Tailor Made

– Quick quotation
– Easy to order
– Competitive delivery

Even more possibilities thanks to tailored design!

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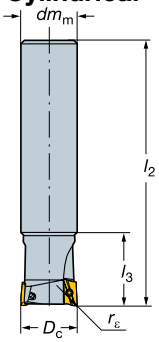
CoroMill® endmill R390

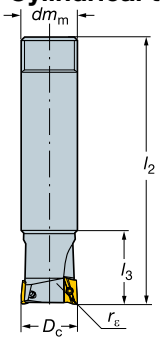
Standard insert,
R390 11 T3 ..., r_ε= 0,2-3,1 mm
R390 17 04 ..., r_ε= 0,4-6,4 mm

Cylindrical



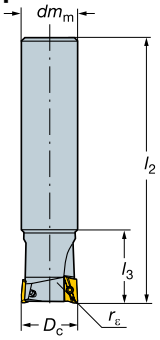
Size	D_c	
12	15,5	-20
16	15,5	-25,4
20	15,5	-40
25	19,05	-50,8
32	25	-80
40	31,75	-80

Cylindrical threaded

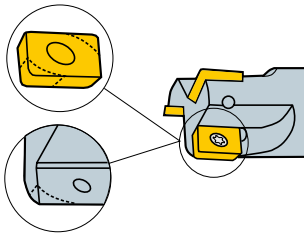


Size	D_c	
12	15,5	-20
16	15,5	-25,4
20	15,5	-40
25	19,05	-50,8
32	25	-80

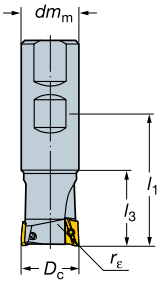
Cylindrical power chuck



Size	D_c	
32	15,5	-80
42	19,05	-80

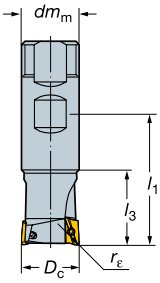


Weldon



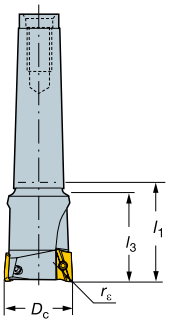
Size	D_c	
12	15,5	-20
16	15,5	-25,4
20	15,5	-40
25	19,05	-50,8
32	25	-80
40	31,75	-80

Weldon threaded



Size	D_c	
16	15,5	-25,4
20	15,5	-40
25	19,05	-50,8
32	25	-80

Morse



Size	D_c	
02	15,5	-32
03	15,5	-40
04	19,05	-50,8
05	25	-63,5

Options

Note For specific details regarding the options, contact your Coromant sales representative.

Insert size	**11, 17**
D_c	-11, Diameter — **15,5 – 80** mm -17, Diameter — **25 – 80** mm
Pitch type	**Even** or **Differential**
Z_n	-11, No of inserts — **1 – 10** -17, No of inserts — **1 – 8**
Mounting type	**Cylindrical, Cylindrical threaded, Cylindrical power chuck, Weldon, Weldon threaded, Morse taper**

dm_m/D_{5m}	**Mounting size — see above**
l_3	Reach length — **20 mm – 3 × D_c**
l_2	Total length — **61 – 300 mm**
l_1	Programming length — **25 – 260,5 mm**
Coolant	**For $D_c \leq$ 50,8 mm,** but not available for threaded shanks
r_ε	Size 11 — **r_ε = 0,2 - 3,2 mm** Size 17 — **r_ε = 0,4 - 6,5 mm** Standard cutter body covers insert radius r_ε 0,40-1,60 mm for both insert size.

Form No. C-1150:118-ENG
Family code = M250
CoroPak 98.3 98.04.14 **Revised** 09.02.28

SANDVIK Coromant

Tailor Made

CoroMill® endmill R390

Inquiry/ordering No.

Customer	Customer No. (Coromant internal)	Date
Street	Telephone	Customer attention
Post Code/City/State	Telefax	Issuer
Quantity	Customer denomination	

State nearest standard catalogue code, see main catalogue or supplement catalogue

R390- | | | | | | | **-** | | | | Metric std

Your value/ Your choice

State only your options deviating from the above standard

Insert size

11, 17

Cutter diameter D_c

Insert size	11	17
D_c	**15,5–80**	**25–80**

Pitch

Even or **differential (Diff)**

Number of inserts, z_n

-11; z_n=**1-10**
-17; z_n=**1-8**

Depending on insert size, cutter diameter and pitch

Mounting type and size

❶ Cylindrical
❷ Cylindrical with thread
❸ Cylindrical power chuck
❹ Weldon
❺ Weldon with thread
❻ Morse

D_c	Cylindrical shanks ❶ = CYL ❷ = CYLTH 12 16 20 25 32 40	Cylindrical shanks ❸ = CYLPC 32 42	Weldon shanks ❹ = WEL ❺ = WELTH 12 16 20 25 32 40	Morse ❻ = MTTH 02 03 04 05
15,5				
19,05				
20				
25				
25,4				
31,75				
32				
40				
50,8				
63,5				
80				

Type

Size

Programming length, l_1
Total length, l_2

Length	Cylindrical shanks	Weldon shanks	Morse
l_1 max	—	98 - 260,5	86 - 150,5
l_2 max	120 - 300	—	—

Min l_1 =25- 43 and min l_2 =61-66, depending on shank size

l_1 =

l_2 =

Reach length, l_3

Insert size	11	17
D_c	l_3 min — l_3 max	l_3 min — l_3 max
15,5 -80	**20 — 3 × D_c**	-
19 -80	**25 — 3 × D_c**	-
25 -80	**31,5 — 3 × D_c**	**32 — 3 × D_c**

l_3 =

Coolant hole

Coolant hole available for D_c **< 50,8 mm**

But not available for threaded shanks

Insert radius r_ε

Size 11 — r_ε = **0,2 - 3,2 mm** and size 17 — r_ε = **0,4 - 6,5 mm**
Standard cutter body covers insert radius r_e 0,40-1,60 mm for both insert size.

SANDVIK Coromant

The value/choice must be given

If no value/choice is specified, it will be recommended by the system

Form No. C-1150:118-ENG
Family code = M250
CoroPak 98.3 98.04.14 **Revised** 09.02.28

Tailor Made

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– Easy to order
– Competitive delivery

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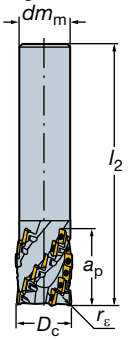
If you do not find what you need in our comprehensive standard programme, choose the tool shape you require and we will tailor it for you to *your* dimensions.

CoroMill® long edge milling cutter R390

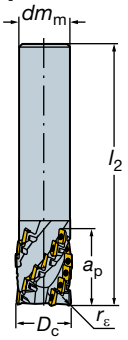
Standard insert ;
R390 11 T3, r_ε= 0,2-3,1 mm
R390 18 06 ..., r_ε= 1,2 mm

Cylindrical



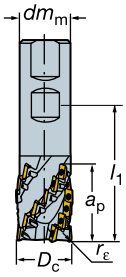
Size	D_c	
25	31,8	-32,0
32	31,8	-40,0
40	31,8	-50,8

Cylindrical for power chuck

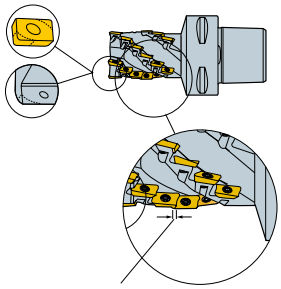


Size	D_c	
32	31,8	-50,8
42	31,8	-63,5

Weldon

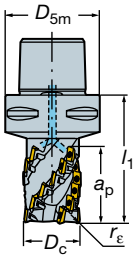


Size	D_c	
25	31,8	-32,0
32	31,8	-40,0
40	31,8	-50,8



Overlapping zone,
-11; max r_ε= 1,0 mm

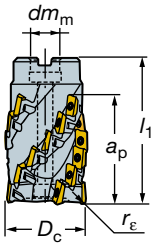
Coromant Capto®



Size	D_c	
C3	31,8	- 40,0
C4	31,8	- 50,8
C5	31,8	- 63,5
C6	31,8	- 84,0
C8	31,8	-102,0

Arbor mounting

acc. to ISO 6462



Style	D_c	
A16	40,0	- 50,8
A22	46,0	- 63,5
A27	51,0	- 80,0
A32	56,0	-102,0
B40	86,0	-127,0
C40	134,5	-205,0
C60	174,5	-205,0

Options

Note For specific details regarding the options, contact your Coromant sales representative.

Insert size	**11, 18**
D_c	-11, Diameter — **31,8 – 66,0** mm -18, Diameter — **44,0 – 205,0** mm
Pitch type	**Even** or **Differential**
No of effective inserts (flutes) z_c	-11 =**1 – 6** (differential pitch could give less -18 =**1 – 9** number of inserts)
Mounting type	**Cylindrical, Cylindrical power chuck, Weldon, Coromant Capto®, Arbor mounting**
dm_m/D_{5m}	**Mounting size — see above**

a_p	Insert size 11 — **a_p = 18 –125** Insert size 18 — **a_p = 29 –155** (max a_p for Coromant Capto = **2,5 × D_c**), (max a_p for arbor mounting = **2 × D_c**), (max a_p for Cylindrical/Weldon = **1,5 × D_c**)
l_1 and l_2	Depending on the length of a_p
Coolant supply for Coromant Capto	**Coolant according to standard, coolant to all pockets** (Valid up to D_C 66 mm), **or no coolant**
r_ε	Insert size 11 — **r_ε = 0,2 - 3,2 and 4,0 mm** Insert size 18 — **r_ε = 1,2 mm** Standard cutter body covers insert radius r_ε = 0,20-1,60 mm.

Form No. C-1150:123-ENG
Family code = M251
CoroPak 01.2 01.08.09 **Revised** 09.02.28

SANDVIK Coromant

Tailor Made

CoroMill® Long Edge milling cutter R390

Inquiry/ordering No.

Customer	Customer No. (Coromant internal)	Date
Street	Telephone	Customer attention
Post Code/City/State	Telefax	Issuer
Quantity	Customer denomination	

State nearest standard catalogue code, see main catalogue or supplement catalogue

R390- | | | | | | | **-** | | | | Metric std

Your value/ Your choice

State only your options deviating from the above standard

Insert size

11, 18

Insert radius r_ε

Front corner insert; -11; **1** — r_ε = 0,2 - 2,2 mm, **2** — r_ε = 2,3 - 3,2 and 4,0 mm
-18; r_ε = 1,2 mm
Standard cutter body covers insert radius r_e 0,20-1,60 mm
-11; Radius r_ε = 1,0 mm on peripherial inserts due to the insert overlapping

Cutter diameter D_c

Insert size	11	18
D_c	**31,8–66**	**44–205**

Cutting depth, a_p

Insert -11, **a_p = 18 –125** (max **a_p** for Coromant Capto = **2,5** × **D_c**),
Insert -18, **a_p = 29 –155** (max **a_p** for arbor mounting = **2** × **D_c**),
(max **a_p** for Cylindrical/Weldon = **1,5** × **D_c**)

Pitch

Even or **differential (Diff)**

Number of effective inserts (flutes), z_c

-11, z_c=**1-6**
-18, z_c=**1-9**

Differential pitch could give less number of inserts

Mounting type and size

❶ **Cylindrical**
❷ **Cylindrical power chuck**
❸ **Weldon**
❹ **Coromant Capto®**
❺ **Arbor mounting**

D_c	❶ = CYL 25	32	40	❷ = CYLPC 32	42	❸ = WEL 25	32	40	❹ = Capto C3	C4	C5	C6	C8	❺ Style A 16	A 22	A 27	A 32	B 40	C 40	C 60
31,8																				
32																				
40																				
46																				
50,8																				
51																				
56																				
63,5																				
80																				
84																				
86																				
102																				
127																				
134,5																				
174,5																				
205																				

Type

Size

Programming length, l_1
Total length, l_2

49 - 179,9 mm depending on the length of a_p

l_1 =

l_2 =

Coolant supply for Coromant Capto

Coolant according to;
- **Standard,**
- **Coolant to all pockets**, Valid up to D_C 66 mm
- **No coolant**

Std. =

All =

No =

Form No. C-1150:123-ENG
Family code = M251
CoroPak 01.2 01.08.09 **Revised** 09.02.28

SANDVIK Coromant

The value/choice must be given

If no value/choice is specified, it will be recommended by the system

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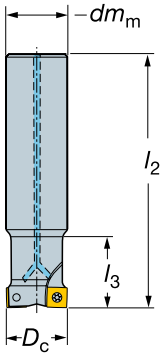
CoroMill® 490

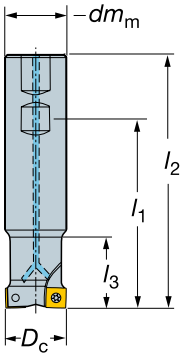
Standard insert,
490R 08 T3 ..
490R 14 04 ..

Cylindrical



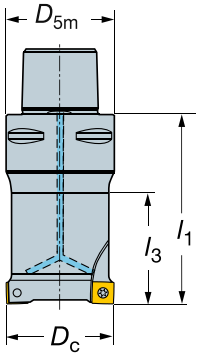
Size	D_c (mm)	iC
16	19.05–25.4	08
20	19.05–40	08
25	19.05–50.8	08/14
32	25 –80	08/14
40	31.75–80	08/14

Weldon



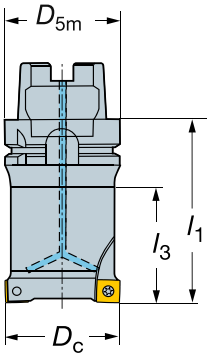
Size	D_c (mm)	iC
16	19.05–25.4	08
20	19.05–40	08
25	19.05–50.8	08/14
32	25 –80	08/14
40	31.75–80	08/14

Coromant Capto®



Size	D_c (mm)	iC
C3	19.05–40	08
C4	19.05–55	08/14
C5	19.05–70	08/14
C6	19.05–80	08/14
C8	31.75–84	08/14

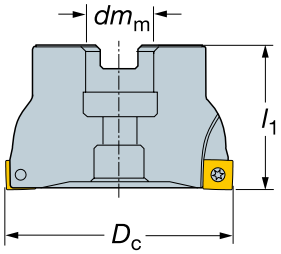
HSK type A



Size	D_c (mm)	iC
63	20–80	08/14

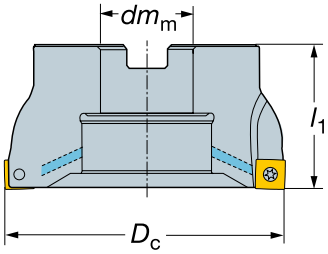
Arbor mounting, TDA

acc. to ISO 6462 (including CIS)



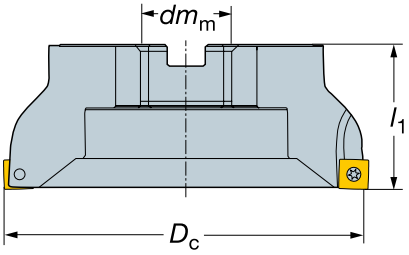
Size	D_c (mm)	iC
16	37.5– 50	08
22	38.1– 80	08/14
22.225	38.1– 80	08
25.4	46 –100	08/14
27	44 –100	08/14
31.75	100 –125	14

TDB



Size	D_c (mm)	iC
32	100–125	14
38.1	125–160	14
40	125–160	14
50.8	160–200	14

TDC



Size	D_c (mm)	iC
40	160–200	14
47.625	200–254	14
60	200–254	14

Options

Note For specific details regarding the options, contact your Coromant sales representative.

Insert size	**08** or **14**
D_c	-08, Diameter — **19.05–84** mm -14, Diameter — **38.1–254** mm
Pitch type	**Even** or **Differential**
Z_n	-08, No of inserts **2–10** -14, No of inserts **2–20**
Mounting type	**Cylindrical, Weldon, Coromant Capto, HSK/A, Arbor mounting**
dm_m/D_{5m}	**Mounting size**, see above
l_3	Reach length, -08, **21** mm **– 3** × D_c -14, **40** mm **– 3** × D_c
l_2	Total length, -08, **74–250** mm, -14, **98–250** mm
l_1	Programming length, -08, **40–175.5** mm, -14, **40–168.5** mm
Coolant hole	-08, **Yes – D_c < 63 mm/No** -14, **Yes/No – all TDC and TDB size 50.8**

Form No. C-1150:131-ENG
Family code = M270
CoroPak 08.2 08.06.30 **Revised** 09.12.01

SANDVIK Coromant

Tailor Made

CoroMill® 490

Inquiry/ordering No.

Customer	**Customer No. (Coromant internal)**	**Date**
Street	**Telephone**	**Customer attention**
Post Code/City/State	**Telefax**	**Issuer**
Quantity	**Customer denomination**	

State nearest standard catalogue code, see main catalogue or supplement catalogue

490- _ _ _ _ _ _ - _ _ _ metric std

Your value/ Your choice

State only your options deviating from the above standard

Insert size

08 or **14**

Cutter diameter D_c

Insert size	08	14	Delivered with shims (with exceptions)
D_c mm	**19.05–84**	**38.1–254**	

Pitch

Even or **differential (Diff)** Differential pitch not valid for every combination

Number of inserts, z_n

-08; z_n = **2–10**
-14; z_n = **2–20**

Depending on insert size, cutter diameter and pitch

Mounting type and size

Cylindrical and Weldon shanks

❶ Cyl / ❷ Wel Size	D_c (mm)	*iC*
16	19.05–25.4	08
20	19.05–40	08
25	19.05–50.8	08/14
32	25 –80	08/14
40	31.75–80	08/14

Coromant Capto

❸ Coromant Capto Size	D_c (mm)	*iC*
C3	19.05–40	08
C4	19.05–55	08/14
C5	19.05–70	08/14
C6	19.05–80	08/14
C8	31.75–84	08/14

HSK A

❹ HSK Size	D_c (mm)	*iC*
63	20–80	08/14

Arbor mounting
acc. to ISO 6462 (including CIS)

❺TDA Size	D_c (mm)	*iC*
16	37.5– 50	08
22	38.1– 80	08/14
22.225	38.1– 80	08
25.4	46 –100	08/14
27	44 –100	08/14
31.75	100 –125	14

❻TDB Size	D_c (mm)	*iC*
32	100–125	14
38.1	125–160	14
40	125–160	14
50.8	160–200	14

❼TDC Size	D_c (mm)	*iC*
40	160–200	14
47.625	200–254	14
60	200–254	14

Type

Size

Programming length, l_1 Total length, l_2

Length		Cylindrical shanks	Weldon shanks	Coromant Capto®	HSK A	Arbor mounting TDA	TDB	TDC
l_1	08	–	50.5–175.5	50–80	70–95	40–80	–	–
	14		66.5–168.5	60–80	70-95	40, 50, 63	50, 63	63
l_2	08	74–250	74 –200	–	–	–		
	14	98–250	98 –200					

Depending on shank size

l_1 =

l_2=

Reach length, l_3

Insert size	08	Insert size	14
D_c	l_3 min – l_3 max	D_c	l_3 min – l_3 max
19.05–84	**21–3 × D_c**	38.1–254	**40–3 × D_c**

l_3 =

Coolant hole

-08, **Yes – D_c < 63 mm/No**
-14, **Yes/No – all TDC and TDB size 50.8**

SANDVIK Coromant

The value/choice must be given

If no value/choice is specified, it will be recommended by the system

Form No. C-1150:131-ENG
Family code = M270
CoroPak 08.2 08.06.30 **Revised** 09.12.01

Tailor Made

– Quick quotation
– Easy to order
– Competitive delivery

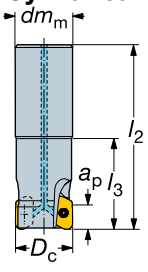
Even more possibilities thanks to tailored design!

If you do not find what you need in our comprehensive standard programme, choose the tool shape you require and we will tailor it for you to *your* dimensions.

CoroMill® R790 Al endmill

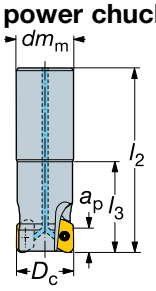
Standard insert,
R790 16 ..., r_ε= 0,5-5,0 mm
R790 22 ..., r_ε= 0,5-6,4 mm
in steps of 0,1 mm

Cylindrical



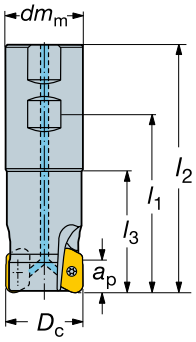
Size	D_c
25	25 - 50
32	25 - 65
40	25 - 80
50	25 -100
1	25 - 50
1 1/4	25 - 65
1 1/2	25 - 80
2	25 -101,6

Cylindrical power chuck



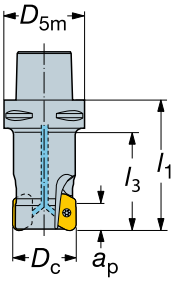
Size	D_c
32	25 -65
42	25 -80

Weldon



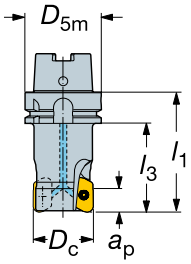
Size	D_c
25	25 - 50
32	25 - 65
40	25 - 80
50	25 -100
1	25 - 50
1 1/4	25 - 65
1 1/2	25 - 80
2	25 -101,6

Coromant Capto®



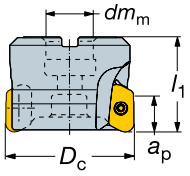
Size	D_c
C4	25 - 51
C5	25 - 65
C6	25 - 80
C8	25 -127

HSK type A/C



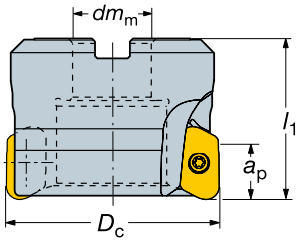
Size	D_c
50	25 - 65
63	25 - 80
80	25 -101,6
100	25 -150

Arbor mounting
acc. to ISO 6462



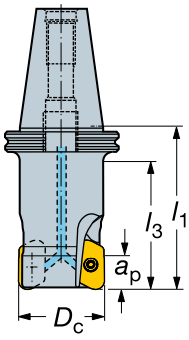
Style	D_c
A16	52 - 64
A22	57 -105
A27	60 -125
A32	66 -165
A 3/4	57 - 84,5
A1	60 -118,6
A1 1/4	86 -165
A1 1/2	72 -200

Arbor mounting
acc. to ISO 6462



Style	D_c
B27	78 -125
B32	85 -165
B40	95 -200
B1	75 -118,6
B1 1/4	86 -165
B1 1/2	100 -200

Cat V 50



Size	D_c
50	25 -150

Options

Note For specific details regarding the options, contact your Coromant sales representative.

Insert size	**16, 22**
D_c	**25 – 200** mm
Pitch type	**Even**
Z_n	**2 – 5**
Mounting type	**Cylindrical, Cylindrical power chuck, Weldon, Coromant Capto®, HSK-A/C, Arbor mounting, Cat V 50**
dm_m/D_{5m}	**Mounting size — see above**

l_3	Reach length — **46 mm – 3 × D_c**
l_2	Total length — **105 – 409 mm**
l_1	Programming length — **49 mm – 3 × D_c or 150 mm**
Coolant hole	**Available for all except arbor coupling**
Balance	**Always for HSK-A/C, Cat V 50** Available for all coupling types

Form No. C-1150:124-ENG
Family code = M231
CoroPak 02.1 01.11.16 **Revised** 09.02.28

SANDVIK Coromant

Tailor Made

CoroMill® R790 Al endmill

Inquiry/ordering No.

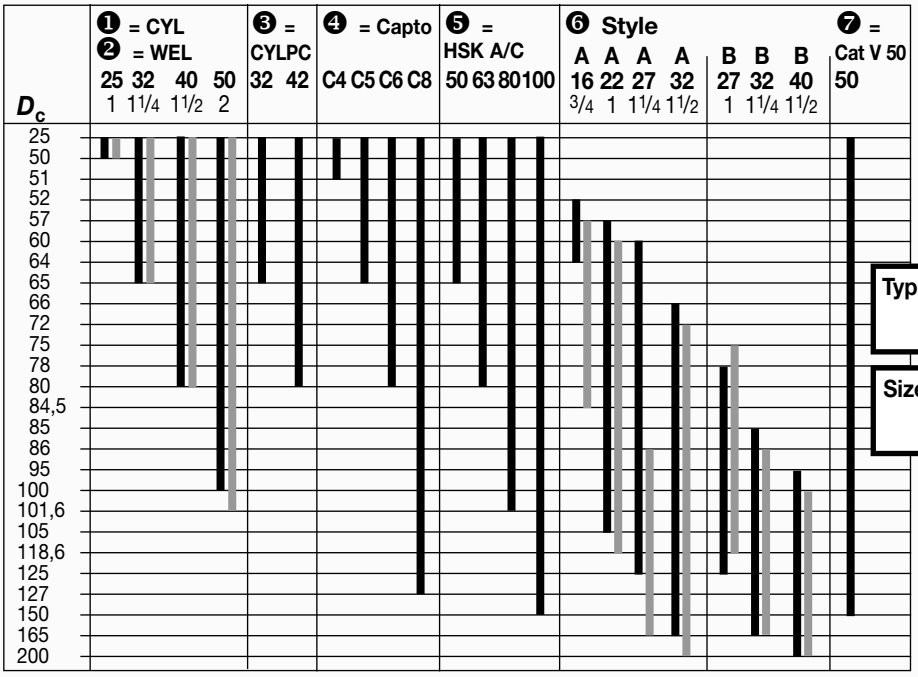
Customer	Customer No. (Coromant internal)	Date
Street	Telephone	Customer attention
Post Code/City/State	Telefax	Issuer
Quantity	Customer denomination	

State nearest standard catalogue code, see main catalogue or supplement catalogue

R790- | | | | | | | | **-** | | | | Metric std

Your value/ Your choice

State only your options deviating from the above standard

Insert size	**16, 22**	
Cutter diameter D_c	**D_c = 25–200**	
Pitch type	**Even**	
Number of inserts, z_n	**z_n = 2–5** Depending on cutter diameter	
Mounting type and size ❶ Cylindrical ❷ Weldon ❸ Cylindrical power chuck ❹ Coromant Capto® ❺ HSK type A/C ❻ Arbor mounting ❼ Cat V 50 ▌ = mm ▌ = inch		**Type** **Size**
Reach length, l_3	**$l_3 = 46 - 3 \times D_c$**	**l_3 =**
Total length, l_2	**l_2 = 105 — 409 mm**	**l_2 =**
Programming length, l_1	**l_1 = 49 mm — 3 × D_c or 150 mm**	**l_1 =**
Coolant hole	**Available for all except arbor coupling**	
Balance	**Always for HSK-A/C and Cat V 50** Available for all coupling types	

SANDVIK Coromant

The value/choice must be given

If no value/choice is specified, it will be recommended by the system

Form No. C-1150:124-ENG
Family code = M231
CoroPak 02.1 01.11.16 **Revised** 09.02.28

Tailor Made

– Quick quotation
– Easy to order
– Competitive delivery

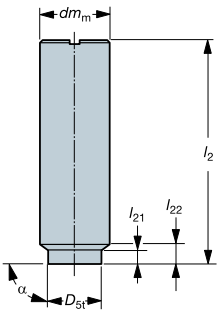
Even more possibilities thanks to tailored design!

If you do not find what you need in our comprehensive standard programme, choose the tool shape you require and we will tailor it for you to *your* dimensions.

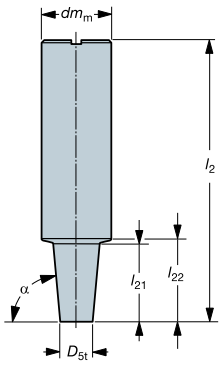
Holder for exchangeable head

Type

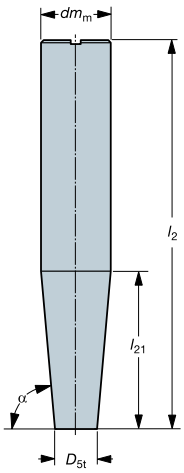
A



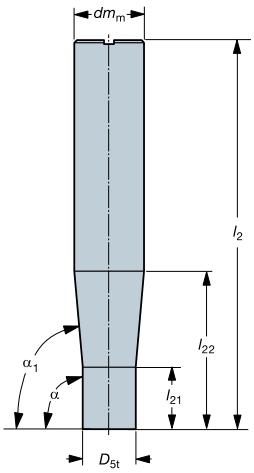
B



C



D



dm_m	D_{5t} 9.6	11.6	15.4	19.2	24.1
	l_2				
10	55–140	–	–	–	–
12	55–160	55–160	–	–	–
16	60–200	60–200	60–200	–	–
20	70–250	70–250	70–250	70–250	–
25	80–250	80–250	80–250	80–250	80–250
32	80–250	80–250	80–250	80–250	80–250

Type	l_{21}	
A	3–195	(depending on total length, contact diameter and mounting size)
B	3–195	(depending on total length, contact diameter and mounting size)
C	–	
D	3–185	(depending on total length, contact diameter and mounting size)

Options

Note For specific details regarding the options, contact your Coromant sales representative.

Holder type	**A, B, C, D**
D_{5t}	**9.6, 11.6, 15.4, 19.2, 24.1**
Mounting type	**Cylindrical, Weldon**
dm_m	**10, 12, 16, 20, 25, 32**
Material	**Steel**
Coolant	**Yes** or **No**
l_2	**55–250** – see above
l_{21}	**3–195** – see above

α	**80°–90°** – depending on total length and mounting size – type B, C, D
α_1	**80°–90°** – depending on total length and mounting size – type D

Form No. C-1150:134-ENG
Family code = M222
CoroPak 09.2 09.09.01

Tailor Made

Holder for exchangeable head

Inquiry/ordering No.

Customer	Customer No. (Coromant internal)	Date
Street	Telephone	Customer attention
Post Code/City/State	Telefax	Issuer
Quantity	Customer denomination	

State nearest standard catalogue code, see main catalogue or supplement catalogue

E			-				-			-				Metric std

Your value/ Your choice

State only your options deviating from the above standard

Holder type

A, B, C, D

Contact diameter D_{5t}

D_{5t}	9.6	11.6	15.4	19.2	24.1

Mounting type and size

❶ Cylindrical

❷ Weldon

Mounting size dm_m	Cylindrical shanks ❶ = CYL D_{5t} 9.6 11.6 15.4 19.2 24.1	Weldon shanks ❷ = WEL D_{5t} 9.6 11.6 15.4 19.2 24.1
10		
12		
16		
20		
25		
32		

Type

Size

Coolant

Yes or **No**

Total length, l_2

	D_{5t} 9.6	11.6	15.4	19.2	24.1
dm_m	l_2				
10	**55–140**	–	–	–	–
12	**55–160**	**55–160**	–	–	–
16	**60–200**	**60–200**	**60–200**	–	–
20	**70–250**	**70–250**	**70–250**	**70–250**	–
25	**80–250**	**80–250**	**80–250**	**80–250**	**80–250**
32	**80–250**	**80–250**	**80–250**	**80–250**	**80–250**

Operational length, l_{21}

Type	l_{21}
A	**3–195**
B	**3–195**
C	–
D	**3–185**

Front angle, α

Type	α
B, C, D	**80°–90°**

°

Secondary front angle, α_1

Type	α_1
D	**80°–90°**

°

SANDVIK Coromant

The value/choice must be given

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Form No. C-1150:134-ENG
Family code = M222
CoroPak 09.2 09.09.01