DORMER PRAMET

To check out our high-feed products in action, scan this code!

HIGH-FEED RANGE

Save on your machining time thanks to our high-feed milling program

2020

DORMER PRAMET

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HIGH-FEED

SAVE ON YOUR MACHINING TIME

A COMPLETE PRODUCT RANGE

The pressure of cost cutting is a commonly-faced reality in many production environments. One option, however, enables you to significantly reduce machining times without the need for major financial investment: **high-feed machining**. Carried out with existing machines, it combines a low pass depth with a high feed per tooth and is a low-cost alternative to high-speed machining (HSM) strategies.

Dormer Pramet offers a wide range of **high-feed solutions in standard and special versions**:

- SBN10 milling cutters
- SSN11 milling cutters
- Multiside CAD15 HF milling cutters
- Penta HF milling cutters
- Feed ZD milling cutters
- PPHF inserts for K2-PPH milling cutters
- HF and HF2 inserts for SAD milling cutters
- S536 high-feed carbide milling cutters

This program covers diameters from 6 to 175 mm, and supports feeds-per-tooth from 0.4 to 3 mm.

They support numerous applications: face milling, oblique plunge milling, profile milling, helical interpolation, copy turning, ramping, slot milling, plunge milling...

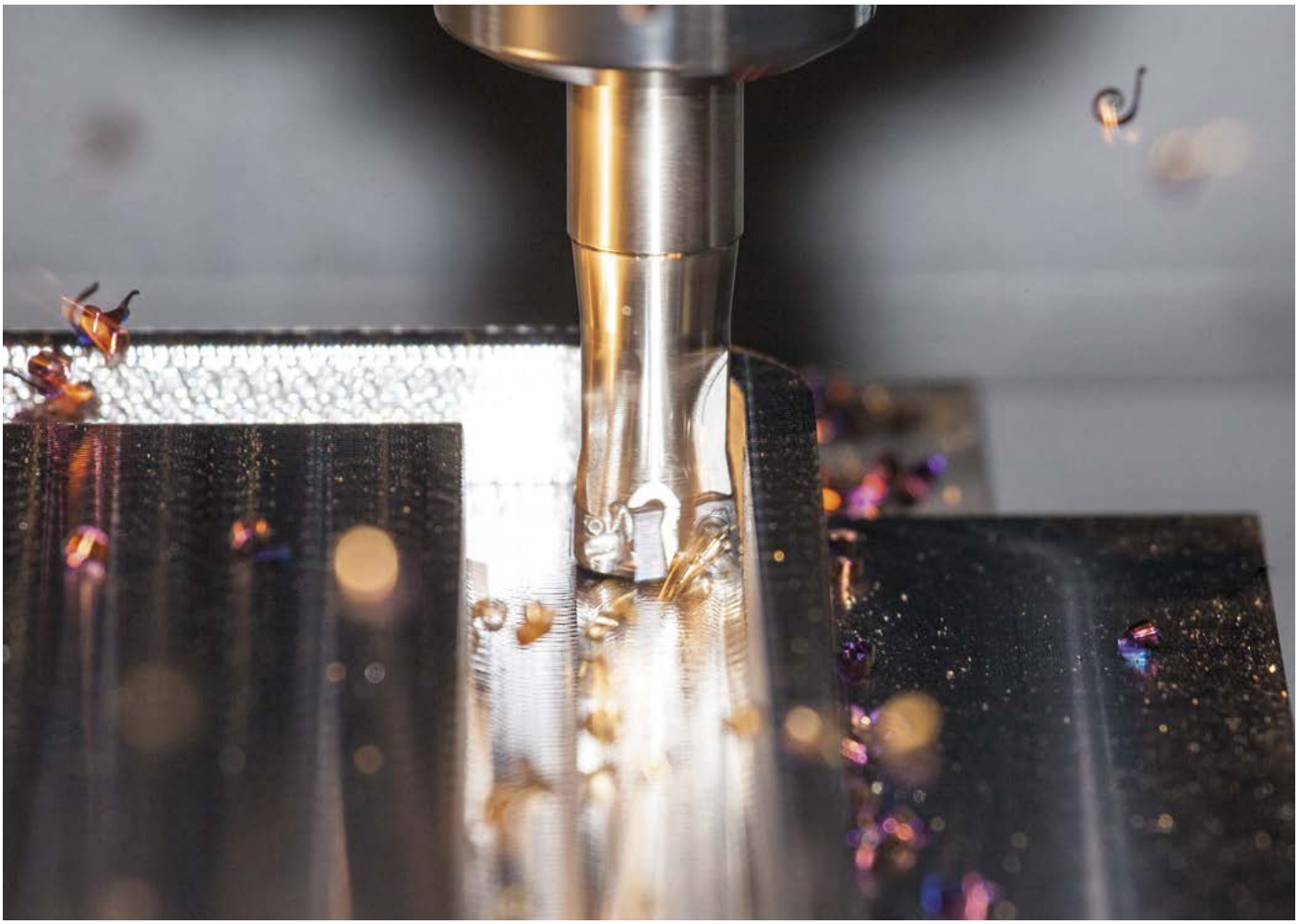
Our program partly consists of high-feed inserts mounted on our standard milling cutters, which represents a highly **economical solution**. Also, many of our inserts are reversible and highly durable, promoting further cost savings.

Thanks to our high-feed products you can achieve substantially lower machining costs whilst slashing cycle times by at least fifty percent!

HIGH-FEED

TEST RESULTS FOR OUR HIGH-FEED PRODUCTS

Material group	P-group	M-group					S-group				H-group
Machined material	40 CMD8 S	ASTM A105	AISI 304L	Z6 CNT 1810	F51 (duplex)	AISI 304	Ta6V	TA6V	TA6V	Inconel 718	Stellite 6
Subgroup	P3	M3	M3	M3	M4	M3	S1	S1	S1	S3	H1
Milling cutter family	CAD15	SPD09	SBN10	SBN10	SPD09	SSN11	SBN10	CAD15	CSC09	CAD15	SPD09
Insert	AD15 T3465	PDKT 090530 ER	BNGX 10T308SR	BNGX 10T308SR	PDKT 090530ER	SNGX11	BNGX 10T308SR	AD15 T3465	SCKR 09T325	AD15 T3465	PDKT 090530 ER
Geometry	HF	FM	MM	MM	FM	MM	MM	HF	M	HF	FM
Grade	M8345	M6330	M8340	M8345	M6330	M8345	M6330	M8345	M8345	M8345	M8310
Lubrication	Without coolant	Without coolant	💧	💧	💧	Without coolant	💧	💧	💧	💧	Without coolant
Cutting speed V_c [m/min]	160	196	120	80	51	166	45	40	50,2	29	40
Pass depth a_p [mm]	1,2	0,7	0,6	0,7	1,5	0,5	0,6	1,5	1	1,5	1
Feed f_z [mm/tooth]	1	1,2	0,6	0,5	0,33	0,6	0,52	0,5	0,57	0,3	0,2
Chip flow rate Q [cm^3/min]	489	315	57,8	33,4	37,5	30	22,3	64	72,9	13,1	3,1
Results vs. Competitors	360%	133%	250%	266%	900%	127%	120%	160%	130%	335%	344%



HIGH-FEED

CHARACTERISTICS OF MILLING CUTTERS AND INSERTS

Save time and cut your production costs with our high-productivity milling cutters. The first choice for high-feed machining!

	Cutter teeth number for each diameter The cutter teeth numbers with * can be made specially on request																							
Productive and versatile HF milling cutters	**Ø 8**	**Ø 10**	**Ø 12**	**Ø 16**	**Ø 18**	**Ø 20**	**Ø 22**	**Ø 25**	**Ø 28**	**Ø 30**	**Ø 32**	**Ø 35**	**Ø 40**	**Ø 42**	**Ø 50**	**Ø 52**	**Ø 63**	**Ø 66**	**Ø 80**	**Ø 88**	**Ø 100**	**Ø 125**	**Ø 140**	**Ø 175**
SBN10 milling cutters				2	2	3-4		4-5	5		5-6	5-6	5-6-7	5-7										
SSN11 milling cutters											3	3	4	4	5-6	5-6	6-8	6-8	7-9		8	8		
Multiside milling cutters CAD15 HF								3			5		6		8		10	12*	10-14					
Multiside milling cutters CSC09 HF											5*				8*			10*						
PENTA HF milling cutters											2		3	3	4-5	4	5-6-7*	6	5-6		6-8	8-10	8	

	Cutter teeth number for each diameter																							
HF milling cutters for mould making applications	**Ø 6**	**Ø 8**	**Ø 10**	**Ø 12**	**Ø 16**	**Ø 18**	**Ø 20**	**Ø 22**	**Ø 25**	**Ø 28**	**Ø 30**	**Ø 32**	**Ø 35**	**Ø 40**	**Ø 42**	**Ø 50**	**Ø 52**	**Ø 63**	**Ø 66**	**Ø 80**	**(Ø 88)**	**Ø 100**	**Ø 125**	**Ø 140**
FEED ZD07 milling cutters					2		3		3			4												
FEED ZD09 milling cutters									3			3		4										
FEED ZD12 milling cutters												3		4		4		5		5				
S536 milling cutters	4	6	6	6																				

	Cutter teeth number for each diameter																							
HF inserts for K2-PPH & SAD milling cutters	**Ø 8**	**Ø 10**	**Ø 12**	**Ø 14**	**Ø 16**	**Ø 18**	**Ø 20**	**Ø 22**	**Ø 25**	**Ø 30**	**Ø 32**	**Ø 35**	**Ø 40**	**Ø 42**	**Ø 50**	**Ø 52**	**Ø 63**	**Ø 66**	**Ø 80**	**(Ø 88)**	**Ø 100**	**Ø 125**	**Ø 140**	**Ø 175**
PPHF inserts	2	2	2		2		2		2															
AD07 HF inserts		2	2-3	3	3-4	4	4-5		5-6		8													
Inserts AD11 HF and HF2					2	2	2-3	3	3-4	3	3-4-5	5	4-5-6		5-7		6-9		10		11	12		
Inserts AD16 HF and HF2									2		2-3		3-4		3-5		4-6		5-7		6-8	9	10	10

CHIP FLOW RATE (Q) FOR VARIOUS TA6V MACHINING SOLUTION EXAMPLES, WITH CUTTING SPEED V_c 50 M/MIN

Milling cutter Ø 32 mm	Multiside AD solution	SBN10 solution	Conventional solution
Milling cutter reference	32A5R040A32- -CAD15-C	32E6R070A32- -SBN10-C	32A5R034A32- -SAD11E-C
Insert reference	AD15T3465- HF:M8345	BNGX 10T308SR- MM:M8345	ADMX 11T308SR- MM:M8345
Number of teeth	5	6	5
a_p [mm]	1,2	0,7	2
a_e [mm]	26	26	26
f_z	0,5	0,5	0,1
N [rpm]	497	497	497
F [mm/min]	1243	1492	249
Q [cm^3/min]	**38**	**27**	**13**

Milling cutter Ø 50 mm	Multiside AD Multiside AD	PENTA HF solution	Conventional solution
Milling cutter reference	50A08R- C90AD15-C	50A05R- S19PD09-C	50A05R- S45OE06Z-C
Insert reference	AD15T3465-HF M8345	PDKT 090530ER- FM:M8345	OEHT 0604AEER- MM:M8345
Number of teeth	8	5	5
a_p [mm]	1,5	1,5	3
a_e [mm]	50	50	40
f_z	0,5	0,5	0,25
N [rpm]	318	318	318
F [mm/min]	1273	796	398
Q [cm^3/min]	**95**	**60**	**48**

Productive and versatile HF milling cutters	ISO material groups						Number of edges	Diameter range	$a_{p\,max}$	$f_{z\,max}$	Insert for 90° milling	Insert radii range
SBN10 milling cutters	P	M	K		S	H	4	16 - 42	1,0	1,4	ANHX 10	R20 in standard R25-40 in special
SSN11 milling cutters	P	M			S		8	32 - 125	1,7	1,5	no	no
Multiside CAD15 HF milling cutters	P	M			S		2	25 - 80	1,8	1,5	ADKX 15	R 04-08-30-40-60*
PENTA HF milling cutters	P	M	K		S	H	5	32 - 140	2,0	2,5	no	no

HF milling cutters for mould making applications	ISO material groups						Number of edges	Diameter range	$a_{p\,max}$	$f_{z\,max}$	Insert for 90° milling	Insert radii range
FEED ZD07 milling cutters	P		K			H	4	16 - 32	1,0	1,5	no	no
FEED ZD09 milling cutters	P		K			H	4	25 - 40	1,0	2,0	no	no
FEED ZD12 milling cutters	P		K			H	4	32 - 80	1,6	3,0	no	no
S536 milling cutters						H	Solid	6 - 12	1,2 - 2,8	-	-	-

HF inserts for K2-PPH & SAD11 / 16 milling cutters	ISO material groups						Number of edges	Diameter range	$a_{p\,max}$	$f_{z\,max}$	Insert for 90° milling	Insert radii range
PPHF inserts	P		K				2	8 - 25	0,4 -1,2	0,4 - 1,5	no	PPHT inserts
ADEX07 HF and HF2 inserts	P	M			S		2	10 - 32	0,3	0,9	ADMX 07	R02 - 20
ADEX11 HF and HF2 inserts	P	M	K		S	H	2	16 - 125	0,6	1,3	ADMX 11	R02 - 30
ADEX16 HF and HF2 inserts	P	M	K		S	H	2	25 - 175	1,3	1,3	ADMX 16	R04 - 50

*See M114 catalogue page

HIGH-FEED

GRADES FOR HIGH-FEED MACHINING

Grade code	Material Application Area	Application	Feed	Cutting speed	Resistance under difficult machining conditions	Substrate	Coating type	Colour	Cooling benefit	General	Disc milling cutters	Copy turning	Heavy roughing
M6330	P20 - P35	◪				H	PVD		+/-	✓			
	M20 - M35	■											
	S10 - S30	■											
M8310	P01 - P10	■				submicron H	PVD		-			✓	
	M01 - M10	◪											
	K01 - K10	■											
	S05 - S10	◪											
	H05 - H15	■											
M8330	P20 - P40	■				submicron H	PVD		-	✓	✓	✓	
	M20 - M33	◪											
	K20 - K40	■											
	N15 - N30	□											
	S15 - S25	□											
	H15 - H25	◪											
M8340	P25 - P50	■			+	submicron H	PVD		+/-	✓	✓	✓	
	M20 - M40	■											
	K20 - K40	◪											
	S20 - S30	■											
M8345	P30 - P50	■			+	H	PVD		-	✓		✓	✓
	M30 - M40	■											
	S20 - S30	■											

CLOSE-UP

M8330

M8330

Versatile choice for milling steels and cast irons

- It offers improved performance in terms of productivity, and resistance to wear and heat-related cracks
- Versatile, suited to finishing and roughing, even under the toughest conditions
- Reliability and performance when machining, with and without coolant
- High durability machining steels with medium-high cutting speeds
- Easy to use - Gold surface finish to help visually monitor wear progression
- Second choice for stainless steels, superalloys and hardened steels
- Toughness and impact resistance

M6330

M6330

For milling stainless steels and difficult to machine materials

- For applications with internal lubrication and for tough cutting conditions
- High durability insert cutting edges when machining stainless steels, with and without coolant
- Improved abrasion resistance thanks to the combination of its substrate and PVD coating
- Higher resistance to heat-related cracks
- Higher reliability
- Better dissipation of heat from the cutting area

AD15T3465 HF

AD15T3465 HF

For high-feed face milling of P, M and S materials

- High-performance and high-productivity insert with its Sidelock™ fastening system, making it possible to obtain a higher cutter teeth number than with a standard solution
- Improved versatility of the Multiside AD concept thanks to the high-feed insert
- As with the other Multiside AD standard inserts, this HF insert provides the option of ramping

AEROSPACE

MOULDS & DIES

GENERAL MACHINING

HIGH-FEED

SBN 10

SBN10, S90BN10 - APMX 1 mm milling cutters

- Standard milling cutters equipped with BNGX inserts
- Diameters from 16 to 42 mm with intermediate diameters
- Attachments: cylindrical, modular and reaming
- 3 cutting geometries suitable for a wide range of materials: steels and cast irons (M), stainless steel and superalloys (MM), hardened steel (HM), thereby reducing the cutting forces
- Face milling, ramping, pocket opening and interpolation operations
- Reversible BNGX10 inserts with 4 cutting edges
- Direct cooling on the cutting edge via the tool body
- Versatile milling cutters, which can be equipped with ANHX radius inserts

SBN10		
20°	APMX [mm]	1,0
	DCX [mm]	16 – 42

	BNGX 10 ANHX 10	P	M	K
			S	H
	PRAMET			

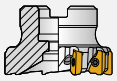
MULTISIDE AD

CAD15 and C90AD15 milling cutters – APMX 1.8 mm

- High-density milling cutters thanks to their Sidelock™ fastening system for high table feeds, and a higher chip flow rate
- Diameters from 25 to 80 mm with intermediate diameters
- Attachments: cylindrical, modular and reaming
- Approach angle and cutting geometry reduce cutting forces
- Face milling, ramping, pocket opening and interpolation operations
- AD inserts with 2 cutting edges
- Inserts with a 3 mm radius for machining along vertical walls without reducing feeds
- Direct cooling on the cutting edge via the insert screw
- Versatile milling cutters, which can be equipped with ADKX radius inserts

CAD15 HF		
19°	APMX [mm]	1,8 (HF)
	DCX [mm]	25 – 80

MULTISIDE AD



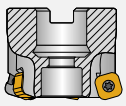
	AD 15T3	P	M	K
		N	S	
	PRAMET			

SSN11

SSN11 milling cutters – APMX 1.7 mm

- Double-sided square inserts with eight cutting edges
- Strong main cutting edge
- MM geometry designed for smoother cut
- Cutters for copy milling, helical interpolation, ramping and face milling
- Diameter range 32 mm - 125 mm with intermediate sizes for die and mold
- End mills, modular and shell mills
- All cutters feature special through coolant design
- Cost savings - eight indexes for price-per-edge efficiency
- Increased productivity - High feed milling with up to 50% higher metal removal rates due to greater depths
- Process security - Especially when machining corners inside a pocket

SSN11		
18°	APMX [mm]	1,7 (HF)
	DCX [mm]	32 – 125



	SNGX 11	P	M	K
			S	H
	PRAMET			

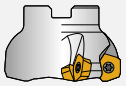
PENTA HF

SPD09 and S90PD09 milling cutters – APMX 2 mm

- Standard milling cutters equipped with PD09 inserts
- Diameters from 32 to 140 mm with intermediate diameters
- Attachments: cylindrical and reamer
- Approach angle and cutting geometry reduce cutting forces
- Face milling, ramping, pocket opening and interpolation operations
- PD09 inserts with 5 cutting edges
- PDKT and PDMW inserts with a 3 mm radius, making it possible to machine along vertical walls without reducing feeds
- Direct cooling on the cutting edge via the tool body

SPD09		
19°	APMX [mm]	2,0
	DCX [mm]	32 – 140

PENTA HF



	PD 0905	P	M	K
		N	S	H
	PRAMET			

For more information on the tools range, please refer to our DORMER and PRAMET general catalogues.

HIGH-FEED

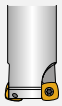
FEED ZD

SZD07 milling cutters - APMX 1 mm
SZD09, SMOZD09 milling cutters - APMX 1 mm
SZD12, SMOZD12 milling cutters - APMX 1.6 mm

- Standard milling cutters equipped with ZD inserts
- Diameters from 16 to 80 mm with intermediate diameters and 3 insert sizes
- Attachments: cylindrical, modular, weldon and reaming
- Approach angle and cutting geometry reduce cutting forces
- Face milling, ramping, pocket opening and interpolation operations
- ZD inserts with 4 cutting edges
- Direct cooling on the cutting edge via the tool body

SZD		
SZD07	APMX [mm]	1,0
	DCX [mm]	16 – 32
SZD09	APMX [mm]	1,0
	DCX [mm]	25 – 40
SZD12	APMX [mm]	1,6
	DCX [mm]	32 – 80

FEED ZD



	ZD 0703	P		K
				H
PRAMET				

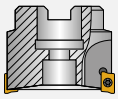
FORCE AD

SAD07 milling cutters - APMX 0.3 mm
SAD11, S90AD11 milling cutters - APMX 0.6 mm
SAD16, S90AD16 milling cutters - APMX 1.3 mm

- Standard milling cutters equipped with ADEX HF inserts
- Diameters from 10 to 175 mm with intermediate diameters and 3 insert sizes
- Attachments: cylindrical, modular, weldon and reaming
- Approach angle and cutting geometry reduce cutting forces
- Face milling, ramping, pocket opening and interpolation operations
- AD inserts with 2 cutting edges
- Direct cooling on the cutting edge via the tool body
- Versatile milling cutters, which can be equipped with ADMX radius inserts for finishing vertical walls, pockets and faces

SAD		
SAD07D	APMX [mm]	0,3
	DCX [mm]	10 – 32
SAD11E	APMX [mm]	0,6
	DCX [mm]	16 – 125
SAD16E	APMX [mm]	1,3
	DCX [mm]	25 – 175

FORCE AD



	AD 1606	P	M	K
		N	S	H
PRAMET		M91 – M112		

K2-PPH

PPH milling cutters - APMX 0.4 to 1.2 mm, according to diameter

- Standard milling cutters equipped with PPHF inserts
- Diameters from 8 to 25 mm with intermediate diameters
- Attachments: cylindrical, carbide and modular
- Applications: moulds and dies
- Option of carbide shank for applications with long overhang
- Approach angle and cutting geometry reduce cutting forces
- Face milling, ramping, pocket opening and interpolation operations
- Versatile milling cutters, which can be equipped with PPH and PPHT inserts for finishing complex faces

K2-PPH		
	APMX [mm]	0,4 – 1,2
	DCX [mm]	8 - 25

	PPH	P	M	K
	PPHF	N	S	H
	PPHT			
PRAMET		M284 – M295		

S536

S536 high-feed finishing milling cutters - APMX 0.4 mm

- Diameters from 6 to 12 mm, with 4 to 6 teeth
- Attachment: DIN 6535 HA cylindrical
- High-strength steel applications
- Approach angle and cutting geometry reduce cutting forces
- Face milling, ramping, pocket opening and interpolation operations
- TiSiN coating specially designed for high-speed machining of hard materials, with low or zero lubrication

S536		
-	APMX [mm]	0,4
	DCX [mm]	6 – 12
	Angle d'hélice	25°
	Angle de coupe	0°

DORMER				
423				H

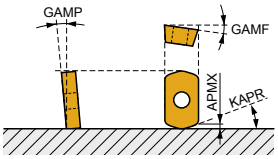
For more information on the tools range, please refer to our DORMER and PRAMET general catalogues.

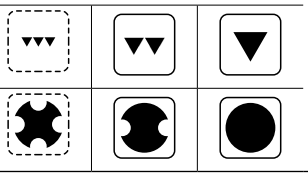
SBN10

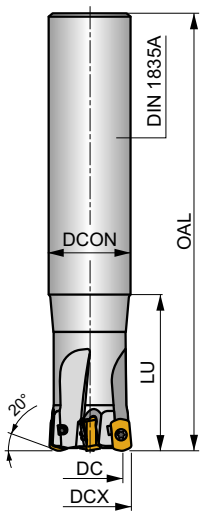
P M K S H

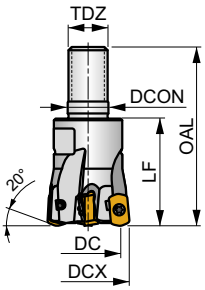
PRAMET

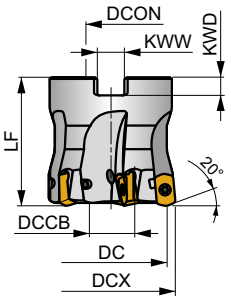
KAPR	20°
APMX	1,0 mm











h_m 0,17-0,41

h_m 0,17-0,41

	ISO	DCX	DC [mm]	OAL [mm]	DCON [mm]	DCCB [mm]	LU [mm]	LF [mm]	TDZ [mm]	KWW [mm]	KWD [mm]	GAMP [°]	GAMF [°]			max.		kg		
	16E2R030A16-SBN10-C	16	9,4	100	16	–	30	–	–	–	–	-10	-12	2	–	31100	✓	0,12	GI329	CO310
	16E2R050A16-SBN10-C	16	9,4	150	16	–	50	–	–	–	–	-10	-12	2	–	31100	✓	0,18	GI329	CO310
	16E2R030A14-SBN10-C	16	9,4	150	14	–	30	–	–	–	–	-10	-12	2	–	31100	✓	0,15	GI329	CO310
	18E2R030A16-SBN10-C	18	11,4	150	16	–	30	–	–	–	–	-10	-11	2	–	29200	✓	0,20	GI329	CO310
	20E3R040A20-SBN10-C	20	13,4	130	20	–	40	–	–	–	–	-10	-10	3	–	27700	✓	0,25	GI329	CO310
	20E3R080A20-SBN10-C	20	13,4	160	20	–	80	–	–	–	–	-10	-10	3	–	27700	✓	0,29	GI329	CO310
	20E3R040A18-SBN10-C	20	13,4	180	18	–	40	–	–	–	–	-10	-10	3	–	27700	✓	0,30	GI329	CO310
	20E4R040A20-SBN10-C	20	13,4	130	20	–	40	–	–	–	–	-10	-10	4	–	27700	✓	0,26	GI329	CO310
DIN 1835A	**25E4R050A25-SBN10-C**	25	18,4	140	25	–	50	–	–	–	–	-10	-9	4	✓	24800	✓	0,42	GI329	CO310
	25E4R100A25-SBN10-C	25	18,4	180	25	–	100	–	–	–	–	-10	-9	4	✓	24800	✓	0,51	GI329	CO310
	25E4R050A22-SBN10-C	25	18,4	220	22	–	50	–	–	–	–	-10	-9	4	✓	24800	✓	0,54	GI329	CO310
	25E5R050A25-SBN10-C	25	18,4	140	25	–	50	–	–	–	–	-10	-9	5	–	24800	✓	0,50	GI329	CO310
	32E5R070A32-SBN10-C	32	25,4	150	32	–	70	–	–	–	–	-10	-8	5	✓	21900	✓	0,73	GI329	CO310
	32E6R070A32-SBN10-C	32	25,4	150	32	–	70	–	–	–	–	-10	-8	6	✓	21900	✓	0,73	GI329	CO310
	32E5R120A32-SBN10-C	32	25,4	200	32	–	120	–	–	–	–	-10	-8	5	✓	21900	✓	0,94	GI329	CO310
	35E5R050A32-SBN10-C	35	28,4	200	32	–	50	–	–	–	–	-10	-7,5	5	✓	21000	✓	1,08	GI329	CO310
	35E6R050A32-SBN10-C	35	28,4	200	32	–	50	–	–	–	–	-10	-7,5	6	✓	21000	✓	1,08	GI329	CO310
	16E2R025M08-SBN10-C	16	9,4	43	8,5	–	–	25	M8	–	–	-10	-12	2	–	–	✓	0,03	GI329	CO310
	18E2R025M08-SBN10-C	18	11,4	43	8,5	–	–	25	M8	–	–	-10	-11	2	–	–	✓	0,03	GI329	CO310
	20E3R030M10-SBN10-C	20	13,4	49	10,5	–	–	30	M10	–	–	-10	-10	3	–	–	✓	0,05	GI329	CO310
	20E4R030M10-SBN10-C	20	13,4	49	10,5	–	–	30	M10	–	–	-10	-10	4	–	–	✓	0,05	GI329	CO310
	25E4R033M12-SBN10-C	25	18,4	55	12,5	–	–	33	M12	–	–	-10	-9	4	✓	–	✓	0,08	GI329	CO310
MODULAR	**25E5R033M12-SBN10-C**	25	18,4	55	12,5	–	–	33	M12	–	–	-10	-9	5	–	–	✓	0,19	GI329	CO310
	28E5R035M12-SBN10-C	28	21,4	57	12,5	–	–	35	M12	–	–	-10	-8,5	5	✓	–	✓	0,10	GI329	CO310
	32E5R040M16-SBN10-C	32	25,4	63	17	–	–	40	M16	–	–	-10	-8	5	✓	–	✓	0,19	GI329	CO310
	32E6R040M16-SBN10-C	32	25,4	63	17	–	–	40	M16	–	–	-10	-8	6	✓	–	✓	0,19	GI329	CO310
	35E6R043M16-SBN10-C	35	28,4	66	17	–	–	43	M16	–	–	-10	-7,5	6	✓	–	✓	0,22	GI329	CO310
	40E6R043M16-SBN10-C	40	33,4	66	17	–	–	43	M16	–	–	-10	-7	6	✓	–	✓	0,26	GI329	CO310
	40E7R043M16-SBN10-C	40	33,4	66	17	–	–	43	M16	–	–	-10	-7	7	✓	–	✓	0,26	GI329	CO310

	ISO	DCX	DC	OAL	DCON	DCCB	LU	LF	TDZ	KWW	KWD	GAMP	GAMF			max.		kg		
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]	[°]							
ISO 6462 DIN 8030	**40A05R-SMOBN10-C**	33,4	40	–	16	14,1	–	40	–	8,4	5,6	-10	-7	5	✓	19600	✓	0,21	GI329	CO312
	40A07R-SMOBN10-C	33,4	40	–	16	14,1	–	40	–	8,4	5,6	-10	-7	7	✓	19600	✓	0,22	GI329	CO312
	42A05R-SMOBN10-C	35,4	42	–	16	14,1	–	40	–	8,4	5,6	-10	-7	5	✓	19100	✓	0,23	GI329	CO312
	42A07R-SMOBN10-C	35,4	42	–	16	14,1	–	40	–	8,4	5,6	-10	-7	7	✓	19100	✓	0,24	GI329	CO312

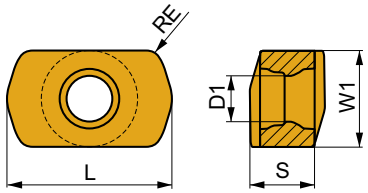
GI329	BNGX 10T3..	ANHX 10T3..

		Nm						
CO310	US42507-T07P	0,9	M 2,5	7	–	–	Flag T07P	–
CO312	US42507-T07P	0,9	M 2,5	7	D-T07P/T09P	FG-15	–	HS0830C

BNGX 10

	W1	D1	L	S
10T3	5,800	2,76	9,92	3,90

PRAMET



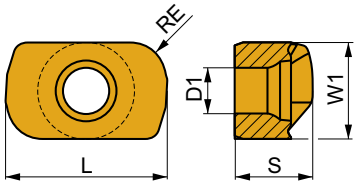
		ISO		P	M	K	N	S	H			RE	FN	FX	APMN	APMX
1, U, S	0,15 / 24°	**BNGX 10T308SR-M**	**M9325**	■						●	- - -	0,8	0,20	1,05	0,3	1,0
			M8310	■		■			◪	●	-	0,8	0,20	1,40	0,3	1,0
			M8330	■		■			◪	●	-	0,8	0,20	1,40	0,3	1,0
			M8340	■		◪				✖	+ / -	0,8	0,20	1,40	0,3	1,0
			M8345	■						✖	+ / -	0,8	0,20	1,40	0,3	1,0
			8215	■		■			◪	●	-	0,8	0,20	1,40	0,3	1,0
HFC, S	0,08 / 28° / 10°	**BNGX 10T308SR-MM**	**M9325**	◪	◪			◪		●	- - -	0,8	0,20	0,83	0,3	1,0
			M9340	◪	■			■		●	- - -	0,8	0,20	0,83	0,3	1,0
			M6330	◪	■			■		●	-	0,8	0,25	1,10	0,3	1,0
			M8310	◪	◪					●	-	0,8	0,25	1,10	0,3	1,0
			M8330	◪	◪					●	-	0,8	0,25	1,10	0,3	1,0
			M8340	◪	■			■		●	+ / -	0,8	0,25	1,10	0,3	1,0
			M8345	◪	■			■		●	+ / -	0,8	0,25	1,10	0,3	1,0
HFC, S	0,09 / 14° / 14°	**BNGX 10T308SR-HM**	**M8310**			■			■	✖	-	0,8	0,10	1,00	0,1	1,0
			M8330			■			◪	✖	-	0,8	0,10	1,00	0,1	1,0
			8215			■			■	✖	-	0,8	0,10	1,00	0,1	1,0

ISO		FN	FX	M9325	M9340	M6330	M8310	M8330	M8340	M8345	8215
P	●	0,20	1,40	296	264	212	267	244	222	177	257
	⧓	0,20	1,16	272	243	195	246	224	204	162	236
	✖	0,20	0,93	234	209	167	205	187	175	140	194
M	●	0,25	1,10	149	155	149	127	137	132	104	142
	⧓	0,25	0,88	137	143	137	117	126	121	95	130
	✖	0,25	0,66	117	123	117	100	108	104	82	112
K	●	0,20	1,50	–	–	–	253	230	208	–	242
	⧓	0,20	1,25	–	–	–	233	211	191	–	223
	✖	0,20	1,00	–	–	–	200	181	164	–	191
S	●	0,20	0,90	68	72	65	59	63	59	47	–
	⧓	0,20	0,77	62	66	60	54	58	54	43	–
	✖	0,10	0,66	53	57	52	46	50	46	37	–
H	●	0,05	0,70	–	–	–	53	48	–	–	51
	⧓	0,05	0,56	–	–	–	49	45	–	–	47
	✖	0,05	0,42	–	–	–	42	38	–	–	40

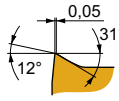
PRAMET

ANHX 10

	W1	D1	L	S
10T3	5,800	2,76	9,72	4,70



ISO			P	M	K	N	S	H			RE	FN	FX	APMN	APMX
ANHX 10T320SR-F	M8310		■	◪				◪	⧓	-	2,0	0,05	0,15	0,1	3,0
	M8330		■	◪				◪	✖	-	2,0	0,05	0,15	0,1	3,0
	M8340		■	◪			◪		✖	+/-	2,0	0,05	0,15	0,1	3,0
S-ANHX 10T325SR-F*	M6330		◪	■			■		⧓	+/-	2,5	0,05	0,15	0,1	3,5
S-ANHX 10T340SR-F*	M6330		◪	■			■		⧓	+/-	4,0	0,05	0,15	0,1	5,0



*** S-ANHX inserts to be ordered specially**

ISO		FN	FX	M6330	M8310	M8330	M8340
P	●	0,05	0,15	281	400	323	323
	⧓	0,05	0,12	259	368	297	297
	✖	0,05	0,10	228	316	255	255
M	●	0,05	0,15	207	203	190	213
	⧓	0,05	0,12	190	186	175	196
	✖	0,05	0,09	163	160	150	168
K	●	0,05	0,15	–	378	303	340
	⧓	0,05	0,12	–	347	278	313
	✖	0,05	0,10	–	298	239	269
S	●	0,05	0,15	88	90	85	95
	⧓	0,05	0,13	81	83	78	87
	✖	0,05	0,11	70	71	67	75
H	●	0,05	0,15	–	78	70	-
	⧓	0,05	0,12	–	71	64	-
	✖	0,05	0,09	–	61	55	-

a_e / DCX	0,05	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,70	0,75	0,80	0,90	1,00
X.V	1,48	1,35	1,27	1,22	1,19	1,16	1,11	1,08	1,05	1,03	1,00	1,00	1,00	1,00
⇨X.f	2,87	2,05	1,69	1,48	1,33	1,23	1,09	0,75	0,94	0,90	0,89	0,88	0,88	1,00
⇨X.f	0,64	0,64	0,64	0,64	0,64	0,65	0,65	0,67	0,68	0,71	0,72	0,74	0,79	1,00

	BNGX 10-M	BNGX 10-MM	BNGX 10-HM
RE	0,8	0,8	0,8
BS	–	–	–

	ANHX 10 - F
RE	2,0
BS	0,92

BNGX 10 (HFC)

DCX	AP / DEF	0,00	0,30	0,40	0,50	0,60	0,70	0,80	0,90	1,00
16		9,40	12,85	13,36	13,80	14,20	14,56	14,88	15,19	15,47
18		11,40	14,85	15,36	15,80	16,20	16,56	16,88	17,19	17,47
20		13,40	16,85	17,36	17,80	18,20	18,56	18,88	19,19	19,47
25		18,40	21,85	22,36	22,80	23,20	23,56	23,88	24,19	24,47
32		25,40	28,85	29,36	29,80	30,20	30,56	30,88	31,19	31,47
35		28,40	31,85	32,36	32,80	33,20	33,56	33,88	34,19	34,47
40		33,40	36,85	37,36	37,80	38,20	38,56	38,88	39,19	39,47
42		35,40	38,85	39,36	39,80	40,20	40,56	40,88	41,19	41,47

AP	0,00	0,30	0,40	0,50	0,60	0,70	0,80	0,90	1,00
1 F	–	1,30	1,10	0,90	0,80	0,72	0,68	0,65	0,50

BNGX 10

DCX	max	FX
16	3,5	0,12
18	3,5	0,12
20	4,0	0,15
25	4,0	0,15
28	4,0	0,17
32	4,0	0,17
35	4,0	0,17
40	4,0	0,17
42	4,0	0,17

BNGX 10 (HFC)

DCX	RPMX	APMX / l
16	4,0	1/16
18	4,0	1/16
20	4,0	1/16
25	2,8	1/22
28	2,3	1/26
32	1,9	1/32
35	1,7	1/35
40	1,3	1/46
42	1,3	1/46

ANHX 10

DCX	RPMX	APMX / l
16	1,6	2,65/100
18	1,3	2,15/100
20	1,1	1,80/100
25	0,8	1,25/100
28	0,7	1,10/100
32	0,5	0,75/100
35	0,5	0,75/100
40	0,4	0,55/100
42	0,4	0,55/100

BNGX 10 (HFC)

AP	0,3	0,6	1,0
1 F	1,10	0,60	0,30

BNGX 10 (HFC)

DCX	AP	FX
16	0,4	0,15
18	0,7	0,15
20	0,7	0,15
25	0,7	0,15
32	0,7	0,2
35	0,7	0,2
40	0,7	0,2
42	0,7	0,2

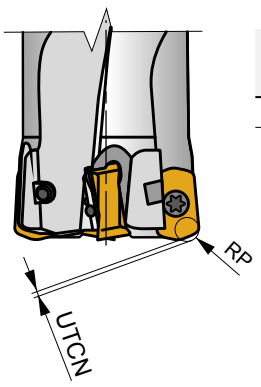
BNGX 10 (HFC)

DCX	d_{min}	d_{max}	s_{max} / d_{min}	s_{max} / d_{max}
16	22,4	31,8	0,5	0,5
18	25,4	35,8	0,5	0,5
20	29,4	39,8	0,5	0,5
25	39,4	49,8	0,5	0,5
28	45,4	55,8	0,5	0,5
32	53,4	63,8	0,5	0,5
35	59,4	69,8	0,5	0,5
40	69,4	79,8	0,5	0,5
42	73,4	83,8	0,5	0,5

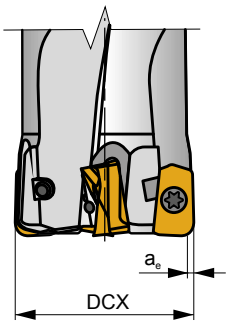
DCX	µm / f_e	3	5	10	15	20	30	40	50	60	80	100
16		0,438	0,566	0,800	0,980	1,131	1,386	1,600	1,789	1,960	2,263	2,530
18		0,465	0,600	0,849	1,039	1,200	1,470	1,697	1,897	2,078	2,400	2,683
20		0,490	0,632	0,894	1,095	1,265	1,549	1,789	2,000	2,191	2,530	2,828
25		0,548	0,707	1,000	1,225	1,414	1,732	2,000	2,236	2,449	2,828	3,162
32		0,620	0,800	1,131	1,386	1,600	1,960	2,263	2,530	2,771	3,200	3,578
35		0,648	0,837	1,183	1,449	1,673	2,049	2,366	2,646	2,898	3,347	3,742
40		0,693	0,894	1,265	1,549	1,789	2,191	2,530	2,828	3,098	3,578	4,000
42		0,710	0,917	1,296	1,587	1,833	2,245	2,592	2,898	3,175	3,666	4,099

ANHX 10

RE	µm / f_e	3	5	10	15	20	30	40	50	60	80	100
2,0		0,219	0,283	0,400	0,490	0,566	0,693	0,800	0,894	0,980	1,131	1,265



	RP	UTCN
BNGX 10T308	1,60	0,44



	max a_e /DCX
ANHX 10T320	0,05

CAD15 HF

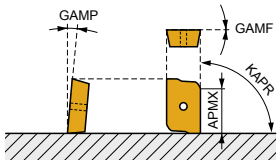
P M K N S

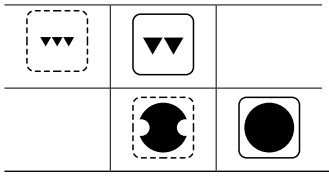
C

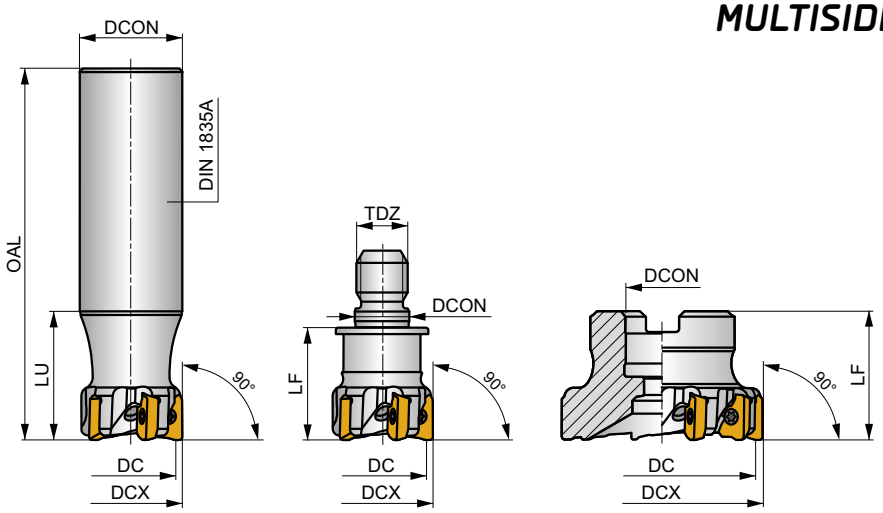
PRAMET

MULTISIDE AD

KAPR	19° - 90°
APMX	1,8 - 10,0 mm







h_m 0,05 - 0,1

h_m 0,04 - 0,06

	ISO	DCX [mm]	DC [mm]	OAL [mm]	DCON [mm]	LU [mm]	LF [mm]	TDZ [mm]	GAMP [°]	GAMF [°]			max.		kg		
DIN 1835A	25A3R040A25-CAD15-C*	25	11,6	160	25	40	–	–	0	+2	3	–	19300	✓	0,53	GI263	SQ090
	32A5R040A32-CAD15-C*	32	18,6	200	32	40	–	–	0	+2	5	–	17000	✓	1,10	GI263	SQ090
MODULAR	25A3R030M12-CAD15-C*	25	11,6	–	12,5	–	30	M12	0	+2	3	–	–	✓	-	GI263	SQ090
	32A5R035M16-CAD15-C*	32	18,6	–	17,0	–	35	M16	0	+2	5	–	–	✓	0,17	GI263	SQ090
	40A6R035M16-CAD15-C*	40	25,8	–	17,0	–	35	M16	0	+2	6	–	–	✓	0,25	GI263	SQ090
ISO 6462 DIN 8030	S-40A06R-AD15-HF-000239**	40	25,8	–	16	–	40	–	0	+2	6	–	15200	✓	0,30	GI263	SQ092
	50A08R-C90AD15-HF-C**	50	35,6	–	22	–	40	–	0	+2	8	–	13600	✓	0,40	GI263	SQ093
	63A10R-C90AD15-C*	63	48,6	–	22	–	40	–	0	+2	10	–	12100	✓	0,56	GI263	SQ093
	S-66A12R-AD15-HF-000129**	66	51,6	–	22	–	40	–	0	+2	12	–	12100	✓	0,65	GI263	SQ093
	80A10R-C90AD15-C*	80	65,6	–	27	–	50	–	0	+2	10	–	10800	✓	0,89	GI263	SQ094
	80A14R-C90AD15-C*	80	65,6	–	27	–	50	–	0	+2	14	–	10800	✓	0,89	GI263	SQ094

*Modification required to standard cutter body before mounting the HF insert

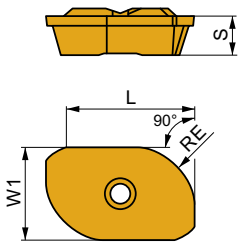
**Milling cutter already modified in special stocked version

GI263	ADKX 15T3..

		Nm						
SQ090	US 63511D-T15P	3,0	M 3,5	11	–	–	Flag T15P	–
SQ092	US 63511D-T15P	3,0	M 3,5	11	D-T08P/T15P	FG-15	–	HS 0830C
SQ093	US 63511D-T15P	3,0	M 3,5	11	D-T08P/T15P	FG-15	–	HS 1030C
SQ094	US 63511D-T15P	3,0	M 3,5	11	D-T08P/T15P	FG-15	–	HS 1230C

ADKX 15

	W1	L	S
15T3	9,525	12,20	3,97



	ISO		P	M	K	N	S	H			RE	FN	FX	APMN	APMX
	S-AD15T3465-HF*	M6330	◪	■			■		✖	+ / -	3,0	0,3	2	0,3	1,8
	AD15T3465-HF*	M8345	◪	■			■		✖	+ / -	3,0	0,3	2	0,3	1,8

*Special stocked

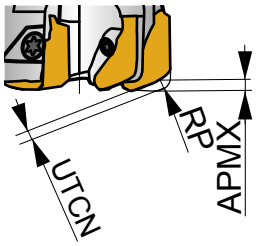
ISO		FN	FX	M6330	M8345
P	●	0,3	2	212	177
	⧓	0,3	1,5	195	162
	✖	0,3	1	167	140
M	●	0,3	2	149	104
	⧓	0,3	1,5	137	95
	✖	0,3	1	117	82
S	●	0,3	0,9	65	47
	⧓	0,3	0,7	60	43
	✖	0,3	0,6	52	37

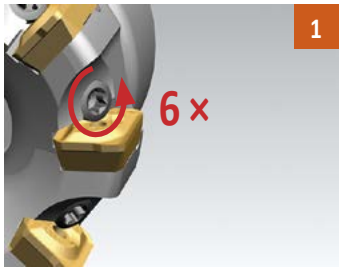
RAMPING ANGLES WITH HF INSERT

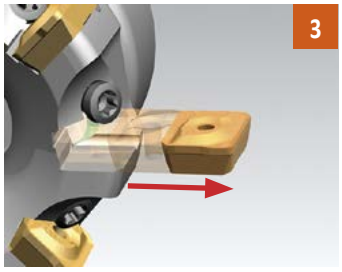
DCX	AP	AP = 0	AP = 0,5	AP = 1,0	AP = 1,5	RPMX
25	AD 15T3465-HF	11,6	14,3	17,0	19,7	10
32		18,6	21,3	24,0	26,7	5
40		25,8	28,7	31,6	34,5	3,5
42		27,8	30,6	33,5	36,4	3,4
50		35,6	38,5	41,4	44,3	3
52		37,6	40,5	43,4	46,3	2,8
63		48,6	51,5	54,4	57,4	1,5
66		51,6	54,5	57,4	60,3	1,3
80		65,6	68,5	71,4	74,4	1

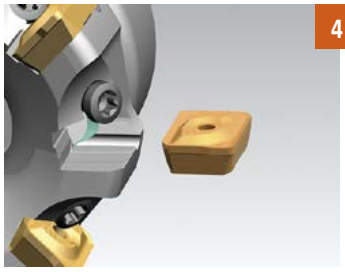
INFORMATION ON CNC PROGRAMMING

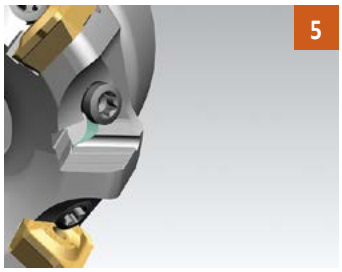
Insert	RP (mm)	UTCN (mm)	APMX (mm)
AD15T3465-HF	4,65	1,1	1,8

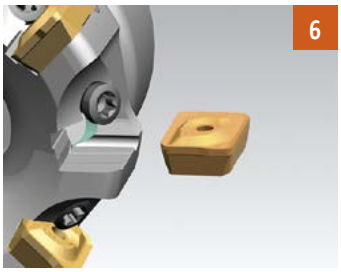


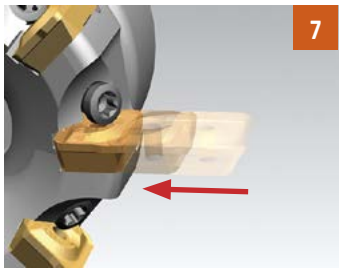


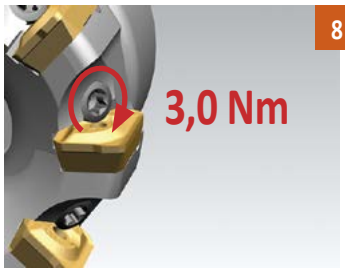












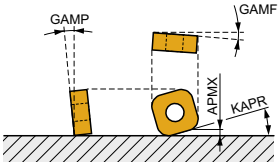
SSN11

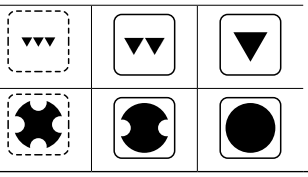
P M K S H

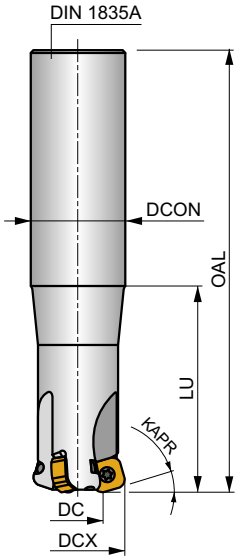
S

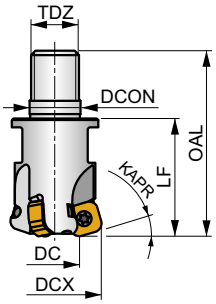
PRAMET

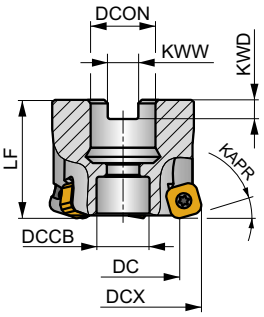
KAPR	18°
APMX	1,7 mm











h_m 0,20-0,46

h_m 0,20-0,46

	ISO	DCX [mm]	DC [mm]	OAL [mm]	LF [mm]	DCON MS [mm]	DCCB [mm]	LU [mm]	TDZ [mm]	KWW [mm]	KWD [mm]	GAMP [°]	GAMF [°]			max.		kg			
DIN 1835A	**32E3R070A32-SSN11-C**	32	18,3	150	–	32	–	70	–	–	–	-10	-11,5	3	–	17500	✓	0,69	GI339	C0314	–
	32E3R120A32-SSN11-C	32	18,3	200	–	32	–	120	–	–	–	-10	-11,5	3	–	17500	✓	0,89	GI339	C0314	–
	35E3R050A32-SSN11-C	35	21,2	200	–	32	–	50	–	–	–	-10	-11	3	–	16800	✓	1,05	GI339	C0314	–
MODULAR	**32E3R040M16-SSN11-C**	32	18,3	63	40	17	–	–	M16	–	–	-10	-11,5	3	–	–	✓	0,17	GI339	C0314	–
	35E3R040M16-SSN11-C	35	21,2	63	40	17	–	–	M16	–	–	-10	-11	3	–	–	✓	0,19	GI339	C0314	–
	40E4R043M16-SSN11-C	40	26,2	66	43	17	–	–	M16	–	–	-10	-10,5	4	✓	–	✓	0,23	GI339	C0314	–
ISO 6462 DIN 8030	**40A04R-SMOSN11-C**	40	26,2	–	40	16	12,4	–	–	8,4	5,6	-10	-10,5	4	✓	15700	✓	0,19	GI339	C0316	–
	42A04R-SMOSN11-C	42	28,2	–	40	16	14,1	–	–	8,4	5,6	-10	-10,5	4	✓	15300	✓	0,21	GI339	C0318	–
	50A05R-SMOSN11-C	50	36,1	–	40	22	18,1	–	–	10,4	6,3	-10	-10	5	✓	14000	✓	0,31	GI339	C0320	–
	50A06R-SMOSN11-C	50	36,1	–	40	22	18,1	–	–	10,4	6,3	-10	-10	6	✓	14000	✓	0,31	GI339	C0320	–
	52A05R-SMOSN11-C	52	38,1	–	40	22	18,1	–	–	10,4	6,3	-10	-10	5	✓	13800	✓	0,34	GI339	C0320	–
	52A06R-SMOSN11-C	52	38,1	–	40	22	18,1	–	–	10,4	6,3	-10	-10	6	✓	13800	✓	0,33	GI339	C0320	–
	63A06R-SMOSN11-C	63	49,1	–	40	22	18,1	–	–	10,4	6,3	-10	-10	6	✓	12500	✓	0,46	GI339	C0320	–
	63A08R-SMOSN11-C	63	49,1	–	40	22	18,1	–	–	10,4	6,3	-10	-10	8	✓	12500	✓	0,47	GI339	C0320	–
	66A06R-SMOSN11-C	66	52,1	–	50	27	18,1	–	–	12,4	7	-10	-10	6	✓	12200	✓	0,74	GI339	C0322	–
	66A08R-SMOSN11-C	66	52,1	–	50	27	18,1	–	–	12,4	7	-10	-10	8	✓	12200	✓	0,75	GI339	C0322	–
	80A07R-SMOSN11-C	80	66,1	–	50	27	38,1	–	–	12,4	7	-10	-10	7	✓	11100	✓	0,95	GI339	C0324	AC001
	80A09R-SMOSN11-C	80	66,1	–	50	27	38,1	–	–	12,4	7	-10	-10	9	✓	11100	✓	0,93	GI339	C0324	AC001
	100A08R-SMOSN11-C	100	86,1	–	50	32	45,1	–	–	14,4	8	-10	-10	8	✓	9900	✓	1,63	GI339	C0324	AC002
	115A08R-SMOSN11-C	115	101,1	–	50	32	45,1	–	–	14,4	8	-10	-10	8	✓	9200	✓	2,09	GI339	C0324	AC002
	125A08R-SMOSN11-C	125	111,1	–	63	40	56,1	–	–	16,4	9	-10	-10	8	✓	8900	✓	3,16	GI339	C0324	AC003

GI339	SNGX 1104..

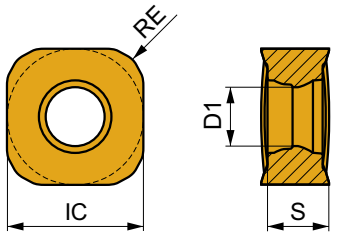
		Nm						
C0314	US 44012-T15P	3,5	M4	12	–	–	Flag T15P	–
C0316	US 44012-T15P	3,5	M4	12	D-T08P/T15P	FG-15	–	HCS0840C
C0318	US 44012-T15P	3,5	M4	12	D-T08P/T15P	FG-15	–	HS90835
C0320	US 44012-T15P	3,5	M4	12	D-T08P/T15P	FG-15	–	HS1030C
C0322	US 44012-T15P	3,5	M4	12	D-T08P/T15P	FG-15	–	HS1230C
C0324	US 44012-T15P	3,5	M4	12	D-T08P/T15P	FG-15	-	-

AC001	KS 1230	K.FMH27
AC002	KS 1635	K.FMH32
AC003	KS 2040	K.FMH40

PRAMET

SNGX 11

	IC	D1	S
1104	10,6	4,56	4,76

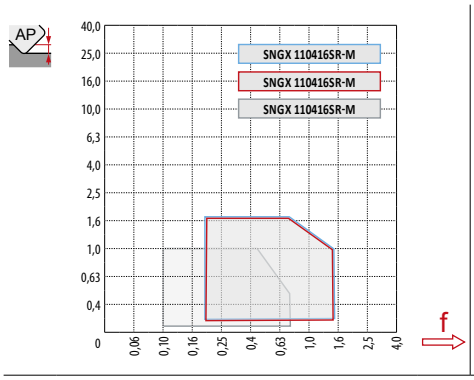


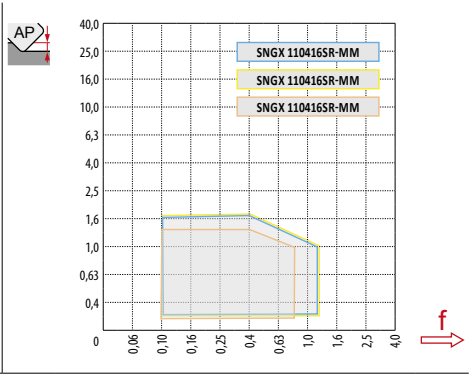
ISO		P	M	K	N	S	H			RE	FN	FX	APMN	APMX
SNGX 110416SR-M	**M9325**	■						●	---	1,6	0,2	1,5	0,2	1,7
	M9340	■						✖	---	1,6	0,2	1,5	0,2	1,7
	M8310	■		◪			◪	✖	-	1,6	0,2	1,5	0,2	1,7
	M8330	■		◪			◪	✖	-	1,6	0,2	1,5	0,2	1,7
	M8340	■		◪				✖	+/-	1,6	0,2	1,5	0,2	1,7
	8215	■		◪			◪	✖	-	1,6	0,2	1,5	0,2	1,7
SNGX 110416SR-MM	**M9340**	◪	■			■		●	---	1,6	0,1	1,2	0,2	1,7
	M6330	◪	■			■		✖	-	1,6	0,1	1,2	0,2	1,7
	M8340	◪	■			■		✖	+/-	1,6	0,1	1,2	0,2	1,7
	M8345	◪	■			■		✖	+/-	1,6	0,1	1,2	0,2	1,7

ISO		FN	FX	M9325	M9340	M6330	M8310	M8330	M8340	M8345	8215
P	●	0,20	1,50	335	299	230	290	273	246	193	275
	●	0,20	1,25	308	275	212	267	251	227	177	253
	✖	0,20	1,00	265	236	182	229	215	195	152	217
M	●	0,10	1,20	-	175	163	-	-	143	113	-
	●	0,10	1,00	-	161	150	-	-	131	104	-
	✖	0,10	0,80	-	138	128	-	-	113	89	-
K	●	0,20	1,50	-	-	-	275	258	238	-	260
	●	0,20	1,25	-	-	-	253	237	219	-	239
	✖	0,20	1,00	-	-	-	217	203	188	-	205
S	●	0,10	0,84	-	80	73	-	-	63	50	-
	●	0,10	0,70	-	74	67	-	-	58	46	-
	✖	0,10	0,60	-	63	57	-	-	49	40	-
H	●	0,10	0,75	-	-	-	58	53	-	-	53
	●	0,10	0,60	-	-	-	53	48	-	-	48
	✖	0,10	0,45	-	-	-	45	41	-	-	41

a_e / DCX	0,05	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,70	0,75	0,80	0,90	1,00
X.V	1,48	1,35	1,27	1,22	1,19	1,16	1,11	1,08	1,05	1,03	1,02	1,01	0,99	0,98
X.f	2,87	2,05	1,69	1,48	1,33	1,23	1,09	0,75	0,94	0,90	0,89	0,88	0,88	1,00
X.f	0,64	0,64	0,64	0,64	0,64	0,65	0,65	0,67	0,68	0,71	0,72	0,74	0,79	1,00

	SNGX 11 - M	SNGX 11 - MM
RE	1,6	1,6
BS	-	-





HFC

DCX	AP	0,00	0,20	0,40	0,60	0,80	1,00	1,10	1,20	1,30	1,40	1,50	1,60	1,70
32		18,30	19,53	20,76	21,99	23,22	24,46	25,07	25,69	26,30	26,92	27,53	28,15	28,76
35		21,20	22,43	23,66	24,89	26,12	27,36	27,97	28,59	29,20	29,82	30,43	31,05	31,66
40		26,20	27,43	28,66	29,89	31,12	32,36	32,97	33,59	34,20	34,82	35,43	36,05	36,66
42		28,20	29,43	30,66	31,89	33,12	34,36	34,97	35,59	36,20	36,82	37,43	38,05	38,66
50		36,10	37,33	38,56	39,79	41,02	42,26	42,87	43,49	44,10	44,72	45,33	45,95	46,56
52	DEF	38,10	39,33	40,56	41,79	43,02	44,26	44,87	45,49	46,10	46,72	47,33	47,95	48,56
63		49,10	50,33	51,56	52,79	54,02	55,26	55,87	56,49	57,10	57,72	58,33	58,95	59,56
66		52,10	53,33	54,56	55,79	57,02	58,26	58,87	59,49	60,10	60,72	61,33	61,95	62,56
80		66,10	67,33	68,56	69,79	71,02	72,26	72,87	73,49	74,10	74,72	75,33	75,95	76,56
100		86,10	87,33	88,56	89,79	91,02	92,26	92,87	93,49	94,10	94,72	95,33	95,95	96,56
115		101,10	102,33	103,56	104,79	106,02	107,26	107,87	108,49	109,10	109,72	110,33	110,95	111,56
125		111,10	112,33	113,56	114,79	116,02	117,26	117,87	118,49	119,10	119,72	120,33	120,95	121,56

	AP	–	0,20	0,40	0,60	0,80	1,00	1,10	1,20	1,30	1,40	1,50	1,60	1,70
	1 f	–	1,37	0,98	0,81	0,71	0,64	0,62	0,59	0,58	0,56	0,54	0,53	0,52

SNGX		
DCX	max	f_{max}
32	7,0	0,25
35	7,0	0,25
40	7,2	0,30
42	7,2	0,30
50	7,3	0,30
52	7,3	0,30
63	7,4	0,30
66	7,4	0,30
80	7,5	0,35
100	7,5	0,35
115	7,5	0,35
125	7,5	0,35

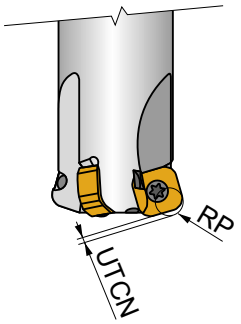
SNGX (HFC)		
DCX	α_{max} °	a_p/l
32	0,8	1,4/100
35	0,8	1,4/100
40	0,7	1,2/100
42	0,7	1,2/100
50	0,5	0,9/100
52	0,5	0,9/100
63	0,4	0,7/100
66	0,4	0,7/100
80	0,3	0,5/100
100	0,2	0,3/100
115	0,2	0,3/100
125	0,2	0,3/100

SNGX (HFC)		
DCX	AP	f_{max}
32	0,2	0,3
35	0,2	0,3
40	0,2	0,3
42	0,2	0,3
50	0,3	0,4
52	0,3	0,4
63	0,3	0,4
66	0,3	0,4
80	0,3	0,4
100	0,3	0,4
115	0,3	0,4
125	0,3	0,4

DCX	µm	3	5	10	15	20	30	40	50	60	80	100
32		0,620	0,800	1,131	1,386	1,600	1,960	2,263	2,530	2,771	3,200	3,578
35		0,648	0,837	1,183	1,449	1,673	2,049	2,366	2,646	2,898	3,347	3,742
40		0,693	0,894	1,265	1,549	1,789	2,191	2,530	2,828	3,098	3,578	4,000
42		0,710	0,917	1,296	1,587	1,833	2,245	2,592	2,898	3,175	3,666	4,099
50		0,775	1,000	1,414	1,732	2,000	2,449	2,828	3,162	3,464	4,000	4,472
52	f_e	0,790	1,020	1,442	1,766	2,040	2,498	2,884	3,225	3,533	4,079	4,561
63		0,869	1,122	1,587	1,944	2,245	2,750	3,175	3,550	3,888	4,490	5,020
66		0,890	1,149	1,625	1,990	2,298	2,814	3,250	3,633	3,980	4,596	5,138
80		0,980	1,265	1,789	2,191	2,530	3,098	3,578	4,000	4,382	5,060	5,657
100		1,095	1,414	2,000	2,449	2,828	3,464	4,000	4,472	4,899	5,657	6,325
115		1,175	1,517	2,145	2,627	3,033	3,715	4,290	4,796	5,254	6,066	6,782
125		1,225	1,581	2,236	2,739	3,162	3,873	4,472	5,000	5,477	6,325	7,071

SNGX				
AP	0,2	0,5	1,0	1,7
1 f	1,20	1,00	0,50	0,25

SNGX (HFC)				
DCX	d_{min}	d_{max}	s_{max} d_{min}	s_{max} d_{max}
32	48,0	63,8	0,7	1,4
35	54,0	69,8	0,8	1,5
40	64,0	79,8	0,9	1,5
42	68,0	83,8	1,0	1,6
50	84,0	99,8	0,9	1,4
52	88,0	103,8	1,0	1,4
63	109,0	125,8	1,0	1,4
66	115,0	131,8	1,1	1,4
80	143,0	159,8	1,0	1,3
100	183,0	199,8	0,9	1,1
115	213,0	229,8	1,1	1,3
125	233,0	249,8	1,2	1,4



SNGX	RP	UTCN
	[mm]	[mm]
SNGX 110416	4,6	0,92

SPD09

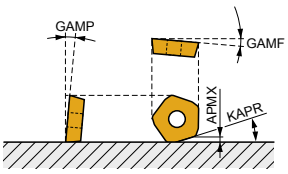
P M K N S H

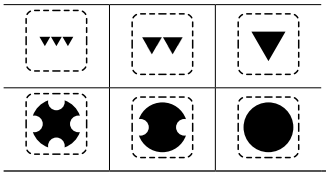
S

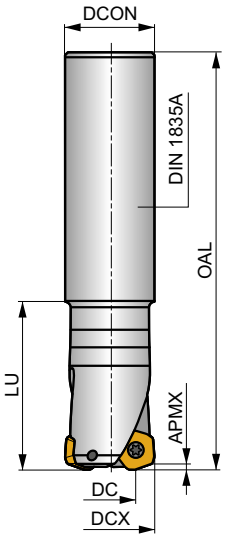
PRAMET

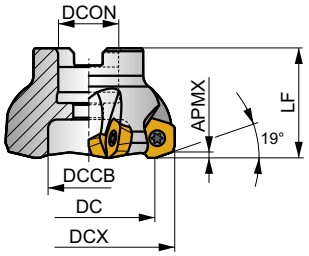
PENTA *HF*

KAPR	19°
APMX	2,0 mm









h_m 0,065 - 0,975

h_m 0,065 - 0,975

	ISO	DCX [mm]	DC [mm]	OAL [mm]	LF [mm]	DCON [mm]	DCCB [mm]	LU [mm]	GAMP [°]	GAMF [°]			max.		kg			
DIN 1835A	**32E2R060A32-SPD09-C**	32	18,4	250	–	32	–	60	-24	+10	2	–	13100	✓	1,54	GI245	CO340	–
DIN 1835A	**40E3R060A32-SPD09-C**	40	25,5	250	–	32	–	60	-11	+10	3	–	11700	✓	1,43	GI245	CO340	–
	42A03R-S19PD09-C	42	27,5	–	40	16	12	–	-8	+10	3	–	11500	✓	0,18	GI245	CO342	–
	50A04R-S19PD09-C	50	35,3	–	40	22	18	–	-3	+10	4	–	10500	✓	0,23	GI245	CO343	–
	50A05R-S19PD09-C	50	35,3	–	40	22	18	–	-3	+10	5	–	10500	✓	0,36	GI245	CO343	–
	52A04R-S19PD09-C	52	37,3	–	40	22	18	–	-3	+10	4	–	10300	✓	0,25	GI245	CO343	–
	63A05R-S19PD09-C	63	48,2	–	40	22	18	–	-1	+10	5	–	9400	✓	0,33	GI245	CO343	–
	63A06R-S19PD09-C	63	48,2	–	40	22	18	–	-1	+10	6	–	9300	✓	0,47	GI245	CO343	–
	S-63A07R-S19PD09-000197*	63	48,2	–	40	22	18	–	-1	+10	7	–	9200	✓	0,47	GI245	CO343	–
ISO 6462 DIN 8030	**66A06R-S19PD09-C**	66	51,2	–	40	22	18	–	-1	+10	6	–	9200	✓	0,35	GI245	CO343	–
ISO 6462 DIN 8030	**66A06R-S19PD09-CF**	66	51,2	–	50	27	22	–	-1	+10	6	–	9100	✓	0,68	GI245	CO344	–
	80A05R-S19PD09-C	80	65,3	–	50	27	37	–	-1	+10	5	–	8300	✓	0,84	GI245	CO341	AC001
	80A06R-S19PD09-C	80	65,3	–	50	27	37	–	-1	+10	6	–	8300	✓	0,88	GI245	CO341	AC001
	100A06R-S19PD09-C	100	85,3	–	50	32	45	–	-1	+10	6	–	7400	✓	1,46	GI245	CO341	AC002
	100A08R-S19PD09-C	100	85,3	–	50	32	45	–	-1	+10	8	–	7400	✓	1,40	GI245	CO341	AC002
	125A08R-S19PD09-C	125	110,3	–	63	40	36	–	-1	+10	8	–	6600	✓	3,16	GI245	CO349	–
	125A10R-S19PD09-C	125	110,3	–	63	40	36	–	-1	+10	10	–	6600	✓	3,15	GI245	CO349	–
	140A08R-S19PD09-C	140	125,3	–	63	40	36	–	-1	+10	8	–	6200	✓	3,62	GI245	CO349	–

* Milling cutter to be ordered specially

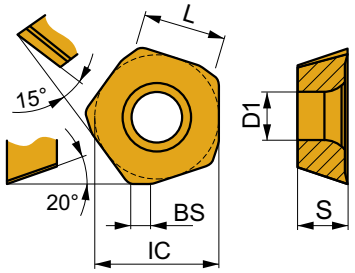
GI245	PD.X 0905ZE..	PDKT 0905..	PDMW 0905..

		Nm					
CO340	US 45011-T20P	5,0	M 5	11	–	–	Flag T20P
CO341	US 45011-T20P	5,0	M 5	11	SDR T20P-T	–	–
CO342	US 45011-T20P	5,0	M 5	11	SDR T20P-T	HS 90835	–
CO343	US 45011-T20P	5,0	M 5	11	SDR T20P-T	HS 1030C	–
CO344	US 45011-T20P	5,0	M 5	11	SDR T20P-T	HS 1230C	–
CO349	US 45011-T20P	5,0	M 5	11	SDR T20P-T	HSD 2040	–

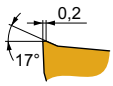
AC001	KS 1230	K.FMH27
AC002	KS 1635	K.FMH32

PDKX 09

	BS	IC	D1	L	S
0905	2,00	13,500	5,50	9,00	5,47

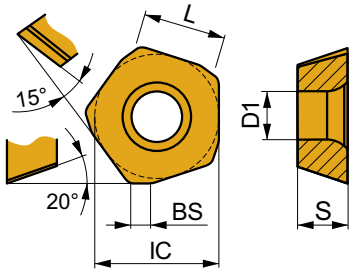


ISO		P	M	K	N	S	H			RE	FN	FX	APMN	APMX
PDKX 0905ZEER-FM	M9340	◪	■					●	- - -	–	0,50	1,75	0,3	2,0
	M6330	◪	■			■		⬢	-	–	0,50	2,50	0,3	2,0
	M8345	■	■			■		⬢	+ / -	–	0,50	2,50	0,3	2,0

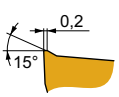


PDMX 09

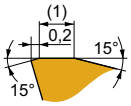
	BS	IC	D1	L	S
0905	2,00	13,500	5,50	9,00	5,47



ISO		P	M	K	N	S	H			RE	FN	FX	APMN	APMX
PDMX 0905ZEER-M	M9340	◪	■					⬢	- - -	–	0,50	1,75	0,3	2,0
	M8330	■	◪	◪				⬢	-	–	0,50	2,50	0,3	2,0
	M8345	■	■					⬢	+ / -	–	0,50	2,50	0,3	2,0
	8215	◪	◪	◪				⬢	-	–	0,50	2,50	0,3	2,0



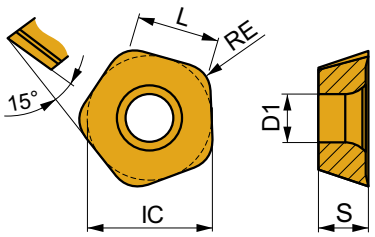
ISO		P	M	K	N	S	H			RE	FN	FX	APMN	APMX
PDMX 0905ZESR-R	M9325	◪	□					●	---	–	0,50	1,75	0,3	2,0
	M8330	◪	□	■			◪	●	-	–	0,50	2,50	0,3	2,0
	M8345	◪	□					✖	+/-	–	0,50	2,50	0,3	2,0
	8215	◪	□	■			■	●	-	–	0,50	2,50	0,3	2,0



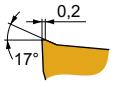
PDKT 09

PRAMET

	IC	D1	L	S
0905	13,500	5,50	9,00	5,47



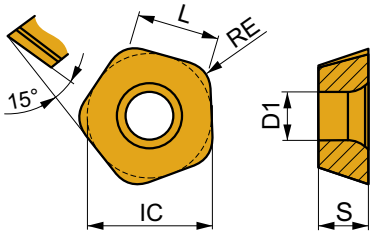
ISO		P	M	K	N	S	H			RE	FN	FX	APMN	APMX
PDKT 090530ER-FM	M9325	■	◪					●	---	3,0	0,50	1,75	0,3	2,0
	M6330	◪	■			■		●	-	3,0	0,50	2,50	0,3	2,0
	M8310	■	◪	◪				●	-	3,0	0,50	2,50	0,3	2,0
	M8330	■	◪	◪				●	-	3,0	0,50	2,50	0,3	2,0
	M8345	■	■			■		●	+/-	3,0	0,50	2,50	0,3	2,0
	8215	■	◪	◪				●	-	3,0	0,50	2,50	0,3	2,0



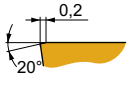
PDMW 09

PRAMET

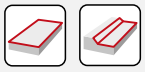
	IC	D1	L	S
0905	13,500	5,50	9,00	5,47



ISO		P	M	K	N	S	H			RE	FN	FX	APMN	APMX
PDMW 090530SR	M9315	◪		◪			◪	●	---	3,0	0,50	1,75	0,3	2,0
	M9325	◪		■					---	3,0	0,50	1,75	0,3	2,0
	M8310	◪		■			■	✖	-	3,0	0,50	2,50	0,3	2,0
	M8345	◪						✖	+/-	3,0	0,50	2,50	0,3	2,0



ISO		FN	FX	M9315	M9325	M9340	M6330	M8310	M8330	M8345	8215
P	●	0,50	2,50	468	451	391	352	402	352	259	385
	⧓	0,50	2,00	429	407	347	314	363	308	220	336
	✖	0,50	1,50	385	358	308	275	325	264	187	286
M	●	0,50	2,50	–	270	231	231	242	209	154	231
	⧓	0,50	2,00	–	242	209	204	215	187	132	198
	✖	0,50	1,50	–	215	182	176	193	160	110	171
K	●	0,50	2,50	446	–	–	–	380	336	–	363
	⧓	0,50	2,00	407	–	–	–	347	292	–	319
	✖	0,50	1,50	369	–	–	–	308	253	–	270
N	●	0,50	2,50	–	–	–	–	–	886	–	968
	⧓	0,50	2,00	–	–	–	–	–	781	–	842
	✖	0,50	1,50	–	–	–	–	–	671	–	721
S	●	0,50	2,15	–	132	116	116	121	105	77	116
	⧓	0,50	1,80	–	121	105	99	105	94	66	99
	✖	0,50	1,40	–	105	88	88	94	77	55	83
H	●	0,50	2,00	94	–	–	–	77	66	–	77
	⧓	0,50	1,60	83	–	–	–	72	61	–	66
	✖	0,50	1,20	77	–	–	–	61	50	–	55



a_e / DCX	0,05	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,70	0,75	0,80	0,90	1,00
X.V	1,48	1,35	1,27	1,22	1,19	1,16	1,11	1,08	1,05	1,03	1,00	1,00	1,00	1,00
⇨X.f	2,87	2,05	1,69	1,48	1,33	1,23	1,09	0,75	0,94	0,90	0,89	0,88	0,88	1,00
⇨X.f	0,64	0,64	0,64	0,64	0,64	0,65	0,65	0,67	0,68	0,71	0,72	0,74	0,79	1,00

	PDKX 09-FM	PDMX 09-M	PDMX 09-R	PDKT 09-FM	PDMW 09
RE	–	–	–	3,0	3,0
BS	2,00	2,00	2,00	–	–

DCX	AP	0,00	0,30	0,40	0,50	0,60	0,70	0,80	0,90	1,00	1,25	1,50	2,00
32		18,4	20,1	20,7	21,3	21,9	22,5	23,0	23,6	24,2	25,7	27,1	30,0
40		25,5	27,2	27,8	28,4	29,0	29,6	30,1	30,7	31,3	32,8	34,2	37,1
42		27,5	29,2	29,8	30,4	31,0	31,6	32,1	32,7	33,3	34,8	36,2	39,1
50	DEF	35,3	37,0	37,6	38,2	38,8	39,4	39,9	40,5	41,1	42,6	44,0	46,9
52		37,3	39,0	39,6	40,2	40,8	41,4	41,9	42,5	43,1	44,6	46,0	48,9
63		48,2	49,9	50,5	51,1	51,7	52,3	52,8	53,4	54,0	55,5	56,9	59,8
66		51,2	52,9	53,5	54,1	54,7	55,3	55,8	56,4	57,0	58,5	59,9	62,8
80		65,3	67,0	67,6	68,2	68,8	69,4	69,9	70,5	71,1	72,6	74,0	76,9
100		85,3	87,0	87,6	88,2	88,8	89,4	89,9	90,5	91,1	92,6	94,0	96,9

AP	0,00	0,30	0,40	0,50	0,60	0,70	0,80	0,90	1,00	1,25	1,50	2,00
1 ⇨F	–	3,00	3,00	2,90	2,80	2,70	2,60	2,50	2,40	2,25	1,50	1,50

Follow the instructions provided for milling flat surfaces. If milling close to a vertical surface, reduce the feed per tooth (f_z) by 50 % to prevent vibrations and edge breakage.

DCX	max	FX
32	5,0	0,20
40	5,0	0,20
42	5,0	0,20
50	6,0	0,20
52	6,0	0,20
63	7,0	0,25
66	7,0	0,25
80	8,0	0,30
100	8,0	0,30

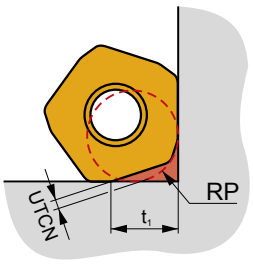
	HFC		
AP	**0,5**	**1,0**	**2,0**
F	2,99	2,30	1,49

DCX	RPMX	APMX / l
40	8,0	1,80/16
42	8,0	2,00/16
50	8,0	2,00/16
52	8,0	2,00/16
63	7,0	2,00/18
66	6,0	2,00/21
80	5,0	2,00/24
100	3,0	2,00/40

DCX	d_{min}	d_{max}	s_{max} d_{min}	s_{max} d_{max}
40	63,7	80,0	2,00	2,00
42	67,5	84,0	2,00	2,00
50	83,3	100,0	2,00	2,00
52	87,3	104,0	2,00	2,00
63	109,2	126,0	2,00	2,00
66	115,2	132,0	2,00	2,00
80	143,3	160,0	2,00	2,00
100	183,3	200,0	2,00	2,00

DCX	AP	FX
32	1,8	0,20
40	1,8	0,20
42	2,0	0,20
50	2,0	0,20
52	2,0	0,20
63	2,0	0,25
66	2,0	0,25
80	2,0	0,30
100	2,0	0,30

DCX	µm	3	5	10	15	20	30	40	50	60	80	100
32		0,620	0,800	1,131	1,386	1,600	1,960	2,263	2,530	2,771	3,200	3,578
40		0,693	0,894	1,265	1,549	1,789	2,191	2,530	2,828	3,098	3,578	4,000
42		0,710	0,917	1,296	1,587	1,833	2,245	2,592	2,898	3,175	3,666	4,099
50	f_e	0,775	1,000	1,414	1,732	2,000	2,449	2,828	3,162	3,464	4,000	4,472
52		0,790	1,020	1,442	1,766	2,040	2,498	2,884	3,225	3,533	4,079	4,561
63		0,869	1,122	1,587	1,944	2,245	2,750	3,175	3,550	3,888	4,490	5,020
66		0,890	1,149	1,625	1,990	2,298	2,814	3,250	3,633	3,980	4,596	5,138
80		0,980	1,265	1,789	2,191	2,530	3,098	3,578	4,000	4,382	5,060	5,657



DCX	RP	UTCN	t_1
32	4,5	1,1	6,8
40 – 140	4,5	1,1	7,3

SZD07

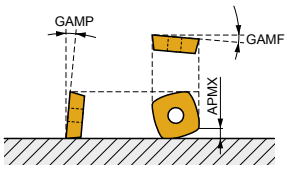
P K H

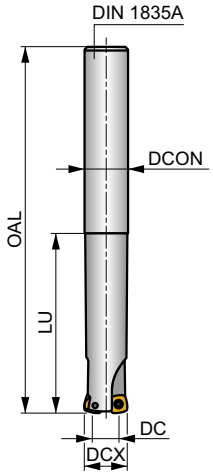
S

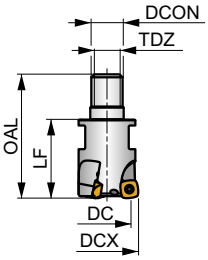
PRAMET

FEED *ZD*

APMX	1,0 mm







h_m 0,175 - 0,44

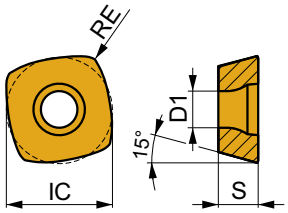
	ISO	DCX [mm]	DC [mm]	OAL [mm]	DCON [mm]	LU [mm]	LF [mm]	TDZ [mm]	GAMP [°]	GAMF [°]			max.		kg		
DIN 1835A	**16E2R030A16-SZD07**	16	6	100	16,0	30	–	–	-5	+8	2	–	47400	✓	0,13	GI201	CO350
	16E2R065A16-SZD07	16	6	145	16,0	65	–	–	-5	+8	2	–	47400	✓	0,19	GI201	CO350
	20E3R040A20-SZD07	20	10	120	20,0	40	–	–	-5	+8	3	–	42400	✓	0,25	GI201	CO350
	20E3R080A20-SZD07	20	10	165	20,0	80	–	–	-5	+8	3	–	42400	✓	0,33	GI201	CO350
	25E3R050A25-SZD07	25	15	140	25,0	50	–	–	-5	+8	3	–	37900	✓	0,47	GI201	CO350
	25E3R100A25-SZD07	25	15	190	25,0	100	–	–	-5	+8	3	–	37900	✓	0,60	GI201	CO350
MODULAR	**16E2R030M08-SZD07**	16	6	48	8,5	–	30	M8	-5	+8	2	–	–	✓	0,04	GI201	CO350
	20E3R030M10-SZD07	20	10	49	10,5	–	30	M10	-5	+8	3	–	–	✓	0,08	GI201	CO350
	25E3R032M12-SZD07	25	15	54	12,5	–	32	M12	-5	+8	3	–	–	✓	0,15	GI201	CO350
	25E4R032M12-SZD07	25	15	54	12,5	–	32	M12	-5	+8	4	✓	–	✓	0,04	GI201	CO350
	32E4R040M16-SZD07	32	22	65	17,0	–	40	M16	-5	+8	4	✓	–	✓	0,22	GI201	CO350

GI201	ZDCW 0703..

		Nm			
CO350	US 2205-T07P	0,9	M 2,2	5	Flag T07P

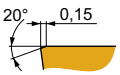
ZDCW 07

	IC	D1	S
0703	6,800	2,60	3,18



ISO		P	M	K	N	S	H		RE	FN	FX	APMN	APMX
ZDCW 070304	M8310	■		■			■		-	0,4	0,15	1,50	0,3	1,0
	M8325	■							-	0,4	0,15	1,50	0,3	1,0
	M8345	■							+ / -	0,4	0,15	1,50	0,3	1,0
	7215	◪		■			■		-	0,4	0,15	1,50	0,3	1,0
	7230	■		■			◪		-	0,4	0,15	1,50	0,3	1,0

HFC



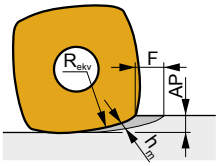
ISO		FN	FX	M8310	M8325	M8345	7215	7230
P	●	0,15	1,50	383	294	247	294	252
	⬣	0,15	1,25	347	263	210	263	226
	✖	0,15	1,00	310	231	179	231	194
K	●	0,15	1,50	362	278	–	284	242
	⬣	0,15	1,25	331	247	–	252	215
	✖	0,15	1,00	294	221	–	221	189
H	●	0,15	1,00	74	–	–	58	47
	⬣	0,15	0,80	68	–	–	53	42
	✖	0,15	0,60	58	–	–	42	37

a_e / DCX	0,05	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,70	0,75	0,80	0,90	1,00
X.V	1,48	1,35	1,27	1,22	1,19	1,16	1,11	1,08	1,05	1,03	1,00	1,00	1,00	1,00
⇨X.f	2,87	2,05	1,69	1,48	1,33	1,23	1,09	0,75	0,94	0,90	0,89	0,88	0,88	1,00
⇨X.f	0,64	0,64	0,64	0,64	0,64	0,65	0,65	0,67	0,68	0,71	0,72	0,74	0,79	1,00

	ZDCW 07
RE	0,4
BS	–

DCX	AP	0,00	0,30	0,40	0,50	0,60	0,70	0,80	0,90	1,00
16	DEF	6,0	12,0	12,9	13,7	14,4	15,1	15,7	16,2	16,8
20		10,0	16,0	16,9	17,7	18,4	19,1	19,7	20,2	20,8
25		15,0	21,0	21,9	22,7	23,4	24,1	24,7	25,2	25,8
32		22,0	28,0	28,9	29,7	30,4	31,1	31,7	32,2	32,8

AP	0,00	0,30	0,40	0,50	0,60	0,70	0,80	0,90	1,00
1 F	–	1,50	1,50	1,13	1,00	0,88	0,75	0,61	0,60



$$F = h_m \sqrt{\frac{2R_{ekv.}}{AP}} \quad \text{[mm/tooth]}$$

Follow the instructions provided for milling flat surfaces. If milling close to a vertical surface, reduce the feed per tooth (f_z) by 50 % to prevent vibrations and edge breakage.

DCX	max	FX
16	5,6	0,12
20	5,6	0,15
25	5,6	0,17
32	5,6	0,17

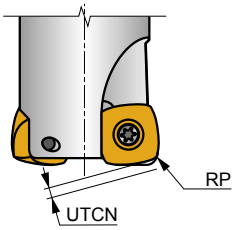
DCX	d_{min}	d_{max}	s_{max} / d_{min}	s_{max} / d_{max}
16	21,0	32,0	0,10	0,40
20	29,0	40,0	0,10	0,30
25	39,0	50,0	0,15	0,25
32	53,0	64,0	0,10	0,15

HFC			
AP	0,3	0,6	1,0
1 F	1,50	0,80	0,40

DCX	RPMX	APMX / l
16	7,8	1,0/9
20	9,7	1,0/7
25	4,9	1,0/13
32	2,8	1,0/22

HFC		
DCX	RPMX	APMX / l
16	0,5	0,75/100
20	0,3	0,40/100
25	0,2	0,20/100
32	0,1	0,05/100

DCX	µm	3	5	10	15	20	30	40	50	60	80	100
16	f_e	0,438	0,566	0,800	0,980	1,131	1,386	1,600	1,789	1,960	2,263	2,530
20		0,490	0,632	0,894	1,095	1,265	1,549	1,789	2,000	2,191	2,530	2,828
25		0,548	0,707	1,000	1,225	1,414	1,732	2,000	2,236	2,449	2,828	3,162
32		0,620	0,800	1,131	1,386	1,600	1,960	2,263	2,530	2,771	3,200	3,578



	RP	UTCN
ZDCW 070304	1,70	0,60

DCX	AP	FX
16	0,05	0,12
20	0,05	0,15
25	0,05	0,17
32	0,05	0,17

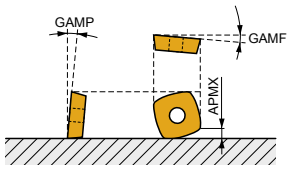
SZD09

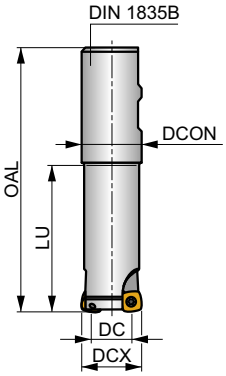
P K H S

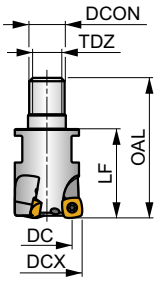
PRAMET

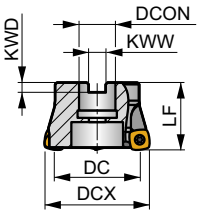
FEED ZD

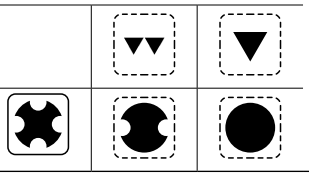
APMX	1,0 mm











h_m 0,31 - 0,618

h_m 0,31 - 0,618

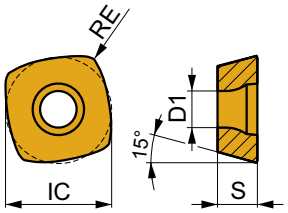
	ISO	DCX [mm]	DC [mm]	OAL [mm]	DCON [mm]	LU [mm]	LF [mm]	TDZ [mm]	KWW [mm]	KWD [mm]	GAMP [°]	GAMF [°]			max.		kg		
DIN 1835B	25E2R080B25-SZD09-C	25	11,6	140	25	80	–	–	–	–	-6	+10	2	–	22800	✓	0,49	GI191	SQ400
	25E2R140B25-SZD09-C	25	11,6	200	25	140	–	–	–	–	-6	+10	2	–	22800	✓	0,60	GI191	SQ400
	25E2R240B25-SZD09-C	25	11,6	300	25	240	–	–	–	–	-6	+10	2	–	22800	✓	0,90	GI191	SQ400
	32E2R080B32-SZD09-C	32	18,7	140	32	80	–	–	–	–	-6	+10	2	–	20100	✓	0,80	GI191	SQ400
	32E2R140B32-SZD09-C	32	18,7	200	32	140	–	–	–	–	-6	+10	2	–	20100	✓	1,07	GI191	SQ400
	32E2R240B32-SZD09-C	32	18,7	300	32	240	–	–	–	–	-6	+10	2	–	20100	✓	1,57	GI191	SQ400
MODULAR	25E2R032M12-SZD09-C	25	11,6	54	12,5	–	32	M12	–	–	-6	+10	2	–	–	✓	0,15	GI191	SQ400
	25E3R032M12-SZD09-C	25	11,6	54	12,5	–	32	M12	–	–	-6	+10	3	–	–	✓	0,14	GI191	SQ400
	32E3R040M16-SZD09-C	32	18,7	63	17	–	40	M16	–	–	-6	+10	3	–	–	✓	0,26	GI191	SQ400
	35E4R040M16-SZD09-C	35	21,7	63	17	–	40	M16	–	–	-6	+10	4	✓	–	✓	0,22	GI191	SQ400
	42E4R040M16-SZD09-C	42	28,7	63	17	–	40	M16	–	–	-6	+10	4	✓	–	✓	0,27	GI191	SQ400
ISO 6462 DIN 8030	40A03R-SMOZD09-C	40	26,7	–	16	–	40	–	8,4	5,6	-6	+10	3	–	18000	✓	0,36	GI191	SQ402
	40A04R-SMOZD09-C	40	26,7	–	16	–	40	–	8,4	5,6	-6	+10	4	✓	18000	✓	0,44	GI191	SQ402
	50A05R-SMOZD09-C	50	36,7	–	22	–	40	–	10,4	6,4	-6	+10	5	✓	16000	✓	0,43	GI191	SQ403
	52A05R-SMOZD09-C	52	38,7	–	22	–	40	–	10,4	6,4	-6	+10	5	✓	15700	✓	0,46	GI191	SQ403
	63A06R-SMOZD09-C	63	49,7	–	22	–	40	–	10,4	6,4	-6	+10	6	✓	14300	✓	0,60	GI191	SQ403
	66A06R-SMOZD09-C	66	52,7	–	27	–	50	–	12,0	7	-6	+10	6	✓	14000	✓	0,89	GI191	CO364

GI191	ZDCW 09T3..

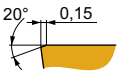
		Nm						
SQ400	US 3006-T09P	2,0	M 3	6	–	–	Flag T09P	–
SQ402	US 3006-T09P	2,0	M 3	6	D-T07P/T09P	FG-15	–	HS 0830C
SQ403	US 3006-T09P	2,0	M 3	6	D-T07P/T09P	FG-15	–	HS 1030C
CO364	US 3006-T09P	2,0	M 3	6	D-T07P/T09P	FG-15	HS 1230C	–

ZDCW 09

	IC	D1	L	S
09T3	9,525	3,40	9,53	3,97



ISO		P	M	K	N	S	H		RE	FN	FX	APMN	APMX
ZDCW 09T304	M8310	■		■			■	⬢	-	0,4	0,30	2,00	0,3	1,0
	M8325	■		■			■	⬢	-	0,4	0,30	2,00	0,3	1,0
	M8345	■						⬢	+ / -	0,4	0,30	2,00	0,3	1,0
	7205	◪		■			■	⬢	-	0,4	0,30	2,00	0,3	1,0
	7215	◪		■			■	⬢	-	0,4	0,30	2,00	0,3	1,0
	7230	■		■			◪	⬢	-	0,4	0,30	2,00	0,3	1,0



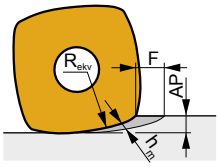
ISO		FN	FX	M8310	M8325	M8345	7205	7215	7230
P	●	0,30	2,00	402	308	259	341	308	264
	⬢	0,30	1,80	363	275	220	303	275	237
	✖	0,30	1,60	325	242	187	270	242	204
K	●	0,30	2,00	380	292	–	325	297	253
	⬢	0,30	1,80	347	259	–	292	264	226
	✖	0,30	1,60	308	231	–	253	231	198
H	●	0,30	1,60	77	–	–	66	61	50
	⬢	0,30	1,40	72	–	–	61	55	44
	✖	0,30	1,20	61	–	–	50	44	39

a_e / DCX	0,05	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,70	0,75	0,80	0,90	1,00
X.V	1,48	1,35	1,27	1,22	1,19	1,16	1,11	1,08	1,05	1,03	1,00	1,00	1,00	1,00
X.f	2,87	2,05	1,69	1,48	1,33	1,23	1,09	0,75	0,94	0,90	0,89	0,88	0,88	1,00
X.f	0,64	0,64	0,64	0,64	0,64	0,65	0,65	0,67	0,68	0,71	0,72	0,74	0,79	1,00

	ZDCW 09
RE	0,4
BS	–

DCX	AP	0,00	0,30	0,40	0,50	0,60	0,70	0,80	0,90	1,00
25		11,7	17,3	18,1	18,8	19,5	20,1	20,7	21,2	21,7
32		18,7	24,3	25,1	25,8	26,5	27,1	27,7	28,2	28,7
40		**26,7**	**32,3**	33,1	33,8	34,5	35,1	35,7	36,2	36,7
42	DEF	**28,7**	**34,3**	35,1	35,8	36,5	37,1	37,7	38,2	38,7
50		**36,7**	**42,3**	43,1	43,8	44,5	45,1	45,7	46,2	46,7
52		**38,7**	**44,3**	45,1	45,8	46,5	47,1	77,7	48,2	48,7
63		**49,7**	**55,3**	56,1	56,8	57,5	58,1	58,7	59,2	59,7
66		52,7	58,3	59,1	59,8	60,5	61,1	61,0	62,2	62,7

AP	0,00	0,30	0,40	0,50	0,60	0,70	0,80	0,90	1,00
1 F	–	2,00	2,00	2,00	1,75	1,50	1,25	1,13	1,00



$$F = h_m \sqrt{\frac{2R_{ekv.}}{AP}} \quad \text{[mm/tooth]}$$

Follow the instructions provided for milling flat surfaces. If milling close to a vertical surface, reduce the feed per tooth (f_z) by 50 % to prevent vibrations and edge breakage.

DCX	max	FX
25	7,7	0,15
32	7,7	0,17
40	7,7	0,20

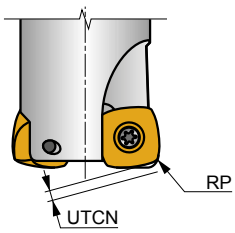
	HFC		
AP	0,3	0,6	1,0
1 F	2,00	1,50	1,00

			HFC		
DCX	RPMX	APMX / l	DCX	RPMX	APMX / l
25	12,0	1,0/6	25	0,9	1,00/65
32	7,5	1,0/11	32	0,5	0,75/100
40	3,6	1,0/17	40	0,4	0,55/100

DCX	d_{min}	d_{max}	s_{max} / d_{min}	s_{max} / d_{max}
25	35,0	50,0	0,45	1,00
32	49,0	64,0	0,45	0,85
40	65,0	80,0	0,50	0,85

DCX	µm	3	5	10	15	20	30	40	50	60	80	100
25	f_e	0,548	0,707	1,000	1,225	1,414	1,732	2,000	2,236	2,449	2,828	3,162
32		0,620	0,800	1,131	1,386	1,600	1,960	2,263	2,530	2,771	3,200	3,578
40		0,693	0,894	1,265	1,549	1,789	2,191	2,530	2,828	3,098	3,578	4,000

DCX	AP	FX
25	0,15	0,15
32	0,15	0,17
40	0,15	0,20



	RP	UTCN
ZDCW 09T304	2,27	0,52

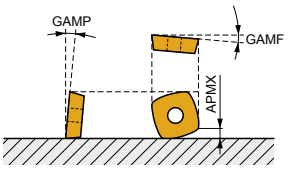
SZD12

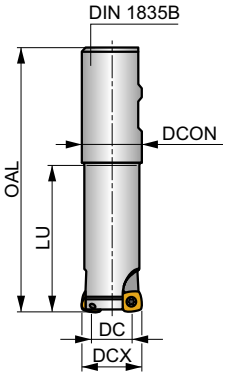
P K H S

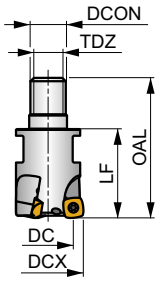
PRAMET

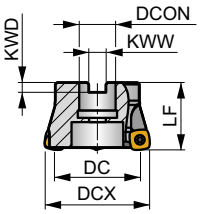
FEED *ZD*

APMX	1,6 mm









h_m	0,46 - 0,925
h_m	0,46 - 0,925

	ISO	DCX [mm]	DC [mm]	OAL [mm]	DCON [mm]	LU [mm]	LF [mm]	TDZ [mm]	KWW [mm]	KWD [mm]	GAMP [°]	GAMF [°]			max.		kg			
DIN 1835B	**40E4R080B32-SZD12-C**	40	22,5	140	32	80	–	–	–	–	-6	+10	4	✓	15700	✓	0,78	GI192	SQ220	–
	40E4R140B32-SZD12-C	40	22,5	200	32	140	–	–	–	–	-6	+10	4	✓	15700	✓	1,13	GI192	SQ220	–
	40E4R240B32-SZD12-C	40	22,5	300	32	240	–	–	–	–	-6	+10	4	✓	15700	✓	1,58	GI192	SQ220	–
MODULAR	**32E3R040M16-SZD12-C**	32	14,5	63	17	–	40	M16	–	–	-6	+10	3	–	–	✓	0,24	GI192	SQ220	–
	40E4R040M16-SZD12-C	40	22,5	63	17	–	40	M16	–	–	-6	+10	4	–	–	✓	0,27	GI192	SQ220	–
ISO 6462 DIN 8030	**50A04R-SMOZD12-C**	50	32,5	–	22	–	40	–	10,4	6,4	-6	+10	4	✓	14000	✓	0,47	GI192	SQ033	–
	52A04R-SMOZD12-C	52	34,5	–	22	–	40	–	10,4	6,4	-6	+10	4	✓	13700	✓	0,47	GI192	SQ033	–
	63A04R-SMOZD12-C	63	45,5	–	22	–	40	–	10,4	6,4	-6	+10	4	✓	12500	✓	0,65	GI192	SQ033	–
	63A05R-SMOZD12-C	63	45,5	–	22	–	40	–	10,4	6,4	-6	+10	5	✓	12500	✓	0,63	GI192	SQ033	–
	66A05R-SMOZD12-C	66	48,5	–	27	–	50	–	12,0	7,0	-6	+10	5	✓	12200	✓	0,88	GI192	CO371	–
	80A05R-SMOZD12-C	80	62,5	–	27	–	50	–	12,0	7,0	-6	+10	5	✓	11100	✓	1,12	GI192	CO371	AC001

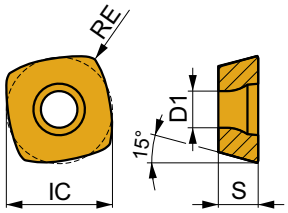
GI192	ZDEW 1204..

		Nm						
CO371	US 4011-T15P	3,5	M 4	11	D-T08P/T15P	FG-15	–	–
SQ033	US 4011-T15P	3,5	M 4	11	D-T08P/T15P	FG-15	–	HS 1030C
SQ220	US 4011-T15P	3,5	M 4	11	–	–	Flag T15P	–

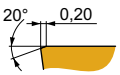
AC001	KS 1230	K.FMH27

ZDEW 12

	IC	D1	S
1204	12,700	4,40	4,76



ISO		P	M	K	N	S	H		RE	FN	FX	APMN	APMX
ZDEW 120408	M8310	■		■			■	⚙	-	0,8	0,50	3,00	0,3	1,6
	M8325	■						⚙	-	0,8	0,50	3,00	0,3	1,6
	M8345	■						✖	+ / -	0,8	0,50	3,00	0,3	1,6
	7205	◪		■			■	⚙	-	0,8	0,20	1,50	0,3	1,0



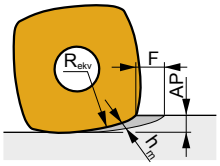
ISO		FN	FX	M8310	M8325	M8345	7205
P	●	0,50	3,00	420	322	270	357
	⚙	0,50	2,50	380	288	230	316
	✖	0,50	2,00	339	253	196	282
K	●	0,50	3,00	397	305	–	339
	⚙	0,50	2,50	362	270	–	305
	✖	0,50	2,00	322	242	–	265
H	●	0,50	2,00	81	–	–	69
	⚙	0,50	1,50	75	–	–	63
	✖	0,50	1,00	63	–	–	52

a_e / DCX	0,05	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,70	0,75	0,80	0,90	1,00
X.V	1,48	1,35	1,27	1,22	1,19	1,16	1,11	1,08	1,05	1,03	1,00	1,00	1,00	1,00
⇨X.f	2,87	2,05	1,69	1,48	1,33	1,23	1,09	0,75	0,94	0,90	0,89	0,88	0,88	1,00
⇨X.f	0,64	0,64	0,64	0,64	0,64	0,65	0,65	0,67	0,68	0,71	0,72	0,74	0,79	1,00

	ZDEW 12
RE	0,8
BS	–

DCX	AP	0,00	0,50	0,60	0,70	0,80	0,90	1,00	1,10	1,20	1,30	1,40	1,50	1,60
32		14,5	22,7	23,5	24,2	24,8	25,4	26,0	26,5	27,0	27,5	28,0	28,5	28,9
40		22,5	30,7	31,5	32,2	32,8	33,4	34,0	34,5	35,0	35,5	36,0	36,5	36,9
50	DEF	32,5	40,7	41,5	42,2	42,8	43,4	44,0	44,5	45,0	45,5	46,0	46,5	46,9
52		34,5	42,7	43,5	44,2	44,8	45,4	46,0	46,5	47,0	47,5	48,0	48,5	48,9
63		45,5	53,7	54,5	55,2	55,8	56,4	57,0	57,5	58,0	58,5	59,0	59,5	59,9
66		48,5	56,7	57,5	58,2	58,8	59,4	60,0	60,5	61,0	61,5	62,0	62,5	62,9
80		62,5	70,7	71,5	72,2	72,8	73,4	74,0	74,5	75,0	75,5	76,0	76,5	76,9

AP	0,00	0,50	0,60	0,70	0,80	0,90	1,00	1,10	1,20	1,30	1,40	1,50	1,60
1 F	–	3,00	3,00	3,00	3,00	3,00	3,00	2,50	2,25	2,00	1,80	1,65	1,50



$$F = h_m \sqrt{\frac{2R_{ekv.}}{AP}} \quad \text{[mm/tooth]}$$

Follow the instructions provided for milling flat surfaces. If milling close to a vertical surface, reduce the feed per tooth (f_z) by 50 % to prevent vibrations and edge breakage.

DCX	max	FX
32	10,0	0,15
40	10,0	0,17
50	10,0	0,20
52	10,0	0,20
63	10,0	0,20
66	10,0	0,20
80	10,0	0,25

	HFC		
AP	0,5	1,0	1,6
1 F	3,00	2,00	1,50

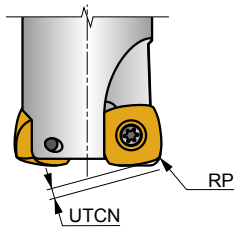
DCX	RPMX	APMX / l
32	10	1,6/11
40	5,5	1,6/18
50	3,3	1,6/29
52	3,1	1,6/31
63	2,2	1,6/43
66	2,0	1,6/47
80	1,5	1,6/63

HFC		
DCX	RPMX	APMX / l
32	1,2	1,60/78
40	0,7	1,10/100
50	0,5	0,75/100
52	0,5	0,75/100
63	0,3	0,40/100
66	0,3	0,40/100
80	0,2	0,20/100

DCX	d_{min}	d_{max}	s_{max} / d_{min}	s_{max} / d_{max}
32	44,0	64,0	0,75	1,60
40	60,0	80,0	0,75	1,50
50	80,0	100,0	0,80	1,35
52	84,0	104,0	0,80	1,35
63	106,0	126,0	0,70	1,00
66	112,0	132,0	0,70	1,00
80	140,0	160,0	0,65	0,85

DCX	µm	3	5	10	15	20	30	40	50	60	80	100
32		0,620	0,800	1,131	1,386	1,600	1,960	2,263	2,530	2,771	3,200	3,578
40		0,693	0,894	1,265	1,549	1,789	2,191	2,530	2,828	3,098	3,578	4,000
50		0,775	1,000	1,414	1,732	2,000	2,449	2,828	3,162	3,464	4,000	4,472
52		0,790	1,020	1,442	1,766	2,040	2,498	2,884	3,225	3,533	4,079	4,561
63		0,869	1,122	1,587	1,944	2,245	2,750	3,175	3,550	3,888	4,490	5,020
66		0,890	1,149	1,625	1,990	2,298	2,814	3,250	3,633	3,980	4,596	5,138
80		0,980	1,265	1,789	2,191	2,530	3,098	3,578	4,000	4,382	5,060	5,657

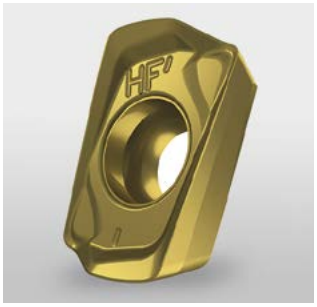
DCX	AP	FX
32	0,25	0,15
40	0,25	0,17
50	0,25	0,20
52	0,25	0,20
63	0,25	0,20
66	0,25	0,20
80	0,25	0,25

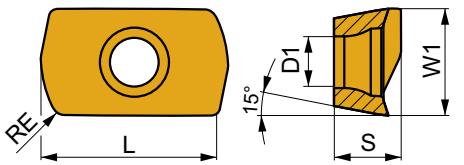


	RP	UTCN
ZDEW 120408	3,52	0,64

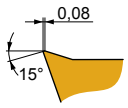
ADEX 07-HF

	W1	D1	L	S
0702	4,439	2,20	6,45	2,48

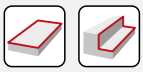




ISO		P	M	K	N	S	H		RE	FN	FX	APMN	APMX
ADEX 070206SR-HF	M6330	◪	■			◪		-	0,6	0,20	0,90	0,1	0,3
	M8330	■	◪					-	0,6	0,20	0,90	0,1	0,3
	M8340	■	■			◪		+ / -	0,6	0,20	0,90	0,1	0,3



HFC		FN	FX	M8330	M8340	M6330
P	●	0,20	0,90	265	250	235
	⬢	0,20	0,70	235	220	210
	✖	0,20	0,50	205	190	180
M	●	0,20	0,90	160	150	165
	⬢	0,20	0,70	140	130	145
	✖	0,20	0,50	125	115	127
K	●	0,20	0,90	250	235	–
	⬢	0,20	0,70	220	205	–
	✖	0,20	0,50	190	180	–
N	●	0,20	0,70	70	65	73
	⬢	0,20	0,60	60	55	65
	✖	0,20	0,50	55	50	56
S	●	0,10	0,20	52	–	–
	⬢	0,10	0,20	42	–	–
	✖	0,10	0,20	40	–	–



a_e / DCX	0,05	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,70	0,75	0,80	0,90	1,00
X.V	1,48	1,35	1,27	1,22	1,19	1,16	1,11	1,08	1,05	1,03	1,00	1,00	1,00	1,00
X.f	2,87	2,05	1,69	1,48	1,33	1,23	1,09	0,75	0,94	0,90	0,89	0,88	0,88	1,00
X.f	0,64	0,64	0,64	0,64	0,64	0,65	0,65	0,67	0,68	0,71	0,72	0,74	0,79	1,00

	ADMX 07-M				ADEX 07-HF	ADEX 07-FA	
RE	0,2	0,4	0,8	2,0	0,6	0,4	0,8
BS	1,38	0,89	0,54	0,33	–	0,94	0,55

max
3,9

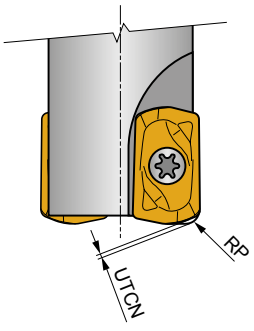
AP	1,0	3,0	5,0
1 F	0,13	0,08	0,05

			HFC	
DCX	RPMX	APMX / l	RPMX	APMX / l
10	5,2	5,0/56	3,5	0,3/6
12	3,4	5,0/86	2,2	0,3/9
14	2,5	4,2/100	1,6	0,3/12
16	1,9	3,2/100	1,3	0,3/15
18	1,7	2,8/100	1,1	0,3/17
20	1,5	2,5/100	0,9	0,3/21
25	1,1	1,8/100	0,7	0,3/26
32	0,8	1,2/100	0,5	0,3/36

			HFC	
DCX	d_{min}	d_{max}	s_{max} / d_{min}	s_{max} / d_{max}
10	12	20	0,30	0,30
12	16	24	0,30	0,30
14	20	28	0,30	0,30
16	24	32	0,30	0,30
18	28	36	0,30	0,30
20	32	40	0,30	0,30
25	42	50	0,30	0,30
32	56	64	0,30	0,30

AP	HFC
0,9	0,3

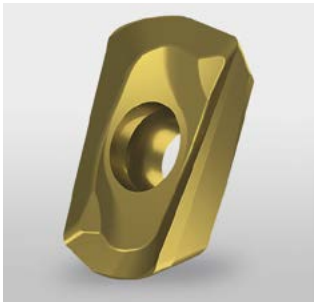
DCX	µm	3	5	10	15	20	30	40	50	60	80	100
10		0,346	0,447	0,632	0,775	0,894	1,095	1,265	1,414	1,549	1,789	2,000
12		0,379	0,490	0,693	0,849	0,980	1,200	1,386	1,549	1,697	1,960	2,191
14		0,410	0,529	0,748	0,917	1,058	1,296	1,497	1,673	1,833	2,117	2,366
16	f_e	0,438	0,566	0,800	0,980	1,131	1,386	1,600	1,789	1,960	2,263	2,530
18		0,465	0,600	0,849	1,039	1,200	1,470	1,697	1,897	2,078	2,400	2,683
20		0,490	0,632	0,894	1,095	1,265	1,549	1,789	2,000	2,191	2,530	2,828
25		0,548	0,707	1,000	1,225	1,414	1,732	2,000	2,236	2,449	2,828	3,162
32		0,620	0,800	1,131	1,386	1,600	1,960	2,263	2,530	2,771	3,200	3,578

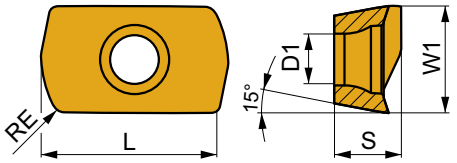


ADEX 07	RP	UTCN
	[mm]	[mm]
ADEX 070206SR-HF	0,8	0,18

ADEX 11-HF

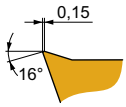
	W1	D1	L	S
11T3	6,450	2,90	10,67	3,82





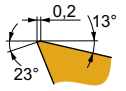
ISO		P	M	K	N	S	H		RE	FN	FX	APMN	APMX
ADEX 11T308SR-HF	**M9340**	◪	■			◪		●	- - -	0,8	0,40	1,11	0,1	0,6
	M8310	■	◪			◪		●	-	0,8	0,40	1,30	0,1	0,6
	M8330	■	◪					●	-	0,8	0,40	1,30	0,1	0,6
	M8340	■	■			◪		●	+ / -	0,8	0,40	1,30	0,1	0,6
	M6330	■	◪					●	-	0,8	0,40	1,30	0,1	0,6
	8215	■	◪			◪		●	-	0,8	0,40	1,30	0,1	0,6

HFC



ISO		P	M	K	N	S	H		RE	FN	FX	APMN	APMX
ADEX 11T308SR-HF2	**M9325**	■	◪					●	- - -	0,8	0,40	1,17	0,2	0,6
	M9340	◪	◪					●	- - -	0,8	0,40	1,17	0,2	0,6
	M8310	■	◪	■			■	●	-	0,8	0,40	1,30	0,2	0,6
	M8330	■	◪	■			◪	●	-	0,8	0,40	1,30	0,2	0,6
	M8340	■	◪	◪				✖	+ / -	0,8	0,40	1,30	0,2	0,6

HFC



HFC		FN	FX	M9325	M9340	M8310	M8340	8215	M8330	M6330
P	●	0,45	1,25	325	280	290	260	280	255	255
	●	0,45	1,00	295	250	260	225	240	220	220
	✖	0,45	0,80	260	220	235	195	205	190	190
M	●	0,45	1,25	195	165	175	155	165	150	150
	●	0,45	1,00	175	150	155	135	140	135	135
	✖	0,45	0,80	155	130	140	115	120	115	115
K	●	0,45	1,25	–	–	275	240	260	240	240
	●	0,45	1,00	–	–	250	215	230	210	210
	✖	0,45	0,80	–	–	220	185	195	180	180
N	●	0,45	1,25	–	–	–	–	700	640	640
	●	0,45	1,00	–	–	–	–	610	565	565
	✖	0,45	0,80	–	–	–	–	520	485	485
S	●	0,45	1,20	95	80	85	75	80	75	75
	●	0,45	1,00	85	75	75	65	70	65	65
	✖	0,45	0,80	75	60	65	55	60	55	55
H	●	0,40	1,00	–	–	55	–	55	45	45
	●	0,40	0,80	–	–	50	–	45	40	40
	✖	0,40	0,60	–	–	40	–	40	35	35

a_e / DCX	0,05	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,70	0,75	0,80	0,90	1,00
X.V	1,48	1,35	1,27	1,22	1,19	1,16	1,11	1,08	1,05	1,03	1,00	1,00	1,00	1,00
⇨X.f	2,87	2,05	1,69	1,48	1,33	1,23	1,09	0,75	0,94	0,90	0,89	0,88	0,88	1,00
⇨X.f	0,64	0,64	0,64	0,64	0,64	0,65	0,65	0,67	0,68	0,71	0,72	0,74	0,79	1,00

	ADEX 11-HF	ADEX 11-HF2
RE	0,8	0,8
BS	0,17	0,17

max
4,5

AP	1,0	5,0	9,0
1 ⇨F	0,20	0,13	0,10

			HFC		
DCX	RPMX	APMX / l	DCX	RPMX	APMX / l
16	13,5	9,0/40	4,1	5,7	0,6/8
18	10,0	9,0/53	2,8	4,5	0,6/12
20	9,0	9,0/59	2,3	4,3	0,6/15
25	6,0	9,0/87	1,3	6,7	0,6/26
32	5,3	9,0/99	0,7	4,3	0,6/49
40	3,8	6,5/100	0,3	2,9	0,6/100
50	2,8	4,7/100	0,1	2,1	0,6/100
63	1,8	3,0/100	–	–	–
80	1,6	2,6/100	–	–	–

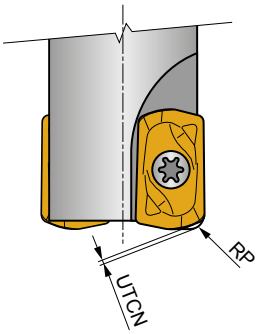
AP
1,7

					HFC			
DCX	d_{min}	d_{max}	s_{max} / d_{min}	s_{max} / d_{max}	d_{min}	d_{max}	s_{max} / d_{min}	s_{max} / d_{max}
16	27,0	32,0	8,3	9,0	21,0	32,0	0,6	0,6
18	32,0	36,0	7,5	9,0	29,0	36,0	0,6	0,6
20	35,0	40,0	7,5	9,0	29,0	40,0	0,6	0,6
25	45,0	50,0	6,5	7,5	39,0	50,0	0,6	0,6
32	59,0	64,0	4,0	4,5	53,0	64,0	0,6	0,6
40	75,0	80,0	1,5	2,0	68,5	80,0	0,6	0,6
50	–	–	–	–	88,5	100,0	0,6	0,6

ØCX	µm	3	5	10	15	20	30	40	50	60	80	100
16		0,438	0,566	0,800	0,980	1,131	1,386	1,600	1,789	1,960	2,263	2,530
18		0,465	0,600	0,849	1,039	1,200	1,470	1,697	1,897	2,078	2,400	2,683
20		0,490	0,632	0,894	1,095	1,265	1,549	1,789	2,000	2,191	2,530	2,828
20		0,490	0,632	0,894	1,095	1,265	1,549	1,789	2,000	2,191	2,530	2,828
25		0,548	0,707	1,000	1,225	1,414	1,732	2,000	2,236	2,449	2,828	3,162
32		0,620	0,800	1,131	1,386	1,600	1,960	2,263	2,530	2,771	3,200	3,578
40		0,693	0,894	1,265	1,549	1,789	2,191	2,530	2,828	3,098	3,578	4,000
50		0,775	1,000	1,414	1,732	2,000	2,449	2,828	3,162	3,464	4,000	4,472
63		0,869	1,122	1,587	1,944	2,245	2,750	3,175	3,550	3,888	4,490	5,020
80		0,980	1,265	1,789	2,191	2,530	3,098	3,578	4,000	4,382	5,060	5,657

RE	µm	3	5	10	15	20	30	40	50	60	80	100
1,0		0,155	0,200	0,283	0,346	0,400	0,490	0,566	0,632	0,693	0,800	0,894
1,2		0,170	0,219	0,310	0,379	0,438	0,537	0,620	0,693	0,759	0,876	0,980
1,6		0,196	0,253	0,358	0,438	0,506	0,620	0,716	0,800	0,876	1,012	1,131
2,0		0,219	0,283	0,400	0,490	0,566	0,693	0,800	0,894	0,980	1,131	1,265
2,5		0,245	0,316	0,447	0,548	0,632	0,775	0,894	1,000	1,095	1,265	1,414
3,0		0,268	0,346	0,490	0,600	0,693	0,849	0,980	1,095	1,200	1,386	1,549

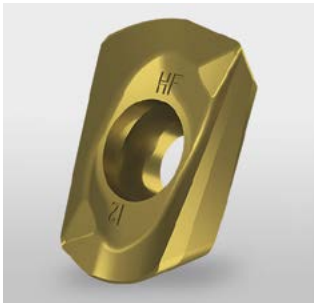
ADMX/ADEX 11	R
ADEX 11T308SR-HF	1,4
ADEX 11T308SR-HF2	1,4

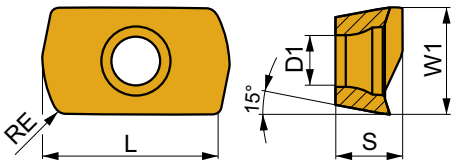


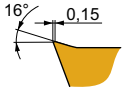
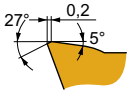
ADEX 11	RP	UTCN
	[mm]	[mm]
ADEX 11T308SR-HF	1,42	0,35
ADEX 11T308SR-HF2	1,34	0,38

ADEX 16-HF

	W1	D1	L	S
1606	15,575	4,50	16,00	5,88





		ISO		P	M	K	N	S	H			RE	FN	FX	APMN	APMX
HFC S		ADEX 160612SR-HF	M9340	◪	■			◪		●	---	1,2	0,60	1,11	0,3	1,3
			M8310	■	◪			◪		●	-	1,2	0,60	1,30	0,3	1,3
			M8330	■	◪					●	-	1,2	0,60	1,30	0,3	1,3
			M8340	■	■			◪		●	+/-	1,2	0,60	1,30	0,3	1,3
			8215	■	◪			◪		●	-	1,2	0,60	1,30	0,3	1,3
HFC S		ADEX 160612SR-HF2	M9325	■	◪					●	---	1,2	0,60	1,17	0,3	1,3
			M9340	◪	◪					●	---	1,2	0,60	1,17	0,3	1,3
			M8310	■	◪	■			■	●	-	1,2	0,60	1,30	0,3	1,3
			M8330	■	◪	■			◪	✖	-	1,2	0,60	1,30	0,3	1,3
			M8340	■	◪	◪				✖	+/-	1,2	0,60	1,30	0,3	1,3

HFC		FN	FX	M9325	M9340	M8310	M8340	8215	M8330
P	●	0,55	1,25	345	300	310	275	295	270
	●	0,55	1,00	310	265	280	240	255	235
	✖	0,55	0,80	275	235	250	205	220	200
M	●	0,55	1,25	205	175	185	165	175	160
	●	0,55	1,00	185	160	165	140	150	140
	✖	0,55	0,80	165	140	145	120	130	120
K	●	0,55	1,25	–	–	290	255	280	255
	●	0,55	1,00	–	–	265	225	245	225
	✖	0,55	0,80	–	–	235	195	205	195
N	●	0,55	1,25	–	–	–	–	745	680
	●	0,55	1,00	–	–	–	–	650	600
	✖	0,55	0,80	–	–	–	–	555	515
S	●	0,55	1,20	100	85	90	80	85	80
	●	0,55	1,00	90	80	80	70	75	70
	✖	0,55	0,80	80	65	70	55	60	55
H	●	0,50	1,00	–	–	55	–	55	50
	●	0,50	0,80	–	–	55	–	50	45
	✖	0,50	0,60	–	–	45	–	40	35

a_e / DCX	0,05	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,70	0,75	0,80	0,90	1,00
X.V	1,48	1,35	1,27	1,22	1,19	1,16	1,11	1,08	1,05	1,03	1,00	1,00	1,00	1,00
X.f	2,87	2,05	1,69	1,48	1,33	1,23	1,09	0,75	0,94	0,90	0,89	0,88	0,88	1,00
X.f	0,64	0,64	0,64	0,64	0,64	0,65	0,65	0,67	0,68	0,71	0,72	0,74	0,79	1,00

	ADEX 16-HF	ADEX 16-HF2
RE	1,2	1,2
BS	0,52	0,52

max
7,5

AP	1,0	6,0	13,0
1 F	0,28	0,19	0,10

DCX	RPMX	APMX / l	HFC RPMX	HFC APMX / l
25	12,5	13,0/60	4,0	1,3/19
32	7,5	13,0/100	2,0	1,3/38
40	5,0	8,6/100	1,2	1,3/65
50	3,5	6,0/100	0,8	1,3/100
63	2,5	4,2/100	0,5	0,8/100
80	2,0	3,3/100	0,4	0,6/100

DCX	d_{min}	d_{max}	s_{max} / d_{min}	s_{max} / d_{max}	HFC d_{min}	HFC d_{max}	HFC s_{max} / d_{min}	HFC s_{max} / d_{max}
25	42,0	50,0	10,0	12,5	42,0	50,0	1,3	1,3
32	55,0	64,0	6,5	9,0	55,0	64,0	1,3	1,3
40	72,0	80,0	5,0	8,0	72,0	80,0	1,3	1,3
50	92,0	100,0	4,5	6,0	92,0	100,0	1,3	1,3
63	118,0	126,0	4,0	5,0	118,0	126,0	1,3	1,3
80	136,0	160,0	1,5	2,0	136,0	160,0	1,3	1,3

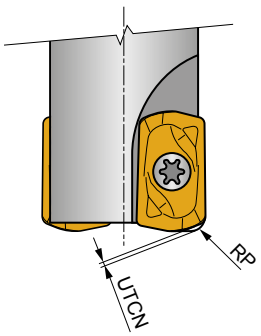
AP

2,5

DCX	µm	3	5	10	15	20	30	40	50	60	80	100
25		0,548	0,707	1,000	1,225	1,414	1,732	2,000	2,236	2,449	2,828	3,162
32		0,620	0,800	1,131	1,386	1,600	1,960	2,263	2,530	2,771	3,200	3,578
40	f_e	0,693	0,894	1,265	1,549	1,789	2,191	2,530	2,828	3,098	3,578	4,000
50		0,775	1,000	1,414	1,732	2,000	2,449	2,828	3,162	3,464	4,000	4,472
63		0,869	1,122	1,587	1,944	2,245	2,750	3,175	3,550	3,888	4,490	5,020
80		0,980	1,265	1,789	2,191	2,530	3,098	3,578	4,000	4,382	5,060	5,657

RE	µm	3	5	10	15	20	30	40	50	60	80	100
1,6		0,196	0,253	0,358	0,438	0,506	0,620	0,716	0,800	0,876	1,012	1,131
2,0		0,219	0,283	0,400	0,490	0,566	0,693	0,800	0,894	0,980	1,131	1,265
3,0	f_e	0,268	0,346	0,490	0,600	0,693	0,849	0,980	1,095	1,200	1,386	1,549
3,2		0,277	0,358	0,506	0,620	0,716	0,876	1,012	1,131	1,239	1,431	1,600
4,0		0,310	0,400	0,566	0,693	0,800	0,980	1,131	1,265	1,386	1,600	1,789
5,0		0,346	0,447	0,632	0,775	0,894	1,095	1,265	1,414	1,549	1,789	2,000

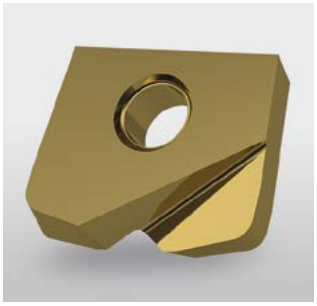
ADMX/ADEX 16	R
ADEX 160612SR-HF	3,0
ADEX 160612SR-HF2	3,0

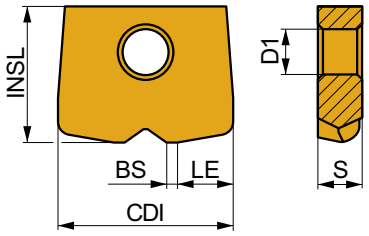


ADEX 16	RP	UTCN
	[mm]	[mm]
ADEX 160612SR-HF	2,59	0,56
ADEX 160612SR-HF2	2,48	0,57

PPHF

	BS	LE	CDI	D1	INSL	S
0800	0,40	2,60	8,000	2,50	7,0	2,40
1000	0,50	3,20	10,000	3,00	8,5	2,60
1200	0,60	3,90	12,000	3,50	10,0	3,00
1600	0,80	5,20	16,000	4,00	12,0	4,00
2000	1,00	6,40	20,000	5,00	15,0	5,00
2500	1,20	7,90	25,000	6,00	18,5	6,00





ISO		P	M	K	N	S	H		RE	FN	FX	APMN	APMX
PPHF 080004-CE1	M8330	■	◪	■			◪	●	-	–	0,20	0,40	0,1	0,4
PPHF 100005-CE1	M8330	■	◪	■			◪	⬣	-	–	0,20	0,50	0,1	0,5
PPHF 120006-CE1	M8330	■	◪	■			◪	⬣	-	–	0,30	0,60	0,1	0,6
PPHF 160008-CE1	M8330	■	◪	■			◪	⬣	-	–	0,40	0,80	0,1	0,8
PPHF 200010-CE1	M8330	■	◪	■			◪	⬣	-	–	0,50	1,00	0,1	1,0
PPHF 250012-CE1	M8330	■	◪	■			◪	⬣	-	–	0,60	1,50	0,2	1,2

ISO		FN	FX	M8330
P	●	0,05	0,17	288
		0,05	0,20	
		0,05	0,25	
	⬣	0,05	0,15	252
		0,05	0,18	
		0,05	0,23	
	✖	0,05	0,12	216
		0,05	0,15	
		0,05	0,20	
M	●	0,05	0,17	171
		0,05	0,20	
		0,05	0,25	
	⬣	0,05	0,15	153
		0,05	0,18	
		0,05	0,23	
	✖	0,05	0,12	131
		0,05	0,15	
		0,05	0,20	
K	●	0,05	0,17	275
		0,05	0,20	
		0,05	0,25	
	⬣	0,05	0,15	239
		0,05	0,18	
		0,05	0,23	
	✖	0,05	0,12	207
		0,05	0,15	
		0,05	0,20	

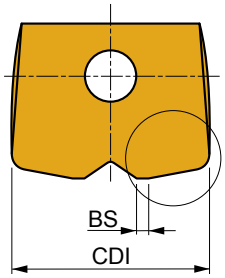
ISO		FN	FX	M8330
N	●	0,05	0,17	725
		0,05	0,20	
		0,05	0,25	
	⬣	0,05	0,15	639
		0,05	0,18	
		0,05	0,23	
	✖	0,05	0,12	549
		0,05	0,15	
		0,05	0,20	
S	●	0,05	0,17	99
		0,05	0,20	
		0,05	0,25	
	⬣	0,05	0,15	86
		0,05	0,18	
		0,05	0,23	
	✖	0,05	0,12	77
		0,05	0,15	
		0,05	0,20	
H	●	0,05	0,17	54
		0,05	0,20	
		0,05	0,25	
	⬣	0,05	0,15	50
		0,05	0,18	
		0,05	0,23	
	✖	0,05	0,12	41
		0,05	0,15	
		0,05	0,20	

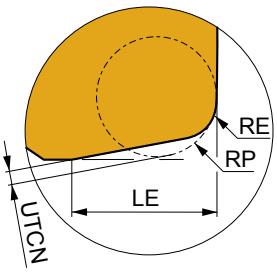
	DCX	RE	max
PPHF 08-CE1	8	0,6	2,0
PPHF 10-CE1	10	0,8	2,5
PPHF 12-CE1	12	1,0	3,0
PPHF 16-CE1	16	1,3	4,0
PPHF 20-CE1	20	1,6	5,0
PPHF 25-CE1	25	1,9	6,0

	DCX	RE	d_{min}	d_{max}	s_{max} / d_{min}	s_{max} / d_{max}
PPHF 08-CE1	8	0,6	10,0	14,7	2,4	6,7
PPHF 10-CE1	10	0,8	13,0	18,4	3,0	8,4
PPHF 12-CE1	12	1,0	15,7	22,0	3,7	10,0
PPHF 16-CE1	16	1,3	20,9	29,4	4,9	13,4
PPHF 20-CE1	20	1,6	26,2	36,7	6,2	16,7
PPHF 25-CE1	25	1,9	33,0	46,1	8,0	21,1

	DCX	RE	AP
PPHF 08-CE1	8	0,6	0,40
PPHF 10-CE1	10	0,8	0,50
PPHF 12-CE1	12	1,0	0,60
PPHF 16-CE1	16	1,3	0,80
PPHF 20-CE1	20	1,6	1,00
PPHF 25-CE1	25	1,9	1,20

Overhang (increasing the diameter *D*)	**<3**	**3 – 3,5**	**3,6 – 4**	**4,1 – 4,5**	**>4,6**
Multiplication factor for feed	1	0,9	0,8	0,7	0,5





CDI	**RE**	**RP**	**LE**	**UTCN**
08	0,6	1,0	2,6	0,3
10	0,8	1,2	3,2	0,4
12	1,0	1,5	3,9	0,4
16	1,3	2,0	5,2	0,6
20	1,6	2,5	6,4	0,7
25	1,9	3,0	7,9	0,9

S536 • High-feed finishing cutters

S536 ▪ **1.7** **1.8**

S536										
	HM		N	Z 4-6		λ25° γ0°	DIN 6535HA	 TiSiN	h9	

DORMER

S536

6.00 - 12.00

DCX Ø mm	RE ±0.01 mm	DMM Øh6 mm	LU mm	LF mm	NOF	S536
6.00	1.00	6	6	60	4	**S5366.0XR1.0**
8.00	2.00	8	8	64	6	**S5368.0XR2.0**
10.00	2.00	10	10	75	6	**S53610.0XR2.0**
12.00	2.00	12	12	75	6	**S53612.0XR2.0**

For our full carbide milling range, please refer to the DORMER 2018 catalogue.

S536

Cutting conditions

High-speed conditions

			P STEEL 30-45 HRC					H STEEL 45-55 HRC					H STEEL 55-60 HRC				
D	Z	a_0	a_p	V_c	f_z	n	V_f	a_p	V_c	f_z	n	V_f	a_p	V_c	f_z	n	V_f
6,0	4	1,50	0,3	100	0,300	5308	6369	0,3	80	0,300	4246	5096	0,2	70	0,120	3715	1783
8,0	4	3,00	0,4	100	0,400	3981	6369	0,4	80	0,400	3185	5096	0,2	70	0,160	2787	1783
10,0	4	3,00	0,4	100	0,500	3185	6369	0,4	80	0,500	2548	5096	0,2	70	0,200	2229	1783
12,0	4	4,00	0,4	100	0,600	2654	6369	0,4	80	0,600	2123	5096	0,2	70	0,230	1858	1709

High-depth conditions

			P STEEL 30-45 HRC					H STEEL 45-55 HRC					H STEEL 55-60 HRC				
D	Z	a_0	a_p	V_c	f_z	n	V_f	a_p	V_c	f_z	n	V_f	a_p	V_c	f_z	n	V_f
6,0	4	1,50	0,7	65	0,150	3450	2070	0,5	50	0,150	2654	1592	0,3	50	0,075	2654	796
8,0	4	3,00	1,0	65	0,200	2588	2070	0,7	50	0,200	1990	1592	0,4	50	0,100	1990	796
10,0	4	3,00	1,0	65	0,250	2070	2070	0,7	50	0,250	1592	1592	0,4	50	0,125	1592	796
12,0	4	4,00	1,0	65	0,300	1725	2070	0,7	50	0,300	1327	1592	0,4	50	0,140	1327	743

Standard conditions

			P STEEL 30-45 HRC					H STEEL 45-55 HRC					H STEEL 55-60 HRC				
D	Z	a_0	a_p	V_c	f_z	n	V_f	a_p	V_c	f_z	n	V_f	a_p	V_c	f_z	n	V_f
6,0	4	1,50	0,5	65	0,300	3450	4140	0,3	50	0,300	2654	3185	0,2	50	0,120	2654	1274
8,0	4	3,00	0,6	65	0,400	2588	4140	0,4	50	0,400	1990	3185	0,3	50	0,160	1990	1274
10,0	4	3,00	0,6	65	0,500	2070	4140	0,4	50	0,500	1592	3185	0,3	50	0,200	1592	1274
12,0	4	4,00	0,6	65	0,600	1725	4140	0,4	50	0,600	1327	3185	0,3	50	0,230	1327	1221

Semi-finishing conditions

			P STEEL 30-45 HRC					H STEEL 45-55 HRC					H STEEL 55-60 HRC				
D	Z	a_0	a_p	V_c	f_z	n	V_f	a_p	V_c	f_z	n	V_f	a_p	V_c	f_z	n	V_f
6,0	4	1,50	0,5	85	0,250	4512	4512	0,3	65	0,250	3450	3450	0,2	60	0,090	3185	1146
8,0	4	3,00	0,6	85	0,300	3384	4061	0,4	65	0,300	2588	3105	0,3	60	0,120	2389	1146
10,0	4	3,00	0,6	85	0,350	2707	3790	0,4	65	0,350	2070	2898	0,3	60	0,150	1911	1146
12,0	4	4,00	0,6	85	0,400	2256	3609	0,4	65	0,400	1725	2760	0,3	60	0,170	1592	1083

Finishing conditions

			P STEEL 30-45 HRC					H STEEL 45-55 HRC					H STEEL 55-60 HRC				
D	Z	a_0	a_p	V_c	f_z	n	V_f	a_p	V_c	f_z	n	V_f	a_p	V_c	f_z	n	V_f
6,0	4	0,10	0,1	120	0,040	6369	1019	0,1	80	0,055	4246	934	0,1	70	0,025	3715	372
8,0	4	0,15	0,1	120	0,050	4777	955	0,1	80	0,075	3185	955	0,1	70	0,035	2787	390
10,0	4	0,20	0,1	120	0,060	3822	917	0,1	80	0,095	2548	968	0,1	70	0,040	2229	357
12,0	4	0,20	0,1	120	0,070	3185	892	0,1	80	0,105	2123	892	0,1	70	0,045	1858	334

SIMPLY RELIABLE

As a professional you can judge the quality of work by just looking at the chip. Our chip is a clean and uncomplicated shape that in itself tells a story. It is a clear and consistent signal and that's why we use it as a symbol for being **simply reliable**.

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