	15°
QS-160	30	17.3	15°

For Hanwa machines

Ordering code	Dimensions, mm, inch		
	OAL	OAW	α
QS-410	32	11	20°
QS-450	32	15.8	20°

Wedge	MTM	Model	Shank	
			ISO metric	ANSI inch
QS-150	Tsugami	BH 38	1616	10 (5/8)
QS-160	Tsugami	BS 32/BS 20	1616	10 (5/8)
QS-140 For front position	Tsugami	S 205/S 206/S 207	1212	08 (1/2)
QS-140 HP For back position	Tsugami	S 205/S 206/S 207	1212	08 (1/2)
QS-410	Hanwa	XD 20H,J/XD 26H	1212	08 (1/2)
QS-450	Hanwa	XD 32H	1616	10 (5/8)

Note! The information above is a guide to choosing the correct tooling combinations. However, you should always perform a practical test to ensure the correct fit.

Assembly item

Tsugami/Tornos

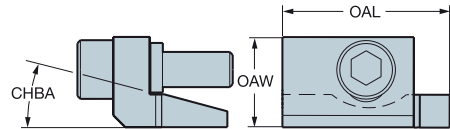
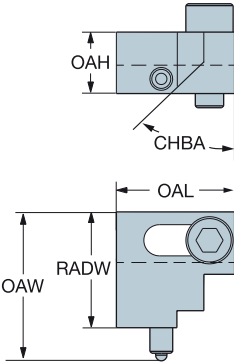
Wedge

QS-130



Stop

QS-130-12
QS-130-16



Ordering code	Dimensions, millimeter, inch (mm, in.)				
Wedge	OAW	OAW"	OAL	OAL "	CHBA
Metric					
QS-130	15.1	.594	28.0	1.102	15°
Ordering code	For shank size		Dimensions, millimeter, inch (mm, in.)		
Stop	mm (inch)		RADW	RADW"	
Metric					
QS-130-12	1212 (1/2")		24.5	.965	27.6 1.087
QS-130-16	1616 (5/8")		24.5	.965	31.5 1.241
					13.0 .512



Assembly item

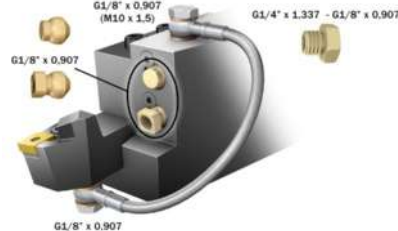
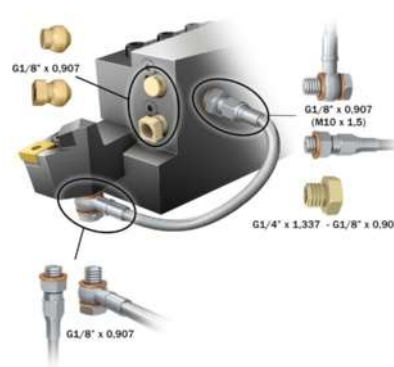
Wedge	MTM	Model	Shank	
			ISO metric	ANSI inch
QS-10	Citizen	R04/R07	0808	
QS-20	Citizen	A16,C12,K12,K16,L16,L20	1010	06
QS-30	Citizen	A20,B20,C16,C20,C32,K12,K16,L16,L20	1212	
QS-30A	Citizen	A20,B20,C16,C20,C32,K12,K16,L16,L20		08
QS-31	Citizen	L16 VIII, L720	1212	
QS-31A	Citizen	L16 VIII, L720		08
QS-40	Citizen	L32,M20,M32	1616	
QS-40A	Citizen	L32,M20,M32		10
QS-130	Tornos	Delta 12/20	1212,1616	08,10
	Tsugami	B0,BS,BU,BM,BN,BA and BW models	1212,1616	08,10
QS-230	Nexturn	SA20	1212	
QS-230A	Nexturn	SA20		08
QS-240	Nexturn	SA26	1616	10
QS-351 (For back position and front position for parting off tools)	Star	SB-16,SC20,SE12/16	1010	06
		SE16B,SR16,SR20,SR20R	1212	08
		S25/32J	1616	10
QS-352 (For front position for turning tools)	Star	SB-16,SC20,SE12/16	1010	06
		SE16B,SR16,SR20,SR20R	1212	08
		S25/32J	1616	10

Note! The information above is a guide to choosing the correct tooling combinations. However, you should always perform a practical test to ensure the correct fit.

Stop	MTM	Shank	
		ISO metric	ANSI inch
QS-0808	Citizen/Star/Nexturn	0808	
QS-1010	Citizen/Star/Nexturn	1010	
QS-1212	Citizen/Star/Nexturn	1212	
QS-1616	Citizen/Star/Nexturn	1616	
QS-A06	Citizen/Star/Nexturn		06
QS-A08	Citizen/Star/Nexturn		08
QS-A10	Citizen/Star/Nexturn		10
QS-130-12	Tsugami/Tornos	1212	08
QS-130-16	Tsugami/Tornos	1616	10

Coolant connection kit

High precision coolant supply



Tube length, mm	Straight to straight fitting			Banjo to straight fitting			Banjo to banjo fitting		
	Kit	Included parts	Pcs	Kit	Included parts	Pcs	Kit	Included parts	Pcs
150	5693 066-011	5693 066-01 ¹⁾	1	5693 067-011	5693 067-01 ¹⁾	1	5693 068-011	5693 068-01 ¹⁾	1
		5692 063-01	1		5692 063-01	1		5692 063-01	1
		5692 063-02	1		5692 063-02	1		5692 063-02	1
		5692 063-03	2		5692 063-03	1		5692 063-05	1
		5692 063-04	1		5692 063-05	1		5692 063-06	2
		5692 063-08	2		5692 063-06	1		5692 063-07	1
					5692 063-07	1		5692 063-08	4
					5692 063-08	3			
200	5693 066-021	5693 066-02 ¹⁾	1	5693 067-021	5693 067-02 ¹⁾	1	5693 068-021	5693 068-02 ¹⁾	1
		5692 063-01	1		5692 063-01	1		5692 063-01	1
		5692 063-02	1		5692 063-02	1		5692 063-02	1
		5692 063-03	2		5692 063-03	1		5692 063-05	1
		5692 063-04	1		5692 063-05	1		5692 063-06	2
		5692 063-08	2		5692 063-06	1		5692 063-07	1
					5692 063-07	1		5692 063-08	4
					5692 063-08	3			
250	5693 066-031	5693 066-03 ¹⁾	1	5693 067-031	5693 067-03 ¹⁾	1	5693 068-031	5693 068-03 ¹⁾	1
		5692 063-01	1		5692 063-01	1		5692 063-01	1
		5692 063-02	1		5692 063-02	1		5692 063-02	1
		5692 063-03	2		5692 063-03	1		5692 063-05	1
		5692 063-04	1		5692 063-05	1		5692 063-06	2
		5692 063-08	2		5692 063-06	1		5692 063-07	1
					5692 063-07	1		5692 063-08	4
					5692 063-08	3			
300	5693 066-041	5693 066-04 ¹⁾	1	5693 067-041	5693 067-04 ¹⁾	1	5693 068-041	5693 068-04 ¹⁾	1
		5692 063-01	1		5692 063-01	1		5692 063-01	1
		5692 063-02	1		5692 063-02	1		5692 063-02	1
		5692 063-03	2		5692 063-03	1		5692 063-05	1
		5692 063-04	1		5692 063-05	1		5692 063-06	2
		5692 063-08	2		5692 063-06	1		5692 063-07	1
					5692 063-07	1		5692 063-08	4
					5692 063-08	3			

¹⁾ Hose. Can not be ordered separately.

Other included parts can be ordered separately. Minimum ordering quantity is 2 pcs.

Included parts

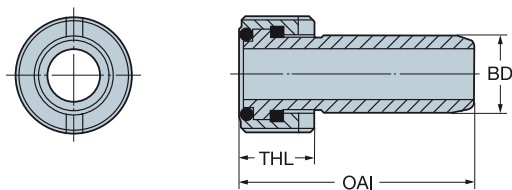
VDI Coolant feed plug G1/8" x 0.907 5692 063-01	VDI Coolant blanking plug 5692 063-02	G1/8" x 0.907 5692 063-03	M10x1.5 5692 063-04	M10x1.5 5692 063-05	G1/8" x 0.907 5692 063-06	G1/4" x 1.337 - G1/8" x 0.907 5692 063-07	Washer (M10) 5692 063-08

INFORMATION:

This coolant connection kit replaces CoroTurn HP tubes (and extension tube adaptor 5692 067-01) 5693 065-01, 5693 065-02, 5693 065-03. "CoroTurn HP connection kit" (5692 070-01) is still available to order for; ø 6 mm copper or steel pipe connection with accessories; (5692 061-01) and (5692 062-01).

Coolant tube

For solid HSK assortment



CZC _{MS}	Ordering code	Dimensions, mm, inch			Key		
		BD	THL	OAL	 Kg	Ordering code	Torque Nm
40	5692 022-02	8 .315	7.5 .295	29.5 1.161	0.01	5680 094-02	10
50	5692 022-03	10 .394	9.5 .374	32.8 1.291	0.02	5680 094-03	15
63	5692 022-04	12 .472	11.5 .453	46.5 1.437	0.03	5680 094-04	20
100	5692 022-06	16 .630	15.5 .610	44.5 1.752	0.05	5680 094-06	30
125	5692 022-07	18 .709	17.5 .689	48 1.890	0.08	5680 094-07	30

A

B

Coolant connectors

C

D

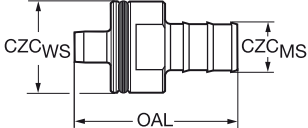
E

F

G

H

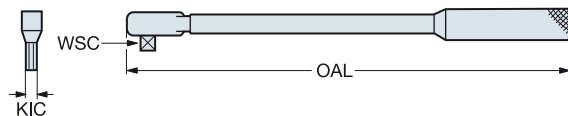
I

	For bar diameter	Ordering code	Dimensions, mm, inch		
	DCON		CZC _{MS}	CZC _{WS}	OAL
	mm	Metric			
	6	CS-060-054	5.4	6.0	25.0
	8	CS-080-066	6.6	8.0	28.5
	10	CS-100-086	8.6	10.0	28.5
	12	CS-120-086	8.6	12.0	38.0
	16	CS-160-137	13.7	16.0	40.0
	20	CS-200-137	13.7	20.0	40.0
	25	CS-250-137	13.7	25.0	44.0
	Inch	Inch			
	.250	CS-063-054	.213	.250	.984
	.312	CS-079-066	.260	.312	1.122
	.375	CS-095-086	.339	.375	1.122
	.500	CS-127-086	.339	.500	1.496
	.625	CS-159-137	.539	.625	1.575
	.750	CS-190-137	.539	.750	1.575
	1.000	CS-254-137	.539	1.000	1.732

Torque wrenches

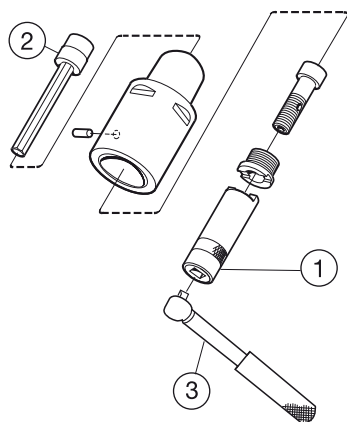
Coromant Capto®

Torque wrench for manual clamping units, Quick change



	Torque wrench	Dimensions, mm, inch			Key adaptor	
	Ordering code	Torque range, Nm, ft-lbs	WSC	OAL	Ordering code	KIC
CZC						
C3	C-TK-01	20-100	1/2"	400	5680 035-14	8
		15-74		15.748		.315
C4	C-TK-01	20-100	1/2"	400	5680 035-06	10
		15-74		15.748		.394
C5	C-TK-01	20-100	1/2"	400	5680 035-07	12
		15-74		15.748		.472
C6	C-TK-01	20-100	1/2"	400	5680 035-07	12
		15-74		15.748		.472
C8	C-TK-02	40-200	1/2"	520	5680 035-07	12
		30-148		20.472		.472
C10	C-TK-03	60-300	1/2"	620	5680 035-10	17
		44-220		24.409		.669

Torque wrench for modular assemblies, centre bolt clamping



	3. Torque wrench	Dimensions, mm, inch			2. Extension key	1. Retaining nut spanner	
	Ordering code	Torque range, Nm, ft-lbs	WSC	OAL	Ordering code	KIC	Ordering code
CZC							
C3	C-TK-02	40-200	1/2"	345	5680 015-05	8	5680 065-13
		30-148		13.583		.315	
C4	C-TK-02	40-200	1/2"	345	5680 015-05	8	5680 065-10
		30-148		13.583		.315	
C5	C-TK-02	40-200	1/2"	345	5680 015-01	10	5680 065-11
		30-148		13.583		.394	
C6	C-TK-02	40-200	1/2"	345	5680 015-02	14	5680 065-12
		30-148		13.583		.551	
C8	C-TK-02	40-200	1/2"	440	5680 015-02	14	5680 065-12
		30-148		17.323		.551	
C10	C-TK-04	80-400	3/4"	683	5680 015-06	17	5680 065-14
		60-295		26.890		.669	

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

Torque wrenches

Tightening torque recommendations

Coromant Capto® tightening torque:

Manual clamping units type NC2000 and NC3000

CZC	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 mechanism

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

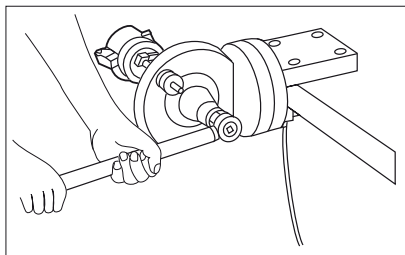
Coromant Capto® required pressure:

Hydro-mechanical clamping units type 5000

CZC	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



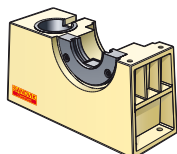
Centre bolt clamping

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

Assembly fixture

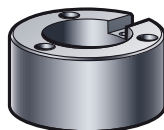
Fixture body
Ordering code:

391.500



Fixture body for sleeves
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-HA04	HSK 40 Form A/C
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
391.540-30	MAS-BT/CAT/ISO 30
391.540-40	MAS-BT/CAT/ISO 40
391.540-50	MAS-BT/CAT/ISO 50

Ordering code

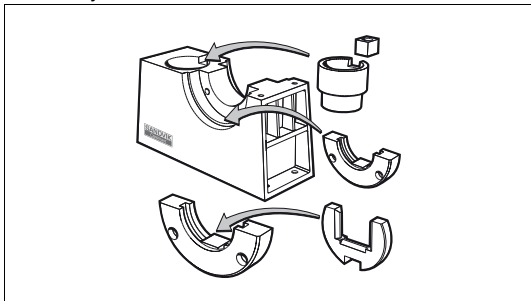


Flange	Collar	For holder type, size
391.510-140 50	391.530-C3	Coromant Capto Size C3
391.510-140 50	391.530-C4	Coromant Capto Size C4
391.510-140 50	391.530-C5	Coromant Capto Size C5
391.510-140 50	391.530-C6	Coromant Capto Size C6
391.510-140 50	391.530-C8	Coromant Capto Size C8
	391.530-C10*	Coromant Capto Size C10
391.510-HA04		HSK 40 Form A
391.510-HA05		HSK 50 Form A
391.510-HA06		HSK 63 Form A
391.510-HA08		HSK 80 Form A
391.510-HA10		HSK 100 Form A
391.510-HA12		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, CAT 40
391.510-540 50		BIG-PLUS DIN69871/1-50, BIG-PLUS 7388/1-50, CAT 50
391.510-00 40		DIN 2080-40/NMTB 40
391.510-00 50		DIN 2080-50/NMTB 50
A391.510-45 40		ANSIB 5.50-2009, CAT-V 40-2009
A391.510-45 50		ANSIB 5.50-2009, CAT-V 50-2009
A391.510-545 40		BIG-PLUS ANSIB 5.50-2009, CAT-V 40-2009
A391.510-545 50		BIG-PLUS ANSIB 5.50-2009, CAT-V 50-2009

Note: Key is delivered with the sleeve.

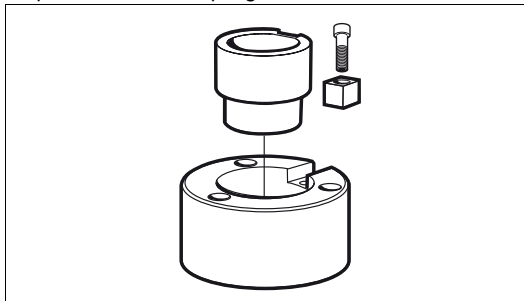
* Combined collar and flange

Assembly fixture 391.500



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

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



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

Tool wagon for Coromant Capto®

Quick change tooling



1. Cradle carrier
2. Tool cradles
3. Molded tool holders (To be ordered separately)

Ordering code	Kit consist of:		
CCW-KIT	TC-0	4 pieces	Tool cradles
	TCC-2	4 pairs	Frame carriers for tool cradle

To order a complete wagon 1 pcs CCW-KIT + Molded tool holders

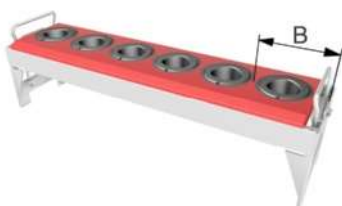
Bench stand



Ordering code	Kit consist of:		
BS-KIT	3 pieces	Tool cradles	
	3 pairs	Frame carriers for tool cradle	

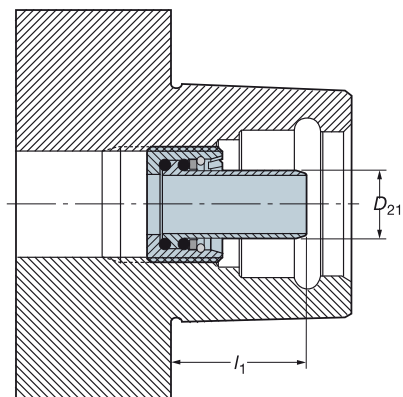
To order a complete bench stand 1 pcs BS-KIT + Molded tool holders

Molded tool holders - to be ordered separately



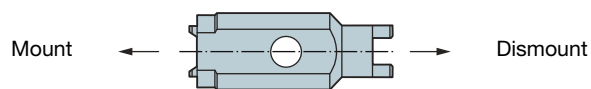
Ordering code	Width (B), mm	Max. number of tool holders in a cradle
C3-IC-1	58	C3 = 9
C4-IC-1	58	C4 = 9
C5-IC-1	65.5	C5 = 8
C6-IC-1	81.5	C6 = 6
C8-IC-1	105	C8 = 5
C10-IC-1	120	C10 = 4

Coolant tubes for Coromant Capto



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

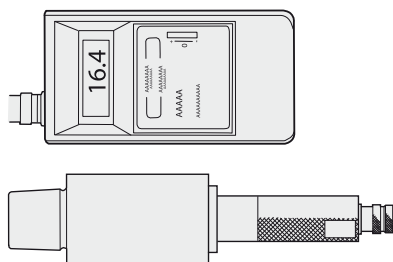
Ensure the clamping device and/or machine are able to accept/handle the coolant tube before using.



Please refer to M/C manual

Contact your local Sandvik representative for more information.

Clamping force measuring device

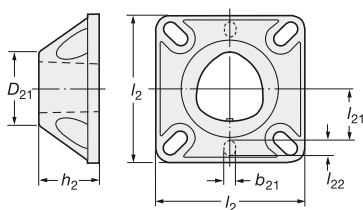
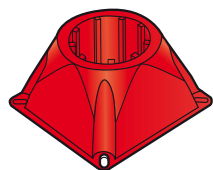


The safe control is used for measuring the clamping force of a machine's clamping system. If the clamping force is too low, the dynamic reaction between spindle and tool deteriorates.

Contact your local Sandvik representative for more information.

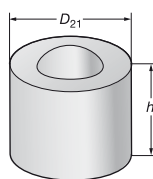
Cassettes (polygon seating)

Coromant Capto®

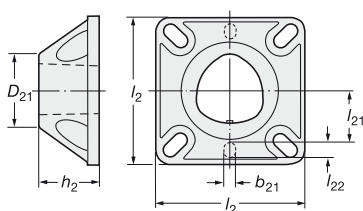
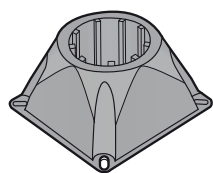


-4000
Plastic storage cassettes (red)

-6000-B



Aluminium cassette blanks

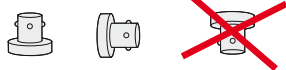
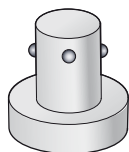


-5000
High grade plastic in-machine tool storage (black)

CZC	Ordering code	Dimensions, mm, inch						
		b_{21}	D_{21}	h_2	l_2	l_{21}	l_{22}	
C3	C3-C-4000	-	32	26	65	-	-	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.
		-	1.260	1.024	2.559	-	-	
C4	C4-C-4000	6	50	39	74	26	8	
		.236	1.969	1.535	2.913	1.024	.315	
C5	C5-C-4000	6	50	39	74	26	8	
		.236	1.969	1.535	2.913	1.024	.315	High grade re-inforced black plastic. For in-machine tool storage with mechanism AL-01.
C6	C6-C-4000	8	80	63	116	41	10	
		.315	3.150	2.480	4.567	1.614	.394	
C8	C8-C-4000	8	80	63	116	41	10	
		.315	3.150	2.480	4.567	1.614	.394	
C4	C4-C-5000	6	50	39	74	26	8	
		.236	1.969	1.535	2.913	1.024	.315	
C5	C5-C-5000	6	50	39	74	26	8	
		.236	1.969	1.535	2.913	1.024	.315	
C6	C6-C-5000	8	80	63	116	41	10	
		.315	3.150	2.480	4.567	1.614	.394	Aluminium cassette blanks for individual adaptation. To be used with AL-01.
C8	C8-C-5000	8	80	63	116	41	10	
		.315	3.150	2.480	4.567	1.614	.394	
C10	C10-C-5000	8	100	80	150	60	68	
		.315	3.940	3.150	5.910	2.360	2.630	
C6	C6-C-6000-B	-	120	63	-	-	-	
		-	4.724	2.480	-	-	-	
C8	C8-C-6000-B	-	120	63	-	-	-	
		-	4.724	2.480	-	-	-	
C10	C10-C-6000-B	-	138	80	-	-	-	
		-	5.433	3.150	-	-	-	

Locking mechanism for cassettes

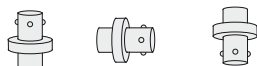
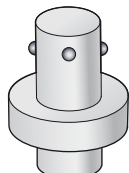
-PL-01



Passive locking mechanism

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

-AL-01



Active locking mechanism

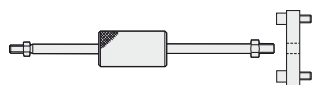
For storage at all angles: vertical upwards and downwards or horizontal.

CZC	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	
CZC	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	
CZC	Ordering code	Rec. max. tool weight, kg	Rec. max. tool weight, lbs	
C6	C6-AL-02	75	165	Active locking mechanism – mechanical push action. Fits directly into all cassettes type 5000/6000.
C8	C8-AL-02	110	243	

Assembly item

Extracting tool

for disassembling the polygon socket on manual and automatic clamping units



	Ordering code
CZC	
C3	CC-ET-01
C4	CC-ET-01
C5	CC-ET-02
C6	CC-ET-02
C8	CC-ET-02

Extracting tool

Withdrawal tool

Note: Withdrawal tool to be ordered separately.

Withdrawal tool

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



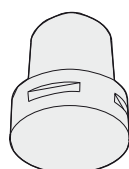
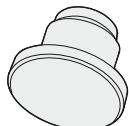
	Ordering code	Spare parts	
CZC		Centre screw	Peripheral screw
C3	C3-WDT-01M	3214 030-463	5512 040-03
C4	C4-WDT-02	3214 030-464	5512 040-04
C5	C5-WDT-02	3214 030-516	5512 040-05
C6	C6-WDT-02	3214 030-516	5512 040-06
C8	C8-WDT-02	3214 030-516	3212 010-511

Cover plug

CP-11

CP-01

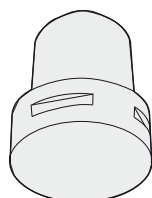
CPA-01



	Ordering code		
CZC	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

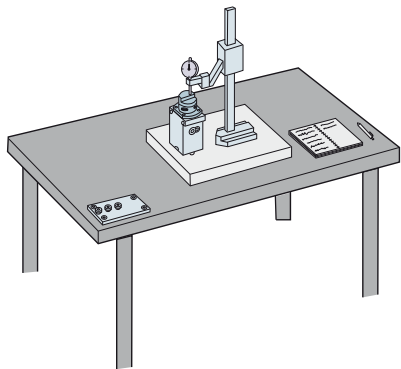
Cx-BAT-01



	Ordering code
CZC	
C3	C3 - BAT - 01
C4	C4 - BAT - 01
C5	C5 - BAT - 01
C6	C6 - BAT - 01
C8	C8 - BAT - 01
C10	C10 - BAT - 01

Assembly item

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.

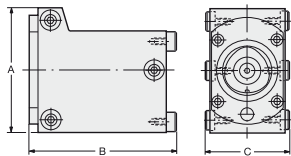
The fixture can be used with any dial indicator and preferably, a surface plate, but Sandvik recommend an indicator with a zero-set switch and a contact stylus.

Basic package

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

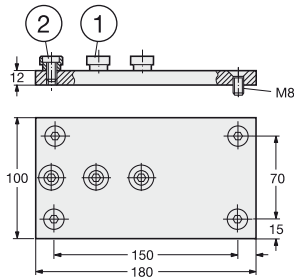
- Pre-measuring unit
- Holding plate (anchor for tightening)
- Master

Pre-measuring unit



CZC	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 for Pre-measuring unit



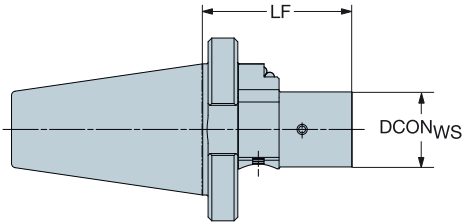
CZC	Ordering code	Spare parts	
		1	2
		Stud	Screw
C3 – C8	C-HP-01	5638 060-01	3212 020-409

A

Assembly item

B

Pre-measuring unit
Coromant Capto®



C

					Dimensions, mm	
CZC _{MS}	CZC _{WS}	CNSC	CXSC	Ordering code	DCON _{WS}	LF
50	C4	0	0	C4-PMU-I50	40	80
	C5	0	0	C5-PMU-I50	50	90
	C6	0	0	C6-PMU-I50	63	107
	C8	0	0	C8-PMU-I50	80	127

D

E

F

G

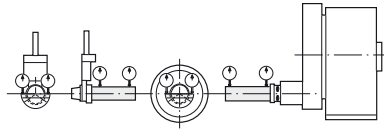
H

I

Assembly item

Master setting gauges

Checking position for grippers Spindle orientation

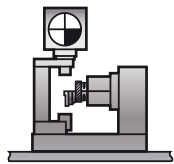


The Coromant Capto system guarantees exceptional, repeatable accuracy but this is of little use unless the various other components in the total machining process are correctly and accurately positioned.

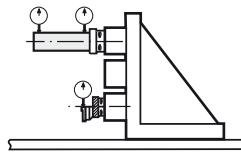
Coromant offers a range of axial and centre height master setting gauges for the various coupling sizes which are strongly recommended for setting important parameters such as:

- 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



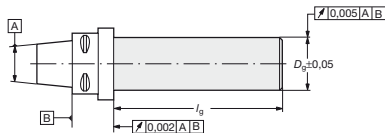
Tool presetting



Component fixture geometric control

Axial gauge

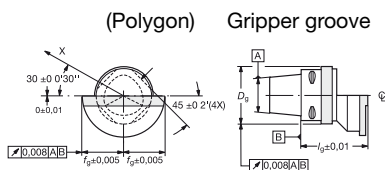
Master setting gauges MAS-11



	Ordering code	Dimensions, mm (inch)	
CZC		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



	Ordering code	Dimensions, mm (inch)		
CZC		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)

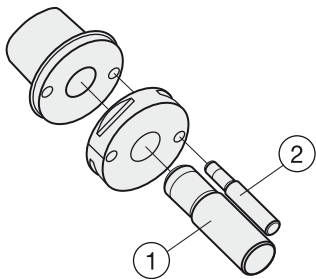
Centre height gauge

(Polygon) Gripper groove

	Ordering code	Dimensions, mm (inch)	
CZC		l_g	D_g
C4	C4-MAS-25 140	140 (5.512)	25 (.984)
C5	C5-MAS-32 145	145 (5.709)	32 (1.260)
C6	C6-MAS-40 180	180 (7.087)	40 (1.575)
C8	C8-MAS-40 240	240 (9.449)	40 (1.575)

Assembly item

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.

		Ordering code		Spare parts	
				1	2
CZC	Tool	Gauge pin		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		