



DELEVEL
CARBIDE CUTTING TOOLS

DELEVELTOOL.COM

Cutting Tools Catalog

EDITION
2026



DRILLS

Solid carbide, coolant, deep-hole, micro and replaceable-head drills

BORING

Small-diameter boring, grooving and threading tools

MILLING

Anti-vibration, multi-flute and ball nose end mills

THREADS & MODULAR

Thread mills and modular tool systems

Contents

Standard sizes are listed by order code. Every tool can also be ground to your drawing: special diameters, lengths, steps, profiles and coatings.

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Ø0.10 mm

smallest micro drill

3xD – 50xD

through-coolant drill
depths

5 pcs

minimum order for
specials

15–30 days

lead time for made-to-
order tools

Workpiece materials

Each product page marks the workpiece groups a tool is designed for. Tell us the material and hardness and we confirm the series, grade and coating.

GROUP	MATERIAL	EXAMPLES
P	Steel	Carbon, alloy and tool steels; cast steel (not austenitic)
M	Stainless steel	Austenitic, duplex and cast stainless steel
K	Cast iron	Grey, ductile and malleable cast iron
N	Non-ferrous	Aluminium alloys, copper alloys and other non-ferrous metals
S	Heat-resistant alloys	Titanium alloys; Fe-, Ni- and Co-based superalloys
H	Hardened materials	Hardened steel, hardened and chilled cast iron
O	Other	Plastics, GFRP, CFRP and graphite

Conditions that change the choice of tool: blind or through hole, cross holes, interrupted cuts, inclined or curved entry, stepped or chamfered holes, machine type and coolant delivery. Send these with your inquiry.

Reading the order code

Every standard tool has an order code. Quote it in your inquiry, or send hole size, depth and workpiece material and we select the code for you.

R	D	T	03	10	-	0
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R	Series prefix	DELEVEL product code prefix
D	Tool type	D drill · N micro drill · M milling cutter · T thread mill · B small-diameter boring tool
T	Series	T general purpose · M stainless steel · P flat bottom · S deep hole
03	Length / diameter	03 = 3xD · 05 = 5xD · 08 = 8xD · 12 = 12xD · 16 = 16xD ... 30 = 30xD
10	Diameter	Examples: 03 = 3 mm · 10 = 10 mm · 105 = 10.5 mm
-	Separator	Metric
0	Coolant	0 = external coolant · 1 = through-coolant

Special diameters, lengths, steps, profiles and coatings are made to order from 5 pieces per size, lead time 15–30 working days. We confirm the drawing with you before production.

Solid Carbide Drills

General-purpose, stainless-steel, flat-bottom, deep-hole and micro drills. Through-coolant from 3xD, deep-hole drills to 50xD, micro drills from Ø0.10 mm.



RDT · RDM

General purpose and stainless steel, 3xD and 5xD

RDP · RDS

Flat bottom drills and deep-hole drills to 50xD

RNT · RNS

Micro drills, external or through-coolant

RDT Series

General-purpose solid carbide drills, external or through-coolant



Steel and cast iron

Point geometry for carbon steel, alloy steel and cast iron.

Honed edges

Honed cutting edges resist chipping.

Chip evacuation

Large polished flutes carry chips out smoothly.

3xD · 5xD

standard depths

h7

diameter tolerance

Ø3–20

standard range, mm

0 / 1

external / through-coolant

RDT Series

General-purpose carbide drills, external coolant

WC

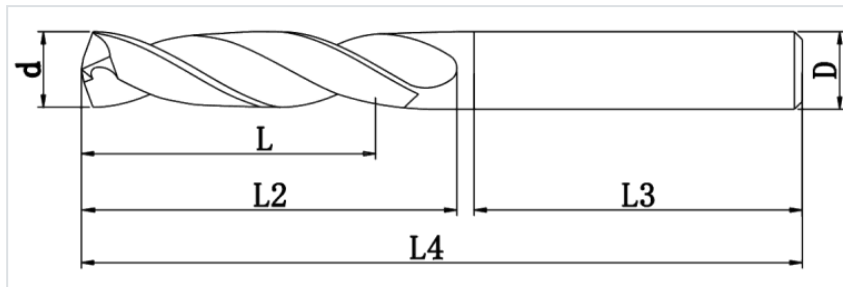
CARBIDE

h7

DIA. TOL.

3xD

DEPTH



3D HOLE DEPTH

Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03030-0	3.0	14	20	62	36	6
RDT03031-0	3.1	14	20	62	36	6
RDT03032-0	3.2	14	20	62	36	6
RDT03033-0	3.3	14	20	62	36	6
RDT03034-0	3.4	14	20	62	36	6
RDT03035-0	3.5	14	20	62	36	6
RDT03036-0	3.6	14	20	62	36	6
RDT03037-0	3.7	14	20	62	36	6
RDT03038-0	3.8	17	24	66	36	6
RDT03039-0	3.9	17	24	66	36	6
RDT03040-0	4.0	17	24	66	36	6
RDT03041-0	4.1	17	24	66	36	6
RDT03042-0	4.2	17	24	66	36	6
RDT03043-0	4.3	17	24	66	36	6
RDT03044-0	4.4	17	24	66	36	6
RDT03045-0	4.5	17	24	66	36	6
RDT03046-0	4.6	17	24	66	36	6
RDT03047-0	4.7	17	24	66	36	6
RDT03048-0	4.8	20	28	66	36	6
RDT03049-0	4.9	20	28	66	36	6
RDT03050-0	5.0	20	28	66	36	6
RDT03051-0	5.1	20	28	66	36	6
RDT03052-0	5.2	20	28	66	36	6
RDT03053-0	5.3	20	28	66	36	6
RDT03054-0	5.4	20	28	66	36	6
RDT03055-0	5.5	20	28	66	36	6
RDT03056-0	5.6	20	28	66	36	6
RDT03057-0	5.7	20	28	66	36	6
RDT03058-0	5.8	20	28	66	36	6
RDT03059-0	5.9	20	28	66	36	6

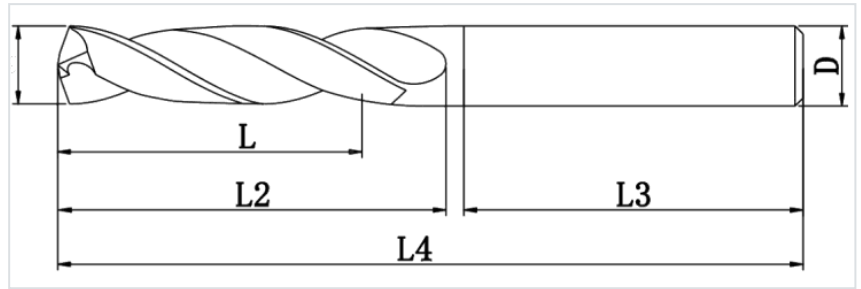
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03060-0	6.0	20	28	66	36	6
RDT03061-0	6.1	24	34	79	36	8
RDT03062-0	6.2	24	34	79	36	8
RDT03063-0	6.3	24	34	79	36	8
RDT03064-0	6.4	24	34	79	36	8
RDT03065-0	6.5	24	34	79	36	8
RDT03066-0	6.6	24	34	79	36	8
RDT03067-0	6.7	24	34	79	36	8
RDT03068-0	6.8	24	34	79	36	8
RDT03069-0	6.9	24	34	79	36	8
RDT03070-0	7.0	24	34	79	36	8
RDT03071-0	7.1	29	41	79	36	8
RDT03072-0	7.2	29	41	79	36	8
RDT03073-0	7.3	29	41	79	36	8
RDT03074-0	7.4	29	41	79	36	8
RDT03075-0	7.5	29	41	79	36	8
RDT03076-0	7.6	29	41	79	36	8
RDT03077-0	7.7	29	41	79	36	8
RDT03078-0	7.8	29	41	79	36	8
RDT03079-0	7.9	29	41	79	36	8
RDT03080-0	8.0	29	41	79	36	8
RDT03081-0	8.1	35	47	89	40	10
RDT03082-0	8.2	35	47	89	40	10
RDT03083-0	8.3	35	47	89	40	10
RDT03084-0	8.4	35	47	89	40	10
RDT03085-0	8.5	35	47	89	40	10
RDT03086-0	8.6	35	47	89	40	10
RDT03087-0	8.7	35	47	89	40	10
RDT03088-0	8.8	35	47	89	40	10
RDT03089-0	8.9	35	47	89	40	10

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, external coolant

WC	h7	3xD
CARBIDE	DIA. TOL.	DEPTH



3D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03090-0	9.0	35	47	89	40	10
RDT03091-0	9.1	35	47	89	40	10
RDT03092-0	9.2	35	47	89	40	10
RDT03093-0	9.3	35	47	89	40	10
RDT03094-0	9.4	35	47	89	40	10
RDT03095-0	9.5	35	47	89	40	10
RDT03096-0	9.6	35	47	89	40	10
RDT03097-0	9.7	35	47	89	40	10
RDT03098-0	9.8	35	47	89	40	10
RDT03099-0	9.9	35	47	89	40	10
RDT03100-0	10.0	35	47	89	40	10
RDT03101-0	10.1	40	55	102	45	12
RDT03102-0	10.2	40	55	102	45	12
RDT03103-0	10.3	40	55	102	45	12
RDT03104-0	10.4	40	55	102	45	12
RDT03105-0	10.5	40	55	102	45	12
RDT03106-0	10.6	40	55	102	45	12
RDT03107-0	10.7	40	55	102	45	12
RDT03108-0	10.8	40	55	102	45	12
RDT03109-0	10.9	40	55	102	45	12
RDT03110-0	11.0	40	55	102	45	12
RDT03111-0	11.1	40	55	102	45	12
RDT03112-0	11.2	40	55	102	45	12
RDT03113-0	11.3	40	55	102	45	12
RDT03114-0	11.4	40	55	102	45	12
RDT03115-0	11.5	40	55	102	45	12
RDT03116-0	11.6	40	55	102	45	12
RDT03117-0	11.7	40	55	102	45	12
RDT03118-0	11.8	40	55	102	45	12
RDT03119-0	11.9	40	55	102	45	12
RDT03120-0	12.0	40	55	102	45	12

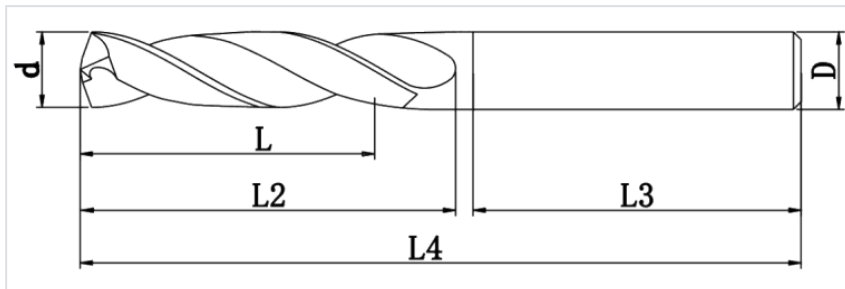
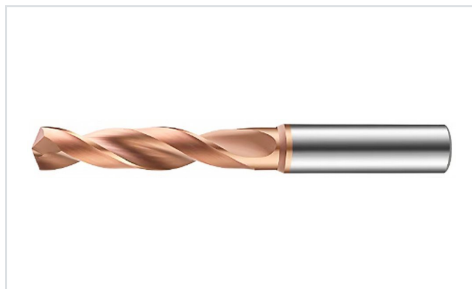
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03121-0	12.1	43	60	107	45	14
RDT03122-0	12.2	43	60	107	45	14
RDT03123-0	12.3	43	60	107	45	14
RDT03124-0	12.4	43	60	107	45	14
RDT03125-0	12.5	43	60	107	45	14
RDT03126-0	12.6	43	60	107	45	14
RDT03127-0	12.7	43	60	107	45	14
RDT03128-0	12.8	43	60	107	45	14
RDT03129-0	12.9	43	60	107	45	14
RDT03130-0	13.0	43	60	107	45	14
RDT03131-0	13.1	43	60	107	45	14
RDT03132-0	13.2	43	60	107	45	14
RDT03133-0	13.3	43	60	107	45	14
RDT03134-0	13.4	43	60	107	45	14
RDT03135-0	13.5	43	60	107	45	14
RDT03136-0	13.6	43	60	107	45	14
RDT03137-0	13.7	43	60	107	45	14
RDT03138-0	13.8	43	60	107	45	14
RDT03139-0	13.9	43	60	107	45	14
RDT03140-0	14.0	43	60	107	45	14
RDT03141-0	14.1	45	65	115	48	16
RDT03142-0	14.2	45	65	115	48	16
RDT03143-0	14.3	45	65	115	48	16
RDT03144-0	14.4	45	65	115	48	16
RDT03145-0	14.5	45	65	115	48	16
RDT03146-0	14.6	45	65	115	48	16
RDT03147-0	14.7	45	65	115	48	16
RDT03148-0	14.8	45	65	115	48	16
RDT03149-0	14.9	45	65	115	48	16

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, external coolant

WC	h7	3xD
CARBIDE	DIA. TOL.	DEPTH



3D HOLE DEPTH

Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03150-0	15.0	45	65	115	48	16
RDT03151-0	15.1	45	65	115	48	16
RDT03152-0	15.2	45	65	115	48	16
RDT03153-0	15.3	45	65	115	48	16
RDT03154-0	15.4	45	65	115	48	16
RDT03155-0	15.5	45	65	115	48	16
RDT03156-0	15.6	45	65	115	48	16
RDT03157-0	15.7	45	65	115	48	16
RDT03158-0	15.8	45	65	115	48	16
RDT03159-0	15.9	45	65	115	48	16
RDT03160-0	16.0	45	65	115	48	16
RDT03161-0	16.1	51	73	123	48	18
RDT03162-0	16.2	51	73	123	48	18
RDT03163-0	16.3	51	73	123	48	18
RDT03164-0	16.4	51	73	123	48	18
RDT03165-0	16.5	51	73	123	48	18
RDT03166-0	16.6	51	73	123	48	18
RDT03167-0	16.7	51	73	123	48	18
RDT03168-0	16.8	51	73	123	48	18
RDT03169-0	16.9	51	73	123	48	18
RDT03170-0	17.0	51	73	123	48	18
RDT03171-0	17.1	51	73	123	48	18
RDT03172-0	17.2	51	73	123	48	18
RDT03173-0	17.3	51	73	123	48	18
RDT03174-0	17.4	51	73	123	48	18
RDT03175-0	17.5	51	73	123	48	18
RDT03176-0	17.6	51	73	123	48	18
RDT03177-0	17.7	51	73	123	48	18
RDT03178-0	17.8	51	73	123	48	18
RDT03179-0	17.9	51	73	123	48	18

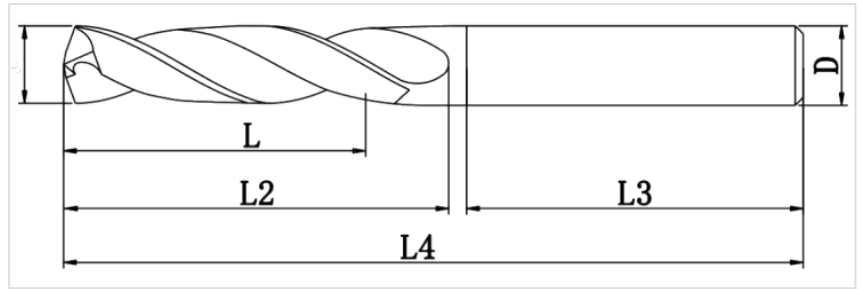
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03180-0	18.0	51	73	123	48	18
RDT03181-0	18.1	55	79	131	50	20
RDT03182-0	18.2	55	79	131	50	20
RDT03183-0	18.3	55	79	131	50	20
RDT03184-0	18.4	55	79	131	50	20
RDT03185-0	18.5	55	79	131	50	20
RDT03186-0	18.6	55	79	131	50	20
RDT03187-0	18.7	55	79	131	50	20
RDT03188-0	18.8	55	79	131	50	20
RDT03189-0	18.9	55	79	131	50	20
RDT03190-0	19.0	55	79	131	50	20
RDT03191-0	19.1	55	79	131	50	20
RDT03192-0	19.2	55	79	131	50	20
RDT03193-0	19.3	55	79	131	50	20
RDT03194-0	19.4	55	79	131	50	20
RDT03195-0	19.5	55	79	131	50	20
RDT03196-0	19.6	55	79	131	50	20
RDT03197-0	19.7	55	79	131	50	20
RDT03198-0	19.8	55	79	131	50	20
RDT03199-0	19.9	55	79	131	50	20
RDT03200-0	20.0	55	79	131	50	20
RDT03201-0	20.1	76	96	146	50	25
RDT03202-0	20.2	76	96	146	50	25
RDT03203-0	20.3	76	96	146	50	25
RDT03204-0	20.4	76	96	146	50	25
RDT03205-0	20.5	76	96	146	50	25
RDT03206-0	20.6	76	96	146	50	25
RDT03207-0	20.7	76	96	146	50	25
RDT03208-0	20.8	76	96	146	50	25
RDT03209-0	20.9	76	96	146	50	25

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, external coolant

WC	h7	3xD
CARBIDE	DIA. TOL.	DEPTH



3D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03210-0	21.0	76	96	146	50	25
RDT03211-0	21.1	76	96	146	50	25
RDT03212-0	21.2	76	96	146	50	25
RDT03213-0	21.3	76	96	146	50	25
RDT03214-0	21.4	76	96	146	50	25
RDT03215-0	21.5	76	96	146	50	25
RDT03216-0	21.6	76	96	146	50	25
RDT03217-0	21.7	76	96	146	50	25
RDT03218-0	21.8	76	96	146	50	25
RDT03219-0	21.9	76	96	146	50	25
RDT03220-0	22.0	76	96	146	50	25
RDT03221-0	22.1	83	103	153	50	25
RDT03222-0	22.2	83	103	153	50	25
RDT03223-0	22.3	83	103	153	50	25
RDT03224-0	22.4	83	103	153	50	25
RDT03225-0	22.5	83	103	153	50	25
RDT03226-0	22.6	83	103	153	50	25
RDT03227-0	22.7	83	103	153	50	25
RDT03228-0	22.8	83	103	153	50	25
RDT03229-0	22.9	83	103	153	50	25
RDT03230-0	23.0	83	103	153	50	25
RDT03231-0	23.1	83	103	153	50	25
RDT03232-0	23.2	83	103	153	50	25
RDT03233-0	23.3	83	103	153	50	25
RDT03234-0	23.4	83	103	153	50	25
RDT03235-0	23.5	83	103	153	50	25
RDT03236-0	23.6	83	103	153	50	25
RDT03237-0	23.7	83	103	153	50	25
RDT03238-0	23.8	83	103	153	50	25
RDT03239-0	23.9	83	103	153	50	25
RDT03240-0	24.0	83	103	153	50	25

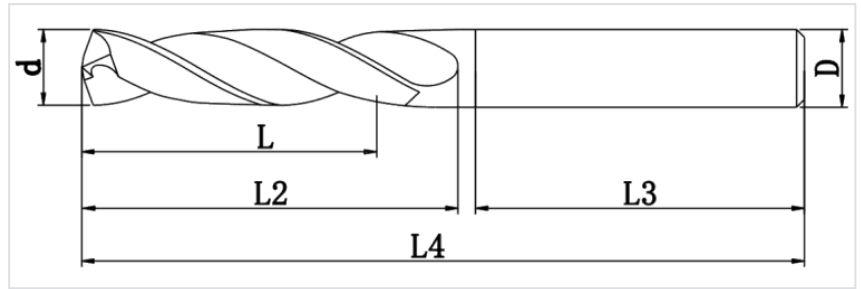
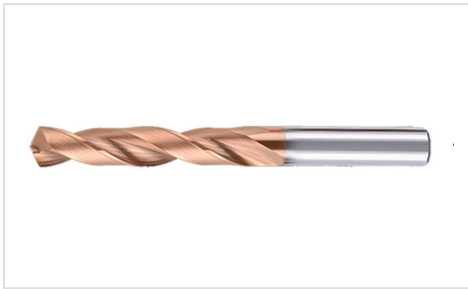
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03241-0	24.1	83	103	153	50	25
RDT03242-0	24.2	83	103	153	50	25
RDT03243-0	24.3	83	103	153	50	25
RDT03244-0	24.4	83	103	153	50	25
RDT03245-0	24.5	83	103	153	50	25
RDT03246-0	24.6	83	103	153	50	25
RDT03247-0	24.7	83	103	153	50	25
RDT03248-0	24.8	83	103	153	50	25
RDT03249-0	24.9	83	103	153	50	25
RDT03250-0	25.0	83	103	153	50	25

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, external coolant

WC	h7	5xD
CARBIDE	DIA. TOL.	DEPTH



5D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05030-0	3.0	23	28	66	36	6
RDT05031-0	3.1	23	28	66	36	6
RDT05032-0	3.2	23	28	66	36	6
RDT05033-0	3.3	23	28	66	36	6
RDT05034-0	3.4	23	28	66	36	6
RDT05035-0	3.5	23	28	66	36	6
RDT05036-0	3.6	23	28	66	36	6
RDT05037-0	3.7	23	28	66	36	6
RDT05038-0	3.8	29	36	74	36	6
RDT05039-0	3.9	29	36	74	36	6
RDT05040-0	4.0	29	36	74	36	6
RDT05041-0	4.1	29	36	74	36	6
RDT05042-0	4.2	29	36	74	36	6
RDT05043-0	4.3	29	36	74	36	6
RDT05044-0	4.4	29	36	74	36	6
RDT05045-0	4.5	29	36	74	36	6
RDT05046-0	4.6	29	36	74	36	6
RDT05047-0	4.7	29	36	74	36	6
RDT05048-0	4.8	35	44	82	36	6
RDT05049-0	4.9	35	44	82	36	6
RDT05050-0	5	35	44	82	36	6
RDT05051-0	5.1	35	44	82	36	6
RDT05052-0	5.2	35	44	82	36	6
RDT05053-0	5.3	35	44	82	36	6
RDT05054-0	5.4	35	44	82	36	6
RDT05055-0	5.5	35	44	82	36	6
RDT05056-0	5.6	35	44	82	36	6
RDT05057-0	5.7	35	44	82	36	6
RDT05058-0	5.8	35	44	82	36	6
RDT05059-0	5.9	35	44	82	36	6

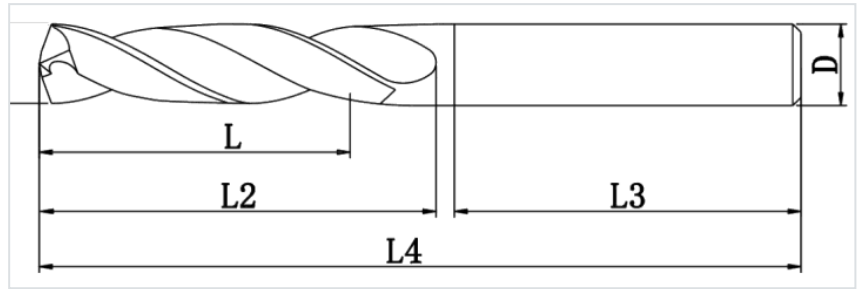
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05060-0	6.0	35	44	82	36	6
RDT05061-0	6.1	43	53	91	36	8
RDT05062-0	6.2	43	53	91	36	8
RDT05063-0	6.3	43	53	91	36	8
RDT05064-0	6.4	43	53	91	36	8
RDT05065-0	6.5	43	53	91	36	8
RDT05066-0	6.6	43	53	91	36	8
RDT05067-0	6.7	43	53	91	36	8
RDT05068-0	6.8	43	53	91	36	8
RDT05069-0	6.9	43	53	91	36	8
RDT05070-0	7.0	43	53	91	36	8
RDT05071-0	7.1	43	53	91	36	8
RDT05072-0	7.2	43	53	91	36	8
RDT05073-0	7.3	43	53	91	36	8
RDT05074-0	7.4	43	53	91	36	8
RDT05075-0	7.5	43	53	91	36	8
RDT05076-0	7.6	43	53	91	36	8
RDT05077-0	7.7	43	53	91	36	8
RDT05078-0	7.8	43	53	91	36	8
RDT05079-0	7.9	43	53	91	36	8
RDT05080-0	8.0	43	53	91	36	8
RDT05081-0	8.1	49	61	103	40	10
RDT05082-0	8.2	49	61	103	40	10
RDT05083-0	8.3	49	61	103	40	10
RDT05084-0	8.4	49	61	103	40	10
RDT05085-0	8.5	49	61	103	40	10
RDT05086-0	8.6	49	61	103	40	10
RDT05087-0	8.7	49	61	103	40	10
RDT05088-0	8.8	49	61	103	40	10
RDT05089-0	8.9	49	61	103	40	10

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, external coolant

WC	h7	5xD
CARBIDE	DIA. TOL.	DEPTH



5D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05090-0	9	49	61	103	40	10
RDT05091-0	9.1	49	61	103	40	10
RDT05092-0	9.2	49	61	103	40	10
RDT05093-0	9.3	49	61	103	40	10
RDT05094-0	9.4	49	61	103	40	10
RDT05095-0	9.5	49	61	103	40	10
RDT05096-0	9.6	49	61	103	40	10
RDT05097-0	9.7	49	61	103	40	10
RDT05098-0	9.8	49	61	103	40	10
RDT05099-0	9.9	49	61	103	40	10
RDT05100-0	10.0	49	61	103	40	10
RDT05101-0	10.1	56	71	118	45	12
RDT05102-0	10.2	56	71	118	45	12
RDT05103-0	10.3	56	71	118	45	12
RDT05104-0	10.4	56	71	118	45	12
RDT05105-0	10.5	56	71	118	45	12
RDT05106-0	10.6	56	71	118	45	12
RDT05107-0	10.7	56	71	118	45	12
RDT05108-0	10.8	56	71	118	45	12
RDT05109-0	10.9	56	71	118	45	12
RDT05110-0	11	56	71	118	45	12
RDT05111-0	11.1	56	71	118	45	12
RDT05112-0	11.2	56	71	118	45	12
RDT05113-0	11.3	56	71	118	45	12
RDT05114-0	11.4	56	71	118	45	12
RDT05115-0	11.5	56	71	118	45	12
RDT05116-0	11.6	56	71	118	45	12
RDT05117-0	11.7	56	71	118	45	12
RDT05118-0	11.8	56	71	118	45	12
RDT05119-0	11.9	56	71	118	45	12

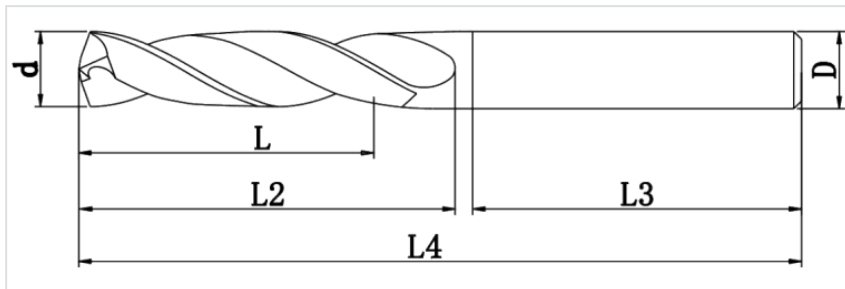
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05120-0	12	56	71	118	45	12
RDT05121-0	12.1	60	77	124	45	14
RDT05122-0	12.2	60	77	124	45	14
RDT05123-0	12.3	60	77	124	45	14
RDT05124-0	12.4	60	77	124	45	14
RDT05125-0	12.5	60	77	124	45	14
RDT05126-0	12.6	60	77	124	45	14
RDT05127-0	12.7	60	77	124	45	14
RDT05128-0	12.8	60	77	124	45	14
RDT05129-0	12.9	60	77	124	45	14
RDT05130-0	13	60	77	124	45	14
RDT05131-0	13.1	60	77	124	45	14
RDT05132-0	13.2	60	77	124	45	14
RDT05133-0	13.3	60	77	124	45	14
RDT05134-0	13.4	60	77	124	45	14
RDT05135-0	13.5	60	77	124	45	14
RDT05136-0	13.6	60	77	124	45	14
RDT05137-0	13.7	60	77	124	45	14
RDT05138-0	13.8	60	77	124	45	14
RDT05139-0	13.9	60	77	124	45	14
RDT05140-0	14	60	77	124	45	14
RDT05141-0	14.1	63	83	133	48	16
RDT05142-0	14.2	63	83	133	48	16
RDT05143-0	14.3	63	83	133	48	16
RDT05144-0	14.4	63	83	133	48	16
RDT05145-0	14.5	63	83	133	48	16
RDT05146-0	14.6	63	83	133	48	16
RDT05147-0	14.7	63	83	133	48	16
RDT05148-0	14.8	63	83	133	48	16
RDT05149-0	14.9	63	83	133	48	16

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, external coolant

WC	h7	5xD
CARBIDE	DIA. TOL.	DEPTH



5D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05150-0	15.0	63	83	133	48	16
RDT05151-0	15.1	63	83	133	48	16
RDT05152-0	15.2	63	83	133	48	16
RDT05153-0	15.3	63	83	133	48	16
RDT05154-0	15.4	63	83	133	48	16
RDT05155-0	15.5	63	83	133	48	16
RDT05156-0	15.6	63	83	133	48	16
RDT05157-0	15.7	63	83	133	48	16
RDT05158-0	15.8	63	83	133	48	16
RDT05159-0	15.9	63	83	133	48	16
RDT05160-0	16	63	83	133	48	16
RDT05161-0	16.1	71	93	143	48	18
RDT05162-0	16.2	71	93	143	48	18
RDT05163-0	16.3	71	93	143	48	18
RDT05164-0	16.4	71	93	143	48	18
RDT05165-0	16.5	71	93	143	48	18
RDT05166-0	16.6	71	93	143	48	18
RDT05167-0	16.7	71	93	143	48	18
RDT05168-0	16.8	71	93	143	48	18
RDT05169-0	16.9	71	93	143	48	18
RDT05170-0	17.0	71	93	143	48	18
RDT05171-0	17.1	71	93	143	48	18
RDT05172-0	17.2	71	93	143	48	18
RDT05173-0	17.3	71	93	143	48	18
RDT05174-0	17.4	71	93	143	48	18
RDT05175-0	17.5	71	93	143	48	18
RDT05176-0	17.6	71	93	143	48	18
RDT05177-0	17.7	71	93	143	48	18
RDT05178-0	17.8	71	93	143	48	18
RDT05179-0	17.9	71	93	143	48	18

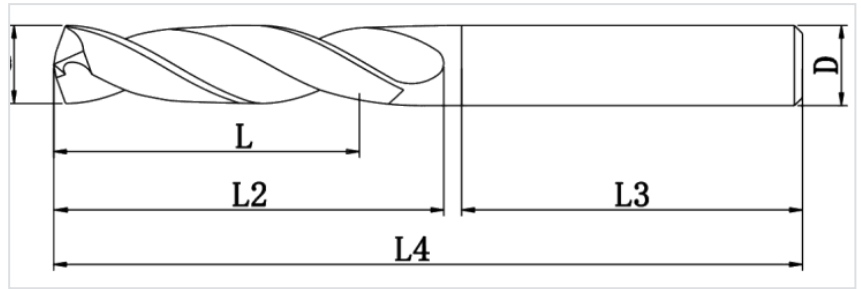
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05180-0	18	71	93	143	48	18
RDT05181-0	18.1	77	101	153	50	20
RDT05182-0	18.2	77	101	153	50	20
RDT05183-0	18.3	77	101	153	50	20
RDT05184-0	18.4	77	101	153	50	20
RDT05185-0	18.5	77	101	153	50	20
RDT05186-0	18.6	77	101	153	50	20
RDT05187-0	18.7	77	101	153	50	20
RDT05188-0	18.8	77	101	153	50	20
RDT05189-0	18.9	77	101	153	50	20
RDT05190-0	19.0	77	101	153	50	20
RDT05191-0	19.1	77	101	153	50	20
RDT05192-0	19.2	77	101	153	50	20
RDT05193-0	19.3	77	101	153	50	20
RDT05194-0	19.4	77	101	153	50	20
RDT05195-0	19.5	77	101	153	50	20
RDT05196-0	19.6	77	101	153	50	20
RDT05197-0	19.7	77	101	153	50	20
RDT05198-0	19.8	77	101	153	50	20
RDT05199-0	19.9	77	101	153	50	20
RDT05200-0	20.0	77	101	153	50	20
RDT05201-0	20.1	88	108	166	55	25
RDT05202-0	20.2	88	108	166	55	25
RDT05203-0	20.3	88	108	166	55	25
RDT05204-0	20.4	88	108	166	55	25
RDT05205-0	20.5	88	108	166	55	25
RDT05206-0	20.6	88	108	166	55	25
RDT05207-0	20.7	88	108	166	55	25
RDT05208-0	20.8	88	108	166	55	25
RDT05209-0	20.9	88	108	166	55	25

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, external coolant

WC	h7	5xD
CARBIDE	DIA. TOL.	DEPTH



5D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05210-0	21.0	88	108	166	55	25
RDT05211-0	21.1	88	108	166	55	25
RDT05212-0	21.2	88	108	166	55	25
RDT05213-0	21.3	88	108	166	55	25
RDT05214-0	21.4	88	108	166	55	25
RDT05215-0	21.5	88	108	166	55	25
RDT05216-0	21.6	88	108	166	55	25
RDT05217-0	21.7	88	108	166	55	25
RDT05218-0	21.8	88	108	166	55	25
RDT05219-0	21.9	88	108	166	55	25
RDT05220-0	22.0	88	108	166	55	25
RDT05221-0	22.1	95	115	173	55	25
RDT05222-0	22.2	95	115	173	55	25
RDT05223-0	22.3	95	115	173	55	25
RDT05224-0	22.4	95	115	173	55	25
RDT05225-0	22.5	95	115	173	55	25
RDT05226-0	22.6	95	115	173	55	25
RDT05227-0	22.7	95	115	173	55	25
RDT05228-0	22.8	95	115	173	55	25
RDT05229-0	22.9	95	115	173	55	25
RDT05230-0	23.0	95	115	173	55	25
RDT05231-0	23.1	95	115	173	55	25
RDT05232-0	23.2	95	115	173	55	25
RDT05233-0	23.3	95	115	173	55	25
RDT05234-0	23.4	95	115	173	55	25
RDT05235-0	23.5	95	115	173	55	25
RDT05236-0	23.6	95	115	173	55	25
RDT05237-0	23.7	95	115	173	55	25
RDT05238-0	23.8	95	115	173	55	25
RDT05239-0	23.9	95	115	173	55	25

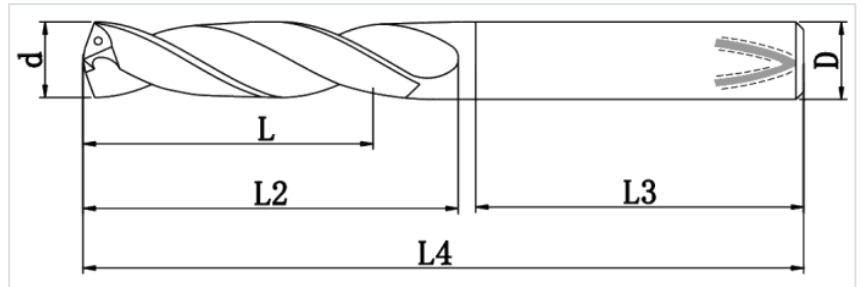
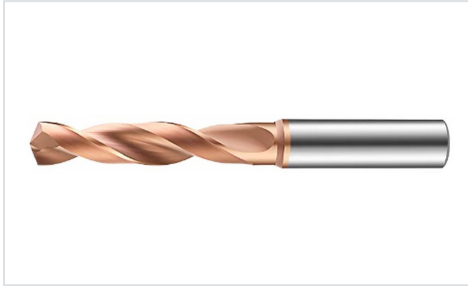
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05240-0	24.0	95	115	173	55	25
RDT05241-0	24.1	100	122	180	55	25
RDT05242-0	24.2	100	122	180	55	25
RDT05243-0	24.3	100	122	180	55	25
RDT05244-0	24.4	100	122	180	55	25
RDT05245-0	24.5	100	122	180	55	25
RDT05246-0	24.6	100	122	180	55	25
RDT05247-0	24.7	100	122	180	55	25
RDT05248-0	24.8	100	122	180	55	25
RDT05249-0	24.9	100	122	180	55	25
RDT05250-0	25.0	100	122	180	55	25

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, through-coolant

WC	h7	3xD
CARBIDE	DIA. TOL.	DEPTH



3D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03030-1	3.0	14	20	62	36	6
RDT03031-1	3.1	14	20	62	36	6
RDT03032-1	3.2	14	20	62	36	6
RDT03033-1	3.3	14	20	62	36	6
RDT03034-1	3.4	14	20	62	36	6
RDT03035-1	3.5	14	20	62	36	6
RDT03036-1	3.6	14	20	62	36	6
RDT03037-1	3.7	14	20	62	36	6
RDT03038-1	3.8	17	24	66	36	6
RDT03039-1	3.9	17	24	66	36	6
RDT03040-1	4.0	17	24	66	36	6
RDT03041-1	4.1	17	24	66	36	6
RDT03042-1	4.2	17	24	66	36	6
RDT03043-1	4.3	17	24	66	36	6
RDT03044-1	4.4	17	24	66	36	6
RDT03045-1	4.5	17	24	66	36	6
RDT03046-1	4.6	17	24	66	36	6
RDT03047-1	4.7	17	24	66	36	6
RDT03048-1	4.8	20	28	66	36	6
RDT03049-1	4.9	20	28	66	36	6
RDT03050-1	5.0	20	28	66	36	6
RDT03051-1	5.1	20	28	66	36	6
RDT03052-1	5.2	20	28	66	36	6
RDT03053-1	5.3	20	28	66	36	6
RDT03054-1	5.4	20	28	66	36	6
RDT03055-1	5.5	20	28	66	36	6
RDT03056-1	5.6	20	28	66	36	6
RDT03057-1	5.7	20	28	66	36	6
RDT03058-1	5.8	20	28	66	36	6
RDT03059-1	5.9	20	28	66	36	6

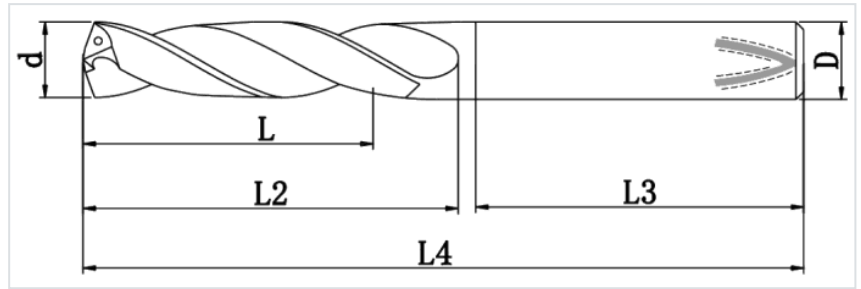
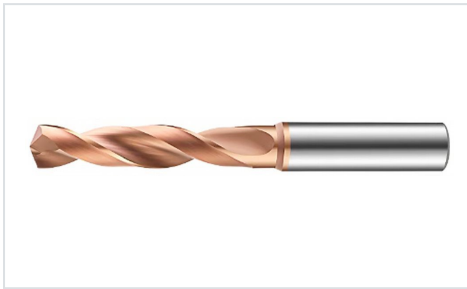
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03060-1	6.0	20	28	66	36	6
RDT03061-1	6.1	24	34	79	36	8
RDT03062-1	6.2	24	34	79	36	8
RDT03063-1	6.3	24	34	79	36	8
RDT03064-1	6.4	24	34	79	36	8
RDT03065-1	6.5	24	34	79	36	8
RDT03066-1	6.6	24	34	79	36	8
RDT03067-1	6.7	24	34	79	36	8
RDT03068-1	6.8	24	34	79	36	8
RDT03069-1	6.9	24	34	79	36	8
RDT03070-1	7.0	24	34	79	36	8
RDT03071-1	7.1	29	41	79	36	8
RDT03072-1	7.2	29	41	79	36	8
RDT03073-1	7.3	29	41	79	36	8
RDT03074-1	7.4	29	41	79	36	8
RDT03075-1	7.5	29	41	79	36	8
RDT03076-1	7.6	29	41	79	36	8
RDT03077-1	7.7	29	41	79	36	8
RDT03078-1	7.8	29	41	79	36	8
RDT03079-1	7.9	29	41	79	36	8
RDT03080-1	8.0	29	41	79	36	8
RDT03081-1	8.1	35	47	89	40	10
RDT03082-1	8.2	35	47	89	40	10
RDT03083-1	8.3	35	47	89	40	10
RDT03084-1	8.4	35	47	89	40	10
RDT03085-1	8.5	35	47	89	40	10
RDT03086-1	8.6	35	47	89	40	10
RDT03087-1	8.7	35	47	89	40	10
RDT03088-1	8.8	35	47	89	40	10

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, through-coolant

WC	h7	3xD
CARBIDE	DIA. TOL.	DEPTH



3D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03090-1	9.0	35	47	89	40	10
RDT03091-1	9.1	35	47	89	40	10
RDT03092-1	9.2	35	47	89	40	10
RDT03093-1	9.3	35	47	89	40	10
RDT03094-1	9.4	35	47	89	40	10
RDT03095-1	9.5	35	47	89	40	10
RDT03096-1	9.6	35	47	89	40	10
RDT03097-1	9.7	35	47	89	40	10
RDT03098-1	9.8	35	47	89	40	10
RDT03099-1	9.9	35	47	89	40	10
RDT03100-1	10.0	35	47	89	40	10
RDT03101-1	10.1	40	55	102	45	12
RDT03102-1	10.2	40	55	102	45	12
RDT03103-1	10.3	40	55	102	45	12
RDT03104-1	10.4	40	55	102	45	12
RDT03105-1	10.5	40	55	102	45	12
RDT03106-1	10.6	40	55	102	45	12
RDT03107-1	10.7	40	55	102	45	12
RDT03108-1	10.8	40	55	102	45	12
RDT03109-1	10.9	40	55	102	45	12
RDT03110-1	11.0	40	55	102	45	12
RDT03111-1	11.1	40	55	102	45	12
RDT03112-1	11.2	40	55	102	45	12
RDT03113-1	11.3	40	55	102	45	12
RDT03114-1	11.4	40	55	102	45	12
RDT03115-1	11.5	40	55	102	45	12
RDT03116-1	11.6	40	55	102	45	12
RDT03117-1	11.7	40	55	102	45	12
RDT03118-1	11.8	40	55	102	45	12
RDT03119-1	11.9	40	55	102	45	12

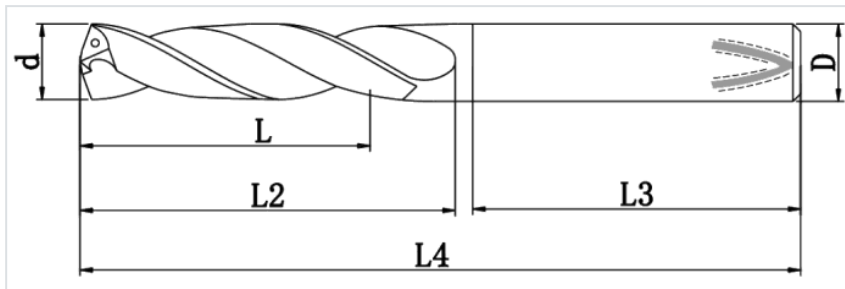
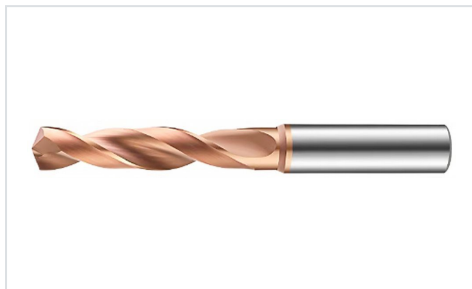
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03120-1	12.0	40	55	102	45	12
RDT03121-1	12.1	43	60	107	45	14
RDT03122-1	12.2	43	60	107	45	14
RDT03123-1	12.3	43	60	107	45	14
RDT03124-1	12.4	43	60	107	45	14
RDT03125-1	12.5	43	60	107	45	14
RDT03126-1	12.6	43	60	107	45	14
RDT03127-1	12.7	43	60	107	45	14
RDT03128-1	12.8	43	60	107	45	14
RDT03129-1	12.9	43	60	107	45	14
RDT03130-1	13.0	43	60	107	45	14
RDT03131-1	13.1	43	60	107	45	14
RDT03132-1	13.2	43	60	107	45	14
RDT03133-1	13.3	43	60	107	45	14
RDT03134-1	13.4	43	60	107	45	14
RDT03135-1	13.5	43	60	107	45	14
RDT03136-1	13.6	43	60	107	45	14
RDT03137-1	13.7	43	60	107	45	14
RDT03138-1	13.8	43	60	107	45	14
RDT03139-1	13.9	43	60	107	45	14
RDT03140-1	14.0	43	60	107	45	14
RDT03141-1	14.1	45	65	115	48	16
RDT03142-1	14.2	45	65	115	48	16
RDT03143-1	14.3	45	65	115	48	16
RDT03144-1	14.4	45	65	115	48	16
RDT03145-1	14.5	45	65	115	48	16
RDT03146-1	14.6	45	65	115	48	16
RDT03147-1	14.7	45	65	115	48	16
RDT03148-1	14.8	45	65	115	48	16
RDT03149-1	14.9	45	65	115	48	16

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, through-coolant

WC	h7	3xD
CARBIDE	DIA. TOL.	DEPTH



3D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03150-1	15.0	45	65	115	48	16
RDT03151-1	15.1	45	65	115	48	16
RDT03152-1	15.2	45	65	115	48	16
RDT03153-1	15.3	45	65	115	48	16
RDT03154-1	15.4	45	65	115	48	16
RDT03155-1	15.5	45	65	115	48	16
RDT03156-1	15.6	45	65	115	48	16
RDT03157-1	15.7	45	65	115	48	16
RDT03158-1	15.8	45	65	115	48	16
RDT03159-1	15.9	45	65	115	48	16
RDT03160-1	16.0	45	65	115	48	16
RDT03161-1	16.1	51	73	123	48	18
RDT03162-1	16.2	51	73	123	48	18
RDT03163-1	16.3	51	73	123	48	18
RDT03164-1	16.4	51	73	123	48	18
RDT03165-1	16.5	51	73	123	48	18
RDT03166-1	16.6	51	73	123	48	18
RDT03167-1	16.7	51	73	123	48	18
RDT03168-1	16.8	51	73	123	48	18
RDT03169-1	16.9	51	73	123	48	18
RDT03170-1	17.0	51	73	123	48	18
RDT03171-1	17.1	51	73	123	48	18
RDT03172-1	17.2	51	73	123	48	18
RDT03173-1	17.3	51	73	123	48	18
RDT03174-1	17.4	51	73	123	48	18
RDT03175-1	17.5	51	73	123	48	18
RDT03176-1	17.6	51	73	123	48	18
RDT03177-1	17.7	51	73	123	48	18
RDT03178-1	17.8	51	73	123	48	18
RDT03179-1	17.9	51	73	123	48	18

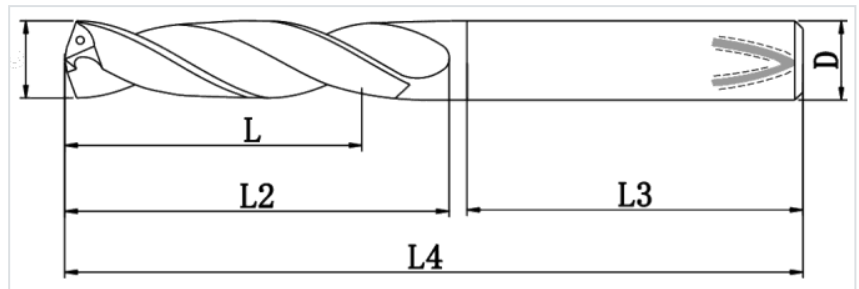
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03180-1	18.0	51	73	123	48	18
RDT03181-1	18.1	55	79	131	50	20
RDT03182-1	18.2	55	79	131	50	20
RDT03183-1	18.3	55	79	131	50	20
RDT03184-1	18.4	55	79	131	50	20
RDT03185-1	18.5	55	79	131	50	20
RDT03186-1	18.6	55	79	131	50	20
RDT03187-1	18.7	55	79	131	50	20
RDT03188-1	18.8	55	79	131	50	20
RDT03189-1	18.9	55	79	131	50	20
RDT03190-1	19.0	55	79	131	50	20
RDT03191-1	19.1	55	79	131	50	20
RDT03192-1	19.2	55	79	131	50	20
RDT03193-1	19.3	55	79	131	50	20
RDT03194-1	19.4	55	79	131	50	20
RDT03195-1	19.5	55	79	131	50	20
RDT03196-1	19.6	55	79	131	50	20
RDT03197-1	19.7	55	79	131	50	20
RDT03198-1	19.8	55	79	131	50	20
RDT03199-1	19.9	55	79	131	50	20
RDT03200-1	20.0	55	79	131	50	20
RDT03201-1	20.1	76	96	146	50	25
RDT03202-1	20.2	76	96	146	50	25
RDT03203-1	20.3	76	96	146	50	25
RDT03204-1	20.4	76	96	146	50	25
RDT03205-1	20.5	76	96	146	50	25
RDT03206-1	20.6	76	96	146	50	25
RDT03207-1	20.7	76	96	146	50	25
RDT03208-1	20.8	76	96	146	50	25
RDT03209-1	20.9	76	96	146	50	25

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, through-coolant

WC	h7	3xD
CARBIDE	DIA. TOL.	DEPTH



3D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03210-1	21.0	76	96	146	50	25
RDT03211-1	21.1	76	96	146	50	25
RDT03212-1	21.2	76	96	146	50	25
RDT03213-1	21.3	76	96	146	50	25
RDT03214-1	21.4	76	96	146	50	25
RDT03215-1	21.5	76	96	146	50	25
RDT03216-1	21.6	76	96	146	50	25
RDT03217-1	21.7	76	96	146	50	25
RDT03218-1	21.8	76	96	146	50	25
RDT03219-1	21.9	76	96	146	50	25
RDT03220-1	22.0	76	96	146	50	25
RDT03221-1	22.1	83	103	153	50	25
RDT03222-1	22.2	83	103	153	50	25
RDT03223-1	22.3	83	103	153	50	25
RDT03224-1	22.4	83	103	153	50	25
RDT03225-1	22.5	83	103	153	50	25
RDT03226-1	22.6	83	103	153	50	25
RDT03227-1	22.7	83	103	153	50	25
RDT03228-1	22.8	83	103	153	50	25
RDT03229-1	22.9	83	103	153	50	25
RDT03230-1	23.0	83	103	153	50	25
RDT03231-1	23.1	83	103	153	50	25
RDT03232-1	23.2	83	103	153	50	25
RDT03233-1	23.3	83	103	153	50	25
RDT03234-1	23.4	83	103	153	50	25
RDT03235-1	23.5	83	103	153	50	25
RDT03236-1	23.6	83	103	153	50	25
RDT03237-1	23.7	83	103	153	50	25
RDT03238-1	23.8	83	103	153	50	25
RDT03239-1	23.9	83	103	153	50	25

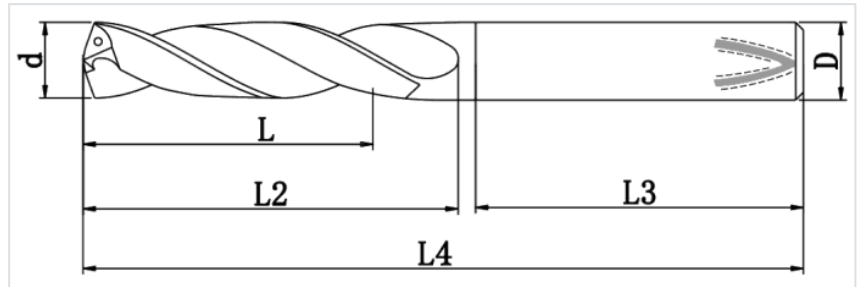
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT03240-1	24.0	83	103	153	50	25
RDT03241-1	24.1	83	103	153	50	25
RDT03242-1	24.2	83	103	153	50	25
RDT03243-1	24.3	83	103	153	50	25
RDT03244-1	24.4	83	103	153	50	25
RDT03245-1	24.5	83	103	153	50	25
RDT03246-1	24.6	83	103	153	50	25
RDT03247-1	24.7	83	103	153	50	25
RDT03248-1	24.8	83	103	153	50	25
RDT03249-1	24.9	83	103	153	50	25
RDT03250-1	25.0	83	103	153	50	25

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, through-coolant

WC	h7	5xD
CARBIDE	DIA. TOL.	DEPTH



5D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05030-1	3.0	23	28	66	36	6
RDT05031-1	3.1	23	28	66	36	6
RDT05032-1	3.2	23	28	66	36	6
RDT05033-1	3.3	23	28	66	36	6
RDT05034-1	3.4	23	28	66	36	6
RDT05035-1	3.5	23	28	66	36	6
RDT05036-1	3.6	23	28	66	36	6
RDT05037-1	3.7	23	28	66	36	6
RDT05038-1	3.8	29	36	74	36	6
RDT05039-1	3.9	29	36	74	36	6
RDT05040-1	4.0	29	36	74	36	6
RDT05041-1	4.1	29	36	74	36	6
RDT05042-1	4.2	29	36	74	36	6
RDT05043-1	4.3	29	36	74	36	6
RDT05044-1	4.4	29	36	74	36	6
RDT05045-1	4.5	29	36	74	36	6
RDT05046-1	4.6	29	36	74	36	6
RDT05047-1	4.7	29	36	74	36	6
RDT05048-1	4.8	35	44	82	36	6
RDT05049-1	4.9	35	44	82	36	6
RDT05050-1	5	35	44	82	36	6
RDT05051-1	5.1	35	44	82	36	6
RDT05052-1	5.2	35	44	82	36	6
RDT05053-1	5.3	35	44	82	36	6
RDT05054-1	5.4	35	44	82	36	6
RDT05055-1	5.5	35	44	82	36	6
RDT05056-1	5.6	35	44	82	36	6
RDT05057-1	5.7	35	44	82	36	6
RDT05058-1	5.8	35	44	82	36	6
RDT05059-1	5.9	35	44	82	36	6

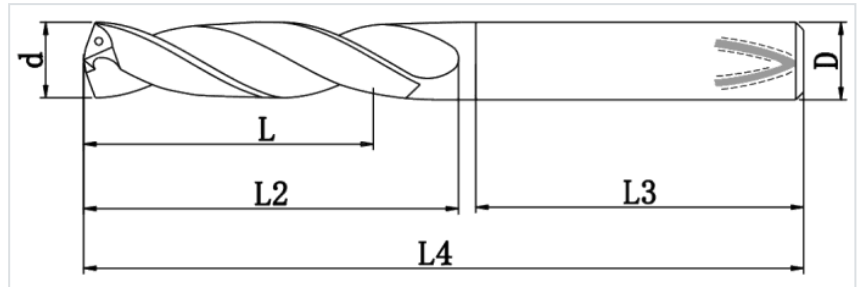
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05060-1	6.0	35	44	82	36	6
RDT05061-1	6.1	43	53	91	36	8
RDT05062-1	6.2	43	53	91	36	8
RDT05063-1	6.3	43	53	91	36	8
RDT05064-1	6.4	43	53	91	36	8
RDT05065-1	6.5	43	53	91	36	8
RDT05066-1	6.6	43	53	91	36	8
RDT05067-1	6.7	43	53	91	36	8
RDT05068-1	6.8	43	53	91	36	8
RDT05069-1	6.9	43	53	91	36	8
RDT05070-1	7.0	43	53	91	36	8
RDT05071-1	7.1	43	53	91	36	8
RDT05072-1	7.2	43	53	91	36	8
RDT05073-1	7.3	43	53	91	36	8
RDT05074-1	7.4	43	53	91	36	8
RDT05075-1	7.5	43	53	91	36	8
RDT05076-1	7.6	43	53	91	36	8
RDT05077-1	7.7	43	53	91	36	8
RDT05078-1	7.8	43	53	91	36	8
RDT05079-1	7.9	43	53	91	36	8
RDT05080-1	8.0	43	53	91	36	8
RDT05081-1	8.1	49	61	103	40	10
RDT05082-1	8.2	49	61	103	40	10
RDT05083-1	8.3	49	61	103	40	10
RDT05084-1	8.4	49	61	103	40	10
RDT05085-1	8.5	49	61	103	40	10
RDT05086-1	8.6	49	61	103	40	10
RDT05087-1	8.7	49	61	103	40	10
RDT05088-1	8.8	49	61	103	40	10
RDT05089-1	8.9	49	61	103	40	10

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, through-coolant

WC	h7	5xD
CARBIDE	DIA. TOL.	DEPTH



5D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05090-1	9	49	61	103	40	10
RDT05091-1	9.1	49	61	103	40	10
RDT05092-1	9.2	49	61	103	40	10
RDT05093-1	9.3	49	61	103	40	10
RDT05094-1	9.4	49	61	103	40	10
RDT05095-1	9.5	49	61	103	40	10
RDT05096-1	9.6	49	61	103	40	10
RDT05097-1	9.7	49	61	103	40	10
RDT05098-1	9.8	49	61	103	40	10
RDT05099-1	9.9	49	61	103	40	10
RDT05100-1	10.0	49	61	103	40	10
RDT05101-1	10.1	56	71	118	45	12
RDT05102-1	10.2	56	71	118	45	12
RDT05103-1	10.3	56	71	118	45	12
RDT05104-1	10.4	56	71	118	45	12
RDT05105-1	10.5	56	71	118	45	12
RDT05106-1	10.6	56	71	118	45	12
RDT05107-1	10.7	56	71	118	45	12
RDT05108-1	10.8	56	71	118	45	12
RDT05109-1	10.9	56	71	118	45	12
RDT05110-1	11	56	71	118	45	12
RDT05111-1	11.1	56	71	118	45	12
RDT05112-1	11.2	56	71	118	45	12
RDT05113-1	11.3	56	71	118	45	12
RDT05114-1	11.4	56	71	118	45	12
RDT05115-1	11.5	56	71	118	45	12
RDT05116-1	11.6	56	71	118	45	12
RDT05117-1	11.7	56	71	118	45	12
RDT05118-1	11.8	56	71	118	45	12
RDT05119-1	11.9	56	71	118	45	12

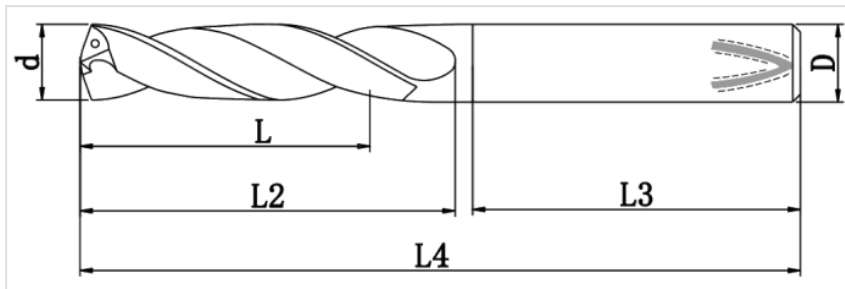
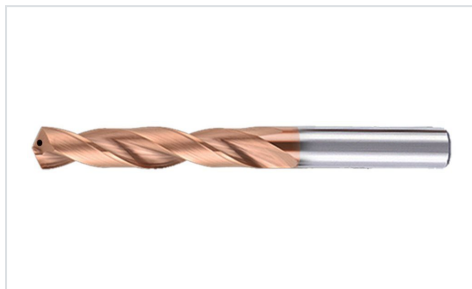
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05120-1	12	56	71	118	45	12
RDT05121-1	12.1	60	77	124	45	14
RDT05122-1	12.2	60	77	124	45	14
RDT05123-1	12.3	60	77	124	45	14
RDT05124-1	12.4	60	77	124	45	14
RDT05125-1	12.5	60	77	124	45	14
RDT05126-1	12.6	60	77	124	45	14
RDT05127-1	12.7	60	77	124	45	14
RDT05128-1	12.8	60	77	124	45	14
RDT05129-1	12.9	60	77	124	45	14
RDT05130-1	13	60	77	124	45	14
RDT05131-1	13.1	60	77	124	45	14
RDT05132-1	13.2	60	77	124	45	14
RDT05133-1	13.3	60	77	124	45	14
RDT05134-1	13.4	60	77	124	45	14
RDT05135-1	13.5	60	77	124	45	14
RDT05136-1	13.6	60	77	124	45	14
RDT05137-1	13.7	60	77	124	45	14
RDT05138-1	13.8	60	77	124	45	14
RDT05139-1	13.9	60	77	124	45	14
RDT05140-1	14	60	77	124	45	14
RDT05141-1	14.1	63	83	133	48	16
RDT05142-1	14.2	63	83	133	48	16
RDT05143-1	14.3	63	83	133	48	16
RDT05144-1	14.4	63	83	133	48	16
RDT05145-1	14.5	63	83	133	48	16
RDT05146-1	14.6	63	83	133	48	16
RDT05147-1	14.7	63	83	133	48	16
RDT05148-1	14.8	63	83	133	48	16
RDT05149-1	14.9	63	83	133	48	16

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, through-coolant

WC	h7	5xD
CARBIDE	DIA. TOL.	DEPTH



5D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05150-1	15.0	63	83	133	48	16
RDT05151-1	15.1	63	83	133	48	16
RDT05152-1	15.2	63	83	133	48	16
RDT05153-1	15.3	63	83	133	48	16
RDT05154-1	15.4	63	83	133	48	16
RDT05155-1	15.5	63	83	133	48	16
RDT05156-1	15.6	63	83	133	48	16
RDT05157-1	15.7	63	83	133	48	16
RDT05158-1	15.8	63	83	133	48	16
RDT05159-1	15.9	63	83	133	48	16
RDT05160-1	16	63	83	133	48	16
RDT05161-1	16.1	71	93	143	48	18
RDT05162-1	16.2	71	93	143	48	18
RDT05163-1	16.3	71	93	143	48	18
RDT05164-1	16.4	71	93	143	48	18
RDT05165-1	16.5	71	93	143	48	18
RDT05166-1	16.6	71	93	143	48	18
RDT05167-1	16.7	71	93	143	48	18
RDT05168-1	16.8	71	93	143	48	18
RDT05169-1	16.9	71	93	143	48	18
RDT05170-1	17.0	71	93	143	48	18
RDT05171-1	17.1	71	93	143	48	18
RDT05172-1	17.2	71	93	143	48	18
RDT05173-1	17.3	71	93	143	48	18
RDT05174-1	17.4	71	93	143	48	18
RDT05175-1	17.5	71	93	143	48	18
RDT05176-1	17.6	71	93	143	48	18
RDT05177-1	17.7	71	93	143	48	18
RDT05178-1	17.8	71	93	143	48	18
RDT05179-1	17.9	71	93	143	48	18

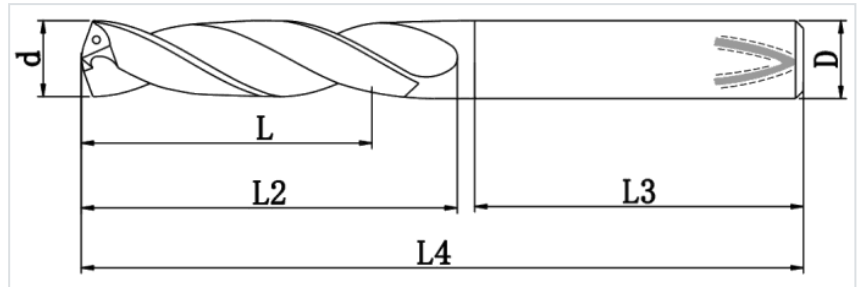
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05180-1	18	71	93	143	48	18
RDT05181-1	18.1	77	101	153	50	20
RDT05182-1	18.2	77	101	153	50	20
RDT05183-1	18.3	77	101	153	50	20
RDT05184-1	18.4	77	101	153	50	20
RDT05185-1	18.5	77	101	153	50	20
RDT05186-1	18.6	77	101	153	50	20
RDT05187-1	18.7	77	101	153	50	20
RDT05188-1	18.8	77	101	153	50	20
RDT05189-1	18.9	77	101	153	50	20
RDT05190-1	19.0	77	101	153	50	20
RDT05191-1	19.1	77	101	153	50	20
RDT05192-1	19.2	77	101	153	50	20
RDT05193-1	19.3	77	101	153	50	20
RDT05194-1	19.4	77	101	153	50	20
RDT05195-1	19.5	77	101	153	50	20
RDT05196-1	19.6	77	101	153	50	20
RDT05197-1	19.7	77	101	153	50	20
RDT05198-1	19.8	77	101	153	50	20
RDT05199-1	19.9	77	101	153	50	20
RDT05200-1	20.0	77	101	153	50	20
RDT05201-1	20.1	88	108	166	55	25
RDT05202-1	20.2	88	108	166	55	25
RDT05203-1	20.3	88	108	166	55	25
RDT05204-1	20.4	88	108	166	55	25
RDT05205-1	20.5	88	108	166	55	25
RDT05206-1	20.6	88	108	166	55	25
RDT05207-1	20.7	88	108	166	55	25
RDT05208-1	20.8	88	108	166	55	25
RDT05209-1	20.9	88	108	166	55	25

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, through-coolant

WC	h7	5xD
CARBIDE	DIA. TOL.	DEPTH



5D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05210-1	21.0	88	108	166	55	25
RDT05211-1	21.1	88	108	166	55	25
RDT05212-1	21.2	88	108	166	55	25
RDT05213-1	21.3	88	108	166	55	25
RDT05214-1	21.4	88	108	166	55	25
RDT05215-1	21.5	88	108	166	55	25
RDT05216-1	21.6	88	108	166	55	25
RDT05217-1	21.7	88	108	166	55	25
RDT05218-1	21.8	88	108	166	55	25
RDT05219-1	21.9	88	108	166	55	25
RDT05220-1	22.0	88	108	166	55	25
RDT05221-1	22.1	95	115	173	55	25
RDT05222-1	22.2	95	115	173	55	25
RDT05223-1	22.3	95	115	173	55	25
RDT05224-1	22.4	95	115	173	55	25
RDT05225-1	22.5	95	115	173	55	25
RDT05226-1	22.6	95	115	173	55	25
RDT05227-1	22.7	95	115	173	55	25
RDT05228-1	22.8	95	115	173	55	25
RDT05229-1	22.9	95	115	173	55	25
RDT05230-1	23.0	95	115	173	55	25
RDT05231-1	23.1	95	115	173	55	25
RDT05232-1	23.2	95	115	173	55	25
RDT05233-1	23.3	95	115	173	55	25
RDT05234-1	23.4	95	115	173	55	25
RDT05235-1	23.5	95	115	173	55	25
RDT05236-1	23.6	95	115	173	55	25
RDT05237-1	23.7	95	115	173	55	25
RDT05238-1	23.8	95	115	173	55	25

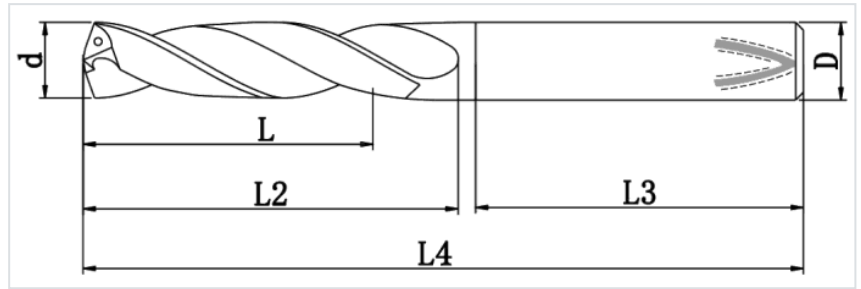
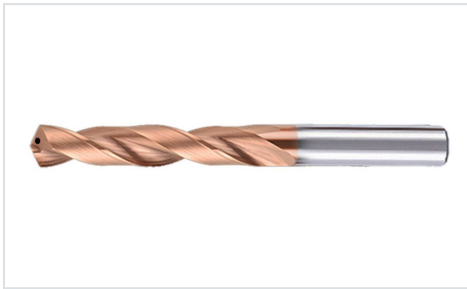
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05240-1	24.0	95	115	173	55	25
RDT05241-1	24.1	100	122	180	55	25
RDT05242-1	24.2	100	122	180	55	25
RDT05243-1	24.3	100	122	180	55	25
RDT05244-1	24.4	100	122	180	55	25
RDT05245-1	24.5	100	122	180	55	25
RDT05246-1	24.6	100	122	180	55	25
RDT05247-1	24.7	100	122	180	55	25
RDT05248-1	24.8	100	122	180	55	25
RDT05249-1	24.9	100	122	180	55	25
RDT05250-1	25.0	100	122	180	55	25

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDT Series

General-purpose carbide drills, through-coolant

WC	h7	5xD
CARBIDE	DIA. TOL.	DEPTH



5D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05030-1	3.0	23	28	66	36	6
RDT05031-1	3.1	23	28	66	36	6
RDT05032-1	3.2	23	28	66	36	6
RDT05033-1	3.3	23	28	66	36	6
RDT05034-1	3.4	23	28	66	36	6
RDT05035-1	3.5	23	28	66	36	6
RDT05036-1	3.6	23	28	66	36	6
RDT05037-1	3.7	23	28	66	36	6
RDT05038-1	3.8	29	36	74	36	6
RDT05039-1	3.9	29	36	74	36	6
RDT05040-1	4.0	29	36	74	36	6
RDT05041-1	4.1	29	36	74	36	6
RDT05042-1	4.2	29	36	74	36	6
RDT05043-1	4.3	29	36	74	36	6
RDT05044-1	4.4	29	36	74	36	6
RDT05045-1	4.5	29	36	74	36	6
RDT05046-1	4.6	29	36	74	36	6
RDT05047-1	4.7	29	36	74	36	6
RDT05048-1	4.8	35	44	82	36	6
RDT05049-1	4.9	35	44	82	36	6
RDT05050-1	5	35	44	82	36	6
RDT05051-1	5.1	35	44	82	36	6
RDT05052-1	5.2	35	44	82	36	6
RDT05053-1	5.3	35	44	82	36	6
RDT05054-1	5.4	35	44	82	36	6
RDT05055-1	5.5	35	44	82	36	6
RDT05056-1	5.6	35	44	82	36	6
RDT05057-1	5.7	35	44	82	36	6
RDT05058-1	5.8	35	44	82	36	6
RDT05059-1	5.9	35	44	82	36	6

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDT05060-1	6.0	35	44	82	36	6
RDT05061-1	6.1	43	53	91	36	8
RDT05062-1	6.2	43	53	91	36	8
RDT05063-1	6.3	43	53	91	36	8
RDT05064-1	6.4	43	53	91	36	8
RDT05065-1	6.5	43	53	91	36	8
RDT05066-1	6.6	43	53	91	36	8
RDT05067-1	6.7	43	53	91	36	8
RDT05068-1	6.8	43	53	91	36	8
RDT05069-1	6.9	43	53	91	36	8
RDT05070-1	7.0	43	53	91	36	8
RDT05071-1	7.1	43	53	91	36	8
RDT05072-1	7.2	43	53	91	36	8
RDT05073-1	7.3	43	53	91	36	8
RDT05074-1	7.4	43	53	91	36	8
RDT05075-1	7.5	43	53	91	36	8
RDT05076-1	7.6	43	53	91	36	8
RDT05077-1	7.7	43	53	91	36	8
RDT05078-1	7.8	43	53	91	36	8
RDT05079-1	7.9	43	53	91	36	8
RDT05080-1	8.0	43	53	91	36	8
RDT05081-1	8.1	49	61	103	40	10
RDT05082-1	8.2	49	61	103	40	10
RDT05083-1	8.3	49	61	103	40	10
RDT05084-1	8.4	49	61	103	40	10
RDT05085-1	8.5	49	61	103	40	10
RDT05086-1	8.6	49	61	103	40	10
RDT05087-1	8.7	49	61	103	40	10
RDT05088-1	8.8	49	61	103	40	10
RDT05089-1	8.9	49	61	103	40	10

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDM Series

Through-coolant carbide drills for stainless steel



Stainless steel

Geometry for stainless steel and titanium alloys.

Low cutting force

Point geometry for smooth, low-force cutting.

Profiled flutes

Profiled flutes for smoother chip evacuation.

3xD · 5xD

standard depths

h7

diameter tolerance

M · S

main workpiece groups

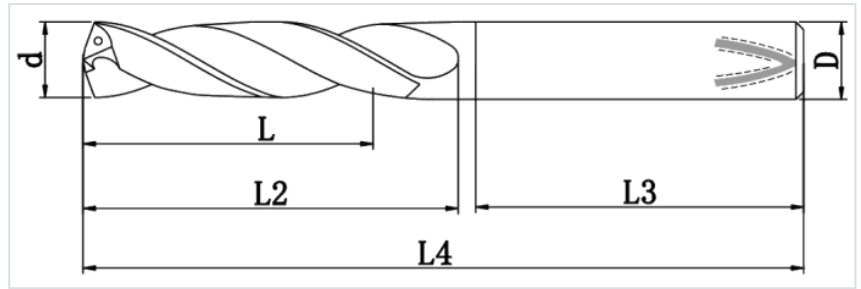
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through-coolant

RDM Series

Carbide drills for stainless steel, through-coolant

WC	h7	3xD
CARBIDE	DIA. TOL.	DEPTH



3D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDM03030-1	3.0	14	20	62	36	6
RDM03031-1	3.1	14	20	62	36	6
RDM03032-1	3.2	14	20	62	36	6
RDM03033-1	3.3	14	20	62	36	6
RDM03034-1	3.4	14	20	62	36	6
RDM03035-1	3.5	14	20	62	36	6
RDM03036-1	3.6	14	20	62	36	6
RDM03037-1	3.7	14	20	62	36	6
RDM03038-1	3.8	17	24	66	36	6
RDM03039-1	3.9	17	24	66	36	6
RDM03040-1	4.0	17	24	66	36	6
RDM03041-1	4.1	17	24	66	36	6
RDM03042-1	4.2	17	24	66	36	6
RDM03043-1	4.3	17	24	66	36	6
RDM03044-1	4.4	17	24	66	36	6
RDM03045-1	4.5	17	24	66	36	6
RDM03046-1	4.6	17	24	66	36	6
RDM03047-1	4.7	17	24	66	36	6
RDM03048-1	4.8	20	28	66	36	6
RDM03049-1	4.9	20	28	66	36	6
RDM03050-1	5.0	20	28	66	36	6
RDM03051-1	5.1	20	28	66	36	6
RDM03052-1	5.2	20	28	66	36	6
RDM03053-1	5.3	20	28	66	36	6
RDM03054-1	5.4	20	28	66	36	6
RDM03055-1	5.5	20	28	66	36	6
RDM03056-1	5.6	20	28	66	36	6
RDM03057-1	5.7	20	28	66	36	6
RDM03058-1	5.8	20	28	66	36	6
RDM03059-1	5.9	20	28	66	36	6

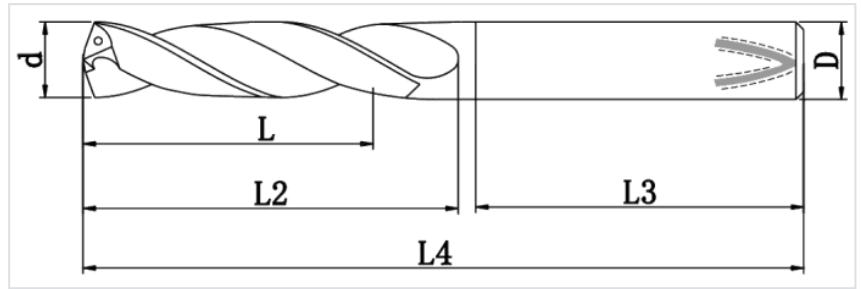
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDM03060-1	6.0	20	28	66	36	6
RDM03061-1	6.1	24	34	79	36	8
RDM03062-1	6.2	24	34	79	36	8
RDM03063-1	6.3	24	34	79	36	8
RDM03064-1	6.4	24	34	79	36	8
RDM03065-1	6.5	24	34	79	36	8
RDM03066-1	6.6	24	34	79	36	8
RDM03067-1	6.7	24	34	79	36	8
RDM03068-1	6.8	24	34	79	36	8
RDM03069-1	6.9	24	34	79	36	8
RDM03070-1	7.0	24	34	79	36	8
RDM03071-1	7.1	29	41	79	36	8
RDM03072-1	7.2	29	41	79	36	8
RDM03073-1	7.3	29	41	79	36	8
RDM03074-1	7.4	29	41	79	36	8
RDM03075-1	7.5	29	41	79	36	8
RDM03076-1	7.6	29	41	79	36	8
RDM03077-1	7.7	29	41	79	36	8
RDM03078-1	7.8	29	41	79	36	8
RDM03079-1	7.9	29	41	79	36	8
RDM03080-1	8.0	29	41	79	36	8
RDM03081-1	8.1	35	47	89	40	10
RDM03082-1	8.2	35	47	89	40	10
RDM03083-1	8.3	35	47	89	40	10
RDM03084-1	8.4	35	47	89	40	10
RDM03085-1	8.5	35	47	89	40	10
RDM03086-1	8.6	35	47	89	40	10
RDM03087-1	8.7	35	47	89	40	10
RDM03088-1	8.8	35	47	89	40	10
RDM03089-1	8.9	35	47	89	40	10

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDM Series

Carbide drills for stainless steel, through-coolant

WC	h7	3xD
CARBIDE	DIA. TOL.	DEPTH



3D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDM03090-1	9.0	35	47	89	40	10
RDM03091-1	9.1	35	47	89	40	10
RDM03092-1	9.2	35	47	89	40	10
RDM03093-1	9.3	35	47	89	40	10
RDM03094-1	9.4	35	47	89	40	10
RDM03095-1	9.5	35	47	89	40	10
RDM03096-1	9.6	35	47	89	40	10
RDM03097-1	9.7	35	47	89	40	10
RDM03098-1	9.8	35	47	89	40	10
RDM03099-1	9.9	35	47	89	40	10
RDM03100-1	10.0	35	47	89	40	10
RDM03101-1	10.1	40	55	102	45	12
RDM03102-1	10.2	40	55	102	45	12
RDM03103-1	10.3	40	55	102	45	12
RDM03104-1	10.4	40	55	102	45	12
RDM03105-1	10.5	40	55	102	45	12
RDM03106-1	10.6	40	55	102	45	12
RDM03107-1	10.7	40	55	102	45	12
RDM03108-1	10.8	40	55	102	45	12
RDM03109-1	10.9	40	55	102	45	12
RDM03110-1	11.0	40	55	102	45	12
RDM03111-1	11.1	40	55	102	45	12
RDM03112-1	11.2	40	55	102	45	12
RDM03113-1	11.3	40	55	102	45	12
RDM03114-1	11.4	40	55	102	45	12
RDM03115-1	11.5	40	55	102	45	12
RDM03116-1	11.6	40	55	102	45	12
RDM03117-1	11.7	40	55	102	45	12
RDM03118-1	11.8	40	55	102	45	12
RDM03119-1	11.9	40	55	102	45	12

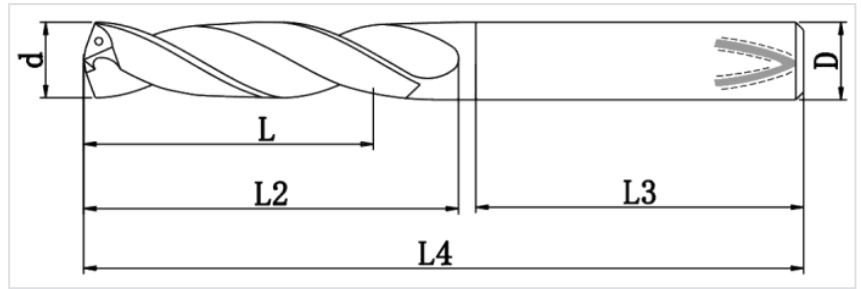
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDM03120-1	12.0	40	55	102	45	12
RDM03121-1	12.1	43	60	107	45	14
RDM03122-1	12.2	43	60	107	45	14
RDM03123-1	12.3	43	60	107	45	14
RDM03124-1	12.4	43	60	107	45	14
RDM03125-1	12.5	43	60	107	45	14
RDM03126-1	12.6	43	60	107	45	14
RDM03127-1	12.7	43	60	107	45	14
RDM03128-1	12.8	43	60	107	45	14
RDM03129-1	12.9	43	60	107	45	14
RDM03130-1	13.0	43	60	107	45	14
RDM03131-1	13.1	43	60	107	45	14
RDM03132-1	13.2	43	60	107	45	14
RDM03133-1	13.3	43	60	107	45	14
RDM03134-1	13.4	43	60	107	45	14
RDM03135-1	13.5	43	60	107	45	14
RDM03136-1	13.6	43	60	107	45	14
RDM03137-1	13.7	43	60	107	45	14
RDM03138-1	13.8	43	60	107	45	14
RDM03139-1	13.9	43	60	107	45	14
RDM03140-1	14.0	43	60	107	45	14
RDM03141-1	14.1	45	65	115	48	16
RDM03142-1	14.2	45	65	115	48	16
RDM03143-1	14.3	45	65	115	48	16
RDM03144-1	14.4	45	65	115	48	16
RDM03145-1	14.5	45	65	115	48	16
RDM03146-1	14.6	45	65	115	48	16
RDM03147-1	14.7	45	65	115	48	16
RDM03148-1	14.8	45	65	115	48	16
RDM03149-1	14.9	45	65	115	48	16

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDM Series

Carbide drills for stainless steel, through-coolant

WC	h7	5xD
CARBIDE	DIA. TOL.	DEPTH



5D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDM05030-1	3.0	23	28	66	36	6
RDM05031-1	3.1	23	28	66	36	6
RDM05032-1	3.2	23	28	66	36	6
RDM05033-1	3.3	23	28	66	36	6
RDM05034-1	3.4	23	28	66	36	6
RDM05035-1	3.5	23	28	66	36	6
RDM05036-1	3.6	23	28	66	36	6
RDM05037-1	3.7	23	28	66	36	6
RDM05038-1	3.8	29	36	74	36	6
RDM05039-1	3.9	29	36	74	36	6
RDM05040-1	4.0	29	36	74	36	6
RDM05041-1	4.1	29	36	74	36	6
RDM05042-1	4.2	29	36	74	36	6
RDM05043-1	4.3	29	36	74	36	6
RDM05044-1	4.4	29	36	74	36	6
RDM05045-1	4.5	29	36	74	36	6
RDM05046-1	4.6	29	36	74	36	6
RDM05047-1	4.7	29	36	74	36	6
RDM05048-1	4.8	35	44	82	36	6
RDM05049-1	4.9	35	44	82	36	6
RDM05050-1	5	35	44	82	36	6
RDM05051-1	5.1	35	44	82	36	6
RDM05052-1	5.2	35	44	82	36	6
RDM05053-1	5.3	35	44	82	36	6
RDM05054-1	5.4	35	44	82	36	6
RDM05055-1	5.5	35	44	82	36	6
RDM05056-1	5.6	35	44	82	36	6
RDM05057-1	5.7	35	44	82	36	6
RDM05058-1	5.8	35	44	82	36	6
RDM05059-1	5.9	35	44	82	36	6

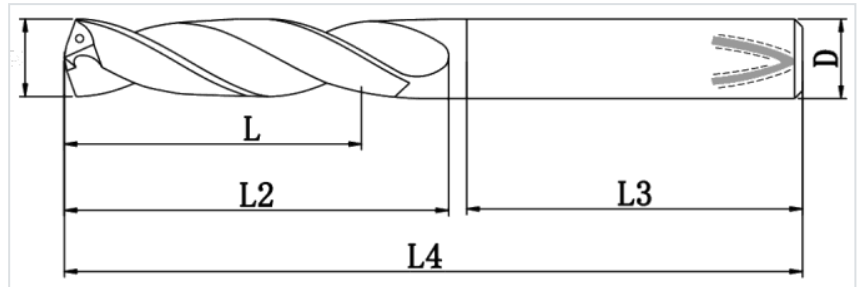
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDM05060-1	6.0	35	44	82	36	6
RDM05061-1	6.1	43	53	91	36	8
RDM05062-1	6.2	43	53	91	36	8
RDM05063-1	6.3	43	53	91	36	8
RDM05064-1	6.4	43	53	91	36	8
RDM05065-1	6.5	43	53	91	36	8
RDM05066-1	6.6	43	53	91	36	8
RDM05067-1	6.7	43	53	91	36	8
RDM05068-1	6.8	43	53	91	36	8
RDM05069-1	6.9	43	53	91	36	8
RDM05070-1	7.0	43	53	91	36	8
RDM05071-1	7.1	43	53	91	36	8
RDM05072-1	7.2	43	53	91	36	8
RDM05073-1	7.3	43	53	91	36	8
RDM05074-1	7.4	43	53	91	36	8
RDM05075-1	7.5	43	53	91	36	8
RDM05076-1	7.6	43	53	91	36	8
RDM05077-1	7.7	43	53	91	36	8
RDM05078-1	7.8	43	53	91	36	8
RDM05079-1	7.9	43	53	91	36	8
RDM05080-1	8.0	43	53	91	36	8
RDM05081-1	8.1	49	61	103	40	10
RDM05082-1	8.2	49	61	103	40	10
RDM05083-1	8.3	49	61	103	40	10
RDM05084-1	8.4	49	61	103	40	10
RDM05085-1	8.5	49	61	103	40	10
RDM05086-1	8.6	49	61	103	40	10
RDM05087-1	8.7	49	61	103	40	10
RDM05088-1	8.8	49	61	103	40	10
RDM05089-1	8.9	49	61	103	40	10

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDM Series

Carbide drills for stainless steel, through-coolant

WC	h7	5xD
CARBIDE	DIA. TOL.	DEPTH



5D HOLE DEPTH

P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDM05090-1	9	49	61	103	40	10
RDM05091-1	9.1	49	61	103	40	10
RDM05092-1	9.2	49	61	103	40	10
RDM05093-1	9.3	49	61	103	40	10
RDM05094-1	9.4	49	61	103	40	10
RDM05095-1	9.5	49	61	103	40	10
RDM05096-1	9.6	49	61	103	40	10
RDM05097-1	9.7	49	61	103	40	10
RDM05098-1	9.8	49	61	103	40	10
RDM05099-1	9.9	49	61	103	40	10
RDM05100-1	10.0	49	61	103	40	10
RDM05101-1	10.1	56	71	118	45	12
RDM05102-1	10.2	56	71	118	45	12
RDM05103-1	10.3	56	71	118	45	12
RDM05104-1	10.4	56	71	118	45	12
RDM05105-1	10.5	56	71	118	45	12
RDM05106-1	10.6	56	71	118	45	12
RDM05107-1	10.7	56	71	118	45	12
RDM05108-1	10.8	56	71	118	45	12
RDM05109-1	10.9	56	71	118	45	12
RDM05110-1	11.0	56	71	118	45	12
RDM05111-1	11.1	56	71	118	45	12
RDM05112-1	11.2	56	71	118	45	12
RDM05113-1	11.3	56	71	118	45	12
RDM05114-1	11.4	56	71	118	45	12
RDM05115-1	11.5	56	71	118	45	12
RDM05116-1	11.6	56	71	118	45	12
RDM05117-1	11.7	56	71	118	45	12
RDM05118-1	11.8	56	71	118	45	12
RDM05119-1	11.9	56	71	118	45	12

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDM05120-1	12.0	56	71	118	45	12
RDM05121-1	12.1	60	77	124	45	14
RDM05122-1	12.2	60	77	124	45	14
RDM05123-1	12.3	60	77	124	45	14
RDM05124-1	12.4	60	77	124	45	14
RDM05125-1	12.5	60	77	124	45	14
RDM05126-1	12.6	60	77	124	45	14
RDM05127-1	12.7	60	77	124	45	14
RDM05128-1	12.8	60	77	124	45	14
RDM05129-1	12.9	60	77	124	45	14
RDM05130-1	13	60	77	124	45	14
RDM05131-1	13.1	60	77	124	45	14
RDM05132-1	13.2	60	77	124	45	14
RDM05133-1	13.3	60	77	124	45	14
RDM05134-1	13.4	60	77	124	45	14
RDM05135-1	13.5	60	77	124	45	14
RDM05136-1	13.6	60	77	124	45	14
RDM05137-1	13.7	60	77	124	45	14
RDM05138-1	13.8	60	77	124	45	14
RDM05139-1	13.9	60	77	124	45	14
RDM05140-1	14	60	77	124	45	14
RDM05141-1	14.1	63	83	133	48	16
RDM05142-1	14.2	63	83	133	48	16
RDM05143-1	14.3	63	83	133	48	16
RDM05144-1	14.4	63	83	133	48	16
RDM05145-1	14.5	63	83	133	48	16
RDM05146-1	14.6	63	83	133	48	16
RDM05147-1	14.7	63	83	133	48	16
RDM05148-1	14.8	63	83	133	48	16
RDM05149-1	14.9	63	83	133	48	16

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDM Series

Carbide drills for stainless steel, through-coolant

WC

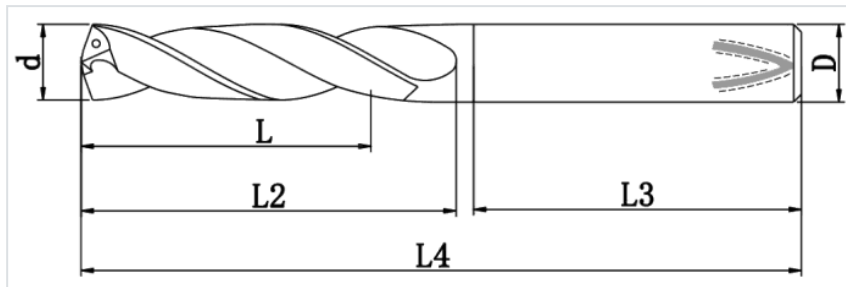
CARBIDE

h7

DIA. TOL.

5xD

DEPTH



5D HOLE DEPTH

P
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Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDM05150-1	15.0	63	83	133	48	16
RDM05151-1	15.1	63	83	133	48	16
RDM05152-1	15.2	63	83	133	48	16
RDM05153-1	15.3	63	83	133	48	16
RDM05154-1	15.4	63	83	133	48	16
RDM05155-1	15.5	63	83	133	48	16
RDM05156-1	15.6	63	83	133	48	16
RDM05157-1	15.7	63	83	133	48	16
RDM05158-1	15.8	63	83	133	48	16
RDM05159-1	15.9	63	83	133	48	16
RDM05160-1	16	63	83	133	48	16
RDM05161-1	16.1	71	93	143	48	18
RDM05162-1	16.2	71	93	143	48	18
RDM05163-1	16.3	71	93	143	48	18
RDM05164-1	16.4	71	93	143	48	18
RDM05165-1	16.5	71	93	143	48	18
RDM05166-1	16.6	71	93	143	48	18
RDM05167-1	16.7	71	93	143	48	18
RDM05168-1	16.8	71	93	143	48	18
RDM05169-1	16.9	71	93	143	48	18
RDM05170-1	17.0	71	93	143	48	18
RDM05171-1	17.1	71	93	143	48	18
RDM05172-1	17.2	71	93	143	48	18
RDM05173-1	17.3	71	93	143	48	18
RDM05174-1	17.4	71	93	143	48	18
RDM05175-1	17.5	71	93	143	48	18
RDM05176-1	17.6	71	93	143	48	18
RDM05177-1	17.7	71	93	143	48	18
RDM05178-1	17.8	71	93	143	48	18
RDM05179-1	17.9	71	93	143	48	18

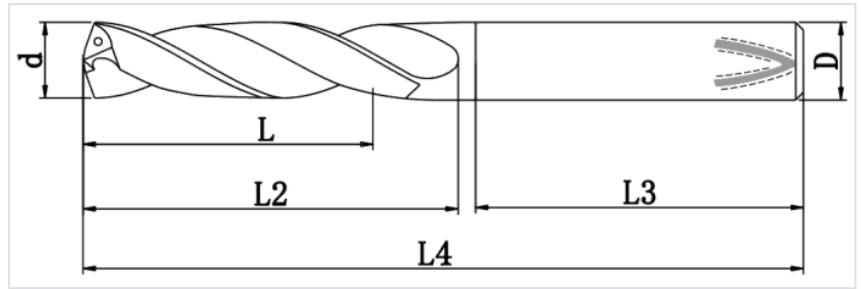
ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDM05180-1	18	71	93	143	48	18
RDM05181-1	18.1	77	101	153	50	20
RDM05182-1	18.2	77	101	153	50	20
RDM05183-1	18.3	77	101	153	50	20
RDM05184-1	18.4	77	101	153	50	20
RDM05185-1	18.5	77	101	153	50	20
RDM05186-1	18.6	77	101	153	50	20
RDM05187-1	18.7	77	101	153	50	20
RDM05188-1	18.8	77	101	153	50	20
RDM05189-1	18.9	77	101	153	50	20
RDM05190-1	19.0	77	101	153	50	20
RDM05191-1	19.1	77	101	153	50	20
RDM05192-1	19.2	77	101	153	50	20
RDM05193-1	19.3	77	101	153	50	20
RDM05194-1	19.4	77	101	153	50	20
RDM05195-1	19.5	77	101	153	50	20
RDM05196-1	19.6	77	101	153	50	20
RDM05197-1	19.7	77	101	153	50	20
RDM05198-1	19.8	77	101	153	50	20
RDM05199-1	19.9	77	101	153	50	20
RDM05200-1	20.0	77	101	153	50	20
RDM05201-1	20.1	88	108	166	55	25
RDM05202-1	20.2	88	108	166	55	25
RDM05203-1	20.3	88	108	166	55	25
RDM05204-1	20.4	88	108	166	55	25
RDM05205-1	20.5	88	108	166	55	25
RDM05206-1	20.6	88	108	166	55	25
RDM05207-1	20.7	88	108	166	55	25
RDM05208-1	20.8	88	108	166	55	25
RDM05209-1	20.9	88	108	166	55	25

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDM Series

Carbide drills for stainless steel, through-coolant

WC	h7	5xD
CARBIDE	DIA. TOL.	DEPTH



5D HOLE DEPTH

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Workpiece groups

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDM05210-1	21.0	88	108	166	55	25
RDM05211-1	21.1	88	108	166	55	25
RDM05212-1	21.2	88	108	166	55	25
RDM05213-1	21.3	88	108	166	55	25
RDM05214-1	21.4	88	108	166	55	25
RDM05215-1	21.5	88	108	166	55	25
RDM05216-1	21.6	88	108	166	55	25
RDM05217-1	21.7	88	108	166	55	25
RDM05218-1	21.8	88	108	166	55	25
RDM05219-1	21.9	88	108	166	55	25
RDM05220-1	22.0	88	108	166	55	25
RDM05221-1	22.1	95	115	173	55	25
RDM05222-1	22.2	95	115	173	55	25
RDM05223-1	22.3	95	115	173	55	25
RDM05224-1	22.4	95	115	173	55	25
RDM05225-1	22.5	95	115	173	55	25
RDM05226-1	22.6	95	115	173	55	25
RDM05227-1	22.7	95	115	173	55	25
RDM05228-1	22.8	95	115	173	55	25
RDM05229-1	22.9	95	115	173	55	25
RDM05230-1	23.0	95	115	173	55	25
RDM05231-1	23.1	95	115	173	55	25
RDM05232-1	23.2	95	115	173	55	25
RDM05233-1	23.3	95	115	173	55	25
RDM05234-1	23.4	95	115	173	55	25
RDM05235-1	23.5	95	115	173	55	25
RDM05236-1	23.6	95	115	173	55	25
RDM05237-1	23.7	95	115	173	55	25
RDM05238-1	23.8	95	115	173	55	25
RDM05239-1	23.9	95	115	173	55	25

ORDER CODE	DIA. d	DEPTH L	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDM05240-1	24.0	95	115	173	55	25
RDM05241-1	24.1	100	122	180	55	25
RDM05242-1	24.2	100	122	180	55	25
RDM05243-1	24.3	100	122	180	55	25
RDM05244-1	24.4	100	122	180	55	25
RDM05245-1	24.5	100	122	180	55	25
RDM05246-1	24.6	100	122	180	55	25
RDM05247-1	24.7	100	122	180	55	25
RDM05248-1	24.8	100	122	180	55	25
RDM05249-1	24.9	100	122	180	55	25
RDM05250-1	25.0	100	122	180	55	25

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDP Series

Flat-bottom drills, external or through-coolant



Flat bottom

Drill and enlarge holes on curved and inclined surfaces, counterbores and thin plates.

No spot drilling

Low-carbon steel up to HRC 30, copper, aluminium and plastics without a spot drill.

Enlarging

Enlarge or ream holes in low- and medium-carbon steel up to HRC 45.

Ø1–16

standard range, mm

h7

diameter tolerance

0 / 1

external / through-coolant

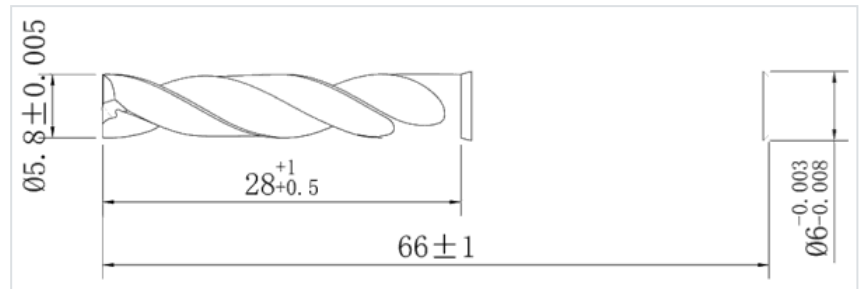
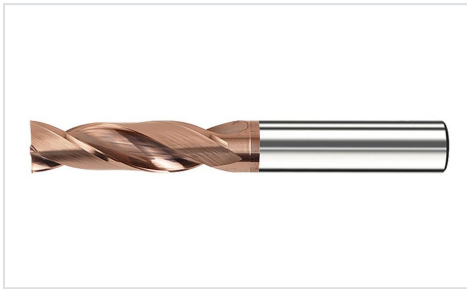
Pilot holes

also for pre-tap holes

RDP Series

Flat-bottom drills, external coolant

WC	h7
CARBIDE	DIA. TOL.



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Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05010-0	1.00	6	50	3
RDP05011-0	1.10	6	50	3
RDP05012-0	1.20	6	50	3
RDP05013-0	1.30	6	50	3
RDP05014-0	1.40	6	50	3
RDP05015-0	1.50	6	50	3
RDP05016-0	1.60	10	50	3
RDP05017-0	1.70	10	50	3
RDP05018-0	1.80	10	50	3
RDP05019-0	1.90	10	50	3
RDP05020-0	2.00	14	50	4
RDP05021-0	2.10	14	50	4
RDP05022-0	2.20	14	50	4
RDP05023-0	2.30	14	50	4
RDP05024-0	2.40	14	50	4

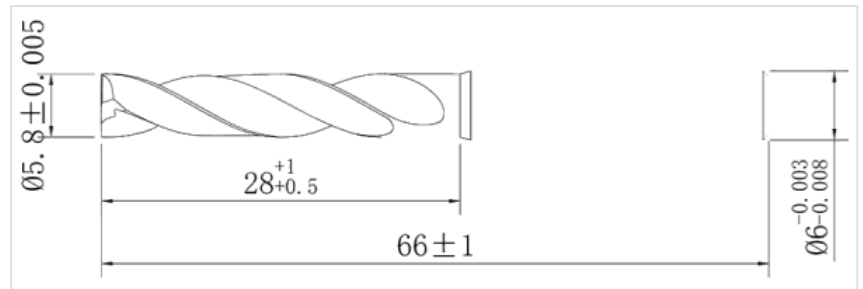
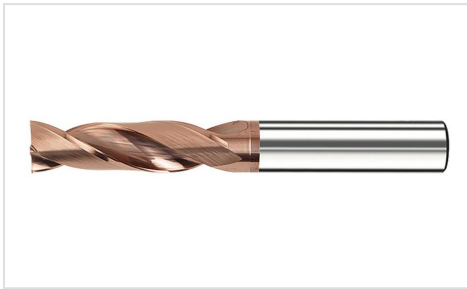
ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05025-0	2.50	14	50	4
RDP05026-0	2.60	14	50	4
RDP05027-0	2.70	14	50	4
RDP05028-0	2.80	14	50	4
RDP05029-0	2.90	14	50	4
RDP05030-0	3.00	17	50	4
RDP05031-0	3.10	17	50	4
RDP05032-0	3.20	17	50	4
RDP05033-0	3.30	17	50	4
RDP05034-0	3.40	17	50	4
RDP05035-0	3.50	17	50	4
RDP05036-0	3.60	17	50	4
RDP05037-0	3.70	17	50	4
RDP05038-0	3.80	17	50	4
RDP05039-0	3.90	17	50	4

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDP Series

Flat-bottom drills, external coolant

WC	h7
CARBIDE	DIA. TOL.



P
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Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05040-0	4.00	17	50	4
RDP05041-0	4.10	23	65	6
RDP05042-0	4.20	23	65	6
RDP05043-0	4.30	23	65	6
RDP05044-0	4.40	23	65	6
RDP05045-0	4.50	23	65	6
RDP05046-0	4.60	23	65	6
RDP05047-0	4.70	23	65	6
RDP05048-0	4.80	23	65	6
RDP05049-0	4.90	23	65	6
RDP05050-0	5.00	23	65	6
RDP05051-0	5.10	27	65	6
RDP05052-0	5.20	27	65	6
RDP05053-0	5.30	27	65	6
RDP05054-0	5.40	27	65	6

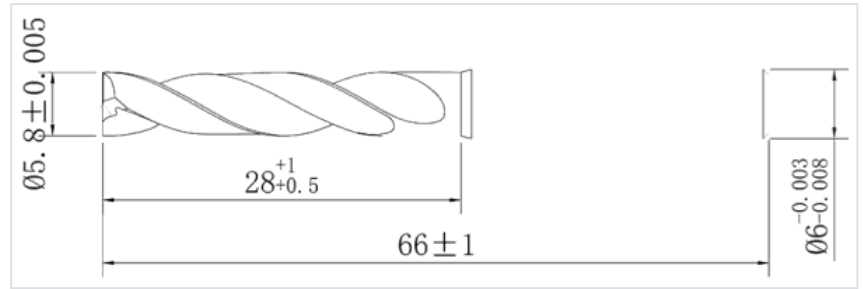
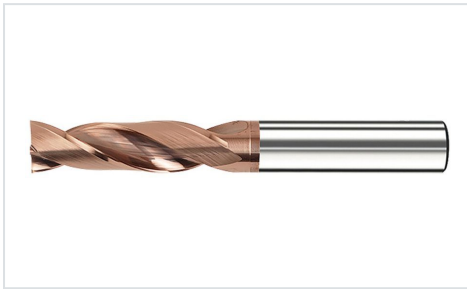
ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05055-0	5.50	27	65	6
RDP05056-0	5.60	27	65	6
RDP05057-0	5.70	27	65	6
RDP05058-0	5.80	27	65	6
RDP05059-0	5.90	27	65	6
RDP05060-0	6.00	27	65	6
RDP05061-0	6.10	32	75	8
RDP05062-0	6.20	32	75	8
RDP05063-0	6.30	32	75	8
RDP05064-0	6.40	32	75	8
RDP05065-0	6.50	32	75	8
RDP05066-0	6.60	32	75	8
RDP05067-0	6.70	32	75	8
RDP05068-0	6.80	32	75	8
RDP05069-0	6.90	32	75	8

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDP Series

Flat-bottom drills, external coolant

WC	h7
CARBIDE	DIA. TOL.



P
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H
O
Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05070-0	7.00	32	75	8
RDP05071-0	7.10	36	75	8
RDP05072-0	7.20	36	75	8
RDP05073-0	7.30	36	75	8
RDP05074-0	7.40	36	75	8
RDP05075-0	7.50	36	75	8
RDP05076-0	7.60	36	75	8
RDP05077-0	7.70	36	75	8
RDP05078-0	7.80	36	75	8
RDP05079-0	7.90	36	75	8
RDP05080-0	8.00	36	75	8
RDP05081-0	8.10	41	85	10
RDP05082-0	8.20	41	85	10
RDP05083-0	8.30	41	85	10
RDP05084-0	8.40	41	85	10

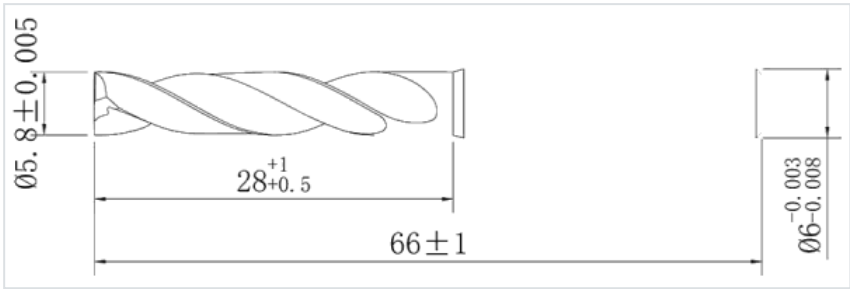
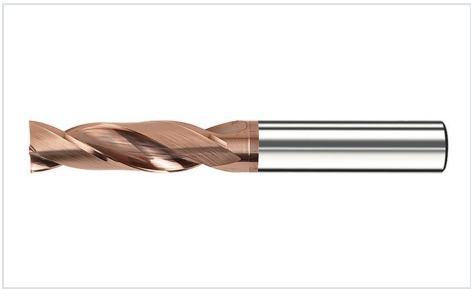
ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05085-0	8.50	41	85	10
RDP05086-0	8.60	41	85	10
RDP05087-0	8.70	41	85	10
RDP05088-0	8.80	41	85	10
RDP05089-0	8.90	41	85	10
RDP05090-0	9.00	41	85	10
RDP05091-0	9.10	45	85	10
RDP05092-0	9.20	45	85	10
RDP05093-0	9.30	45	85	10
RDP05094-0	9.40	45	85	10
RDP05095-0	9.50	45	85	10
RDP05096-0	9.60	45	85	10
RDP05097-0	9.70	45	85	10
RDP05098-0	9.80	45	85	10
RDP05099-0	9.90	45	85	10

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDP Series

Flat-bottom drills, external coolant

WC	h7
CARBIDE	DIA. TOL.



P **M** **K** **N** **S** **H** **O** Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05100-0	10.00	45	85	10
RDP05101-0	10.10	50	95	12
RDP05102-0	10.20	50	95	12
RDP05103-0	10.30	50	95	12
RDP05104-0	10.40	50	95	12
RDP05105-0	10.50	50	95	12
RDP05106-0	10.60	50	95	12
RDP05107-0	10.70	50	95	12
RDP05108-0	10.80	50	95	12
RDP05109-0	10.90	50	95	12
RDP05110-0	11.00	50	95	12
RDP05111-0	11.10	54	95	12
RDP05112-0	11.20	54	95	12
RDP05113-0	11.30	54	95	12
RDP05114-0	11.40	54	95	12

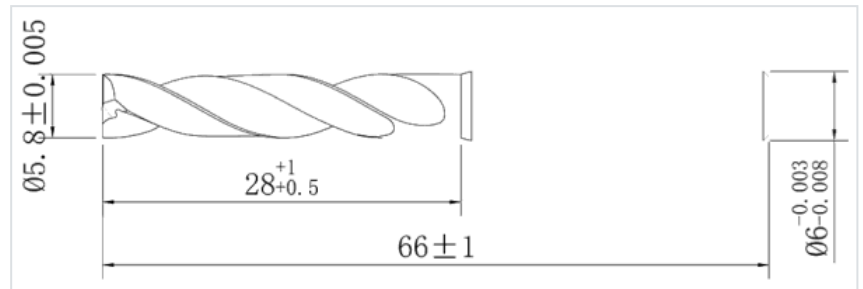
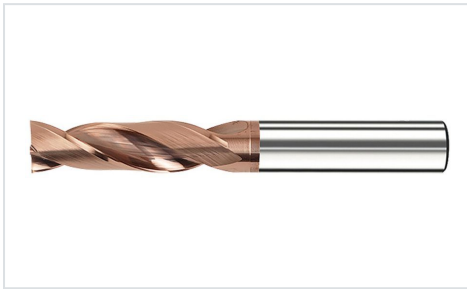
ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05115-0	11.50	54	95	12
RDP05116-0	11.60	54	95	12
RDP05117-0	11.70	54	95	12
RDP05118-0	11.80	54	95	12
RDP05119-0	11.90	54	95	12
RDP05120-0	12.00	54	95	12
RDP05121-0	12.10	57	100	14
RDP05122-0	12.20	57	100	14
RDP05123-0	12.30	57	100	14
RDP05124-0	12.40	57	100	14
RDP05125-0	12.50	57	100	14
RDP05126-0	12.60	59	100	14
RDP05127-0	12.70	59	100	14
RDP05128-0	12.80	59	100	14
RDP05129-0	12.90	59	100	14

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDP Series

Flat-bottom drills, external coolant

WC	h7
CARBIDE	DIA. TOL.



P
M
K
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H
O
Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05130-0	13.00	59	100	14
RDP05131-0	13.10	61	105	14
RDP05132-0	13.20	61	105	14
RDP05133-0	13.30	61	105	14
RDP05134-0	13.40	61	105	14
RDP05135-0	13.50	61	105	14
RDP05136-0	13.60	63	105	14
RDP05137-0	13.70	63	105	14
RDP05138-0	13.80	63	105	14
RDP05139-0	13.90	63	105	14
RDP05140-0	14.00	63	105	14
RDP05141-0	14.10	65	110	16
RDP05142-0	14.20	65	110	16
RDP05143-0	14.30	65	110	16
RDP05144-0	14.40	65	110	16
RDP05145-0	14.50	65	110	16

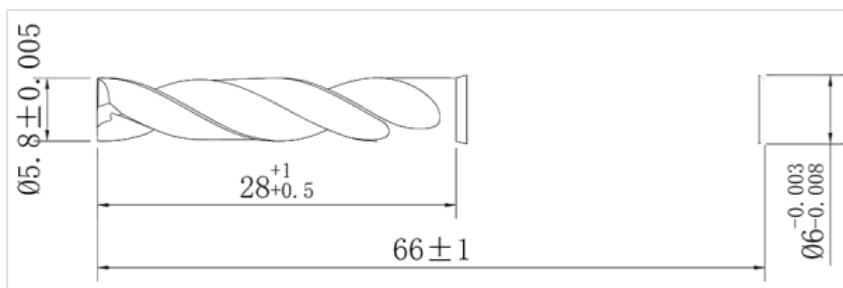
ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05146-0	14.60	65	110	16
RDP05147-0	14.70	65	110	16
RDP05148-0	14.80	65	110	16
RDP05149-0	14.90	65	110	16
RDP05150-0	15.00	68	110	16
RDP05151-0	15.10	68	110	16
RDP05152-0	15.20	68	110	16
RDP05153-0	15.30	68	110	16
RDP05154-0	15.40	68	110	16
RDP05155-0	15.50	70	120	16
RDP05156-0	15.60	70	120	16
RDP05157-0	15.70	70	120	16
RDP05158-0	15.80	70	120	16
RDP05159-0	15.90	70	120	16
RDP05160-0	16.00	70	120	16

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDP Series

Flat-bottom drills, through-coolant

WC	h7
CARBIDE	DIA. TOL.



P
M
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N
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H
O
Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05010-1	1.00	6	50	3
RDP05011-1	1.10	6	50	3
RDP05012-1	1.20	6	50	3
RDP05013-1	1.30	6	50	3
RDP05014-1	1.40	6	50	3
RDP05015-1	1.50	6	50	3
RDP05016-1	1.60	10	50	3
RDP05017-1	1.70	10	50	3
RDP05018-1	1.80	10	50	3
RDP05019-1	1.90	10	50	3
RDP05020-1	2.00	14	50	4
RDP05021-1	2.10	14	50	4
RDP05022-1	2.20	14	50	4
RDP05023-1	2.30	14	50	4
RDP05024-1	2.40	14	50	4

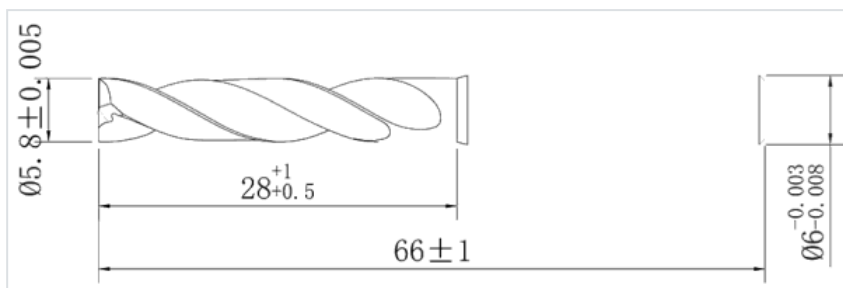
ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05025-1	2.50	14	50	4
RDP05026-1	2.60	14	50	4
RDP05027-1	2.70	14	50	4
RDP05028-1	2.80	14	50	4
RDP05029-1	2.90	14	50	4
RDP05030-1	3.00	17	50	4
RDP05031-1	3.10	17	50	4
RDP05032-1	3.20	17	50	4
RDP05033-1	3.30	17	50	4
RDP05034-1	3.40	17	50	4
RDP05035-1	3.50	17	50	4
RDP05036-1	3.60	17	50	4
RDP05037-1	3.70	17	50	4
RDP05038-1	3.80	17	50	4
RDP05039-1	3.90	17	50	4

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDP Series

Flat-bottom drills, through-coolant

WC	h7
CARBIDE	DIA. TOL.



P
M
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Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05040-1	4.00	17	50	4
RDP05041-1	4.10	23	65	6
RDP05042-1	4.20	23	65	6
RDP05043-1	4.30	23	65	6
RDP05044-1	4.40	23	65	6
RDP05045-1	4.50	23	65	6
RDP05046-1	4.60	23	65	6
RDP05047-1	4.70	23	65	6
RDP05048-1	4.80	23	65	6
RDP05049-1	4.90	23	65	6
RDP05050-1	5.00	23	65	6
RDP05051-1	5.10	27	65	6
RDP05052-1	5.20	27	65	6
RDP05053-1	5.30	27	65	6
RDP05054-1	5.40	27	65	6

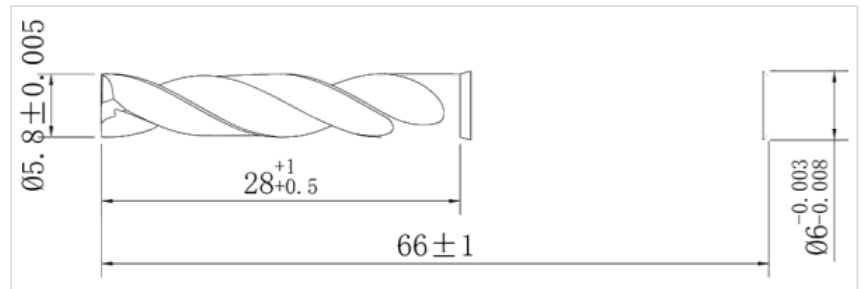
ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05055-1	5.50	27	65	6
RDP05056-1	5.60	27	65	6
RDP05057-1	5.70	27	65	6
RDP05058-1	5.80	27	65	6
RDP05059-1	5.90	27	65	6
RDP05060-1	6.00	27	65	6
RDP05061-1	6.10	32	75	8
RDP05062-1	6.20	32	75	8
RDP05063-1	6.30	32	75	8
RDP05064-1	6.40	32	75	8
RDP05065-1	6.50	32	75	8
RDP05066-1	6.60	32	75	8
RDP05067-1	6.70	32	75	8
RDP05068-1	6.80	32	75	8
RDP05069-1	6.90	32	75	8

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDP Series

Flat-bottom drills, through-coolant

WC	h7
CARBIDE	DIA. TOL.



P
M
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H
O
Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05070-1	7.00	32	75	8
RDP05071-1	7.10	36	75	8
RDP05072-1	7.20	36	75	8
RDP05073-1	7.30	36	75	8
RDP05074-1	7.40	36	75	8
RDP05075-1	7.50	36	75	8
RDP05076-1	7.60	36	75	8
RDP05077-1	7.70	36	75	8
RDP05078-1	7.80	36	75	8
RDP05079-1	7.90	36	75	8
RDP05080-1	8.00	36	75	8
RDP05081-1	8.10	41	85	10
RDP05082-1	8.20	41	85	10
RDP05083-1	8.30	41	85	10
RDP05084-1	8.40	41	85	10

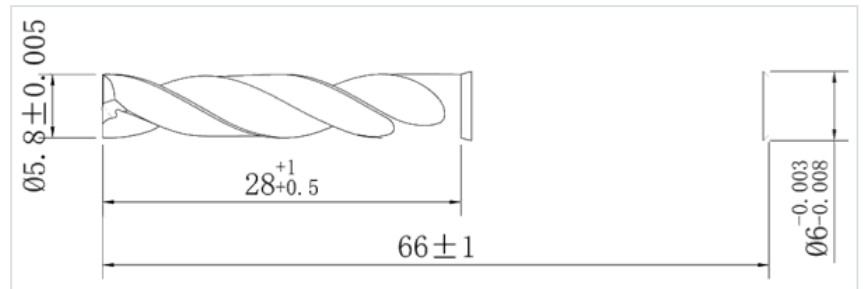
ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05085-1	8.50	41	85	10
RDP05086-1	8.60	41	85	10
RDP05087-1	8.70	41	85	10
RDP05088-1	8.80	41	85	10
RDP05089-1	8.90	41	85	10
RDP05090-1	9.00	41	85	10
RDP05091-1	9.10	45	85	10
RDP05092-1	9.20	45	85	10
RDP05093-1	9.30	45	85	10
RDP05094-1	9.40	45	85	10
RDP05095-1	9.50	45	85	10
RDP05096-1	9.60	45	85	10
RDP05097-1	9.70	45	85	10
RDP05098-1	9.80	45	85	10
RDP05099-1	9.90	45	85	10

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDP Series

Flat-bottom drills, through-coolant

WC	h7
CARBIDE	DIA. TOL.



P
M
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Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05100-1	10.00	45	85	10
RDP05101-1	10.10	50	95	12
RDP05102-1	10.20	50	95	12
RDP05103-1	10.30	50	95	12
RDP05104-1	10.40	50	95	12
RDP05105-1	10.50	50	95	12
RDP05106-1	10.60	50	95	12
RDP05107-1	10.70	50	95	12
RDP05108-1	10.80	50	95	12
RDP05109-1	10.90	50	95	12
RDP05110-1	11.00	50	95	12
RDP05111-1	11.10	54	95	12
RDP05112-1	11.20	54	95	12
RDP05113-1	11.30	54	95	12
RDP05114-1	11.40	54	95	12

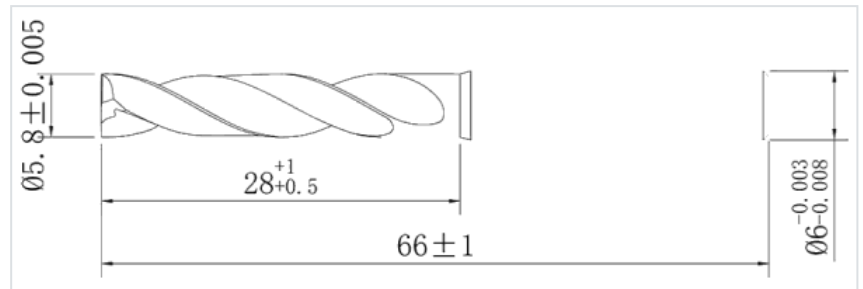
ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05115-1	11.50	54	95	12
RDP05116-1	11.60	54	95	12
RDP05117-1	11.70	54	95	12
RDP05118-1	11.80	54	95	12
RDP05119-1	11.90	54	95	12
RDP05120-1	12.00	54	95	12
RDP05121-1	12.10	57	100	14
RDP05122-1	12.20	57	100	14
RDP05123-1	12.30	57	100	14
RDP05124-1	12.40	57	100	14
RDP05125-1	12.50	57	100	14
RDP05126-1	12.60	59	100	14
RDP05127-1	12.70	59	100	14
RDP05128-1	12.80	59	100	14
RDP05129-1	12.90	59	100	14

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDP Series

Flat-bottom drills, through-coolant

WC	h7
CARBIDE	DIA. TOL.



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Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05130-1	13.00	59	100	14
RDP05131-1	13.10	61	105	14
RDP05132-1	13.20	61	105	14
RDP05133-1	13.30	61	105	14
RDP05134-1	13.40	61	105	14
RDP05135-1	13.50	61	105	14
RDP05136-1	13.60	63	105	14
RDP05137-1	13.70	63	105	14
RDP05138-1	13.80	63	105	14
RDP05139-1	13.90	63	105	14
RDP05140-1	14.00	63	105	14
RDP05141-1	14.10	65	110	16
RDP05142-1	14.20	65	110	16
RDP05143-1	14.30	65	110	16
RDP05144-1	14.40	65	110	16
RDP05145-1	14.50	65	110	16

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RDP05146-1	14.60	65	110	16
RDP05147-1	14.70	65	110	16
RDP05148-1	14.80	65	110	16
RDP05149-1	14.90	65	110	16
RDP05150-1	15.00	68	110	16
RDP05151-1	15.10	68	110	16
RDP05152-1	15.20	68	110	16
RDP05153-1	15.30	68	110	16
RDP05154-1	15.40	68	110	16
RDP05155-1	15.50	70	120	16
RDP05156-1	15.60	70	120	16
RDP05157-1	15.70	70	120	16
RDP05158-1	15.80	70	120	16
RDP05159-1	15.90	70	120	16
RDP05160-1	16.00	70	120	16

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDS Series

Through-coolant deep-hole drills, 8xD to 50xD



Deep holes

Guide margins keep the drill stable in deep holes.

Coolant flow

Polished flute bottoms help chip evacuation and coolant flow.

Process reliability

Strong cutting edges for long, unattended cycles.

8xD–50xD

standard depths

h7

diameter tolerance

1

through-coolant

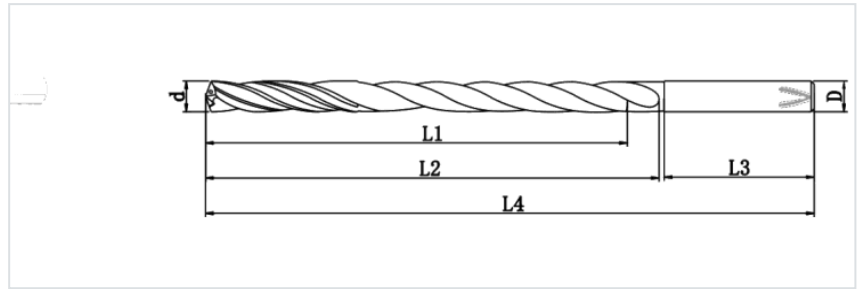
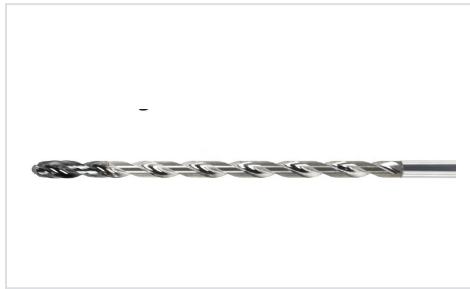
Pilot

use a pilot hole for deep drilling

RDS Series

Deep-hole drills, through-coolant

WC	h7	8xD
CARBIDE	DIA. TOL.	DEPTH



8D HOLE DEPTH

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Workpiece groups

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS08030-1	3.0	28	34	80	36	6
RDS08031-1	3.1	28	34	80	36	6
RDS08032-1	3.2	28	34	80	36	6
RDS08033-1	3.3	28	34	80	36	6
RDS08034-1	3.4	28	34	80	36	6
RDS08035-1	3.5	28	34	80	36	6
RDS08036-1	3.6	28	34	80	36	6
RDS08037-1	3.7	28	34	80	36	6
RDS08038-1	3.8	37	45	85	36	6
RDS08039-1	3.9	37	45	85	36	6
RDS08040-1	4.0	37	45	85	36	6
RDS08041-1	4.1	37	45	85	36	6
RDS08042-1	4.2	37	45	85	36	6
RDS08043-1	4.3	37	45	85	36	6
RDS08044-1	4.4	37	45	85	36	6
RDS08045-1	4.5	37	45	85	36	6
RDS08046-1	4.6	37	45	85	36	6
RDS08047-1	4.7	37	45	85	36	6
RDS08048-1	4.8	48	57	97	36	6
RDS08049-1	4.9	48	57	97	36	6
RDS08050-1	5.0	48	57	97	36	6
RDS08051-1	5.1	48	57	97	36	6
RDS08052-1	5.2	48	57	97	36	6
RDS08053-1	5.3	48	57	97	36	6
RDS08054-1	5.4	48	57	97	36	6
RDS08055-1	5.5	48	57	97	36	6
RDS08056-1	5.6	48	57	97	36	6
RDS08057-1	5.7	48	57	97	36	6
RDS08058-1	5.8	48	57	97	36	6
RDS08059-1	5.9	48	57	97	36	6

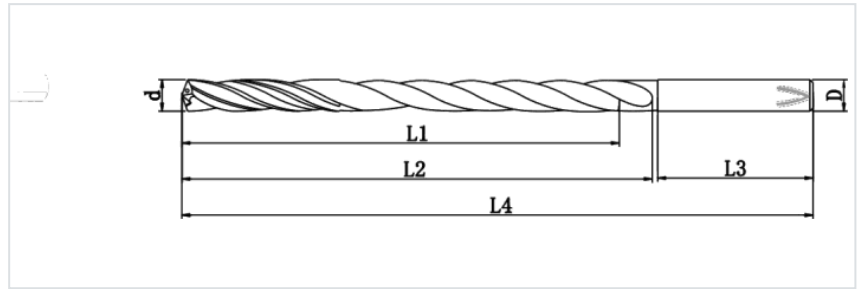
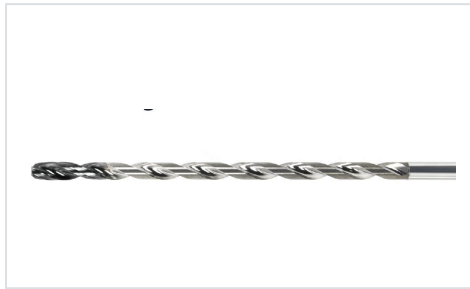
ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS08060-1	6.0	48	57	97	36	6
RDS08061-1	6.1	55	66	106	36	8
RDS08062-1	6.2	55	66	106	36	8
RDS08063-1	6.3	55	66	106	36	8
RDS08064-1	6.4	55	66	106	36	8
RDS08065-1	6.5	55	66	106	36	8
RDS08066-1	6.6	55	66	106	36	8
RDS08067-1	6.7	55	66	106	36	8
RDS08068-1	6.8	55	66	106	36	8
RDS08069-1	6.9	55	66	106	36	8
RDS08070-1	7.0	55	66	106	36	8
RDS08071-1	7.1	64	76	116	36	8
RDS08072-1	7.2	64	76	116	36	8
RDS08073-1	7.3	64	76	116	36	8
RDS08074-1	7.4	64	76	116	36	8
RDS08075-1	7.5	64	76	116	36	8
RDS08076-1	7.6	64	76	116	36	8
RDS08077-1	7.7	64	76	116	36	8
RDS08078-1	7.8	64	76	116	36	8
RDS08079-1	7.9	64	76	116	36	8
RDS08080-1	8.0	64	76	116	36	8
RDS08081-1	8.1	80	95	139	40	10
RDS08082-1	8.2	80	95	139	40	10
RDS08083-1	8.3	80	95	139	40	10
RDS08084-1	8.4	80	95	139	40	10
RDS08085-1	8.5	80	95	139	40	10
RDS08086-1	8.6	80	95	139	40	10
RDS08087-1	8.7	80	95	139	40	10
RDS08088-1	8.8	80	95	139	40	10
RDS08089-1	8.9	80	95	139	40	10

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDS Series

Deep-hole drills, through-coolant

WC	h7	8xD
CARBIDE	DIA. TOL.	DEPTH



8D HOLE DEPTH

P
M
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H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS08090-1	9.0	80	95	139	40	10
RDS08091-1	9.1	80	95	139	40	10
RDS08092-1	9.2	80	95	139	40	10
RDS08093-1	9.3	80	95	139	40	10
RDS08094-1	9.4	80	95	139	40	10
RDS08095-1	9.5	80	95	139	40	10
RDS08096-1	9.6	80	95	139	40	10
RDS08097-1	9.7	80	95	139	40	10
RDS08098-1	9.8	80	95	139	40	10
RDS08099-1	9.9	80	95	139	40	10
RDS08100-1	10.0	80	95	139	40	10
RDS08101-1	10.1	96	114	163	45	12
RDS08102-1	10.2	96	114	163	45	12
RDS08103-1	10.3	96	114	163	45	12
RDS08104-1	10.4	96	114	163	45	12
RDS08105-1	10.5	96	114	163	45	12
RDS08106-1	10.6	96	114	163	45	12
RDS08107-1	10.7	96	114	163	45	12
RDS08108-1	10.8	96	114	163	45	12
RDS08109-1	10.9	96	114	163	45	12
RDS08110-1	11.0	96	114	163	45	12
RDS08111-1	11.1	96	114	163	45	12
RDS08112-1	11.2	96	114	163	45	12
RDS08113-1	11.3	96	114	163	45	12
RDS08114-1	11.4	96	114	163	45	12
RDS08115-1	11.5	96	114	163	45	12
RDS08116-1	11.6	96	114	163	45	12
RDS08117-1	11.7	96	114	163	45	12
RDS08118-1	11.8	96	114	163	45	12
RDS08119-1	11.9	96	114	163	45	12

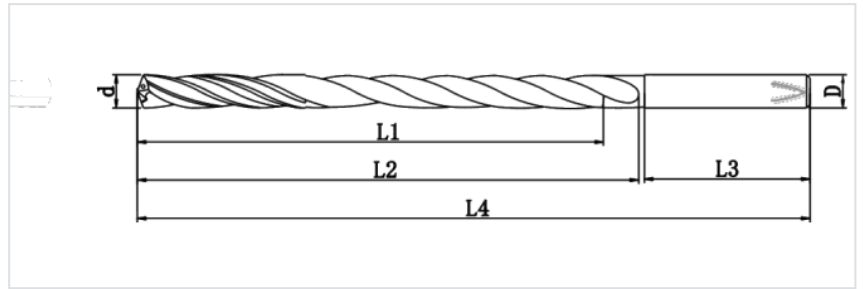
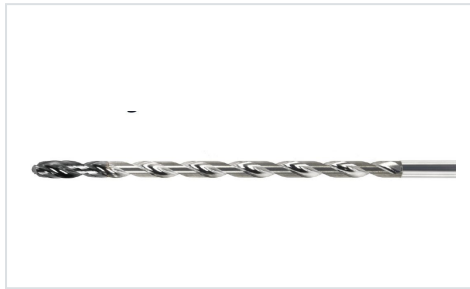
ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS08120-1	12.0	96	114	163	45	12
RDS08125-1	12.5	119	133	182	45	14
RDS08127-1	12.7	119	133	182	45	14
RDS08130-1	13.0	119	133	182	45	14
RDS08135-1	13.5	119	133	182	45	14
RDS08140-1	14.0	119	133	182	45	14
RDS08145-1	14.5	136	152	204	48	16
RDS08150-1	15.0	136	152	204	48	16
RDS08155-1	15.5	136	152	204	48	16
RDS08160-1	16.0	136	152	204	48	16
RDS08165-1	16.5	153	171	223	48	18
RDS08170-1	17.0	153	171	223	48	18
RDS08175-1	17.5	153	171	223	48	18
RDS08180-1	18.0	153	171	223	48	18
RDS08185-1	18.5	170	190	244	50	20
RDS08190-1	19.0	170	190	244	50	20
RDS08195-1	19.5	170	190	244	50	20
RDS08200-1	20.0	170	190	244	50	20

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDS Series

Deep-hole drills, through-coolant

WC	h7	12xD
CARBIDE	DIA. TOL.	DEPTH



12D HOLE DEPTH

P
M
K
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H
O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS12030-1	3.0	48	54	92	36	6
RDS12031-1	3.1	48	54	92	36	6
RDS12032-1	3.2	48	54	92	36	6
RDS12033-1	3.3	48	54	92	36	6
RDS12034-1	3.4	48	54	92	36	6
RDS12035-1	3.5	48	54	92	36	6
RDS12036-1	3.6	48	54	92	36	6
RDS12037-1	3.7	48	54	92	36	6
RDS12038-1	3.8	56	64	102	36	6
RDS12039-1	3.9	56	64	102	36	6
RDS12040-1	4.0	56	64	102	36	6
RDS12041-1	4.1	56	64	102	36	6
RDS12042-1	4.2	56	64	102	36	6
RDS12043-1	4.3	56	64	102	36	6
RDS12044-1	4.4	56	64	102	36	6
RDS12045-1	4.5	56	64	102	36	6
RDS12046-1	4.6	56	64	102	36	6
RDS12047-1	4.7	56	64	102	36	6
RDS12048-1	4.8	74	83	121	36	6
RDS12049-1	4.9	74	83	121	36	6
RDS12050-1	5.0	74	83	121	36	6
RDS12051-1	5.1	74	83	121	36	6
RDS12052-1	5.2	74	83	121	36	6
RDS12053-1	5.3	74	83	121	36	6
RDS12054-1	5.4	74	83	121	36	6
RDS12055-1	5.5	74	83	121	36	6
RDS12056-1	5.6	74	83	121	36	6
RDS12057-1	5.7	74	83	121	36	6
RDS12058-1	5.8	74	83	121	36	6
RDS12059-1	5.9	74	83	121	36	6

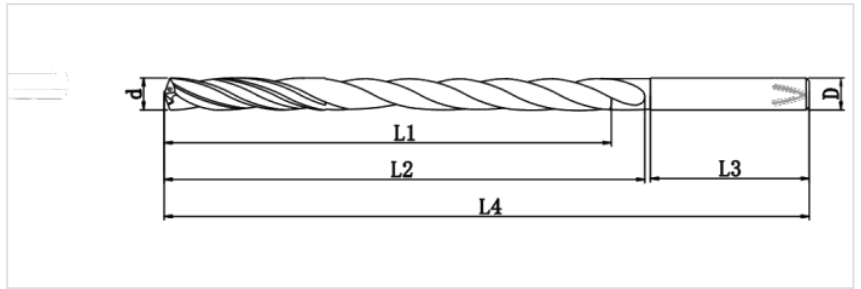
ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS12060-1	6.0	74	83	121	36	6
RDS12061-1	6.1	98	110	148	36	8
RDS12062-1	6.2	98	110	148	36	8
RDS12063-1	6.3	98	110	148	36	8
RDS12064-1	6.4	98	110	148	36	8
RDS12065-1	6.5	98	110	148	36	8
RDS12066-1	6.6	98	110	148	36	8
RDS12067-1	6.7	98	110	148	36	8
RDS12068-1	6.8	98	110	148	36	8
RDS12069-1	6.9	98	110	148	36	8
RDS12070-1	7.0	98	110	148	36	8
RDS12071-1	7.1	98	110	148	36	8
RDS12072-1	7.2	98	110	148	36	8
RDS12073-1	7.3	98	110	148	36	8
RDS12074-1	7.4	98	110	148	36	8
RDS12075-1	7.5	98	110	148	36	8
RDS12076-1	7.6	98	110	148	36	8
RDS12077-1	7.7	98	110	148	36	8
RDS12078-1	7.8	98	110	148	36	8
RDS12079-1	7.9	98	110	148	36	8
RDS12080-1	8.0	98	110	148	36	8
RDS12081-1	8.1	123	138	180	40	10
RDS12082-1	8.2	123	138	180	40	10
RDS12083-1	8.3	123	138	180	40	10
RDS12084-1	8.4	123	138	180	40	10
RDS12085-1	8.5	123	138	180	40	10
RDS12086-1	8.6	123	138	180	40	10
RDS12087-1	8.7	123	138	180	40	10
RDS12088-1	8.8	123	138	180	40	10
RDS12089-1	8.9	123	138	180	40	10

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDS Series

Deep-hole drills, through-coolant

WC	h7	12xD
CARBIDE	DIA. TOL.	DEPTH



12D HOLE DEPTH

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS12090-1	9.0	123	138	180	40	10
RDS12091-1	9.1	123	138	180	40	10
RDS12092-1	9.2	123	138	180	40	10
RDS12093-1	9.3	123	138	180	40	10
RDS12094-1	9.4	123	138	180	40	10
RDS12095-1	9.5	123	138	180	40	10
RDS12096-1	9.6	123	138	180	40	10
RDS12097-1	9.7	123	138	180	40	10
RDS12098-1	9.8	123	138	180	40	10
RDS12099-1	9.9	123	138	180	40	10
RDS12100-1	10.0	123	138	180	40	10
RDS12101-1	10.1	140	158	206	45	12
RDS12102-1	10.2	140	158	206	45	12
RDS12103-1	10.3	140	158	206	45	12
RDS12104-1	10.4	140	158	206	45	12
RDS12105-1	10.5	140	158	206	45	12
RDS12106-1	10.6	140	158	206	45	12
RDS12107-1	10.7	140	158	206	45	12
RDS12108-1	10.8	140	158	206	45	12
RDS12109-1	10.9	140	158	206	45	12
RDS12110-1	11.0	140	158	206	45	12
RDS12111-1	11.1	140	158	206	45	12
RDS12112-1	11.2	140	158	206	45	12
RDS12113-1	11.3	140	158	206	45	12
RDS12114-1	11.4	140	158	206	45	12
RDS12115-1	11.5	140	158	206	45	12
RDS12116-1	11.6	140	158	206	45	12
RDS12117-1	11.7	140	158	206	45	12
RDS12118-1	11.8	140	158	206	45	12
RDS12119-1	11.9	140	158	206	45	12

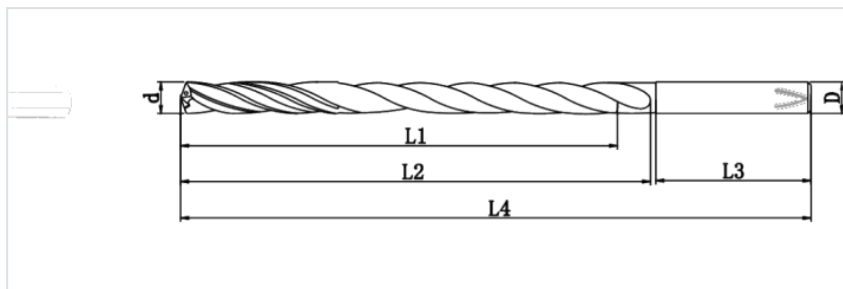
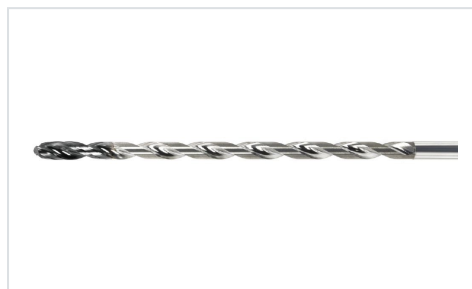
	P	M	K	N	S	H	O	Workpiece groups
ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D		
RDS12120-1	12.0	140	158	206	45	12		
RDS12121-1	12.1	168	182	230	45	14		
RDS12122-1	12.2	168	182	230	45	14		
RDS12123-1	12.3	168	182	230	45	14		
RDS12124-1	12.4	168	182	230	45	14		
RDS12125-1	12.5	168	182	230	45	14		
RDS12126-1	12.6	168	182	230	45	14		
RDS12127-1	12.7	168	182	230	45	14		
RDS12128-1	12.8	168	182	230	45	14		
RDS12129-1	12.9	168	182	230	45	14		
RDS12130-1	13.0	168	182	230	45	14		
RDS12135-1	13.5	168	182	230	45	14		
RDS12140-1	14.0	168	182	230	45	14		
RDS12145-1	14.5	168	208	260	48	16		
RDS12150-1	15.0	168	208	260	48	16		
RDS12155-1	15.5	168	208	260	48	16		
RDS12160-1	16.0	168	208	260	48	16		
RDS12165-1	16.5	216	234	285	48	18		
RDS12170-1	17.0	216	234	285	48	18		
RDS12175-1	17.5	216	234	285	48	18		
RDS12180-1	18.0	216	234	285	48	18		
RDS12185-1	18.5	238	258	310	50	20		
RDS12190-1	19.0	238	258	310	50	20		
RDS12195-1	19.5	238	258	310	50	20		
RDS12200-1	20.0	238	258	310	50	20		

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDS Series

Deep-hole drills, through-coolant

WC CARBIDE	h7 DIA. TOL.
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P	M	K	N	S	H	O	Workpiece groups
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16D HOLE DEPTH

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS16030-1	3.0	52	57	100	36	6
RDS16035-1	3.5	72	78	120	36	6
RDS16040-1	4.0	72	78	120	36	6
RDS16045-1	4.5	92	100	140	36	6
RDS16048-1	4.8	92	100	140	36	6
RDS16050-1	5.0	92	100	140	36	6
RDS16055-1	5.5	101	110	150	36	6
RDS16058-1	5.8	111	120	160	36	6
RDS16060-1	6.0	111	120	160	36	6
RDS16061-1	6.1	124	135	175	36	8
RDS16065-1	6.5	124	135	175	36	8
RDS16068-1	6.8	124	135	175	36	8
RDS16070-1	7.0	124	135	175	36	8
RDS16074-1	7.4	140	152	192	36	8
RDS16075-1	7.5	140	152	192	36	8
RDS16080-1	8.0	140	152	192	36	8
RDS16083-1	8.3	148	162	206	40	10
RDS16085-1	8.5	148	162	206	40	10
RDS16090-1	9.0	148	162	206	40	10
RDS16098-1	9.8	165	180	224	40	10
RDS16100-1	10.0	165	180	224	40	10
RDS16102-1	10.2	181	198	247	45	12
RDS16110-1	11.0	181	198	247	45	12
RDS16115-1	11.5	198	216	265	45	12
RDS16118-1	11.8	198	216	265	45	12
RDS16120-1	12.0	198	216	265	45	12
RDS16127-1	12.7	238	252	301	45	14
RDS16130-1	13.0	238	252	301	45	14
RDS16140-1	14.0	238	252	301	45	14
RDS16150-1	15.0	272	288	340	48	16
RDS16160-1	16.0	272	288	340	48	16

20D HOLE DEPTH

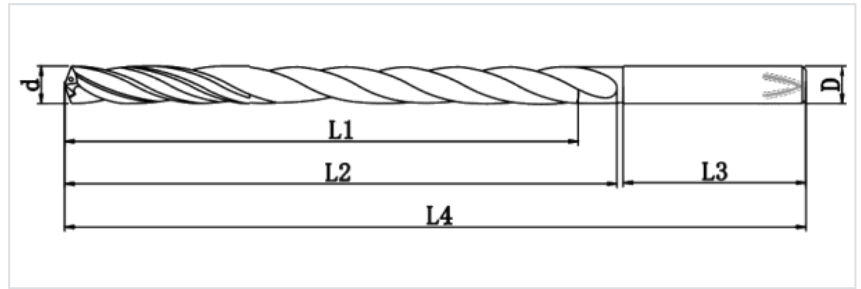
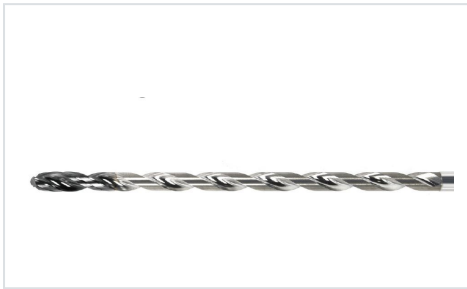
ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS20030-1	3.0	60	65	110	36	6
RDS20035-1	3.5	86	92	135	36	6
RDS20040-1	4.0	86	92	135	36	6
RDS20045-1	4.5	110	118	160	36	6
RDS20048-1	4.8	110	118	160	36	6
RDS20050-1	5.0	110	118	160	36	6
RDS20055-1	5.5	123	132	175	36	6
RDS20058-1	5.8	135	144	185	36	6
RDS20060-1	6.0	135	144	185	36	6
RDS20061-1	6.1	151	162	200	36	8
RDS20065-1	6.5	151	162	200	36	8
RDS20068-1	6.8	151	162	200	36	8
RDS20070-1	7.0	151	162	200	36	8
RDS20074-1	7.4	172	184	222	36	8
RDS20075-1	7.5	172	184	222	36	8
RDS20080-1	8.0	172	184	222	36	8
RDS20083-1	8.3	184	198	240	40	10
RDS20085-1	8.5	184	198	240	40	10
RDS20090-1	9.0	184	198	240	40	10
RDS20098-1	9.8	205	220	262	40	10
RDS20100-1	10.0	205	220	262	40	10
RDS20102-1	10.2	225	242	289	45	12
RDS20111-1	11.0	225	242	289	45	12
RDS20115-1	11.5	246	264	311	45	12
RDS20118-1	11.8	246	264	311	45	12
RDS20120-1	12.0	246	264	311	45	12
RDS20127-1	12.7	294	308	357	45	14
RDS20130-1	13.0	294	308	357	45	14
RDS20140-1	14.0	294	308	357	45	14
RDS20150-1	15.0	336	352	404	48	16
RDS20160-1	16.0	336	352	404	48	16

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDS Series

Deep-hole drills, through-coolant

WC CARBIDE	h7 DIA. TOL.
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Workpiece groups

25D HOLE DEPTH

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS25030-1	3.0	79	84	125	36	6
RDS25035-1	3.5	108	114	155	36	6
RDS25040-1	4.0	108	114	155	36	6
RDS25045-1	4.5	137	145	185	36	6
RDS25048-1	4.8	137	145	185	36	6
RDS25050-1	5.0	137	145	185	36	6
RDS25055-1	5.5	151	160	200	36	6
RDS25060-1	6.0	165	174	214	36	6
RDS25061-1	6.1	183	194	234	36	8
RDS25065-1	6.5	183	194	234	36	8
RDS25068-1	6.8	183	194	234	36	8
RDS25070-1	7.0	183	194	234	36	8
RDS25080-1	8.0	209	220	260	36	8
RDS25085-1	8.5	229	243	289	40	10
RDS25090-1	9.0	229	243	289	40	10
RDS25098-1	9.8	255	270	314	40	10
RDS25100-1	10.0	255	270	314	40	12
RDS25102-1	10.2	280	297	346	45	12
RDS25110-1	11.0	280	297	346	45	12
RDS25115-1	11.5	306	324	373	45	12
RDS25120-1	12.0	306	324	373	45	12

30D HOLE DEPTH

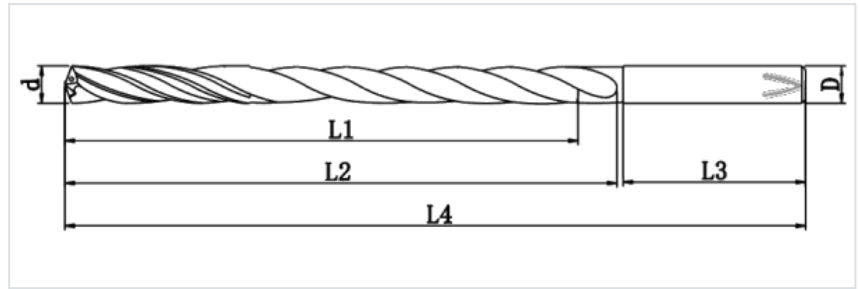
ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS30030-1	3.0	92	97	135	36	6
RDS30035-1	3.5	127	133	166	36	6
RDS30040-1	4.0	127	133	166	36	6
RDS30045-1	4.5	162	169	210	36	6
RDS30048-1	4.8	162	169	210	36	6
RDS30050-1	5.0	162	169	210	36	6
RDS30055-1	5.5	178	187	230	36	6
RDS30060-1	6.0	195	204	245	36	6
RDS30065-1	6.5	217	228	268	36	8
RDS30068-1	6.8	217	228	268	36	8
RDS30070-1	7.0	217	228	268	36	8
RDS30074-1	7.4	244	256	294	36	8
RDS30080-1	8.0	244	256	294	36	8
RDS30085-1	8.5	273	287	330	40	10
RDS30090-1	9.0	273	287	330	40	10
RDS30100-1	10.0	305	320	364	40	10
RDS30102-1	10.2	335	352	401	45	12
RDS30110-1	11.0	335	352	401	45	12
RDS30120-1	12.0	364	382	430	45	12

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RDS Series

Deep-hole drills, through-coolant

WC CARBIDE	h7 DIA. TOL.
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Workpiece groups

40D HOLE DEPTH

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS40030-1	3.00	134	139	180	36	6
RDS40035-1	3.50	150	156	198	36	6
RDS40040-1	4.00	168	174	215	36	6
RDS40045-1	4.50	188	195	236	36	6
RDS40048-1	4.80	209	217	258	36	6
RDS40050-1	5.00	209	217	258	36	6
RDS40055-1	5.50	248	257	300	36	6
RDS40058-1	5.80	248	257	300	36	6
RDS40060-1	6.00	248	257	300	36	6
RDS40061-1	6.10	272	282	324	36	8
RDS40065-1	6.50	272	282	324	36	8
RDS40068-1	6.80	287	298	339	36	8
RDS40070-1	7.00	287	298	339	36	8
RDS40075-1	7.50	313	325	366	36	8
RDS40080-1	8.00	330	342	382	36	8
RDS40085-1	8.50	356	369	415	40	10
RDS40090-1	9.00	371	385	430	40	10
RDS40095-1	9.50	418	433	477	40	10
RDS40100-1	10.00	418	433	477	40	10
RDS40105-1	10.50	460	477	528	45	12
RDS40110-1	11.00	460	477	528	45	12

50D HOLE DEPTH

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RDS50030-1	3.00	166	171	215	36	6
RDS50035-1	3.50	186	192	235	36	6
RDS50040-1	4.00	208	214	255	36	6
RDS50045-1	4.50	233	240	283	36	6
RDS50048-1	4.80	259	267	310	36	6
RDS50050-1	5.00	259	267	310	36	6
RDS50055-1	5.50	308	317	358	36	6
RDS50060-1	6.00	308	317	358	36	6
RDS50061-1	6.10	337	347	389	36	8
RDS50065-1	6.50	337	347	389	36	8
RDS50068-1	6.80	357	368	409	36	8
RDS50070-1	7.00	357	368	409	36	8
RDS50074-1	7.40	388	400	441	36	8
RDS50075-1	7.50	388	400	441	36	8
RDS50080-1	8.00	410	422	462	36	8
RDS50083-1	8.30	441	454	500	40	10
RDS50085-1	8.50	441	454	500	40	10
RDS50090-1	9.00	466	480	525	40	10

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RNT · RNS Series

Solid carbide micro drills, external or through-coolant



From Ø0.10 mm

Micro drills from Ø0.10 mm for small parts.

Through-coolant

Through-coolant micro drills from Ø0.6 mm.

Deep micro holes

Lengths up to 30xD in the RNS series.

Ø0.10

smallest diameter, mm

h7

diameter tolerance

3 · 4 mm

shank diameters

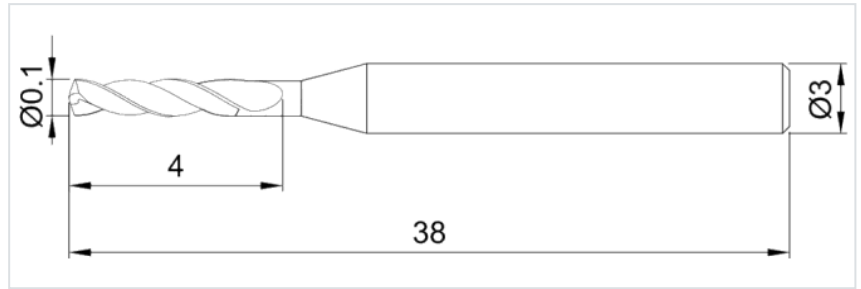
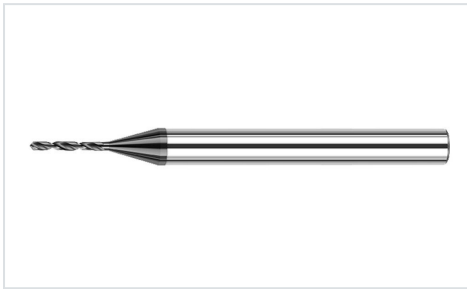
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external / through-coolant

RNT Series

Micro drills, external coolant

WC	h7
CARBIDE	DIA. TOL.



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Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RNT05010-3-0	0.10	4	38	3
RNT05020-3-0	0.20	4	38	3
RNT05030-3-0	0.30	4	38	3
RNT05040-3-0	0.40	4	38	3
RNT05050-3-0	0.50	5	38	3
RNT05060-3-0	0.60	5	38	3
RNT05070-3-0	0.70	5	38	3
RNT05080-3-0	0.80	5	38	3
RNT05090-3-0	0.90	5	38	3
RNT05100-3-0	1.00	6	38	3
RNT05110-3-0	1.10	6	38	3
RNT05120-3-0	1.20	6	38	3
RNT05130-3-0	1.30	8	38	3
RNT05140-3-0	1.40	8	38	3
RNT05150-3-0	1.50	8	38	3

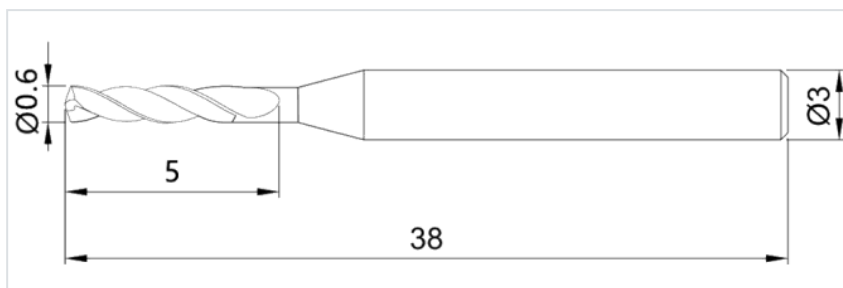
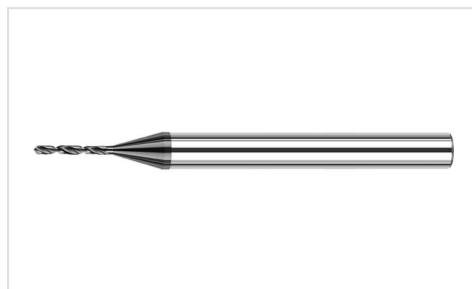
ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RNT05160-3-0	1.60	8	38	3
RNT05170-3-0	1.70	8	38	3
RNT05180-3-0	1.80	8	38	3
RNT05190-3-0	1.90	8	38	3
RNT05200-3-0	2.00	8	38	3
RNT05210-3-0	2.10	10	38	3
RNT05220-3-0	2.20	10	38	3
RNT05230-3-0	2.30	10	38	3
RNT05240-3-0	2.40	10	38	3
RNT05250-3-0	2.50	10	38	3
RNT05260-3-0	2.60	10	38	3
RNT05270-3-0	2.70	10	38	3
RNT05280-3-0	2.80	10	38	3
RNT05290-3-0	2.90	10	38	3

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RNT Series

Micro drills, through-coolant

WC CARBIDE	h7 DIA. TOL.
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P
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H
O
Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RNT05060-3-1	0.60	5	38	3
RNT05070-3-1	0.70	5	38	3
RNT05080-3-1	0.80	5	38	3
RNT05090-3-1	0.90	5	38	3
RNT05100-3-1	1.00	6	38	3
RNT05110-3-1	1.10	6	38	3
RNT05120-3-1	1.20	6	38	3
RNT05130-3-1	1.30	8	38	3
RNT05140-3-1	1.40	8	38	3
RNT05150-3-1	1.50	8	38	3
RNT05160-3-1	1.60	8	38	3
RNT05170-3-1	1.70	8	38	3

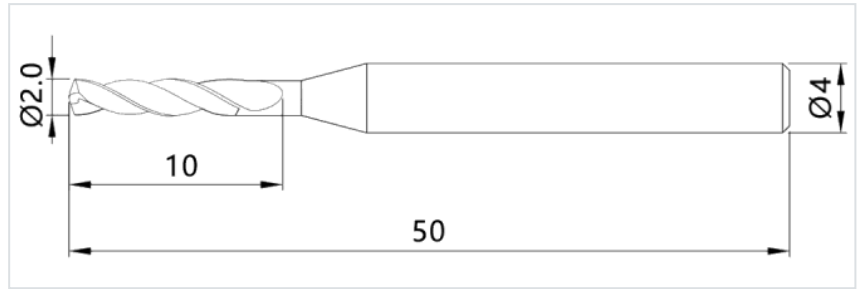
ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RNT05180-3-1	1.80	8	38	3
RNT05190-3-1	1.90	8	38	3
RNT05200-3-1	2.00	8	38	3
RNT05210-3-1	2.10	10	38	3
RNT05220-3-1	2.20	10	38	3
RNT05230-3-1	2.30	10	38	3
RNT05240-3-1	2.40	10	38	3
RNT05250-3-1	2.50	10	38	3
RNT05260-3-1	2.60	10	38	3
RNT05270-3-1	2.70	10	38	3
RNT05280-3-1	2.80	10	38	3
RNT05290-3-1	2.90	10	38	3

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RNT Series

Micro drills, external coolant

WC CARBIDE	h7 DIA. TOL.
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Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RNT05200-4-0	2.00	10	50	4
RNT05210-4-0	2.10	12	50	4
RNT05220-4-0	2.20	12	50	4
RNT05230-4-0	2.30	14	50	4
RNT05240-4-0	2.40	14	50	4
RNT05250-4-0	2.50	15	50	4
RNT05260-4-0	2.60	15	50	4
RNT05270-4-0	2.70	16	50	4
RNT05280-4-0	2.80	17	50	4
RNT05290-4-0	2.90	17	50	4
RNT05300-4-0	3.00	18	50	4

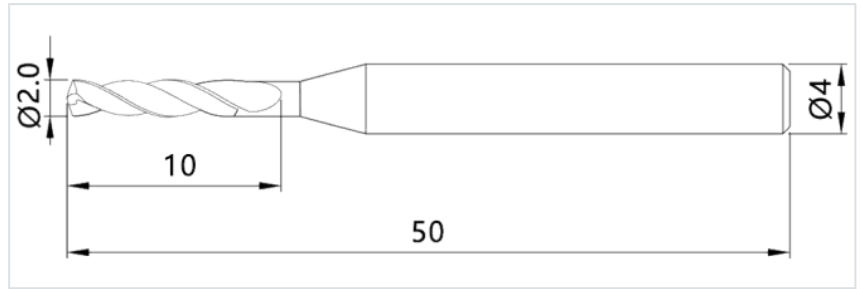
ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RNT05310-4-0	3.10	18	50	4
RNT05320-4-0	3.20	18	50	4
RNT05330-4-0	3.30	18	50	4
RNT05340-4-0	3.40	18	50	4
RNT05350-4-0	3.50	18	50	4
RNT05360-4-0	3.60	20	50	4
RNT05370-4-0	3.70	20	50	4
RNT05380-4-0	3.80	20	50	4
RNT05390-4-0	3.90	20	50	4
RNT05400-4-0	4.00	20	50	4

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RNT Series

Micro drills, through-coolant

WC CARBIDE	h7 DIA. TOL.
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P
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O
Workpiece groups

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RNT05200-4-1	2.00	10	50	4
RNT05210-4-1	2.10	12	50	4
RNT05220-4-1	2.20	12	50	4
RNT05230-4-1	2.30	14	50	4
RNT05240-4-1	2.40	14	50	4
RNT05250-4-1	2.50	15	50	4
RNT05260-4-1	2.60	15	50	4
RNT05270-4-1	2.70	16	50	4
RNT05280-4-1	2.80	17	50	4
RNT05290-4-1	2.90	17	50	4
RNT05300-4-1	3.00	18	50	4

ORDER CODE	DIA. d	FLUTE L2	OAL L4	SHANK D
RNT05310-4-1	3.10	18	50	4
RNT05320-4-1	3.20	18	50	4
RNT05330-4-1	3.30	18	50	4
RNT05340-4-1	3.40	18	50	4
RNT05350-4-1	3.50	18	50	4
RNT05360-4-1	3.60	20	50	4
RNT05370-4-1	3.70	20	50	4
RNT05380-4-1	3.80	20	50	4
RNT05390-4-1	3.90	20	50	4
RNT05400-4-1	4.00	20	50	4

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RNS Series

Deep micro drills, through-coolant

WC

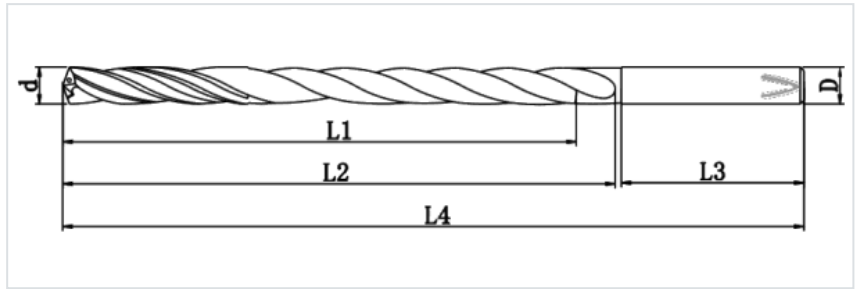
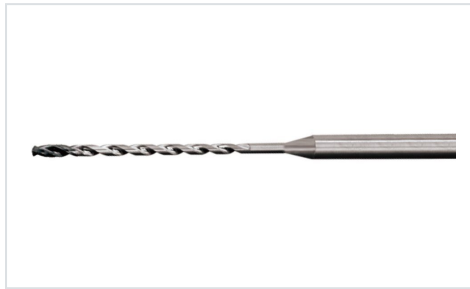
CARBIDE

h7

DIA. TOL.

8xD

DEPTH



8D HOLE DEPTH

P
M
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O
Workpiece groups

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RNS080060-1	0.60	8	10	50	25	3
RNS080070-1	0.70	8	10	50	25	3
RNS080075-1	0.75	8.5	10	50	25	3
RNS080080-1	0.80	8.5	10	50	25	3
RNS080088-1	0.88	8.5	10	50	25	3
RNS080090-1	0.90	8.5	10	50	25	3
RNS080095-1	0.95	8.5	10	50	25	3
RNS080100-1	1.00	12	15	55	36	3
RNS080105-1	1.05	12	15	55	36	3
RNS080108-1	1.08	12	15	55	36	3
RNS080110-1	1.10	12	15	55	36	3
RNS080115-1	1.15	12	15	55	36	3
RNS080120-1	1.20	12	15	55	36	3
RNS080125-1	1.25	12	15	55	36	3
RNS080130-1	1.30	12	15	55	36	3
RNS080135-1	1.35	12	15	55	36	3
RNS080140-1	1.40	12	15	55	36	3
RNS080145-1	1.45	12	15	55	36	3
RNS080150-1	1.50	17	20	68	36	3
RNS080155-1	1.55	17	20	68	36	3
RNS080160-1	1.60	17	20	68	36	3
RNS080165-1	1.65	17	20	68	36	3
RNS080170-1	1.70	17	20	68	36	3
RNS080175-1	1.75	17	20	68	36	3
RNS080180-1	1.80	17	20	68	36	3
RNS080182-1	1.82	17	20	68	36	3
RNS080185-1	1.85	17	20	68	36	3
RNS080190-1	1.90	17	20	68	36	3
RNS080195-1	1.95	17	20	68	36	3
RNS080200-1	2.00	20	23	63	36	3

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RNS080205-1	2.05	20	24	63	36	3
RNS080210-1	2.10	20	24	63	36	3
RNS080215-1	2.15	21	25	63	36	3
RNS080220-1	2.20	21	25	63	36	3
RNS080225-1	2.25	22	26	67	36	3
RNS080230-1	2.30	22	26	67	36	3
RNS080235-1	2.35	24	28	67	36	3
RNS080240-1	2.40	24	28	67	36	3
RNS080245-1	2.45	25	29	67	36	3
RNS080250-1	2.50	25	29	67	36	3
RNS080255-1	2.55	26	30	71	36	3
RNS080260-1	2.60	26	30	71	36	3
RNS080265-1	2.65	26	31	71	36	3
RNS080270-1	2.70	26	31	71	36	3
RNS080275-1	2.75	27	32	71	36	3
RNS080280-1	2.80	27	32	71	36	3
RNS080285-1	2.85	28	33	71	36	3
RNS080290-1	2.90	28	33	71	36	3
RNS080295-1	2.95	29	34	71	36	3

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RNS Series

Deep micro drills, through-coolant

WC

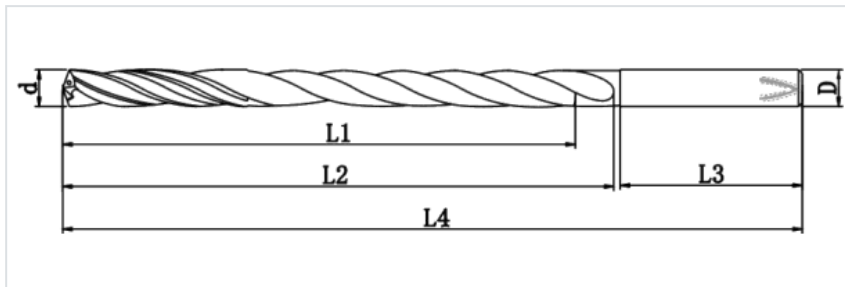
CARBIDE

h7

DIA. TOL.

12xD

DEPTH



12D HOLE DEPTH

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RNS1200060-1	0.60	10	13	50	25	3
RNS1200070-1	0.70	10	13	50	25	3
RNS1200080-1	0.80	13	16	50	25	3
RNS1200090-1	0.90	13	16	50	25	3
RNS1200100-1	1.00	15	18	50	25	3
RNS1200110-1	1.10	15	18	50	26	3
RNS1200120-1	1.20	18	21	55	26	3
RNS1200130-1	1.30	18	21	55	26	3
RNS1200140-1	1.40	18	21	55	26	3
RNS1200150-1	1.50	22	25	65	33	3
RNS1200160-1	1.60	22	25	65	33	3
RNS1200170-1	1.70	25	28	68	33	3

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Workpiece groups

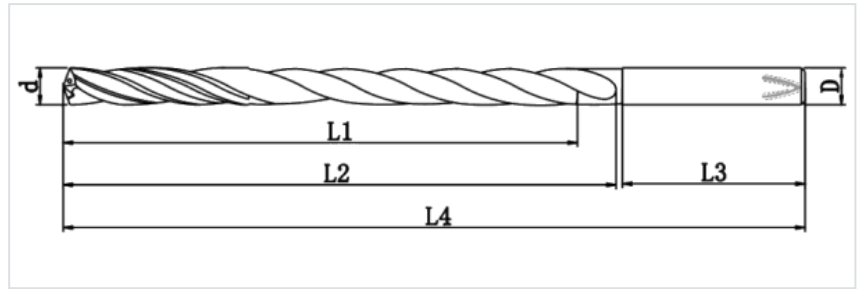
ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RNS1200180-1	1.80	25	28	68	36	3
RNS1200190-1	1.90	25	28	68	36	3
RNS1200210-1	2.10	29	33	72	36	3
RNS1200220-1	2.20	30	34	72	36	3
RNS1200230-1	2.30	32	36	77	36	3
RNS1200240-1	2.40	33	37	77	36	3
RNS1200250-1	2.50	35	39	77	36	3
RNS1200260-1	2.60	36	40	83	36	3
RNS1200270-1	2.70	37	42	83	36	3
RNS1200280-1	2.80	38	43	83	36	3
RNS1200290-1	2.90	40	45	83	36	3

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RNS Series

Deep micro drills, through-coolant

WC CARBIDE	h7 DIA. TOL.
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Workpiece groups

16D HOLE DEPTH

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RNS1600060-1	0.60	13	16	60	36	3
RNS1600070-1	0.70	13	16	60	36	3
RNS1600080-1	0.80	17	20	65	36	3
RNS1600090-1	0.90	17	20	65	36	3
RNS1600100-1	1.00	20	23	65	36	3
RNS1600100-1	1.00	20	23	65	36	3
RNS1600110-1	1.10	20	23	65	36	3
RNS1600120-1	1.20	24	27	70	36	3
RNS1600130-1	1.30	24	27	70	36	3
RNS1600140-1	1.40	24	27	70	36	3
RNS1600150-1	1.50	28	31	75	36	3
RNS1600160-1	1.60	28	31	75	36	3
RNS1600170-1	1.70	32	35	75	36	3
RNS1600180-1	1.80	32	35	75	36	3
RNS1600200-1	2.00	36	39	81	36	3
RNS1600210-1	2.10	37	41	81	36	3
RNS1600220-1	2.20	39	43	81	36	3
RNS1600230-1	2.30	39	45	87	36	3
RNS1600240-1	2.40	43	47	87	36	3
RNS1600250-1	2.50	45	49	87	36	3
RNS1600260-1	2.60	47	51	95	36	3
RNS1600270-1	2.70	48	53	95	36	3
RNS1600280-1	2.80	50	55	95	36	3
RNS1600290-1	2.90	52	57	95	36	3

20D HOLE DEPTH

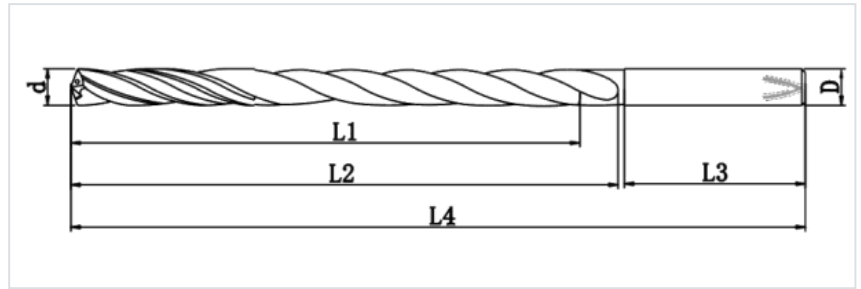
ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RNS2000060-1	0.60	16	19	60	36	3
RNS2000070-1	0.70	16	19	60	36	3
RNS2000080-1	0.80	20	23	65	36	3
RNS2000090-1	0.90	20	23	65	36	3
RNS2000100-1	1.00	24	27	70	36	3
RNS2000110-1	1.10	24	27	70	36	3
RNS2000120-1	1.20	28	30	70	36	3
RNS2000130-1	1.30	28	30	70	36	3
RNS2000140-1	1.40	28	30	70	36	3
RNS2000150-1	1.50	34	37	80	36	3
RNS2000160-1	1.60	34	37	80	36	3
RNS2000170-1	1.70	40	43	85	36	3
RNS2000180-1	1.80	40	43	85	36	3
RNS2000190-1	1.90	40	43	85	36	3
RNS2000200-1	2.00	44	47	90	36	3
RNS2000210-1	2.10	45	49	90	36	3
RNS2000220-1	2.20	48	52	90	36	3
RNS2000230-1	2.30	50	54	97	36	3
RNS2000240-1	2.40	52	56	97	36	3
RNS2000250-1	2.50	55	59	97	36	3
RNS2000260-1	2.60	57	61	107	36	3
RNS2000270-1	2.70	58	63	107	36	3
RNS2000280-1	2.80	61	66	107	36	3
RNS2000290-1	2.90	63	68	107	36	3

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

RNS Series

Deep micro drills, through-coolant

WC CARBIDE	h7 DIA. TOL.
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Workpiece groups

25D HOLE DEPTH

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RNS2500060-1	0.60	20	23	65	36	3
RNS2500070-1	0.70	20	23	65	36	3
RNS2500080-1	0.80	25	28	70	36	3
RNS2500090-1	0.90	25	28	70	36	3
RNS2500100-1	1.00	30	33	75	36	3
RNS2500110-1	1.10	35	38	75	36	3
RNS2500120-1	1.20	35	38	75	36	3
RNS2500130-1	1.30	37	40	80	36	3
RNS2500140-1	1.40	37	40	80	36	3
RNS2500150-1	1.50	43	46	85	36	3
RNS2500160-1	1.60	43	46	85	36	3
RNS2500170-1	1.70	50	53	95	36	3
RNS2500180-1	1.80	50	53	95	36	3
RNS2500190-1	1.90	50	53	95	36	3
RNS2500200-1	2.00	54	57	101	36	3
RNS2500210-1	2.10	56	60	101	36	3
RNS2500220-1	2.20	59	63	101	36	3
RNS2500230-1	2.30	62	66	107	36	3
RNS2500240-1	2.40	64	68	107	36	3
RNS2500250-1	2.50	67	71	107	36	3
RNS2500260-1	2.60	70	74	122	36	3
RNS2500270-1	2.70	72	77	122	36	3
RNS2500280-1	2.80	75	80	122	36	3
RNS2500290-1	2.90	78	83	122	36	3

30D HOLE DEPTH

ORDER CODE	DIA. d	DEPTH L1	FLUTE L2	OAL L4	SHANK L3	SHANK D
RNS3000060-1	0.60	23	26	65	36	3
RNS3000070-1	0.70	23	26	65	36	3
RNS3000080-1	0.80	30	33	75	36	3
RNS3000090-1	0.90	30	33	75	36	3
RNS3000100-1	1.00	35	38	85	36	3
RNS3000110-1	1.10	35	38	85	36	3
RNS3000120-1	1.20	40	43	85	36	3
RNS3000130-1	1.30	40	43	85	36	3
RNS3000140-1	1.40	47	50	90	36	3
RNS3000150-1	1.50	47	50	90	36	3
RNS3000160-1	1.60	55	58	100	36	3
RNS3000170-1	1.70	55	58	100	36	3
RNS3000180-1	1.80	60	63	105	36	3
RNS3000190-1	1.90	60	63	105	36	3
RNS3000200-1	2.00	64	67	112	36	3
RNS3000210-1	2.10	66	70	112	36	3
RNS3000220-1	2.20	70	74	112	36	3
RNS3000230-1	2.30	73	77	122	36	3
RNS3000240-1	2.40	76	80	122	36	3
RNS3000250-1	2.50	80	84	122	36	3
RNS3000260-1	2.60	83	87	136	36	3
RNS3000270-1	2.70	85	90	136	36	3
RNS3000280-1	2.80	89	94	136	36	3
RNS3000290-1	2.90	92	97	136	36	3

Dimensions in mm. Intermediate diameters, other lengths, step drills and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Replaceable-tip Drills

Steel drill bodies with exchangeable carbide tips. Replace only the worn tip, not the whole drill. Side-locking, two-screw and rear-locking systems from Ø8 to Ø52 mm.



TPD

Side-locking tips, Ø8–32.9 mm, 3xD to 8xD

SMD

Two-screw tips, Ø12–32 mm, 1.5xD to 12xD

KS

Rear-locking tips, Ø12.5–52 mm, 3xD to 12xD

TPD Series

Side-locking replaceable-tip drills



One body, many sizes

Each body takes tips over a 0.5–1 mm diameter band in 0.1 mm steps.

Side screw lock

The tip is clamped in the body by a side screw.

Applications

Moulds, automotive parts, construction and mining machinery components.

Ø8–32.9

tip diameter range, mm

0.1 mm

tip diameter step

3 · 5 · 8xD

body lengths

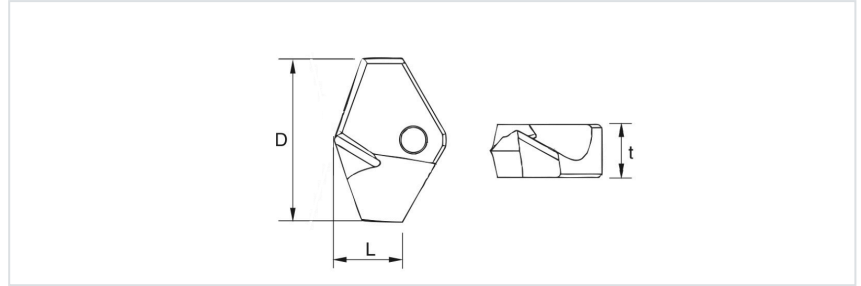
d1 16–32

shank diameter, mm

TPD Drill Tips

Side-locking carbide tips, Ø8.0–32.9 mm

WC	0.1
CARBIDE	STEP, MM



TIP CODE	DIA. D	LENGTH L	THICK. t	DIA. RANGE D	SCREW	WRENCH	TORQUE N·m
TPD080B-109B	8.0–10.9	5.5	3.5	8.0–12.9	FTNB0209	TW06P	0.4
TPD110B-119B	11.0–11.9	5.8	3.5	13.0–14.9	FTNB02512	TW07S	0.8
TPD120B-129B	12.0–12.9	6.3	3.5	15.0–17.9	FTNB02514	TW07S	0.8
TPD130B-139B	13.0–13.9	6.5	4.0	18.0–19.9	FTNB0316	TW09S	1.2
TPD140B-149B	14.0–14.9	6.8	4.0	20.0–23.9	FTNB0319	TW09S	1.2
TPD150B-159B	15.0–15.9	7.0	4.0	24.0–25.9	FTNB03522	TW15S	3
TPD160B-169B	16.0–16.9	7.7	5.5	26.0–27.9	FTNB03524	TW15S	3
TPD170B-179B	17.0–17.9	7.9	5.5	28.0–29.9	FTNB0426	TW15S	3
TPD180B-189B	18.0–18.9	8.1	6.0	30.0–32.9	FTNB0528	TW20-100	4
TPD190B-199B	19.0–19.9	8.3	6.0				
TPD200B-209B	20.0–20.9	9.7	6.5				
TPD210B-219B	21.0–21.9	9.4	6.5				
TPD220B-229B	22.0–22.9	9.6	7.0				
TPD230B-239B	23.0–23.9	9.8	7.0				
TPD240B-249B	24.0–24.9	10.7	7.5				
TPD250B-259B	25.0–25.9	10.9	7.5				
TPD260B-269B	26.0–26.9	11.0	8.5				
TPD270B-279B	27.0–27.9	11.8	8.5				
TPD280B-289B	28.0–28.9	12.6	9.5				
TPD290B-299B	29.0–29.9	12.9	9.5				
TPD300B-309B	30.0–30.9	13.0	10				
TPD310B-319B	31.0–31.9	13.3	10				
TPD320B-329B	32.0–32.9	13.5	10				

ORDERING TIPS

Tip code = TPD + diameter × 10 + B. Example: Ø8.5 mm = TPD085B, Ø15.2 mm = TPD152B. Any 0.1 mm size inside each band.

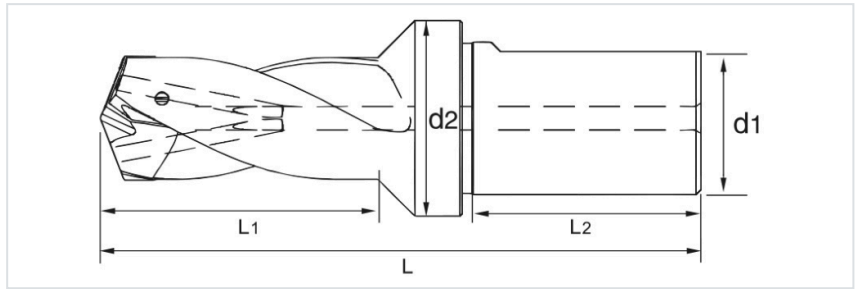
Dimensions in mm. Bodies and tips are ordered separately. Other diameters, lengths and tip geometries are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

TPD-3D Drill Bodies

Side-locking drill bodies, 3xD hole depth

3xD

DEPTH



ORDER CODE	TIP DIA. D	SHANK d1	COLLAR d2	FLUTE L1	SHANK L2	OAL L
TPD090-16A-3D	9.0–9.9	16	20	20.0	48	85
TPD100-16A-3D	10.0–10.4	16	20	30.0	48	95
TPD105-16A-3D	10.5–10.9	16	20	31.5	48	96
TPD110-16A-3D	11.0–11.4	16	20	33.0	48	98
TPD115-16A-3D	11.5–11.9	16	20	34.5	48	99
TPD120-16A-3D	12.0–12.4	16	20	36.0	48	102
TPD125-16A-3D	12.5–12.9	16	20	37.5	48	104
TPD130-16A-3D	13.0–13.4	16	20	39.0	48	107
TPD135-16A-3D	13.5–13.9	16	20	40.5	48	109
TPD140-16A-3D	14.0–14.4	16	20	42.0	48	111
TPD145-16A-3D	14.5–14.9	16	20	43.5	48	114
TPD150-20A-3D	15.0–15.4	20	25	45.0	50	118
TPD155-20A-3D	15.5–15.9	20	25	46.5	50	120
TPD160-20A-3D	16.0–16.4	20	25	48.0	50	122
TPD165-20A-3D	16.5–16.9	20	25	49.5	50	124
TPD170-20A-3D	17.0–17.4	20	25	51.0	50	127
TPD175-20A-3D	17.5–17.9	20	25	52.5	50	129
TPD180-25A-3D	18.0–18.4	25	33	54.0	56	137
TPD185-25A-3D	18.5–18.9	25	33	55.5	56	139
TPD190-25A-3D	19.0–19.4	25	33	57.0	56	142

ORDER CODE	TIP DIA. D	SHANK d1	COLLAR d2	FLUTE L1	SHANK L2	OAL L
TPD195-25A-3D	19.5–19.9	25	33	58.5	56	144
TPD200-25A-3D	20.0–20.4	25	33	60.0	56	146
TPD205-25A-3D	20.5–20.9	25	33	61.5	56	148
TPD210-25A-3D	21.0–21.4	25	33	63.0	60	151
TPD215-25A-3D	21.5–21.9	25	33	64.5	60	153
TPD220-25A-3D	22.0–22.4	25	33	66.0	60	155
TPD225-25A-3D	22.5–22.9	25	33	67.5	60	157
TPD230-25A-3D	23.0–23.4	25	33	69.0	60	160
TPD235-25A-3D	23.5–23.9	25	33	70.5	60	162
TPD240-32A-3D	24.0–24.4	32	43	72.0	60	168
TPD245-32A-3D	24.5–24.9	32	43	73.5	60	170
TPD250-32A-3D	25.0–25.4	32	43	75.0	60	173
TPD255-32A-3D	25.5–25.9	32	43	76.5	60	175
TPD260-32A-3D	26.0–26.9	32	43	78.0	60	177
TPD270-32A-3D	27.0–27.9	32	43	81.0	60	182
TPD280-32A-3D	28.0–28.9	32	43	84.0	60	186
TPD290-32A-3D	29.0–29.9	32	43	87.0	60	191
TPD300-32A-3D	30.0–30.9	32	43	90.0	60	194
TPD310-32A-3D	31.0–31.9	32	43	93.0	60	199
TPD320-32A-3D	32.0–32.9	32	43	96.0	60	201

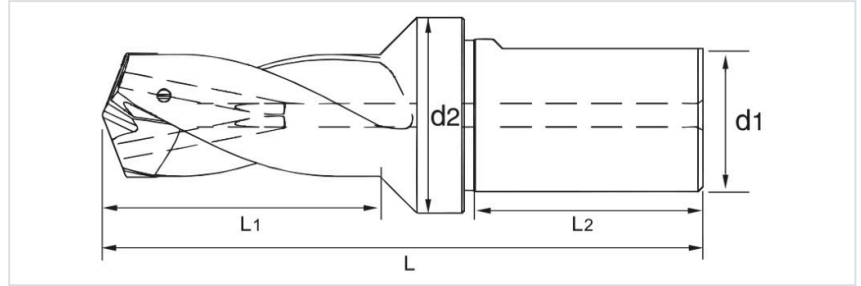
Dimensions in mm. Bodies and tips are ordered separately. Other diameters, lengths and tip geometries are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry. Each body takes the TPD tips of its D range, e.g. TPD150-20A-3D takes TPD150B–TPD154B.

TPD-5D Drill Bodies

Side-locking drill bodies, 5xD hole depth

5xD

DEPTH



ORDER CODE	TIP DIA. D	SHANK d1	COLLAR d2	FLUTE L1	SHANK L2	OAL L
TPD090-16A-5D	9.0–9.9	16	20	45.0	48	110
TPD100-16A-5D	10.0–10.4	16	20	50.0	48	115
TPD105-16A-5D	10.5–10.9	16	20	52.5	48	117
TPD110-16A-5D	11.0–11.4	16	20	55.0	48	120
TPD115-16A-5D	11.5–11.9	16	20	57.5	48	123
TPD120-16A-5D	12.0–12.4	16	20	60.0	48	126
TPD125-16A-5D	12.5–12.9	16	20	62.5	48	129
TPD130-16A-5D	13.0–13.4	16	20	65.0	48	133
TPD135-16A-5D	13.5–13.9	16	20	67.5	48	136
TPD140-16A-5D	14.0–14.4	16	20	70.0	48	139
TPD145-16A-5D	14.5–14.9	16	20	72.5	48	143
TPD150-20A-5D	15.0–15.4	20	25	75.0	50	148
TPD155-20A-5D	15.5–15.9	20	25	77.5	50	151
TPD160-20A-5D	16.0–16.4	20	25	80.0	50	154
TPD165-20A-5D	16.5–16.9	20	25	82.5	50	157
TPD170-20A-5D	17.0–17.4	20	25	85.0	50	161
TPD175-20A-5D	17.5–17.9	20	25	87.5	50	164
TPD180-25A-5D	18.0–18.4	25	33	90.0	56	173
TPD185-25A-5D	18.5–18.9	25	33	92.5	56	176
TPD190-25A-5D	19.0–19.4	25	33	95.0	56	180

ORDER CODE	TIP DIA. D	SHANK d1	COLLAR d2	FLUTE L1	SHANK L2	OAL L
TPD195-25A-5D	19.5–19.9	25	33	97.5	56	183
TPD200-25A-5D	20.0–20.4	25	33	100.0	56	186
TPD205-25A-5D	20.5–20.9	25	33	102.5	56	189
TPD210-25A-5D	21.0–21.4	25	33	105.0	60	193
TPD215-25A-5D	21.5–21.9	25	33	107.5	60	196
TPD220-25A-5D	22.0–22.4	25	33	110.0	60	199
TPD225-25A-5D	22.5–22.9	25	33	112.5	60	202
TPD230-25A-5D	23.0–23.4	25	33	115.0	60	206
TPD235-25A-5D	23.5–23.9	25	33	117.5	60	209
TPD240-32A-5D	24.0–24.4	32	43	120.0	60	216
TPD245-32A-5D	24.5–24.9	32	43	122.5	60	219
TPD250-32A-5D	25.0–25.4	32	43	125.0	60	223
TPD255-32A-5D	25.5–25.9	32	43	127.5	60	226
TPD260-32A-5D	26.0–26.9	32	43	130.0	60	229
TPD270-32A-5D	27.0–27.9	32	43	135.0	60	236
TPD280-32A-5D	28.0–28.9	32	43	140.0	60	242
TPD290-32A-5D	29.0–29.9	32	43	145.0	60	249
TPD300-32A-5D	30.0–30.9	32	43	150.0	60	254
TPD310-32A-5D	31.0–31.9	32	43	155.0	60	261
TPD320-32A-5D	32.0–32.9	32	43	160.0	60	265

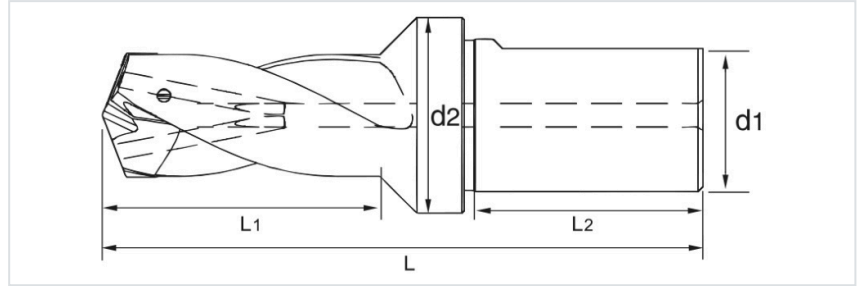
Dimensions in mm. Bodies and tips are ordered separately. Other diameters, lengths and tip geometries are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry. Each body takes the TPD tips of its D range, e.g. TPD150-20A-5D takes TPD150B–TPD154B.

TPD-8D Drill Bodies

Side-locking drill bodies, 8xD hole depth

8xD

DEPTH



ORDER CODE	TIP DIA. D	SHANK d1	COLLAR d2	FLUTE L1	SHANK L2	OAL L
TPD100-16A-8D	10.0–10.4	16	20	80	48	145.0
TPD105-16A-8D	10.5–10.9	16	20	84	48	149.0
TPD110-16A-8D	11.0–11.4	16	20	88	48	153.0
TPD115-16A-8D	11.5–11.9	16	20	92	48	157.0
TPD120-16A-8D	12.0–12.4	16	20	96	48	162.0
TPD125-16A-8D	12.5–12.9	16	20	100	48	166.5
TPD130-16A-8D	13.0–13.4	16	20	104	48	172.0
TPD135-16A-8D	13.5–13.9	16	20	108	48	176.5
TPD140-16A-8D	14.0–14.4	16	20	112	48	181.0
TPD145-16A-8D	14.5–14.9	16	20	116	48	186.5
TPD150-20A-8D	15.0–15.4	20	25	120	50	193.0
TPD155-20A-8D	15.5–15.9	20	25	124	50	197.5
TPD160-20A-8D	16.0–16.4	20	25	128	50	202.0
TPD165-20A-8D	16.5–16.9	20	25	132	50	206.5
TPD170-20A-8D	17.0–17.4	20	25	136	50	212.0
TPD175-20A-8D	17.5–17.9	20	25	140	50	216.5
TPD180-25A-8D	18.0–18.4	25	33	144	56	227.0
TPD185-25A-8D	18.5–18.9	25	33	148	56	231.5
TPD190-25A-8D	19.0–19.4	25	33	152	56	237.0
TPD195-25A-8D	19.5–19.9	25	33	156	56	241.5

ORDER CODE	TIP DIA. D	SHANK d1	COLLAR d2	FLUTE L1	SHANK L2	OAL L
TPD200-25A-8D	20.0–20.4	25	33	160	56	246.0
TPD205-25A-8D	20.5–20.9	25	33	164	56	250.5
TPD210-25A-8D	21.0–21.4	25	33	168	60	256.0
TPD215-25A-8D	21.5–21.9	25	33	172	60	260.5
TPD220-25A-8D	22.0–22.4	25	33	176	60	265.0
TPD225-25A-8D	22.5–22.9	25	33	180	60	269.5
TPD230-25A-8D	23.0–23.4	25	33	184	60	275.0
TPD235-25A-8D	23.5–23.9	25	33	188	60	279.5
TPD240-32A-8D	24.0–24.4	32	43	192	60	288.0
TPD245-32A-8D	24.5–24.9	32	43	196	60	292.5
TPD250-32A-8D	25.0–25.4	32	43	200	60	298.0
TPD255-32A-8D	25.5–25.9	32	43	204	60	302.5
TPD260-32A-8D	26.0–26.9	32	43	208	60	307.0
TPD270-32A-8D	27.0–27.9	32	43	216	60	317.0
TPD280-32A-8D	28.0–28.9	32	43	224	60	326.0
TPD290-32A-8D	29.0–29.9	32	43	232	60	336.0
TPD300-32A-8D	30.0–30.9	32	43	240	60	344.0
TPD310-32A-8D	31.0–31.9	32	43	248	60	354.0
TPD320-32A-8D	32.0–32.9	32	43	256	60	361.0

Dimensions in mm. Bodies and tips are ordered separately. Other diameters, lengths and tip geometries are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry. Each body takes the TPD tips of its D range, e.g. TPD150-20A-8D takes TPD150B–TPD154B.

SMD Series

Replaceable-tip drills with two-screw tip clamping



Two tip types

SMDT tips for hard materials, TCEA tips for soft materials.

Accurate seating

Runout at both ends 0–0.02 mm after the tip is mounted and checked.

Long reach

Bodies from 1.5xD to 12xD hole depth.

Ø12–32

body range, mm

1.5xD–12xD

hole depths

h7

tip diameter tolerance

16–32

shank D1, mm

SMD Drill Bodies

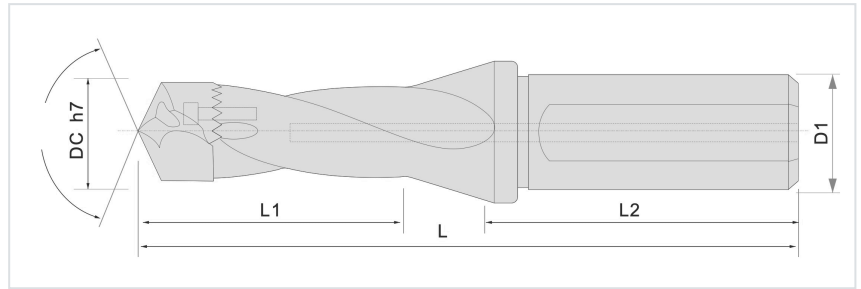
Two-screw replaceable-tip drill bodies

h7

TIP DC

1.5-12

XD



TIP SIZE DC	DEPTH L/D	ORDER CODE	DRILL. L1	OAL L	SHANK D1	SHANK L2
12.0-12.4	1.5D	SMD-1.5D-028-C16(12.0)	28	91	16	48
	3D	SMD-3D-046-C16(12.0)	46	107	16	48
	5D	SMD-5D-071-C16(12.0)	71	132	16	48
12.5-12.9	1.5D	SMD-1.5D-028-C16(13.0)	28	91	16	48
	3D	SMD-3D-046-C16(13.0)	46	107	16	48
	5D	SMD-5D-071-C16(13.0)	71	132	16	48
13.0-13.4	1.5D	SMD-1.5D-030-C16	30	92	16	48
	3D	SMD-3D-049-C16	49	112	16	48
	5D	SMD-5D-076-C16	76	142	16	48
13.5-14.5	1.5D	SMD-1.5D-034-C16	34	96	16	48
	3D	SMD-3D-055-C16	55	119	16	48
	5D	SMD-5D-084-C16	84	149	16	48
	8D	SMD-8D-127-C16	127	194	16	48
	12D	SMD-12D-171-C16	171	239	16	48
14.6-15.5	1.5D	SMD-1.5D-035-C20	35	100	20	50
	3D	SMD-3D-058-C20	58	129	20	50
	5D	SMD-5D-089-C20	89	159	20	50
	8D	SMD-8D-136-C20	136	204	20	50
	12D	SMD-12D-183-C20	183	253	20	50
15.6-16.5	1.5D	SMD-1.5D-038-C20	38	103	20	50
	3D	SMD-3D-062-C20	62	134	20	50
	5D	SMD-5D-095-C20	95	169	20	50
	8D	SMD-8D-144-C20	144	214	20	50
	12D	SMD-12D-195-C20	195	266	20	50
16.6-17.5	1.5D	SMD-1.5D-039-C20	39	105	20	50
	3D	SMD-3D-066-C20	66	140	20	50
	5D	SMD-5D-101-C20	101	175	20	50
	8D	SMD-8D-154-C20	154	225	20	50
	12D	SMD-12D-207-C20	207	278	20	50
17.6-18.5	1.5D	SMD-1.5D-043-C20	43	107	20	50
	3D	SMD-3D-070-C20	70	145	20	50
	5D	SMD-5D-107-C20	107	180	20	50
	8D	SMD-8D-162-C20	162	230	20	50
	12D	SMD-12D-219-C20	219	291	20	50

TIP SIZE DC	DEPTH L/D	ORDER CODE	DRILL. L1	OAL L	SHANK D1	SHANK L2
18.6-19.5	1.5D	SMD-1.5D-044-C25	44	115	25	56
	3D	SMD-3D-073-C25	73	160	25	56
	5D	SMD-5D-112-C25	112	195	25	56
	8D	SMD-8D-171-C25	171	255	25	56
19.6-20.5	1.5D	SMD-1.5D-047-C25	47	118	25	56
	3D	SMD-3D-077-C25	77	160	25	56
	5D	SMD-5D-118-C25	118	200	25	56
	8D	SMD-8D-179-C25	179	270	25	56
20.6-21.5	1.5D	SMD-1.5D-048-C25	48	119	25	56
	3D	SMD-3D-080-C25	80	160	25	56
	5D	SMD-5D-123-C25	123	200	25	56
	8D	SMD-8D-188-C25	188	266	25	56
21.6-22.8	1.5D	SMD-1.5D-051-C25	51	124	25	56
	3D	SMD-3D-084-C25	84	165	25	56
	5D	SMD-5D-129-C25	129	205	25	56
	8D	SMD-8D-196-C25	196	275	25	56
22.9-23.8	1.5D	SMD-1.5D-051-C25	51	122	25	56
	3D	SMD-3D-087-C25	87	165	25	56
	5D	SMD-5D-134-C25	134	215	25	56
	8D	SMD-8D-205-C25	205	285	25	56
23.9-24.8	1.5D	SMD-1.5D-054-C32	54	129	32	60
	3D	SMD-3D-091-C32	91	175	32	60
	5D	SMD-5D-140-C32	140	225	32	60
	8D	SMD-8D-213-C32	213	300	32	60
	12D	SMD-12D-292-C32	292	376	32	60

Dimensions in mm. Bodies and tips are ordered separately. Other diameters, lengths and tip geometries are made to order from 5 pieces, 15-30 working days. Stock varies by code; please confirm on inquiry.

SMD Drill Bodies

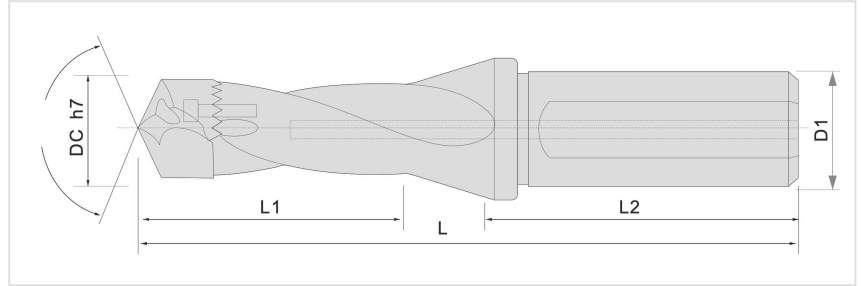
Two-screw replaceable-tip drill bodies

h7

TIP DC

1.5-12

XD



TIP SIZE DC	DEPTH L/D	ORDER CODE	DRILL. L1	OAL L	SHANK D1	SHANK L2
24.9-25.8	1.5D	SMD-1.5D-054-C32	54	129	32	60
	3D	SMD-3D-093-C32	93	175	32	60
	5D	SMD-5D-145-C32	145	230	32	60
	8D	SMD-8D-222-C32	222	305	32	60
	12D	SMD-12D-305-C32	305	388	32	60
25.9-26.8	1.5D	SMD-1.5D-057-C32	57	132	32	60
	3D	SMD-3D-097-C32	97	180	32	60
	5D	SMD-5D-151-C32	151	235	32	60
	8D	SMD-8D-230-C32	230	315	32	60
26.9-27.8	1.5D	SMD-1.5D-058-C32	58	133	32	60
	3D	SMD-3D-099-C32	99	180	32	60
	5D	SMD-5D-156-C32	156	240	32	60
	8D	SMD-8D-239-C32	239	325	32	60
27.9-28.8	1.5D	SMD-1.5D-060-C32	60	135	32	60
	3D	SMD-3D-102-C32	102	185	32	60
	5D	SMD-5D-162-C32	162	245	32	60
	8D	SMD-8D-247-C32	247	330	32	60
28.9-29.8	1.5D	SMD-1.5D-061-C32	61	136	32	60
	3D	SMD-3D-105-C32	105	190	32	60
	5D	SMD-5D-167-C32	167	250	32	60
	8D	SMD-8D-256-C32	256	340	32	60
29.9-30.8	1.5D	SMD-1.5D-064-C32	64	139	32	60
	3D	SMD-3D-110-C32	110	191	32	60
	5D	SMD-5D-173-C32	173	261	32	60
	8D	SMD-8D-265-C32	265	351	32	60
31.0-32.0	3D	SMD-3D-116-C32	116	201	32	60
	5D	SMD-5D-181-C32	181	266	32	60
	8D	SMD-8D-276-C32	276	361	32	60

Dimensions in mm. Bodies and tips are ordered separately. Other diameters, lengths and tip geometries are made to order from 5 pieces, 15-30 working days. Stock varies by code; please confirm on inquiry.

SMD Drill Tips

SMDT and TCEA tips, screws and wrenches

h7

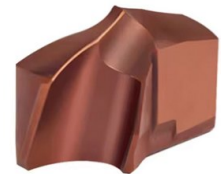
TIP DC

TIP SIZE DC	HARD MATERIALS SMDT	SOFT MATERIALS TCEA
12.0–12.5	SMDT1200 / SMDT1250	TCEA-1200 / TCEA-1250
13.0–13.5	SMDT1300 / SMDT1350	TCEA-1300 / TCEA-1350
14.0–14.5	SMDT1400 / SMDT1450	TCEA-1400 / TCEA-1450
15.0–15.5	SMDT1500 / SMDT1550	TCEA-1500 / TCEA-1550
16.0–16.5	SMDT1600 / SMDT1650	TCEA-1600 / TCEA-1650
17.0–17.5	SMDT1700 / SMDT1750	TCEA-1700 / TCEA-1750
18.0–18.5	SMDT1800 / SMDT1850	TCEA-1800 / TCEA-1850
19.0–19.5	SMDT1900 / SMDT1950	TCEA-1900 / TCEA-1950
20.0–20.5	SMDT2000 / SMDT2050	TCEA-2000 / TCEA-2050
21.0–21.5	SMDT2100 / SMDT2150	TCEA-2100 / TCEA-2150
22.0–22.5	SMDT2200 / SMDT2250	TCEA-2200 / TCEA-2250
23.0–23.5	SMDT2300 / SMDT2350	TCEA-2300 / TCEA-2350
24.0–24.5	SMDT2400 / SMDT2450	TCEA-2400 / TCEA-2450
25.0–25.5	SMDT2500 / SMDT2550	TCEA-2500 / TCEA-2550
26.0–26.5	SMDT2600 / SMDT2650	TCEA-2600 / TCEA-2650
27.0–27.5	SMDT2700 / SMDT2750	TCEA-2700 / TCEA-2750
28.0–28.5	SMDT2800 / SMDT2850	TCEA-2800 / TCEA-2850
29.0–29.5	SMDT2900 / SMDT2950	TCEA-2900 / TCEA-2950
30.0–30.5	SMDT3000 / SMDT3050	TCEA-3000 / TCEA-3050
31.0–31.5	SMDT3100 / SMDT3150	TCEA-3100 / TCEA-3150
32.0–32.5	SMDT3200 / SMDT3250	TCEA-3200
33.0–33.5	SMDT3300 / SMDT3350	—
34.0–34.5	SMDT3400 / SMDT3450	—
35.0–35.5	SMDT3500 / SMDT3550	—
36.0–36.5	SMDT3600 / SMDT3650	—
37.0–37.5	SMDT3700 / SMDT3750	—
38.0–38.5	SMDT3800 / SMDT3850	—
39.0–39.5	SMDT3900 / SMDT3950	—
40.0–40.5	SMDT4000 / SMDT4050	—
41.0	SMDT4100	—
42.0	SMDT4200	—



SMDT

hard materials



TCEA

soft materials

TIP SIZE DC	SCREW	THREAD	WRENCH
12.0–15.5	BXD02208IP	M2.2×7.5	TRDR08IP
15.6–18.5	BXD02509IP	M2.5×9.0	TRDR10IP
18.6–21.5	BXD03011IP	M3.0×10.5	TRDR15IP
21.6–24.8	BXD03512IP	M3.5×11.5	TRDR15IP
24.9–25.8	BXD04014IP	M4.0×12.4	TRDR15IP
25.9–27.8	BXD04014IP	M4.0×12.4	TRDR20IP
27.9–32.0	BXD04515IP	M4.5×15	TRDR20IP

ORDERING TIPS

Two tip codes per row: whole and half millimetre, e.g. SMDT1200 = Ø12.0, SMDT1250 = Ø12.5. Tip type for all SMD bodies: MTL / MEL.

Dimensions in mm. Bodies and tips are ordered separately. Other diameters, lengths and tip geometries are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Installing SMD tips

Five steps for a seated tip and a straight hole. Step 5 matters: retighten after the first holes.



01

Align

Align the grooves on the tip with the drill body.



02

Tighten

Tighten the two screws in sequence.



03

Check runout

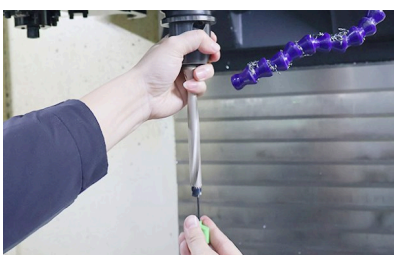
Mount in the holder and check on a tool presetter. Runout at both ends 0–0.02 mm.



04

Trial run

Use the recommended cutting data and start with a trial run of 1–3 holes.



05

Retighten

Stop the machine with the holder still installed and retighten both screws with the supplied wrench. Then continue drilling.

KS Series

Rear-locking replaceable-tip drills



Central locking screw

A central screw, turned with a long wrench from the shank end, clamps the tip.

Large diameters

Bodies from Ø12.5 to Ø52 mm, 3xD to 12xD.

Seat sizes

Each seat size takes tips over a diameter band; see the tip seat table.

Ø12.5–52

body range, mm

3xD–12xD

hole depths

h7

tip diameter tolerance

16–40

shank D, mm

KS Drill Bodies

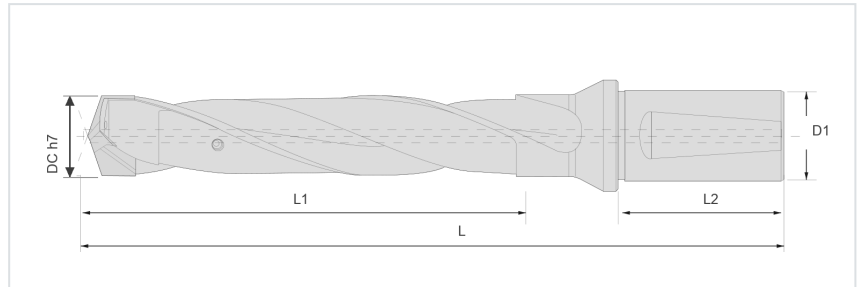
Rear-locking replaceable-tip drill bodies

h7

TIP DC

3-12

XD



TIP SIZE DC	DEPTH L/D	ORDER CODE	OAL L	FLUTE L1	SEAT	WRENCH
12.50-12.99	3D	KS-12.5-3D-C16	123	52	C	T6×180
	5D	KS-12.5-5D-C16	148	78	C	T6×180
	7D	KS-12.5-7D-C16	173	104	C	T6×290
	10D	KS-12.5-10D-C16	191	143	C	T6×290
	12D	KS-12.5-12D-C16	240	156	C	T6×291
13.00-13.50	3D	KS-13-3D-C16	125.5	54	C	T6×180
	5D	KS-13-5D-C16	151.5	81	C	T6×180
	7D	KS-13-7D-C16	177.5	108	C	T6×290
	10D	KS-13-10D-C16	216.5	148.5	C	T6×290
	12D	KS-13-12D-C16	247	162	C	T6×291
13.51-13.99	3D	KS-13.5-3D-C16	128	56	B	T6×180
	5D	KS-13.5-5D-C16	155	84	B	T6×180
	7D	KS-13.5-7D-C16	182	112	B	T6×290
	10D	KS-13.5-10D-C16	222	154	B	T6×290
	12D	KS-13.5-12D-C16	254	168	B	T6×291
14.00-14.50	3D	KS-14-3D-C16	129.5	58	B	T6×180
	5D	KS-14-5D-C16	157.5	87	B	T6×180
	7D	KS-14-7D-C16	185.5	116	B	T6×290
	10D	KS-14-10D-C16	227.5	159.5	B	T6×290
	12D	KS-14-12D-C16	261	174	B	T6×291
14.51-14.99	3D	KS-14.5-3D-C20	137	60	A	T6×180
	5D	KS-14.5-5D-C20	166	90	A	T6×180
	7D	KS-14.5-7D-C20	195	120	A	T6×290
	10D	KS-14.5-10D-C20	239	165	A	T6×290
	12D	KS-14.5-12D-C20	267	180	A	T6×291
15.00-15.99	3D	KS-15-3D-C20	141	64	A	T6×180
	5D	KS-15-5D-C20	171	96	A	T6×180
	7D	KS-15-7D-C20	201	128	A	T6×290
	10D	KS-15-10D-C20	246	176	A	T6×290
	12D	KS-15-12D-C20	281	192	A	T6×291

TIP SIZE DC	DEPTH L/D	ORDER CODE	OAL L	FLUTE L1	SEAT	WRENCH
16.00-16.99	3D	KS-16-3D-C20	149	68	1	1.5×180
	5D	KS-16-5D-C20	181	102	1	1.5×180
	7D	KS-16-7D-C20	213	136	1	1.5×330
	10D	KS-16-10D-C20	261	187	1	1.5×330
	12D	KS-16-12D-C20	294	204	1	1.5×350
17.00-18.00	3D	KS-17-3D-C20	154	72	1	1.5×180
	5D	KS-17-5D-C20	188	108	1	1.5×180
	7D	KS-17-7D-C20	222	144	1	1.5×330
	10D	KS-17-10D-C20	273	198	1	1.5×330
	12D	KS-17-12D-C20	307.5	216	1	1.5×350
18.01-18.99	3D	KS-18-3D-C25	157	76	2	2.0×210
	5D	KS-18-5D-C25	193	114	2	2.0×210
	7D	KS-18-7D-C25	229	152	2	2.0×280
	10D	KS-18-10D-C25	293	209	2	2.0×280
	12D	KS-18-12D-C25	328	228	2	2.0×410
19.00-19.99	3D	KS-19-3D-C25	171	80	2	2.0×210
	5D	KS-19-5D-C25	209	120	2	2.0×210
	7D	KS-19-7D-C25	247	160	2	2.0×280
	10D	KS-19-10D-C25	304	220	2	2.0×280
	12D	KS-19-12D-C25	341	240	2	2.0×410
20.00-20.99	3D	KS-20-3D-C25	179	84	3	2.0×210
	5D	KS-20-5D-C25	219	126	3	2.0×210
	7D	KS-20-7D-C25	259	168	3	2.0×280
	10D	KS-20-10D-C25	319	231	3	2.0×280
	12D	KS-20-12D-C25	355	252	3	2.0×410
21.00-22.00	3D	KS-21-3D-C25	179.5	88	3	2.0×210
	5D	KS-21-5D-C25	221.5	132	3	2.0×210
	7D	KS-21-7D-C25	263.5	176	3	2.0×280
	10D	KS-21-10D-C25	326.5	242	3	2.0×370
	12D	KS-21-12D-C25	368	264	3	2.0×410

Dimensions in mm. Bodies and tips are ordered separately. Other diameters, lengths and tip geometries are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry. OAL "—": length on request. Tips are ordered by diameter and seat size.

KS Drill Bodies

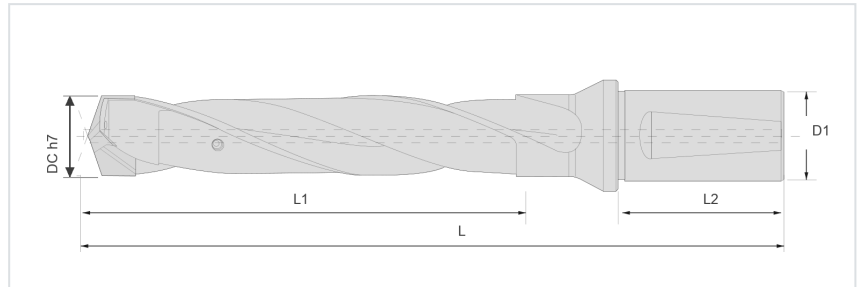
Rear-locking replaceable-tip drill bodies

h7

TIP DC

3-12

XD



TIP SIZE DC	DEPTH L/D	ORDER CODE	OAL L	FLUTE L1	SEAT	WRENCH
22.01-22.99	3D	KS-22-3D-C25	184	92	4	2.0×210
	5D	KS-22-5D-C25	228	138	4	2.0×210
	7D	KS-22-7D-C25	272	184	4	2.0×280
	10D	KS-22-10D-C25	338	253	4	2.0×370
	12D	KS-22-12D-C25	381.5	276	4	2.0×410
23.00-24.00	3D	KS-23-3D-C25	188.5	96	4	2.0×210
	5D	KS-23-5D-C25	234.5	144	4	2.0×210
	7D	KS-23-7D-C25	280.5	192	4	2.0×280
	10D	KS-23-10D-C25	349.5	264	4	2.0×370
	12D	KS-23-12D-C25	395	288	4	2.0×410
24.01-24.99	3D	KS-24-3D-C32	198	100	5	2.5×240
	5D	KS-24-5D-C32	246	150	5	2.5×240
	7D	KS-24-7D-C32	294	200	5	2.5×320
	10D	KS-24-10D-C32	366	275	5	2.5×420
	12D	KS-24-12D-C32	418	300	5	2.5×460
25.00-26.00	3D	KS-25-3D-C32	202	104	5	2.5×240
	5D	KS-25-5D-C32	252	156	5	2.5×240
	7D	KS-25-7D-C32	302	208	5	2.5×320
	10D	KS-25-10D-C32	377	286	5	2.5×420
	12D	KS-25-12D-C32	432	312	5	2.5×460
26.01-26.99	3D	KS-26-3D-C32	206.5	108	6	2.5×240
	5D	KS-26-5D-C32	258.5	162	6	2.5×240
	7D	KS-26-7D-C32	310.5	216	6	2.5×320
	10D	KS-26-10D-C32	388.5	297	6	2.5×420
	12D	KS-26-12D-C32	445	324	6	2.5×460
27.00-28.00	3D	KS-27-3D-C32	210.5	112	6	2.5×240
	5D	KS-27-5D-C32	264.5	168	6	2.5×240
	7D	KS-27-7D-C32	318.5	224	6	2.5×320
	10D	KS-27-10D-C32	399.5	308	6	2.5×420
	12D	KS-27-12D-C32	458.5	336	6	2.5×460

TIP SIZE DC	DEPTH L/D	ORDER CODE	OAL L	FLUTE L1	SEAT	WRENCH
28.01-28.99	3D	KS-28-3D-C32	215.5	116	7	3.0×350
	5D	KS-28-5D-C32	271.5	174	7	3.0×350
	7D	KS-28-7D-C32	327.5	232	7	3.0×450
	10D	KS-28-10D-C32	411.5	319	7	3.0×515
	12D	KS-28-12D-C32	472	348	7	3.0×530
29.00-30.00	3D	KS-29-3D-C32	219.5	120	7	3.0×350
	5D	KS-29-5D-C32	277.5	180	7	3.0×350
	7D	KS-29-7D-C32	335.5	240	7	3.0×450
	10D	KS-29-10D-C32	422.5	330	7	3.0×515
	12D	KS-29-12D-C32	485	360	7	3.0×530
30.01-30.99	3D	KS-30-3D-C32	224.5	124	8	3.0×350
	5D	KS-30-5D-C32	284.5	186	8	3.0×350
	7D	KS-30-7D-C32	344.5	248	8	3.0×450
	10D	KS-30-10D-C32	434.5	341	8	3.0×515
	12D	KS-30-12D-C32	496	372	8	3.0×530
31.00-32.00	3D	KS-31-3D-C32	229	128	8	3.0×350
	5D	KS-31-5D-C32	291	192	8	3.0×350
	7D	KS-31-7D-C32	353	256	8	3.0×450
	10D	KS-31-10D-C32	446	352	8	3.0×515
	12D	KS-31-12D-C32	508	384	8	3.0×530
32.01-32.99	3D	KS-32-3D-C40	249.5	132	9	3.0×350
	5D	KS-32-5D-C40	313.5	198	9	3.0×350
	7D	KS-32-7D-C40	377.5	264	9	3.0×450
	10D	KS-32-10D-C40	473.5	363	9	3.0×515
	12D	KS-32-12D-C40	526	396	9	3.0×600
33.00-33.99	3D	KS-33-3D-C40	257	136	9	3.0×350
	5D	KS-33-5D-C40	323	204	9	3.0×350
	7D	KS-33-7D-C40	389	272	9	3.0×450
	10D	KS-33-10D-C40	488	374	9	3.0×515
	12D	KS-33-12D-C40	538	408	9	3.0×600

Dimensions in mm. Bodies and tips are ordered separately. Other diameters, lengths and tip geometries are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry. OAL "—": length on request. Tips are ordered by diameter and seat size.

KS Drill Bodies

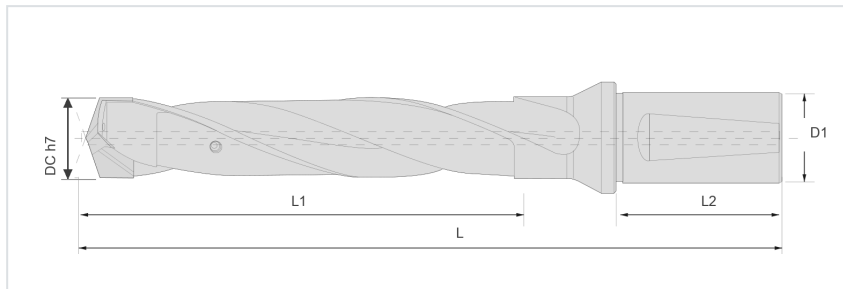
Rear-locking replaceable-tip drill bodies

h7

TIP DC

3-12

XD



TIP SIZE DC	DEPTH L/D	ORDER CODE	OAL L	FLUTE L1	SEAT	WRENCH
34.00-34.99	3D	KS-34-3D-C40	258.5	140	9	3.0×350
	5D	KS-34-5D-C40	326.5	210	9	3.0×350
	7D	KS-34-7D-C40	394.5	280	9	3.0×450
	10D	KS-34-10D-C40	496.5	385	9	3.0×515
	12D	KS-34-12D-C40	550	420	9	3.0×600
35.00-36.00	3D	KS-35-3D-C40	263.5	144	9	3.0×350
	5D	KS-35-5D-C40	333.5	216	9	3.0×350
	7D	KS-35-7D-C40	403.5	288	9	3.0×450
	10D	KS-35-10D-C40	508.5	396	9	3.0×515
	12D	KS-35-12D-C40	562	432	9	3.0×600
36.01-36.99	3D	KS-36-3D-C40	269	148	10	3.0×350
	5D	KS-36-5D-C40	341	222	10	3.0×350
	7D	KS-36-7D-C40	413	296	10	3.0×450
	10D	KS-36-10D-C40	521	407	10	3.0×515
	12D	KS-36-12D-C40	574	444	10	3.0×600
37.00-37.99	3D	KS-37-3D-C40	272.5	152	10	3.0×350
	5D	KS-37-5D-C40	346.5	228	10	3.0×350
	7D	KS-37-7D-C40	420.5	304	10	3.0×450
	10D	KS-37-10D-C40	531.5	418	10	3.0×515
	12D	KS-37-12D-C40	586	456	10	3.0×600
38.00-38.99	3D	KS-38-3D-C40	277	156	10	3.0×350
	5D	KS-38-5D-C40	353	234	10	3.0×350
	7D	KS-38-7D-C40	429	312	10	3.0×450
	10D	KS-38-10D-C40	543	429	10	3.0×515
	12D	KS-38-12D-C40	598	468	10	3.0×600
39.00-39.99	3D	KS-39-3D-C40	282	160	10	3.0×350
	5D	KS-39-5D-C40	360	240	10	3.0×350
	7D	KS-39-7D-C40	438	320	10	3.0×450
	10D	KS-39-10D-C40	555	440	10	3.0×515
	12D	KS-39-12D-C40	610	480	10	3.0×600
40.00-40.99	3D	KS-40-3D-C40	286	164	10	3.0×350
	5D	KS-40-5D-C40	366	246	10	3.0×350
	7D	KS-40-7D-C40	446	328	10	3.0×450
	10D	KS-40-10D-C40	566	451	10	3.0×600

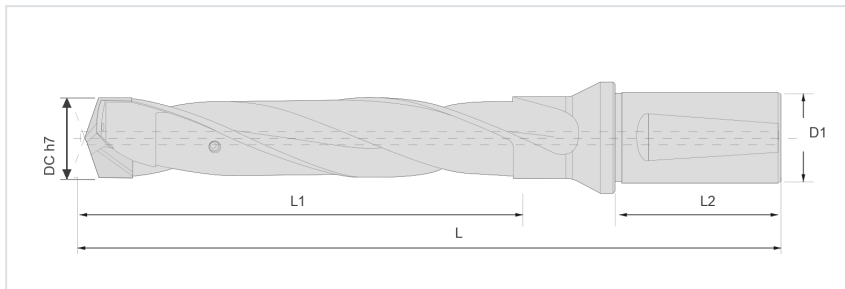
TIP SIZE DC	DEPTH L/D	ORDER CODE	OAL L	FLUTE L1	SEAT	WRENCH
41.00-41.99	3D	KS-41-3D-C40	—	168	11	3.0×350
	5D	KS-41-5D-C40	—	252	11	3.0×350
	7D	KS-41-7D-C40	—	336	11	3.0×350
	10D	KS-41-10D-C40	—	462	11	3.0×350
42.00-42.99	3D	KS-42-3D-C40	—	172	11	3.0×350
	5D	KS-42-5D-C40	—	258	11	3.0×350
	7D	KS-42-7D-C40	—	344	11	3.0×350
	10D	KS-42-10D-C40	—	473	11	3.0×350
43.00-43.99	3D	KS-43-3D-C40	—	176	11	3.0×350
	5D	KS-43-5D-C40	—	264	11	3.0×350
	7D	KS-43-7D-C40	—	352	11	3.0×350
44.00-45.00	3D	KS-44-3D-C40	—	180	11	3.0×350
	5D	KS-44-5D-C40	—	270	11	3.0×350
	7D	KS-44-7D-C40	—	360	11	3.0×350
45.01-45.99	3D	KS-45-3D-C40	—	184	12	3.0×350
	5D	KS-45-5D-C40	—	276	12	3.0×350
	7D	KS-45-7D-C40	—	368	12	3.0×350
	10D	KS-45-10D-C40	—	506	12	3.0×350
46.00-46.99	3D	KS-46-3D-C40	—	188	12	3.0×350
	5D	KS-46-5D-C40	—	282	12	3.0×350
	7D	KS-46-7D-C40	—	376	12	3.0×350
	10D	KS-46-10D-C40	—	517	12	3.0×350
47.00-47.99	3D	KS-47-3D-C40	—	192	12	3.0×350
	5D	KS-47-5D-C40	—	288	12	3.0×350
	7D	KS-47-7D-C40	—	384	12	3.0×350
48.00-48.99	3D	KS-48-3D-C40	—	196	12	3.0×350
	5D	KS-48-5D-C40	—	294	12	3.0×350
	7D	KS-48-7D-C40	—	392	12	3.0×350
	10D	KS-48-10D-C40	—	539	12	3.0×350

Dimensions in mm. Bodies and tips are ordered separately. Other diameters, lengths and tip geometries are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry. OAL "—": length on request. Tips are ordered by diameter and seat size.

KS Drill Bodies

Rear-locking replaceable-tip drill bodies

h7	3-12
TIP DC	XD

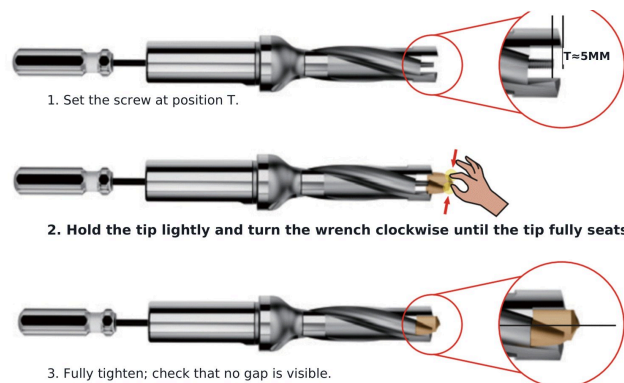


TIP SIZE DC	DEPTH L/D	ORDER CODE	OAL L	FLUTE L1	SEAT	WRENCH
49.00-49.99	3D	KS-49-3D-C40	—	200	12	3.0×350
	5D	KS-49-5D-C40	—	300	12	3.0×350
	7D	KS-49-7D-C40	—	400	12	3.0×350
	10D	KS-49-10D-C40	—	550	12	3.0×350
50.00-50.99	3D	KS-50-3D-C40	—	204	12	3.0×350
	5D	KS-50-5D-C40	—	306	12	3.0×350
	7D	KS-50-7D-C40	—	408	12	3.0×350
	10D	KS-50-10D-C40	—	561	12	3.0×350
51.00-52.00	3D	KS-51-3D-C40	—	208	12	3.0×350
	5D	KS-51-5D-C40	—	312	12	3.0×350
	7D	KS-51-7D-C40	—	416	12	3.0×350
	10D	KS-51-10D-C40	—	572	12	3.0×350

Tip seats KS TIPS

TIP DIA. D	SEAT SIZE	TIP SERIES	LOCKING SCREW
10.00-11.99	Z	HD / HP	M2.0×7.5
12.00-12.99	Y	HD / HP	M2.2×7.5
12.50-13.50	C	HD / HP	M3.0/M2.5×14
13.51-14.50	B	HD / HP	M3.0/M2.5×14
14.51-15.99	A	HD / HP	M3.0/M2.5×14
16.00-18.00	1	HD / HP	M3.5/M2.5×16
18.01-19.99	2	HD / HP	M4.0/M3.0×19
20.00-22.00	3	HD / HP	M4.0/M3.0×19
22.01-24.00	4	HD / HP	M4.0/M3.0×19
24.01-26.00	5	HD / HP	M5.0/M4.0×23
26.01-28.00	6	HD / HP	M5.0/M4.0×23
28.01-30.00	7	HD / HP	M6.0/M5.0×28
30.01-32.00	8	HD / HP	M6.0/M5.0×28
32.01-36.00	9	HD / HP	M6.0/M6.0×32
36.01-40.99	10	HD / HP	M6.0/M6.0×32
41.00-45.00	11	HD / HP	M6.0/M6.0×32
45.01-52.00	12	HD / HP	M6.0/M6.0×32

INSTALLING KS TIPS



Dimensions in mm. Bodies and tips are ordered separately. Other diameters, lengths and tip geometries are made to order from 5 pieces, 15-30 working days. Stock varies by code; please confirm on inquiry. OAL "—": length on request. Tips are ordered by diameter and seat size.

Cutting data

Starting values for replaceable-tip drills Ø12–32 mm. Adjust to machine, holder and workpiece.

WORKPIECE MATERIAL		vc m/min	Ø12–16	Ø16–22	Ø22–26	Ø26–30	Ø30–32
		cutting speed	feed f, mm/rev				
P	Low-carbon steel, long chips (<125 HB)	100–60	0.15–0.25	0.15–0.25	0.15–0.25	0.15–0.25	0.15–0.25
	Low-carbon steel, short chips; free-cutting steel (<125 HB)	100–60	0.15–0.25	0.15–0.25	0.15–0.25	0.15–0.25	0.15–0.25
	High- / medium-carbon steel (<25 HRC)	80–60	0.15–0.25	0.15–0.25	0.15–0.25	0.15–0.25	0.15–0.25
	Alloy / tool steel (<35 HRC)	80–50	0.15–0.25	0.15–0.25	0.15–0.25	0.15–0.25	0.15–0.25
	Alloy / tool steel (35–48 HRC)	60–40	0.15–0.25	0.15–0.25	0.15–0.25	0.15–0.25	0.15–0.25
	PH, ferritic and martensitic steel (<35 HRC)	50–30	0.15–0.25	0.15–0.25	0.15–0.25	0.15–0.25	0.15–0.25
M	Austenitic stainless steel (130–200 HB)	50–40–20	0.10–0.17–0.22	0.11–0.18–0.24	0.12–0.20	0.13–0.22	0.14–0.24
	High-strength austenitic / cast stainless steel (<25 HRC)	55–40–30	0.08–0.13–0.16	0.09–0.13–0.18	0.10–0.14–0.18	0.10–0.14–0.20	0.12–0.16
	Duplex stainless steel (<30 HRC)	55–40–20	0.08–0.13–0.16	0.09–0.13–0.18	0.10–0.14–0.18	0.10–0.14–0.20	0.12–0.16
K	Grey cast iron (<32 HRC)	140–120–60	0.15–0.25	0.15–0.30	0.15–0.30	0.15–0.30	0.15–0.30
	Alloy / ductile cast iron, medium difficulty (<28 HRC)	140–120–60	0.15–0.25	0.15–0.30	0.15–0.30	0.15–0.30	0.15–0.30
	Difficult high-alloy / ductile cast iron (<28 HRC)	100–90–60	0.17–0.22–0.28	0.15–0.30	0.15–0.30	0.15–0.30	0.15–0.30
N	Wrought aluminium alloys (Si <12%)	230–90	0.22–0.34	0.24–0.36	0.28–0.38	0.32–0.40	0.34–0.42
	Copper and copper alloys (<200 HB)	135–90	0.22–0.34	0.24–0.36	0.28–0.38	0.32–0.40	0.34–0.42

Use a rigid machine and a hydraulic, shrink-fit or high-grip collet holder. Radial runout at the tip below 0.02 mm after mounting. Values for water-soluble coolant. For diameters not listed, use the nearest listed diameter and adjust to the actual conditions.

Small-diameter Boring Tools

Solid carbide micro boring tools for small bores: boring, grooving, threading, chamfering and profiling, on 3–10 mm shanks.



BORING

MTR, MXR, MUR and indexable bars

GROOVING

MGR, MFR, MKR, MZR, MVR, MDR

THREADS • PROFILES

MIR / MIL, ACME, TR; MCR, MPR, MQR, MZVB

Micro Boring Tools

Solid carbide, external or through-coolant



17 series

Boring, grooving, face grooving, threading, chamfering and profiling.

Small bores

Minimum bores from Ø2.1 mm; shanks 3–10 mm, reach L1 10–55 mm.

Coolant

External or through-coolant.

Ø2.1

smallest bore, mm

3–10

shank D, mm

10–55

reach L1, mm

P M K N

workpiece groups

Series overview

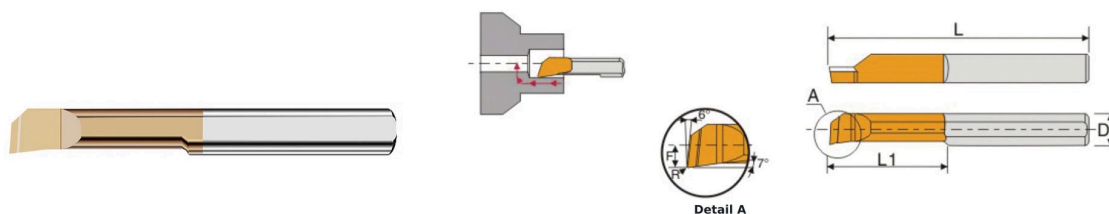
Pick the series by operation, then the size by shank D, reach L1 and minimum bore.

SERIES	OPERATION	RANGE
MTR	Boring	Boring with corner radius R0.15–0.2, minimum bore Ø2.1 mm.
C04X · C06X	Indexable boring bars	Small boring bars with CC.. inserts, minimum bore Ø5.1 mm. Max. overhang about 5xD. Inserts sold separately.
MGR	Internal grooving	Square grooves, width B 1.0–2.0 mm.
MFR	Face grooving	Face grooves, width B 1.0–2.0 mm.
MKR	Radius grooving and profiling	Full-radius grooves, R0.5–1.0 mm.
MZR	Face radius grooving and profiling	Full-radius face grooves, R0.5–1.0 mm.
MCR	Chamfering and boring	Internal and external chamfers with boring.
MIR · MIL	Threading	Internal threading, 55° and 60° profiles.
MIR · ACME	29° ACME threading	Internal ACME threads 1/4-16 to 3/8-12.
MIR · TR	30° trapezoidal threading	Internal TR threads, pitch 2–5 mm.
MXR	Back boring	Back boring and back chamfering.
MUR	Profile turning	Internal profiling, R0.05–0.15 mm.
MVR	Deep face grooving	Deep face grooves, width B 2.0–4.0 mm.
MDR	Chamfering and grooving	Groove with 45° chamfer in one tool.
MPR	Profile cutting	Profiling with R0.2 mm corner, reach to 50 mm.
MZVB	Profiling, 52°	Narrow 52° profile, minimum bore Ø3.5 mm.
MQR	Profile cutting	Profiling, R0.05–0.2 mm, minimum bore Ø2.1 mm.

MTR

Boring

Boring with corner radius R0.15–0.2, minimum bore Ø2.1 mm.

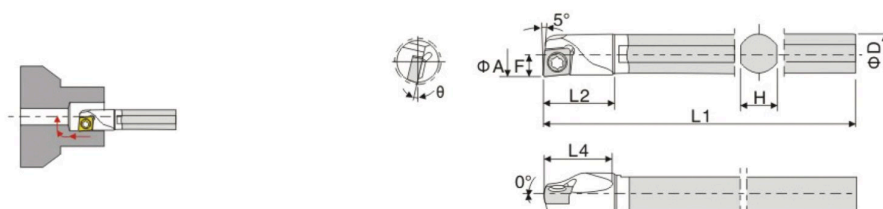


ORDER CODE	SHANK D	OAL L	REACH L1	RADIUS R	F	MIN. BORE Ø
MTR 2R0.15L10	3.0	39	10	0.15	0.8	2.1
MTR 2R0.15L20	3.0	39	20	0.15	0.8	2.1
MTR 3R0.2L10	3.0	39	10	0.2	1.3	3.1
MTR 3R0.2L15	3.0	39	15	0.2	1.3	3.1
MTR 4R0.2L15	4.0	51	15	0.2	1.7	4.1
MTR 4R0.2L22	4.0	51	22	0.2	1.7	4.1
MTR 5R0.2L22	5.0	51	22	0.2	2.1	5.1
MTR 6R0.2L22	6.0	51	22	0.2	2.8	6.1
MTR 7R0.2L30	7.0	62	30	0.2	3.3	7.1
MTR 8R0.2L40	8.0	76	40	0.2	3.8	8.1

C04X · C06X

Indexable boring bars

Small boring bars with CC.. inserts, minimum bore Ø5.1 mm. Max. overhang about 5xD. Inserts sold separately.

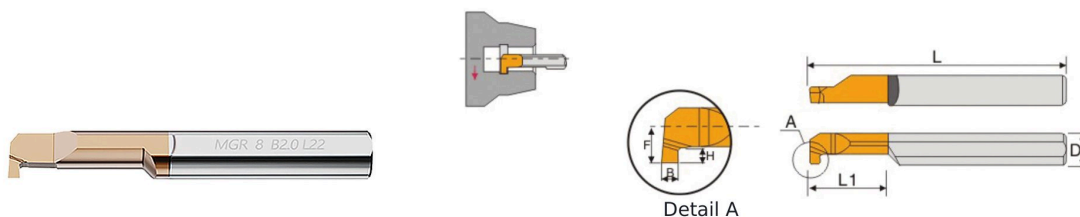


ORDER CODE	SHANK D	OAL L	F	MIN. BORE Ø	INSERT
C04X-SCLCR03-05-MINI	5.0	62	2.5	5.1	CC=T0301*
C06X-SCLCR04-07-MINI	7.0	62	3.5	7.1	CC=T0401*

Dimensions in mm. Order code = series + code, e.g. MTR 2R0.15L10. Other diameters, reaches, radii and profiles are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

MGR Internal grooving

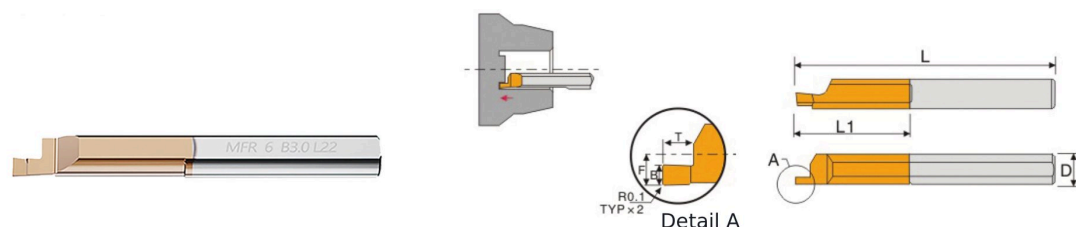
Square grooves, width B 1.0–2.0 mm.



ORDER CODE	SHANK D	OAL L	REACH L1	WIDTH B	H/T	F	MIN. BORE Ø
MGR 4B1.0L10	4.0	51	10	1.0	1.0	1.7	4.1
MGR 4B1.5L10	4.0	51	10	1.5	1.0	1.7	4.1
MGR 5B1.0L15	5.0	51	15	1.0	1.2	2.3	5.1
MGR 5B1.5L15	5.0	51	15	1.5	1.2	2.3	5.1
MGR 5B2.0L15	5.0	51	15	2.0	1.2	2.3	5.1
MGR 6B1.0L15	6.0	51	15	1.0	1.4	2.8	6.1
MGR 6B1.5L15	6.0	51	15	1.5	1.4	2.8	6.1
MGR 6B2.0L15	6.0	51	15	2.0	1.4	2.8	6.1
MGR 8B1.0L22	8.0	64	22	1.0	2.6	3.8	8.1
MGR 8B1.5L22	8.0	64	22	1.5	2.6	3.8	8.1
MGR 8B2.0L22	8.0	64	22	2.0	2.6	3.8	8.1

MFR Face grooving

Face grooves, width B 1.0–2.0 mm.

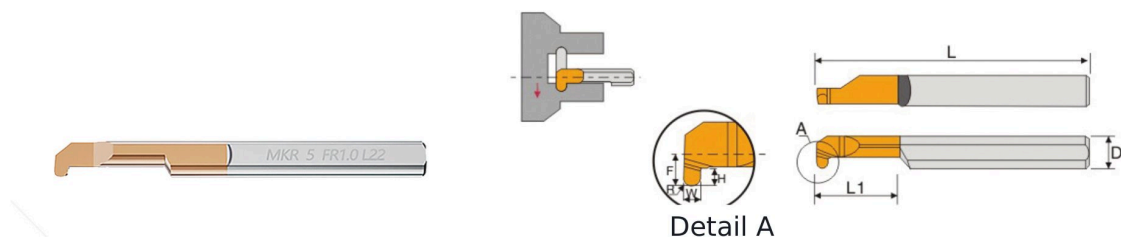


ORDER CODE	SHANK D	OAL L	REACH L1	WIDTH B	H/T	F	MIN. BORE Ø
MFR 4B1.0L15	4.0	51	15	1.0	1.5	1.75	5.0
MFR 5B1.0L22	5.0	51	22	1.0	1.5	2.25	6.0
MFR 5B1.5L22	5.0	51	22	1.5	2.5	2.25	6.0
MFR 6B1.0L22	6.0	51	22	1.0	1.5	2.75	8.0
MFR 6B1.5L22	6.0	51	22	1.5	2.5	2.75	8.0
MFR 6B2.0L22	6.0	51	22	2.0	3.0	2.75	8.0

Dimensions in mm. Order code = series + code, e.g. MTR 2R0.15L10. Other diameters, reaches, radii and profiles are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

MKR Radius grooving and profiling

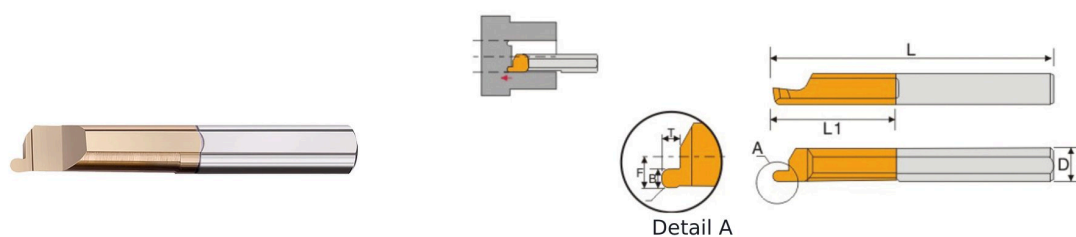
Full-radius grooves, R0.5–1.0 mm.



ORDER CODE	SHANK D	OAL L	REACH L1	RADIUS R	WIDTH W	H/T	F	MIN. BORE Ø
MKR 4R0.5L10	4.0	51	10	0.50	1.0	1.0	1.7	4.1
MKR 4R0.75L10	4.0	51	10	0.75	1.5	1.0	1.7	4.1
MKR 5R0.5L15	5.0	51	15	0.50	1.0	1.2	2.3	5.1
MKR 5R0.75L15	5.0	51	15	0.75	1.5	1.2	2.3	5.1
MKR 5R1.0L15	5.0	51	15	1.0	2.0	1.2	2.3	5.1
MKR 6R0.5L15	6.0	51	15	0.50	1.0	1.6	2.8	6.1
MKR 6R0.75L15	6.0	51	15	0.75	1.5	1.6	2.8	6.1
MKR 6R1.0L15	6.0	51	15	1.0	2.0	1.6	2.8	6.1

MZR Face radius grooving and profiling

Full-radius face grooves, R0.5–1.0 mm.

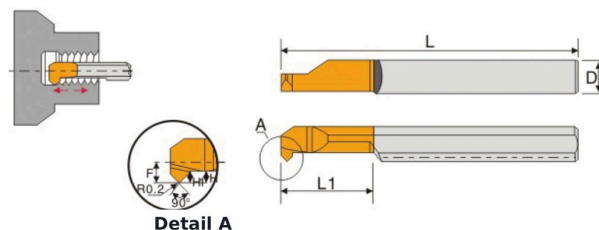


ORDER CODE	SHANK D	OAL L	REACH L1	RADIUS R	WIDTH W	H/T	F	MIN. BORE Ø
MZR 4R0.5L15	4.0	51	15	0.50	1.0	1.2	1.95	5.0
MZR 4R0.75L15	4.0	51	15	0.75	1.5	1.5	1.95	5.0
MZR 5R0.5L22	5.0	51	22	0.5	1.0	1.2	2.45	6.0
MZR 5R0.75L22	5.0	51	22	0.75	1.5	1.5	2.45	6.0
MZR 5R1.0L22	5.0	51	22	1.0	2.0	2.5	2.45	6.0
MZR 6R0.5L22	6.0	51	22	0.5	1.0	1.2	2.95	8.0
MZR 6R0.75L22	6.0	51	22	0.75	1.5	1.5	2.95	8.0
MZR 6R1.0L22	6.0	51	22	1.0	2.0	2.5	2.95	8.0

Dimensions in mm. Order code = series + code, e.g. MTR 2R0.15L10. Other diameters, reaches, radii and profiles are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

MCR Chamfering and boring

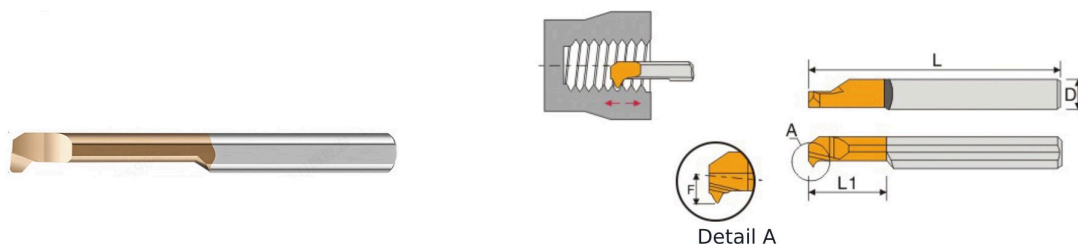
Internal and external chamfers with boring.



ORDER CODE	SHANK D	OAL L	REACH L1	RADIUS R	H/T	H1	F	MIN. BORE Ø
MCR 3R0.2L10	3.0	39	10	0.2	0.7	0.3	1.3	3.1
MCR 4R0.2L15	4.0	50	15	0.2	0.8	0.4	1.7	4.1
MCR 5R0.2L15	5.0	50	15	0.2	1.2	0.7	2.1	5.1
MCR 6R0.2L15	6.0	50	15	0.2	1.4	0.7	2.8	6.1

MIR · MIL Threading

Internal threading, 55° and 60° profiles.



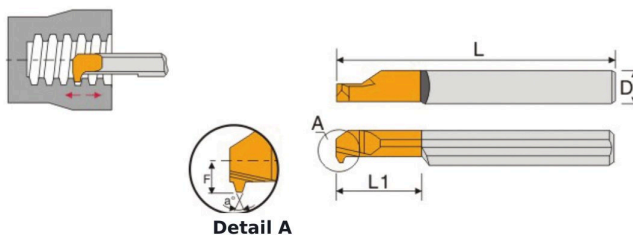
ORDER CODE	SHANK D	OAL L	REACH L1	ANGLE °	PITCH mm	TPI	F	MIN. BORE Ø
MIR 3L15A55	3.0	39	15	55	0.5-1.0	48-24	1.4	3.2
MIR 3L15A60	3.0	39	15	60	0.7-1.0	32-24	1.4	3.2
MIR 4L15A55	4.0	51	15	55	0.5-1.0	48-24	1.8	4.1
MIR 4L15A60	4.0	51	15	60	0.8-1.0	32-24	1.8	4.1
MIR 5L15A55	5.0	51	15	55	0.5-1.25	48-20	2.3	5.1
MIR 5L15A60	5.0	51	15	60	1.0-1.25	24-20	2.3	5.1
MIR 6L15A55	6.0	51	15	55	0.5-1.5	48-16	2.6	6.0
MIR 6L15A60	6.0	51	15	60	1.0-1.5	24-16	2.6	6.0
MIL 4L15A60	4.0	51	15	60	0.8-1.0	32-24	1.8	4.1
MIL 5L15A60	5.0	51	15	60	1.0-1.25	24-20	2.3	5.1
MIL 6L15A60	6.0	51	15	60	1.0-1.5	24-16	2.6	6.0

Dimensions in mm. Order code = series + code, e.g. MTR 2R0.15L10. Other diameters, reaches, radii and profiles are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

MIR · ACME

29° ACME threading

Internal ACME threads 1/4-16 to 3/8-12.

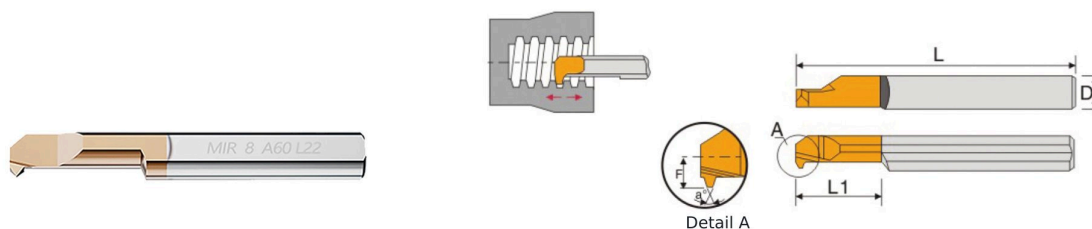


ORDER CODE	SHANK D	OAL L	REACH L1	ANGLE °	TPI	F	MIN. BORE Ø	THREAD
MIR 4L1516ACME	4.0	51	15	29	16	1.8	4.6	1/4-16
MIR 6L2014ACME	6.0	51	20	29	14	2.8	6.0	5/16-14
MIR 7L2212ACME	7.0	62	22	29	12	3.3	7.2	3/8-12

MIR · TR

30° trapezoidal threading

Internal TR threads, pitch 2–5 mm.

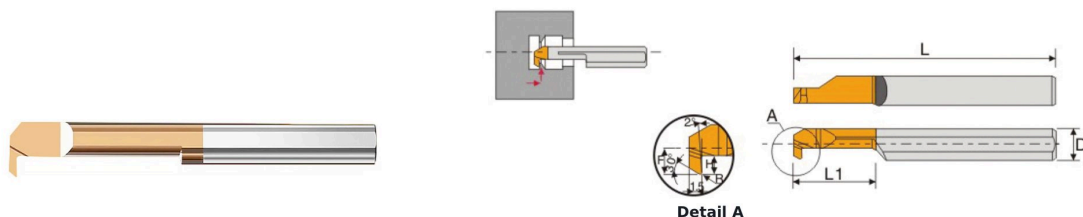


ORDER CODE	SHANK D	OAL L	REACH L1	ANGLE °	PITCH mm	F	MIN. BORE Ø	THREAD
MIR 7L25 2TR	7.0	62	25	30	2	3.2	6.9	TR9–12 ×2
MIR 10L35 2TR	10.0	73	35	30	2	4.8	11.0	TR14–20 ×2
MIR 7L35 3TR	7.0	62	35	30	3	3.3	7.5	TR11, TR12 ×3
MIR 10L35 3TR	10.0	73	35	30	3	4.8	10.5	TR14, TR22–28 ×3
MIR 10L45 4TR	10.0	105	45	30	4	4.8	11.5	TR16–20 ×4
MIR 10L55 5TR	10.0	105	55	30	5	4.8	11.0	TR22, TR24, TR28 ×5

Dimensions in mm. Order code = series + code, e.g. MTR 2R0.15L10. Other diameters, reaches, radii and profiles are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

MXR Back boring

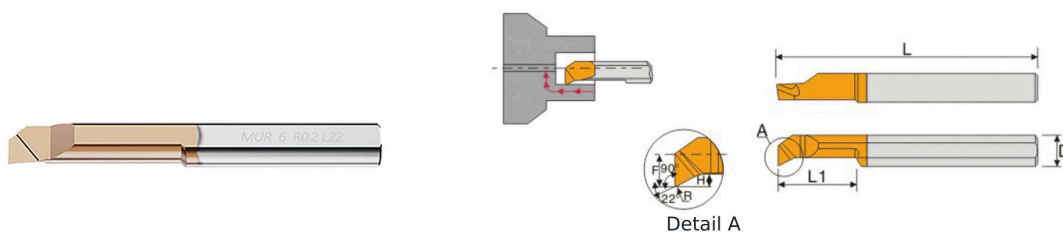
Back boring and back chamfering.



ORDER CODE	SHANK D	OAL L	REACH L1	RADIUS R	H/T	F	MIN. BORE Ø
MXR 4R0.1L10	4.0	50	10	0.1	0.5	1.3	3.1
MXR 4R0.15L15	4.0	50	15	0.15	0.8	1.6	4.1
MXR 5R0.2L22	5.0	50	22	0.2	1.0	2.2	5.1
MXR 6R0.2L22	6.0	50	22	0.2	1.8	2.8	6.1

MUR Profile turning

Internal profiling, R0.05–0.15 mm.

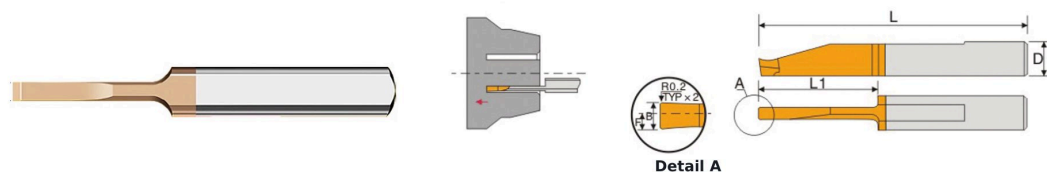


ORDER CODE	SHANK D	OAL L	REACH L1	RADIUS R	H/T	F	MIN. BORE Ø
MUR 3R0.05L15	3.0	39	15	0.05	0.4	1.3	3.1
MUR 4R0.1L15	4.0	51	15	0.1	0.5	1.7	4.1
MUR 5R0.15L22	5.0	51	22	0.15	0.7	2.1	5.1
MUR 6R0.15L22	6.0	51	22	0.15	0.9	2.8	6.1

Dimensions in mm. Order code = series + code, e.g. MTR 2R0.15L10. Other diameters, reaches, radii and profiles are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

MVR Deep face grooving

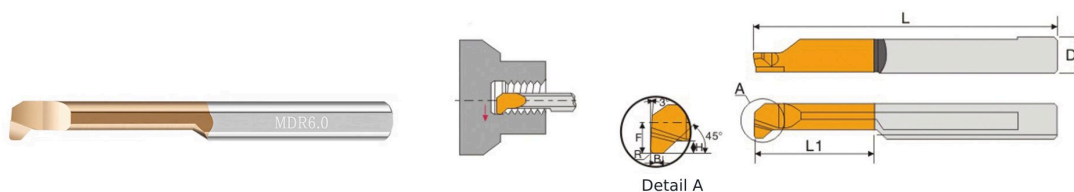
Deep face grooves, width B 2.0–4.0 mm.



ORDER CODE	SHANK D	OAL L	REACH L1	WIDTH B	F	MIN. BORE Ø
MVR 6B2.0L15	6.0	64	15	2.0	1.1	12
MVR 6B2.0L22	6.0	64	22	2.0	1.1	12
MVR 6B2.5L22	6.0	64	22	2.5	1.4	12
MVR 8B3.0L27	8.0	64	27	3.0	1.6	15
MVR 8B3.0L43	8.0	80	43	3.0	1.6	15
MVR 8B4.0L43	8.0	80	43	4.0	2.1	20

MDR Chamfering and grooving

Groove with 45° chamfer in one tool.

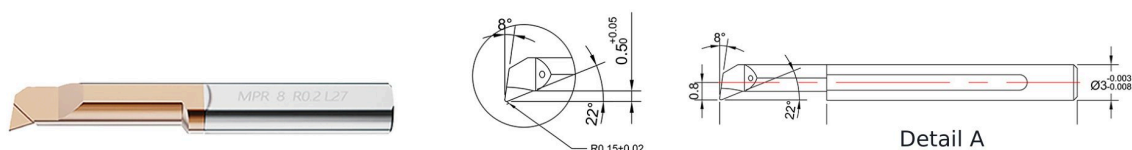


ORDER CODE	SHANK D	OAL L	REACH L1	WIDTH B	RADIUS R	H/T	F	MIN. BORE Ø
MDR 4R0.5L18	4.0	51	18	1.5	0.5	0.8	1.8	4.1
MDR 5R0.5L24	5.0	51	24	1.5	0.5	1.2	2.3	5.1
MDR 6R0.5L27	6.0	58	27	1.5	0.5	1.4	2.8	6.1

Dimensions in mm. Order code = series + code, e.g. MTR 2R0.15L10. Other diameters, reaches, radii and profiles are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

MPR Profile cutting

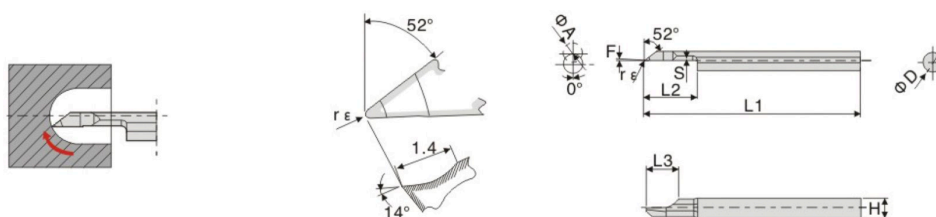
Profiling with R0.2 mm corner, reach to 50 mm.



ORDER CODE	SHANK D	OAL L	REACH L1	RADIUS R	H/T	F	MIN. BORE Ø
MPR 5R0.2L22	5.0	50	22	0.2	1.2	2.4	5.1
MPR 5R0.2L30	5.0	65	30	0.2	1.2	2.4	5.1
MPR 6R0.2L15	6.0	50	15	0.2	1.4	2.9	6.1
MPR 6R0.2L22	6.0	50	22	0.2	1.4	2.9	6.1
MPR 6R0.2L30	6.0	65	30	0.2	1.4	2.9	6.1
MPR 6R0.2L35	6.0	65	35	0.2	1.4	2.9	6.1
MPR 6R0.2L40	6.0	65	40	0.2	1.4	2.9	6.1
MPR 7R0.2L22	7.0	50	22	0.2	1.6	3.4	7.1
MPR 7R0.2L30	7.0	65	30	0.2	1.6	3.4	7.1
MPR 7R0.2L35	7.0	65	35	0.2	1.6	3.4	7.1
MPR 7R0.2L42	7.0	80	42	0.2	1.6	3.4	7.1
MPR 7R0.2L50	7.0	80	50	0.2	1.6	3.4	7.1
MPR 8R0.2L22	8.0	50	22	0.2	1.6	3.9	8.1
MPR 8R0.2L35	8.0	65	35	0.2	1.6	3.9	8.1
MPR 10R0.2L35	10.0	65	35	0.2	2.0	4.9	10.1
MPR 10R0.2L50	10.0	80	50	0.2	2.0	4.9	10.1

MZVB Profiling, 52°

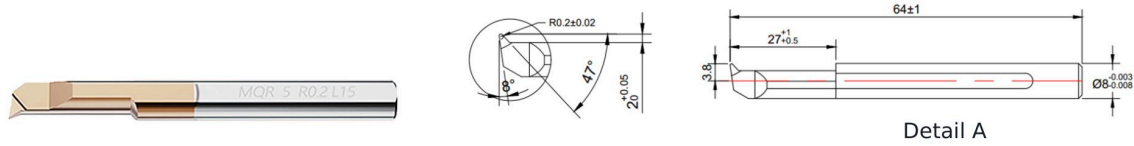
Narrow 52° profile, minimum bore Ø3.5 mm.



MQR

Profile cutting

Profiling, R0.05–0.2 mm, minimum bore Ø2.1 mm.



ORDER CODE	SHANK D	OAL L	REACH L1	RADIUS R	H/T	F	MIN. BORE Ø
MQR 2R0.05L10	3.0	40	10	0.05	0.5	0.9	2.1
MQR 3R0.1L10	3.0	40	10	0.10	0.7	1.4	3.1
MQR 3R0.1L15	3.0	40	15	0.10	0.7	1.4	3.1
MQR 3R0.2L10	3.0	40	10	0.20	0.7	1.4	3.1
MQR 3R0.2L15	3.0	40	15	0.20	0.7	1.4	3.1
MQR 4R0.2L10	4.0	50	10	0.20	0.8	1.9	4.1
MQR 4R0.2L15	4.0	50	15	0.20	0.8	1.9	4.1
MQR 4R0.2L22	4.0	50	22	0.20	0.8	1.9	4.1
MQR 5R0.2L15	5.0	50	15	0.20	1.0	2.4	5.1
MQR 5R0.2L22	5.0	50	22	0.20	1.0	2.4	5.1
MQR 6R0.2L15	6.0	50	15	0.20	1.4	2.9	6.1
MQR 6R0.2L22	6.0	50	22	0.20	1.4	2.9	6.1
MQR 6R0.2L30	6.0	65	30	0.20	1.4	2.9	6.1
MQR 7R0.2L30	7.0	65	30	0.20	2.0	3.4	7.1
MQR 8R0.2L22	8.0	50	22	0.20	2.0	3.9	8.1
MQR 8R0.2L27	8.0	65	27	0.20	2.0	3.9	8.1
MQR 8R0.2L30X	8.0	65	30	0.20	3.0	3.9	8.1

ORDERING

Quote series + code, e.g. MQR 3R0.2L15. Holders (sleeves) for 3–10 mm shanks, coatings and special profiles on request: send the bore diameter, depth and profile drawing.

Dimensions in mm. Order code = series + code, e.g. MTR 2R0.15L10. Other diameters, reaches, radii and profiles are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Carbide End Mills

Anti-vibration, multi-flute, ball nose and tapered ball nose end mills
in solid carbide, Ø1 to Ø20 mm, h7.



KF

Anti-vibration 4-flute, Ø4–20 mm, two
lengths

5F · 6F · 8F

Multi-flute end mills, Ø6–20 mm

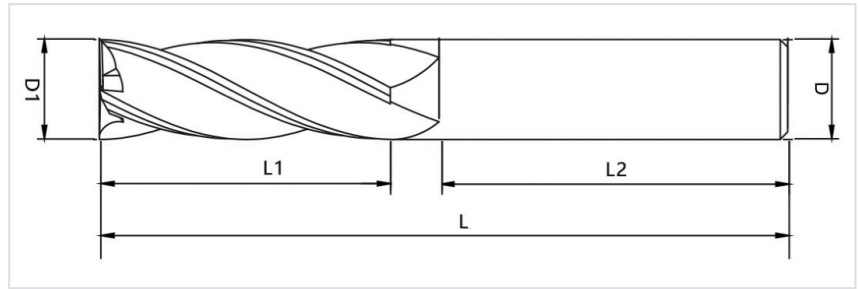
BALL · TAPER

Ball nose Ø4–20 mm; tapered 2°, 3°, 5°

KF Anti-Vibration End Mills

4-flute anti-vibration end mills, two lengths

WC	h7	4
CARBIDE	DIA. TOL.	FLUTES



P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. D1	FLUTE L1	SHANK D	OAL L
RMT020404T-4	4	12	4	50
RMT020404T-6	4	12	6	50
RMT030404T-4	4	12	4	75
RMT030404T-6	4	12	6	75
RMT020504T-6	5	15	6	50
RMT030504T-6	5	15	6	75
RMT050504T-6	5	15	6	100
RMT020604T-6	6	18	6	50
RMT040604T-6	6	18	6	75
RMT050604T-6	6	18	6	100
RMT020804T-8	8	24	8	60
RMT030804T-10	8	24	10	60
RMT030804T-8	8	24	8	75
RMT040804T-8	8	24	8	100

ORDER CODE	DIA. D1	FLUTE L1	SHANK D	OAL L
RMT021004T-10	10	30	10	75
RMT031004T-10	10	30	10	75
RMT041004T-10	10	30	10	100
RMT021204T-12	12	36	12	75
RMT031204T-12	12	36	12	75
RMT041204T-12	12	36	12	100
RMT021404T-14	14	42	14	100
RMT051404T-14	14	42	14	150
RMT021604T-16	16	48	16	100
RMT041604T-16	16	48	16	150
RMT021804T-18	18	54	18	100
RMT041804T-18	18	54	18	150
RMT022004T-20	20	60	20	100
RMT032004T-20	20	60	20	150

Variable pitch and helix

Unequal flute spacing ($\alpha \neq \beta$) and helix ($\theta 1 \neq \theta 2$) reduce vibration and improve surface finish.

Eccentric relief

Eccentric relief supports edge strength; edge finishing and composite coating.

One tool, many jobs

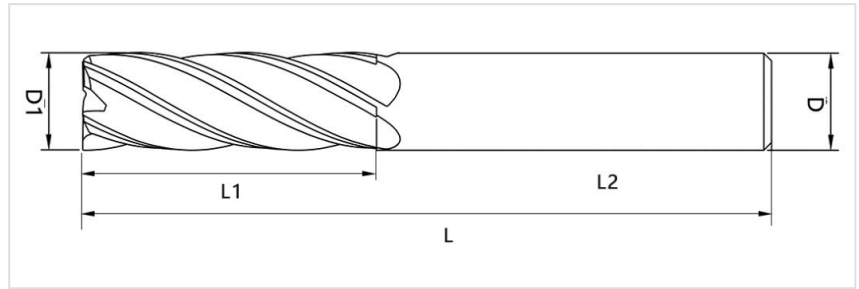
Pockets, keyways, side and face milling, roughing and finishing.

Dimensions in mm. Other diameters, lengths, corner radii, flute counts and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

5-Flute End Mills

Corner-chamfered 5-flute end mills

WC	h7	5
CARBIDE	DIA. TOL.	FLUTES



P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	DIA. D1	FLUTE L1	SHANK D	OAL L
RMT020605T-6	6	15	6	50
RMT040605T-6	6	25	6	75
RMT050605T-6	6	30	6	100
RMT020805T-8	8	20	8	60
RMT030805T-10	8	25	10	60
RMT030805T-8	8	25	8	75
RMT040805T-8	8	35	8	100
RMT021005T-10	10	25	10	75
RMT031005T-10	10	30	10	75
RMT041005T-10	10	40	10	100
RMT021205T-12	12	30	12	75

ORDER CODE	DIA. D1	FLUTE L1	SHANK D	OAL L
RMT031205T-12	12	36	12	75
RMT041205T-12	12	45	12	100
RMT021405T-14	14	40	14	100
RMT051405T-14	14	70	14	150
RMT021605T-16	16	45	16	100
RMT041605T-16	16	75	16	150
RMT021805T-18	18	45	18	100
RMT041805T-18	18	75	18	150
RMT022005T-20	20	45	20	100
RMT032005T-20	20	75	20	150

Materials

Roughing and finishing stainless steel, titanium alloys, low-carbon steel, cast iron and materials below HRC 60.

Chip flutes

Polished chip flutes for smooth chip evacuation; corner chamfer.

Substrate

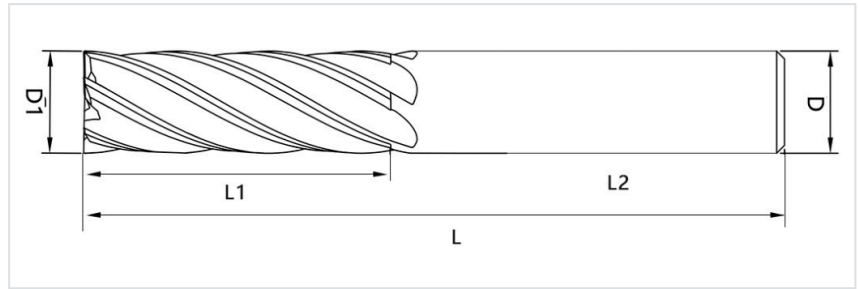
Wear-resistant coating on 0.4 µm ultrafine-grain carbide.

Dimensions in mm. Other diameters, lengths, corner radii, flute counts and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

6-Flute End Mills

Corner-chamfered 6-flute end mills

WC	h7	6
CARBIDE	DIA. TOL.	FLUTES



					P	M	K	N	S	H	O	Workpiece groups
ORDER CODE	DIA. D1	FLUTE L1	SHANK D	OAL L	ORDER CODE	DIA. D1	FLUTE L1	SHANK D	OAL L			
RMT020806T-8	8	20	8	60	RMT041206T-12	12	45	12	100			
RMT030806T-10	8	25	10	60	RMT021406T-14	14	40	14	100			
RMT030806T-8	8	25	8	75	RMT051406T-14	14	70	14	150			
RMT040806T-8	8	35	8	100	RMT021606T-16	16	16	16	100			
RMT021006T-10	10	25	10	75	RMT041606T-16	16	75	16	150			
RMT031006T-10	10	30	10	75	RMT021806T-18	18	45	18	100			
RMT041006T-10	10	40	10	100	RMT041806T-18	18	75	18	150			
RMT021206T-12	12	30	12	75	RMT022006T-20	20	45	20	100			
RMT031206T-12	12	36	12	75	RMT032006T-20	20	75	20	150			

Materials

Roughing and finishing stainless steel, titanium alloys, low-carbon steel, cast iron and materials below HRC 60.

Chip flutes

Polished chip flutes for smooth chip evacuation; corner chamfer.

Substrate

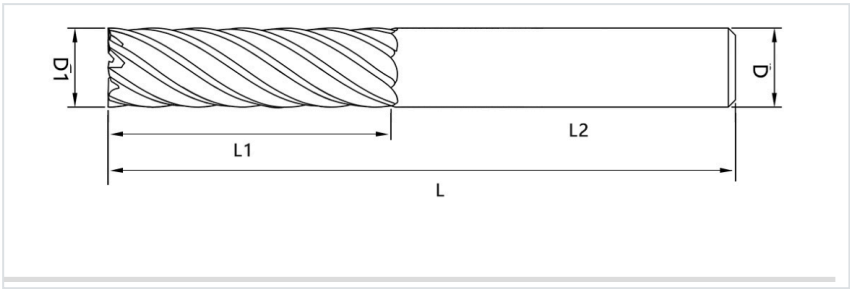
Wear-resistant coating on 0.4 µm ultrafine-grain carbide.

Dimensions in mm. Other diameters, lengths, corner radii, flute counts and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

8-Flute End Mills

Corner-chamfered 8-flute end mills

WC	h7	8
CARBIDE	DIA. TOL.	FLUTES



					P	M	K	N	S	H	O	Workpiece groups
ORDER CODE	DIA. D1	FLUTE L1	SHANK D	OAL L	ORDER CODE	DIA. D1	FLUTE L1	SHANK D	OAL L			
RMT021008T-10	10	25	10	75	RMT051408T-14	14	70	14	150			
RMT031008T-10	10	30	10	75	RMT021608T-16	16	45	16	100			
RMT041008T-10	10	40	10	100	RMT041608T-16	16	75	16	150			
RMT021208T-12	12	30	12	75	RMT021808T-18	18	45	18	100			
RMT031208T-12	12	36	12	75	RMT041808T-18	18	75	18	150			
RMT041208T-12	12	45	12	100	RMT022008T-20	20	45	20	100			
RMT021408T-14	14	40	14	100	RMT032008T-20	20	75	20	150			

Materials

Roughing and finishing stainless steel, titanium alloys, low-carbon steel, cast iron and materials below HRC 60.

Chip flutes

Polished chip flutes for smooth chip evacuation; corner chamfer.

Substrate

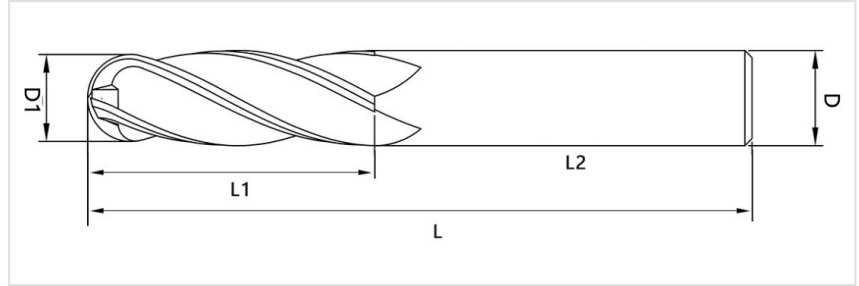
Wear-resistant coating on 0.4 µm ultrafine-grain carbide.

Dimensions in mm. Other diameters, lengths, corner radii, flute counts and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

4-Flute Ball Nose End Mills

Ball nose end mills for curved-surface finishing

WC	h7	4
CARBIDE	DIA. TOL.	FLUTES



P	M	K	N	S	H	O	Workpiece groups
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ORDER CODE	DIA. D1	FLUTE L1	SHANK D	OAL L
RMT0202R04T-4	4	10	4	50
RMT0202R04T-6	4	10	6	50
RMT0302R04T-4	4	16	4	75
RMT0302R04T-6	4	16	6	75
RMT02025R04T-6	5	13	6	50
RMT03025R04T-6	5	20	6	75
RMT05025R04T-6	5	25	6	100
RMT0203R04T-6	6	15	6	50
RMT0503R04T-6	6	30	6	100
RMT0204R04T-8	8	20	8	60
RMT0304R04T-10	8	25	10	60
RMT0304R04T-8	8	25	8	75
RMT0405R04T-8	8	35	8	100
RMT0205R04T-10	10	25	10	75

ORDER CODE	DIA. D1	FLUTE L1	SHANK D	OAL L
RMT0305R04T-10	10	30	10	75
RMT0405R04T-10	10	40	10	100
RMT0206R04T-12	12	30	12	75
RMT0306R04T-12	12	36	12	75
RMT0406R04T-12	12	45	12	100
RMT0207R04T-14	14	40	14	100
RMT0507R04T-14	14	70	14	150
RMT0208R04T-16	16	45	16	100
RMT0408R04T-16	16	75	16	150
RMT0209R04T-18	18	45	18	100
RMT0409R04T-18	18	75	18	150
RMT0210R04T-20	20	45	20	100
RMT0310R04T-20	20	75	20	150

Curved surfaces

Precision ball nose for accurate finishing of curved surfaces.

Materials

Finishing stainless steel, titanium alloys, low-carbon steel, cast iron and materials below HRC 60.

Substrate

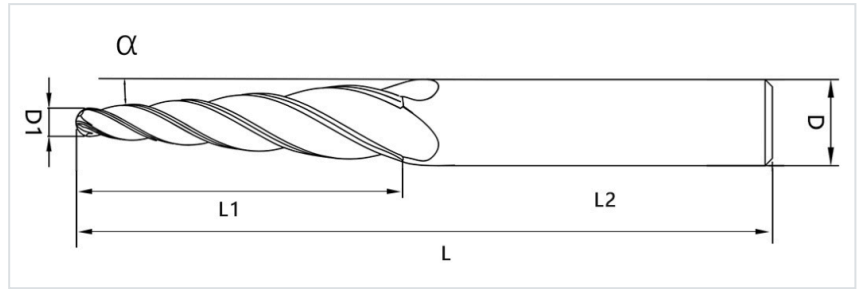
Specialised coating on 0.4 µm ultrafine-grain carbide.

Dimensions in mm. Other diameters, lengths, corner radii, flute counts and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Tapered Ball Nose End Mills

Tapered ball nose end mills, 2°, 3° and 5° per side

WC	h7	4
CARBIDE	DIA. TOL.	FLUTES



P
M
K
N
S
H
O
Workpiece groups

ORDER CODE	TIP DIA. D1	TAPER α	SHANK D	OAL L
RMT02C012T	1	2°	6	60
RMT02C022T	2	2°	6	60
RMT02C0252T	2.5	2°	8	80
RMT02C032T	3	2°	8	80
RMT02C0352T	3.5	2°	8	80
RMT02C042T	4	2°	10	100
RMT02C052T	5	2°	12	100
RMT02C062T	6	2°	12	100
RMT03C012T	1	3°	6	60
RMT03C022T	2	3°	6	60
RMT03C0252T	2.5	3°	8	80
RMT03C032T	3	3°	8	80

ORDER CODE	TIP DIA. D1	TAPER α	SHANK D	OAL L
RMT03C0352T	3.5	3°	8	80
RMT03C042T	4	3°	10	100
RMT03C052T	5	3°	12	100
RMT03C062T	6	3°	12	100
RMT05C012T	1	5°	6	60
RMT05C022T	2	5°	6	60
RMT05C0252T	2.5	5°	8	80
RMT05C032T	3	5°	8	80
RMT05C0352T	3.5	5°	8	80
RMT05C042T	4	5°	10	100
RMT05C052T	5	5°	12	100
RMT05C062T	6	5°	12	100

Reach

Tapered geometry reaches deep and difficult-to-machine areas.

Materials

Finishing stainless steel, titanium alloys, low-carbon steel, cast iron and materials below HRC 60.

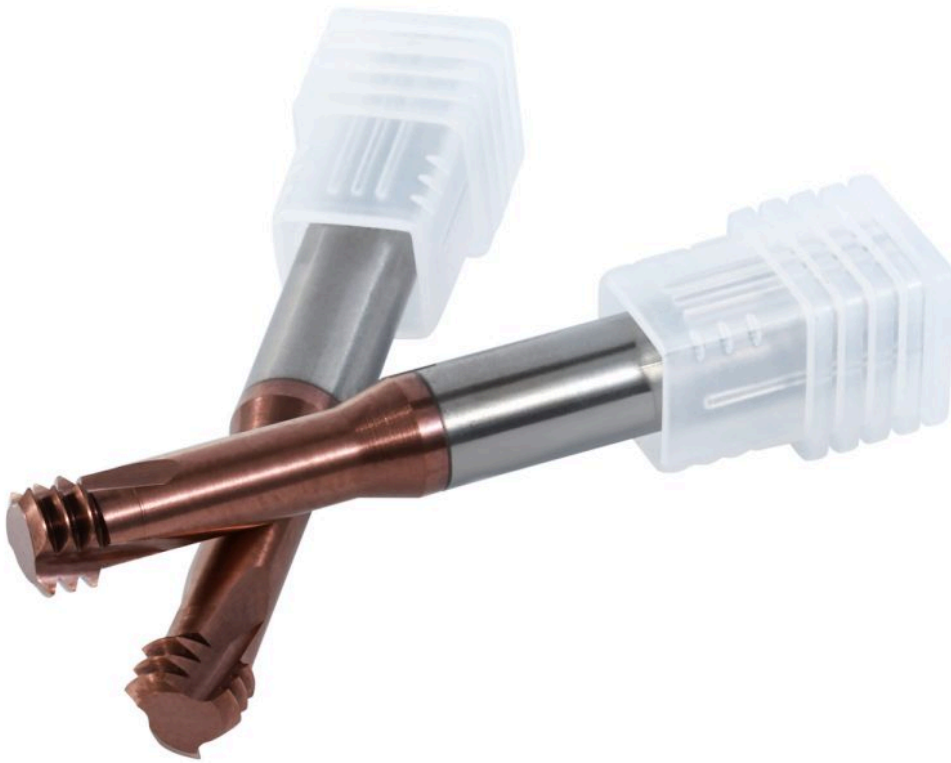
Substrate

Specialised coating on 0.4 µm ultrafine-grain carbide.

Dimensions in mm. Other diameters, lengths, corner radii, flute counts and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Solid Carbide Thread Mills

Metric, unified, pipe, trapezoidal, ACME and PG thread mills: single-form, 3-tooth, multi-row and multi-function designs, plus tools for hardened steel up to 65 HRC.



METRIC • UN

60° single-form, 3-tooth, multi-row, partial-profile

PIPE • SPECIAL

NPT, BSP, BSPT, TR, ACME, PG

HARD • MULTI

GX, T, RX; drill-thread and no-pre-drill tools

Thread Mills

Solid carbide, one tool for many thread sizes of the same pitch



Threads in any material

Steel, stainless steel, cast iron, non-ferrous metals, titanium, superalloys and hardened steel up to 65 HRC.

Short chips, safe holes

Thread milling makes short chips and no broken taps; one tool cuts right- or left-hand threads.

Read the tables

Choose by pitch and thread size, then reach L1. © best, ○ suitable for each workpiece group.

M0.8–M80

metric sizes

No.0–1"

unified sizes

≤65 HRC

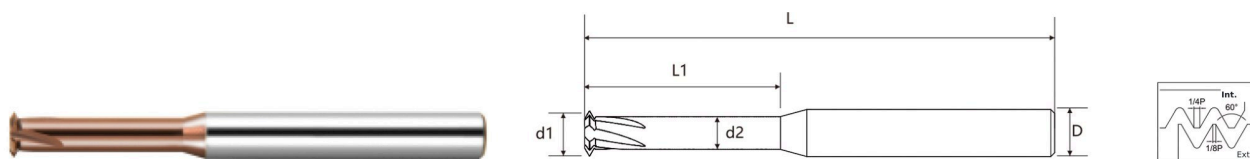
RX hardened-steel series

4–16

shank D, mm

60° Metric Single-Form Thread Mills

One profile tooth; one tool for many thread sizes of the same pitch



P			M		K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium		≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○		○			

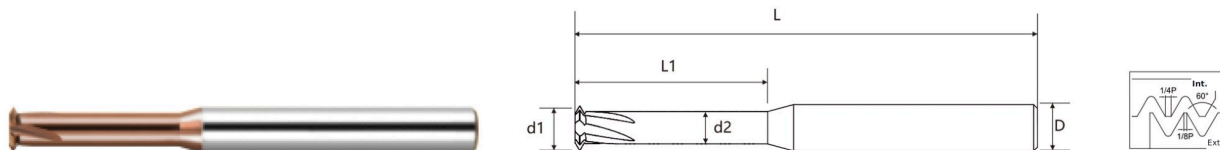
PITCH mm	COARSE	FINE	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES	PRE-HOLE Ø
0.2	M0.8×0.2		0.55	0.29	1.5	4	50	2	0.6
0.25	M1×0.25	M1.5×0.25	0.7	0.375	3.1	4	50	3	0.75
0.25	M1.2×0.25	M1.4×0.25	0.9	0.575	3.8	4	50	3	0.95
0.3	M1.4×0.3		1.05	0.66	4	4	50	3	1.1
0.35	M1.6×0.35		1.2	0.745	5	4	50	3	1.25
0.35		M1.8×0.35/M2.0×0.35	1.4	0.945	5.6	4	50	3	1.45
0.4	M2×0.4		1.54	1.02	6	4	50	3	1.6
0.45	M2.5×0.45		1.96	1.375	6.5	4	50	3	2.1
0.5	M3×0.5		2.4	1.75	8	4	50	3	2.5
0.5		M8×0.5	6	5.35	20	6	50	3	7.5
0.6	M3.5×0.6		2.75	1.97	10	4	50	3	2.9
0.7	M4×0.7		3.15	2.24	10	4	50	3	3.3
0.75	M4.5×0.75		3.5	2.525	12	4	50	3	3.8
0.75		M8×0.75	6	5.025	20	6	50	3	7.3
0.8	M5×0.8		4	2.96	12	4	50	3	4.2
1	M6×1		4.8	3.5	15	6	50	3	5
1.25	M8×1.25		6	4.375	20	6	50	3	6.8
1.25	M8×1.25		6.5	4.87	25	8	60	3	6.8
1.5	M10×1.5		8	6.05	25	8	60	3	8.5
1.5	M10×1.5		8.2	6.25	31	10	75	4	8.5
1.5		M14×1.5	12	10.05	30	12	75	4	12.5
1.75	M12×1.75		10	7.725	30	10	75	4	10.3
2	M14×2		10	7.4	36	10	75	4	12
2	M14×2		11.6	9	45	12	75	4	12
2	M16×2		12	9.4	45	12	75	4	14
2	M16×2		13.6	11	50	14	100	5	14
2.5	M18-M20×2.5		14	10.75	48	14	90	5	15.5
2.5	M20×2.5		16	12.75	61	16	100	5	17.6
3	M24×3.0		14	10.1	48	14	90	5	21
3.5	M30×3.5		16	11.45	50	16	90	5	26.5

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° M Single-Form Thread Mills

Reach 3xD and 4xD

3D · $L1 \geq 3 \times \text{thread dia.}$



P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○	○			

PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
0.3	M1.4×0.3	1.05	0.6	4.4	4	50	3
0.35	M1.6×0.35	1.2	0.745	5	4	50	3
0.4	M2×0.4	1.5	1.02	6.2	4	50	3
0.45	M2.5×0.45	1.95	1.375	7.7	4	50	3
0.5	M3×0.5	2.4	1.75	9.2	4	50	3
0.7	M4×0.7	3.15	2.14	13	4	50	3
0.8	M5×0.8	3.9	2.96	16	4	50	3
1	M6×1.0	4.85	3.5	20	6	50	4

4D · $L1 \geq 4 \times \text{thread dia.}$

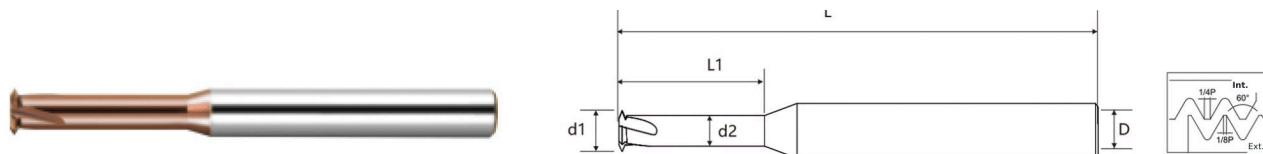
PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
0.3	M1.4×0.3	1.05	0.6	5.9	4	50	3
0.35	M1.6×0.35	1.2	0.745	6.8	4	50	3
0.4	M2×0.4	1.5	1.02	8.4	4	50	3
0.45	M2.5×0.45	1.95	1.375	10.5	4	50	3
0.5	M3×0.5	2.4	1.75	12.5	4	50	3
0.7	M4×0.7	3.15	2.14	16.7	4	50	3
0.8	M5×0.8	3.9	2.96	20.8	4	50	3
1	M6×1.0	4.85	3.5	25	6	50	4

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° M Long Single-Form Thread Mills

Overall length 75 and 100 mm

75 mm long



P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○	○			

PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
0.3	M1.4×0.3	1.05	0.66	5	4	75	3
0.35	M1.6×0.35	1.2	0.745	6	4	75	3
0.4	M2×0.4	1.55	0.9	8	4	75	3
0.45	M2.5×0.45	1.96	1.3	10	4	75	3
0.5	M3×0.5	2.35	1.6	12	4	75	3
0.7	M4×0.7	3.15	2.1	16	4	75	3
0.8	M5×0.8	3.9	2.8	20	4	75	3
1	M6×1	4.8	3.4	24	6	75	3
1.25	M8×1.25	6	4.2	32	6	75	3
1.5	M10×1.5	7.7	5.6	35	8	75	3

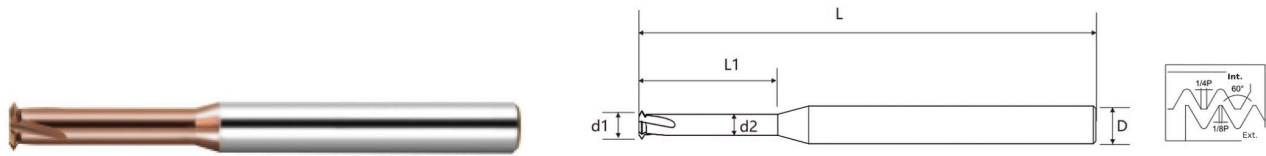
100 mm long

PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
0.3	M1.4×0.3	1.05	0.66	4	4	100	3
0.35	M1.6×0.35	1.2	0.745	4.5	4	100	3
0.4	M2×0.4	1.55	0.9	6	4	100	3
0.45	M2.5×0.45	1.96	1.3	6.5	4	100	4
0.5	M3×0.5	2.35	1.6	8	4	100	4
0.7	M4×0.7	3.15	2.1	10	4	100	4
0.8	M5×0.8	3.9	2.8	12	4	100	4
1	M6×1	4.8	3.4	15	6	100	4
1.25	M8×1.25	6	4.2	20	6	100	4
1.5	M10×1.5	7.7	5.6	25	8	100	4
1.75	M12×1.75	9.6	7.3	30	10	100	4
2	M14×2	10	7.3	36	10	100	4
2.5	M18×2.5	12	8.75	38	12	100	4
3	M24×3.0	14	10.1	48	14	100	6
3.5	M30×3.5	16	11.45	50	16	100	6

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° M / UN Partial-Profile Thread Mills

One tool covers a pitch range, 3D reach



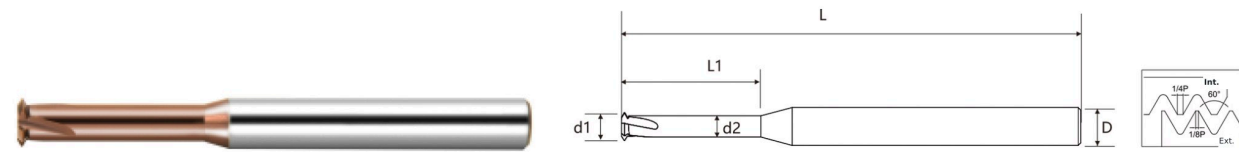
P		M		K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○	○			

TPI	PITCH mm	COARSE	FINE	DIA. d1	REACH L1	SHANK D	OAL L	FLUTES
	0.25	M1×0.25	M1.4×0.25	0.7	3.1	4	50	3
	0.25	M1.2×0.25	M1.4×0.25	0.9	3.8	4	50	3
80	0.3	M1.4×0.3		1.05	4.4	4	50	3
72-80	0.35	M1.6×0.35	M1.7-M1.8×0.35	1.2	5	4	50	3
56-64	0.4	M2×0.4		1.5	6.2	4	50	3
48-56	0.45	M2.5×0.45	M4-M5×0.45	1.95	7.7	4	50	3
48-56	0.5	M3×0.5		2.4	9.2	4	50	3
40	0.6	M3.5×0.6		2.75	12	4	50	3
	0.7	M4×0.7		3.15	13	4	50	3
32-56	0.5-0.8	M5×0.8	M5×0.5, M5×0.75	3.9	16	4	50	3
24-56	0.5-1.0	M6×1	M6×0.5, M6×0.75	4.85	20	6	60	4
20-48	0.5-1.25	M8×1.25	M7×0.5, M7×0.75, M7.5×1	5.9	25	6	60	4
24-56	0.5-1.0		M10.5×0.5, M11×0.75, M11×1	9.9	35	10	75	5
16-24	1.0-1.5	M10×1.5	M10×1, M10×1.25	7.9	32	8	60	5
14-24	1.0-1.75	M12×1.75	M12×1,, M12×1.25,, M12×1.5	9.9	38	10	75	5
14-24	1.0-1.75	M14-M16×2	M13.5×1, M14×1.25, M14×1.5	11.9	45	12	75	5
12-20	1.25-2.0			11.6	45	12	75	5
10-18	1.5-2.5	M18×2.5		13.9	50	14	90	6
10-18	1.5-2.5	M20×2.5		13.9	55	14	90	6
10-18	2.0-3.0	M24×3		13.9	65	16	100	6

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° Partial-Profile Thread Mills, UN / M

Metric and unified sizes covered by each tool



P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○	○			

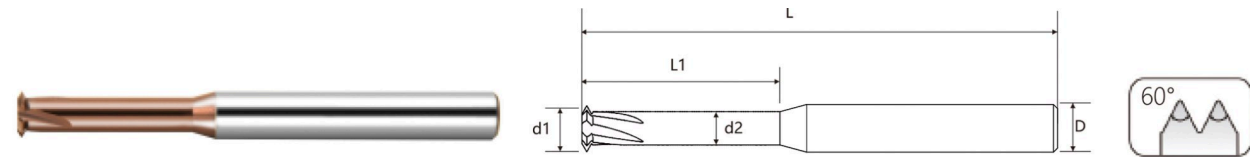
TPI	PITCH mm	COARSE		FINE	UNC · UNF · UNEF		DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
32-56	0.5-0.8	M5×0.8		M5×0.5, M5×0.75	No.10-56UNS, No.10-48UNS, No.10-40UNS, M5×0.75		3.9	2.8	16	4	50	4
24-56	0.5-1.0	M6×1.0		M6×0.5, M6×0.75	No.12-56UNS, No.12-48UNS, 1/4-40UNS, 1/4-36UNS, 1/4-32UNEF, 1/4-28UNF, 1/4-27UNS, 1/4-24UNS		4.85	3.5	20	6	60	5
20-48	0.5-1.25	M8×1.25		M7×0.5, M7×0.75, M7.5×1.0	5/16-48UNS, 5/16-40UNS, 5/16-36UNS, 5/16-36UNEF, 5/16-28UN, 5/16-27UNS, 5/16-24UNS, 5/16-20UNS		5.9	4.2	25	6	60	5
24-56	0.5-1.0			M10×0.5, M11×0.75, M11×1.0	7/16-32UNS, 7/16-28UNEF, 7/16-27UNS, 7/16-24UNS		9.8	8.5	35	10	75	6
13-24	1.0-1.50	M10×1.5		M10×1.0, M10×1.25	3/8-24UNF, 3/8-20UNS, 7/16-18UNS, 7/16-16UNS		7.9	5.8	32	8	75	6
14-24	1.0-1.75	M12×1.75		M12×1.0, M12×1.25, M12×1.5	1/2-24UNS, 1/2-20UNS, 1/2-18UNS, 1/2-16UNS, 1/2-14UNS		9.9	7.6	38	10	75	6
14-24	1.0-2.0	M16×2.0		M13.5×1.0, M14×1.25, M14×1.5	9/16-24UNEF, 9/16-18UNF, 5/8-18UNF, 3/4-16UNF, 7/8-14UNF		11.9	9.6	40	12	75	6
9-12	2.0-3.0	M18×2.5, M20×2.5, M22×2.5, M24×3.0, M27×3.0			9/16-12UNC, 5/8-11UNC, 3/4-10UNC, 7/8-9UNC		14	10.2	48	14	100	6
8-12	2.0-3.5	M20×2.5, M22×2.5, M24×3.0, M27×3.0, M30×3.5, M33×3.5			9/16-12UNC, 5/8-11UNC, 3/4-10UNC, 1-8UNC		16	11.5	50	16	100	6

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° Metric Thread Mills, Large Shank

Single-form and 3-tooth, 6 mm shank

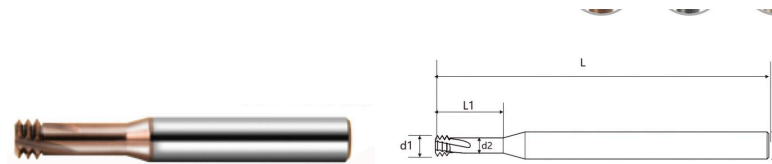
Single-form



P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○	○			

PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
0.35	M1.6×0.35	1.2	0.75	5	6	50	3
0.4	M2×0.4	1.5	0.98	6.2	6	50	3
0.45	M2.5×0.45	1.95	1.36	7.7	6	50	3
0.5	M3×0.5	2.4	1.75	9	6	50	3
0.7	M4×0.7	3.15	2.24	12	6	50	3
0.8	M5×0.8	4	2.96	15	6	50	3

3-tooth



PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
0.35	M1.6×0.35	1.2	0.75	3.3	6	50	3
0.4	M2×0.4	1.54	1.02	4.4	6	50	3
0.45	M2.5×0.45	1.96	1.37	5.3	6	50	3
0.5	M3×0.5	2.4	1.75	6.4	6	50	3
0.7	M4×0.7	3.15	2.24	8.6	6	50	3
0.8	M5×0.8	4	2.96	12	6	50	3

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° Metric 3-Tooth Thread Mills

Three profile teeth for faster threading



P			M		K	N				S	H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○	○			

PITCH mm	COARSE	FINE	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES	PRE-HOLE Ø
0.25	M1×0.25		0.7	0.375	2.8	4	50	3	0.75
0.25	M1.2×0.25		0.9	0.575	3	4	50	3	0.95
0.3	M1.4×0.3		1.05	0.66	3.2	4	50	3	1.1
0.35	M1.6×0.35	M1.8×0.35	1.2	0.745	4	4	50	3	1.25
0.35			1.41	0.955	4.1	4	50	3	1.45
0.4	M2×0.4		1.54	1.02	4.4	4	50	3	1.6
0.45	M2.5×0.45		1.96	1.375	5.3	4	50	3	2.1
0.5	M3×0.5	M3.5×0.5	2.4	1.75	6.4	4	50	3	2.5
0.5		M4-M6×0.5	3	2.35	8.6	4	50	3	3.5
0.5		M6-M10×0.5	4.8	4.15	13	6	50	3	5.5
0.5		M10-M16×0.5	8	7.35	21.8	8	60	3	9.5
0.6	M3.5×0.6		2.75	1.94	7.4	4	50	3	2.9
0.7	M4×0.7		3.15	2.24	8.6	4	50	3	3.3
0.75	M4.5×0.75		3.5	2.525	9.5	4	50	3	3.8
0.75		M6×0.75	4.8	3.825	13	6	50	3	5.3
0.75		M8×0.75	6	5.025	16	6	50	3	7.3
0.75		M10×0.75	8	7.025	21.8	8	60	3	9.3
0.8	M5×0.8		4	2.96	12	4	50	3	4.2
1	M6×1		4.8	3.5	13	6	50	3	5
1		M8×1	6	4.7	16	6	50	3	7
1		M10×1	8	6.7	21.8	8	60	3	9
1		M12×1	10	8.7	25	10	75	4	11
1		M14×1	10	8.7	28	10	75	4	13
1		M16×1	12	10.7	30	12	75	4	15

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° Metric 3-Tooth Thread Mills (cont.)

Three profile teeth for faster threading

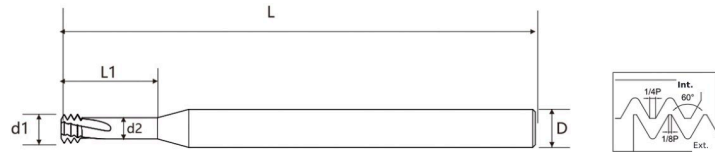
PITCH mm	COARSE	FINE	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES	PRE-HOLE Ø
1		M20-M40×1	15.8	14.5	40	16	90	4	19
1.25	M8×1.25		6	4.375	16	6	50	3	6.8
1.25	M8×1.25		6.5	4.87	20	8	60	3	6.8
1.25		M10×1.25	8	6.375	21.8	8	60	3	8.8
1.25		M12×1.25	10	8.375	25	10	75	4	10.8
1.25		M14×1.25	10	8.375	28	10	75	4	12.8
1.25		M16-M40×1.25	12	10.375	30	12	75	4	14.8
1.5	M10×1.5		8	6.05	21.8	8	60	3	8.5
1.5	M10×1.5		8.2	6.25	21.8	10	75	4	8.8
1.5		M12×1.5	10	8.05	25	10	75	4	10.6
1.5		M14×1.5	12	10.05	28	12	75	4	12.6
1.5		M16×1.5	12	10.05	30	12	75	4	14.6
1.5		M20-M40×1.5	15.8	13.85	40	16	90	4	18.6
1.75	M12×1.75		10	7.725	25	10	75	4	10.3
2	M14×2		10	7.4	25	10	75	4	12.1
2	M14×2		11.6	9	29	12	74	4	12.1
2	M16×2		12	9.4	27	12	75	4	14.1
2	M16×2		13.6	11	50	14	100	4	14.1
2		M20-M40×2	15.8	13.2	40	16	90	4	18.1
2.5	M18-M20×2.5		14	10.75	40	14	90	4	15.5
2.5	M20×2.5		16	12.75	61	16	100	4	17.6
3	M24×3.0		16	12.1	45	16	90	4	21.2
3.5	M30×3.5		16	11.45	48	16	90	4	26.5

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° M 3-Tooth Thread Mills

Reach 3xD and 4xD

3D · $L1 \geq 3 \times \text{thread dia.}$



P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○	○			

PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
0.3	M1.4×0.3	1.05	0.66	4.2	4	50	3
0.35	M1.6×0.35	1.2	0.745	4.8	4	50	3
0.4	M2×0.4	1.55	1.02	6	4	50	3
0.45	M2.5×0.45	1.95	1.375	7.5	4	50	3
0.5	M3×0.5	2.4	1.75	9	4	50	3
0.7	M4×0.7	3.15	2.14	12	4	50	3
0.8	M5×0.8	3.9	2.96	15	4	50	3
1	M6×1.0	4.8	3.5	18	6	50	3

4D · $L1 \geq 4 \times \text{thread dia.}$

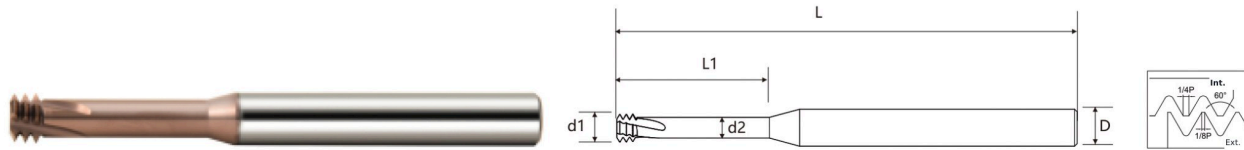
PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
0.3	M1.4×0.3	1.05	0.66	5.6	4	50	3
0.35	M1.6×0.35	1.2	0.745	6.4	4	50	3
0.4	M2×0.4	1.55	1.02	8	4	50	3
0.45	M2.5×0.45	1.95	1.375	10	4	50	3
0.5	M3×0.5	2.4	1.75	12	4	50	3
0.7	M4×0.7	3.15	2.14	16	4	50	3
0.8	M5×0.8	3.9	2.96	20	4	50	3
1	M6×1.0	4.8	3.5	24	6	60	3

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° M Long 3-Tooth Thread Mills

Overall length 75 and 100 mm

75 mm long



P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○	○			

PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
0.35	M1.6×0.35	1.2	0.745	6.4	4	75	3
0.4	M2×0.4	1.55	1.03	8	4	75	3
0.45	M2.5×0.45	1.96	1.375	10	4	75	3
0.5	M3×0.5	2.4	1.75	12	4	75	3
0.7	M4×0.7	3.15	2.24	16	4	75	3
0.8	M5×0.8	4	2.96	20	4	75	3
1	M6×1	4.8	3.5	15	6	75	3
1.25	M8×1.25	6	4.375	32	6	75	3
1.5	M10×1.5	8	6.05	35	8	75	—

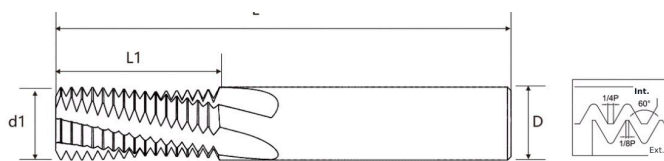
100 mm long

PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
0.35	M1.6×0.35	1.2	0.745	6.4	4	100	3
0.35	M1.6×0.35	1.2	0.745	3.2	6	100	3
0.4	M2×0.4	1.55	1.03	8	4	100	3
0.4	M2×0.4	1.55	1.03	4	6	100	3
0.45	M2.5×0.45	1.96	1.375	10	4	100	3
0.45	M2.5×0.45	1.96	1.375	5	6	100	3
0.5	M3×0.5	2.4	1.75	12	4	100	3
0.5	M3×0.5	2.4	1.75	6	6	100	3
0.7	M4×0.7	3.15	2.24	16	4	100	3
0.7	M4×0.7	3.15	2.24	8	6	100	3
0.8	M5×0.8	4	2.96	20	4	100	3
0.8	M5×0.8	4	2.96	10	6	100	3
1	M6×1	4.8	3.5	12	6	100	3
1.25	M8×1.25	6	4.375	16	6	100	4
1.5	M10×1.5	8	6.05	21.8	8	100	4
1.75	M12×1.75	10	7.725	24	10	100	4
2	M14×2	10	7.4	37	10	100	4

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° Metric Multi-Row Thread Mills

Full-length thread form, one revolution per thread



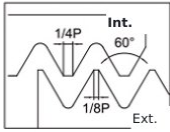
P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○	○			

PITCH mm	COARSE	FINE	DIA. d1	REACH L1	SHANK D	FLUTES	PRE-HOLE Ø
0.35	M1.6×0.35		1.2	3.4	4	3	1.25
0.4	M2×0.4		1.54	5	4	3	1.6
0.45	M2.5×0.45		1.96	5.3	4	3	2.05
0.5	M3×0.5		2.3	6	4	3	2.5
0.5		M6×0.5	4	10	4	3	5.5
0.5		M8-M12×0.5	6	16	6	3	7.5
0.6	M3.5×0.6		2.7	7	4	3	2.9
0.7	M4×0.7		3	8	4	3	3.3
0.75	M4.5×0.75		3.4	9	4	3	3.75
0.75		M6×0.75	4.8	12	6	3	5.25
0.75		M8×0.75	6	16	6	3	7.25
0.75		M10-M12×0.75	8	20	8	3	9.25
0.8	M5×0.8		4	10	4	3	4.2
1	M6×1		4.8	12	6	3	5
1		M8×1	6	16	6	3	7
1		M10×1	8	20	8	3	9
1		M12-M14×1	10	22	10	4	11
1		M16×1	12	22	12	4	15
1		M20-M48×1	16	30	16	4	19
1.25	M8×1.25		6	16	6	3	6.75
1.25	M8×1.25		6.5	17.5	8	3	6.75
1.25		M10×1.25	8	20	8	3	8.75
1.25		M12-M14×1.25	10	25	10	4	10.75
1.5	M10×1.5		8	20	8	3	8.5
1.5	M10×1.5		8.2	21	10	4	8.5
1.5		M12-M20×1.5	10	28	10	4	10.5
1.5		M14-M24×1.5	12	28	12	4	12.5
1.5		M20-M48×1.5	16	30	16	4	18.5
1.75	M12×1.75		9.8	30	10	4	10.25
2	M14×2.0		10	30	10	4	12
2	M14×2.0		11.6	30	12	4	12
2	M16×2.0		12	30	12	4	14
2	M16×2.0		13.6	33	14	4	14
2		M20-M80×2.0	16	40	16	4	18
2.5	M18-M20×2.5		14	36	14	4	15.5
2.5		M20-M80×2.5	16	40	16	4	17.5
3	M24×3.0		16	42	16	4	21
3.5	M30×3.5		16	42	16	4	26.5

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° UN Single-Form Thread Mills

Unified threads, pitch in TPI

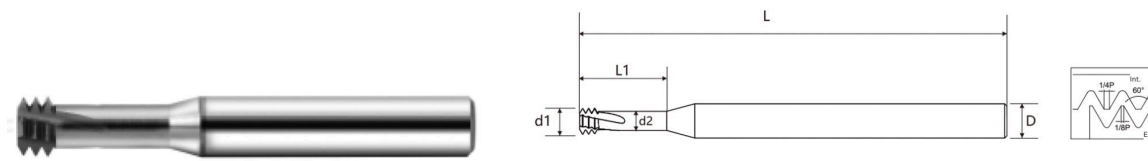


P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○	○			
TPI	UNC		UNF			DIA. d1	NECK d2	REACH L1		SHANK D	OAL L	FLUTES		PRE-HOLE Ø
80			No.0-80			1.15	0.737	4.6		4	50	3		1.3
72			No.1-72			1.45	0.991	3.9		4	50	3		1.6
56	No.2-56		No.3-56			1.65	1.06	6.5		4	50	3		1.8
40	No.4, No.5-40		No.6-40			2.1	1.275	8.5		4	50	3		2.3
40	No.5-40		No.6-40			2.55	1.6	7.4		4	50	3		2.6
32	No.6, No.8-32		No.10-32			2.55	1.518	7.4		4	50	3		3.5
32	No.8-32		No.10-32			3.2	2.168	11		4	50	3		4.0
32			No.10-32			3.8	2.768	12		4	50	3		4
20	1/4-20		7/16-20			4.88	3.229	20		6	50	3		5.2
16	3/8-16					7.7		20		8	60	3		8

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° UN Triple-Form Thread Mills

Unified threads, pitch in TPI



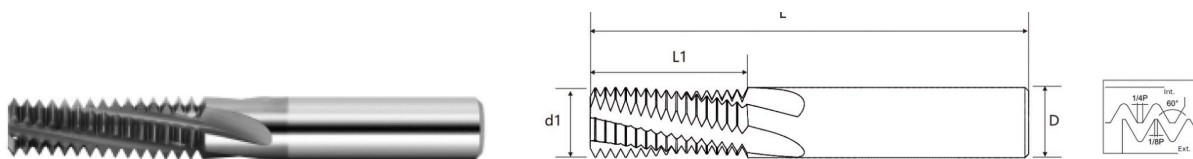
P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○	○			

TPI	UNC	UNF	DIA. d1	NECK d2	REACH L1	SHANK D	FLUTES
80		No.0-80	1.15	0.737	3.5	4	3
72		No.1-72	1.45	0.991	3.9	4	3
64	No.1-64	No.2-64	1.4	0.884	4.2	4	3
56	No.2-56	No.3-56	1.65	1.06	5	4	3
48	No.3-48	No.4-48	1.9	1.212	6	4	3
40	No.4, No.5-40	No.6-40	2.1	1.275	6	4	3
40	No.5-40	No.6-40	2.45	1.6	7.2	4	3
36		No.8-36	3.3	2.383	8.7	4	3
32	No.6, No.8-32	No.10-32	2.55	1.518	7.4	4	3
32	No.8-32	No.10-32	3.2	2.168	10	4	3
32		No.10-32	3.8	2.768	10.3	4	3
28		1/4-28	5.25	4.071	13.2	6	3
24	No.10-24	5/16-24	3.58	2.204	10.2	4	3
24		5/16-24	6.68	5.304	16.5	8	3
20	1/4-20	7/16-20	4.88	3.229	13.4	6	3
20		7/16-20	9.55	7.899	23	10	4
18	5/16-18		6.15	4.316	16.9	8	3
16	3/8-16		6.7	4.636	19.1	8	3
14	7/16-14		9	6.641	23.3	10	4

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

60° UN Multi-Form Thread Mills

Unified threads, pitch in TPI



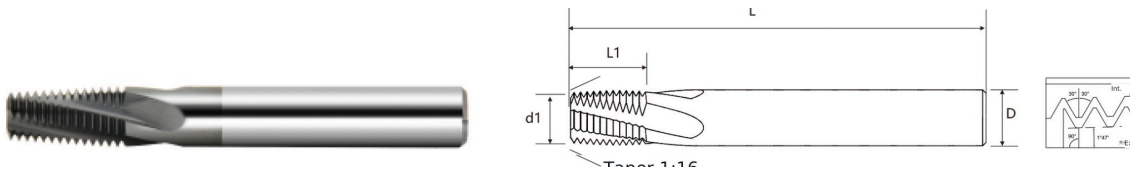
P		M		K		N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium		≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○					

TPI	UNC	UNF	UNEF	DIA. d1	REACH L1	SHANK D	OAL L	FLUTES	PRE-HOLE Ø
36		No.8-36		3	8.5	4	50	3	3.5
32		No.10-32	No.12-3/8-32	3.5	11.1	4	50	3	4
28		No.12-28, 1/4-28	7/16, 1/2-28	4	11.8	4	50	3	4.6
28			7/16, 1/2-28	5	12.7	6	60	3	5.5
28		1/4-28	7/16, 1/2-28	9.2	22.7	10	75	4	10.2
24	No.10-24	5/16, 3/8-24	9/16, 11/16-24	3.2	10.6	4	50	3	3.8
24	No.12-24	5/16, 3/8-24	9/16, 11/16-24	4	11.6	4	50	3	4.5
24		5/16, 3/8-24	9/16, 11/16-24	6	15.9	6	60	3	6.8
24		3/8-24	9/16, 11/16-24	7.8	19.1	8	60	3	8.5
24			9/16, 11/16-24	11.9	28.6	12	75	4	13.2
20	1/4-20	7/16, 1/2-20	3/4, 1-20	4	12.7	4	50	3	5.2
20	1/4-20	7/16, 1/2-20	3/4, 1-20	4.88	13	6	60	3	5.2
20		7/16, 1/2-20	3/4, 1-20	9	22.9	10	75	4	9.8
20		1/2-20	3/4, 1-20	10	25.4	10	75	4	11.5
20			3/4, 1-20	12	38.1	12	75	4	17.8
18	5/16-18	9/16, 5/8-18	11/16, 1 11/16-18	5.8	16.9	6	60	3	6.5
18		9/16, 5/8-18	11/16, 1 11/16-18	10	29.6	10	75	4	12.8
18	3/8-16	5/8-18	11/16, 1 11/16-18	11.9	32.5	12	75	4	14.5
16		3/4-16		7.6	19.1	8	60	3	8
16	7/16-14	3/4-16		12	28	12	75	4	17.5
14		7/8-14		8	20	8	60	3	9.3
14		7/8-14		16	39.9	16	100	4	20.5
13	1/2-13			8	20	8	60	3	10.8
12	9/16-12	1, 1 1/2-12		10	28	10	75	4	12.3
12		1, 1 1/2-12		16	40	16	100	4	23.5
11	5/8-11			12	30	12	75	4	13.5
10	3/4-10			12	30	12	75	4	16.5
9	7/8-9			16	38	16	100	4	19.5
8	1-8			16	40	16	100	4	22

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

NPT / NPTF Taper Pipe Thread Mills

Taper 1:16, pitch in TPI



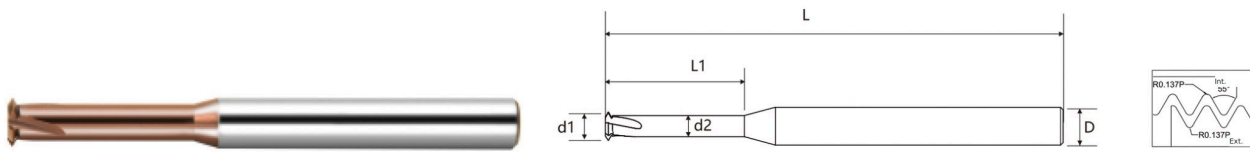
P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○				

TPI	THREAD	DIA. d1	REACH L1	SHANK D	OAL L	FLUTES	PRE-HOLE Ø
27	1/16", 1/8"	5.2	12	6	60	3	6.3
27	1/8"	7.2	12	8	60	3	8.5
18	1/4"	7.1	14.1	8	60	3	11.1
18	1/4", 3/8"	8.7	20	10	75	4	11.1
18	3/8"	10.6	22	12	75	4	14.5
18	3/8"	12.6	22	14	90	4	14.5
14	1/2"	10.8	18.1	12	75	4	17.7
14	1/2", 3/4", 5/8"	14.4	25	16	90	4	23
11.5	1"-2"	14.1	30	16	90	4	29-56
8	2-1/2", 3"	13.8	35	16	90	4	66.5

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

55° BSP Single-Form Thread Mills

For G, PF, RC and PT threads



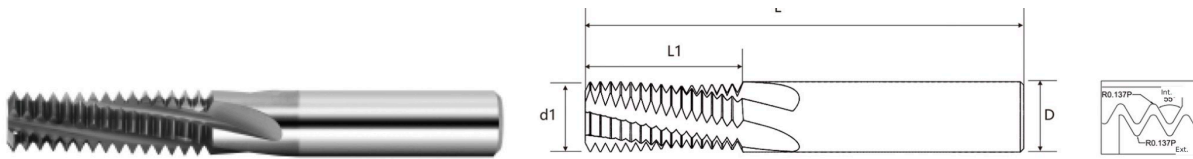
P		M		K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○	○			

PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
P0.793	W5/32	3.1	1.9	8	4	50	4
P1.058	W3/16-24	3.5	2	10	4	50	4
P1.27	W1/4-20	4	2.2	12	4	50	4
P0.907-P1.411	W5/16-18, G1/16-28, G1/8-28	6	4.5	14	6	50	4
P1.336-P1.814	W3/8-16, W7/16-14, G1/4-19, G3/8-19	8	5.9	22	8	60	4
P1.336-P1.814	W7/16-14, G1/2-14, G1/4-19, G3/4-14, G3/8-19	10	7.3	30	10	75	4
P1.336-P2.54	W5/8-11, W3/4-10, G1/2-14, G3/4-14, G1-11	12	8.2	38	12	75	4

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

55° BSP Parallel Pipe Thread Mills

BSP (G), pitch in TPI



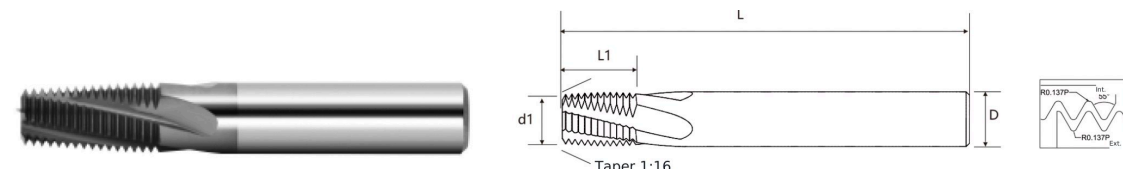
P			M		K		N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65		
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○						

TPI	THREAD	DIA. d1	REACH L1	SHANK D	OAL L	FLUTES	PRE-HOLE Ø
28	G1/16, G1/8	6	12	6	60	3	6.7
28	G1/8	8	12	8	60	3	8.7
19	G1/4	8	18	8	60	3	11.8
19	G1/4, G3/8	10	15	10	75	4	15.2
19	G1/4, G3/8	9.9	26.7	10	75	4	15.2
19	G1/4, G3/8	12	22	12	75	4	15.2
19	G3/8	14	22	14	90	4	19
14	G1/2, G5/8, G3/4	11.9	35	12	83	4	19
14	G1/2, G5/8, G3/4	16	30	16	90	4	23
11	G1"-G4"	16	34	16	90	4	30.7

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

55° BSPT Taper Pipe Thread Mills

BSPT (PT, RC), taper 1:16, pitch in TPI



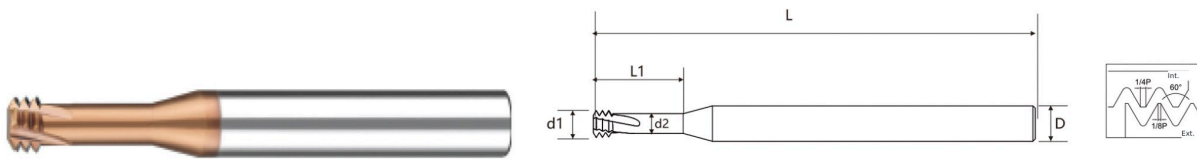
P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	○	○				

TPI	THREAD	DIA. d1	REACH L1	SHANK D	OAL L	FLUTES	PRE-HOLE Ø
28	RC1/16, RC1/8	5.24	12	6	60	3	6.7
28	RC1/8	7.24	12	8	60	3	8.7
19	RC1/4	7.13	14	8	60	3	11.8
19	RC1/4, RC3/8	8.88	18	10	75	4	15.2
19	RC3/8	10.75	20	12	75	4	15.2
19	RC3/8	12.75	20	14	90	4	19
14	RC1/2, RC3/4, RC7/8	14.48	24	16	90	4	23
11	RC1, RC1-1/2, RC2, RC2-1/2	14.13	30	16	90	4	30.7

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

GX Metric Triple-Form Thread Mills, 2xD

For materials up to 58 HRC



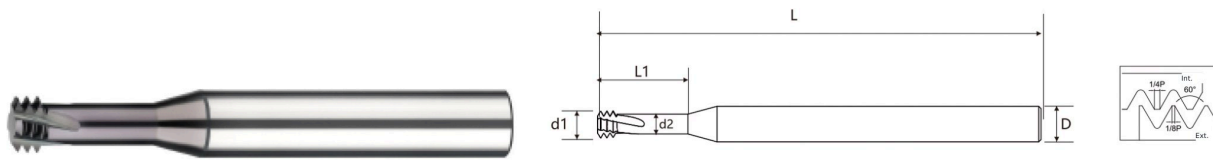
P			M		K	N				S	H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
☉	☉	☉									☉	☉		

PITCH mm	COARSE	FINE	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES	PRE-HOLE Ø
0.25	M1×0.25		0.7	0.375	2.8	4	50	3	0.75
0.25	M1.2×0.25		0.9	0.575	3	4	50	3	0.95
0.3	M1.4×0.3		1.05	0.66	3.2	4	50	3	1.1
0.35	M1.6×0.35		1.2	0.745	3.4	4	50	3	1.25
0.4	M2×0.4		1.55	1.03	4.2	4	50	3	1.6
0.45	M2.2×0.45		1.7	1.11	5	4	50	3	1.75
0.45	M2.5×0.45	M2.6×0.45	1.95	1.365	5.2	4	50	3	2.05
0.5	M3×0.5	M3.5-M16×0.5	2.4	1.75	6.2	4	50	3	2.5
0.6	M3.5×0.6		2.75	1.97	7.3	4	50	3	2.9
0.7	M4×0.7		3.15	2.24	8.3	4	50	3	3.3
0.8	M5×0.8		3.9	2.86	10.4	4	50	3	4.2
1	M6×1	M8-M40×1	4.8	3.5	12.5	6	60	3	5
1.25	M8×1.25		6.5	4.875	16.6	8	60	3	6.8
1.5	M10×1.5	M12-M48×1.5	8.2	6.25	20.8	10	75	4	8.5
1.75	M12×1.75		9.9	7.625	25	10	75	4	10.3
2	M14×2, M16×2		11.6	9	33	12	75	4	12.0-14.0
2.5	M20×2.5		13.9	10.65	41.3	14	90	5	17.5
3	M24×3		15.9	12	50	16	100	5	21

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

T Metric Triple-Form Thread Mills, 2xD

For stainless steel, titanium and superalloys



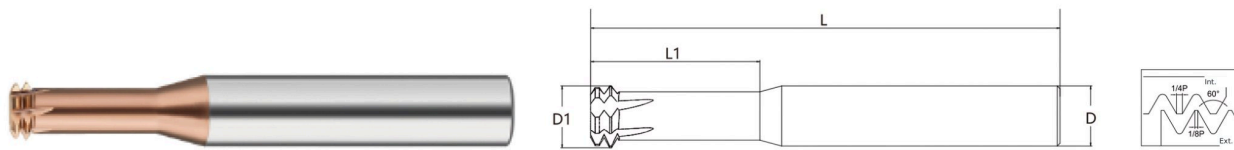
P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
			⊙	⊙					○	⊙				

PITCH mm	COARSE	FINE	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES	PRE-HOLE Ø
0.25	M1×0.25		0.7	0.375	2.8	4	50	3	0.75
0.25	M1.2×0.25		0.9	0.575	3	4	50	3	0.95
0.3	M1.4×0.3		1.05	0.66	3.2	4	50	3	1.1
0.35	M1.6×0.35		1.2	0.745	3.4	4	50	3	1.25
0.4	M2×0.4		1.55	1.03	4.2	4	50	3	1.6
0.45	M2.5×0.45	M2.6×0.45	1.95	1.365	5.2	4	50	3	2.05
0.5	M3×0.5	M3.5-M16×0.5	2.4	1.75	6.2	4	50	3	2.5
0.6	M3.5×0.6		2.75	1.97	7.3	4	50	3	2.9
0.7	M4×0.7		3.15	2.24	8.3	4	50	3	3.3
0.8	M5×0.8		3.9	2.86	10.4	4	50	3	4.2
1	M6×1	M8-M40×1	4.8	3.5	12.5	6	60	3	5
1.25	M8×1.25		6.5	4.875	16.6	8	60	3	6.8
1.5	M10×1.5	M12-M48×1.5	8.2	6.25	20.8	10	75	4	8.5
1.75	M12×1.75		9.9	7.625	25	10	75	4	10.3
2	M14×2,, M16×2		11.6	9	33	12	75	4	12.0-14.0
2.5	M20×2.5		13.9	10.65	41.3	14	90	5	17.5
3	M24×3		15.9	12	50	16	100	5	21

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

RX Double-Row Thread Mills

For hardened steel up to 65 HRC



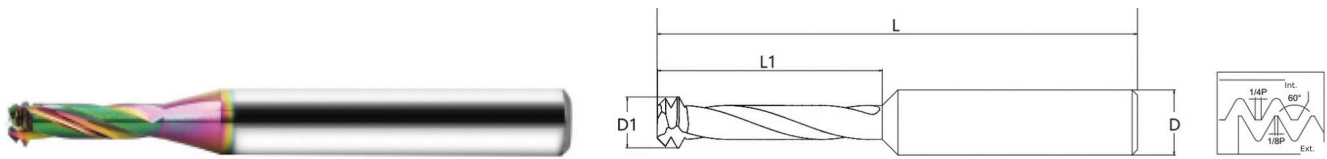
P			M	K	N					S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65	
												⊙	⊙	⊙	

PITCH mm	COARSE	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES	PRE-HOLE Ø
0.35	M1.6×0.35	1.2	0.78	3.2	6	50	3	1.25
0.4	M2×0.4	1.55	1.05	4	6	50	4	1.6
0.45	M2.5×0.45	2	1.45	5	6	50	4	2.05
0.5	M3×0.5	2.4	1.8	6	6	50	4	2.5
0.7	M4×0.7	3.15	2.3	8	6	50	4	3.3
0.8	M5×0.8	4.05	3.05	10	6	50	4	4.2
1	M6×1	4.8	3.6	12	6	50	5	5
1.25	M8×1.25	6.5	5	16	8	60	6	6.75
1.5	M10×1.5	8.2	6.4	20	10	75	6	8.5
1.75	M12×1.75	9.6	7.5	24	10	75	6	10.25

Two rows of teeth: the partial-profile row roughs, the full-profile row finishes. Cut from the hole bottom to the top with reverse spindle rotation (M04). Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

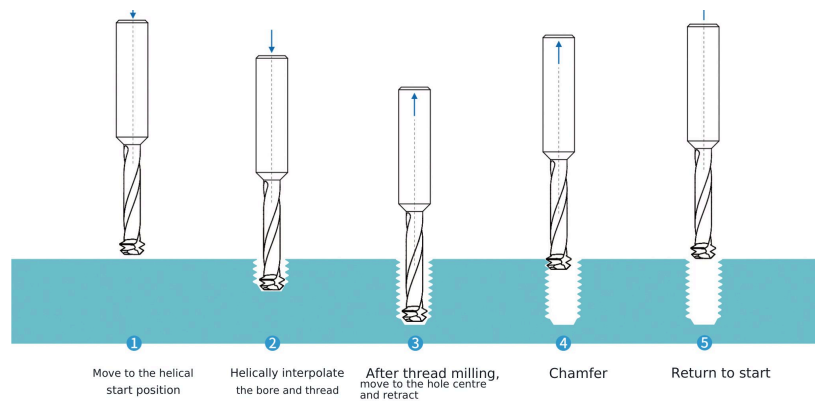
Multi-Function Thread Mills for Aluminium

Drill, thread and chamfer in one tool, no pre-drilling



P			M		K		N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65		
					⊙	⊙	⊙	⊙								

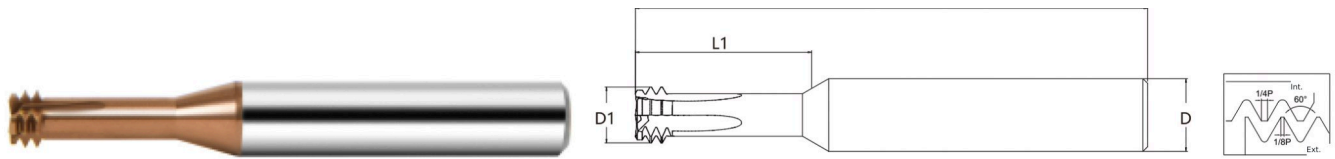
PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
0.35	M1.6	1.15	0.69	5	4	50	2
0.4	M2	1.5	0.98	6.5	4	50	2
0.45	M2.5	1.9	1.31	7	4	50	2
0.5	M3	2.4	1.75	9	6	50	3
0.7	M4	3.2	2.29	11	6	50	3
0.8	M5	3.9	2.86	12	6	50	3
1	M6	4.7	3.4	14	6	50	3
1.25	M8	6.5	4.87	18	8	60	4
1.5	M10	7.8	5.55	23	8	60	4
1.75	M12	9.6	7.32	26	10	75	4



Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

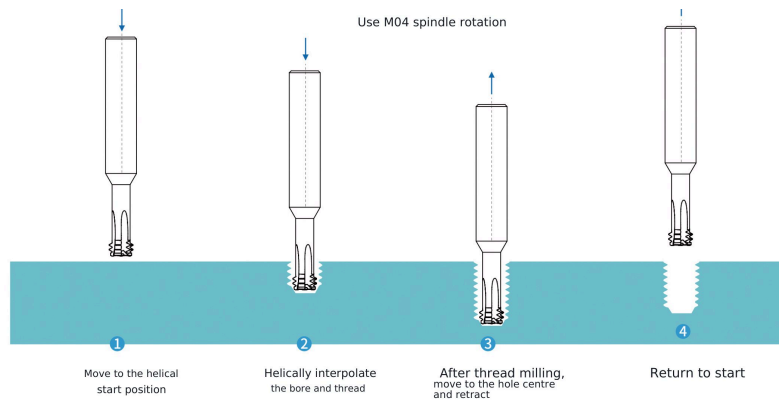
Multi-Function Thread Mills for Steel

Bore and thread in one tool, no pre-drilling



P					M				K		N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65						
◎	◎	◎	○	◎						○										

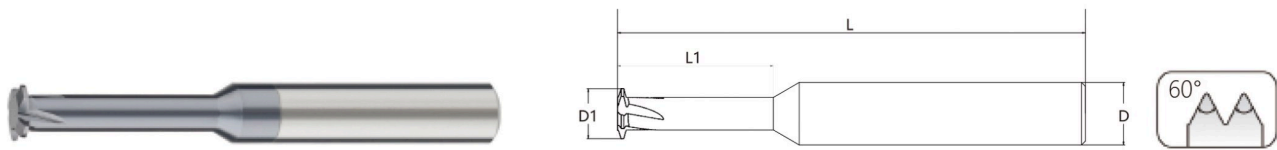
PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
0.5	M3	2.4	1.75	7	6	50	4
0.7	M4	3.2	2.29	9	6	50	4
0.8	M5	3.9	2.86	12	6	50	4
1	M6	4.7	3.4	14	6	50	4
1.25	M8	6.5	4.87	18	8	60	4
1.5	M10	7.8	5.55	23	8	60	4
1.75	M12	9.6	7.32	26	10	75	4



Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

TR 30° Trapezoidal Thread Mills

Internal trapezoidal threads, pitch 1–6 mm



P			M	K	N				S	H · HRC				
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		○	○			

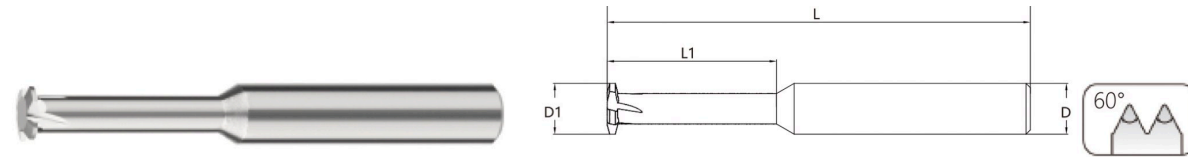
PITCH mm	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
1	TR7×1	5.5	4.1	20	6	50	4
1.5	TR8×1.5, TR9×1.5	6	4	20	6	50	4
2	TR9×2, TR10×2, TR11×2	6.4	3.7	20	8	60	4
2	TR12×2, TR14×2, TR16×2, TR18×2, TR20×2	9.4	6.5	35	10	75	4
3	TR11×3, TR14×3	7.4	3.8	25	8	60	4
3	TR14×3, TR22×3, TR24×3, TR26×3, TR28×3, TR30×3	10	6	35	10	75	4
4	on request	11	6	38	12	75	4
5	TR22×5, TR24×5, TR26×5, TR28×5	14	7.8	50	14	100	4
6	TR30×6, TR32×6, TR34×6, TR36×6, TR38×6, TR40×6, TR42×6	16	9	50	16	100	4

Pitch 4 mm: thread sizes on request. Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

ACME 29° and PG 80° Thread Mills

ACME and PG (Panzergewinde) threads

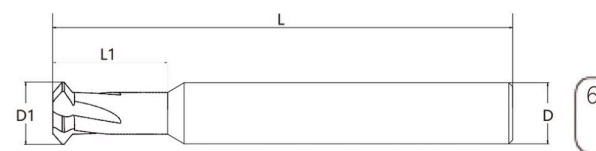
ACME 29°, pitch in TPI



P			M	K	N				S		H · HRC			
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○	○				

TPI	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
16	ACME 1/4-16	4.7	2.6	15	6	50	4
14	ACME 5/16-14	6	3.6	20	6	50	4
12	ACME 3/8-12, ACME 7/16-12	7.2	4.5	25	8	60	4
10	ACME 1/2-10	10	6.5	35	10	75	4
8	ACME 5/8-8	12	7.5	35	12	75	4
6	ACME 3/4-6, ACME 7/8-6	12	6.5	35	12	75	4

PG 80°, pitch in TPI



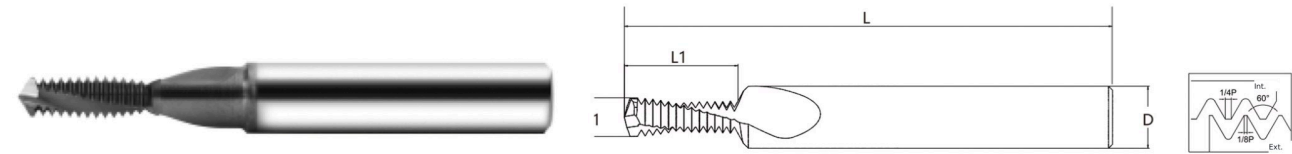
TPI	THREAD	DIA. d1	NECK d2	REACH L1	SHANK D	OAL L	FLUTES
20	PG7, PG9, PG11, PG13.5, PG16	7.9	6.25	20	8	60	4
18	PG9, PG11, PG13.5, PG16	9.9	8.06	25	10	75	5
16	PG21, PG29, PG36, PG42, PG48	12	9.94	28	12	75	5

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

3-in-1 Drill and Thread Mills · Pre-Milling End Mills

Drill and thread M6–M12 in one tool; pre-mill the 1:16 taper before pipe threading

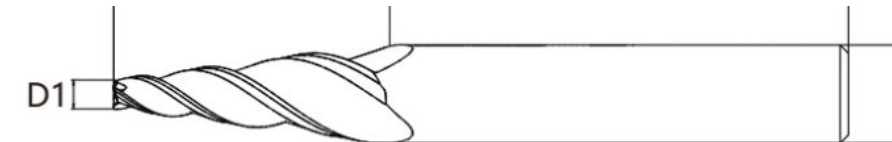
3-in-1 drill and thread mills



P			M	K	N				S	H · HRC				
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
○				◎	○	○	○	○						

THREAD	CUTTER Ø	DRILL d1	THREAD L. L1	POINT L	NECK D1	OAL L	FLUTES
M6×1	4.8	5	12	1	7	60	
M8×1.25	6.5	6.8	15	1.3	9	75	
M10×1.5	8.2	8.5	20	1.5	11	75	
M12×1.75	9.9	10.3	24	1.8	13.5	75	

Taper pipe thread pre-milling end mills, NPT / NPTF / BSPT



P			M	K	N				S	H · HRC				
Carbon	Alloy	Prehard.	Stainless	Cast iron	Alu.	Copper	Plastics	Acrylic	Superalloy	Titanium	≤48	≤55	≤60	≤65
◎	◎	○	◎	◎	◎	◎	○	○			○			

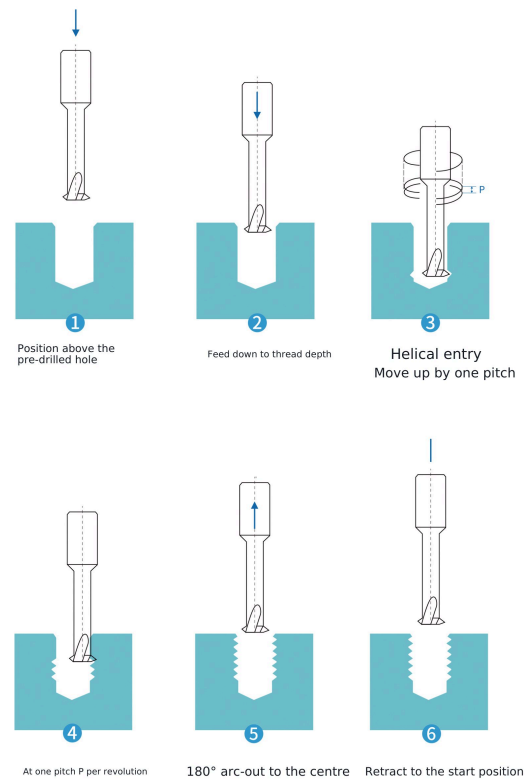
THREAD	DIA. d1	REACH L1	SHANK D	OAL L	FLUTES
NPT 1/16"-1/8", NPTF 1/16"-1/8", BSPT 1/16"-1/8"	5.2	12	6	50	4
NPT 1/4"-1", NPTF 1/4"-1", BSPT 1/4"-1"	8.5	24	10	75	4
NPT 1/4"-3", NPTF 1/4"-3", BSPT 1/4"-3"	10	32	12	75	4

Dimensions in mm. Other pitches, profiles, reaches and coatings are made to order from 5 pieces, 15–30 working days. Stock varies by size; please confirm on inquiry.

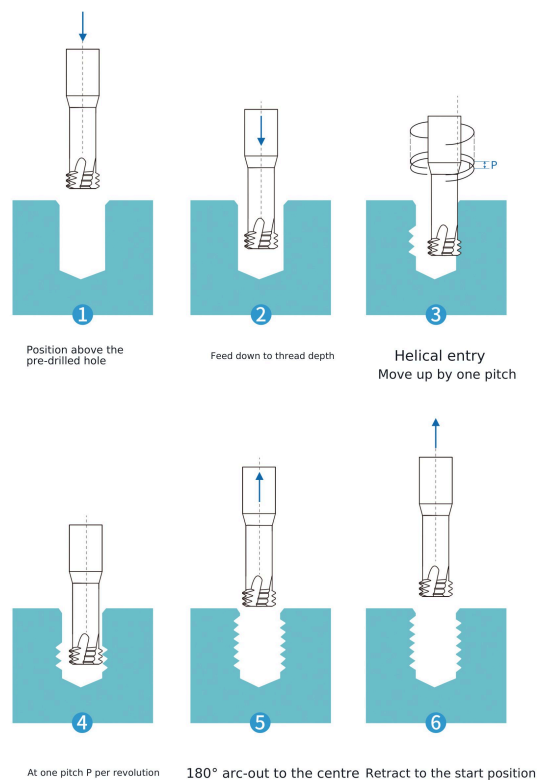
Thread milling cycles

Tool path for internal threads; use climb milling

Single-form thread milling



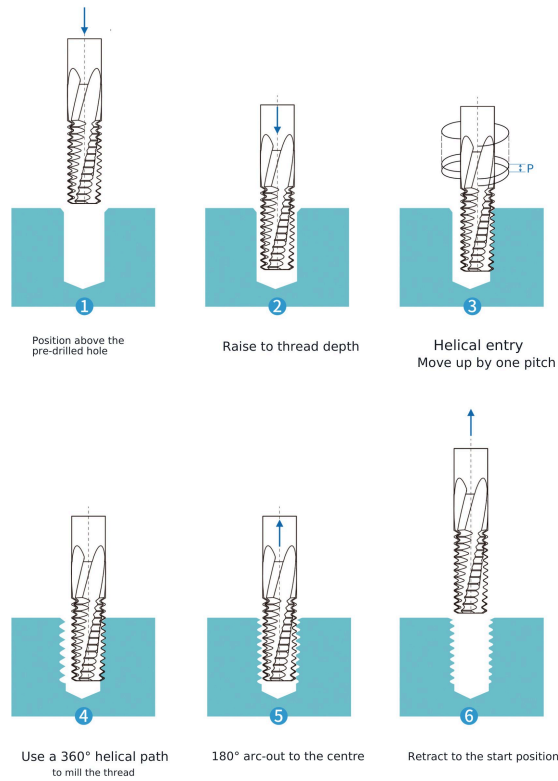
Triple-form thread milling



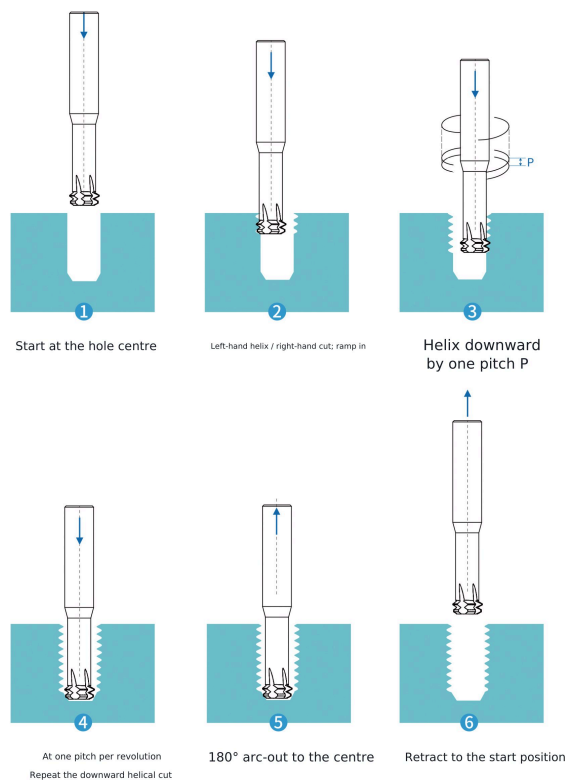
Thread milling cycles

Tool path for internal threads; use climb milling

Multi-form thread milling

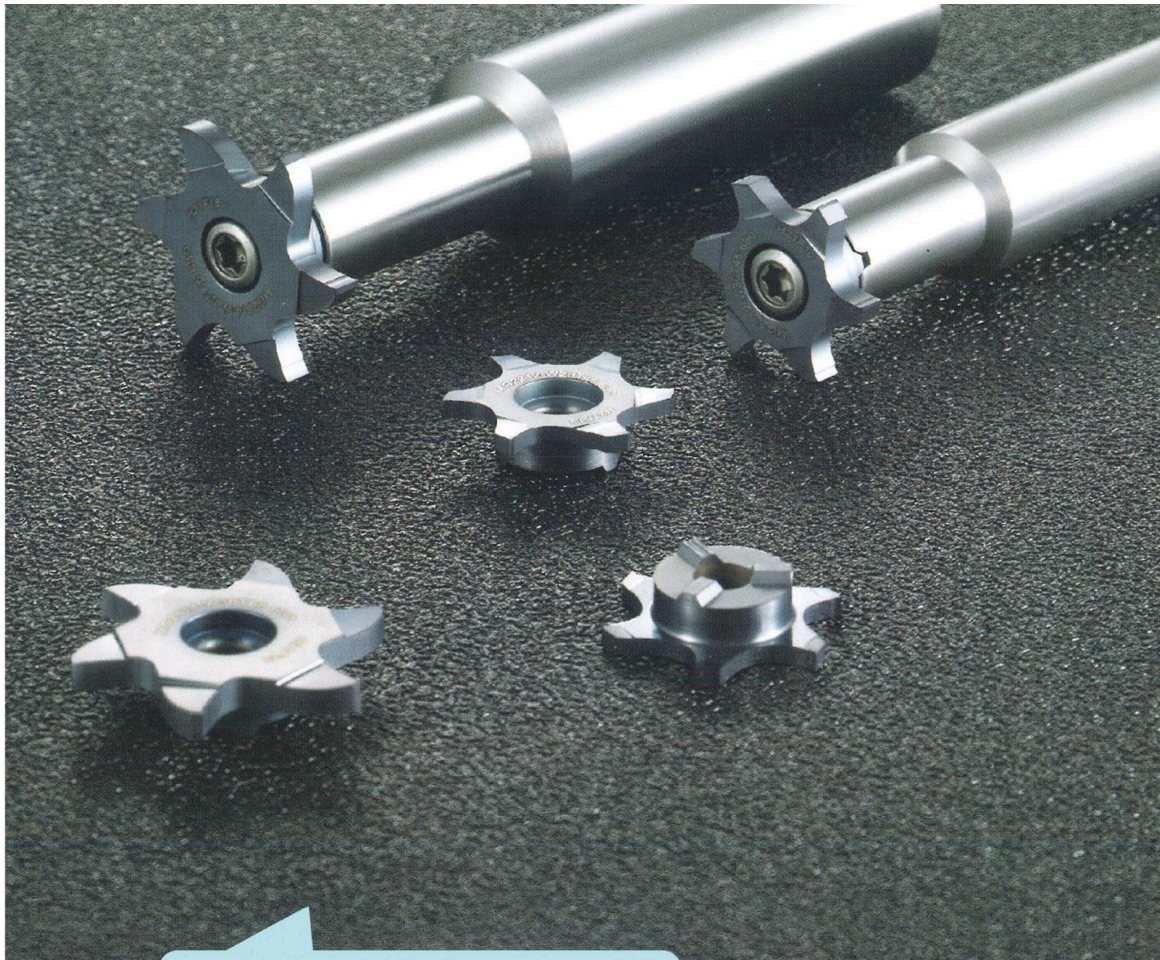


Double-row (RX) thread milling



Modular Tooling

Serrated-connection inserts on steel or carbide holders: small-bore grooving, boring, threading and face grooving, plus modular milling cutters for grooves, circlips, radii, threads and chamfers.



RBMB

Small-bore inserts and holders, min. grooving bore $\varnothing 5.5$ mm

RTMG • RTMI

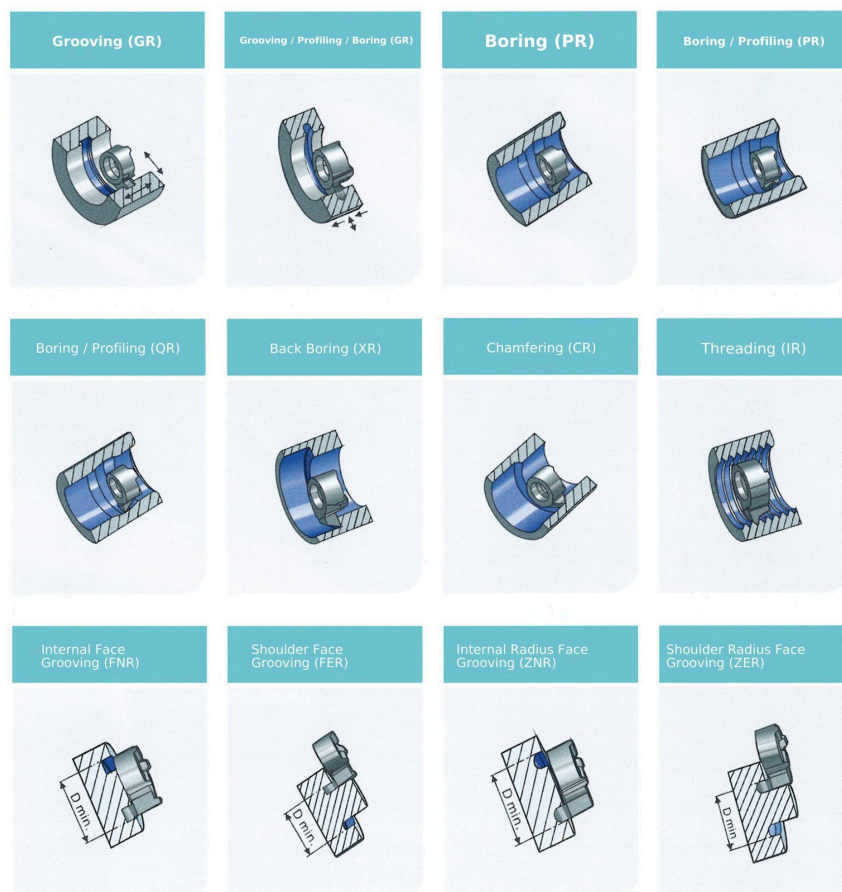
Milling inserts Ds 9.7–34.7 mm, 3 or 6 teeth

RTMC

Holders and adapters, DIN 6535 shanks

Modular Small-Bore Tools

Compact modular grooving and boring system



Serrated connection

Secure clamping for small-bore machining; precision-ground inserts for chip control.

One holder, many jobs

Grooving, boring, profiling, back boring, chamfering, threading and face grooving with one holder.

Holder choice

Eccentric-neck holders for rigidity, concentric holders for turning and milling, carbide holders for long reach.

Ø5.5

min. grooving bore, mm

05-11

insert sizes

R / L

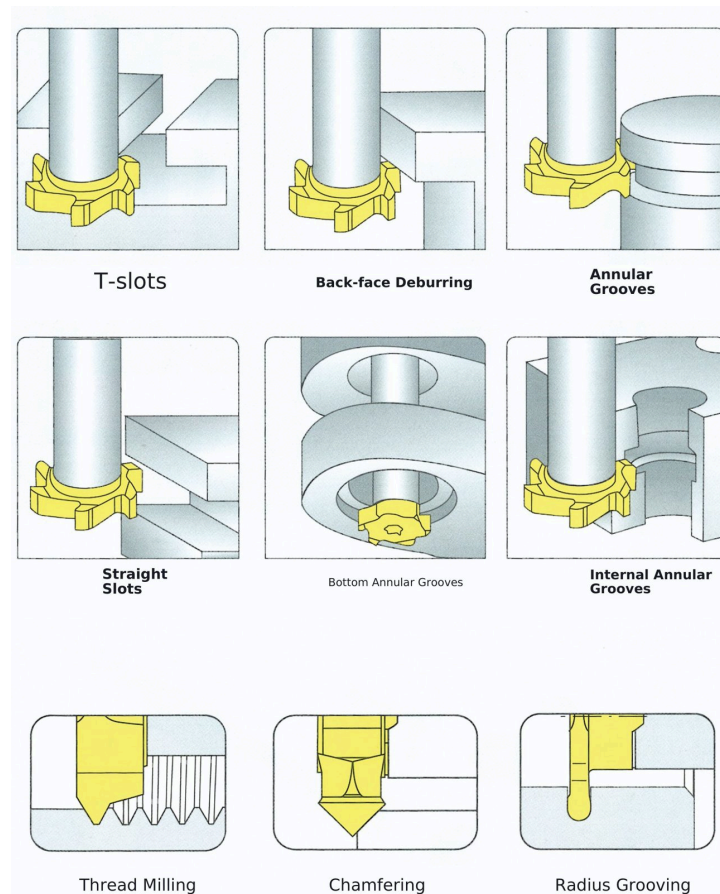
right- and left-hand

Coolant

through-coolant holders

Modular Milling Cutters

Features and applications



Serrated connection

Screw-clamped inserts for secure, easy replacement; radial and axial runout within 0.02 mm.

One holder

Square, circlip and radius grooves, chamfers and threads on the same holder.

Teeth

Ds 9.7 and 11.7 mm inserts have 3 teeth; from Ds 13.7 mm, 6 teeth.

0.02 mm

insert runout

9.7–34.7

insert dia. Ds, mm

3 / 6

teeth

Coolant

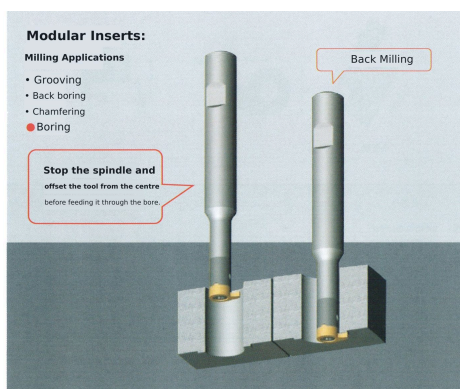
through-coolant holders

Installation and use

Align the insert locating-tooth mark with the holder mark; check radial and axial runout within 0.02 mm before use



Small-bore inserts: milling applications



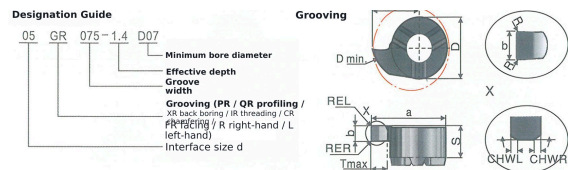
Size Change Example



Modular Small-Bore Tools

RBMB serrated-connection inserts and holders

Grooving GR, size 05



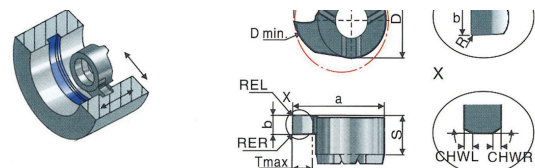
ORDER CODE RBMB-...	SIZE D	CIRCLIP width	WIDTH W	DEPTH Tmax	REL/RER	CHWL/R	S	f	a	MIN. BORE Dmin
05GR/L050-1.4D07	5	–	0.5	1.4	–	0.04	3.3	4.3	6.8	7.0
05GR/L075-1.4D07	5	0.7	0.75	1.4	–	0.04	3.3	4.3	6.8	7.0
05GR/L083-1.4D07	5	0.8	0.83	1.4	–	0.04	3.3	4.3	6.8	7.0
05GR/L093-1.4D07	5	0.9	0.93	1.4	–	0.04	3.3	4.3	6.8	7.0
05GR/L100-1.4D07	5	–	1.0	1.4	–	0.04	3.3	4.3	6.8	7.0
05GR/L120-1.4D07	5	1.1	1.2	1.4	–	0.04	3.3	4.3	6.8	7.0
05GR/L140-1.4D07	5	1.3	1.4	1.4	–	0.04	3.3	4.3	6.8	7.0
05GR/L150-1.4D07	5	–	1.5	1.4	–	0.04	3.3	4.3	6.8	7.0
05GR/L170-1.4D07	5	1.6	1.7	1.4	–	0.04	3.3	4.3	6.8	7.0
05GR/L200-1.4D07	5	–	2.0	1.4	–	0.04	3.3	4.3	6.8	7.0
05GR/L100-2.3D08	5	–	1.0	2.3	–	0.04	3.3	5.2	7.7	8.0
05GR/L150-2.3D08	5	–	1.5	2.3	–	0.04	3.3	5.2	7.7	8.0
05GR/L200-2.3D08	5	–	2.0	2.3	–	0.04	3.3	5.2	7.7	8.0
05GR/L100-2.8D09	5	–	1.0	2.8	–	0.04	3.3	5.8	8.3	8.8
05GR/L150-2.8D09	5	–	1.5	2.8	–	0.04	3.3	5.8	8.3	8.8
05GR/L200-2.8D09	5	–	2.0	2.8	–	0.04	3.3	5.8	8.3	8.8
05GR/L250-2.8D09	5	–	2.5	2.8	–	0.04	3.3	5.8	8.3	8.8
05GR/L300-2.8D09	5	–	3.0	2.8	–	0.04	3.3	5.8	8.3	8.8
07GR/L075-2.0D10	7	0.7	0.75	2.0	–	0.04	3.5	6.0	8.3	10.0

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Small-Bore Tools (cont.)

RBMB serrated-connection inserts and holders

Grooving GR, size 07



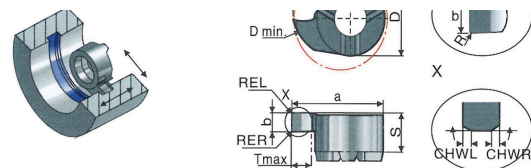
ORDER CODE RBMB-...	SIZE D	CIRCLIP width	WIDTH W	DEPTH Tmax	REL/RER	CHWL/R	S	f	a	MIN. BORE Dmin
07GR/L083-2.0D10	7	0.8	0.83	2.0	–	0.04	3.5	6.0	9.5	10.0
07GR/L093-2.0D10	7	0.9	0.93	2.0	–	0.04	3.5	6.0	9.5	10.0
07GR/L100-2.0D10	7	–	1.00	2.0	–	0.04	3.5	6.0	9.5	10.0
07GR/L120-2.0D10	7	–	1.20	2.0	–	0.04	3.5	6.0	9.5	10.0
07GR/L140-2.0D10	7	–	1.40	2.0	–	0.04	3.5	6.0	9.5	10.0
07GR/L150-2.0D10	7	–	1.50	2.0	–	0.04	3.5	6.0	9.5	10.0
07GR/L170-2.0D10	7	–	1.70	2.0	–	0.04	3.5	6.0	9.5	10.0
07GR/L200-2.0D10	7	–	2.00	2.0	–	0.04	3.5	6.0	9.5	10.0
07GR/L250-2.0D10	7	–	2.50	2.0	–	0.04	3.5	6.0	9.5	10.0
07GR/L300-2.0D10	7	–	3.00	2.0	–	0.04	3.5	6.0	9.5	10.0
07GR/L100-3.0D11	7	–	1.00	3.0	–	0.04	3.5	7.0	10.5	11.0
07GR/L150-3.0D11	7	–	1.50	3.0	–	0.04	3.5	7.0	10.5	11.0
07GR/L200-3.0D11	7	–	2.00	3.0	–	0.04	3.5	7.0	10.5	11.0
07GR/L250-3.0D11	7	–	2.50	3.0	–	0.04	3.5	7.0	10.5	11.0
07GR/L300-3.5D12	7	–	3.00	3.5	–	0.04	3.5	7.0	10.5	11.0
07GR/L100-3.5D12	7	–	1.00	3.5	–	0.04	3.5	7.5	11.0	12.0
07GR/L150-3.5D12	7	–	1.50	3.5	–	0.04	3.5	7.5	11.0	12.0
07GR/L200-3.5D12	7	–	2.00	3.5	–	0.04	3.5	7.5	11.0	12.0
07GR/L250-3.5D12	7	–	2.50	3.5	–	0.04	3.5	7.5	11.0	12.0
07GR/L300-3.5D12	7	–	3.00	3.5	–	0.04	3.5	7.5	11.0	12.0
09GR/L100-4.0D14	9	–	1.00	4.0	–	0.04	4.7	9.0	13.5	14.0
09GR/L120-4.0D14	9	–	1.20	4.0	–	0.04	4.7	9.0	13.5	14.0
09GR/L140-4.0D14	9	–	1.40	4.0	–	0.04	4.7	9.0	13.5	14.0
09GR/L150-4.0D14	9	–	1.50	4.0	–	0.04	4.7	9.0	13.5	14.0
09GR/L170-4.0D14	9	–	1.70	4.0	–	0.04	4.7	9.0	13.5	14.0
09GR/L200-4.0D14	9	–	2.00	4.0	–	0.04	4.7	9.0	13.5	14.0
09GR/L250-4.0D14	9	–	2.50	4.0	–	0.04	4.7	9.0	13.5	14.0
09GR/L300-4.0D14	9	–	3.00	4.0	–	0.04	4.7	9.0	13.5	14.0
09GR/L200-R0.2D14	9	–	2.00	4.0	0.2	–	4.7	9.0	13.5	14.0
09GR/L100-5.5D16	9	–	1.00	5.5	–	0.04	4.7	10.5	15.0	16.0
09GR/L150-5.5D16	9	–	1.50	5.5	–	0.04	4.7	10.5	15.0	16.0

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Small-Bore Tools (cont.)

RBMB serrated-connection inserts and holders

Grooving GR, sizes 09 and 11



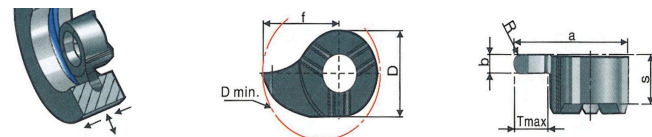
ORDER CODE RBMB-...	SIZE D	CIRCLIP width	WIDTH W	DEPTH Tmax	REL/RER	CHWL/R	S	f	a	MIN. BORE Dmin
09GR/L200-5.5D16	9	–	2.0	5.5	–	0.04	4.7	10.5	15.0	16.0
09GR/L250-5.5D16	9	–	2.5	5.5	–	0.04	4.7	10.5	15.0	16.0
09GR/L300-5.5D16	9	–	3.0	5.5	–	0.04	4.7	10.5	15.0	16.0
09GR/L150-R0.2D16	9	–	1.5	5.5	0.2	–	4.7	10.5	15.0	16.0
09GR/L200-R0.2D16	9	–	2.0	5.5	0.2	–	4.7	10.5	15.0	16.0
09GR/L250-R0.2D16	9	–	2.5	5.5	0.2	–	4.7	10.5	15.0	16.0
09GR/L300-R0.2D16	9	–	3.0	5.5	0.2	–	4.7	10.5	15.0	16.0
09GR/L100-6.5D17	9	–	1.0	6.5	–	0.04	4.7	11.5	16.0	17.0
09GR/L150-6.5D17	9	–	1.5	6.5	–	0.04	4.7	11.5	16.0	17.0
09GR/L200-6.5D17	9	–	2.0	6.5	–	0.04	4.7	11.5	16.0	17.0
09GR/L250-6.5D17	9	–	2.5	6.5	–	0.04	4.7	11.5	16.0	17.0
09GR/L300-6.5D17	9	–	3.0	6.5	–	0.04	4.7	11.5	16.0	17.0
11GR/L100-4.3D16	11	–	1.0	4.3	–	0.04	5.3	10.2	15.7	16.0
11GR/L120-4.3D16	11	1.1	1.2	4.3	–	0.04	5.3	10.2	15.7	16.0
11GR/L140-4.3D16	11	1.3	1.4	4.3	–	0.04	5.3	10.2	15.7	16.0
11GR/L150-4.3D16	11	–	1.5	4.3	0.2	–	5.3	10.2	15.7	16.0
11GR/L170-4.3D16	11	1.6	1.7	4.3	0.2	–	5.3	10.2	15.7	16.0
11GR/L200-4.3D16	11	–	2.0	4.3	0.2	–	5.3	10.2	15.7	16.0
11GR/L250-4.3D16	11	–	2.5	4.3	0.2	–	5.3	10.2	15.7	16.0
11GR/L300-4.3D16	11	–	3.0	4.3	0.2	–	5.3	10.2	15.7	16.0
11GR/L400-4.3D16	11	–	4.0	4.3	0.2	–	5.3	10.2	15.7	16.0
11GR/L150-6.0D18	11	–	1.5	6.0	0.2	–	5.3	12.0	17.5	18.0
11GR/L200-6.0D18	11	–	2.0	6.0	0.2	–	5.3	12.0	17.5	18.0
11GR/L250-6.0D18	11	–	2.5	6.0	0.2	–	5.3	12.0	17.5	18.0
11GR/L300-6.0D18	11	–	3.0	6.0	0.2	–	5.3	12.0	17.5	18.0
11GR/L400-6.0D18	11	–	4.0	6.0	0.2	–	5.3	12.0	17.5	18.0
11GR/L150-8.0D20	11	–	1.5	8.0	0.2	–	5.3	14.0	19.5	20.0
11GR/L200-8.0D20	11	–	2.0	8.0	0.2	–	5.3	14.0	19.5	20.0
11GR/L250-8.0D20	11	–	2.5	8.0	0.2	–	5.3	14.0	19.5	20.0
11GR/L300-8.0D20	11	–	3.0	8.0	0.2	–	5.3	14.0	19.5	20.0
11GR/L400-8.0D20	11	–	4.0	8.0	0.2	–	5.3	14.0	19.5	20.0

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Small-Bore Tools (cont.)

RBMB serrated-connection inserts and holders

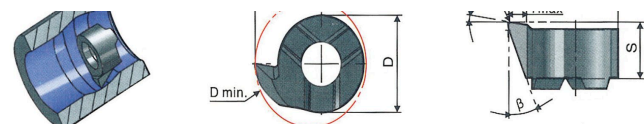
Radius grooving / profiling GR



Profiling / Grooving

ORDER CODE RBMB - ...	SIZE D	WIDTH W	DEPTH Tmax	RADIUS R	S	f	a	MIN. BORE Dmin
05GR/L100-R0.50D07	5	1.0	1.4	0.50	3.3	4.30	6.8	7.0
05GR/L150-R0.75D07	5	1.5	1.4	0.75	3.3	4.30	6.8	7.0
05GR/L200-R1.00D07	5	2.0	1.4	1.00	3.3	4.30	6.8	7.0
05GR/L100-R0.50D08	5	1.0	2.3	0.50	3.3	5.30	7.7	8.0
05GR/L150-R0.75D08	5	1.5	2.3	0.75	3.3	5.30	7.7	8.0
05GR/L200-R1.00D08	5	2.0	2.3	1.00	3.3	5.30	7.7	8.0
05GR/L100-R0.50D09	5	1.0	2.8	0.50	3.3	5.80	8.3	9.0
05GR/L150-R0.75D09	5	1.5	2.8	0.75	3.3	5.80	8.3	9.0
05GR/L200-R1.00D09	5	2.0	2.8	1.00	3.3	5.80	8.3	9.0
07GR/L100-R0.50D10	7	1.0	2.0	0.50	3.5	6.00	9.5	10.0
07GR/L150-R0.75D10	7	1.5	2.0	0.75	3.5	6.00	9.5	10.0
07GR/L200-R1.00D10	7	2.0	2.0	1.00	3.5	6.00	9.5	10.0
07GR/L300-R1.50D10	7	3.0	2.0	1.50	3.5	6.00	9.5	10.0
07GR/L100-R0.50D11	7	1.0	3.0	0.50	3.5	7.00	10.5	11.0
07GR/L150-R0.75D11	7	1.5	3.0	0.75	3.5	7.00	10.5	11.0
07GR/L200-R1.00D11	7	2.0	3.0	1.00	3.5	7.00	10.5	11.0
07GR/L300-R1.50D11	7	3.0	3.0	1.50	3.5	7.00	10.5	11.0
07GR/L100-R0.50D12	7	1.0	3.5	0.50	3.5	7.50	11.0	12.0
07GR/L150-R0.75D12	7	1.5	3.5	0.75	3.5	7.50	11.0	12.0
07GR/L200-R1.00D12	7	2.0	3.5	1.00	3.5	7.50	11.0	12.0

Boring PR



Boring

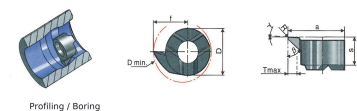
ORDER CODE RBMB - ...	SIZE D	DEPTH Tmax	γ°	β°	RADIUS R	S	f	a	MIN. BORE Dmin
05PR/L-R0.2-D065	5	1.0	8	18	0.2	3.3	3.6	6.1	6.5
07PR/L-R0.2-D10	7	2.0	8	18	0.2	3.5	6.0	9.5	10.0
09PR/L-R0.2-D14	9	4.0	8	18	0.2	4.7	8.7	13.2	13.8

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Small-Bore Tools (cont.)

RBMB serrated-connection inserts and holders

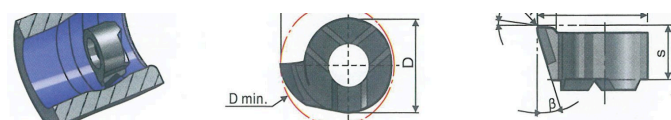
Profiling / boring QR



Profiling / Boring

ORDER CODE RBMB-...	SIZE D	DEPTH T _{max}	γ°	β°	RADIUS R	S	f	a	MIN. BORE D _{min}
05QR/L-R0.2-1.5D07	5	1.5	3	47	0.2	3.3	4.3	6.8	7.0
05QR/L-R0.2-2.5D09	5	2.5	3	47	0.2	3.3	5.5	8.5	9.0
07QR/L-R0.2-2.0D10	7	2.0	3	47	0.2	3.5	6.0	9.5	10.0
07QR/L-R0.2-3.5D12	7	3.5	3	47	0.2	3.5	7.5	11.0	12.0
09QR/L-R0.2-4.0D14	9	4.0	3	47	0.2	4.7	9.0	13.5	14.0
09QR/L-R0.2-6.0D16	9	6.0	3	47	0.2	4.7	11.0	15.5	16.0
11QR/L-R0.2-4.0D16	11	4.0	3	47	0.2	5.3	10.0	15.5	16.0
11QR/L-R0.2-8.0D20	11	8.0	3	47	0.2	5.3	14.0	19.5	20.0

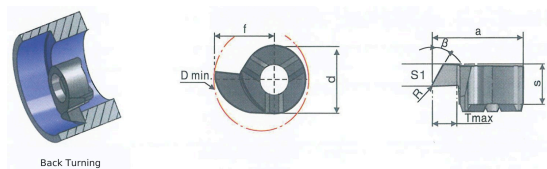
Boring / profiling PR, CBN



Boring / Profiling

ORDER CODE RBMB-...	SIZE D	DEPTH T _{max}	γ°	β°	RADIUS R	S	f	a	MIN. BORE D _{min}
05PR/L-R0.2-D07-CBN	5	1.0	8	18	0.2	3.3	3.6	6.1	6.5
07PR/L-R0.2-D10-CBN	7	2.0	8	18	0.2	3.5	6.0	9.5	10.0
09PR/L-R0.2-D14-CBN	9	4.0	8	18	0.2	4.7	8.7	13.2	13.8

Back turning XR



Back Turning

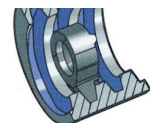
ORDER CODE RBMB-...	SIZE D	DEPTH T _{max}	β°	RADIUS R	S1	S	f	a	MIN. BORE D _{min}
05XR/L-R0.2-1.5D07	5	1.5	30	0.2	2.3	3.3	4.3	6.8	7.0
05XR/L-R0.2-2.5D09	5	2.5	30	0.2	2.3	3.3	5.5	8.5	9.0
07XR/L-R0.2-2.0D10	7	2.0	30	0.2	2.6	3.5	6.0	9.5	10.0
07XR/L-R0.2-3.5D12	7	3.5	30	0.2	2.6	3.5	7.5	11.0	10.0
09XR/L-R0.2-4.0D14	9	4.0	30	0.2	3.0	4.7	9.0	13.5	14.0
09XR/L-R0.2-6.0D16	9	6.0	30	0.2	3.0	4.7	11.0	15.5	16.0
11XR/L-R0.2-4.0D16	11	4.0	30	0.2	3.5	5.3	10.0	15.5	16.0
11XR/L-R0.2-8.0D20	11	8.0	30	0.2	3.5	5.3	14.0	19.5	20.0

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

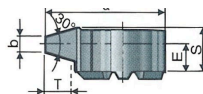
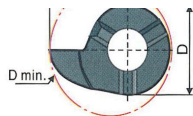
Modular Small-Bore Tools (cont.)

RBMB serrated-connection inserts and holders

Threading IR

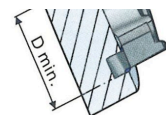


Threading

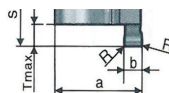
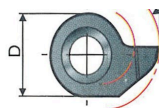


ORDER CODE RBMB-...	SIZE D	THREAD	E	T	b	HELIX °	S	f	a	MIN. BORE Dmin
05IR/L15TR-07R	5	TR10×1.5	2.9	0.90	0.47	3.0	3.3	4.3	6.8	7.0
05IR/L20TR-08R	5	TR10×2, TR11×2, TR12×2	2.7	1.25	0.60	3.5	3.3	4.7	7.2	8.0
05IR/L30TR-08R	5	TR11×3, TR12×3	2.4	1.75	0.96	5.0	3.3	5.0	7.5	8.0
07IR/L30TR-10R	7	TR14×3, TR22×3, TR26×3, TR28×3	2.7	1.75	0.96	5.0	3.5	6.2	9.7	10.0
07IR/L40TR-11R	7	TR16×4, TR18×4, TR20×4	2.2	2.25	1.33	4.5	3.5	6.7	10.2	11.0
09IR/L40TR-14R	9	TR18×4, TR20×4	2.2	2.25	1.33	4.5	4.7	8.0	12.5	14.0
09IR/L50TR-14R	9	TR22×5, TR24×5, TR26×5, TR28×5	3.55	2.75	1.69	4.5	4.7	9.0	13.5	14.0
11IR/L40TR-15R	11	TR18×4, TR20×4	4.0	2.25	1.33	4.5	5.3	9.0	14.5	15.0
11IR/L50TR-16R	11	TR22×5, TR24×5, TR26×5, TR28×5	3.6	2.75	1.69	4.5	5.3	10.0	15.5	16.0
11IR/L60TR-16R	11	TR30×6, TR36×6	3.3	3.50	1.92	4.5	5.3	10.2	15.7	16.0

Face grooving FNR



Face Grooving



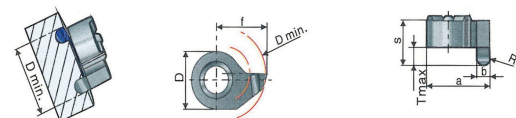
ORDER CODE RBMB-...	SIZE D	DEPTH Tmax	b	RADIUS R	S	f	a	MIN. BORE Dmin
09FNRB1.0-1.5D14	9	1.5	1.0	—	8.2	9.0	13.5	14.0
09FNRB1.0-3.0D14	9	3.0	1.0	—	8.2	9.0	13.5	14.0
09FNRB1.5-3.0D14	9	3.0	1.5	0.2	8.2	9.0	13.5	14.0
09FNRB2.0-3.0D14	9	3.0	2.0	0.2	8.2	9.0	13.5	14.0
09FNRB3.0-3.0D14	9	3.0	3.0	0.2	8.2	9.0	13.5	14.0
09FNRB2.0-5.0D14	9	5.0	2.0	0.2	10.2	9.0	13.5	14.0
09FNRB3.0-5.0D14	9	5.0	3.0	0.2	10.2	9.0	13.5	14.0
09FNRB3.0-6.0D14	9	6.0	3.0	0.2	11.2	9.0	13.5	14.0

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Small-Bore Tools (cont.)

RBMB serrated-connection inserts and holders

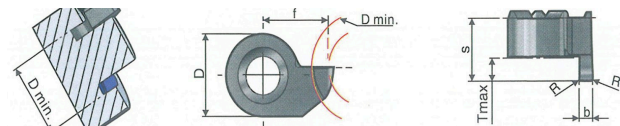
Face / radius grooving ZNR



Face / Radius Grooving

ORDER CODE RBMB-...	SIZE D	DEPTH T max	b	RADIUS R	S	f	a	MIN. BORE D min
09ZNR-R0.50-1.5D14	9	1.5	1.0	0.50	8.2	9.0	13.5	14.0
09ZNR-R0.75-3.0D14	9	3.0	1.5	0.75	8.2	9.0	13.5	14.0
09ZNR-R1.00-3.0D14	9	3.0	2.0	1.00	8.2	9.0	13.5	14.0
09ZNR-R1.50-3.0D14	9	3.0	3.0	1.50	8.2	9.0	13.5	14.0
09ZNR-R1.00-5.0D14	9	5.0	2.0	1.00	10.2	9.0	13.5	14.0
09ZNR-R1.50-5.0D14	9	5.0	3.0	1.50	10.2	9.0	13.5	14.0
09ZNR-R1.50-6.0D14	9	6.0	3.0	1.50	11.2	9.0	13.5	14.0

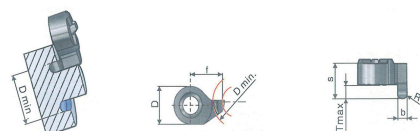
Face grooving FER



Face Grooving

ORDER CODE RBMB-...	SIZE D	DEPTH T max	b	RADIUS R	S	f	MIN. BORE D min
09FERB1.0-1.5D12	9	1.5	1.0	—	8.2	7.0	12.0
09FERB1.0-3.0D12	9	3.0	1.0	—	8.2	7.0	12.0
09FERB1.5-3.0D12	9	3.0	1.5	0.2	8.2	7.5	12.0
09FERB2.0-3.0D12	9	3.0	2.0	0.2	8.2	8.0	12.0
09FERB3.0-3.0D12	9	3.0	3.0	0.2	8.2	9.0	12.0
09FERB2.0-5.0D12	9	5.0	2.0	0.2	10.2	8.0	12.0
09FERB3.0-5.0D12	9	5.0	3.0	0.2	10.2	9.0	12.0
09FERB3.0-6.0D12	9	6.0	3.0	0.2	11.2	9.0	12.0

Face / radius grooving ZER



Face / Radius Grooving

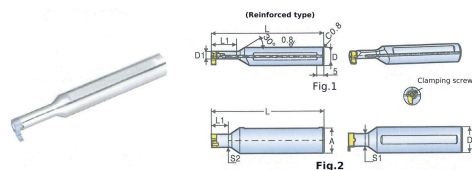
ORDER CODE RBMB-...	SIZE D	DEPTH T max	b	RADIUS R	S	f	MIN. BORE D min
09ZER-R0.50-1.5D14	9	1.5	1.0	0.50	8.2	7.0	12.0
09ZER-R0.75-3.0D14	9	3.0	1.5	0.75	8.2	7.5	12.0
09ZER-R1.00-3.0D12	9	3.0	2.0	1.00	8.2	8.0	12.0
09ZER-R1.50-3.0D12	9	3.0	3.0	1.50	8.2	9.0	12.0
09ZER-R1.00-5.0D12	9	5.0	2.0	1.00	10.2	8.0	12.0
09ZER-R1.50-5.0D12	9	5.0	3.0	1.50	10.2	9.0	12.0
09ZER-R1.50-6.0D12	9	6.0	3.0	1.50	11.2	9.0	12.0

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Small-Bore Tools (cont.)

RBMB serrated-connection inserts and holders

MG steel holders



ORDER CODE RBMB-...	SHANK D	S1	S2	L1	OAL L	A	INSERT	SCREW	WRENCH	FIG. / COOLANT
H16-20-07R	16	7.0	7.0	20	120	15	RBMB-07	CSTB3.0	T10	Fig.2 / No
H16-30-09R	16	9.0	9.0	30	120	15	RBMB-09	CSTB4.0	T15	Fig.2 / No
H20-40-11R	20	11.0	11.0	40	130	19	RBMB-11	CSTB5.0	T20	Fig.2 / No
H12-18-05ST	12	5.0	6.7	18	80	11	RBMB-05	CSTB2.2	T6	Fig.1 / No
H16-20-07ST	16	7.0	8.5	20	120	15	RBMB-07	CSTB3.0	T10	Fig.1 / No
H16-30-09ST	16	9.0	11.0	30	120	15	RBMB-09	CSTB4.0	T15	Fig.1 / No
H20-40-11ST	20	11.0	13.5	40	130	19	RBMB-11	CSTB5.0	T20	Fig.1 / No
H12-16-04ST-N	12	4.0	5.2	16	80	11	RBMB-04	CSTB1.8	T6	Fig.1 / Yes
H12-18-05ST-N	12	5.0	6.7	18	80	11	RBMB-05	CSTB2.2	T6	Fig.1 / Yes
H16-20-07ST-N	16	7.0	8.5	20	120	15	RBMB-07	CSTB3.0	T10	Fig.1 / Yes
H16-30-09ST-N	16	9.0	11.0	30	120	15	RBMB-09	CSTB4.0	T15	Fig.1 / Yes
H20-40-11ST-N	20	11.0	13.5	40	130	19	RBMB-11	CSTB5.0	T20	Fig.1 / Yes

Fig.1 eccentric reinforced holders must not rotate. For rotating use (Fig.2) check the minimum entry bore: $f \times 2 + 0.2$ mm. With custom inserts on ST holders, check S2 for interference.

Carbide holders, reduced neck



ORDER CODE RBMB-...	SHANK D	d1	L1	OAL L	A	INSERT	SCREW	WRENCH	FIG. / COOLANT
E12-28-05	12	5	28	90	11	RBMB-05	CSTB2.2	T6	Fig.2 / Yes
E12-36-05	12	5	36	100	11	RBMB-05	CSTB2.2	T6	Fig.2 / Yes
E12-33-07	12	7	33	90	11	RBMB-07	CSTB3.0	T10	Fig.2 / Yes
E12-49-07	12	7	49	110	11	RBMB-07	CSTB3.0	T10	Fig.2 / Yes
E12-45-09	12	9	45	110	11	RBMB-09	CSTB4.0	T15	Fig.2 / Yes
E12-56-09	12	9	56	120	11	RBMB-09	CSTB4.0	T15	Fig.2 / Yes
E12-45-11	12	11	45	110	11	RBMB-11	CSTB5.0	T20	Fig.2 / Yes
E12-80-11	12	11	80	150	11	RBMB-11	CSTB5.0	T20	Fig.2 / Yes

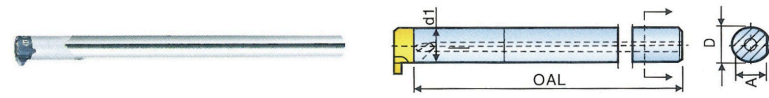
Fig.1 eccentric reinforced holders must not rotate. For rotating use (Fig.2) check the minimum entry bore: $f \times 2 + 0.2$ mm.

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Small-Bore Tools (cont.)

RBMB serrated-connection inserts and holders

Carbide holders, straight shank



ORDER CODE RBMB-...	SHANK D	d1	L1	OAL L	A	INSERT	SCREW	WRENCH	COOLANT
E04-00-04	4	4	–	95	3.8	RBMB-05	CSTB1.8	T6	Yes
E05-00-05	5	5	–	95	4.7	RBMB-05	CSTB2.2	T6	Yes
E07-00-07	7	7	–	95	6.6	RBMB-07	CSTB3.0	T10	Yes
E09-00-09	9	9	–	125	8.5	RBMB-09	CSTB4.0	T15	Yes
E11-00-11	11	11	–	125	11.5	RBMB-11	CSTB5.0	T20	Yes

Straight-shank carbide holders can also be used as milling holders.

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters

RTMG / RTMI / RTMC inserts, holders and adapters

Square grooving, Ds 9.7-11.7

	Grooving / Chamfering / Threading	Minimum entry dia.	Interface dia.	Cutting width	Effective depth		
M	G/C/I	10	06	W050	T08		
ORDER CODE RTMG - ...	DIA. Ds	INTERF. d	WIDTH W	DEPTH Tmax	S	TEETH Z	FIG.
1006-W050T15	9.7	6.0	0.5	1.50	3.5	3	Fig1
1006-W070T15	9.7	6.0	0.7	1.50	3.5	3	Fig1
1006-W100T15	9.7	6.0	1.0	1.50	3.5	3	Fig1
1006-W150T15	9.7	6.0	1.5	1.50	3.5	3	Fig1
1006-W200T15	9.7	6.0	2.0	1.50	3.5	3	Fig1
1006-W250T15	9.7	6.0	2.5	1.50	3.5	3	Fig1
1006-W300T15	9.7	6.0	3.0	1.50	3.5	3	Fig1
1206-W100T25	11.7	6.0	1.0	2.50	3.5	3	Fig1
1206-W150T25	11.7	6.0	1.5	2.50	3.5	3	Fig1
1206-W200T25	11.7	6.0	2.0	2.50	3.5	3	Fig1
1206-W250T25	11.7	6.0	2.5	2.50	3.5	3	Fig1
1206-W300T25	11.7	6.0	3.0	2.50	3.5	3	Fig1

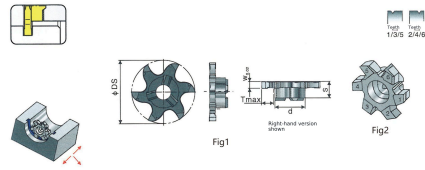
* Fig2 inserts have chip-splitting grooves; holder clearance is about 1.5 mm smaller than with Fig1 inserts.

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15-30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

RTMG / RTMI / RTMC inserts, holders and adapters

Square grooving, Ds 13.7–19.7



ORDER CODE RTMG-...	DIA. Ds	INTERF. d	WIDTH W	DEPTH Tmax	S	TEETH Z	FIG.
1408-W100T25	13.7	8.0	1.0	2.50	4.0	6	Fig1
1408-W150T25	13.7	8.0	1.5	2.50	4.0	6	Fig1
1408-W200T25	13.7	8.0	2.0	2.50	4.0	6	Fig1
1408-W250T25	13.7	8.0	2.5	2.50	4.0	6	Fig1
1408-W300T25	13.7	8.0	3.0	2.50	4.0	6	Fig1
1408-W400T25	13.7	8.0	4.0	2.50	4.0	6	Fig1
1608-W100T35	15.7	8.0	1.0	3.50	(14.0)	6	Fig1
1608-W150T35	15.7	8.0	1.5	3.50	14.0	6	Fig1
1608-W200T35	15.7	8.0	2.0	3.50	(14.0)	6	Fig1
1608-W250T35	15.7	8.0	2.5	3.50	(14.0)	6	Fig1
1608-W300T35	15.7	8.0	3.0	3.50	(14.0)	6	Fig1
1608-W350T35	15.7	8.0	3.5	3.50	(14.0)	6	Fig1
1608-W400T35	15.7	8.0	4.0	3.50	(14.0)	6	Fig1
1809-W100T40	17.7	9.0	1.0	4.00	5.5	6	Fig1
1809-W150T40	17.7	9.0	1.5	4.00	5.5	6	Fig1
1809-W200T40	17.7	9.0	2.0	4.00	5.5	6	Fig1
1809-W250T40	17.7	9.0	2.5	4.00	5.5	6	Fig1
1809-W300T40	17.7	9.0	3.0	4.00	5.5	6	Fig1
1809-W350T40	17.7	9.0	3.5	4.00	5.5	6	Fig1
1809-W400T40	17.7	9.0	4.0	4.00	5.5	6	Fig1
2009-W100T50	19.7	9.0	1.0	5.00	4.0	6	Fig1
2009-W150T50	19.7	9.0	1.5	5.00	4.0	6	Fig1
2009-W200T50	19.7	9.0	2.0	5.00	4.0	6	Fig1
2009-W250T50	19.7	9.0	2.5	5.00	4.0	6	Fig1

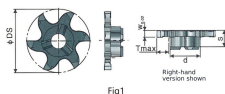
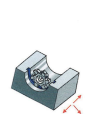
S for 1608 inserts is 4.0 mm (earlier 5.5 mm). Always confirm the effective cutting depth when replacing inserts.

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

RTMG / RTMI / RTMC inserts, holders and adapters

Square grooving, Ds 19.7–24.7



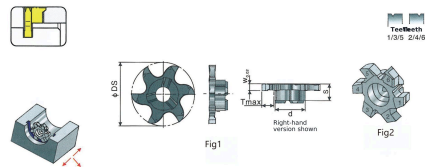
ORDER CODE RTMG - ...	DIA. Ds	INTERF. d	WIDTH W	DEPTH Tmax	S	TEETH Z	FIG.
2009-W300T50	19.7	9.0	3.0	5.00	4.0	9	Fig1
2009-W350T50	19.7	9.0	3.5	5.00	4.0	6	Fig1
2009-W400T50	19.7	9.0	4.0	5.00	4.0	6	Fig1
2212-W100T45	21.7	12.0	1.0	4.50	6°9	6	Fig1
2212-W150T45	21.7	12.0	1.5	4.50	5.9	6	Fig1
2212-W200T45	21.7	12.0	2.0	4.50	5.9	6	Fig1
2212-W250T45	21.7	12.0	2.5	4.50	5.9	6	Fig1
2212-W300T45	21.7	12.0	3.0	4.50	5.9	6	Fig1
2212-W350T45	21.7	12.0	3.5	4.50	5.9	6	Fig1
2212-W400T45	21.7	12.0	4.0	4.50	5.9	6	Fig1
2212-W500T45*	21.7	12.0	5.0	4.50	5.2	6	Fig2
2212-W600T45*	21.7	12.0	6.0	4.50	5.2	6	Fig2
2412-W100T55	23.7	12.0	1.0	5.50	5.9	6	Fig1
2412-W150T55	23.7	12.0	1.5	5.50	5.9	6	Fig1
2412-W200T55	23.7	12.0	2.0	5.50	5.9	6	Fig1
2412-W250T55	23.7	12.0	2.5	5.50	5.9	6	Fig1
2412-W300T55	23.7	12.0	3.0	5.50	5.9	6	Fig1
2412-W350T55	23.7	12.0	3.5	5.50	5.9	6	Fig1
2412-W400T55	23.7	12.0	4.0	5.50	5.9	6	Fig1
2412-W500T55*	23.7	12.0	5.0	5.50	5.2	6	Fig2
2412-W600T55*	23.7	12.0	6.0	5.50	5.2	6	Fig2
2514-W100T50	24.7	14.0	1.0	5.00	5.9	6	Fig1
2514-W150T50	24.7	14.0	1.5	5.00	5.9	6	Fig1
2514-W200T50	24.7	14.0	2.0	5.00	5.9	6	Fig1

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

RTMG / RTMI / RTMC inserts, holders and adapters

Square grooving, Ds 24.7–27.7



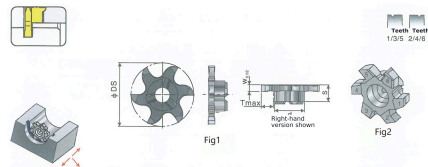
ORDER CODE RTMG-...	DIA. Ds	INTERF. d	WIDTH W	DEPTH Tmax	S	TEETH Z	FIG.
2514-W250T50	24.7	14.0	2.5	5.00	5.9	6	Fig1
2514-W300T50	24.7	14.0	3.0	5.00	5.9	6	Fig1
2514-W350T50	24.7	14.0	3.5	5.00	5.9	6	Fig1
2514-W400T50	24.7	14.0	4.0	5.00	5.9	6	Fig1
2514-W500T50*	24.7	14.0	5.0	5.00	5.2	6	Fig2
2514-W600T50*	24.7	14.0	6.0	5.00	5.2	6	Fig2
2512-W100T60	24.7	12.0	1.0	6.00	5.9	6	Fig1
2512-W150T60	24.7	12.0	1.5	6.00	5.9	6	Fig1
2512-W200T60	24.7	12.0	2.0	6.00	5.9	6	Fig1
2512-W250T60	24.7	12.0	2.5	6.00	5.9	6	Fig1
2512-W300T60	24.7	12.0	3.0	6.00	5.9	6	Fig1
2512-W400T60	24.7	12.0	4.0	6.00	5.9	6	Fig1
2512-W500T60*	24.7	12.0	5.0	6.00	5.2	6	Fig2
2512-W600T60*	24.7	12.0	6.0	6.00	5.2	6	Fig2
2614-W200T55	25.7	14.0	2.0	5.50	5.9	6	Fig1
2614-W250T55	25.7	14.0	2.5	5.50	5.9	6	Fig1
2614-W300T55	25.7	14.0	3.0	5.50	5.9	6	Fig1
2614-W350T55	25.7	14.0	3.5	5.50	5.9	6	Fig1
2614-W400T55	25.7	14.0	4.0	5.50	5.9	6	Fig1
2614-W500T55*	25.7	14.0	5.0	5.50	5.2	6	Fig2
2614-W600T55*	25.7	14.0	6.0	5.50	5.2	6	Fig2
2814-W100T65	27.7	14.0	1.0	6.50	5.9	6	Fig1
2814-W150T65	27.7	14.0	1.5	6.50	5.9	6	Fig1
2814-W200T65	27.7	14.0	2.0	6.50	5.9	6	Fig1

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

RTMG / RTMI / RTMC inserts, holders and adapters

Square grooving, Ds 27.7–34.7



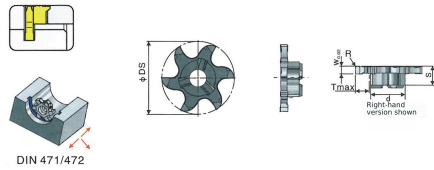
ORDER CODE RTMG-...	DIA. Ds	INTERF. d	WIDTH W	DEPTH Tmax	S	TEETH Z	FIG.
2814-W250T65	27.7	14.0	2.5	6.50	5.9	6	Fig1
2814-W300T65	27.7	14.0	3.0	6.50	5.9	6	Fig1
2814-W350T65	27.7	14.0	3.5	6.50	5.9	6	Fig1
2814-W400T65	27.7	14.0	4.0	6.50	5.9	6	Fig1
2814-W500T65*	27.7	14.0	5.0	6.50	5.2	6	Fig2
2814-W600T65*	27.7	14.0	6.0	6.50	5.2	6	Fig2
2812-W200T75	27.7	12.0	2.0	7.50	5.9	6	Fig1
2812-W250T75	27.7	12.0	2.5	7.50	5.9	6	Fig1
2812-W300T75	27.7	12.0	3.0	7.50	5.9	6	Fig1
2812-W350T75	27.7	12.0	3.5	7.50	5.9	6	Fig1
2812-W400T75	27.7	12.0	4.0	7.50	5.9	6	Fig1
2812-W500T75*	27.7	12.0	5.0	7.50	5.2	6	Fig2
2812-W600T75*	27.7	12.0	6.0	7.50	5.2	6	Fig2
3214-W150T85	31.7	14.0	1.5	8.50	5.9	6	Fig1
3214-W200T85	31.7	14.0	2.0	8.50	5.9	6	Fig1
3214-W250T85	31.7	14.0	2.5	8.50	5.9	6	Fig1
3214-W300T85	31.7	14.0	3.0	8.50	5.9	6	Fig1
3214-W400T85	31.7	14.0	4.0	8.50	5.9	6	Fig1
3514-W150T100	34.7	14.0	1.5	10.00	5.9	6	Fig1
3514-W200T100	34.7	14.0	2.0	10.00	5.9	6	Fig1
3514-W250T100	34.7	14.0	2.5	10.00	5.9	6	Fig1
3514-W300T100	34.7	14.0	3.0	10.00	5.9	6	Fig1
3514-W350T100	34.7	14.0	3.5	10.00	5.9	6	Fig1
3514-W400T100	34.7	14.0	4.0	10.00	5.9	6	Fig1

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

RTMG / RTMI / RTMC inserts, holders and adapters

Circlip grooves DIN 471 / 472



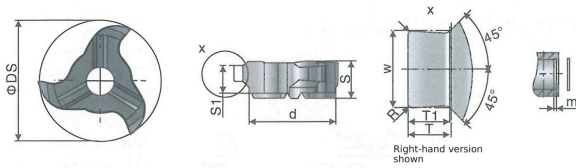
ORDER CODE RTMG-...	DIA. D _s	INTERF. d	CIRCLIP size	WIDTH W	DEPTH T _{max}	RADIUS R	S	TEETH Z
1006-W050T15-471/472	9.7	6.0	0.50	0.57	1.50	–	3.5	3
1006-W070T15-471/472	9.7	6.0	0.70	0.77	1.50	–	3.5	3
1006-W090T15-471/472	9.7	6.0	0.90	0.97	1.50	–	3.5	3
1006-W110T15-471/472	9.7	6.0	1.10	1.21	1.50	–	3.5	3
1006-W130T15-471/472	9.7	6.0	1.30	1.41	1.50	0.1	3.5	3
1006-W160T15-471/472	9.7	6.0	1.60	1.71	1.50	0.1	3.5	3
1206-W110T25-471/472	11.7	6.0	1.10	1.21	2.50	–	3.5	3
1206-W130T25-471/472	11.7	6.0	1.30	1.41	2.50	0.1	3.5	3
1206-W160T25-471/472	11.7	6.0	1.60	1.71	2.50	0.1	3.5	3
1608-W110T35-471/472	15.7	8.0	1.10	1.21	3.50	–	4.0	6
1608-W130T35-471/472	15.7	8.0	1.30	1.41	3.50	0.1	4.0	6
1608-W160T35-471/472	15.7	8.0	1.60	1.71	3.50	0.1	4.0	6
1809-W110T35-471/472	17.7	9.0	1.10	1.21	3.50	–	5.5	6
1809-W130T35-471/472	17.7	9.0	1.30	1.41	3.50	0.1	5.5	6
1809-W160T35-471/472	17.7	9.0	1.60	1.71	3.50	0.1	5.5	6
2212-W130T45-471/472	21.7	12.0	1.30	1.41	4.50	0.1	5.9	6
2212-W160T45-471/472	21.7	12.0	1.60	1.71	4.50	0.1	5.9	6
2212-W185T45-471/472	21.7	12.0	1.85	1.96	4.50	0.2	5.9	6
2212-W215T45-471/472	21.7	12.0	2.15	2.26	4.50	0.2	5.9	6
2212-W265T45-471/472	21.7	12.0	2.65	2.76	4.50	0.2	5.9	6
2212-W315T45-471/472	21.7	12.0	3.15	3.26	4.50	0.2	5.9	6
2212-W415T45-471/472*	21.7	12.0	4.15	4.26	4.50	0.2	5.2	6
2212-W515T45-471/472*	21.7	12.0	5.15	5.26	4.50	0.2	5.2	6
2814-W130T65-471/472	27.7	14.0	1.30	1.41	6.50	0.1	5.9	6
2814-W160T65-471/472	27.7	14.0	1.60	1.71	6.50	0.1	5.9	6
2814-W185T65-471/472	27.7	14.0	1.85	1.96	6.50	0.2	5.9	6
2814-W215T65-471/472	27.7	14.0	2.15	2.26	6.50	0.2	5.9	6
2814-W265T65-471/472	27.7	14.0	2.65	2.76	6.50	0.2	5.9	6

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

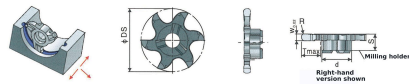
RTMG / RTMI / RTMC inserts, holders and adapters

Circlip grooves with 45° chamfer



ORDER CODE RTMG-...	DIA. Ds	INTERF. d	CIRCLIP size	WIDTH W	T	T1	RADIUS R	S	TEETH Z
2212-W110T050-45°	21.7	12.0	1.10	1.21	0.50	0.49	—	5.9	6
2212-W130T070-45°	21.7	12.0	1.30	1.41	0.70	0.67	—	5.9	6
2212-W130T085-45°	21.7	12.0	1.30	1.41	0.85	0.86	—	5.9	6
2212-W160T085-45°	21.7	12.0	1.60	1.71	0.85	0.83	—	5.9	6
2212-W160T100-45°	21.7	12.0	1.60	1.71	1.00	0.97	—	5.9	6
2212-W185T125-45°	21.7	12.0	1.85	1.96	1.25	1.23	0.15	5.9	6
2212-W215T150-45°	21.7	12.0	2.15	2.26	1.50	1.47	0.15	5.9	6
2212-W265T175-45°	21.7	12.0	2.65	2.76	1.75	1.72	0.15	5.9	6
2212-W265T150-45°	21.7	12.0	2.65	2.76	1.50	1.47	0.15	5.9	6
2212-W315T175-45°	21.7	12.0	3.15	3.26	1.75	1.72	0.20	5.9	6
2212-W415T250-45°*	21.7	12.0	4.15	4.26	2.50	2.47	0.20	5.2	6
2212-W415T200-45°*	21.7	12.0	4.15	4.26	2.00	1.97	0.20	5.2	6

Radius grooving, Ds 9.7-19.7



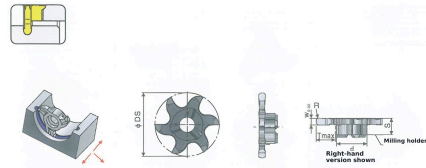
ORDER CODE RTMG-...	DIA. Ds	INTERF. d	WIDTH W	DEPTH Tmax	RADIUS R	S	TEETH Z
1006-R050T15	9.7	6.0	1.00	1.5	0.50	3.5	3
1006-R075T15	9.7	6.0	1.50	1.5	0.75	3.5	3
1006-R100T15	9.7	6.0	2.00	1.5	1.00	3.5	3
1206-R050T25	11.7	6.0	1.00	2.5	0.50	3.5	3
1206-R075T25	11.7	6.0	1.50	2.5	0.75	3.5	3
1206-R100T25	11.7	6.0	2.00	2.5	1.00	3.5	3
1608-R075T35	15.7	8.0	1.50	3.5	0.75	4.0	6
1608-R100T35	15.7	8.0	2.00	3.5	1.00	4.0	6
1608-R125T35	15.7	8.0	2.50	3.5	1.25	4.0	6
1608-R150T35	15.7	8.0	3.00	3.5	1.50	4.0	6
1608-R200T35	15.7	8.0	4.00	3.5	2.00	4.0	6
1809-R075T40	17.7	9.0	1.50	4.0	0.75	5.5	6
1809-R100T40	17.7	9.0	2.00	4.0	1.00	5.5	6
1809-R125T40	17.7	9.0	2.50	4.0	1.25	5.5	6
1809-R150T40	17.7	9.0	3.00	4.0	1.50	5.5	6
1809-R200T40	17.7	9.0	4.00	4.0	2.00	5.5	6

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

RTMG / RTMI / RTMC inserts, holders and adapters

Radius grooving, Ds 19.7–34.7



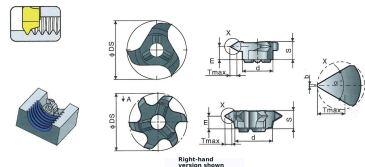
ORDER CODE RTMG-...	DIA. Ds	INTERF. d	WIDTH W	DEPTH Tmax	RADIUS R	S	TEETH Z
2009-R050T50	19.7	9.0	1.00	5.0	0.50	4.0	6
2009-R075T50	19.7	9.0	1.50	5.0	0.75	4.0	6
2009-R100T50	19.7	9.0	2.00	5.0	1.00	4.0	6
2009-R125T50	19.7	9.0	2.50	5.0	1.25	4.0	6
2009-R150T50	19.7	9.0	3.00	5.0	1.50	4.0	6
2009-R200T50	19.7	9.0	4.00	5.0	2.00	4.0	6
2412-R100T55	23.7	12.0	2.00	5.5	1.00	5.9	6
2412-R125T55	23.7	12.0	2.50	5.5	1.25	5.9	6
2412-R150T55	23.7	12.0	3.00	5.5	1.50	5.9	6
2412-R200T55	23.7	12.0	4.00	5.5	2.00	5.9	6
2412-R250T55*	23.7	12.0	5.00	5.5	2.50	5.2	6
2412-R300T55*	23.7	12.0	6.00	5.5	3.00	5.2	6
2814-R125T65	27.7	14.0	2.50	6.5	1.25	5.9	6
2814-R150T65	27.7	14.0	3.00	6.5	1.50	5.9	6
2814-R200T65	27.7	14.0	4.00	6.5	2.00	5.9	6
2814-R250T65*	27.7	14.0	5.00	6.5	2.50	5.2	6
2814-R300T65*	27.7	14.0	6.00	6.5	3.00	5.2	6
3514-R075T100	34.7	14.0	1.50	10.0	0.75	5.9	6
3514-R100T100	34.7	14.0	2.00	10.0	1.00	5.9	6
3514-R125T100	34.7	14.0	2.50	10.0	1.25	5.9	6
3514-R150T100	34.7	14.0	3.00	10.0	1.50	5.9	6
3514-R200T100	34.7	14.0	4.00	10.0	2.00	5.9	6

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

RTMG / RTMI / RTMC inserts, holders and adapters

Partial-profile thread mills



ORDER CODE RTMI - ...	DIA. Ds	INTERF. d	MAX. HOLDER Dmax	PITCH mm	PITCH TPI	RADIUS R	b	E	DEPTH Tmax	ANGLE α°	S	TEETH Z
1006-1017560	9.7	6.0	7.0	1.0-1.75	24-15	/	0.13	3.5	1.08	60	3.4	3
1006-102560	10.1	6.0	6.0	1.0-2.5	24-12	/	0.13	3.4	1.53	60	3.4	3
1106-152560	11.0	6.0	7.0	1.5-2.5	16-12	/	0.19	3.4	1.47	60	3.4	3
1206-102560	11.7	6.0	8.0	1.0-2.5	24-12	/	0.13	3.4	1.53	60	3.4	3
1206-203060	11.7	6.0	8.0	2.0-3.0	12-8	0.12	/	3.2	1.85	60	3.4	3
1208-102060	12.3	8.0	9.0	1.0-2.0	24-12	/	0.13	3.4	1.25	60	4.5	6
1308-152560	13.2	8.0	10.0	1.5-2.5	16-12	/	0.19	2.4	1.53	60	4.0	6
1308-203060	13.3	8.0	9.0	2.0-3.0	12-8	0.12	/	2.4	1.85	60	4.0	6
1509-102560	14.7	9.0	11.0	1.0-2.5	24-12	/	0.13	2.5	1.53	60	3.4	6
1609-103060	15.7	9.0	11.0	1.0-3.0	24-8	/	0.13	2.4	1.84	60	4.2	6
1709-102560	17.2	9.0	14.0	1.0-2.5	24-12	/	0.13	4.9	1.53	60	4.0	6
1809-204060	17.7	9.0	14.0	2.0-4.0	12-6	0.19	/	4.0	2.53	60	5.2	6
2012-103060	19.7	12.0	16.0	1.0-3.0	24-8	/	0.13	2.4	1.84	60	4.0	6
2012-203060	19.7	12.0	16.0	2.0-3.0	12-8	0.12	/	4.8	1.85	60	4.0	6
2212-102560	21.7	12.0	16.0	1.0-2.5	24-12	/	0.13	4.9	1.53	60	5.9	6
2212-254060	21.7	12.0	16.0	2.5-4.0	10-6	0.19	/	4.0	2.53	60	5.2	6
2614-102560	25.7	14.0	20.0	1.0-2.5	24-12	/	0.13	4.9	1.53	60	5.9	6
2614-254060	25.7	14.0	20.0	2.5-4.0	10-6	0.19	/	4.0	2.53	60	5.2	6
2814-255060*	27.7	14.0	20.0	2.5-5.0	10-5	0.19	/	1.8	3.18	60	5.2	6

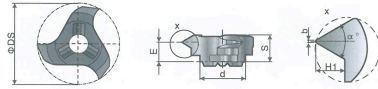
Dmax is the maximum holder clearance diameter.

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

RTMG / RTMI / RTMC inserts, holders and adapters

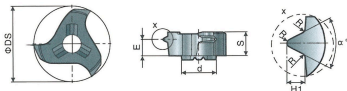
Full-profile metric ISO thread mills



ORDER CODE RTMI-...	DIA. Ds	INTERF. d	MIN. THREAD	PITCH mm	b	E	H1	ANGLE α°	S	TEETH Z
1006-1.00ISO	9.7	6.0	M12	1.00	0.13	3.0	0.54	60	3.5	3
1006-1.50ISO	9.7	6.0	M12	1.50	0.19	2.8	0.81	60	3.5	3
1006-2.00ISO	9.7	6.0	M14	2.00	0.25	2.6	1.08	60	3.5	3
1408-1.00ISO	13.7	8.0	M16	1.00	0.13	3.6	0.54	60	4.0	6
1408-1.50ISO	13.7	8.0	M18	1.50	0.19	3.5	0.81	60	4.0	6
1408-2.00ISO	13.7	8.0	M18	2.00	0.25	3.3	1.08	60	4.0	6
1809-1.50ISO	17.7	9.0	M22	1.50	0.19	4.8	0.81	60	5.5	6
1809-2.00ISO	17.7	9.0	M22	2.00	0.25	4.6	1.08	60	5.5	6
1809-3.00ISO	17.7	9.0	M27	3.00	0.37	4.3	1.62	60	5.5	6
2212-1.50ISO	21.7	12.0	M24	1.50	0.19	4.8	0.81	60	5.5	6
2212-2.00ISO	21.7	12.0	M27	2.00	0.25	4.6	1.08	60	5.5	6
2212-3.00ISO	21.7	12.0	M30	3.00	0.37	4.4	1.62	60	5.5	6
2212-3.50ISO	21.7	12.0	M30	3.50	0.43	4.3	1.89	60	5.5	6
2212-4.00ISO	21.7	12.0	M33	4.00	0.50	2.5	2.16	60	5.2	6

Values below R0.1 are given as b.

Full-profile Whitworth thread mills



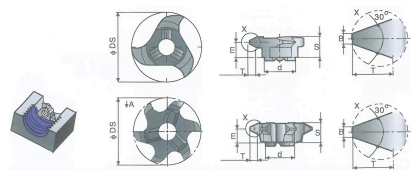
ORDER CODE RTMI-...	DIA. Ds	INTERF. d	MIN. THREAD	PITCH TPI	RADIUS R	E	H1	ANGLE α°	S	TEETH Z
1006-19W	9.7	6.0	G1/4"	19	0.18	2.5	0.856	55	3.5	3
1408-19W	13.7	8.0	G3/8"	19	0.18	2.5	0.856	55	4.0	6
1809-14W	17.7	9.0	G3/4"	14	0.24	4.3	1.160	55	5.5	6
2814-11W	27.7	14.0	G1"	11	0.31	1.6	1.480	55	5.2	6
2814-8W	27.7	14.0	—	8	0.43	2.0	2.030	55	5.2	6
2814-6W	27.7	14.0	G1 1/2"	6	0.58	2.5	2.710	55	5.2	6

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

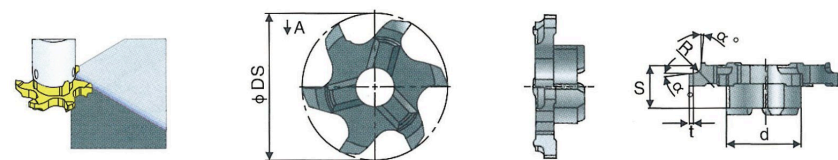
RTMG / RTMI / RTMC inserts, holders and adapters

Trapezoidal TR thread mills



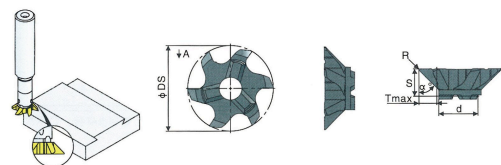
ORDER CODE RTMG-...	DIA. Ds	INTERF. d	THREAD	T	B	HELIX °	S	TEETH Z
1006-2TR	9.7	6	TR14×2	1.25	0.60	3.5	3.5	3
1206-2TR	11.7	6	TR16×2, TR18×2, TR20×2	1.25	0.60	3.5	3.5	3
1609-3TR	15.7	9	TR20×3, TR22×3, TR24×3, TR26×3, TR28×3, TR32×3	1.75	0.96	5.0	5.5	6
1509-4TR	14.7	9	TR20×4	2.25	1.33	4.5	5.5	6
1609-5TR	15.7	9	TR22×5, TR24×5, TR26×5, TR28×5	2.75	1.69	4.5	5.5	6
2012-5TR	19.7	12	TR26×5, TR28×5	2.75	1.69	4.5	5.9	6
2212-6TR	21.7	12	TR30×6, TR36×6	3.50	1.92	4.5	5.9	6
2814-6TR	27.7	14	TR36×6	3.50	1.92	4.5	5.2	6

External corner-rounding cutters



ORDER CODE RTMG-...	DIA. Ds	INTERF. d	RADIUS R	ANGLE α°	t	S	TEETH Z
2212-NR050	21.7	12.0	0.50	5	0.5	5.2	6
2212-NR100	21.7	12.0	1.00	5	0.5	5.2	6
2212-NR150	21.7	12.0	1.50	5	0.5	5.2	6
2212-NR200	21.7	12.0	2.00	5	0.5	5.2	6
2212-NR250	21.7	12.0	2.50	5	0.5	5.2	6
2212-NR300	21.7	12.0	3.00	5	0.5	5.2	6
2212-NR400	21.7	12.0	4.00	5	0.5	5.2	6

Dovetail cutters



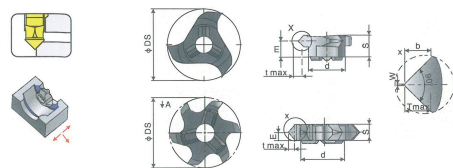
ORDER CODE RTMG-...	DIA. Ds	INTERF. d	RADIUS R	ANGLE α°	DEPTH Tmax	S	TEETH Z
1206-YW45T20	12.0	6.0	0.2	45	2.0	3.5	3
1608-YW45T25	16.0	8.0	0.2	45	2.5	5.5	6
2212-YW45T40	22.0	12.0	0.2	45	4.0	5.9	6
2614-YW45T55	26.0	14.0	0.2	45	5.5	5.2	6

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

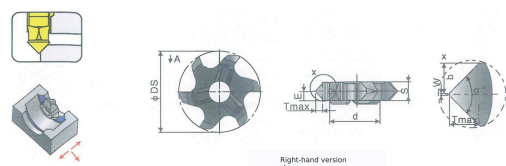
RTMG / RTMI / RTMC inserts, holders and adapters

Slotting / chamfering, 90°



ORDER CODE RTMC-...	DIA. Ds	INTERF. d	WIDTH W	b	E	DEPTH Tmax	S	TEETH Z
1006-A90	9.7	6.0	0.2	1.2	2.0	1.2	3.5	3
1609-A90	15.7	9.0	0.2	1.6	3.4	1.6	4.0	6
2212-A90	21.7	12.0	0.2	2.6	2.4	2.6	5.2	6
2614-A90	25.7	14.0	0.2	2.6	2.4	2.6	5.2	6

Slotting / chamfering, 30° and 60°



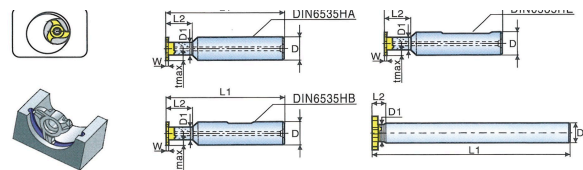
ORDER CODE RTMC-...	DIA. Ds	INTERF. d	WIDTH W	b	E	DEPTH Tmax	ANGLE α°	S	TEETH Z
1609A30	15.7	9.0	0.2	1.9	3.4	0.52	15	4.0	6
1609A40	15.7	9.0	0.2	1.9	3.4	0.69	20	4.0	6
1609A60	15.7	9.0	0.2	1.9	3.4	1.12	30	4.0	6

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

RTMG / RTMI / RTMC inserts, holders and adapters

Modular groove-milling holders



ORDER CODE RTMC-...	SHANK D	D1	L1	L2	SHANK	INSERT	SCREW	WRENCH	COOLANT
H08-13-04-N	8.0	4.0	60	13	DIN6535HB	M*-**04	CSTB1.8	T6	Yes
H12-15-06-N	12.0	6.0	70	15	DIN6535HB	M*-**06	CSTB2.5	T6	Yes
H16-18-08-N	16.0	8.0	80	18	DIN6535HB	M*-**08/09	CSTB4.0	T15	Yes
H16-20-09-N	16.0	9.0	80	20	DIN6535HB	M*-**08/09	CSTB4.0	T15	Yes
H16-25-12-N	16.0	12.0	90	25	DIN6535HB	M*-**12/14	CSTB5.0	T20	Yes
H20-35-14-N	20.0	14.0	100	35	DIN6535HB	M*-**12/14	CSTB5.0	T20	Yes
H08-00-06*	8.0	8.0	100	6	DIN6535HA	MG-**06	CSTB2.5	T6	No
H12-00-09*	12.0	12.0	120	7	DIN6535HA	MG-**08/09	CSTB4.0	T15	No
H16-00-14*	16.0	16.0	150	8	DIN6535HA	MG-**12/14	CSTB5.0	T20	No
H20-00-14*	20.0	20.0	160	8	DIN6535HA	MG-**12/14	CSTB5.0	T20	No
H25-00-14*	25.0	25.0	180	8	DIN6535HA	MG-**12/14	CSTB5.0	T20	No
E08-13-04-N	8.0	4.0	60	13	DIN6535HA	M*-**04	CSTB1.8	T6	Yes
E08-17-04-N	8.0	4.0	64	17	DIN6535HA	M*-**04	CSTB1.8	T6	Yes
E08-21-04-N	8.0	4.0	68	21	DIN6535HA	M*-**04	CSTB1.8	T6	Yes
E12-21-06-N	12.0	6.0	80	21	DIN6535HA	M*-**06	CSTB2.5	T6	Yes
E12-30-06-N	12.0	6.0	90	30	DIN6535HA	M*-**06	CSTB2.5	T6	Yes
E12-42-06-N	12.0	6.0	100	42	DIN6535HA	M*-**06	CSTB2.5	T6	Yes
E12-29-08-N	12.0	8.0	95	29	DIN6535HA	M*-**08/09	CSTB4.0	T15	Yes
E12-42-08-N	12.0	8.0	100	42	DIN6535HA	M*-**08/09	CSTB4.0	T15	Yes
E12-56-08-N	12.0	8.0	120	56	DIN6535HA	M*-**08/09	CSTB4.0	T15	Yes
E16-32-09-N	16.0	9.0	100	32	DIN6535HA	M*-**08/09	CSTB4.0	T15	Yes
E16-45-09-N	16.0	9.0	110	45	DIN6535HA	M*-**08/09	CSTB4.0	T15	Yes
E16-64-09-N	16.0	9.0	130	64	DIN6535HA	M*-**08/09	CSTB4.0	T15	Yes
E16-42-12-N	16.0	12.0	100	42	DIN6535HA	M*-**12/14	CSTB5.0	T20	Yes
E16-60-12-N	16.0	12.0	130	60	DIN6535HA	M*-**12/14	CSTB5.0	T20	Yes
E16-85-12-N	16.0	12.0	160	85	DIN6535HA	M*-**12/14	CSTB5.0	T20	Yes
E16-42-14-N	16.0	14.0	100	42	DIN6535HA	M*-**12/14	CSTB5.0	T20	Yes
E16-60-14-N	16.0	14.0	130	60	DIN6535HA	M*-**12/14	CSTB5.0	T20	Yes
E16-85-14-N	16.0	14.0	160	85	DIN6535HA	M*-**12/14	CSTB5.0	T20	Yes

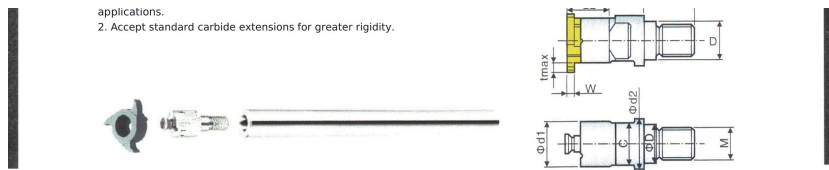
* Economical straight shanks (no coolant) allow neck relief or length changes; not for deep bores. 08/09/12/14 interfaces are interchangeable with adapters and screws; fitting 12/14 inserts to 08/09 holders needs a screw change.

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Modular Milling Cutters (cont.)

RTMG / RTMI / RTMC inserts, holders and adapters

Adapters, same-diameter / stepped

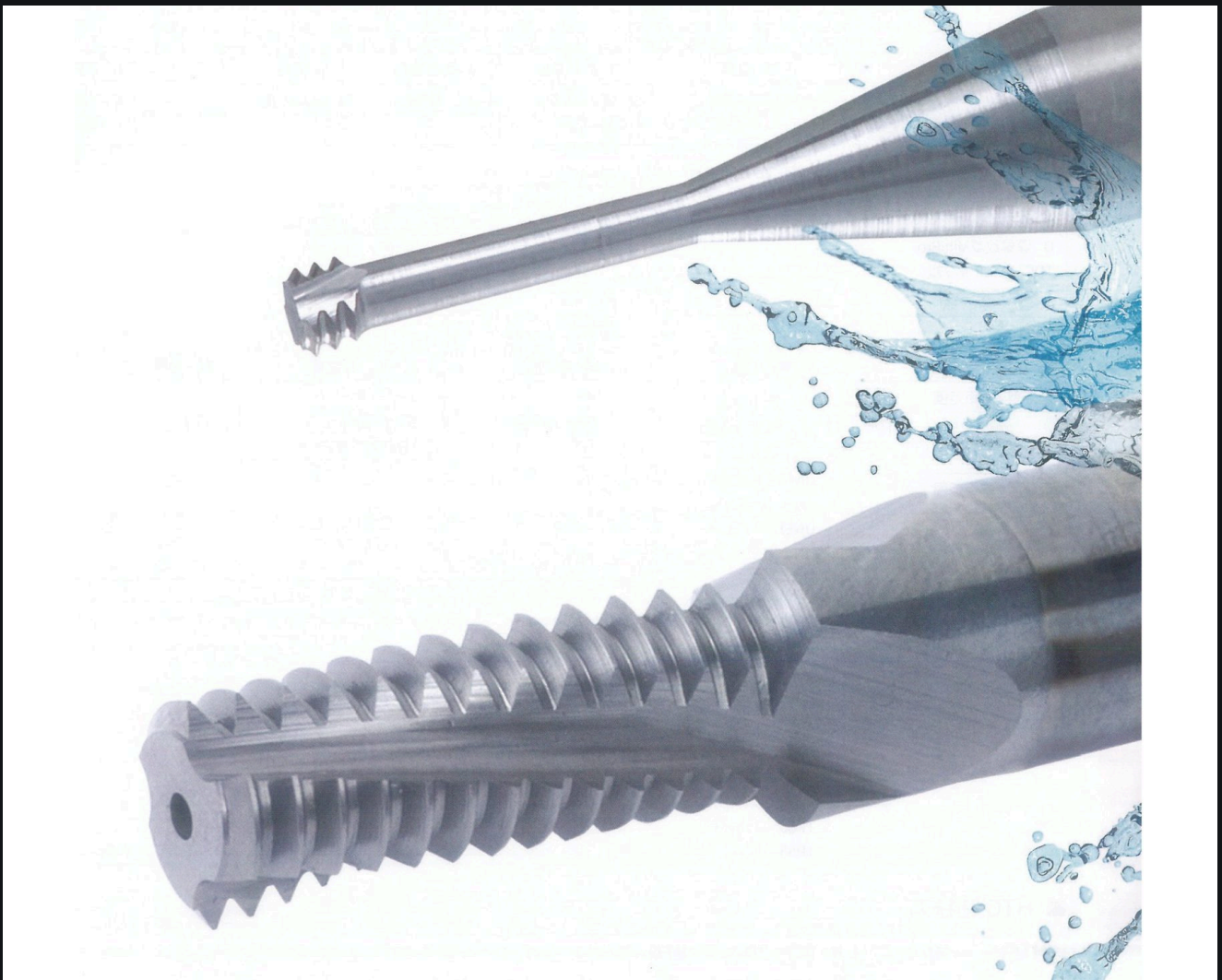


ORDER CODE	L1	L2	L3	d1	d2	C	D	THREAD	INSERT	SCREW	WRENCH	COOLANT
RTMC-...								M				
0606-M3	23	13	13	6	6	5	3.5	M3	M*-**06	CSTB2.5	T6	Yes
0808-M4	28	16	16	8	8	7	4.5	M4	M*-**08/09	CSTB4.0	T15	Yes
0909-M5	30	16	16	9	9	8	5.5	M5	M*-**08/09	CSTB4.0	T15	Yes
1212-M6	34	19	19	12	12	11	6.5	M6	M*-**12/14	CSTB5.0	T20	Yes
1414-M8	36	19	19	14	14	13	8.5	M8	M*-**12/14	CSTB5.0	T20	Yes
1616-12/M8	36	3	19	12	16	14	8.5	M8	M*-**12/14	CSTB5.0	T20	Yes
2020-14/M10	41	3	19	14	20	18	10.5	M10	M*-**12/14	CSTB5.0	T20	Yes
2020-14/M12	41	3	19	14	20	18	12.5	M12	M*-**12/14	CSTB5.0	T20	Yes
1606-M8	42	11	25	6	16	13	8.5	M8	M*-**06	CSTB2.5	T6	Yes
1608-M8	42	14	25	8	16	13	8.5	M8	M*-**08/09	CSTB4.0	T15	Yes
1609-M8	42	14	25	9	16	13	8.5	M8	M*-**08/09	CSTB4.0	T15	Yes
1612-M8	42	15	25	12	16	13	8.5	M8	M*-**12/14	CSTB5.0	T20	Yes
1614-M8	42	15	25	14	16	13	8.5	M8	M*-**12/14	CSTB5.0	T20	Yes

Dimensions in mm. Special widths, radii, profiles and holder lengths are made to order from 5 pieces, 15–30 working days. Stock varies by code; please confirm on inquiry.

Technical Data

Thread-mill coatings, cutting data for thread mills and modular small-bore tools, and pre-hole tables for metric, unified and pipe threads.



COATINGS

RA, RN, RM, RD, SC and DLC

CUTTING DATA

Thread mills and modular small-bore tools

PRE-HOLES

Metric, UN, Whitworth, G, PT and NPT

Coatings and applications

Thread-mill coatings. Tell us the workpiece material and hardness and we select the coating.

CODE		COMPOSITION	WORKPIECE MATERIALS	HARDNESS	FRICTION	OXIDATION
RA		AlTiSiXN	Materials up to HRC 45 (max. HRC 50): cast iron, low- and medium-carbon, alloy and heat-treated steels; 304/316 stainless steel; TC4/TC6 titanium alloys.	HV 3500	0.5	1100 °C
RN		AlCrTiSiN	Materials up to HRC 45 (max. HRC 50): cast iron, low- and medium-carbon, alloy and heat-treated steels; 304/316 stainless steel; TC4/TC6 titanium alloys.	HV 3500	0.4	1100 °C
RM		AlTiSiXN	Stainless steel, titanium alloys and superalloys; also cast iron and low- and medium-carbon steels.	HV 3500	0.4	1100 °C
RD		AlTiSiXN	Quenched and tempered / hardened steels HRC 40–58 and selected superalloys.	HV 3500	0.5	1100 °C
SC		TiAlSiN	Hard materials $\geq$ HRC 50, max. HRC 65.	HV 3800	0.3	1100 °C
DLC		ta-C	Aluminium, copper and their alloys; acrylic and plastics.	HV 4500	0.31	500 °C

Cutting data: thread mills

Single-form and triple-form thread mills

WORKPIECE MATERIAL		vc	m/min	Ø1	Ø1.5	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø12	Ø14
feed per tooth fz, mm/tooth, by cutter diameter																
P	Structural, free-cutting and unalloyed steels	50–130	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.09	0.1	0.12	
	Alloy case-hardening, alloy heat-treated and alloy tool steels	40–100	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.1	
M	Ferritic, austenitic and martensitic stainless steels	40–110	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07	
K	Malleable, grey and ductile cast iron	75–130	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.09	0.1	0.12	
N	Aluminium, copper and their alloys	120–260	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.1	0.11	0.12	0.14	
S	Titanium and titanium alloys	10–40	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07	
H	Hardened steel, max. 52 HRC	10–25	0.01	0.02	0.02	0.03	0.03	0.035	0.035	0.04	0.045	0.045	0.05	0.055	0.06	

Multi-form thread mills

WORKPIECE MATERIAL		vc	m/min	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø12	Ø14	Ø16
feed per tooth fz, mm/tooth, by cutter diameter															
P	Structural, free-cutting and unalloyed steels	50–130	0.02	0.02	0.025	0.03	0.035	0.045	0.05	0.055	0.06	0.06	0.065	0.065	
	Alloy case-hardening, alloy heat-treated and alloy tool steels	40–100	0.015	0.015	0.02	0.025	0.03	0.035	0.04	0.045	0.05	0.05	0.05	0.055	
M	Ferritic, austenitic and martensitic stainless steels	40–110	0.01	0.01	0.015	0.02	0.025	0.03	0.03	0.035	0.04	0.045	0.05	0.05	
K	Malleable, grey and ductile cast iron	75–130	0.02	0.02	0.025	0.03	0.035	0.045	0.05	0.055	0.06	0.065	0.065	0.07	
N	Aluminium, copper and their alloys	120–260	0.03	0.035	0.04	0.045	0.05	0.055	0.06	0.065	0.07	0.08	0.085	0.09	
S	Titanium and titanium alloys	10–40	0.01	0.01	0.015	0.02	0.025	0.03	0.03	0.035	0.04	0.045	0.05	0.05	
H	Hardened steel, max. 52 HRC	10–25	–	0.005	0.005	0.01	0.012	0.014	0.018	0.02	0.02	0.022	0.025	0.03	

Use lower cutting speeds for smaller tool diameters. Climb milling, internal coolant or air blast recommended. Start at the middle of the range and adjust to the machine and set-up.

Cutting data: modular small-bore tools

RBMB inserts. Cutting speed v_c and maximum radial depth of cut for boring.

MATERIAL			HB	v_c THREADING / BORING	v_c GROOVING	BORING a_p max.	
P	Unalloyed steel	Low carbon (C 0.1–0.25%)	125	40–210	40–180	0.30–0.50	
		Medium carbon (C 0.25–0.55%)	150	40–180	40–170	0.30–0.50	
		High carbon (C 0.55–0.85%)	170	40–170	40–160	0.25–0.35	
	Low-alloy steel (alloy $\leq$ 5%)	Unhardened	180	40–90	40–155	0.28–0.45	
		Hardened	275	40–150	40–160	0.25–0.45	
	High-alloy steel (alloy $>$ 5%)	Hardened	350	40–140	40–190	0.25–0.40	
		Annealed	200	40–130	40–115	0.20–0.30	
	Cast steel	Hardened	325	40–110	40–100	0.18–0.30	
		Low alloy ($\leq$ 5%)	200	40–170	40–170	0.20–0.30	
		High alloy ($\geq$ 5%)	225	40–120	40–130	0.17–0.30	
M	Ferritic stainless steel	Unhardened	200	40–170	40–180	0.22–0.34	
		Hardened	330	40–170	40–180	0.21–0.32	
	Austenitic stainless steel	Austenitic	180	40–140	40–140	0.25–0.40	
		Super-austenitic	200	40–140	40–140	0.17–0.26	
	Cast ferritic stainless steel	Unhardened	200	40–140	40–140	0.25–0.37	
		Hardened	330	40–140	40–140	0.17–0.26	
	Cast austenitic stainless steel	Austenitic	200	40–120	40–120	0.20–0.30	
		Hardened	330	40–120	40–120	0.17–0.26	
	K	Malleable cast iron	Ferritic (short chips)	130	40–130	40–120	0.25–0.37
			Pearlitic (long chips)	230	40–120	40–100	0.20–0.30
Grey cast iron		Low tensile strength	180	40–130	40–100	0.22–0.34	
		High tensile strength	260	40–100	40–100	0.20–0.30	
Ductile cast iron		Ferritic	160	40–125	40–100	0.15–0.25	
		Pearlitic	260	40–90	40–90	0.20–0.30	
N	Wrought aluminium alloy	Not aged	60	40–250	40–400	0.60–1.00	
		Aged	100	40–180	40–400	0.50–0.90	
	Aluminium alloy	Cast	75	40–400	40–400	0.50–0.90	
		Cast and aged	90	40–280	40–200	0.40–0.60	
	Aluminium alloy	Cast, Si 13–22%	130	40–150	40–200	0.50–0.90	
	Copper / copper alloys	Brass	90	40–210	40–200	0.60–1.00	
		Bronze / lead-free copper	100	40–210	40–200	0.50–0.90	
	S	Superalloy	Annealed (iron-based)	200	20–45	20–40	0.12–0.22
Aged (iron-based)			280	20–30	20–30	0.10–0.20	
Annealed (nickel- or cobalt-based)			250	15–20	15–20	0.08–0.20	
Aged (nickel- or cobalt-based)			350	10–15	10–15	0.08–0.20	
Titanium alloy		99.5% pure titanium	400 Rm	40–140	70–120	0.10–0.20	
		$\alpha + \beta$ alloy	1050 Rm	20–50	20–50	0.10–0.20	

Pre-hole tables: metric fine threads

Standard drill diameter and class 2 (6H) pre-hole limits, mm.

Metric fine threads				Metric fine threads (cont.)			
SIZE	DRILL	MAX.	MIN.	SIZE	DRILL	MAX.	MIN.
M1.0×0.2	0.80	0.821	0.783	M15×1.0	14.00	14.153	13.917
M1.1×0.2	0.90	0.921	0.883	M16×1.5	14.50	14.676	14.376
M1.2×0.2	1.00	1.021	0.983	M16×1.0	15.00	15.153	14.917
M1.4×0.2	1.20	1.221	1.183	M17×1.5	15.00	15.676	15.376
M1.6×0.2	1.40	1.421	1.383	M17×1.0	16.00	16.153	15.917
M1.7×0.2	1.45	1.5	1.46	M18×2.0	16.00	16.21	15.835
M1.8×0.2	1.60	1.621	1.583	M18×1.5	16.50	16.676	16.376
M2.0×0.25	1.75	1.785	1.729	M18×1.0	17.00	17.153	16.917
M2.2×0.25	1.95	1.985	1.929	M20×2.0	18.00	18.21	17.835
M2.3×0.25	2.05	2.061	2.001	M20×1.5	18.50	18.676	18.376
M2.5×0.35	2.20	2.221	2.121	M20×1.0	19.00	19.153	18.917
M2.6×0.35	2.20	2.246	2.186	M22×2.0	20.00	20.21	19.835
M3.0×0.35	2.70	2.721	2.621	M22×1.5	20.50	20.676	20.376
M3.5×0.35	3.20	3.221	3.121	M22×1.0	21.00	21.153	20.917
M4.0×0.5	3.50	3.599	3.459	M24×2.0	22.00	22.21	21.835
M4.5×0.5	4.00	4.099	3.959	M24×1.5	22.50	22.676	22.376
M5.0×0.5	4.50	4.599	4.459	M24×1.0	23.00	23.153	22.917
M5.5×0.5	5.00	5.099	4.959	M25×2.0	23.00	23.21	22.835
M6.0×0.75	5.30	5.378	5.188	M25×1.5	23.50	23.676	23.376
M6.0×0.5	5.50	5.55	5.4	M25×1.0	24.00	24.153	23.917
M7.0×0.75	6.30	6.378	6.188	M26×1.5	24.50	24.676	24.376
M7.0×0.5	6.50	6.55	6.4	M27×2.0	25.00	25.21	24.835
M8.0×1.0	7.00	7.153	6.917	M27×1.5	25.50	25.676	25.376
M8.0×0.75	7.30	7.378	7.188	M27×1.0	26.00	26.153	25.917
M8.0×0.5	7.50	7.52	7.4	M28×2.0	26.00	26.21	25.835
M9.0×1.0	8.00	8.153	7.917	M28×1.5	26.50	26.676	26.376
M9.0×0.75	8.30	8.378	8.188	M28×1.0	27.00	27.153	26.917
M10×1.25	8.80	8.912	8.647	M30×3.0	27.00	27.252	26.752
M10×1.0	9.00	9.153	8.917	M30×2.0	28.00	28.21	27.835
M10×0.75	9.30	9.378	9.188	M30×1.5	28.50	28.676	28.376
M10×0.5	9.50	9.52	9.4	M30×1.0	29.00	29.153	28.917
M11×1.0	10.00	10.153	9.917	M32×2.0	30.00	30.21	29.835
M11×0.75	10.30	10.378	10.188	M32×1.5	30.50	30.676	30.376
M12×1.5	10.50	10.676	10.376	M33×3.0	30.00	30.252	29.752
M12×1.25	10.80	10.912	10.647	M33×2.0	31.00	31.21	30.835
M12×1.0	11.00	11.153	10.917	M33×1.5	31.50	31.676	31.376
M12×0.5	11.50	11.52	11.4	M35×1.5	33.50	33.676	33.376
M14×1.5	12.50	12.676	12.376	M36×3.0	33.00	33.252	32.752
M14×1.0	13.00	13.153	12.917	M36×2.0	34.00	34.21	33.835
M15×1.5	13.50	13.676	13.376	M36×1.5	34.50	34.676	34.376

Pre-hole tables: metric coarse and UN

Standard drill diameter and class 2 pre-hole limits, mm. Unified sizes: nominal diameter in brackets, mm.

Metric coarse threads

SIZE	DRILL	MAX.	MIN.
M1.0×0.25	0.75	0.785	0.729
M1.1×0.25	0.85	0.885	0.829
M1.2×0.25	0.95	0.985	0.929
M1.4×0.3	1.1	1.142	1.075
M1.6×0.35	1.25	1.321	1.221
M1.7×0.35	1.35	1.421	1.321
M1.8×0.35	1.45	1.521	1.421
M2.0×0.4	1.6	1.679	1.567
M2.2×0.45	1.75	1.838	1.713
M2.3×0.4	1.9	1.979	1.867
M2.5×0.45	2.1	2.138	2.013
M2.6×0.45	2.2	2.238	2.113
M3.0×0.5	2.5	2.599	2.459
M3.0×0.6	2.4	2.44	2.28
M3.5×0.6	2.9	3.01	2.85
M4.0×0.7	3.3	3.422	3.242
M4.0×0.75	3.25	3.326	3.106
M4.5×0.75	3.8	3.878	3.688
M5.0×0.8	4.2	4.334	4.134
M5.0×0.9	4.1	4.17	3.93
M6.0×1.0	5	5.153	4.917
M7.0×1.0	6	6.153	5.917
M8.0×1.25	6.8	6.912	6.647
M9.0×1.25	7.8	7.912	7.647
M10×1.5	8.5	8.676	8.376
M11×1.5	9.5	9.676	9.376
M12×1.75	10.3	10.441	10.106
M14×2.0	12	12.21	11.835
M16×2.0	14	14.21	13.835
M18×2.5	15.5	15.744	15.294
M20×2.5	17.5	17.744	17.294
M22×2.5	19.5	19.744	19.294
M24×3.0	21	21.252	20.752
M27×3.0	24	24.252	23.752
M30×3.5	26.5	26.771	26.211

UN coarse (UNC)

SIZE	DRILL	MAX.	MIN.
No. 1-64(1.854)	1.55	1.582	1.425
No. 2-56(2.184)	1.80	1.871	1.695
No. 3-48(2.515)	2.10	2.146	1.941
No. 4-40(2.845)	2.30	2.385	2.157
No. 5-40(3.175)	2.60	2.697	2.487
No. 6-32(3.505)	2.80	2.895	2.642
No. 8-32(4.166)	3.40	3.53	3.302
No. 10-24(4.826)	3.90	3.962	3.683
No. 12-24(5.486)	4.50	4.597	4.344
1/4-20	5.10	5.257	4.979
5/16-18	6.60	6.731	6.401
3/8-16	8.00	8.153	7.798
7/16-14	9.40	9.55	9.144
1/2-13	10.80	11.023	10.592
9/16-12	12.20	12.446	11.989
5/8-11	13.60	13.868	13.386
3/4-10	16.50	16.840	16.307
7/8-9	19.50	19.761	19.177
1-8	22.20	22.606	21.971
1-1/8-7	25.00	25.349	24.638
1-1/4-7	28.20	28.524	27.813
1-3/8-6	30.80	31.115	30.353
1-1/2-6	34.00	34.290	33.528
1-3/4-5	39.50	39.827	38.964
2-4-1/2	45.20	45.593	44.679

UN extra fine (UNEF)

SIZE	DRILL	MAX.	MIN.
No. 12-32	4.70	4.826	4.623
1/4-32	5.60	5.690	5.486
5/16-32	7.10	7.264	7.087
3/8-32	8.70	8.865	8.661
7/16-28	10.20	10.338	10.135
1/2-28	11.80	11.938	11.709
9/16-24	13.20	13.386	13.132
5/8-24	14.80	14.986	14.732
3/4-20	17.80	17.958	17.678
7/8-20	21.00	21.133	20.853
1-20	24.00	24.308	24.028

Pre-hole tables: UN fine and pipe threads

Drill diameters in mm.

UN fine (UNF)

SIZE	DRILL	MAX.	MIN.
No. 0-80(1.524)	1.25	1.305	1.182
No. 1-72(1.854)	1.55	1.612	1.474
No. 2-64(2.184)	1.85	1.912	1.756
No. 3-56(2.515)	2.10	2.197	2.025
No. 4-48(2.845)	2.40	2.458	2.271
No. 5-44(3.175)	2.70	2.740	2.551
No. 6-40(3.505)	2.90	3.022	2.820
No. 8-36(4.166)	3.50	3.606	3.404
No. 10-32(4.826)	4.10	4.165	3.963
No. 12-28(5.846)	4.60	4.724	4.496
1/4-28	5.50	5.588	5.360
5/16-24	6.90	7.035	6.782
3/8-24	8.50	8.636	8.382
7/16-20	9.90	10.033	9.729
1/2-20	11.50	11.607	11.329
9/16-18	12.90	13.081	12.751
5/8-18	14.50	14.681	14.351
3/4-16	17.50	17.678	17.323
7/8-14	20.50	20.675	20.270
1-12	23.20	23.571	23.114
1-1/8-12	26.50	26.746	26.289
1-1/4-12	29.50	29.921	29.464
1-3/8-12	32.80	33.096	32.639
1-1/2-12	36.00	36.271	35.814

Whitworth (BSW)

SIZE	HARD MAT.	SOFT MAT.
W1/8-40	2.65	2.6
W5/32-32	3.25	3.2
W3/16-24	3.75	3.7
W1/4-20	5.1	5
W5/16-18	6.6	6.5
W3/8-16	8	7.9
W7/16-14	9.4	9.3
W1/2-12	10.7	10.5
W9/16-12	12.3	12
W5/8-11	13.7	13.5
W3/4-10	16.7	16.5
W7/8-9	19.5	19.3
W1-8	22.4	22
W1-1/8-7	25	24.8
W1-1/4-7	28.3	28

G parallel pipe (BSPP)

SIZE	DRILL	UPPER	LOWER
G1/16-28	6.70	6.843	6.561
G1/8-28	8.70	8.848	8.566
G1/4-19	11.70	11.890	11.445
G3/8-19	15.20	15.395	14.950
G1/2-14	19.00	19.172	18.631
G5/8-14	21.00	21.128	20.587
G3/4-14	24.50	24.658	24.117
G7/8-14	28.20	28.418	27.877
G1-11	30.60	30.931	30.291
G1-1/8-11	35.20	35.579	34.939
G1-1/4-11	39.20	39.592	38.952
G1-1/2-11	45.00	45.485	44.845
G1-3/4-11	51.00	51.428	50.788
G2-11	57.00	57.296	56.656

PT taper pipe (BSPT)

SIZE	WITH REAM.	W/O REAM.	EFF. L	STD. L
PT1/16-28	6.10	6.20	6.244	6.384
PT1/8-28	8.10	8.20	8.249	8.388
PT1/4-19	10.70	11.00	10.962	11.174
PT3/8-19	14.20	14.50	14.448	14.658
PT1/2-14	17.60	18.00	17.979	18.263
PT3/4-14	23.00	23.50	23.37	23.378
PT1-11	29.00	29.50	29.459	29.822
PT1-1/4-11	37.50	38.00	37.976	38.339
PT1-1/2-11	43.40	44.00	43.869	44.232
PT2-11	54.90	55.50	55.412	55.844

American pipe (NPT / NPSC)

SIZE	NPT REAM.	NPT W/O	NPSC
1/16-27	5.94	6.15	6.35
1/8-27	8.33	8.43	8.74
1/4-18	10.72	11.13	11.13
3/8-18	14.27	14.27	14.68
1/2-18	17.48	17.86	18.26
3/4-14	22.63	23.01	23.42
1-11-1/2	28.58	28.98	29.36
1-1/4-11-1/2	37.31	37.69	38.10
1-1/2-11-1/2	43.26	43.66	44.45
2-11-1/2	55.17	55.58	56.36



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