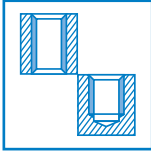


M, MF
YAMAWA
NORM

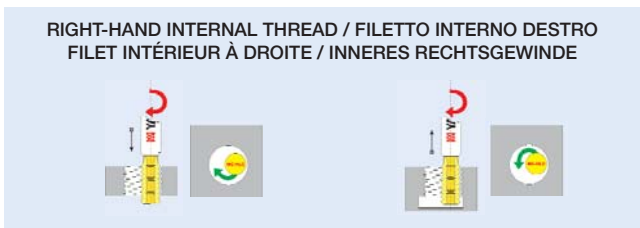


MATERIAL GROUP	Vc (m/min)	f _z (mm/z)
1-5	20~45	0.02~0.05
6	10~25	0.02~0.04
9 - 10 - 11	10~25	0.02~0.05
13 - 14	30~50	0.03~0.08
15-20	40~80	0.03~0.05

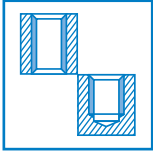


MATERIAL GROUPS / GRUPPI MATERIALE WERKSTOFFEGRUPPE / GROUPES MATIÈRE		1-5 6 9-11 13 14 15-20					
D	p	Ø min	L	l	d	z	Stock
mm 10	1	14	90	20	10	4	EX
10	1.5	14	90	20	10	4	EX
12	1	17	100	25	12	4	EX
12	1.5	17	100	25	12	4	EX
12	2	17	100	25	12	4	EX
16	1	23	110	30	16	4	EX
16	1.5	23	110	30	16	4	EX
16	2	23	110	30	16	4	EX
16	2.5	23	110	30	16	4	EX
20	1	28	140	50	20	5	EX
20	1.5	28	140	50	20	5	EX
20	2	28	140	50	20	5	EX
20	3	28	140	50	20	5	EX
20	3.5	28	140	50	20	5	EX
25	1	36	160	50	20	6	EX
25	1.5	36	160	50	20	6	EX
25	2	36	160	50	20	6	EX
25	3	36	160	50	20	6	EX
25	3.5	36	160	50	20	6	EX
32	1.5	45	200	50	25	6	EX
32	2	45	200	50	25	6	EX
32	3	45	200	50	25	6	EX

● stock standard ○ non-standard stock △ on request EX stock exhaustion



G, Rp
YAMAWA
NORM



MATERIAL GROUP	Vc (m/min)	f _z (mm/z)
1-5	20~45	0.02~0.05
6	10~25	0.02~0.04
9 - 10 - 11	10~25	0.02~0.05
13 - 14	30~50	0.03~0.08
15-20	40~80	0.03~0.05

MC-HLC

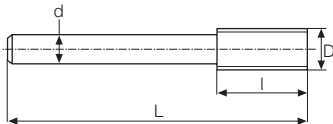
MC-HLC



MATERIAL GROUPS / GRUPPI MATERIALE
WERKSTOFFEGRUPPE / GROUPES MATIÈRE

1-5 6 9-11
13 14 15-20

l = MC-HLC



HSS/Co
TIN

D	n	Ø min	L	l	d	z	Stock
mm 10	19	3/8	70	15	10	4	EX
12	14	1/2	80	20	12	4	EX
20	11	1	100	30	20	5	EX
32	11	2 1/2	200	50	25	6	EX

● stock standard ○ non-standard stock △ on request EX stock exhaustion