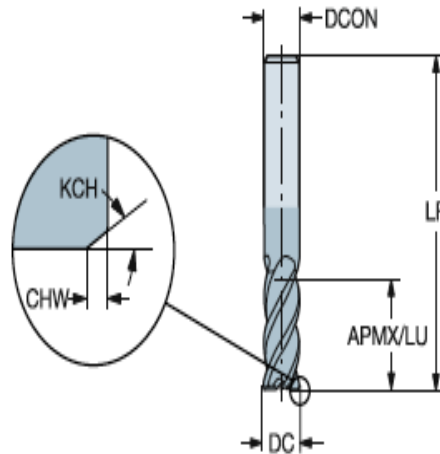


CoroMill® Plura solid carbide square shoulder end mill

Straight, center cut. Hardness $\leq 48\text{HRc}$

End mills for high feed side milling

2P340-PA
 CNCS 0
 FHA 37°
 BSG COROMANT
 TCDCON h6



Metric version

DC	CZC _{MS}	APMX	CHW	KCH	LU	ZEFP	Ordering code	P K		Dimensions, mm		
								1630	1630	DCON	RMPX	LF
2.00	6.0	7.00	0.15	45°	7.00	4	2P340-0200-PA	☆	☆	6.00	5°	57.00
2.50	6.0	8.00	0.15	45°	8.00	4	2P340-0250-PA	☆	☆	6.00	5°	57.00
3.00	6.0	8.00	0.15	45°	8.00	4	2P340-0300-PA	☆	☆	6.00	5°	57.00
3.50	6.0	10.00	0.13	45°	10.00	4	2P340-0350-PA	☆	☆	6.00	5°	57.00
4.00	6.0	11.00	0.13	45°	11.00	4	2P340-0400-PA	☆	☆	6.00	5°	57.00
5.00	6.0	13.00	0.13	45°	13.00	4	2P340-0500-PA	☆	☆	6.00	5°	57.00
6.00	6.0	13.00	0.15	45°	13.00	4	2P340-0600-PA	☆	☆	6.00	5°	57.00
7.00	8.0	16.00	0.15	45°	16.00	4	2P340-0700-PA	☆	☆	8.00	5°	63.00
8.00	8.0	19.00	0.15	45°	19.00	4	2P340-0800-PA	☆	☆	8.00	5°	63.00
9.00	10.0	19.00	0.15	45°	19.00	4	2P340-0900-PA	☆	☆	10.00	5°	72.00
10.00	10.0	22.00	0.15	45°	22.00	4	2P340-1000-PA	☆	☆	10.00	5°	72.00
12.00	12.0	26.00	0.15	45°	26.00	4	2P340-1200-PA	☆	☆	12.00	5°	83.00
14.00	14.0	26.00	0.20	45°	26.00	4	2P340-1400-PA	☆	☆	14.00	5°	83.00
16.00	16.0	32.00	0.20	45°	32.00	4	2P340-1600-PA	☆	☆	16.00	5°	92.00
18.00	18.0	32.00	0.20	45°	32.00	4	2P340-1800-PA	☆	☆	18.00	5°	92.00
20.00	20.0	38.00	0.20	45°	38.00	4	2P340-2000-PA	☆	☆	20.00	5°	104.00
25.00	25.0	45.00	0.20	45°	45.00	4	2P340-2500-PA	☆	☆	25.00	5°	121.00

CoroMill® Plura cutting data

Speed recommendations

		GC1620 GC1630 H10F N20C										
				$a_p \times a_0 > D_c$		$a_p \times a_0 < D_c$		$a_0 \leq 0.05 \times D_c$		$a_0 \leq 0.05 \times DC$ or DCX $a_p \leq 0.05 \times DC$ or DCX		
ISO	MC	CMC	HB	HRC	v_c m/min	v_c feet/min	v_c m/min	v_c feet/min	v_c m/min	v_c feet/min	v_c m/min	v_c feet/min
P	P1.1.Z.AN	01.1	125		155	510	200	660	375	1230	690	2260
	P1.2.Z.AN	01.2	150		135	440	185	610	340	1120	630	2070
	P1.3.Z.AN	01.4	200		120	390	140	460	255	840	470	1540
	P2.5.Z.HT	02.2	250		100	330	130	430	245	800	450	1480
	P2.5.Z.HT	02.2	300		90	300	120	390	220	720	410	1350
	P3.0.Z.HT	03.22	400		75	250	95	310	180	590	335	1100
	P3.0.Z.HT	03.22	450		65	210	85	280	160	520	300	980
M	P5.0.Z.AN	05.11	200		60	200	90	300	165	540	300	980
	M1.0.Z.AQ	05.21	200		60	200	75	250	145	480	270	890
	M3.1.Z.AQ	05.51	230		45	150	55	180	110	360	200	660
K		07.1	150		135	440	180	590	330	1080	610	2000
	K2.1.C.UT	08.1	180		85	280	110	360	210	690	385	1260
	K3.3.C.UT	09.2	200		100	330	130	430	240	790	440	1440
N	N1.3.C.AG	30.22	90		1000	3280	1100	3610	1250	4100	1300	4270
	N1.4.C.NS	30.42	130		470	1540	605	1985	1000	3280	1050	3445
S	S2.0.Z.AG	20.22	350		50	165	60	195	100	330	150	490
	S4.3.Z.AG	23.22	350		70	230	80	260	160	525	300	985
H	H1.1.Z.HA	04.1		50	55	180	80	260				
	H1.3.Z.HA	04.1		55	-	-	55	180	GC1610		GC1610 1700	
	H1.4.Z.HA	04.1		60	-	-	40	130				
O	O3.0.U.NS		250		125	410	-	-	-	-	-	-
	O4.0.U.NS		250		150	490	-	-	-	-	-	-
CD15					$a_p \times a_0 > D_c$		$a_p \times a_0 < D_c$		$a_0 \leq 0.05 \times D_c$		$a_0 \leq 0.05 \times DC$ or DCX $a_p \leq 0.05 \times DC$ or DCX	
ISO	MC	CMC	HB	HRC	v_c m/min	v_c feet/min	v_c m/min	v_c feet/min	v_c m/min	v_c feet/min	v_c m/min	v_c feet/min
O	O3.0.U.NS		250		95	310	300	985	400	1310	-	-
	O4.0.U.NS		250		120	390	315	1035	420	1380	-	-

Feed recommendations

		GC1620 GC1630 H10F N20C CD15									
		DC or DCX		f_z		f_z		f_z		f_z	
Metric		mm	inch	mm/tooth	inch/tooth	mm/tooth	inch/tooth	mm/tooth	inch/tooth	mm/tooth	inch/tooth
$n = \frac{1000 \times v_c}{\pi \times DC}$ (rpm)		1	.039	0.002	.0001	0.002	.0001	0.013	.0005	0.023	.0009
$v_f = n \times f_z \times ZEPF$ (mm/min)		2	.079	0.004	.0002	0.003	.0001	0.032	.0013	0.056	.0022
		3	.118	0.006	.0002	0.007	.0003	0.039	.0015	0.07	.0028
$D_0 = 2 \times \sqrt{a_p \times (DCX - a_p)}$ (mm)		3.175	.125 (1/8")	0.006	.0003	0.008	.0003	0.040	.0016	0.072	.0028
		4	.157	0.008	.0003	0.014	.0006	0.045	.0018	0.08	.0031
		4.76	.188 (3/16")	0.010	.0004	0.019	.0008	0.046	.0018	0.078	.0031
Inch		5	.197	0.011	.0004	0.021	.0008	0.046	.0018	0.078	.0031
$n = \frac{v_c \times 12}{\pi \times D_0}$ (rpm)		6	.236	0.014	.0006	0.03	.0012	0.055	.0022	0.099	.0039
		6.35	.250 (1/4")	0.015	.0006	0.031	.0012	0.056	.0022	0.102	.0040
		8	.315	0.020	.0008	0.033	.0013	0.063	.0025	0.114	.0045
$v_f = n \times f_z \times ZEPF$ (inch/min)		9.525	.375 (3/8")	0.025	.0010	0.050	.0020	0.069	.0027	0.124	.0049
		10	.394	0.027	.0011	0.055	.0022	0.071	.0028	0.127	.0050
		12	.472	0.036	.0014	0.071	.0028	0.077	.0030	0.139	.0055
$D_0 = 2 \times \sqrt{a_p \times (DCX - a_p)}$ (inch)		12.7	.500 (1/2")	0.039	.0015	0.074	.0029	0.079	.0031	0.143	.0056
		15.875	.625 (5/8")	0.054	.0021	0.089	.0035	0.089	.0035	0.160	.0063
		16	.630	0.055	.0022	0.09	.0035	0.089	.0035	0.161	.0063
		19.05	.750 (3/4")	0.073	.0029	0.105	.0041	0.097	.0038	0.175	.0069
		20	.787	0.078	.0031	0.11	.0043	0.1	.0039	0.18	.0071
		25	.984	0.11	.0043	0.11	.0043	0.11	.0043	-	-

Note: In the formula for n the parameters v_c and DC can be replaced with v_c and DCX.

CoroDrill® 860 solid carbide drill

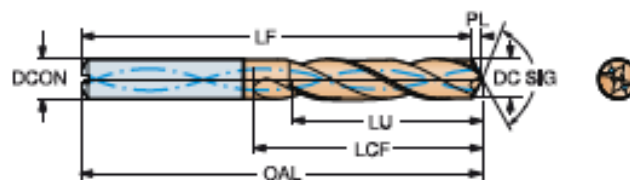
HA shank

Internal coolant supply



TCHA
CN5C

H8
1



										P Dimensions, mm, inch											
DC	DC*	LU	LU*	ULDR	CZC _{min}	Ordering code	PS	DC CON	DC CON*	OAL	OAL*	LF	LF*	LCF	LCF*	PL	PL*	SIG	CP _{Bar}	BSG	
8.00	.315	25.3	.996	3	8	860.1-9800-026A1-PM	*	8.00	.315	79	3.110	77.7	3.059	41	1.614	1.3	.051	145°	20	0.049	DIN 8537 K
8.00	.315	41.3	1.626	5	8	860.1-9800-040A1-PM	*	8.00	.315	91	3.583	89.7	3.532	53	2.067	1.3	.051	145°	20	0.054	DIN 8537 L
8.00	.315	65.3	2.571	8	8	860.1-9800-064A1-PM	*	8.00	.315	116	4.567	114.7	4.516	78	3.071	1.3	.051	145°	20	0.066	COROMANT
8.10	.319	25.6	1.008	3	10	860.1-9810-031A1-PM	*	10.00	.394	89	3.504	87.7	3.453	47	1.850	1.3	.051	144°	20	0.072	DIN 8537 K
8.10	.319	41.8	1.646	5	10	860.1-9810-045A1-PM	*	10.00	.394	103	4.055	101.7	4.004	61	2.402	1.3	.051	144°	20	0.079	DIN 8537 L
8.10	.319	66.1	2.602	8	10	860.1-9810-080A1-PM	*	10.00	.394	139	5.472	137.7	5.421	94	3.701	1.3	.051	144°	20	0.095	COROMANT
8.15	.321	42.1	1.657	5	10	860.1-9815-045A1-PM	*	10.00	.394	103	4.055	101.7	4.004	61	2.402	1.3	.051	144°	20	0.079	DIN 8537 L
8.20	.323	25.9	1.020	3	10	860.1-9820-031A1-PM	*	10.00	.394	89	3.504	87.7	3.453	47	1.850	1.3	.051	144°	20	0.073	DIN 8537 K
8.20	.323	42.3	1.665	5	10	860.1-9820-045A1-PM	*	10.00	.394	103	4.055	101.7	4.004	61	2.402	1.3	.051	144°	20	0.079	DIN 8537 L
8.20	.323	66.9	2.634	8	10	860.1-9820-080A1-PM	*	10.00	.394	139	5.472	137.7	5.421	94	3.701	1.3	.051	144°	20	0.097	COROMANT
8.30	.327	26.3	1.035	3	10	860.1-9830-031A1-PM	*	10.00	.394	89	3.504	87.8	3.449	47	1.850	1.4	.055	144°	20	0.073	DIN 8537 K
8.30	.327	42.9	1.689	5	10	860.1-9830-045A1-PM	*	10.00	.394	103	4.055	101.8	4.000	61	2.402	1.4	.055	144°	20	0.080	DIN 8537 L
8.30	.327	67.8	2.689	8	10	860.1-9830-080A1-PM	*	10.00	.394	139	5.472	137.8	5.417	94	3.701	1.4	.055	144°	20	0.098	COROMANT
8.33	.328	43.0	1.693	5	10	860.1-9833-045A1-PM	*	10.00	.394	103	4.055	101.8	4.000	61	2.402	1.4	.055	144°	20	0.080	DIN 8537 L
8.40	.331	28.6	1.047	3	10	860.1-9840-031A1-PM	*	10.00	.394	89	3.504	87.8	3.449	47	1.850	1.4	.055	144°	20	0.074	DIN 8537 K
8.40	.331	43.4	1.709	5	10	860.1-9840-045A1-PM	*	10.00	.394	103	4.055	101.8	4.000	61	2.402	1.4	.055	144°	20	0.081	DIN 8537 L
8.40	.331	68.6	2.701	8	10	860.1-9840-080A1-PM	*	10.00	.394	139	5.472	137.8	5.417	94	3.701	1.4	.055	144°	20	0.099	COROMANT
8.50	.335	28.9	1.059	3	10	860.1-9850-031A1-PM	*	10.00	.394	89	3.504	87.8	3.449	47	1.850	1.4	.055	144°	20	0.075	DIN 8537 K
8.50	.335	43.9	1.728	5	10	860.1-9850-045A1-PM	*	10.00	.394	103	4.055	101.8	4.000	61	2.402	1.4	.055	144°	20	0.082	DIN 8537 L
8.50	.335	69.4	2.732	8	10	860.1-9850-080A1-PM	*	10.00	.394	139	5.472	137.8	5.417	95	3.740	1.4	.055	144°	20	0.101	COROMANT
8.60	.339	27.2	1.071	3	10	860.1-9860-031A1-PM	*	10.00	.394	89	3.504	87.8	3.449	47	1.850	1.4	.055	144°	20	0.076	DIN 8537 K
8.60	.339	44.4	1.748	5	10	860.1-9860-045A1-PM	*	10.00	.394	103	4.055	101.8	4.000	61	2.402	1.4	.055	144°	20	0.083	DIN 8537 L
8.60	.339	70.2	2.764	8	10	860.1-9860-080A1-PM	*	10.00	.394	139	5.472	137.8	5.417	95	3.740	1.4	.055	144°	20	0.102	COROMANT
8.70	.343	27.5	1.083	3	10	860.1-9870-031A1-PM	*	10.00	.394	89	3.504	87.8	3.449	47	1.850	1.4	.055	144°	20	0.076	DIN 8537 K
8.70	.343	44.9	1.768	5	10	860.1-9870-045A1-PM	*	10.00	.394	103	4.055	101.8	4.000	61	2.402	1.4	.055	144°	20	0.084	DIN 8537 L
8.70	.343	71.0	2.795	8	10	860.1-9870-080A1-PM	*	10.00	.394	139	5.472	137.8	5.417	95	3.740	1.4	.055	144°	20	0.103	COROMANT
8.73	.344	27.6	1.087	3	10	860.1-9873-031A1-PM	*	10.00	.394	89	3.504	87.8	3.449	47	1.850	1.4	.055	144°	20	0.077	DIN 8537 K
8.73	.344	45.1	1.776	5	10	860.1-9873-045A1-PM	*	10.00	.394	103	4.055	101.8	4.000	61	2.402	1.4	.055	144°	20	0.084	DIN 8537 L
8.73	.344	71.3	2.807	8	10	860.1-9873-080A1-PM	*	10.00	.394	139	5.472	137.8	5.417	95	3.740	1.4	.055	144°	20	0.104	COROMANT
8.80	.346	27.8	1.094	3	10	860.1-9880-031A1-PM	*	10.00	.394	89	3.504	87.8	3.449	47	1.850	1.4	.055	144°	20	0.077	DIN 8537 K
8.80	.346	45.4	1.787	5	10	860.1-9880-045A1-PM	*	10.00	.394	103	4.055	101.8	4.000	61	2.402	1.4	.055	144°	20	0.085	DIN 8537 L
8.80	.346	71.8	2.827	8	10	860.1-9880-080A1-PM	*	10.00	.394	139	5.472	137.8	5.417	95	3.740	1.4	.055	144°	20	0.105	COROMANT
8.90	.350	28.1	1.106	3	10	860.1-9890-031A1-PM	*	10.00	.394	89	3.504	87.8	3.449	47	1.850	1.4	.055	144°	20	0.078	DIN 8537 K
8.90	.350	45.9	1.807	5	10	860.1-9890-045A1-PM	*	10.00	.394	103	4.055	101.8	4.000	61	2.402	1.4	.055	144°	20	0.086	DIN 8537 L
8.90	.350	72.6	2.858	8	10	860.1-9890-080A1-PM	*	10.00	.394	139	5.472	137.8	5.417	95	3.740	1.4	.055	144°	20	0.106	COROMANT
9.00	.354	28.5	1.122	3	10	860.1-9900-031A1-PM	*	10.00	.394	89	3.504	87.5	3.445	47	1.850	1.5	.059	144°	20	0.079	DIN 8537 K
9.00	.354	46.5	1.831	5	10	860.1-9900-045A1-PM	*	10.00	.394	103	4.055	101.5	3.996	61	2.402	1.5	.059	144°	20	0.086	DIN 8537 L
9.00	.354	73.5	2.894	8	10	860.1-9900-080A1-PM	*	10.00	.394	139	5.472	137.5	5.413	95	3.740	1.5	.059	144°	20	0.107	COROMANT
9.10	.358	28.8	1.134	3	10	860.1-9910-031A1-PM	*	10.00	.394	89	3.504	87.5	3.445	47	1.850	1.5	.059	144°	20	0.079	DIN 8537 K
9.10	.358	47.0	1.850	5	10	860.1-9910-045A1-PM	*	10.00	.394	103	4.055	101.5	3.996	61	2.402	1.5	.059	144°	20	0.087	DIN 8537 L
9.10	.358	74.3	2.925	8	10	860.1-9910-080A1-PM	*	10.00	.394	139	5.472	137.5	5.413	95	3.740	1.5	.059	144°	20	0.109	COROMANT
9.13	.359	28.9	1.138	3	10	860.1-9913-031A1-PM	*	10.00	.394	89	3.504	87.5	3.445	47	1.850	1.5	.059	144°	20	0.080	DIN 8537 K
9.20	.362	29.1	1.146	3	10	860.1-9920-031A1-PM	*	10.00	.394	89	3.504	87.5	3.445	47	1.850	1.5	.059	144°	20	0.080	DIN 8537 K
9.20	.362	47.5	1.870	5	10	860.1-9920-045A1-PM	*	10.00	.394	103	4.055	101.5	3.996	61	2.402	1.5	.059	144°	20	0.088	DIN 8537 L
9.20	.362	75.1	2.957	8	10	860.1-9920-080A1-PM	*	10.00	.394	139	5.472	137.5	5.413	95	3.740	1.5	.059	144°	20	0.110	COROMANT
9.30	.366	29.4	1.157	3	10	860.1-9930-031A1-PM	*	10.00	.394	89	3.504	87.5	3.445	47	1.850	1.5	.059	144°	20	0.081	DIN 8537 K
9.30	.366	48.0	1.890	5	10	860.1-9930-045A1-PM	*	10.00	.394	103	4.055	101.5	3.996	61	2.402	1.5	.059	144°	20	0.089	DIN 8537 L
9.30	.366	75.9	2.968	8	10	860.1-9930-080A1-PM	*	10.00	.394	139	5.472	137.5	5.413	95	3.740	1.5	.059	144°	20	0.112	COROMANT

DRILLING

Cutting data

CoroDrill® 860

Internal coolant supply, metric values

3 - 8 x DC

ISO	MC No.	Material	Hardness Brinell	Grade	Cutting speed (v _c), m/min						
P	P1.1.ZAN P1.1.ZAN P1.2.ZAN P1.3.ZAN	Unalloyed steel C - 0.05-0.10 % C - 0.1-0.25% C - 0.25-0.55% C - 0.55-0.80%	HB	4234	DC 3.00 - 20.00mm (min-start-max)						
						125	140-200-250				
						125	140-200-250				
						150	140-180-250				
						170	140-180-250				
						P1.3.ZAN	High carbon steel Carbon tool steel	210	4234	150-170-220	
											Low alloy steel
						P2.5.ZHT	Hardened and tempered	275	4234	80-110-140	
											P2.5.ZHT
						P3.0.ZAN	High alloy steel	200	4234	60-120-140	
											P3.0.ZHT
P1.5.C.UT	Steel castings	150	4234	120-170-210							
					P2.6.C.UT	Unalloyed	200	4234	120-160-220		
	Low-alloy (alloying elements <5%)										

