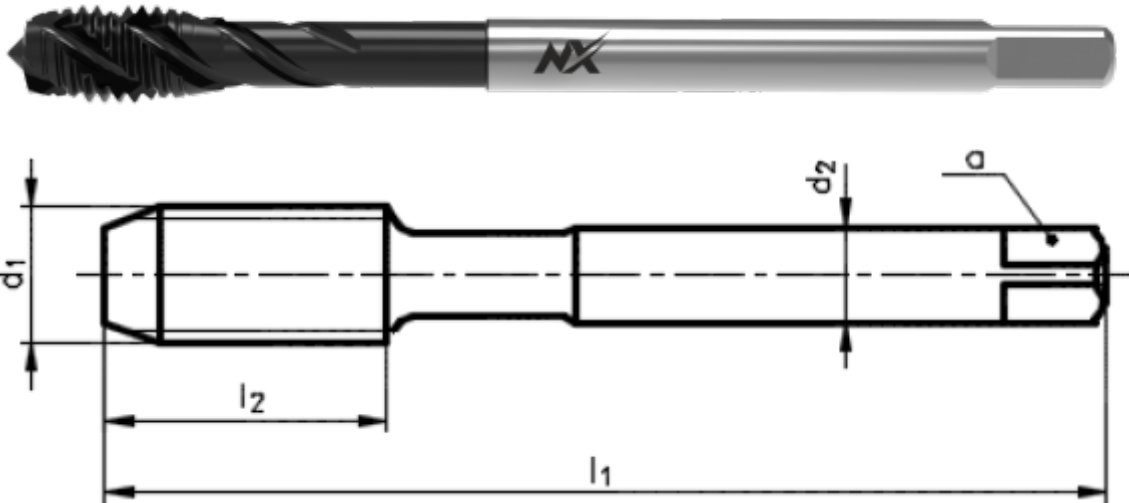


# Machine tap with spiral flute 40°

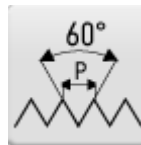


**CATALOGUE NUMBER: 4290NX**

High precision machine tap with 40° spiral, metric, DIN 376, steam oxidized, suitable for structural steels, cast steels, free cutting steels, spheroidal and malleable cast iron, aluminium alloys Si<10 %, long chipping copper alloys.



**THREAD M**  
ISO Metric coarse thread



**PROFILE SKETCH**  
60°



**THREAD STANDARD**  
DIN13



**TYPE VA**  
Tap for stainless steels



**TAP MATERIAL**  
Vanadium extra high speed steel HSSE V3



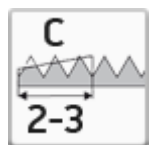
**COATING**  
Oxidation



**TAP STANDARD**  
DIN 376



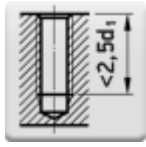
**THREAD TOLERANCE**  
ISO 2 - 6H



**CHAMFER C**  
Length 2-3 pitch



**SPIRAL FLUTE ANGLE**  
40°

**HOLE TYPE**Blind hole (thread length  $< 2,5 d_1$ )

## Select product model

ID	D1	P	Tolerance	l1	l2	d2	a	Price excl. VAT	Price incl. VAT
042037332030000	M3	0,5	6H	56	5	2,2	0	27.25 EUR	32.97 EUR
042037332040000	M4	0,7	6H	63	7	2,8	2,1	26.25 EUR	31.76 EUR
042037332050000	M5	0,8	6H	70	8	3,5	2,7	27.25 EUR	32.97 EUR
042037332060000	M6	1	6H	80	10	4,5	3,4	28.40 EUR	34.36 EUR
042037332080000	M8	1,25	6H	90	13	6	4,9	39.15 EUR	47.37 EUR
042037332100000	M10	1,5	6H	100	15	7	5,5	51.15 EUR	61.89 EUR
042037332120000	M12	1,75	6H	110	18	9	7	68.75 EUR	83.19 EUR
042037332140000	M14	2	6H	110	20	11	9	95.80 EUR	115.92 EUR
042037332160000	M16	2	6H	110	20	12	9	97.90 EUR	118.46 EUR
042037332180000	M18	2,5	6H	125	25	14	11	141.15 EUR	170.79 EUR
042037332200000	M20	2,5	6H	140	25	16	12	143.95 EUR	174.18 EUR
042037332220000	M22	2,5	6H	140	25	18	14,5	159.80 EUR	193.36 EUR
042037332240000	M24	3	6H	160	30	18	14,5	182.15 EUR	220.40 EUR
042037332270000	M27	3	6H	160	30	20	16	263.10 EUR	318.35 EUR
042037332300000	M30	3,5	6H	180	35	22	18	318.15 EUR	384.96 EUR
042037332330000	M33	3,5	6H	180	35	25	20	375.75 EUR	454.66 EUR
042037332360000	M36	4	6H	200	40	28	22	380.85 EUR	460.83 EUR

# Use

MACHINED MATERIAL	HOLE TYPE	CUTTING SPEED	LUBRICATION	USE
Aluminium alloys si content < 10%	blind hole (thread length < 1,5 d1, pilot drilling depth $\geq L+d1$ )	10-12	Cutting Oil/Emulsion	Possible use
Aluminium alloys si content < 10%	blind hole (thread length L < 2,5xd1)	10-12	Cutting Oil/Emulsion	Possible use
Aluminium alloys si content < 10%	blind hole (thread length L < 2xd1)	10-12	Cutting Oil/Emulsion	Possible use
Aluminium alloys si content < 10%	through hole (thread length L < 1,5xd1)	10-12	Cutting Oil/Emulsion	Possible use
Aluminium alloys si content > 10%	blind hole (thread length L < 2xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Aluminium alloys si content > 10%	through hole (thread length L < 1,5xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Aluminium alloys si content > 10%	blind hole (thread length < 1,5 d1, pilot drilling depth $\geq L+d1$ )	10-12	Cutting Oil/Emulsion	Recommended use
Aluminium alloys si content > 10%	blind hole (thread length L < 2,5xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Case hardened steels and nitriding steels up to 1100 N/mm2	blind hole (thread length L < 2xd1)	8-10	Cutting Oil/Emulsion	Recommended use
Case hardened steels and nitriding steels up to 1100 N/mm2	through hole (thread length L < 1,5xd1)	8-10	Cutting Oil/Emulsion	Recommended use
Case hardened steels and nitriding steels up to 1100 N/mm2	blind hole (thread length < 1,5 d1, pilot drilling depth $\geq L+d1$ )	8-10	Cutting Oil/Emulsion	Recommended use
Case hardened steels and nitriding steels up to 1100 N/mm2	blind hole (thread length L < 2,5xd1)	8-10	Cutting Oil/Emulsion	Recommended use
Copper alloys (long chipping)	blind hole (thread length L < 2xd1)	10-12	Cutting Oil/Emulsion	Possible use
Copper alloys (long chipping)	through hole (thread length L < 1,5xd1)	10-12	Cutting Oil/Emulsion	Possible use
Copper alloys (long chipping)	blind hole (thread length < 1,5 d1, pilot drilling depth $\geq L+d1$ )	10-12	Cutting Oil/Emulsion	Possible use
Copper alloys (long chipping)	blind hole (thread length L < 2,5xd1)	10-12	Cutting Oil/Emulsion	Possible use
Copper alloys (short chipping)	blind hole (thread length < 1,5 d1, pilot drilling depth $\geq L+d1$ )	10-12	Cutting Oil/Emulsion	Recommended use
Copper alloys (short chipping)	blind hole (thread length L < 2,5xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Copper alloys (short chipping)	blind hole (thread length L < 2xd1)	10-12	Cutting Oil/Emulsion	Recommended use

<b>MACHINED MATERIAL</b>	<b>HOLE TYPE</b>	<b>CUTTING SPEED</b>	<b>LUBRICATION</b>	<b>USE</b>
Copper alloys (short chipping)	through hole (thread length $L < 1,5 \times d1$ )	10-12	Cutting Oil/Emulsion	Recommended use
Free cutting steels up to 800 N/mm <sup>2</sup>	through hole (thread length $L < 1,5 \times d1$ )	10-15	Cutting Oil/Emulsion	Possible use
Free cutting steels up to 800 N/mm <sup>2</sup>	blind hole (thread length $L < 1,5 \times d1$ )	10-15	Cutting Oil/Emulsion	Possible use
Free cutting steels up to 800 N/mm <sup>2</sup>	blind hole (thread length $< 1,5 d1$ , pilot drilling depth $\geq L+d1$ )	10-15	Cutting Oil/Emulsion	Possible use
Free cutting steels up to 800 N/mm <sup>2</sup>	blind hole (thread length $L < 2,5 \times d1$ )	10-15	Cutting Oil/Emulsion	Possible use
Heat-treated steels up to 1100 N/mm <sup>2</sup>	blind hole (thread length $L < 2 \times d1$ )	8-10	Cutting Oil/Emulsion	Recommended use
Heat-treated steels up to 1100 N/mm <sup>2</sup>	through hole (thread length $L < 1,5 \times d1$ )	8-10	Cutting Oil/Emulsion	Recommended use
Heat-treated steels up to 1100 N/mm <sup>2</sup>	blind hole (thread length $< 1,5 d1$ , pilot drilling depth $\geq L+d1$ )	8-10	Cutting Oil/Emulsion	Recommended use
Heat-treated steels up to 1100 N/mm <sup>2</sup>	blind hole (thread length $L < 2,5 \times d1$ )	8-10	Cutting Oil/Emulsion	Recommended use
Plain cast steels up to 800 N/mm <sup>2</sup>	blind hole (thread length $< 1,5 d1$ , pilot drilling depth $\geq L+d1$ )	10-15	Cutting Oil/Emulsion	Possible use
Plain cast steels up to 800 N/mm <sup>2</sup>	blind hole (thread length $L < 2,5 \times d1$ )	10-15	Cutting Oil/Emulsion	Possible use
Plain cast steels up to 800 N/mm <sup>2</sup>	blind hole (thread length $L < 2 \times d1$ )	10-15	Cutting Oil/Emulsion	Possible use
Plain cast steels up to 800 N/mm <sup>2</sup>	through hole (thread length $L < 1,5 \times d1$ )	10-15	Cutting Oil/Emulsion	Possible use
Spheroidal graphite cast iron and malleable cast iron	blind hole (thread length $L < 2 \times d1$ )	10-12	Cutting Oil/Emulsion	Possible use
Spheroidal graphite cast iron and malleable cast iron	through hole (thread length $L < 1,5 \times d1$ )	10-12	Cutting Oil/Emulsion	Possible use
Spheroidal graphite cast iron and malleable cast iron	blind hole (thread length $< 1,5 d1$ , pilot drilling depth $\geq L+d1$ )	10-12	Cutting Oil/Emulsion	Possible use
Spheroidal graphite cast iron and malleable cast iron	blind hole (thread length $L < 2,5 \times d1$ )	10-12	Cutting Oil/Emulsion	Possible use
Stainless steels and heat resisting steels with strength 450 - 800 N/mm <sup>2</sup>	blind hole (thread length $< 1,5 d1$ , pilot drilling depth $\geq L+d1$ )	10-12	Cutting Oil/Emulsion	Recommended use
Stainless steels and heat resisting steels with strength 450 - 800 N/mm <sup>2</sup>	blind hole (thread length $L < 2,5 \times d1$ )	10-12	Cutting Oil/Emulsion	Recommended use
Stainless steels and heat resisting steels with strength 450 - 800 N/mm <sup>2</sup>	blind hole (thread length $L < 2 \times d1$ )	10-12	Cutting Oil/Emulsion	Recommended use

<b>MACHINED MATERIAL</b>	<b>HOLE TYPE</b>	<b>CUTTING SPEED</b>	<b>LUBRICATION</b>	<b>USE</b>
Stainless steels and heat resisting steels with strength 450 - 800 N/mm <sup>2</sup>	through hole (thread length $L < 1,5d_1$ )	10-12	Cutting Oil/Emulsion	Recommended use
Stainless steels and heat resisting steels with strength 600 - 1000 N/mm <sup>2</sup>	blind hole (thread length $< 1,5 d_1$ , pilot drilling depth $\geq L+d_1$ )	10-12	Cutting Oil/Emulsion	Recommended use
Stainless steels and heat resisting steels with strength 600 - 1000 N/mm <sup>2</sup>	blind hole (thread length $L < 2,5d_1$ )	10-12	Cutting Oil/Emulsion	Recommended use
Stainless steels and heat resisting steels with strength 600 - 1000 N/mm <sup>2</sup>	blind hole (thread length $L < 2xd_1$ )	10-12	Cutting Oil/Emulsion	Recommended use
Stainless steels and heat resisting steels with strength 600 - 1000 N/mm <sup>2</sup>	through hole (thread length $L < 1,5d_1$ )	10-12	Cutting Oil/Emulsion	Recommended use
Structural steels and heat-treated steels up to 800 N/mm <sup>2</sup>	blind hole (thread length $L < 2xd_1$ )	10-15	Cutting Oil/Emulsion	Possible use
Structural steels and heat-treated steels up to 800 N/mm <sup>2</sup>	through hole (thread length $L < 1,5d_1$ )	10-15	Cutting Oil/Emulsion	Possible use
Structural steels and heat-treated steels up to 800 N/mm <sup>2</sup>	blind hole (thread length $< 1,5 d_1$ , pilot drilling depth $\geq L+d_1$ )	10-15	Cutting Oil/Emulsion	Possible use
Structural steels and heat-treated steels up to 800 N/mm <sup>2</sup>	blind hole (thread length $L < 2,5d_1$ )	10-15	Cutting Oil/Emulsion	Possible use
Tool steels up to 1100 N/mm <sup>2</sup>	blind hole (thread length $L < 2xd_1$ )	8-10	Cutting Oil/Emulsion	Recommended use
Tool steels up to 1100 N/mm <sup>2</sup>	through hole (thread length $L < 1,5d_1$ )	8-10	Cutting Oil/Emulsion	Recommended use
Tool steels up to 1100 N/mm <sup>2</sup>	blind hole (thread length $< 1,5 d_1$ , pilot drilling depth $\geq L+d_1$ )	8-10	Cutting Oil/Emulsion	Recommended use
Tool steels up to 1100 N/mm <sup>2</sup>	blind hole (thread length $L < 2,5d_1$ )	8-10	Cutting Oil/Emulsion	Recommended use
Unalloyed aluminium	blind hole (thread length $< 1,5 d_1$ , pilot drilling depth $\geq L+d_1$ )	15-20	Cutting Oil/Emulsion	Possible use
Unalloyed aluminium	blind hole (thread length $L < 2,5d_1$ )	15-20	Cutting Oil/Emulsion	Possible use
Unalloyed aluminium	blind hole (thread length $L < 2xd_1$ )	15-20	Cutting Oil/Emulsion	Possible use
Unalloyed aluminium	through hole (thread length $L < 1,5d_1$ )	15-20	Cutting Oil/Emulsion	Possible use
Unalloyed copper	blind hole (thread length $< 1,5 d_1$ , pilot drilling depth $\geq L+d_1$ )	10-12	Cutting Oil/Emulsion	Possible use
Unalloyed copper	through hole (thread length $L < 1,5d_1$ )	10-12	Cutting Oil/Emulsion	Possible use
Unalloyed copper	blind hole (thread length $L < 2xd_1$ )	10-12	Cutting Oil/Emulsion	Possible use

<b>MACHINED MATERIAL</b>	<b>HOLE TYPE</b>	<b>CUTTING SPEED</b>	<b>LUBRICATION</b>	<b>USE</b>
Unalloyed copper	blind hole (thread length $L < 2,5 \times d_1$ )	10-12	Cutting Oil/Emulsion	Possible use
Zinc and zinc alloys	blind hole (thread length $< 1,5 d_1$ , pilot drilling depth $\geq L + d_1$ )	10-12	Cutting Oil/Emulsion	Possible use
Zinc and zinc alloys	blind hole (thread length $L < 2,5 \times d_1$ )	10-12	Cutting Oil/Emulsion	Possible use
Zinc and zinc alloys	blind hole (thread length $L < 2 \times d_1$ )	10-12	Cutting Oil/Emulsion	Possible use
Zinc and zinc alloys	through hole (thread length $L < 1,5 \times d_1$ )	10-12	Cutting Oil/Emulsion	Possible use