

FRIDRO

ALL IN ONE PLACE

02/26

TOOLS
Special offer
valid until: 31.03.2026

SET of ER
clamping collets

14



Countersinks-Set,
90°

07



Clamping
arbors for ER
bushings

15





Solid carbide drill

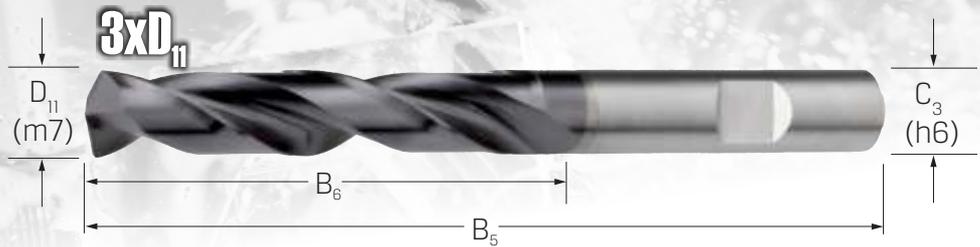
- Reinforced geometry for reliable machining
- Excellent tool life thanks to carefully selected carbide (ultra-fine grain quality)
- Good self-centering capability
- Optimal chip breaking, even at greater drilling depths
- High concentricity
- Precise hole quality

102632-
from: **15,60**
price/PC

Solid carbide DIN 6537 $3 \times D_1$ Teeth: 2

P **K**

Cat. num.	P N/mm ²	K HB
102632	(1200)	(750)
vc = m/min.		
102632	85-130	155-210



Cat. num.	D11 (mm)	B5 (mm)	B6 (mm)	C3 (mm)	f (mm/U)	price/pc	Cat. num.	D11 (mm)	B5 (mm)	B6 (mm)	C3 (mm)	f (mm/U)	price/pc
102632 3,00	3	62	20	6	0,100-0,140	15,60	102632 8,70	8,7	89	47	10	0,180-0,270	17,50
102632 3,10	3,1	62	20	6	0,100-0,140	15,60	102632 8,80	8,8	89	47	10	0,180-0,270	17,50
102632 3,20	3,2	62	20	6	0,100-0,140	15,60	102632 8,90	8,9	89	47	10	0,180-0,270	17,50
102632 3,30	3,3	62	20	6	0,100-0,140	15,60	102632 9,00	9	89	47	10	0,190-0,280	17,50
102632 3,40	3,4	62	20	6	0,100-0,140	15,60	102632 9,10	9,1	89	47	10	0,190-0,280	17,50
102632 3,50	3,5	62	20	6	0,100-0,140	15,60	102632 9,20	9,2	89	47	10	0,190-0,280	17,50
102632 3,60	3,6	62	20	6	0,100-0,140	15,60	102632 9,30	9,3	89	47	10	0,190-0,280	17,50
102632 3,70	3,7	62	20	6	0,100-0,140	15,60	102632 9,40	9,4	89	47	10	0,190-0,280	17,50
102632 3,80	3,8	62	20	6	0,100-0,140	15,60	102632 9,50	9,5	89	47	10	0,190-0,280	17,50
102632 3,90	3,9	66	24	6	0,100-0,140	15,60	102632 9,60	9,6	89	47	10	0,190-0,280	17,50
102632 4,00	4	66	24	6	0,110-0,160	15,60	102632 9,70	9,7	89	47	10	0,190-0,280	17,50
102632 4,10	4,1	66	24	6	0,110-0,160	15,60	102632 9,80	9,8	89	47	10	0,190-0,280	17,50
102632 4,20	4,2	66	24	6	0,110-0,160	15,60	102632 9,90	9,9	89	47	10	0,190-0,280	17,50
102632 4,30	4,3	66	24	6	0,110-0,160	15,60	102632 10,00	10	89	47	10	0,200-0,300	17,50
102632 4,40	4,4	66	24	6	0,110-0,160	15,60	102632 10,10	10,1	102	55	12	0,200-0,300	23,30
102632 4,50	4,5	66	24	6	0,110-0,160	15,60	102632 10,20	10,2	102	55	12	0,200-0,300	23,30
102632 4,60	4,6	66	24	6	0,110-0,160	15,60	102632 10,30	10,3	102	55	12	0,200-0,300	23,30
102632 4,70	4,7	66	24	6	0,110-0,160	15,60	102632 10,40	10,4	102	55	12	0,200-0,300	23,30
102632 4,80	4,8	66	28	6	0,110-0,160	15,60	102632 10,50	10,5	102	55	12	0,200-0,300	23,30
102632 4,90	4,9	66	28	6	0,110-0,160	15,60	102632 10,60	10,6	102	55	12	0,200-0,300	23,30
102632 5,00	5	66	28	6	0,130-0,200	15,60	102632 10,70	10,7	102	55	12	0,200-0,300	23,30
102632 5,10	5,1	66	28	6	0,130-0,200	15,60	102632 10,80	10,8	102	55	12	0,200-0,300	23,30
102632 5,20	5,2	66	28	6	0,130-0,200	15,60	102632 10,90	10,9	102	55	12	0,200-0,300	23,30
102632 5,30	5,3	66	28	6	0,130-0,200	15,60	102632 11,00	11	102	55	12	0,200-0,300	23,30
102632 5,40	5,4	66	28	6	0,130-0,200	15,60	102632 11,10	11,1	102	55	12	0,200-0,300	23,30
102632 5,50	5,5	66	28	6	0,130-0,200	15,60	102632 11,20	11,2	102	55	12	0,200-0,300	23,30
102632 5,60	5,6	66	28	6	0,130-0,200	15,60	102632 11,30	11,3	102	55	12	0,200-0,300	23,30
102632 5,70	5,7	66	28	6	0,130-0,200	15,60	102632 11,40	11,4	102	55	12	0,200-0,300	23,30
102632 5,80	5,8	66	28	6	0,130-0,200	15,60	102632 11,50	11,5	102	55	12	0,200-0,300	23,30
102632 5,90	5,9	66	28	6	0,130-0,200	15,60	102632 11,60	11,6	102	55	12	0,200-0,300	23,30
102632 6,00	6	66	28	6	0,140-0,230	15,60	102632 11,70	11,7	102	55	12	0,200-0,300	23,30
102632 6,10	6,1	79	34	8	0,140-0,230	15,60	102632 11,80	11,8	102	55	12	0,200-0,300	23,30
102632 6,20	6,2	79	34	8	0,140-0,230	15,60	102632 11,90	11,9	102	55	12	0,200-0,300	23,30
102632 6,30	6,3	79	34	8	0,140-0,230	15,60	102632 12,00	12	102	55	12	0,200-0,320	23,30
102632 6,40	6,4	79	34	8	0,140-0,230	15,60	102632 12,20	12,2	107	60	14	0,200-0,320	34,70
102632 6,50	6,5	79	34	8	0,140-0,230	15,60	102632 12,50	12,5	107	60	14	0,200-0,320	34,70
102632 6,60	6,6	79	34	8	0,140-0,230	15,60	102632 12,80	12,8	107	60	14	0,200-0,320	34,70
102632 6,70	6,7	79	34	8	0,140-0,230	15,60	102632 13,00	13	107	60	14	0,200-0,320	34,70
102632 6,80	6,8	79	34	8	0,140-0,230	15,60	102632 13,50	13,5	107	60	14	0,200-0,320	34,70
102632 6,90	6,9	79	34	8	0,140-0,230	15,60	102632 13,80	13,8	107	60	14	0,200-0,320	34,70
102632 7,00	7	79	34	8	0,150-0,250	15,60	102632 14,00	14	107	60	14	0,220-0,350	34,70
102632 7,10	7,1	79	41	8	0,150-0,250	15,60	102632 14,20	14,2	115	65	16	0,220-0,350	45,00
102632 7,20	7,2	79	41	8	0,150-0,250	15,60	102632 14,50	14,5	115	65	16	0,220-0,350	45,00
102632 7,30	7,3	79	41	8	0,150-0,250	15,60	102632 14,80	14,8	115	65	16	0,220-0,350	45,00
102632 7,40	7,4	79	41	8	0,150-0,250	15,60	102632 15,00	15	115	65	16	0,220-0,350	45,00
102632 7,50	7,5	79	41	8	0,150-0,250	15,60	102632 15,50	15,5	115	65	16	0,220-0,350	45,00
102632 7,60	7,6	79	41	8	0,150-0,250	15,60	102632 15,80	15,8	115	65	16	0,220-0,350	45,00
102632 7,70	7,7	79	41	8	0,150-0,250	15,60	102632 16,00	16	115	65	16	0,250-0,370	45,00
102632 7,80	7,8	79	41	8	0,150-0,250	15,60	102632 16,50	16,5	123	73	18	0,250-0,370	78,80
102632 7,90	7,9	79	41	8	0,150-0,250	15,60	102632 17,00	17	123	73	18	0,250-0,370	78,80
102632 8,00	8	79	41	8	0,180-0,270	15,60	102632 17,50	17,5	123	73	18	0,250-0,370	78,80
102632 8,10	8,1	89	47	10	0,180-0,270	17,50	102632 18,00	18	123	73	18	0,270-0,400	78,80
102632 8,20	8,2	89	47	10	0,180-0,270	17,50	102632 18,50	18,5	131	79	20	0,270-0,400	85,50
102632 8,30	8,3	89	47	10	0,180-0,270	17,50	102632 19,00	19	131	79	20	0,270-0,400	85,50
102632 8,40	8,4	89	47	10	0,180-0,270	17,50	102632 19,50	19,5	131	79	20	0,270-0,400	85,50
102632 8,50	8,5	89	47	10	0,180-0,270	17,50	102632 19,80	19,8	131	79	20	0,270-0,400	85,50
102632 8,60	8,6	89	47	10	0,180-0,270	17,50	102632 20,00	20	131	79	20	0,270-0,400	85,50



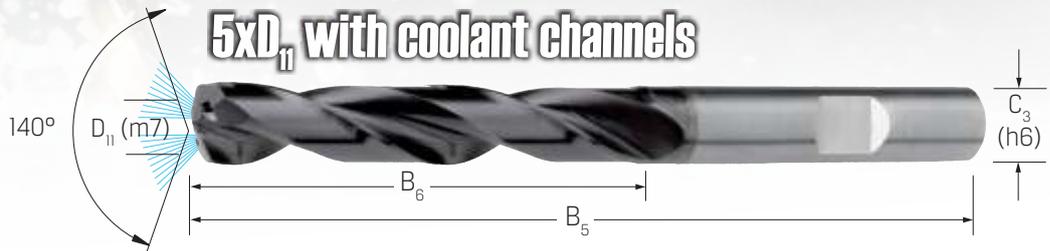
Solid carbide drill

- Reinforced geometry for reliable machining
- Excellent tool life thanks to carefully selected carbide (ultra-fine grain quality)
- Good self-centering capability
- Optimal chip breaking, even at greater drilling depths
- Very wide application range, even under non-ideal conditions
- High concentricity
- Precise hole quality
- With twisted coolant channels

102657-
from: **23,70**
price/PC



Cat. num.	P N/mm ²	M N/mm ²	K HB	N N/mm ²
102657	<1200	<750	Aluminium	Bronze
vc = m/min.				
102657	85-170	45-60	130-210	220-310 80-125



5xD₁₁ with coolant channels

Cat. num.	D11 (mm)	B5 (mm)	B6 (mm)	C3 (mm)	f (mm/U)	price/pc
102657 3,00	3	66	28	6	0,060-0,140	23,70
102657 3,10	3,1	66	28	6	0,060-0,140	23,70
102657 3,20	3,2	66	28	6	0,060-0,140	23,70
102657 3,30	3,3	66	28	6	0,060-0,140	23,70
102657 3,40	3,4	66	28	6	0,060-0,140	23,70
102657 3,50	3,5	66	28	6	0,060-0,140	23,70
102657 3,60	3,6	66	28	6	0,060-0,140	23,70
102657 3,70	3,7	66	28	6	0,060-0,140	23,70
102657 3,80	3,8	66	28	6	0,060-0,140	23,70
102657 3,90	3,9	74	36	6	0,060-0,140	23,70
102657 4,00	4	74	36	6	0,080-0,160	23,70
102657 4,10	4,1	74	36	6	0,080-0,160	23,70
102657 4,20	4,2	74	36	6	0,080-0,160	23,70
102657 4,30	4,3	74	36	6	0,080-0,160	23,70
102657 4,40	4,4	74	36	6	0,080-0,160	23,70
102657 4,50	4,5	74	36	6	0,080-0,160	23,70
102657 4,60	4,6	74	36	6	0,080-0,160	23,70
102657 4,70	4,7	74	36	6	0,080-0,160	23,70
102657 4,80	4,8	74	36	6	0,080-0,160	23,70
102657 4,90	4,9	82	44	6	0,080-0,160	23,70
102657 5,00	5	82	44	6	0,090-0,200	23,70
102657 5,10	5,1	82	44	6	0,090-0,200	23,70
102657 5,20	5,2	82	44	6	0,090-0,200	23,70
102657 5,30	5,3	82	44	6	0,090-0,200	23,70
102657 5,40	5,4	82	44	6	0,090-0,200	23,70
102657 5,50	5,5	82	44	6	0,090-0,200	23,70
102657 5,60	5,6	82	44	6	0,090-0,200	23,70
102657 5,70	5,7	82	44	6	0,090-0,200	23,70
102657 5,80	5,8	82	44	6	0,090-0,200	23,70
102657 5,90	5,9	82	44	6	0,090-0,200	23,70
102657 6,00	6	82	44	6	0,100-0,230	23,70
102657 6,10	6,1	91	53	8	0,100-0,230	29,00
102657 6,20	6,2	91	53	8	0,100-0,230	29,00
102657 6,30	6,3	91	53	8	0,100-0,230	29,00
102657 6,40	6,4	91	53	8	0,100-0,230	29,00
102657 6,50	6,5	91	53	8	0,100-0,230	29,00
102657 6,60	6,6	91	53	8	0,100-0,230	29,00
102657 6,70	6,7	91	53	8	0,100-0,230	29,00
102657 6,80	6,8	91	53	8	0,100-0,230	29,00
102657 6,90	6,9	91	53	8	0,100-0,230	29,00
102657 7,00	7	91	53	8	0,110-0,250	29,00
102657 7,10	7,1	91	53	8	0,110-0,250	29,00
102657 7,20	7,2	91	53	8	0,110-0,250	29,00
102657 7,30	7,3	91	53	8	0,110-0,250	29,00
102657 7,40	7,4	91	53	8	0,110-0,250	29,00
102657 7,45	7,45	91	53	8	0,110-0,250	29,00
102657 7,50	7,5	91	53	8	0,110-0,250	29,00
102657 7,60	7,6	91	53	8	0,110-0,250	29,00
102657 7,70	7,7	91	53	8	0,110-0,250	29,00
102657 7,80	7,8	91	53	8	0,110-0,250	29,00
102657 7,90	7,9	91	53	8	0,110-0,270	29,00
102657 8,00	8	91	53	10	0,110-0,270	29,00
102657 8,10	8,1	103	61	10	0,110-0,270	33,50
102657 8,20	8,2	103	61	10	0,110-0,270	33,50

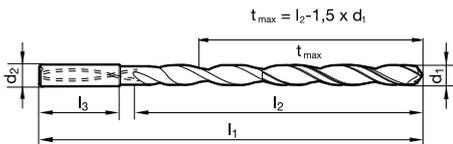
Cat. num.	D11 (mm)	B5 (mm)	B6 (mm)	C3 (mm)	f (mm/U)	price/pc
102657 8,30	8,3	103	61	10	0,110-0,270	33,50
102657 8,40	8,4	103	61	10	0,110-0,270	33,50
102657 8,50	8,5	103	61	10	0,110-0,270	33,50
102657 8,60	8,6	103	61	10	0,110-0,270	33,50
102657 8,70	8,7	103	61	10	0,110-0,270	33,50
102657 8,80	8,8	103	61	10	0,110-0,270	33,50
102657 8,90	8,9	103	61	10	0,110-0,270	33,50
102657 9,00	9	103	61	10	0,120-0,280	33,50
102657 9,10	9,1	103	61	10	0,120-0,280	33,50
102657 9,20	9,2	103	61	10	0,120-0,280	33,50
102657 9,30	9,3	103	61	10	0,120-0,280	33,50
102657 9,40	9,4	103	61	10	0,120-0,280	33,50
102657 9,50	9,5	103	61	10	0,120-0,280	33,50
102657 9,60	9,6	103	61	10	0,120-0,280	33,50
102657 9,70	9,7	103	61	10	0,120-0,280	33,50
102657 9,80	9,8	103	61	10	0,120-0,280	33,50
102657 9,90	9,9	103	61	10	0,120-0,280	33,50
102657 10,00	10	103	61	10	0,130-0,300	33,50
102657 10,10	10,1	118	71	12	0,130-0,300	49,30
102657 10,20	10,2	118	71	12	0,130-0,300	49,30
102657 10,30	10,3	118	71	12	0,130-0,300	49,30
102657 10,40	10,4	118	71	12	0,130-0,300	49,30
102657 10,50	10,5	118	71	12	0,130-0,300	49,30
102657 10,80	10,8	118	71	12	0,130-0,300	49,30
102657 11,00	11	118	71	12	0,140-0,320	49,30
102657 11,20	11,2	118	71	12	0,140-0,320	49,30
102657 11,50	11,5	118	71	12	0,140-0,320	49,30
102657 11,80	11,8	118	71	12	0,140-0,320	49,30
102657 12,00	12	118	71	12	0,150-0,320	49,30
102657 12,20	12,2	124	77	14	0,150-0,320	66,50
102657 12,50	12,5	124	77	14	0,150-0,320	66,50
102657 12,80	12,8	124	77	14	0,150-0,320	66,50
102657 13,00	13	124	77	14	0,150-0,320	66,50
102657 13,50	13,5	124	77	14	0,150-0,320	66,50
102657 13,80	13,8	124	77	14	0,150-0,320	66,50
102657 14,00	14	124	77	14	0,160-0,350	66,50
102657 14,20	14,2	133	83	16	0,160-0,350	80,80
102657 14,50	14,5	133	83	16	0,160-0,350	80,80
102657 14,80	14,8	133	83	16	0,160-0,350	80,80
102657 15,00	15	133	83	16	0,160-0,350	80,80
102657 15,50	15,5	133	83	16	0,160-0,350	80,80
102657 15,80	15,8	133	83	16	0,160-0,350	80,80
102657 16,00	16	133	83	16	0,170-0,370	80,80
102657 16,50	16,5	143	93	18	0,170-0,370	124,50
102657 17,00	17	143	93	18	0,170-0,370	124,50
102657 17,50	17,5	143	93	18	0,170-0,370	124,50
102657 17,80	17,8	143	93	18	0,170-0,370	124,50
102657 18,00	18	143	93	18	0,180-0,400	124,50
102657 18,50	18,5	153	101	20	0,180-0,400	141,00
102657 18,80	18,8	153	101	20	0,180-0,400	141,00
102657 19,00	19	153	101	20	0,180-0,400	141,00
102657 19,50	19,5	153	101	20	0,180-0,400	141,00
102657 19,80	19,8	153	101	20	0,180-0,400	141,00
102657 20,00	20	153	101	20	0,200-0,450	141,00



STOCK

SuperV drills with internal cooling

25xD **STOCK**



from: **133,00**
price/PC

SuperV-T	25xD	WN	VHM	AlTiN	135°	h7	R	HA
P	M	K	N	S	H			
•	•	•	○	○				

Cat. num.	d2 (mm)	l1 (mm)	l2 (mm)	l3 (mm)	price/pc
51766 3,0	6,000	125,000	85,000	36,000	133,00
51766 3,1	6,000	141,000	101,000	36,000	133,00
51766 3,2	6,000	141,000	101,000	36,000	133,00
51766 3,3	6,000	141,000	101,000	36,000	133,00
51766 3,5	6,000	156,000	116,000	36,000	133,00
51766 3,57	6,000	156,000	116,000	36,000	138,00
51766 3,7	6,000	156,000	116,000	36,000	138,00
51766 3,8	6,000	156,000	116,000	36,000	138,00
51766 3,97	6,000	156,000	116,000	36,000	144,00
51766 4,0	6,000	183,000	143,000	36,000	146,00
51766 4,2	6,000	183,000	143,000	36,000	146,00
51766 4,3	6,000	183,000	143,000	36,000	146,00
51766 4,37	6,000	183,000	143,000	36,000	162,00
51766 4,5	6,000	183,000	143,000	36,000	162,00
51766 4,6	6,000	210,000	170,000	36,000	171,00
51766 4,76	6,000	210,000	170,000	36,000	174,00
51766 4,8	6,000	210,000	170,000	36,000	175,00
51766 5,0	6,000	210,000	170,000	36,000	177,00
51766 5,16	6,000	210,000	170,000	36,000	177,00
51766 5,41	6,000	210,000	170,000	36,000	184,00
51766 5,5	6,000	210,000	170,000	36,000	201,00
51766 5,56	6,000	237,000	197,000	36,000	205,00
51766 5,8	6,000	237,000	197,000	36,000	206,00
51766 5,95	6,000	237,000	197,000	36,000	207,00
51766 6,0	8,000	237,000	197,000	36,000	210,00
51766 6,3	8,000	237,000	197,000	36,000	210,00

Cat. num.	d2 (mm)	l1 (mm)	l2 (mm)	l3 (mm)	price/pc
51766 6,8	8,000	237,000	197,000	36,000	210,00
51766 7,0	8,000	263,000	223,000	36,000	211,00
51766 7,14	8,000	263,000	223,000	36,000	227,00
51766 7,5	8,000	263,000	223,000	36,000	234,00
51766 7,54	8,000	263,000	223,000	36,000	235,00
51766 7,94	8,000	263,000	223,000	36,000	253,00
51766 8,0	8,000	263,000	223,000	36,000	255,00
51766 8,33	10,000	294,000	250,000	40,000	268,00
51766 8,5	10,000	294,000	250,000	40,000	279,00
51766 8,73	10,000	294,000	250,000	40,000	294,00
51766 8,8	10,000	294,000	250,000	40,000	299,00
51766 9,0	10,000	294,000	250,000	40,000	309,00
51766 9,13	10,000	321,000	277,000	40,000	309,00
51766 9,52	10,000	321,000	277,000	40,000	309,00
51766 10,0	10,000	321,000	277,000	40,000	309,00
51766 10,72	12,000	359,000	310,000	45,000	331,00
51766 11,0	12,000	359,000	310,000	45,000	336,00
51766 11,11	12,000	386,000	337,000	45,000	336,00
51766 12,0	12,000	386,000	337,000	45,000	356,00
51766 12,3	14,000	437,000	388,000	45,000	363,00
51766 12,7	14,000	437,000	388,000	45,000	390,00
51766 13,0	14,000	437,000	388,000	45,000	390,00
51766 13,1	14,000	437,000	388,000	45,000	423,00
51766 13,49	14,000	437,000	388,000	45,000	462,00
51766 13,89	14,000	437,000	388,000	45,000	489,00
51766 14,0	16,000	493,000	441,000	48,000	489,00
51766 14,29	16,000	493,000	441,000	48,000	573,00
51766 15,0	16,000	493,000	441,000	48,000	573,00
51766 15,87	16,000	493,000	441,000	48,000	573,00
51766 16,0	16,000	493,000	441,000	48,000	573,00

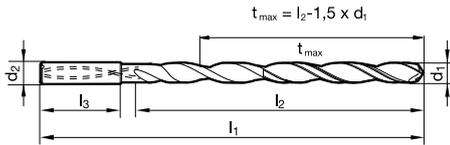
SuperV drills with internal cooling

15xD 



SuperV-T 15xD WN VHM AITiN 135° h7 R HA

P	M	K	N	S	H
●	●	●	○	○	



from: **107,00**
price/PC

Cat. num.	d2 (mm)	l1 (mm)	l2 (mm)	l3 (mm)	price/pc
51764 3,0	6,000	95,000	55,000	36,000	107,00
51764 3,1	6,000	106,000	66,000	36,000	107,00
51764 3,17	6,000	106,000	66,000	36,000	107,00
51764 3,2	6,000	106,000	66,000	36,000	107,00
51764 3,3	6,000	106,000	66,000	36,000	107,00
51764 3,5	6,000	116,000	76,000	36,000	107,00
51764 3,57	6,000	116,000	76,000	36,000	110,00
51764 3,7	6,000	116,000	76,000	36,000	110,00
51764 3,8	6,000	116,000	76,000	36,000	110,00
51764 3,97	6,000	116,000	76,000	36,000	110,00
51764 4,0	6,000	116,000	76,000	36,000	113,00
51764 4,2	6,000	133,000	93,000	36,000	122,00
51764 4,3	6,000	133,000	93,000	36,000	122,00
51764 4,37	6,000	133,000	93,000	36,000	123,00
51764 4,5	6,000	133,000	93,000	36,000	127,00
51764 4,6	6,000	133,000	93,000	36,000	127,00
51764 4,76	6,000	133,000	93,000	36,000	128,00
51764 4,8	6,000	133,000	93,000	36,000	128,00
51764 5,0	6,000	133,000	93,000	36,000	129,00
51764 5,1	6,000	150,000	110,000	36,000	131,00
51764 5,16	6,000	150,000	110,000	36,000	131,00
51764 5,41	6,000	150,000	110,000	36,000	133,00
51764 5,5	6,000	150,000	110,000	36,000	135,00
51764 5,56	6,000	150,000	110,000	36,000	136,00
51764 5,8	6,000	150,000	110,000	36,000	136,00
51764 5,95	6,000	150,000	110,000	36,000	148,00
51764 6,0	6,000	150,000	110,000	36,000	149,00
51764 6,3	8,000	167,000	127,000	36,000	160,00
51764 6,35	8,000	167,000	127,000	36,000	160,00
51764 6,5	8,000	167,000	127,000	36,000	162,00
51764 6,75	8,000	167,000	127,000	36,000	163,00
51764 6,8	8,000	167,000	127,000	36,000	163,00
51764 7,0	8,000	167,000	127,000	36,000	164,00
51764 7,14	8,000	183,000	143,000	36,000	174,00
51764 7,5	8,000	183,000	143,000	36,000	180,00
51764 7,54	8,000	183,000	143,000	36,000	180,00

Cat. num.	d2 (mm)	l1 (mm)	l2 (mm)	l3 (mm)	price/pc
51764 7,8	8,000	183,000	143,000	36,000	180,00
51764 7,94	8,000	183,000	143,000	36,000	192,00
51764 8,0	8,000	183,000	143,000	36,000	193,00
51764 8,33	10,000	204,000	160,000	40,000	205,00
51764 8,5	10,000	204,000	160,000	40,000	213,00
51764 8,73	10,000	204,000	160,000	40,000	214,00
51764 8,8	10,000	204,000	160,000	40,000	214,00
51764 9,0	10,000	204,000	160,000	40,000	216,00
51764 9,13	10,000	221,000	177,000	40,000	216,00
51764 9,52	10,000	221,000	177,000	40,000	216,00
51764 9,8	10,000	221,000	177,000	40,000	216,00
51764 9,92	10,000	221,000	177,000	40,000	216,00
51764 10,0	10,000	221,000	177,000	40,000	216,00
51764 10,32	12,000	247,000	198,000	45,000	220,00
51764 10,5	12,000	247,000	198,000	45,000	220,00
51764 10,72	12,000	247,000	198,000	45,000	224,00
51764 11,0	12,000	247,000	198,000	45,000	226,00
51764 11,11	12,000	263,000	214,000	45,000	226,00
51764 11,51	12,000	263,000	214,000	45,000	233,00
51764 11,8	12,000	263,000	214,000	45,000	233,00
51764 11,91	12,000	263,000	214,000	45,000	238,00
51764 12,0	12,000	263,000	214,000	45,000	238,00
51764 12,3	14,000	297,000	248,000	45,000	255,00
51764 12,5	14,000	297,000	248,000	45,000	255,00
51764 12,7	14,000	297,000	248,000	45,000	274,00
51764 13,0	14,000	297,000	248,000	45,000	274,00
51764 13,1	14,000	297,000	248,000	45,000	294,00
51764 13,49	14,000	297,000	248,000	45,000	320,00
51764 13,89	14,000	297,000	248,000	45,000	341,00
51764 14,0	14,000	297,000	248,000	45,000	341,00
51764 14,29	16,000	333,000	281,000	48,000	399,00
51764 15,0	16,000	333,000	281,000	48,000	399,00
51764 15,87	16,000	333,000	281,000	48,000	399,00
51764 16,0	16,000	333,000	281,000	48,000	399,00

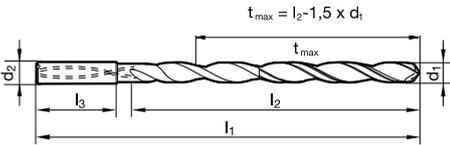
SuperV drills with internal cooling

20xD 



SuperV-T 20xD WN VHM AITiN 135° h7 R HA

P	M	K	N	S	H
●	●	●	○	○	



from: **122,00**
price/PC

Cat. num.	d2 (mm)	l1 (mm)	l2 (mm)	l3 (mm)	price/pc
51765 3,0	6,000	110,000	70,000	36,000	147,00
51765 3,1	6,000	123,000	83,000	36,000	122,00
51765 3,2	6,000	123,000	83,000	36,000	122,00
51765 3,3	6,000	123,000	83,000	36,000	122,00
51765 3,5	6,000	136,000	96,000	36,000	122,00
51765 3,57	6,000	136,000	96,000	36,000	125,00
51765 3,7	6,000	136,000	96,000	36,000	125,00
51765 3,8	6,000	136,000	96,000	36,000	125,00
51765 3,97	6,000	136,000	96,000	36,000	125,00
51765 4,0	6,000	136,000	96,000	36,000	129,00
51765 4,2	6,000	158,000	118,000	36,000	139,00
51765 4,3	6,000	158,000	118,000	36,000	139,00
51765 4,37	6,000	158,000	118,000	36,000	139,00
51765 4,5	6,000	158,000	118,000	36,000	143,00
51765 4,6	6,000	158,000	118,000	36,000	143,00
51765 4,76	6,000	158,000	118,000	36,000	145,00
51765 4,8	6,000	158,000	118,000	36,000	145,00
51765 5,0	6,000	158,000	118,000	36,000	147,00
51765 5,1	6,000	180,000	140,000	36,000	148,00
51765 5,16	6,000	180,000	140,000	36,000	148,00
51765 5,41	6,000	180,000	140,000	36,000	152,00
51765 5,5	6,000	180,000	140,000	36,000	153,00
51765 5,56	6,000	180,000	140,000	36,000	154,00
51765 5,8	6,000	180,000	140,000	36,000	154,00
51765 5,95	6,000	180,000	140,000	36,000	168,00
51765 6,0	6,000	180,000	140,000	36,000	170,00
51765 6,35	6,000	202,000	162,000	36,000	182,00
51765 6,5	8,000	202,000	162,000	36,000	185,00
51765 6,75	8,000	202,000	162,000	36,000	186,00
51765 6,8	8,000	202,000	162,000	36,000	186,00
51765 7,0	8,000	202,000	162,000	36,000	188,00
51765 7,14	8,000	223,000	183,000	36,000	200,00
51765 7,5	8,000	223,000	183,000	36,000	204,00
51765 7,54	8,000	223,000	183,000	36,000	205,00
51765 7,8	8,000	223,000	183,000	36,000	205,00
51765 7,94	8,000	223,000	183,000	36,000	218,00

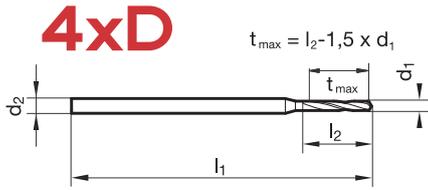
Cat. num.	d2 (mm)	l1 (mm)	l2 (mm)	l3 (mm)	price/pc
51765 8,0	8,000	223,000	183,000	36,000	221,00
51765 8,33	10,000	249,000	205,000	40,000	234,00
51765 8,5	10,000	249,000	205,000	40,000	243,00
51765 8,73	10,000	249,000	205,000	40,000	243,00
51765 8,8	10,000	249,000	205,000	40,000	243,00
51765 9,0	10,000	249,000	205,000	40,000	245,00
51765 9,13	10,000	271,000	227,000	40,000	245,00
51765 9,52	10,000	271,000	227,000	40,000	245,00
51765 10,0	10,000	271,000	227,000	40,000	245,00
51765 10,2	12,000	302,000	253,000	45,000	250,00
51765 10,32	12,000	302,000	253,000	45,000	250,00
51765 10,5	12,000	302,000	253,000	45,000	250,00
51765 10,72	12,000	302,000	253,000	45,000	255,00
51765 11,0	12,000	302,000	253,000	45,000	258,00
51765 11,11	12,000	323,000	274,000	45,000	259,00
51765 11,51	12,000	323,000	274,000	45,000	263,00
51765 11,8	12,000	323,000	274,000	45,000	263,00
51765 11,91	12,000	323,000	274,000	45,000	268,00
51765 12,0	12,000	323,000	274,000	45,000	273,00
51765 12,5	14,000	367,000	318,000	45,000	288,00
51765 12,7	14,000	367,000	318,000	45,000	309,00
51765 13,0	14,000	367,000	318,000	45,000	309,00
51765 13,49	14,000	367,000	318,000	45,000	367,00
51765 14,0	14,000	367,000	318,000	45,000	388,00
51765 14,29	16,000	413,000	361,000	48,000	456,00
51765 15,0	16,000	413,000	361,000	48,000	456,00
51765 15,87	16,000	413,000	361,000	48,000	456,00
51765 16,0	16,000	413,000	361,000	48,000	456,00

SuperV-NX high-performance microdrills



SuperV-NX
4xD
WN
VHM
Al-TiN+
140°
m7
R
Cyl

P	M	K	N	S	H
●	○	●	○	○	



from: **40,80**
price/PC

Cat. num.	d2 (mm)	l1 (mm)	l2 (mm)	price/pc
71998 0,5	3,0	47,000	3,000	40,80
71998 0,55	3,0	47,000	3,300	40,80
71998 0,6	3,0	47,000	3,600	40,80
71998 0,65	3,0	47,000	3,900	40,80
71998 0,7	3,0	47,000	4,200	40,80
71998 0,75	3,0	47,000	4,500	40,80
71998 0,8	3,0	47,000	4,800	40,80
71998 0,85	3,0	47,000	5,100	40,80
71998 0,9	3,0	47,000	5,400	40,80
71998 0,95	3,0	47,000	5,700	40,80
71998 1,0	3,0	47,000	6,000	41,70
71998 1,05	3,0	47,000	6,300	41,70
71998 1,1	3,0	47,000	6,600	41,70
71998 1,15	3,0	47,000	6,900	41,70
71998 1,2	3,0	47,000	7,200	44,40
71998 1,25	3,0	47,000	7,500	44,40
71998 1,3	3,0	47,000	7,800	44,40
71998 1,35	3,0	47,000	8,100	44,40
71998 1,4	3,0	47,000	8,400	44,40
71998 1,45	3,0	47,000	8,700	44,40
71998 1,5	3,0	47,000	9,000	44,40
71998 1,55	3,0	47,000	9,300	44,40
71998 1,59	3,0	47,000	9,600	44,40
71998 1,6	3,0	47,000	9,600	46,70
71998 1,65	3,0	47,000	9,900	46,70
71998 1,7	3,0	47,000	10,200	46,70
71998 1,75	3,0	47,000	10,500	46,70
71998 1,8	3,0	52,000	10,800	46,70
71998 1,85	3,0	52,000	11,100	46,70
71998 1,9	3,0	52,000	11,400	46,70
71998 1,95	3,0	52,000	11,700	46,70

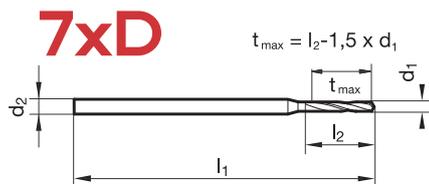
Cat. num.	d2 (mm)	l1 (mm)	l2 (mm)	price/pc
71998 1,98	4,0	59,000	12,000	46,70
71998 2,0	4,0	59,000	12,000	52,90
71998 2,05	4,0	59,000	12,300	52,90
71998 2,1	4,0	59,000	12,600	52,90
71998 2,15	4,0	59,000	12,900	52,90
71998 2,2	4,0	59,000	13,200	52,90
71998 2,25	4,0	59,000	13,500	52,90
71998 2,3	4,0	59,000	13,800	52,90
71998 2,35	4,0	59,000	14,100	57,00
71998 2,38	4,0	59,000	14,400	57,00
71998 2,4	4,0	59,000	14,400	57,00
71998 2,45	4,0	59,000	14,700	57,00
71998 2,5	4,0	59,000	15,000	57,00
71998 2,55	4,0	59,000	15,300	57,00
71998 2,6	4,0	59,000	15,600	57,00
71998 2,65	4,0	59,000	15,900	57,00
71998 2,7	4,0	59,000	16,200	57,00
71998 2,75	4,0	59,000	16,500	58,90
71998 2,78	4,0	59,000	16,800	58,90
71998 2,8	4,0	59,000	16,800	58,90
71998 2,85	4,0	59,000	17,100	58,90
71998 2,9	4,0	59,000	17,400	58,90
71998 2,95	4,0	59,000	17,700	58,90
71998 3,0	4,0	59,000	18,000	58,90

SuperV-NX high-performance microdrills



SuperV-NX
7xD
WN
VHM
Al-TiN+
140°
m7
R
HA

P	M	K	N	S	H
●	○	●	○	○	



from: **42,30**
price/PC

Cat. num.	d2 (mm)	l1 (mm)	l2 (mm)	price/pc
71999 0,5	3,0	47,000	4,000	42,30
71999 0,55	3,0	47,000	4,400	42,30
71999 0,6	3,0	47,000	4,800	42,30
71999 0,65	3,0	47,000	5,200	42,30
71999 0,7	3,0	47,000	5,600	42,30
71999 0,75	3,0	47,000	6,000	42,30
71999 0,8	3,0	47,000	6,400	42,30
71999 0,85	3,0	47,000	6,800	42,30
71999 0,9	3,0	47,000	7,200	42,30
71999 0,95	3,0	47,000	7,600	42,30
71999 1,0	3,0	47,000	8,000	42,30
71999 1,05	3,0	47,000	8,400	44,30
71999 1,1	3,0	47,000	8,800	44,30
71999 1,15	3,0	47,000	9,200	44,30
71999 1,2	3,0	47,000	10,800	46,70
71999 1,25	3,0	47,000	11,300	46,70
71999 1,3	3,0	47,000	11,700	48,40
71999 1,35	3,0	47,000	12,200	48,40
71999 1,4	3,0	47,000	12,600	48,40
71999 1,45	3,0	47,000	13,100	48,40
71999 1,5	3,0	47,000	13,500	48,40
71999 1,55	3,0	47,000	14,000	48,40
71999 1,59	3,0	47,000	14,400	48,40
71999 1,6	3,0	47,000	14,400	52,90
71999 1,65	3,0	47,000	14,900	52,90
71999 1,7	3,0	47,000	15,300	52,90
71999 1,75	3,0	47,000	15,800	52,90
71999 1,8	3,0	52,000	16,200	52,90
71999 1,85	3,0	52,000	16,700	52,90
71999 1,9	3,0	52,000	17,100	52,90
71999 1,95	3,0	52,000	17,600	52,90

Cat. num.	d2 (mm)	l1 (mm)	l2 (mm)	price/pc
71999 1,98	4,0	63,000	18,000	52,90
71999 2,0	4,0	63,000	18,000	58,90
71999 2,05	4,0	63,000	18,500	58,90
71999 2,1	4,0	63,000	18,900	58,90
71999 2,15	4,0	63,000	19,400	58,90
71999 2,2	4,0	63,000	19,800	58,90
71999 2,25	4,0	63,000	20,300	58,90
71999 2,3	4,0	63,000	20,700	60,00
71999 2,35	4,0	63,000	21,200	60,00
71999 2,38	4,0	63,000	21,600	60,00
71999 2,4	4,0	63,000	21,600	62,00
71999 2,45	4,0	63,000	22,100	62,00
71999 2,5	4,0	63,000	22,500	62,00
71999 2,55	4,0	63,000	23,000	62,00
71999 2,6	4,0	67,000	23,400	64,00
71999 2,65	4,0	67,000	23,900	64,00
71999 2,7	4,0	67,000	24,300	64,00
71999 2,75	4,0	67,000	24,800	64,00
71999 2,78	4,0	67,000	25,200	66,20
71999 2,8	4,0	67,000	25,200	66,20
71999 2,85	4,0	67,000	25,700	66,20
71999 2,9	4,0	67,000	26,100	66,20
71999 2,95	4,0	67,000	26,600	66,20
71999 3,0	4,0	67,000	27,000	66,20

Countersinks, 90°

- F3 different convex cutting edges
- Low-vibration cutting processes
- For round and chatter-free countersinking
- Considerably lower feed force required
- For universal application

STOCK

P	M	K	N	S	H
●	●	●	○	○	○



Ø16,5
52348 16,5
25,00
price/PC

Ø20,5
52348 20,5
35,50
price/PC

Ø25,0
52348 25,0
47,00
price/PC

Ø31,0
52348 31,0
55,50
price/PC

Ø12,4
52348 12,4
20,90
price/PC

Ø10,4
52348 10,4
20,50
price/PC

Ø6,3
52348 6,3
16,50
price/PC

Countersinks-Set, 90°

- Ø6,3, Ø8,3, Ø10,4, Ø12,4, Ø16,5, Ø20,5
- 3 different convex cutting edges
- Low-vibration cutting processes
- For round and chatter-free countersinking
- Considerably lower feed force required
- For universal application

STOCK

P	M	K	N	S	H
●	●	●	○	○	○



52398 1,0
119,00
price/SET

Countersinks-Set, 90°

- Ø8,3, Ø10,4, Ø12,4, Ø16,5, Ø20,5, Ø25,0
- 3 different convex cutting edges
- Low-vibration cutting processes
- For round and chatter-free countersinking
- Considerably lower feed force for universal application

STOCK

P	M	K	N	S	H
●	●	●	○	○	○



322050524
129,00
price/SET

Countersink HSS, 90°

PREMUS



Cat. num. d1 mm	price/ pc	A11 mm	A12 mm	B5 mm	C3 mm	F mm/U
110110 4,3	5,30	1,3	4,3	40	4	0,03-0,1
110110 5,0	5,10	1,5	5	40	4	0,04-0,12
110110 5,3	5,10	1,5	5,3	40	4	0,04-0,12
110110 5,8	5,30	1,5	5,8	40	5	0,04-0,12
110110 6,0	5,10	1,5	6	45	5	0,04-0,12
110110 6,3	5,10	1,5	6,3	45	5	0,04-0,12
110110 7,0	5,50	1,8	7	50	6	0,04-0,12
110110 7,3	5,50	1,8	7,3	50	6	0,04-0,12
110110 8,0	5,50	2	8	50	6	0,06-0,14
110110 8,3	5,50	2	8,3	50	6	0,06-0,14
110110 9,4	6,60	2,2	9,4	50	6	0,06-0,14
110110 10,0	6,40	2,5	10	50	6	0,06-0,14
110110 10,4	6,40	2,5	10,4	50	6	0,06-0,14
110110 11,5	7,10	2,8	11,5	56	8	0,06-0,14
110110 12,4	7,10	2,8	12,4	56	8	0,07-0,18
110110 13,4	7,10	2,9	13,4	56	8	0,07-0,18
110110 15,0	7,99	3,2	15	60	10	0,07-0,18
110110 16,5	8,30	3,2	16,5	60	10	0,08-0,2
110110 19,0	11,70	3,5	19	63	10	0,08-0,2
110110 20,5	11,70	3,5	20,5	63	10	0,09-0,24
110110 23,0	15,90	3,8	23	67	10	0,09-0,24
110110 25,0	15,90	3,8	25	67	10	0,12-0,3
110110 31,0	21,60	4,2	31	71	12	0,12-0,3

from: **5,10**
price/PC

P	M	K	S	N
N/mm ²	N/mm ²	HB	N/mm ²	N/mm ²
(850)	(250)	Copper, brass, Alu (600)	Plastics	
vc = m/min.				
110110	18-28	8-20	10-80	10-80

Countersink, HSS

PREMUS



from: **44,00**
price/PC

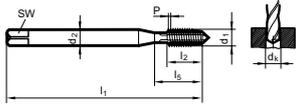
P	M	K	S	N
N/mm ²	N/mm ²	HB	N/mm ²	N/mm ²
(850)	(750)	(250)	Titan	Copper, brass, Alu (600)
110260	18-28	4-10	8-20	4-10
110265	18-28	4-10	8-20	4-10

HSS	DIN 335	Form D
90°	MK-Schaft	UNI

d1 mm	110260-90°	110265-90° TiN	A11 mm	A12 mm	B5 mm	C2	f mm/U
25,0	44,00	74,50	3,8	25	106	MK2	0,120-0,300
31,0	56,60	85,50	4,2	31	106	MK2	0,120-0,300
37,0	55,50	105,00	4,8	37	118	MK2	0,120-0,300
40,0	72,30	120,00	10	40	140	MK3	0,140-0,400
50,0	89,50	180,00	14	50	150	MK3	0,140-0,400
63,0	153,00	299,00	16	63	180	MK4	0,140-0,400

Machine taps for ISO metric threads

- For through-holes
- With spiral point
- Chip evacuation in feed direction



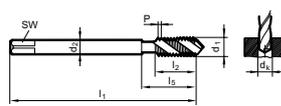
STOCK

P	M	K	N	S	H
	●			○	

Norm: DIN 371/376
 Material: HSS-E-PM
 Surface: Without
 Type: Produktiv HD
 Form: B
 Cutting direction: right-hand
 Tolerance class thread: ISO2/6H

Machine taps for ISO metric threads

- For blind holes
- Flutes with appr. 40° right-hand helix
- Chip evacuation in shank direction



STOCK

P	M	K	N	S	H
	●		○	○	

Norm: DIN 371/376
 Material: HSS-E-PM
 Surface: Without
 Type: Intensiv HD
 Form: C
 Cutting direction: right-hand
 Tolerance class thread: ISO2/6H

from: **10,60**
price/PC



Cat. num.	d1 (mm)	P (mm)	d2 (mm)	SW (mm)	dk (mm)	l1 (mm)	l2 (mm)	l5 (mm)	price/pc
73641 3,0	M3	0,50	3,500	2,700	2,500	56,00	10,00	18,000	10,60
73641 4,0	M4	0,70	4,500	3,400	3,300	63,00	12,00	21,000	10,60
73641 5,0	M5	0,80	6,000	4,900	4,200	70,00	14,00	25,000	10,60
73641 6,0	M6	1,00	6,000	4,900	5,000	80,00	16,00	30,000	10,60
73641 8,0	M8	1,25	8,000	6,200	6,800	90,00	18,00	35,000	12,80
73641 10,0	M10	1,50	10,000	8,000	8,500	100,00	20,00	39,000	15,50
73643 12,0	M12	1,75	9,000	7,000	10,200	110,00	18,50	49,000	21,50
73643 14,0	M14	2,00	11,000	9,000	12,000	110,00	20,00	53,000	27,90
73643 16,0	M16	2,00	12,000	9,000	14,000	110,00	20,00	54,000	27,90
73643 20,0	M20	2,50	16,000	12,000	17,500	140,00	25,00	62,000	43,40

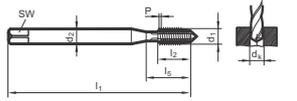
from: **11,30**
price/PC



Cat. num.	d1 (mm)	P (mm)	d2 (mm)	SW (mm)	dk (mm)	l1 (mm)	l2 (mm)	l5 (mm)	price/pc
73662 3,0	M3	0,50	3,500	2,700	2,500	56,00	6,00	18,000	11,30
73662 4,0	M4	0,70	4,500	3,400	3,300	63,00	7,50	21,000	11,30
73662 5,0	M5	0,80	6,000	4,900	4,200	70,00	8,50	25,000	11,30
73662 6,0	M6	1,00	6,000	4,900	5,000	80,00	11,00	30,000	11,30
73662 8,0	M8	1,25	8,000	6,200	6,800	90,00	14,00	35,000	14,20
73662 10,0	M10	1,50	10,000	8,000	8,500	100,00	16,00	39,000	17,50
73665 12,0	M12	1,75	9,000	7,000	10,200	110,00	18,50	49,000	23,80
73665 14,0	M14	2,00	11,000	9,000	12,000	110,00	20,00	53,000	32,30
73665 16,0	M16	2,00	12,000	9,000	14,000	110,00	20,00	54,000	32,30
73665 20,0	M20	2,50	16,000	12,000	17,500	140,00	25,00	62,000	47,60

Machine taps for ISO metric threads

- For through-holes
- With spiral point
- Chip evacuation in feed direction



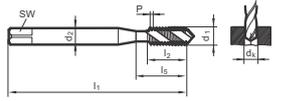
STOCK

P	M	K	N	S	H
	●				

Norm: DIN 371
 Material: HSS-E
 Surface: Without
 Type: Produktiv W
 Form: B
 Cutting direction: right-hand
 Tolerance class thread: ISO2/6H

Machine taps for ISO metric threads

- For blind holes
- Flutes with appr. 45° right-hand helix
- Chip evacuation in shank direction



STOCK

P	M	K	N	S	H
	●				

Norm: DIN 371
 Material: HSS-E
 Surface: Without
 Type: Intensiv W
 Form: C
 Cutting direction: right-hand
 Tolerance class thread: ISO2/6H

from: **8,40**
price/PC



Cat. num.	d1 (mm)	P (mm)	d2 (mm)	SW (mm)	dk (mm)	l1 (mm)	l2 (mm)	l5 (mm)	price/pc
73131 2,0	M2	0,40	2,800	2,100	1,60	45,00	8,000	13,500	8,40
73131 3,0	M3	0,50	3,500	2,700	2,50	56,00	10,000	18,000	8,40
73131 4,0	M4	0,70	4,500	3,400	3,30	63,00	12,000	21,000	8,40
73131 5,0	M5	0,80	6,000	4,900	4,20	70,00	14,000	25,000	9,10
73131 6,0	M6	1,00	6,000	4,900	5,00	80,00	16,000	30,000	9,10
73131 8,0	M8	1,25	8,000	6,200	6,80	90,00	18,000	35,000	10,80
73131 10,0	M10	1,50	10,000	8,000	8,50	100,00	20,000	39,000	12,80

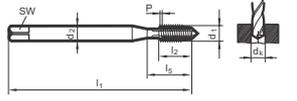
from: **8,60**
price/PC



Cat. num.	d1 (mm)	P (mm)	d2 (mm)	SW (mm)	dk (mm)	l1 (mm)	l2 (mm)	l5 (mm)	price/pc
73156 2,0	M2	0,40	2,800	2,100	1,60	45,00	8,00	13,50	8,60
73156 3,0	M3	0,50	3,500	2,700	2,50	56,00	6,00	18,00	8,60
73156 4,0	M4	0,70	4,500	3,400	3,30	63,00	7,50	21,00	8,60
73156 5,0	M5	0,80	6,000	4,900	4,20	70,00	8,50	25,00	8,60
73156 6,0	M6	1,00	6,000	4,900	5,00	80,00	11,00	30,00	8,60
73156 8,0	M8	1,25	8,000	6,200	6,80	90,00	14,00	35,00	10,90
73156 10,0	M10	1,50	10,000	8,000	8,50	100,00	16,00	39,00	12,99

Machine taps for ISO metric threads

- For through-holes
- With spiral point
- Chip evacuation in feed direction



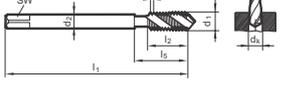
STOCK

P	M	K	N	S	H
●		○			

Norm: DIN 371
 Material: HSS-E-PM
 Surface: Without
 Type: Produktiv H
 Form: B
 Cutting direction: right-hand
 Tolerance class thread: ISO2/6H

Machine taps for ISO metric threads

- For through-holes
- With spiral point
- Chip evacuation in feed direction



STOCK

P	M	K	N	S	H
●		○			

Norm: DIN 371
 Material: HSS-E
 Surface: Without
 Type: Intensiv H
 Form: C
 Cutting direction: right-hand
 Tolerance class thread: ISO2/6H

from: **8,80**
price/PC



Cat. num.	d1 (mm)	P (mm)	d2 (mm)	SW (mm)	dk (mm)	l1 (mm)	l2 (mm)	l5 (mm)	price/pc
73640 3,0	M3	0,50	2,500	2,700	2,50	56,00	10,000	18,000	8,80
73640 4,0	M4	0,70	4,500	3,400	3,30	63,00	12,000	21,000	8,80
73640 5,0	M5	0,80	6,000	4,900	4,20	70,00	14,000	25,000	9,60
73640 6,0	M6	1,00	6,000	4,900	5,00	80,00	16,000	30,000	9,60
73640 8,0	M8	1,25	8,000	6,200	6,80	90,00	18,000	35,000	12,20
73640 10,0	M10	1,50	10,000	8,000	8,50	100,00	20,000	39,000	14,90

from: **8,50**
price/PC



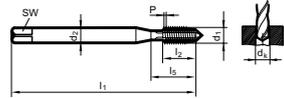
Cat. num.	d1 (mm)	P (mm)	d2 (mm)	SW (mm)	dk (mm)	l1 (mm)	l2 (mm)	l5 (mm)	price/pc
322054927	M3	0,50	3,500	2,700	2,500	56,00	6,00	18,00	8,50
322054928	M4	0,70	4,500	3,400	3,300	63,00	7,50	21,00	8,50
322054929	M5	0,80	6,000	4,900	4,200	70,00	8,50	25,00	9,20
322054950	M6	1,00	6,000	4,900	5,000	80,00	11,00	30,00	9,20
322054951	M8	1,25	8,000	6,200	6,800	90,00	14,00	35,00	11,40
322054952	M10	1,50	10,000	8,000	8,500	100,00	16,00	39,00	14,10

Cat. num.	d1 (mm)	P (mm)	d2 (mm)	SW (mm)	dk (mm)	l1 (mm)	l2 (mm)	l5 (mm)	price/pc
322054958	M12	1,75	9,000	7,000	10,200	110,00	24,00	49,00	20,90
322054959	M16	2,00	12,000	9,000	14,000	110,00	26,00	54,00	27,00
322054960	M20	2,50	16,000	12,000	17,500	140,00	32,00	62,00	42,00

Cat. num.	d1 (mm)	P (mm)	d2 (mm)	SW (mm)	dk (mm)	l1 (mm)	l2 (mm)	l5 (mm)	price/pc
322054954	M12	1,75	9,000	7,000	10,200	110,00	18,50	49,00	22,60
322055304	M14	2,00	11,000	9,000	12,000	110,00	20,00	53,00	30,90
322054955	M16	2,00	12,000	9,000	14,000	110,00	20,00	54,00	29,90
322054956	M20	2,50	16,000	12,000	17,500	140,00	25,00	62,00	45,40

Machine taps for ISO metric threads

- For through holes
- With spiral point
- Chip evacuation in feed direction
- General application
- Steel to 800 N/mm²



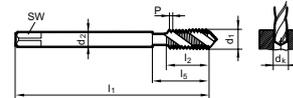
STOCK

P	M	K	N	S	H
●			○		

Norm : DIN 371/376
 Material : HSS-E
 Surface : Without
 Type : Produktiv N
 Form : B
 Cutting direction : right-hand
 Tolerance class thread : ISO2/6H

Machine taps for ISO metric threads

- For through holes
- With spiral point
- Chip evacuation in feed direction
- General application
- Steel to 800 N/mm²



STOCK

P	M	K	N	S	H
●			○		

Norm : DIN 371/376
 Material : HSS-E
 Surface : TiN
 Type : Produktiv N
 Form : C
 Cutting direction : right-hand
 Tolerance class thread : ISO2/6H

from: **6,60**
price/PC



Cat. num.	d1 (mm)	P (mm)	d2 (mm)	SW (mm)	dk (mm)	l1 (mm)	l2 (mm)	l3 (mm)	price/pc
73133 2,0	M2	0,40	2,800	2,100	1,600	45,00	8,00	13,500	6,60
73133 3,0	M3	0,50	3,500	2,700	2,500	56,00	10,00	18,000	6,90
73133 4,0	M4	0,70	4,500	3,400	3,300	63,00	12,00	21,000	6,90
73133 5,0	M5	0,80	6,000	4,900	4,200	70,00	14,00	25,000	6,90
73133 6,0	M6	1,00	6,000	4,900	5,000	80,00	16,00	30,000	6,90
73133 8,0	M8	1,25	8,000	6,200	6,800	90,00	18,00	35,000	9,70
73133 10,0	M10	1,50	10,000	8,000	8,500	100,00	20,00	39,000	10,90
73138 12,0	M12	1,75	9,000	7,000	10,200	110,00	24,00	49,000	16,90
73138 14,0	M14	2,00	11,000	9,000	12,000	110,00	26,00	53,000	24,40
73138 16,0	M16	2,00	12,000	9,000	14,000	110,00	26,00	54,000	24,40
73138 20,0	M20	2,50	16,000	12,000	17,500	140,00	32,00	62,000	37,70
73138 24,0	M24	3,00	18,000	14,500	21,000	160,00	36,00	73,000	44,60

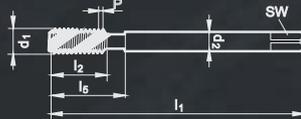
from: **9,90**
price/PC



Cat. num.	d1 (mm)	P (mm)	d2 (mm)	SW (mm)	dk (mm)	l1 (mm)	l2 (mm)	l3 (mm)	price/pc
73146 2,0	M2	0,40	2,800	2,100	1,600	45,00	8,00	13,500	9,00
73146 3,0	M3	0,50	3,500	2,700	2,500	56,00	6,00	18,000	9,00
73146 4,0	M4	0,70	4,500	3,400	3,300	63,00	7,50	21,000	9,00
73146 5,0	M5	0,80	6,000	4,900	4,200	70,00	8,50	25,000	9,00
73146 6,0	M6	1,00	6,000	4,900	5,000	80,00	11,00	30,000	9,00
73146 8,0	M8	1,25	8,000	6,200	6,800	90,00	14,00	35,000	10,60
73146 10,0	M10	1,50	10,000	8,000	8,500	100,00	16,00	39,000	12,70
73148 12,0	M12	1,75	9,000	7,000	10,200	110,00	18,50	49,000	18,90
73148 14,0	M14	2,00	11,000	9,000	12,000	110,00	20,00	53,000	26,60
73148 16,0	M16	2,00	12,000	9,000	14,000	110,00	20,00	54,000	24,60
73148 20,0	M20	2,50	16,000	12,000	17,500	140,00	25,00	62,000	41,40
73148 24,0	M24	3,00	18,000	14,500	21,000	160,00	30,00	73,000	49,90
73148 30,0	M30	3,50	22,000	18,000	26,500	180,00	35,00	85,000	83,90

Machine taps for ISO metric threads

- For through-holes
- With spiral point
- Chip evacuation in feed direction



P	M	K	N	S	H
●	●	○	●	●	

Cyl DIN 371 TiN R N HSS E PM C

Cat. num.	d1 mm	P mm	d2 mm	SW	dk mm	l1 mm	l2 mm	l3 mm	proce/pc
63946 3,0	M3	0,50	3,50	2,70	2,50	56,00	6,00	18,00	10,40
63946 4,0	M4	0,70	4,50	3,40	3,30	63,00	7,50	21,00	10,40
63946 5,0	M5	0,80	6,00	4,90	4,20	70,00	8,50	25,00	10,40
63946 6,0	M6	1,00	6,00	4,90	5,00	80,00	11,00	30,00	12,20
63946 8,0	M8	1,25	8,00	6,20	6,80	90,00	14,00	35,00	13,40
63946 10,0	M10	1,50	10,00	8,00	8,50	100,00	16,00	39,00	19,30
63946 12,0	M12	1,75	9,00	7,00	10,20	110,00	18,50	49,00	28,20
63946 14,0	M14	2,00	11,00	9,00	12,00	110,00	20,00	53,00	31,50
63946 16,0	M16	2,00	12,00	9,00	14,00	110,00	20,00	54,00	33,40
63946 20,0	M20	2,50	16,00	12,00	17,50	140,00	25,00	62,00	47,50

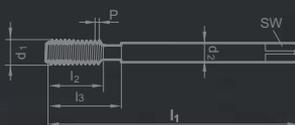


NEW!

Norm : DIN371 / DIN376
 Material : HSS-E-PM
 Surface : TiN
 Type : N R50
 Form : C
 Cutting direction : right-hand
 Tolerance class thread : ISO2 / 6H

Machine taps for ISO metric threads

- For through-holes
- With spiral point
- Chip evacuation in feed direction



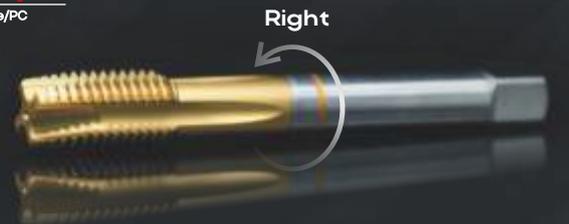
P	M	K	N	S	H
●	●	○	●	●	

Cyl DIN 371 TiN R N HSS E PM B

Cat. num.	d1 mm	P mm	d2 mm	SW	dk mm	l1 mm	l2 mm	l3 mm	price/PC
63933 2,0	M2	0,40	2,80	2,10	1,60	45,00	8,00	13,50	8,90
63933 3,0	M3	0,50	3,50	2,70	2,50	56,00	10,00	18,00	9,40
63933 4,0	M4	0,70	4,50	3,40	3,30	63,00	12,00	21,00	9,40
63933 5,0	M5	0,80	6,00	4,90	4,20	70,00	14,00	25,00	10,10
63933 6,0	M6	1,00	6,00	4,90	5,00	80,00	16,00	30,00	12,20
63933 8,0	M8	1,25	8,00	6,20	6,80	90,00	17,00	35,00	13,10
63933 10,0	M10	1,50	10,00	8,00	8,50	100,00	20,00	39,00	16,60
63933 12,0	M12	1,75	9,00	7,00	10,20	110,00	24,00	49,00	24,70
63933 14,0	M14	2,00	11,00	9,00	12,00	110,00	26,00	53,00	31,20
63933 16,0	M16	2,00	12,00	9,00	14,00	110,00	26,00	54,00	33,00
63933 18,0	M18	2,50	14,00	11,00	15,50	125,00	30,00	62,00	48,50
63933 20,0	M20	2,50	16,00	12,00	17,50	140,00	32,00	62,00	57,00

NEW!

Norm : DIN371 / DIN376
 Material : HSS-E-PM
 Surface : TiN
 Type : N
 Form : B
 Cutting direction : right-hand
 Tolerance class thread : ISO2 / 6H



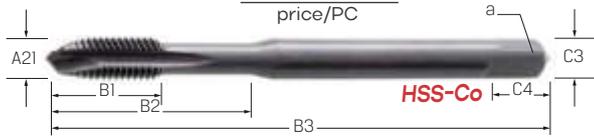
Machine threaded drill



	P N/mm ²	N N/mm ²
132310	(850)	Alu (600) Zink
vc = m/min.		
132310	6-10	12-20 8-10

M Metric thread
HSS-Co
Cutting form B
3-5 threads
Metric
BP
DIN 13
6H
P
DIN 371

from: **5,80**
price/PC



Cat. num.	price/pc	A21	thread pitch	B1 mm	B2 mm	B3 mm	C3 mm	C4 mm	a mm	drill diameter-Ø mm
132310 M2	7,50	M2	0,4	8	-	45	2,8	-	2,1	1,6
132310 M2,5	7,30	M2,5	0,45	9	-	50	2,8	-	2,1	2,05
132310 M3	5,80	M3	0,5	9	18	56	3,5	6	2,7	2,5
132310 M4	6,00	M4	0,7	12	21	63	4,5	6	3,3	3,3
132310 M5	6,20	M5	0,8	13	25	70	6	8	4,2	4,2
132310 M6	6,20	M6	1	15	30	80	6	8	5	5
132310 M8	7,20	M8	1,25	18	35	90	8	9	6,8	6,8
132310 M10	8,90	M10	1,5	20	39	100	10	11	8	8,5

Machine threaded drill



	P N/mm ²	N N/mm ²
132410	(850)	Alu (600) Zink
vc = m/min.		
132410	6-10	12-20 8-10

from: **12,10**
price/PC

M Metric thread
HSS-Co
Lead form B
3-5 threads
Metric
BP
DIN 13
6H
P
DIN 376



Cat. num.	price/pc	A21	thread pitch	B1 mm	B3 mm	C3 mm	C4 mm	a mm	drill diameter-Ø mm
132410 M12	12,10	M12	1,75	23	110	9	10	7	10,2
132410 M14	16,90	M14	2	25	110	11	12	9	12
132410 M16	17,60	M16	2	25	110	12	12	9	14
132410 M18	27,50	M18	2,5	30	125	14	14	11	15,5
132410 M20	27,50	M20	2,5	30	140	16	15	12	17,5
132410 M22	35,70	M22	2,5	30	140	18	17	14,5	19,5
132410 M24	36,70	M24	3	36	160	18	17	14,5	21
132410 M27	45,60	M27	3	36	160	20	19	16	24
132410 M30	56,80	M30	3,5	40	180	22	21	18	26,5
132410 M33	58,90	M33	3,5	42	180	25	-	20	29,5
132410 M36	74,00	M36	4	50	200	28	-	22	32

Machine threaded drill



	P N/mm ²	K HB	N N/mm ²
133050	(850)	Alu (600) Zink	
vc = m/min.			
133050	6-10	12-20	8-10

M Metric thread
DIN 371
40° rake angle
Lead form C
2-3 threads
Metric
BP
DIN 13
6H
P
HSS-Co
2 x A21

from: **5,60**
price/PC



Cat. num.	price/pc	A21	thread pitch	B1 mm	B2 mm	B3 mm	C3 mm	C4 mm	a mm	drill diameter-Ø mm
133050 M3	5,60	M3	0,5	6	18	56	3,5	6	2,7	2,5
133050 M4	5,70	M4	0,7	7	21	63	4,5	6	3,4	3,3
133050 M5	5,80	M5	0,8	8	25	70	6	8	4,9	4,2
133050 M6	5,80	M6	1	10	30	80	6	8	4,9	5
133050 M8	6,99	M8	1,25	12	35	90	8	9	6,2	6,8
133050 M10	9,00	M10	1,5	15	39	100	10	11	8	8,5

Machine threaded drill



	P N/mm ²	K HB	N N/mm ²
133150	(850)	Alu (600) Zink	
vc = m/min.			
133150	6-10	12-20	8-10

from: **11,80**
price/PC

M Metric thread
DIN 376
40° rake angle
Lead form C
2-3 threads
Metric
BP
DIN 13
6H
P
HSS-Co
2 x A21



Cat. num.	price/pc	A21	thread pitch	B1 mm	B3 mm	C3 mm	C4 mm	a mm	drill diameter-Ø mm
133150 M12	11,80	M12	1,75	16	110	9	10	7	10,2
133150 M14	16,80	M14	2	20	110	11	12	9	12
133150 M16	18,90	M16	2	20	110	12	12	9	14
133150 M18	24,60	M18	2,5	25	125	14	14	11	15,5
133150 M20	26,80	M20	2,5	25	140	16	15	12	17,5

Machine threaded drill



	P N/mm ²	N N/mm ²
132911	(850)	Alu (600) Zink
vc = m/min.		
132911	10-15	12-20 10-12

M Metric line thread
DIN 13
6H
P
MF Metric line thread
DIN 374
Lead form B
3-5 threads
HSS-Co

from: **11,50**
price/PC



Cat. num.	price/pc	A21	thread pitch	B1 mm	B3 mm	C3 mm	C4 mm	a mm	drill diameter-Ø mm
132911 M8x1,00	11,50	M8	1	18	90	6	8	4,9	7
132911 M10x1,00	11,90	M10	1	20	90	7	8	5,5	9
132911 M10x1,25	14,90	M10	1,25	20	100	7	8	5,5	8,8
132911 M12x1,00	13,80	M12	1	21	100	9	10	7	11
132911 M12x1,25	15,60	M12	1,25	21	100	9	10	7	10,8
132911 M12x1,50	13,10	M12	1,5	21	100	9	10	7	10,5
132911 M14x1,50	17,40	M14	1,5	21	100	11	12	9	12,5
132911 M16x1,00	20,70	M16	1	21	100	12	12	9	15
132911 M16x1,50	19,90	M16	1,5	21	100	12	12	9	14,5
132911 M20x1,00	28,90	M20	1	24	125	16	15	12	19
132911 M20x1,50	27,43	M20	1,5	24	125	16	15	12	18,5
132911 M22x1,50	29,20	M22	1,5	24	125	18	17	14,5	20,5
132911 M24x1,50	32,00	M24	1,5	26	140	18	17	14,5	22,5

Machine threaded drill



	P N/mm ²	N N/mm ²
133211	(850)	Alu (600) Zink
vc = m/min.		
133211	6-10	12-20 8-10

from: **11,90**
price/PC

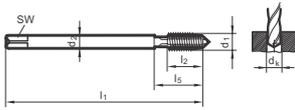
MF Metric line thread
DIN 374
35° rake angle
Lead form C
3-5 threads
Metric
BP
DIN 13
6H
P
HSS-Co
1,5 x A21



Cat. num.	price/pc	A21	thread pitch	B1 mm	B3 mm	C3 mm	C4 mm	a mm	drill diameter-Ø mm
133211 M6x0,75	11,90	M6	0,75	10	80	4,5	6	3,4	5,2
133211 M8x0,75	13,00	M8	0,75	10	80	6	8	4,9	7,2
133211 M10x1,00	12,70	M10	1	12	90	7	8	5,5	9
133211 M10x1,25	17,60	M10	1,25	15	100	7	8	5,5	8,8
133211 M12x1,00	15,30	M12	1	14	100	9	10	7	11
133211 M12x1,25	19,80	M12	1,25	14	100	9	10	7	10,8
133211 M12x1,50	14,40	M12	1,5	14	100	9	10	7	10,5
133211 M14x1,50	18,80	M14	1,5	16	100	11	12	9	12,5
133211 M16x1,00	23,30	M16	1	16	100	12	12	9	15
133211 M16x1,50	22,80	M16	1,5	16	100	12	12	9	14,5
133211 M18x1,00	28,80	M18	1	20	110	14	14	11	17
133211 M18x1,50	25,80	M18	1,5	20	110	14	14	11	16,5
133211 M20x1,00	32,00	M20	1	20	125	16	15	12	19
133211 M20x1,50	29,50	M20	1,5	20	125	16	15	12	18,5
133211 M22x1,50	33,90	M22	1,5	20	125	18	17	14,5	20,5
133211 M24x1,50	37,20	M24	1,5	22	140	18	17	14,5	22,5

Machine taps f. BSP-threads

- For through-holes
- With spiral point
- Chip evacuation in feed direction
- For universal application
- Steel materials up to 1100 N/mm²



P	M	K	N	S	H
●	○	○	○		

Norm : DIN 5156
 Material : HSS-E
 Surface : Without
 Type : Produktiv N
 Form : B
 Cutting direction : right-hand

Imperial

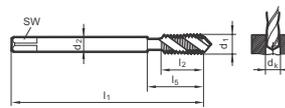
from: **17,50**
price/PC



Cat. num.	d1	P G/inch	d2 (mm)	SW (mm)	dk (mm)	l1 (mm)	l5 (mm)	l5 (mm)	price/pc
73321 9,728	G 1/8	28	7,000	5,500	8,80	90,00	18,000	35,000	17,50
73321 13,157	G 1/4	19	11,000	9,000	11,80	100,00	20,000	40,000	29,90
73321 16,662	G 3/8	19	12,000	9,000	15,25	100,00	22,000	44,000	39,90
73321 20,955	G 1/2	14	16,000	12,000	19,00	125,00	25,000	44,000	48,00
73321 26,441	G 3/4	14	20,000	16,000	24,50	140,00	28,000	53,000	75,50
73321 33,249	G1	11	25,000	20,000	30,75	160,00	30,000	56,000	96,00

Machine taps f. BSP-threads

- For blind holes
- Flutes with appr. 40° right-hand helix
- Chip evacuation in shank direction
- For universal application
- Steel materials up to 1100 N/mm²



P	M	K	N	S	H
●	○	○	○		

Norm : DIN 5156
 Material : HSS-E
 Surface : Without
 Type : Intensiv N
 Form : C
 Cutting direction : right-hand

Imperial

from: **19,50**
price/PC

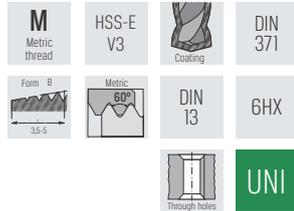


Cat. num.	d1	P G/inch	d2 (mm)	SW (mm)	dk (mm)	l1 (mm)	l2 (mm)	l5 (mm)	price/pc
73325 9,728	G1/8	28	7,000	5,500	8,80	90,00	11,000	35,000	19,50
73325 13,157	G1/4	19	11,000	9,000	11,80	100,00	14,000	40,000	30,90
73325 16,662	G3/8	19	12,000	9,000	15,25	100,00	14,000	44,000	43,10
73325 20,955	G1/2	14	16,000	12,000	19,00	125,00	18,000	44,000	56,00
73325 26,441	G3/4	14	20,000	16,000	24,50	140,00	20,000	53,000	84,00
73325 33,249	G1	11	25,000	20,000	30,75	160,00	24,000	56,000	108,00

SET of machine taps Universal

- For through threads
- Form B, 3.5-5
- High-performance high-speed steel with vanadium content
- TiN coated

PREMUS®



132203 M3-M10
75,00
price/SET

	P N/mm ²	M N/mm ²	K HB	N N/mm ²
132203	<1300	<900	<300	Alu <600 Copper <500
132203	5-30	5-15	15-30	10-30 10-20

vc = m/min.



Cat. num.	metric, HSS-V3, TiN	price	contents				
132203 M3-M10	75,00	1 piece each	132203 M3 M4 M5 M6 M8 M10				
A21 metric	thread pitch	B1 mm	B2 mm	B3 mm	C3 mm	a mm	core Ø mm
M3	0,5	11	18	56	3,5	2,7	2,5
M4	0,7	13	21	63	4,5	3,4	3,3
M5	0,8	16	25	70	6	4,9	4,2
M6	1	19	30	80	6	4,9	5
M8	1,25	22	35	90	8	6,2	6,8
M10	1,5	24	39	100	10	8	8,5

SET of machine taps Universal

- For blind-hole threads
- Form C, 2-3
- High-performance high-speed steel with vanadium content
- TiN coated

PREMUS®



132252 M3-M10
79,00
price/SET

	P N/mm ²	M N/mm ²	K HB	N N/mm ²
132252	<1300	<900	<300	Alu <600 Copper <500
132252	5-20	5-10	15-20	10-20 5-15

vc = m/min.



Cat. num.	metric, HSS-V3, TiN	price	contents				
132252 M3-M10	79,00	1 piece each	132252 M3 M4 M5 M6 M8 M10				
A21 metric	thread pitch	B1 mm	B2 mm	B3 mm	C3 mm	a mm	core Ø mm
M3	0,5	4	18	56	3,5	3	2,5
M4	0,7	5,6	21	63	4,5	3	3,3
M5	0,8	6,4	25	70	6	3	4,2
M6	1	8	30	80	6	3	5
M8	1,25	10	35	90	8	3	6,8
M10	1,5	12	39	100	10	3	8,5

SET HSS thread-cutting tool, M3-M12 and M3-M20



from: **95,00**
price/SET

Cat. num./metric thread	The set includes the following tools:	price/set
131400 M3-M12	1 set of hand taps DIN 352 (3-piece) 1 piece of die DIN 22569 in M3 M4 M5 M6 M8 M10 M12 1 piece of die holder DIN 225 in 20 × 5 20 × 7 25 × 9 30 × 11 38 × 14 1 piece of adjustable tap wrench DIN 1814 sizes 1 and 2 1 thread gauge 1 screwdriver 4.5 mm	95,00
131400 M3-M20	1 set of hand taps DIN 352 (3-piece) 1 and 1 piece of die M3 M4 M5 M6 M8 M10 M12 M14 M16 M18 M20, 1 piece of die holder DIN 225 20 × 5 20 × 7 25 × 9 30 × 11 38 × 14 45 × 18 1 piece of adjustable tap wrench DIN 1814 sizes 1 and 3 1 thread gauge 1 screwdriver 4.5 mm	189,00

PRETEC®



131400 M3-M12

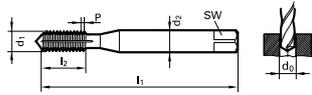
Fluteless machine taps for ISO metric threads



- For through and blind holes
- For large thread depths
- For universal application
- Steel materials up to 1000 N/mm²
- Acid resist./stainless steels
- Tough, long-chipping materials



Standard ~DIN 371
Material HSS-E
Coating TiN
Type Durativ
Shape C
Cutting direction Right
Ø-tolerance 6HX



from: **12,30**
price/PC

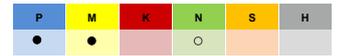


Cat. num. / d1 mm	d1 mm	P mm	d2 mm	SW	dk mm	l1 mm	l2 mm	price/pc
63120 3,0	M3	0,50	3,500	2,700	2,80	56,00	10,00	12,30
63120 4,0	M4	0,70	4,500	3,400	3,70	63,00	12,00	12,30
63120 5,0	M5	0,80	6,000	4,900	4,65	70,00	14,00	15,50
63120 6,0	M6	1,00	6,000	4,900	5,55	80,00	16,00	18,50
63120 8,0	M8	1,25	8,000	6,200	7,40	90,00	18,00	18,90
63120 10,0	M10	1,50	10,000	8,000	9,25	100,00	20,00	21,00

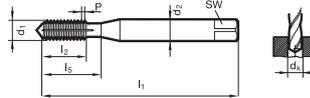
Fluteless machine taps for ISO metric threads



- For through and blind holes
- For large thread depths
- For universal application
- Steel materials up to 1000 N/mm²
- Acid resist./stainless steels
- Tough, long-chipping materials



Standard ~DIN 376
Material HSS-E
Coating TiN
Type Durativ
Shape C
Cutting direction Right
Ø-tolerance 6HX



from: **32,50**
price/PC



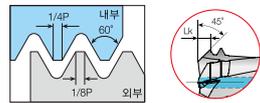
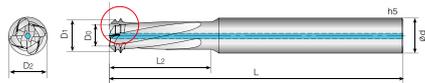
Cat. num. / d1 mm	d1 mm	P mm	d2 mm	SW	dk mm	l1 mm	l2 mm	l5 mm	price/pc
63122 12,0	M12	1,75	9,000	7,000	11,25	110,00	24,00	49,00	32,50
63122 16,0	M16	2,00	12,000	9,000	15,10	110,00	26,00	54,00	39,00

4ETM

4 Flutes Multi-functional Thread Mills for Multi Purpose (L Rotation)



- Thread mills for Hardened steels (up to HRC 40), pre-hardened steels, alloy steels, carbon steels, cast irons
- With one 4ETM tool, it's available for drilling, threading and chamfering all together
- Pre-drilling for tapping is no longer needed
- It can also be used on blocked holes, penetrating holes, and sloping curved surfaces as multi-function tool
- If the diameter of hole is longer than 2D without pre-drilled hole, use the tool with coolant for the better chip emission
- It can be used for heli coil threading
- The main direction of tool rotation is left-handed (M4) and the direction of threading is right-handed



from: **68,70**
price/PC



Order Number	Thread	Pitch	Flutes Z	Teeth Zt	Diameter			Effective Length L2	Lk	Overall Length L	Shank Dia d	price/pc
					D0	D1	D2					
4ETM024085S06M3	M3	0.5	4	2	1.37	2.17	2.4	8.5	0.4	60	6	68,70
4ETM032112S06M4	M4	0.7	4	2	1.74	2.88	3.2	11.2	0.57	60	6	68,70
4ETM039144S06M5	M5	0.8	4	2	2.21	3.61	3.9	14.4	0.7	60	6	68,70
4ETM047170S06M6	M6-M9	1	4	2	2.82	4.4	4.7	17	0.79	60	6	68,70
4ETM061220S08M8	M8-M12	1.25	4	2	4	5.8	6.1	22	0.9	65	8	100,70
4ETM078280S08M10	M10-M15	1.5	4	2	5.16	7.4	7.8	28	1.12	65	8	110,30
4ETM090330S10M12	M12	1.75	4	2	6.2	8.6	9	33	1.2	80	10	122,90

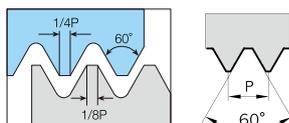
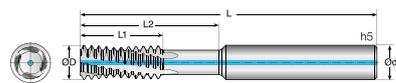
(Without coolant)

4HTMS

4 Flutes Helix Thread Mills for Stainless Steels



- Thread Mills for SUS, Titanium alloys
- Coolant type of helix flutes for deep threading
- With multiple flutes composition, it shortens threading time
- Maximum drilling depth: 3*D2 (Threading diameter)
- It can be used for heli coil threading
- Both right and left threading are available



from: **51,20**
price/PC



Order Number	Thread	Pitch	Guide Hole mm	Diameter D	Thread Length L1	Effective Length L2	Overall Length L	Shank Dia d	price/pc
4HTMS039150S04M5	M5	0.8	4.2	3.9	7.6	15	50	4	51,20
4HTMS048180S06M6	M6	1	5	4.8	9.5	18	60	6	57,50
4HTMS065240S08M8	M8	1.25	6.8	6.5	13.1	24	65	8	62,70
4HTMS082300S10M10	M10	1.5	8.5	8.2	15.7	30	75	10	68,80
4HTMS099360S10M12	M12	1.75	10.2	9.9	18.4	36	85	10	88,70
4HTMS116420S12M14	M14	2	12	11.6	21	42	90	12	110,30
4HTMS136480S14M16	M16	2	14	13.6	25	48	100	14	128,10

(Without coolant)



HPC
Machining strategy

Weldon
shank

TiAlN coating

Radius

Four cutting edges

The unequal helix pitch
helps reduce vibrations

HPC end mills (4-fluted)

- High-performance end mills with variable helix angle
- Centre cutting

54940-
from: **9,90**
price/PC

Areas of application



Milling in
solid material



Rough
milling



Angular
plunging



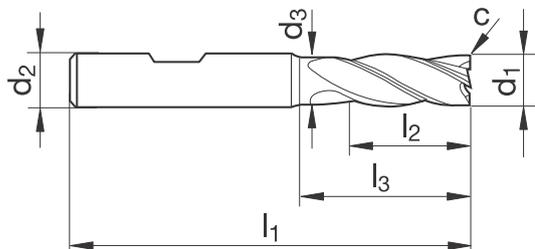
Helical
milling



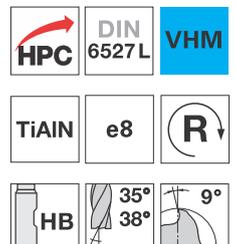
Finishing

Universal application (materials)

First choice ● / alternative ○



Cat. num.	d1 e8 mm	d2 h6 mm	d3 mm	l1 mm	l2 mm	l3 mm	c mm x 45°	Z	price/pc
54940 3,0	3,000	6,000	2,80	57,000	8,000	11,400	0,060	4	9,90
54940 4,0	4,000	6,000	3,80	57,000	11,000	14,900	0,080	4	9,90
54940 5,0	5,000	6,000	4,80	57,000	13,000	17,400	0,100	4	9,90
54940 6,0	6,000	6,000	5,70	57,000	13,000	21,000	0,120	4	11,50
54940 8,0	8,000	8,000	7,70	63,000	19,000	27,000	0,160	4	12,90
54940 10,0	10,000	10,000	9,50	72,000	22,000	32,000	0,200	4	19,90
54940 12,0	12,000	12,000	11,50	83,000	26,000	38,000	0,240	4	27,00
54940 14,0	14,000	14,000	13,50	83,000	26,000	38,000	0,280	4	36,90
54940 16,0	16,000	16,000	15,50	92,000	32,000	44,000	0,320	4	45,00
54940 20,0	20,000	20,000	19,50	104,000	38,000	54,000	0,400	4	89,00



SET of sealed ER collets

- Accuracy: 15 µm
- For tools with through-coolant
- DIN 6499 B
- ISO 15488 B

from: **92,00**
price/SET



Sealed!

Cat. num.	price/set	number of collets in the set/ø
426EA-S	92,00	426E (ER 16; 8 piece) 3-4-5-6-7-8-9-10
428EA-S	122,00	428E (ER 20; 11 piece) 3-4-5-6-7-8-9-10-11-12-13
430EA-S	152,00	430E (ER 25; 14 piece) 3-4-5-6-7-8-9-10-11-12-13-14-15-16
470EA-S	172,00	470E (ER 32; 15 piece) 3-4-5-6-7-8-9-10-11-12-14-15-16-18-20
472EA-S	230,00	472E (ER 40; 16 piece) 4-5-6-7-8-9-10-11-12-14-16-18-20-22-24-26



SET of collets for tapping drills

- For thread taps
- With internal square

from: **69,90**
price/SET



Cat. num.	number of collets in the set/ø	L mm	B mm	H mm	price/set
426G-S	ER16-6 piece, 3,5x2,7 - 4x3 - 4,5x3,4 - 6x4,9 - 7x5,5 - 8x6,2	130	50	25	69,90
428G-S	ER20-8 piece, 3,5x2,7 - 4x3 - 4,5x3,4 - 6x4,9 - 7x5,5 - 8x6,2 - 9x7 - 10x8	165	110	25	89,00
430G-S	ER25-10 piece, 3,5x2,7 - 4x3 - 4,5x3,4 - 6x4,9 - 7x5,5 - 8x6,2 - 9x7 - 10x8 - 11x9 - 12x9	150	195	25	109,00
470G-S	ER32-10 piece, 4,5x3,4 - 6x4,9 - 7x5,5 - 8x6,2 - 9x7 - 10x8 - 11x9 - 12x9 - 14x11 - 16x12	190	150	30	110,00
472G-S	ER40-11 piece, 6x4,9 - 7x5,5 - 8x6,2 - 9x7 - 10x8 - 11x9 - 12x9 - 14x11 - 16x12 - 18x14,5 - 20x16	290	195	25	159,00

SET of ER clamping collets



BER-
from: **51,00**
price/SET



Cat. num.	price/set	number of collets in the set/ø
BER16-K10	51,00	10 piece, ø 1,2,3,4,5,6,7,8,9,10
BER20-K12	57,00	12 piece, ø 2,3,4,5,6,7,8,9,10,11,12,13
BER25-K15	73,50	13 piece, ø 4,5,6,7,8,9,10,11,12,13,14,15,16
BER32-K18	94,00	18 piece, ø 3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20
BER40-K23	115,00	23 piece, ø 4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26

Mounting stand for clamping arbors

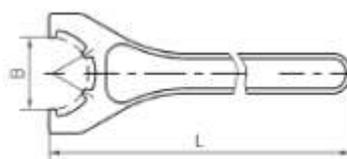
- Use:
- Vertical and horizontal mounting
- Solid and stable design for safe work
- Better tool clamping to reduce damage
- Contributes to longer tool life



BLD-
from: **48,00**
price/PC

Cat. num.	price/pc	for arbors of size	size mm	weight kg
BLD-BT40	48,00	BT40	205x98,5x128	3,80
BLD-BT50	89,00	BT50	275x150x198	11,40
BLD-DT40	48,00	DIN69871 SK40	205x98,5x128	3,80
BLD-DT50	89,00	DIN69871 SK50	275x150x198	11,40

ER collet wrench



BS/ER-
from: **7,25**
price/PC

Cat. num.	price/pc	B	L	for clamping nuts
BS/ER25-S	7,25	37	210	ER25-B ER25-T2
BS/ER32-S	8,29	45	250	ER32-B ER32-T2
BS/ER40-S	10,39	58	290	ER40-B ER40-T2

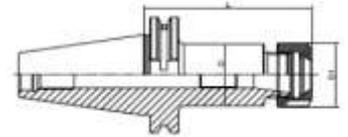
Clamping arbors for ER bushings

- DIN69871
- SK40

from: **25,00**
price/PC



Cat. num.	price/pc	D mm	D1 mm	L mm	capacity
SK40-ER25-70	25,00	42	42	70	2-16
SK40-ER32-70	25,00	40	50	70	2-20
SK40-ER40-80	25,00	63	63	80	3-26
SK40-ER25-100	33,00	42	42	100	2-16
SK40-ER32-100	33,00	50	63	100	2-20
SK40-ER40-100	33,00	63	63	100	3-26
SK40-ER16UM-63	25,00	28	32	63	1-10
SK40-ER16UM-100	33,00	28	32	100	1-10



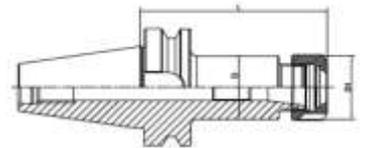
Clamping arbors for ER bushings

- MAS-BT40

from: **25,00**
price/PC



Cat. num.	price/pc	D mm	D1 mm	L mm	capacity
BT40-ER16-100	25,00	28	28	100	1-10
BT40-ER25-70	25,00	42	42	70	2-16
BT40-ER32-70	25,00	50	50	70	2-20
BT40-ER40-80	25,00	50	63	80	3-26
BT40-ER25-100	33,00	42	42	100	2-16
BT40-ER32-100	33,00	50	50	100	2-20
BT40-ER40-100	33,00	50	63	100	3-26
BT40-ER16UM-70	25,00	28	32	70	1-10



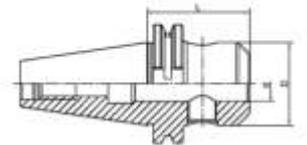
Clamping arbors, WELDON

- DIN69871
- SK40

from: **24,00**
price/PC



Cat. num.	price/pc	d mm	D mm	L mm	M	number of screws
SK40-SLA06-50	24,00	6	25	50	M6	1
SK40-SLA08-50	24,00	8	28	50	M8	1
SK40-SLA10-50	24,00	10	35	50	M10	1
SK40-SLA12-50	24,00	12	42	50	M12	1
SK40-SLA14-50	24,00	14	44	50	M12	1
SK40-SLA16-63	24,00	16	48	63	M14	1
SK40-SLA18-63	24,00	18	50	63	M14	1
SK40-SLA20-63	24,00	20	52	63	M16	1
SK40-SLA25-100	28,00	25	65	100	M18*2	2
SK40-SLA32-100	28,00	32	72	100	M20*2	2
SK40-SLA40-120	45,00	40	80	120	M20*2	2



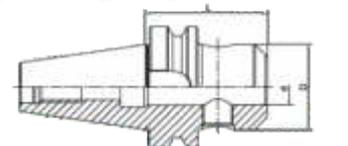
Clamping arbors, WELDON

- MAS-BT 40

from: **24,00**
price/PC



Cat. num.	price/pc	d mm	D mm	L mm	M	number of screws
BT40-SLA06-50	24,00	6	25	50	M6	1
BT40-SLA08-50	24,00	8	28	50	M8	1
BT40-SLA10-63	24,00	10	35	63	M10	1
BT40-SLA12-63	24,00	12	42	63	M12	1
BT40-SLA14-63	24,00	14	44	63	M12	1
BT40-SLA16-63	24,00	16	48	63	M14	1
BT40-SLA18-63	24,00	18	50	63	M14	1
BT40-SLA20-63	24,00	20	52	63	M16	1
BT40-SLA25-90	28,00	25	65	90	M18*2	2
BT40-SLA32-100	28,00	32	72	100	M20*2	2
BT40-SLA40-120	45,00	40	80	120	M20*2	2



FRIDRO

ALL IN ONE PLACE



Offer valid until: 31.03.2026
Prices are in € and exclude VAT.

FREE DELIVERY ON ORDERS OVER 100€ NET

Due to current market conditions, there may be delays in the delivery of materials.
Consequently, price changes may also occur.

Printing errors may occur in the brochure, which are beyond our control and for which we cannot be held responsible.
Should there be any discrepancies in prices or technical data, we will notify you at the time of your order. Thank you for your understanding."



Slovenia

Fridro d.o.o.
Obrtniška ulica 12,
2360 Radlje ob Dravi

T: 02 / 88 79 140,
info@fridro.si, www.fridro.si



Croatia

FRIDRO COMPANY d.o.o.
Ulica bana Josipa Jelačića 4,
40000, Čakovec

T: +385 (0)40 360 026
info@fridro.hr, www.fridro.hr



Bulgaria

Фридро България ЕООД
ул. Инж. Асен Йорданов No8
Тракия Икономическа Зона
4023 Тракия, гр. Пловдив

T: 0899 880682, 0899 880024,
info@fridro.bg, www.fridro.bg