

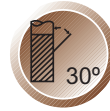


Solid Carbide Ball Nose End Mills For <48HRC



VERTEX®

Micro Grain 10% Co Grade
2 Flute



Work Material / Velocity m/min

ORDER NO.	GR.1 Non alloyed steels Alloyed Steels	GR.2 Heat resistant steels Stainless steels	GR.3 Hardened steels < 48 HRC	GR.6 Iron	GR.7 Titanium	GR.8 Nickel	GR.9 Copper
VB221F	60-250	30-100	60-80	30-150	30-180	40-120	100-450
VB222F	60-250	30-100	60-80	30-150	30-180	40-120	100-450
VB232F	60-180	20-80	40-80	30-130	30-120	40-100	100-300

Standard Length(Order No. VB222F-Dia)

Unit:mm

ORDER NO.	Dia of Mill Tol e8	Shank Dia mm	Flute Length mm	Overall Length mm	CODE NO.
VB222-1	1.00x0.50R	4	2.5	50	6007-180
VB222-1.5	1.50x0.75R	4	4	50	6007-181
VB222-2	2.00x1.00R	4	5	50	6007-182
VB222-2.5	2.50x1.25R	4	6	50	6007-183
VB222-3	3.00x1.50R	6	6	50	6007-184
VB222-4	4.00x2.00R	6	8	50	6007-186
VB222-5	5.00x2.50R	6	10	50	6007-188
VB222-6	6.00x3.00R	6	12	50	6007-190
VB222-7	7.00x3.50R	8	14	60	6007-191
VB222-8	8.00x4.00R	8	14	60	6007-192
VB222-9	9.00x4.50R	10	18	72	6007-193
VB222-10	10.00x5.00R	10	18	72	6007-194
VB222-12	12.00x6.00R	12	22	75	6007-196
VB222-14	14.00x7.00R	16	26	100	6007-197
VB222-16	16.00x8.00R	16	30	100	6007-198
VB222-20	20.00x10.0R	20	38	100	6007-200

Stub Length(Order No. VB221F-Dia)

Unit:mm

ORDER NO.	Dia of Mill Tol e8	Shank Dia mm	Flute Length mm	Overall Length mm	CODE NO.
VB221-1	1.0x0.50R	3	2.5	38	6007-160
VB221-1.5	1.5x0.75R	3	4.0	38	6007-161
VB221-2	2.0x1.00R	3	5.0	38	6007-162
VB221-2.5	2.5x1.25R	3	6.0	38	6007-163
VB221-3	3.0x1.50R	3	6.0	38	6007-164
VB221-3.5	3.5x1.75R	4	8.0	50	6007-165
VB221-4	4.0x2.00R	4	8.0	50	6007-166
VB221-4.5	4.5x2.25R	5	10.0	50	6007-167
VB221-5	5.0x2.50R	5	10.0	50	6007-168
VB221-5.5	5.5x2.75R	6	12.0	50	6007-169
VB221-6	6.0x3.00R	6	12.0	50	6007-170

Long Length(Order No. VB232F-Dia)

Unit:mm

ORDER NO.	Dia of Mill Tol e8	Shank Dia mm	Flute Length mm	Overall Length mm	CODE NO.
VB232-3	3.0x1.50R	6	6	70	6007-210
VB232-4	4.0x2.00R	6	8	70	6007-211
VB232-5	5.0x2.50R	6	10	80	6007-212
VB232-6	6.0x3.00R	6	12	80	6007-213
VB232-8	8.0x4.00R	8	14	100	6007-215
VB232-10	10.0x5.00R	10	18	100	6007-217
VB232-12	12.0x6.00R	12	22	110	6007-219
VB232-14	14.0x7.00R	16	26	120	6007-220
VB232-16	16.0x8.00R	16	30	140	6007-221
VB232-20	20.0x10.0R	20	38	160	6007-222