

_ EXPERTISE IN MACHINING

**Visibly different –
completely reliable.**

Ordering information

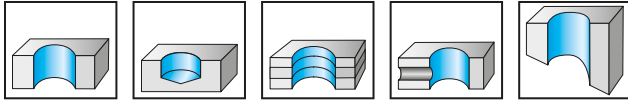
Drilling



**DC170 – THE IKON
OF DRILLING.**

Solid carbide coolant through drills

Supreme DC170

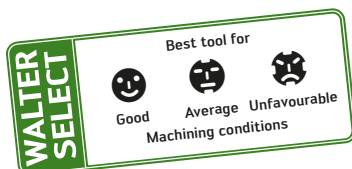
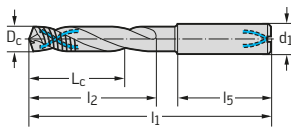

 16 x D_c


- 140° point angle
- Shank end accommodates minimum quantity lubrication; from D_c 6 mm according to DIN 69090

	P	M	K	N	S	H	O
WJ30EJ	●●		●●				

Designation	D _c h7 mm	D _c inches/no.	L _c mm	l ₁ mm	l ₂ mm	l ₅ mm	d ₁ h6 mm	WJ30EJ
DC170-16-03.000A1-	3		52	89	57	28	4	☒
DC170-16-03.175A1-	3,175	1/8"	60	98	66	28	4	☒
DC170-16-03.500A1-	3,5		72	110	78	28	4	☒
DC170-16-03.572A1-	3,572	9/64"	72	110	78	28	4	☒
DC170-16-03.969A1-	3,969	5/32"	72	110	78	28	4	☒
DC170-16-04.000A1-	4		72	110	78	28	4	☒
DC170-16-04.500A1-	4,5		93	132	100	28	5	☒
DC170-16-04.763A1-	4,763	3/16"	92	132	100	28	5	☒
DC170-16-04.800A1-	4,8		92	132	100	28	5	☒
DC170-16-05.000A1-	5		92	132	100	28	5	☒
DC170-16-05.500A1-	5,5		101	150	110	36	6	☒
DC170-16-05.556A1-	5,556	7/32"	111	160	120	36	6	☒
DC170-16-05.800A1-	5,8		111	160	120	36	6	☒
DC170-16-06.000A1-	6		111	160	120	36	6	☒
DC170-16-06.100A1-	6,1		124	175	135	36	8	☒
DC170-16-06.350A1-	6,35	1/4"	124	175	135	36	8	☒
DC170-16-06.500A1-	6,5		124	175	135	36	8	☒
DC170-16-06.800A1-	6,8		124	175	135	36	8	☒
DC170-16-07.000A1-	7		124	175	135	36	8	☒
DC170-16-07.144A1-	7,144	9/32"	140	192	152	36	8	☒
DC170-16-07.400A1-	7,4		140	192	152	36	8	☒
DC170-16-07.500A1-	7,5		140	192	152	36	8	☒
DC170-16-07.938A1-	7,938	5/16"	140	192	152	36	8	☒
DC170-16-08.000A1-	8		140	192	152	36	8	☒
DC170-16-08.300A1-	8,3		148	206	162	40	10	☒
DC170-16-08.500A1-	8,5		148	206	162	40	10	☒
DC170-16-08.731A1-	8,731	11/32"	148	206	162	40	10	☒
DC170-16-09.000A1-	9		148	206	162	40	10	☒
DC170-16-09.525A1-	9,525	3/8"	165	224	180	40	10	☒
DC170-16-09.800A1-	9,8		165	224	180	40	10	☒
DC170-16-10.000A1-	10		165	224	180	40	10	☒
DC170-16-10.200A1-	10,2		181	247	198	45	12	☒
DC170-16-10.319A1-	10,319	13/32"	181	247	198	45	12	☒
DC170-16-11.000A1-	11		181	247	198	45	12	☒
DC170-16-11.113A1-	11,113	7/16"	198	265	216	45	12	☒
DC170-16-11.500A1-	11,5		198	265	216	45	12	☒
DC170-16-11.800A1-	11,8		198	265	216	45	12	☒
DC170-16-11.906A1-	11,906	15/32"	198	265	216	45	12	☒
DC170-16-12.000A1-	12		198	265	216	45	12	☒
DC170-16-12.700A1-	12,7	1/2"	238	301	252	45	14	☒
DC170-16-13.000A1-	13		238	301	252	45	14	☒
DC170-16-14.000A1-	14		238	301	252	45	14	☒
DC170-16-14.288A1-	14,288	9/16"	272	340	288	48	16	☒
DC170-16-15.000A1-	15		272	340	288	48	16	☒
DC170-16-16.000A1-	16		272	340	288	48	16	☒

Shank DIN 6535 HA



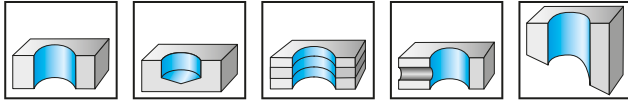
Ordering example: DC170 solid carbide twist drill with D_c 3 mm in the WJ30EJ grade
 Ordering code: DC170-16-03.000A1-WJ30EJ

☒☒☒ New addition to the product range

Solid carbide coolant through drills Supreme DC170



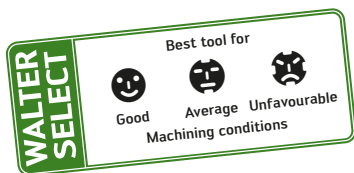
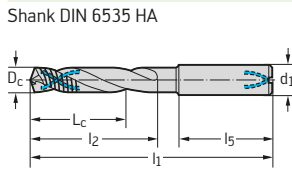
20 x D_c



- 140° point angle
- Shank end accommodates minimum quantity lubrication; from D_c 6 mm according to DIN 69090

	P	M	K	N	S	H	O
WJ30EJ	●●		●●				

Designation	D _c h7 mm	D _c inches/no.	L _c mm	l ₁ mm	l ₂ mm	l ₅ mm	d ₁ h6 mm	WJ30EJ
DC170-20-03.000A1-	3		60	97	65	28	4	☹
DC170-20-03.175A1-	3,175	1/8"	74	112	80	28	4	☹
DC170-20-03.500A1-	3,5		86	124	92	28	4	☹
DC170-20-03.572A1-	3,572	9/64"	86	124	92	28	4	☹
DC170-20-03.969A1-	3,969	5/32"	86	124	92	28	4	☹
DC170-20-04.000A1-	4		86	124	92	28	4	☹
DC170-20-04.500A1-	4,5		111	150	118	28	5	☹
DC170-20-04.763A1-	4,763	3/16"	110	150	118	28	5	☹
DC170-20-04.800A1-	4,8		110	150	118	28	5	☹
DC170-20-05.000A1-	5		110	150	118	28	5	☹
DC170-20-05.500A1-	5,5		123	170	132	36	6	☹
DC170-20-05.556A1-	5,556	7/32"	135	182	144	36	6	☹
DC170-20-05.800A1-	5,8		135	182	144	36	6	☹
DC170-20-06.000A1-	6		135	182	144	36	6	☹
DC170-20-06.100A1-	6,1		151	200	162	36	8	☹
DC170-20-06.350A1-	6,35	1/4"	151	200	162	36	8	☹
DC170-20-06.500A1-	6,5		151	200	162	36	8	☹
DC170-20-06.800A1-	6,8		151	200	162	36	8	☹
DC170-20-07.000A1-	7		151	200	162	36	8	☹
DC170-20-07.144A1-	7,144	9/32"	172	222	184	36	8	☹
DC170-20-07.400A1-	7,4		172	222	184	36	8	☹
DC170-20-07.500A1-	7,5		172	222	184	36	8	☹
DC170-20-07.938A1-	7,938	5/16"	172	222	184	36	8	☹
DC170-20-08.000A1-	8		172	222	184	36	8	☹
DC170-20-08.300A1-	8,3		184	240	198	40	10	☹
DC170-20-08.500A1-	8,5		184	240	198	40	10	☹
DC170-20-08.731A1-	8,731	11/32"	184	240	198	40	10	☹
DC170-20-09.000A1-	9		184	240	198	40	10	☹
DC170-20-09.525A1-	9,525	3/8"	205	262	220	40	10	☹
DC170-20-09.800A1-	9,8		205	262	220	40	10	☹
DC170-20-10.000A1-	10		205	262	220	40	10	☹
DC170-20-10.200A1-	10,2		225	289	242	45	12	☹
DC170-20-10.319A1-	10,319	13/32"	225	289	242	45	12	☹
DC170-20-11.000A1-	11		225	289	242	45	12	☹
DC170-20-11.113A1-	11,113	7/16"	246	311	264	45	12	☹
DC170-20-11.500A1-	11,5		246	311	264	45	12	☹
DC170-20-11.800A1-	11,8		246	311	264	45	12	☹
DC170-20-11.906A1-	11,906	15/32"	246	311	264	45	12	☹
DC170-20-12.000A1-	12		246	311	264	45	12	☹
DC170-20-12.700A1-	12,7	1/2"	294	357	308	45	14	☹
DC170-20-13.000A1-	13		294	357	308	45	14	☹
DC170-20-14.000A1-	14		294	357	308	45	14	☹
DC170-20-14.288A1-	14,288	9/16"	336	404	352	48	16	☹
DC170-20-15.000A1-	15		336	404	352	48	16	☹
DC170-20-16.000A1-	16		336	404	352	48	16	☹



Ordering example: DC170 solid carbide twist drill with D_c 3 mm in the WJ30EJ grade
Ordering code: DC170-20-03.000A1-WJ30EJ

☹☹☹ New addition to the product range

Cutting data

The specified cutting data are average recommended values.
For special applications, adjustment is recommended.

= Cutting data for wet machining = Dry machining is possible, cutting data must be selected from Walter GPS E = Emulsion O = Oil M = MQL L = Dry v_c = Cutting speed VRR = Feed rate chart			Drilling depth			16 x D _c				20 x D _c						
			Product family			DC170				DC170						
Material group			Structure of main material groups and code letters			Dimensions			Walter standard				Walter standard			
			Workpiece material			Dia. range (mm)			3,00 – 16,00				3,00 – 16,00			
						Cooling			Internal cooling				Internal cooling			
						Grade			WJ30EJ				WJ30EJ			
						Birnell hardness HB										
						Tensile strength R _m N/mm ²										
						Machining group ¹										
									v _c		VRR		v _c		VRR	
P	Non-alloyed steel	C ≤ 0.25%	Annealed	125	428	P1	150	12	EO	ML	143	12	EO	ML		
		C > 0.25 to ≤ 0.55%	Annealed	190	639	P2	135	12	EO	ML	130	12	EO	ML		
		C > 0.25 to ≤ 0.55%	Heat-treated	210	708	P3	130	12	EO	ML	125	12	EO	ML		
		C > 0.55%	Annealed	190	639	P4	135	12	EO	ML	130	12	EO	ML		
		C > 0.55%	Heat-treated	300	1013	P5	105	9	EO	ML	100	9	EO	ML		
		Free cutting steel (short-chipping)	Annealed	220	745	P6	150	12	EO	ML	138	10	EO	ML		
	Low-alloyed steel	Annealed	175	591	P7	135	12	EO		125	10	EO				
		Heat-treated	300	1013	P8	105	9	EO		100	9	EO				
		Heat-treated	380	1282	P9	63	7	OE		60	7	OE				
		Heat-treated	430	1477	P10	45	6	OE		40	6	OE				
	High-alloyed steel and high-alloyed tool steel	Annealed	200	675	P11	72	9	EO		68	9	EO				
		Hardened and tempered	300	1013	P12	90	8	EO		85	8	EO				
		Hardened and tempered	400	1361	P13	45	6	OE		40	6	OE				
	Stainless steel	Ferritic/martensitic, annealed	200	675	P14	71	8	EO		67	8	EO				
Martensitic, heat-treated		330	1114	P15	41	7	EO		38	7	EO					
K	Malleable cast iron	Ferritic	200	675	K1	100	16	EO	ML	95	16	EO	ML			
		Pearlitic	260	867	K2	75	12	EO	ML	70	12	EO	ML			
	Grey cast iron	Low tensile strength	180	602	K3	120	16	EO	ML	115	16	EO	ML			
		High tensile strength/austenitic	245	825	K4	100	16	EO	ML	95	16	EO	ML			
	Cast iron with spheroidal graphite	Ferritic	155	518	K5	120	16	EO	ML	113	16	EO	ML			
		Pearlitic	265	885	K6	95	12	EO	ML	90	12	EO	ML			
	GGV (CGI)		200	675	K7	110	16	EO	ML	103	16	EO	ML			

¹ The classification of the machining groups can be found in the Walter General Catalogue 2012 from page H 8 onwards.

VRR: Feed rate charts

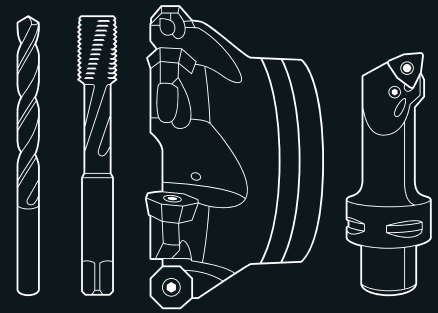
VRR	Feed rate f (mm/rev) for Ø (mm)							
	3	5	6	8	10	12	15	20
1	0,013	0,017	0,018	0,021	0,024	0,026	0,029	0,033
2	0,027	0,033	0,037	0,042	0,047	0,052	0,058	0,067
3	0,040	0,050	0,055	0,063	0,071	0,077	0,087	0,10
4	0,053	0,067	0,073	0,084	0,094	0,10	0,12	0,13
5	0,067	0,083	0,091	0,11	0,12	0,13	0,14	0,17
6	0,080	0,10	0,11	0,13	0,14	0,15	0,17	0,20
7	0,093	0,12	0,13	0,15	0,16	0,18	0,20	0,23
8	0,11	0,13	0,15	0,17	0,19	0,21	0,23	0,27
9	0,12	0,15	0,16	0,19	0,21	0,23	0,26	0,30
10	0,13	0,17	0,18	0,21	0,24	0,26	0,29	0,33
12	0,16	0,20	0,22	0,25	0,28	0,31	0,35	0,40
16	0,21	0,27	0,29	0,34	0,38	0,41	0,46	0,53
20	0,27	0,33	0,37	0,42	0,47	0,52	0,58	0,67



Walter AG

Derendinger Straße 53, 72072 Tübingen
Postfach 2049, 72010 Tübingen
Germany

www.walter-tools.com



Walter GB Ltd.

Bromsgrove, England
+44 (1527) 839 450, service.uk@walter-tools.com

Walter Kesici Takımlar Sanayi ve Ticaret Ltd. Şti.

Istanbul, Türkiye
+90 (216) 528 1900 Pbx, service.tr@walter-tools.com

Walter Wuxi Co. Ltd.

Wuxi, Jiangsu, P.R. China
+86 (510) 8241 9399, service.cn@walter-tools.com

Walter AG Singapore Pte. Ltd.

+65 6773 6180, service.sg@walter-tools.com

Walter Korea Ltd.

Anyang-si Gyeonggi-do, Korea
+82 (31) 337 6100, service.kr@walter-tools.com

Walter Tools India Pvt. Ltd.

Pune, India
+91 (20) 3045 7300, service.in@walter-tools.com

Walter (Thailand) Co., Ltd.

Bangkok, 10120, Thailand
+66 2 687 0388, service.th@walter-tools.com

Walter Malaysia Sdn. Bhd.

Selangor D.E., Malaysia
+60 (3) 8023 7748, service.my@walter-tools.com

Walter Tooling Japan K.K.

Nagoya, Japan
+81 (52) 723 5800, service.jp@walter-tools.com

Walter USA, LLC

Waukesha WI, USA
+1 800-945-5554, service.us@walter-tools.com

Walter Canada

Mississauga, Canada
service.ca@walter-tools.com

Watch trailer:

