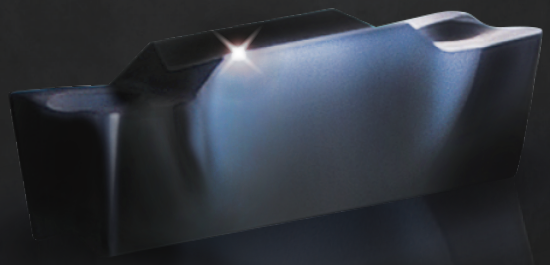


GROOVING TOOL

槽刀片

"N-MT" SERIES

Applying stable clamping system, guaranteed high quality and efficiency machining

采用稳定的该系统, 可实现高品质、高效率加工

Grooving inserts & holders

槽刀片&刀杆

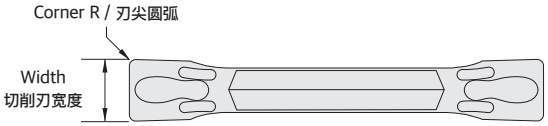
1. Stable clamping system for specially designed grooving machining
1. 为特殊设计的槽加工提供稳定的夹紧系统

2. Various machining available (grooving, parting off, turning)
2. 可用各种机械加工(开槽、分型、车削)

3. High quality and high efficiency machining in aerospace and automobile industry
3. 从精加工到粗加工各种几何形状

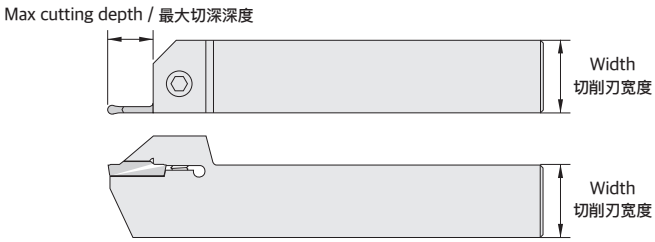
NUMBERING SYSTEM
命名系统

Numbering system (Insert & holder)
命名系统(槽刀片&刀杆)



INSERT

2	NG	30	N	-	04	M	-	M1
Number. of corner 切削刃数(2)	Nano grooving Nano 切槽	Width 切削刃宽度 (3.0mm)	Edge shape 切削刃数(2)		Corner R 刃尖圆弧 (0.4mm)	Tolerance 精度级别 (M class)		C/B

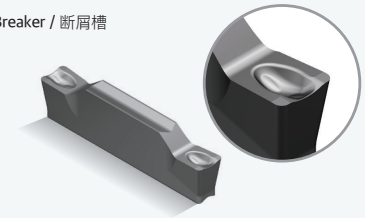
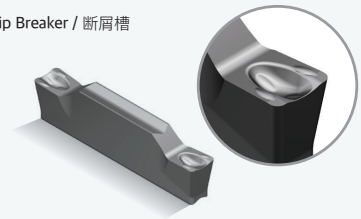
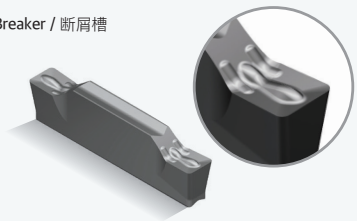
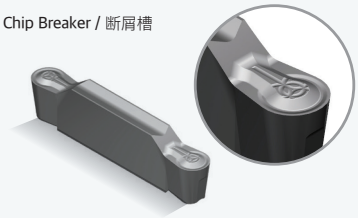
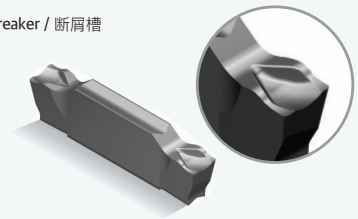
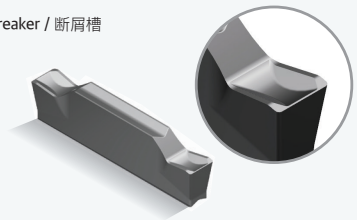


※ Right hand shown / 右手型

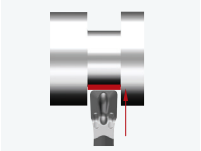
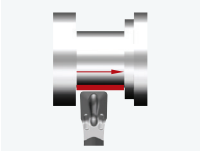
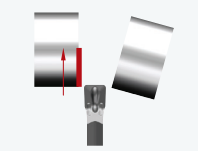
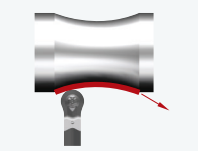
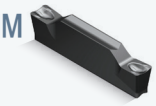
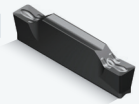
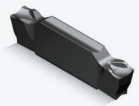
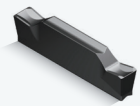
HOLDER

NG	3	E	H	R	2525	-	T11
Nano grooving Nano 切槽	Insert width 刀片宽度	Application 用途 E : External 外径用 I : Internal 内径用	Holder type 刀杆形式 H : Horizontal 水平形(卧式) V : Vertical 垂直形(立式) U : Under cut 底切削	Hand 手柄 L : Left 左 R : Right 右	Shank size 柄径尺寸 (Height / Width 25mm) (高度/宽度 25mm)		Max cutting depth(11mm) 最大切深深度(11mm) 9~30mm

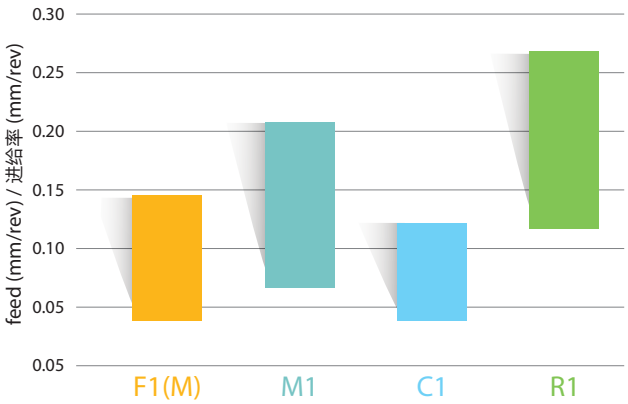
GEOMETRY FEATURE
形状特点

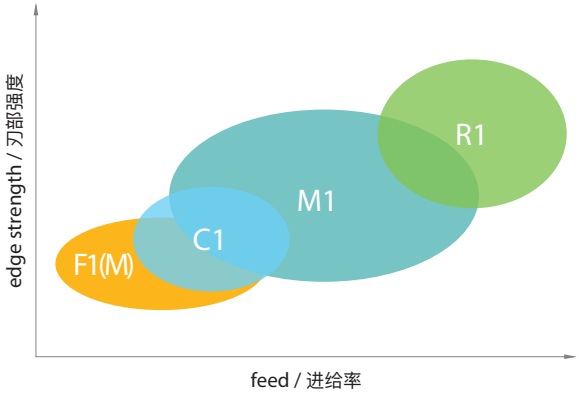
Insert shape / 刀片形状	Machining type 加工方式	Work piece 被加工材料	Features 特点
F1 Chip Breaker / 断屑槽 	Grooving / 切槽	P,M,S Group / P,M,S 系列 M (Mold/冲压级) G (Grind/研磨)	• Sharp edge • 锋利刃线 • Low cutting force • 减少切削力 • Prevent B.U.E • 防止切屑瘤
F1M Chip Breaker / 断屑槽 	Grooving / 切槽 Turning / 切削 Parting off / 切断	P,M,S Group / P,M,S 系列 M (Mold/冲压级) G (Grind/研磨)	• Sharp edge • 锋利刃线 • Enhanced chip control • 容易排屑 • Prevent B.U.E • 防止切屑瘤
M1 Chip Breaker / 断屑槽 	Grooving / 切槽 Turning / 切削 Parting off / 切断	P,M,S Group / P,M,S 系列 M (Mold/冲压级) G (Grind/研磨)	• Multi function • 多样的的应用范围 • Excellent tool life • 优秀的寿命 • Enhanced chip control • 容易排屑
M1(R) Chip Breaker / 断屑槽 	Profiling / 外形加工 Under cut / 底切	P,M,S Group / P,M,S 系列 M (Mold/冲压级) G (Grind/研磨)	• Multi function • 多样的的应用范围 • Excellent tool life • 优秀的寿命 • Enhanced chip control • 容易排屑 • For profiling • 外形加工
C1 Chip Breaker / 断屑槽 	Parting off / 切断	P,M,S Group / P,M,S 系列 G (Grind/研磨)	• Sharp edge • 锋利刃线 • Low cutting force • 减少切削力 • Enhanced chip control • 容易排屑
R1 Chip Breaker / 断屑槽 	Grooving / 切槽 Turning / 切削 Parting off / 切断	P,M,S Group / P,M,S 系列 M (Mold/冲压级)	• High speed machining • 适合高进给加工 • Enhanced edge rigidity • 提升刃部刚性 • Enhanced productivity • 提升产率

MACHINING TYPE BY GEOMETRY
根据刀片形状的应用形式

Insert shape 刀片形状	Application / 应用				
	Grooving / 切槽	Turning / 车削	Parting off / 切断	Profiling / 仿形切削	Under cut / 底切削
					
F1	●		●		
F1M 	●	●	●		
M1 	●	●	●		
F1				●	●
M1				●	●
C1 			●		
R1 	●	●	●		

APPLIED AREA / 应用范围根据断屑槽型

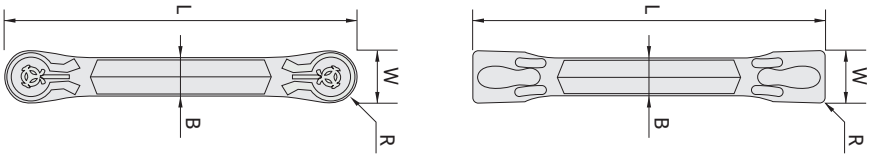


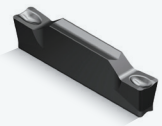
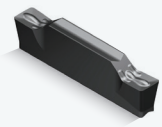
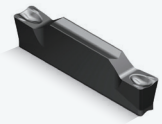
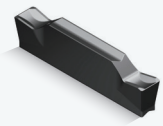


GROOVING INSERT SERIES (M)

GROOVING 槽刀片系列 (M级)

Configuration
主要尺寸

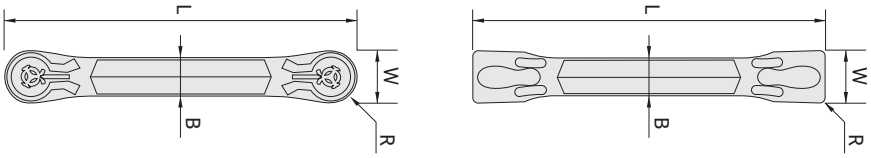


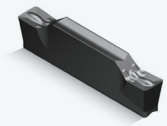
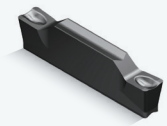
Insert shape / 刀片形状	Designation / 形号	Dimension (mm) / 尺寸				Feed (mm/rev) 进给
		W	L	B	R	
F1 	2NG20N-02M-F1	2	20	1.7	0.2	0.03~0.12
	2NG30N-02M-F1	3	20	2.2	0.2	0.05~0.18
	2NG30N-03M-F1	3	20	2.2	0.3	0.05~0.18
	2NG30N-04M-F1	3	20	2.2	0.4	0.05~0.20
	2NG40N-04M-F1	4	20	3.2	0.4	0.05~0.20
	2NG40N-08M-F1	4	20	3.2	0.8	0.05~0.25
	2NG50N-02M-F1	5	25	4	0.2	0.05~0.15
	2NG50N-04M-F1	5	25	4	0.4	0.05~0.20
	2NG50N-08M-F1	5	25	4	0.8	0.05~0.25
M1 	2NG20N-02M-M1	2	20	1.7	0.2	0.03~0.12
	2NG30N-02M-M1	3	20	2.2	0.2	0.05~0.20
	2NG30N-04M-M1	3	20	2.2	0.4	0.05~0.25
	2NG40N-02M-M1	4	20	3.2	0.2	0.05~0.20
	2NG40N-04M-M1	4	20	3.2	0.4	0.05~0.25
	2NG40N-08M-M1	4	20	3.2	0.8	0.05~0.27
	2NG50N-02M-M1	5	25	4	0.2	0.05~0.20
	2NG50N-04M-M1	5	25	4	0.4	0.05~0.25
	2NG50N-08M-M1	5	25	4	0.8	0.05~0.30
	2NG60N-08M-M1	6	25	5	0.8	0.05~0.22
	2NG80N-08M-M1	8	30.3	6	0.8	0.05~0.30
F1M 	2NG30N-04M-F1M	3	20	2.2	0.4	0.05~0.20
	2NG40N-03M-F1M	4	20	3.2	0.3	0.05~0.18
	2NG40N-04M-F1M	4	20	3.2	0.4	0.05~0.20
	2NG40N-08M-F1M	4	20	3.2	0.8	0.05~0.20
	2NG50N-02M-F1M	5	25	4	0.2	0.05~0.15
	2NG50N-04M-F1M	5	25	4	0.4	0.05~0.20
	2NG50N-08M-F1M	5	25	4	0.8	0.05~0.25
	2NG60N-03M-F1M	6	25	5	0.3	0.05~0.20
M1	2NG30R-15M-M1	3	20	2.2	1.5	0.05~0.20
	2NG40R-20M-M1	4	20	3.2	2	0.05~0.22
	2NG50R-25M-M1	5	25	4	2.5	0.05~0.25
	2NG60R-30M-M1	6	25	5	0.3	0.05~0.27
	2NG80R-40M-M1	8	30.3	6	0.4	0.05~0.30
F1	2NG30R-15M-F1	3	20	2.2	1.5	0.05~0.15
	2NG40R-20M-F1	4	20	3.2	2	0.05~0.20
	2NG50R-25M-F1	5	25	4	2.5	0.05~0.22
R1 	2NG20N-02M-R1	2	20	1.7	0.2	0.08~0.15
	2NG30N-02M-R1	3	20	2.2	0.2	0.08~0.20
	2NG40N-03M-R1	4	20	3.2	0.3	0.08~0.22
	2NG50N-03M-R1	5	25	4	0.3	0.08~0.25
	2NG60N-03M-R1	6	25	5	0.3	0.08~0.27
	2NG80N-04M-R1	8	30.3	6	0.4	0.08~0.30

GROOVING INSERT SERIES (G)

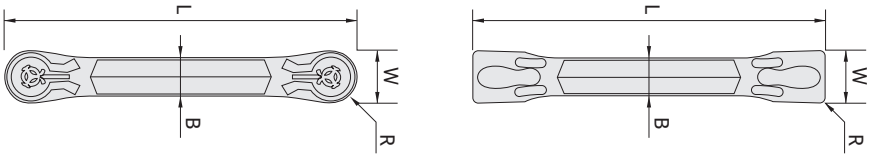
GROOVING 槽刀片系列 (G级)

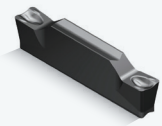
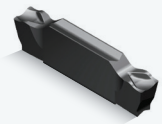
Configuration
主要尺寸



Insert shape / 刀片形状	Designation / 形号	Dimension (mm) / 尺寸				Feed (mm/rev) 进给
		W	L	B	R	
M1 	2NG20N-02G-M1	3	20	2.2	0.2	0.05~0.20
	2NG20N-03G-M1	3	20	2.2	0.3	0.05~0.20
	2NG20N-04G-M1	3	20	2.2	0.4	0.05~0.20
	2NG30N-02G-M1	3	20	3.2	0.2	0.05~0.25
	2NG30N-03G-M1	3	20	3.2	0.3	0.05~0.25
	2NG30N-04G-M1	3	20	3.2	0.4	0.05~0.25
	2NG40N-02G-M1	4	20	3.2	0.2	0.05~0.25
	2NG40N-03G-M1	4	20	3.2	0.3	0.05~0.25
	2NG40N-04G-M1	4	20	3.2	0.4	0.05~0.25
	2NG40N-06G-M1	4	20	3.2	0.6	0.05~0.25
	2NG40N-08G-M1	4	20	3.2	0.8	0.05~0.30
	2NG50N-02G-M1	5	25	4	0.2	0.05~0.22
	2NG50N-03G-M1	5	25	4	0.3	0.05~0.25
	2NG50N-04G-M1	5	25	4	0.4	0.05~0.25
	2NG50N-06G-M1	5	25	4	0.6	0.05~0.30
	2NG50N-08G-M1	5	25	4	0.8	0.05~0.30
	2NG60N-02G-M1	6	25	5	0.2	0.05~0.25
	2NG60N-03G-M1	6	25	5	0.3	0.05~0.25
	2NG60N-04G-M1	6	25	5	0.4	0.05~0.25
	2NG60N-06G-M1	6	25	5	0.6	0.05~0.30
	2NG60N-08G-M1	6	25	5	0.8	0.05~0.30
	2NG80N-04G-M1	8	30.3	6	0.4	0.05~0.30
	2NG80N-06G-M1	8	30.3	6	0.6	0.05~0.35
	2NG80N-08G-M1	8	30.3	6	0.8	0.05~0.35
F1 	2NG20N-02G-F1	2	20	1.7	0.2	0.03~0.12
	2NG20N-03G-F1	2	20	1.7	0.3	0.05~0.20
	2NG20N-04G-F1	2	20	1.7	0.4	0.05~0.20
	2NG27N-08G-F1	2.7	20	2.2	0.8	0.05~0.25
	2NG30N-02G-F1	3	20	2.2	0.2	0.05~0.20
	2NG30N-03G-F1	3	20	2.2	0.3	0.05~0.20
	2NG30N-04G-F1	3	20	2.2	0.4	0.05~0.20
	2NG30N-06G-F1	3	20	2.2	0.6	0.05~0.25
	2NG30N-08G-F1	3	20	2.2	0.8	0.05~0.25
	2NG40N-02G-F1	4	20	3.2	0.2	0.05~0.20
	2NG40N-03G-F1	4	20	3.2	0.3	0.05~0.20
	2NG40N-04G-F1	4	20	3.2	0.4	0.05~0.20
	2NG40N-06G-F1	4	20	3.2	0.6	0.05~0.25
	2NG40N-08G-F1	4	20	3.2	0.8	0.05~0.25
	2NG50N-02G-F1	5	25	4	0.2	0.05~0.20
	2NG50N-03G-F1	5	25	4	0.3	0.05~0.22
	2NG50N-04G-F1	5	25	4	0.4	0.05~0.22
	2NG50N-06G-F1	5	25	4	0.6	0.05~0.25
	2NG50N-08G-F1	5	25	4	0.8	0.05~0.25
	2NG60N-02G-F1	6	25	5	0.2	0.03~0.12
	2NG60N-03G-F1	6	25	5	0.3	0.05~0.20
	2NG60N-04G-F1	6	25	5	0.4	0.05~0.20
	2NG60N-06G-F1	6	25	5	0.6	0.05~0.25
	2NG60N-08G-F1	6	25	5	0.8	0.05~0.25
	2NG80N-04G-F1	8	30.3	6	0.4	0.05~0.20
	2NG80N-06G-F1	8	30.3	6	0.6	0.05~0.25
	2NG80N-08G-F1	8	30.3	6	0.8	0.05~0.25
	2NG80N-12G-F1	8	30.3	6	1.2	0.05~0.30

Configuration
主要尺寸

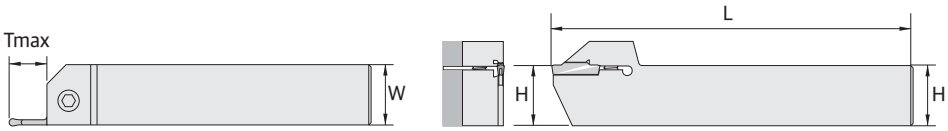


Insert shape / 刀片形状	Designation / 形号	Dimension (mm) / 尺寸				Feed (mm/rev) 进给
		W	L	B	R	
F1M 	2NG30N-02G-F1M	3	20	2.2	0.2	0.05~0.18
	2NG30N-03G-F1M	3	20	2.2	0.3	0.05~0.20
	2NG30N-04G-F1M	3	20	2.2	0.4	0.05~0.20
	2NG30N-06G-F1M	3	20	2.2	0.6	0.05~0.22
	2NG30N-08G-F1M	3	20	2.2	0.8	0.05~0.22
	2NG40N-02G-F1M	4	20	3.2	0.2	0.05~0.18
	2NG40N-03G-F1M	4	20	3.2	0.3	0.05~0.20
	2NG40N-04G-F1M	4	20	3.2	0.4	0.05~0.20
	2NG40N-06G-F1M	4	20	3.2	0.6	0.05~0.22
	2NG40N-08G-F1M	4	20	3.2	0.8	0.05~0.22
	2NG50N-02G-F1M	5	25	4	0.2	0.03~0.12
	2NG50N-03G-F1M	5	25	4	0.3	0.05~0.20
	2NG50N-04G-F1M	5	25	4	0.4	0.05~0.20
	2NG50N-06G-F1M	5	25	4	0.6	0.05~0.25
	2NG50N-08G-F1M	5	25	4	0.8	0.05~0.25
M1	2NG20R-10G-M1	2	20	1.7	1	0.03~0.15
	2NG30R-15G-M1	3	20	2.2	1.5	0.05~0.20
	2NG40R-20G-M1	4	20	3.2	2	0.05~0.22
	2NG50R-25G-M1	5	25	4	2.5	0.05~0.25
	2NG60R-30G-M1	6	25	5	3	0.05~0.25
	2NG80R-40G-M1	8	30.3	6	4	0.05~0.30
F1	2NG30R-15G-F1	3	20	2.2	1.5	0.05~0.15
	2NG40R-20G-F1	4	20	3.2	2	0.05~0.20
	2NG50R-25G-F1	5	25	4	2.5	0.05~0.22
C1 	2NG20C-02G-L/Ra-C1	2	20	1.7	0.2	0.03~0.12
	2NG20C-03G-L/Ra-C1	2	20	1.7	0.3	0.03~0.15
	2NG20C-04G-L/Ra-C1	2	20	1.7	0.4	0.03~0.20
	2NG30C-02G-L/Ra-C1	3	20	2.2	0.2	0.03~0.15
	2NG30C-03G-L/Ra-C1	3	20	2.2	0.3	0.03~0.18
	2NG30C-04G-L/Ra-C1	3	20	2.2	0.4	0.03~0.20

GROOVING TOOL HOLDER SERIES

GROOVING 槽刀片刀杆系列

Configuration
主要尺寸

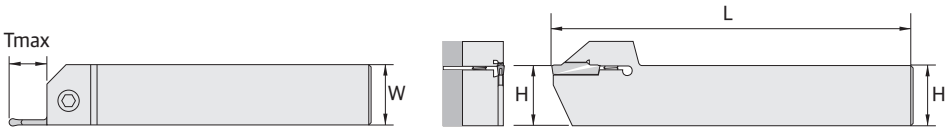


※ Right hand shown / 右手型

Application / 应用	Designation / 形号	Dimension (mm) / 尺寸				
		Insert width / 刀片宽度	H	W	L	Tmax
External holder 外径刀杆	NG2EHR/L2020-T09	2	20	20	125	9
	NG2EHR/L2020-T13		20	20	125	13
	NG2EHR/L2020-T15		20	20	125	15
	NG2EHR/L2525-T09		25	25	150	9
	NG2EHR/L2525-T13		25	25	150	13
	NG2EHR/L2525-T15		25	25	150	15
	NG2EHR/L2525-T17		25	25	150	17
	NG2EHR/L3225-T09		32	25	150	9
	NG2EHR/L3225-T13		32	25	150	13
	NG2EHR/L3225-T15		32	25	150	15
	NG2EHR/L3225-T17		32	25	150	17
	NG3EHR/L2020-T09	3	20	20	120	9
	NG3EHR/L2020-T11		20	20	120	11
	NG3EHR/L2020-T13		20	20	120	13
	NG3EHR/L2020-T15		20	20	120	15
	NG3EHR/L2020-T17		20	20	120	17
	NG3EHR/L2020-T20		20	20	120	20
	NG3EHR/L2525-T09		25	25	150	9
	NG3EHR/L2525-T11		25	25	150	11
	NG3EHR/L2525-T13		25	25	150	13
	NG3EHR/L2525-T15		25	25	150	15
	NG3EHR/L2525-T17		25	25	150	17
	NG3EHR/L2525-T20		25	25	150	20
	NG3EHR/L3225-T09		32	25	150	9
	NG3EHR/L3225-T11		32	25	150	11
	NG3EHR/L3225-T13		32	25	150	13
	NG3EHR/L3225-T15		32	25	150	15
	NG3EHR/L3225-T17		32	25	150	17
	NG3EHR/L3225-T20		32	25	150	20
	NG3EHR/L3232-T09		32	32	150	9
	NG3EHR/L3232-T11		32	32	150	11
	NG3EHR/L3232-T13		32	32	150	13
	NG3EHR/L3232-T15		32	32	150	15
	NG3EHR/L3232-T17		32	32	150	17
	NG3EHR/L3232-T20		32	32	150	20
	NG4EHR/L2020-T09	4	20	20	125	9
	NG4EHR/L2020-T11		20	20	125	11
	NG4EHR/L2020-T13		20	20	125	13
	NG4EHR/L2020-T15		20	20	125	15
	NG4EHR/L2525-T09		25	25	150	9
	NG4EHR/L2525-T11		25	25	150	11
	NG4EHR/L2525-T13		25	25	150	13
	NG4EHR/L2525-T15		25	25	150	15
	NG4EHR/L3225-T09		32	25	150	9
	NG4EHR/L3225-T11		32	25	150	11
	NG4EHR/L3225-T13		32	25	150	13
	NG4EHR/L3225-T15		32	25	150	15
	NG4EHR/L3225-T17		32	25	150	17
	NG4EHR/L3225-T20		32	25	150	20

*Holder is possibly designed by customer order / 订购

Configuration
主要尺寸



※ Right hand shown / 右手型

Application / 应用	Designation / 形号	Dimension (mm) / 尺寸				
		Insert width / 刀片宽度	H	W	L	Tmax
External holder 外径刀杆	NG5EHR/L2525-T15	5	25	25	150	15
	NG5EHR/L2525-T20		25	25	150	20
	NG5EHR/L3225-T15		32	25	150	15
	NG5EHR/L3225-T20		32	25	150	20
	NG5EHR/L3225-T25		32	25	150	25
	NG5EHR/L3232-T15		32	32	170	15
	NG5EHR/L3232-T20		32	32	170	20
	NG5EHR/L3232-T25		32	32	170	25
	NG6EHR/L2525-T15	6	25	25	150	15
	NG6EHR/L2525-T20		25	25	150	20
	NG6EHR/L2525-T25		25	25	150	25
	NG6EHR/L3225-T15		32	25	150	15
	NG6EHR/L3225-T20		32	25	150	20
	NG6EHR/L3225-T25		32	25	150	25
	NG6EHR/L3232-T15		32	32	170	15
	NG6EHR/L3232-T20		32	32	170	20
	NG6EHR/L3232-T25		32	32	170	25
	NG8EHR/L3225-T15	8	32	25	170	15
	NG8EHR/L3225-T20		32	25	170	20
	NG8EHR/L3225-T25		32	25	170	25
	NG8EHR/L3225-T30		32	25	170	30
	NG8EHR/L3232-T15		32	32	170	15
	NG8EHR/L3232-T20		32	32	170	20
	NG8EHR/L3232-T25		32	32	170	25
	NG8EHR/L3232-T30		32	32	170	30
	NG8EHR/L3232-T32		32	32	170	32

*Holder is possibly designed by customer order / 订购