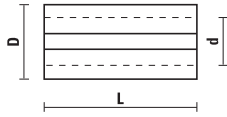


BUSHINGS

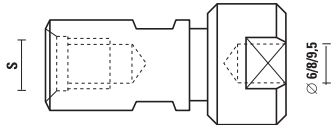
ART. Z001



Item	D	d	L
Z001.001.N	8	6	25
Z001.002.N	9,5	6	25
Z001.003.N	9,5	8	25
Z001.004.N	10	8	25
Z001.005.N	12	8	25
Z001.006.N	12	6	25
Z001.007.N	12	10	25
Z001.008.N	16	13	40
Z001.009.N	8	6,4	25
Z001.010.N	12	9,5	25
Z001.011.N	10	6	25
Z001.012.N	8	5	25
Z001.013.N	8	4	25
Z001.014.N	8	3	25
Z001.015.N	10	5	25
Z001.016.N	10	4	25
Z001.017.N	9,5	6,4	25
Z001.018.N	12,7	9,5	25
Z001.019.N	12,7	8	25
Z001.020.N	12,7	6,4	25

COLLET CHUCKS WITH SPRING COLLETS 6 - 8 - 9,5

ART. Z002



Supplied with nr 3 spring collets $\varnothing 6$ - $\varnothing 8$ - $\varnothing 9,5$

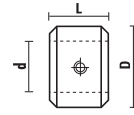
Item	S
Z002.001.R	M12x1 (kit with spring collet)
Z002.002.R	M10x1,5 (kit with spring collet)

Spare parts

Z002.101.R chuck without collets	M12x1
Z002.102.R chuck without collets	M10x1,5
Z002.160.R	spring collet $\varnothing 6$
Z002.180.R	spring collet $\varnothing 8$
Z002.195.R	spring collet $\varnothing 9,5$

SETTING RINGS

ART. Z003



- Rings for setting the drilling depth use when working with manual feed
- Used with Art. R101 - R201 - R 205

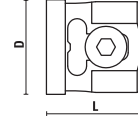
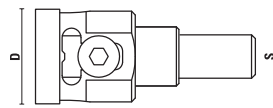
Item	d	D	L
Z003.050.N	5	16	10
Z003.060.N	6	16	10
Z003.070.N	7	18	10
Z003.080.N	8	18	10
Z003.090.N	9	20	10
Z003.100.N	10	20	10
Z003.120.N	12	22	10



Z051.301.R



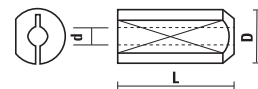
Z052.006.N



Item	D	Drawing
Z003.900.N NEW	32	1
Z003.905.N NEW	25	2

DRILL HOLDER-SLEEVE

ART. Z010



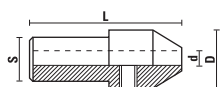
Used with Art. L120



Item	d	D	L
Z010.020.N	2	10	24
Z010.025.N	2,5	10	24
Z010.030.N	3	10	24
Z010.032.N	3,2	10	24
Z010.035.N	3,5	10	24
Z010.040.N	4	10	24
Z010.045.N	4,5	10	24
Z010.050.N	5	10	24
Z010.060.N	6	10	24

DRILL HOLDERS

ART. Z011



Used with Art. L120



Item	d	D	L	S
Z011.020.N	2	15	35	10x19
Z011.025.N	2,5	15	35	10x19
Z011.030.N	3	15	35	10x19
Z011.032.N	3,2	15	35	10x19
Z011.035.N	3,5	15	35	10x19
Z011.040.N	4	15	35	10x19
Z011.045.N	4,5	15	35	10x19
Z011.050.N	5	15	35	10x19
Z011.060.N	6	15	35	10x19



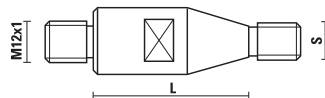
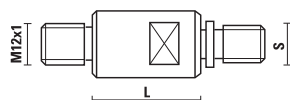
Z051.311.R



Z052.102.N

EXTENSION SHAFTS

ART. Z021

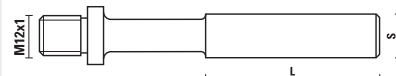


Used with Art. R130

RH rotation	LH rotation	S	L
Z021.025.R	Z021.025.L	M10/11	25
Z021.035.R	Z021.035.L	M10/11	35
Z021.045.R	Z021.045.L	M10/11	45
Z021.125.R	Z021.125.L	M10/30°	25
Z021.135.R	Z021.135.L	M10/30°	35
Z021.145.R	Z021.145.L	M10/30°	45

EXTENSION SHAFTS

ART. Z021

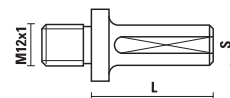


Used with Art. R130 and
Art. F101 - F103 - F104 - F105 - F202 - F203 - F204

RH rotation	LH rotation	S	L
Z021.213.R	Z021.213.L	13	50
Z021.216.R	Z021.216.L	16	50

SHAFT ADAPTERS Ø10 FOR BORING MACHINES

ART. Z021

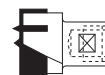
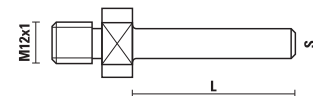


Used with Art. R130

RH rotation	LH rotation	S	L
Z021.310.R	Z021.310.L	10	27
Z021.311.R	Z021.311.L	10	40
Z021.312.R	Z021.312.L	10	47

SHAFT ADAPTERS FOR PORTABLE ROUTERS

ART. Z021

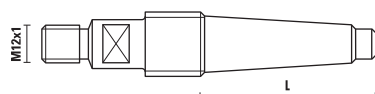


Used with Art. R130 and
Art. F101 - F103 - F104 - F105 - F202 - F203 - F204

RH rotation	S	L
Z021.406.R	6	40
Z021.408.R	8	40
Z021.409.R	9,5	40
Z021.410.R	10	40
Z021.412.R	12	40

SHAFT ADAPTERS MK2

ART. Z021

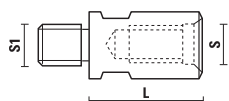


Used with Art. R130

RH rotation	S	L
Z021.500.R	MK2/M20	67

ADAPTERS OR EXTENSION SHAFTS

ART. Z021

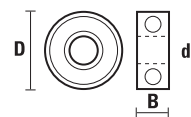


Used with Art. R130
and Art. F101 - F103 - F104 - F105 - F202 - F203 - F204

RH rotation	S	S1	L
Z021.600.R	M12x1	M12x1	25
Z021.601.R	M12x1	M10x1,5	25
Z021.610.R	M10x1,5	M12x1	25
Z021.611.R	M10x1,5	M10x1,5	25

BALL BEARINGS

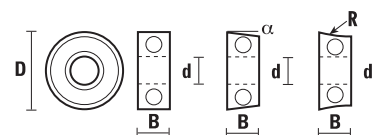
ART. Z050



Item	D	d	B
Z050.001.N	9,5	3,2	4
Z050.002.N	9,5	4,8	3,2
Z050.003.N	12,7	4,8	5
Z050.004.N	16	5	5
Z050.005.N	19	6,4	7,1
Z050.006.N	19	6	6
Z050.007.N	12,7	6,4	4,7
Z050.008.N	22	8	7
Z050.009.N	25,4	15	5,5
Z050.010.N	28	8	9
Z050.011.N	15,8	6,4	5
Z050.012.N	19	12,7	4
Z050.013.N	38	15	8,5
Z050.014.N	35	15	11
Z050.015.N	28,6	12,7	8
Z050.016.N	33,5	8	8,6
Z050.017.N	6,4	3,2	2,8
Z050.018.N	16	8	5
Z050.019.N	14	8	4
Z050.022.N	16	4,8	5
Z050.023.N	19	4,8	5
Z050.024.N	19	5	5

"DELRIN®" BALL BEARINGS

ART. Z050

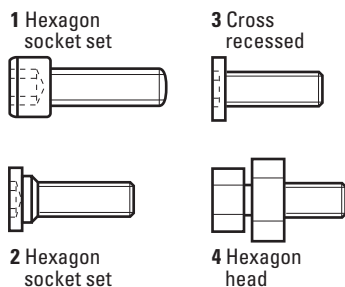


Used for working solid surface (**CORIAN®**)

Item	D	d	B	α	R
Z050.100.N	12,7	4,8	3,2	0°	
Z050.101.N	19	6,4	5	0°	
Z050.102.N	21,8	6,4	5	10°	
Z050.103.N	22,2	6,4	5	5°	
Z050.104.N	28,6	15	7	0°	
Z050.105.N	19	6,4	6,4		R=12,7
Z050.106.N	25,4	6,4	7	5°	
Z050.107.N	28	8	8,5	0°	
Z050.108.N	29	8	8,5	0°	
Z050.109.N	34	8	8,5	0°	
Z050.110.N	22	6	7	11°	
Z050.111.N	19	6	7	0°	
Z050.112.N	28,6	7,9	7	0°	
Z050.113.N	19,5	6,4	6,4		R=11,9
Z050.120.N	22,2	6,4	5	10°	

CHEESE HEAD SCREWS

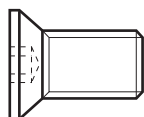
ART. Z051



Item	Description	Draw.
Z051.001.R	M 2,5x12 ch 1,9	1
Z051.002.R	M 3,5x13 ch 2,4	1
Z051.004.R	M 5x17 ch 4	1
Z051.006.R	M 2,2x8 for art. A119.064.R	3
Z051.007.R	M 5x13 ch 3 for art. E316	2
Z051.008.R	M 3x12 ch 2,4	1
Z051.012.R	M 5x16 ch 4 for art. R110.600.R	1
Z051.013.R	M 6,3x19 ch 4,7 for art. R110.800.R	1
Z051.016.R	M 6x25 ch 5 for art. T128 cutter arbors	1
Z051.050.R	anti dust set for art. WE178	
Z051.312.R	M 5x10 for NOVASYSTEM	1
Z051.401.R	M 8x10	1
Z051.408.R	M 6x8 for art. W168	1
Z051.409.R	M 5x16 for art. W168	1
Z051.506.R	M 8x30 hex socket 13 complete with hexagon nut for art. T128.140.R	4

COUNTERSUNK HEAD SCREWS

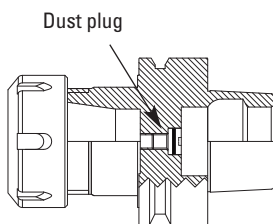
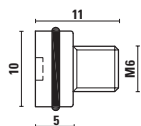
ART. Z051



Item	Description
Z051.011.R	M 4x8 Torx T15
Z051.014.R	M 6x10 for art. T128.140.R slotted head
Z051.015.R	M 5x15 ch 3 for art. A/B/C/E/G - 117.280.R
Z051.018.R	M 4x12 for art. T128.141.R
Z051.020.R	M 5x6,75 ch 3 for art. W190
Z051.024.R	M 6x15 for art. Z092
Z051.205.R	M 5x12,3 Torx T20 for art. W190
Z051.307.R	M 5x6
Z051.309.R	M 3x6 Torx T9
Z051.310.R	M 3x8 Torx T9
Z051.315.R	M 4x6,5 Torx T9
Z051.403.R	M 5x6 Torx T20
Z051.405.R	M 5x15 ch 2,5
Z051.700.R	M 4x3,2 Torx T15
Z051.701.R	M 5x7 Torx T15

DUST PLUG

ART. Z051



- To be used with our HSK toolholders to avoid any contamination of dust into the electrospindle.
- Inexpensive and easy to use.

Item	Description
Z051.070.N NEW	M6x6

SET SCREWS

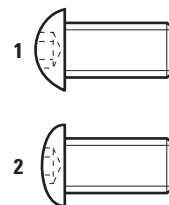
ART. Z051



Item	Description	Draw.
Z051.005.R	M 3x2,5 ch 1,6 with flat point	1
Z051.101.R	M 2,5x2,5 ch 1,3 with flat point	1
Z051.102.R	M 4x4 ch 2 with flat point	1
Z051.300.R	M 6x6 ch 3 with cone point for L130 D=∅ 8÷12	1
Z051.301.R	M 5x5 ch 2,5 with flat point	1
Z051.302.R	M 5x10	2
Z051.303.R	M 5x6 ch 2,5 with cone point for art. L130 D=∅ 4÷8 1	
Z051.304.R	M 6x6 ch 3 with flat point for art. L131 D=∅ 10÷12 1	
Z051.306.R	M 5x6 ch 2,5 with cone point	1
Z051.311.R	M 4x5 ch 2 with flat point for art. Z011	1
Z051.313.R	M 5x4 ch 2,5 with flat point	1
Z051.314.R	M 6x5 ch 3 with flat point for art. L131 D=∅ 10 1	
Z051.321.R	M 3x5 ch 1,6	1
Z051.324.R	M 5x3 ch 1,6 for art. R155÷R159	1
Z051.404.R	M 3x6 ch 1,5 with cone point for art. W182	1
Z051.407.R	M 6x10 ch 3	1
Z051.704.R	M 8x12 ch 4 with cyl point for art. SA	1
Z051.705.R	M 8x16 ch 4 with cyl point for art. SA	1

ROUNDED HEAD SCREWS

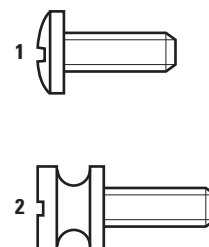
ART. Z051



Item	Description	Draw.
Z051.010.R	M 4x8 - ∅ 9 - T15	1
Z051.201.R	M 4x9 - ∅ 7,8 - T15	1
Z051.210.R	M 3,5x7 - ∅ 7,8 - T15	2
Z051.211.R	M 3,5x7 - ∅ 9 - T15	1
Z051.212.R	M 3,5x6,6 for art. W170 - ∅ 6 - T15	1
Z051.214.R	M 5x7 ch 2,5 for art. R155 e R159	1
Z051.308.R	M 3x6 - T9 - ∅ 5,5	1
Z051.320.R	M 3x4	1
Z051.400.R	M 4x6 for art. W178 - ∅ 8	1
Z051.402.R	M 4x8 for art. W171/W176 - ∅ 9	1
Z051.406.R	M 4x3,2 for art. W182	1
Z051.702.R	M 5x10 for art. TTL	1

SLOTTED CHEESE HEAD SCREWS

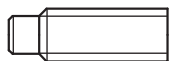
ART. Z051



Item	Description	Draw.
Z051.501.R	M 3x4 for spare knife art. WC	1
Z051.503.R	M 3x10 for ball bearing art. WC	1
Z051.505.R	M 5x17 for machines Weeke	2

HEXAGON SOCKET SET SCREWS FOR WEDGES

ART. Z051



Item	Description	For item
Z051.800.R	M 5x18	TA/TB/TC
Z051.801.R	M 7x21	TB
Z051.802.R	M 8x21	THL
Z051.803.R	M 6x10	TI 120
Z051.804.R	M 6x12	TI 160
Z051.805.R	M 8x20	TLL
Z051.807.R	M 6x20	TYL
Z051.808.R	M 6x25	TWL
Z051.809.R	M 8x18	TZA
Z051.810.R	M 8x16	TEL
Z051.811.R	M 4x10 - Torx T15	TIL

ALLEN KEYS

ART. Z052



Item	Description
Z052.001.N	ch 1,9
Z052.002.N	ch 2,4
Z052.003.N	ch 4
Z052.005.N	ch 1,6
Z052.006.N	ch 2,5 for art. L001.100L/R
Z052.007.N	ch 1,5
Z052.013.N	ch 4,7 for art. R110.800.R
Z052.055.N	ch 1,6 and ch 2,5 for art. R156 and R159
Z052.101.N	ch 1,3
Z052.102.N	ch 2
Z052.103.N	ch 3 for art. W168
Z052.104.N	ch 4 for art. W168
Z052.406.N	ch 3 for art. SB080

TORX KEYS

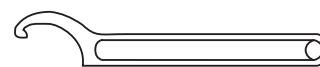
ART. Z052



Item	Description
Z052.004.N	Torx T10
Z052.201.N	Torx T15
Z052.205.N	Torx T20
Z052.302.N	Torx T9

WRENCHES

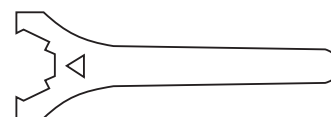
ART. Z052



Item	Description	Collet nut
Z052.300.N	Wrench 34/38	DIN6388/EOC12
Z052.305.N	Wrench 45/50	Z091.005.R
Z052.301.N	Wrench 40/42	Z091.000.R
Z052.310.N	Wrench 58/62	DIN6388/EOC25
Z052.314.N	Wrench for dust & chip extraction nut D=80	
Z052.315.N	Wrench for dust & chip extraction nut D=92	

WRENCHES FOR COLLET NUT "STANDARD"

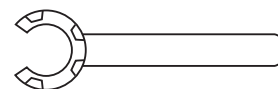
ART. Z052



Item	Description
Z052.401.N	Wrench for collet nut ER 32 "standard" type
Z052.402.N	Wrench for collet nut ER 40 "standard" type
Z052.404.N	Wrench for collet nut ER 20 "standard" type
Z052.407.N	Wrench for collet nut ER 25 "standard" type
Z052.409.N	Wrench for collet nut ER 16 "standard" type

WRENCHES FOR COLLET NUT "MINI"

ART. Z052



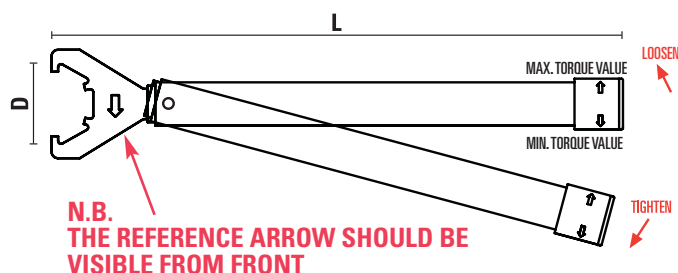
Item	Description
Z052.503.N	Wrench for collet nut ER 25 "mini" type
Z052.505.N	Wrench for collet nut ER 16 "mini" type
Z052.508.N	Wrench for collet nut ER 20 "mini" type
Z052.511.N	Wrench for collet nut ER 11 "mini" type

TORQUE WRENCHES

While setting a tool it is extremely important to tighten it properly.

If not effectively tight indeed a cutting tool could slide away from the tool holder during the working process. On the other side, an excessive tightening can cause damages to the tool holder or spring collet or the tool itself.

The wrench indicates when the torque (Nm) is reached according to the value indicated, in order to avoid any damages.

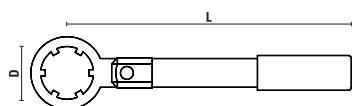


Dr. ① Collets as per drawing n. 1 must be tightened by setting the minimum torque value and rotating the handle counterclockwise.

Dr. ② Collets as per drawing n. 2 must be tightened by setting the maximum torque value and rotating the handle clockwise.

TORQUE WRENCHES FOR "MINI" NUTS

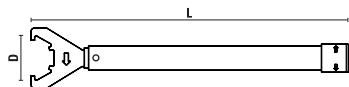
ART. Z052



Item	D	L	Nm	Threaded nut
Z052.701.N	16	120	18	ER11
Z052.702.N	22	175	28	ER16
Z052.703.N	28	180	35	ER20
Z052.704.N	35	185	40	ER25

TORQUE WRENCHES FOR "STANDARD" NUTS

ART. Z052



Item	D	L	Nm (Dr. 1)	Nm (Dr. 2)	Threaded nut
Z052.710.N	32	380	25-35	45-55	ER16
Z052.711.N	35	380	30-40	60-70	ER20
Z052.712.N	40	400	40-55	80-90	ER25
Z052.713.N	50	400	66-70	120-130	ER32
Z052.714.N	63	450	110-120	190-200	ER40

TORQUE WRENCHES FOR TORNADO®

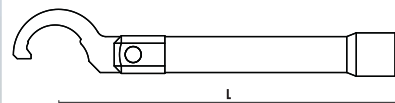
ART. Z052



Item	Type	L	Nm (dis. 1)	Nm (dis. 2)
Z052.722.N NEW	ER25	480	40-55	80-90
Z052.723.N NEW	ER32	480	66-70	120-130
Z052.724.N NEW	ER40	480	110-120	190-200
Z052.728.N NEW	EOC25	480	110-120	190-200

TORQUE HOOK WRENCHES

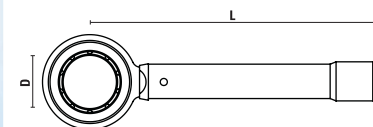
ART. Z052



Item	D	L	Nm (Dr. 1)	Nm (Dr. 2)	Threaded nut
Z052.732.N	58-62	380	110-120	190-200	DIN 6388/EOC25
Z052.735.N NEW	50	380	110-120	190-200	Z091.005.R

TORQUE WRENCHES FOR "NO-NOISE" NUTS

ART. Z052

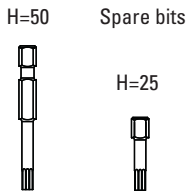
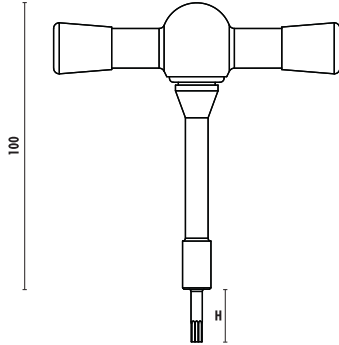


Item	D	L	Nm (Dr. 1)	Nm (Dr. 2)	Threaded nut
Z052.790.N	32	400	25-35	45-55	ER 16
Z052.793.N	50	400	65-70	120-130	ER 32
Z052.795.N	60	400	110-120	190-200	DIN 6388/EOC25

While tightening with constant action a strong shot is perceived both mechanically and acoustically. This indicates that the set torque is reached.

TORQUE WRENCHES FOR "TORX" SCREWS

ART. Z052



Supplied with H=25

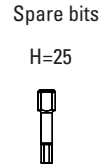
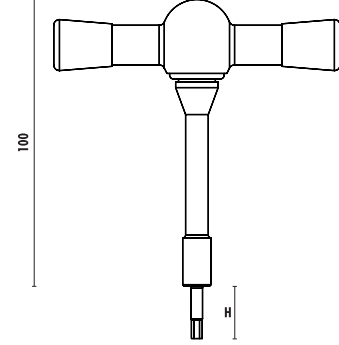
Item	Torx	Nm
Z052.748.N	T6	0,6
Z052.749.N	T7	0,9
Z052.750.N	T8	1,2
Z052.751.N	T9	1,4
Z052.752.N	T10	2
Z052.753.N	T15	3
Z052.754.N	T20	5
Z052.755.N	T25	7,2

Spare parts	Torx	H
Z052.748.NCH25	T6	25
Z052.749.NCH25	T7	25
Z052.750.NCH25	T8	25
Z052.750.NCH50	T8	50
Z052.751.NCH25	T9	25
Z052.751.NCH50	T9	50
Z052.752.NCH25	T10	25
Z052.752.NCH50	T10	50
Z052.753.NCH25	T15	25
Z052.753.NCH50	T15	50
Z052.754.NCH25	T20	25
Z052.754.NCH50	T20	50
Z052.755.NCH25	T25	25
Z052.755.NCH50	T25	50

Insert bits in 5 pieces box

TORQUE WRENCHES FOR "HEX" SCREWS

ART. Z052



Supplied with H=25

Item	Socket size	Nm	Used on screw
Z052.771.N	1,3	0,10	Z051.101.R
Z052.772.N	1,5	0,12	Z051.404.R
Z052.773.N	2	0,50	Z051.001.R
Z052.774.N	2,4	0,76	Z051.002.R
Z052.775.N	4	3,10	Z051.004.R
Z052.776.N	5	5,00	Z051.016.R
Z052.785.N	1,6	3,00	Z051.005.R
Z052.786.N	2,5	5,00	Z051.301.R
Z052.787.N	3	7,00	Z051.314.R

Spare parts	Socket size
Z052.771.NCH25	1,3
Z052.772.NCH25	1,5
Z052.773.NCH25	2
Z052.774.NCH25	2,4
Z052.775.NCH25	4
Z052.776.NCH25	5
Z052.785.NCH25	1,6
Z052.786.NCH25	2,5
Z052.787.NCH25	3

Insert bits in 5 pieces box

WASHERS

ART. Z053



Item	D	d
Z053.001.N	9,5	3,2
Z053.002.N	8	4,8
Z053.003.N	12,7	4,8
Z053.004.N	16	5
Z053.010.N	9,5	6,4

SPRING WASHERS

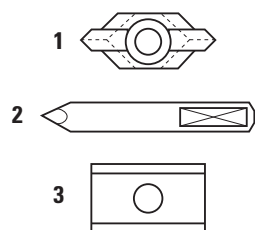
ART. Z054



Item	D	d
Z054.001.N	6	2,5
Z054.002.N	7,5	3,2
Z054.003.N	11	6,4
Z054.410.N	9,5	6,4

KNIVES

ART. Z055

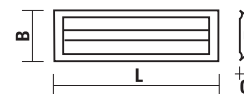


10 pcs. set

Item	Drawing	
Z055.100.N	1	spur
Z055.101.N	2	centerpoint
Z055.125.N	3	HW-knife for Ø25
Z055.126.N	3	HW-knife for Ø26
Z055.130.N	3	HW-knife for Ø30
Z055.135.N	3	HW-knife for Ø35
Z055.140.N	3	HW-knife for Ø40

HW "VERSOFIX" KNIVES

ART. Z055



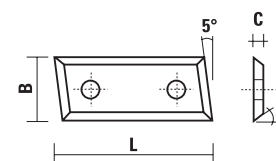
10 pcs. set

- With "Kawedur" coating
- 4 cutting edges
- Spare parts for W120-W127 and W138

Item	L	B	C
Z055.220.N	20	5,5	1,1
Z055.221.N	20	10	1,5
Z055.230.N	30	6,5	1,1
Z055.231.N	30	10	1,5
Z055.250.N	50	10	1,5

HW STANDARD REVERSIBLE KNIVES

ART. Z055



10 pcs. set

- 4 cutting edges
- 2 fixing holes
- 5° right
- Spare parts for Art. W153 - W154 - W155 - W156

Item	Grade	L	B	C	α
Z055.423.N	HC05	30	9	1,5	35°
Z055.424.N	HC05	40	9	1,5	35°
Z055.425.N	HC05	50	9	1,5	35°
Z055.430.N	HC05	30	12	1,5	35°
Z055.440.N	HC05	40	12	1,5	35°
Z055.450.N	HC05	50	12	1,5	35°

HW KNIVES

ART. Z055

Item	Description	For item
Z055.330.N	29,5x9x1,5	WC101
Z055.500.R	50x5,5x1,1	W174 - W175
Z055.500.L	50x5,5x1,1 Sx	W174 - W175
Z055.501.N	16x7x1,5 (1 chip breaker)	W172 - W173
Z055.502.N	16x7x1,5 (2 chip breaker)	W172 - W173
Z055.503.N	23x7x1,5 (1 chip breaker)	W172 - W173
Z055.504.N	23x7x1,5 (2 chip breaker)	W172 - W173
Z055.505.N	48x12x1,5	W171
Z055.506.N	27x9x1,5	W170.210.R+260
Z055.507.N	28x12x1,5	W170.380.R
Z055.516.N	16x7x1,5	W165
Z055.528.N	28x7x1,5	W165
Z055.529.N	29,5x5,5x1,1	WE101.120.R
Z055.520.N	R= 3	WE152.250.R
Z055.521.N	R= 6	WE152.280.R
Z055.522.N	R= 8	WE152.320.R
Z055.523.N	R= 10	WE152.360.R
Z055.550.N	R= 6	WC111
Z055.551.N	20x9x1,5	WC120
Z055.552.N	13,25x9x1,1	WC121
Z055.553.N	R= 3/45°	WC122
Z055.554.N	R= 6	WC123
Z055.555.N	R= 6	WC125
Z055.556.N	R= 4,5	WC129
Z055.560.N	33,3x18,5x2	W178.860.R
Z055.561.N	31x17x2	W178.861.R
Z055.562.N	32x20x1,5	W178.862.R
Z055.569.N	13,9x9,5x2 - R=8	W178.999.R
Z055.571.N	40x19x2	WE180
Z055.572.N	R= 6,4	WE112
Z055.573.N	R= 8	WE112
Z055.574.N	R= 9,5	WE112
Z055.575.N	R= 12,7	WE112
Z055.580.N	30x23x2	WE194
Z055.581.N	30x23x2	WE194
Z055.582.N	30x23x2	WE195
Z055.583.N	30x23x2	WE195
Z055.584.N	30x23x2	WE197
Z055.585.N	30x23x2	WE197
Z055.586.N	30x23x2	WE198
Z055.587.N	30x23x2	WE198
Z055.628.N	40x28x1,5	WE180 - W181
Z055.641.N	Profile C1 - 45°	W162
Z055.642.N	Profile C2 - R= 4/45°	W162
Z055.643.N	Profile C3 - R= 1/11	W162
Z055.644.N	Profile C4 - R= 3°	W162
Z055.645.N	Profile C5 - R= 8/30°	W162
Z055.646.N	Profile C6 - R= 4/2	W162
Z055.647.N	Profile C7 - R= 12	W162
Z055.648.N	Profile C8 - R= 3/2	W162
Z055.649.N	Profile C9 - R= 2/10	W162
Z055.650.N	Profile C10 - R= 45°/2	W162
Z055.651.N	Profile B1 - R= 12x4	W161
Z055.652.N	Profile B2 - R= 12	W161
Z055.653.N	Profile B3 - R= 15	W161
Z055.654.N	Profile B4 - R= 3/R3	W161
Z055.655.N	Profile B5 - R= 26/5	W161
Z055.656.N	Profile B6 - R= 6/1,5	W161

Item	Item	Description	For item
Z055.661.N		Profile A1 - R= 10/4	W160
Z055.662.N		Profile A2 - R= 6/6	W160
Z055.663.N		Profile A3 - R= 5/6	W160
Z055.664.N		Profile A4 - R= 15/14	W160
Z055.665.N		Profile A5 - R= 3/20°	W160
Z055.666.N		Profile A6 - R= 5/20°	W160
Z055.800.R	Z055.800.L	R= 2/45°	TLL
Z055.801.R	Z055.801.L	R= 3/45°	TLL
Z055.802.R	Z055.802.L	R= 4/45°	TLL
Z055.803.R	Z055.803.L	R= 5/45°	TLL
Z055.804.R	Z055.804.L	R= 6/45°	TLL
Z055.805.R		R= 3/6	TML
Z055.806.R		R= 4/8	TML
Z055.807.R		R= 5/10	TML
Z055.808.R		R= 12/18	TML
Z055.809.R		R= 15/20	TML
Z055.810.R		R= 4/4	TNL
Z055.811.R		R= 6/6	TNL
Z055.812.R		R= 8/8	TNL
Z055.813.R		R= 10/10	TNL
Z055.814.R		R= 12/12	TNL
Z055.815.R		R= 15/15	TNL
Z055.830.R		45°	TSL
Z055.831.N		Profile A	TTL
Z055.832.N		Profile B	TTL
Z055.833.N		Profile C	TTL
Z055.834.N		Profile D	TTL
Z055.835.N		Profile E	TTL
Z055.836.N		Profile F	TTL
Z055.841.R		Profile A	TVL
Z055.842.R		Profile B	TVL
Z055.843.N		Profile A	TWL
Z055.844.N		Profile B	TWL
Z055.845.N		Profile C	TWL
Z055.846.N		Profile D	TWL
Z055.847.N		Profile A4	TZL
Z055.848.N		Profile B4	TZL
Z055.851.R		Profile A1	TYL
Z055.852.R		Profile A2	TYL
Z055.853.R		Profile B1	TYL
Z055.854.R		Profile B2	TYL
Z055.855.R		Profile C1	TYL
Z055.856.R		Profile C2	TYL
Z055.857.R		Profile D1	TYL
Z055.858.R		Profile D2	TYL
Z055.859.R		Profile E1	TYL
Z055.860.R		Profile E2	TYL
Z055.861.N		Profile A1	TS
Z055.862.N		Profile A2	TS
Z055.863.N		Profile B1	TS
Z055.864.N		Profile B2	TS
Z055.870.R	Z055.870.L	R= 3	W184+W185
Z055.871.R	Z055.871.L	R= 4	W184+W185
Z055.872.R	Z055.872.L	R= 5	W184+W185
Z055.873.R	Z055.873.L	R= 6	W184+W185
Z055.874.R	Z055.874.L	R= 8	W184+W185
Z055.875.R	Z055.875.L	R= 10	W184+W185
Z055.876.R	Z055.876.L	45°	W184+W185

WEDGES

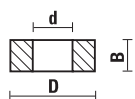
ART. Z056



Item	Description	For item
Z056.100.N	40x22,5x4	W180
Z056.101.N	40x13,5x8	W180/W181
Z056.102.N	L= 6,5	W182
Z056.700.N	L= 6,8	TA/TC
Z056.701.N	L= 14	TB
Z056.702.N	L= 46	TEL
Z056.703.N	L= 26	TF
Z056.704.N	45°	THL
Z056.705.N	L= 37	TI
Z056.706.N	L= 47	TI 160
Z056.707.N	wedge	TLL
Z056.708.N	wedge	TLL
Z056.709.N	D= 112/113	TML
Z056.710.N	D= 109/132	TML
Z056.711.N	D= 122	TNL
Z056.712.N	R= 8/9/10	TOL
Z056.719.N	45°	TSL
Z056.721.N	for profile A	TVL
Z056.722.N	for profile B	TVL
Z056.723.N	for profiles A/B/C/D	TWL
Z056.724.N	for profiles A1/B1/C1/D1/E1	TYL
Z056.725.N	for profiles A2/B2/C2/D2/E2	TYL
Z056.726.N	L= 46	TS
Z056.760.N	L= 120	TZA
Z056.761.N	L= 130	TZA
Z056.762.N	L= 150	TZA
Z056.763.N	L= 180	TZA
Z056.764.N	L= 230	TZA
Z056.765.N	L= 38	W168
Z056.790.N	38x24x13	SA
Z056.791.N	38x15x16	SA
Z056.800.N	wedges	TSL/THL

SPACERS

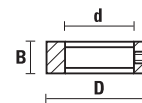
ART. Z057



Item	D	d	B
Z057.001.N	16	7,94	3,6
Z057.002.N	16	7,94	1
Z057.003.N	16	7,94	0,5
Z057.004.N	16	7,94	0,1
Z057.005.N	16	7,94	3
Z057.006.N	16	7,94	6
Z057.007.N	16	7,94	0,4
Z057.008.N	16	7,94	0,05
Z057.009.N	16	7,94	5,3
Z057.010.N	9,5	6,4	2,2
Z057.101.N	10	6	1
Z057.102.N	10	6	1,5
Z057.103.N	10	6	3

LOCK RING

ART. Z058



Item	D	d	B
Z058.001.N	11	6,4	5
Z058.002.N	18,2	12,7	6
Z058.003.N	20	12,7	6

O-RING

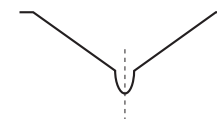
ART. Z059



Item	D	Rotation
Z059.001.L	8,5	Left (red color)
Z059.001.R	8,5	Right (black color)

SPRINGS

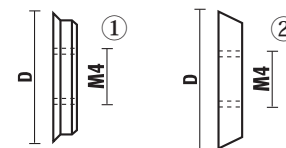
ART. Z060



Item	Description	For item
Z060.100.N	36x95	TZA

THREADED RINGS

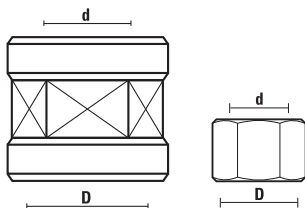
ART. Z060



Item	Description	For item	Drawing
Z060.700.R	thread M4/10	TA	1
Z060.701.R	thread M4/12	TA	2
Z060.750.N	thread M4/12	W182	2
Z060.751.N	thread M4/10	W182	1

THREADED NUTS FOR MK2 SHANKS

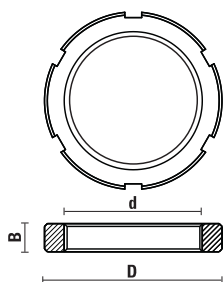
ART. Z090



RH rotation	LH rotation	D	d	Wrench
Z090.001.R	Z090.001.L	M33x3	∅20/14x1"	38
Z090.002.R	Z090.002.L	M33x3	M30x1,5	38
Z090.011.R		1"1/8"x7G8	∅20/14x1"	38
Z090.012.R	Z090.012.L	1"1/8"x7G9	M30x1,5	38

COLLET NUTS

ART. Z091

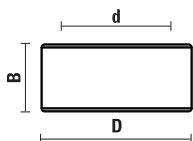


For Art. T118.953.R/T118.956.R/T118.959.R

Item	D	B	d	Rotation
Z091.902.R	63	10	M 50x1,5	RH

"NO-NOISE" COLLET NUTS

ART. Z091

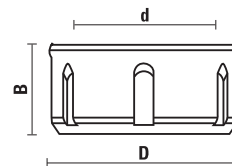


- Recommended when using router bits working at higher RPM
- Threaded nut with ground contours, remarkable reduction of noise

Item	Type	D	B	d	Rot.
Z091.501.R	DIN 6499 (ER 32)	50	23	M 40x1,5	RH
Z091.505.R	DIN 6499 (ER 16)	32	17,5	M 22x1,5	RH
Z091.522.R	DIN 6499 (EOC 25)	60	30	M 48x2	RH

COLLET NUTS

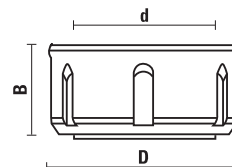
ART. Z091



Item	Type	D	B	d	Rot.
Z091.000.R	For spring collets Art. T117	40	20	M 30x1,5	RH
Z091.000.L	For spring collets Art. T117	40	20	M 30x1,5	LH
Z091.001.R	DIN 6499 (ER 32)	50	23	M 40x1,5	RH
Z091.001.L	DIN 6499 (ER 32)	50	23	M 40x1,5	LH
Z091.002.R	DIN 6499 (ER 40)	63	25	M 50x1,5	RH
Z091.002.L	DIN 6499 (ER 40)	63	25	M 50x1,5	LH
Z091.005.R NEW	For spring collets T133	50	23	M 40x1,5	RH
Z091.103.R	DIN 6499 (ER 25)	42	20	M 32x1,5	RH
Z091.104.R	DIN 6499 (ER 20)	35	19	M 25x1,5	RH
Z091.105.R	DIN 6499 (ER 16)	32	17,5	M 22x1,5	RH
Z091.202.R	DIN 6388 (EOC25)	60	30	M 48x2	RH
Z091.205.R	DIN 6388 (EOC12)	35	28	M 27x1,5	RH
Z091.301.R	ETS 32	50	22	M 40x1,5	RH
Z091.302.R	ETS 40	63	25	M 50x1,5	RH
Z091.403.R	ER 25 Type mini	35	20	M 30x1	RH
Z091.404.R	ER 20 Type mini	28	19	M 24x1	RH
Z091.405.R	ER 16 Type mini	22	18	M 19x1	RH
Z091.406.R	ER 11 Type mini	16	12	M 13x0,75	RH

COLLET NUTS WITH BALL BEARINGS

ART. Z091

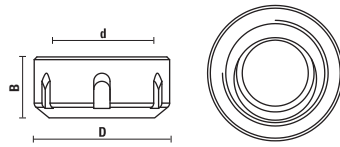


- The ball bearing clamping nut **improves the clamping precision** thanks to a **homogeneous clamping force**
- Easy and fast removal of the collet from the nut
- It can be used **both for right-hand and left-hand rotation**

Item	Type	D	B	d	Rot.
Z091.100.R	DIN 6499 (ER 25)	42	20	M 32x1,5	RH/LH
Z091.101.R	DIN 6499 (ER 32)	50	26	M 40x1,5	RH/LH
Z091.102.R	DIN 6499 (ER 40)	63	29	M 50x1,5	RH/LH
Z091.203.R	DIN 6388 (EOC25)	60	30	M 48x2	RH/LH

CLAMPING NUT WITH ECCENTRIC RING

ART. Z091

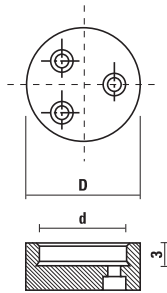


- To be used with our water-tight collets (Items T119/T123 NTS) at page 7.26 and stainless steel collet chucks at page 7.23 of our Catalog
 - Suitable when working with coolant

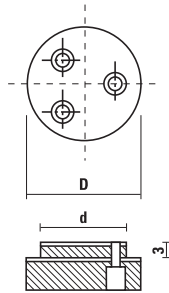
Item	Type	D	B	d	Rot.
Z091.051.R NEW	DIN 6499 (ER 32)	50	23	M 40x1,5	RH
Z091.052.R NEW	DIN 6499 (ER 40)	63	25	M 50x1,5	RH

END CAPS

ART. Z092



Hollow end cap (FF)



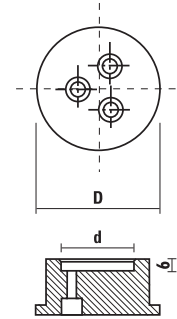
Extended end cap (FP)

Use on arbors Art. T128

Item	d	D	Type
Z092.001.R	30	40	FF
Z092.002.R	30	40	FP
Z092.003.R	35	50	FF
Z092.004.R	35	50	FP
Z092.005.R	40	50	FF
Z092.006.R	40	50	FP
Z092.007.R	25,4 (1")	50	FF
Z092.008.R	25,4 (1")	50	FP
Z092.009.R	31,75 (1/4")	50	FF
Z092.010.R	31,75 (1/4")	50	FP

FIXING FLANGE FOR ART. T132.320.NS

ART. Z092



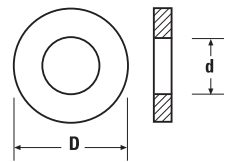
Hollow end cap (FF)

Use on arbors Art. T132.320.NS

Item	d	D	Type
Z092.050.R	40	80	FF

REDUCTION RINGS FOR SAWBLADES

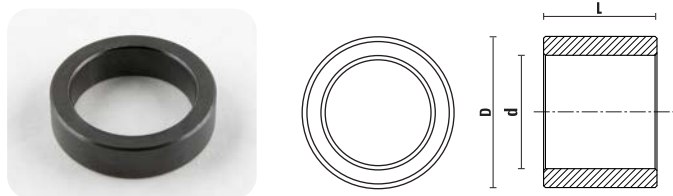
ART. ZA



Item	D	d
ZA000.02012	20	12,7
ZA000.02013	Selling out	20
ZA000.02015	Selling out	20
ZA000.02016	20	16
ZA000.03015	Selling out	30
ZA000.03016	30	16
ZA000.03020	30	20
ZA000.03025	30	25
ZA000.03026	30	25,4
ZA000.03028	Selling out	30
ZA000.03220	32	20
ZA000.03230	32	30
ZA000.03516	35	16
ZA000.03520	35	20
ZA000.03526	35	26
ZA000.03530	35	30
ZA000.03532	35	32
ZA000.04030	40	30
ZA000.04032	40	32
ZA000.04035	40	35

REDUCTION RINGS FOR CUTTERHEADS

ART. ZA010



Tolerance:

D= 0/- 0,02
d= + 0,02/0
L= ± 0,02

Item	D	d	L
ZA010.322020	32	20	20
ZA010.353005	35	30	5
ZA010.353010	35	30	10
ZA010.353015	35	30	15
ZA010.353020	35	30	20
ZA010.353025	35	30	25
ZA010.353030	35	30	30
ZA010.353035	35	30	35
ZA010.353040	35	30	40
ZA010.403005	40	30	5
ZA010.403010	40	30	10
ZA010.403015	40	30	15
ZA010.403020	40	30	20
ZA010.403025	40	30	25
ZA010.403030	40	30	30
ZA010.403035	40	30	35
ZA010.403040	40	30	40
ZA010.403505	40	35	5
ZA010.403510	40	35	10
ZA010.403515	40	35	15
ZA010.403520	40	35	20
ZA010.403525	40	35	25
ZA010.403530	40	35	30
ZA010.403535	40	35	35
ZA010.403540	40	35	40

REDUCING BUSHES

ART. ZA011



Tolerance:

D= 0/- 0,02
d= + 0,02/0

Item	D	d	D2
ZA011.03530	35	30	55
ZA011.04030	40	30	60
ZA011.04035	40	35	55
ZA011.05030	50	30	70
ZA011.05035	50	35	70
ZA011.05040	50	40	70

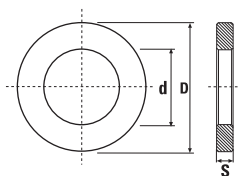
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SPACERS

ART. YD300 - YD350 - YD400 - YD500 - YD600



- For arbors Art. T128 - Art. T130 - Art. T131 - Art. T132
- Burnished
- Spacer rings fine-blanking processed for thickness 0,1÷1 mm (tolerance ± 0,02)
- Spacer rings grinded on two sides for thickness 2÷50 mm (tolerance ± 0,01)

Item	D	d	S
YD300.001	30	50	0,1
YD300.002	30	50	0,2
YD300.005	30	50	0,5
YD300.010	30	50	1
YD300.020	30	50	2
YD300.030	30	50	3
YD300.040	30	50	4
YD300.050	30	50	5
YD300.060	30	50	6
YD300.080	30	50	8
YD300.100	30	50	10
YD300.120	30	50	12
YD300.150	30	50	15
YD300.200	30	50	20
YD300.250	30	50	25
YD300.300	30	50	30
YD300.400	30	50	40
YD300.500	30	50	50
YD350.001	35	55	0,1
YD350.002	35	55	0,2
YD350.005	35	55	0,5
YD350.010	35	55	1
YD350.020	35	55	2
YD350.030	35	55	3
YD350.040	35	55	4
YD350.050	35	55	5
YD350.060	35	55	6
YD350.080	35	55	8
YD350.100	35	55	10
YD350.120	35	55	12
YD350.150	35	55	15
YD350.200	35	55	20
YD350.250	35	55	25
YD350.300	35	55	30
YD350.400	35	55	40
YD350.500	35	55	50

Item	D	D1	S
YD400.001	40	60	0,1
YD400.002	40	60	0,2
YD400.005	40	60	0,5
YD400.010	40	60	1
YD400.020	40	60	2
YD400.030	40	60	3
YD400.040	40	60	4
YD400.050	40	60	5
YD400.060	40	60	6
YD400.080	40	60	8
YD400.100	40	60	10
YD400.120	40	60	12
YD400.150	40	60	15
YD400.200	40	60	20
YD400.250	40	60	25
YD400.300	40	60	30
YD400.400	40	60	40
YD400.500	40	60	50
YD500.001	50	70	0,1
YD500.002	50	70	0,2
YD500.005	50	70	0,5
YD500.010	50	70	1
YD500.020	50	70	2
YD500.030	50	70	3
YD500.040	50	70	4
YD500.050	50	70	5
YD500.060	50	70	6
YD500.080	50	70	8
YD500.100	50	70	10
YD500.120	50	70	12
YD500.150	50	70	15
YD500.200	50	70	20
YD500.250	50	70	25
YD500.300	50	70	30
YD500.400	50	70	40
YD500.500	50	70	50
YD600.001	60	80	0,1
YD600.002	60	80	0,2
YD600.005	60	80	0,5
YD600.010	60	80	1
YD600.020	60	80	2
YD600.030	60	80	3
YD600.040	60	80	4
YD600.050	60	80	5
YD600.060	60	80	6
YD600.080	60	80	8
YD600.100	60	80	10
YD600.120	60	80	12
YD600.150	60	80	15
YD600.200	60	80	20
YD600.250	60	80	25
YD600.300	60	80	30
YD600.400	60	80	40
YD600.500	60	80	50



SPACERS SET

ART. YD300 - YD350 - YD400 - YD500 - YD600

Item	D	D1
YD300.990	30	50
YD350.990	35	55
YD400.990	40	60
YD500.990	50	70
YD600.990	60	80

Complete with:

- nr. 4 sp. 2 mm - nr. 3 sp. 4 mm - nr. 2 sp. 5 mm
- nr. 2 sp. 10 mm - nr. 1 sp. 20 mm - nr. 1 sp. 30 mm

