

# THERMDRILL-Selection Table & Speeds for FORM and CUT-type thermal drills, short and long version


**Form**  
without cutting edges


Additional thread in the collar provides a more stable connection

wirh collar



Thread
M3 (2,7)
M4 (3,7)
M5 (4,5)
M6 (5,4)
M8 (7,4)
M10 (9,3)
M12 (11,0)
M16 (14,9)
M18 (16,8)
M20 (18,8)
1/8" (9,3)
1/4" (12,5)
3/8" (16,0)
1/2" (20,0)
3/4" (25,5)
1" (32,1)

Short Version	Maximum material thickness	Lenght working part	Art.no.
	[mm]	[mm]	
	1,5	6,4	27FS
	1,5	7,6	37FS
	2,0	9,1	45FS
	2,0	10,1	54FS
	2,5	13,5	74FS
	2,5	16,2	93FS
	3,0	19,3	110FS
	3,5	26,2	149FS
	3,5	29,4	168FS
	4,0	33,1	188FS
	2,5	16,2	93FS
	2,5	21,3	125FS
	2,5	27,0	160FS
	2,5	36,3	200FS
2,5	43,6	255FS	
2,5	52,3	321FS	

Long Version	Maximum material thickness	Lenght working part	Art.no.
	[mm]	[mm]	
	2,0	7,6	27FL
	2,5	10,1	37FL
	3,0	12,0	45FL
	3,5	14,4	54FL
	4,0	18,2	74FL
	4,5	21,7	93FL
	5,0	25,8	110FL
	6,0	35,7	149FL
	6,0	39,5	168FL
	8,0	43,4	188FL
	4,5	21,7	93FL
	5,0	26,4	125FL
	5,0	31,0	160FL


Shaft Ø
6,0
6,0
6,0
6,0
8,0
8,0
10,0
12,0
16,0
18,0
20,0
10,0
14,0
16,0
18,0
20,0
20,0

	Speeds			Thread Forming
	Thermal Drilling			
	min.	optimal	Alu, Cu,	
	[U/min.]	[U/min.]	[U/min.]	[U/min.]
6,0	2.600	3.000	4.000	1.350
6,0	2.300	2.600	3.800	1.000
6,0	2.200	2.500	3.700	800
8,0	2.000	2.400	3.600	650
8,0	1.600	2.200	3.200	500
10,0	1.500	2.000	3.000	400
12,0	1.400	1.800	2.800	350
16,0	1.200	1.400	2.200	250
18,0	1.100	1.300	2.000	230
20,0	1.000	1.200	1.900	200
10,0	1.500	2.000	3.000	400
14,0	1.400	1.600	2.600	350
16,0	1.200	1.400	2.200	300
18,0	1.000	1.200	1.800	250
20,0	900	1.000	1.600	200
20,0	900	1.000	1.500	150


**Cut**  
with cutting edges


for a flat finish

without collar



Thread
M3 (2,7)
M4 (3,7)
M5 (4,5)
M6 (5,4)
M8 (7,4)
M10 (9,3)
M12 (11,0)
M16 (14,9)
M18 (16,8)
M20 (18,8)
1/8" (9,3)
1/4" (12,5)
3/8" (16,0)
1/2" (20,0)
3/4" (25,5)
1" (32,1)

Short Version	Maximum material thickness	Lenght working part	Art.no.
	[mm]	[mm]	
	1,5	6,4	27CS
	2,0	7,6	37CS
	3,0	9,1	45CS
	3,0	10,1	54CS
	4,0	13,5	74CS
	4,0	16,2	93CS
	4,5	19,3	110CS
	5,0	26,2	149CS
	5,0	29,4	168CS
	6,0	33,1	188CS
	4,0	16,2	93CS
	4,0	21,3	125CS
	4,0	27,0	160CS
	4,0	36,3	200CS
4,0	43,6	255CS	
4,0	52,3	321CS	

Long Version	Maximum material thickness	Lenght working part	Art.no.
	[mm]	[mm]	
	3,0	7,6	27CL
	4,0	10,1	37CL
	4,5	12,0	45CL
	5,0	14,4	54CL
	6,0	18,2	74CL
	6,5	21,7	93CL
	7,0	25,8	110CL
	8,0	35,7	149CL
	8,0	39,5	168CL
	10,0	43,4	188CL
	6,5	21,7	93CL
	7,0	26,4	125CL
	7,0	31,0	160CL

Shaft Ø
6,0
6,0
6,0
8,0
8,0
10,0
12,0
16,0
18,0
20,0
10,0
14,0
16,0
18,0
20,0
20,0

	Speeds			Thread Forming
	Thermal Drilling			
	min.	optimal	Alu, Cu,	
	[U/min.]	[U/min.]	[U/min.]	[U/min.]
6,0	2.600	3.000	4.000	1.350
6,0	2.300	2.600	3.800	1.000
6,0	2.200	2.500	3.700	800
8,0	2.000	2.400	3.600	65
8,0	1.600	2.200	3.200	500
10,0	1.500	2.000	3.000	400
12,0	1.400	1.800	2.800	350
16,0	1.200	1.400	2.200	250
18,0	1.100	1.300	2.000	230
20,0	1.000	1.200	1.900	200
10,0	1.500	2.000	3.000	400
14,0	1.400	1.600	2.600	350
16,0	1.200	1.400	2.200	300
18,0	1.000	1.200	1.800	250
20,0	900	1.000	1.600	200
20,0	900	1.000	1.500	150