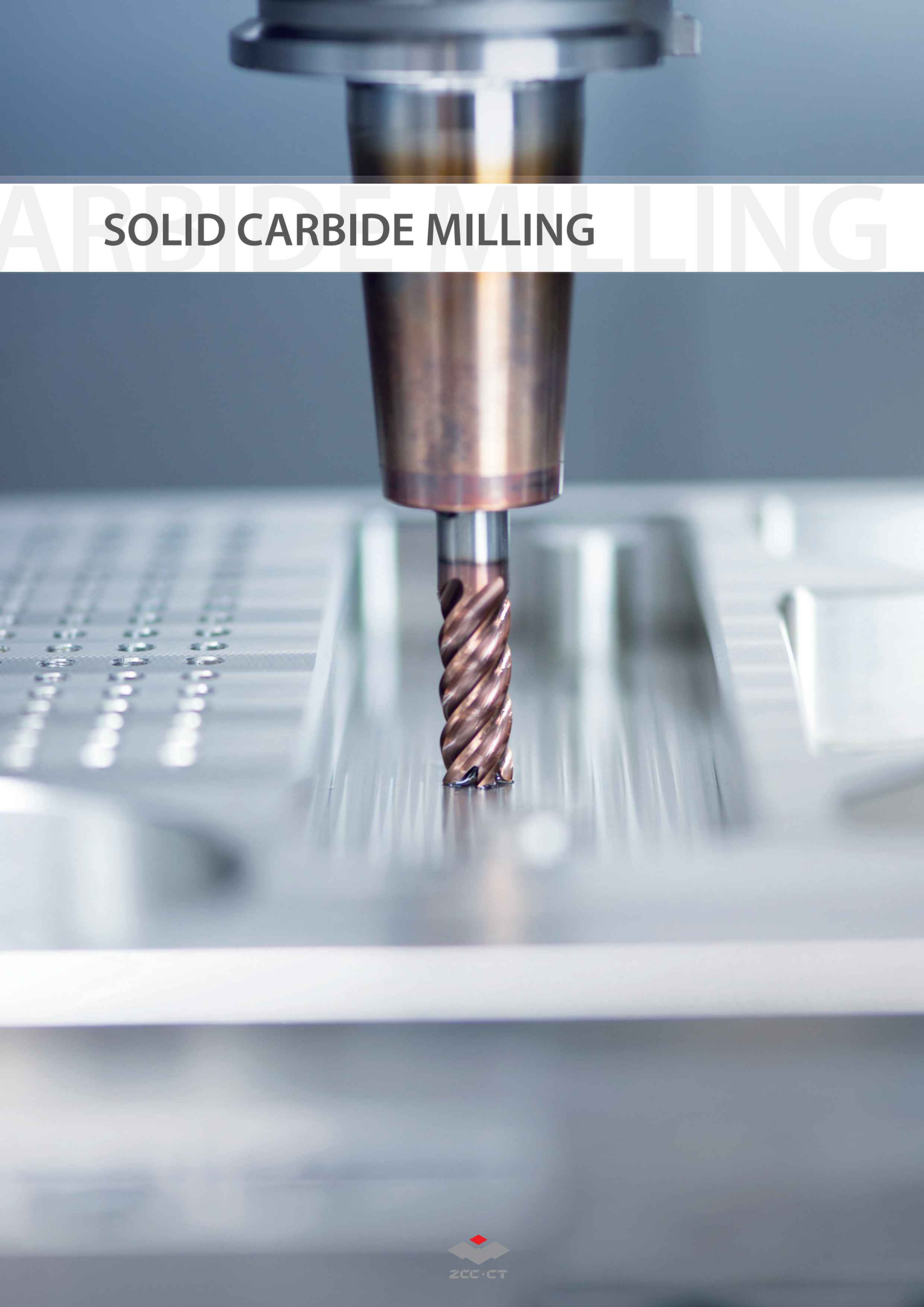


ARBIDE MILLING

SOLID CARBIDE MILLING



Solid carbide milling

Product overview	B266-B275
Grade overview	B276-B277
System code – DIN-ISO series	B278
System code – JIS series	B279
System code – QCH series	B280-B282
GM series	B283-B338
PM series	B339-B360
PM Micro series	B361-B370
EPM series	B371-B386
VPM series	B387-B388
HM series	B389-B410
NM series	B411-B416
AL series	B417-B428
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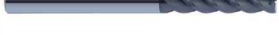













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High performance milling

Products	Solid carbide cutters	Teeth	Ø	Application						Type	Page
				P	M	K	N	S	H		
PM-2E		2	1.0-20.0	✓	✓	✓			✓	End mills	B339
PM-2EL		2	3.0-20.0	✓	✓	✓			✓	End mills	B340
PM-4E-G		4	1.0-20.0	✓	✓	✓			✓	End mills	B341
PM-4EL-G		4	3.0-20.0	✓	✓	✓			✓	End mills	B342
PM-4EX-G		4	3.0-20.0	✓	✓	✓			✓	End mills	B343
PM-4E		4	1.0-20.0	✓	✓	✓			✓	End mills	B344
PM-4EL		4	3.0-20.0	✓	✓	✓			✓	End mills	B345
PM-6E		6	6.0-20.0	✓	✓	✓			✓	End mills	B346
PM-6EL		6	6.0-20.0	✓	✓	✓			✓	End mills	B347
PM-2B		2	1.0-20.0	✓	✓	✓			✓	Ball nose cutters	B348
PM-2BL		2	2.0-20.0	✓	✓	✓			✓	Ball nose cutters	B349
PM-2BFP		2	1.0-20.0	✓	✓	✓			✓	Ball nose cutters	B350
PM-2BC		2	0.5-4.0	✓	✓	✓			✓	Ball nose cutter with conical neck	B351
PM-4B		4	3.0-20.0	✓	✓	✓			✓	Ball nose cutters	B354
PM-4BL		4	3.0-20.0	✓	✓	✓			✓	Ball nose cutters	B355
PM-2R		2	1.0-12.0	✓	✓	✓			✓	Torus mills	B356
PM-4H		4	3.0-12.0	✓	✓	✓			✓	High-feed mills	B357
PM-4HL		4	4.0-12.0	✓	✓	✓			✓	High-feed mills	B358
PM-4R		4	3.0-12.0	✓	✓	✓			✓	Torus mills	B359
PM-4RL		4	6.0-16.0	✓	✓	✓			✓	Torus mills	B360
PM-2EP		2	0.5-5.0	✓	✓	✓			✓	End mills	B362

✓ Very suitable ✓ Suitable

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Products	Solid carbide cutters	Teeth	Ø	Application						Type	Page
				P	M	K	N	S	H		
PM-2ES		2	0.3-3.0	✓	✓	✓			✓	End mills	B361
PM-2BS		2	0.3-3.0	✓	✓	✓			✓	Ball nose cutters	B364
PM-2BP		2	0.5-5.0	✓	✓	✓			✓	Ball nose cutters	B365
PM-2RP		2	0.5-5.0	✓	✓	✓			✓	Torus mills	B367
EPM-2E		2	3.0-20.0	✓	✓	✓			✓	End mills	B371
EPM-2E-W		2	3.0-20.0	✓	✓	✓			✓	End mills	B372
EPM-2EL		2	3.0-20.0	✓	✓	✓			✓	End mills	B373
EPM-2EL-W		2	3.0-20.0	✓	✓	✓			✓	End mills	B374
EPM-4E		4	3.0-20.0	✓	✓	✓			✓	End mills	B375
EPM-4E-W		4	3.0-20.0	✓	✓	✓			✓	End mills	B376
EPM-4EL		4	3.0-20.0	✓	✓	✓			✓	End mills	B377
EPM-4EL-W		4	3.0-20.0	✓	✓	✓			✓	End mills	B378
EPM-2B		2	3.0-20.0	✓	✓	✓			✓	Ball nose cutters	B379
EPM-2B-W		2	3.0-20.0	✓	✓	✓			✓	Ball nose cutters	B380
EPM-2BL		2	3.0-20.0	✓	✓	✓			✓	Ball nose cutters	B381
EPM-2BL-W		2	3.0-20.0	✓	✓	✓			✓	Ball nose cutters	B382
EPM-4B		4	3.0-20.0	✓	✓	✓			✓	Ball nose cutters	B383
EPM-4B-W		4	3.0-20.0	✓	✓	✓			✓	Ball nose cutters	B384
EPM-4BL		4	3.0-20.0	✓	✓	✓			✓	Ball nose cutters	B385
EPM-4BL-W		4	3.0-20.0	✓	✓	✓			✓	Ball nose cutters	B386
VPM-4E		4	3.0-20.0	✓	✓	✓			✓	End mills	B387

✓ Very suitable ✓ Suitable

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Products	Solid carbide cutters	Teeth	Ø	Application						Type	Page
				P	M	K	N	S	H		
TM-4B		2	6.0-20.0		✓			✓		Ball nose cutters	B439
TM-4BL		2	6.0-20.0		✓			✓		Ball nose cutters	B440
TM-4BP		2	6.0-20.0		✓			✓		Ball nose cutters	B441
TM-5B		2	6.0-20.0		✓			✓		Ball nose cutters	B442
TM-5BL		2	6.0-20.0		✓			✓		Ball nose cutters	B443
TM-5BP		2	6.0-20.0		✓			✓		Ball nose cutters	B444
TM-4R		2	6.0-25.0		✓			✓		Torus mills	B445
TM-4RP		2	8.0-25.0		✓			✓		Torus mills	B447
TM-5R		2	6.0-10.0		✓			✓		Torus mills	B449
TM-7R		2	12.0-21.0		✓			✓		Torus mills	B450
TM-9R		2	25.0		✓			✓		Torus mills	B451
TM-5RP		2	8.0-10.0		✓			✓		Torus mills	B452
TM-7RP		2	12.0-20.0		✓			✓		Torus mills	B453
TM-9RP		2	25.0		✓			✓		Torus mills	B454

✓ Very suitable ✓ Suitable

General machining

5501R302GM		2	3.0-20.0	✓	✓	✓				End mills	B283
5601R302GM		2	3.0-20.0	✓	✓	✓				End mills	B284
5502R302GM		2	1.0-20.0	✓	✓	✓				End mills	B285
5602R302GM		2	2.0-20.0	✓	✓	✓				End mills	B286
GM-2E		2	1.0-20.0	✓	✓	✓				End mills	B287
GM-2EL		2	3.0-20.0	✓	✓	✓				End mills	B288

✓ Very suitable ✓ Suitable

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Products	Solid carbide cutters	Teeth	Ø	Application						Type	Page
				P	M	K	N	S	H		
GM-2EX		2	3.0-20.0	✓	✓	✓				End mills	B289
GM-2EFP		2	6.0-16.0	✓	✓	✓				End mills	B290
GM-2F		2	1.0-20.0	✓	✓	✓				End mills	B291
GM-2FL		2	3.0-20.0	✓	✓	✓				End mills	B292
GM-2EP		2	0.5-5.0	✓	✓	✓				Mini end mills	B293
GM-2ES		2	0.3-3.0	✓	✓	✓				Mini end mills	B295
GM-3E		3	1.0-20.0	✓	✓	✓				End mills	B296
GM-3EL		3	3.0-20.0	✓	✓	✓				End mills	B297
5501R303GM		3	3.0-20.0	✓	✓	✓				End mills	B298
5601R303GM		3	3.0-20.0	✓	✓	✓				End mills	B299
5502R303GM		3	3.0-20.0	✓	✓	✓				End mills	B300
5602R303GM		3	3.0-20.0	✓	✓	✓				End mills	B301
5502R453GM		3	3.0-20.0	✓	✓	✓				End mills	B302
5602R453GM		3	3.0-20.0	✓	✓	✓				End mills	B303
GM-4F-G		4	1.0-20.0	✓	✓	✓				End mills	B304
GM-4EL-G		4	3.0-20.0	✓	✓	✓				End mills	B305
GM-4FL-G		4	3.0-16.0	✓	✓	✓				End mills	B306
GM-4EX-G		4	3.0-20.0	✓	✓	✓				End mills	B307
GM-4E		4	1.0-20.0	✓	✓	✓				End mills	B308
GM-4E-G		4	1.0-20.0	✓	✓	✓				End mills	B309
GM-4EL		4	3.0-20.0	✓	✓	✓				End mills	B310

✓ Very suitable ✓ Suitable

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				P	M	K	N	S	H		
GM-4EFP		4	6.0-20.0	✓	✓	✓				End mills	B311
5501R304GF		4	3.0-20.0	✓	✓	✓				End mills	B312
5601R304GF		4	3.0-20.0	✓	✓	✓				End mills	B313
5502R304GF		4	3.0-20.0	✓	✓	✓				End mills	B314
5602R304GF		4	3.0-20.0	✓	✓	✓				End mills	B315
5508R454GM		4	3.0-20.0	✓	✓	✓				End mills	B316
5602R454GM		4	3.0-20.0	✓	✓	✓				End mills	B317
5589R45MGFR		6-10	6.0-12.0	✓	✓	✓				End mills	B318
GM-6E		6	6.0-20.0	✓	✓	✓				End mills	B319
GM-6EL		6	6.0-20.0	✓	✓	✓				End mills	B320
5565R302GF		2	3.0-20.0	✓	✓	✓				Ball nose cutters	B321
5665R202GM		2	3.0-20.0	✓	✓	✓				Ball nose cutters	B322
5566R302GF		2	3.0-12.0	✓	✓	✓				Ball nose cutters	B323
GM-2B		2	1.0-20.0	✓	✓	✓				Ball nose cutters	B324
GM-2BL		2	2.0-20.0	✓	✓	✓				Ball nose cutters	B325
GM-2BFP		2	1.0-20.0	✓	✓	✓				Ball nose cutters	B326
GM-2BS		2	0.3-3.0	✓	✓	✓				Mini ball nose cutters	B327
GM-2BP		2	0.5-5.0	✓	✓	✓				Mini ball nose cutters	B328
GM-4B		4	3.0-20.0	✓	✓	✓				Ball nose cutters	B330
GM-4BL		4	3.0-20.0	✓	✓	✓				Ball nose cutters	B331
GM-2R		2	1.0-12.0	✓	✓	✓				Torus mills	B332

✓ Very suitable ✓ Suitable

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Products	Solid carbide cutters	Teeth	Ø	Application						Type	Page
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GM-4R		4	3.0-12.0	✓	✓	✓				Torus mills	B333
GM-4RL		4	6.0-16.0	✓	✓	✓				Torus mills	B334
5602R303GR		3	6.0-8.0	✓	✓	✓				Rippers	B335
5602R304GR		4	10.0-20.0	✓	✓	✓				Rippers	B336
5602R305GR		5	25.0	✓	✓	✓				Rippers	B337
GM-4W		4	6.0-20.0	✓	✓	✓				Rippers	B338

✓ Very suitable ✓ Suitable

Machining high hardness steel

HM-2E		2	1.0-20.0						✓	End mills	B389
HM-2EFP		2	6.0-20.0						✓	End mills	B390
HM-2EP		2	0.5-5.0						✓	Mini end mills	B391
HM-2ES		2	0.3-3.0						✓	Mini end mills	B393
HM-4E		4	1.0-20.0						✓	End mills	B394
HM-4EL		4	3.0-20.0						✓	End mills	B395
HM-4EFP		4	6.0-20.0						✓	End mills	B396
5502R55MHH		4-8	3.0-20.0						✓	End mills	B397
HM-6E		6	6.0-20.0						✓	End mills	B398
HM-6EL		6	6.0-20.0						✓	End mills	B399
HM-2B		2	1.0-20.0						✓	Ball nose cutters	B400
HM-2BL		2	2.0-20.0						✓	Ball nose cutters	B401
HM-2BFP		2	1.0-20.0						✓	Ball nose cutters	B402
HM-2BS		2	0.3-3.0						✓	Mini ball nose cutters	B403

✓ Very suitable ✓ Suitable

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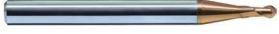





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Machining high hardness steel

Products	Solid carbide cutters	Teeth	Ø	Application						Type	Page
				P	M	K	N	S	H		
HM-2BP		2	0.5-5.0						✓	Mini ball nose cutters	B404
HM-4B		4	3.0-20.0						✓	Ball nose cutters	B406
HM-4BL		4	3.0-20.0						✓	Ball nose cutters	B407
HM-4R		4	3.0-12.0						✓	Torus mills	B408
HM-4RF		4	6.0-12.0						✓	Torus mills	B409
HM-4RP		4	6.0-16.0						✓	Torus mills	B410

✓ Very suitable ✓ Suitable

B

Milling

Copper and copper alloys

5502R402NM		2	3.0-20.0				✓			End mills	B411
NM-2E		2	1.0-12.0				✓			End mills	B412
NM-2EP		2	0.5-5.0				✓			Mini end mills	B413
NM-4E		4	3.0-12.0				✓			End mills	B414
NM-2B		2	1.0-12.0				✓			Ball nose cutters	B415
NM-2BP		2	0.5-5.0				✓			Mini ball nose cutters	B416

✓ Very suitable ✓ Suitable

C

Drilling

Aluminium and aluminium alloys

AL-2E		2	1.0-20.0				✓			End mills	B417
AL-2EL		2	3.0-20.0				✓			End mills	B418
AL-3E		3	1.0-20.0				✓			End mills	B419
AL-3EL		3	3.0-20.0				✓			End mills	B420
AL-3W		3	6.0-20.0				✓			Rippers	B421
5565R302NH		2	3.0-16.0				✓			Ball nose cutters	B422
5566R302NH		2	3.0-16.0				✓			Ball nose cutters	B423

✓ Very suitable ✓ Suitable















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Aluminium and aluminium alloys

Products	Solid carbide cutters	Teeth	Ø	Application						Type	Page
				P	M	K	N	S	H		
AL-2B		2	2.0-12.0				✓			Ball nose cutters	B424
AL-2R-AIR		2	6.0-20.0				✓			High performance torus mills	B425
AL-2RL-AIR		2	6.0-20.0				✓			High performance torus mills	B426
AL-3R-AIR		3	12.0-20.0				✓			High performance torus mills	B427
AL-3RL-AIR		3	12.0-20.0				✓			High performance torus mills	B428
ALG-2E		2	1.0-20.0				✓			End mills	B429
ALG-3E		3	1.0-20.0				✓			End mills	B430
ALG-3E-W		3	3.0-20.0				✓			End mills	B431
ALP-3E		3	1.0-20.0				✓			End mills	B432
ALP-3E-W		3	3.0-20.0				✓			End mills	B433
ALP-4E		4	3.0-20.0				✓			End mills	B434
ALP-4E-W		4	3.0-20.0				✓			End mills	B435
ALG-2R		2	6.0-25.0				✓			Torus mills	B436
ALG-2R-W		2	6.0-25.0				✓			Torus mills	B437

✓ Very suitable ✓ Suitable

HPC with unequal helix angle

5501R38414GM		4	4.0-20.0	✓	✓	✓			✓	End mills	B455
5502R38414GM		4	4.0-20.0	✓	✓	✓			✓	End mills	B456
5601R38414GM		4	4.0-20.0	✓	✓	✓			✓	End mills	B457
5602R38414GM		4	4.0-20.0	✓	✓	✓			✓	End mills	B458
5502R38414GM-R		4	4.0-20.0	✓	✓	✓			✓	Torus mills	B459
5602R38414GM-R		4	4.0-20.0	✓	✓	✓			✓	Torus mills	B460

✓ Very suitable ✓ Suitable

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HPC with unequal helix angle

Products	Solid carbide cutters	Teeth	Ø	Application						Type	Page
				P	M	K	N	S	H		
UM-4E		4	4.0-20.0	✓	✓	✓			✓	End mills	B461
UM-4E-W		4	4.0-20.0	✓	✓	✓			✓	End mills	B462
UM-4EL		4	4.0-20.0	✓	✓	✓			✓	End mills	B463
UM-4EL-W		4	4.0-20.0	✓	✓	✓			✓	End mills	B464
UM-4ELP-W		4	4.0-20.0	✓	✓	✓			✓	End mills	B465
UM-4EFP		4	6.0-20.0	✓	✓	✓			✓	End mills	B466
UM-4R		4	4.0-20.0	✓	✓	✓			✓	Torus mills	B467
UM-4RL		4	6.0-16.0	✓	✓	✓			✓	Torus mills	B468
UM-4RFP		4	6.0-16.0	✓	✓	✓			✓	Torus mills	B469
UM-5EP-W		5	6.0-25.0	✓	✓	✓			✓	End mills	B470
UMC-4E		4	6.0-20.0	✓	✓	✓			✓	End mills	B471
UMC-4E-W		4	6.0-20.0	✓	✓	✓			✓	End mills	B472
VSM-4E		4	4.0-20.0	✓	✓			✓		End mills	B473
VSM-4E-C		4	10.0-20.0	✓	✓			✓		End mills	B474
VSM-4R		4	4.0-20.0	✓	✓			✓		Torus mills	B475

✓ Very suitable ✓ Suitable

Deburring cutter

5501/5601		3-4	0.2-0.7	✓	✓	✓	✓			Deburring cutters	B477
5501/5601		3-4	0.2-0.7	✓	✓	✓	✓			Deburring cutters	B478
5501/5601		3-4	0.2-0.7	✓	✓	✓	✓			Deburring cutters	B479
5601		4	5.2-10.0	✓	✓	✓	✓			Deburring cutters	B480

✓ Very suitable ✓ Suitable

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QCH series

Products	Solid carbide cutters	Teeth	Ø	Application						Type	Page
				P	M	K	N	S	H		
PM-2B		2	12.0-32.0	✓	✓	✓			✓	Ball nose cutters	B481
PM-4B		4	12.0-32.0	✓	✓	✓			✓	Ball nose cutters	B482
PM-4E		4	12.0-32.0	✓	✓	✓			✓	End mills	B483
PM-4R		4	12.0-32.0	✓	✓	✓			✓	Torus mills	B484
HMX-2B		2	12.0-32.0						✓	Ball nose cutters	B486
HMX-4B		4	12.0-32.0						✓	Ball nose cutters	B487
HMX-4E		4	12.0-32.0						✓	End mills	B488
HMX-4R		4	12.0-32.0						✓	Torus mills	B489
VPM-4E		4	12.0-25.0	✓	✓	✓			✓	End mills	B485

✓ Very suitable ✓ Suitable

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Coated cemented carbide PVD

Grade	Grade description
KMD401	PVD coated carbide substrate for high performance milling application of non-ferrous metals, CFRP and GFRP and organic materials. The DLC layer has very good wear protection and high thermal stability.

B

Milling

KMG303	PVD coated carbide substrate for universal milling application of steel (up to HRC<=48), stainless steel and cast iron.
---------------	-------------------------------------------------------------------------------------------------------------------------

KMG405	PVD coated carbide substrate for high performance milling application of steel (up to HRC <55), stainless steel, super alloy material and cast iron. High wear resistance and toughness for a wide application field.
---------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

C

Drilling

KMG406	PVD coated carbide substrate for entry into high performance machining. Universal range of application for steel and cast materials up to 55 HRC as well as stainless steel.
---------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

KMG555	PVD coated carbide substrate for hard milling application of steel (HRC 55–68), highest wear resistance and toughness for best cutting result.
---------------	------------------------------------------------------------------------------------------------------------------------------------------------

D

Technical Information

KMG309	PVD coated carbide substrate for non ferrous materials. High wear resistance even in abrasive materials.
---------------	----------------------------------------------------------------------------------------------------------

Uncoated cemented carbide

Grade	Grade description
YK30F	Uncoated K30 carbide substrate for steel, stainless steel, cast iron and non ferrous materials.

E

Index

Uncoated cemented carbide

Grade	Grade description
YK40F	Uncoated K20–K30/N20–N30 carbide substrate for cast iron and non ferrous materials.

A

Turning

B

Milling

C

Drilling

DTechnical
Information**E**

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5 5 0 1 R 30 2 GM R05 0800

1 2 3 4 5 6 7 8 9 10

A

Turning

Type	
Code	Description
5	Milling cutter

Shank type	
Code	Description
1	Shank
5	DIN 6535 HA
6	Weldon shank DIN 6535 HB
7	Whistle Notch DIN 6535 HE
9	Morse taper shank

B

Milling

1

2

Cutting edge type	
Code	Description
0	Square shoulder mill
6	Ball nose cutter
8	Torus mill

Tool length	
Code	Description
1	DIN 6527 K
2	DIN 6527 L
5	Factory standard ZCC-A
6	Factory standard ZCC-B
8	DIN 6528
9	Factory standard ZCC-D

C

Drilling

3

4

Rotation direction	
Code	Description
R	Right
L	Left

Helix angle	
Code	Description
20	20°
30	30°
3841	38°/41°
45	45°
55	55°
60	60°

Number of teeth	
Code	Description
2	2
...	...
M	Indicated when different diameters have a different number of teeth

D

Technical Information

5

6

7

Application	
Code	Description
GM	Semi-finishing
GF	Finishing
HM	Hard machining
MHH	High-speed hard machining
NH	High-performance machining of heat-resistant alloys

Radius [mm]	
Code	Description
R03	0,3
R15	1,5
R30	3,0
...	...

Diameter [mm]	
Code	Description
0100	1,0
0800	8,0
2000	20,0
...	...

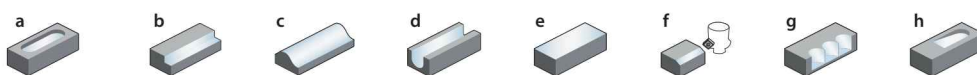
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10

E

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a Groove milling
g Plunge milling
b Square shoulder milling
h Circular milling/Ramping
c Profile milling
d Slot milling
e Face milling
f Chamfer milling

GM – 2 E L P – D12 R0.5 – M08

1 **2** **3** **4** **5** **6** **7** **8**

Application	
Code	Description
GR	General roughing
GM	Semi-finishing
GF	Finishing
PM	High-performance machining
EPM	«Ecoline» – High-performance machining
VPM	Full-slot applications
HM	Hard machining
NM	General machining of non-ferrous metals
AL	General machining of Al and Al alloys
ALP	High-performance machining of Al and Al alloys
ALG	General machining of Al and Al alloys
UM	HSC/HPC machining
UMC	HSC machining with chip splitter geometry
VSM	General machining of heat-resistant alloys
TM	General machining of heat-resistant alloys

Number of teeth

1

2

Cutting edge type	
Code	Description
E	Square shoulder mill with protective chamfer
F	Square shoulder mill with sharp cutting edges
B	Ball nose cutter
R	Torus mill
W	Ripper
H	High-feed mill

Cutting edge length	
Code	Description
L	Long
X	Extra long
F	Short

Type	
Code	Description
S	Mini diameter
P	Ground neck
C	Conical neck

3

4

5

Diameter [mm]	
Code	Description
D3.0	3,0
D20.0	20,0
...	

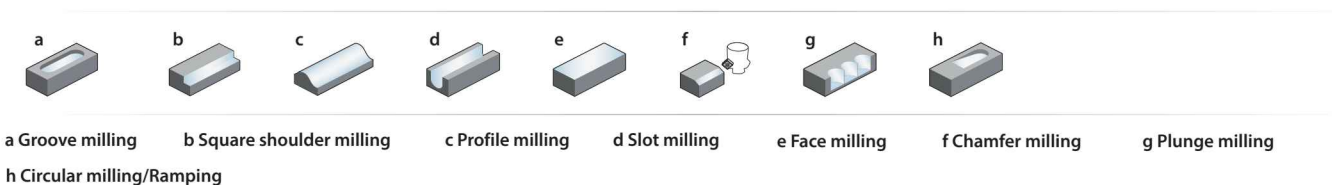
Radius [mm]	
Code	Description
R0.5	0,5
R3.0	3,0
...	

Features	
Code	Description
G	Spiral angle 30°
M	Neck length [mm]
S	Thin shank
AIR	For aerospace industry

6

7

8



A
Turning

B
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Technical Information

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Index

Q 08 – PM – 2 B – D12 R0.5

1

2

3

4

5

6

7

Thread type

Thread diameter [mm]

Code	Description
08	8,0
10	10,0
12	12,0
14	14,0
18	18,0

Application

Code	Description
PM	High-performance machining
HMX	Hard machining

1

2

3

Number of teeth

Cutting edge type

Code	Description
E	Square shoulder mill with protective chamfer
B	Ball nose cutter
R	Torus mill

Diameter [mm]

Code	Description
D3.0	3,0
D8.0	8,0
D20.0	20,0

4

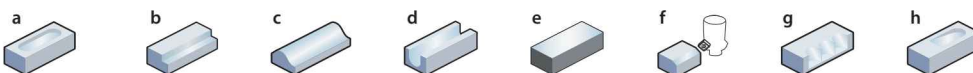
5

6

Radius [mm]

Code	Description
R0.5	0,5
R1.0	1,5
R3.0	3,0
...	

7



a Groove milling

b Square shoulder milling

c Profile milling

d Slot milling

e Face milling

f Chamfer milling

g Plunge milling

h Circular milling/Ramping

G 25 – QCH – Q 12 – 250 C – (ZJ) (115)**1****2****3****4****5****6****7****8****9**

Clamping form	
Code	Description
G	Cylindrical
XP	Weldon

1

Clamping diameter [mm]	
Code	Description
12	12
16	16
20	20
25	25
32	32

2

Series [mm]	
Code	Description
QCH	Indexable head system

3

Thread type	
Code	Description
M	Metric
Q	Q thread

4

Thread size [mm]	
Code	Description
8	8
10	10
12	12
14	14
...	

5

Total length [mm]	
Code	Description
85	85
150	150
200	200
...	

6

Material	
Code	Description
C	Solid carbide
S	Steel

7

Shank	
Code	Description
ZJ	Conical
-	Cylindrically stepped

8

Taper length [mm]	
Code	Description
90	90
115	115
...	

9**A**

Turning

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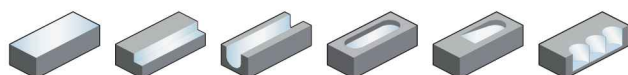
Technical
Information

E

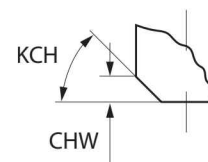
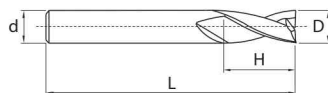
Index

End mill **Semi-finishing**

5501R302GM



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5501R302GM-0300		3	6	4	50	0	0	2	●	○
5501R302GM-0400		4	6	5	54	0	0	2	●	○
5501R302GM-0500		5	6	6	54	0	0	2	●	○
5501R302GM-0600		6	6	7	54	45	0.1	2	●	○
5501R302GM-0800		8	8	9	58	45	0.1	2	●	○
5501R302GM-1000		10	10	11	66	45	0.1	2	●	○
5501R302GM-1200		12	12	12	73	45	0.1	2	●	○
5501R302GM-1400		14	14	14	75	45	0.15	2	●	○
5501R302GM-1600		16	16	16	82	45	0.15	2	●	○
5501R302GM-1800		18	18	18	84	45	0.15	2	●	○
5501R302GM-2000		20	20	20	92	45	0.15	2	●	○

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

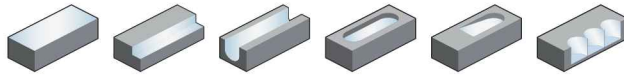
Cutting data > B492

Nonstandard order > B541



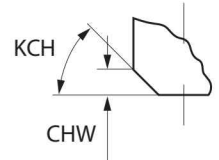
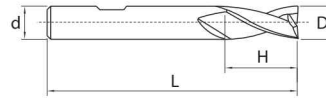
A

End mill Semi-finishing



5601R302GM

- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	H	L	KCH	CHW		KMG303
5601R302GM-0300		3	6	4	50	0	0	2	●
5601R302GM-0400		4	6	5	54	0	0	2	●
5601R302GM-0500		5	6	6	54	0	0	2	●
5601R302GM-0600		6	6	7	54	45	0.1	2	●
5601R302GM-0800		8	8	9	58	45	0.1	2	●
5601R302GM-1000		10	10	11	66	45	0.1	2	●
5601R302GM-1200		12	12	12	73	45	0.1	2	●
5601R302GM-1400		14	14	14	75	45	0.15	2	●
5601R302GM-1600		16	16	16	82	45	0.15	2	●
5601R302GM-1800		18	18	18	84	45	0.15	2	●
5601R302GM-2000		20	20	20	92	45	0.15	2	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

Drilling

D

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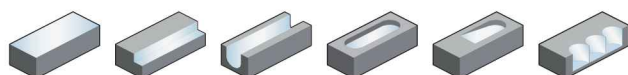
System code > B278

Cutting data > B492

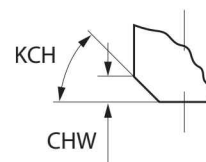
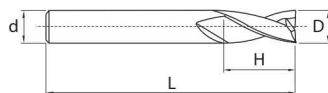
Nonstandard order > B541

End mill long cutting edge **Semi-finishing**

5502R302GM



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5502R302GM-0100		1	3	2	38	0	0	2	●	○
5502R302GM-0150		1.5	3	3	38	0	0	2	●	○
5502R302GM-0200		2	6	6	57	0	0	2	●	○
5502R302GM-0250		2.5	6	7	57	0	0	2	●	○
5502R302GM-0280		2.8	6	7	57	0	0	2	●	○
5502R302GM-0300		3	6	7	57	0	0	2	●	○
5502R302GM-0350		3.5	6	7	57	0	0	2	●	○
5502R302GM-0380		3.8	6	8	57	0	0	2	●	○
5502R302GM-0400		4	6	8	57	0	0	2	●	○
5502R302GM-0450		4.5	6	8	57	0	0	2	●	○
5502R302GM-0480		4.8	6	8	57	0	0	2	●	○
5502R302GM-0500		5	6	10	57	0	0	2	●	○
5502R302GM-0550		5.5	6	10	57	0	0	2	●	○
5502R302GM-0575		5.75	6	10	57	0	0	2	●	○
5502R302GM-0600		6	6	10	57	45	0.1	2	●	○
5502R302GM-0675		6.75	8	13	63	45	0.1	2	○	○
5502R302GM-0700		7	8	13	63	45	0.1	2	●	○
5502R302GM-0750		7.5	8	16	63	45	0.1	2	●	○
5502R302GM-0775		7.75	8	16	63	45	0.1	2	●	○
5502R302GM-0800		8	8	16	63	45	0.1	2	●	○
5502R302GM-0870		8.7	10	16	72	45	0.1	2	●	○
5502R302GM-0900		9	10	16	72	45	0.1	2	●	○
5502R302GM-0950		9.5	10	16	72	45	0.1	2	○	○
5502R302GM-1000		10	10	19	72	45	0.1	2	●	○
5502R302GM-1100		11	12	22	83	45	0.1	2	●	○
5502R302GM-1170		11.7	12	22	83	45	0.1	2	●	○
5502R302GM-1200		12	12	22	83	45	0.1	2	●	○
5502R302GM-1370		13.7	14	22	83	45	0.1	2	●	○
5502R302GM-1400		14	14	22	83	45	0.15	2	●	○
5502R302GM-1500		15	16	26	92	45	0.15	2	●	○
5502R302GM-1570		15.7	16	26	92	45	0.15	2	●	○
5502R302GM-1600		16	16	26	92	45	0.15	2	●	○
5502R302GM-1700		17	18	26	92	45	0.15	2	○	○
5502R302GM-1800		18	18	26	92	45	0.15	2	●	○
5502R302GM-2000		20	20	32	104	45	0.15	2	●	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

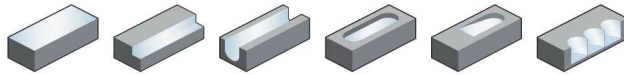
Nonstandard order > B541



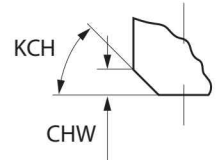
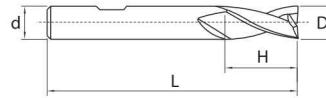
A

End mill long cutting edge Semi-finishing

5602R302GM



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	H	L	KCH	CHW		KMG303
5602R302GM-0200		2	6	6	57	0	0	2	●
5602R302GM-0250		2.5	6	7	57	0	0	2	●
5602R302GM-0280		2.8	6	7	57	0	0	2	●
5602R302GM-0300		3	6	7	57	0	0	2	●
5602R302GM-0350		3.5	6	7	57	0	0	2	●
5602R302GM-0380		3.8	6	8	57	0	0	2	●
5602R302GM-0400		4	6	8	57	0	0	2	●
5602R302GM-0450		4.5	6	8	57	0	0	2	●
5602R302GM-0480		4.8	6	8	57	0	0	2	●
5602R302GM-0500		5	6	10	57	0	0	2	●
5602R302GM-0550		5.5	6	10	57	0	0	2	●
5602R302GM-0575		5.75	6	10	57	0	0	2	●
5602R302GM-0600		6	6	10	57	45	0.1	2	●
5602R302GM-0675		6.75	8	13	63	45	0.1	2	○
5602R302GM-0700		7	8	13	63	45	0.1	2	●
5602R302GM-0750		7.5	8	16	63	45	0.1	2	●
5602R302GM-0775		7.75	8	16	63	45	0.1	2	○
5602R302GM-0800		8	8	16	63	45	0.1	2	●
5602R302GM-0870		8.7	10	16	72	45	0.1	2	●
5602R302GM-0900		9	10	16	72	45	0.1	2	●
5602R302GM-1000		10	10	19	72	45	0.1	2	●
5602R302GM-1170		11.7	12	22	83	45	0.1	2	●
5602R302GM-1200		12	12	22	83	45	0.1	2	●
5602R302GM-1370		13.7	14	22	83	45	0.1	2	●
5602R302GM-1400		14	14	22	83	45	0.15	2	●
5602R302GM-1570		15.7	16	26	92	45	0.15	2	●
5602R302GM-1600		16	16	26	92	45	0.15	2	●
5602R302GM-1800		18	18	26	92	45	0.15	2	●
5602R302GM-2000		20	20	32	104	45	0.15	2	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Drilling

D

Technical Information

E

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Application field

P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

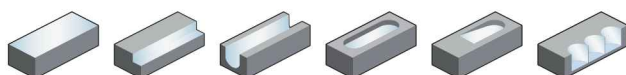
System code > B278

Cutting data > B492

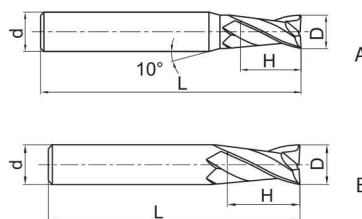
Nonstandard order > B541

End mill **Semi-finishing**

GM-2E



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-2E-D1.0S		1	4	3	50	2	A	●
GM-2E-D1.5S		1.5	4	4	50	2	A	●
GM-2E-D2.0S		2	4	6	50	2	A	●
GM-2E-D2.5S		2.5	4	8	50	2	A	●
GM-2E-D3.0S		3	4	8	50	2	A	●
GM-2E-D4.0S		4	4	11	50	2	B	●
GM-2E-D1.0		1	6	3	50	2	A	●
GM-2E-D1.5		1.5	6	4	50	2	A	●
GM-2E-D2.0		2	6	6	50	2	A	●
GM-2E-D2.5		2.5	6	8	50	2	A	●
GM-2E-D3.0		3	6	8	50	2	A	●
GM-2E-D3.5		3.5	6	10	50	2	A	●
GM-2E-D4.0		4	6	11	50	2	A	●
GM-2E-D4.5		4.5	6	11	50	2	A	●
GM-2E-D5.0		5	6	13	50	2	A	●
GM-2E-D5.5		5.5	6	16	50	2	A	●
GM-2E-D6.0		6	6	16	50	2	B	●
GM-2E-D7.0		7	8	20	60	2	A	●
GM-2E-D8.0		8	8	20	60	2	B	●
GM-2E-D9.0		9	10	22	75	2	A	●
GM-2E-D10.0		10	10	25	75	2	B	●
GM-2E-D11.0		11	12	26	75	2	A	●
GM-2E-D12.0		12	12	30	75	2	B	●
GM-2E-D14.0		14	14	32	75	2	B	●
GM-2E-D16.0		16	16	45	100	2	B	●
GM-2E-D18.0		18	18	45	100	2	B	●
GM-2E-D20.0		20	20	45	100	2	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

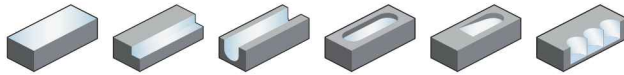
Nonstandard order > B541



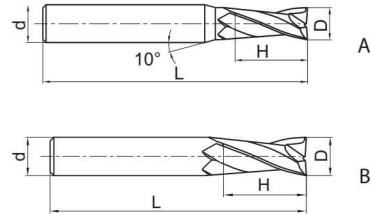
A

End mill long cutting edge Semi-finishing

GM-2EL



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-2EL-D3.0	*	3	6	12	75	2	A	●
GM-2EL-D4.0		4	6	15	75	2	A	●
GM-2EL-D5.0		5	6	20	75	2	A	●
GM-2EL-D6.0		6	6	20	75	2	B	●
GM-2EL-D8.0		8	8	25	100	2	B	●
GM-2EL-D10.0		10	10	30	100	2	B	●
GM-2EL-D12.0		12	12	35	100	2	B	●
GM-2EL-D14.0		14	14	40	100	2	B	●
GM-2EL-D16.0		16	16	50	150	2	B	●
GM-2EL-D20.0		20	20	55	150	2	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

D

Technical Information

E

Index

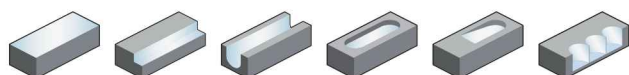
System code > B278

Cutting data > B492

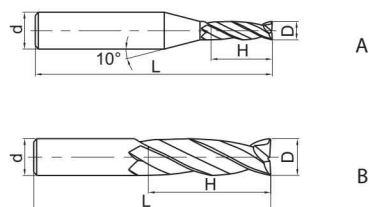
Nonstandard order > B541

End mill extra long cutting edge **Semi-finishing**

GM-2EX



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-2EX-D3.0		3	6	20	75	2	A	●
GM-2EX-D4.0		4	6	25	75	2	A	●
GM-2EX-D5.0		5	6	30	75	2	A	●
GM-2EX-D6.0		6	6	30	75	2	B	○
GM-2EX-D8.0		8	8	40	100	2	B	○
GM-2EX-D10.0		10	10	50	110	2	B	○
GM-2EX-D12.0		12	12	50	110	2	B	○
GM-2EX-D16.0		16	16	70	150	2	B	○
GM-2EX-D20.0		20	20	75	150	2	B	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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System code > B278

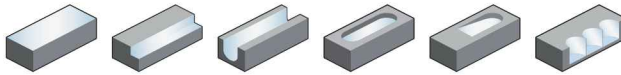
Cutting data > B492

Nonstandard order > B541

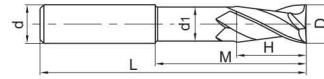
A

End mill short cutting edge Semi-finishing

GM-2EFP



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG303
GM-2EFP-D6.0		6	6	5.8	9	30	75	2	○
GM-2EFP-D8.0		8	8	7.8	12	40	100	2	○
GM-2EFP-D10.0		10	10	9.6	15	50	100	2	○
GM-2EFP-D12.0		12	12	11.5	18	50	100	2	○
GM-2EFP-D16.0		16	16	15.5	24	50	150	2	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

Drilling

D

Technical Information

E

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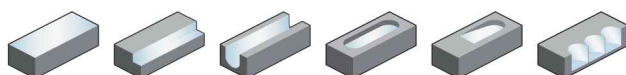
System code > B278

Cutting data > B492

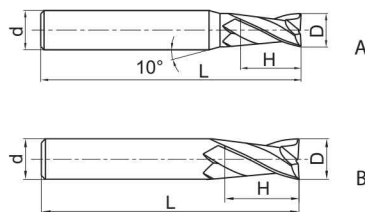
Nonstandard order > B541

End mill **Semi-finishing**

GM-2F



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-2F-D1.0		1	6	3	50	2	A	○
GM-2F-D1.5		1.5	6	4	50	2	A	○
GM-2F-D2.0		2	6	6	50	2	A	○
GM-2F-D2.5		2.5	6	8	50	2	A	○
GM-2F-D3.0		3	6	8	50	2	A	●
GM-2F-D3.5		3.5	6	10	50	2	A	○
GM-2F-D4.0		4	6	11	50	2	A	●
GM-2F-D4.5		4.5	6	11	50	2	A	●
GM-2F-D5.0		5	6	13	50	2	A	●
GM-2F-D5.5		5.5	6	16	50	2	A	○
GM-2F-D6.0		6	6	16	50	2	B	●
GM-2F-D7.0		7	8	20	60	2	A	●
GM-2F-D8.0		8	8	20	60	2	B	●
GM-2F-D9.0		9	10	22	75	2	A	○
GM-2F-D10.0		10	10	25	75	2	B	○
GM-2F-D11.0		11	12	26	75	2	A	○
GM-2F-D12.0		12	12	30	75	2	B	●
GM-2F-D14.0		14	14	32	75	2	B	○
GM-2F-D16.0		16	16	45	100	2	B	○
GM-2F-D18.0		18	18	45	100	2	B	○
GM-2F-D20.0		20	20	45	100	2	B	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

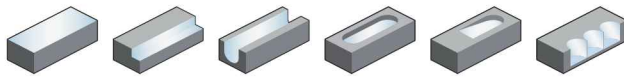
Nonstandard order > B541



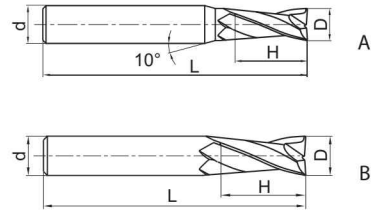
A

End mill long cutting edge Semi-finishing

GM-2FL



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-2FL-D3.0		3	6	12	75	2	A	○
GM-2FL-D4.0		4	6	15	75	2	A	○
GM-2FL-D5.0		5	6	20	75	2	A	○
GM-2FL-D6.0		6	6	20	75	2	B	○
GM-2FL-D8.0		8	8	25	100	2	B	○
GM-2FL-D10.0		10	10	30	100	2	B	○
GM-2FL-D12.0		12	12	35	100	2	B	○
GM-2FL-D14.0		14	14	40	100	2	B	○
GM-2FL-D16.0		16	16	50	150	2	B	○
GM-2FL-D20.0		20	20	55	150	2	B	○

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

D

Technical Information

E

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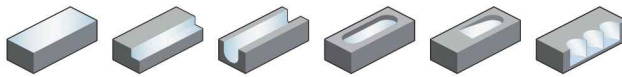
System code > B278

Cutting data > B492

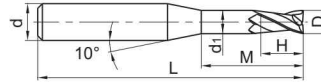
Nonstandard order > B541

End mill **Semi-finishing**

GM-2EP



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]						Teeth	Grade KMG303
		D	d (h6)	d ₁	H	M	L		
GM-2EP-D0.5-M04		0.5	4	0.45	0.7	4	50	2	●
GM-2EP-D0.5-M06		0.5	4	0.45	0.7	6	50	2	●
GM-2EP-D0.5-M08		0.5	4	0.45	0.7	8	50	2	●
GM-2EP-D0.8-M04		0.8	4	0.75	1.2	4	50	2	●
GM-2EP-D0.8-M06		0.8	4	0.75	1.2	6	50	2	●
GM-2EP-D0.8-M08		0.8	4	0.75	1.2	8	50	2	●
GM-2EP-D0.8-M10		0.8	4	0.75	1.2	10	50	2	●
GM-2EP-D1.0-M04		1	4	0.95	1.5	4	50	2	●
GM-2EP-D1.0-M06		1	4	0.95	1.5	6	50	2	●
GM-2EP-D1.0-M08		1	4	0.95	1.5	8	50	2	●
GM-2EP-D1.0-M10		1	4	0.95	1.5	10	50	2	●
GM-2EP-D1.0-M12		1	4	0.95	1.5	12	50	2	●
GM-2EP-D1.0-M14		1	4	0.95	1.5	14	50	2	●
GM-2EP-D1.2-M06		1.2	4	1.15	1.8	6	50	2	●
GM-2EP-D1.2-M08		1.2	4	1.15	1.8	8	50	2	●
GM-2EP-D1.2-M10		1.2	4	1.15	1.8	10	50	2	●
GM-2EP-D1.2-M12		1.2	4	1.15	1.8	12	50	2	○
GM-2EP-D1.5-M06		1.5	4	1.45	2.3	6	50	2	●
GM-2EP-D1.5-M08		1.5	4	1.45	2.3	8	50	2	●
GM-2EP-D1.5-M10		1.5	4	1.45	2.3	10	50	2	●
GM-2EP-D1.5-M12		1.5	4	1.45	2.3	12	50	2	●
GM-2EP-D1.5-M14		1.5	4	1.45	2.3	14	50	2	●
GM-2EP-D2.0-M06		2	4	1.95	3	6	50	2	●
GM-2EP-D2.0-M08		2	4	1.95	3	8	50	2	●
GM-2EP-D2.0-M10		2	4	1.95	3	10	50	2	●
GM-2EP-D2.0-M12		2	4	1.95	3	12	50	2	●
GM-2EP-D2.0-M14		2	4	1.95	3	14	50	2	●
GM-2EP-D2.0-M16		2	4	1.95	3	16	50	2	●
GM-2EP-D2.5-M08		2.5	4	2.4	3.7	8	50	2	●
GM-2EP-D2.5-M10		2.5	4	2.4	3.7	10	50	2	●
GM-2EP-D2.5-M12		2.5	4	2.4	3.7	12	50	2	●
GM-2EP-D2.5-M14		2.5	4	2.4	3.7	14	50	2	●
GM-2EP-D2.5-M16		2.5	4	2.4	3.7	16	60	2	●
GM-2EP-D2.5-M18		2.5	4	2.4	3.7	18	60	2	●
GM-2EP-D2.5-M20		2.5	4	2.4	3.7	20	60	2	●
GM-2EP-D3.0-M06		3	6	2.85	4.5	6	50	2	●
GM-2EP-D3.0-M08		3	6	2.85	4.5	8	50	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278 Cutting data > B492 Nonstandard order > B541



A

Turning

B

Milling

C

Drilling

D

Technical Information

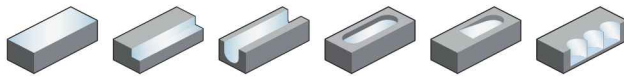
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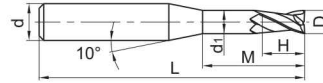
A

End mill Semi-finishing

GM-2EP



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG303
GM-2EP-D3.0-M10		3	6	2.85	4.5	10	50	2	●
GM-2EP-D3.0-M12		3	6	2.85	4.5	12	50	2	●
GM-2EP-D3.0-M14		3	6	2.85	4.5	14	60	2	●
GM-2EP-D3.0-M16		3	6	2.85	4.5	16	60	2	●
GM-2EP-D3.0-M18		3	6	2.85	4.5	18	60	2	●
GM-2EP-D3.0-M20		3	6	2.85	4.5	20	60	2	●
GM-2EP-D4.0-M12		4	6	3.85	6	12	50	2	●
GM-2EP-D4.0-M14		4	6	3.85	6	14	60	2	●
GM-2EP-D4.0-M16		4	6	3.85	6	16	60	2	●
GM-2EP-D4.0-M20		4	6	3.85	6	20	60	2	●
GM-2EP-D4.0-M25		4	6	3.85	6	25	60	2	●
GM-2EP-D5.0-M16		5	6	4.85	7.5	16	60	2	●
GM-2EP-D5.0-M25		5	6	4.85	7.5	25	70	2	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

Drilling

D

Technical Information

E

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System code > B278

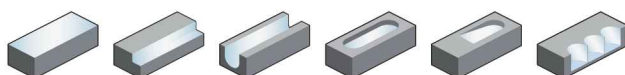
Cutting data > B492

Nonstandard order > B541

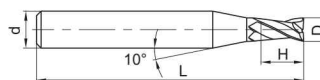
Schaftfräser

Semi-finishing

GM-2ES



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]				Teeth	Grade
		D	d (h6)	H	L		KMG303
GM-2ES-D0.3		0.3	4	0.6	50	2	●
GM-2ES-D0.4		0.4	4	0.8	50	2	●
GM-2ES-D0.5		0.5	4	1	50	2	●
GM-2ES-D0.6		0.6	4	1.2	50	2	●
GM-2ES-D0.7		0.7	4	1.4	50	2	●
GM-2ES-D0.8		0.8	4	1.6	50	2	●
GM-2ES-D0.9		0.9	4	1.8	50	2	●
GM-2ES-D1.0		1	4	2	50	2	●
GM-2ES-D1.1		1.1	4	2	50	2	●
GM-2ES-D1.2		1.2	4	2.5	50	2	●
GM-2ES-D1.3		1.3	4	2.5	50	2	●
GM-2ES-D1.4		1.4	4	3	50	2	●
GM-2ES-D1.5		1.5	4	3	50	2	●
GM-2ES-D1.6		1.6	4	3.5	50	2	●
GM-2ES-D1.7		1.7	4	3.5	50	2	●
GM-2ES-D1.8		1.8	4	4	50	2	●
GM-2ES-D1.9		1.9	4	4	50	2	●
GM-2ES-D2.0		2	4	4	50	2	●
GM-2ES-D2.1		2.1	4	4	50	2	●
GM-2ES-D2.2		2.2	4	4.5	50	2	●
GM-2ES-D2.3		2.3	4	4.5	50	2	●
GM-2ES-D2.4		2.4	4	5	50	2	●
GM-2ES-D2.5		2.5	4	5	50	2	●
GM-2ES-D2.6		2.6	4	5	50	2	●
GM-2ES-D2.7		2.7	4	5.5	50	2	●
GM-2ES-D2.8		2.8	4	5.5	50	2	●
GM-2ES-D2.9		2.9	4	6	50	2	●
GM-2ES-D3.0		3	4	6	50	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541

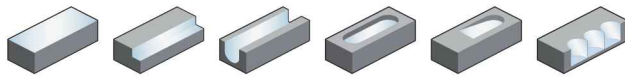


A

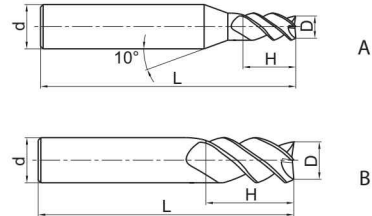
End mill

Semi-finishing

GM-3E



- Factory standard
- Centre cutting
- Helix angle 45°



Turning

B

Milling

C

Drilling

D

Technical Information

E

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Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-3E-D1.0S		1	4	3	50	3	A	○
GM-3E-D1.5S		1.5	4	4	50	3	A	○
GM-3E-D2.0S		2	4	6	50	3	A	○
GM-3E-D2.5S		2.5	4	8	50	3	A	○
GM-3E-D3.0S		3	4	8	50	3	A	○
GM-3E-D4.0S		4	4	11	50	3	B	○
GM-3E-D1.0		1	6	3	50	3	A	○
GM-3E-D1.5		1.5	6	4	50	3	A	○
GM-3E-D2.0		2	6	6	50	3	A	○
GM-3E-D2.5		2.5	6	8	50	3	A	○
GM-3E-D3.0		3	6	8	50	3	A	○
GM-3E-D3.5		3.5	6	10	50	3	A	○
GM-3E-D4.0		4	6	11	50	3	A	○
GM-3E-D4.5		4.5	6	11	50	3	A	○
GM-3E-D5.0		5	6	13	50	3	A	○
GM-3E-D5.5		5.5	6	16	50	3	A	○
GM-3E-D6.0		6	6	16	50	3	B	○
GM-3E-D7.0		7	8	20	60	3	A	○
GM-3E-D8.0		8	8	20	60	3	B	○
GM-3E-D9.0		9	10	22	75	3	A	○
GM-3E-D10.0		10	10	25	75	3	B	○
GM-3E-D11.0		11	12	26	75	3	A	○
GM-3E-D12.0		12	12	30	75	3	B	○
GM-3E-D14.0		14	14	32	75	3	B	○
GM-3E-D16.0		16	16	45	100	3	B	○
GM-3E-D18.0		18	18	45	100	3	B	○
GM-3E-D20.0		20	20	45	100	3	B	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

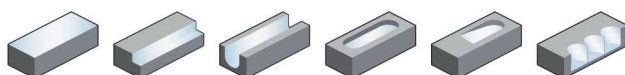
System code > B278

Cutting data > B492

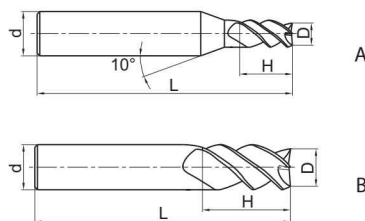
Nonstandard order > B541

End mill long cutting edge **Semi-finishing**

GM-3EL



- Factory standard
- Centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-3EL-D3.0		3	6	12	75	3	A	●
GM-3EL-D4.0		4	6	15	75	3	A	●
GM-3EL-D5.0		5	6	20	75	3	A	●
GM-3EL-D6.0		6	6	20	75	3	B	●
GM-3EL-D8.0		8	8	25	100	3	B	●
GM-3EL-D10.0		10	10	30	100	3	B	●
GM-3EL-D12.0		12	12	35	100	3	B	●
GM-3EL-D14.0		14	14	40	100	3	B	●
GM-3EL-D16.0		16	16	50	150	3	B	●
GM-3EL-D20.0		20	20	55	150	3	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

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System code > B278

Cutting data > B492

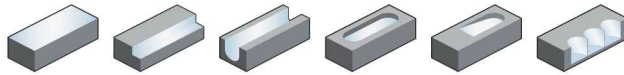
Nonstandard order > B541



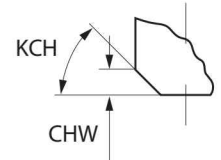
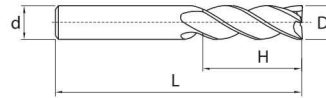
A

End mill Semi-finishing

5501R303GM



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5501R303GM-0300		3	6	4	50	0	0	3	●	○
5501R303GM-0400		4	6	5	54	0	0	3	●	○
5501R303GM-0500		5	6	6	54	0	0	3	●	○
5501R303GM-0600		6	6	7	54	45	0.1	3	●	○
5501R303GM-0800		8	8	9	58	45	0.1	3	●	○
5501R303GM-1000		10	10	11	66	45	0.1	3	●	○
5501R303GM-1200		12	12	12	73	45	0.1	3	●	○
5501R303GM-1400		14	14	14	75	45	0.15	3	●	○
5501R303GM-1600		16	16	16	82	45	0.15	3	●	○
5501R303GM-1800		18	18	18	84	45	0.15	3	●	○
5501R303GM-2000		20	20	20	92	45	0.15	3	●	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

Drilling

D

Technical Information

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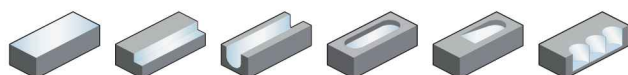
System code > B278

Cutting data > B492

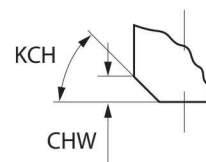
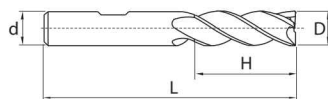
Nonstandard order > B541

End mill **Semi-finishing**

5601R303GM



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	H	L	KCH	CHW		KMG303
5601R303GM-0300		3	6	4	50	0	0	3	●
5601R303GM-0400		4	6	5	54	0	0	3	●
5601R303GM-0500		5	6	6	54	0	0	3	●
5601R303GM-0600		6	6	7	54	45	0.1	3	●
5601R303GM-0800		8	8	9	58	45	0.1	3	●
5601R303GM-1000		10	10	11	66	45	0.1	3	●
5601R303GM-1200		12	12	12	73	45	0.1	3	●
5601R303GM-1400		14	14	14	75	45	0.15	3	●
5601R303GM-1600		16	16	16	82	45	0.15	3	●
5601R303GM-1800		18	18	18	84	45	0.15	3	●
5601R303GM-2000		20	20	20	92	45	0.15	3	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

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System code > B278

Cutting data > B492

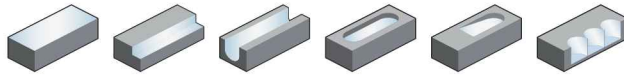
Nonstandard order > B541



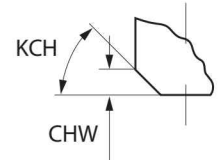
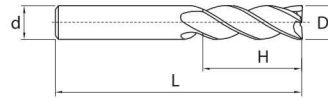
A

End mill long cutting edge Semi-finishing

5502R303GM



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5502R303GM-0300		3	6	7	57	0	0	3	●	○
5502R303GM-0400		4	6	8	57	0	0	3	●	○
5502R303GM-0500		5	6	10	57	0	0	3	●	○
5502R303GM-0600		6	6	10	57	45	0.1	3	●	○
5502R303GM-0800		8	8	16	63	45	0.1	3	●	○
5502R303GM-1000		10	10	19	72	45	0.1	3	●	○
5502R303GM-1200		12	12	22	83	45	0.1	3	●	○
5502R303GM-1300		13	14	22	83	45	0.1	3	○	○
5502R303GM-1400		14	14	22	83	45	0.15	3	●	○
5502R303GM-1600		16	16	26	92	45	0.15	3	●	○
5502R303GM-1800		18	18	26	92	45	0.15	3	●	○
5502R303GM-2000		20	20	32	104	45	0.15	3	●	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

Drilling

D

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System code > B278

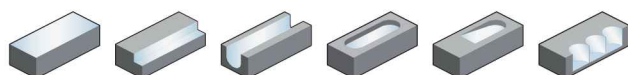
Cutting data > B492

Nonstandard order > B541

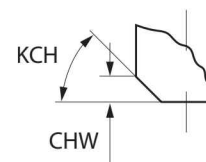
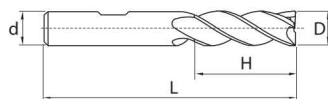
End mill long cutting edge

Semi-finishing

5602R303GM



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	H	L	KCH	CHW		KMG303
5602R303GM-0300		3	6	7	57	0	0	3	●
5602R303GM-0400		4	6	8	57	0	0	3	●
5602R303GM-0500		5	6	10	57	0	0	3	●
5602R303GM-0600		6	6	10	57	45	0.1	3	●
5602R303GM-0800		8	8	16	63	45	0.1	3	●
5602R303GM-1000		10	10	19	72	45	0.1	3	●
5602R303GM-1200		12	12	22	83	45	0.1	3	●
5602R303GM-1400		14	14	22	83	45	0.15	3	●
5602R303GM-1600		16	16	26	92	45	0.15	3	●
5602R303GM-1800		18	18	26	92	45	0.15	3	●
5602R303GM-2000		20	20	32	104	45	0.15	3	●

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

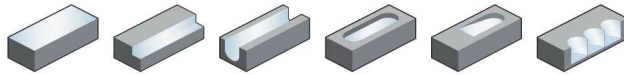
Nonstandard order > B541



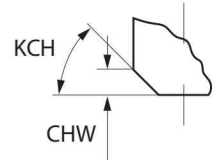
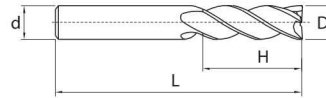
A

End mill long cutting edge Semi-finishing

5502R453GM



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 45°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	H	L	KCH	CHW		KMG405
5502R453GM-0300		3	6	7	57	0	0	3	●
5502R453GM-0400		4	6	8	57	0	0	3	●
5502R453GM-0500		5	6	10	57	0	0	3	●
5502R453GM-0600		6	6	10	57	45	0.1	3	●
5502R453GM-0800		8	8	16	63	45	0.1	3	●
5502R453GM-1000		10	10	19	72	45	0.1	3	●
5502R453GM-1200		12	12	22	83	45	0.1	3	●
5502R453GM-1400		14	14	22	83	45	0.15	3	●
5502R453GM-1600		16	16	26	92	45	0.15	3	●
5502R453GM-1800		18	18	26	92	45	0.15	3	●
5502R453GM-2000		20	20	32	104	45	0.15	3	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

Drilling

D

Technical Information

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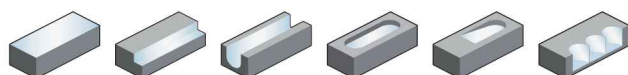
System code > B278

Cutting data > B492

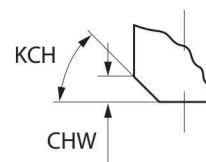
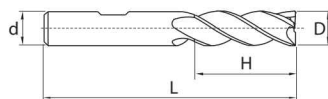
Nonstandard order > B541

End mill long cutting edge **Semi-finishing**

5602R453GM



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	H	L	KCH	CHW		KMG303	KMG405
5602R453GM-0300		3	6	7	57	0	0	3	○	●
5602R453GM-0400		4	6	8	57	0	0	3	○	●
5602R453GM-0500		5	6	10	57	0	0	3	○	●
5602R453GM-0600		6	6	10	57	45	0.1	3	○	●
5602R453GM-0800		8	8	16	63	45	0.1	3	○	●
5602R453GM-1000		10	10	19	72	45	0.1	3	○	●
5602R453GM-1200		12	12	22	83	45	0.1	3	○	●
5602R453GM-1400		14	14	22	83	45	0.15	3	○	●
5602R453GM-1600		16	16	26	92	45	0.15	3	○	●
5602R453GM-1800		18	18	26	92	45	0.15	3	○	●
5602R453GM-2000		20	20	32	104	45	0.15	3	○	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541

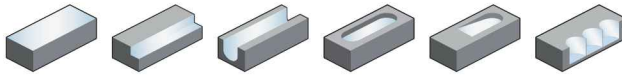


A

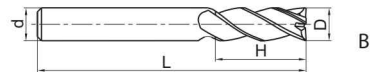
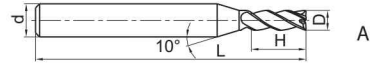
End mill

Semi-finishing

GM-4F-G



- Factory standard
- Centre cutting
- Helix angle 30°



Turning

B

Milling

C

Drilling

D

Technical Information

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-4F-D2.0S-G		2	4	6	50	4	A	○
GM-4F-D2.5S-G		2.5	4	8	50	4	A	○
GM-4F-D4.0S-G		4	4	11	50	4	B	○
GM-4F-D1.0-G		1	6	3	50	4	A	○
GM-4F-D1.5-G		1.5	6	4	50	4	A	○
GM-4F-D2.0-G		2	6	6	50	4	A	○
GM-4F-D2.5-G		2.5	6	8	50	4	A	○
GM-4F-D3.0-G		3	6	8	50	4	A	○
GM-4F-D3.5-G		3.5	6	10	50	4	A	○
GM-4F-D4.0-G		4	6	11	50	4	A	○
GM-4F-D4.5-G		4.5	6	11	50	4	A	○
GM-4F-D5.0-G		5	6	13	50	4	A	○
GM-4F-D5.5-G		5.5	6	16	50	4	A	○
GM-4F-D6.0-G		6	6	16	50	4	B	○
GM-4F-D7.0-G		7	8	20	60	4	A	○
GM-4F-D8.0-G		8	8	20	60	4	B	○
GM-4F-D9.0-G		9	10	22	75	4	A	○
GM-4F-D10.0-G		10	10	25	75	4	B	○
GM-4F-D11.0-G		11	12	26	75	4	A	○
GM-4F-D12.0-G		12	12	30	75	4	B	○
GM-4F-D14.0-G		14	14	32	75	4	B	○
GM-4F-D16.0-G		16	16	45	100	4	B	○
GM-4F-D18.0-G		18	18	45	100	4	B	○
GM-4F-D20.0-G		20	20	45	100	4	B	○

● Ex stock ○ On demand

* With internal cooling

E

Index

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

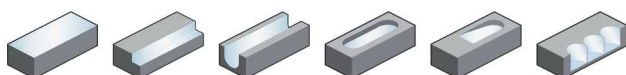
Cutting data > B492

Nonstandard order > B541

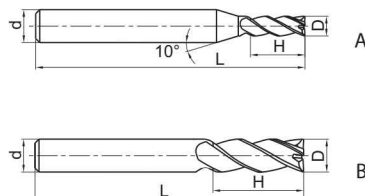
End mill long cutting edge

Semi-finishing

GM-4EL-G



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-4EL-D3.0-G		3	6	12	75	4	A	○
GM-4EL-D4.0-G		4	6	15	75	4	A	○
GM-4EL-D5.0-G		5	6	20	75	4	A	○
GM-4EL-D6.0-G		6	6	20	75	4	B	○
GM-4EL-D8.0-G		8	8	25	100	4	B	○
GM-4EL-D10.0-G		10	10	30	100	4	B	○
GM-4EL-D12.0-G		12	12	35	100	4	B	○
GM-4EL-D14.0-G		14	14	40	100	4	B	○
GM-4EL-D16.0-G		16	16	50	150	4	B	○
GM-4EL-D20.0-G		20	20	55	150	4	B	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

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System code > B278

Cutting data > B492

Nonstandard order > B541



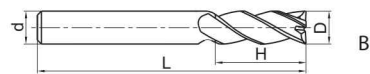
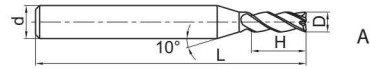
A

End mill long cutting edge Semi-finishing

GM-4FL-G



- Factory standard
- Centre cutting
- Helix angle 30°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-4FL-D3.0-G		3	6	12	75	4	A	○
GM-4FL-D4.0-G		4	6	15	75	4	A	○
GM-4FL-D5.0-G		5	6	20	75	4	A	●
GM-4FL-D6.0-G		6	6	20	75	4	B	●
GM-4FL-D8.0-G		8	8	25	100	4	B	●
GM-4FL-D10.0-G		10	10	30	100	4	B	●
GM-4FL-D12.0-G		12	12	35	100	4	B	●
GM-4FL-D14.0-G		14	14	40	100	4	B	○
GM-4FL-D16.0-G		16	16	50	150	4	B	○

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Application field

P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

D

Technical Information

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System code > B278

Cutting data > B492

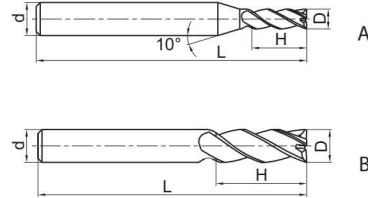
Nonstandard order > B541

End mill extra long cutting edge **Semi-finishing**

GM-4EX-G



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-4EX-D3.0-G		3	6	20	75	4	A	●
GM-4EX-D4.0-G		4	6	25	75	4	A	●
GM-4EX-D5.0-G		5	6	30	75	4	A	●
GM-4EX-D6.0-G		6	6	30	75	4	B	●
GM-4EX-D8.0-G		8	8	40	100	4	B	●
GM-4EX-D10.0-G		10	10	50	110	4	B	●
GM-4EX-D12.0-G		12	12	50	110	4	B	●
GM-4EX-D16.0-G		16	16	70	150	4	B	●
GM-4EX-D20.0-G		20	20	75	150	4	B	●

- Ex stock ○ On demand
- * With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

Nonstandard order > B541

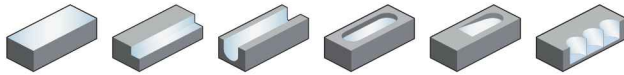


A

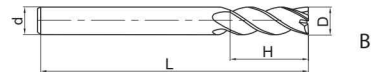
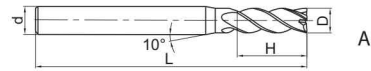
End mill

Semi-finishing

GM-4E



- Factory standard
- Centre cutting
- Helix angle 45°



Turning

B

Milling

C

Drilling

D

Technical Information

E

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Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-4E-D1.0S		1	4	3	50	4	A	●
GM-4E-D1.5S		1.5	4	4	50	4	A	●
GM-4E-D2.0S		2	4	6	50	4	A	●
GM-4E-D2.5S		2.5	4	8	50	4	A	●
GM-4E-D3.0S		3	4	8	50	4	A	●
GM-4E-D4.0S		4	4	11	50	4	B	●
GM-4E-D1.0		1	6	3	50	4	A	●
GM-4E-D1.5		1.5	6	4	50	4	A	●
GM-4E-D2.0		2	6	6	50	4	A	●
GM-4E-D2.5		2.5	6	8	50	4	A	●
GM-4E-D3.0		3	6	8	50	4	A	●
GM-4E-D3.5		3.5	6	10	50	4	A	●
GM-4E-D4.0		4	6	11	50	4	A	●
GM-4E-D4.5		4.5	6	11	50	4	A	●
GM-4E-D5.0		5	6	13	50	4	A	●
GM-4E-D5.5		5.5	6	16	50	4	A	●
GM-4E-D6.0		6	6	16	50	4	B	●
GM-4E-D7.0		7	8	20	60	4	A	●
GM-4E-D8.0		8	8	20	60	4	B	●
GM-4E-D9.0		9	10	22	75	4	A	●
GM-4E-D10.0		10	10	25	75	4	B	●
GM-4E-D11.0		11	12	26	75	4	A	●
GM-4E-D12.0		12	12	30	75	4	B	●
GM-4E-D14.0		14	14	32	75	4	B	●
GM-4E-D16.0		16	16	45	100	4	B	●
GM-4E-D18.0		18	18	45	100	4	B	●
GM-4E-D20.0		20	20	45	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

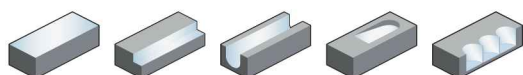
System code > B278

Cutting data > B492

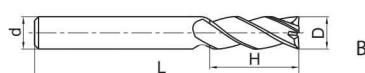
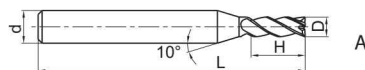
Nonstandard order > B541

End mill **Semi-finishing**

GM-4E-G



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-4E-D1.0S-G		1	4	3	50	4	A	●
GM-4E-D1.5S-G		1.5	4	4	50	4	A	●
GM-4E-D2.0S-G		2	4	6	50	4	A	●
GM-4E-D2.5S-G		2.5	4	8	50	4	A	●
GM-4E-D3.0S-G		3	4	8	50	4	A	●
GM-4E-D4.0S-G		4	4	11	50	4	B	●
GM-4E-D1.0-G		1	6	3	50	4	A	●
GM-4E-D1.5-G		1.5	6	4	50	4	A	●
GM-4E-D2.0-G		2	6	6	50	4	A	●
GM-4E-D2.5-G		2.5	6	8	50	4	A	●
GM-4E-D3.0-G		3	6	8	50	4	A	●
GM-4E-D3.5-G		3.5	6	10	50	4	A	●
GM-4E-D4.0-G		4	6	11	50	4	A	●
GM-4E-D4.5-G		4.5	6	11	50	4	A	○
GM-4E-D5.0-G		5	6	13	50	4	A	●
GM-4E-D5.5-G		5.5	6	16	50	4	A	●
GM-4E-D6.0-G		6	6	16	50	4	B	●
GM-4E-D7.0-G		7	8	20	60	4	A	●
GM-4E-D8.0-G		8	8	20	60	4	B	●
GM-4E-D9.0-G		9	10	22	75	4	A	●
GM-4E-D10.0-G		10	10	25	75	4	B	●
GM-4E-D11.0-G		11	12	26	75	4	A	●
GM-4E-D12.0-G		12	12	30	75	4	B	●
GM-4E-D14.0-G		14	14	32	75	4	B	●
GM-4E-D16.0-G		16	16	45	100	4	B	●
GM-4E-D18.0-G		18	18	45	100	4	B	●
GM-4E-D20.0-G		20	20	45	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

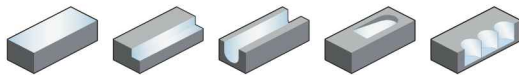
Nonstandard order > B541



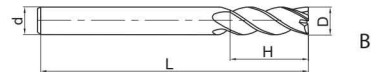
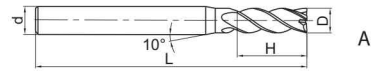
A

End mill long cutting edge Semi-finishing

GM-4EL



- Factory standard
- Centre cutting
- Helix angle 45°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG303
GM-4EL-D3.0		3	6	12	75	4	A	●
GM-4EL-D4.0		4	6	15	75	4	A	●
GM-4EL-D5.0		5	6	20	75	4	A	●
GM-4EL-D6.0		6	6	20	75	4	B	●
GM-4EL-D8.0		8	8	25	100	4	B	●
GM-4EL-D10.0		10	10	30	100	4	B	●
GM-4EL-D12.0		12	12	35	100	4	B	●
GM-4EL-D14.0		14	14	40	100	4	B	●
GM-4EL-D16.0		16	16	50	150	4	B	●
GM-4EL-D20.0		20	20	55	150	4	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

D

Technical Information

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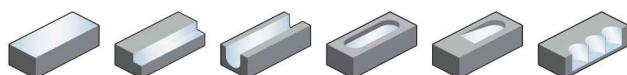
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Cutting data > B492

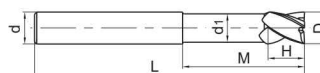
Nonstandard order > B541

End mill short cutting edge **Semi-finishing**

GM-4EFP



- Factory standard
- Centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG303
GM-4EFP-D6.0		6	6	5.8	9	30	75	4	○
GM-4EFP-D8.0		8	8	7.8	12	40	100	4	○
GM-4EFP-D10.0		10	10	9.6	15	50	100	4	○
GM-4EFP-D12.0		12	12	11.5	18	50	100	4	○
GM-4EFP-D16.0		16	16	15.5	24	50	150	4	○
GM-4EFP-D20.0		20	20	19.5	30	60	150	4	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

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System code > B278

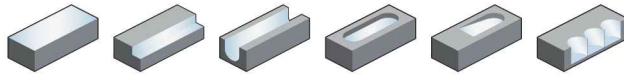
Cutting data > B492

Nonstandard order > B541



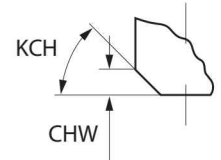
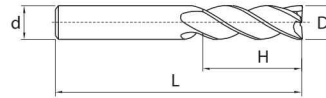
A

End mill Finishing



5501R304GF

- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5501R304GF-0300		3	6	5	50	0	0	4	●	○
5501R304GF-0400		4	6	8	54	0	0	4	●	○
5501R304GF-0500		5	6	9	54	0	0	4	●	○
5501R304GF-0600		6	6	10	54	45	0.1	4	●	○
5501R304GF-0800		8	8	12	58	45	0.1	4	●	○
5501R304GF-1000		10	10	14	66	45	0.1	4	●	○
5501R304GF-1200		12	12	16	73	45	0.1	4	●	○
5501R304GF-1400		14	14	18	75	45	0.15	4	●	○
5501R304GF-1600		16	16	22	82	45	0.15	4	●	○
5501R304GF-1800		18	18	24	84	45	0.15	4	●	○
5501R304GF-2000		20	20	26	92	45	0.15	4	●	○

Milling

C

- Ex stock ○ On demand
- * With internal cooling

Drilling

Application field

P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

D

Technical Information

E

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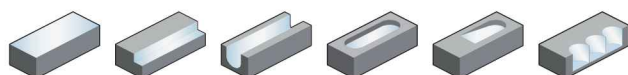
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Cutting data > B492

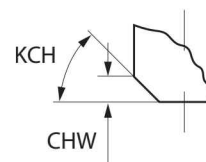
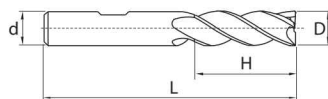
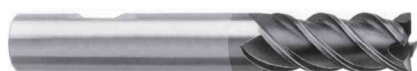
Nonstandard order > B541

End mill **Finishing**

5601R304GF



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	H	L	KCH	CHW		KMG303
5601R304GF-0300		3	6	5	50	0	0	4	●
5601R304GF-0400		4	6	8	54	0	0	4	●
5601R304GF-0500		5	6	9	54	0	0	4	●
5601R304GF-0600		6	6	10	54	45	0.1	4	●
5601R304GF-0800		8	8	12	58	45	0.1	4	●
5601R304GF-1000		10	10	14	66	45	0.1	4	●
5601R304GF-1200		12	12	16	73	45	0.1	4	●
5601R304GF-1400		14	14	18	75	45	0.15	4	●
5601R304GF-1600		16	16	22	82	45	0.15	4	●
5601R304GF-1800		18	18	24	84	45	0.15	4	●
5601R304GF-2000		20	20	26	92	45	0.15	4	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

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System code > B278

Cutting data > B492

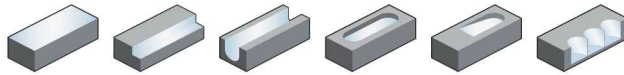
Nonstandard order > B541



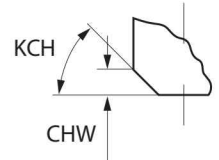
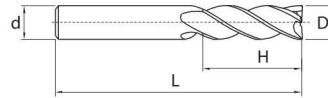
A

End mill long cutting edge Finishing

5502R304GF



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5502R304GF-0300		3	6	8	57	0	0	4	●	○
5502R304GF-0400		4	6	11	57	0	0	4	●	○
5502R304GF-0500		5	6	13	57	0	0	4	●	○
5502R304GF-0600		6	6	13	57	45	0.1	4	●	○
5502R304GF-0800		8	8	19	63	45	0.1	4	●	○
5502R304GF-1000		10	10	22	72	45	0.1	4	●	○
5502R304GF-1200		12	12	26	83	45	0.1	4	●	○
5502R304GF-1400		14	14	26	83	45	0.15	4	●	○
5502R304GF-1600		16	16	32	92	45	0.15	4	●	○
5502R304GF-1800		18	18	32	92	45	0.15	4	●	○
5502R304GF-2000		20	20	38	104	45	0.15	4	●	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

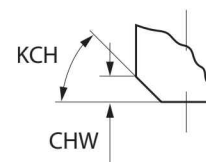
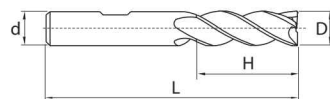
Nonstandard order > B541

End mill long cutting edge **Finishing**

5602R304GF



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5602R304GF-0300		3	6	8	57	0	0	4	●	○
5602R304GF-0400		4	6	11	57	0	0	4	●	○
5602R304GF-0500		5	6	13	57	0	0	4	●	○
5602R304GF-0600		6	6	13	57	45	0.1	4	●	○
5602R304GF-0800		8	8	19	63	45	0.1	4	●	○
5602R304GF-1000		10	10	22	72	45	0.1	4	●	○
5602R304GF-1200		12	12	26	83	45	0.1	4	●	○
5602R304GF-1400		14	14	26	83	45	0.15	4	●	○
5602R304GF-1600		16	16	32	92	45	0.15	4	●	○
5602R304GF-1800		18	18	32	92	45	0.15	4	●	○
5602R304GF-2000		20	20	38	104	45	0.15	4	●	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

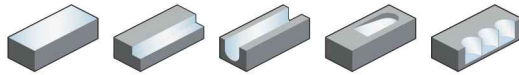
Nonstandard order > B541



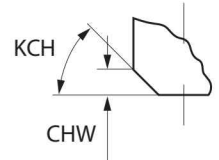
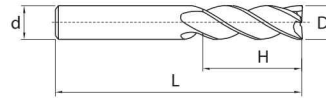
A

End mill long cutting edge Semi-finishing

5508R454GM



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 45°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5508R454GM-0300		3	3	8	45	0	0	4	●	○
5508R454GM-0400		4	4	11	50	0	0	4	●	○
5508R454GM-0500		5	5	13	50	0	0	4	●	○
5508R454GM-0600		6	6	13	57	45	0.1	4	●	○
5508R454GM-0800		8	8	19	63	45	0.1	4	●	○
5508R454GM-1000		10	10	22	72	45	0.1	4	●	○
5508R454GM-1200		12	12	26	83	45	0.1	4	●	○
5508R454GM-1400		14	14	26	83	45	0.15	4	●	○
5508R454GM-1500		15	16	32	92	0	0	4	○	
5508R454GM-1600		16	16	32	92	45	0.15	4	●	○
5508R454GM-1800		18	18	32	92	45	0.15	4	●	○
5508R454GM-2000		20	20	38	104	45	0.15	4	●	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

Drilling

D

Technical Information

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System code > B278

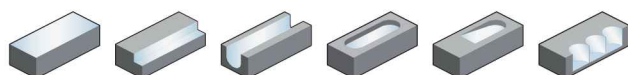
Cutting data > B492

Nonstandard order > B541

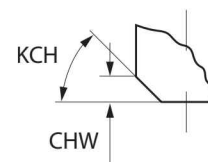
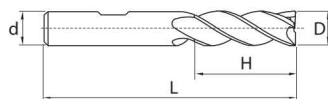
End mill long cutting edge

Semi-finishing

5602R454GM



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	H	L	KCH	CHW		KMG303
5602R454GM-0300		3	6	8	57	0	0	4	●
5602R454GM-0400		4	6	11	57	0	0	4	●
5602R454GM-0500		5	6	13	57	0	0	4	●
5602R454GM-0600		6	6	13	57	45	0.1	4	●
5602R454GM-0800		8	8	19	63	45	0.1	4	●
5602R454GM-1000		10	10	22	72	45	0.1	4	●
5602R454GM-1200		12	12	26	83	45	0.1	4	●
5602R454GM-1400		14	14	26	83	45	0.15	4	●
5602R454GM-1600		16	16	32	92	45	0.15	4	●
5602R454GM-1800		18	18	32	92	45	0.15	4	●
5602R454GM-2000		20	20	38	104	45	0.15	4	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

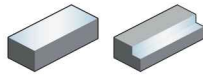
Nonstandard order > B541



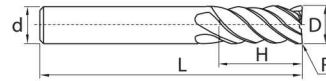
A

Torus mill long cutting edge Finishing

5589R45MGFR



- Type of shank DIN 6535HA
- Helix angle 45°



Turning

B

Article	*	Dimensions [mm]					Teeth	Grade
		D	R	d (h6)	H	L		KMG405
5589R45MGFR02-0600		6	0.2	6	19	63	6	●
5589R45MGFR02-0800		8	0.2	8	28	72	6	●
5589R45MGFR02-1000		10	0.2	10	34	84	6	●
5589R45MGFR02-1200		12	0.2	12	40	97	6	●

- Ex stock ○ On demand
- * With internal cooling

Milling

C

Application field						
P	M	K	N	S	H	
✓	✓	✓				✓ Very suitable ✓ Suitable

Drilling

D

Technical Information

E

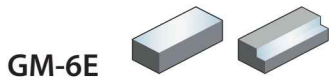
Index

System code > B278

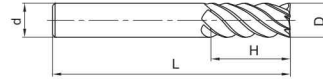
Cutting data > B492

Nonstandard order > B541

End mill **Semi-finishing**



- Factory standard
- Non-centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]				Teeth	Grade
		D	d (h6)	H	L		KMG303
GM-6E-D6.0		6	6	18	60	6	●
GM-6E-D8.0		8	8	20	60	6	●
GM-6E-D10.0		10	10	30	75	6	●
GM-6E-D12.0		12	12	32	75	6	●
GM-6E-D16.0		16	16	40	100	6	●
GM-6E-D20.0		20	20	45	100	6	●

- Ex stock ○ On demand
- * With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

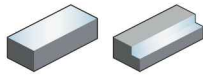
Nonstandard order > B541



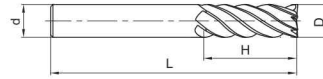
A

End mill long cutting edge Semi-finishing

GM-6EL



- Factory standard
- Non-centre cutting
- Helix angle 45°



Turning

B

Article	*	Dimensions [mm]				Teeth	Grade
		D	d (h6)	H	L		KMG303
GM-6EL-D6.0		6	6	24	75	6	●
GM-6EL-D8.0		8	8	32	75	6	●
GM-6EL-D10.0		10	10	40	100	6	●
GM-6EL-D12.0		12	12	45	100	6	●
GM-6EL-D16.0		16	16	64	150	6	●
GM-6EL-D20.0		20	20	75	150	6	●

- Ex stock ○ On demand
- * With internal cooling

Milling

C

Application field						
P	M	K	N	S	H	
✓	✓	✓				✓ Very suitable
						✓ Suitable

Drilling

D

Technical Information

E

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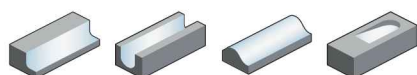
System code > B278

Cutting data > B492

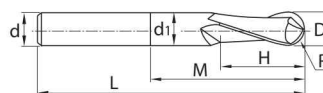
Nonstandard order > B541

Ball nose cutter **Finishing**

5565R302GF



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]							Teeth	Grade
		D	R	d (h6)	d ₁	H	M	L		KMG303
5565R302GF-0300		3	1.5	6	2.8	4	9	57	2	●
5565R302GF-0400		4	2	6	3.7	5	12	57	2	●
5565R302GF-0500		5	2.5	6	4.6	6	15	57	2	●
5565R302GF-0600		6	3	6	5.5	7	20	57	2	●
5565R302GF-0800		8	4	8	7.4	9	26	63	2	●
5565R302GF-1000		10	5	10	9.2	11	31	72	2	●
5565R302GF-1200		12	6	12	11	12	37	83	2	●
5565R302GF-1600		16	8	16	15	16	43	92	2	●
5565R302GF-2000		20	10	20	19	20	50	104	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

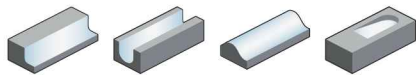
Nonstandard order > B541



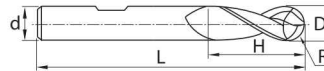
A

Ball nose cutter Semi-finishing

5665R202GM



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 20°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		D	R	d (h6)	d ₁	H	L		KMG303
5665R202GM-0300		3	1.5	6	2.8	4	57	2	●
5665R202GM-0400		4	2	6	3.7	5	57	2	●
5665R202GM-0500		5	2.5	6	4.6	6	57	2	●
5665R202GM-0600		6	3	6	5.5	7	57	2	●
5665R202GM-0800		8	4	8	7.4	9	63	2	●
5665R202GM-1000		10	5	10	9.2	11	72	2	●
5665R202GM-1200		12	6	12	11	12	83	2	●
5665R202GM-1600		16	8	16	15	16	92	2	●
5665R202GM-2000		20	10	20	19	20	104	2	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

Drilling

D

Technical Information

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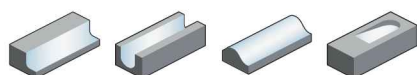
System code > B278

Cutting data > B492

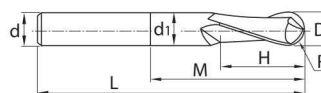
Nonstandard order > B541

Ball nose cutter long shank Finishing

5566R302GF



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]							Teeth	Grade
		D	R	d (h6)	d ₁	H	M	L		KMG303
5566R302GF-0300		3	1.5	6	2.8	4	15	75	2	●
5566R302GF-0400		4	2	6	3.7	5	20	75	2	●
5566R302GF-0500		5	2.5	6	4.6	6	25	80	2	●
5566R302GF-0600		6	3	6	5.5	7	60	80	2	●
5566R302GF-0800		8	4	8	7.4	9	65	90	2	●
5566R302GF-1000		10	5	10	9.2	11	40	100	2	●
5566R302GF-1200		12	6	12	11	12	50	120	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

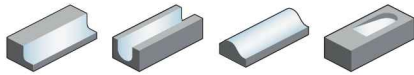
Nonstandard order > B541



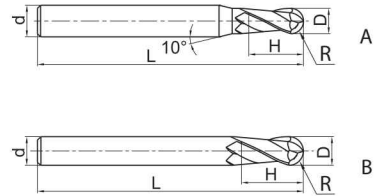
A

Ball nose cutter Semi-finishing

GM-2B



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

C

Drilling

D

Technical Information

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG303
GM-2B-R0.5S		0.5	1	4	2	50	2	A	●
GM-2B-R0.75S		0.75	1.5	4	3	50	2	A	●
GM-2B-R1.0S		1	2	4	4	50	2	A	●
GM-2B-R1.25S		1.25	2.5	4	5	50	2	A	●
GM-2B-R1.5S		1.5	3	4	6	50	2	A	●
GM-2B-R2.0S		2	4	4	8	50	2	B	●
GM-2B-R0.5		0.5	1	6	2	50	2	A	○
GM-2B-R0.75		0.75	1.5	6	3	50	2	A	○
GM-2B-R1.0		1	2	6	4	50	2	A	●
GM-2B-R1.25		1.25	2.5	6	5	50	2	A	○
GM-2B-R1.5		1.5	3	6	6	50	2	A	●
GM-2B-R1.75		1.75	3.5	6	8	50	2	A	○
GM-2B-R2.0		2	4	6	8	50	2	A	●
GM-2B-R2.5		2.5	5	6	10	50	2	A	●
GM-2B-R2.75		2.75	5.5	6	12	50	2	A	○
GM-2B-R3.0		3	6	6	12	50	2	B	●
GM-2B-R3.5		3.5	7	8	14	60	2	A	○
GM-2B-R4.0		4	8	8	16	60	2	B	●
GM-2B-R4.5		4.5	9	10	18	75	2	A	○
GM-2B-R5.0		5	10	10	20	75	2	B	●
GM-2B-R6.0		6	12	12	24	75	2	B	●
GM-2B-R7.0		7	14	14	28	75	2	B	●
GM-2B-R8.0		8	16	16	32	100	2	B	●
GM-2B-R10.0		10	20	20	40	100	2	B	●

● Ex stock ○ On demand

* With internal cooling

E

Index

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

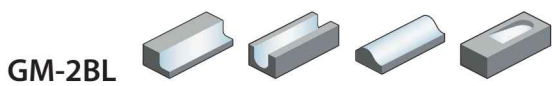
✓ Suitable

System code > B278

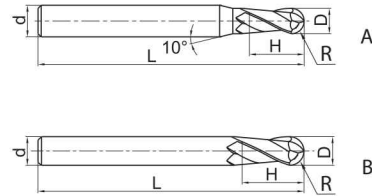
Cutting data > B492

Nonstandard order > B541

Ball nose cutter long shank **Semi-finishing**



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG303
GM-2BL-R1.0		1	2	6	4	75	2	A	●
GM-2BL-R1.25		1.25	2.5	6	5	75	2	A	●
GM-2BL-R1.5		1.5	3	6	6	75	2	A	●
GM-2BL-R1.75		1.75	3.5	6	8	75	2	A	●
GM-2BL-R2.0		2	4	6	8	75	2	A	●
GM-2BL-R2.5		2.5	5	6	10	75	2	A	●
GM-2BL-R2.75		2.75	5.5	6	12	75	2	A	●
GM-2BL-R3.0		3	6	6	12	75	2	B	●
GM-2BL-R3.5		3.5	7	8	14	75	2	A	●
GM-2BL-R4.0		4	8	8	16	100	2	B	●
GM-2BL-R4.5		4.5	9	10	18	100	2	A	●
GM-2BL-R5.0		5	10	10	20	100	2	B	●
GM-2BL-R6.0		6	12	12	24	100	2	B	●
GM-2BL-R7.0		7	14	14	28	100	2	B	●
GM-2BL-R8.0		8	16	16	32	150	2	B	●
GM-2BL-R10.0		10	20	20	40	150	2	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

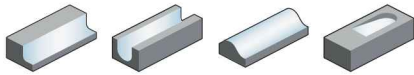
Nonstandard order > B541



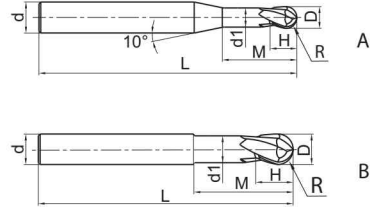
A

Ball nose cutter short cutting edge Semi-finishing

GM-2BFP



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

Article	*	Dimensions [mm]								Teeth	Geometry	Grade
		R	D	d (h6)	d ₁	H	M	L	KMG303			
GM-2BFP-R0.5		0.5	1	6	0.95	1	2.5	75	2	A	○	
GM-2BFP-R0.75		0.75	1.5	6	1.45	1	3	75	2	A	○	
GM-2BFP-R1.0		1	2	6	1.95	2	4	75	2	A	●	
GM-2BFP-R1.5		1.5	3	6	2.85	3	6	75	2	A	○	
GM-2BFP-R2.0		2	4	6	3.85	4	8	75	2	A	○	
GM-2BFP-R2.5		2.5	5	6	4.85	5	10	75	2	A	○	
GM-2BFP-R3.0		3	6	6	5.8	6	12	75	2	B	○	
GM-2BFP-R4.0		4	8	8	7.8	8	16	100	2	B	○	
GM-2BFP-R5.0		5	10	10	9.6	10	20	100	2	B	○	
GM-2BFP-R6.0		6	12	12	11.5	12	24	100	2	B	○	
GM-2BFP-R8.0		8	16	16	15.5	16	32	150	2	B	○	
GM-2BFP-R10.0		10	20	20	19.5	20	40	150	2	B	○	

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

Application field

P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

E

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System code > B278

Cutting data > B492

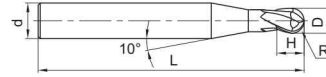
Nonstandard order > B541

Ball nose cutter **Semi-finishing**

GM-2BS



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMG303
GM-2BS-R0.15		0.15	0.3	4	0.5	50	2	●
GM-2BS-R0.20		0.2	0.4	4	0.6	50	2	●
GM-2BS-R0.25		0.25	0.5	4	0.8	50	2	●
GM-2BS-R0.30		0.3	0.6	4	0.9	50	2	●
GM-2BS-R0.35		0.35	0.7	4	1	50	2	●
GM-2BS-R0.40		0.4	0.8	4	1.2	50	2	●
GM-2BS-R0.45		0.45	0.9	4	1.3	50	2	●
GM-2BS-R0.50		0.5	1	4	1.5	50	2	●
GM-2BS-R0.60		0.6	1.2	4	1.8	50	2	●
GM-2BS-R0.70		0.7	1.4	4	2	50	2	●
GM-2BS-R0.75		0.75	1.5	4	2.3	50	2	●
GM-2BS-R0.80		0.8	1.6	4	2.5	50	2	●
GM-2BS-R0.90		0.9	1.8	4	2.7	50	2	●
GM-2BS-R1.00		1	2	4	3	50	2	●
GM-2BS-R1.25		1.25	2.5	4	3.7	50	2	●
GM-2BS-R1.50		1.5	3	4	4.5	50	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



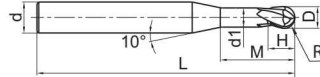
A

Ball nose cutter Semi-finishing

GM-2BP



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		KMG303
GM-2BP-R0.25-M04		0.25	0.5	4	0.45	0.7	4	50	2	●
GM-2BP-R0.25-M06		0.25	0.5	4	0.45	0.7	6	50	2	●
GM-2BP-R0.3-M04		0.3	0.6	4	0.55	0.9	4	50	2	●
GM-2BP-R0.3-M06		0.3	0.6	4	0.55	0.9	6	50	2	●
GM-2BP-R0.3-M08		0.3	0.6	4	0.55	0.9	8	50	2	●
GM-2BP-R0.4-M04		0.4	0.8	4	0.75	1.2	4	50	2	●
GM-2BP-R0.4-M06		0.4	0.8	4	0.75	1.2	6	50	2	●
GM-2BP-R0.4-M08		0.4	0.8	4	0.75	1.2	8	50	2	●
GM-2BP-R0.4-M10		0.4	0.8	4	0.75	1.2	10	50	2	●
GM-2BP-R0.5-M04		0.5	1	4	0.95	1.5	4	50	2	●
GM-2BP-R0.5-M06		0.5	1	4	0.95	1.5	6	50	2	●
GM-2BP-R0.5-M08		0.5	1	4	0.95	1.5	8	50	2	●
GM-2BP-R0.5-M10		0.5	1	4	0.95	1.5	10	50	2	●
GM-2BP-R0.5-M12		0.5	1	4	0.95	1.5	12	50	2	●
GM-2BP-R0.6-M06		0.6	1.2	4	1.15	1.8	6	50	2	●
GM-2BP-R0.6-M08		0.6	1.2	4	1.15	1.8	8	50	2	●
GM-2BP-R0.6-M12		0.6	1.2	4	1.15	1.8	12	50	2	●
GM-2BP-R0.6-M16		0.6	1.2	4	1.15	1.8	16	50	2	●
GM-2BP-R0.75-M08		0.75	1.5	4	1.45	2.3	8	50	2	●
GM-2BP-R0.75-M12		0.75	1.5	4	1.45	2.3	12	50	2	●
GM-2BP-R0.75-M16		0.75	1.5	4	1.45	2.3	16	50	2	●
GM-2BP-R1.0-M06		1	2	4	1.95	3	6	50	2	●
GM-2BP-R1.0-M08		1	2	4	1.95	3	8	50	2	●
GM-2BP-R1.0-M10		1	2	4	1.95	3	10	50	2	●
GM-2BP-R1.0-M12		1	2	4	1.95	3	12	50	2	●
GM-2BP-R1.0-M16		1	2	4	1.95	3	16	50	2	●
GM-2BP-R1.0-M20		1	2	4	1.95	3	20	50	2	●
GM-2BP-R1.25-M08		1.25	2.5	4	2.4	3.7	8	50	2	●
GM-2BP-R1.25-M12		1.25	2.5	4	2.4	3.7	12	50	2	●
GM-2BP-R1.25-M16		1.25	2.5	4	2.4	3.7	16	60	2	●
GM-2BP-R1.25-M20		1.25	2.5	4	2.4	3.7	20	60	2	●
GM-2BP-R1.5-M08		1.5	3	6	2.85	4.5	8	50	2	●
GM-2BP-R1.5-M10		1.5	3	6	2.85	4.5	10	50	2	●
GM-2BP-R1.5-M12		1.5	3	6	2.85	4.5	12	50	2	●
GM-2BP-R1.5-M16		1.5	3	6	2.85	4.5	16	60	2	●
GM-2BP-R1.5-M20		1.5	3	6	2.85	4.5	20	60	2	●
GM-2BP-R2.0-M10		2	4	6	3.85	6	10	60	2	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Drilling

D

Technical Information

E

Index

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

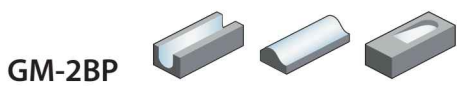
✓ Suitable

System code > B278

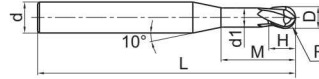
Cutting data > B492

Nonstandard order > B541

Ball nose cutter **Semi-finishing**



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		KMG303
GM-2BP-R2.0-M16		2	4	6	3.85	6	16	60	2	●
GM-2BP-R2.0-M20		2	4	6	3.85	6	20	60	2	●
GM-2BP-R2.0-M25		2	4	6	3.85	6	25	60	2	●
GM-2BP-R2.5-M16		2.5	5	6	4.85	7.5	16	60	2	●
GM-2BP-R2.5-M25		2.5	5	6	4.85	7.5	25	70	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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System code > B278

Cutting data > B492

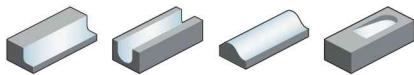
Nonstandard order > B541



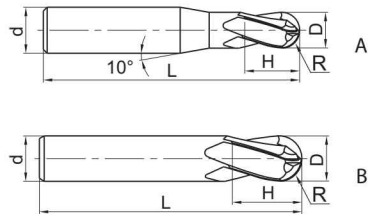
A

Ball nose cutter Semi-finishing

GM-4B



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG303
GM-4B-R1.5		1.5	3	6	6	50	4	A	●
GM-4B-R2.0		2	4	6	8	50	4	A	●
GM-4B-R2.5		2.5	5	6	10	50	4	A	●
GM-4B-R3.0		3	6	6	12	50	4	B	●
GM-4B-R4.0		4	8	8	16	60	4	B	●
GM-4B-R5.0		5	10	10	20	75	4	B	●
GM-4B-R6.0		6	12	12	24	75	4	B	●
GM-4B-R7.0		7	14	14	28	75	4	B	●
GM-4B-R8.0		8	16	16	32	100	4	B	●
GM-4B-R9.0		9	18	18	36	100	4	B	●
GM-4B-R10.0		10	20	20	40	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

E

Index

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

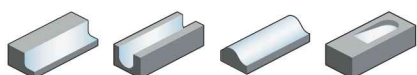
System code > B278

Cutting data > B492

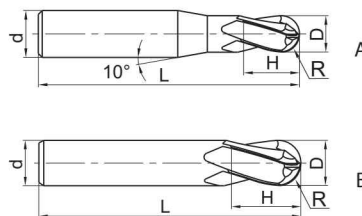
Nonstandard order > B541

Ball nose cutter long shank **Semi-finishing**

GM-4BL



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG303
GM-4BL-R1.5		1.5	3	6	6	75	4	A	○
GM-4BL-R2.0		2	4	6	8	75	4	A	○
GM-4BL-R2.5		2.5	5	6	10	75	4	A	○
GM-4BL-R3.0		3	6	6	12	75	4	B	○
GM-4BL-R4.0		4	8	8	16	100	4	B	○
GM-4BL-R5.0		5	10	10	20	100	4	B	○
GM-4BL-R6.0		6	12	12	24	100	4	B	○
GM-4BL-R7.0		7	14	14	28	100	4	B	○
GM-4BL-R8.0		8	16	16	32	150	4	B	○
GM-4BL-R10.0		10	20	20	40	150	4	B	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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System code > B278

Cutting data > B492

Nonstandard order > B541

Solid carbide milling GM series

A

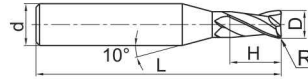
Torus mill

Semi-finishing

GM-2R



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMG303
GM-2R-D1.0R0.2		0.2	1	4	3	50	2	○
GM-2R-D1.5R0.2		0.2	1.5	4	4	50	2	○
GM-2R-D2.0R0.2		0.2	2	4	6	50	2	○
GM-2R-D2.0R0.5		0.5	2	4	6	50	2	○
GM-2R-D2.5R0.2		0.2	2.5	4	8	50	2	○
GM-2R-D2.5R0.5		0.5	2.5	4	8	50	2	○
GM-2R-D3.0R0.2		0.2	3	4	8	50	2	○
GM-2R-D3.0R0.3		0.3	3	4	8	50	2	○
GM-2R-D3.0R0.5		0.5	3	4	8	50	2	○
GM-2R-D4.0R0.2		0.2	4	4	11	50	2	○
GM-2R-D4.0R0.3		0.3	4	4	11	50	2	○
GM-2R-D4.0R0.5		0.5	4	4	11	50	2	○
GM-2R-D4.0R1.0		1	4	4	11	50	2	○
GM-2R-D5.0R0.3		0.3	5	6	13	50	2	○
GM-2R-D5.0R0.5		0.5	5	6	13	50	2	○
GM-2R-D5.0R1.0		1	5	6	13	50	2	○
GM-2R-D6.0R0.3		0.3	6	6	16	50	2	○
GM-2R-D6.0R0.5		0.5	6	6	16	50	2	○
GM-2R-D6.0R1.0		1	6	6	16	50	2	○
GM-2R-D8.0R0.3		0.3	8	8	20	60	2	○
GM-2R-D8.0R0.5		0.5	8	8	20	60	2	○
GM-2R-D8.0R1.0		1	8	8	20	60	2	○
GM-2R-D10.0R0.5		0.5	10	10	25	75	2	○
GM-2R-D10.0R1.0		1	10	10	25	75	2	○
GM-2R-D10.0R1.5		1.5	10	10	25	75	2	●
GM-2R-D10.0R2.0		2	10	10	25	75	2	○
GM-2R-D12.0R0.5		0.5	12	12	30	75	2	○
GM-2R-D12.0R1.0		1	12	12	30	75	2	○
GM-2R-D12.0R1.5		1.5	12	12	30	75	2	○
GM-2R-D12.0R2.0		2	12	12	30	75	2	●

Milling

C

Drilling

D

Technical Information

- Ex stock ○ On demand
- * With internal cooling

E

Application field

P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

Index

System code > B278

Cutting data > B492

Nonstandard order > B541

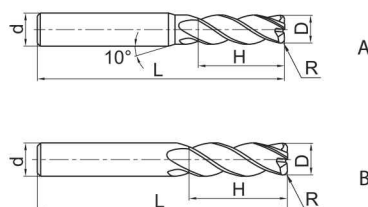
Torus mill

Semi-finishing

GM-4R



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG303
GM-4R-D3.0R0.2		0.2	3	4	8	50	4	A	●
GM-4R-D4.0R0.3		0.3	4	4	10	50	4	B	○
GM-4R-D4.0R0.5		0.5	4	4	10	50	4	B	●
GM-4R-D5.0R0.5		0.5	5	6	13	50	4	A	●
GM-4R-D5.0R1.0		1	5	6	13	50	4	A	●
GM-4R-D6.0R0.5		0.5	6	6	16	50	4	B	●
GM-4R-D6.0R1.0		1	6	6	16	50	4	B	●
GM-4R-D8.0R0.5		0.5	8	8	20	60	4	B	●
GM-4R-D8.0R1.0		1	8	8	20	60	4	B	●
GM-4R-D10.0R0.5		0.5	10	10	25	75	4	B	●
GM-4R-D10.0R1.0		1	10	10	25	75	4	B	●
GM-4R-D10.0R2.0		2	10	10	25	75	4	B	●
GM-4R-D10.0R3.0		3	10	10	25	75	4	B	●
GM-4R-D12.0R0.5		0.5	12	12	30	75	4	B	●
GM-4R-D12.0R1.0		1	12	12	30	75	4	B	●
GM-4R-D12.0R2.0		2	12	12	30	75	4	B	●
GM-4R-D12.0R3.0		3	12	12	30	75	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



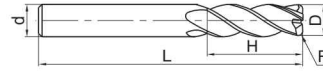
A

Torus mill long shank Semi-finishing

GM-4RL



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMG303
GM-4RL-D6.0R0.5		0.5	6	6	16	75	4	●
GM-4RL-D6.0R1.0		1	6	6	16	75	4	●
GM-4RL-D8.0R0.5		0.5	8	8	20	100	4	●
GM-4RL-D8.0R1.0		1	8	8	20	100	4	●
GM-4RL-D10.0R0.5		0.5	10	10	25	100	4	●
GM-4RL-D10.0R1.0		1	10	10	25	100	4	●
GM-4RL-D10.0R2.0		2	10	10	25	100	4	●
GM-4RL-D12.0R0.5		0.5	12	12	30	100	4	○
GM-4RL-D12.0R1.0		1	12	12	30	100	4	●
GM-4RL-D12.0R2.0		2	12	12	30	100	4	●
GM-4RL-D16.0R1.0		1	16	16	45	150	4	●
GM-4RL-D16.0R2.0		2	16	16	45	150	4	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable
✓ Suitable

Drilling

D

Technical Information

E

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System code > B278

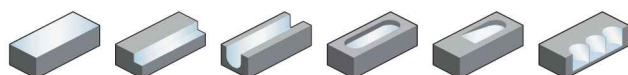
Cutting data > B492

Nonstandard order > B541

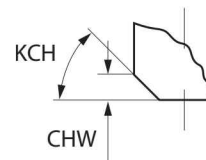
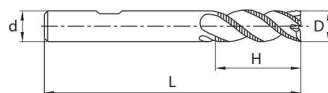
End mill long cutting edge

General roughing

5602R303GR



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	H	L	KCH	CHW		KMG303
5602R303GR-0600		6	6	13	57	45	0.25	3	●
5602R303GR-0800		8	8	19	63	45	0.25	3	●

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B278

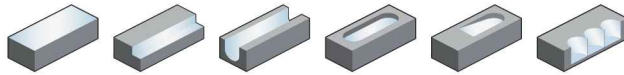
Cutting data > B492

Nonstandard order > B541

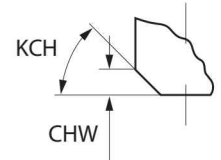
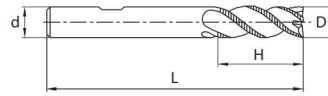
A

End mill long cutting edge General roughing

5602R304GR



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	H	L	KCH	CHW		KMG303
5602R304GR-1000		10	10	22	72	45	0.5	4	●
5602R304GR-1200		12	12	26	83	45	0.5	4	●
5602R304GR-1400		14	14	30	90	45	0.5	4	○
5602R304GR-1600		16	16	32	92	45	0.5	4	●
5602R304GR-2000		20	20	38	104	45	0.5	4	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field						
P	M	K	N	S	H	
✓	✓	✓				✓ Very suitable
						✓ Suitable

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

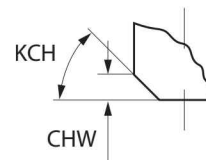
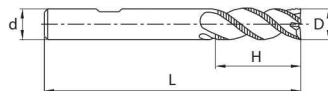
Nonstandard order > B541

End mill long cutting edge **General roughing**

5602R305GR



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]					Teeth	Grade	
		D	d (h6)	H	L	KCH		CHW	KMG303
5602R305GR-2500		25	25	45	121	45	0.5	5	o

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

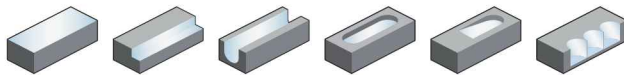
Nonstandard order > B541



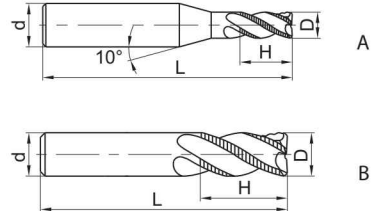
A

End mill serrated teeth Semi-finishing

GM-4W



- Factory standard
- Centre cutting
- Helix angle 30°



Turning

B

Milling

C

Drilling

D

Technical Information

E

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Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG405
GM-4W-D6.0		6	6	16	50	4	B	●
GM-4W-D7.0		7	8	20	60	4	A	●
GM-4W-D8.0		8	8	20	60	4	B	●
GM-4W-D9.0		9	10	22	75	4	A	●
GM-4W-D10.0		10	10	25	75	4	B	●
GM-4W-D11.0		11	12	26	75	4	A	●
GM-4W-D12.0		12	12	30	75	4	B	●
GM-4W-D16.0		16	16	45	100	4	B	●
GM-4W-D20.0		20	20	45	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			

- ✓ Very suitable
- ✓ Suitable

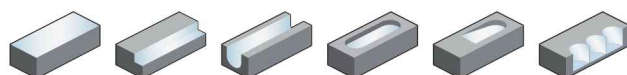
System code > B278

Cutting data > B492

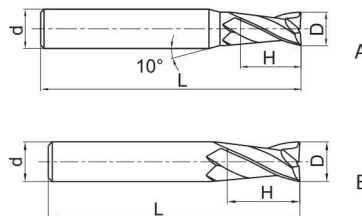
Nonstandard order > B541

End mill **High-performance machining**

PM-2E



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG405
PM-2E-D1.0S		1	4	3	50	2	A	●
PM-2E-D1.5S		1.5	4	4	50	2	A	●
PM-2E-D2.0S		2	4	6	50	2	A	●
PM-2E-D2.5S		2.5	4	8	50	2	A	●
PM-2E-D3.0S		3	4	8	50	2	A	●
PM-2E-D4.0S		4	4	11	50	2	B	●
PM-2E-D1.0		1	6	3	50	2	A	●
PM-2E-D1.5		1.5	6	4	50	2	A	●
PM-2E-D2.0		2	6	6	50	2	A	●
PM-2E-D2.5		2.5	6	8	50	2	A	●
PM-2E-D3.0		3	6	8	50	2	A	●
PM-2E-D3.5		3.5	6	10	50	2	A	●
PM-2E-D4.0		4	6	11	50	2	A	●
PM-2E-D4.5		4.5	6	11	50	2	A	●
PM-2E-D5.0		5	6	13	50	2	A	●
PM-2E-D5.5		5.5	6	16	50	2	A	●
PM-2E-D6.0		6	6	16	50	2	B	●
PM-2E-D7.0		7	8	20	60	2	A	●
PM-2E-D8.0		8	8	20	60	2	B	●
PM-2E-D9.0		9	10	22	75	2	A	●
PM-2E-D10.0		10	10	25	75	2	B	●
PM-2E-D11.0		11	12	26	75	2	A	○
PM-2E-D12.0		12	12	30	75	2	B	●
PM-2E-D14.0		14	14	32	75	2	B	●
PM-2E-D16.0		16	16	45	100	2	B	●
PM-2E-D18.0		18	18	45	100	2	B	○
PM-2E-D20.0		20	20	45	100	2	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

Turning

B

Milling

C

Drilling

D

Technical Information

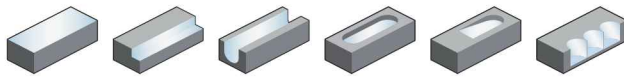
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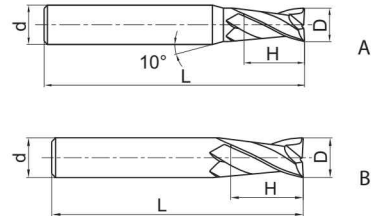
A

End mill long cutting edge High-performance machining

PM-2EL



- Factory standard
- Centre cutting
- Helix angle 30°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG405
PM-2EL-D3.0		3	6	12	75	2	A	●
PM-2EL-D4.0		4	6	15	75	2	A	●
PM-2EL-D5.0		5	6	20	75	2	A	●
PM-2EL-D6.0		6	6	20	75	2	B	●
PM-2EL-D8.0		8	8	25	100	2	B	●
PM-2EL-D10.0		10	10	30	100	2	B	●
PM-2EL-D12.0		12	12	35	100	2	B	●
PM-2EL-D14.0		14	14	40	100	2	B	○
PM-2EL-D16.0		16	16	50	150	2	B	●
PM-2EL-D20.0		20	20	55	150	2	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

D

Technical Information

E

Index

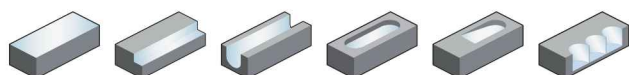
System code > B278

Cutting data > B492

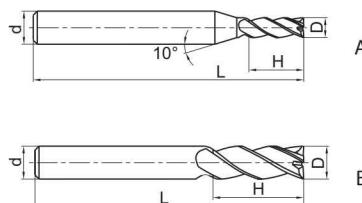
Nonstandard order > B541

End mill **High-performance machining**

PM-4E-G



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG405
PM-4E-D1.0S-G		1	4	3	50	4	A	●
PM-4E-D1.5S-G		1.5	4	4	50	4	A	●
PM-4E-D2.0S-G		2	4	6	50	4	A	●
PM-4E-D2.5S-G		2.5	4	8	50	4	A	●
PM-4E-D3.0S-G		3	4	8	50	4	A	●
PM-4E-D4.0S-G		4	4	11	50	4	B	●
PM-4E-D1.0-G		1	6	3	50	4	A	●
PM-4E-D1.5-G		1.5	6	4	50	4	A	●
PM-4E-D2.0-G		2	6	6	50	4	A	●
PM-4E-D2.5-G		2.5	6	8	50	4	A	●
PM-4E-D3.0-G		3	6	8	50	4	A	●
PM-4E-D3.5-G		3.5	6	10	50	4	A	●
PM-4E-D4.0-G		4	6	11	50	4	A	●
PM-4E-D4.5-G		4.5	6	11	50	4	A	●
PM-4E-D5.0-G		5	6	13	50	4	A	●
PM-4E-D5.5-G		5.5	6	16	50	4	A	●
PM-4E-D6.0-G		6	6	16	50	4	B	●
PM-4E-D7.0-G		7	8	20	60	4	A	●
PM-4E-D8.0-G		8	8	20	60	4	B	●
PM-4E-D9.0-G		9	10	22	75	4	A	●
PM-4E-D10.0-G		10	10	25	75	4	B	●
PM-4E-D11.0-G		11	12	26	75	4	A	●
PM-4E-D12.0-G		12	12	30	75	4	B	●
PM-4E-D14.0-G		14	14	32	75	4	B	●
PM-4E-D16.0-G		16	16	45	100	4	B	●
PM-4E-D18.0-G		18	18	45	100	4	B	●
PM-4E-D20.0-G		20	20	45	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

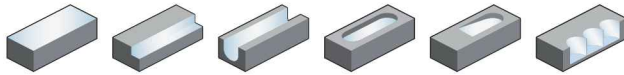
Nonstandard order > B541



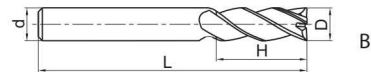
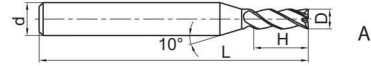
A

End mill long cutting edge High-performance machining

PM-4EL-G



- Factory standard
- Centre cutting
- Helix angle 30°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG405
PM-4EL-D3.0-G		3	6	12	75	4	A	○
PM-4EL-D4.0-G		4	6	15	75	4	A	○
PM-4EL-D5.0-G		5	6	20	75	4	A	○
PM-4EL-D6.0-G		6	6	20	75	4	B	○
PM-4EL-D8.0-G		8	8	25	100	4	B	○
PM-4EL-D10.0-G		10	10	30	100	4	B	○
PM-4EL-D12.0-G		12	12	35	100	4	B	○
PM-4EL-D14.0-G		14	14	40	100	4	B	○
PM-4EL-D16.0-G		16	16	50	150	4	B	○
PM-4EL-D20.0-G		20	20	55	150	4	B	○

- Ex stock ○ On demand
- * With internal cooling

C

Drilling

D

Technical Information

E

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Application field

P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

System code > B278

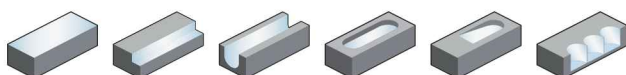
Cutting data > B492

Nonstandard order > B541

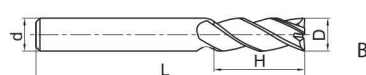
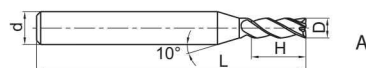
End mill extra long cutting edge

High-performance machining

PM-4EX-G



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG405
PM-4EX-D3.0-G		3	6	20	75	4	A	●
PM-4EX-D4.0-G		4	6	25	75	4	A	●
PM-4EX-D5.0-G		5	6	30	75	4	A	●
PM-4EX-D6.0-G		6	6	30	75	4	B	●
PM-4EX-D8.0-G		8	8	40	100	4	B	●
PM-4EX-D10.0-G		10	10	50	110	4	B	●
PM-4EX-D12.0-G		12	12	50	110	4	B	●
PM-4EX-D16.0-G		16	16	70	150	4	B	●
PM-4EX-D20.0-G		20	20	75	150	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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System code > B278

Cutting data > B492

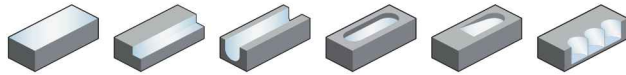
Nonstandard order > B541



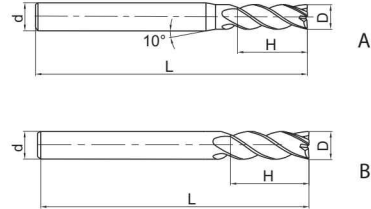
A

End mill High-performance machining

PM-4E



- Factory standard
- Centre cutting
- Helix angle 45°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG405
PM-4E-D1.0S		1	4	3	50	4	A	●
PM-4E-D1.5S		1.5	4	4	50	4	A	●
PM-4E-D2.0S		2	4	6	50	4	A	●
PM-4E-D2.5S		2.5	4	8	50	4	A	●
PM-4E-D3.0S		3	4	8	50	4	A	●
PM-4E-D4.0S		4	4	11	50	4	B	●
PM-4E-D1.0		1	6	3	50	4	A	●
PM-4E-D1.5		1.5	6	4	50	4	A	●
PM-4E-D2.0		2	6	6	50	4	A	●
PM-4E-D2.5		2.5	6	8	50	4	A	●
PM-4E-D3.0		3	6	8	50	4	A	●
PM-4E-D3.5		3.5	6	10	50	4	A	●
PM-4E-D4.0		4	6	11	50	4	A	●
PM-4E-D4.5		4.5	6	11	50	4	A	●
PM-4E-D5.0		5	6	13	50	4	A	●
PM-4E-D5.5		5.5	6	16	50	4	A	●
PM-4E-D6.0		6	6	16	50	4	B	●
PM-4E-D7.0		7	8	20	60	4	A	●
PM-4E-D8.0		8	8	20	60	4	B	●
PM-4E-D9.0		9	10	22	75	4	A	●
PM-4E-D10.0		10	10	25	75	4	B	●
PM-4E-D11.0		11	12	26	75	4	A	●
PM-4E-D12.0		12	12	30	75	4	B	●
PM-4E-D14.0		14	14	32	75	4	B	●
PM-4E-D16.0		16	16	45	100	4	B	●
PM-4E-D18.0		18	18	45	100	4	B	●
PM-4E-D20.0		20	20	45	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

E

Index

Application field						
P	M	K	N	S	H	
✓	✓	✓			✓	✓ Very suitable ✓ Suitable

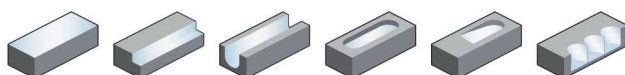
System code > B278

Cutting data > B492

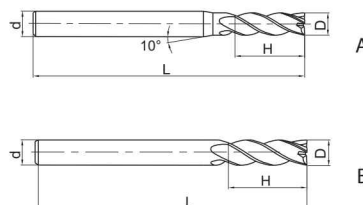
Nonstandard order > B541

End mill long cutting edge **High-performance machining**

PM-4EL



- Factory standard
- Centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG405
PM-4EL-D3.0		3	6	12	75	4	A	●
PM-4EL-D4.0		4	6	15	75	4	A	●
PM-4EL-D5.0		5	6	20	75	4	A	●
PM-4EL-D6.0		6	6	20	75	4	B	●
PM-4EL-D8.0		8	8	25	100	4	B	●
PM-4EL-D10.0		10	10	30	100	4	B	●
PM-4EL-D12.0		12	12	35	100	4	B	●
PM-4EL-D14.0		14	14	40	100	4	B	●
PM-4EL-D16.0		16	16	50	150	4	B	●
PM-4EL-D20.0		20	20	55	150	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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System code > B278

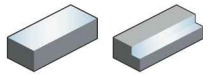
Cutting data > B492

Nonstandard order > B541

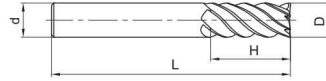
A

End mill High-performance machining

PM-6E



- Factory standard
- Non-centre cutting
- Helix angle 45°



Turning

B

Article	*	Dimensions [mm]				Teeth	Grade
		D	d (h6)	H	L		KMG405
PM-6E-D6.0		6	6	18	60	6	●
PM-6E-D8.0		8	8	20	60	6	●
PM-6E-D10.0		10	10	30	75	6	●
PM-6E-D12.0		12	12	32	75	6	●
PM-6E-D16.0		16	16	40	100	6	●
PM-6E-D20.0		20	20	45	100	6	●

- Ex stock ○ On demand
- * With internal cooling

Milling

C

Application field						
P	M	K	N	S	H	
✓	✓	✓			✓	✓ Very suitable
						✓ Suitable

Drilling

D

Technical Information

E

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System code > B278

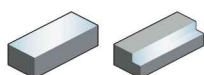
Cutting data > B492

Nonstandard order > B541

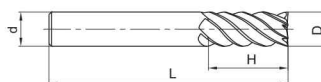
End mill long cutting edge

High-performance machining

PM-6EL



- Factory standard
- Non-centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]				Teeth	Grade
		D	d (h6)	H	L		KMG405
PM-6EL-D6.0		6	6	24	75	6	●
PM-6EL-D8.0		8	8	32	75	6	●
PM-6EL-D10.0		10	10	40	100	6	●
PM-6EL-D12.0		12	12	45	100	6	●
PM-6EL-D16.0		16	16	64	150	6	●
PM-6EL-D20.0		20	20	75	150	6	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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System code > B278

Cutting data > B492

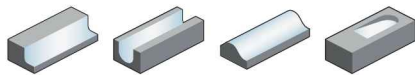
Nonstandard order > B541



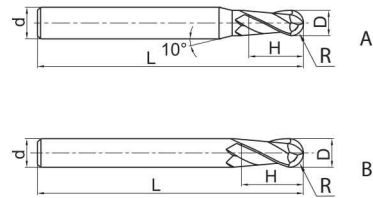
A

Ball nose cutter High-performance machining

PM-2B



- Factory standard
- Centre cutting
- Helix angle 30°



Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG405
PM-2B-R0.5S		0.5	1	4	2	50	2	A	●
PM-2B-R0.75S		0.75	1.5	4	3	50	2	A	●
PM-2B-R1.0S		1	2	4	4	50	2	A	●
PM-2B-R1.25S		1.25	2.5	4	5	50	2	A	●
PM-2B-R1.5S		1.5	3	4	6	50	2	A	●
PM-2B-R2.0S		2	4	4	8	50	2	B	●
PM-2B-R0.5		0.5	1	6	2	50	2	A	●
PM-2B-R0.75		0.75	1.5	6	3	50	2	A	●
PM-2B-R1.0		1	2	6	4	50	2	A	●
PM-2B-R1.25		1.25	2.5	6	5	50	2	A	●
PM-2B-R1.5		1.5	3	6	6	50	2	A	●
PM-2B-R1.75		1.75	3.5	6	8	50	2	A	●
PM-2B-R2.0		2	4	6	8	50	2	A	●
PM-2B-R2.5		2.5	5	6	10	50	2	A	●
PM-2B-R2.75		2.75	5.5	6	12	50	2	A	●
PM-2B-R3.0		3	6	6	12	50	2	B	●
PM-2B-R3.5		3.5	7	8	14	60	2	A	●
PM-2B-R4.0		4	8	8	16	60	2	B	●
PM-2B-R4.5		4.5	9	10	18	75	2	A	●
PM-2B-R5.0		5	10	10	20	75	2	B	●
PM-2B-R6.0		6	12	12	24	75	2	B	●
PM-2B-R7.0		7	14	14	28	75	2	B	●
PM-2B-R8.0		8	16	16	32	100	2	B	●
PM-2B-R10.0		10	20	20	40	100	2	B	●

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

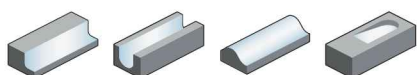
System code > B278

Cutting data > B492

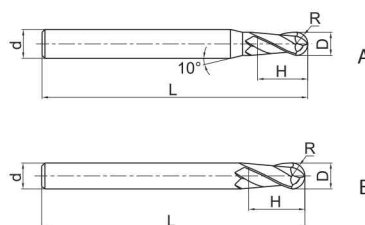
Nonstandard order > B541

Ball nose cutter long shank High-performance machining

PM-2BL



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG405
PM-2BL-R1.0		1	2	6	4	75	2	A	●
PM-2BL-R1.25		1.25	2.5	6	5	75	2	A	●
PM-2BL-R1.5		1.5	3	6	6	75	2	A	●
PM-2BL-R1.75		1.75	3.5	6	8	75	2	A	●
PM-2BL-R2.0		2	4	6	8	75	2	A	●
PM-2BL-R2.5		2.5	5	6	10	75	2	A	●
PM-2BL-R2.75		2.75	5.5	6	12	75	2	A	●
PM-2BL-R3.0		3	6	6	12	75	2	B	●
PM-2BL-R3.5		3.5	7	8	14	75	2	A	●
PM-2BL-R4.0		4	8	8	16	100	2	B	●
PM-2BL-R4.5		4.5	9	10	18	100	2	A	●
PM-2BL-R5.0		5	10	10	20	100	2	B	●
PM-2BL-R6.0		6	12	12	24	100	2	B	●
PM-2BL-R7.0		7	14	14	28	100	2	B	●
PM-2BL-R8.0		8	16	16	32	150	2	B	●
PM-2BL-R10.0		10	20	20	40	150	2	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

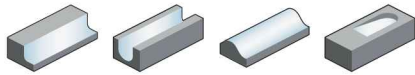
Nonstandard order > B541



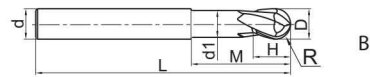
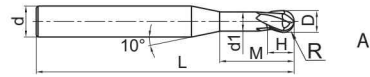
A

Ball nose cutter short cutting edge High-performance machining

PM-2BFP



- Factory standard
- Centre cutting
- Helix angle 30°



Turning

B

Milling

Article	*	Dimensions [mm]								Teeth	Geometry	Grade
		R	D	d (h6)	d ₁	H	M	L	KMG405			
PM-2BFP-R0.5		0.5	1	6	0.95	1	2.5	75	2	A	●	
PM-2BFP-R0.75		0.75	1.5	6	1.45	1.5	3	75	2	A	●	
PM-2BFP-R1.0		1	2	6	1.95	2	4	75	2	A	●	
PM-2BFP-R1.5		1.5	3	6	2.85	3	6	75	2	A	●	
PM-2BFP-R2.0		2	4	6	3.85	4	8	75	2	A	●	
PM-2BFP-R2.5		2.5	5	6	4.85	5	10	75	2	A	●	
PM-2BFP-R3.0		3	6	6	5.8	6	12	75	2	B	●	
PM-2BFP-R4.0		4	8	8	7.8	8	16	100	2	B	●	
PM-2BFP-R5.0		5	10	10	9.6	10	20	100	2	B	●	
PM-2BFP-R6.0		6	12	12	11.5	12	24	100	2	B	●	
PM-2BFP-R8.0		8	16	16	15.5	16	32	150	2	B	●	
PM-2BFP-R10.0		10	20	20	19.5	20	40	150	2	B	●	

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

E

Index

System code > B278

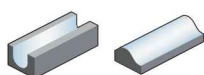
Cutting data > B492

Nonstandard order > B541

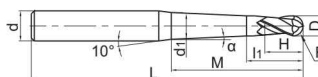
Ball nose cutter conical neck

High-performance machining

PM-2BC



- Straight shank
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]										Teeth	Grade KMG405
		R	D	d (h6)	d ₁	M	H	L	α	l ₁			
PM-2BC05-R0.25-M03		0.25	0.5	4	0.49	3	0.5	50	0.5	1.5	2	○	
PM-2BC05-R0.25-M05		0.25	0.5	4	0.53	5	0.5	50	0.5	1.5	2	○	
PM-2BC10-R0.25-M03		0.25	0.5	4	0.52	3	0.5	50	1	1.5	2	○	
PM-2BC10-R0.25-M05		0.25	0.5	4	0.59	5	0.5	50	1	1.5	2	○	
PM-2BC15-R0.25-M03		0.25	0.5	4	0.54	3	0.5	50	1.5	1.5	2	○	
PM-2BC15-R0.25-M05		0.25	0.5	4	0.65	5	0.5	50	1.5	1.5	2	○	
PM-2BC05-R0.30-M05		0.3	0.6	4	0.62	5	0.6	50	0.5	1.6	2	○	
PM-2BC05-R0.30-M08		0.3	0.6	4	0.68	8	0.6	50	0.5	1.6	2	○	
PM-2BC10-R0.30-M05		0.3	0.6	4	0.68	5	0.6	50	1	1.6	2	○	
PM-2BC10-R0.30-M08		0.3	0.6	4	0.79	8	0.6	50	1	1.6	2	○	
PM-2BC10-R0.30-M10		0.3	0.6	4	0.86	10	0.6	50	1	1.6	2	○	
PM-2BC10-R0.30-M12		0.3	0.6	4	0.93	12	0.6	50	1	1.6	2	○	
PM-2BC10-R0.30-M15		0.3	0.6	4	1.03	15	0.6	50	1	1.6	2	○	
PM-2BC15-R0.30-M05		0.3	0.6	4	0.74	5	0.6	50	1.5	1.6	2	○	
PM-2BC15-R0.30-M08		0.3	0.6	4	0.9	8	0.6	50	1.5	1.6	2	○	
PM-2BC05-R0.40-M08		0.4	0.8	4	0.87	8	0.8	50	0.5	1.8	2	○	
PM-2BC10-R0.40-M08		0.4	0.8	4	0.98	8	0.8	50	1	1.8	2	○	
PM-2BC15-R0.40-M08		0.4	0.8	4	1.09	8	0.8	50	1.5	1.8	2	○	
PM-2BC05-R0.40-M12		0.4	0.8	4	0.94	12	0.8	60	0.5	1.8	2	○	
PM-2BC10-R0.40-M12		0.4	0.8	4	1.12	12	0.8	60	1	1.8	2	○	
PM-2BC15-R0.40-M12		0.4	0.8	4	1.3	12	0.8	60	1.5	1.8	2	○	
PM-2BC05-R0.50-M10		0.5	1	6	1.08	10	1	60	0.5	2.5	2	○	
PM-2BC05-R0.50-M15		0.5	1	6	1.16	15	1	60	0.5	2.5	2	○	
PM-2BC10-R0.50-M10		0.5	1	6	1.21	10	1	60	1	2.5	2	○	
PM-2BC10-R0.50-M15		0.5	1	6	1.38	15	1	60	1	2.5	2	○	
PM-2BC15-R0.50-M10		0.5	1	6	1.34	10	1	60	1.5	2.5	2	○	
PM-2BC15-R0.50-M15		0.5	1	6	1.6	15	1	60	1.5	2.5	2	○	
PM-2BC20-R0.50-M15		0.5	1	6	1.82	15	1	60	2	2.5	2	○	
PM-2BC05-R0.50-M20		0.5	1	6	1.25	20	1	70	0.5	2.5	2	○	
PM-2BC05-R0.50-M25		0.5	1	6	1.34	25	1	70	0.5	2.5	2	○	
PM-2BC05-R0.50-M30		0.5	1	6	1.42	30	1	70	0.5	2.5	2	○	
PM-2BC10-R0.50-M20		0.5	1	6	1.56	20	1	70	1	2.5	2	○	
PM-2BC10-R0.50-M25		0.5	1	6	1.73	25	1	70	1	2.5	2	○	
PM-2BC10-R0.50-M30		0.5	1	6	1.91	30	1	70	1	2.5	2	○	
PM-2BC15-R0.50-M20		0.5	1	6	1.86	20	1	70	1.5	2.5	2	○	
PM-2BC20-R0.50-M20		0.5	1	6	2.17	20	1	70	2	2.5	2	○	
PM-2BC30-R0.50-M20		0.5	1	6	2.78	20	1	70	3	2.5	2	○	

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

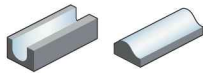
Nonstandard order > B541



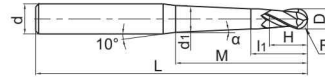
Ball nose cutter conical neck

High-performance machining

PM-2BC



- Straight shank
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]										Teeth	Grade
		R	D	d (h6)	d ₁	M	H	L	α	I ₁	KMG405		
PM-2BC50-R0.50-M20		0.5	1	6	4.01	20	1	70	5	2.5	2	○	
PM-2BC10-R0.50-M35		0.5	1	6	2.08	35	1	80	1	2.5	2	○	
PM-2BC05-R0.60-M12		0.6	1.2	6	1.31	12	1.2	60	0.5	2.7	2	○	
PM-2BC10-R0.60-M12		0.6	1.2	6	1.47	12	1.2	60	1	2.7	2	○	
PM-2BC15-R0.60-M12		0.6	1.2	6	1.63	12	1.2	60	1.5	2.7	2	○	
PM-2BC05-R0.60-M24		0.6	1.2	6	1.52	24	1.2	70	0.5	2.7	2	○	
PM-2BC10-R0.60-M24		0.6	1.2	6	1.89	24	1.2	70	1	2.7	2	○	
PM-2BC15-R0.60-M24		0.6	1.2	6	2.26	24	1.2	70	1.5	2.7	2	○	
PM-2BC05-R0.75-M10		0.75	1.5	6	1.57	10	1.5	60	0.5	3	2	○	
PM-2BC05-R0.75-M15		0.75	1.5	6	1.65	15	1.5	60	0.5	3	2	○	
PM-2BC10-R0.75-M10		0.75	1.5	6	1.69	10	1.5	60	1	3	2	○	
PM-2BC10-R0.75-M15		0.75	1.5	6	1.86	15	1.5	60	1	3	2	○	
PM-2BC15-R0.75-M10		0.75	1.5	6	1.81	10	1.5	60	1.5	3	2	○	
PM-2BC15-R0.75-M15		0.75	1.5	6	2.07	15	1.5	60	1.5	3	2	○	
PM-2BC05-R0.75-M30		0.75	1.5	6	1.92	30	1.5	70	0.5	3	2	○	
PM-2BC10-R0.75-M20		0.75	1.5	6	2.04	20	1.5	70	1	3	2	○	
PM-2BC10-R0.75-M30		0.75	1.5	6	2.39	30	1.5	70	1	3	2	○	
PM-2BC15-R0.75-M30		0.75	1.5	6	2.86	30	1.5	70	1.5	3	2	○	
PM-2BC05-R1.0-M20		1	2	6	2.18	20	2	60	0.5	4	2	○	
PM-2BC10-R1.0-M20		1	2	6	2.46	20	2	60	1	4	2	○	
PM-2BC10-R1.0-M25		1	2	6	2.64	25	2	60	1	4	2	○	
PM-2BC15-R1.0-M20		1	2	6	2.74	20	2	60	1.5	4	2	○	
PM-2BC05-R1.0-M30		1	2	6	2.36	30	2	70	0.5	4	2	○	
PM-2BC10-R1.0-M30		1	2	6	2.81	30	2	70	1	4	2	○	
PM-2BC15-R1.0-M30		1	2	6	3.27	30	2	70	1.5	4	2	○	
PM-2BC20-R1.0-M30		1	2	6	3.72	30	2	70	2	4	2	○	
PM-2BC30-R1.0-M30		1	2	6	4.63	30	2	70	3	4	2	○	
PM-2BC05-R1.0-M40		1	2	6	2.53	40	2	80	0.5	4	2	○	
PM-2BC10-R1.0-M35		1	2	6	2.99	35	2	80	1	4	2	○	
PM-2BC10-R1.0-M40		1	2	6	3.16	40	2	80	1	4	2	○	
PM-2BC15-R1.0-M40		1	2	6	3.79	40	2	80	1.5	4	2	○	
PM-2BC20-R1.0-M40		1	2	6	4.42	40	2	80	2	4	2	○	
PM-2BC30-R1.0-M40		1	2	6	5.68	40	2	80	3	4	2	○	
PM-2BC10-R1.0-M50		1	2	6	3.51	50	2	90	1	4	2	○	
PM-2BC05-R1.5-M30		1.5	3	6	3.32	30	3	70	0.5	6	2	○	
PM-2BC10-R1.5-M30		1.5	3	6	3.74	30	3	70	1	6	2	○	
PM-2BC15-R1.5-M30		1.5	3	6	4.16	30	3	70	1.5	6	2	○	

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

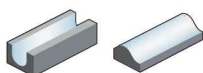
Cutting data > B492

Nonstandard order > B541

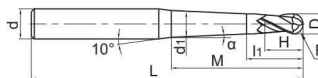
Ball nose cutter conical neck

High-performance machining

PM-2BC



- Straight shank
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]										Grade	
		R	D	d (h6)	d ₁	M	H	L	α	l ₁	Teeth	KMG405	
PM-2BC05-R1.5-M40		1.5	3	6	3.5	40	3	80	0.5	6	2	○	
PM-2BC10-R1.5-M40		1.5	3	6	4.09	40	3	80	1	6	2	○	
PM-2BC15-R1.5-M40		1.5	3	6	4.69	40	3	80	1.5	6	2	○	
PM-2BC05-R1.5-M50		1.5	3	6	3.67	50	3	90	0.5	6	2	○	
PM-2BC10-R1.5-M50		1.5	3	6	4.44	50	3	90	1	6	2	○	
PM-2BC15-R1.5-M50		1.5	3	6	5.21	50	3	90	1.5	6	2	○	
PM-2BC05-R2.0-M60		2	4	6	4.83	60	4	110	0.5	7	2	○	
PM-2BC10-R2.0-M60		2	4	6	5.76	60	4	110	1	7	2	○	

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

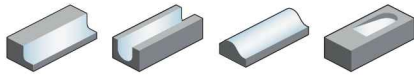
Nonstandard order > B541



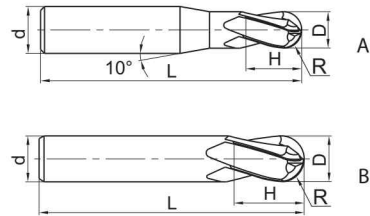
A

Ball nose cutter High-performance machining

PM-4B



- Factory standard
- Centre cutting
- Helix angle 30°



Turning

B

Milling

C

Drilling

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG405
PM-4B-R1.5		1.5	3	6	6	50	4	A	●
PM-4B-R2.0		2	4	6	8	50	4	A	●
PM-4B-R2.5		2.5	5	6	10	50	4	A	●
PM-4B-R3.0		3	6	6	12	50	4	B	●
PM-4B-R4.0		4	8	8	16	60	4	B	●
PM-4B-R5.0		5	10	10	20	75	4	B	●
PM-4B-R6.0		6	12	12	24	75	4	B	●
PM-4B-R7.0		7	14	14	28	75	4	B	●
PM-4B-R8.0		8	16	16	32	100	4	B	●
PM-4B-R9.0		9	18	18	36	100	4	B	●
PM-4B-R10.0		10	20	20	40	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

D

Technical Information

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

E

Index

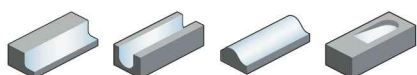
System code > B278

Cutting data > B492

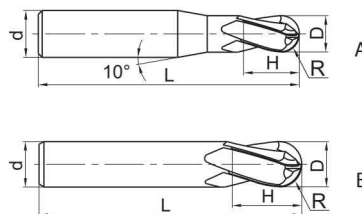
Nonstandard order > B541

Ball nose cutter long shank High-performance machining

PM-4BL



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG405
PM-4BL-R1.5		1.5	3	6	6	75	4	A	●
PM-4BL-R2.0		2	4	6	8	75	4	A	●
PM-4BL-R2.5		2.5	5	6	10	75	4	A	●
PM-4BL-R3.0		3	6	6	12	75	4	B	●
PM-4BL-R4.0		4	8	8	16	100	4	B	●
PM-4BL-R5.0		5	10	10	20	100	4	B	●
PM-4BL-R6.0		6	12	12	24	100	4	B	●
PM-4BL-R7.0		7	14	14	28	100	4	B	●
PM-4BL-R8.0		8	16	16	32	150	4	B	●
PM-4BL-R9.0		9	18	18	36	150	4	B	●
PM-4BL-R10.0		10	20	20	40	150	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

System code > B278

Cutting data > B492

Nonstandard order > B541



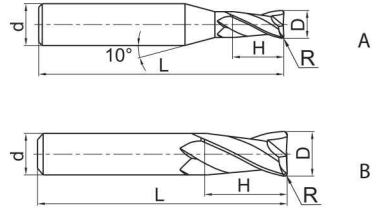
A

Torus mill High-performance machining

PM-2R



- Factory standard
- Centre cutting
- Helix angle 30°



Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG405
PM-2R-D1.0R0.2		0.2	1	4	3	50	2	A	●
PM-2R-D1.5R0.2		0.2	1.5	4	4	50	2	A	●
PM-2R-D2.0R0.2		0.2	2	4	6	50	2	A	●
PM-2R-D2.0R0.5		0.5	2	4	6	50	2	A	●
PM-2R-D2.5R0.2		0.2	2.5	4	8	50	2	A	●
PM-2R-D2.5R0.5		0.5	2.5	4	8	50	2	A	●
PM-2R-D3.0R0.2		0.2	3	4	8	50	2	A	●
PM-2R-D3.0R0.3		0.3	3	4	8	50	2	A	○
PM-2R-D3.0R0.5		0.5	3	4	8	50	2	A	●
PM-2R-D4.0R0.2		0.2	4	4	11	50	2	B	●
PM-2R-D4.0R0.3		0.3	4	4	11	50	2	B	●
PM-2R-D4.0R0.5		0.5	4	4	11	50	2	B	●
PM-2R-D4.0R1.0		1	4	4	11	50	2	B	●
PM-2R-D5.0R0.3		0.3	5	6	13	50	2	A	○
PM-2R-D5.0R0.5		0.5	5	6	13	50	2	A	●
PM-2R-D5.0R1.0		1	5	6	13	50	2	A	●
PM-2R-D6.0R0.3		0.3	6	6	16	50	2	B	●
PM-2R-D6.0R0.5		0.5	6	6	16	50	2	B	●
PM-2R-D6.0R1.0		1	6	6	16	50	2	B	●
PM-2R-D8.0R0.3		0.3	8	8	20	60	2	B	○
PM-2R-D8.0R0.5		0.5	8	8	20	60	2	B	●
PM-2R-D8.0R1.0		1	8	8	20	60	2	B	●
PM-2R-D10.0R0.5		0.5	10	10	25	75	2	B	●
PM-2R-D10.0R1.0		1	10	10	25	75	2	B	●
PM-2R-D10.0R1.5		1.5	10	10	25	75	2	B	●
PM-2R-D10.0R2.0		2	10	10	25	75	2	B	●
PM-2R-D12.0R0.5		0.5	12	12	30	75	2	B	●
PM-2R-D12.0R1.0		1	12	12	30	75	2	B	●
PM-2R-D12.0R1.5		1.5	12	12	30	75	2	B	●
PM-2R-D12.0R2.0		2	12	12	30	75	2	B	●

- Ex stock ○ On demand
- * With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

System code > B278

Cutting data > B492

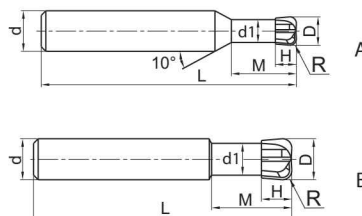
Nonstandard order > B541

End mill **High-performance machining**

PM-4H



- Factory standard
- Centre cutting
- Helix angle 0°



Article	*	Dimensions [mm]								Teeth	Geometry	Grade
		R	D	d (h6)	d ₁	H	M	L	KMG405			
PM-4H-D3.0R0.8		0.8	3	6	2.7	1.2	8	50	4	A	●	
PM-4H-D4.0R1.0		1	4	6	3.6	1.6	10	50	4	A	●	
PM-4H-D5.0R1.2		1.2	5	6	4.5	2	12.5	50	4	A	●	
PM-4H-D6.0R1.0		1	6	6	5.4	2.5	12	50	4	B	●	
PM-4H-D6.0R1.5		1.5	6	6	5.4	2.5	12	50	4	B	●	
PM-4H-D6.0R2.0		2	6	6	5.4	2.5	12	50	4	B	●	
PM-4H-D8.0R1.0		1	8	8	7	3.5	16	60	4	B	●	
PM-4H-D8.0R2.0		2	8	8	7	3.5	16	60	4	B	●	
PM-4H-D10.0R1.0		1	10	10	9	4	20	75	4	B	●	
PM-4H-D10.0R2.0		2	10	10	9	4	20	75	4	B	●	
PM-4H-D10.0R3.0		3	10	10	9	4	20	75	4	B	●	
PM-4H-D12.0R2.0		2	12	12	11	5	24	75	4	B	●	
PM-4H-D12.0R3.0		3	12	12	11	5	24	75	4	B	●	

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



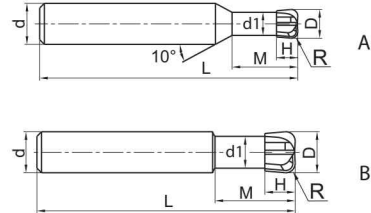
A

End mill long shank High-performance machining

PM-4HL



- Factory standard
- Centre cutting
- Helix angle 0°



Turning

B

Milling

C

Drilling

Article	*	Dimensions [mm]								Teeth	Geometry	Grade
		R	D	d (h6)	d ₁	H	M	L	KMG405			
PM-4HL-D4.0R1.0		1	4	6	3.6	1.6	10	75	4	A	●	
PM-4HL-D5.0R1.2		1.2	5	6	4.5	2	12.5	75	4	A	●	
PM-4HL-D6.0R1.0		1	6	6	5.4	2.5	12	75	4	B	●	
PM-4HL-D6.0R1.5		1.5	6	6	5.4	2.5	12	75	4	B	●	
PM-4HL-D6.0R2.0		2	6	6	5.4	2.5	12	75	4	B	●	
PM-4HL-D8.0R1.0		1	8	8	7	3.5	16	100	4	B	●	
PM-4HL-D8.0R2.0		2	8	8	7	3.5	16	100	4	B	●	
PM-4HL-D10.0R1.0		1	10	10	9	4	20	100	4	B	●	
PM-4HL-D10.0R2.0		2	10	10	9	4	20	100	4	B	●	
PM-4HL-D10.0R3.0		3	10	10	9	4	20	100	4	B	●	
PM-4HL-D12.0R2.0		2	12	12	11	5	24	100	4	B	●	
PM-4HL-D12.0R3.0		3	12	12	11	5	24	100	4	B	●	

● Ex stock ○ On demand

* With internal cooling

D

Technical Information

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

E

Index

System code > B278

Cutting data > B492

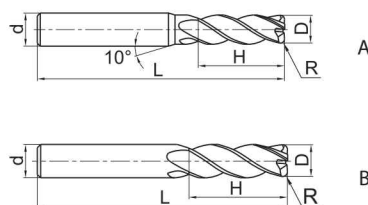
Nonstandard order > B541

Torus mill **High-performance machining**

PM-4R



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG405
PM-4R-D3.0R0.2		0.2	3	6	8	50	4	A	●
PM-4R-D4.0R0.3		0.3	4	6	10	50	4	A	●
PM-4R-D4.0R0.5		0.5	4	6	10	50	4	A	●
PM-4R-D5.0R0.5		0.5	5	6	13	50	4	A	●
PM-4R-D5.0R1.0		1	5	6	13	50	4	A	●
PM-4R-D6.0R0.5		0.5	6	6	16	50	4	B	●
PM-4R-D6.0R1.0		1	6	6	16	50	4	B	●
PM-4R-D8.0R0.5		0.5	8	8	20	60	4	B	●
PM-4R-D8.0R1.0		1	8	8	20	60	4	B	●
PM-4R-D10.0R0.5		0.5	10	10	25	75	4	B	●
PM-4R-D10.0R1.0		1	10	10	25	75	4	B	●
PM-4R-D10.0R2.0		2	10	10	25	75	4	B	●
PM-4R-D10.0R3.0		3	10	10	25	75	4	B	●
PM-4R-D12.0R0.5		0.5	12	12	30	75	4	B	●
PM-4R-D12.0R1.0		1	12	12	30	75	4	B	●
PM-4R-D12.0R2.0		2	12	12	30	75	4	B	●
PM-4R-D12.0R3.0		3	12	12	30	75	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



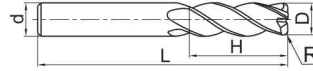
A

Torus mill long shank High-performance machining

PM-4RL



- Factory standard
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMG405
PM-4RL-D6.0R0.5		0.5	6	6	16	75	4	●
PM-4RL-D6.0R1.0		1	6	6	16	75	4	●
PM-4RL-D8.0R0.5		0.5	8	8	20	100	4	●
PM-4RL-D8.0R1.0		1	8	8	20	100	4	○
PM-4RL-D10.0R0.5		0.5	10	10	25	100	4	○
PM-4RL-D10.0R1.0		1	10	10	25	100	4	●
PM-4RL-D10.0R2.0		2	10	10	25	100	4	●
PM-4RL-D12.0R0.5		0.5	12	12	30	100	4	●
PM-4RL-D12.0R1.0		1	12	12	30	100	4	●
PM-4RL-D12.0R2.0		2	12	12	30	100	4	●
PM-4RL-D16.0R1.0		1	16	16	45	150	4	●
PM-4RL-D16.0R2.0		2	16	16	45	150	4	●

- Ex stock ○ On demand
- * With internal cooling

Milling

C

Application field						
P	M	K	N	S	H	
✓	✓	✓			✓	✓ Very suitable ✓ Suitable

Drilling

D

Technical Information

E

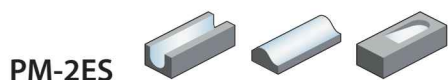
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System code > B278

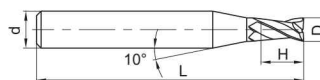
Cutting data > B492

Nonstandard order > B541

End mill High-performance machining



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]				Teeth	Grade
		D	d (h6)	H	L		KMG405
PM-2ES-D0.3		0.3	4	0.6	50	2	●
PM-2ES-D0.4		0.4	4	0.8	50	2	●
PM-2ES-D0.5		0.5	4	1	50	2	●
PM-2ES-D0.6		0.6	4	1.2	50	2	●
PM-2ES-D0.7		0.7	4	1.4	50	2	●
PM-2ES-D0.8		0.8	4	1.6	50	2	●
PM-2ES-D0.9		0.9	4	1.8	50	2	○
PM-2ES-D1.0		1	4	2	50	2	●
PM-2ES-D1.1		1.1	4	2	50	2	○
PM-2ES-D1.2		1.2	4	2.5	50	2	●
PM-2ES-D1.3		1.3	4	2.5	50	2	●
PM-2ES-D1.4		1.4	4	3	50	2	●
PM-2ES-D1.5		1.5	4	3	50	2	●
PM-2ES-D1.6		1.6	4	3.5	50	2	●
PM-2ES-D1.7		1.7	4	3.5	50	2	●
PM-2ES-D1.8		1.8	4	4	50	2	●
PM-2ES-D1.9		1.9	4	4	50	2	○
PM-2ES-D2.0		2	4	4	50	2	●
PM-2ES-D2.1		2.1	4	4	50	2	●
PM-2ES-D2.2		2.2	4	4.5	50	2	●
PM-2ES-D2.3		2.3	4	4.5	50	2	●
PM-2ES-D2.4		2.4	4	5	50	2	●
PM-2ES-D2.5		2.5	4	5	50	2	●
PM-2ES-D2.6		2.6	4	5	50	2	○
PM-2ES-D2.7		2.7	4	5.5	50	2	○
PM-2ES-D2.8		2.8	4	5.5	50	2	○
PM-2ES-D2.9		2.9	4	6	50	2	○
PM-2ES-D3.0		3	4	6	50	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



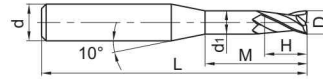
A

End mill High-performance machining

PM-2EP



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG405
PM-2EP-D0.5-M06		0.5	4	0.45	0.7	6	50	2	●
PM-2EP-D0.5-M04		0.5	4	0.45	0.6	4	50	2	●
PM-2EP-D0.5-M08		0.5	4	0.45	0.7	8	50	2	○
PM-2EP-D0.8-M04		0.8	4	0.75	1.2	4	50	2	●
PM-2EP-D0.8-M08		0.8	4	0.75	1.2	8	50	2	○
PM-2EP-D0.8-M10		0.8	4	0.75	1.2	10	50	2	○
PM-2EP-D0.8-M06		0.8	4	0.75	1.2	6	50	2	○
PM-2EP-D1.0-M20		1	4	0.95	1.5	20	50	2	●
PM-2EP-D1.0-M14		1	4	0.95	1.5	14	50	2	●
PM-2EP-D1.0-M16		1	4	0.95	1.5	16	50	2	●
PM-2EP-D1.0-M04		1	4	0.95	1.5	4	50	2	●
PM-2EP-D1.0-M06		1	4	0.95	1.5	6	50	2	●
PM-2EP-D1.0-M10		1	4	0.95	1.5	10	50	2	●
PM-2EP-D1.0-M12		1	4	0.95	1.5	12	50	2	●
PM-2EP-D1.0-M08		1	4	0.95	1.5	8	50	2	●
PM-2EP-D1.2-M10		1.2	4	1.15	1.8	10	50	2	○
PM-2EP-D1.2-M06		1.2	4	1.15	1.8	6	50	2	●
PM-2EP-D1.2-M08		1.2	4	1.15	1.8	8	50	2	○
PM-2EP-D1.2-M16		1.2	4	1.15	1.8	16	50	2	○
PM-2EP-D1.2-M12		1.2	4	1.15	1.8	12	50	2	○
PM-2EP-D1.5-M18		1.5	4	1.45	2.3	18	50	2	●
PM-2EP-D1.5-M16		1.5	4	1.45	2.3	16	50	2	●
PM-2EP-D1.5-M10		1.5	4	1.45	2.3	10	50	2	●
PM-2EP-D1.5-M12		1.5	4	1.45	2.3	12	50	2	●
PM-2EP-D1.5-M14		1.5	4	1.45	2.3	14	50	2	●
PM-2EP-D1.5-M20		1.5	4	1.45	2.3	20	50	2	●
PM-2EP-D1.5-M08		1.5	4	1.45	2.3	8	50	2	●
PM-2EP-D1.5-M06		1.5	4	1.45	2.3	6	50	2	●
PM-2EP-D2.0-M20		2	4	1.95	3	20	50	2	●
PM-2EP-D2.0-M12		2	4	1.95	3	12	50	2	●
PM-2EP-D2.0-M10		2	4	1.95	3	10	50	2	●
PM-2EP-D2.0-M18		2	4	1.95	3	18	50	2	●
PM-2EP-D2.0-M16		2	4	1.95	3	16	50	2	●
PM-2EP-D2.0-M08		2	4	1.95	3	8	50	2	●
PM-2EP-D2.0-M14		2	4	1.95	3	14	50	2	●
PM-2EP-D2.0-M06		2	4	1.95	3	6	50	2	●
PM-2EP-D2.5-M08		2.5	4	2.4	3.7	8	50	2	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

E

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Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

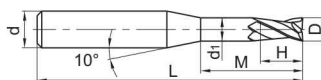
System code > B278

Cutting data > B492

Nonstandard order > B541

End mill **High-performance machining**
PM-2EP


- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG405
PM-2EP-D2.5-M10		2.5	4	2.4	3.7	10	50	2	○
PM-2EP-D2.5-M16		2.5	4	2.4	3.7	16	60	2	○
PM-2EP-D2.5-M20		2.5	4	2.4	3.7	20	60	2	○
PM-2EP-D2.5-M14		2.5	4	2.4	3.7	14	50	2	○
PM-2EP-D2.5-M12		2.5	4	2.4	3.7	12	50	2	○
PM-2EP-D2.5-M18		2.5	4	2.4	3.7	18	60	2	○
PM-2EP-D3.0-M18		3	6	2.85	4.5	18	60	2	○
PM-2EP-D3.0-M10		3	6	2.85	4.5	10	50	2	●
PM-2EP-D3.0-M20		3	6	2.85	4.5	20	60	2	●
PM-2EP-D3.0-M16		3	6	2.85	4.5	16	60	2	●
PM-2EP-D3.0-M06		3	6	2.85	4.5	6	50	2	○
PM-2EP-D3.0-M14		3	6	2.85	4.5	14	60	2	○
PM-2EP-D3.0-M12		3	6	2.85	4.5	12	50	2	●
PM-2EP-D3.0-M08		3	6	2.85	4.5	8	50	2	○
PM-2EP-D4.0-M20		4	6	3.85	6	20	60	2	●
PM-2EP-D4.0-M14		4	6	3.85	6	14	60	2	○
PM-2EP-D4.0-M16		4	6	3.85	6	16	60	2	○
PM-2EP-D4.0-M25		4	6	3.85	6	25	60	2	●
PM-2EP-D4.0-M12		4	6	3.85	6	12	50	2	●
PM-2EP-D5.0-M25		5	6	4.85	7.5	25	70	2	●
PM-2EP-D5.0-M12		5	6	4.85	7.5	12	60	2	●
PM-2EP-D5.0-M14		5	6	4.85	7.5	14	60	2	●
PM-2EP-D5.0-M20		5	6	4.85	7.5	20	70	2	●
PM-2EP-D5.0-M16		5	6	4.85	7.5	16	60	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541

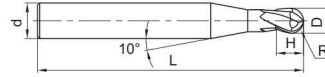
A

Ball nose cutter High-performance machining

PM-2BS



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMG405
PM-2BS-R0.15		0.15	0.3	4	0.5	50	2	●
PM-2BS-R0.20		0.2	0.4	4	0.6	50	2	●
PM-2BS-R0.25		0.25	0.5	4	0.8	50	2	●
PM-2BS-R0.30		0.3	0.6	4	0.9	50	2	●
PM-2BS-R0.35		0.35	0.7	4	1	50	2	○
PM-2BS-R0.40		0.4	0.8	4	1.2	50	2	●
PM-2BS-R0.45		0.45	0.9	4	1.3	50	2	○
PM-2BS-R0.50		0.5	1	4	1.5	50	2	●
PM-2BS-R0.60		0.6	1.2	4	1.8	50	2	●
PM-2BS-R0.70		0.7	1.4	4	2	50	2	○
PM-2BS-R0.75		0.75	1.5	4	2.3	50	2	●
PM-2BS-R0.80		0.8	1.6	4	2.5	50	2	○
PM-2BS-R0.90		0.9	1.8	4	2.7	50	2	○
PM-2BS-R1.00		1	2	4	3	50	2	●
PM-2BS-R1.25		1.25	2.5	4	3.7	50	2	○
PM-2BS-R1.50		1.5	3	4	4.5	50	2	●

Milling

C

- Ex stock ○ On demand
- * With internal cooling

Drilling

D

Application field

P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

Technical Information

E

Index

System code > B278

Cutting data > B492

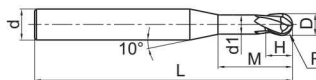
Nonstandard order > B541

Ball nose cutter **High-performance machining**

PM-2BP



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]								Teeth	Grade KMG405
		R	D	d (h6)	d ₁	H	M	L			
PM-2BP-R0.25-M04		0.25	0.5	4	0.45	0.7	4	50	2	●	
PM-2BP-R0.25-M06		0.25	0.5	4	0.45	0.7	6	50	2	●	
PM-2BP-R0.3-M06		0.3	0.6	4	0.55	0.9	6	50	2	●	
PM-2BP-R0.3-M08		0.3	0.6	4	0.55	0.9	8	50	2	●	
PM-2BP-R0.3-M04		0.3	0.6	4	0.55	0.9	4	50	2	●	
PM-2BP-R0.4-M04		0.4	0.8	4	0.75	1.2	4	50	2	●	
PM-2BP-R0.4-M10		0.4	0.8	4	0.75	1.2	10	50	2	●	
PM-2BP-R0.4-M06		0.4	0.8	4	0.75	1.2	6	50	2	●	
PM-2BP-R0.4-M08		0.4	0.8	4	0.75	1.2	8	50	2	●	
PM-2BP-R0.5-M06		0.5	1	4	0.95	1.5	6	50	2	●	
PM-2BP-R0.5-M15		0.5	1	4	0.95	1.5	15	50	2	○	
PM-2BP-R0.5-M04		0.5	1	4	0.95	1.5	4	50	2	●	
PM-2BP-R0.5-M08		0.5	1	4	0.95	1.5	8	50	2	●	
PM-2BP-R0.5-M10		0.5	1	4	0.95	1.5	10	50	2	●	
PM-2BP-R0.5-M12		0.5	1	4	0.95	1.5	12	50	2	●	
PM-2BP-R0.6-M16		0.6	1.2	4	1.15	1.8	16	50	2	○	
PM-2BP-R0.6-M06		0.6	1.2	4	1.15	1.8	6	50	2	●	
PM-2BP-R0.6-M12		0.6	1.2	4	1.15	1.8	12	50	2	○	
PM-2BP-R0.6-M08		0.6	1.2	4	1.15	1.8	8	50	2	○	
PM-2BP-R0.75-M08		0.75	1.5	4	1.45	2.3	8	50	2	●	
PM-2BP-R0.75-M06		0.75	1.5	4	1.45	2.3	6	50	2	○	
PM-2BP-R0.75-M12		0.75	1.5	4	1.45	2.3	12	50	2	●	
PM-2BP-R0.75-M16		0.75	1.5	4	1.45	2.3	16	50	2	●	
PM-2BP-R1.0-M16		1	2	4	1.95	3	16	50	2	●	
PM-2BP-R1.0-M06		1	2	4	1.95	3	6	50	2	●	
PM-2BP-R1.0-M20		1	2	4	1.95	3	20	50	2	●	
PM-2BP-R1.0-M10		1	2	4	1.95	3	10	50	2	●	
PM-2BP-R1.0-M12		1	2	4	1.95	3	12	50	2	●	
PM-2BP-R1.0-M08		1	2	4	1.95	3	8	50	2	●	
PM-2BP-R1.25-M08		1.25	2.5	4	2.4	3.7	8	50	2	○	
PM-2BP-R1.25-M10		1.25	2.5	4	2.4	3.7	10	50	2	○	
PM-2BP-R1.25-M16		1.25	2.5	4	2.4	3.7	16	60	2	○	
PM-2BP-R1.25-M12		1.25	2.5	4	2.4	3.7	12	50	2	●	
PM-2BP-R1.25-M20		1.25	2.5	4	2.4	3.7	20	60	2	○	
PM-2BP-R1.5-M10		1.5	3	6	2.85	4.5	10	50	2	●	
PM-2BP-R1.5-M20		1.5	3	6	2.85	4.5	20	60	2	●	
PM-2BP-R1.5-M08		1.5	3	6	2.85	4.5	8	50	2	●	

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



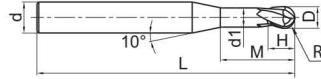
A

Ball nose cutter High-performance machining

PM-2BP



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		
PM-2BP-R1.5-M12		1.5	3	6	2.85	4.5	12	50	2	●
PM-2BP-R1.5-M16		1.5	3	6	2.85	4.5	16	60	2	●
PM-2BP-R2.0-M10		2	4	6	3.85	6	10	60	2	●
PM-2BP-R2.0-M16		2	4	6	3.85	6	16	60	2	●
PM-2BP-R2.0-M20		2	4	6	3.85	6	20	60	2	●
PM-2BP-R2.0-M25		2	4	6	3.85	6		60	2	○
PM-2BP-R2.5-M16		2.5	5	6	4.85	7.5	16	60	2	●
PM-2BP-R2.5-M25		2.5	5	6	4.85	7.5	25	70	2	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field						
P	M	K	N	S	H	
✓	✓	✓			✓	✓ Very suitable ✓ Suitable

Drilling

D

Technical Information

E

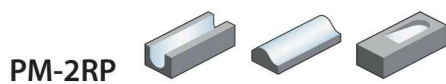
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System code > B278

Cutting data > B492

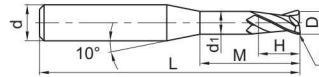
Nonstandard order > B541

Torus mill High-performance machining



PM-2RP

- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]								Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L	KMG405		
PM-2RP-D0.5-R0.1-M04		0.1	0.5	4	0.45	0.6	4	50	2	●	
PM-2RP-D0.5-R0.1-M08		0.1	0.5	4	0.45	0.7	8	50	2	○	
PM-2RP-D0.5-R0.1-M06		0.1	0.5	4	0.45	0.7	6	50	2	●	
PM-2RP-D0.5-R0.05-M06		0.05	0.5	4	0.45	0.7	6	50	2	●	
PM-2RP-D0.5-R0.05-M08		0.05	0.5	4	0.45	0.7	8	50	2	○	
PM-2RP-D0.5-R0.05-M04		0.05	0.5	4	0.45	0.6	4	50	2	●	
PM-2RP-D0.8-R0.1-M04		0.1	0.8	4	0.75	1.2	4	50	2	●	
PM-2RP-D0.8-R0.1-M08		0.1	0.8	4	0.75	1.2	8	50	2	●	
PM-2RP-D0.8-R0.2-M04		0.2	0.8	4	0.75	1.2	4	50	2	●	
PM-2RP-D0.8-R0.1-M10		0.1	0.8	4	0.75	1.2	10	50	2	○	
PM-2RP-D0.8-R0.2-M08		0.2	0.8	4	0.75	1.2	8	50	2	●	
PM-2RP-D0.8-R0.2-M10		0.2	0.8	4	0.75	1.2	10	50	2	○	
PM-2RP-D0.8-R0.1-M06		0.1	0.8	4	0.75	1.2	6	50	2	●	
PM-2RP-D0.8-R0.2-M06		0.2	0.8	4	0.75	1.2	6	50	2	●	
PM-2RP-D1.0-R0.3-M12		0.3	1	4	0.95	1.5	12	50	2	●	
PM-2RP-D1.0-R0.3-M08		0.3	1	4	0.95	1.5	8	50	2	●	
PM-2RP-D1.0-R0.2-M16		0.2	1	4	0.95	1.5	16	60	2	●	
PM-2RP-D1.0-R0.2-M14		0.2	1	4	0.95	1.5	14	50	2	○	
PM-2RP-D1.0-R0.1-M20		0.1	1	4	0.95	1.5	20	60	2	●	
PM-2RP-D1.0-R0.3-M10		0.3	1	4	0.95	1.5	10	50	2	●	
PM-2RP-D1.0-R0.1-M10		0.1	1	4	0.95	1.5	10	50	2	●	
PM-2RP-D1.0-R0.1-M12		0.1	1	4	0.95	1.5	12	50	2	●	
PM-2RP-D1.0-R0.3-M04		0.3	1	4	0.95	1.5	4	50	2	●	
PM-2RP-D1.0-R0.2-M04		0.2	1	4	0.95	1.5	4	50	2	●	
PM-2RP-D1.0-R0.2-M12		0.2	1	4	0.95	1.5	12	50	2	●	
PM-2RP-D1.0-R0.1-M14		0.1	1	4	0.95	1.5	14	50	2	○	
PM-2RP-D1.0-R0.2-M08		0.2	1	4	0.95	1.5	8	50	2	●	
PM-2RP-D1.0-R0.1-M06		0.1	1	4	0.95	1.5	6	50	2	●	
PM-2RP-D1.0-R0.2-M20		0.2	1	4	0.95	1.5	20	60	2	●	
PM-2RP-D1.0-R0.1-M04		0.1	1	4	0.95	1.5	4	50	2	●	
PM-2RP-D1.0-R0.3-M06		0.3	1	4	0.95	1.5	6	50	2	●	
PM-2RP-D1.0-R0.1-M16		0.1	1	4	0.95	1.5	16	60	2	●	
PM-2RP-D1.0-R0.2-M06		0.2	1	4	0.95	1.5	6	50	2	●	
PM-2RP-D1.0-R0.2-M10		0.2	1	4	0.95	1.5	10	50	2	●	
PM-2RP-D1.0-R0.1-M08		0.1	1	4	0.95	1.5	8	50	2	●	
PM-2RP-D1.2-R0.2-M16		0.2	1.2	4	1.5	1.8	16	60	2	○	
PM-2RP-D1.2-R0.1-M08		0.1	1.2	4	1.15	1.8	8	50	2	●	

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



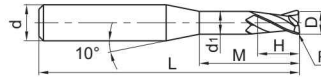
A

Torus mill High-performance machining

PM-2RP



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		KMG405
PM-2RP-D1.2-R0.1-M16		0.1	1.2	4	1.5	1.8	16	60	2	○
PM-2RP-D1.2-R0.2-M12		0.2	1.2	4	1.15	1.8	12	50	2	●
PM-2RP-D1.2-R0.1-M06		0.1	1.2	4	1.15	1.8	6	50	2	●
PM-2RP-D1.2-R0.2-M10		0.2	1.2	4	1.15	1.8	10	50	2	●
PM-2RP-D1.2-R0.1-M12		0.1	1.2	4	1.15	1.8	12	50	2	●
PM-2RP-D1.2-R0.2-M06		0.2	1.2	4	1.15	1.8	6	50	2	●
PM-2RP-D1.2-R0.2-M08		0.2	1.2	4	1.15	1.8	8	50	2	●
PM-2RP-D1.2-R0.1-M10		0.1	1.2	4	1.15	1.8	10	50	2	●
PM-2RP-D1.5-R0.3-M12		0.3	1.5	4	1.45	2.3	12	50	2	●
PM-2RP-D1.5-R0.3-M10		0.3	1.5	4	1.45	2.3	10	50	2	●
PM-2RP-D1.5-R0.2-M12		0.2	1.5	4	1.45	2.3	12	50	2	●
PM-2RP-D1.5-R0.3-M08		0.3	1.5	4	1.45	2.3	8	50	2	●
PM-2RP-D1.5-R0.2-M06		0.2	1.5	4	1.45	2.3	6	50	2	●
PM-2RP-D1.5-R0.2-M10		0.2	1.5	4	1.45	2.3	10	50	2	●
PM-2RP-D1.5-R0.2-M14		0.2	1.5	4	1.45	2.3	14	50	2	○
PM-2RP-D1.5-R0.2-M20		0.2	1.5	4	1.45	2.3	20	50	2	○
PM-2RP-D1.5-R0.3-M18		0.3	1.5	4	1.45	2.3	18	50	2	○
PM-2RP-D1.5-R0.3-M20		0.3	1.5	4	1.45	2.3	20	50	2	○
PM-2RP-D1.5-R0.3-M06		0.3	1.5	4	1.45	2.3	6	50	2	●
PM-2RP-D1.5-R0.2-M08		0.2	1.5	4	1.45	2.3	8	50	2	●
PM-2RP-D1.5-R0.2-M18		0.2	1.5	4	1.45	2.3	18	50	2	○
PM-2RP-D1.5-R0.2-M16		0.2	1.5	4	1.45	2.3	16	50	2	●
PM-2RP-D1.5-R0.3-M16		0.3	1.5	4	1.45	2.3	16	50	2	●
PM-2RP-D1.5-R0.3-M14		0.3	1.5	4	1.45	2.3	14	50	2	○
PM-2RP-D2.0-R0.5-M06		0.5	2	4	1.95	3	6	50	2	●
PM-2RP-D2.0-R0.2-M10		0.2	2	4	1.95	3	10	50	2	●
PM-2RP-D2.0-R0.5-M20		0.5	2	4	1.97	3	20	50	2	●
PM-2RP-D2.0-R0.5-M08		0.5	2	4	1.95	3	8	50	2	●
PM-2RP-D2.0-R0.5-M16		0.5	2	4	1.95	3	16	50	2	●
PM-2RP-D2.0-R0.2-M08		0.2	2	4	1.95	3	8	50	2	●
PM-2RP-D2.0-R0.2-M16		0.2	2	4	1.95	3	16	50	2	●
PM-2RP-D2.0-R0.5-M12		0.5	2	4	1.95	3	12	50	2	●
PM-2RP-D2.0-R0.5-M14		0.5	2	4	1.95	3	14	50	2	○
PM-2RP-D2.0-R0.5-M10		0.5	2	4	1.95	3	10	50	2	●
PM-2RP-D2.0-R0.2-M18		0.2	2	4	1.96	3	18	50	2	○
PM-2RP-D2.0-R0.2-M12		0.2	2	4	1.95	3	12	50	2	●
PM-2RP-D2.0-R0.5-M18		0.5	2	4	1.96	3	18	50	2	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Drilling

D

Technical Information

E

Index

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

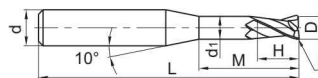
Nonstandard order > B541

Torus mill **High-performance machining**

PM-2RP



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]								Teeth	Grade KMG405
		R	D	d (h6)	d ₁	H	M	L			
PM-2RP-D2.0-R0.2-M20		0.2	2	4	1.97	3	20	50	2	●	
PM-2RP-D2.0-R0.2-M06		0.2	2	4	1.95	3	6	50	2	●	
PM-2RP-D2.0-R0.2-M14		0.2	2	4	1.95	3	14	50	2	○	
PM-2RP-D2.5-R0.2-M16		0.2	2.5	4	2.4	3.7	16	60	2	○	
PM-2RP-D2.5-R0.2-M18		0.2	2.5	4	2.4	3.7	18	60	2	○	
PM-2RP-D2.5-R0.2-M08		0.2	2.5	4	2.4	3.7	8	50	2	●	
PM-2RP-D2.5-R0.2-M20		0.2	2.5	4	2.4	3.7	20	60	2	●	
PM-2RP-D2.5-R0.5-M14		0.5	2.5	4	2.4	3.7	14	50	2	○	
PM-2RP-D2.5-R0.5-M20		0.5	2.5	4	2.4	3.7	20	60	2	●	
PM-2RP-D2.5-R0.5-M10		0.5	2.5	4	2.4	3.7	10	50	2	●	
PM-2RP-D2.5-R0.5-M18		0.5	2.5	4	2.4	3.7	18	60	2	○	
PM-2RP-D2.5-R0.2-M10		0.2	2.5	4	2.4	3.7	10	50	2	●	
PM-2RP-D2.5-R0.5-M08		0.5	2.5	4	2.4	3.7	8	50	2	●	
PM-2RP-D2.5-R0.5-M12		0.5	2.5	4	2.4	3.7	12	50	2	○	
PM-2RP-D2.5-R0.5-M16		0.5	2.5	4	2.4	3.7	16	60	2	○	
PM-2RP-D2.5-R0.2-M14		0.2	2.5	4	2.4	3.7	14	50	2	○	
PM-2RP-D2.5-R0.2-M12		0.2	2.5	4	2.4	3.7	12	50	2	○	
PM-2RP-D3.0-R0.5-M18		0.5	3	6	2.85	4.5	18	60	2	○	
PM-2RP-D3.0-R0.2-M18		0.2	3	6	2.85	4.5	18	60	2	○	
PM-2RP-D3.0-R0.5-M08		0.5	3	6	2.85	4.5	8	50	2	●	
PM-2RP-D3.0-R0.2-M08		0.2	3	6	2.85	4.5	8	50	2	●	
PM-2RP-D3.0-R0.2-M06		0.2	3	6	2.85	4.5	6	50	2	○	
PM-2RP-D3.0-R0.2-M20		0.2	3	6	2.85	4.5	20	60	2	●	
PM-2RP-D3.0-R0.5-M10		0.5	3	6	2.85	4.5	10	50	2	●	
PM-2RP-D3.0-R0.2-M10		0.2	3	6	2.85	4.5	10	50	2	●	
PM-2RP-D3.0-R0.5-M14		0.5	3	6	2.85	4.5	14	60	2	○	
PM-2RP-D3.0-R0.5-M06		0.5	3	6	2.85	4.5	6	50	2	○	
PM-2RP-D3.0-R0.2-M16		0.2	3	6	2.85	4.5	16	60	2	●	
PM-2RP-D3.0-R0.2-M12		0.2	3	6	2.85	4.5	12	50	2	●	
PM-2RP-D3.0-R0.5-M20		0.5	3	6	2.85	4.5	20	60	2	●	
PM-2RP-D3.0-R0.5-M12		0.5	3	6	2.85	4.5	12	50	2	●	
PM-2RP-D3.0-R0.2-M14		0.2	3	6	2.85	4.5	14	60	2	○	
PM-2RP-D3.0-R0.5-M16		0.5	3	6	2.85	4.5	16	60	2	●	
PM-2RP-D4.0-R0.2-M12		0.2	4	6	3.85	6	12	50	2	●	
PM-2RP-D4.0-R0.5-M20		0.5	4	6	3.85	6	20	60	2	●	
PM-2RP-D4.0-R0.5-M12		0.5	4	6	3.85	6	12	50	2	●	
PM-2RP-D4.0-R0.5-M14		0.5	4	6	3.85	6	14	60	2	○	

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



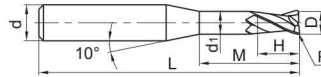
A

Torus mill High-performance machining

PM-2RP



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade KMG405
		R	D	d (h6)	d ₁	H	M	L		
PM-2RP-D4.0-R0.2-M20		0.2	4	6	3.85	6	20	60	2	●
PM-2RP-D4.0-R0.2-M16		0.2	4	6	3.85	6	16	60	2	●
PM-2RP-D4.0-R0.5-M25		0.5	4	6	3.85	6	25	60	2	●
PM-2RP-D4.0-R0.5-M16		0.5	4	6	3.85	6	16	60	2	●
PM-2RP-D4.0-R0.2-M25		0.2	4	6	3.85	6	25	60	2	●
PM-2RP-D4.0-R0.2-M14		0.2	4	6	3.85	6	14	60	2	○
PM-2RP-D5.0-R0.5-M14		0.5	5	6	4.85	7.5	14	60	2	○
PM-2RP-D5.0-R0.5-M12		0.5	5	6	4.85	7.5	12	60	2	●
PM-2RP-D5.0-R1.0-M12		1	5	6	4.85	7.5	12	60	2	●
PM-2RP-D5.0-R0.5-M20		0.5	5	6	4.85	7.5	20	70	2	●
PM-2RP-D5.0-R1.0-M14		1	5	6	4.85	7.5	14	60	2	○
PM-2RP-D5.0-R0.5-M25		0.5	5	6	4.85	7.5	25	70	2	●
PM-2RP-D5.0-R1.0-M20		1	5	6	4.85	7.5	20	70	2	●
PM-2RP-D5.0-R1.0-M25		1	5	6	4.85	7.5	25	70	2	●
PM-2RP-D5.0-R0.5-M16		0.5	5	6	4.85	7.5	16	60	2	●
PM-2RP-D5.0-R1.0-M16		1	5	6	4.85	7.5	16	60	2	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Drilling

D

Technical Information

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

E

Index

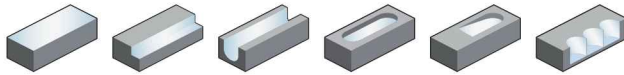
System code > B278

Cutting data > B492

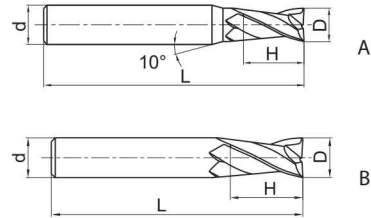
Nonstandard order > B541

End mill **High-performance machining**

EPM-2E



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG406
EPM-2E-D3.0		3	6	8	50	2	A	●
EPM-2E-D4.0		4	6	11	50	2	A	●
EPM-2E-D5.0		5	6	13	50	2	A	●
EPM-2E-D6.0		6	6	16	50	2	B	●
EPM-2E-D8.0		8	8	20	60	2	B	●
EPM-2E-D10.0		10	10	25	75	2	B	●
EPM-2E-D12.0		12	12	30	75	2	B	●
EPM-2E-D14.0		14	14	32	75	2	B	●
EPM-2E-D16.0		16	16	45	100	2	B	●
EPM-2E-D18.0		18	18	45	100	2	B	●
EPM-2E-D20.0		20	20	45	100	2	B	●

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

System code > B278

Cutting data > B492

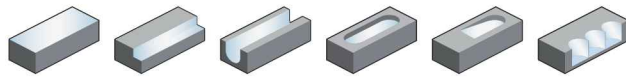
Nonstandard order > B541



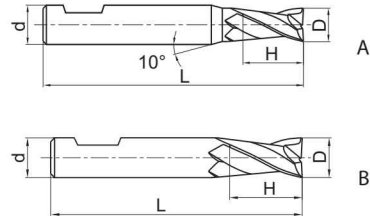
A

End mill High-performance machining

EPM-2E-W



- Type of shank DIN 6535HB
- Centre cutting
- Helix angle 30°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG406
EPM-2E-D3.0-W		3	6	4	50	2	A	●
EPM-2E-D4.0-W		4	6	5	54	2	A	●
EPM-2E-D5.0-W		5	6	6	54	2	A	●
EPM-2E-D6.0-W		6	6	7	54	2	B	●
EPM-2E-D8.0-W		8	8	9	58	2	B	●
EPM-2E-D10.0-W		10	10	11	66	2	B	●
EPM-2E-D12.0-W		12	12	12	73	2	B	●
EPM-2E-D14.0-W		14	14	14	75	2	B	●
EPM-2E-D16.0-W		16	16	16	82	2	B	●
EPM-2E-D18.0-W		18	18	18	84	2	B	●
EPM-2E-D20.0-W		20	20	20	92	2	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

E

Index

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

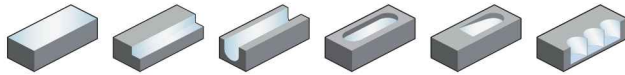
System code > B278

Cutting data > B492

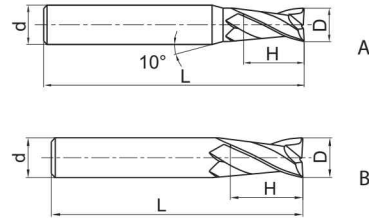
Nonstandard order > B541

End mill long cutting edge **High-performance machining**

EPM-2EL



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG406
EPM-2EL-D3.0		3	6	12	75	2	A	●
EPM-2EL-D4.0		4	6	15	75	2	A	●
EPM-2EL-D5.0		5	6	20	75	2	A	●
EPM-2EL-D6.0		6	6	20	75	2	B	●
EPM-2EL-D8.0		8	8	25	100	2	B	●
EPM-2EL-D10.0		10	10	30	100	2	B	●
EPM-2EL-D12.0		12	12	35	100	2	B	●
EPM-2EL-D14.0		14	14	40	100	2	B	●
EPM-2EL-D16.0		16	16	50	150	2	B	●
EPM-2EL-D20.0		20	20	55	150	2	B	●

- Ex stock ○ On demand
- * With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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System code > B278

Cutting data > B492

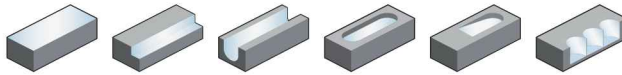
Nonstandard order > B541



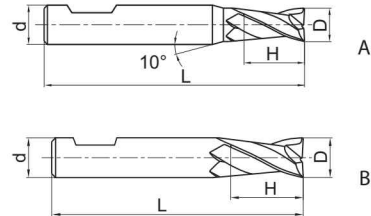
A

End mill long cutting edge High-performance machining

EPM-2EL-W



- Type of shank DIN 6535HB
- Centre cutting
- Helix angle 30°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG406
EPM-2EL-D3.0-W		3	6	6	57	2	A	●
EPM-2EL-D4.0-W		4	6	8	57	2	A	●
EPM-2EL-D5.0-W		5	6	10	57	2	A	●
EPM-2EL-D6.0-W		6	6	10	57	2	B	●
EPM-2EL-D8.0-W		8	8	16	63	2	B	●
EPM-2EL-D10.0-W		10	10	19	72	2	B	●
EPM-2EL-D12.0-W		12	12	22	83	2	B	●
EPM-2EL-D14.0-W		14	14	22	83	2	B	●
EPM-2EL-D16.0-W		16	16	26	92	2	B	●
EPM-2EL-D18.0-W		18	18	26	92	2	B	●
EPM-2EL-D20.0-W		20	20	32	104	2	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

E

Index

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

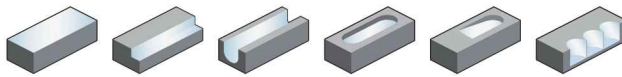
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Cutting data > B492

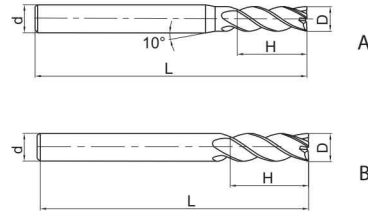
Nonstandard order > B541

End mill **High-performance machining**

EPM-4E



- Factory standard
- Centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG406
EPM-4E-D3.0		3	6	8	50	4	A	●
EPM-4E-D4.0		4	6	11	50	4	A	●
EPM-4E-D5.0		5	6	13	50	4	A	●
EPM-4E-D6.0		6	6	16	50	4	B	●
EPM-4E-D8.0		8	8	20	60	4	B	●
EPM-4E-D10.0		10	10	25	75	4	B	●
EPM-4E-D12.0		12	12	30	75	4	B	●
EPM-4E-D14.0		14	14	32	75	4	B	●
EPM-4E-D16.0		16	16	45	100	4	B	●
EPM-4E-D18.0		18	18	45	100	4	B	●
EPM-4E-D20.0		20	20	45	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

Turning

B

Milling

C

Drilling

D

Technical Information

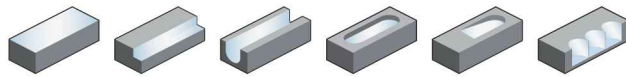
E

Index

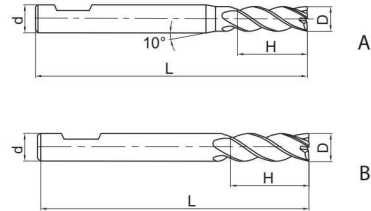
A

End mill High-performance machining

EPM-4E-W



- Type of shank DIN 6535HB
- Centre cutting
- Helix angle 45°



Turning

B

Milling

C

Drilling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG406
EPM-4E-D3.0-W		3	6	4	50	4	A	●
EPM-4E-D4.0-W		4	6	5	54	4	A	●
EPM-4E-D5.0-W		5	6	6	54	4	A	●
EPM-4E-D6.0-W		6	6	7	54	4	B	●
EPM-4E-D8.0-W		8	8	9	58	4	B	●
EPM-4E-D10.0-W		10	10	11	66	4	B	●
EPM-4E-D12.0-W		12	12	12	73	4	B	●
EPM-4E-D14.0-W		14	14	14	75	4	B	●
EPM-4E-D16.0-W		16	16	16	82	4	B	●
EPM-4E-D18.0-W		18	18	18	84	4	B	●
EPM-4E-D20.0-W		20	20	20	92	4	B	●

● Ex stock ○ On demand

* With internal cooling

D

Technical Information

E

Index

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

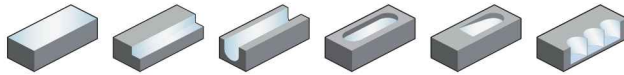
System code > B278

Cutting data > B492

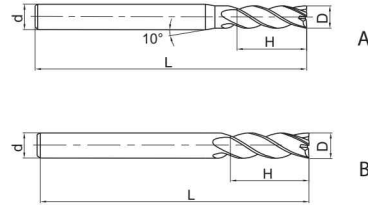
Nonstandard order > B541

End mill long cutting edge **High-performance machining**

EPM-4EL



- Factory standard
- Centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG406
EPM-4EL-D3.0		3	6	12	75	4	A	●
EPM-4EL-D4.0		4	6	15	75	4	A	●
EPM-4EL-D5.0		5	6	20	75	4	A	●
EPM-4EL-D6.0		6	6	20	75	4	B	●
EPM-4EL-D8.0		8	8	25	100	4	B	●
EPM-4EL-D10.0		10	10	30	100	4	B	●
EPM-4EL-D12.0		12	12	35	100	4	B	●
EPM-4EL-D14.0		14	14	40	100	4	B	●
EPM-4EL-D16.0		16	16	50	150	4	B	●
EPM-4EL-D20.0		20	20	55	150	4	B	●

- Ex stock ○ On demand
- * With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

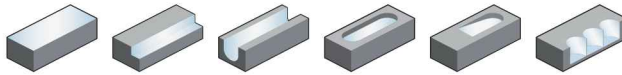
E

Index

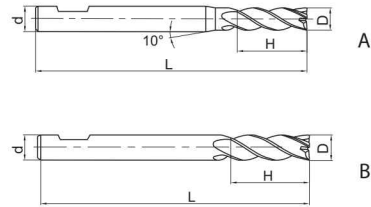
A

End mill long cutting edge High-performance machining

EPM-4EL-W



- Type of shank DIN 6535HB
- Centre cutting
- Helix angle 45°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG406
EPM-4EL-D3.0-W		3	6	8	57	4	A	●
EPM-4EL-D4.0-W		4	6	11	57	4	A	●
EPM-4EL-D5.0-W		5	6	13	57	4	A	●
EPM-4EL-D6.0-W		6	6	13	57	4	B	●
EPM-4EL-D8.0-W		8	8	19	63	4	B	●
EPM-4EL-D10.0-W		10	10	22	72	4	B	●
EPM-4EL-D12.0-W		12	12	26	83	4	B	●
EPM-4EL-D14.0-W		14	14	26	83	4	B	●
EPM-4EL-D16.0-W		16	16	32	92	4	B	●
EPM-4EL-D18.0-W		18	18	32	92	4	B	●
EPM-4EL-D20.0-W		20	20	38	104	4	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

E

Index

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

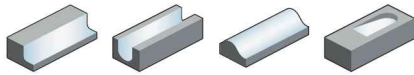
System code > B278

Cutting data > B492

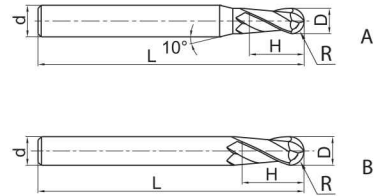
Nonstandard order > B541

Ball nose cutter **High-performance machining**

EPM-2B



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG406
EPM-2B-R1.5		1.5	3	6	6	50	2	A	●
EPM-2B-R2.0		2	4	6	8	50	2	A	●
EPM-2B-R2.5		2.5	5	6	10	50	2	A	●
EPM-2B-R3.0		3	6	6	12	50	2	B	●
EPM-2B-R4.0		4	8	8	16	60	2	B	●
EPM-2B-R5.0		5	10	10	20	75	2	B	●
EPM-2B-R6.0		6	12	12	24	75	2	B	●
EPM-2B-R7.0		7	14	14	28	75	2	B	●
EPM-2B-R8.0		8	16	16	32	100	2	B	●
EPM-2B-R10.0		10	20	20	40	100	2	B	●

- Ex stock ○ On demand
- * With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

System code > B278

Cutting data > B492

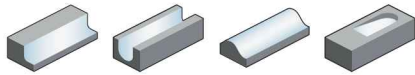
Nonstandard order > B541



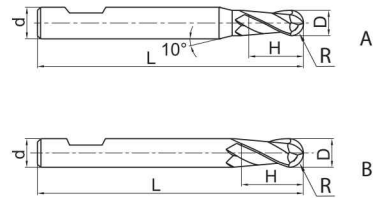
A

Ball nose cutter High-performance machining

EPM-2B-W



- Type of shank DIN 6535HB
- Centre cutting
- Helix angle 30°



Turning

B

Milling

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG406
EPM-2B-R1.5-W		1.5	3	6	4	50	2	A	●
EPM-2B-R2.0-W		2	4	6	5	54	2	A	●
EPM-2B-R2.5-W		2.5	5	6	6	54	2	A	●
EPM-2B-R3.0-W		3	6	6	7	54	2	B	●
EPM-2B-R4.0-W		4	8	8	9	58	2	B	●
EPM-2B-R5.0-W		5	10	10	11	66	2	B	●
EPM-2B-R6.0-W		6	12	12	12	73	2	B	●
EPM-2B-R8.0-W		8	16	16	16	83	2	B	●
EPM-2B-R10.0-W		10	20	20	20	92	2	B	●

- Ex stock ○ On demand
- * With internal cooling

C

Drilling

Application field						
P	M	K	N	S	H	
✓	✓	✓			✓	✓ Very suitable ✓ Suitable

D

Technical Information

E

Index

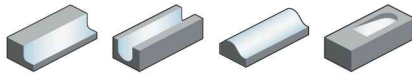
System code > B278

Cutting data > B492

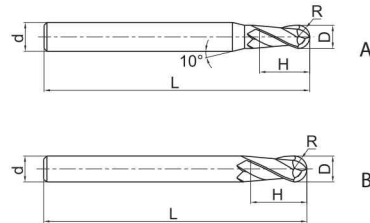
Nonstandard order > B541

Ball nose cutter long shank **High-performance machining**

EPM-2BL



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG406
EPM-2BL-R1.5		1.5	3	6	6	75	2	A	●
EPM-2BL-R2.0		2	4	6	8	75	2	A	●
EPM-2BL-R2.5		2.5	5	6	10	75	2	A	●
EPM-2BL-R3.0		3	6	6	12	75	2	B	●
EPM-2BL-R4.0		4	8	8	16	100	2	B	●
EPM-2BL-R5.0		5	10	10	20	100	2	B	●
EPM-2BL-R6.0		6	12	12	24	100	2	B	●
EPM-2BL-R7.0		7	14	14	28	100	2	B	●
EPM-2BL-R8.0		8	16	16	32	150	2	B	●
EPM-2BL-R10.0		10	20	20	40	150	2	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

System code > B278

Cutting data > B492

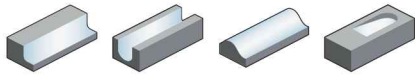
Nonstandard order > B541



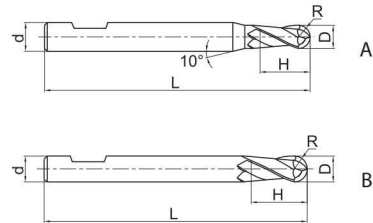
A

Ball nose cutter long shank High-performance machining

EPM-2BL-W



- Type of shank DIN 6535HB
- Centre cutting
- Helix angle 30°



Turning

B

Milling

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG406
EPM-2BL-R1.5-W		1.5	3	6	4	57	2	A	●
EPM-2BL-R2.0-W		2	4	6	5	57	2	A	●
EPM-2BL-R2.5-W		2.5	5	6	6	57	2	A	●
EPM-2BL-R3.0-W		3	6	6	7	57	2	B	●
EPM-2BL-R4.0-W		4	8	8	9	63	2	B	●
EPM-2BL-R5.0-W		5	10	10	11	72	2	B	●
EPM-2BL-R6.0-W		6	12	12	12	83	2	B	●
EPM-2BL-R8.0-W		8	16	16	16	92	2	B	●
EPM-2BL-R10.0-W		10	20	20	20	104	2	B	●

- Ex stock ○ On demand
- * With internal cooling

C

Drilling

Application field						
P	M	K	N	S	H	
✓	✓	✓			✓	✓ Very suitable ✓ Suitable

D

Technical Information

E

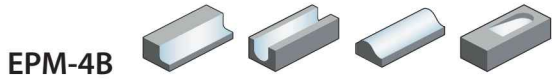
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System code > B278

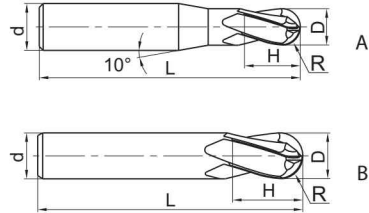
Cutting data > B492

Nonstandard order > B541

Ball nose cutter **High-performance machining**



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG406
EPM-4B-R1.5		1.5	3	6	6	50	4	A	●
EPM-4B-R2.0		2	4	6	8	50	4	A	●
EPM-4B-R2.5		2.5	5	6	10	50	4	A	●
EPM-4B-R3.0		3	6	6	12	50	4	B	●
EPM-4B-R4.0		4	8	8	16	60	4	B	●
EPM-4B-R5.0		5	10	10	20	75	4	B	●
EPM-4B-R6.0		6	12	12	24	75	4	B	●
EPM-4B-R7.0		7	14	14	28	75	4	B	●
EPM-4B-R8.0		8	16	16	32	100	4	B	●
EPM-4B-R9.0		9	18	18	36	100	4	B	●
EPM-4B-R10.0		10	20	20	40	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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System code > B278

Cutting data > B492

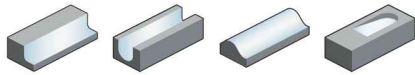
Nonstandard order > B541



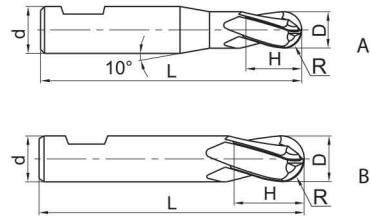
A

Ball nose cutter High-performance machining

EPM-4B-W



- Type of shank DIN 6535HB
- Centre cutting
- Helix angle 30°



Turning

B

Milling

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG406
EPM-4B-R1.5-W	*	1.5	3	6	4	50	4	A	●
EPM-4B-R2.0-W		2	4	6	5	54	4	A	●
EPM-4B-R2.5-W		2.5	5	6	6	54	4	A	●
EPM-4B-R3.0-W		3	6	6	7	54	4	B	●
EPM-4B-R4.0-W		4	8	8	9	58	4	B	●
EPM-4B-R5.0-W		5	10	10	11	66	4	B	●
EPM-4B-R6.0-W		6	12	12	12	73	4	B	●
EPM-4B-R7.0-W		7	14	14	14	75	4	B	●
EPM-4B-R8.0-W		8	16	16	16	83	4	B	●
EPM-4B-R9.0-W		9	18	18	18	84	4	B	●
EPM-4B-R10.0-W		10	20	20	20	92	4	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

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Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

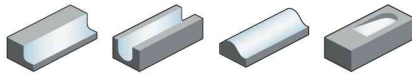
System code > B278

Cutting data > B492

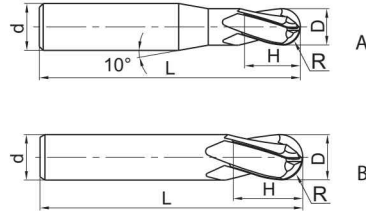
Nonstandard order > B541

Ball nose cutter long shank **High-performance machining**

EPM-4BL



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG406
EPM-4BL-R1.5		1.5	3	6	6	75	4	A	●
EPM-4BL-R2.0		2	4	6	8	75	4	A	●
EPM-4BL-R2.5		2.5	5	6	10	75	4	A	●
EPM-4BL-R3.0		3	6	6	12	75	4	B	●
EPM-4BL-R4.0		4	8	8	16	100	4	B	●
EPM-4BL-R5.0		5	10	10	20	100	4	B	●
EPM-4BL-R6.0		6	12	12	24	100	4	B	●
EPM-4BL-R7.0		7	14	14	28	100	4	B	●
EPM-4BL-R8.0		8	16	16	32	150	4	B	●
EPM-4BL-R10.0		10	20	20	40	150	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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System code > B278

Cutting data > B492

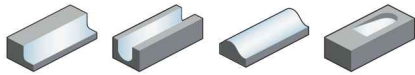
Nonstandard order > B541



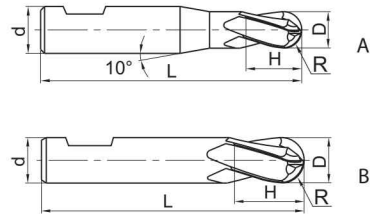
A

Ball nose cutter long shank High-performance machining

EPM-4BL-W



- Type of shank DIN 6535HB
- Centre cutting
- Helix angle 30°



Turning

B

Milling

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG406
EPM-4BL-R1.5-W		1.5	3	6	4	57	4	A	●
EPM-4BL-R2.0-W		2	4	6	5	57	4	A	●
EPM-4BL-R2.5-W		2.5	5	6	6	57	4	A	●
EPM-4BL-R3.0-W		3	6	6	7	57	4	B	●
EPM-4BL-R4.0-W		4	8	8	9	63	4	B	●
EPM-4BL-R5.0-W		5	10	10	11	72	4	B	●
EPM-4BL-R6.0-W		6	12	12	12	83	4	B	●
EPM-4BL-R8.0-W		8	16	16	16	92	4	B	●
EPM-4BL-R10.0-W		10	20	20	20	104	4	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Application field

P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

D

Technical Information

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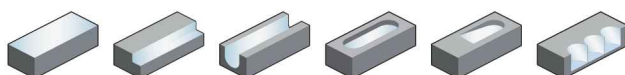
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Cutting data > B492

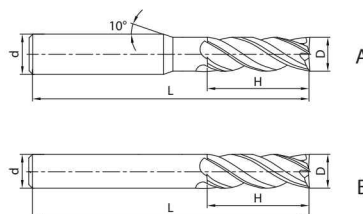
Nonstandard order > B541

End mill **High-performance machining**

VPM-4E



- Factory standard
- Centre cutting
- Helix angle 36°/38°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG406
VPM-4E-D3.0		3	6	8	50	4	A	●
VPM-4E-D4.0		4	6	11	50	4	A	●
VPM-4E-D5.0		5	6	13	50	4	A	●
VPM-4E-D6.0		6	6	16	50	4	B	●
VPM-4E-D7.0		7	8	20	60	4	A	●
VPM-4E-D8.0		8	8	20	60	4	B	●
VPM-4E-D9.0		9	10	22	75	4	A	●
VPM-4E-D10.0		10	10	25	75	4	B	●
VPM-4E-D11.0		11	12	26	75	4	A	●
VPM-4E-D12.0		12	12	30	75	4	B	●
VPM-4E-D14.0		14	14	32	75	4	B	●
VPM-4E-D16.0		16	16	45	100	4	B	●
VPM-4E-D18.0		18	18	45	100	4	B	●
VPM-4E-D20.0		20	20	45	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



Notes

A

Turning

B

Milling

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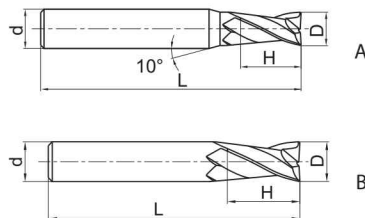
Index

End mill **Hard machining**

HM-2E



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG555
HM-2E-D1.0S		1	4	3	50	2	A	●
HM-2E-D1.5S		1.5	4	4	50	2	A	●
HM-2E-D2.0S		2	4	6	50	2	A	●
HM-2E-D2.5S		2.5	4	8	50	2	A	●
HM-2E-D3.0S		3	4	8	50	2	A	●
HM-2E-D4.0S		4	4	11	50	2	B	●
HM-2E-D1.0		1	6	3	50	2	A	●
HM-2E-D1.5		1.5	6	4	50	2	A	●
HM-2E-D2.0		2	6	6	50	2	A	●
HM-2E-D2.5		2.5	6	8	50	2	A	●
HM-2E-D3.0		3	6	8	50	2	A	●
HM-2E-D3.5		3.5	6	10	50	2	A	●
HM-2E-D4.0		4	6	11	50	2	A	●
HM-2E-D4.5		4.5	6	11	50	2	A	●
HM-2E-D5.0		5	6	13	50	2	A	●
HM-2E-D5.5		5.5	6	16	50	2	A	●
HM-2E-D6.0		6	6	16	50	2	B	●
HM-2E-D7.0		7	8	20	60	2	A	●
HM-2E-D8.0		8	8	20	60	2	B	●
HM-2E-D9.0		9	10	22	75	2	A	●
HM-2E-D10.0		10	10	25	75	2	B	●
HM-2E-D11.0		11	12	26	75	2	A	○
HM-2E-D12.0		12	12	30	75	2	B	●
HM-2E-D14.0		14	14	32	100	2	B	●
HM-2E-D16.0		16	16	45	100	2	B	●
HM-2E-D18.0		18	18	45	100	2	B	○
HM-2E-D20.0		20	20	45	100	2	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

Turning

B

Milling

C

Drilling

D

Technical Information

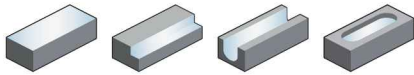
E

Index

A

End mill short cutting edge Hard machining

HM-2EFP



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG555
HM-2EFP-D6.0		6	6	5.8	9	30	75	2	○
HM-2EFP-D8.0		8	8	7.8	12	40	100	2	○
HM-2EFP-D10.0		10	10	9.6	15	50	100	2	○
HM-2EFP-D12.0		12	12	11.5	18	50	100	2	○
HM-2EFP-D16.0		16	16	15.5	24	50	150	2	○
HM-2EFP-D20.0		20	20	19.5	30	60	150	2	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

Drilling

D

Technical Information

E

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System code > B278

Cutting data > B492

Nonstandard order > B541

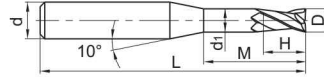
End mill

Hard machining

HM-2EP



- Straight shank
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]						Teeth	Grade KMG555
		D	d (h6)	d ₁	H	M	L		
HM-2EP-D0.5-M04		0.5	4	0.45	0.7	4	50	2	●
HM-2EP-D0.5-M06		0.5	4	0.45	0.7	6	50	2	●
HM-2EP-D0.5-M08		0.5	4	0.45	0.7	8	50	2	●
HM-2EP-D0.8-M04		0.8	4	0.75	1.2	4	50	2	●
HM-2EP-D0.8-M06		0.8	4	0.75	1.2	6	50	2	●
HM-2EP-D0.8-M08		0.8	4	0.75	1.2	8	50	2	●
HM-2EP-D0.8-M10		0.8	4	0.75	1.2	10	50	2	●
HM-2EP-D1.0-M04		1	4	0.95	1.5	4	50	2	●
HM-2EP-D1.0-M06		1	4	0.95	1.5	6	50	2	●
HM-2EP-D1.0-M08		1	4	0.95	1.5	8	50	2	●
HM-2EP-D1.0-M10		1	4	0.95	1.5	10	50	2	●
HM-2EP-D1.0-M12		1	4	0.95	1.5	12	50	2	●
HM-2EP-D1.0-M14		1	4	0.95	1.5	14	50	2	●
HM-2EP-D1.2-M06		1.2	4	1.15	1.8	6	50	2	●
HM-2EP-D1.2-M08		1.2	4	1.15	1.8	8	50	2	●
HM-2EP-D1.2-M10		1.2	4	1.15	1.8	10	50	2	●
HM-2EP-D1.2-M12		1.2	4	1.15	1.8	12	50	2	●
HM-2EP-D1.5-M06		1.5	4	1.45	2.3	6	50	2	●
HM-2EP-D1.5-M08		1.5	4	1.45	2.3	8	50	2	●
HM-2EP-D1.5-M10		1.5	4	1.45	2.3	10	50	2	●
HM-2EP-D1.5-M12		1.5	4	1.45	2.3	12	50	2	●
HM-2EP-D1.5-M14		1.5	4	1.45	2.3	14	50	2	●
HM-2EP-D2.0-M06		2	4	1.95	3	6	50	2	●
HM-2EP-D2.0-M08		2	4	1.95	3	8	50	2	●
HM-2EP-D2.0-M10		2	4	1.95	3	10	50	2	●
HM-2EP-D2.0-M12		2	4	1.95	3	12	50	2	●
HM-2EP-D2.0-M14		2	4	1.95	3	14	50	2	●
HM-2EP-D2.0-M16		2	4	1.95	3	16	50	2	●
HM-2EP-D2.5-M08		2.5	4	2.4	3.7	8	50	2	●
HM-2EP-D2.5-M10		2.5	4	2.4	3.7	10	50	2	●
HM-2EP-D2.5-M12		2.5	4	2.4	3.7	12	50	2	●
HM-2EP-D2.5-M14		2.5	4	2.4	3.7	14	50	2	●
HM-2EP-D2.5-M16		2.5	4	2.4	3.7	16	60	2	●
HM-2EP-D2.5-M18		2.5	4	2.4	3.7	18	60	2	●
HM-2EP-D2.5-M20		2.5	4	2.4	3.7	20	60	2	●
HM-2EP-D3.0-M06		3	6	2.85	4.5	6	50	2	●
HM-2EP-D3.0-M08		3	6	2.85	4.5	8	50	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541

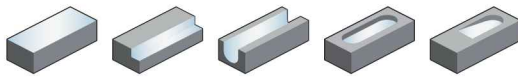


A

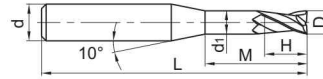
End mill

Hard machining

HM-2EP



- Straight shank
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG555
HM-2EP-D3.0-M10		3	6	2.85	4.5	10	50	2	●
HM-2EP-D3.0-M12		3	6	2.85	4.5	12	50	2	●
HM-2EP-D3.0-M14		3	6	2.85	4.5	14	60	2	●
HM-2EP-D3.0-M16		3	6	2.85	4.5	16	60	2	●
HM-2EP-D3.0-M18		3	6	2.85	4.5	18	60	2	●
HM-2EP-D3.0-M20		3	6	2.85	4.5	20	60	2	●
HM-2EP-D4.0-M12		4	6	3.85	6	12	60	2	●
HM-2EP-D4.0-M16		4	6	3.85	6	16	60	2	●
HM-2EP-D4.0-M20		4	6	3.85	6	20	60	2	●
HM-2EP-D4.0-M25		4	6	3.85	6	25	60	2	●
HM-2EP-D5.0-M16		5	6	4.85	7.5	16	60	2	●
HM-2EP-D5.0-M25		5	6	4.85	7.5	25	70	2	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

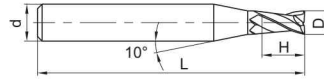
Nonstandard order > B541

End mill **Hard machining**

HM-2ES



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]				Teeth	Grade
		D	d (h6)	H	L		KMG555
HM-2ES-D0.3		0.3	4	0.6	50	2	●
HM-2ES-D0.4		0.4	4	0.8	50	2	●
HM-2ES-D0.5		0.5	4	1	50	2	●
HM-2ES-D0.6		0.6	4	1.2	50	2	●
HM-2ES-D0.7		0.7	4	1.4	50	2	●
HM-2ES-D0.8		0.8	4	1.6	50	2	●
HM-2ES-D0.9		0.9	4	1.8	50	2	●
HM-2ES-D1.0		1	4	2	50	2	●
HM-2ES-D1.1		1.1	4	2	50	2	●
HM-2ES-D1.2		1.2	4	2.5	50	2	●
HM-2ES-D1.3		1.3	4	2.5	50	2	●
HM-2ES-D1.4		1.4	4	3	50	2	●
HM-2ES-D1.5		1.5	4	3	50	2	●
HM-2ES-D1.6		1.6	4	3.5	50	2	●
HM-2ES-D1.7		1.7	4	3.5	50	2	●
HM-2ES-D1.8		1.8	4	4	50	2	●
HM-2ES-D1.9		1.9	4	4	50	2	●
HM-2ES-D2.0		2	4	4	50	2	●
HM-2ES-D2.1		2.1	4	4	50	2	●
HM-2ES-D2.2		2.2	4	4.5	50	2	●
HM-2ES-D2.3		2.3	4	4.5	50	2	●
HM-2ES-D2.4		2.4	4	5	50	2	●
HM-2ES-D2.5		2.5	4	5	50	2	●
HM-2ES-D2.6		2.6	4	5	50	2	●
HM-2ES-D2.7		2.7	4	5.5	50	2	●
HM-2ES-D2.8		2.8	4	5.5	50	2	●
HM-2ES-D2.9		2.9	4	6	50	2	●
HM-2ES-D3.0		3	4	6	50	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
					✓

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

A

End mill

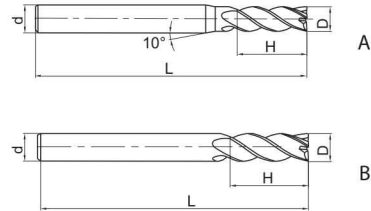
Hard machining



HM-4E

- Factory standard
- Centre cutting
- Helix angle 45°

Turning



B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG555
HM-4E-D1.0S		1	4	3	50	4	A	●
HM-4E-D1.5S		1.5	4	4	50	4	A	●
HM-4E-D2.0S		2	4	6	50	4	A	●
HM-4E-D2.5S		2.5	4	8	50	4	A	●
HM-4E-D3.0S		3	4	8	50	4	A	●
HM-4E-D4.0S		4	4	11	50	4	B	●
HM-4E-D1.0		1	6	3	50	4	A	●
HM-4E-D1.5		1.5	6	4	50	4	A	●
HM-4E-D2.0		2	6	6	50	4	A	●
HM-4E-D2.5		2.5	6	8	50	4	A	●
HM-4E-D3.0		3	6	8	50	4	A	●
HM-4E-D3.5		3.5	6	10	50	4	A	●
HM-4E-D4.0		4	6	11	50	4	A	●
HM-4E-D4.5		4.5	6	11	50	4	A	●
HM-4E-D5.0		5	6	13	50	4	A	●
HM-4E-D5.5		5.5	6	16	50	4	A	●
HM-4E-D6.0		6	6	16	50	4	B	●
HM-4E-D7.0		7	8	20	60	4	A	●
HM-4E-D8.0		8	8	20	60	4	B	●
HM-4E-D9.0		9	10	22	75	4	A	●
HM-4E-D10.0		10	10	25	75	4	B	●
HM-4E-D11.0		11	12	26	75	4	A	●
HM-4E-D12.0		12	12	30	75	4	B	●
HM-4E-D14.0		14	14	32	75	4	B	●
HM-4E-D16.0		16	16	45	100	4	B	●
HM-4E-D18.0		18	18	45	100	4	B	●
HM-4E-D20.0		20	20	45	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

E

Index

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable
 ✓ Suitable

System code > B278

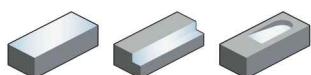
Cutting data > B492

Nonstandard order > B541

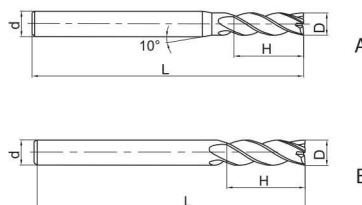
End mill long shank

Hard machining

HM-4EL



- Factory standard
- Centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG555
HM-4EL-D3.0		3	6	12	75	4	A	●
HM-4EL-D4.0		4	6	15	75	4	A	●
HM-4EL-D5.0		5	6	20	75	4	A	●
HM-4EL-D6.0		6	6	20	75	4	B	●
HM-4EL-D8.0		8	8	25	100	4	B	●
HM-4EL-D10.0		10	10	30	100	4	B	●
HM-4EL-D12.0		12	12	35	100	4	B	●
HM-4EL-D14.0		14	14	40	100	4	B	●
HM-4EL-D16.0		16	16	50	150	4	B	●
HM-4EL-D20.0		20	20	55	150	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

Nonstandard order > B541



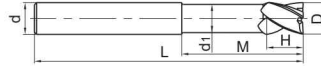
A

End mill short cutting edge Hard machining

HM-4EFP



- Factory standard
- Centre cutting
- Helix angle 45°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG555
HM-4EFP-D6.0		6	6	5.8	9	30	75	4	●
HM-4EFP-D8.0		8	8	7.8	12	40	100	4	●
HM-4EFP-D10.0		10	10	9.6	15	50	100	4	●
HM-4EFP-D12.0		12	12	11.5	18	50	100	4	●
HM-4EFP-D16.0		16	16	15.5	24	50	150	4	●
HM-4EFP-D20.0		20	20	19.5	30	60	150	4	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

Drilling

D

Technical Information

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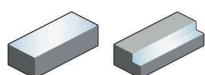
System code > B278

Cutting data > B492

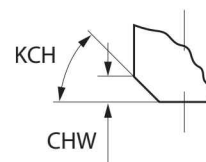
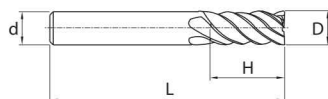
Nonstandard order > B541

End mill long cutting edge **High-speed hard machining**

5502R55MHH



- Type of shank DIN 6535HA
- Non-centre cutting
- Helix angle 55°



Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	H	L	KCH	CHW		KMG405	KMG555
5502R55MHH-0300		3	6	8	57	0	0	4	●	●
5502R55MHH-0400		4	6	11	57	0	0	4	●	●
5502R55MHH-0500		5	6	13	57	0	0	5	●	●
5502R55MHH-0600		6	6	13	57	45	0.1	6	●	●
5502R55MHH-0800		8	8	19	63	45	0.1	6	●	●
5502R55MHH-1000		10	10	22	72	45	0.1	6	●	●
5502R55MHH-1200		12	12	26	83	45	0.1	6	●	●
5502R55MHH-1600		16	16	32	92	45	0.1	6	●	●
5502R55MHH-2000		20	20	38	104	45	0.1	8	●	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

Nonstandard order > B541



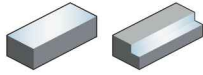
A

End mill

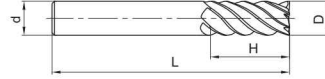
Hard machining

Turning

HM-6E



- Factory standard
- Non-centre cutting
- Helix angle 45°



B

Milling

Article	*	Dimensions [mm]				Teeth	Grade
		D	d (h6)	H	L		KMG555
HM-6E-D6.0		6	6	18	60	6	○
HM-6E-D8.0		8	8	20	60	6	○
HM-6E-D10.0		10	10	30	75	6	○
HM-6E-D12.0		12	12	32	75	6	○
HM-6E-D16.0		16	16	40	100	6	○
HM-6E-D20.0		20	20	45	100	6	●

- Ex stock ○ On demand
- * With internal cooling

C

Drilling

Application field					
P	M	K	N	S	H
					✓

- ✓ Very suitable
- ✓ Suitable

D

Technical Information

E

Index

System code > B278

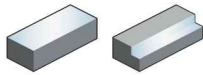
Cutting data > B492

Nonstandard order > B541

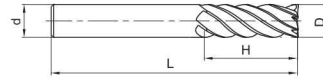
End mill long shank

Hard machining

HM-6EL



- Factory standard
- Non-centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]				Teeth	Grade
		D	d (h6)	H	L		KMG555
HM-6EL-D6.0		6	6	24	75	6	●
HM-6EL-D8.0		8	8	32	75	6	●
HM-6EL-D10.0		10	10	40	100	6	●
HM-6EL-D12.0		12	12	45	100	6	●
HM-6EL-D16.0		16	16	64	150	6	●
HM-6EL-D20.0		20	20	75	150	6	●

- Ex stock ○ On demand
- * With internal cooling

Application field					
P	M	K	N	S	H
					✓

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

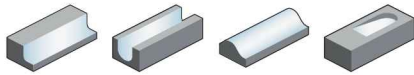
Nonstandard order > B541



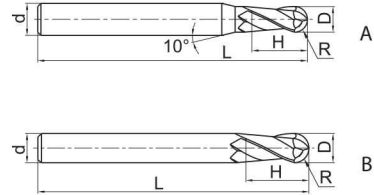
A

Ball nose cutter Hard machining

HM-2B



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

C

Drilling

D

Technical Information

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG555
HM-2B-R0.5S		0.5	1	4	2	50	2	A	●
HM-2B-R0.75S		0.75	1.5	4	3	50	2	A	●
HM-2B-R1.0S		1	2	4	4	50	2	A	●
HM-2B-R1.25S		1.25	2.5	4	5	50	2	A	●
HM-2B-R1.5S		1.5	3	4	6	50	2	A	●
HM-2B-R2.0S		2	4	4	8	50	2	B	●
HM-2B-R0.5		0.5	1	6	2	50	2	A	●
HM-2B-R0.75		0.75	1.5	6	3	50	2	A	●
HM-2B-R1.0		1	2	6	4	50	2	A	●
HM-2B-R1.25		1.25	2.5	6	5	50	2	A	●
HM-2B-R1.5		1.5	3	6	6	50	2	A	●
HM-2B-R1.75		1.75	3.5	6	8	50	2	A	●
HM-2B-R2.0		2	4	6	8	50	2	A	●
HM-2B-R2.5		2.5	5	6	10	50	2	A	●
HM-2B-R2.75		2.75	5.5	6	12	50	2	A	●
HM-2B-R3.0		3	6	6	12	50	2	B	●
HM-2B-R3.5		3.5	7	8	14	60	2	A	●
HM-2B-R4.0		4	8	8	16	60	2	B	●
HM-2B-R4.5		4.5	9	10	18	75	2	A	●
HM-2B-R5.0		5	10	10	20	75	2	B	●
HM-2B-R6.0		6	12	12	24	75	2	B	●
HM-2B-R7.0		7	14	14	28	75	2	B	●
HM-2B-R8.0		8	16	16	32	100	2	B	●
HM-2B-R10.0		10	20	20	40	100	2	B	●

● Ex stock ○ On demand

* With internal cooling

E

Index

Application field

P	M	K	N	S	H
					✓

✓ Very suitable

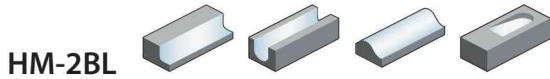
✓ Suitable

System code > B278

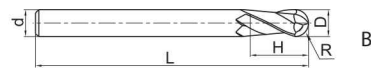
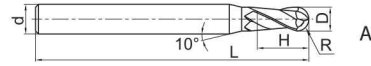
Cutting data > B492

Nonstandard order > B541

Ball nose cutter long shank **Hard machining**



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG555
HM-2BL-R1.0		1	2	6	4	75	2	A	●
HM-2BL-R1.25		1.25	2.5	6	6	75	2	A	●
HM-2BL-R1.5		1.5	3	6	6	75	2	A	●
HM-2BL-R1.75		1.75	3.5	6	8	75	2	A	●
HM-2BL-R2.0		2	4	6	8	75	2	A	●
HM-2BL-R2.5		2.5	5	6	10	75	2	A	●
HM-2BL-R2.75		2.75	5.5	6	12	75	2	A	●
HM-2BL-R3.0		3	6	6	12	75	2	B	●
HM-2BL-R3.5		3.5	7	8	14	75	2	A	●
HM-2BL-R4.0		4	8	8	16	100	2	B	●
HM-2BL-R4.5		4.5	9	10	18	100	2	A	●
HM-2BL-R5.0		5	10	10	20	100	2	B	●
HM-2BL-R6.0		6	12	12	24	100	2	B	●
HM-2BL-R7.0		7	14	14	28	100	2	B	●
HM-2BL-R8.0		8	16	16	32	150	2	B	●
HM-2BL-R10.0		10	20	20	40	150	2	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

Turning

B

Milling

C

Drilling

D

Technical Information

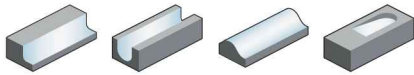
E

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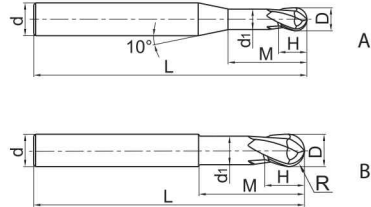
A

Ball nose cutter short cutting edge Hard machining

HM-2BFP



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

Article	*	Dimensions [mm]								Teeth	Geometry	Grade
		R	D	d (h6)	d ₁	H	M	L	KMG555			
HM-2BFP-R0.5		0.5	1	6	0.95	1	2.5	75	2	A	●	
HM-2BFP-R0.75		0.75	1.5	6	1.45	1.5	3	75	2	A	●	
HM-2BFP-R1.0		1	2	6	1.95	2	4	75	2	A	●	
HM-2BFP-R1.5		1.5	3	6	2.85	3	6	75	2	A	●	
HM-2BFP-R2.0		2	4	6	3.85	4	8	75	2	A	●	
HM-2BFP-R2.5		2.5	5	6	4.85	5	10	75	2	A	●	
HM-2BFP-R3.0		3	6	6	5.8	6	12	75	2	B	●	
HM-2BFP-R4.0		4	8	8	7.8	8	16	100	2	B	●	
HM-2BFP-R5.0		5	10	10	9.6	10	20	100	2	B	●	
HM-2BFP-R6.0		6	12	12	11.5	12	24	100	2	B	●	
HM-2BFP-R8.0		8	16	16	15.5	16	32	150	2	B	●	
HM-2BFP-R10.0		10	20	20	19.5	20	40	150	2	B	○	

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

E

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Application field

P	M	K	N	S	H
					✓

✓ Very suitable

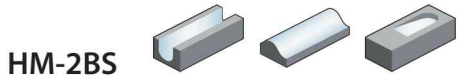
✓ Suitable

System code > B278

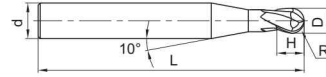
Cutting data > B492

Nonstandard order > B541

Ball nose cutter **Hard machining**



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMG555
HM-2BS-R0.15		0.15	0.3	4	0.5	50	2	●
HM-2BS-R0.20		0.2	0.4	4	0.6	50	2	●
HM-2BS-R0.25		0.25	0.5	4	0.8	50	2	●
HM-2BS-R0.30		0.3	0.6	4	0.9	50	2	●
HM-2BS-R0.35		0.35	0.7	4	1	50	2	●
HM-2BS-R0.40		0.4	0.8	4	1.2	50	2	●
HM-2BS-R0.45		0.45	0.9	4	1.3	50	2	●
HM-2BS-R0.50		0.5	1	4	1.5	50	2	●
HM-2BS-R0.60		0.6	1.2	4	1.8	50	2	●
HM-2BS-R0.70		0.7	1.4	4	2	50	2	●
HM-2BS-R0.75		0.75	1.5	4	2.3	50	2	●
HM-2BS-R0.80		0.8	1.6	4	2.5	50	2	●
HM-2BS-R0.90		0.9	1.8	4	2.7	50	2	●
HM-2BS-R1.00		1	2	4	3	50	2	●
HM-2BS-R1.25		1.25	2.5	4	3.7	50	2	●
HM-2BS-R1.50		1.5	3	4	4.5	50	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

A

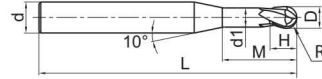
End mill

Hard machining

HM-2BP



- Straight shank
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		
HM-2BP-R0.25-M04		0.25	0.5	4	0.45	0.7	4	50	2	●
HM-2BP-R0.25-M06		0.25	0.5	4	0.45	0.7	6	50	2	●
HM-2BP-R0.3-M04		0.3	0.6	4	0.55	0.9	4	50	2	●
HM-2BP-R0.3-M06		0.3	0.6	4	0.55	0.9	6	50	2	●
HM-2BP-R0.3-M08		0.3	0.6	4	0.55	0.9	8	50	2	●
HM-2BP-R0.4-M04		0.4	0.8	4	0.75	1.2	4	50	2	●
HM-2BP-R0.4-M06		0.4	0.8	4	0.75	1.2	6	50	2	●
HM-2BP-R0.4-M08		0.4	0.8	4	0.75	1.2	8	50	2	●
HM-2BP-R0.4-M10		0.4	0.8	4	0.75	1.2	10	50	2	●
HM-2BP-R0.5-M04		0.5	1	4	0.95	1.5	4	50	2	●
HM-2BP-R0.5-M06		0.5	1	4	0.95	1.5	6	50	2	●
HM-2BP-R0.5-M08		0.5	1	4	0.95	1.5	8	50	2	●
HM-2BP-R0.5-M10		0.5	1	4	0.95	1.5	10	50	2	●
HM-2BP-R0.5-M12		0.5	1	4	0.95	1.5	12	50	2	●
HM-2BP-R0.6-M06		0.6	1.2	4	1.15	1.8	6	50	2	●
HM-2BP-R0.6-M08		0.6	1.2	4	1.15	1.8	8	50	2	●
HM-2BP-R0.6-M12		0.6	1.2	4	1.15	1.8	12	50	2	●
HM-2BP-R0.6-M16		0.6	1.2	4	1.15	1.8	16	50	2	●
HM-2BP-R0.75-M08		0.75	1.5	4	1.45	2.3	8	50	2	●
HM-2BP-R0.75-M12		0.75	1.5	4	1.45	2.3	12	50	2	●
HM-2BP-R0.75-M16		0.75	1.5	4	1.45	2.3	16	50	2	●
HM-2BP-R1.0-M06		1	2	4	1.95	3	6	50	2	●
HM-2BP-R1.0-M08		1	2	4	1.95	3	8	50	2	●
HM-2BP-R1.0-M10		1	2	4	1.95	3	10	50	2	●
HM-2BP-R1.0-M12		1	2	4	1.95	3	12	50	2	●
HM-2BP-R1.0-M16		1	2	4	1.95	3	16	50	2	●
HM-2BP-R1.0-M20		1	2	4	1.95	3	20	50	2	●
HM-2BP-R1.25-M08		1.25	2.5	4	2.4	3.7	8	50	2	●
HM-2BP-R1.25-M12		1.25	2.5	4	2.4	3.7	12	50	2	●
HM-2BP-R1.25-M16		1.25	2.5	4	2.4	3.7	16	60	2	●
HM-2BP-R1.25-M20		1.25	2.5	4	2.4	3.7	20	60	2	●
HM-2BP-R1.5-M08		1.5	3	6	2.85	4.5	8	50	2	●
HM-2BP-R1.5-M10		1.5	3	6	2.85	4.5	10	50	2	●
HM-2BP-R1.5-M12		1.5	3	6	2.85	4.5	12	50	2	●
HM-2BP-R1.5-M16		1.5	3	6	2.85	4.5	16	60	2	●
HM-2BP-R1.5-M20		1.5	3	6	2.85	4.5	20	60	2	●
HM-2BP-R2.0-M10		2	4	6	3.85	6	10	60	2	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Drilling

D

Technical Information

E

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Application field

P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

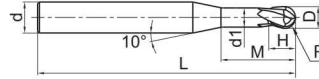
Nonstandard order > B541

End mill **Hard machining**

HM-2BP



- Straight shank
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		
HM-2BP-R2.0-M16		2	4	6	3.85	6	16	60	2	●
HM-2BP-R2.0-M20		2	4	6	3.85	6	20	60	2	●
HM-2BP-R2.0-M25		2	4	6	3.85	6	25	60	2	●
HM-2BP-R2.5-M16		2.5	5	6	4.85	7.5	16	60	2	●
HM-2BP-R2.5-M25		2.5	5	6	4.85	7.5	25	70	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
					✓

- ✓ Very suitable
- ✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



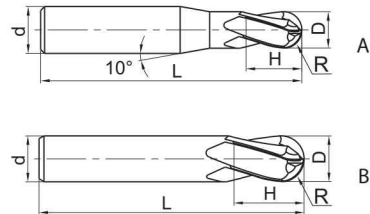
A

Ball nose cutter Hard machining

HM-4B



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG555
HM-4B-R1.5		1.5	3	6	6	50	4	A	●
HM-4B-R2.0		2	4	6	8	50	4	A	●
HM-4B-R2.5		2.5	5	6	10	50	4	A	●
HM-4B-R3.0		3	6	6	12	50	4	B	●
HM-4B-R4.0		4	8	8	16	60	4	B	●
HM-4B-R5.0		5	10	10	20	75	4	B	●
HM-4B-R6.0		6	12	12	24	75	4	B	●
HM-4B-R7.0		7	14	14	28	75	4	B	●
HM-4B-R8.0		8	16	16	32	100	4	B	●
HM-4B-R9.0		9	18	18	36	100	4	B	●
HM-4B-R10.0		10	20	20	40	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

E

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Application field

P	M	K	N	S	H
					✓

✓ Very suitable

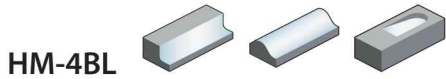
✓ Suitable

System code > B278

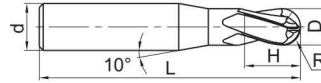
Cutting data > B492

Nonstandard order > B541

Ball nose cutter long shank **Hard machining**



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG555
HM-4BL-R1.5		1.5	3	6	6	75	4	A	●
HM-4BL-R2.0		2	4	6	8	75	4	A	●
HM-4BL-R2.5		2.5	5	6	10	75	4	A	●
HM-4BL-R3.0		3	6	6	12	75	4	B	●
HM-4BL-R4.0		4	8	8	16	100	4	B	●
HM-4BL-R5.0		5	10	10	20	100	4	B	●
HM-4BL-R6.0		6	12	12	24	100	4	B	●
HM-4BL-R7.0		7	14	14	28	100	4	B	●
HM-4BL-R8.0		8	16	16	32	150	4	B	●
HM-4BL-R9.0		9	18	18	36	150	4	B	●
HM-4BL-R10.0		10	20	20	40	150	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

Nonstandard order > B541



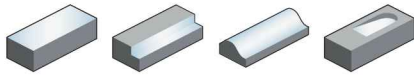
A

Torus mill

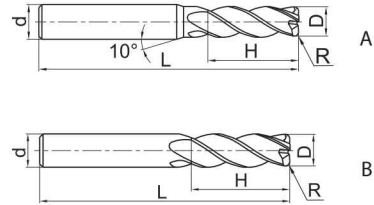
Hard machining

Turning

HM-4R



- Factory standard
- Centre cutting
- Helix angle 35°



B

Milling

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG555
HM-4R-D3.0R0.2		0.2	3	4	8	50	4	A	●
HM-4R-D4.0R0.3		0.3	4	4	10	50	4	B	●
HM-4R-D4.0R0.5		0.5	4	4	10	50	4	B	●
HM-4R-D5.0R0.5		0.5	5	6	13	50	4	A	●
HM-4R-D5.0R1.0		1	5	6	13	50	4	A	●
HM-4R-D6.0R0.5		0.5	6	6	16	50	4	B	●
HM-4R-D6.0R1.0		1	6	6	16	50	4	B	●
HM-4R-D8.0R0.5		0.5	8	8	20	60	4	B	●
HM-4R-D8.0R1.0		1	8	8	20	60	4	B	●
HM-4R-D10.0R0.5		0.5	10	10	25	75	4	B	●
HM-4R-D10.0R1.0		1	10	10	25	75	4	B	●
HM-4R-D10.0R2.0		2	10	10	25	75	4	B	●
HM-4R-D10.0R3.0		3	10	10	25	75	4	B	●
HM-4R-D12.0R0.5		0.5	12	12	30	75	4	B	●
HM-4R-D12.0R1.0		1	12	12	30	75	4	B	●
HM-4R-D12.0R2.0		2	12	12	30	75	4	B	●
HM-4R-D12.0R3.0		3	12	12	30	75	4	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

Application field

P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

E

Index

System code > B278

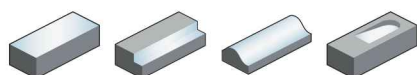
Cutting data > B492

Nonstandard order > B541

Torus mill short cutting edge

Hard machining

HM-4RF



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMG555
HM-4RF-D6.0R0.5		0.5	6	6	6	50	4	○
HM-4RF-D6.0R1.0		1	6	6	6	50	4	○
HM-4RF-D8.0R0.5		0.5	8	8	8	60	4	○
HM-4RF-D8.0R1.0		1	8	8	8	60	4	○
HM-4RF-D10.0R1.0		1	10	10	10	75	4	○
HM-4RF-D10.0R2.0		2	10	10	10	75	4	○
HM-4RF-D12.0R0.5		0.5	12	12	12	75	4	○
HM-4RF-D12.0R1.0		1	12	12	12	75	4	○
HM-4RF-D12.0R2.0		2	12	12	12	75	4	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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System code > B278

Cutting data > B492

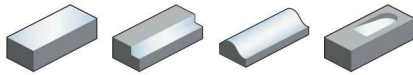
Nonstandard order > B541



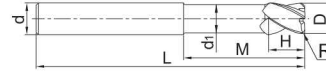
A

Torus mill long shank Hard machining

HM-4RP



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		KMG555
HM-4RP-D6.0R0.5		0.5	6	6	5.8	6	18	75	4	○
HM-4RP-D6.0R1.0		1	6	6	5.8	6	18	75	4	○
HM-4RP-D8.0R0.5		0.5	8	8	7.8	8	24	100	4	○
HM-4RP-D8.0R1.0		1	8	8	7.8	8	24	100	4	○
HM-4RP-D10.0R0.5		0.5	10	10	9.6	10	30	100	4	○
HM-4RP-D10.0R1.0		1	10	10	9.6	10	30	100	4	○
HM-4RP-D10.0R2.0		2	10	10	9.6	10	30	100	4	○
HM-4RP-D12.0R0.5		0.5	12	12	11.5	12	36	100	4	○
HM-4RP-D12.0R1.0		1	12	12	11.5	12	36	100	4	○
HM-4RP-D12.0R2.0		2	12	12	11.5	12	36	100	4	○
HM-4RP-D16.0R1.0		1	16	16	15.5	16	40	150	4	●
HM-4RP-D16.0R2.0		2	16	16	15.5	16	40	150	4	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

Drilling

D

Technical Information

E

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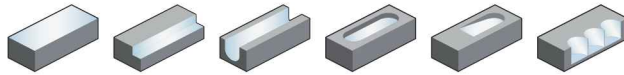
System code > B278

Cutting data > B492

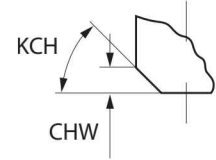
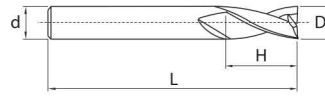
Nonstandard order > B541

End mill **General machining of non-ferrous metals**

5502R402NM



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 40°



Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	H	L	KCH	CHW		YK30F
5502R402NM-0300		3	6	8	57	0	0	2	●
5502R402NM-0400		4	6	11	57	0	0	2	●
5502R402NM-0500		5	6	13	57	0	0	2	●
5502R402NM-0600		6	6	13	57	45	0.1	2	●
5502R402NM-0800		8	8	19	63	45	0.1	2	●
5502R402NM-1000		10	10	22	72	45	0.1	2	●
5502R402NM-1200		12	12	26	83	45	0.1	2	●
5502R402NM-1400		14	14	26	83	45	0.15	2	●
5502R402NM-1600		16	16	32	92	45	0.15	2	●
5502R402NM-1800		18	18	32	92	45	0.15	2	●
5502R402NM-2000		20	20	38	104	45	0.15	2	●

- Ex stock ○ On demand
- * With internal cooling

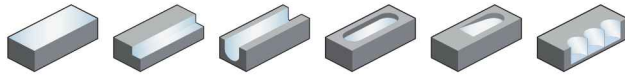
Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

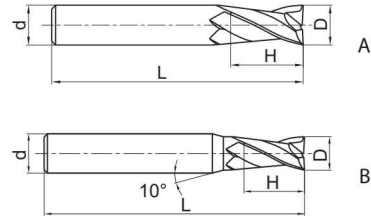
A

End mill General machining of non-ferrous metals

NM-2E



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG309
NM-2E-D1.0		1	4	3	50	2	A	●
NM-2E-D2.0		2	4	6	50	2	A	●
NM-2E-D3.0		3	6	8	50	2	A	●
NM-2E-D4.0		4	6	11	50	2	A	●
NM-2E-D5.0		5	6	13	50	2	A	●
NM-2E-D6.0		6	6	16	50	2	B	●
NM-2E-D8.0		8	8	20	60	2	B	●
NM-2E-D10.0		10	10	25	75	2	B	●
NM-2E-D12.0		12	12	30	75	2	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

D

Technical Information

E

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System code > B278

Cutting data > B492

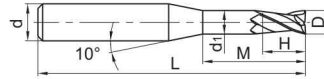
Nonstandard order > B541

End mill **General machining of non-ferrous metals**

NM-2EP



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG309
NM-2EP-D0.5-M04		0.5	4	0.45	0.7	4	50	2	●
NM-2EP-D0.5-M08		0.5	4	0.45	0.7	8	50	2	●
NM-2EP-D0.5-M06		0.5	4	0.45	0.7	6	50	2	●
NM-2EP-D0.8-M10		0.8	4	0.75	1.2	10	50	2	●
NM-2EP-D0.8-M04		0.8	4	0.75	1.2	4	50	2	●
NM-2EP-D0.8-M08		0.8	4	0.75	1.2	8	50	2	●
NM-2EP-D0.8-M06		0.8	4	0.75	1.2	6	50	2	●
NM-2EP-D1.0-M08		1	4	0.95	1.5	8	50	2	●
NM-2EP-D1.0-M10		1	4	0.95	1.5	10	50	2	●
NM-2EP-D1.0-M14		1	4	0.95	1.5	14	50	2	●
NM-2EP-D1.0-M12		1	4	0.95	1.5	12	50	2	●
NM-2EP-D1.0-M06		1	4	0.95	1.5	6	50	2	●
NM-2EP-D1.0-M04		1	4	0.95	1.5	4	50	2	●
NM-2EP-D1.5-M08		1.5	4	1.45	2.3	8	50	2	●
NM-2EP-D1.5-M16		1.5	4	1.45	2.3	16	50	2	●
NM-2EP-D2.0-M16		2	4	1.95	3	16	50	2	●
NM-2EP-D2.0-M14		2	4	1.95	3	14	50	2	●
NM-2EP-D2.0-M08		2	4	1.95	3	8	50	2	●
NM-2EP-D2.0-M10		2	4	1.95	3	10	50	2	●
NM-2EP-D2.0-M12		2	4	1.95	3	12	50	2	●
NM-2EP-D2.0-M06		2	4	1.95	3	6	50	2	●
NM-2EP-D2.5-M10		2.5	4	2.4	3.7	10	50	2	●
NM-2EP-D2.5-M20		2.5	4	2.4	3.7	20	60	2	●
NM-2EP-D3.0-M20		3	6	2.85	4.5	20	60	2	●
NM-2EP-D3.0-M10		3	6	2.85	4.5	10	50	2	●
NM-2EP-D4.0-M25		4	6	3.85	6	25	60	2	●
NM-2EP-D4.0-M16		4	6	3.85	6	16	60	2	●
NM-2EP-D5.0-M25		5	6	4.85	7.5	25	70	2	●
NM-2EP-D5.0-M16		5	6	4.85	7.5	16	60	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

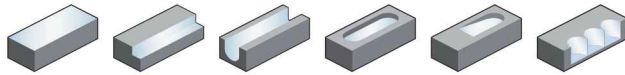
Nonstandard order > B541



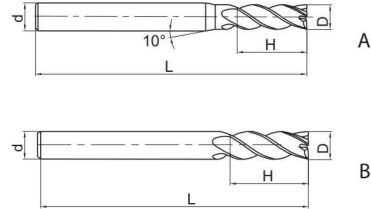
A

End mill General machining of non-ferrous metals

NM-4E



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMG309
NM-4E-D3.0		3	6	8	50	4	A	●
NM-4E-D4.0		4	6	11	50	4	A	●
NM-4E-D5.0		5	6	13	50	4	A	●
NM-4E-D6.0		6	6	16	50	4	B	●
NM-4E-D8.0		8	8	20	60	4	B	●
NM-4E-D10.0		10	10	25	75	4	B	●
NM-4E-D12.0		12	12	30	75	4	B	●

- Ex stock ○ On demand
- * With internal cooling

C

Drilling

Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

D

Technical Information

E

Index

System code > B278

Cutting data > B492

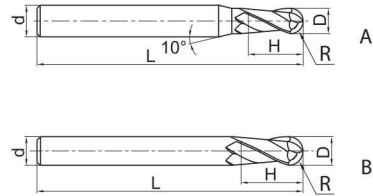
Nonstandard order > B541

Ball nose cutter **General machining of non-ferrous metals**

NM-2B



- Factory standard
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			KMG309
NM-2B-R0.5		0.5	1	4	2	50	2	A	●
NM-2B-R0.75		0.75	1.5	4	3	50	2	A	●
NM-2B-R1.0		1	2	4	4	50	2	A	●
NM-2B-R1.25		1.25	2.5	4	5	50	2	A	●
NM-2B-R1.5		1.5	3	6	6	50	2	A	●
NM-2B-R1.75		1.75	3.5	6	8	50	2	A	●
NM-2B-R2.0		2	4	6	8	50	2	A	●
NM-2B-R2.5		2.5	5	6	10	50	2	A	●
NM-2B-R3.0		3	6	6	12	50	2	B	●
NM-2B-R4.0		4	8	8	16	60	2	B	●
NM-2B-R5.0		5	10	10	20	75	2	B	●
NM-2B-R6.0		6	12	12	24	75	2	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

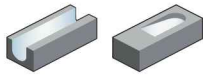
Nonstandard order > B541



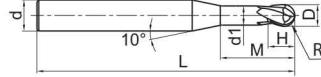
A

Ball nose cutter General machining of non-ferrous metals

NM-2BP



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		
NM-2BP-R0.25-M04		0.25	0.5	4	0.45	0.7	4	50	2	●
NM-2BP-R0.25-M06		0.25	0.5	4	0.45	0.7	6	50	2	●
NM-2BP-R0.3-M04		0.3	0.6	4	0.55	0.9	4	50	2	●
NM-2BP-R0.3-M06		0.3	0.6	4	0.55	0.9	6	50	2	●
NM-2BP-R0.3-M08		0.3	0.6	4	0.55	0.9	8	50	2	●
NM-2BP-R0.4-M04		0.4	0.8	4	0.75	1.2	4	50	2	●
NM-2BP-R0.4-M06		0.4	0.8	4	0.75	1.2	6	50	2	●
NM-2BP-R0.4-M08		0.4	0.8	4	0.75	1.2	8	50	2	●
NM-2BP-R0.4-M10		0.4	0.8	4	0.75	1.2	10	50	2	●
NM-2BP-R0.5-M04		0.5	1	4	0.95	1.5	4	50	2	●
NM-2BP-R0.5-M06		0.5	1	4	0.95	1.5	6	50	2	●
NM-2BP-R0.5-M08		0.5	1	4	0.95	1.5	8	50	2	●
NM-2BP-R0.5-M10		0.5	1	4	0.95	1.5	10	50	2	●
NM-2BP-R0.5-M12		0.5	1	4	0.95	1.5	12	50	2	●
NM-2BP-R0.75-M08		0.75	1.5	4	1.45	2.3	8	50	2	●
NM-2BP-R0.75-M16		0.75	1.5	4	1.45	2.3	16	50	2	●
NM-2BP-R1.0-M06		1	2	4	1.95	3	6	50	2	●
NM-2BP-R1.0-M08		1	2	4	1.95	3	8	50	2	●
NM-2BP-R1.0-M10		1	2	4	1.95	3	10	50	2	●
NM-2BP-R1.0-M12		1	2	4	1.95	3	12	50	2	●
NM-2BP-R1.0-M16		1	2	4	1.95	3	16	50	2	●
NM-2BP-R1.0-M20		1	2	4	1.95	3	20	60	2	●
NM-2BP-R1.5-M10		1.5	3	6	2.85	4.5	10	50	2	●
NM-2BP-R1.5-M20		1.5	3	6	2.85	4.5	20	60	2	●
NM-2BP-R2.0-M10		2	4	6	3.85	6	10	60	2	●
NM-2BP-R2.0-M16		2	4	6	3.85	6	16	60	2	●
NM-2BP-R2.0-M20		2	4	6	3.85	6	20	60	2	●
NM-2BP-R2.0-M25		2	4	6	3.85	6	25	60	2	●
NM-2BP-R2.5-M16		2.5	5	6	4.85	7.5	16	60	2	●
NM-2BP-R2.5-M25		2.5	5	6	4.85	7.5	25	70	2	●

Milling

C

Drilling

D

Technical Information

- Ex stock ○ On demand
- * With internal cooling

E

Application field

P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

Index

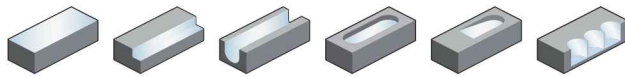
System code > B278

Cutting data > B492

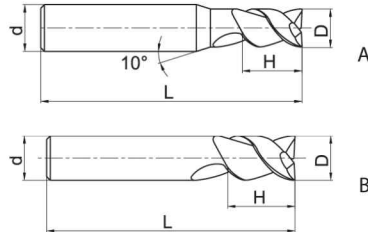
Nonstandard order > B541

End mill **General machining of Al and Al alloys**

AL-2E



- Factory standard
- Centre cutting
- Helix angle 55°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			YK30F
AL-2E-D1.0		1	4	3	50	2	A	●
AL-2E-D1.5		1.5	4	4	50	2	A	●
AL-2E-D2.0		2	4	6	50	2	A	●
AL-2E-D2.5		2.5	4	7	50	2	A	●
AL-2E-D3.0		3	6	9	50	2	A	●
AL-2E-D4.0		4	6	12	50	2	A	●
AL-2E-D5.0		5	6	15	50	2	A	●
AL-2E-D6.0		6	6	18	60	2	B	●
AL-2E-D8.0		8	8	20	60	2	B	●
AL-2E-D10.0		10	10	30	75	2	B	●
AL-2E-D12.0		12	12	32	75	2	B	●
AL-2E-D16.0		16	16	45	100	2	B	●
AL-2E-D20.0		20	20	45	100	2	B	●

- Ex stock ○ On demand
- * With internal cooling

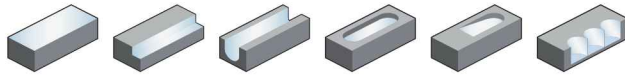
Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

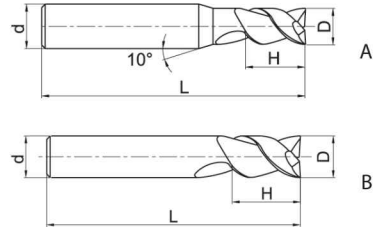
A

End mill long cutting edge General machining of Al and Al alloys

AL-2EL



- Factory standard
- Centre cutting
- Helix angle 55°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			YK30F
AL-2EL-D3.0		3	6	12	60	2	A	●
AL-2EL-D4.0		4	6	16	60	2	A	●
AL-2EL-D5.0		5	6	20	60	2	A	●
AL-2EL-D6.0		6	6	25	75	2	B	●
AL-2EL-D8.0		8	8	32	75	2	B	●
AL-2EL-D10.0		10	10	45	100	2	B	●
AL-2EL-D12.0		12	12	45	100	2	B	●
AL-2EL-D16.0		16	16	65	150	2	B	●
AL-2EL-D20.0		20	20	75	150	2	B	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

D

Technical Information

E

Index

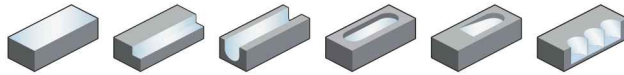
System code > B278

Cutting data > B492

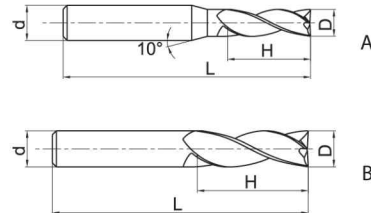
Nonstandard order > B541

End mill **General machining of Al and Al alloys**

AL-3E



- Factory standard
- Centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			YK30F
AL-3E-D1.0		1	4	3	50	3	A	●
AL-3E-D1.5		1.5	4	4	50	3	A	●
AL-3E-D2.0		2	4	6	50	3	A	●
AL-3E-D2.5		2.5	4	7	50	3	A	●
AL-3E-D3.0		3	6	9	50	3	A	●
AL-3E-D4.0		4	6	12	50	3	A	●
AL-3E-D5.0		5	6	15	50	3	A	●
AL-3E-D6.0		6	6	18	60	3	B	●
AL-3E-D8.0		8	8	20	60	3	B	●
AL-3E-D10.0		10	10	30	75	3	B	●
AL-3E-D12.0		12	12	32	75	3	B	●
AL-3E-D16.0		16	16	45	100	3	B	●
AL-3E-D20.0		20	20	45	100	3	B	●

- Ex stock ○ On demand
- * With internal cooling

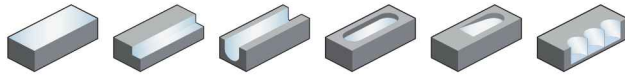
Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

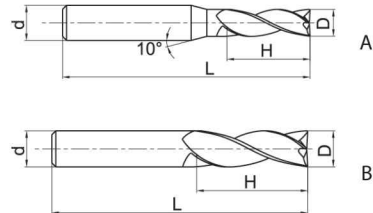
A

End mill long cutting edge General machining of Al and Al alloys

AL-3EL



- Factory standard
- Centre cutting
- Helix angle 45°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			YK30F
AL-3EL-D3.0		3	6	12	60	3	A	●
AL-3EL-D4.0		4	6	16	60	3	A	●
AL-3EL-D5.0		5	6	20	60	3	A	●
AL-3EL-D6.0		6	6	25	75	3	B	●
AL-3EL-D8.0		8	8	32	75	3	B	●
AL-3EL-D10.0		10	10	45	100	3	B	●
AL-3EL-D12.0		12	12	45	100	3	B	●
AL-3EL-D16.0		16	16	65	150	3	B	●
AL-3EL-D20.0		20	20	75	150	3	B	●

- Ex stock ○ On demand
- * With internal cooling

C

Drilling

Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

D

Technical Information

E

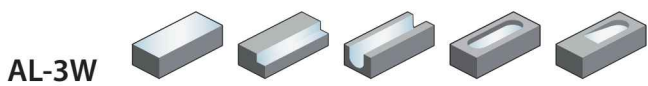
Index

System code > B278

Cutting data > B492

Nonstandard order > B541

End mill serrated teeth **General machining of Al and Al alloys**



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]				Teeth	Grade
		D	d (h6)	H	L		YK30F
AL-3W-D6.0		6	6	16	50	3	●
AL-3W-D8.0		8	8	20	60	3	●
AL-3W-D10.0		10	10	25	75	3	●
AL-3W-D12.0		12	12	30	75	3	●
AL-3W-D16.0		16	16	45	100	3	●
AL-3W-D18.0		18	18	45	100	3	○
AL-3W-D20.0		20	20	45	100	3	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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System code > B278

Cutting data > B492

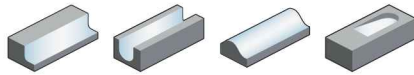
Nonstandard order > B541



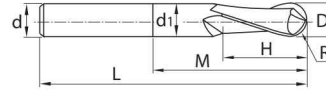
A

Ball nose cutter High performance machining of non-ferrous metals

5565R302NH



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		D	R	d (h6)	d ₁	H	M	L		YK40F
5565R302NH-0300		3	1.5	6	2.8	6	9	57	2	●
5565R302NH-0400		4	2	6	3.7	8	12	57	2	●
5565R302NH-0500		5	2.5	6	4.6	10	15	57	2	●
5565R302NH-0600		6	3	6	5.5	12	20	57	2	●
5565R302NH-0800		8	4	8	7.4	16	26	63	2	●
5565R302NH-1000		10	5	10	9.2	20	31	72	2	●
5565R302NH-1200		12	6	12	11	24	37	83	2	●
5565R302NH-1600		16	8	16	15	32	43	92	2	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

Drilling

D

Technical Information

E

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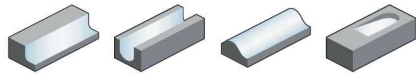
System code > B278

Cutting data > B492

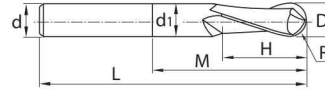
Nonstandard order > B541

Ball nose cutter long shank High performance machining of non-ferrous metals

5566R302NH



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]							Teeth	Grade YK40F
		D	R	d (h6)	d ₁	H	M	L		
5566R302NH-0300		3	1.5	6	2.8	6	9	75	2	●
5566R302NH-0400		4	2	6	3.7	8	12	75	2	●
5566R302NH-0500		5	2.5	6	4.6	10	15	80	2	●
5566R302NH-0600		6	3	6	5.5	12	20	80	2	●
5566R302NH-0800		8	4	8	7.4	16	26	90	2	●
5566R302NH-1000		10	5	10	9.2	20	31	100	2	●
5566R302NH-1200		12	6	12	11	24	37	120	2	●
5566R302NH-1600		16	8	16	15	32	43	140	2	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical
Information

E

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System code > B278

Cutting data > B492

Nonstandard order > B541



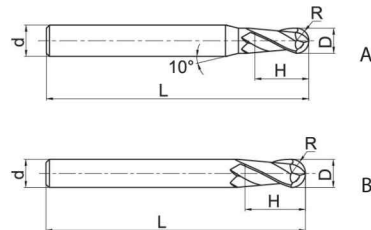
A

Ball nose cutter General machining of Al and Al alloys

AL-2B



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		R	D	d (h6)	H	L			YK30F
AL-2B-R1.0		1	2	6	4	60	2	A	○
AL-2B-R1.5		1.5	3	6	6	60	2	A	○
AL-2B-R2.0		2	4	6	8	60	2	A	○
AL-2B-R2.5		2.5	5	6	10	60	2	A	○
AL-2B-R3.0		3	6	6	12	60	2	B	○
AL-2B-R4.0		4	8	8	16	75	2	B	○
AL-2B-R5.0		5	10	10	20	75	2	B	○
AL-2B-R6.0		6	12	12	24	75	2	B	○

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

D

Technical Information

E

Index

System code > B278

Cutting data > B492

Nonstandard order > B541

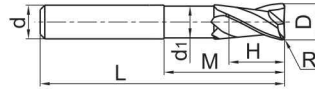
Torus mill

General machining of Al and Al alloys

AL-2R-AIR



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]							Teeth	Grade YK40F
		R	D	d (h6)	d ₁	H	M	L		
AL-2R-D6.0R1.0-AIR		1	6	6	5.5	7	20	57	2	●
AL-2R-D8.0R1.0-AIR		1	8	8	7.4	9	26	63	2	●
AL-2R-D10.0R1.0-AIR		1	10	10	9.2	11	31	72	2	○
AL-2R-D10.0R2.0-AIR		2	10	10	9.2	11	31	72	2	○
AL-2R-D12.0R1.0-AIR		1	12	12	11	12	37	83	2	●
AL-2R-D12.0R2.0-AIR		2	12	12	11	12	37	83	2	○
AL-2R-D12.0R3.0-AIR		3	12	12	11	12	37	83	2	○
AL-2R-D16.0R1.0-AIR		1	16	16	15	16	43	92	2	○
AL-2R-D16.0R2.0-AIR		2	16	16	15	16	43	92	2	○
AL-2R-D16.0R3.0-AIR		3	16	16	15	16	43	92	2	○
AL-2R-D16.0R4.0-AIR		4	16	16	15	16	43	92	2	○
AL-2R-D20.0R1.0-AIR		1	20	20	19	20	53	104	2	●
AL-2R-D20.0R2.0-AIR		2	20	20	19	20	53	104	2	○
AL-2R-D20.0R3.0-AIR		3	20	20	19	20	53	104	2	○
AL-2R-D20.0R4.0-AIR		4	20	20	19	20	53	104	2	○
AL-2R-D20.0R5.0-AIR		5	20	20	19	20	53	104	2	●
AL-2R-D20.0R6.0-AIR		6	20	20	19	20	53	104	2	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

Torus mill long shank General machining of Al and Al alloys

AL-2RL-AIR



- Factory standard
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		YK40F
AL-2RL-D6.0R1.0-AIR		1	6	6	5.5	7	43	80	2	●
AL-2RL-D8.0R1.0-AIR		1	8	8	7.4	9	53	90	2	●
AL-2RL-D10.0R1.0-AIR		1	10	10	9.2	11	59	100	2	●
AL-2RL-D10.0R2.0-AIR		2	10	10	9.2	11	59	100	2	●
AL-2RL-D12.0R1.0-AIR		1	12	12	11	12	74	120	2	●
AL-2RL-D12.0R2.0-AIR		2	12	12	11	12	74	120	2	●
AL-2RL-D12.0R3.0-AIR		3	12	12	11	12	74	120	2	●
AL-2RL-D16.0R1.0-AIR		1	16	16	15	16	84	140	2	●
AL-2RL-D16.0R2.0-AIR		2	16	16	15	16	84	140	2	●
AL-2RL-D16.0R3.0-AIR		3	16	16	15	16	84	140	2	●
AL-2RL-D16.0R4.0-AIR		4	16	16	15	16	84	140	2	●
AL-2RL-D20.0R1.0-AIR		1	20	20	19	20	89	140	2	○
AL-2RL-D20.0R2.0-AIR		2	20	20	19	20	89	140	2	●
AL-2RL-D20.0R3.0-AIR		3	20	20	19	20	89	140	2	●
AL-2RL-D20.0R4.0-AIR		4	20	20	19	20	89	140	2	●
AL-2RL-D20.0R5.0-AIR		5	20	20	19	20	89	140	2	○
AL-2RL-D20.0R6.0-AIR		6	20	20	19	20	89	140	2	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Drilling

D

Technical Information

E

Index

Application field

P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

System code > B278

Cutting data > B492

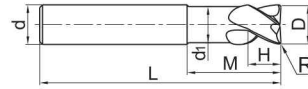
Nonstandard order > B541

Torus mill **General machining of Al and Al alloys**

AL-3R-AIR



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		
AL-3R-D12.0R1.0-AIR	*	1	12	12	11	12	37	83	3	●
AL-3R-D12.0R2.0-AIR		2	12	12	11	12	37	83	3	●
AL-3R-D12.0R3.0-AIR		3	12	12	11	12	37	83	3	●
AL-3R-D16.0R1.0-AIR		1	16	16	15	16	43	92	3	●
AL-3R-D16.0R2.0-AIR		2	16	16	15	16	43	92	3	●
AL-3R-D16.0R3.0-AIR		3	16	16	15	16	43	92	3	●
AL-3R-D16.0R4.0-AIR		4	16	16	15	16	43	92	3	●
AL-3R-D20.0R1.0-AIR		1	20	20	19	20	53	104	3	●
AL-3R-D20.0R2.0-AIR		2	20	20	19	20	53	104	3	○
AL-3R-D20.0R3.0-AIR		3	20	20	19	20	53	104	3	○
AL-3R-D20.0R4.0-AIR		4	20	20	19	20	53	104	3	○
AL-3R-D20.0R5.0-AIR		5	20	20	19	20	53	104	3	●
AL-3R-D20.0R6.0-AIR		6	20	20	19	20	53	104	3	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



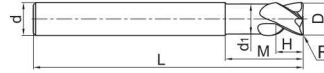
A

Torus mill long shank General machining of Al and Al alloys

AL-3RL-AIR



- Factory standard
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		YK40F
AL-3RL-D12.0R1.0-AIR	*	1	12	12	11	12	74	120	3	●
AL-3RL-D12.0R2.0-AIR		2	12	12	11	12	74	120	3	●
AL-3RL-D12.0R3.0-AIR		3	12	12	11	12	74	120	3	●
AL-3RL-D16.0R1.0-AIR		1	16	16	15	16	84	140	3	●
AL-3RL-D16.0R2.0-AIR		2	16	16	15	16	84	140	3	○
AL-3RL-D16.0R3.0-AIR		3	16	16	15	16	84	140	3	●
AL-3RL-D16.0R4.0-AIR		4	16	16	15	16	84	140	3	●
AL-3RL-D20.0R1.0-AIR		1	20	20	19	20	89	140	3	●
AL-3RL-D20.0R2.0-AIR		2	20	20	19	20	89	140	3	○
AL-3RL-D20.0R3.0-AIR		3	20	20	19	20	89	140	3	○
AL-3RL-D20.0R4.0-AIR		4	20	20	19	20	89	140	3	○
AL-3RL-D20.0R5.0-AIR		5	20	20	19	20	89	140	3	○
AL-3RL-D20.0R6.0-AIR		6	20	20	19	20	89	140	3	○

Milling

C

- Ex stock ○ On demand
- * With internal cooling

Drilling

Application field

P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

D

Technical Information

E

Index

System code > B278

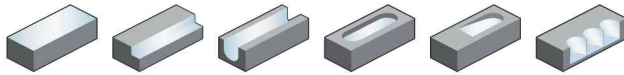
Cutting data > B492

Nonstandard order > B541

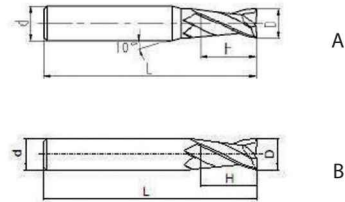
End mill

General machining of Al and Al alloys

ALG-2E



- Factory standard
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			YK40F
ALG-2E-D1.0		1	4	3	50	2	A	●
ALG-2E-D1.5		1.5	4	4	50	2	A	○
ALG-2E-D2.0		2	4	6	50	2	A	●
ALG-2E-D2.5		2.5	4	8	50	2	A	○
ALG-2E-D3.0S		3	4	8	50	2	A	●
ALG-2E-D3.5S		3.5	4	10	50	2	A	○
ALG-2E-D4.0S		4	4	11	50	2	B	○
ALG-2E-D3.0		3	6	8	50	2	A	●
ALG-2E-D3.5		3.5	6	10	50	2	A	○
ALG-2E-D4.0		4	6	11	50	2	A	●
ALG-2E-D4.5		4.5	6	11	50	2	A	○
ALG-2E-D5.0		5	6	13	50	2	A	●
ALG-2E-D5.5		5.5	6	16	50	2	A	○
ALG-2E-D6.0		6	6	16	50	2	B	●
ALG-2E-D7.0		7	8	20	60	2	A	○
ALG-2E-D8.0		8	8	20	60	2	B	●
ALG-2E-D9.0		9	10	22	75	2	A	○
ALG-2E-D10.0		10	10	25	75	2	B	●
ALG-2E-D11.0		11	12	26	75	2	A	○
ALG-2E-D12.0		12	12	30	75	2	B	●
ALG-2E-D14.0		14	14	32	75	2	B	●
ALG-2E-D16.0		16	16	45	100	2	B	●
ALG-2E-D18.0		18	18	45	100	2	B	○
ALG-2E-D20.0		20	20	45	100	2	B	●

- Ex stock ○ On demand
- * With internal cooling

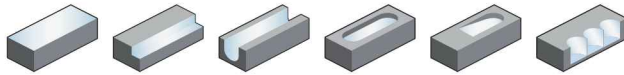
Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

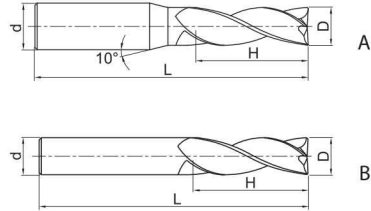
A

End mill General machining of Al and Al alloys

ALG-3E



- Factory standard
- Centre cutting
- Helix angle 45°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade	
		D	d (h6)	H	L			KMD401	YK40F
ALG-3E-D1.0		1	4	3	50	3	A	○	●
ALG-3E-D1.5		1.5	4	4	50	3	A	○	●
ALG-3E-D2.0		2	4	6	50	3	A	○	●
ALG-3E-D2.5		2.5	4	8	50	3	A	○	○
ALG-3E-D3.0S		3	4	8	50	3	A	○	●
ALG-3E-D3.5S		3.5	4	10	50	3	A	○	○
ALG-3E-D4.0S		4	4	11	50	3	B	○	●
ALG-3E-D3.0		3	6	8	50	3	A	●	●
ALG-3E-D3.5		3.5	6	10	50	3	A	●	○
ALG-3E-D4.0		4	6	11	50	3	A	●	●
ALG-3E-D4.5		4.5	6	11	50	3	A	●	○
ALG-3E-D5.0		5	6	13	50	3	A	●	●
ALG-3E-D5.5		5.5	6	16	50	3	A	●	○
ALG-3E-D6.0		6	6	16	50	3	B	●	●
ALG-3E-D7.0		7	8	20	60	3	A	●	○
ALG-3E-D8.0		8	8	20	60	3	B	●	●
ALG-3E-D9.0		9	10	22	75	3	A	●	○
ALG-3E-D10.0		10	10	25	75	3	B	●	●
ALG-3E-D11.0		11	12	26	75	3	A	●	○
ALG-3E-D12.0		12	12	30	75	3	B	●	●
ALG-3E-D14.0		14	14	32	75	3	B	●	●
ALG-3E-D16.0		16	16	45	100	3	B	●	●
ALG-3E-D18.0		18	18	45	100	3	B	●	○
ALG-3E-D20.0		20	20	45	100	3	B	○	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

E

Index

Application field

P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

System code > B278

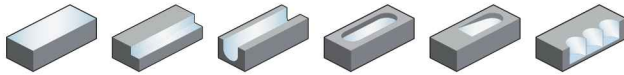
Cutting data > B492

Nonstandard order > B541

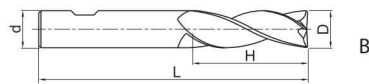
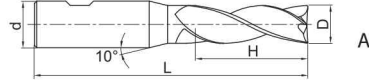
End mill

General machining of Al and Al alloys

ALG-3E-W



- Factory standard with weldon clamping surface
- Centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMD401
ALG-3E-D3.0-W		3	6	8	50	3	A	●
ALG-3E-D3.5-W		3.5	6	10	50	3	A	●
ALG-3E-D4.0-W		4	6	11	50	3	A	●
ALG-3E-D4.5-W		4.5	6	11	50	3	A	●
ALG-3E-D5.0-W		5	6	13	50	3	A	●
ALG-3E-D5.5-W		5.5	6	16	50	3	A	●
ALG-3E-D6.0-W		6	6	16	50	3	B	●
ALG-3E-D7.0-W		7	8	20	60	3	A	●
ALG-3E-D8.0-W		8	8	20	60	3	B	●
ALG-3E-D9.0-W		9	10	22	75	3	A	●
ALG-3E-D10.0-W		10	10	25	75	3	B	●
ALG-3E-D11.0-W		11	12	26	75	3	A	●
ALG-3E-D12.0-W		12	12	30	75	3	B	●
ALG-3E-D14.0-W		14	14	32	75	3	B	●
ALG-3E-D16.0-W		16	16	45	100	3	B	●
ALG-3E-D18.0-W		18	18	45	100	3	B	●
ALG-3E-D20.0-W		20	20	45	100	3	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

System code > B278 Cutting data > B492 Nonstandard order > B541



A

Turning

B

Milling

C

Drilling

D

Technical Information

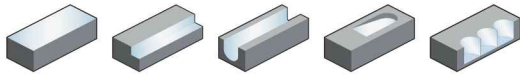
E

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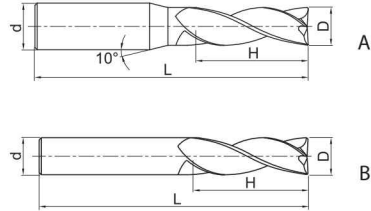
A

End mill High-performance machining of Al and Al alloys

ALP-3E



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

Article	*	Dimensions [mm]				Teeth	Geometry	Grade	
		D	d (h6)	H	L			KMD401	YK40F
ALP-3E-D1.0		1	4	3	50	3	A	○	○
ALP-3E-D1.5		1.5	4	4	50	3	A	○	●
ALP-3E-D2.0		2	4	6	50	3	A	○	●
ALP-3E-D2.5		2.5	4	8	50	3	A	○	○
ALP-3E-D3.0S		3	4	8	50	3	A	○	●
ALP-3E-D4.0S		4	4	11	50	3	B	○	●
ALP-3E-D3.0		3	6	8	50	3	A	●	●
ALP-3E-D4.0		4	6	11	50	3	A	●	●
ALP-3E-D4.5		4.5	6	11	50	3	A	●	○
ALP-3E-D5.0		5	6	13	50	3	A	●	●
ALP-3E-D5.5		5.5	6	16	50	3	A	●	○
ALP-3E-D6.0		6	6	16	50	3	B	●	●
ALP-3E-D7.0		7	8	20	60	3	B	●	○
ALP-3E-D8.0		8	8	20	60	3	B	●	●
ALP-3E-D9.0		9	10	22	75	3	B	●	○
ALP-3E-D10.0		10	10	25	75	3	B	●	●
ALP-3E-D11.0		11	12	26	75	3	B	●	●
ALP-3E-D12.0		12	12	30	75	3	B	●	●
ALP-3E-D14.0		14	14	32	75	3	B	●	●
ALP-3E-D16.0		16	16	45	100	3	B	●	●
ALP-3E-D20.0		20	20	45	100	3	B	●	○

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541

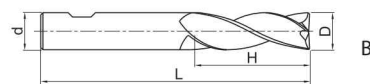
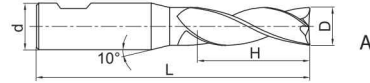
End mill

High-performance machining of Al and Al alloys

ALP-3E-W



- Factory standard with weldon clamping surface
- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMD401
ALP-3E-D3.0-W		3	6	8	50	3	A	●
ALP-3E-D4.0-W		4	6	11	50	3	A	●
ALP-3E-D4.5-W		4.5	6	11	50	3	A	●
ALP-3E-D5.0-W		5	6	13	50	3	A	●
ALP-3E-D5.5-W		5.5	6	16	50	3	A	●
ALP-3E-D6.0-W		6	6	16	50	3	B	●
ALP-3E-D7.0-W		7	8	20	60	3	B	●
ALP-3E-D8.0-W		8	8	20	60	3	B	●
ALP-3E-D9.0-W		9	10	22	75	3	B	●
ALP-3E-D10.0-W		10	10	25	75	3	B	●
ALP-3E-D11.0-W		11	12	26	75	3	B	●
ALP-3E-D12.0-W		12	12	30	75	3	B	●
ALP-3E-D14.0-W		14	14	32	75	3	B	●
ALP-3E-D16.0-W		16	16	45	100	3	B	●
ALP-3E-D20.0-W		20	20	45	100	3	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
			✓		

- ✓ Very suitable
- ✓ Suitable

System code > B278

Cutting data > B492

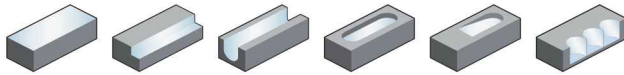
Nonstandard order > B541



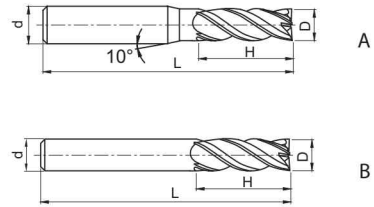
A

End mill High-performance machining of Al and Al alloys

ALP-4E



- Factory standard
- Centre cutting
- Helix angle 38°



Turning

B

Milling

Article	*	Dimensions [mm]				Teeth	Geometry	Grade	
		D	d (h6)	H	L			KMD401	YK40F
ALP-4E-D3.0S	*	3	4	9	50	4	A	○	●
ALP-4E-D4.0S	*	4	4	11	50	4	B	○	●
ALP-4E-D3.0		3	6	9	50	4	A	●	●
ALP-4E-D4.0		4	6	11	50	4	A	●	●
ALP-4E-D5.0		5	6	13	50	4	A	●	●
ALP-4E-D6.0		6	6	16	50	4	B	●	●
ALP-4E-D8.0		8	8	20	60	4	B	●	●
ALP-4E-D10.0		10	10	25	75	4	B	●	●
ALP-4E-D12.0		12	12	30	75	4	B	●	●
ALP-4E-D16.0		16	16	45	100	4	B	●	●
ALP-4E-D18.0		18	18	45	100	4	B	●	○
ALP-4E-D20.0		20	20	45	100	4	B	●	●

● Ex stock ○ On demand

* With internal cooling

C

Drilling

D

Technical Information

Application field

P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

E

Index

System code > B278

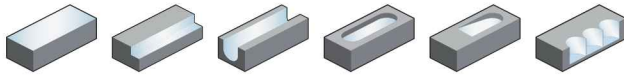
Cutting data > B492

Nonstandard order > B541

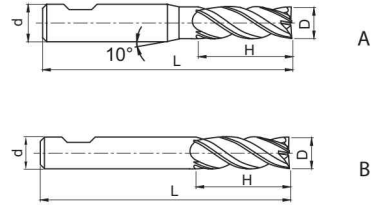
End mill

High-performance machining of Al and Al alloys

ALP-4E-W



- Factory standard with weldon clamping surface
- Centre cutting
- Helix angle 38°



Article	*	Dimensions [mm]				Teeth	Geometry	Grade
		D	d (h6)	H	L			KMD401
ALP-4E-D3.0-W		3	6	9	50	4	A	●
ALP-4E-D4.0-W		4	6	11	50	4	A	●
ALP-4E-D5.0-W		5	6	13	50	4	A	●
ALP-4E-D6.0-W		6	6	16	50	4	B	●
ALP-4E-D8.0-W		8	8	20	60	4	B	●
ALP-4E-D10.0-W		10	10	25	75	4	B	●
ALP-4E-D12.0-W		12	12	30	75	4	B	●
ALP-4E-D16.0-W		16	16	45	100	4	B	●
ALP-4E-D18.0-W		18	18	45	100	4	B	●
ALP-4E-D20.0-W		20	20	45	100	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

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System code > B278

Cutting data > B492

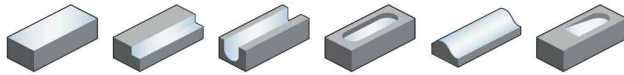
Nonstandard order > B541



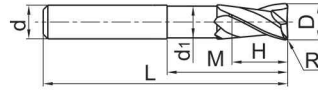
A

Torus mill General machining of Al and Al alloys

ALG-2R



- Straight shank
- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade	
		R	D	d (h6)	d ₁	H	M	L		KMD401	YK40F
ALG-2R-D6.0R0.3		0.3	6	6	5,7	8	16	75	2	●	●
ALG-2R-D6.0R0.5		0.5	6	6	5,7	8	16	75	2	●	●
ALG-2R-D6.0R1.0		1	6	6	5,7	8	16	75	2	●	●
ALG-2R-D8.0R0.3		0.3	8	8	7,4	10	20	75	2	●	●
ALG-2R-D8.0R0.5		0.5	8	8	7,4	10	20	75	2	●	●
ALG-2R-D8.0R1.0		1	8	8	7,4	10	20	75	2	●	●
ALG-2R-D10.0R0.5		0.5	10	10	9,4	12	35	100	2	●	●
ALG-2R-D10.0R1.0		1	10	10	9,4	12	35	100	2	●	●
ALG-2R-D10.0R1.6		1.6	10	10	9,4	12	35	100	2	●	●
ALG-2R-D10.0R2.5		2.5	10	10	9,4	12	35	100	2	●	●
ALG-2R-D12.0R0.5		0.5	12	12	11,4	15	35	100	2	●	●
ALG-2R-D12.0R1.0		1	12	12	11,4	15	35	100	2	●	●
ALG-2R-D12.0R1.6		1.6	12	12	11,4	15	35	100	2	●	●
ALG-2R-D12.0R2.5		2.5	12	12	11,4	15	35	100	2	●	●
ALG-2R-D12.0R3.2		3.2	12	12	11,4	15	35	100	2	●	●
ALG-2R-D12.0R4.0		4	12	12	11,4	15	35	100	2	●	●
ALG-2R-D16.0R1.0		1	16	16	15,4	15	45	125	2	●	●
ALG-2R-D16.0R1.6		1.6	16	16	15,4	15	45	125	2	●	●
ALG-2R-D16.0R2.5		2.5	16	16	15,4	15	45	125	2	●	●
ALG-2R-D16.0R3.2		3.2	16	16	15,4	15	45	125	2	●	●
ALG-2R-D16.0R4.0		4	16	16	15,4	15	45	125	2	●	●
ALG-2R-D16.0R6.3		6.3	16	16	15,4	15	45	125	2	○	○
ALG-2R-D20.0R1.0		1	20	20	18	20	50	125	2	●	●
ALG-2R-D20.0R1.6		1.6	20	20	18	20	50	125	2	●	●
ALG-2R-D20.0R2.5		2.5	20	20	18	20	50	125	2	●	●
ALG-2R-D20.0R3.2		3.2	20	20	18	20	50	125	2	●	●
ALG-2R-D20.0R4.0		4	20	20	18	20	50	125	2	●	●
ALG-2R-D20.0R6.3		6.3	20	20	18	20	50	125	2	○	○
ALG-2R-D25.0R6.3		6.3	25	25	23	25	75	150	2	○	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Drilling

D

Technical Information

E

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Application field

P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

System code > B278

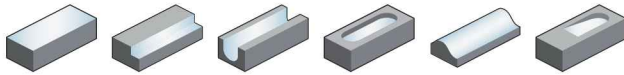
Cutting data > B492

Nonstandard order > B541

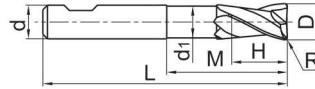
Torus mill

General machining of Al and Al alloys

ALG-2R-W



- Factory standard with weldon clamping surface
- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		
ALG-2R-D6.0R0.3-W		0.3	6	6	5,7	8	16	75	2	●
ALG-2R-D6.0R0.5-W		0.5	6	6	5,7	8	16	75	2	●
ALG-2R-D6.0R1.0-W		1	6	6	5,7	8	16	75	2	●
ALG-2R-D8.0R0.3-W		0.3	8	8	7,4	10	20	75	2	●
ALG-2R-D8.0R0.5-W		0.5	8	8	7,4	10	20	75	2	●
ALG-2R-D8.0R1.0-W		1	8	8	7,4	10	20	75	2	●
ALG-2R-D10.0R0.5-W		0.5	10	10	9,4	12	35	100	2	●
ALG-2R-D10.0R1.0-W		1	10	10	9,4	12	35	100	2	●
ALG-2R-D10.0R1.6-W		1.6	10	10	9,4	12	35	100	2	●
ALG-2R-D10.0R2.5-W		2.5	10	10	9,4	12	35	100	2	●
ALG-2R-D12.0R0.5-W		0.5	12	12	11,4	15	35	100	2	●
ALG-2R-D12.0R1.0-W		1	12	12	11,4	15	35	100	2	●
ALG-2R-D12.0R1.6-W		1.6	12	12	11,4	15	35	100	2	●
ALG-2R-D12.0R2.5-W		2.5	12	12	11,4	15	35	100	2	●
ALG-2R-D12.0R3.2-W		3.2	12	12	11,4	15	35	100	2	●
ALG-2R-D12.0R4.0-W		4	12	12	11,4	15	35	100	2	●
ALG-2R-D16.0R1.0-W		1	16	16	15,4	15	45	125	2	●
ALG-2R-D16.0R1.6-W		1.6	16	16	15,4	15	45	125	2	●
ALG-2R-D16.0R2.5-W		2.5	16	16	15,4	15	45	125	2	●
ALG-2R-D16.0R3.2-W		3.2	16	16	15,4	15	45	125	2	●
ALG-2R-D16.0R4.0-W		4	16	16	15,4	15	45	125	2	●
ALG-2R-D16.0R6.3-W		6.3	16	16	15,4	15	45	125	2	○
ALG-2R-D20.0R1.0-W		1	20	20	18	20	50	125	2	●
ALG-2R-D20.0R1.6-W		1.6	20	20	18	20	50	125	2	●
ALG-2R-D20.0R2.5-W		2.5	20	20	18	20	50	125	2	●
ALG-2R-D20.0R3.2-W		3.2	20	20	18	20	50	125	2	●
ALG-2R-D20.0R4.0-W		4	20	20	18	20	50	125	2	●
ALG-2R-D20.0R6.3-W		6.3	20	20	18	20	50	125	2	○
ALG-2R-D25.0R6.3-W		6.3	25	25	23	25	75	150	2	○

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



Notes

A

Turning

B

Milling

C

Drilling

D

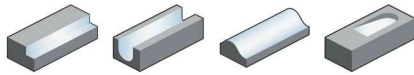
Technical
Information

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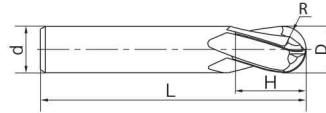
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Ball nose cutter **High-performance machining**

TM-4B



- Factory standard
- Centre cutting
- Helix angle 38°



Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMS405
TM-4B-R3.0		3	6	6	9	50	4	●
TM-4B-R4.0		4	8	8	12	60	4	●
TM-4B-R5.0		5	10	10	15	75	4	●
TM-4B-R6.0		6	12	12	18	75	4	●
TM-4B-R8.0		8	16	16	24	85	4	●
TM-4B-R10.0		10	20	20	30	100	4	●

- Ex stock ○ On demand
- * With internal cooling

Application field					
P	M	K	N	S	H
	✓			✓	

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

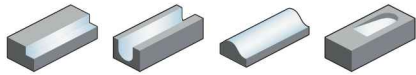
Nonstandard order > B541



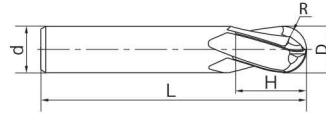
A

Ball nose cutter High-performance machining

TM-4BL



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 38°



Turning

B

Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMS405
TM-4BL-R3.0		3	6	6	16	57	4	●
TM-4BL-R4.0		4	8	8	20	63	4	●
TM-4BL-R5.0		5	10	10	22	72	4	●
TM-4BL-R6.0		6	12	12	25	83	4	●
TM-4BL-R8.0		8	16	16	32	92	4	●
TM-4BL-R10.0		10	20	20	38	104	4	●

- Ex stock ○ On demand
- * With internal cooling

Milling

C

Application field						
P	M	K	N	S	H	
	✓			✓		✓ Very suitable ✓ Suitable

Drilling

D

Technical Information

E

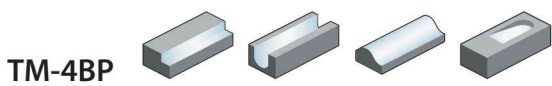
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System code > B278

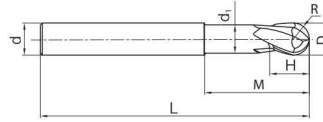
Cutting data > B492

Nonstandard order > B541

Ball nose cutter **High-performance machining**



- Factory standard
- Centre cutting
- Helix angle 38°



Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		
TM-4BP-R3.0		3	6	6	5.5	9	18	60	4	●
TM-4BP-R4.0		4	8	8	7.4	12	24	75	4	●
TM-4BP-R5.0		5	10	10	9.4	15	30	75	4	●
TM-4BP-R6.0		6	12	12	11.4	18	35	90	4	●
TM-4BP-R8.0		8	16	16	15.4	24	40	90	4	●
TM-4BP-R10.0		10	20	20	19.4	35	50	110	4	●

- Ex stock ○ On demand
- * With internal cooling

Application field					
P	M	K	N	S	H
	✓			✓	

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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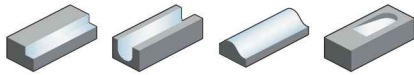
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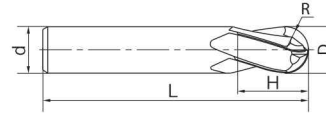
A

Ball nose cutter High-performance machining

TM-5B



- Factory standard
- Helix angle 38°



Turning

B

Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMS405
TM-5B-R3.0		3	6	6	9	50	5	●
TM-5B-R4.0		4	8	8	12	60	5	●
TM-5B-R5.0		5	10	10	15	75	5	●
TM-5B-R6.0		6	12	12	18	75	5	●
TM-5B-R8.0		8	16	16	24	85	5	●
TM-5B-R10.0		10	20	20	35	100	5	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
	✓			✓	

✓ Very suitable

✓ Suitable

Drilling

D

Technical Information

E

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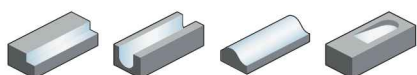
System code > B278

Cutting data > B492

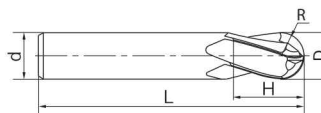
Nonstandard order > B541

Ball nose cutter **High-performance machining**

TM-5BL



- Type of shank DIN 6535HA
- Helix angle 38°



Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMS405
TM-5BL-R3.0		3	6	6	16	57	5	●
TM-5BL-R4.0		4	8	8	20	63	5	●
TM-5BL-R5.0		5	10	10	22	72	5	●
TM-5BL-R6.0		6	12	12	25	83	5	●
TM-5BL-R8.0		8	16	16	32	92	5	●
TM-5BL-R10.0		10	20	20	38	104	5	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
	✓			✓	

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B278

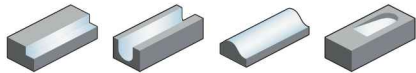
Cutting data > B492

Nonstandard order > B541

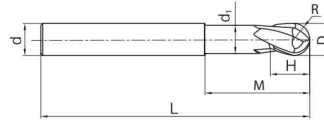
A

Ball nose cutter High-performance machining

TM-5BP



- Factory standard
- Helix angle 38°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		
TM-5BP-R3.0		3	6	6	5.5	9	18	60	5	●
TM-5BP-R4.0		4	8	8	7.4	12	24	75	5	●
TM-5BP-R5.0		5	10	10	9.4	15	30	75	5	●
TM-5BP-R6.0		6	12	12	11.4	18	35	90	5	●
TM-5BP-R8.0		8	16	16	15.4	24	40	90	5	●
TM-5BP-R10.0		10	20	20	19.4	35	50	110	5	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
	✓			✓	

✓ Very suitable

✓ Suitable

Drilling

D

Technical Information

E

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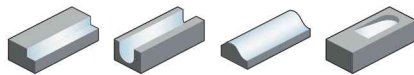
System code > B278

Cutting data > B492

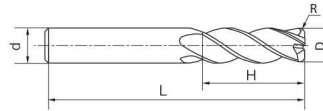
Nonstandard order > B541

Torus mill **High-performance machining**

TM-4R



- Factory standard
- Centre cutting
- Helix angle 38°



Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMS405
TM-4R-D6R0.5		0.5	6	6	16	50	4	●
TM-4R-D6R0.3		0.3	6	6	16	50	4	●
TM-4R-D6R1.0		1	6	6	16	50	4	●
TM-4R-D6R 0.75		0.75	6	6	16	50	4	○
TM-4R-D8R0.5		0.5	8	8	20	60	4	●
TM-4R-D8R0.3		0.3	8	8	20	60	4	●
TM-4R-D8R1.0		1	8	8	20	60	4	●
TM-4R-D8R0.75		0.75	8	8	20	60	4	○
TM-4R-D10R0.75		0.75	10	10	25	75	4	○
TM-4R-D10R1.6		1.6	10	10	25	75	4	●
TM-4R-D10R2.0		2	10	10	25	75	4	●
TM-4R-D10R0.5		0.5	10	10	25	75	4	●
TM-4R-D10R2.5		2.5	10	10	25	75	4	○
TM-4R-D10R1.0		1	10	10	25	75	4	●
TM-4R-D10R3.0		3	10	10	25	75	4	●
TM-4R-D10R1.25		1.25	10	10	25	75	4	○
TM-4R-D10R1.5		1.5	10	10	25	75	4	●
TM-4R-D12R1.5		1.5	12	12	30	75	4	●
TM-4R-D12R0.5		0.5	12	12	30	75	4	●
TM-4R-D12R1.0		1	12	12	30	75	4	●
TM-4R-D12R4.0		4	12	12	30	75	4	●
TM-4R-D12R1.6		1.6	12	12	30	75	4	●
TM-4R-D12R2.5		2.5	12	12	30	75	4	●
TM-4R-D12R1.25		1.25	12	12	30	75	4	○
TM-4R-D12R0.75		0.75	12	12	30	75	4	○
TM-4R-D12R3.0		3	12	12	30	75	4	●
TM-4R-D12R3.2		3.2	12	12	30	75	4	●
TM-4R-D12R2.0		2	12	12	30	75	4	●
TM-4R-D16R1.25		1.25	16	16	35	90	4	●
TM-4R-D16R4.0		4	16	16	35	90	4	●
TM-4R-D16R1.0		1	16	16	35	90	4	●
TM-4R-D16R3.0		3	16	16	35	90	4	●
TM-4R-D16R2.0		2	16	16	35	90	4	●
TM-4R-D16R6.3		6.3	16	16	35	90	4	○
TM-4R-D16R5.0		5	16	16	35	90	4	●
TM-4R-D16R1.5		1.5	16	16	35	90	4	●
TM-4R-D16R2.5		2.5	16	16	35	90	4	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
	✓			✓	

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

Turning

B

Milling

C

Drilling

D

Technical Information

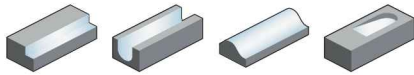
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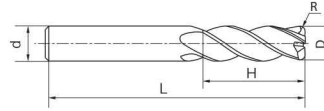
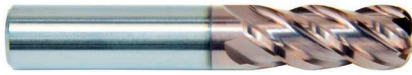
A

Torus mill High-performance machining

TM-4R



- Factory standard
- Centre cutting
- Helix angle 38°



Turning

B

Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMS405
TM-4R-D16R1.6		1.6	16	16	35	90	4	●
TM-4R-D16R3.2		3.2	16	16	35	90	4	●
TM-4R-D20R1.5		1.5	20	20	45	100	4	●
TM-4R-D20R2.0		2	20	20	45	100	4	●
TM-4R-D20R2.5		2.5	20	20	45	100	4	●
TM-4R-D20R1.0		1	20	20	45	100	4	●
TM-4R-D20R4.0		4	20	20	45	100	4	●
TM-4R-D20R1.6		1.6	20	20	45	100	4	●
TM-4R-D20R5.0		5	20	20	45	100	4	●
TM-4R-D20R3.0		3	20	20	45	100	4	●
TM-4R-D20R3.2		3.2	20	20	45	100	4	●
TM-4R-D20R6.3		6.3	20	20	45	100	4	●
TM-4R-D20R1.25		1.25	21	20	45	100	4	●
TM-4R-D25R1.0		1	25	25	50	110	4	●
TM-4R-D25R3.0		3	25	25	50	110	4	●
TM-4R-D25R2.0		2	25	25	50	110	4	●
TM-4R-D25R2.5		2.5	25	25	50	110	4	○
TM-4R-D25R4.0		4	25	25	50	110	4	●
TM-4R-D25R3.2		3.2	25	25	50	110	4	●
TM-4R-D25R1.5		1.5	25	25	50	110	4	●
TM-4R-D25R5.0		5	25	25	50	110	4	●
TM-4R-D25R6.3		6.3	25	25	50	110	4	●
TM-4R-D25R1.6		1.6	25	25	50	110	4	●
TM-4R-D25R1.25		1.25	25	25	50	110	4	○

Milling

C

Drilling

D

- Ex stock ○ On demand
- * With internal cooling

Technical Information

Application field					
P	M	K	N	S	H
	✓			✓	

- ✓ Very suitable
- ✓ Suitable

E

Index

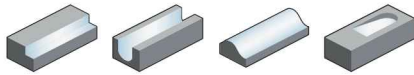
System code > B278

Cutting data > B492

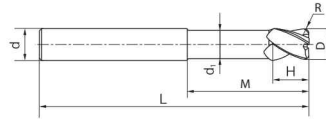
Nonstandard order > B541

Torus mill **High-performance machining**

TM-4RP



- Factory standard
- Centre cutting
- Helix angle 38°



Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		
TM-4RP-D8R0.75		0.75	8	8	7.4	16	25	75	4	○
TM-4RP-D8R1.0		1	8	8	7.4	16	25	75	4	●
TM-4RP-D8R0.3		0.3	8	8	7.4	16	25	75	4	●
TM-4RP-D8R0.5		0.5	8	8	7.4	16	25	75	4	●
TM-4RP-D10R2.0		2	10	10	9.4	20	32	75	4	●
TM-4RP-D10R1.6		1.6	10	10	9.4	20	32	75	4	●
TM-4RP-D10R1.5		1.5	10	10	9.4	20	32	75	4	●
TM-4RP-D10R1.25		1.25	10	10	9.4	20	32	75	4	●
TM-4RP-D10R3.0		3	10	10	9.4	20	32	75	4	●
TM-4RP-D10R0.5		0.5	10	10	9.4	20	32	75	4	●
TM-4RP-D10R0.75		0.75	10	10	9.4	20	32	75	4	○
TM-4RP-D10R2.5		2.5	10	10	9.4	20	32	75	4	○
TM-4RP-D10R1.0		1	10	10	9.4	20	32	75	4	●
TM-4RP-D12R1.25		1.25	12	12	11.4	24	40	90	4	●
TM-4RP-D12R1.0		1	12	12	11.4	24	40	90	4	●
TM-4RP-D12R2.0		2	12	12	11.4	24	40	90	4	●
TM-4RP-D12R0.5		0.5	12	12	11.4	24	40	90	4	●
TM-4RP-D12R3.0		3	12	12	11.4	24	40	90	4	●
TM-4RP-D12R4.0		4	12	12	11.4	24	40	90	4	●
TM-4RP-D12R3.2		3.2	12	12	11.4	24	40	90	4	●
TM-4RP-D12R1.5		1.5	12	12	11.4	24	40	90	4	●
TM-4RP-D12R2.5		2.5	12	12	11.4	24	40	90	4	○
TM-4RP-D12R0.75		0.75	12	12	11.4	24	40	90	4	○
TM-4RP-D12R1.6		1.6	12	12	11.4	24	40	90	4	●
TM-4RP-D16R6.3		6.3	16	16	15	32	50	100	4	○
TM-4RP-D16R4.0		4	16	16	15	32	50	100	4	●
TM-4RP-D16R5.0		5	16	16	15	32	50	100	4	●
TM-4RP-D16R3.2		3.2	16	16	15	32	50	100	4	●
TM-4RP-D16R1.25		1.25	16	16	15	32	50	100	4	●
TM-4RP-D16R2.5		2.5	16	16	15	32	50	100	4	○
TM-4RP-D16R1.0		1	16	16	15	32	50	100	4	●
TM-4RP-D16R3.0		3	16	16	14	32	50	100	4	●
TM-4RP-D16R1.6		1.6	16	16	15	32	50	100	4	●
TM-4RP-D16R1.5		1.5	16	16	15	32	50	100	4	●
TM-4RP-D16R2.0		2	16	16	15	32	50	100	4	●
TM-4RP-D20R1.6		1.6	20	20	19	35	60	110	4	●
TM-4RP-D20R4.0		4	20	20	19	35	60	110	4	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
	✓			✓	

✓ Very suitable

✓ Suitable

System code > B278 Cutting data > B492 Nonstandard order > B541



A

Turning

B

Milling

C

Drilling

D

Technical Information

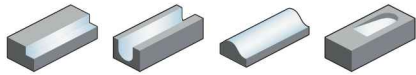
E

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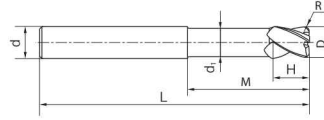
A

Torus mill High-performance machining

TM-4RP



- Factory standard
- Centre cutting
- Helix angle 38°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade KMS405
		R	D	d (h6)	d ₁	H	M	L		
TM-4RP-D20R1.0		1	20	20	19	35	60	110	4	●
TM-4RP-D20R1.5		1.5	20	20	19	35	60	110	4	●
TM-4RP-D20R1.25		1.25	20	20	19	35	60	110	4	●
TM-4RP-D20R2.5		2.5	20	20	19	35	60	110	4	○
TM-4RP-D20R2.0		2	20	20	19	35	60	110	4	●
TM-4RP-D20R3.0		3	20	20	19	35	60	110	4	●
TM-4RP-D20R5.0		5	20	20	19	35	60	110	4	●
TM-4RP-D20R6.3		6.3	20	20	19	35	60	110	4	●
TM-4RP-D20R3.2		3.2	20	20	19	35	60	110	4	●
TM-4RP-D25R3.0		3	25	25	24	45	75	150	4	●
TM-4RP-D25R6.3		6.3	25	25	24	45	75	150	4	●
TM-4RP-D25R2.5		2.5	25	25	24	45	75	150	4	●
TM-4RP-D25R4.0		4	25	25	24	45	75	150	4	●
TM-4RP-D25R3.2		3.2	25	25	24	45	75	150	4	●
TM-4RP-D25R1.5		1.5	25	25	24	45	75	150	4	●
TM-4RP-D25R2.0		2	25	25	24	45	75	150	4	●
TM-4RP-D25R1.25		1.25	25	25	24	45	75	150	4	○
TM-4RP-D25R5.0		5	25	25	24	45	75	150	4	●
TM-4RP-D25R1.0		1	25	25	24	45	75	150	4	●
TM-4RP-D25R1.6		1.6	25	25	24	45	75	150	4	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Drilling

D

Technical Information

Application field

P	M	K	N	S	H
	✓			✓	

✓ Very suitable

✓ Suitable

E

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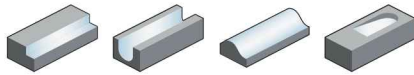
System code > B278

Cutting data > B492

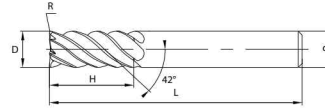
Nonstandard order > B541

Torus mill **High-performance machining**

TM-5R



- Factory standard
- Helix angle 42°



Article	*	Dimensions [mm]					Teeth	Grade KMS405
		R	D	d (h6)	H	L		
TM-5R-D6R1.0		1	6	6	16	50	5	●
TM-5R-D6R0.5		0.5	6	6	16	50	5	●
TM-5R-D6R0.3		0.3	6	6	16	50	5	●
TM-5R-D6R0.75		0.75	6	6	16	50	5	○
TM-5R-D8R0.5		0.5	8	8	20	60	5	●
TM-5R-D8R0.3		0.3	8	8	20	60	5	●
TM-5R-D8R0.75		0.75	8	8	20	60	5	○
TM-5R-D8R1.0		1	8	8	20	60	5	●
TM-5R-D10R3.0		3	10	10	25	75	5	●
TM-5R-D10R1.6		1.6	10	10	25	75	5	●
TM-5R-D10R2.5		2.5	10	10	25	75	5	○
TM-5R-D10R1.5		1.5	10	10	25	75	5	●
TM-5R-D10R2.0		2	10	10	25	75	5	●
TM-5R-D10R0.75		0.75	10	10	25	75	5	○
TM-5R-D10R1.0		1	10	10	25	75	5	●
TM-5R-D10R1.25		1.25	10	10	25	75	5	○
TM-5R-D10R0.5		0.5	10	10	25	75	5	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
	✓			✓	

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

Turning

B

Milling

C

Drilling

D

Technical Information

E

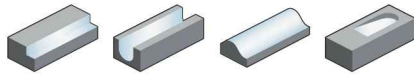
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Solid carbide milling TM series

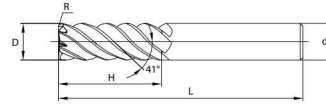
A

Torus mill **High-performance machining**

TM-7R



- Factory standard
- Helix angle 41°



Turning

B

Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		KMS405
TM-7R-D12R2.0		2	12	12	30	75	7	●
TM-7R-D12R1.5		1.5	12	12	30	75	7	●
TM-7R-D12R1.0		1	12	12	30	75	7	●
TM-7R-D12R3.2		3.2	12	12	30	75	7	●
TM-7R-D12R1.6		1.6	12	12	30	75	7	●
TM-7R-D12R3.0		3	12	12	30	75	7	●
TM-7R-D12R0.75		0.75	12	12	30	75	7	○
TM-7R-D12R2.5		2.5	12	12	30	75	7	●
TM-7R-D12R4.0		4	12	12	30	75	7	●
TM-7R-D12R0.5		0.5	12	12	30	75	7	●
TM-7R-D12R1.25		1.25	12	12	30	75	7	○
TM-7R-D16R1.25		1.25	16	16	35	90	7	○
TM-7R-D16R5.0		5	16	16	35	90	7	●
TM-7R-D16R6.3		6.3	16	16	35	90	7	○
TM-7R-D16R1.0		1	16	16	35	90	7	●
TM-7R-D16R3.0		3	16	16	35	90	7	●
TM-7R-D16R2.0		2	16	16	35	90	7	●
TM-7R-D16R2.5		2.5	16	16	35	90	7	●
TM-7R-D16R3.2		3.2	16	16	35	90	7	●
TM-7R-D16R1.5		1.5	16	16	35	90	7	●
TM-7R-D16R1.6		1.6	16	16	35	90	7	●
TM-7R-D16R4.0		4	16	16	35	90	7	●
TM-7R-D20R4.0		4	20	20	45	100	7	●
TM-7R-D20R6.3		6.3	20	20	45	100	7	●
TM-7R-D20R1.5		1.5	20	20	45	100	7	●
TM-7R-D20R3.0		3	20	20	45	100	7	●
TM-7R-D20R5.0		5	20	20	45	100	7	●
TM-7R-D20R2.0		2	20	20	45	100	7	●
TM-7R-D20R1.6		1.6	20	20	45	100	7	●
TM-7R-D20R3.2		3.2	20	20	45	100	7	●
TM-7R-D20R2.5		2.5	20	20	45	100	7	●
TM-7R-D20R1.0		1	20	20	45	100	7	●
TM-7R-D20R1.25		1.25	21	20	45	100	7	○

Milling

C

Drilling

D

Technical Information

- Ex stock ○ On demand
- * With internal cooling

E

Application field

P	M	K	N	S	H
	✓			✓	

- ✓ Very suitable
- ✓ Suitable

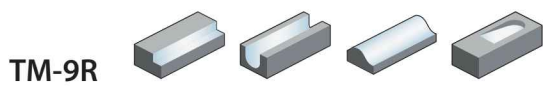
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System code > B278

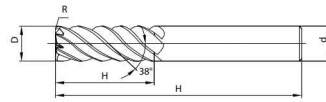
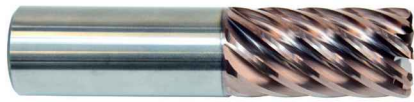
Cutting data > B492

Nonstandard order > B541

Torus mill **High-performance machining**



- Factory standard
- Helix angle 38°



Article	*	Dimensions [mm]					Teeth	Grade
		R	D	d (h6)	H	L		
TM-9R-D25R2.0		2	25	25	50	110	9	●
TM-9R-D25R3.2		3.2	25	25	50	110	9	●
TM-9R-D25R1.6		1.6	25	25	50	110	9	●
TM-9R-D25R5.0		5	25	25	50	110	9	●
TM-9R-D25R1.25		1.25	25	25	50	110	9	○
TM-9R-D25R1.0		1	25	25	50	110	9	●
TM-9R-D25R1.5		1.5	25	25	50	110	9	●
TM-9R-D25R3.0		3	25	25	50	110	9	●
TM-9R-D25R6.3		6.3	25	25	50	110	9	●
TM-9R-D25R4.0		4	25	25	50	110	9	●
TM-9R-D25R2.5		2.5	25	25	50	110	9	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
	✓			✓	

- ✓ Very suitable
- ✓ Suitable

System code > B278

Cutting data > B492

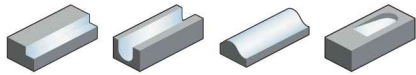
Nonstandard order > B541



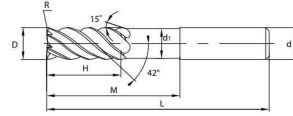
A

Torus mill High-performance machining

TM-5RP



- Factory standard
- Helix angle 42°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		
TM-5RP-D8R0.5		0.5	8	8	7.4	16	25	75	5	●
TM-5RP-D8R1.0		1	8	8	7.4	16	25	75	5	●
TM-5RP-D8R0.3		0.3	8	8	7.4	16	25	75	5	●
TM-5RP-D8R0.75		0.75	8	8	7.4	16	25	75	5	○
TM-5RP-D10R1.6		1.6	10	10	9.4	20	32	75	5	●
TM-5RP-D10R1.5		1.5	10	10	9.4	20	32	75	5	●
TM-5RP-D10R3.0		3	10	10	9.4	20	32	75	5	●
TM-5RP-D10R0.5		0.5	10	10	9.4	20	32	75	5	●
TM-5RP-D10R1.25		1.25	10	10	9.4	20	32	75	5	○
TM-5RP-D10R2.0		2	10	10	9.4	20	32	75	5	●
TM-5RP-D10R1.0		1	10	10	9.4	20	32	75	5	●
TM-5RP-D10R0.75		0.75	10	10	9.4	20	32	75	5	○
TM-5RP-D10R2.5		2.5	10	10	9.4	20	32	75	5	●

- Ex stock ○ On demand
- * With internal cooling

Milling

C

Application field						
P	M	K	N	S	H	
	✓			✓		✓ Very suitable
						✓ Suitable

Drilling

D

Technical Information

E

Index

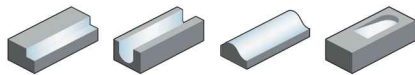
System code > B278

Cutting data > B492

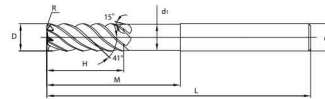
Nonstandard order > B541

Torus mill **High-performance machining**

TM-7RP



- Factory standard
- Helix angle 41°



Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		
TM-7RP-D12R1.6		1.6	12	12	11.4	24	40	90	7	●
TM-7RP-D12R1.5		1.5	12	12	11.4	24	40	90	7	●
TM-7RP-D12R2.0		2	12	12	11.4	24	40	90	7	●
TM-7RP-D12R2.5		2.5	12	12	11.4	24	40	90	7	●
TM-7RP-D12R4.0		4	12	12	11.4	24	40	90	7	●
TM-7RP-D12R0.5		0.5	12	12	11.4	24	40	90	7	●
TM-7RP-D12R1.0		1	12	12	11.4	24	40	90	7	●
TM-7RP-D12R3.0		3	12	12	11.4	24	40	90	7	●
TM-7RP-D12R0.75		0.75	12	12	11.4	24	40	90	7	○
TM-7RP-D12R3.2		3.2	12	12	11.4	24	40	90	7	●
TM-7RP-D12R1.25		1.25	12	12	11.4	24	40	90	7	○
TM-7RP-D16R2.0		2	16	16	15	32	50	100	7	●
TM-7RP-D16R3.2		3.2	16	16	15	32	50	100	7	●
TM-7RP-D16R1.5		1.5	16	16	15	32	50	100	7	●
TM-7RP-D16R1.6		1.6	16	16	15	32	50	100	7	●
TM-7RP-D16R4.0		4	16	16	15	32	50	100	7	●
TM-7RP-D16R3.0		3	16	16	15	32	50	100	7	●
TM-7RP-D16R1.0		1	16	16	15	32	50	100	7	●
TM-7RP-D16R5.0		5	16	16	15	32	50	100	7	●
TM-7RP-D16R6.3		6.3	16	16	15	32	50	100	7	○
TM-7RP-D16R1.25		1.25	16	16	15	32	50	100	7	○
TM-7RP-D16R2.5		2.5	16	16	15	32	50	100	7	●
TM-7RP-D20R3.0		3	20	20	19	35	60	110	7	●
TM-7RP-D20R1.5		1.5	20	20	19	35	60	110	7	●
TM-7RP-D20R6.3		6.3	20	20	19	35	60	110	7	●
TM-7RP-D20R2.5		2.5	20	20	19	35	60	110	7	●
TM-7RP-D20R5.0		5	20	20	19	35	60	110	7	●
TM-7RP-D20R1.25		1.25	20	20	19	35	60	110	7	○
TM-7RP-D20R1.0		1	20	20	19	35	60	110	7	●
TM-7RP-D20R3.2		3.2	20	20	19	35	60	110	7	●
TM-7RP-D20R1.6		1.6	20	20	19	35	60	110	7	●
TM-7RP-D20R2.0		2	20	20	19	35	60	110	7	●
TM-7RP-D20R4.0		4	20	20	19	35	60	110	7	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
	✓			✓	

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

Turning

B

Milling

C

Drilling

D

Technical Information

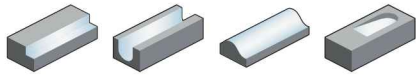
E

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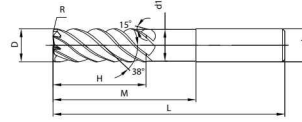
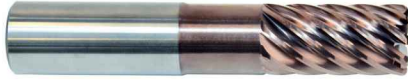
A

Torus mill High-performance machining

TM-9RP



- Factory standard
- Helix angle 38°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		KMS405
TM-9RP-D25R3.0		3	25	25	24	45	75	150	9	●
TM-9RP-D25R3.2		3.2	25	25	24	45	75	150	9	●
TM-9RP-D25R6.3		6.3	25	25	24	45	75	150	9	●
TM-9RP-D25R1.0		1	25	25	24	45	75	150	9	●
TM-9RP-D25R1.6		1.6	25	25	24	45	75	150	9	●
TM-9RP-D25R1.5		1.5	25	25	24	45	75	150	9	●
TM-9RP-D25R2.0		2	25	25	24	45	75	150	9	●
TM-9RP-D25R4.0		4	25	25	24	45	75	150	9	●
TM-9RP-D25R5.0		5	25	25	24	45	75	150	9	●
TM-9RP-D25R1.25		1.25	25	25	24	45	75	150	9	○
TM-9RP-D25R2.5		2.5	25	25	24	45	75	150	9	●

Milling

C

- Ex stock ○ On demand
- * With internal cooling

Drilling

Application field						
P	M	K	N	S	H	
	✓			✓		✓ Very suitable ✓ Suitable

D

Technical Information

E

Index

System code > B278

Cutting data > B492

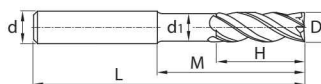
Nonstandard order > B541

End mill **HSC/HPC machining**

5501R38414GM



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 38°/41°



Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG405
5501R38414GM-0400		4	6	3.7	8	16	54	4	●
5501R38414GM-0500		5	6	4.7	9	17	54	4	●
5501R38414GM-0600		6	6	5.7	10	18	54	4	●
5501R38414GM-0800		8	8	7.7	12	22	58	4	●
5501R38414GM-1000		10	10	9.5	14	26	66	4	●
5501R38414GM-1200		12	12	11.5	16	28	73	4	●
5501R38414GM-1400		14	14	13.5	18	30	75	4	●
5501R38414GM-1600		16	16	15.5	22	34	82	4	●
5501R38414GM-1800		18	18	17.5	24	36	84	4	●
5501R38414GM-2000		20	20	19.5	26	42	92	4	●

- Ex stock ○ On demand
- * With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

End mill long cutting edge HSC/HPC machining

5502R38414GM



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 38°/41°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	d ₁	H	M	L		KMG405	KMG406
5502R38414GM-0400	*	4	6	3.7	11	19	57	4	●	●
5502R38414GM-0500		5	6	4.7	13	21	57	4	●	●
5502R38414GM-0600		6	6	5.7	13	21	57	4	●	●
5502R38414GM-0800		8	8	7.7	19	27	63	4	●	●
5502R38414GM-1000		10	10	9.5	22	32	72	4	●	●
5502R38414GM-1200		12	12	11.5	26	38	83	4	●	●
5502R38414GM-1400		14	14	13.5	26	38	83	4	●	●
5502R38414GM-1600		16	16	15.5	32	44	92	4	●	●
5502R38414GM-1800		18	18	17.5	32	44	92	4	●	●
5502R38414GM-2000		20	20	19.5	38	54	104	4	●	●

- Ex stock ○ On demand
- * With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

Drilling

D

Technical Information

E

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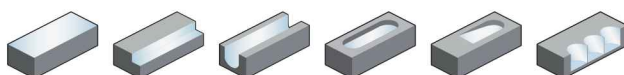
System code > B278

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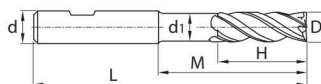
Nonstandard order > B541

End mill **HSC/HPC machining**

5601R38414GM



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 38°/41°



Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG405
5601R38414GM-0400		4	6	3.7	8	16	54	4	●
5601R38414GM-0500		5	6	4.7	9	17	54	4	●
5601R38414GM-0600		6	6	5.7	10	18	54	4	●
5601R38414GM-0800		8	8	7.7	12	22	58	4	●
5601R38414GM-1000		10	10	9.5	14	26	66	4	●
5601R38414GM-1200		12	12	11.5	16	28	73	4	●
5601R38414GM-1400		14	14	13.5	18	30	75	4	●
5601R38414GM-1600		16	16	15.5	22	34	82	4	●
5601R38414GM-1800		18	18	17.5	24	36	84	4	●
5601R38414GM-2000		20	20	19.5	26	42	92	4	●

- Ex stock ○ On demand
- * With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

Turning

B

Milling

C

Drilling

D

Technical Information

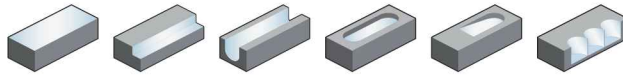
E

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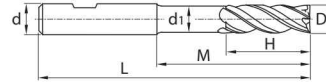
A

End mill long cutting edge HSC/HPC machining

5602R38414GM



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 38°/41°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade	
		D	d (h6)	d ₁	H	M	L		KMG405	KMG406
5602R38414GM-0400		4	6	3.7	11	19	57	4	●	●
5602R38414GM-0500		5	6	4.7	13	21	57	4	●	●
5602R38414GM-0600		6	6	5.7	13	21	57	4	●	●
5602R38414GM-0800		8	8	7.7	19	27	63	4	●	●
5602R38414GM-1000		10	10	9.5	22	32	72	4	●	●
5602R38414GM-1200		12	12	11.5	26	38	83	4	●	●
5602R38414GM-1400		14	14	13.5	26	38	83	4	●	●
5602R38414GM-1600		16	16	15.5	32	44	92	4	●	●
5602R38414GM-1800		18	18	17.5	32	44	92	4	●	●
5602R38414GM-2000		20	20	19.5	38	54	104	4	●	●

- Ex stock ○ On demand
- * With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

Drilling

D

Technical Information

E

Index

System code > B278

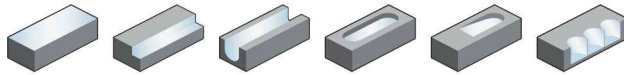
Cutting data > B492

Nonstandard order > B541

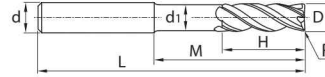
Torus mill long cutting edge

HSC/HPC machining

5502R38414GM-R



- Type of shank DIN 6535HA
- Centre cutting
- Helix angle 38°/41°



Article	*	Dimensions [mm]							Teeth	Grade KMG405
		D	R	d (h6)	d ₁	H	M	L		
5502R38414GM-R02-0400		4	0.2	6	3.7	11	19	57	4	●
5502R38414GM-R05-0400		4	0.5	6	3.7	11	19	57	4	●
5502R38414GM-R02-0500		5	0.2	6	4.7	13	21	57	4	●
5502R38414GM-R05-0500		5	0.5	6	4.7	13	21	57	4	●
5502R38414GM-R02-0600		6	0.2	6	5.7	13	21	57	4	●
5502R38414GM-R05-0600		6	0.5	6	5.7	13	21	57	4	●
5502R38414GM-R10-0600		6	1	6	5.7	13	21	57	4	●
5502R38414GM-R02-0800		8	0.2	8	7.7	19	27	63	4	●
5502R38414GM-R05-0800		8	0.5	8	7.7	19	27	63	4	●
5502R38414GM-R10-0800		8	1	8	7.7	19	27	63	4	●
5502R38414GM-R15-0800		8	1.5	8	7.7	19	27	63	4	●
5502R38414GM-R20-0800		8	2	8	7.7	19	27	63	4	●
5502R38414GM-R02-1000		10	0.2	10	9.5	22	32	72	4	●
5502R38414GM-R05-1000		10	0.5	10	9.5	22	32	72	4	●
5502R38414GM-R10-1000		10	1	10	9.5	22	32	72	4	●
5502R38414GM-R15-1000		10	1.5	10	9.5	22	32	72	4	●
5502R38414GM-R20-1000		10	2	10	9.5	22	32	72	4	●
5502R38414GM-R05-1200		12	0.5	12	11.5	26	38	83	4	●
5502R38414GM-R10-1200		12	1	12	11.5	26	38	83	4	●
5502R38414GM-R15-1200		12	1.5	12	11.5	26	38	83	4	●
5502R38414GM-R20-1200		12	2	12	11.5	26	38	83	4	●
5502R38414GM-R10-1600		16	1	16	15.5	32	44	92	4	●
5502R38414GM-R15-1600		16	1.5	16	15.5	32	44	92	4	●
5502R38414GM-R20-1600		16	2	16	15.5	32	44	92	4	●
5502R38414GM-R30-1600		16	3	16	15.5	32	44	92	4	●
5502R38414GM-R10-2000		20	1	20	19.5	38	54	104	4	●
5502R38414GM-R15-2000		20	1.5	20	19.5	38	54	104	4	●
5502R38414GM-R20-2000		20	2	20	19.5	38	54	104	4	●
5502R38414GM-R30-2000		20	3	20	19.5	38	54	104	4	●

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

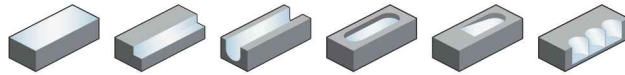
Cutting data > B492

Nonstandard order > B541

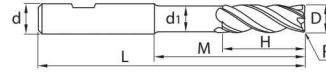
A

Torus mill long cutting edge HSC/HPC machining

5602R38414GM-R



- Type of shank: DIN 6535HB
- Centre cutting
- Helix angle 38°/41°



Turning

B

Article	*	Dimensions [mm]							Teeth	Grade
		D	R	d (h6)	d ₁	H	M	L		KMG405
5602R38414GM-R02-0400		4	0.2	6	3.7	11	19	57	4	●
5602R38414GM-R05-0400		4	0.5	6	3.7	11	19	57	4	●
5602R38414GM-R02-0500		5	0.2	6	4.7	13	21	57	4	●
5602R38414GM-R05-0500		5	0.5	6	4.7	13	21	57	4	●
5602R38414GM-R02-0600		6	0.2	6	5.7	13	21	57	4	●
5602R38414GM-R05-0600		6	0.5	6	5.7	13	21	57	4	●
5602R38414GM-R10-0600		6	1	6	5.7	13	21	57	4	●
5602R38414GM-R02-0800		8	0.2	8	7.7	19	27	63	4	●
5602R38414GM-R05-0800		8	0.5	8	7.7	19	27	63	4	●
5602R38414GM-R10-0800		8	1	8	7.7	19	27	63	4	●
5602R38414GM-R15-0800		8	1.5	8	7.7	19	27	63	4	●
5602R38414GM-R20-0800		8	2	8	7.7	19	27	63	4	●
5602R38414GM-R02-1000		10	0.2	10	9.5	22	32	72	4	●
5602R38414GM-R05-1000		10	0.5	10	9.5	22	32	72	4	●
5602R38414GM-R10-1000		10	1	10	9.5	22	32	72	4	●
5602R38414GM-R15-1000		10	1.5	10	9.5	22	32	72	4	●
5602R38414GM-R20-1000		10	2	10	9.5	22	32	72	4	●
5602R38414GM-R05-1200		12	0.5	12	11.5	26	38	83	4	●
5602R38414GM-R10-1200		12	1	12	11.5	26	38	83	4	●
5602R38414GM-R15-1200		12	1.5	12	11.5	26	38	83	4	●
5602R38414GM-R20-1200		12	2	12	11.5	26	38	83	4	●
5602R38414GM-R10-1600		16	1	16	15.5	32	44	92	4	●
5602R38414GM-R15-1600		16	1.5	16	15.5	32	44	92	4	●
5602R38414GM-R20-1600		16	2	16	15.5	32	44	92	4	●
5602R38414GM-R30-1600		16	3	16	15.5	32	44	92	4	●
5602R38414GM-R10-2000		20	1	20	19.5	38	54	104	4	●
5602R38414GM-R15-2000		20	1.5	20	19.5	38	54	104	4	●
5602R38414GM-R20-2000		20	2	20	19.5	38	54	104	4	●
5602R38414GM-R30-2000		20	3	20	19.5	38	54	104	4	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Drilling

D

Technical Information

E

Index

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

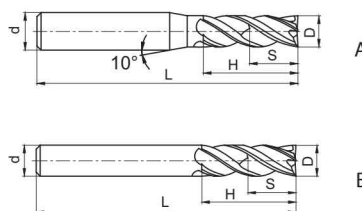
Nonstandard order > B541

End mill **HSC/HPC machining**

UM-4E



- Factory standard
- Centre cutting
- Helix angle 38°/41°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade	
		D	d (h6)	H	L	S			KMG405	YK40F
UM-4E-D4.0S		4	4	11	50	6	4	B	●	
UM-4E-D4.0		4	6	11	50	6	4	A	●	
UM-4E-D4.5		4.5	6	11	50	6.75	4	A	●	
UM-4E-D5.0		5	6	13	50	7.5	4	A	●	
UM-4E-D5.5		5.5	6	16	50	8.25	4	A	●	
UM-4E-D6.0		6	6	16	50	9	4	B	●	○
UM-4E-D7.0		7	8	20	60	10.5	4	A	●	
UM-4E-D8.0		8	8	20	60	12	4	B	●	○
UM-4E-D9.0		9	10	22	75	13.5	4	A	●	
UM-4E-D10.0		10	10	25	75	15	4	B	●	○
UM-4E-D11.0		11	12	26	75	16.5	4	A	●	
UM-4E-D12.0		12	12	30	75	18	4	B	●	○
UM-4E-D14.0		14	14	32	75	21	4	B	●	
UM-4E-D16.0		16	16	45	100	24	4	B	●	○
UM-4E-D18.0		18	18	45	100	27	4	B	●	
UM-4E-D20.0		20	20	45	100	30	4	B	●	

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

Turning

B

Milling

C

Drilling

D

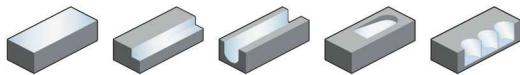
Technical Information

E

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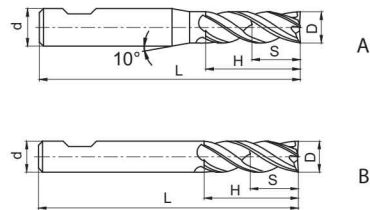
A

End mill **HSC/HPC machining**



UM-4E-W

- Factory standard with weldon clamping surface
- Centre cutting
- Helix angle 38°/41°



Turning

B

Milling

C

Drilling

Article	*	Dimensions [mm]					Teeth	Geometry	Grade	
		D	d (h6)	H	L	S			KMG405	YK40F
UM-4E-D4.0-W		4	6	11	50	6	4	A	●	
UM-4E-D4.5-W		4.5	6	11	50	6.75	4	A	●	
UM-4E-D5.0-W		5	6	13	50	7.5	4	A	●	
UM-4E-D5.5-W		5.5	6	16	50	8.25	4	A	●	
UM-4E-D6.0-W		6	6	16	50	9	4	B	●	○
UM-4E-D7.0-W		7	8	20	60	10.5	4	A	●	
UM-4E-D8.0-W		8	8	20	60	12	4	B	●	○
UM-4E-D9.0-W		9	10	22	75	13.5	4	A	●	
UM-4E-D10.0-W		10	10	25	75	15	4	B	●	○
UM-4E-D11.0-W		11	12	26	75	16.5	4	A	●	
UM-4E-D12.0-W		12	12	30	75	18	4	B	●	○
UM-4E-D14.0-W		14	14	32	75	21	4	B	●	
UM-4E-D16.0-W		16	16	45	100	24	4	B	●	○
UM-4E-D18.0-W		18	18	45	100	27	4	B	●	
UM-4E-D20.0-W		20	20	45	100	30	4	B	●	

● Ex stock ○ On demand

* With internal cooling

D

Technical Information

Application field

P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

E

Index

System code > B278

Cutting data > B492

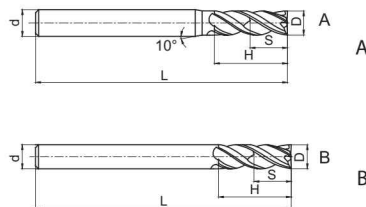
Nonstandard order > B541

End mill long cutting edge **HSC/HPC machining**

UM-4EL



- Factory standard
- Centre cutting
- Helix angle 38°/41°



Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		D	d (h6)	H	L	S			KMG405
UM-4EL-D4.0		4	6	15	75	6	4	A	●
UM-4EL-D5.0		5	6	20	75	7.5	4	A	●
UM-4EL-D6.0		6	6	20	75	9	4	B	●
UM-4EL-D8.0		8	8	25	100	12	4	B	●
UM-4EL-D10.0		10	10	30	100	15	4	B	●
UM-4EL-D12.0		12	12	35	100	18	4	B	●
UM-4EL-D14.0		14	14	40	100	21	4	B	●
UM-4EL-D16.0		16	16	50	150	24	4	B	●
UM-4EL-D20.0		20	20	55	150	30	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

- ✓ Very suitable
- ✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

System code > B278

Cutting data > B492

Nonstandard order > B541



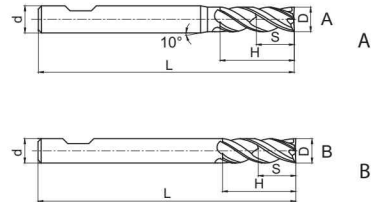
A

End mill long cutting edge HSC/HPC machining

UM-4EL-W



- Factory standard with weldon clamping surface
- Centre cutting
- Helix angle 38°/41°



Turning

B

Milling

C

Drilling

Article	*	Dimensions [mm]					Teeth	Geometry	Grade
		D	d (h6)	H	L	S			KMG405
UM-4EL-D4.0-W		4	6	15	75	6	4	A	●
UM-4EL-D5.0-W		5	6	20	75	7.5	4	A	●
UM-4EL-D6.0-W		6	6	20	75	9	4	B	●
UM-4EL-D8.0-W		8	8	25	100	12	4	B	●
UM-4EL-D10.0-W		10	10	30	100	15	4	B	●
UM-4EL-D12.0-W		12	12	35	100	18	4	B	●
UM-4EL-D14.0-W		14	14	40	100	21	4	B	●
UM-4EL-D16.0-W		16	16	50	150	24	4	B	●
UM-4EL-D20.0-W		20	20	55	150	30	4	B	●

● Ex stock ○ On demand

* With internal cooling

D

Technical Information

E

Index

Application field						
P	M	K	N	S	H	
✓	✓	✓			✓	✓ Very suitable ✓ Suitable

System code > B278

Cutting data > B492

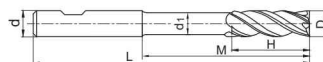
Nonstandard order > B541

End mill reduced neck **HSC/HPC machining**

UM-4ELP-W



- Factory standard with weldon clamping surface
- Centre cutting
- Helix angle 38°/41°



Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG405
UM-4ELP-D4.0-W		4	6	3.8	15	36	75	4	●
UM-4ELP-D5.0-W		5	6	4.8	20	36	75	4	●
UM-4ELP-D6.0-W		6	6	5.7	20	36	75	4	●
UM-4ELP-D8.0-W		8	8	7.7	25	60	100	4	●
UM-4ELP-D10.0-W		10	10	9.5	30	55	100	4	●
UM-4ELP-D12.0-W		12	12	11.5	35	50	100	4	●
UM-4ELP-D14.0-W		14	14	13.5	40	50	100	4	●
UM-4ELP-D16.0-W		16	16	15.5	50	100	150	4	●
UM-4ELP-D20.0-W		20	20	19.5	55	98	150	4	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

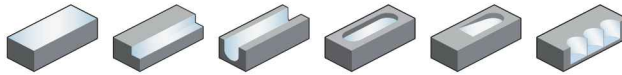
Nonstandard order > B541



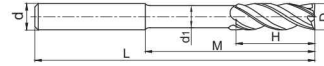
A

End mill short cutting edge HSC/HPC machining

UM-4EFP



- Factory standard
- Centre cutting
- Helix angle 38°/41°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		D	d (h6)	d ₁	H	M	L		KMG405
UM-4EFP-D6.0		6	6	5.8	9	30	75	4	●
UM-4EFP-D8.0		8	8	7.8	12	40	100	4	●
UM-4EFP-D10.0		10	10	9.6	15	50	100	4	●
UM-4EFP-D12.0		12	12	11.5	18	50	100	4	●
UM-4EFP-D16.0		16	16	15.5	24	50	150	4	●
UM-4EFP-D20.0		20	20	19.5	30	60	150	4	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field						
P	M	K	N	S	H	
✓	✓	✓			✓	✓ Very suitable
						✓ Suitable

Drilling

D

Technical Information

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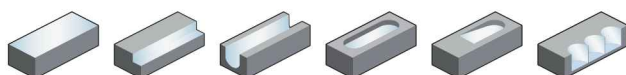
System code > B278

Cutting data > B492

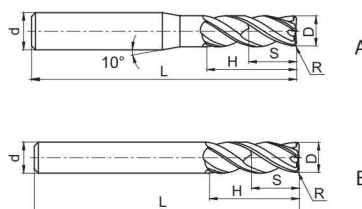
Nonstandard order > B541

End mill **HSC/HPC machining**

UM-4R



- Factory standard
- Centre cutting
- Helix angle 38°/41°



Article	*	Dimensions [mm]						Teeth	Geometry	Grade
		R	D	d (h6)	H	L	S			KMG405
UM-4R-D4.0R0.3		0.3	4	6	10	50	6	4	A	●
UM-4R-D4.0R0.5		0.5	4	6	10	50	6	4	A	●
UM-4R-D5.0R0.5		0.5	5	6	13	50	7.5	4	A	●
UM-4R-D5.0R1.0		1	5	6	13	50	7.5	4	A	●
UM-4R-D6.0R0.5		0.5	6	6	16	50	9	4	B	●
UM-4R-D6.0R1.0		1	6	6	16	50	9	4	B	●
UM-4R-D8.0R0.5		0.5	8	8	20	60	12	4	B	●
UM-4R-D8.0R1.0		1	8	8	20	60	12	4	B	●
UM-4R-D10.0R0.5		0.5	10	10	25	75	15	4	B	●
UM-4R-D10.0R1.0		1	10	10	25	75	15	4	B	●
UM-4R-D10.0R2.0		2	10	10	25	75	15	4	B	●
UM-4R-D10.0R3.0		3	10	10	25	75	15	4	B	●
UM-4R-D12.0R0.5		0.5	12	12	30	75	18	4	B	●
UM-4R-D12.0R1.0		1	12	12	30	75	18	4	B	●
UM-4R-D12.0R2.0		2	12	12	30	75	18	4	B	●
UM-4R-D12.0R3.0		3	12	12	30	75	18	4	B	●
UM-4R-D16.0R0.5		0.5	16	16	45	100	24	4	B	●
UM-4R-D16.0R1.0		1	16	16	45	100	24	4	B	●
UM-4R-D16.0R2.0		2	16	16	45	100	24	4	B	●
UM-4R-D16.0R3.0		3	16	16	45	100	24	4	B	●
UM-4R-D20.0R1.0		1	20	20	45	100	30	4	B	●
UM-4R-D20.0R2.0		2	20	20	45	100	30	4	B	●
UM-4R-D20.0R3.0		3	20	20	45	100	30	4	B	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

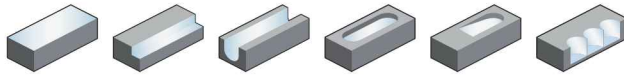
Nonstandard order > B541



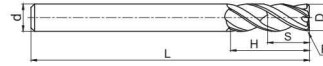
A

Torus mill long shank HSC/HPC machining

UM-4RL



- Factory standard
- Centre cutting
- Helix angle 38°/41°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		R	D	d (h6)	H	L	S		KMG405
UM-4RL-D6.0R0.5		0.5	6	6	16	75	9	4	●
UM-4RL-D6.0R1.0		1	6	6	16	75	9	4	●
UM-4RL-D8.0R0.5		0.5	8	8	20	100	12	4	●
UM-4RL-D8.0R1.0		1	8	8	20	100	12	4	●
UM-4RL-D10.0R0.5		0.5	10	10	25	100	15	4	●
UM-4RL-D10.0R1.0		1	10	10	25	100	15	4	●
UM-4RL-D10.0R2.0		2	10	10	25	100	15	4	●
UM-4RL-D12.0R0.5		0.5	12	12	30	100	18	4	●
UM-4RL-D12.0R1.0		1	12	12	30	100	18	4	●
UM-4RL-D12.0R2.0		2	12	12	30	100	18	4	●
UM-4RL-D16.0R1.0		1	16	16	45	150	24	4	●
UM-4RL-D16.0R2.0		2	16	16	45	150	24	4	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field						
P	M	K	N	S	H	
✓	✓	✓				✓ Very suitable
					✓	✓ Suitable

Drilling

D

Technical Information

E

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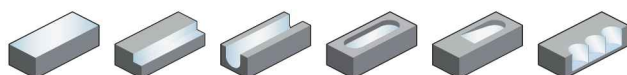
System code > B278

Cutting data > B492

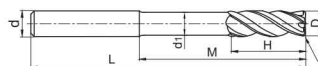
Nonstandard order > B541

Torus mill short cutting edge **HSC/HPC machining**

UM-4RFP



- Factory standard
- Centre cutting
- Helix angle 38°/41°



Article	*	Dimensions [mm]							Teeth	Grade
		R	D	d (h6)	d ₁	H	M	L		
UM-4RFP-D6.0R0.5		0.5	6	6	5.8	6	18	75	4	●
UM-4RFP-D6.0R1.0		1	6	6	5.8	6	18	75	4	●
UM-4RFP-D8.0R0.5		0.5	8	8	7.7	8	24	100	4	●
UM-4RFP-D8.0R1.0		1	8	8	7.7	8	24	100	4	●
UM-4RFP-D10.0R0.5		0.5	10	10	9.6	10	30	100	4	●
UM-4RFP-D10.0R1.0		1	10	10	9.6	10	30	100	4	●
UM-4RFP-D10.0R2.0		2	10	10	9.6	10	30	100	4	●
UM-4RFP-D12.0R0.5		0.5	12	12	11.5	12	36	100	4	●
UM-4RFP-D12.0R1.0		1	12	12	11.5	12	36	100	4	●
UM-4RFP-D12.0R2.0		2	12	12	11.5	12	36	100	4	●
UM-4RFP-D16.0R1.0		1	16	16	15.5	16	40	150	4	●
UM-4RFP-D16.0R2.0		2	16	16	15.5	16	40	150	4	●

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

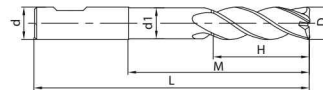
End mill HSC/HPC machining

Turning

UM-5EP-W



- Factory standard with weldon clamping surface
- Non-centre cutting
- Helix angle 38°/39°/40°



B

Milling

Article	*	Dimensions [mm]						Grade
		D	d (h6)	d ₁	H	M	L	KMG405
UM-5EP-D6.0-W		6	6	5.7	16	22	58	●
UM-5EP-D8.0-W		8	8	7.7	21	27	63	●
UM-5EP-D10.0-W		10	10	9.5	24	35	75	●
UM-5EP-D12.0-W		12	12	11.5	31	43	88	●
UM-5EP-D16.0-W		16	16	15.5	36	52	100	●
UM-5EP-D20.0-W		20	20	19.5	41	72	126	●
UM-5EP-D25.0-W		25	25	24	51	102	160	○

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Application field							
P	M	K	N	S	H		
✓	✓	✓			✓	✓ Very suitable	
						✓ Suitable	

D

Technical Information

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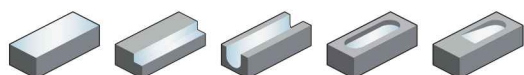
System code > B278

Cutting data > B492

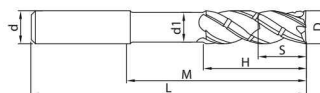
Nonstandard order > B541

End mill **HSC/HPC machining**

UMC-4E



- Factory standard
- Centre cutting
- Helix angle 38°/40°



Article	*	Dimensions [mm]							Grade
		D	d (h6)	d ₁	H	M	L	S	
UMC-4E-D6.0		6	6	5.8	18	24	60	9	○
UMC-4E-D8.0		8	8	7.8	24	34	70	12	○
UMC-4E-D10.0		10	10	9.6	30	40	80	15	○
UMC-4E-D12.0		12	12	11.5	36	45	90	18	○
UMC-4E-D16.0		16	16	15.5	48	62	110	24	○
UMC-4E-D20.0		20	20	19.5	60	80	130	30	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

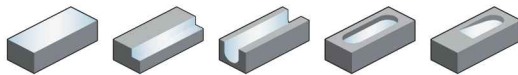
Nonstandard order > B541



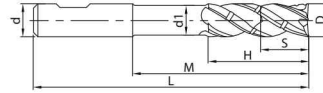
A

End mill HSC/HPC machining

UMC-4E-W



- Factory standard with weldon clamping surface
- Centre cutting
- Helix angle 38°/40°



Turning

B

Article	*	Dimensions [mm]							Grade
		D	d (h6)	d ₁	H	M	L	S	KMG405
UMC-4E-D6.0-W		6	6	5.8	18	24	60	9	○
UMC-4E-D8.0-W		8	8	7.8	24	34	70	12	○
UMC-4E-D10.0-W		10	10	9.6	30	40	80	15	○
UMC-4E-D12.0-W		12	12	11.5	36	45	90	18	○
UMC-4E-D16.0-W		16	16	15.5	48	62	110	24	○
UMC-4E-D20.0-W		20	20	19.5	60	80	130	30	○

- Ex stock ○ On demand
- * With internal cooling

Milling

C

Application field						
P	M	K	N	S	H	
✓	✓	✓			✓	✓ Very suitable
						✓ Suitable

Drilling

D

Technical Information

E

Index

System code > B278

Cutting data > B492

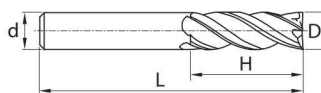
Nonstandard order > B541

End mill **General machining of heat-resistant alloys**

VSM-4E



- Factory standard
- Centre cutting
- Helix angle 38°/41°



Article	*	Dimensions [mm]				Teeth	Grade
		D	d (h6)	H	L		KMG405
VSM-4E-D4.0		4	6	11	50	4	●
VSM-4E-D5.0		5	6	13	50	4	●
VSM-4E-D6.0		6	6	16	50	4	●
VSM-4E-D8.0		8	8	20	60	4	●
VSM-4E-D10.0		10	10	25	75	4	●
VSM-4E-D12.0		12	12	30	75	4	●
VSM-4E-D16.0		16	16	45	100	4	●
VSM-4E-D20.0		20	20	45	100	4	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓			✓	

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

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System code > B278

Cutting data > B492

Nonstandard order > B541



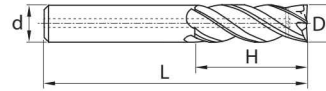
A

End mill General machining of heat-resistant alloys

VSM-4E-C



- Factory standard
- Coolant exit, radial
- Centre cutting
- Helix angle 38°/41°



Turning

B

Article	*	Dimensions [mm]				Teeth	Grade
		D	d (h6)	H	L		KMG405
VSM-4E-C-D10.0	*	10	10	25	75	4	○
VSM-4E-C-D12.0	*	12	12	30	75	4	○
VSM-4E-C-D16.0	*	16	16	45	100	4	○
VSM-4E-C-D20.0	*	20	20	45	100	4	○

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field						
P	M	K	N	S	H	
✓	✓			✓		✓ Very suitable ✓ Suitable

Drilling

D

Technical Information

E

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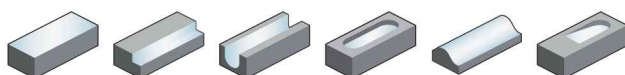
System code > B278

Cutting data > B492

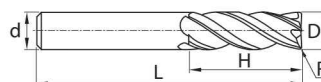
Nonstandard order > B541

Torus mill **General machining of heat-resistant alloys**

VSM-4R



- Factory standard
- Centre cutting
- Helix angle 38°/41°



Article	*	Dimensions [mm]					Teeth	Grade
		D	R	d (h6)	H	L		KMG405
VSM-4R-D4.0R0.2		4	0.2	6	11	50	4	●
VSM-4R-D4.0R0.5		4	0.5	6	11	50	4	●
VSM-4R-D5.0R0.2		5	0.2	6	13	50	4	●
VSM-4R-D5.0R0.5		5	0.5	6	13	50	4	●
VSM-4R-D6.0R0.2		6	0.2	6	16	50	4	●
VSM-4R-D6.0R0.5		6	0.5	6	16	50	4	●
VSM-4R-D6.0R1.0		6	1	6	16	50	4	●
VSM-4R-D6.0R1.5		6	1.5	6	16	50	4	●
VSM-4R-D8.0R0.5		8	0.5	8	20	63	4	●
VSM-4R-D8.0R0.8		8	0.8	8	20	63	4	●
VSM-4R-D8.0R1.0		8	1	8	20	63	4	●
VSM-4R-D8.0R1.5		8	1.5	8	20	63	4	●
VSM-4R-D8.0R2.0		8	2	8	20	63	4	●
VSM-4R-D10.0R0.5		10	0.5	10	25	75	4	●
VSM-4R-D10.0R0.8		10	0.8	10	25	75	4	●
VSM-4R-D10.0R1.0		10	1	10	25	75	4	●
VSM-4R-D10.0R1.5		10	1.5	10	25	75	4	●
VSM-4R-D10.0R2.0		10	2	10	25	75	4	●
VSM-4R-D12.0R0.5		12	0.5	12	30	75	4	●
VSM-4R-D12.0R0.8		12	0.8	12	30	75	4	●
VSM-4R-D12.0R1.0		12	1	12	30	75	4	●
VSM-4R-D12.0R1.5		12	1.5	12	30	75	4	●
VSM-4R-D12.0R2.0		12	2	12	30	75	4	●
VSM-4R-D12.0R2.5		12	2.5	12	30	75	4	●
VSM-4R-D12.0R3.0		12	3	12	30	75	4	●
VSM-4R-D12.0R4.0		12	4	12	30	75	4	●
VSM-4R-D16.0R0.5		16	0.5	16	45	100	4	●
VSM-4R-D16.0R0.8		16	0.8	16	45	100	4	●
VSM-4R-D16.0R1.0		16	1	16	45	100	4	●
VSM-4R-D16.0R1.5		16	1.5	16	45	100	4	●
VSM-4R-D16.0R2.0		16	2	16	45	100	4	●
VSM-4R-D16.0R2.5		16	2.5	16	45	100	4	●
VSM-4R-D16.0R3.0		16	3	16	45	100	4	●
VSM-4R-D16.0R4.0		16	4	16	45	100	4	●
VSM-4R-D20.0R0.5		20	0.5	20	45	100	4	●
VSM-4R-D20.0R1.0		20	1	20	45	100	4	●
VSM-4R-D20.0R1.5		20	1.5	20	45	100	4	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓			✓	

✓ Very suitable

✓ Suitable

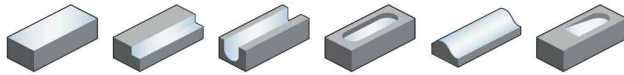
System code > B278 Cutting data > B492 Nonstandard order > B541



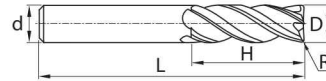
A

Torus mill **General machining of heat-resistant alloys**

VSM-4R



- Factory standard
- Centre cutting
- Helix angle 38°/41°



Turning

B

Article	*	Dimensions [mm]					Teeth	Grade
		D	R	d (h6)	H	L		KMG405
VSM-4R-D20.0R2.0		20	2	20	45	100	4	●
VSM-4R-D20.0R2.5		20	2.5	20	45	100	4	●
VSM-4R-D20.0R3.0		20	3	20	45	100	4	●
VSM-4R-D20.0R4.0		20	4	20	45	100	4	●

- Ex stock ○ On demand
- * With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓			✓	

- ✓ Very suitable
- ✓ Suitable

Drilling

D

Technical Information

E

Index

System code > B278

Cutting data > B492

Nonstandard order > B541

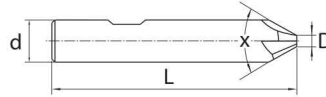
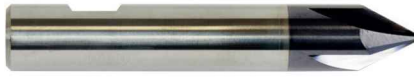
Deburring cutter 60°

General machining

5501/5601R60*FM



- Type of shank DIN 6535HA
- Type of shank: DIN 6535HB
- Non-centre cutting
- Helix angle 0°



Article	*	Dimensions [mm]					Teeth	Grade
		d(h6)	L	D	Shank	X		KMG303
5501R603FM-0300		3	48	0.2	HA	60	3	●
5501R604FM-0400		4	48	0.2	HA	60	4	●
5601R604FM-0600		6	55	0.2	HB	60	4	●
5601R604FM-0800		8	58	0.5	HB	60	4	●
5601R604FM-1000		10	65	0.5	HB	60	4	●
5601R606FM-1000		10	65	0.7	HB	60	6	○
5601R604FM-1200		12	75	0.5	HB	60	4	●
5601R606FM-1200		12	75	0.7	HB	60	6	○
5601R604FM-1600		16	85	0.7	HB	60	4	●
5601R606FM-1600		16	85	0.7	HB	60	6	○

- Ex stock ○ On demand
- * With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓	✓		

- ✓ Very suitable
- ✓ Suitable



A Turning

B Milling

C Drilling

D Technical Information

E Index

A

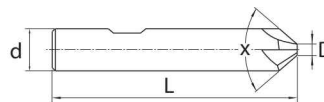
Deburring cutter 90° General machining

Turning

5501/5601R90*FM



- Type of shank DIN 6535HA
- Type of shank: DIN 6535HB
- Non-centre cutting
- Helix angle 0°



B

Milling

Article	*	Dimensions [mm]					Teeth	Grade
		d(h6)	L	D	Shank	X		KMG303
5501R903FM-0300		3	48	0.2	HA	90	3	●
5501R904FM-0400		4	48	0.2	HA	90	4	●
5601R904FM-0600		6	55	0.2	HB	90	4	●
5601R904FM-0800		8	58	0.5	HB	90	4	●
5601R904FM-1000		10	65	0.5	HB	90	4	●
5601R906FM-1000		10	65	0.7	HB	90	6	○
5601R904FM-1200		12	75	0.5	HB	90	4	●
5601R906FM-1200		12	75	0.7	HB	90	6	○
5501R904FM-1600		16	85	0.7	HA	90	4	○
5601R904FM-1600		16	85	0.7	HB	90	4	●
5601R906FM-1600		16	85	0.7	HB	90	6	○

● Ex stock ○ On demand

* With internal cooling

C

Drilling

Application field						
P	M	K	N	S	H	
✓	✓	✓	✓			✓ Very suitable
						✓ Suitable

D

Technical Information

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System code > B278

Cutting data > B492

Nonstandard order > B541

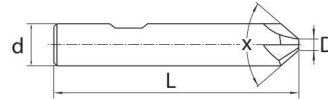
Deburring cutter

General machining

5501/5601R120*FM



- Type of shank DIN 6535HA
- Type of shank: DIN 6535HB
- Non-centre cutting
- Helix angle 0°



Article	*	Dimensions [mm]					Teeth	Grade
		d(h6)	L	D	Shank	X		KMG406
5501R1203FM-0300		3	48	0.2	HA	120	3	○
5501R1204FM-0400		4	48	0.2	HA	120	4	○
5501R1204FM-0600		6	55	0.2	HA	120	4	○
5601R1204FM-0600		6	55	0.2	HB	120	4	○
5501R1204FM-0800		8	58	0.5	HA	120	4	○
5601R1204FM-0800		8	58	0.5	HB	120	4	○
5501R1204FM-1000		10	65	0.5	HA	120	4	○
5601R1204FM-1000		10	65	0.5	HB	120	4	○
5601R1206FM-1000		10	65	0.7	HB	120	6	○
5501R1206FM-1000		10	65	0.7	HA	120	6	○
5501R1204FM-1200		12	75	0.5	HA	120	4	○
5601R1204FM-1200		12	75	0.5	HB	120	4	○
5601R1206FM-1200		12	75	0.7	HB	120	6	○
5501R1206FM-1200		12	75	0.7	HA	120	6	○
5501R1206FM-1600		16	85	0.7	HA	120	6	○
5601R1204FM-1600		16	85	0.7	HB	120	4	○
5501R1204FM-1600		16	85	0.7	HA	120	4	○
5601R1206FM-1600		16	85	0.7	HB	120	6	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓	✓		

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

Nonstandard order > B541



A

Quarter round profile mill

General machining

5601R90*FM-R



- Type of shank: DIN 6535HB
- Non-centre cutting
- Helix angle 0°



Turning

B

Article	*	Dimensions [mm]				Teeth	Grade
		d(h6)	L	D	R		KMG303
5601R904FM-R02-0600		6	60	5.6	0.2	4	●
5601R904FM-R03-0600		6	60	5.4	0.3	4	●
5601R904FM-R04-0600		6	60	5.2	0.4	4	●
5601R904FM-R05-0800		8	70	7	0.5	4	●
5601R904FM-R06-0800		8	70	6.8	0.6	4	●
5601R904FM-R075-0800		8	70	6.5	0.75	4	●
5601R904FM-R08-0800		8	70	6.4	0.8	4	●
5601R904FM-R10-0800		8	70	6	1	4	●
5601R904FM-R15-1000		10	75	7	1.5	4	●
5601R904FM-R20-1000		10	75	6	2	4	●
5601R904FM-R25-1200		12	75	7	2.5	4	●
5601R904FM-R30-1200		12	75	6	3	4	●
5601R904FM-R40-1600		16	80	8	4	4	●
5601R904FM-R50-2000		20	80	10	5	4	●

Milling

C

- Ex stock ○ On demand
- * With internal cooling

Drilling

D

Application field

P	M	K	N	S	H
✓	✓	✓	✓		

- ✓ Very suitable
- ✓ Suitable

Technical Information

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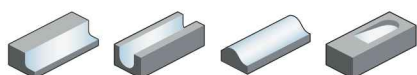
System code > B278

Cutting data > B492

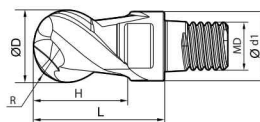
Nonstandard order > B541

Ball nose cutter **High-performance machining**

PM-2B



- Centre cutting
- Helix angle 30°



Article	*	Dimensions [mm]						Teeth	Grade
		R	D	d1	H	L	MD		KMG405
Q08-PM-2B-D12.0		6	12	11.5	7	17	8	2	●
Q10-PM-2B-D16.0		8	16	15.2	9	21.5	10	2	●
Q12-PM-2B-D20.0		10	20	19	11	25.5	12	2	●
Q14-PM-2B-D25.0		12.5	25	24	13.5	31.5	14	2	●
Q18-PM-2B-D32.0		16	32	30	17	36	18	2	●

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

System code > B278

Cutting data > B492

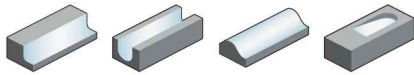
Nonstandard order > B541



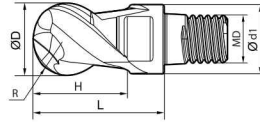
A

Ball nose cutter **High-performance machining**

PM-4B



- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		R	D	d1	H	L	MD		
Q08-PM-4B-D12.0		6	12	11.5	7	17	8	4	●
Q10-PM-4B-D16.0		8	16	15.2	9	21.5	10	4	●
Q12-PM-4B-D20.0		10	20	19	11	25.5	12	4	●
Q14-PM-4B-D25.0		12.5	25	24	13.5	31.5	14	4	●
Q18-PM-4B-D32.0		16	32	30	17	36	18	4	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

Drilling

D

Technical Information

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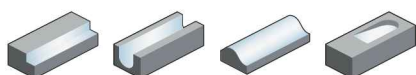
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Cutting data > B492

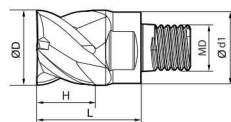
Nonstandard order > B541

Square shoulder mill **High-performance machining**

PM-4E



- Centre cutting
- Helix angle 45°



Article	*	Dimensions [mm]					Teeth	Grade
		D	d1	H	L	MD		KMG405
Q08-PM-4E-D12.0		12	11.5	7	17	8	4	●
Q10-PM-4E-D16.0		16	15.2	9	21.5	10	4	●
Q12-PM-4E-D20.0		20	19	11	25.5	12	4	●
Q14-PM-4E-D25.0		25	24	13.5	31.5	14	4	●
Q18-PM-4E-D32.0		32	30	17	36	18	4	●

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

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System code > B278

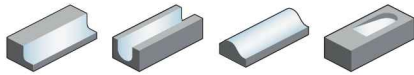
Cutting data > B492

Nonstandard order > B541

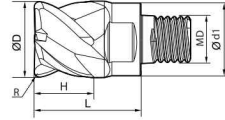
A

Torus mill **High-performance machining**

PM-4R



- Centre cutting
- Helix angle 30°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		R	D	d1	H	L	MD		
Q08-PM-4R-D12.0R1.0		1	12	11.5	7	17	8	4	●
Q08-PM-4R-D12.0R2.0		2	12	11.5	7	17	8	4	●
Q10-PM-4R-D16.0R1.0		1	16	15.2	9	21.5	10	4	●
Q10-PM-4R-D16.0R1.5		1.5	16	15.2	9	21.5	10	4	●
Q10-PM-4R-D16.0R2.0		2	16	15.2	9	21.5	10	4	●
Q12-PM-4R-D20.0R1.0		1	20	19	11	25.5	12	4	●
Q12-PM-4R-D20.0R2.0		2	20	19	11	25.5	12	4	●
Q14-PM-4R-D25.0R1.0		1	25	24	13.5	31.5	14	4	●
Q14-PM-4R-D25.0R2.0		2	25	24	13.5	31.5	14	4	●
Q14-PM-4R-D25.0R2.5		2.5	25	24	13.5	31.5	14	4	●
Q18-PM-4R-D32.0R1.0		1	32	30	17	36	18	4	●
Q18-PM-4R-D32.0R2.0		2	32	30	17	36	18	4	●
Q18-PM-4R-D32.0R3.0		3	32	30	17	36	18	4	●

Milling

C

- Ex stock ○ On demand
- * With internal cooling

Drilling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable
 ✓ Suitable

D

Technical Information

E

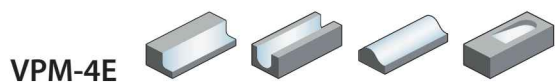
Index

System code > B278

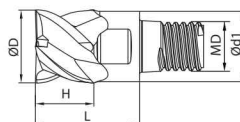
Cutting data > B492

Nonstandard order > B541

Square shoulder mill **High-performance machining**



- Centre cutting
- Helix angle 38°



Article	*	Dimensions [mm]					Teeth	Grade
		D	d1	H	L	MD		KMG406
Q08-VPM-4E-D12.0		12	11.5	7	17	8	4	●
Q10-VPM-4E-D16.0		16	15.2	9	21.5	10	4	●
Q12-VPM-4E-D20.0		20	19	11	25.5	12	4	●
Q14-VPM-4E-D25.0		25	24	13.5	31.5	14	4	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
✓	✓	✓			✓

✓ Very suitable
 ✓ Suitable

A

Turning

B

Milling

C

Drilling

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System code > B278

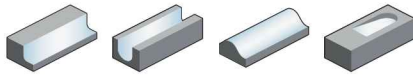
Cutting data > B492

Nonstandard order > B541

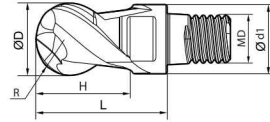
A

Ball nose cutter **Hard machining**

HMX-2B



- Centre cutting
- Helix angle 35°



Turning

B

Article	*	Dimensions [mm]						Teeth	Grade
		R	D	d1	H	L	MD		KMG5515
Q08-HMX-2B-D12.0		6	12	11.5	7	17	8	2	●
Q10-HMX-2B-D16.0		8	16	15.2	9	21.5	10	2	●
Q12-HMX-2B-D20.0		10	20	19	11	25.5	12	2	●
Q14-HMX-2B-D25.0		12.5	25	24	13.5	31.5	14	2	●
Q18-HMX-2B-D32.0		16	32	30	17	36	18	2	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field

P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

Drilling

D

Technical Information

E

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System code > B278

Cutting data > B492

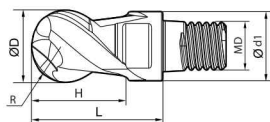
Nonstandard order > B541

Ball nose cutter **Hard machining**

HMX-4B



- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]						Teeth	Grade
		R	D	d1	H	L	MD		
Q08-HMX-4B-D12.0		6	12	11.5	7	17	8	4	●
Q10-HMX-4B-D16.0		8	16	15.2	9	21.5	10	4	●
Q12-HMX-4B-D20.0		10	20	19	11	25.5	12	4	●
Q14-HMX-4B-D25.0		12.5	25	24	13.5	31.5	14	4	●
Q18-HMX-4B-D32.0		16	32	30	17	36	18	4	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B278

Cutting data > B492

Nonstandard order > B541



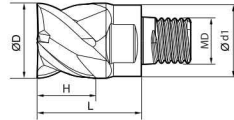
A

Square shoulder mill **Hard machining**

HMX-4E



- Centre cutting
- Helix angle 45°



Turning

B

Article	*	Dimensions [mm]					Teeth	Grade
		D	d1	H	L	MD		KMG5515
Q08-HMX-4E-D12.0		12	11.5	7	17	8	4	●
Q10-HMX-4E-D16.0		16	15.2	9	21.5	10	4	●
Q12-HMX-4E-D20.0		20	19	11	25.5	12	4	●
Q14-HMX-4E-D25.0		25	24	13.5	31.5	14	4	●
Q18-HMX-4E-D32.0		32	30	17	36	18	4	●

● Ex stock ○ On demand

* With internal cooling

Milling

C

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable
 ✓ Suitable

Drilling

D

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System code > B278

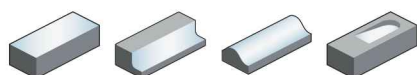
Cutting data > B492

Nonstandard order > B541

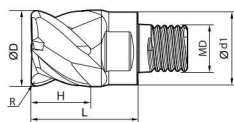
Torus mill

Hard machining

HMX-4R



- Centre cutting
- Helix angle 35°



Article	*	Dimensions [mm]						Teeth	Grade
		R	D	d1	H	L	MD		KMG405
Q08-HMX-4R-D12.0R1.0		1	12	11.5	7	17	8	4	●
Q08-HMX-4R-D12.0R2.0		2	12	11.5	7	17	8	4	●
Q10-HMX-4R-D16.0R1.0		1	16	15.2	9	21.5	10	4	●
Q10-HMX-4R-D16.0R1.5		1.5	16	15.2	9	21.5	10	4	●
Q10-HMX-4R-D16.0R2.0		2	16	15.2	9	21.5	10	4	●
Q12-HMX-4R-D20.0R1.0		1	20	19	11	25.5	12	4	●
Q12-HMX-4R-D20.0R2.0		2	20	19	11	25.5	12	4	●
Q14-HMX-4R-D25.0R1.0		1	25	24	13.5	31.5	14	4	●
Q14-HMX-4R-D25.0R2.0		2	25	24	13.5	31.5	14	4	●
Q14-HMX-4R-D25.0R2.5		2.5	25	24	13.5	31.5	14	4	●
Q18-HMX-4R-D32.0R1.0		1	32	30	17	36	18	4	●
Q18-HMX-4R-D32.0R2.0		2	32	30	17	36	18	4	●
Q18-HMX-4R-D32.0R3.0		3	32	30	17	36	18	4	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

System code > B278

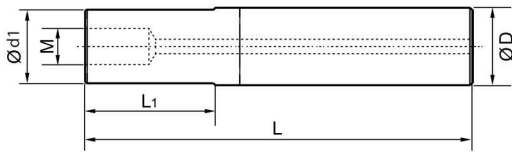
Cutting data > B492

Nonstandard order > B541



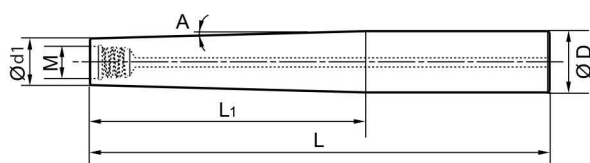
Indexable heads shanks

Solid carbide shank, stepped, Q thread




Article	Dimensions [mm]				Thread (M)	Stock
	D	d1	L	L1		
G12-QCH-Q08-80C	12	11,5	80	30	Q8	●
G12-QCH-Q08-100C	12	11,5	100	50	Q8	●
G12-QCH-Q08-120C	12	11,5	120	70	Q8	●
G16-QCH-Q10-90C	16	15,2	90	40	Q10	●
G16-QCH-Q10-120C	16	15,2	120	70	Q10	●
G16-QCH-Q10-150C	16	15,2	150	100	Q10	●
G20-QCH-Q12-100C	20	19	100	40	Q12	●
G20-QCH-Q12-140C	20	19	140	80	Q12	●
G20-QCH-Q12-180C	20	19	180	120	Q12	●
G25-QCH-Q14-120C	25	24	120	50	Q14	●
G25-QCH-Q14-170C	25	24	170	100	Q14	●
G25-QCH-Q14-220C	25	24	220	150	Q14	●
G32-QCH-Q18-140C	32	30	140	70	Q18	●
G32-QCH-Q18-200C	32	30	200	130	Q18	●
G32-QCH-Q18-260C	32	30	260	190	Q18	●
G32-QCH-Q18-320C	32	30	320	250	Q18	●

Solid carbide shank, tapered, Q thread



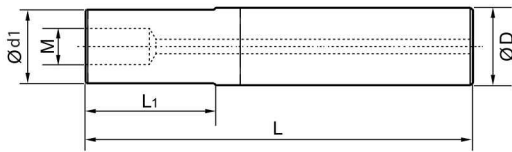
Article	Dimensions [mm]				Thread (M)	Angle (A)	Stock
	D	d1	L	L1			
G16-QCH-Q08-140C-ZJ90	16	11,5	140	90	Q8	1,0	●
G20-QCH-Q10-200C-ZJ140	20	15,2	200	140	Q8	0,8	●
G25-QCH-Q12-250C-ZJ180	25	19	250	180	Q8	0,8	●
G32-QCH-Q14-270C-ZJ200	32	30	270	200	Q10	0,8	●

Spare parts

	Thread	Q8 / Q10	Q12 / Q14	Q18
	Wrench	QCH-10x13	QCH-16x20	QCH-26

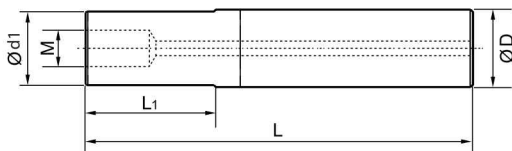
Indexable heads shanks

Steel shank, stepped, Q thread



Article	Dimensions [mm]				Thread (M)	Stock
	D	d1	L	L1		
G12-QCH-Q08-65S	12	11,5	65	19	Q08	●
G16-QCH-Q10-100S	16	15,2	100	42	Q10	●
G20-QCH-Q12-110S	20	19	110	54	Q12	●

Solid carbide shank, stepped, metric thread



Article	Dimensions [mm]				Thread (M)	Stock
	D	d1	L	L1		
G16-QCH-M8-90C-125	16	12,5	90	35	M8	○
G16-QCH-M8-110C-125	16	12,5	110	55	M8	○
G16-QCH-M8-130C-125	16	12,5	130	75	M8	○
G16-QCH-M8-90C	16	15	90	35	M8	○
G16-QCH-M8-110C	16	15	110	55	M8	○
G16-QCH-M8-130C	16	15	130	75	M8	○
G16-QCH-M8-170C	16	15	170	115	M8	○
G16-QCH-M8-200C	16	15	200	145	M8	○
G20-QCH-M10-87C	20	18,5	87	30	M10	○
G20-QCH-M10-107C	20	18,5	107	50	M10	○
G20-QCH-M10-127C	20	18,5	127	70	M10	○
G20-QCH-M10-167C	20	18,5	167	110	M10	○
G20-QCH-M10-197C	20	18,5	197	140	M10	○
G25-QCH-M12-128C	25	23	128	65	M12	○
G25-QCH-M12-148C	25	23	148	85	M12	○
G25-QCH-M12-168C	25	23	168	105	M12	○
G25-QCH-M12-198C	25	23	198	135	M12	○
G25-QCH-M12-228C	25	23	228	165	M12	○
G32-QCH-M16-161C	32	29	161	95	M16	○
G32-QCH-M16-211C	32	29	211	145	M16	○
G32-QCH-M16-281C	32	29	281	215	M16	○
G32-QCH-M16-311C	32	29	311	245	M16	○
G32-QCH-M16-361C	32	29	361	295	M16	○

A

Turning

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Milling

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