

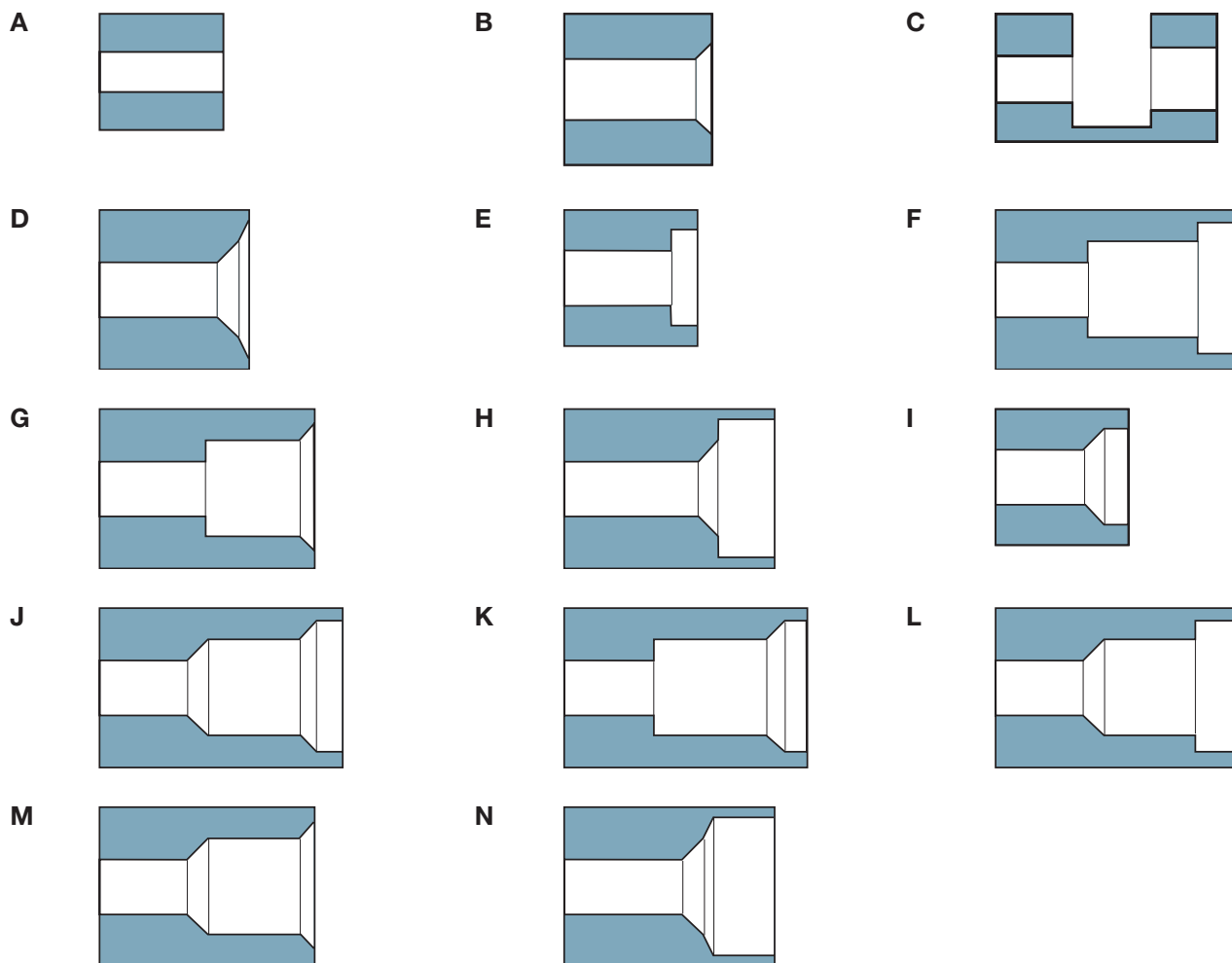


- Quick quotation
- Easy to order
- Competitive delivery

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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.

Application types for short hole drills



Options

Drill type

		CoroDrill 880/881 Coromant U/T-Max U	Coromant Delta	CoroDrill Delta-C
A	Special diameter and length	880/881/416.2/416.1	411.5	840/842/844/846/850/854/855/856/860
B	With one chamfer	880/416.20	411.5	840/842/846/850/854/855/856/860
C	For drills with extended shank	—	411.5	840/842/846/850/860
D	With two chamfers	416.20	—	854/855/856
E	With one step	880/416.20	—	840/842/850
F	With two steps	416.20	—	—
G	With one step and one chamfer	416.20	—	840/850
H	With one chamfer and one step	416.20	—	854/855/856
I	With one step	880/416.20	—	840/842/850
J	With two steps	416.20	—	—
K	With two steps	416.20	—	—
L	With two steps	416.20	—	—
M	With one step and one chamfer	416.20	—	840/850
N	With one chamfer and one step	416.20	—	854/855/856



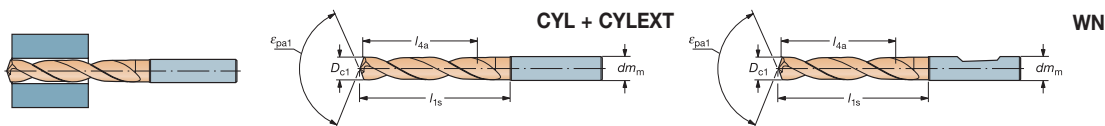
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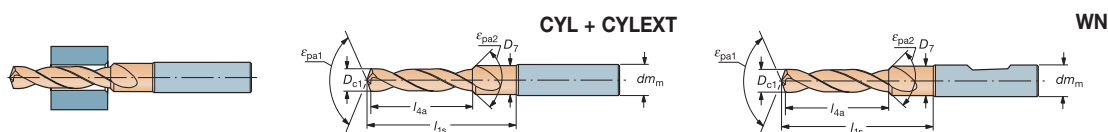
If you do not find what you need in our comprehensive standard programme, choose the tool shape you require and we will tailor it for you to *your* dimensions.

CoroDrill® 860-PM with Cylindrical and Whistle notch shank

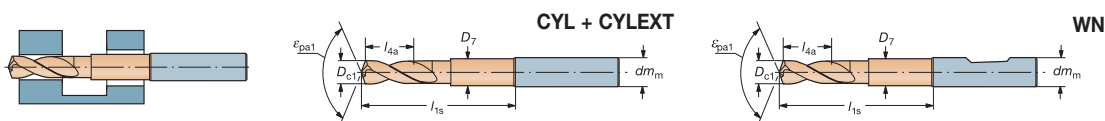
1= Standard type with special diameter and length, $D_{c1} = 3.0\text{--}20.0$ mm



2= Chamferdrill, $D_{c1} = 3.0\text{--}18.0$ mm



3= Standard type with extended shank, $D_{c1} = 3.0\text{--}19.8$ mm



Coolant supply



No



Yes

Shank type

Cylindrical –CYL and
CYLEXT

Whistle Notch –WN

Description

DTYPE: 1=Standard type of drill with special diameter and length
2=Chamfer drill with pilot diameter
3=Standard type of drill with pilot diameter

Options

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

Geometry type	PM
Type of grade	4234
Coolant supply	Y = Yes, N = No
Coupling type	Cylindrical shank –CYL, –CYLEXT. Whistle Notch shank –WN
Drill type	1 – $D_{c1} = 3.0\text{--}20.00$ mm. 2 – $D_{c1} = 3.0\text{--}18.0$ mm. 3 – $D_{c1} = 3.0\text{--}19.80$ mm
ϵ_{pa1}	Point angle = 152°
D_{c1}	Diameter = $3.0\text{--}20.0$ mm
Tolerance	Tolerance on $D_{c1} = h7/js7/m7$ for drill type 1, 2, 3
ϵ_{pa2}	Chamfer angle = $60^\circ\text{--}150^\circ$, for type 2
D_7	Largest tool body diameter = $3.2\text{--}20$ mm, for type 2, 3
l_{4a}	Drill depth = $1\text{--}3 = 3.3\text{--}140.0$ mm
l_{1s}	Programming length = $11.3\text{--}186$ mm
MARG	Margin construction SM = single margin
CMOD	Corner modification N = No
(dm_m)	Coupling size –6, 8, 10, 12, 14, 16, 18, 20 mm)



CoroDrill® 860-PM
with Cylindrical and Whistle notch shank

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

860. - - - PM 4234 metric std

Your value/
Your choice

State only your options deviating from the above standard

Geometry type	PM	
Type of grade	4234	
Coolant supply	Y = Yes, N = No	
Coupling type	Cylindrical shank —CYL, —CYLEXT. Whistle Notch shank—WN	
Drill type	1— D_{c1} = 3.0–20.00 mm. 2— D_{c1} = 3.0–18.0 mm. 3— D_{c1} = 3.0–19.80 mm	
ε_{pa1}	Point angle = 152°	
D_{c1}	Diameter = 3.0–20.0 mm	
Tolerance	Tolerance on D_{c1} = h7/js7/m7 for drill type 1, 2, 3	
ε_{pa2}	Chamfer angle = 60°–150°, for type 2	
D_7	Largest tool body diameter = 3.2–20 mm, for type 2, 3	
l_{4a}	Drill depth = 1–3 = 3.3–140.0 mm	
l_{1s}	Programming length = 11.3–186 mm	
MARG	Margin construction SM = single margin	
CMOD	Corner modification N = No	
(dm_m)	Coupling size—6, 8, 10, 12, 14, 16, 18, 20 mm)	



The value/choice must be given

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



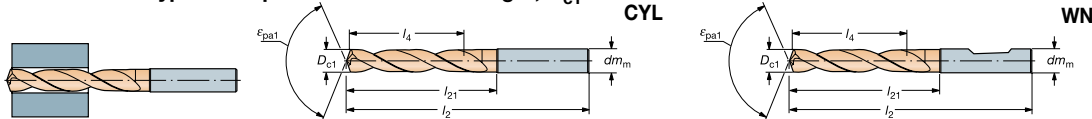
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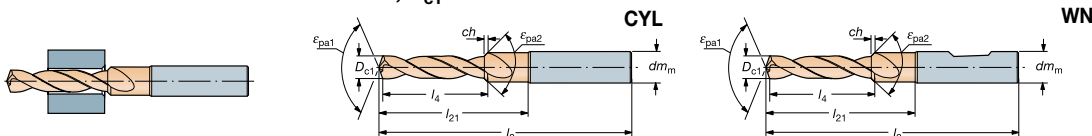
If you do not find what you need in our comprehensive standard programme, choose the tool shape you require and we will tailor it for you to *your* dimensions.

CoroDrill® Delta-C R840 with Cylindrical and Whistle notch shank

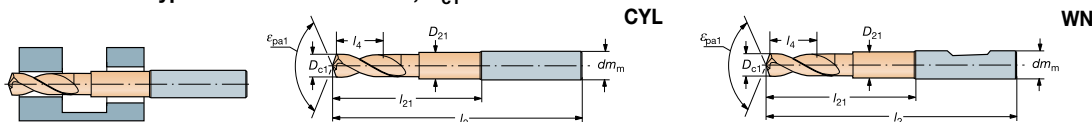
1= Standard type with special diameter and length, $D_{c1} = 3.0\text{--}20.0\text{ mm}$



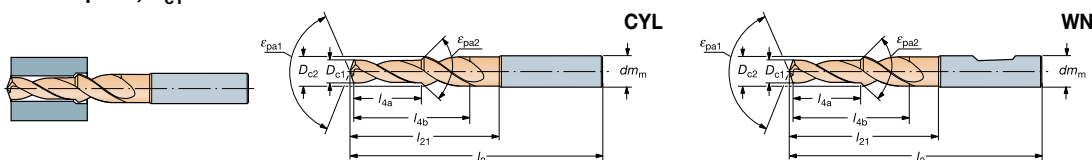
2= Chamferdrill with extended shank, $D_{c1} = 3.0\text{--}16.0\text{ mm}$



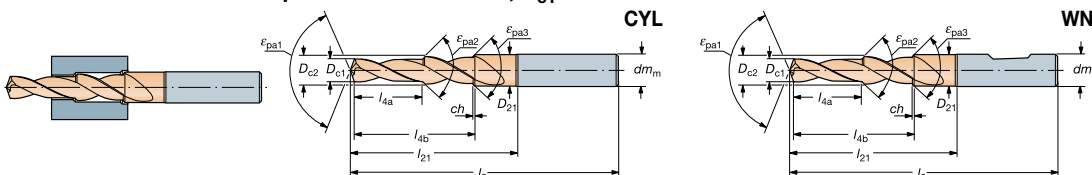
3= Standard type with extended shank, $D_{c1} = 3.0\text{--}20.0\text{ mm}$



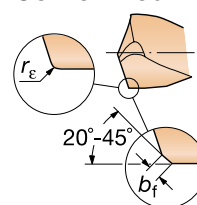
4= Stepdrill, $D_{c1} = 3.0\text{--}16.0\text{ mm}$



5= Chamferdrill with 2 step and extended shank, $D_{c1} = 3.0\text{--}16.0\text{ mm}$



Corner Mod.



Coolant supply



External



Internal

Shank type

Cylindrical – CYL
Whistle Notch – WN

Options

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

D_{c1}	Diameter— 3.0–20.0 mm
Drill type	1, 3 — $D_{c1} = 3.0\text{--}20.0\text{ mm}$. / 2, 4, 5 — $D_{c1} = 3.0\text{--}16.0\text{ mm}$
Carbide grade	GC1220 or modified
Tolerance	Tolerance on $D_{c1} = \text{h7/js7/m7}$ for drill type 1, 2, 3, and h8/js8/m8 for drill type 4, 5
l_4	Drill depth mm—Type 1— 3.0–118.5 , type 2— 3.0–80 , type 3— 3.0–118.5
l_{4a}	Drill depth—Type 4— 3.0–64 mm Drill depth—Type 5— 3.0–80 mm
l_{21}	Reach length— 9.7–155 mm
l_2	Overall length— 49.7–205 mm
D_{c2}	Step diameter— 3.5–20 mm , for drill type 4 Step diameter— 3.2–18 mm , for drill type 5
ch	Chamfer width— 0.5–2 mm , for drill type 2, 5
Tolerance	Tolerance on $D_{c2} = \text{h7/js7/m7}$, for drill type 4, 5
ϵ_{pa1}	Point angle= 118°–150°
ϵ_{pa2}	Chamfer angle = 60°–150° , for type 2 Step angle = 60°–180° , for type 4, 5

ϵ_{pa3}	Step angle = 60°–150° , for type 5
l_{4b}	Step length = 5.2–120 mm , for type 4 Step length = 8–108 mm , for type 5
Mounting type	Cylindrical shank — CYL , Whistle Notch shank— WN
dm	Mounting size—6, 8, 10, 12, 14, 16, 18, 20 mm
D_{21}	Extended diameter— 3.1–20 mm , for type 3, 5
Coolant supply	E = External I = Internal
Coating type, (modified)	TiN, TiCN+TiN, TiAlN, (FUTURA NANO), (FUTURA TOP), TiAlN + WC/C (HARDLUBE), No coating
Back taper	Std, Small
Circular land	Std, Large
Corner Mod.	Yes (state radius or chamfer) or No
Corner radius r_e	r_e mm = 0.2–2
Corner chamfer	20°–45° × b_f mm, ($b_f = 0.5–4$)



CoroDrill® Delta-C R840

with Cylindrical and Whistle notch shank

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

R840 -

metric std

Your value/
Your choice

State only your options deviating from the above standard

Diameter D_{c1}	3,0–20,0 mm					
Drill type	Drill type = 1, 3, D_{c1} = 3.0–20.0 mm Drill type = 2, 4 and 5, D_{c1} = 3.0–16.0 mm					
Carbide grade	GC1220 or modified					
Tolerance on D_{c1}	h7, js7, m7, for drill type 1, 2, 3 and h8, js8, m8, for drill type 4, 5					
Drill depth l_4 / l_{4a}	Drill type 1, 3, l_4 = 3.0–118.5 mm, Drill type 2, 5, l_4 = 3.0–80.0 mm and 4, l_{4a} = 3.0–64.0 mm					
Reach length l_{21}	Reach length l_{21} = 9.7–155 mm					
Overall length l_2	49.7–205 mm					
Step diameter D_{c2}	D_{c2} = 3.5–20.0 mm, for drill type 4 D_{c2} = 3.2–18.0 mm, for drill type 5					
Chamfer width ch	Drill type 2, 5, ch = 0.5–2.0 mm					
Tolerance on D_{c2}	h7, js7, m7, for drill type 4, 5					
Point angle ε_{pa1}	Point angle = 118°–150°					
Chamfer/step angle ε_{pa2}	Chamfer angle = 60°–150°, for drill type 2, step angle = 60°–180°, for drill type 4, 5					
Step angle ε_{pa3}	Step angle = 60°–150°, for drill type 5					
Step length l_{4b}	Step length l_{4b} = 5.2–120 mm, for drill type 4 / 8–108 mm, for drill type 5					
Mounting type and Mounting size dm_m	<table border="1"> <tr> <td>D_c mm</td> <td>Cylindrical shank = CYL, Whistle Notch shank = WN</td> </tr> <tr> <td>3.0–20,0</td> <td>dm_m mm = 6, 8, 10, 12, 14, 16 18, 20</td> </tr> </table>	D_c mm	Cylindrical shank = CYL, Whistle Notch shank = WN	3.0–20,0	dm_m mm = 6, 8, 10, 12, 14, 16 18, 20	Type = Size =
D_c mm	Cylindrical shank = CYL, Whistle Notch shank = WN					
3.0–20,0	dm_m mm = 6, 8, 10, 12, 14, 16 18, 20					
Extended diameter D_{21}	Extended diameter D_{21} = 3.1–20 mm, for drill type 3, 5					
Coolant supply	E = External I = Internal					
Coating type, (modified)	TiN, TiCN+TiN, TiALN, (FUTURA NANO), (FUTURA TOP), TiALN + WC/C (HARDLUBE) , No coating					
Back taper	Std or Small					
Circular land	Std or Large					
Corner modification	Yes (radius or chamfer) or No					
Corner modification r_ε	Radius r_ε mm = 0.2–2					
Corner modification b_f	Chamfer = 20°–45° × b_f mm, (b_f = 0.5–4)					



The value/choice must be given

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



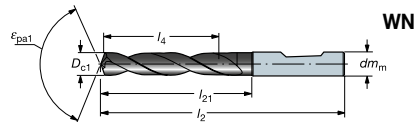
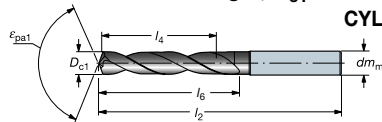
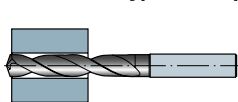
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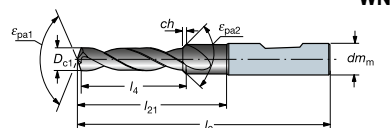
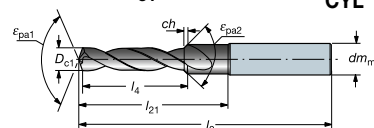
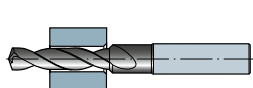
If you do not find what you need in our comprehensive standard programme, choose the tool shape you require and we will tailor it for you to *your* dimensions.

CoroDrill® Delta-C R842 with cylindrical and Whistle Notch shanks

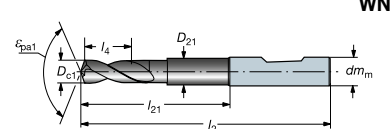
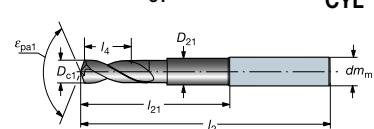
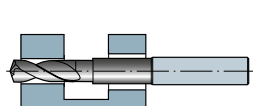
1 = Standard type with special diameter and length, $D_{c1} = 6.0\text{--}16.0$ mm



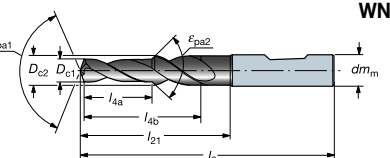
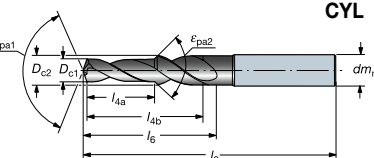
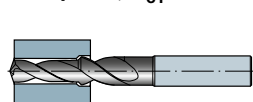
2 = Chamfer drill with extended shank, $D_{c1} = 3.0\text{--}14.4$ mm



3 = Standard type with extended shank, $D_{c1} = 6.0\text{--}16.0$ mm



4 = Step drill, $D_{c1} = 3.0\text{--}14.4$ mm



Coolant supply

External

Internal

Shank type

Cylindrical –CYL

Whistle Notch –WN

Options

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

D_{c1}	Diameter— 3.0–16.0 mm
Drill type	1, 3 — $D_{c1} = 6.0\text{--}16.0$ mm. / 2, 4 — $D_{c1} = 3.0\text{--}14.4$ mm
Carbide grade	GC1210
Tolerance	Tolerance on $D_{c1} = h7/js7/m7$ ($h6/js6/m6$ if $l_4 \leq 2.5 \times D_{c1}$)
l_4	Drill depth— 3.0–60.2 mm
l_{4a}	Drill depth— 3.0–43.2 mm
l_{4b}	Step length— 5.0–52.5 mm
l_{21}	Reach length— 9.6–85 mm
l_2	Overall length— 46.1–133 mm
D_{c2}	Step diameter— 3.2–16 mm, for drill type 4
ch	Chamfer width— 0.2–1.0 mm, for drill type 2
Tolerance	Tolerance on $D_{c2} = h7/js7/m7$, for drill type 4
ϵ_{pa2}	Chamfer angle = 60°–150° , for type 2 Step angle = 60°–180° , for type 4
ϵ_{pa1}	Point angle = 118°–150°

Mounting type	Cylindrical shank —CYL, Whistle Notch shank—WN
Coolant supply	E = External I = Internal
Back taper	Small, Std, Large, XLarge
Circular land	Std, Large



CoroDrill® Delta-C R842
with Cylindrical and Whistle notch shank

Inquiry/ordering No.

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

State only your options

Your value/
Your choice

Diameter D_{c1}	3.0–16 mm	
Drill type	1, 3 D_{c1} = 6.0–16 mm 2, 4 D_{c1} = 3.0–14.4 mm	
Carbide grade	GC1210	
Tolerance on D_{c1}	h7, js7, m7 (h6, js6, m6 if $l_4 \leq 2.5 \times D_{c1}$)	
Drill depth l_4	3.0–60.2 mm	
Reach length l_{21}	9.6–85 mm	
Overall length l_2	46.1–133 mm	
Step diameter D_{c2}	3.2–16.0 mm, for drill type 4	
Chamfer width ch	0.2–1.0 mm, for drill type 2	
Tolerance on D_{c2}	h7, js7, m7, for drill type 4	
Chamfer/step angle ε_{pa2}	Chamfer angle = 60°–150°, for drill type 2 Step angle = 60°–180°, for drill type 4	
Point angle ε_{pa1}	118°–150°	
Drill depth l_{4a}	3.0–43.2 mm	
Step length l_{4b}	5.2–52.5 mm	
Mounting type	Cylindrical shank = CYL, Whistle Notch shank = WN	
Coolant supply	E = External I = Internal	
Back taper	Small, Std, Large, XLarge	
Circular land	Std or Large	



The value/choice must be given

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



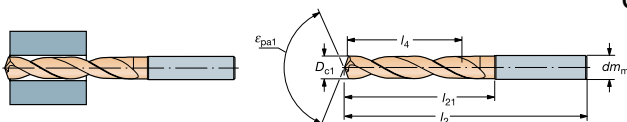
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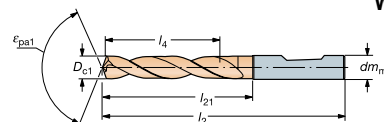
If you do not find what you need in our comprehensive standard programme, choose the tool shape you require and we will tailor it for you to *your* dimensions.

CoroDrill® Delta-C R844 with cylindrical and Whistle Notch shanks

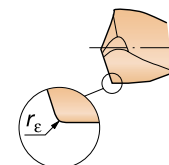
1 = Standard type with special diameter and length, $D_{c1} = 8.0\text{--}20.0$ mm



CYL



WN



Coolant supply



External



Internal

Shank type

Cylindrical –CYL

Whistle Notch –WN

Options

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

D_{c1}	Diameter—8.0–20.0 mm
Drill type	1
Carbide grade	GC1220 or modified
Tolerance	Tolerance on $D_{c1} = h7/js7/m7$ ($h6/js6/m6$ if $l_4 \leq 2.5 \times D_{c1}$)
l_4	Drill depth—8.0–118.5 mm
l_{21}	Reach length—19.7–155 mm
l_2	Overall length—55.7–205 mm
ϵ_{pa1}	Point angle = 118°–150°
Mounting type	Cylindrical shank—CYL, Whistle Notch shank—WN
Coolant supply	E = External I = Internal
Back taper	Small, Std, Large, XLarge
Corner radius r_ϵ	0.2–2.0 mm
Circular land	Std, Large



CoroDrill® Delta-C R844
with Cylindrical and Whistle notch shank

Inquiry/ordering No.

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

State only your options

Diameter D_{c1}	8.0–20.0 mm	Your value/ Your choice ↓
Drill type	1	
Carbide grade	GC1220 or modified	
Tolerance on D_{c1}	h7, js7, m7 (h6/js6/m6 if $l_4 \leq 2.5 \times D_{c1}$)	
Drill depth l_4	8.0–118.5 mm	
Reach length l_{21}	19.7–155 mm	
Overall length l_2	55.7–205 mm	
Point angle ε_{pa1}	118°–150°	
Mounting type	Cylindrical shank = CYL , Whistle Notch shank = WN	
Coolant supply	E = External I = Internal	
Back taper	Small, Std, Large, XLarge	
Corner radius r_ε	0.2–2.0 mm	
Circular land	Std or Large	



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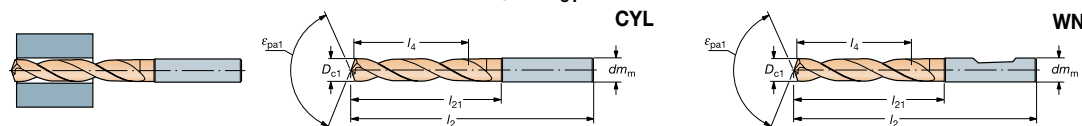
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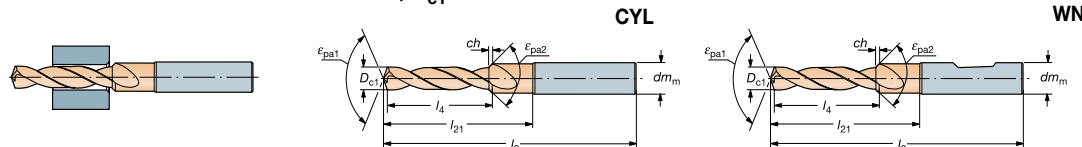
If you do not find what you need in our comprehensive standard programme, choose the tool shape you require and we will tailor it for you to *your* dimensions.

CoroDrill® Delta-C R846 with cylindrical and Whistle Notch shanks

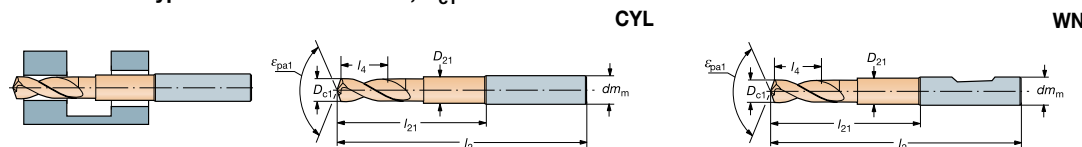
1 = Standard type with special diameter and length, $D_{C1} = 3.0\text{--}16.0$ mm



2 = Chamfer drill with extended shank, $D_{C1} = 4.85\text{--}15.0$ mm



3 = Standard type with extended shank, $D_{C1} = 3.0\text{--}16.0$ mm



Coolant supply



Shank type

Cylindrical –CYL
Whistle Notch –WN

Options

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

D_{C1}	3.0–16.0 mm
Drill type	1, 3 – $D_{C1} = 3.0\text{--}16.0$ mm / 2 – $D_{C1} = 4.85\text{--}15.0$ mm
Carbide grade	GC1220 or modified
Tolerance	Tolerance on $D_{C1} = h7/js7/m7$
l_4	Drill depth—type 1—3.0–105.3 mm type 2—4.9–75 mm type 3—4.5–80 mm
l_{21}	Reach length—type 1—10.1–130 mm type 2—14.6–130 mm type 3—11.6–130 mm
l_2	Overall length—46.1–178 mm
ch	Chamfer width—0.1–1.0 mm, for drill type 2
ϵ_{pa2}	Chamfer angle = 60°–150°, for type 2
Mounting type	Cylindrical shank —CYL, Whistle Notch shank—WN
D_{21}	Extended diameter—3.1–16 mm, for type 3

Coolant supply	E = External I = Internal
Back taper	Large or XLarge



CoroDrill® Delta-C R846

with Cylindrical and Whistle notch shank

Inquiry/ordering No.

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

State only your options		Your value/ Your choice
Diameter D_{c1}	3.0–16.0 mm	
Drill type	Drill type = 1, 3 D_{c1} = 3.0–16.0 mm Drill type = 2 D_{c1} = 4.85–15.0 mm	
Carbide grade	GC1220 or modified	
Tolerance on D_{c1}	h7, js7, m7	
Drill depth l_4	Drill type 1 l_4 = 3.0–105.3 mm, 2, l_4 = 4.9–75.0 mm and 3, l_4 = 4.5–80.0 mm	
Reach length l_{21}	Drill type 1 l_{21} = 10.1–130 mm, 2, l_{21} = 14.6–130 mm and 3, l_{21} = 11.6–130 mm	
Overall length l_2	46.1–178 mm	
Chamfer width ch	0.1–1.0 mm, for drill type 2	
Chamfer angle ε_{pa2}	60°–150°, for drill type 2	
Mounting type	Cylindrical shank = CYL , Whistle Notch shank = WN	
Extended diameter D_{21}	3.1–16 mm, for drill type 3	
Coolant supply	E = External I = Internal	
Back taper	Large or XLarge	



The value/choice must be given

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



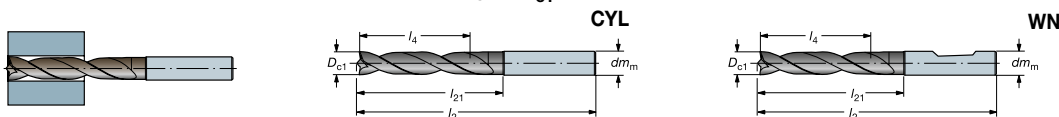
- Quick quotation
- Easy to order
- Competitive delivery

Even more possibilities thanks to tailored design!

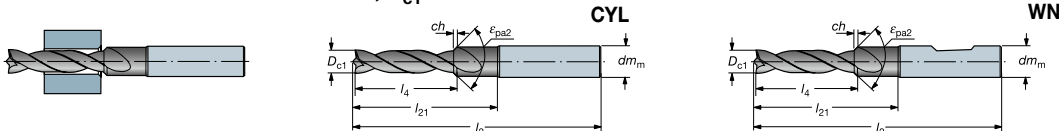
If you do not find what you need in our comprehensive standard programme, choose the tool shape you require and we will tailor it for you to *your* dimensions.

CoroDrill® Delta-C R850 AI with cylindrical and Whistle Notch shanks

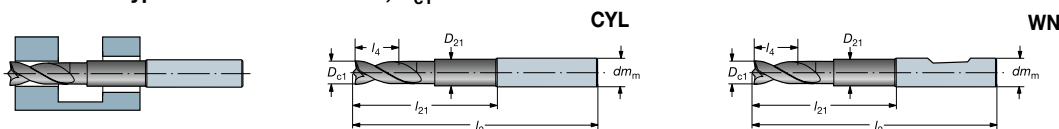
1 = Standard type with special diameter and length, $D_{c1} = 3,0 - 20,0$ mm



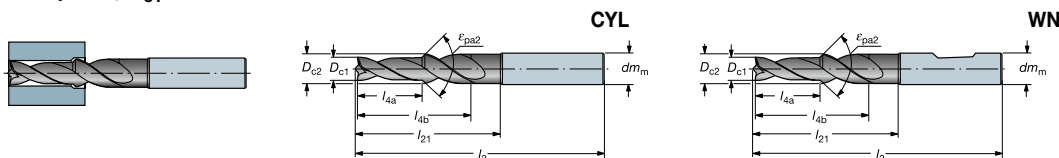
2 = Chamfer drill with extended shank, $D_{c1} = 3,0-16,0$ mm



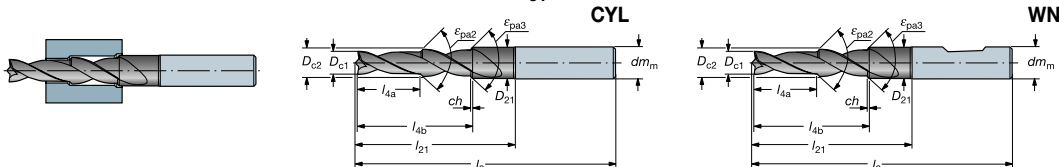
3 = Standard type with extended shank, $D_{c1} = 3,0 - 20,0$ mm



4 = Step drill, $D_{c1} = 3,0-16,0$ mm



5 = Chamfer drill with 2 steps and extended shank, $D_{c1} = 3,0-16,0$ mm



Coolant supply



Shank type

Cylindrical – CYL
Whistle Notch – WN

Options

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

D_{c1}	Diameter—3.0–20.0 mm
Drill type	1, 3 — $D_{c1} = 3.0-20.0$ mm. / 2, 4, 5 — $D_{c1} = 3.0-16.0$ mm
Carbide grade	GC1220 or modified
Tolerance	Tolerance on $D_{c1} = h7/js7/m7$ for drill type 1, 2, 3, and $h8/js8/m8$ for drill type 4, 5
l_4	Drill depth mm—Type 1—3.0–118.5, type 2—3.0–80, type 3—3.0–118.5
l_{4a}	Drill depth—Type 4—3.0–64 mm Drill depth—Type 5—3.0–80 mm
l_{21}	Reach length—9.7–155 mm
l_2	Overall length—49.7–205 mm
D_{c2}	Step diameter—3.5–20 mm, for drill type 4 Step diameter—3.2–18 mm, for drill type 5
ch	Chamfer width—0.5–2 mm, for drill type 2, 5
Tolerance	Tolerance on $D_{c2} = h7/js7/m7$, for drill type 4, 5
ϵ_{pa2}	Chamfer angle = 60°–150°, for type 2 Step angle = 60°–180°, for type 4, 5
ϵ_{pa3}	Step angle = 60°–150°, for type 5

l_{4b}	Step length = 5.2–120 mm, for type 4 Step length = 8–108 mm, for type 5
Mounting type	Cylindrical shank — CYL, Whistle Notch shank — WN
dm_m	Mounting size —6, 8, 10, 12, 14, 16, 18, 20 mm
D_{21}	Extended diameter—3.1–20 mm, for type 3, 5
Coolant supply	E = External I = Internal
Coating type, (modified)	TiN, TiCN+TiN, TiAlN, (FUTURA NANO), (FUTURA TOP), TiAlN + WC/C (HARDLUBE), No coating
Back taper	Std, Small
Circular land	Std, Large



CoroDrill® Delta-C R850 AI

with Cylindrical and Whistle notch shank

Inquiry/ordering No.

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

State only your options		Your value/ Your choice						
Diameter D_{c1}	3.0-20.0 mm							
Drill type	Drill type = 1, 3, D_{c1} = 3.0-20.0 mm Drill type = 2, 4 and 5, D_{c1} = 3.0-16.0 mm							
Carbide grade	GC1220 or modified							
Tolerance on D_{c1}	h7, js7, m7, for drill type 1, 2, 3 and h8, js8, m8, for drill type 4, 5							
Drill depth l_4 / l_{4a}	Drill type 1 / 3, l_4 = 3.0-118.5 mm, Drill type 2/5, l_4 = 3.0-80.0 mm and 4, l_{4a} = 3.0-64.0 mm							
Reach length l_{21}	Reach length l_{21} = 9.7-155 mm							
Overall length l_2	49.7-205 mm							
Step diameter D_{c2}	D_{c2} = 3.5-20.0 mm, for drill type 4 / D_{c2} = 3.2-18.0 mm, for drill type 5							
Chamfer width ch	Drill type 2 / 5, ch = 0.5-2.0 mm							
Tolerance on D_{c2}	h7, js7, m7, for drill type 4, 5							
Chamfer/step angle ε_{pa2}	Chamfer angle = 60°-150°, for drill type 2, step angle = 60°-180°, for drill type 4, 5							
Step angle ε_{pa3}	Step angle = 60°-150°, for drill type 5							
Step length l_{4b}	Step length l_{4b} = 5.2-120 mm, for drill type 4 / 8-108 mm, for drill type 5							
Mounting type and Mounting size dm_m	<table border="1"> <tr> <td>D_c mm</td> <td>Cylindrical shank = CYL, Whistle Notch shank = WN</td> </tr> <tr> <td>3.0-20.0</td> <td>dm_m mm = 6, 8, 10, 12, 14, 16 18, 20</td> </tr> </table>	D_c mm	Cylindrical shank = CYL, Whistle Notch shank = WN	3.0-20.0	dm_m mm = 6, 8, 10, 12, 14, 16 18, 20	<table border="1"> <tr> <td>Type =</td> </tr> <tr> <td>Size =</td> </tr> </table>	Type =	Size =
D_c mm	Cylindrical shank = CYL, Whistle Notch shank = WN							
3.0-20.0	dm_m mm = 6, 8, 10, 12, 14, 16 18, 20							
Type =								
Size =								
Extended diameter D_{21}	Extended diameter D_{21} = 3.1-20 mm, for drill type 3, 5							
Coolant supply	E = External I = Internal							
Coating type, (modified)	TiN, TiCN+TiN, TiALN, (FUTURA NANO), (FUTURA TOP), TiALN + WC/C (HARDLUBE) , No coating							
Back taper	Std or Small							
Circular land	Std or Large							



The value/choice must be given

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



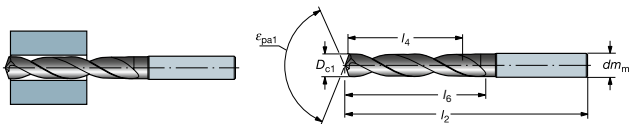
- Quick quotation
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Even more possibilities thanks to tailored design!

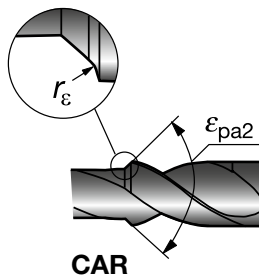
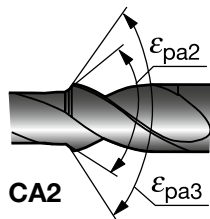
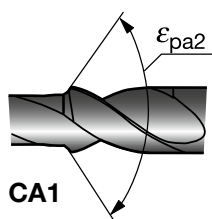
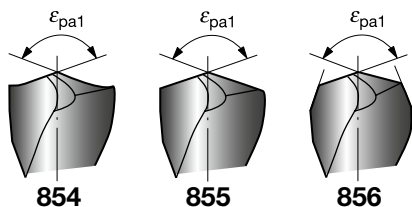
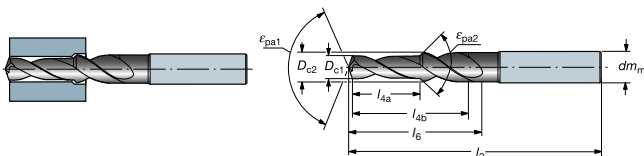
If you do not find what you need in our comprehensive standard programme, choose the tool shape you require and we will tailor it for you to *your* dimensions.

CoroDrill® 854/855/856

1= Standard type with special diameter and length, $D_{c1} = 2.381\text{--}20.0\text{ mm}$



4= Step drill, $D_{c1} = 2.381\text{--}20.0\text{ mm}$



Coolant supply



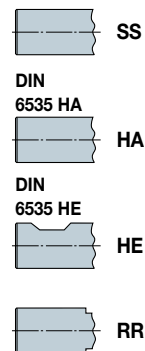
External



Internal

Shank type

Straight shank – SS
Stepped shank – HA
Stepped shank with flat – HE
Reinforced shank – RR



Options

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

Geometry	854, 855, 856
Drill type	1, 4— $D_{c1} = 2.381\text{--}20.0\text{ mm}$
Carbide grade	N30C (diamond-like coating) or N20C (diamond coating) or Uncoated
Coolant supply	E = external I = internal
Circular land	SM = single margin DM = double margin
Mounting type	SS = straight shank HA = stepped shank HE = stepped shank with flat RR = reinforced shank
D_{c1}	Diameter— $2.381\text{--}20.0\text{ mm}$
D_{c2}	Step diameter— $2.881\text{--}19.8\text{ mm}$, for drill type 4
l_{4a}	Drill length— $2\text{--}97.5\text{ mm}$
Chamfer type	CA1 = single chamfer angle CA2 = double chamfer angle CAR = chamfer angle with radius

ϵ_{pa2}	Chamfer angle = $30^\circ\text{--}180^\circ$, (1° increments allowed) specify for CA1/CA2/CAR
ϵ_{pa3}	Secondary chamfer angle = $30^\circ\text{--}180^\circ$, (1° increments allowed) specify for CA2
Chamfer radius	$1\text{--}20.0\text{ mm}$ specify for CAR
r_ϵ	
Lengths	Specify overall, flute or both
l_2	Overall length— $23.8\text{--}310\text{ mm}$ (depending on diameter)
l_6	Flute length— $3.3\text{--}278\text{ mm}$ (depending on diameter and overall length)
Tolerances	Special tolerances are available if requested, see next page



CoroDrill® 854/855/856

Inquiry/ordering No.

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

Your value/
Your choice

State only your options

Geometry	854 or 855 or 856	
Drill type	1 or 4	
Carbide grade	N30C (diamond-like coating) or N20C (diamond coating) or Uncoated	
Coolant supply	E = External I = Internal	
Circular land	SM = single margin, DM = double margin	
Mounting type	SS = straight shank, HA = stepped shank, HE = stepped shank with flat, RR = reinforced shank	
Diameter D_{c1}	2.381–20.0 mm specify pilot (first dia. on type 4) 0.001 mm increments allowed	
Step diameter D_{c2}	2.881–19.8 mm	
Drill length l_{4a}	2–97.5 mm	
Chamfer type	CA1 = single chamfer angle, CA2 = double chamfer angle CAR = chamfer angle with radius	
Chamfer angle ε_{pa2}	30°–180°, (1° increments allowed) specify for CA1/CA2/CAR	
Secondary chamfer angle ε_{pa3}	30°–180°, (1° increments allowed) specify for CA2	
Chamfer radius r_ε	1–20 mm specify for CAR	
Flute length l_6	3.3–278 mm depending on diameter and overall length	
Overall length l_2	23.8–310 mm depending on diameter	
Tolerance on D_{c1}	Accepted input: tolerance code ex. m7 or specify a range ex. +0.021/+0.006 mm – min. allowed range is 0.015 mm	
Tolerance on D_{c2}	Accepted input: tolerance code ex. m7 or specify a range ex. +0.021/+0.006 mm – min. allowed range is 0.015 mm	
Tolerance on shank diameter	Accepted input: tolerance code ex. m7 or specify a range ex. +0.018/+0.006 mm – min. allowed range is 0.012 mm	
Tolerance on l_{4a}	Min. allowed value: +0.1/–0.1 mm	
Tolerance on l_2	Min. allowed value: +0.2/–0.2 mm	
Tolerance on l_6	Min. allowed value: +0.4/–0.4 mm	

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



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Coromant Delta drill R411.5

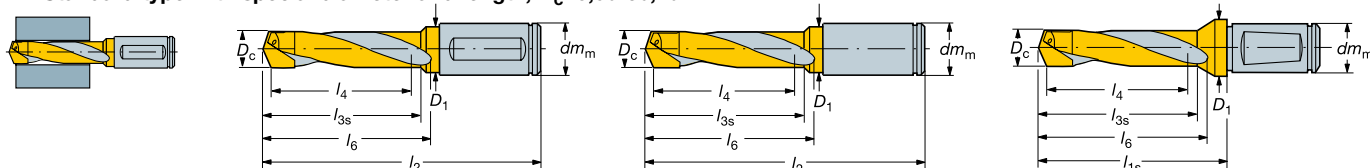
Drill diameter	Mounting type		
	Cylindrical shank with flat	Cylindrical shank	Coromant Whistle Notch shank
D_c	Mounting Size dm_m		
9.50-30.40	16,20 ,25, 32	16,20 ,25, 32	16,20 ,25

Cylindrical shank with flat—CYLPF

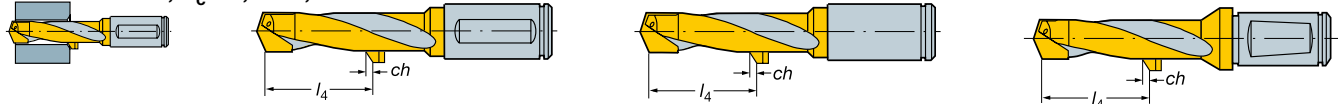
Cylindrical shank—CYL

Coromant Whistle Notch shank—CWN

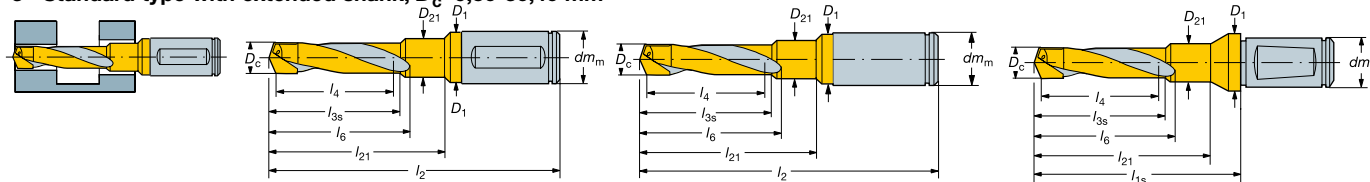
1= Standard type with special diameter and length, $D_c=9,50-30,40$ mm



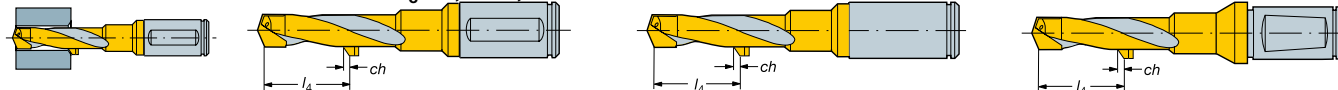
2= Chamferdrill, $D_c=12,25-30,40$ mm



3= Standard type with extended shank, $D_c=9,50-30,40$ mm



4= Chamferdrill with extended shank $D_c=12,25-30,40$ mm



Options

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

D_c	Diameter— 9,50-30,40 mm
Drill type	1, 3 — $D_c=9,50-30,40$ mm—1=standard 2, 4 — $D_c=12,25-30,40$ mm
ch	Chamfer width— 0,5-1,5 mm, only valid for type 2 and 4
I_{3s}	Drill length—Drill type 1 and 2— 17-158 mm Drill type 3 and 4— 17-140 mm
I_4	Drill depth—Type 1— 9,9-134,8 mm Type 2— 16,4-134,8 mm Type 3— 9,9-116,8 mm Type 4— 16,4-116,8 mm
Mounting type	Cylindrical shank with flat—CYLPF, Cylindrical shank—CYL, Coromant Whistle Notch shank—CWN
dm_m	Mounting size—see above

D_{21}	Extended diameter— 10-31 mm, only valid for type 3 and 4
I_{21}	Extended length— 18,6-158 mm, only valid for type 3 and 4
D_1	Flange diameter— 15-32 mm
I_{1s}	Programming length— 44-175 mm, depending on I_{3s} , I_4 , I_{21}
I_2	Overall length— 92-236 mm, depending on I_{3s} , I_4 , I_{21}
I_6	Flute length— 17-172 mm, depending on D_c and dm_m
Carbide grade	P20 for general steel applications K20 for stainless steel, cast iron and aluminium H10F for stainless steel, titanium and aluminium
Coating type	TiN , TiCN , TiAlN (FUTURA) , TiAlN + WC/C (HARDLUBE)

