

BOVENFREZEN

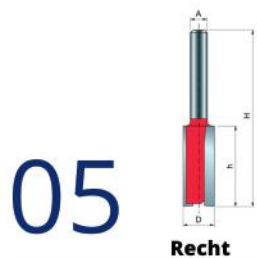
freud



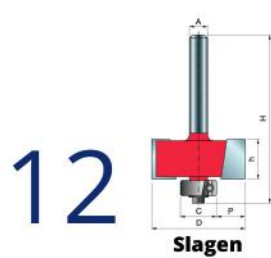
SLIJPERIJ

SNIJGEREEDSCHAPPEN

**MACHINES & TOEBEHOREN
VOOR HOUTBEWERKING**



Recht



Slagen



Half rond



Solid Surfaces



Recht & lager



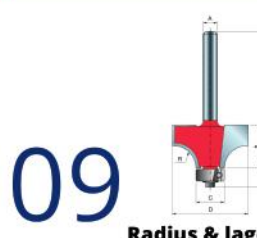
Zwaluwstaart



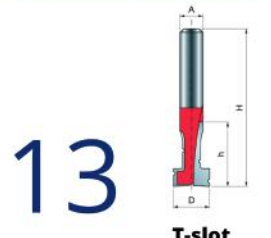
Trapleuning



Schijffrees



Radius & lager



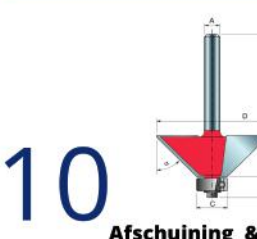
T-slot



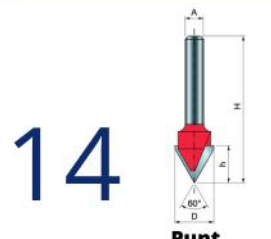
Multiprofiel



Profiel & conter



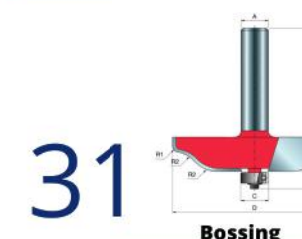
Afschuining & lager



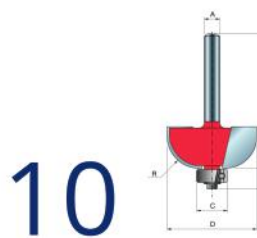
Punt



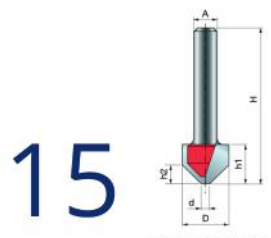
Verstek verbinding



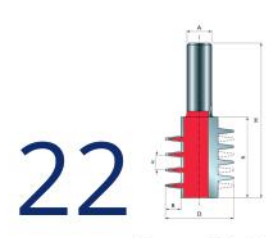
Bossing



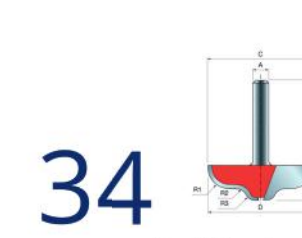
Afronding & lager



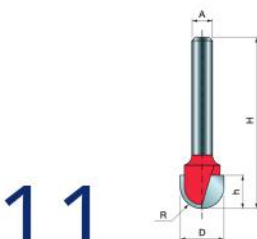
Alucobond



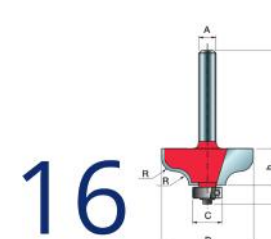
Verlijm verbinding



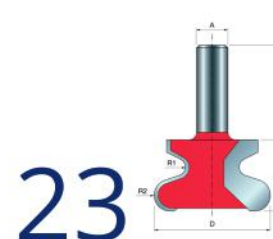
Profiel onder



Afronding



Profiel



Handgreep



Sets

43



Onderdelen

FREUD LEADING TECHNOLOGY

freud

TiCo hardmetaal

Nieuwe soort HM tanden met een legering gecombineerd uit TITANIUM & COBALT



Messen axiaal gepositioneerd

Positie van de HM tanden is axiaal voor een perfecte afwerking waarbij naschuren overbodig wordt, ook in kopshout.



Extreem schok bestendig

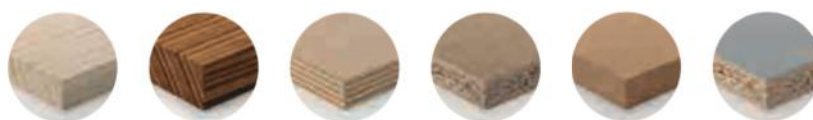
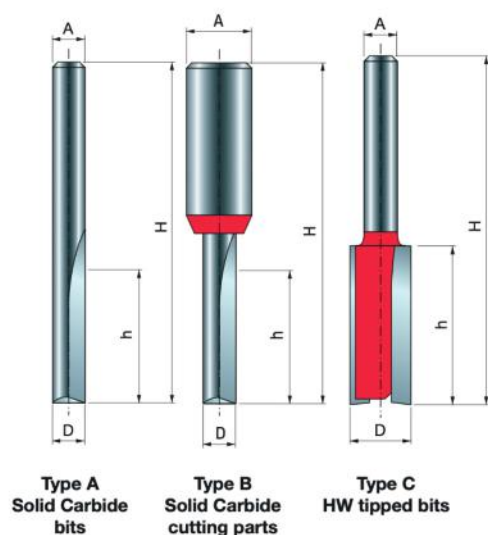
Verstevigde 3 delige las waarbij de HM tanden beter vastgemaakt zijn op de freesbody.



Teflon coating

Frezen voorzien van een TEFLON coating waarbij er minder wijving is met het hout en dus minder kans op verbranden.

Rechte bovenfrezen



Softwood

Hardwood

Plywood

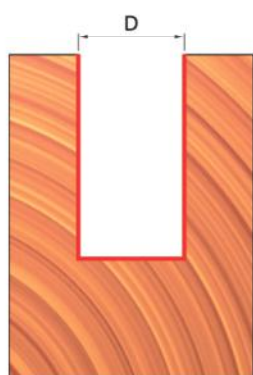
Wood Based Panels

TYPE 04 - 012 MM - R006M

HM bovenfrezen met rechte snede

Type A - Solid Carbide bits

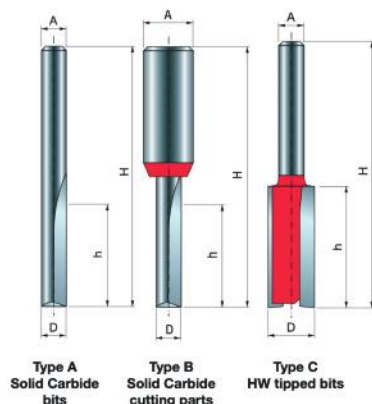
D mm	h mm	H mm	A mm	Z inch	Max RPM 1/min.	Freud Code	Art. No.
2	6,3	44,5	6	2	24.000	04-09706P	F03FR01413
3	9,5	44,5	6	2	24.000	04-09906P	F03FR01415
3	11	50,8	6	2	24.000	04-10006P	F03FR01418
3	12	50	6	2	24.000	R006M03006	F03FR01355
4	12	50,3	6	2	24.000	R006M05006	F03FR01356
4	12	50,8	6	2	24.000	04-10206P	F03FR01423
4	15,8	50,7	6	2	24.000	04-10106P	F03FR01420
5	12	50,3	6	2	24.000	R006M07006	F03FR01357
5	12,7	50,8	6	2	24.000	04-11306P	F03FR01437
5	16	51	6	2	24.000	R006M07406	F03FR01358
6	16	50,8	6	2	24.000	04-11406P	F03FR01440
6	16	57	6	2	24.000	R006M09406	F03FR01359
6	25	63	6	2	24.000	R006M10206	F03FR01360
6	25,4	76,2	6	2	24.000	04-11006P	F03FR01431
3	9,5	44,5	8	2	24.000	04-09908P	F03FR01416
4	15,8	50,7	8	2	24.000	04-10108P	F03FR01421
5	12,7	50,8	8	2	24.000	04-11308P	F03FR01438
6	16	50,8	8	2	24.000	04-11408P	F03FR01441
6	25,4	76,2	8	2	24.000	04-11008P	F03FR01432



Type B - Solid Carbide cutting parts

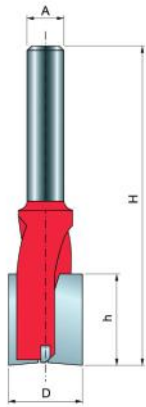
D mm	h mm	H mm	A mm	Z	Max RPM 1/min.	Freud Code	Art. No.
3	8	58	12	2	24.000	12-09612P	F03FR01517
4	10	58	12	2	24.000	12-09712P	F03FR01518
5	12,7	57	12	2	24.000	12-09812P	F03FR01519
6	19	64	12	2	24.000	12-09912P	F03FR01520

Type C - HW tipped bits



D mm	h mm	H mm	A mm	inch	Z	Max RPM 1/min.	Freud Code	Art. No.
7	25,4	63,5	6		2	24.000	04-11206P	F03FR01434
8	19,1	52	6		2	24.000	04-11506P	F03FR01443
8	31,8	70	6		2	24.000	04-11906P	F03FR01447
9	25	63	6		2	24.000	04-12406P	F03FR01450
10	25,4	62,4	6		2	24.000	MM-01006P	F03FR00330
10	31,8	69	6		2	24.000	MM-11006P	F03FR00333
11	25,4	62	6		2	24.000	04-13306P	F03FR01458
12	19	55,5	6		2	24.000	04-13506P	F03FR01460
12	31,8	68	6		2	24.000	04-13706P	F03FR01464
13	25,4	62,4	6		2	24.000	04-14206P	F03FR01470
14	19	56	6		2	24.000	04-14306P	F03FR01472
14	31,8	68,2	6		2	24.000	04-14506P	F03FR01475
15	20	57,2	6		2	24.000	04-14606P	F03FR01478
15	31,8	68,2	6		2	24.000	04-14706P	F03FR01480
16	19	51	6		2	24.000	04-14906P	F03FR01483
16	31,8	66	6		2	24.000	04-15006P	F03FR01486
18	20	52	6		2	24.000	04-15106P	F03FR01488
19	19	54	6		2	24.000	04-14006P	F03FR01468
20	19	56	6		2	24.000	04-15506P	F03FR01492
22	19	51	6		2	24.000	04-15706P	F03FR01495
24	20	52	6		2	24.000	04-15806P	F03FR01498
25	19	56	6		2	24.000	04-15906P	F03FR01500
7	25,4	63,5	8		2	24.000	04-11208P	F03FR01435
8	19	52	8		2	24.000	04-11508P	F03FR01444
8	31,8	70	8		2	24.000	04-11908P	F03FR01448
9	25	63	8		2	24.000	04-12408P	F03FR01451
10	25,4	62,4	8		2	24.000	MM-01008P	F03FR00331
10	31,8	69	8		2	24.000	MM-11008P	F03FR00334
12	19	55,5	8		2	24.000	04-13508P	F03FR01461
12	31,8	63,8	8		2	24.000	04-13708P	F03FR01465
14	19	56	8		2	24.000	04-14308P	F03FR01473
14	31,8	68,2	8		2	24.000	04-14508P	F03FR01476
15	20	57,2	8		2	24.000	04-14608P	F03FR01479
15	31,8	68,2	8		2	24.000	04-14708P	F03FR01481
16	19	51	8		2	24.000	04-14908P	F03FR01484
16	31,8	66	8		2	24.000	04-15008P	F03FR01487
18	20	52	8		2	24.000	04-15108P	F03FR01489
20	19	56	8		2	24.000	04-15508P	F03FR01493
22	19	51	8		2	24.000	04-15708P	F03FR01496
24	20	52	8		2	24.000	04-15808P	F03FR01499
25	19	56	8		2	24.000	04-15908P	F03FR01501
7	18	67	12		2	24.000	12-10312P	F03FR01523
8	31,8	76	12		2	24.000	12-10712P	F03FR01525
9	31,8	76	12		2	24.000	12-11012P	F03FR01528
10	31,8	76	12		2	24.000	12-11212P	F03FR01530
12	38,1	80	12		2	24.000	12-12212P	F03FR01534
12	50,5	98	12		2	24.000	12-12812P	F03FR01537
13	25,4	66,7	12		2	24.000	12-11612P	F03FR01531
14	31,8	73	12		2	24.000	12-13412P	F03FR01540
15	31,8	69,8	12		2	24.000	12-13512P	F03FR01541
16	38,1	76,1	12		2	24.000	12-14012P	F03FR01544
18	38,1	80	12		2	24.000	12-14312P	F03FR01547
19	25,4	63,4	12		2	24.000	12-15212P	F03FR01548
20	38,1	80	12		2	24.000	12-15912P	F03FR01553
22	38,1	80	12		2	24.000	12-16912P	F03FR01556

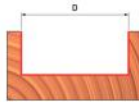
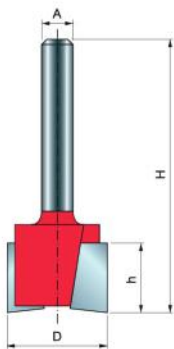




TYPE 17

HM bovenfrezen met rechte snede & kopse HM snede Z=2+1

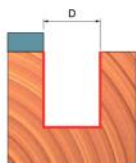
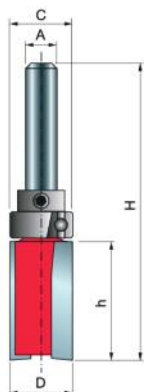
D mm	h mm	H mm	A mm	Z	Max RPM 1/min.	Freud Code	Art. No.
16	45	85	8	2+1	24.000	17-10008P	F03FR01577
18	18	70	8	2+1	24.000	17-10208P	F03FR01578
20	18	70	8	2+1	24.000	17-10408P	F03FR01579
22	25	70	8	2+1	24.000	17-10608P	F03FR01580
16	60	110	12	2+1	24.000	17-10112P	F03FA13994



TYPE 16

HM bovenfrezen met rechte snede en kort snijvlak

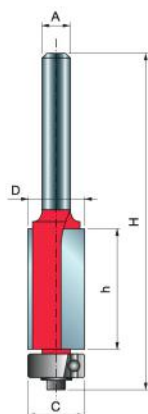
D mm	h mm	H mm	A mm	inch	Z	Max RPM 1/min.	Freud Code	Art. No.
12,7	12,5	51	6		2	24.000	16-10006P	F03FR01565
19	12,5	51	6		2	24.000	16-10406P	F03FR01568
19	19	62,15	6		2	24.000	16-50406P	F03FR01576
12,7	12,5	50,8	8		2	24.000	16-10008P	F03FR01566
19	12,5	50,8	8		2	24.000	16-10408P	F03FR01569
12,7	12,5	60,5	12		2	24.000	16-11012P	F03FR01573
31,75	12,1	56,2	12		2	24.000	16-11812P	F03FR01575



TYPE 50

HM bovenfrezen met rechte snede en kogellager bovenaan

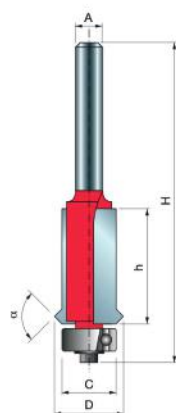
D mm	h mm	H mm	A mm	inch	C mm	Z	Max RPM 1/min.	Freud Code	Art. No.
13	20	60	6		13	2	24.000	50-10206P	F03FR02003
15	20	60	6		15	2	24.000	50-10406P	F03FR02006
19	25,4	67,5	6		19	2	24.000	50-10606P	F03FR02008
16	20	60	8		16	2	24.000	50-10308P	F03FR02005
22	20	60	8		22	2	24.000	50-10808P	F03FR02010



TYPE 42

HM bovenfrezen met rechte snede en kogellager onderaan

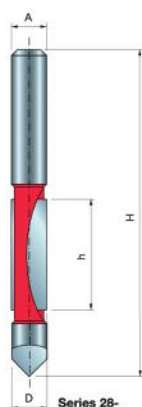
D mm	h mm	H mm	A mm	inch	C mm	Z	Max RPM 1/min.	Freud Code	Art. No.
9,53	12,7	60,9	6		9,53	2	24.000	42-10206P	F03FR01935
9,53	25,8	72,4	6		9,53	2	24.000	42-10006P	F03FR01932
12,7	25,7	72,9	6		12,7	2	24.000	42-10406P	F03FR01938
9,53	12,7	60,9	8		9,53	2	24.000	42-10208P	F03FR01936
9,53	25,8	72,4	8		9,53	2	24.000	42-10008P	F03FR01933
12,7	25,7	72,9	8		12,7	2	24.000	42-10408P	F03FR01939
12,7	40	84	8		12,7	2	24.000	42-11508P	F03FR02771
12,7	25,4	82,5	12		12,7	2	24.000	42-11012P	F03FR01942
12,7	38,5	94,1	12		12,7	2	24.000	42-11412P	F03FR01944
12,7	50,8	106,8	12		12,7	2	24.000	42-11612P	F03FR01946



TYPE 48

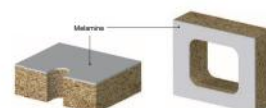
HM bovenfrezen met rechte snede en V-groef met kogellager onderaan

D mm	h mm	H mm	A mm	C mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
15,88	25,4	76,2	6	12,7	90°	2	20.000	48-10206P	F03FR02000
15,88	25,4	76,2	8	12,7	90°	2	24.000	48-10208P	F03FR02001
15,88	25,4	87,2	12	12,7	90°	2	24.000	48-11212P	F03FR02002



TYPE 26-28

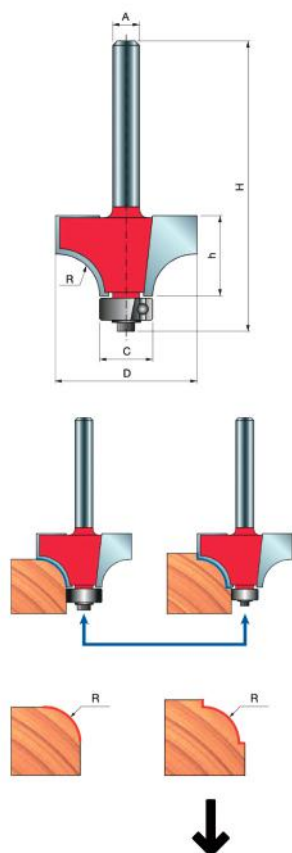
HM bovenfrezen met boor & contourfunctie



D mm	h mm	H mm	A mm	inch	Z	Max RPM 1/min.	Freud Code	Art. No.
6	19	57	6		1	24.000	26-10006P	F03FR01664
8	19	75	8		1	24.000	26-10008P	F03FR01665
12,7	31,75	96,2	12		2	24.000	28-10412P	F03FR01692

TYPE 34 - 36

HM bovenfrezen met afronding en kogellager



Optie kogellager + ring
bijbestellen voor hoekje.

Type 34:

3102M AA9 + FX07M AA9

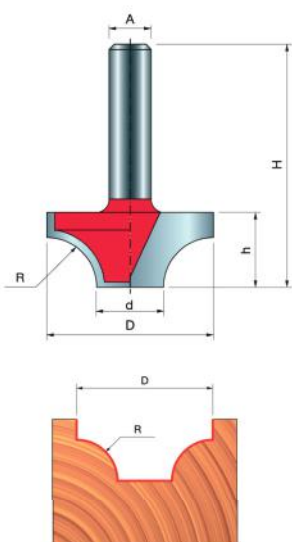
Type 36:

3102M AB9 + FX07M AB9

D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	inch	mm	mm	1/min.		
15,88	12,7	54,9	6		12,7	1,59	2	24.000	34-10006P F03FR01763
16,7	12,7	54,9	6		12,7	2	2	24.000	34-10106P F03FR02766
19,05	12,7	55,2	6		12,7	3,18	2	24.000	34-10406P F03FR01768
22,22	12,7	54,9	6		12,7	4,8	2	24.000	34-10806P F03FR01771
25,4	12,7	54,7	6		9,53	6,35	2	24.000	36-11006P F03FR01803
25,4	12,7	55,2	6		12,7	6,35	2	24.000	34-11006P F03FR01774
28,58	12,7	55,2	6		12,7	8	2	18.000	34-11206P F03FR01777
31,75	18	59,7	6		12,7	9,53	2	18.000	34-11406P F03FR01780
31,75	18	59,2	6		9,53	9,53	2	18.000	36-11406P F03FR01804
38,1	19,1	61,25	6		12,7	12,7	2	16.000	34-11606P F03FR01783
15,88	12,7	54,9	8		12,7	1,59	2	24.000	34-10008P F03FR01764
16,7	12,7	54,9	8		12,7	2	2	24.000	34-10108P F03FR01766
18,7	12,7	54,9	8		12,7	3	2	24.000	34-10308P F03FR01767
19,05	12,7	55,2	8		12,7	3,18	2	24.000	34-10408P F03FR01769
22,22	13,2	54,9	8		12,7	4,75	2	24.000	34-10808P F03FR01772
25,4	12,7	55,2	8		12,7	6,35	2	24.000	34-11008P F03FR01775
28,58	12,7	55,2	8		12,7	7,94	2	18.000	34-11208P F03FR01778
31,75	18	59,7	8		12,7	9,5	2	18.000	34-11408P F03FR01781
38,1	19,1	61,25	8		12,7	12,7	2	16.000	34-11608P F03FR01784
44,44	22,2	64,72	8		12,7	15,8	2	16.000	34-12708P F03FR01793
25,4	12,7	61,2	12		12,7	6,35	2	24.000	34-12012P F03FR01786
31,75	18	65,7	12		12,7	9,53	2	18.000	34-12412P F03FR01788
38,1	19,05	67,25	12		12,7	12,7	2	16.000	34-12612P F03FR01791
44,44	22,22	70,72	12		12,7	15,8	2	16.000	34-12712P F03FR01794
50,8	25,4	73,9	12		12,7	19	2	16.000	34-12812P F03FR01796
57,15	31,4	79,85	12		12,7	22,2	2	16.000	34-13012P F03FR01798
63,5	31,3	79,75	12		12,7	25,4	2	12.000	34-13212P F03FR01799
69,85	34,9	83,3	12		12,7	28,6	2	12.000	34-13412P F03FR01801
76,2	38,1	86,6	12		12,7	31,8	2	12.000	34-13612P F03FR01802

TYPE 39

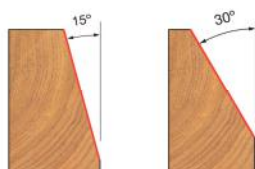
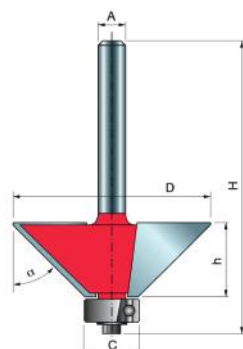
HM bovenfrezen met afronding en kraag



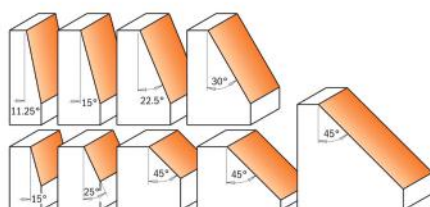
D	h	H	A	R	d	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
12,7	8	40	6	3,2	6,35	2	24.000	39-20206P F03FR01871	
24,7	12,7	44,7	8	6	12,7	2	24.000	39-20908P F03FR01873	
31,75	14,3	46,3	8	9,53	12,7	2	18.000	39-20808P F03FR01872	
63,5	33,3	71,3	12	25,4	12,7	2	12.000	39-23812P* F03FR01874	

TYPE 40

HM bovenfrezen met afschuining en kogellager



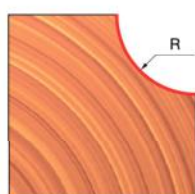
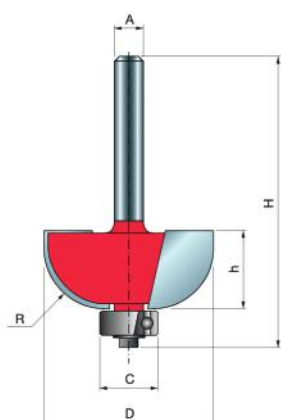
Zonder kogellager



D mm	h mm	H mm	A mm	inch	C mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
18,15	12,7	54,9	6		12,7	15°	2	24.000	40-10006P	F03FR01906
21,77	25	67,3	6		12,7	11.3°	2	24.000	40-09406P	F03FR01900
23,6	12,7	54,9	6		12,7	25°	2	24.000	40-10206P	F03FR01912
24	12	44	6		•	30°	2	24.000	40-90206P	F03FR01929
24	14	46	6		•	15°	2	24.000	40-90006P	F03FR01927
25	8	40,3	6		•	45°	2	24.000	40-90406P	F03FR01931
25,4	25,1	67,25	6		12,7	15°	2	24.000	40-09806P	F03FR01903
30,1	22,5	64,7	6		12,7	22.5°	2	18.000	40-10106P	F03FR01909
31	9,5	52,3	6		12,7	45°	2	18.000	40-10506P	F03FR01917
33	11,5	54	6		12,7	45°	2	16.000	40-10406P	F03FR01914
33	19	61,6	6		12,7	30°	2	16.000	40-20206P	F03FR01925
44	18,5	61	6		12,7	45°	2	16.000	40-10606P	F03FR01919
18,15	12,7	54,9	8		12,7	15°	2	24.000	40-10008P	F03FR01907
21,77	25	67,3	8		12,7	11.3°	2	24.000	40-09408P	F03FR01901
23,6	12,7	54,9	8		12,7	25°	2	24.000	40-10208P	F03FR01913
24	12	44	8		•	30°	2	24.000	40-90208P	F03FR01930
24	14	46	8		•	15°	2	24.000	40-90008P	F03FR01928
25	8	40,3	8		•	45°	2	24.000	40-90408P	F03FR03255
25,4	25,1	67,25	8		12,7	15°	2	24.000	40-09808P	F03FR01904
30,1	22,5	64,7	8		12,7	22.5°	2	18.000	40-10108P	F03FR01910
31	9,5	52,3	8		12,7	45°	2	18.000	40-10508P	F03FR01918
33	11,5	54	8		12,7	45°	2	16.000	40-10408P	F03FR01915
33	19	61,6	8		12,7	30°	2	16.000	40-20208P	F03FR01926
44	18,5	61	8		12,7	45°	2	16.000	40-10608P	F03FR01920
21,77	25	73,3	12		12,7	11.3°	2	24.000	40-09412P	F03FR01902
25,4	25,1	73,25	12		12,7	15°	2	24.000	40-09812P	F03FR01905
30,1	22,5	70,7	12		12,7	22.5°	2	18.000	40-10112P	F03FR01911
44	18,5	67	12		12,7	45°	2	16.000	40-11412P	F03FR01922
62,1	25,5	74	12		12,7	45°	2	12.000	40-11812P	F03FR01924

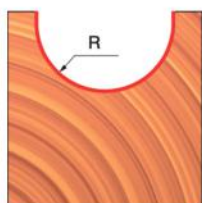
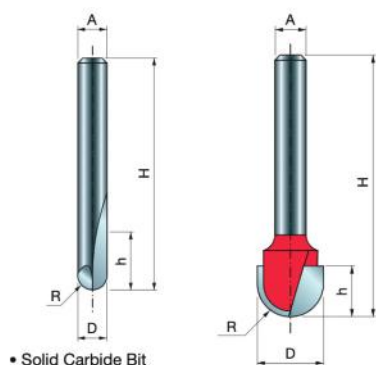
TYPE 30

HM bovenfrezen met bolle radius en kogellager

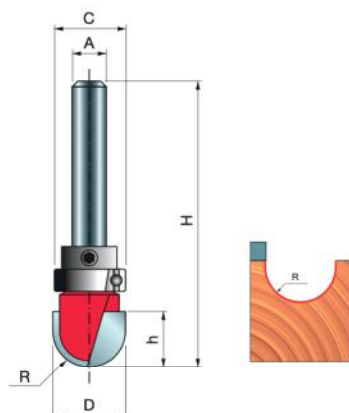


D mm	h mm	H mm	A mm	inch	C mm	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
19,05	14	56	6		9,53	4,76	2	24.000	30-10006P	F03FR01694
22,23	13,2	54,7	6		9,53	6,35	2	24.000	30-10206P	F03FR01697
25,4	12,7	54,7	6		9,53	8	2	24.000	30-10306P	F03FR01700
31,75	12,7	55,2	6		12,7	9,53	2	18.000	30-10406P	F03FR01703
38,1	16,4	58,9	6		12,7	12,7	2	16.000	30-10606P	F03FR01706
19,05	14	56	8		9,53	4,75	2	24.000	30-10008P	F03FR01695
22,23	13,2	54,7	8		9,53	6,35	2	24.000	30-10208P	F03FR01698
25,4	12,7	54,7	8		9,53	8	2	24.000	30-10308P	F03FR01701
31,75	12,7	55,2	8		12,7	9,53	2	18.000	30-10408P	F03FR01704
38,1	16,4	58,9	8		12,7	12,7	2	16.000	30-10608P	F03FR01707
19,05	14	62,4	12		9,53	4,75	2	24.000	30-10012P	F03FR01696
22,23	12,7	60,7	12		9,53	6,35	2	24.000	30-11012P	F03FR01709
25,4	12,7	60,7	12		9,53	8	2	24.000	30-11112P	F03FR01710
31,75	12,7	61,2	12		12,7	9,5	2	18.000	30-11212P	F03FR01711
38,1	16,4	64,9	12		12,7	12,7	2	16.000	30-11412P	F03FR01713

TYPE 18 - HM bovenfrezen met bolle radius

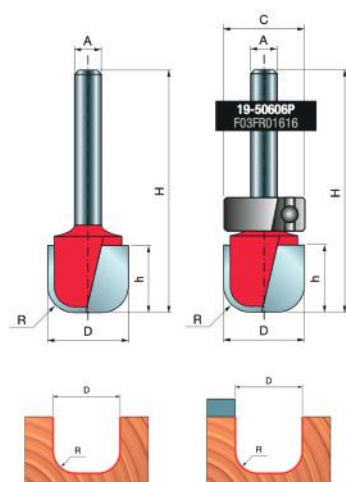


D mm	h mm	H mm	A mm inch	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
3,2	9,5	50,5	6	1,6	2	24.000	18-10006P	F03FR01581
4,8	9,5	50,5	6	2,4	2	24.000	18-10206P	F03FR01584
6	12,7	50,8	6	3	2	24.000	18-10406P	F03FR01587
9,52	9	46	6	4,8	2	24.000	18-10606P	F03FR01590
12	9	46	6	6	2	24.000	18-10806P	F03FR01593
15,88	11	50,8	6	8	2	24.000	18-11006P	F03FR01596
19,05	11	50,8	6	9,5	2	24.000	18-11206P	F03FR01599
3,2	9,5	50,5	8	1,6	2	24.000	18-10008P	F03FR01582
4,8	9,5	50,5	8	2,4	2	24.000	18-10208P	F03FR01585
6	12,7	50,8	8	3	2	24.000	18-10408P	F03FR01588
9,52	9	46	8	4,8	2	24.000	18-10608P	F03FR01591
12	9	46	8	6	2	24.000	18-10808P	F03FR01594
15,88	11	50,8	8	8	2	24.000	18-11008P	F03FR01597
19,05	11	50,8	8	9,5	2	24.000	18-11208P	F03FR01600
6	9,5	57	12	3	2	24.000	18-11412P	F03FR01602
12,7	31,7	71,5	12	6,35	2	24.000	18-11612P	F03FR01604
19,05	31,7	73	12	9,5	2	24.000	18-12212P	F03FR01606
25,4	31,7	73	12	12,7	2	24.000	18-12612P	F03FR01608



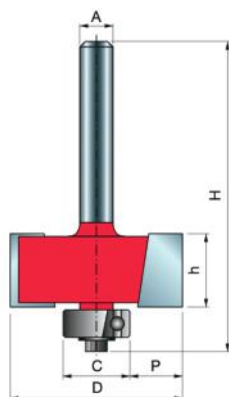
TYPE 18 - HM bovenfrezen met bolle radius & kogellager

D mm	h mm	H mm	A mm	R mm	C mm	Z	Max RPM 1/min.	Freud Code	Art. No.
15,88	11	59,5	6	8	15,8	2	24.000	18-51006P	F03FR01609
19,05	11,1	59,5	6	9,5	19	2	24.000	18-51206P	F03FR01611
15,88	11	59,5	8	8	15,8	2	24.000	18-51008P	F03FR01610
19,05	11	59,5	8	9,5	19,05	2	24.000	18-51208P	F03FR01612



TYPE 19-99 - HM bovenfrezen met bolle radius & kogellager

D mm	h mm	H mm	A mm	R mm	C mm	Z	Max RPM 1/min.	Freud Code	Art. No.
19	15,9	64,1	6	6,35	19	2	24.000	19-50606P	F03FR01616
19,05	15,9	47,5	6	6,35	-	2	24.000	19-10606P	F03FR01613
19,05	15,9	47,5	8	6,35	-	2	24.000	19-10608P	F03FR01614
19,05	15,9	67	12	6,35	-	2	24.000	19-12612P	F03FR01615
31,75	15,8	53	12	6,35	-	2	18.000	99-02612P	F03FR02420



TYPE 32

HM slagfree met kogellager

D	h	H	A	C	P	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	inch	mm		1/min.		
31,75	13,2	55,7	6		12,7	9,52	2	18.000	32-10006P F03FR01745
34,92	12,7	54,4	6		12,7	11,1	2	16.000	32-50006P F03FR01750
31,75	13,2	55,7	8		12,7	9,52	2	18.000	32-10008P F03FR01746
34,92	12,7	54,7	8		12,7	11,1	2	16.000	32-50008P F03FR01751
31,75	13,2	61,7	12		12,7	9,52	2	18.000	32-10212P F03FR01748
34,92	12,7	60,7	12		12,7	11,1	2	16.000	32-52012P F03FR01758

Set of 4 ball bearings	
C	P
mm	mm
9,53	12,7
12,7	11,1
15,88	9,53
19,05	7,94

HM slagfree met SET van 4 kogellagers

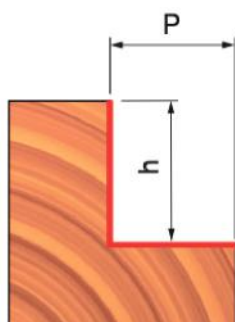
D	h	H	A	C	P	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	inch	mm		1/min.		
34,92	12,7	54,4	6		9,53-19,05	7,94-12,7	2	16.000	32-50206P F03FR01752
34,92	12,7	54,4	8		9,53-19,05	7,94-12,7	2	16.000	32-50208P F03FR01753
34,92	12,7	60,7	12		9,53-19,05	7,94-12,7	2	16.000	32-52212P F03FR01759

Set of 7 ball bearings	
C	P
mm	mm
9,53	12,7
12,7	11,1
15,88	9,53
19,05	7,94
22,22	6,35
28,58	3,18
34,92	0

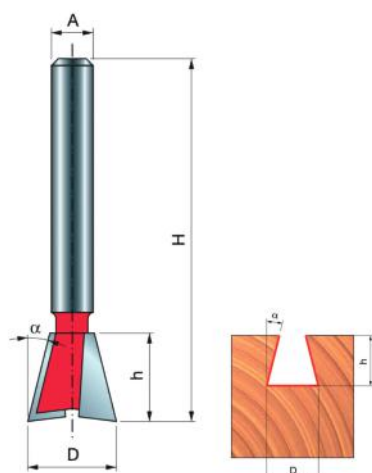
HM slagfree met SET van 7 kogellagers

D	h	H	A	C	P	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
34,92	12,7	54,7	6	9,53-34,92	0-12,7	2	16.000	32-50406P	F03FR01755
34,92	12,7	54,4	8	9,53-34,92	0-12,7	2	16.000	32-50408P	F03FR01756
34,92	12,7	60,7	12	9,53-34,92	0-12,7	2	16.000	32-52412P	F03FR01761

Onderdelen

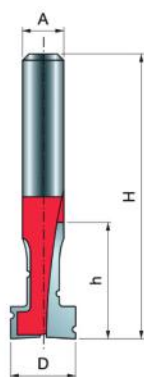


Spare parts		Dimensions	Freud Code	Art. No.
		mm		
	Screw	M3 x 7,6	2607M 001	F03F010000
	Allen key	2,5	2619M CA9	F03FA07432
	Washer	9 x 2 x 6	FX07M AA9	F03F010158
	Washer	12 x 1,1 x 4,8	FX07M AB9	F03F010159
32-52250P	Ball bearing	9,53 x 3,2 x 4,76	3102M AA9	F03F010006
	Ball bearing	12,7 x 4,98 x 4,76	3102M AB9	F03F010007
	Ball bearing	15,88 x 4,97 x 4,76	3102M AJ9	F03F010014
32-50206P 32-50208P 32-52212P	Ball bearing	9,53 x 3,2 x 4,76	3102M AA9	F03F010006
	Ball bearing	12,7 x 4,98 x 4,76	3102M AB9	F03F010007
	Ball bearing	15,88 x 4,97 x 4,76	3102M AJ9	F03F010014
32-50406P 32-50408P 32-52412P	Ball bearing	19,05 x 8 x 4,76	RB62M 1509	F03F011422
	Ball bearing	9,53 x 3,2 x 4,76	3102M AA9	F03F010006
	Ball bearing	12,7 x 4,98 x 4,76	3102M AB9	F03F010007
	Ball bearing	15,88 x 4,97 x 4,76	3102M AJ9	F03F010014
	Ball bearing	22,22 x 8 x 4,76	RB62M 1529	F03F011423
	Ball bearing	28,58 x 8 x 4,76	RB62M 1549	F03F011424
	Ball bearing	34,92 x 8 x 4,76	RB62M 1569	F03F011425



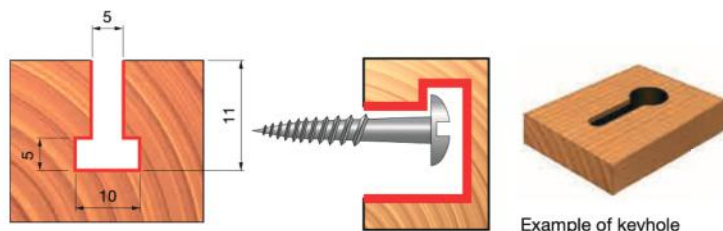
TYPE 22 - HM zwaluwstaartfrezen

D mm	h mm	H mm	A mm	inch	α	Z	Max RPM 1/min.	Freud Code	Art. No.
9,52	10,5	47,5	6		9°	2	24.000	22-10206P	F03FR01640
12,7	12,7	50,7	6		14°	2	24.000	22-10406P	F03FR01643
15,88	22,2	54,2	6		7°	2	24.000	22-10506P	F03FR01646
19,05	22,2	54,2	6		7°	2	24.000	22-10606P	F03FR01648
9,52	10,5	47,5	8		9°	2	24.000	22-10208P	F03FR01641
12,7	12,7	50,7	8		14°	2	24.000	22-10408P	F03FR01644
15,88	22,2	54,2	8		7°	2	24.000	22-10508P	F03FR01647
19,05	22,2	54,2	8		7°	2	24.000	22-10608P	F03FR01649
12,7	12,7	59,7	12		14°	2	24.000	22-11212P	F03FR01650
19,05	22,2	66,7	12		7°	2	24.000	22-11412P	F03FR01653



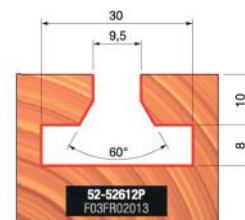
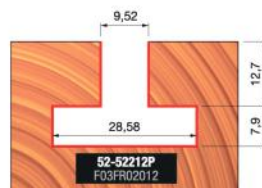
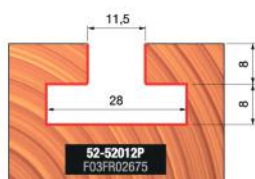
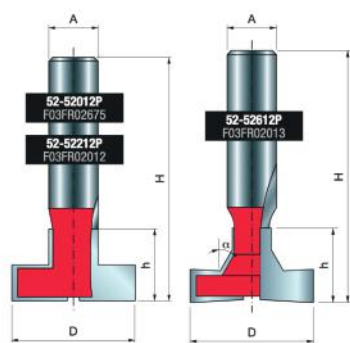
TYPE 70 - HM frees sleutelgaten

D mm	h mm	H mm	A mm	Z	Max RPM 1/min.	Freud Code	Art. No.
10	17	48,2	6	2	24.000	70-10406P	F03FR02159

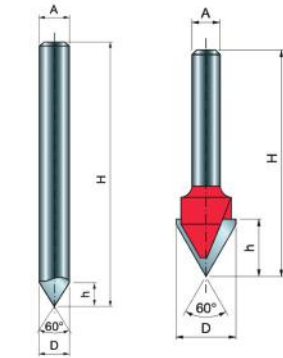


TYPE 52 - HM T-slotfrees

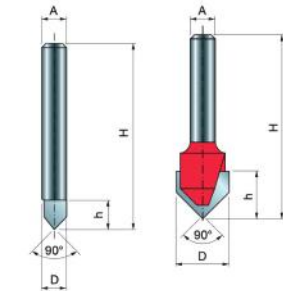
D mm	h mm	H mm	A mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
28	16	59	12	-	2	22.000	52-52012P	F03FR02675
28,58	20,6	63,5	12	-	2	18.000	52-52212P	F03FR02012
30	18	61	12	30°	2	18.000	52-52612P	F03FR02013



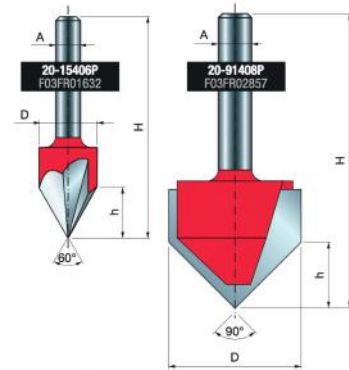
TYPE 20 - HM V-groeffrezen



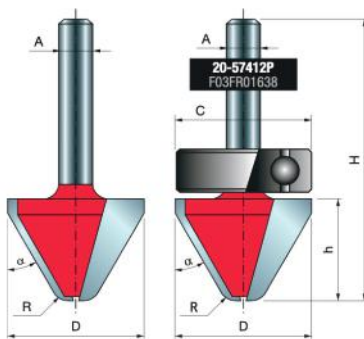
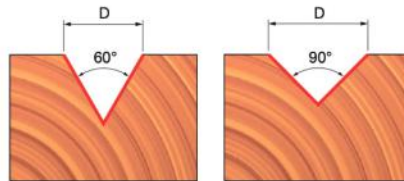
• Solid Carbide Bit



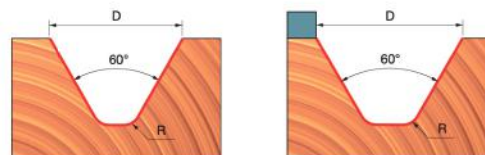
• Solid Carbide Bit



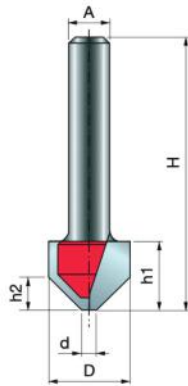
D mm	h mm	H mm	A mm inch	α	Z	Max RPM 1/min.	Freud Code	Art. No.
6	6	38,1	6	90°	1	24.000	20-10006P	F03FR01617
9,5	10	44,4	6	90°	2	24.000	20-10206P	F03FR01619
12,7	10	44,4	6	90°	2	24.000	20-10406P	F03FR01622
12,7	12,7	49,2	6	60°	2	24.000	20-15206P	F03FR01629
12,7	11	57,3	6	60°	3	24.000	20-15406P	F03FR01632
6	6	38,1	8	90°	1	24.000	20-10008P	F03FR01618
8	6	70	8	60°	1	30.000	PI01MD6083	F03FR00382
8	8	70	8	60°	1	24.000	20-16008P	F03FR01634
9,5	10	44,4	8	90°	2	24.000	20-10208P	F03FR01620
12,7	10	44,4	8	90°	2	24.000	20-10408P	F03FR01623
12,7	12,7	50,8	8	60°	2	24.000	20-15208P	F03FR01630
12,7	11	54	8	60°	3	24.000	20-15408P	F03FR01633
31,75	16	51	8	90°	2	24.000	20-91408P	F03FR02857
15,88	12,5	56,5	12	90°	2	24.000	20-10612P	F03FR01625
19,05	12,5	57,2	12	90°	2	24.000	20-10812P	F03FR01626



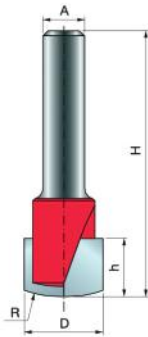
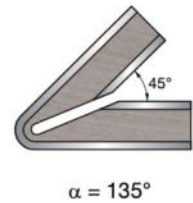
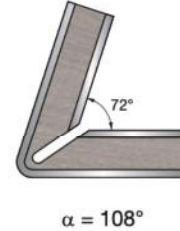
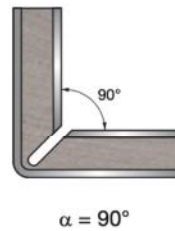
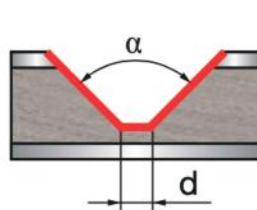
D mm	h mm	H mm	A mm	C mm	R mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
25,4	19	51,05	6	-	3	60°	2	24.000	20-17206P	F03FR01635
25,4	19	51,05	8	-	3	60°	2	24.000	20-17208P	F03FR01636
28,57	19	57	12	-	3	60°	2	18.000	20-17412P	F03FR01637
28	19	67,15	12	28	3	60°	2	18.000	20-57412P	F03FR01638



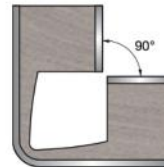
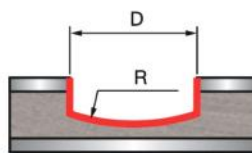
TYPE 21 - HM frezen voor ALUCOBOND

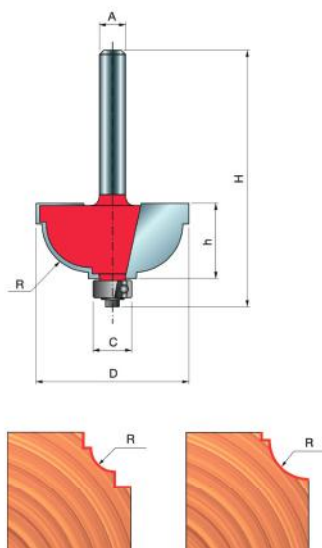


D	h1	h2	H	A	d	α	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	inch	mm		1/min.		
16	12,5	6,8	50,8	6		2,5	90°	2	24.000	21-11206P F03FR04018
19,05	12,5	6	50,8	6		2,5	108°	2	24.000	21-14606P F03FR04021
22,23	12,5	4,2	50,8	6		2,29	135°	2	24.000	21-18206P F03FR04024
16	12,5	6,8	50,8	8		2,5	90°	2	24.000	21-11208P F03FR04019
19,05	12,5	6	50,8	8		2,5	108°	2	24.000	21-14608P F03FR04022
22,23	12,5	4,2	50,8	8		2,29	135°	2	24.000	21-18208P F03FR04025



D	h	H	A	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	inch	mm	1/min.		
15,88	11	50	8		23,8	2	24.000	21-20008P F03FR03967





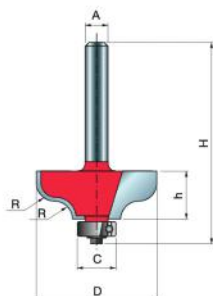
TYPE 30

HM profielbovenfrees met kogellager

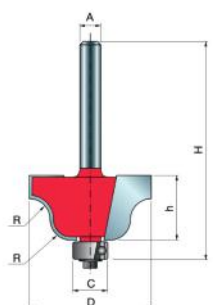
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
28,58	13	54,2	6	9,53	4,8	2	18.000	30-30406P	F03FR01719
31,75	15,1	56,8	6	9,53	4,8	2	18.000	30-20206P	F03FR01715
28,58	13	54,2	8	9,53	4,8	2	18.000	30-30408P	F03FR01720
31,75	15,1	56,8	8	9,53	8	2	18.000	30-20208P	F03FR01716
28,58	13	60,2	12	9,53	4,8	2	18.000	30-32412P	F03FR01722
31,75	15,1	62,8	12	9,53	8	2	18.000	30-22212P	F03FR01718

Bijbestellen kogellager & ring : 3102M AB9 & FX07M AB9

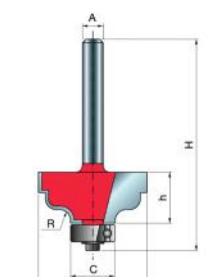
HM profielbovenfreesen



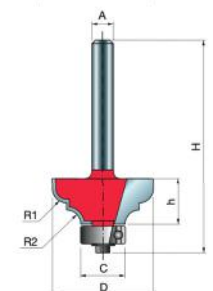
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	inch	mm	mm	1/min.		
31,75	12,2	53,9	6		9,53	4,8	2	18.000	38-20206P F03FR01815
38,1	16,2	57,4	6		9,53	6,35	2	16.000	38-20406P F03FR01818
31,75	12,2	53,9	8		9,53	4,8	2	18.000	38-20208P F03FR01816
38,1	16,2	57,4	8		9,53	6,35	2	16.000	38-20408P F03FR01819
31,75	12,2	59,9	12		9,53	4,8	2	18.000	38-21212P F03FR01821
38,1	16,2	63,4	12		9,53	6,35	2	16.000	38-21412P F03FR01822



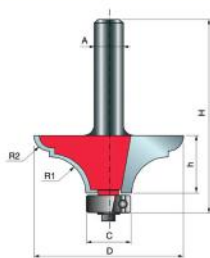
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	inch	mm	mm	1/min.		
27	13,3	55,3	6		9,53	4	2	18.000	38-10006P F03FR01805
35	18,5	60,5	6		9,53	6,35	2	16.000	38-10206P F03FR01808
27	13,3	55,3	8		9,53	4	2	18.000	38-10008P F03FR01806
35	18,5	60,5	8		9,53	6,35	2	16.000	38-10208P F03FR01809
27	13,3	61,31	12		9,53	4	2	18.000	38-10412P F03FR01811
35	18,5	66,5	12		9,53	6,35	2	16.000	38-10612P F03FR01812



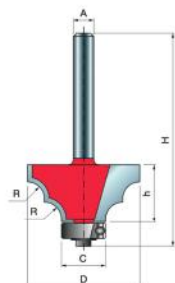
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	inch	mm	mm	1/min.		
31,75	15	56,7	6		12,7	3,18	2	18.000	38-40206P F03FR01832
31,75	15	56,7	8		12,7	3,18	2	18.000	38-40208P F03FR01833
34,92	14,3	62,8	12		12,7	4,8	2	16.000	99-00512P F03FR02411



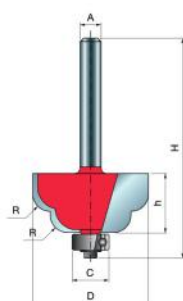
D	h	H	A	C	R1	R2	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	inch	mm	mm	mm	1/min.		
28,58	12,7	54,9	6		12,7	4	4	2	18.000	38-60206P F03FR01838
34,92	18,3	60	6		12,7	6,35	4,76	2	16.000	38-60406P F03FR01841
28,58	12,7	54,9	8		12,7	4	4	2	18.000	38-60208P F03FR01839
34,92	18,3	60	8		12,7	6,35	4,76	2	16.000	38-60408P F03FR01842
28,58	12,7	61,2	12		12,7	4	4	2	18.000	38-61212P F03FR01843
34,92	17,5	65,7	12		12,7	6,35	4,76	2	16.000	38-61412P F03FR01844



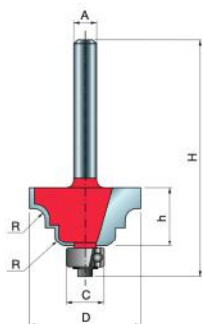
D	h	H	A	C	R1	R2	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm	mm		1/min.		
41,3	15,9	58,4	8	12,7	10	4,3	2	16.000	99-01108P	F03FR02416
41,3	15,9	64,4	12	12,7	10	4,3	2	16.000	99-01112P	F03FR02417



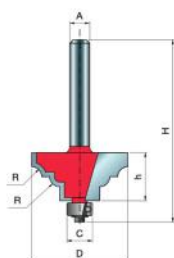
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
32,7	15	57,2	6	12,7	5	2	16.000	38-90006P	F03FR01852
32,7	15	57,2	8	12,7	5	2	16.000	38-90008P	F03FR01853



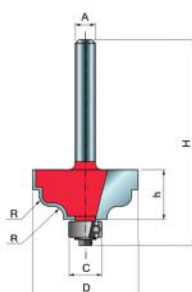
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
32,7	15	57,2	6	12,7	5	2	16.000	38-95006P	F03FR01854
32,7	15	57,2	8	12,7	5	2	16.000	38-95008P	F03FR01855
38,9	18,3	60,8	1/4	9,53	6,35	2	16.000	38-30425P	F03FR01825



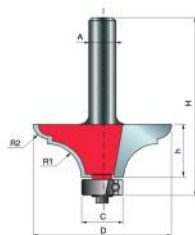
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
29,38	13,5	55,5	6	9,53	3,97	2	18.000	38-30606P	F03FR01826
38,9	18,3	60	6	9,53	6,35	2	16.000	38-30406P	F03FR01823
29,38	13,5	55,5	8	9,53	3,97	2	18.000	38-30608P	F03FR01827
38,9	18,3	60	8	9,53	6,35	2	16.000	38-30408P	F03FR01824
29,38	13,5	61,2	12	9,53	3,97	2	18.000	38-31212P	F03FR01829
38,92	18,3	66	12	9,53	6,35	2	16.000	38-31412P	F03FR01831



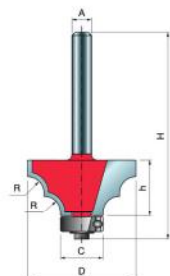
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
32,7	14,5	56,7	6	12,7	3	2	16.000	38-80006P	F03FR01846
36,7	16,5	58,7	6	12,7	4	2	16.000	38-80206P	F03FR01848
40,7	18	60,2	6	12,7	5	2	16.000	38-80406P	F03FR01850
32,7	14,5	56,7	8	12,7	3	2	16.000	38-80008P	F03FR01847
36,7	16,5	58,7	8	12,7	4	2	16.000	38-80208P	F03FR01849
40,7	18	60,2	8	12,7	5	2	16.000	38-80408P	F03FR01851



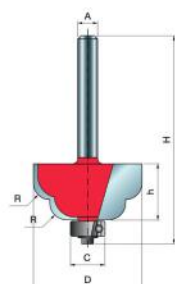
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
31,75	15	56,2	6	9,53	3,18	2	18.000	38-45206P	F03FR01835
31,75	15	56,2	8	9,53	3,18	2	18.000	38-45208P	F03FR01836
31,75	15	56,2	1/4	9,53	3,18	2	18.000	38-45225P	F03FR01837



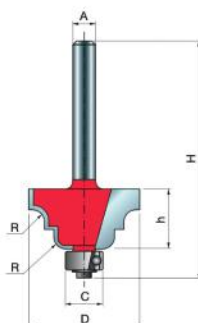
D	h	H	A	C	R1	R2	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm	mm		1/min.		
41,3	15,9	58,4	8	12,7	10	4,3	2	16.000	99-01108P	F03FR02416
41,3	15,9	64,4	12	12,7	10	4,3	2	16.000	99-01112P	F03FR02417



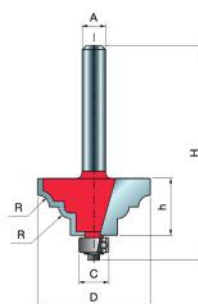
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
32,7	15	57,2	6	12,7	5	2	16.000	38-90006P	F03FR01852
32,7	15	57,2	8	12,7	5	2	16.000	38-90008P	F03FR01853



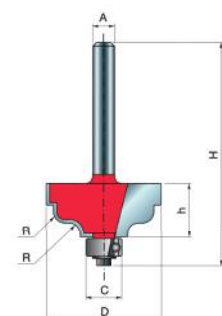
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	inch	mm	mm	1/min.		
32,7	15	57,2	6		12,7	5	2	16.000	38-95006P F03FR01854
32,7	15	57,2	8		12,7	5	2	16.000	38-95008P F03FR01855



D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
29,38	13,5	55,5	6	9,53	3,97	2	18.000	38-30606P	F03FR01826
38,9	18,3	60	6	9,53	6,35	2	16.000	38-30406P	F03FR01823
29,38	13,5	55,5	8	9,53	3,97	2	18.000	38-30608P	F03FR01827
38,9	18,3	60	8	9,53	6,35	2	16.000	38-30408P	F03FR01824
29,38	13,5	61,2	12	9,53	3,97	2	18.000	38-31212P	F03FR01829
38,92	18,3	66	12	9,53	6,35	2	16.000	38-31412P	F03FR01831



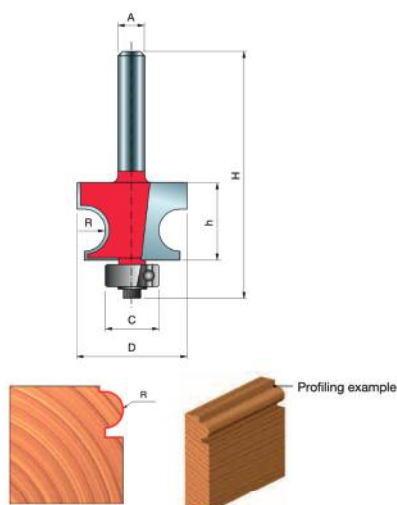
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
32,7	14,5	56,7	6	12,7	3	2	16.000	38-80006P	F03FR01846
36,7	16,5	58,7	6	12,7	4	2	16.000	38-80206P	F03FR01848
40,7	18	60,2	6	12,7	5	2	16.000	38-80406P	F03FR01850
32,7	14,5	56,7	8	12,7	3	2	16.000	38-80008P	F03FR01847
36,7	16,5	58,7	8	12,7	4	2	16.000	38-80208P	F03FR01849
40,7	18	60,2	8	12,7	5	2	16.000	38-80408P	F03FR01851



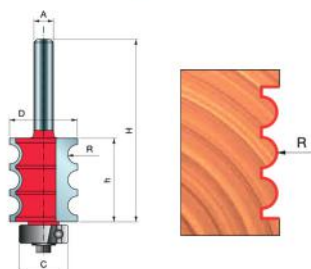
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	inch	mm	mm	1/min.		
31,75	15	56,2	6		9,53	3,18	2	18.000	38-45206P F03FR01835
31,75	15	56,2	8		9,53	3,18	2	18.000	38-45208P F03FR01836

TYPE 80 - 84 - 23

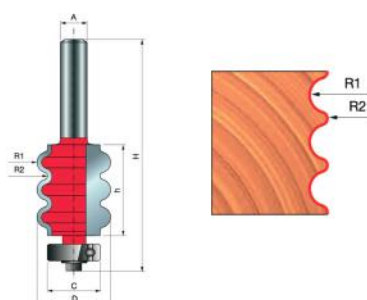
HM bovenfrezes half & kwartrond met kogellager



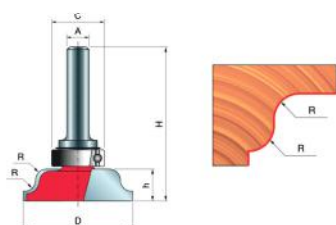
D mm	h mm	H mm	A mm	C mm	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
22,23	14,3	56,9	6	12,7	3,18	2	24.000	80-10206P	F03FR02192
25,4	17,5	60	6	12,7	4,76	2	24.000	80-10406P	F03FR02195
30,17	22,2	64,2	6	12,7	7,14	2	18.000	80-10806P	F03FR02198
22,23	14,3	57,1	8	12,7	3,18	2	24.000	80-10208P	F03FR02193
25,4	17,5	60	8	12,7	4,76	2	24.000	80-10408P	F03FR02196
30,17	22,2	64,2	8	12,7	7,14	2	18.000	80-10808P	F03FR02199
22,23	14,3	62,9	12	12,7	3,18	2	24.000	80-12212P	F03FR02201
25,4	17,5	66,4	12	12,7	4,76	2	24.000	80-12412P	F03FR02203
30,17	22,2	70,6	12	12,7	7,14	2	18.000	80-12812P	F03FR02204



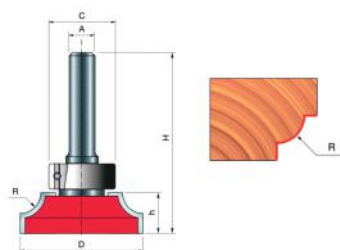
D mm	h mm	H mm	A mm	C mm	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
22,24	27,4	70,9	6	15,88	3,18	2	18.000	80-55206P	F03FR02205
22,24	27,4	70,9	8	15,88	3,18	2	24.000	80-55208P	F03FR02206
22,24	27,4	76,9	12	15,88	3,18	2	24.000	80-57212P	F03FR02207



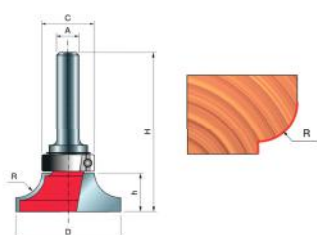
D mm	h mm	H mm	A mm	C mm	R1 mm	R2 mm	Z	Max RPM 1/min.	Freud Code	Art. No.
22,24	27,4	70,9	6	15,88	3,18	1,16	2	24.000	84-10606P	F03FR02220
22,24	27,4	70,9	8	15,88	3,18	1,16	2	24.000	84-10608P	F03FR02221
22,24	27,4	76,9	12	15,88	3,18	1,16	2	24.000	84-12612P	F03FR02222



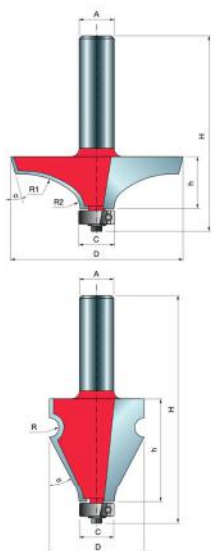
D mm	h mm	H mm	A mm	C mm	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
39,5	11,5	54,6	8	19	4	2	16.000	23-10008P	F03FR01654
39,5	11,5	58	12	19	4	2	16.000	23-10012P	F03FR01655
54	11,5	58	12	19	4	2	16.000	23-10212P	F03FR01656
60,5	17,3	63,8	12	19	6,35	2	12.000	23-10412P	F03FR01657



D mm	h mm	H mm	A mm	C mm	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
38	12,5	55,6	8	19	6,35	2	16.000	23-20008P	F03FR01658
38	12,5	59	12	19	6,35	2	16.000	23-20012P	F03FR01659



D mm	h mm	H mm	A mm	C mm	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
35	13,2	56,3	8	19	8	2	16.000	23-20208P	F03FR01660
38	14,5	57,6	8	19	9,53	2	16.000	23-20408P	F03FR01662
35	13,2	59,7	12	19	8	2	16.000	23-20212P	F03FR01661
38	14,5	61	12	19	9,53	2	16.000	23-20412P	F03FR01663

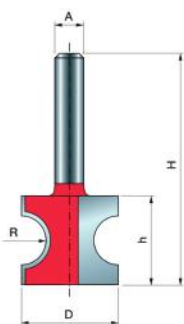
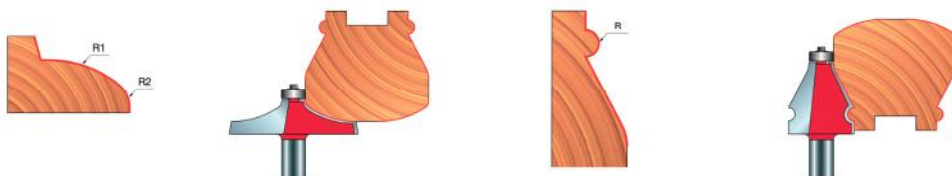


TYPE 99

HM bovenvriren trapeleuningen

D	h	H	A	C	R1	R2	α	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm	mm			1/min.		
63,5	18	66,2	12	12,7	30	8	15°	2	12.000	99-02712P	F03FR02421

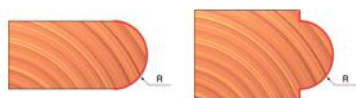
D	h	H	A	C	R	α	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm			1/min.		
35	38,5	86,6	12	12,7	3,18	25°	2	16.000	99-07212P	F03FR02456



TYPE 82

HM bovenvriren halffrond

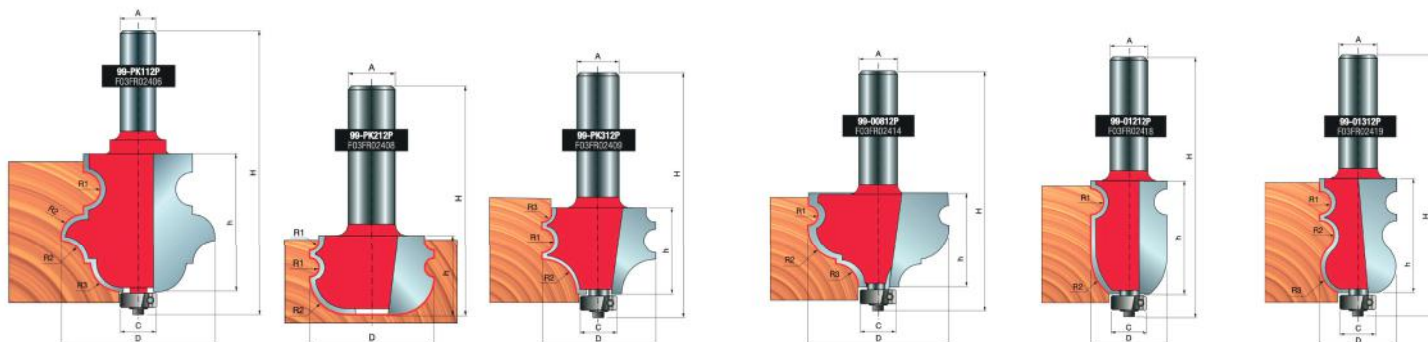
D	h	H	A	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm		1/min.		
19	12,4	44,4	6	3,18	2	24.000	82-10206P	F03FR02208
22,22	19,5	51,5	6	4,8	2	24.000	82-10406P	F03FR02210
25,4	22,9	54,9	6	6,35	2	24.000	82-10606P	F03FR02213
19	12,4	44,4	8	3,18	2	24.000	82-10208P	F03FR02209
22,22	19,5	51,5	8	4,76	2	24.000	82-10408P	F03FR02211
25,4	22,9	54,9	8	6,35	2	24.000	82-10608P	F03FR02214
19	12,4	53,4	12	3,2	2	24.000	82-11012P	F03FR02215
22,22	19,5	60,5	12	4,76	2	24.000	82-11212P	F03FR02216
25,4	22,9	64,9	12	6,35	2	24.000	82-11412P	F03FR02217
37	29,05	71,05	12	9,5	2	16.000	82-11612P	F03FR02218
45,9	35,4	73,4	12	12,7	2	16.000	82-11812P	F03FR02219



TYPE 99

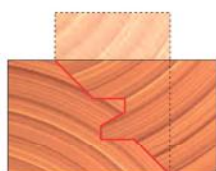
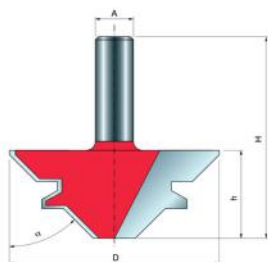
HM bovenvriren multiprofiel

D	h	H	A	C	R1	R2	R3	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm	mm	mm		1/min.		
54,7	49	102	12	12,7	6	8	10	2	10.000	99-PK112P	F03FR02406
31,75	20	58	12	-	2,4	9,53	-	2	18.000	99-PK212P	F03FR02408
31,75	23,8	72	12	12,7	3,2	9,53	2,4	2	18.000	99-PK312P	F03FR02409
44,44	29	77,1	12	12,7	3	10,5	7	2	16.000	99-00812P	F03FR02414
23,8	35	83,5	12	12,7	4	15	-	2	24.000	99-01212P	F03FR02418
23,8	35	83,5	12	12,7	3,5	4,5	8,5	2	24.000	99-01312P	F03FR02419



TYPE 99 - HM verstekfrezen 45°

D mm	h mm	H mm	A mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
55	23	61	12	45°	2	16.000	99-03512P	F03FR02425
70	29,5	67,5	12	45°	2	12.000	99-03412P	F03FR02424



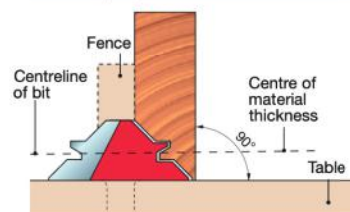
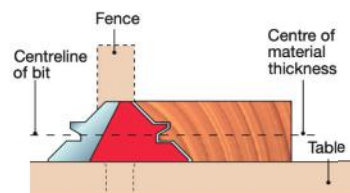
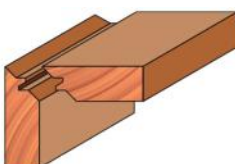
99-03412P
F03FR02424



Simple Joint

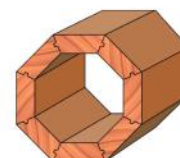
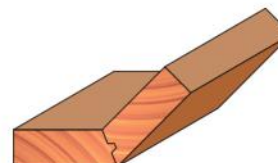
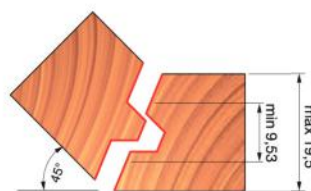
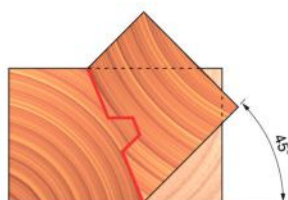
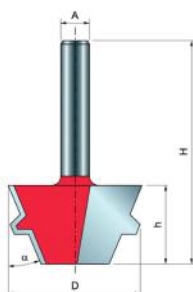
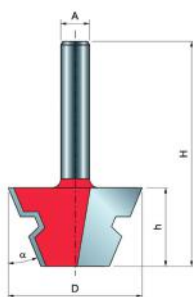


45° Mitre Join



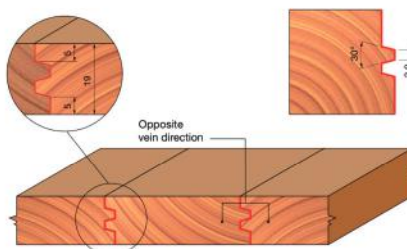
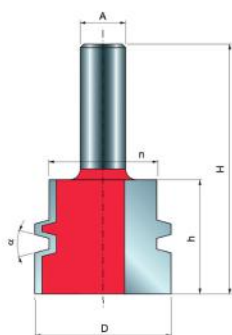
TYPE 99 - SET van 2 HM verstekfrezen 22,5°

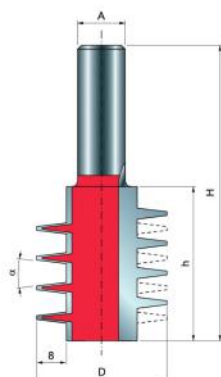
D mm	h mm	H mm	A mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
37,3	22,2	54,2	8	22,5°	2	24.000	99-04308P	F03FR02450



TYPE 99 - HM rechte verbindingsfrezen

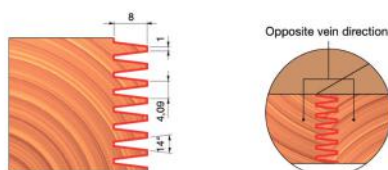
D mm	h mm	H mm	n mm	A mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
38	32	70	30,2	12	15°	2	16.000	99-03112P	F03FR02422
38	32	70	30,2	1/2	15°	2	16.000	99-03150P	F03FR02423





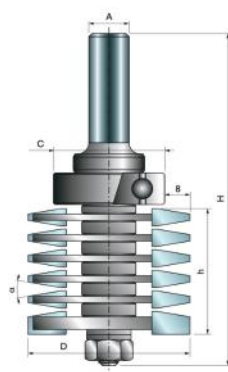
TYPE 99 - HM FINGER JOINT verbindingssrees

D	h	H	A	α	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm			1/min.		
35	41,5	79,5	12	14°	2	16.000	99-03712P	F03FR02440

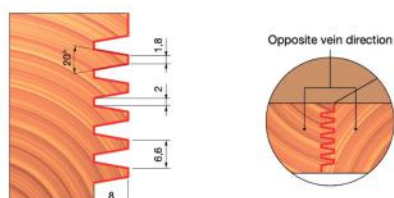


TYPE 99 - HM FINGER JOINT verbindingssrees met kogellager - A

D	h	H	A	C	α	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm			1/min.		
50,8	45,2	108	12	35	20°	2	24.000	99-03912P	F03FR02444

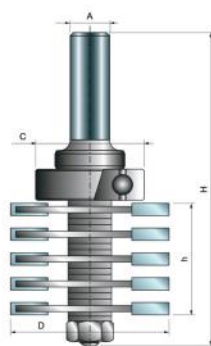


Spare parts	Dimensions	Freud Code	Art. No.
	mm		
	Hex nut	7,94 x 6,75	2610M BB9
	Washer	14 x 8,4 x 1,6	2617M BG9
	Ball bearing	35 x 15 x 11	3102M AI9
	Spacer	18 x 0,1 x 8	AN01MP0019
	Spacer	18 x 1 x 8	AN01MP0109
	Spacer	18 x 2,5 x 8	AN01MP0259
	Spacer	18 x 4,4 x 8	AN01MP0449

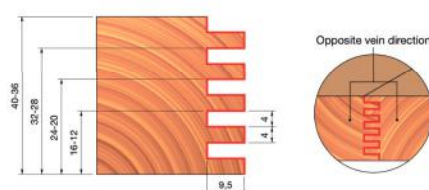


TYPE 99 - HM FINGER JOINT verbindingssrees met kogellager - B

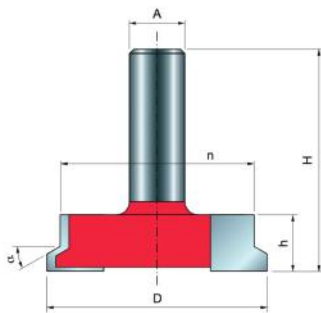
D	h	H	A	C	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm		1/min.		
47	36	101	12	28	2	24.000	99-04212P	F03FR02447



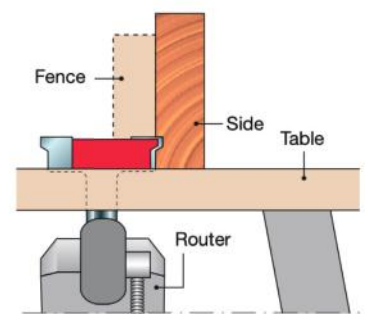
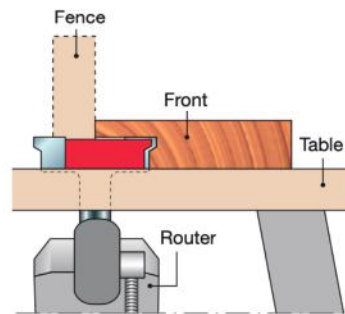
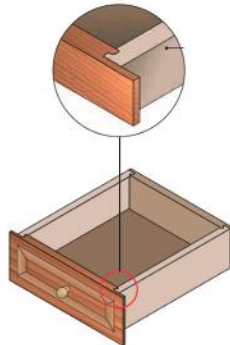
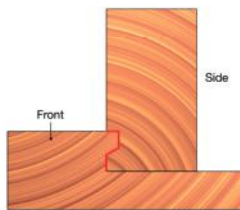
Spare parts	Dimensions	Freud Code	Art. No.
	mm		
	Hex nut	7,94 x 6,75	2610M BB9
	Washer	14 x 8,4 x 1,6	2617M BG9
	Ball bearing	28 x 12 x 8	3102M AH9
	Spacer	18 x 0,2 x 8	AN01MP0029
	Spacer	18 x 1 x 8	AN01MP0109
	Spacer	18 x 0,5 x 8	AN01MP0059
	Spacer	18 x 4,4 x 8	AN01MP0449



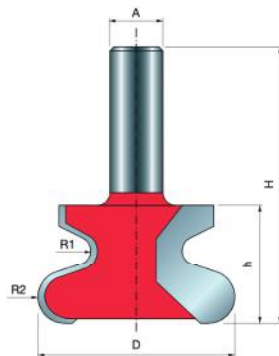
TYPE 99 - HM frees kastlades



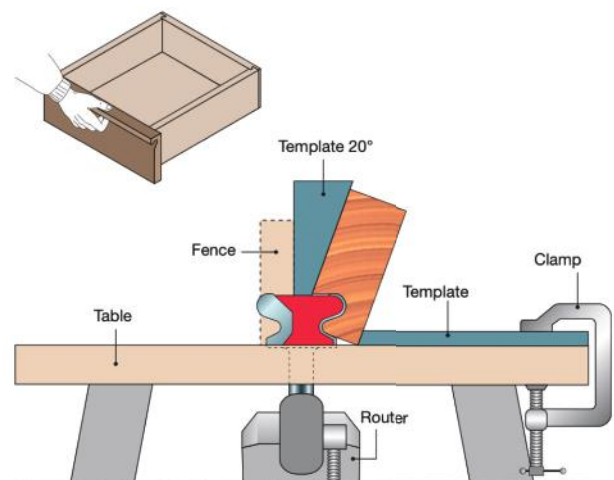
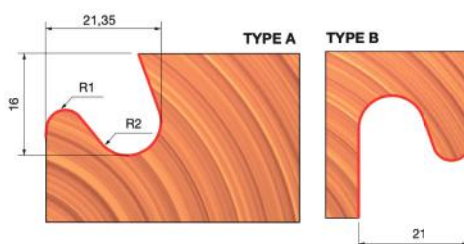
D mm	h mm	H mm	A mm	n mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
50,5	13	49	12	44,5	30°	2	16.000	99-24012P	F03FR02463



TYPE 99 - HM frees handgrepen kastlades

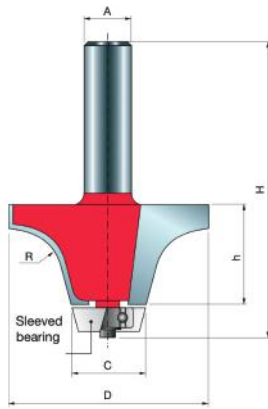


D mm	h mm	H mm	A mm	R1 mm	R2 mm	Z	Max RPM 1/min.	Freud Code	Art. No.
47	28,7	66,7	12	3,2	6,35	2	16.000	99-00712P	F03FR02413

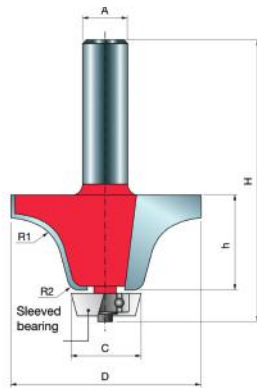
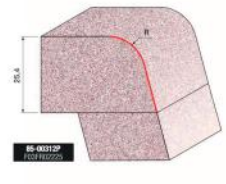
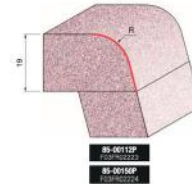
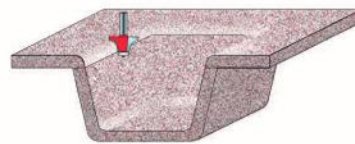


TYPE 85

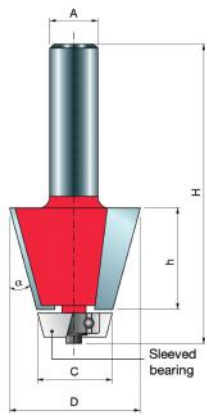
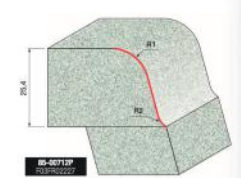
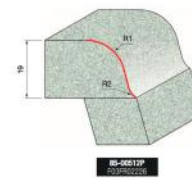
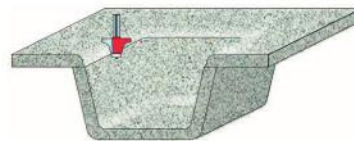
HM bovenfrezes voor Solid Surfaces



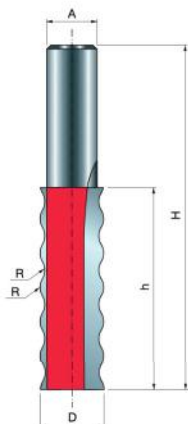
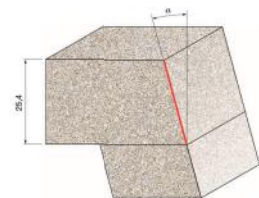
D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
54	25,4	74,6	12	22,2	12,7	2	16.000	85-00112P	F03FR02223
57,2	31,8	81	12	22,2	12,7	2	12.000	85-00312P	F03FR02225
50,8	25,4	73,6	1/2	19,1	12,7	2	16.000	85-00150P	F03FR02224



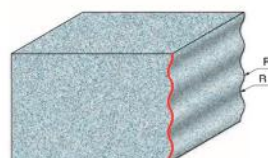
D	h	H	A	C	R1	R2	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm	mm		1/min.		
54	25,4	74,6	12	19,2	12,7	6,35	2	16.000	85-00512P	F03FR02226
57,2	31,8	80,9	12	19,2	12,7	6,35	2	12.000	85-00712P	F03FR02227



D	h	H	A	C	α	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm		1/min.		
35,6	25,4	78,1	12	22,2	15°	2	16.000	85-00912P	F03FR02228

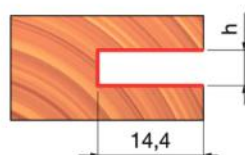
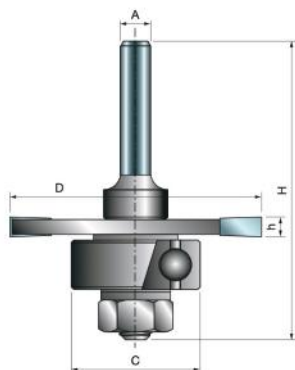


D	h	H	A	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm		1/min.		
16	51,3	88	12	4	2	24.000	85-03312P	F03FR02229



TYPE 63

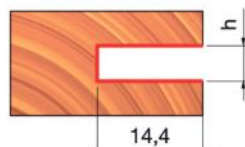
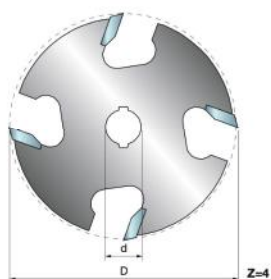
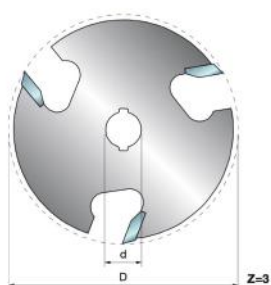
HM schijffrezen op schacht



D mm	h mm	H mm	A mm	C mm	Z	Max RPM 1/min.	Freud Code	Art. No.
50,8	1,5	60,3	6	22	3	24.000	63-09906P	F03FR02049
50,8	1,6	60,3	6	22	3	24.000	63-10006P	F03FR02055
50,8	2	60,3	6	22	3	24.000	63-10406P	F03FR02058
50,8	2,4	60,3	6	22	3	24.000	63-10606P	F03FR02061
50,8	2,5	60,3	6	22	3	24.000	63-11306P	F03FR02079
50,8	3	60,3	6	22	3	24.000	63-11406P	F03FR02085
50,8	3,2	60,3	6	22	3	24.000	63-10806P	F03FR02064
50,8	3,5	60,3	6	22	3	24.000	63-11506P	F03FR02091
50,8	4	60,3	6	22	3	24.000	63-10906P	F03FR02067
50,8	4,8	60,3	6	22	3	24.000	63-11006P	F03FR02070
50,8	5	60,3	6	22	3	24.000	63-11606P	F03FR02097
50,8	6	60,3	6	22	3	24.000	63-11106P	F03FR02073
50,8	6,4	60,3	6	22	3	24.000	63-11206P	F03FR02076
50,8	1,5	60,3	8	22	3	24.000	63-09908P	F03FR02052
50,8	2,5	60,3	8	22	3	24.000	63-11308P	F03FR02082
50,8	3	60,3	8	22	3	24.000	63-11408P	F03FR02088
50,8	3,5	60,3	8	22	3	24.000	63-11508P	F03FR02094
50,8	5	60,3	8	22	3	24.000	63-11608P	F03FR02100
50,8	1,5	60,3	12	22	3	24.000	63-14912P	F03FR02105
50,8	1,6	60,3	12	22	3	24.000	63-15012P	F03FR02108
50,8	2	60,3	12	22	3	24.000	63-15412P	F03FR02111
50,8	2,4	60,3	12	22	3	24.000	63-15612P	F03FR02114
50,8	2,5	60,3	12	22	3	24.000	63-16312P	F03FR02132
50,8	3	60,3	12	22	3	24.000	63-16412P	F03FR03241
50,8	3,2	60,3	12	22	3	24.000	63-15812P	F03FR02117
50,8	3,5	60,3	12	22	3	24.000	63-16512P	F03FR02137
50,8	4	60,3	12	22	3	24.000	63-15912P	F03FR02120
50,8	4,8	60,3	12	22	3	24.000	63-16012P	F03FR02123
50,8	5	60,3	12	22	3	24.000	63-16612P	F03FR02140
50,8	6	60,3	12	22	3	24.000	63-16112P	F03FR02126
50,8	6,4	60,3	12	22	3	24.000	63-16212P	F03FR02129

	Spare parts	Dimensions mm	Freud Code	Art. No.
	Washer	17 x 8,4 x 1,6	2617M AG9	F03F010005
	Hex nut	7,94 x 6,75	2610M BB9	F03F010003
	Ball bearing	22 x 8 x 7,1	3102M AC9	F03F010008

TYPE 56-58 - HM schijffrees

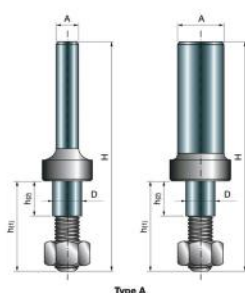


D mm	h mm	d mm	Z	Max RPM 1/min.	Freud Code	Art. No.
50,8	1,5	8	3	24.000	56-09908P	F03FR02014
50,8	1,6	8	3	16.000	56-10008P	F03FR02015
50,8	2	8	3	24.000	56-10408P	F03FR02016
50,8	2,4	8	3	16.000	56-10608P	F03FR02017
50,8	2,5	8	3	24.000	56-11308P	F03FR02028
50,8	3	8	3	24.000	56-11408P	F03FR02029
50,8	3,2	8	3	24.000	56-10808P	F03FR02019
50,8	3,5	8	3	24.000	56-11508P	F03FR02030
50,8	4	8	3	24.000	56-10908P	F03FR02021
50,8	4,8	8	3	24.000	56-11008P	F03FR02023
50,8	5	8	3	24.000	56-11608P	F03FR02031
50,8	6	8	3	24.000	56-11108P	F03FR02025
50,8	6,4	8	3	24.000	56-11208P	F03FR02026

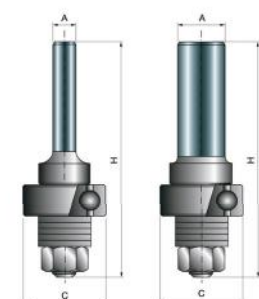
D mm	h mm	d mm	Z	Max RPM 1/min.	Freud Code	Art. No.
50,8	1,5	8	4	16.000	58-09908P	F03FR02032
50,8	2	8	4	16.000	58-10408P	F03FR02033
50,8	2,5	8	4	16.000	58-11308P	F03FR02036
50,8	3	8	4	16.000	58-11408P	F03FR02037
50,8	5	8	4	24.000	58-11608P	F03FR02038
50,8	6	8	4	16.000	58-11108P	F03FR02034

TYPE 60 - Schacht adaptors

D mm	h1 mm	h2 mm	H mm	C mm	A mm inch	Max RPM 1/min.	Freud Code	Art. No.
7,94	24,6	10	60,3	-	6	24.000	60-10006P	F03FR02039
7,94	24,6	10	60,3	22	6	24.000	60-12006P	F03FR02044
7,94	24,6	10	60,3	-	8	24.000	60-10008P	F03FR02040
7,94	24,6	10	60,3	22	8	24.000	60-12008P	F03FR02045
7,94	24,6	10	60,3	-	12	24.000	60-10212P	F03FR02042
7,94	24,6	10	60,3	22	12	24.000	60-12212P	F03FR02046



Type A



Type B

Type A

60-10006P - 60-10008P - 60-10212P - 60-10025P - 60-10250P

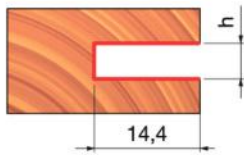
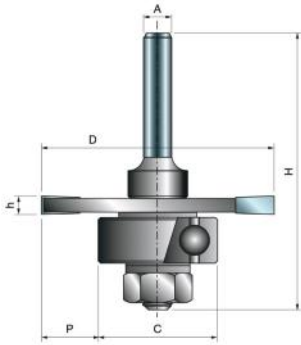
	Quantity	Spare parts	Dimensions mm	Freud Code	Art. No.
	7	Washer	17 x 8,4 x 1,6	2617M AG9	F03F010005
	1	Hex nut	7,94 x 6,75	2610M BB9	F03F010003

Type B

60-12006P - 60-12008P - 60-12212P

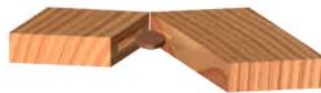
	Quantity	Spare parts	Dimensions mm	Freud Code	Art. No.
	5	Washer	17 x 8,4 x 1,6	2617M AG9	F03F010005
	1	Hex nut	7,94 x 6,75	2610M BB9	F03F010003
	1	Ball bearing	22 x 8 x 7	3102M AC9	F03F010008

TYPE 63 - LAMELLO verbinding

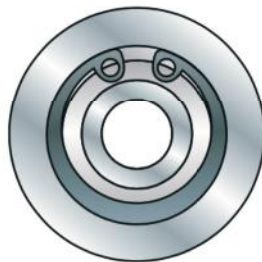


D	h	H	C	P	A	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm inch		1/min.		
50,8	3,97	60,3	26-30-34	12,4-10,4-8,4	6	3	24.000	63-60906P	F03FR02143
50,8	3,97	60,3	26-30-34	12,4-10,4-8,4	8	3	24.000	63-60908P	F03FR02146
50,8	3,97	60,3	26-30-34	12,4-10,4-8,4	12	3	24.000	63-60912P	F03FR02149

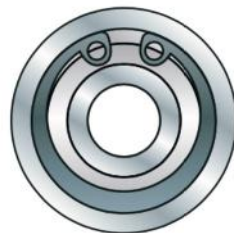
Spare parts	Dimensions mm	Freud Code	Art. No.
	Hex nut	7,94 x 6,75	2610M BB9
	Washer	17 x 8,4 x 1,6	2617M AG9
	Washer	14 x 8,4 x 1,6	2617M BG9
	Ball bearing	26 x 10 x 8	RB62M 1249
	Ball bearing	30 x 10 x 8	RB62M 1289
	Ball bearing	34 x 10 x 8	RB62ME DA9



C	P
mm	mm
Ø 26	12,4
Ø 30	10,4
Ø 34	8,4



Biscuit Size-00
47mm x 15mm

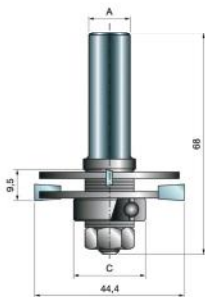
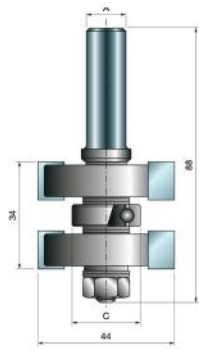


Biscuit Size-10
54mm x 19mm



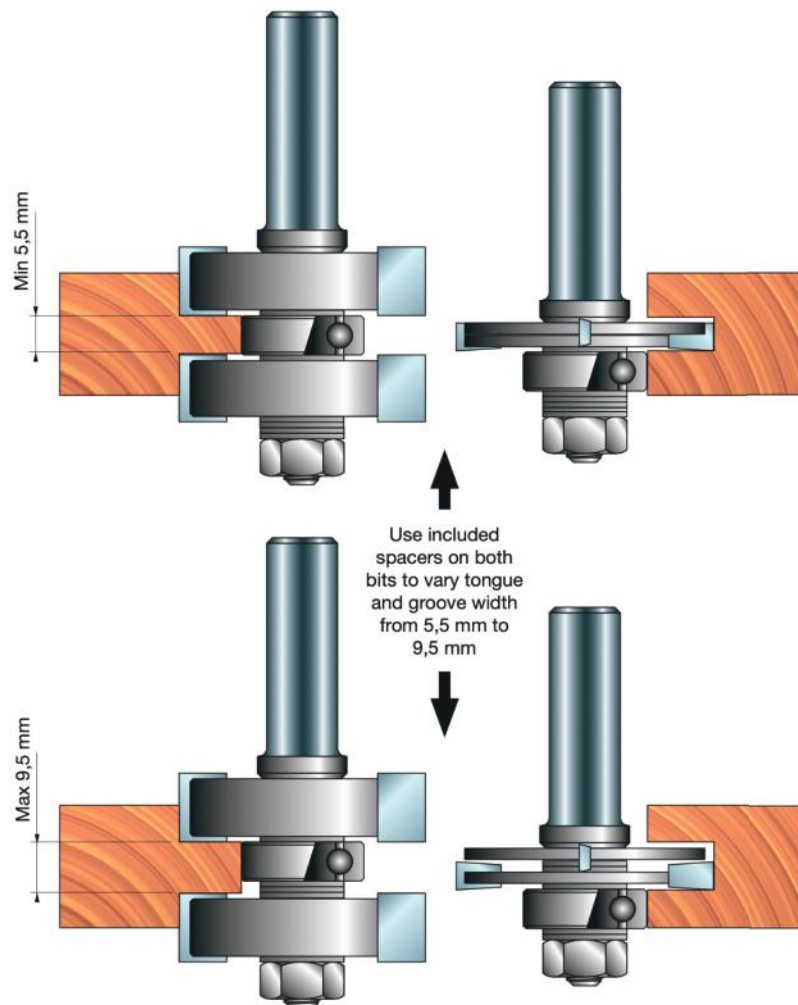
Biscuit Size-20
59mm x 22mm

TYPE 99 - TAND & GROEF verbinding



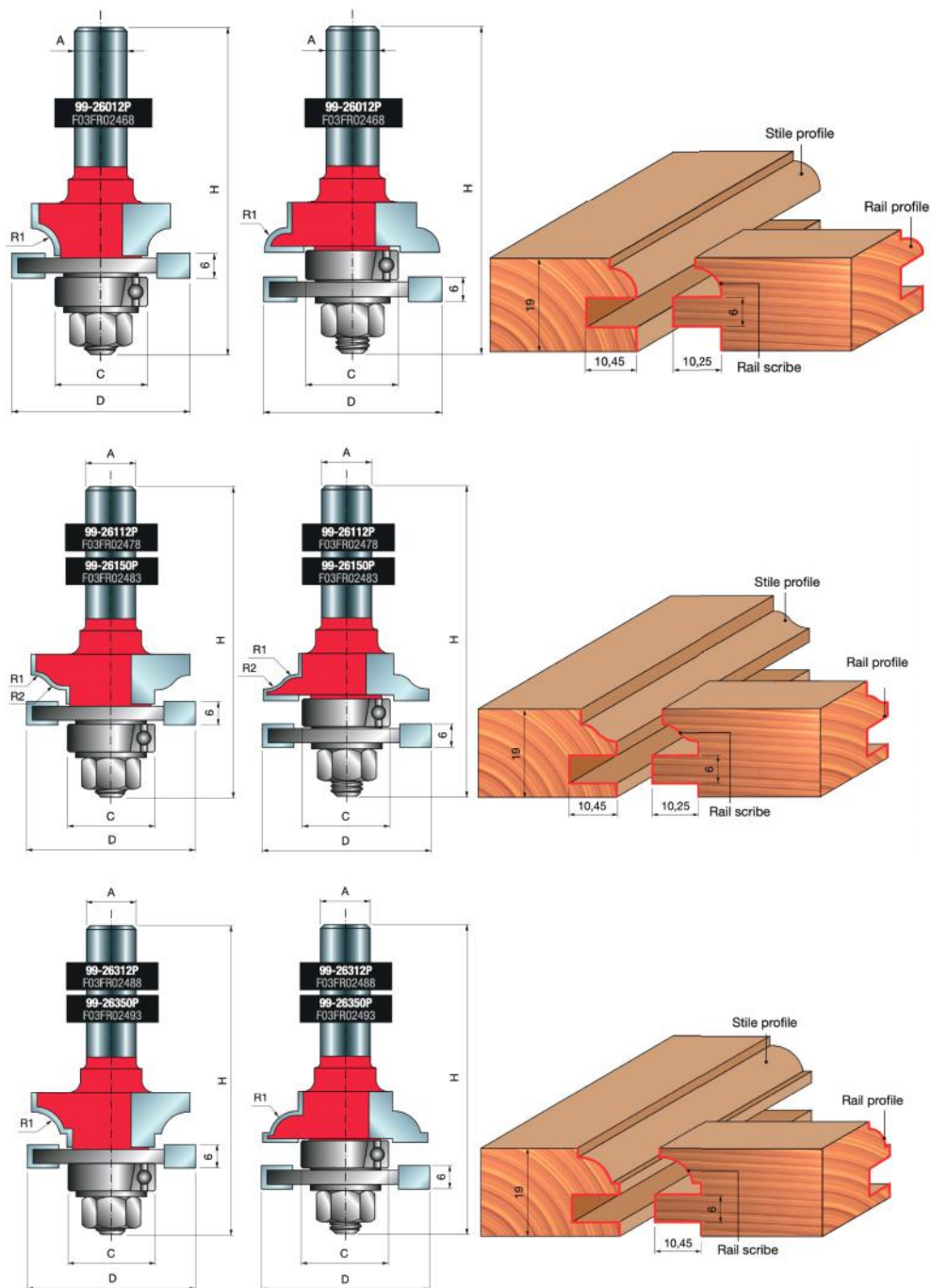
D mm	h mm	H mm	A mm	C mm	Z	Max RPM 1/min.	Freud Code	Art. No.
44	34	88	12	22	2	16.000	99-03612P	F03FR02432
44,4	9,5	68	12	22	2			

	Qty	Spare parts	Dimensions mm	Freud Code	Art. No.
	2	Hex nut	7,94 x 6,75	2610M BB9	F03F010003
	2	Washer	14 x 8,4 x 1,6	2617M BG9	F03FR01668
	2	Ball bearing	22 x 8 x 7,1	3102M AC9	F03F010008
	4	Spacer	18 x 0,1 x 8	AN01MP0019	F03FC00392
	4	Spacer	18 x 0,2 x 8	AN01MP0029	F03FC00393
	2	Spacer	18 x 0,5 x 8	AN01MP0059	F03FC00395
	8	Spacer	18 x 1 x 8	AN01MP0109	F03FC00396
	4	Spacer	18 x 0,15 x 8	AN01MPAA99	F03FC00391



TYPE 99 - Profiel & conterprofielfrezen

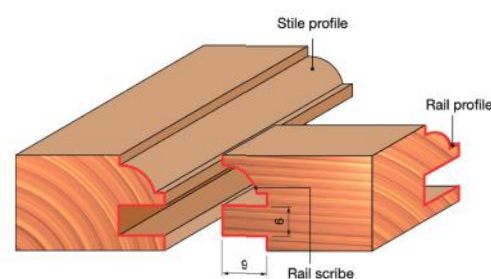
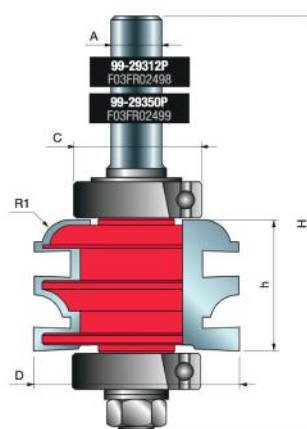
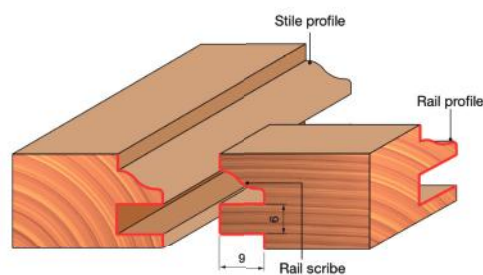
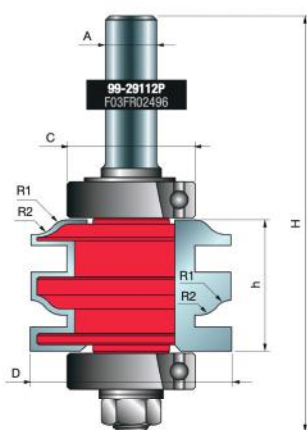
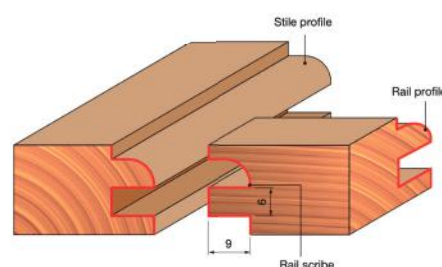
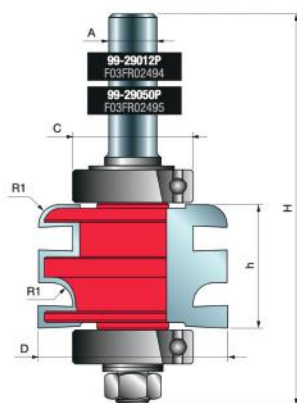
D	H	A	R1	R2	C	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	inch	mm	mm		1/min.		
42,9	77	12	5,5	-	22	2	24.000	99-26012P	F03FR02468
42,9	77	12	4,5	5,5	22	2	24.000	99-26112P	F03FR02478
42,9	77	12	7	-	22	2	24.000	99-26312P	F03FR02488



	Spare parts	Dimensions	Freud Code	Art. No.
		mm		
	Hex nut	7,94 x 6,75	2610M BB9	F03F010003
	Spacer	18 x 0,1 x 8	AN01MP0019	F03FC00392
	Spacer	18 x 0,2 x 8	AN01MP0029	F03FC00393
	Spacer	18 x 0,5 x 8	AN01MP0059	F03FC00395
	Spacer	18 x 1 x 8	AN01MP0109	F03FC00396
	Ball bearing	22 x 8 x 7,1	3102M AC9	F03F010008

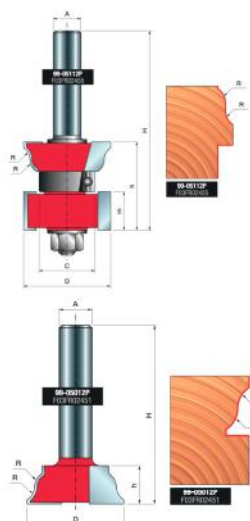
TYPE 99 - Profiel & conterprofielfrezen

D	h	H	A	R1	R2	C	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm inch	mm	mm	mm		1/min.		
50,4	32,7	104	12	5,5	-	32	2	14.000	99-29012P	F03FR02494
50,4	32,7	104	12	5,5	4,5	32	2	14.000	99-29112P	F03FR02496
50,4	32,7	104	12	7	-	32	2	14.000	99-29312P	F03FR02498



	Spare parts	Dimensions mm	Freud Code	Art. No.
	Hex nut	7,94 x 6,75	2610M BB9	F03F010003
	Retaining ring	15 x 13,9	2621ME 015	F03FA07444
	Ball bearing	32 x 15 x 9	3102M AN9	F03F010016
	Spacer	18 x 1 x 8	AN01MP0109	F03FC00396

TYPE 99 - Raamprofiel frezen

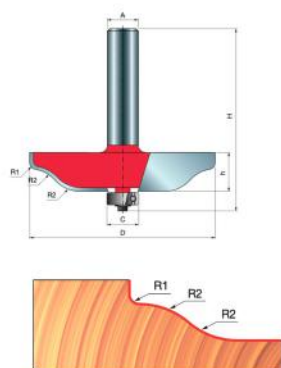


D	h	H	A	m	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm	mm		1/min.		
34	35,9	78,4	12	14,5	22	6	2	16.000	99-05112P	F03FR02455
38	15,5	53,5	12	-	-	6	2	16.000	99-05012P	F03FR02451

Spare parts	Dimensions	Freud Code	Art. No.
	mm		
	Hex nut	7,94 x 6,75	2610M BB9 F03F010003
	Washer	14 x 8,4 x 1,6	2617M BG9 F03FR01668
	Ball bearing	22 x 8 x 7,1	3102M AC9 F03F010008
	Spacer	18 x 0,1 x 8	AN01MP0019 F03FC00392

TYPE 99 - Bossingfreen

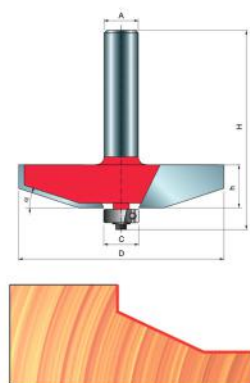
Type A



D	h	H	A	C	R1	R2	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	inch	mm	mm		1/min.		
76,2	16	64,7	12		12,7	2	16	2	12.000	99-22112P F03FR02458
70	16	64,5	1/2	12,7	14	3	4	12.000	99-51050P	F03FR02504
89	16	64,5	1/2	12,7	20	4	4	10.000	99-52050P	F03FR02512

Spare parts	Dimensions	Freud Code	Art. No.
	mm		
	Screw	M3 x 7,6	2607M 001 F03F010000
	Ball bearing	12,7 x 4,98 x 4,76	3102M AB9 F03F010007
	Washer	12 x 1,1 x 4,8	FX07M AB9 F03F010159

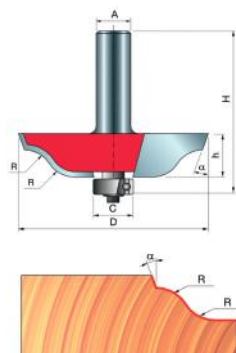
Type B



D	h	H	A	C	α	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	°		1/min.		
63,5	16	60	12	12,7	25°	2	12.000	99-22212P	F03FR02459
76,2	16	60	12	12,7	18°	2	12.000	99-22312P	F03FR02460
89	16,1	64,5	1/2	12,7	16,5°	4	10.000	99-51550P	F03FR02508

Spare parts	Dimensions	Freud Code	Art. No.
	mm		
	Screw	M3 x 7,6	2607M 001 F03F010000
	Ball bearing	12,7 x 4,98 x 4,76	3102M AB9 F03F010007
	Washer	12 x 1,1 x 4,8	FX07M AB9 F03F010159

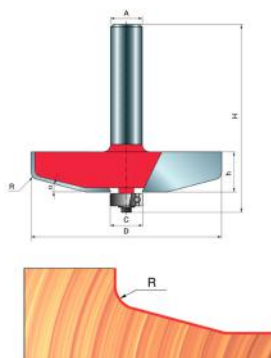
Type C



D	h	H	A	C	α	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	inch	mm	°	mm		1/min.		
70	16	64,5	1/2	12,7	20°	11	4	12.000	99-51350P	F03FR02507

Spare parts	Dimensions	Freud Code	Art. No.
	mm		
	Screw	M3 x 7,6	2607M 001 F03F010000
	Ball bearing	12,7 x 4,98 x 4,76	3102M AB9 F03F010007
	Washer	12 x 1,1 x 4,8	FX07M AB9 F03F010159

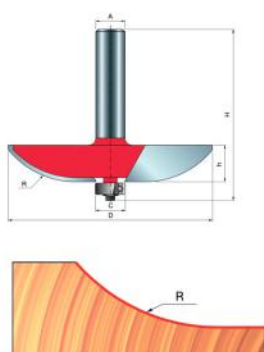
Type D



D	h	H	A	C	α	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm		mm		1/min.		
76,2	16	60	12	12,7	15°	4,8	2	12.000	99-22412P	F03FR02461

Spare parts	Dimensions	Freud Code	Art. No.
	mm		
Screw	M3 x 7,6	2607M 001	F03F010000
Ball bearing	12,7 x 4,98 x 4,76	3102M AB9	F03F010007
Washer	12 x 1,1 x 4,8	FX07M AB9	F03F010159

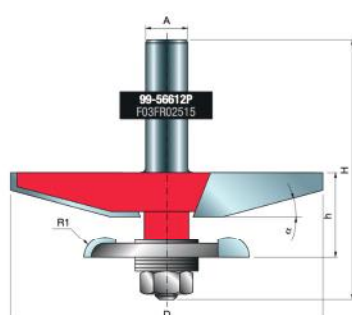
Type E



D	h	H	A	C	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	inch	mm	mm	1/min.		
89	16	64,7	12		12,7	38,1	2	10.000	99-22512P F03FR02462
89	16	64.5		1/2	12.7	38	4	10.000	99-51850P F03FR02510

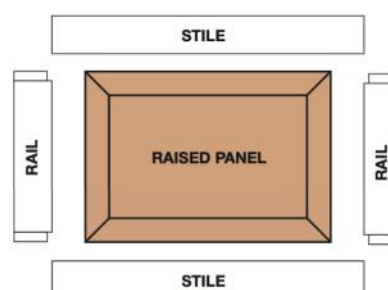
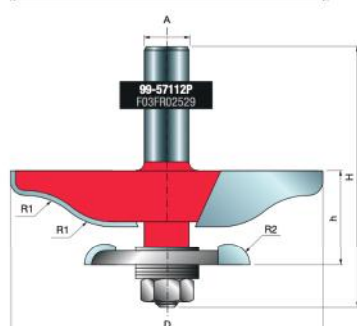
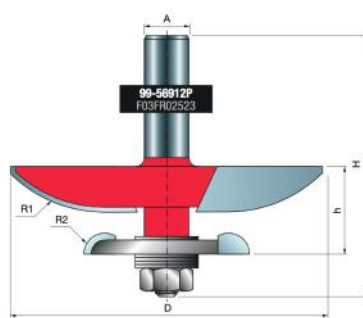
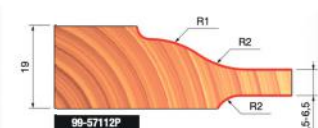
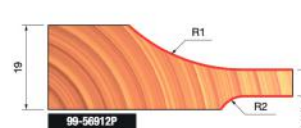
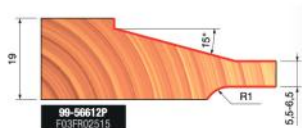
Spare parts	Dimensions	Freud Code	Art. No.
	mm		
Screw	M3 x 7,6	2607M 001	F03F010000
Ball bearing	12,7 x 4,98 x 4,76	3102M AB9	F03F010007
Washer	12 x 1,1 x 4,8	FX07M AB9	F03F010159

TYPE 99 - Bossingfrezen met onderprofiel

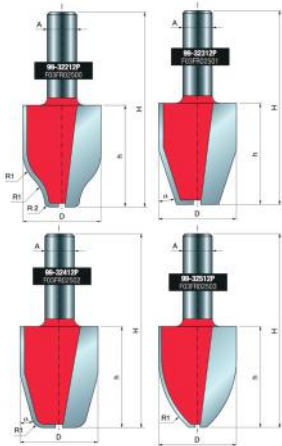


D	h	H	A	α	R1	R2	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm		mm	mm		1/min.		
89	25	75	12	15°	6	-	2	14.000	99-56612P	F03FR02515
89	25	75	12	15°	38	6	2	14.000	99-56912P	F03FR02523
89	25	75	12	15°	30	6	2	14.000	99-57112P	F03FR02529

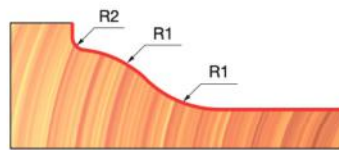
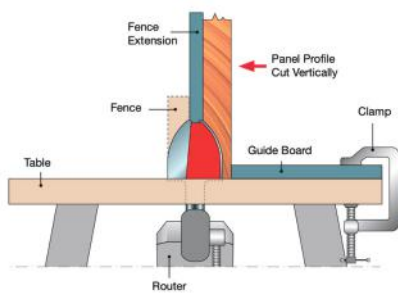
Spare parts	Dimensions	Freud Code	Art. No.
	mm		
Hex nut	7,94 x 6,75	2610M BB9	F03F010003
Spacer	18 x 0,1 x 8	AN01MP0019	F03FC00392
Spacer	18 x 0,2 x 8	AN01MP0029	F03FC00393
Spacer	18 x 0,5 x 8	AN01MP0059	F03FC00395
Spacer	18 x 1 x 8	AN01MP0109	F03FC00396
Spacer	18 x 0,15 x 8	AN01MPAA99	F03FC00391



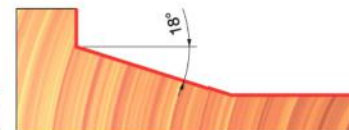
TYPE 99 - Bossingfreen verticaleal



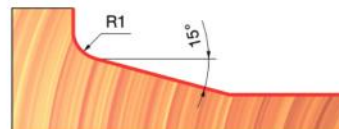
D mm	h mm	H mm	A	α	R1 mm	R2 mm	Z	Max RPM 1/min.	Freud Code	Art. No.
31,8	41,5	79,5	12	-	2	16	2	16.000	99-32212P	F03FR02500
31,8	41,5	79,5	12	18°	-	-	2	16.000	99-32312P	F03FR02501
31,8	41,5	79,5	12	15°	4,8	-	2	16.000	99-32412P	F03FR02502
31,8	41,5	79,5	12	-	38,1	-	2	16.000	99-32512P	F03FR02503



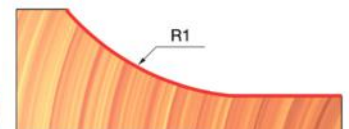
99-32212P
F03FR02500



99-32312P
F03FR02501

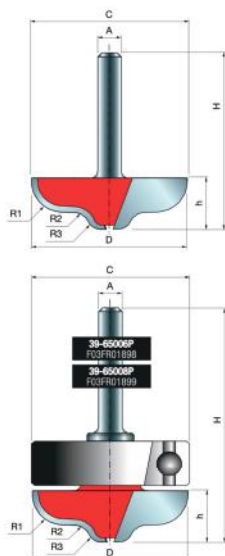


99-32412P
F03FR02502

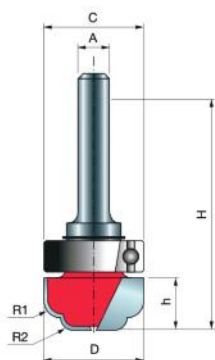
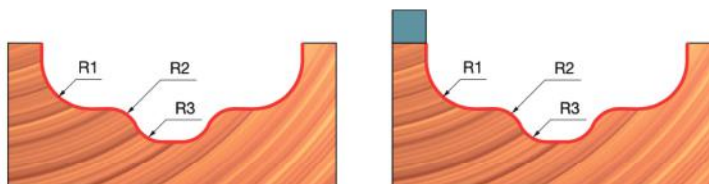


99-32512P
F03FR02503

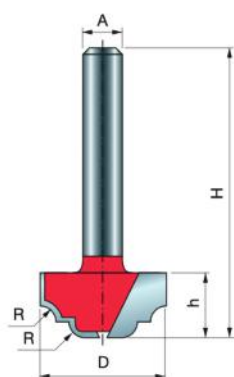
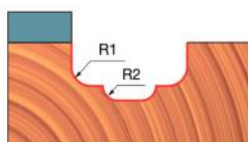
TYPE 39 - HM profielbovenfrezen met snijdende onderkant



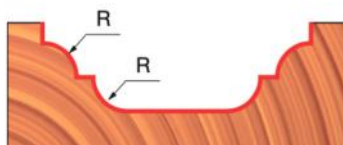
D	h	H	A	C	R1	R2	R3	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm	mm	mm		1/min.		
39,6	13	45	6	-	7,9	4,2	3,4	2	16.000	39-60006P	F03FR01896
39,6	13	60,1	6	39,6	7,9	4,2	3,4	2	16.000	39-65006P	F03FR01898
39,6	13	45	8	-	7,9	4,2	3,4	2	16.000	39-60008P	F03FR01897
39,6	13	60,1	8	39,6	7,9	4,2	3,4	2	16.000	39-65008P	F03FR01899



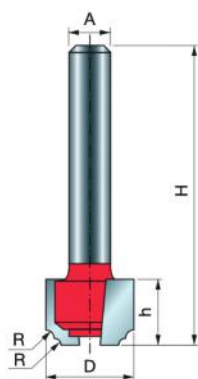
D	h	H	A	C	R1	R2	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm	mm	mm		1/min.		
19	9,6	53	6	19	3,2	2,4	2	24.000	39-51206P	F03FR01887



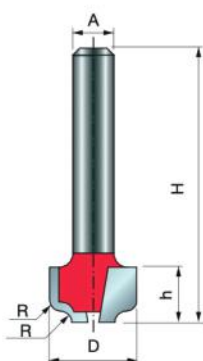
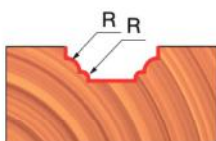
D	h	H	A	R	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm	mm	mm		1/min.		
19,05	9,8	41,8	6	2,38	2	24.000	39-10006P	F03FR01856
25,4	12,7	44,7	6	3,18	2	24.000	39-10206P	F03FR01860
19,05	9,8	41,8	8	2,38	2	24.000	39-10008P	F03FR01857
19	12,7	44,7	8	4	2	24.000	39-10108P	F03FR01859
25,4	12,7	44,7	8	3,18	2	24.000	39-10208P	F03FR01861
31,75	12,7	44,7	8	4	2	18.000	39-11408P	F03FR01863
31,75	12,7	50,7	12	4	2	18.000	39-11412P	F03FR01864



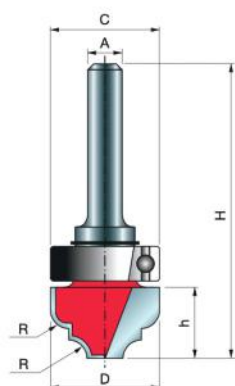
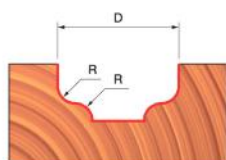
TYPE 39 - HM profielbovenfrezen met snijdende onderkant



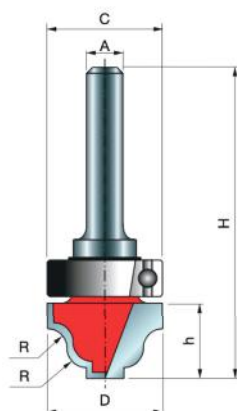
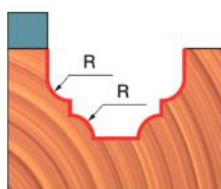
D mm	h mm	H mm	A mm inch	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
12,7	9,5	41,2	6	1,2	2	24.000	39-30206P	F03FR01878
15,88	9,5	41,2	6	2,38	2	24.000	39-30406P	F03FR01881
22,22	12	43,7	6	3,18	2	24.000	39-30606P	F03FR01884
12,7	9,5	41,2	8	1,2	2	24.000	39-30208P	F03FR01879
15,88	9,5	41,2	8	2,38	2	24.000	39-30408P	F03FR01882
22,22	12	43,7	8	3,2	2	24.000	39-30608P	F03FR01885



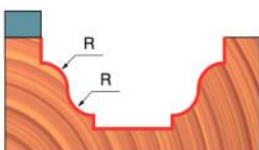
D mm	h mm	H mm	A mm inch	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
12,7	8	40	6	1,59	2	24.000	39-15206P	F03FR01865
19,05	12,7	44,7	6	6,35	2	24.000	39-24006P	F03FR01875
22,23	10,36	42,4	6	3,18	2	24.000	39-15406P	F03FR01868
12,7	8	40	8	1,6	2	24.000	39-15208P	F03FR01866
19,05	12,7	44,7	8	6,4	2	24.000	39-24008P	F03FR01876
22,23	10,36	42,4	8	3,2	2	24.000	39-15408P	F03FR01869
19,05	12,7	50,7	12	6,4	2	24.000	39-24012P	F03FR01877



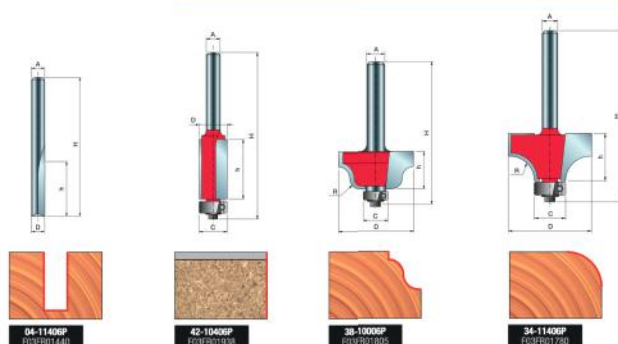
D mm	h mm	H mm	A mm inch	C mm	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
19	12,7	55,5	6	19	3,18	2	24.000	39-53206P	F03FR01892
28	14	58,1	8	28	3,18	2	18.000	39-53808P	F03FR01894
28	14	64,1	12	28	3,18	2	18.000	39-53812P	F03FR01895



D mm	h mm	H mm	A mm inch	C mm	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
19	12,5	55,5	6	19	3,18	2	24.000	39-52206P	F03FR01888
28	14,4	58,1	8	28	4	2	18.000	39-52808P	F03FR01890
28	14,4	64,1	12	28	4	2	18.000	39-52812P	F03FR01891



SET - 88-10606P



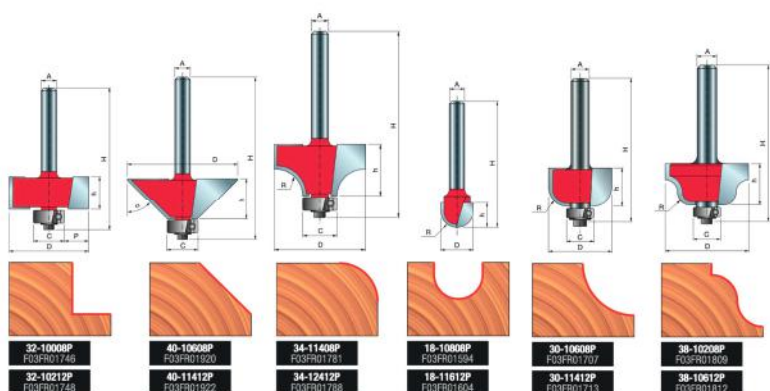
Set code 88-10606P (F03FR02255)

Bit type	Page reference	D mm	h mm	H mm	A mm	C mm	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
Double flute straight bit	244	6	16	50,8	6	-	-	2	24.000	04-11406P	F03FR01440
Flush trim bit	252	12,7	25,7	72,9	6	12,7	-	2	24.000	42-10406P	F03FR01938
Roman ogee bit	261	27	13,3	55,3	6	9,53	4	2	18.000	38-10006P	F03FR01805
Rounding over bit	256	31,75	18	59,7	6	12,7	9,53	2	18.000	34-11406P	F03FR01780

Additional spare parts included

Spare parts	Dimensions mm	Freud Code	Art. No.
 Allen key	2,5	2619M CA9	F03FA07432
 Ball bearing	9,53 x 3,2 x 4,76	3102M AA9P	F03F010006
 Washer	9 x 2 x 6	FX07M AA9P	F03F010158

SET - 91-10408P & 91-10412P



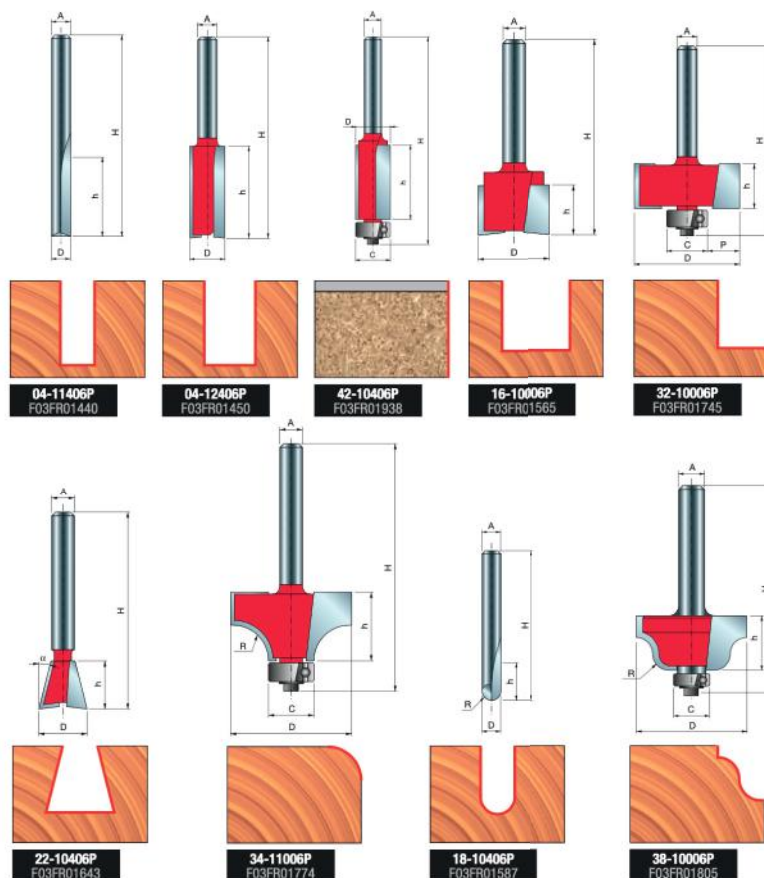
Set code 91-10408P (F03FR02293)

Bit type	Page reference	D mm	h mm	H mm	A mm	C mm	P mm	α	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
Rabbeting bit	282	31,75	13,2	55,7	8	12,7	9,52	-	-	2	18.000	32-10008P	F03FR01746
Chamfer bit	257	44	18,5	61	8	12,7	-	45°	-	2	16.000	40-10608P	F03FR01920
Rounding over bit	256	31,75	18	59,7	8	12,7	-	-	9,5	2	18.000	34-11408P	F03FR01781
Round nose bit	307	12	9	46	8	-	-	-	6	2	24.000	18-10808P	F03FR01594
Cove bit	258	38,1	16,4	58,9	8	12,7	-	-	12,7	2	16.000	30-10608P	F03FR01707
Roman ogee bit	261	35	18,5	60,5	8	9,53	-	-	6,35	2	16.000	38-10208P	F03FR01809

Set code 91-10412P (F03FR02294)

Bit type	Page reference	D mm	h mm	H mm	A mm	C mm	P mm	α	R mm	Z	Max RPM 1/min.	Freud Code	Art. No.
Rabbeting bit	282	31,75	13,2	61,7	12	12,7	9,52	-	-	2	18.000	32-10212P	F03FR01748
Chamfer bit	257	44	18,5	67	12	12,7	-	45°	-	2	16.000	40-11412P	F03FR01922
Rounding over bit	256	31,75	18	65,7	12	12,7	-	-	9,53	2	18.000	34-12412P	F03FR01788
Round nose bit	307	12,7	31,7	71,5	12	-	-	-	6,35	2	24.000	18-11612P	F03FR01604
Cove bit	258	38,1	16,4	64,9	12	12,7	-	-	12,7	2	16.000	30-11412P	F03FR01713
Roman ogee bit	261	35	18,5	66,5	12	9,53	-	-	6,35	2	16.000	38-10612P	F03FR01812

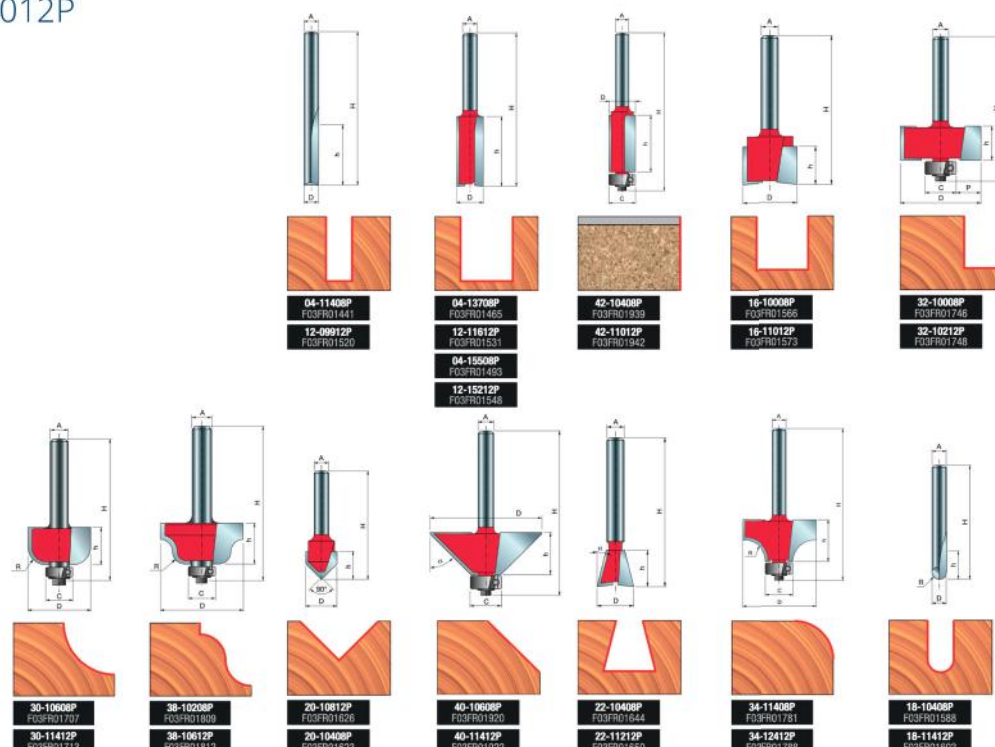
SET - 88-10206P



Set code 88-10206P (F03FR02250)

Bit type	Page reference	D mm	h mm	H mm	A mm	C mm	S mm	R mm	P mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
Double flute straight bit	244	6	16	50,8	6	-	-	-	-	-	2	24.000	04-11406P	F03FR01440
Double flute straight bit	244	9	25	63	6	-	-	-	-	-	2	24.000	04-12406P	F03FR01450
Flush trim bit	252	12,7	25,7	72,9	6	12,7	25,4	-	-	-	2	24.000	42-10406P	F03FR01938
Mortising bit	249	12,7	12,5	51	6	-	-	-	-	-	2	24.000	16-10006P	F03FR01565
Rabbeting bit	282	31,75	13,2	55,7	6	12,7	-	-	9,52	-	2	18.000	32-10006P	F03FR01745
Dovetail bit	285	12,7	12,7	50,7	6	-	-	-	-	14°	2	24.000	22-10406P	F03FR01643
Rounding over bit	256	31,75	18	59,7	6	12,7	-	9,53	-	-	2	18.000	34-11406P	F03FR01780
Round nose bit	307	6	12,7	50,8	6	-	-	3	-	-	2	24.000	18-10406P	F03FR01587
Roman ogee bit	261	27	13,3	54,7	6	9,53	-	4	-	-	2	18.000	38-10006P	F03FR01805

SET - 91 -10008P & 91-10012P



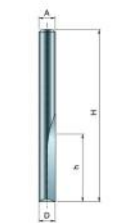
Set code 91-10008P (F03FR02275)

Bit type	Page reference	D mm	h mm	H mm	A mm	C mm	R mm	P mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
Double flute straight bit	244	6	16	50,8	8	-	-	-	-	2	24.000	04-11408P	F03FR01441
Double flute straight bit	245	12	31,8	63,8	8	-	-	-	-	2	24.000	04-13708P	F03FR01465
Double flute straight bit	245	20	19	56	8	-	-	-	-	2	24.000	04-15508P	F03FR01493
Flush trim bit	252	12,7	25,7	72,9	8	12,7	-	-	-	2	24.000	42-10408P	F03FR01939
Mortising bit	249	12,7	12,5	50,8	8	-	-	-	-	2	24.000	16-10008P	F03FR01566
Rabbeting bit	282	31,75	12,7	55,2	6	12,7	-	9,52	-	2	18.000	32-10008P	F03FR01746
V-groove bit	304	12,7	10	44,4	8	-	-	-	90°	2	24.000	20-10408P	F03FR01623
Chamfer bit	257	44	18,5	61	8	12,7	-	-	45°	2	16.000	40-10608P	F03FR01920
Dovetail bit	285	12,7	12,7	50,7	8	-	-	-	14°	2	24.000	22-10408P	F03FR01644
Rounding over bit	256	31,75	18	59,7	8	12,7	9,53	-	-	2	18.000	34-11408P	F03FR01781
Round nose bit	307	6	12,7	50,8	8	-	3	-	-	2	24.000	18-10408P	F03FR01588
Cove bit	258	38,1	16,4	58,9	8	12,7	12,7	-	-	2	16.000	30-10608P	F03FR01707
Roman ogee bit	261	35	18,5	60,5	8	9,53	6,35	-	-	2	16.000	38-10208P	F03FR01809

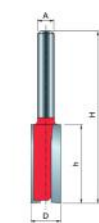
Set code 91-10012P (F03FR02277)

Bit type	Page reference	D mm	h mm	H mm	A mm	C mm	R mm	P mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
Double flute straight bit	244	6	19	64	12	-	-	-	-	2	24.000	12-09912P	F03FR01520
Double flute straight bit	245	13	25,4	66,7	12	-	-	-	-	2	24.000	12-11612P	F03FR01531
Double flute straight bit	245	19	25,4	63,4	12	-	-	-	-	2	24.000	12-15212P	F03FR01548
Flush trim bit	252	12,7	25,4	82,5	12	12,7	-	-	-	2	24.000	42-11012P	F03FR01942
Mortising bit	249	12,7	12,5	60,5	12	-	-	-	-	2	24.000	16-11012P	F03FR01573
Rabbeting bit	282	31,75	13,2	61,7	12	12,7	-	9,53	-	2	18.000	32-10212P	F03FR01748
V-groove bit	304	19,05	12,5	57,2	12	-	-	-	90°	2	24.000	20-10812P	F03FR01626
Chamfer bit	257	44	18,5	67	12	12,7	-	-	45°	2	16.000	40-11412P	F03FR01922
Dovetail bit	285	12,7	12,7	59,7	12	-	-	-	14°	2	24.000	22-11212P	F03FR01650
Rounding over bit	156	31,75	18	65,7	12	12,7	9,53	-	-	2	18.000	34-12412P	F03FR01788
Round nose bit	307	6	9,5	57	12	-	3	-	-	2	24.000	18-11412P	F03FR01602
Cove bit	258	38,1	16,4	64,9	12	12,7	12,7	-	-	2	16.000	30-11412P	F03FR01713
Roman ogee bit	261	35	18,5	66	12	9,53	6,35	-	-	2	16.000	38-10612P	F03FR01812

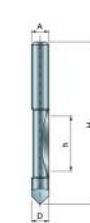
SET - 90-10006P



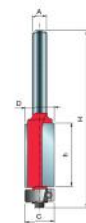
04-10106P
F03FR01420



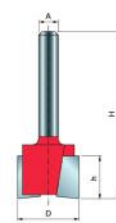
04-11406P
F03FR01440



26-10006P
F03FR01664



42-10206P
F03FR01935



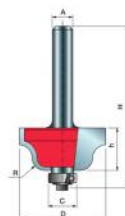
16-10006P
F03FR01565



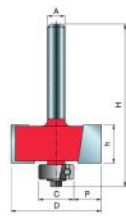
18-10406P
F03FR01587



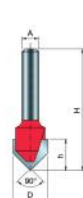
30-10006P
F03FR01706



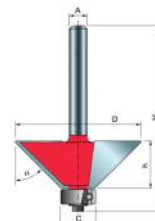
38-10006P
F03FR01805



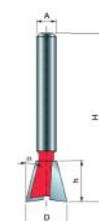
32-10006P
F03FR01745



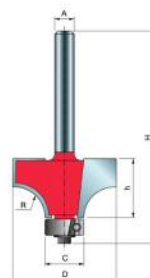
20-10406P
F03FR01622



40-10606P
F03FR01919



22-10406P
F03FR01643

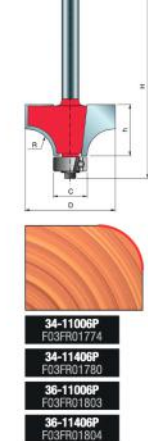
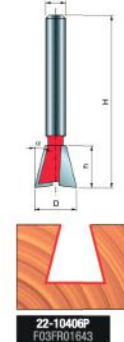
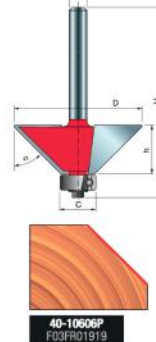
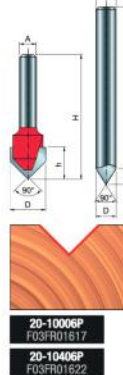
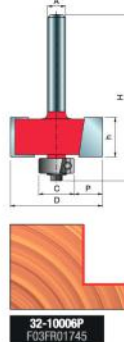
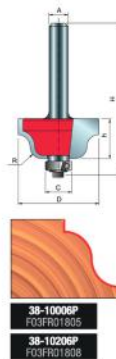
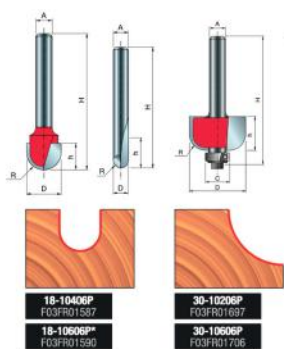
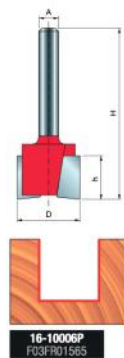
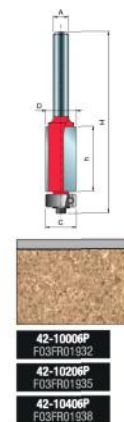
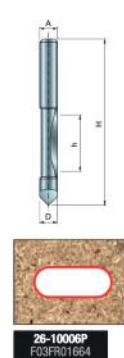
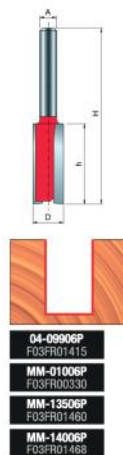
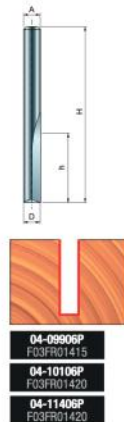


34-11406P
F03FR01780

Set code 90-10006P (F03FR02256)

Bit type	Page reference	D mm	h mm	H mm	A mm	C mm	R mm	P mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
Double flute straight bit	244	4	15,8	50,7	6	-	-	-	-	2	24.000	04-10106P	F03FR01420
Double flute straight bit	244	6	16	50,8	6	-	-	-	-	2	24.000	04-11406P	F03FR01440
Double flute straight bit	245	12	19	55,5	6	-	-	-	-	2	24.000	04-13506P	F03FR01460
Double flute straight bit	245	19	19	54	6	-	-	-	-	2	24.000	04-14006P	F03FR01468
Panel pilot bit	254	6	19	57	6	-	-	-	-	1	24.000	26-10006P	F03FR01664
Flush trim bit	252	9,53	12,7	60,9	6	9,53	-	-	-	2	24.000	42-10206P	F03FR01935
Mortising bit	249	12,7	12,5	51	6	-	-	-	-	2	24.000	16-10006P	F03FR01565
Rabbeting bit	282	31,75	13,2	55,7	6	12,7	-	9,52	-	2	18.000	32-10006P	F03FR01745
V-groove bit	304	12,7	10	44,4	6	-	-	-	90°	2	24.000	20-10406P	F03FR01622
Chamfer bit	257	44	18,5	61	6	12,7	-	-	45°	2	16.000	40-10606P	F03FR01919
Dovetail bit	285	12,7	12,7	47,5	6	-	-	-	14°	2	24.000	22-10406P	F03FR01643
Rounding over bit	256	31,75	18	59,7	6	12,7	9,53	-	-	2	18.000	34-11406P	F03FR01780
Round nose bit	307	6	12,7	50,8	6	-	3	-	-	2	24.000	18-10406P	F03FR01587
Cove bit	258	38,1	16,4	58,9	6	12,7	12,7	-	-	2	16.000	30-10606P	F03FR01706
Roman ogee bit	261	27	13,3	54,7	6	9,53	4	-	-	2	18.000	38-10006P	F03FR01805

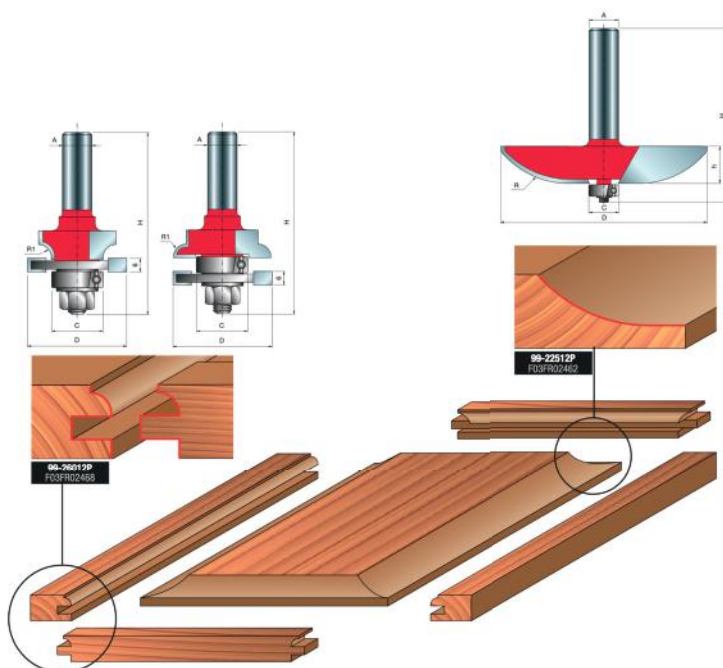
SET - 92 -10006P



Set code 92-10006P (F03FR02308)

Bit type	Page reference	D mm	h mm	H mm	A mm	C mm	R mm	P mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
Double flute straight bit	244	3	9,5	44,5	6	-	-	-	-	2	24.000	04-09906P	F03FR01415
Double flute straight bit	244	4	15,8	50,7	6	-	-	-	-	2	24.000	04-10106P	F03FR01420
Double flute straight bit	244	6	16	50,8	6	-	-	-	-	2	24.000	04-11406P	F03FR01440
Double flute straight bit	244	10	25,4	62,4	6	-	-	-	-	2	24.000	MM-01006P	F03FR00330
Double flute straight bit	245	12	19	55,5	6	-	-	-	-	2	24.000	04-13506P	F03FR01460
Double flute straight bit	245	19	19	54	6	-	-	-	-	2	24.000	04-14006P	F03FR01468
Panel pilot bit	254	6	19	57	6	-	-	-	-	1	24.000	26-10006P	F03FR01664
Flush trim bit	252	9,53	25,8	72,4	6	9,53	-	-	-	2	24.000	42-10006P	F03FR01932
Flush trim bit	252	9,53	12,7	60,9	6	9,53	-	-	-	2	24.000	42-10206P	F03FR01935
Flush trim bit	252	12,7	25,7	72,9	6	12,7	-	-	-	2	24.000	42-10406P	F03FR01938
Mortising bit	249	12,7	12,5	51	6	-	-	-	-	2	24.000	16-10006P	F03FR01565
Rabbeting bit	282	31,75	13,2	55,7	6	12,7	-	9,5	-	2	18.000	32-10006P	F03FR01745
V-groove bit	304	6	6	38,1	6	-	-	-	90°	1	24.000	20-10006P	F03FR01617
V-groove bit	304	12,7	10	44,4	6	-	-	-	90°	2	24.000	20-10406P	F03FR01622
Chamfer bit	257	44	18,5	61	6	12,7	-	-	45°	2	16.000	40-10606P	F03FR01919
Dovetail bits	285	12,7	12,7	47,5	6	-	-	-	14°	2	24.000	22-10406P	F03FR01643
Rounding over bit	256	25,4	12,7	55,2	6	12,7	6,35	-	-	2	24.000	34-11006P	F03FR01774
Rounding over bit	256	31,75	18	59,7	6	12,7	9,53	-	-	2	18.000	34-11406P	F03FR01780
Rounding over bit	256	25,4	12,7	54,7	6	9,53	6,35	-	-	2	24.000	36-11006P	F03FR01803
Rounding over bit	256	31,75	18	59,2	6	9,53	9,53	-	-	2	18.000	36-11406P	F03FR01804
Round nose bit	307	6	12,7	50,8	6	-	3	-	-	2	24.000	18-10406P	F03FR01587
Round nose bit	307	9,52	9	46	6	-	4,8	-	-	2	24.000	18-10606P	F03FR01590
Cove bit	258	22,23	13,2	54,7	6	9,53	6,35	-	-	2	24.000	30-10206P	F03FR01697
Cove bit	258	38,1	16,4	58,9	6	12,7	12,7	-	-	2	16.000	30-10606P	F03FR01706
Roman ogee bit	261	27	13,3	54,7	6	9,53	4	-	-	2	18.000	38-10006P	F03FR01805
Roman ogee bit	261	35	18,5	60,5	6	9,53	6,4	-	-	2	16.000	38-10206P	F03FR01808

SET - 97 - 10212P

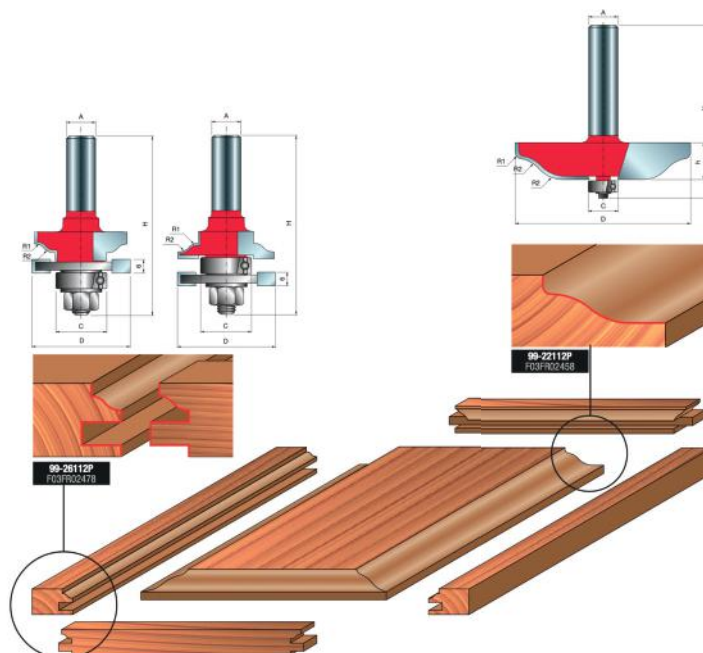


Set Freud Code 97-10212P (F03FR02382)

Bit type	Page reference	D mm	h mm	H mm	A mm	C mm	R1 mm	Z	Max RPM 1/min.	Freud Code	Art. No.
Raised panel bit	300	89	16	64,7	12	12,7	38,1	2	10.000	99-22512P	F03FR02462
Matched profile and scribe bits	294	42,9	-	77	12	22	5,5	2	24.000	99-26012P	F03FR02468

The set includes one raised panel bit and two matched profile and scribe bits.

SET - 97 - 10412P

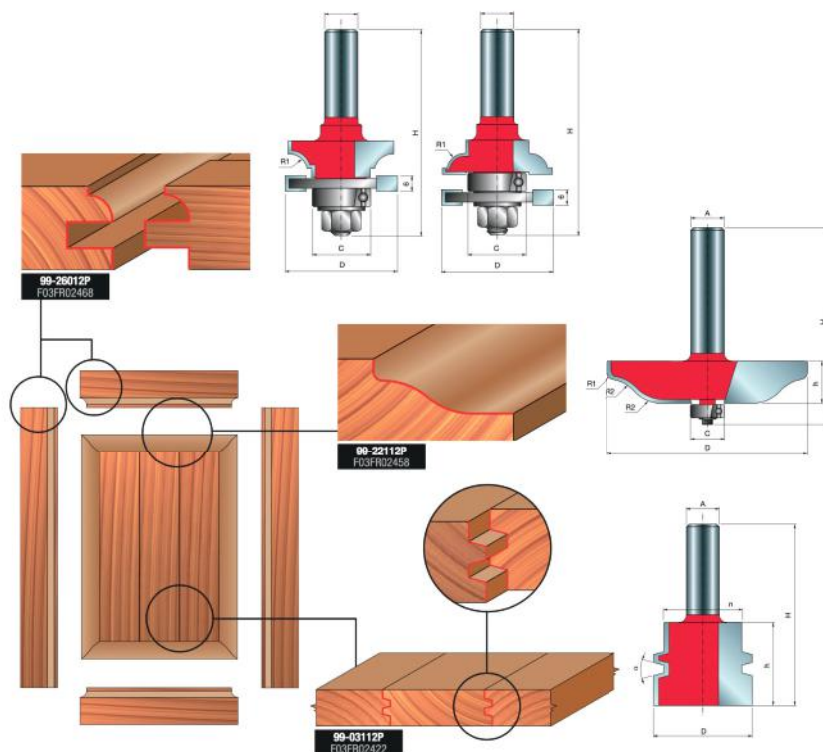


Set code 97-10412P (F03FR02396)

Bit type	Page reference	D mm	h mm	H mm	A mm	C mm	R1 mm	R2 mm	Z	Max RPM 1/min.	Freud Code	Art. No.
Raised panel bit	299	76,2	16	64,7	12	12,7	2	16	2	12.000	99-22112P	F03FR02458
Matched profile and scribe bits	294	42,9	-	77	12	22	4,5	5,5	2	24.000	99-26112P	F03FR02478

The set includes one raised panel bit and two matched profile and scribe bits.

SET - 95 - 20012P

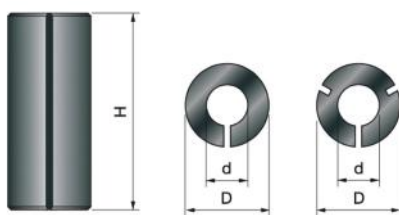


Set code 95-20012P (F03FR02368)

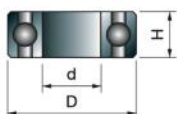
Bit type	Page reference	D mm	h mm	H mm	A mm	C mm	R1 mm	R2 mm	α	Z	Max RPM 1/min.	Freud Code	Art. No.
Reversible glue joint bit	288	38	32	70	12	-	-	-	15°	2	16.000	99-03112P	F03FR02422
Raised panel bit	299	76,2	16	64,7	12	12,7	2	16	-	2	12.000	99-22112P	F03FR02458
Matched profile and scribe bits	294	42,9	-	77	12	22	5,5	-	-	2	24.000	99-26012P	F03FR02468

The set includes one reversible glue joint bit, one raised panel bit and two matched profile and scribe bits.

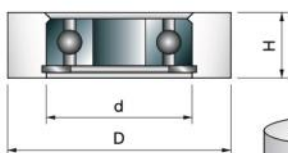
ONDERDELEN



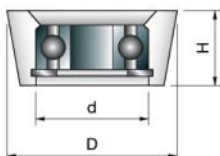
Reducing bushes for router bits.



Ball bearing for router bits.



Cylindrical rub collars for ball bearing.



Conical rub collars for ball bearing.

3105M

REDUCEER HULSEN

D mm	H mm	d mm	Freud Code	Art. No.
8	25	6	3105MVY250	F03FA10588
8	25	6,35	3105MVX250	F03FA10587
9,5	25	6	3105MUY250	F03FA10586
9,5	25	6,35	3105MUX250	F03FA10585
9,5	25	8	3105MUV250	F03FA10584
10	25	8	3105MTV250	F03FA10582
12	25	6	3105MSY250	F03FA10581
12	25	8	3105MSV250	F03FA10580
12	25	10	3105MST250	F03FA10579
12,7	25	6	3105MRY250	F03FA10578
12,7	25	6,35	3105MRX250	F03FA10577
12,7	25	8	3105MRV250	F03FA10576
12,7	25	9,53	3105MRU250	F03FA10575
16	25	13	3105MQQ250	F03FA10574

3102M

KOGELLAGERS

D mm	H mm	d mm	Freud Code	Art. No.
9,53	3,2	4,76	3102M AA9	F03F010006
12,7	4,98	4,76	3102M AB9	F03F010007
13	5	4	3102M CD9	F03FA14096
13	5	6	3102M AP9	F03FA10558
15	5	6	3102M AQ9	F03FA10559
15,88	4,98	4,76	3102M AJ9	F03F010014
16	5	5	3102M CC9	F03FA14095
16	5	8	3102M AS9	F03FA10561
19	6	6	3102M CA9	F03FA14097
19	7	10	3102M AG9	F03F010012
19,05	3,97	12,7	3102M CB9	F03FA14098
19,05	6,35	12,7	3102M AV9	F03F012286
22	7	8	3102M AC9	F03F010008
28	8	12	3102M AH9	F03F010013
32	9	15	3102M AN9	F03F010016
35	11	15	3102M AI9	F03F012285

RB62M

KOGELLAGERS met kraag

D mm	H mm	d mm	Freud Code	Art. No.
19,05	8	4,8	RB62M 1509	F03F011422
22,22	8	4,8	RB62M 1529	F03F011423
26	10	8	RB62M 1249	F03F011417
28,58	8	4,8	RB62M 1549	F03F011424
30	10	8	RB62M 1289	F03F011418
34	10	8	RB62ME DA9	F03FR01146
34,92	8	4,8	RB62M 1569	F03F011425
39,6	11,2	12	RB62ME FB9	F03FR01147

3103MC

KOGELLAGERS met afschuining

D mm	H mm	d mm	α	Freud Code	Art. No.
19,05	6,35	4,8	10°	3103MC HB9	F03F010019
22,2	9	12,7	15°	3103MC HC9	F03FR01724

freud

Precisely the best

