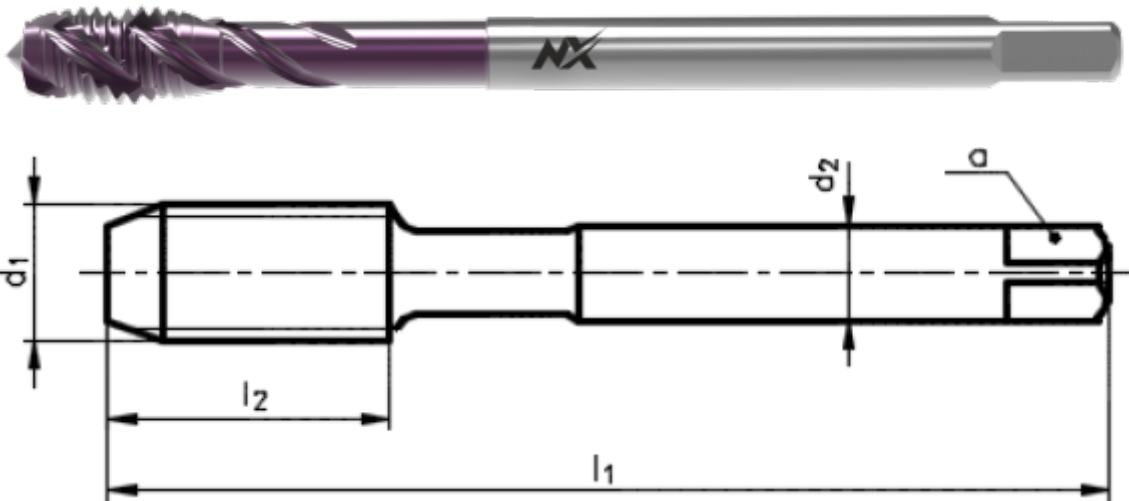


Machine tap with right-hand spiral flutes 50°

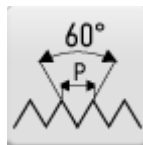


CATALOGUE NUMBER: 4220NX

High performance machine tap with 50° spiral flutes, metric, DIN 376, Balinit Hardlube coated, suitable for universal use.



THREAD M
ISO Metric coarse thread



PROFILE SKETCH
60°



THREAD STANDARD
DIN13



TYPE UNI
Tap for universal applications



TAP MATERIAL
Powder high speed steel



COATING
Balinit® Hardlube coating (titanium aluminiumnitride + tungsten carbide)



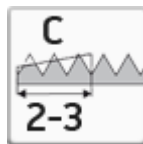
TAP STANDARD
DIN 376



THREAD TOLERANCE
ISO 2 - 6HX



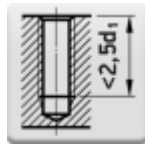
THREAD TOLERANCE
ISO 3 - 6GX



CHAMFER C
Length 2-3 pitch



SPIRAL FLUTE ANGLE
50°



HOLE TYPE
Blind hole (thread length < 2,5 d1)

Select product model

ID	D1	P	Tolerance	l1	l2	d2	a	Price excl. VAT	Price incl. VAT
042036324120000	M12	1,75	6HX	110	18	9	7	93.95 EUR	113.68 EUR
042036324140000	M14	2	6HX	110	20	11	9	124.85 EUR	151.07 EUR
042036324160000	M16	2	6HX	110	20	12	9	137.50 EUR	166.38 EUR
042036324200000	M20	2,5	6HX	140	25	16	12	231.95 EUR	280.66 EUR
042036324240000	M24	3	6HX	160	30	18	14,5	242.20 EUR	293.06 EUR
042036324270000	M27	3	6HX	160	30	20	16	252.55 EUR	305.59 EUR
042036324300000	M30	3,5	6HX	180	35	22	18	302.10 EUR	365.54 EUR
042036326120000	M12	1,75	6GX	110	18	9	7	93.95 EUR	113.68 EUR
042036326160000	M16	2	6GX	110	20	12	9	136.80 EUR	165.53 EUR
042036326200000	M18	2,5	6GX	140	25	16	12	270.80 EUR	327.67 EUR
042036524087000	M8	1	6HX	90	10	6	4,9	68.00 EUR	82.28 EUR
042036524106000	M10	1,25	6HX	100	12	7	5,5	79.55 EUR	96.26 EUR
042036524107000	M10	1	6HX	90	12	7	5,5	79.55 EUR	96.26 EUR
042036524125000	M12	1,5	6HX	100	14	9	7	108.60 EUR	131.41 EUR
042036524126000	M12	1,25	6HX	100	14	9	7	108.60 EUR	131.41 EUR
042036524127000	M12	1	6HX	100	14	9	7	108.60 EUR	131.41 EUR
042036524145000	M14	1,5	6HX	100	16	11	9	128.15 EUR	155.06 EUR
042036524165000	M16	1,5	6HX	100	16	12	9	182.75 EUR	221.13 EUR
042036524185000	M18	1,5	6HX	110	20	14	11	271.05 EUR	327.97 EUR
042036524205000	M20	1,5	6HX	125	20	16	12	313.90 EUR	379.82 EUR

Use

MACHINED MATERIAL	HOLE TYPE	CUTTING SPEED	LUBRICATION	USE
Aluminium alloys si content < 10%	blind hole (thread length $L < 2 \times d_1$)	15-20	Cutting Oil/Emulsion	Recommended use
Aluminium alloys si content < 10%	blind hole (thread length $L < 1,5 \times d_1$)	15-20	Cutting Oil/Emulsion	Recommended use
Aluminium alloys si content < 10%	blind hole (thread length $< 1,5 d_1$, pilot drilling depth $\geq L + d_1$)	15-20	Cutting Oil/Emulsion	Recommended use
Aluminium alloys si content < 10%	blind hole (thread length $L < 2,5 \times d_1$)	15-20	Cutting Oil/Emulsion	Recommended use
Aluminium alloys si content > 10%	blind hole (thread length $L < 1,5 \times d_1$)	10-15	Cutting Oil/Emulsion	Recommended use
Aluminium alloys si content > 10%	blind hole (thread length $< 1,5 d_1$, pilot drilling depth $\geq L + d_1$)	10-15	Cutting Oil/Emulsion	Recommended use
Aluminium alloys si content > 10%	blind hole (thread length $L < 2,5 \times d_1$)	10-15	Cutting Oil/Emulsion	Recommended use
Aluminium alloys si content > 10%	blind hole (thread length $L < 2 \times d_1$)	10-15	Cutting Oil/Emulsion	Recommended use
Case hardened steels and nitriding steels up to 1100 N/mm ²	blind hole (thread length $L < 1,5 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Case hardened steels and nitriding steels up to 1100 N/mm ²	blind hole (thread length $< 1,5 d_1$, pilot drilling depth $\geq L + d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Case hardened steels and nitriding steels up to 1100 N/mm ²	blind hole (thread length $L < 2,5 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Case hardened steels and nitriding steels up to 1100 N/mm ²	blind hole (thread length $L < 2 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Copper alloys (long chipping)	blind hole (thread length $L < 2 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Copper alloys (long chipping)	blind hole (thread length $L < 1,5 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Copper alloys (long chipping)	blind hole (thread length $< 1,5 d_1$, pilot drilling depth $\geq L + d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Copper alloys (long chipping)	blind hole (thread length $L < 2,5 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Copper alloys (short chipping)	blind hole (thread length $L < 2 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Copper alloys (short chipping)	blind hole (thread length $L < 2,5 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use

MACHINED MATERIAL	HOLE TYPE	CUTTING SPEED	LUBRICATION	USE
Copper alloys (short chipping)	blind hole (thread length < 1,5 d1, pilot drilling depth ≥ L+d1)	10-12	Cutting Oil/Emulsion	Recommended use
Copper alloys (short chipping)	blind hole (thread length L < 1,5xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Free cutting steels up to 800 N/mm2	blind hole (thread length L < 2xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Free cutting steels up to 800 N/mm2	blind hole (thread length L < 1,5xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Free cutting steels up to 800 N/mm2	blind hole (thread length < 1,5 d1, pilot drilling depth ≥ L+d1)	10-12	Cutting Oil/Emulsion	Recommended use
Free cutting steels up to 800 N/mm2	blind hole (thread length L < 2,5xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Grey cast iron	blind hole (thread length L < 2,5xd1)	15-20	Cutting Oil/Emulsion	Recommended use
Grey cast iron	blind hole (thread length < 1,5 d1, pilot drilling depth ≥ L+d1)	15-20	Cutting Oil/Emulsion	Recommended use
Grey cast iron	blind hole (thread length L < 1,5xd1)	15-20	Cutting Oil/Emulsion	Recommended use
Grey cast iron	blind hole (thread length L < 2xd1)	15-20	Cutting Oil/Emulsion	Recommended use
Heat-treated steels up to 1100 N/mm2	blind hole (thread length L < 2xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Heat-treated steels up to 1100 N/mm2	blind hole (thread length L < 1,5xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Heat-treated steels up to 1100 N/mm2	blind hole (thread length < 1,5 d1, pilot drilling depth ≥ L+d1)	10-12	Cutting Oil/Emulsion	Recommended use
Heat-treated steels up to 1100 N/mm2	blind hole (thread length L < 2,5xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Heat-treated steels up to 1400 N/mm2	blind hole (thread length L < 2xd1)	10-12	Cutting oil for high resistance steels	Recommended use
Heat-treated steels up to 1400 N/mm2	blind hole (thread length L < 1,5xd1)	10-12	Cutting oil for high resistance steels	Recommended use
Heat-treated steels up to 1400 N/mm2	blind hole (thread length < 1,5 d1, pilot drilling depth ≥ L+d1)	10-12	Cutting oil for high resistance steels	Recommended use
Heat-treated steels up to 1400 N/mm2	blind hole (thread length L < 2,5xd1)	10-12	Cutting oil for high resistance steels	Recommended use
High-alloyed steels up to 1400 N/mm2	blind hole (thread length L < 2xd1)	10-12	Cutting oil for high resistance steels	Recommended use
High-alloyed steels up to 1400 N/mm2	blind hole (thread length L < 1,5xd1)	10-12	Cutting oil for high resistance steels	Recommended use

MACHINED MATERIAL	HOLE TYPE	CUTTING SPEED	LUBRICATION	USE
High-alloyed steels up to 1400 N/mm ²	blind hole (thread length < 1,5 d1, pilot drilling depth ≥ L+d1)	10-12	Cutting oil for high resistance steels	Recommended use
High-alloyed steels up to 1400 N/mm ²	blind hole (thread length L < 2,5xd1)	10-12	Cutting oil for high resistance steels	Recommended use
Plain cast steels up to 500 N/mm ²	blind hole (thread length L < 1,5xd1)	15-25	Cutting Oil/Emulsion	Recommended use
Plain cast steels up to 500 N/mm ²	blind hole (thread length < 1,5 d1, pilot drilling depth ≥ L+d1)	15-25	Cutting Oil/Emulsion	Recommended use
Plain cast steels up to 500 N/mm ²	blind hole (thread length L < 2,5xd1)	15-25	Cutting Oil/Emulsion	Recommended use
Plain cast steels up to 500 N/mm ²	blind hole (thread length L < 2xd1)	15-25	Cutting Oil/Emulsion	Recommended use
Plain cast steels up to 800 N/mm ²	blind hole (thread length L < 2xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Plain cast steels up to 800 N/mm ²	blind hole (thread length L < 1,5xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Plain cast steels up to 800 N/mm ²	blind hole (thread length < 1,5 d1, pilot drilling depth ≥ L+d1)	10-12	Cutting Oil/Emulsion	Recommended use
Plain cast steels up to 800 N/mm ²	blind hole (thread length L < 2,5xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Spheroidal graphite cast iron and malleable cast iron	blind hole (thread length < 1,5 d1, pilot drilling depth ≥ L+d1)	10-15	Cutting Oil/Emulsion	Recommended use
Spheroidal graphite cast iron and malleable cast iron	blind hole (thread length L < 2,5xd1)	10-15	Cutting Oil/Emulsion	Recommended use
Spheroidal graphite cast iron and malleable cast iron	blind hole (thread length L < 2xd1)	10-15	Cutting Oil/Emulsion	Recommended use
Spheroidal graphite cast iron and malleable cast iron	blind hole (thread length L < 1,5xd1)	10-15	Cutting Oil/Emulsion	Recommended use
Stainless steels and heat resisting steels with strength 450 - 800 N/mm ²	blind hole (thread length L < 1,5xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Stainless steels and heat resisting steels with strength 450 - 800 N/mm ²	blind hole (thread length < 1,5 d1, pilot drilling depth ≥ L+d1)	10-12	Cutting Oil/Emulsion	Recommended use
Stainless steels and heat resisting steels with strength 450 - 800 N/mm ²	blind hole (thread length L < 2,5xd1)	10-12	Cutting Oil/Emulsion	Recommended use
Stainless steels and heat resisting steels with strength 450 - 800 N/mm ²	blind hole (thread length L < 2xd1)	10-12	Cutting Oil/Emulsion	Recommended use

MACHINED MATERIAL	HOLE TYPE	CUTTING SPEED	LUBRICATION	USE
Stainless steels and heat resisting steels with strength 600 - 1000 N/mm ²	blind hole (thread length $L < 2 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Stainless steels and heat resisting steels with strength 600 - 1000 N/mm ²	blind hole (thread length $L < 1,5 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Stainless steels and heat resisting steels with strength 600 - 1000 N/mm ²	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 ²	blind hole (thread length $L < 2,5 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Structural steels and heat-treated steels up to 800 N/mm ²	blind hole (thread length $L < 1,5 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Structural steels and heat-treated steels up to 800 N/mm ²	blind hole (thread length $< 1,5 d_1$, pilot drilling depth $\geq L + d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Structural steels and heat-treated steels up to 800 N/mm ²	blind hole (thread length $L < 2,5 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Structural steels and heat-treated steels up to 800 N/mm ²	blind hole (thread length $L < 2 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Structural steels up to 500 N/mm ²	blind hole (thread length $L < 2,5 \times d_1$)	15-25	Cutting Oil/Emulsion	Recommended use
Structural steels up to 500 N/mm ²	blind hole (thread length $< 1,5 d_1$, pilot drilling depth $\geq L + d_1$)	15-25	Cutting Oil/Emulsion	Recommended use
Structural steels up to 500 N/mm ²	blind hole (thread length $L < 1,5 \times d_1$)	15-25	Cutting Oil/Emulsion	Recommended use
Structural steels up to 500 N/mm ²	blind hole (thread length $L < 2 \times d_1$)	15-25	Cutting Oil/Emulsion	Recommended use
Tool steels up to 1100 N/mm ²	blind hole (thread length $L < 2 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Tool steels up to 1100 N/mm ²	blind hole (thread length $L < 1,5 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Tool steels up to 1100 N/mm ²	blind hole (thread length $< 1,5 d_1$, pilot drilling depth $\geq L + d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Tool steels up to 1100 N/mm ²	blind hole (thread length $L < 2,5 \times d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Unalloyed aluminium	blind hole (thread length $L < 2 \times d_1$)	15-30	Cutting Oil/Emulsion	Recommended use
Unalloyed aluminium	blind hole (thread length $L < 1,5 \times d_1$)	15-30	Cutting Oil/Emulsion	Recommended use
Unalloyed aluminium	blind hole (thread length $< 1,5 d_1$, pilot drilling depth $\geq L + d_1$)	15-30	Cutting Oil/Emulsion	Recommended use

MACHINED MATERIAL	HOLE TYPE	CUTTING SPEED	LUBRICATION	USE
Unalloyed aluminium	blind hole (thread length $L < 2,5d_1$)	15-30	Cutting Oil/Emulsion	Recommended use
Unalloyed copper	blind hole (thread length $L < 1,5d_1$)	15-25	Cutting Oil/Emulsion	Recommended use
Unalloyed copper	blind hole (thread length $< 1,5 d_1$, pilot drilling depth $\geq L+d_1$)	15-25	Cutting Oil/Emulsion	Recommended use
Unalloyed copper	blind hole (thread length $L < 2,5d_1$)	15-25	Cutting Oil/Emulsion	Recommended use
Unalloyed copper	blind hole (thread length $L < 2xd_1$)	15-25	Cutting Oil/Emulsion	Recommended 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	Recommended use
Zinc and zinc alloys	blind hole (thread length $L < 2,5d_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Zinc and zinc alloys	blind hole (thread length $L < 2xd_1$)	10-12	Cutting Oil/Emulsion	Recommended use
Zinc and zinc alloys	blind hole (thread length $L < 1,5d_1$)	10-12	Cutting Oil/Emulsion	Recommended use