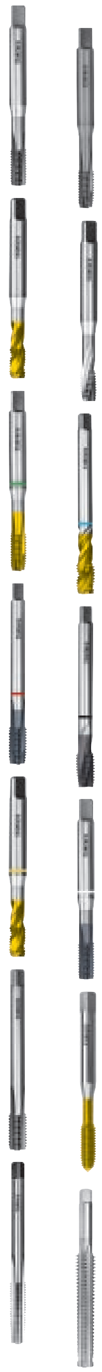
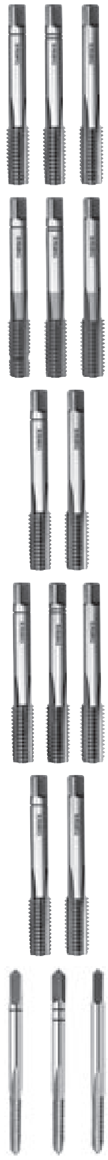
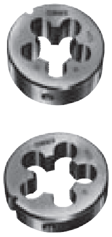
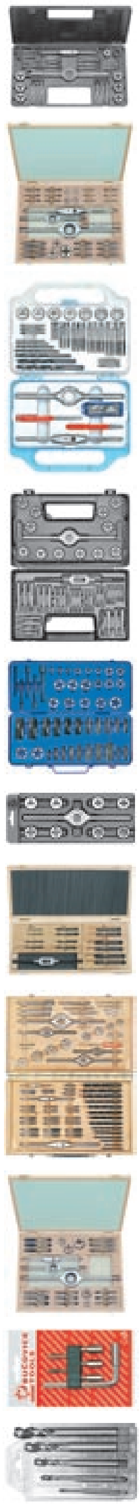
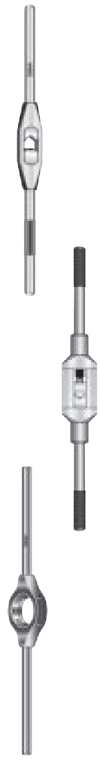
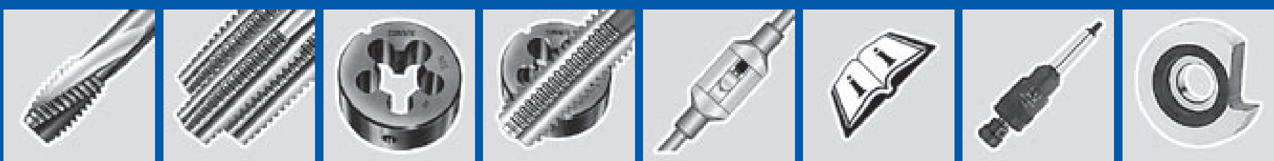
Obsah
General Range

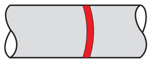








Druhé vydání / Second edition

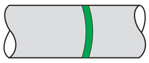


SYSTÉM BAREVNÝCH KROUŽKŮ
COLOUR RING SYSTEM

Bez barevného označení / No ring
- **automatové, konstrukční a zušlechtěné oceli do 800N/mm² / free cutting steels, structural steels and heat-treated steels up to 800N/mm²**
- hliník legovaný / aluminium alloys
- slitiny mědi (krátká drobivá tříska) / copper alloys (short chipping)
- zinek a slitiny zinku / zinc and zinc alloys

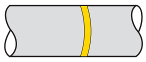


Červený pruh / Red ring
- **zušlechtěné a nástrojové oceli do 1100 N/mm² / heat-treated steels and tool steels up to 1100 N/mm²**
- hliník legovaný (s obsahem Si > 10%) / aluminium alloys (Si content > 10%)

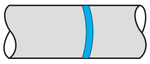


Zelený pruh / Green ring
- **automatové, konstrukční a zušlechtěné oceli do 800 N/mm² / free cutting steels, structural steels and heat-treated steels up to 800 N/mm²**
- **zušlechtěné a nástrojové oceli do 1100 N/mm² / heat-treated steels and tool steels up to 1100 N/mm²**
- **nerezavějící a žáruvzdorné oceli / stainless steels and heat resisting steels**
- **šedá litina / grey cast iron**
- **hliník legovaný / aluminium alloys**
- **měď čistá a slitiny mědi (dlouhá vinutá tříska) / unalloyed copper and copper alloys (long chipping)**

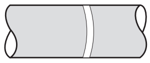
Černý pruh / Black ring
- **vysoce legované a zušlechtěné oceli do 1400 N/mm² / high-alloyed steels and heat-treated steels up to 1400 N/mm²**



Žlutý pruh / Yellow ring
- **čistý hliník / unalloyed aluminium**



Modrý pruh / Blue ring
- **nerezavějící a žáruvzdorné oceli / stainless steels and heat resisting steels**
- zušlechtěné a nástrojové oceli do 1100 N/mm² / heat-treated steels and tool steels up to 1100 N/mm²
- měď čistá a slitiny mědi (dlouhá vinutá tříska) / unalloyed copper and copper alloys (long chipping)

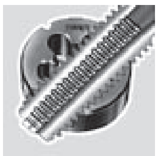


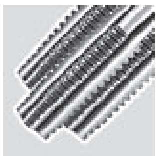
Bílý pruh / White ring
- **litiny / cast iron**

A	Měkké konstrukční oceli s pevností do 500 N/mm² / Soft structural steels up to 500 N/mm²	1. Konstrukční oceli / Structural steels	10004, 11320, 11364, 11373, 11378, 11474
		2. Nelegované lité oceli / Plain cast steels	422630
B	Automatové a konstrukční oceli s pevností do 800 N/mm² / Free cutting steels and structural steels up to 800 N/mm²	1. Automatové oceli / Free cutting steels	11109, 11110
		2. Konstrukční a zušlechtěné oceli / Structural steels and heat-treated steels	11500, 11523, 11600, 11700, 12010, 12040, 12050, 12060
		3. Nelegované lité oceli / Plain cast steels	422640, 422660
C	Zušlechtěné a nástrojové oceli s pevností do 1100 N/mm² / Heat-treated steels and tool steels up to 1100 N/mm²	1. Cementační a nitridační oceli / Case hardened steels and nitriding steels	14220, 16420
		2. Zušlechtěné oceli / Heat-treated steels	15142, 15260, 19552, 19720, 19751
		3. Nástrojové oceli / Tool steels	19312, 19436, 19552, 19751, 19830, 19852
D	Vysoce legované a zušlechtěné oceli s pevností do 1400 N/mm² / High-alloyed steels and heat-treated steels up to 1400 N/mm²	1. Vysoce legované oceli / High-alloyed steels	15330, Inconel 718, HARDOX 400
		2. Zušlechtěné oceli / Heat-treated steels	15142, 15260, 16523, 19452, 19552, 19573
E	Nerezavějící a žáruvzdorné oceli / Stainless steels and heat resisting steels	1. S pevností 450 - 800 N/mm² / With strength 450 - 800 N/mm²	17022, 17040, 17240, 17241, 17246, 17248, 17350, 422905
		2. S pevností 600 -1000 N/mm² / With strength 600 - 1000 N/mm²	17241, 17359, 17360, 17381
F	Litiny / Cast iron	1. Šedá litina / Grey cast iron	422410, 422415, 422420, 422425, 422430, 422435
		2. Tvárná a temperovaná litina / Spheroidal graphite cast iron and malleable cast iron	422304, 422305, 422306, 422540, 422545, 422555
G	Hliník měkký / Unalloyed aluminium	1. Čistý hliník / Unalloyed aluminium	424002, 424003, 424005, 424412, 424413, 424432
H	Hliník legovaný / Aluminium alloys	1. S obsahem Si < 10% / Si content < 10%	424332, 424338, 424381
		2. S obsahem Si > 10 % / Si content > 10 %	424331, 424336, 424384
I	Měď čistá / Unalloyed copper	1. Měď čistá bez přísad / Unalloyed copper	423003, 423005, 423009
J	Slitiny mědi / Copper alloys	1. Krátká drobivá tříska / Short chipping	423220, 423222, 423223
		2. Dlouhá vinutá tříska / Long chipping	423203, 423210, 423213
K	Zinek / Zinc	1. Zinek a slitiny zinku / Zinc and zinc alloys	423560, 423562










STROJNÍ ZÁVITNÍKY
MACHINE TAPS

● Doporučené užití / Recommended use

◒ Možno použít / Possible use

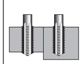
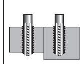
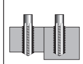
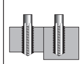
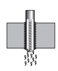
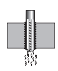
○ Omezené použití / Alternative use

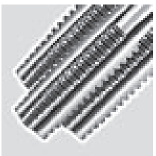
Řezný kužel / Chamfer

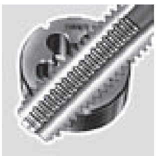
B = 3,5 - 6 Stoupání / Threads

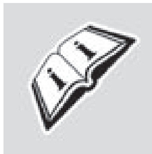
C = 2 - 3 Stoupání / Threads

D = 3,5 - 5 Stoupání / Threads

Katalogové číslo / Cat. No.		100X	101X	300X	301X	150X	151X
Strana katalogu / Catalogue page No.	M X=0	29	29	33	33	30	30
	MF X=0			51	51		
	G X=2			62	62		
	UNC X=4	65	65	67	67	65	65
	UNF X=5			69	69		
Řezný kužel / Chamfer		C	C	C	C	B	B
Druh otvoru / Hole type							
St 33, St 22, H I, St 37-2, St 37-3, H IV	1.0035, 1.0320, 1.0345, 1.0037, 1.0116, 1.0445	○	○	○	○	◒	●
GS 38	1.0416					◒	●
9SMn28, 10S20	1.0715, 1.0721	○	○	○	○	◒	●
St 50-2, St 52-3, St 60-2, St 70-2, C 10, C 35, C 45, C 55	1.0050, 1.0570, 1.0060, 1.0070, 1.0305, 1.0501, 1.0503, 1.0535					◒	●
GS 45, GS 60	1.0443, 1.0558					◒	●
16MnCr5, 14NiCr14	1.7131, 1.5752						
42CrMo4, 50CrV4, X38CrMoV5-1, X30WCrV5-3, X60WCrMoV9-4,	1.7225, 1.8159, 1.2343, 1.2567, 1.2622						
90MnCrV8, X210Cr12, X38CrMoV5-1, X60WCrMoV9-4, S6-5-2, S6-5-2-5	1.2842, 1.2080, 1.2343, 1.2622, 1.3343, 1.3243						
30CrMoV9, NiCr19Fe19NbMo	1.7707, 2.4668						
42CrMo4, 50CrV4, 14NiCr18, 62SiMnCr4, X38CrMoV5-1, X155CrVMo12-1	1.7225, 1.8159, 1.5860, 1.2101, 1.2343, 1.2379						
X20Cr13, X6Cr17, X5CrNi18-10, X10CrNi18-8, X10CrNiTi18-10, X6CrNiTi18-10, X12Cr13	1.4021, 1.4016, 1.4301, 1.4310, 1.4878, 1.4541, 1.4435, 1.4006						
X10CrNi18-8, X2CrNiMoN17-11-2, X2CrNiMoN17-13-3, X2CrNiMoN22-5-3	1.4310, 1.4406, 1.4429, 1.4462						
GG 10, GG 15, GG 20, GG 25, GG 30, GG 35	0.6010, 0.6015, 0.6020, 0.6025, 0.6030, 0.6035	○	◒	○	◒		
GGG 40, GGG 50, GGG 60, GTW 40, GTS 45, GTS 55	0.7040, 0.7050, 0.7060, 0.8040, 0.8145, 0.8155					○	○
Al99,8; Al99,7; Al99,5; AlMg1; AlMg3; AlMn1	3.0255; 3.0275; 3.0285; 3.3315; 3.3535; 3.0515						
G-AlSi7Mg; GD-AlSi8Cu3; G-AlSi5Cu1Mg	3.2371; 3.2162; 3.2134	○	○	○	○	◒	●
G-AlSi11; G-AlSi12, G-AlSi10Mg	3.2211, 3.2581, 3.2381	○	◒	○	◒	○	○
Cu99,85; Cu99,5; Cu99,2As							○
CuZn40, CuZn39Pb1, CuZn40Pb2	2.0360, 2.0380, 2.0410	◒	●	◒	●	○	◒
CuZn20, CuZn30, CuZn37	2.0250, 2.0265, 2.0321					○	○
ZnAl4Cu1, ZnAlCu3	2.2143, 2.2144						

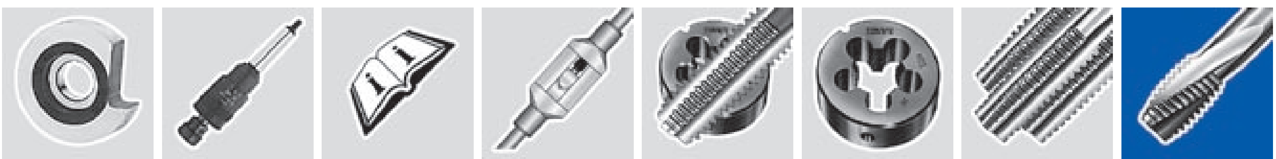







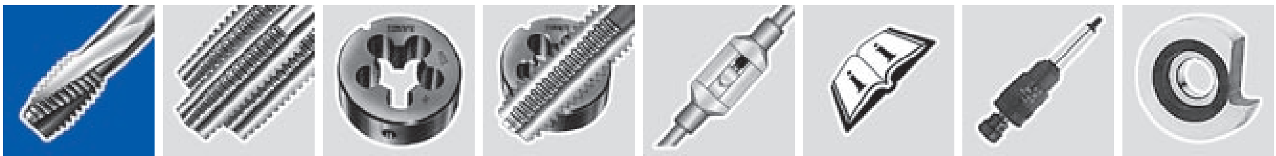
STROJNÍ ZÁVITNÍKY
MACHINE TAPS

	154X	175X	350X	351X	354X	205X	206X	209X	405X	406X	409X	240X	241X	440X	441X	236X	239X
	OX			TiN	OX		TiN	OX		TiN	OX		TiN		TiN	TiN	OX
	30	30	34	34	34	31	31	31	35	35	35	32	32	36	36	32	32
			51	51	51				54	54	54						
			62	62					63	63							
			67	67		66	66		68	68							
			69	69					70	70							
	B	B	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C
	●	○	◒	●	●											●	●
	●	○	◒	●	●											●	●
	●	○	◒	●	●		○	○		○	○					●	●
	◒	○	◒	●	◒	◒	●	◒	◒	●	◒	○	◒	○	◒	◒	◒
	●	○	◒	●	●	◒	●	◒	◒	●	◒						
													○		○		
	○		○	○	○	○	◒	○	○	◒	○		○		○		
	◒	◒	◒	●	◒	◒	●	◒	◒	●	◒					◒	◒
	○	○	○	○	○	○	◒	○	○	◒	○						
	○			○	○		○			○						○	○
	○		○	◒	○							◒	●	◒	●		
	○		○	○	○	○	◒	○	○	◒	○						
	●				●			●			●						



STROJNÍ ZÁVITNÍKY
MACHINE TAPS

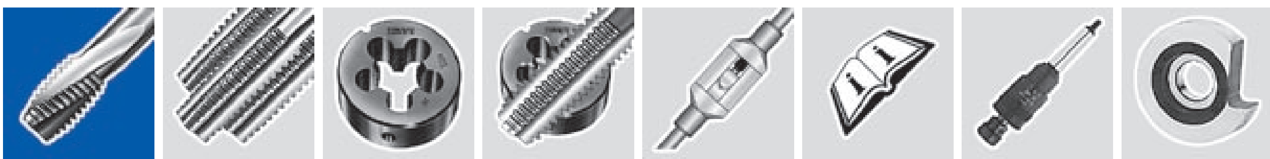
	TiN	OX	TiN	TiN	TiN	TiN	TiN	OX	HSSE-PM TiAlN	TiN	OX	HSSE-PM TiAlN	TiN	OX	HSSE-PM TiAlN	TiN	OX
	436X	439X	171X	371X	221X	421X	166X	169X	187X	366X	369X	387X	226X	229X	232X	426X	429X
M	36	36	37	38	37	38	39	39	39	41	41	41	40	40	40	42	43
MF										56	56					56	56
G										64	64					64	64
UNC																	
UNF																	
	C	C	B	B	C	C	B	B	B	B	B	B	C	C	C	C	C
	●	●															
	●	●															
	●	●	◒	◒	◒	◒											
	◒	◒	◒	◒	◒	◒											
			◒	◒	◒	◒											
			◒	◒	◒	◒	●	○	●	●	○	●	●	○	●	●	○
			◒	◒	◒	◒	◒		◒	◒		◒	◒		◒	◒	
			◒	◒	◒	◒	◒		◒	◒		◒	●		●	●	
			◒	◒	◒	◒	●	◒	●	●	◒	●	●	◒	●	●	◒
			◒	◒	◒	◒	●	◒	●	●	◒	●	●	◒	●	●	◒
			◒	◒	◒	◒											
			◒	◒	◒	◒											
	◒	◒	◒	◒	◒	◒											
			◒	◒	◒	◒											
	○	○	◒	◒	◒	◒	●		●	●		●	●		●	●	
			◒	◒	◒	◒	●		●	●		●	●		●	●	



STROJNÍ ZÁVITNÍKY
MACHINE TAPS

	HSSE-PM TiAlN	TiCN	OX	TiCN	OX	TiCN	OX	TiCN	OX	HSSE-PM TiAlN	HSSE-PM TiAlN	HSSE-PM TiAlN	HSSE-PM TiAlN	HSSE-PM TiAlN	HSSE-PM TiAlN	TiN	TiN
	432X	**158X**	**159X**	**358X**	**359X**	**268X**	**269X**	**468X**	**469X**	**192X**	**392X**	**282X**	**287X**	**482X**	**487X**	**161X**	**361X**
	42	43	43	44	44	43	43	44	44	45	46	45	45	46	46	47	48
				58	58			58	58								
	C	B	B	B	B	C	C	C	C	B	B	D	C	D	C	B	B
	●	◒	○	◒	○	●	○	●	○								
	◒	●	○	●	○	●	○	●	○								
	●	●	○	●	○	◒	○	◒	○	○	○						
										◒	◒	◒	●	◒	●		
										●	●	●	●	●	●		
	●																
	●																
		○		○		○		○									
																●	●
		●	○	●	○	◒	○	◒	○								
	●																
	●																

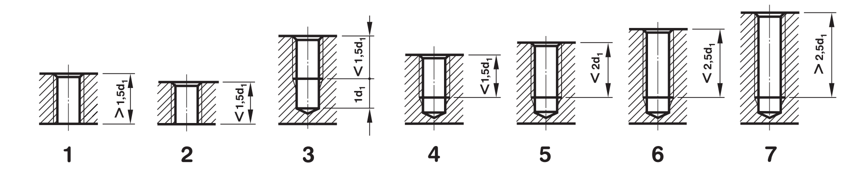
	STROJNÍ ZÁVITNÍKY MACHINE TAPS				STROJNÍ KRÁTKÉ ZÁVITNÍKY SHORT MACHINE TAPS		TVÁŘECÍ ZÁVITNÍKY FORMING TAPS		MATICOVÉ ZÁVITNÍKY NUT TAPS	RUČNÍ SADOVÉ ZÁVITNÍKY HAND TAPS		
	TiN	TiN	TiCN	TiCN			TiN	TiN				OX
	271X	471X	108X	308X	055X	060X	291X	296X	500X	020X	030X	029X
M	47	48	49	50	71	71	72	72	73	75		76
MF				60							77	
G											80	
UNC										81		
UNF											82	
	C	C	C	C	B	C	C	C		C	C	C
					◒		◒	●	●	●	●	
					◒			○	●	●	●	
					◒		◒	◒	●	●	●	
					◒	◒	◒	●	●	●	●	
					◒	◒				●	●	
												●
												●
			●	●						●	●	◒
			●	●	○	○				●	●	◒
	●	●					○	●				
					◒	◒	○	●	◒	●	●	
			◒	◒	○	○			◒	◒	◒	
							○	●				
			○	○	○				◒	●	●	
					○	○			◒	○	○	
							●					



SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

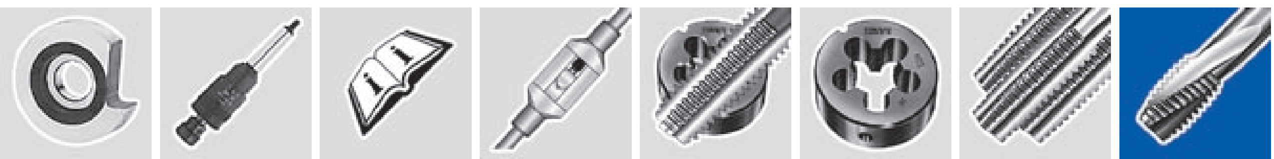
A

Měkké konstrukční oceli s pevností do 500 N/mm²
Soft structural steels up to 500 N/mm²



● doporučené užití / recommended use ◐ možno použít / possible use ○ omezené použití / alternative use

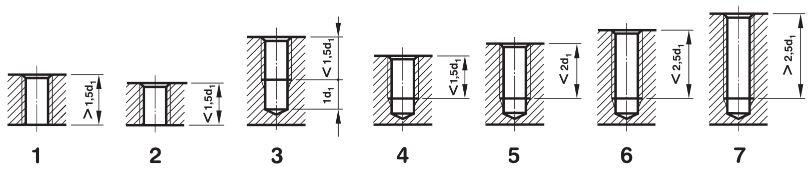
Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 371		1000	M	M3 ÷ M10	A1	○	2; 3	4 - 6	O / E	29
DIN 371	TiN	1010	M	M3 ÷ M10	A1	○	2; 3	5 - 8	O / E	29
DIN 376		3000	M	M3 ÷ M52	A1	○	2; 3	4 - 6	O / E	33
DIN 376	TiN	3010	M	M3 ÷ M52	A1	○	2; 3	5 - 8	O / E	33
DIN 371		1500	M	M2 ÷ M10	A1 A2	◐	1; 2	5 - 8 6 - 10	O / E	30
DIN 371	TiN	1510	M	M2 ÷ M10	A1 A2	●	1; 2	6 - 10 8 - 12	O / E	30
DIN 371	OX	1540	M	M2 ÷ M10	A1; A2	●	1; 2	6 - 10	O / E	30
DIN 371		1750	M	M3 ÷ M10	A1; A2	○	1; 2	5 - 8	O / E	30
DIN 376		3500	M	M3 ÷ M36	A1 A2	◐	1; 2	5 - 8 6 - 10	O / E	34
DIN 376	TiN	3510	M	M3 ÷ M36	A1 A2	●	1; 2	6 - 10 8 - 12	O / E	34
DIN 376	OX	3540	M	M3 ÷ M36	A1; A2	●	1; 2	6 - 10	O / E	34
DIN 371	TiN	2360	M	M3 ÷ M10	A1 A2	●	3; 4; 5	8 - 12 10 - 15	O / E	32
DIN 371	OX	2390	M	M3 ÷ M10	A1 A2	●	3; 4; 5	5 - 8 6 - 10	O / E	32
DIN 376	TiN	4360	M	M3 ÷ M36	A1 A2	●	3; 4; 5	8 - 12 10 - 15	O / E	36
DIN 376	OX	4390	M	M3 ÷ M36	A1 A2	●	3; 4; 5	5 - 8 6 - 10	O / E	36
DIN 352		0550	M	M3 ÷ M12	A1 A2	◐	1; 2	5 - 8 6 - 10	O / E	71
DIN 2174	TiN	2910	M	M3 ÷ M12	A1	◐	1 ÷ 7	12 - 20	O / E	72
DIN 2174	TiN	2960	M	M3 ÷ M12	A1 A2	● ○	1 ÷ 7	15 - 25 12 - 20	O / E	72
DIN 374		3000	MF	M3 ÷ M52	A1	○	2; 3	4 - 6	O / E	51
DIN 374	TiN	3010	MF	M3 ÷ M52	A1	○	2; 3	5 - 8	O / E	51
DIN 374		3500	MF	M3 ÷ M36	A1 A2	◐	1; 2	5 - 8 6 - 10	O / E	51
DIN 374	TiN	3510	MF	M3 ÷ M36	A1 A2	●	1; 2	6 - 10 8 - 12	O / E	51
DIN 374	OX	3540	MF	M3 ÷ M36	A1; A2	●	1; 2	6 - 10	O / E	51
DIN 5156		3002	G	G1/16" ÷ G2"	A1	○	2; 3	4 - 6	O / E	62
DIN 5156	TiN	3012	G	G1/16" ÷ G2"	A1	○	2; 3	5 - 8	O / E	62
DIN 5156		3502	G	G1/16" ÷ G2"	A1 A2	◐	1; 2	5 - 8 6 - 10	O / E	62
DIN 5156	TiN	3512	G	G1/16" ÷ G2"	A1 A2	●	1; 2	6 - 10 8 - 12	O / E	62
~ DIN 371		1004	UNC	5-40 ÷ 3/8-16	A1	○	2; 3	4 - 6	O / E	65



SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

A

Měkké konstrukční oceli s pevností do 500 N/mm²
Soft structural steels up to 500 N/mm²



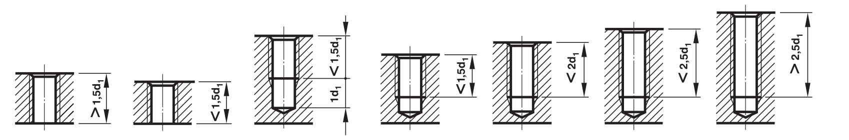
● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
~ DIN 371	TiN	1014	UNC	5-40 ÷ 3/8-16	A1	○	2; 3	5 - 8	O / E	65
~ DIN 376		3004	UNC	7/16-14 ÷ 1 1/8-7	A1	○	2; 3	4 - 6	O / E	67
~ DIN 376	TiN	3014	UNC	7/16-14 ÷ 1 1/8-7	A1	○	2; 3	5 - 8	O / E	67
~ DIN 371		1504	UNC	5-40 ÷ 3/8-16	A1 A2	◒	1; 2	5 - 8 6 - 10	O / E	65
~ DIN 371	TiN	1514	UNC	5-40 ÷ 3/8-16	A1 A2	●	1; 2	6 - 10 8 - 12	O / E	65
~ DIN 376		3504	UNC	7/16-14 ÷ 1 1/8-7	A1 A2	◒	1; 2	5 - 8 6 - 10	O / E	67
~ DIN 376	TiN	3514	UNC	7/16-14 ÷ 1 1/8-7	A1 A2	●	1; 2	6 - 10 8 - 12	O / E	67
~ DIN 374		3005	UNF	5-44 ÷ 1 1/8-12	A1	○	2; 3	4 - 6	O / E	69
~ DIN 374	TiN	3015	UNF	5-44 ÷ 1 1/8-12	A1	○	2; 3	5 - 8	O / E	69
~ DIN 374		3505	UNF	5-44 ÷ 1 1/8-12	A1 A2	◒	1; 2	5 - 8 6 - 10	O / E	69
~ DIN 374	TiN	3515	UNF	5-44 ÷ 1 1/8-12	A1 A2	●	1; 2	6 - 10 8 - 12	O / E	69

SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

B

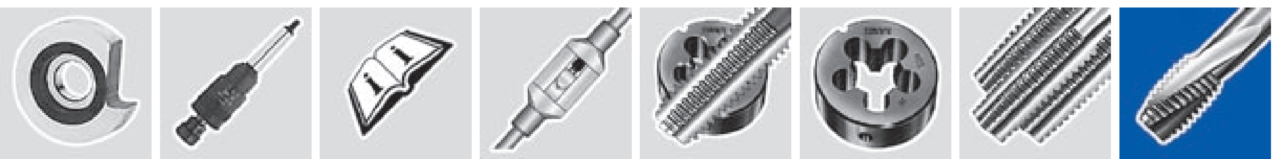
Automatové a konstrukční oceli s pevností do 800 N/mm²
Free cutting steels and structural steels up to 800 N/mm²



1 2 3 4 5 6 7

● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard			Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 371			1000	M	M3 ÷ M10	B1	○	2; 3	8 - 10	O / E	29
DIN 371	TiN		1010	M	M3 ÷ M10	B1	○	2; 3	10 - 14	O / E	29
DIN 376			3000	M	M3 ÷ M52	B1	○	2; 3	8 - 10	O / E	33
DIN 376	TiN		3010	M	M3 ÷ M52	B1	○	2; 3	10 - 14	O / E	33
DIN 371			1500	M	M2 ÷ M10	B1; B2; B3	◒	1; 2	10 - 14	O / E	30
DIN 371	TiN		1510	M	M2 ÷ M10	B1 B2; B3	●	1; 2	10 - 14 12 - 15	O / E	30
DIN 371	OX		1540	M	M2 ÷ M10	B1; B3 B2	● ◒	1; 2	12 - 15 10 - 12	O / E	30
DIN 371			1750	M	M3 ÷ M10	B1 B2; B3	○	1; 2	8 - 10 8 - 12	O / E	30
DIN 376			3500	M	M3 ÷ M36	B1; B2; B3	◒	1; 2	10 - 14	O / E	34
DIN 376	TiN		3510	M	M3 ÷ M36	B1 B2; B3	●	1; 2	10 - 14 12 - 15	O / E	34
DIN 376	OX		3540	M	M3 ÷ M36	B1; B3 B2	● ◒	1; 2	12 - 15 10 - 12	O / E	34
DIN 371			2050	M	M2 ÷ M10	B2; B3	◒	3; 4; 5	10 - 14	O / E	31
DIN 371	TiN		2060	M	M2 ÷ M10	B1 B2; B3	○ ●	3; 4; 5	10 - 14 12 - 15	O / E	31
DIN 371	OX		2090	M	M2 ÷ M10	B1 B2; B3	○ ◒	3; 4; 5	8 - 10 10 - 12	O / E	31
DIN 376			4050	M	M3 ÷ M36	B2; B3	◒	3; 4; 5	10 - 14	O / E	35
DIN 376	TiN		4060	M	M3 ÷ M36	B1 B2; B3	○ ●	3; 4; 5	10 - 14 12 - 15	O / E	35
DIN 376	OX		4090	M	M3 ÷ M36	B1 B2; B3	○ ◒	3; 4; 5	8 - 10 10 - 12	O / E	35
DIN 371			2400	M	M3 ÷ M10	B2	○	3; 4	8 - 10	O / E	32
DIN 371	TiN		2410	M	M3 ÷ M10	B2	◒	3; 4	8 - 12	O / E	32
DIN 376			4400	M	M3 ÷ M36	B2	○	3; 4	8 - 10	O / E	36
DIN 376	TiN		4410	M	M3 ÷ M36	B2	◒	3; 4	8 - 12	O / E	36
DIN 371	TiN		2360	M	M3 ÷ M10	B1 B2	● ◒	3; 4; 5	12 - 15 10 - 14	O / E	32
DIN 371	OX		2390	M	M3 ÷ M10	B1 B2	● ◒	3; 4; 5	12 - 15 10 - 12	O / E	32
DIN 376	TiN		4360	M	M3 ÷ M36	B1 B2	● ◒	3; 4; 5	12 - 15 10 - 14	O / E	36
DIN 376	OX		4390	M	M3 ÷ M36	B1 B2	● ◒	3; 4; 5	12 - 15 10 - 12	O / E	36
DIN 371	TiN		1710	M	M3 ÷ M10	B1; B2 B3	◒	1; 2	10 - 12 12 - 15	O / E	37
DIN 376	TiN		3710	M	M12 ÷ M20	B1; B2 B3	◒	1; 2	10 - 12 12 - 15	O / E	38
DIN 371	TiN		2210	M	M3 ÷ M10	B1; B2 B3	◒	3; 4; 5	8 - 10 10 - 12	O / E	37

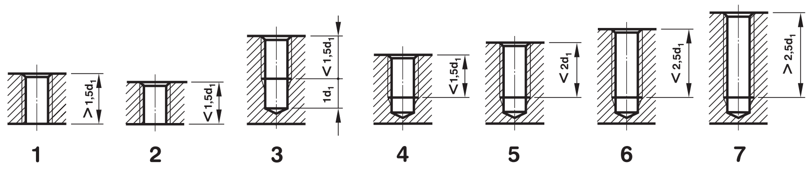


Volba závitníku dle obráběného materiálu
Tap Selection According To Material Groups

SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

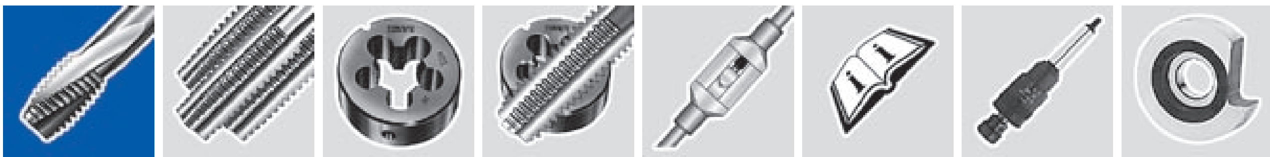
B

Automatové a konstrukční oceli s pevností do 800 N/mm²
Free cutting steels and structural steels up to 800 N/mm²



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

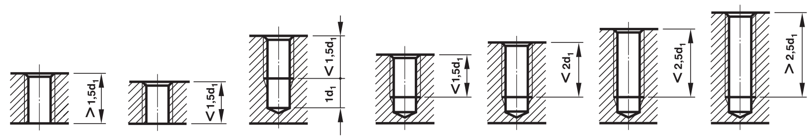
Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application	Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 376	TiN	4210	M	M12 ÷ M20	B1; B2 B3 ◒	3; 4; 5	8 - 10 10 - 12	O / E	38
DIN 352		0550	M	M3 ÷ M12	B1; B2; B3 ◒	1; 2	10 - 14	O / E	71
DIN 352		0600	M	M3 ÷ M12	B2; B3 ◒	3; 4	10 - 14	O / E	71
DIN 2174	TiN	2910	M	M3 ÷ M12	B1; B2 ◒	1 ÷ 7	15-20	O / E	72
DIN 2174	TiN	2960	M	M3 ÷ M12	B1 ◒ B2 ●	1 ÷ 7	20-25	O / E	72
DIN 374		3000	MF	M3 ÷ M52	B1 ○	2; 3	8 - 10	O / E	51
DIN 374	TiN	3010	MF	M3 ÷ M52	B1 ○	2; 3	10 - 14	O / E	51
DIN 374		3500	MF	M3 ÷ M36	B1; B2; B3 ◒	1; 2	10 - 14	O / E	51
DIN 374	TiN	3510	MF	M3 ÷ M36	B1 B2; B3 ●	1; 2	10 - 14 12 - 15	O / E	51
DIN 374	OX	3540	MF	M3 ÷ M36	B1; B3 ● B2 ◒	1; 2	12 - 15 10 - 12	O / E	51
DIN 374		4050	MF	M3 ÷ M36	B2; B3 ◒	3; 4; 5	10 - 14	O / E	54
DIN 374	TiN	4060	MF	M3 ÷ M36	B1 ○ B2; B3 ●	3; 4; 5	10 - 14 12 - 15	O / E	54
DIN 374	OX	4090	MF	M3 ÷ M36	B1 ○ B2; B3 ◒	3; 4; 5	8 - 10 10 - 12	O / E	54
DIN 5156		3002	G	G1/16" ÷ G2"	B1 ○	2; 3	8 - 10	O / E	62
DIN 5156	TiN	3012	G	G1/16" ÷ G2"	B1 ○	2; 3	10 - 14	O / E	62
DIN 5156		3502	G	G1/16" ÷ G2"	B1; B2; B3 ◒	1; 2	10 - 14	O / E	62
DIN 5156	TiN	3512	G	G1/16" ÷ G2"	B1 B2; B3 ●	1; 2	10 - 14 12 - 15	O / E	62
DIN 5156		4052	G	G1/16" ÷ G2"	B2; B3 ◒	3; 4; 5	10 - 14	O / E	63
DIN 5156	TiN	4062	G	G1/16" ÷ G2"	B1 ○ B2; B3 ●	3; 4; 5	10 - 14 12 - 15	O / E	63
~ DIN 371		1004	UNC	5-40 ÷ 3/8-16	B1 ○	2; 3	8 - 10	O / E	65
~ DIN 371	TiN	1014	UNC	5-40 ÷ 3/8-16	B1 ○	2; 3	10 - 14	O / E	65
~ DIN 376		3004	UNC	7/16-14 ÷ 1 1/8-7	B1 ○	2; 3	8 - 10	O / E	67
~ DIN 376	TiN	3014	UNC	7/16-14 ÷ 1 1/8-7	B1 ○	2; 3	10 - 14	O / E	67
~ DIN 371		1504	UNC	5-40 ÷ 3/8-16	B1; B2; B3 ◒	1; 2	10 - 14	O / E	65
~ DIN 371	TiN	1514	UNC	5-40 ÷ 3/8-16	B1 B2; B3 ●	1; 2	10 - 14 12 - 15	O / E	65
~ DIN 376		3504	UNC	7/16-14 ÷ 1 1/8-7	B1; B2; B3 ◒	1; 2	10 - 14	O / E	67
~ DIN 376	TiN	3514	UNC	7/16-14 ÷ 1 1/8-7	B1 B2; B3 ●	1; 2	10 - 14 12 - 15	O / E	67
~ DIN 371		2054	UNC	5-40 ÷ 3/8-16	B2; B3 ◒	3; 4; 5	10 - 14	O / E	66



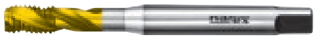
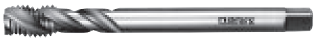
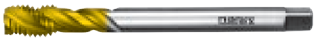
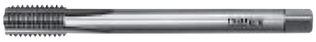
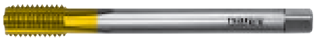
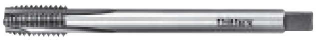
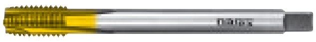
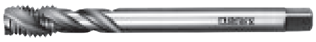
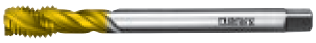
SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

B

Automatové a konstrukční oceli s pevností do 800 N/mm²
Free cutting steels and structural steels up to 800 N/mm²



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

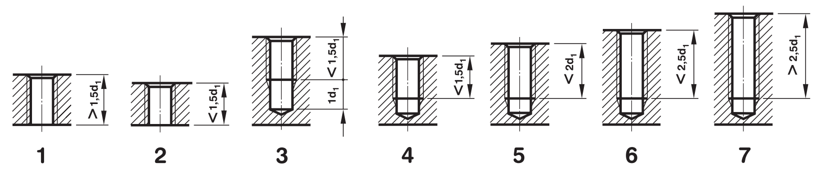
Norma Standard			Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
~ DIN 371	TiN		2064	UNC	5-40 ÷ 3/8-16	B1 B2; B3	○ ●	3; 4; 5	10 - 14 12 - 15	O / E	66
~ DIN 376			4054	UNC	7/16-14 ÷ 1-8	B2; B3	◒	3; 4; 5	10 - 14	O / E	68
~ DIN 376	TiN		4064	UNC	7/16-14 ÷ 1-8	B1 B2; B3	○ ●	3; 4; 5	10 - 14 12 - 15	O / E	68
~ DIN 374			3005	UNF	5-44 ÷ 1 1/8-12	B1	○	2; 3	8 - 10	O / E	69
~ DIN 374	TiN		3015	UNF	5-44 ÷ 1 1/8-12	B1	○	2; 3	10 - 14	O / E	69
~ DIN 374			3505	UNF	5-44 ÷ 1 1/8-12	B1; B2; B3	◒	1; 2	10 - 14	O / E	69
~ DIN 374	TiN		3515	UNF	5-44 ÷ 1 1/8-12	B1 B2; B3	●	1; 2	10 - 14 12 - 15	O / E	69
~ DIN 374			4055	UNF	5-44 ÷ 1-12	B2; B3	◒	3; 4; 5	10 - 14	O / E	70
~ DIN 374	TiN		4065	UNF	5-44 ÷ 1-12	B1 B2; B3	○ ●	3; 4; 5	10 - 14 12 - 15	O / E	70

Volba závitníku dle obráběného materiálu
Tap Selection According To Material Groups

SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

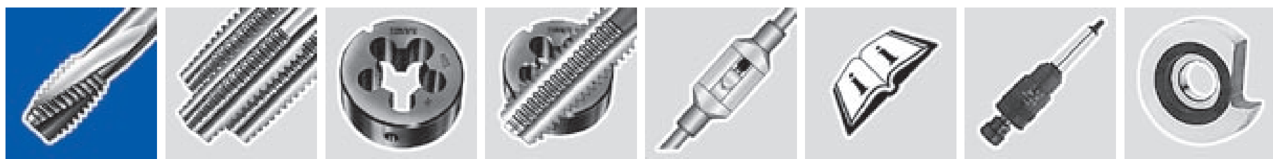
C

Zušlechtěné a nástrojové oceli s pevností do 1100 N/mm^2
Heat-treated steels and tool steels up to 1100 N/mm^2



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

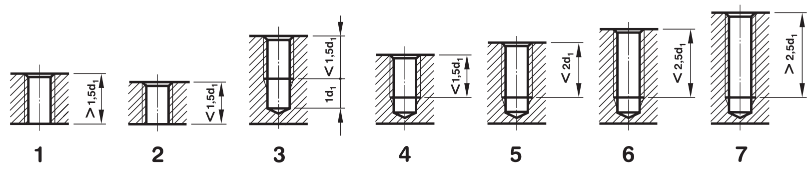
Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application	Typ otvoru Hole type	V_c m/min		Strana Page
DIN 371	TiN	1710	M	M3 ÷ M10	C1; C2; C3 ◒	1; 2	4 - 6	O / E	37
DIN 376	TiN	3710	M	M12 ÷ M20	C1; C2; C3 ◒	1; 2	4 - 6	O / E	38
DIN 371	TiN	2210	M	M3 ÷ M10	C1; C2; C3 ◒	3; 4; 5	4 - 6	O / E	37
DIN 376	TiN	4210	M	M12 ÷ M20	C1; C2; C3 ◒	3; 4; 5	4 - 6	O / E	38
DIN 371	TiN	1660	M	M3 ÷ M10	C1 ● C2; C3 ◒	1; 2	4 - 8 4 - 6	O / E	39
DIN 371	OX	1690	M	M3 ÷ M10	C1 ○	1; 2	3 - 5	O	39
DIN 371	PM TiAlN	1870	M	M3 ÷ M10	C1 ● C2; C3 ◒	1; 2	6 - 8 4 - 6	O / E	39
DIN 376	TiN	3660	M	M3 ÷ M36	C1 ● C2; C3 ◒	1; 2	4 - 8 4 - 6	O / E	41
DIN 376	OX	3690	M	M3 ÷ M36	C1 ○	1; 2	3 - 5	O	41
DIN 376	PM TiAlN	3870	M	M12	C1 ● C2; C3 ◒	1; 2	6 - 8 4 - 6	O / E	41
DIN 371	TiN	2260	M	M3 ÷ M10	C1; C3 ● C2 ◒	3; 4; 5	6 - 8 4 - 6	O / E	40
DIN 371	OX	2290	M	M3 ÷ M10	C1 ○	3; 4; 5	3 - 5	O	40
DIN 371	PM TiAlN	2320	M	M3 ÷ M10	C1; C3 ● C2 ◒	3; 4; 5	6 - 8 4 - 6	O / E	40
DIN 376	TiN	4260	M	M3 ÷ M36	C1; C3 ● C2 ◒	3; 4; 5	6 - 8 4 - 6	O / E	42
DIN 376	OX	4290	M	M3 ÷ M36	C1 ○	3; 4; 5	3 - 5	O	42
DIN 376	PM TiAlN	4320	M	M12	C1; C3 ● C2 ◒	3; 4; 5	6 - 8 4 - 6	O / E	42
DIN 371	TiCN	1580	M	M3 ÷ M10	C1; C3 ◒ C2 ●	1; 2	4 - 8	O / E	43
DIN 371	OX	1590	M	M3 ÷ M10	C1; C2; C3 ○	1; 2	4 - 8	O	43
DIN 376	TiCN	3580	M	M3 ÷ M36	C1; C3 ◒ C2 ●	1; 2	4 - 8	O / E	44
DIN 376	OX	3590	M	M3 ÷ M36	C1; C2; C3 ○	1; 2	4 - 8	O	44
DIN 371	TiCN	2680	M	M3 ÷ M10	C1; C3 ○ C2 ●	3; 4; 5	3 - 5 6 - 8	O O / E	43
DIN 371	OX	2690	M	M3 ÷ M10	C1; C2; C3 ○	3; 4; 5	3 - 5	O	43
DIN 376	TiCN	4680	M	M3 ÷ M36	C1; C3 ○ C2 ●	3; 4; 5	3 - 5 6 - 8	O O / E	44
DIN 376	OX	4690	M	M3 ÷ M36	C1; C2; C3 ○	3; 4; 5	3 - 5	O	44
DIN 371	PM TiAlN	1920	M	M3 ÷ M10	C3 ○	1; 2	4 - 6	O	45
DIN 376	PM TiAlN	3920	M	M12	C3 ○	1; 2	4 - 6	O	46
DIN 374	TiN	3660	MF	M3 ÷ M36	C1 ● C2; C3 ◒	1; 2	4 - 8 4 - 6	O / E	56
DIN 374	OX	3690	MF	M3 ÷ M36	C1 ○	1; 2	3 - 5	O	56



SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

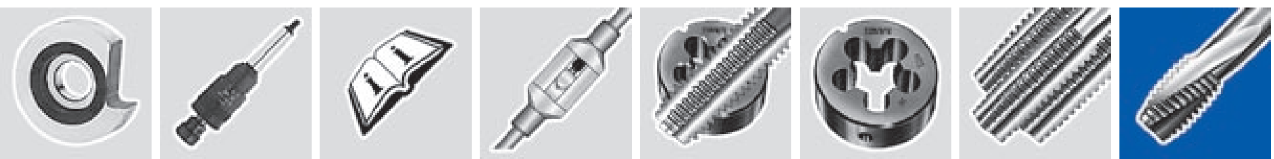
C

Zušlechtěné a nástrojové oceli s pevností do 1100 N/mm²
Heat-treated steels and tool steels up to 1100 N/mm²



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 374	TiN	4260	MF	M3 ÷ M36	C1; C3 C2	● ◒	3; 4; 5	6 - 8 4 - 6	O / E	56
DIN 374	OX	4290	MF	M3 ÷ M36	C1	○	3; 4; 5	3 - 5	O	56
DIN 374	TiCN	3580	MF	M3 ÷ M36	C1; C3 C2	◒ ●	1; 2	4 - 8	O / E	58
DIN 374	OX	3590	MF	M3 ÷ M36	C1; C2; C3	○	1; 2	4 - 8	O	58
DIN 374	TiCN	4680	MF	M3 ÷ M36	C1; C3 C2	○ ●	3; 4; 5	3 - 5 6 - 8	O O / E	58
DIN 374	OX	4690	MF	M3 ÷ M36	C1; C2; C3	○	3; 4; 5	3 - 5	O	58
DIN 5156	TiN	3662	G	G1/16" ÷ G11/2"	C1 C2; C3	● ◒	1; 2	4 - 8 4 - 6	O / E	64
DIN 5156	OX	3692	G	G1/16" ÷ G11/2"	C1	○	1; 2	3 - 5	O	64
DIN 5156	TiN	4262	G	G1/16" ÷ G11/2"	C1; C3 C2	● ◒	3; 4; 5	6 - 8 4 - 6	O / E	64
DIN 5156	OX	4292	G	G1/16" ÷ G11/2"	C1	○	3; 4; 5	3 - 5	O	64

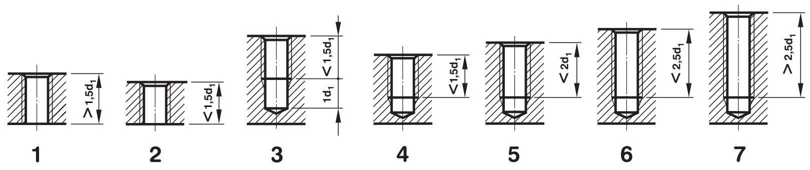


Volba závitníku dle obráběného materiálu
Tap Selection According To Material Groups

SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

D

Vysoce legované a zušlechtěné oceli s pevností do 1400 N/mm²
High-alloyed steels and heat-treated steels up to 1400 N/mm²



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

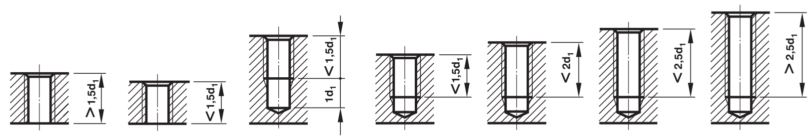
Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application	Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 371	PM TiAlN	1920	M	M3 ÷ M10	D1 ◒ D2 ●	1; 2	3 - 6 4 - 8	O1)	45
DIN 376	PM TiAlN	3920	M	M12	D1 ◒ D2 ●	1; 2	3 - 6 4 - 8	O1)	46
DIN 371	PM TiAlN	2820	M	M3 ÷ M10	D1 ◒ D2 ●	3; 4	3 - 6 4 - 8	O1)	45
DIN 371	PM TiAlN	2870	M	M3 ÷ M10	D1; D2 ●	3; 4	5 - 10	O1)	45
DIN 376	PM TiAlN	4820	M	M12	D1 ◒ D2 ●	3; 4	3 - 6 4 - 8	O1)	46
DIN 376	PM TiAlN	4870	M	M12	D1; D2 ●	3; 4	5 - 10	O1)	46

O1) Řezný olej určený pro těžkoobrobitelné materiály / Cutting oil intended for high resistance steels

SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

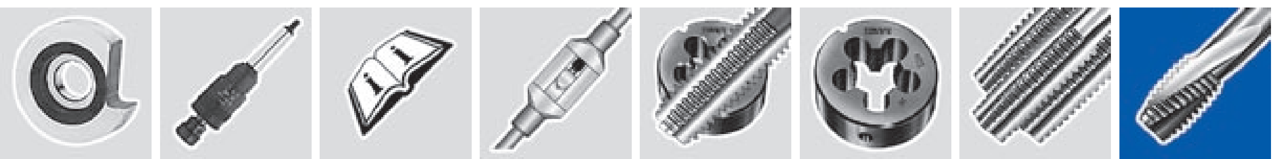
E

Nerezavějící a žáruvzdorné oceli
Stainless steels and heat resisting steels



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 371	TiN	1710	M	M3 ÷ M10	E1 E2	◒	1; 2	6 - 10 4 - 7	O	37
DIN 376	TiN	3710	M	M12 ÷ M20	E1 E2	◒	1; 2	6 - 10 4 - 7	O	38
DIN 371	TiN	2210	M	M3 ÷ M10	E1 E2	◒	3; 4; 5	6 - 10 4 - 7	O	37
DIN 376	TiN	4210	M	M12 ÷ M20	E1 E2	◒	3; 4; 5	6 - 10 4 - 7	O	38
DIN 371	TiN	1660	M	M3 ÷ M10	E1 E2	●	1; 2	8 - 12 5 - 8	O	39
DIN 371	OX	1690	M	M3 ÷ M10	E1 E2	◒	1; 2	4 - 7 3 - 5	O	39
DIN 371	PM TiAlN	1870	M	M3 ÷ M10	E1 E2	●	1; 2	8 - 14 6 - 10	O	39
DIN 376	TiN	3660	M	M3 ÷ M36	E1 E2	●	1; 2	8 - 12 5 - 8	O	41
DIN 376	OX	3690	M	M3 ÷ M36	E1 E2	◒	1; 2	4 - 7 3 - 5	O	41
DIN 376	PM TiAlN	3870	M	M12	E1 E2	●	1; 2	8 - 14 6 - 10	O	41
DIN 371	TiN	2260	M	M3 ÷ M10	E1 E2	●	3; 4; 5	8 - 14 6 - 10	O	40
DIN 371	OX	2290	M	M3 ÷ M10	E1 E2	◒	3; 4; 5	4 - 7 3 - 5	O	40
DIN 371	PM TiAlN	2320	M	M3 ÷ M10	E1 E2	●	3; 4; 5	8 - 14 6 - 10	O	40
DIN 376	TiN	4260	M	M3 ÷ M36	E1 E2	●	3; 4; 5	8 - 14 6 - 10	O	42
DIN 376	OX	4290	M	M3 ÷ M36	E1 E2	◒	3; 4; 5	4 - 7 3 - 5	O	42
DIN 376	PM TiAlN	4320	M	M12	E1 E2	●	3; 4; 5	8 - 14 6 - 10	O	42
DIN 374	TiN	3660	MF	M3 ÷ M36	E1 E2	●	1; 2	8 - 12 5 - 8	O	56
DIN 374	OX	3690	MF	M3 ÷ M36	E1 E2	◒	1; 2	4 - 7 3 - 5	O	56
DIN 374	TiN	4260	MF	M3 ÷ M36	E1 E2	●	3; 4; 5	8 - 14 6 - 10	O	56
DIN 374	OX	4290	MF	M3 ÷ M36	E1 E2	◒	3; 4; 5	4 - 7 3 - 5	O	56
DIN 5156	TiN	3662	G	G1/16" ÷ G11/2"	E1 E2	●	1; 2	8 - 12 5 - 8	O	64
DIN 5156	OX	3692	G	G1/16" ÷ G11/2"	E1 E2	◒	1; 2	4 - 7 3 - 5	O	64
DIN 5156	TiN	4262	G	G1/16" ÷ G11/2"	E1 E2	●	3; 4; 5	8 - 14 6 - 10	O	64
DIN 5156	OX	4292	G	G1/16" ÷ G11/2"	E1 E2	◒	3; 4; 5	4 - 7 3 - 5	O	64

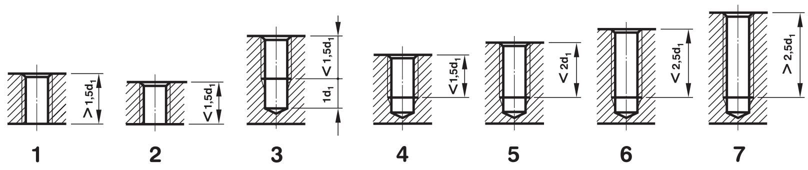


Volba závitníku dle obráběného materiálu
Tap Selection According To Material Groups

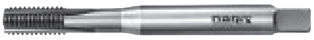
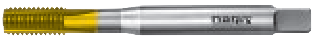
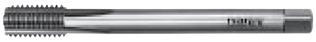
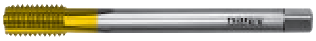
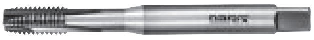
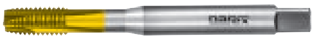
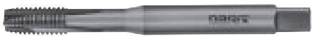
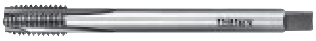
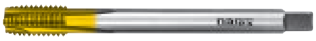
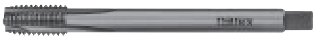
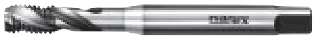
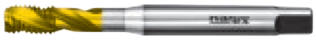
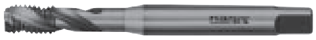
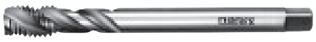
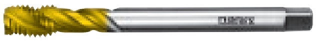
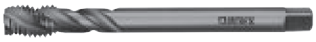
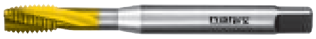
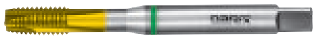
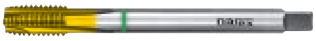
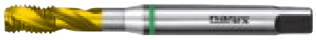
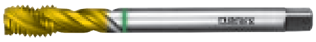
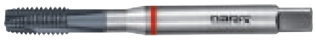
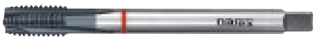
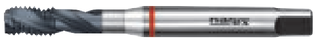
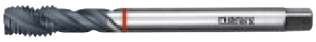
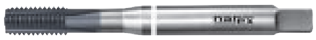
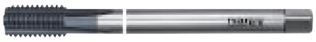
SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

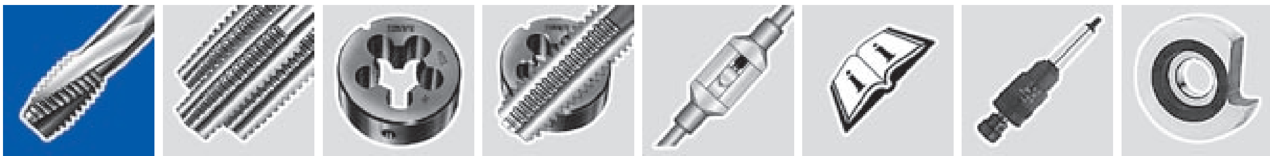
F

Litiny
Cast iron



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

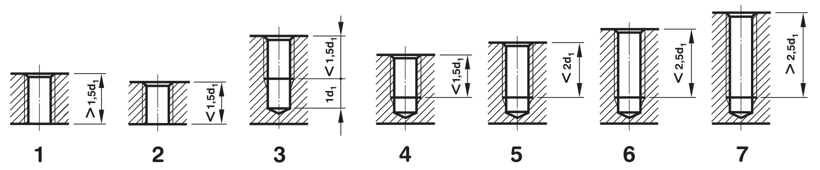
Norma Standard			Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min		Strana Page
DIN 371			1000	M	M3 ÷ M10	F1	○	1 ÷ 6	7 - 10	E	29
DIN 371	TiN		1010	M	M3 ÷ M10	F1	◒	1 ÷ 6	8 - 12	E	29
DIN 376			3000	M	M3 ÷ M52	F1	○	1 ÷ 6	7 - 10	E	33
DIN 376	TiN		3010	M	M3 ÷ M52	F1	◒	1 ÷ 6	8 - 12	E	33
DIN 371			1500	M	M3 ÷ M10	F2	○	1; 2; 3	4 - 7	E	30
DIN 371	TiN		1510	M	M3 ÷ M10	F2	○	1; 2; 3	6 - 8	E	30
DIN 371	OX		1540	M	M3 ÷ M10	F2	○	1; 2; 3	4 - 7	E	30
DIN 376			3500	M	M3 ÷ M36	F2	○	1; 2; 3	4 - 7	E	34
DIN 376	TiN		3510	M	M3 ÷ M36	F2	○	1; 2; 3	6 - 8	E	34
DIN 376	OX		3540	M	M3 ÷ M36	F2	○	1; 2; 3	4 - 7	E	34
DIN 371			2050	M	M3 ÷ M10	F2	○	3; 4; 5; 6	4 - 7	E	31
DIN 371	TiN		2060	M	M3 ÷ M10	F2	◒	3; 4; 5; 6	6 - 8	E	31
DIN 371	OX		2090	M	M3 ÷ M10	F2	○	3; 4; 5; 6	4 - 7	E	31
DIN 376			4050	M	M3 ÷ M36	F2	○	3; 4; 5; 6	4 - 7	E	35
DIN 376	TiN		4060	M	M3 ÷ M36	F2	◒	3; 4; 5; 6	6 - 8	E	35
DIN 376	OX		4090	M	M3 ÷ M36	F2	○	3; 4; 5; 6	4 - 7	E	35
DIN 371	TiN		2410	M	M3 ÷ M10	F1 F2	○	1 ÷ 6	7 - 10 4 - 7	E	32
DIN 376	TiN		4410	M	M3 ÷ M36	F1 F2	○	1 ÷ 6	7 - 10 4 - 7	E	36
DIN 371	TiN		1710	M	M3 ÷ M10	F1 F2	◒	1; 2; 3	8 - 12 7 - 10	E	37
DIN 376	TiN		3710	M	M12 ÷ M20	F1 F2	◒	1; 2; 3	8 - 12 7 - 10	E	38
DIN 371	TiN		2210	M	M3 ÷ M10	F1 F2	◒	3, 4, 5, 6	8 - 12 7 - 10	E	37
DIN 376	TiN		4210	M	M12 ÷ M20	F1 F2	◒	3, 4, 5, 6	8 - 12 7 - 10	E	38
DIN 371	TiCN		1580	M	M3 ÷ M10	F2	○	1; 2; 3	7 - 10	E	43
DIN 376	TiCN		3580	M	M3 ÷ M36	F2	○	1; 2; 3	7 - 10	E	44
DIN 371	TiCN		2680	M	M3 ÷ M10	F2	○	3; 4; 5; 6	7 - 10	E	43
DIN 376	TiCN		4680	M	M3 ÷ M36	F2	○	3; 4; 5; 6	7 - 10	E	44
DIN 371	TiCN		1080	M	M3 ÷ M10	F1 F2	●	1 ÷ 6	15 - 20 10 - 15	E	49
DIN 376	TiCN		3080	M	M3 ÷ M36	F1 F2	●	1 ÷ 6	15 - 20 10 - 15	E	50



SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

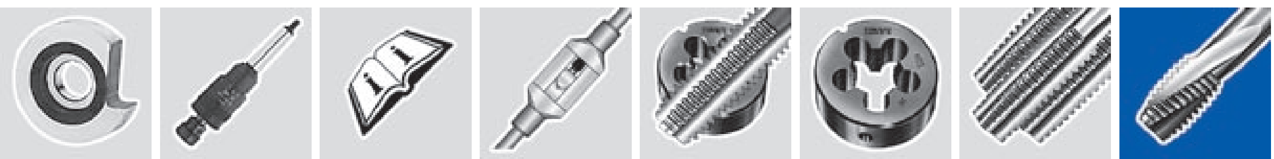
F

Litiny
Cast iron



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 352		0550	M	M3 ÷ M12	F2	○	1; 2; 3	4 - 7	E	71
DIN 352		0600	M	M3 ÷ M12	F2	○	3; 4; 5; 6	4 - 7	E	71
DIN 374		3000	MF	M3 ÷ M52	F1	○	1 ÷ 6	7 - 10	E	51
DIN 374	TiN	3010	MF	M3 ÷ M52	F1	◒	1 ÷ 6	8 - 12	E	51
DIN 374		3500	MF	M3 ÷ M36	F2	○	1; 2; 3	4 - 7	E	51
DIN 374	TiN	3510	MF	M3 ÷ M36	F2	○	1; 2; 3	6 - 8	E	51
DIN 374	OX	3540	MF	M3 ÷ M36	F2	○	1; 2; 3	4 - 7	E	51
DIN 374		4050	MF	M3 ÷ M36	F2	○	3; 4; 5; 6	4 - 7	E	54
DIN 374	TiN	4060	MF	M3 ÷ M36	F2	◒	3; 4; 5; 6	6 - 8	E	54
DIN 374	OX	4090	MF	M3 ÷ M36	F2	○	3; 4; 5; 6	4 - 7	E	54
DIN 374	TiCN	3580	MF	M3 ÷ M36	F2	○	1; 2; 3	7 - 10	E	58
DIN 374	TiCN	4680	MF	M3 ÷ M36	F2	○	3; 4; 5; 6	7 - 10	E	58
DIN 374	TiCN	3080	MF	M3 ÷ M36	F1 F2	●	1 ÷ 6	15 - 20 10 - 15	E	60
DIN 5156		3002	G	G1/16" ÷ G2"	F1	○	1 ÷ 6	7 - 10	E	62
DIN 5156	TiN	3012	G	G1/16" ÷ G2"	F1	◒	1 ÷ 6	8 - 12	E	62
DIN 5156		3502	G	G1/16" ÷ G2"	F2	○	1; 2; 3	4 - 7	E	62
DIN 5156	TiN	3512	G	G1/16" ÷ G2"	F2	○	1; 2; 3	6 - 8	E	62
DIN 5156		4052	G	G1/16" ÷ G2"	F2	○	3; 4; 5; 6	4 - 7	E	63
DIN 5156	TiN	4062	G	G1/16" ÷ G2"	F2	◒	3; 4; 5; 6	6 - 8	E	63
~ DIN 371		1004	UNC	5-40 ÷ 3/8-16	F1	○	1 ÷ 6	7 - 10	E	65
~ DIN 371	TiN	1014	UNC	5-40 ÷ 3/8-16	F1	◒	1 ÷ 6	8 - 12	E	65
~ DIN 376		3004	UNC	7/16-14 ÷ 11/8-7	F1	○	1 ÷ 6	7 - 10	E	67
~ DIN 376	TiN	3014	UNC	7/16-14 ÷ 11/8-7	F1	◒	1 ÷ 6	8 - 12	E	67
~ DIN 371		1504	UNC	5-40 ÷ 3/8-16	F2	○	1; 2; 3	4 - 7	E	65
~ DIN 371	TiN	1514	UNC	5-40 ÷ 3/8-16	F2	○	1; 2; 3	6 - 8	E	65
~ DIN 376		3504	UNC	7/16-14 ÷ 11/8-7	F2	○	1; 2; 3	4 - 7	E	67
~ DIN 376	TiN	3514	UNC	7/16-14 ÷ 11/8-7	F2	○	1; 2; 3	6 - 8	E	67
~ DIN 371		2054	UNC	5-40 ÷ 3/8-16	F2	○	3; 4; 5; 6	4-7	E	66

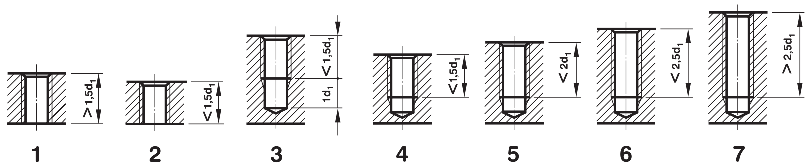


Volba závitníku dle obráběného materiálu
Tap Selection According To Material Groups

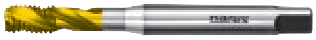
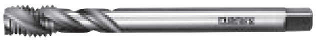
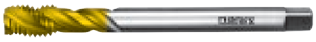
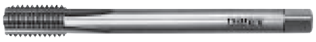
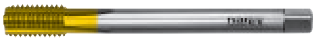
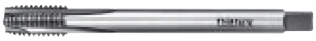
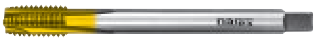
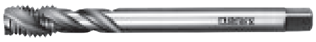
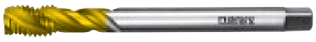
SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

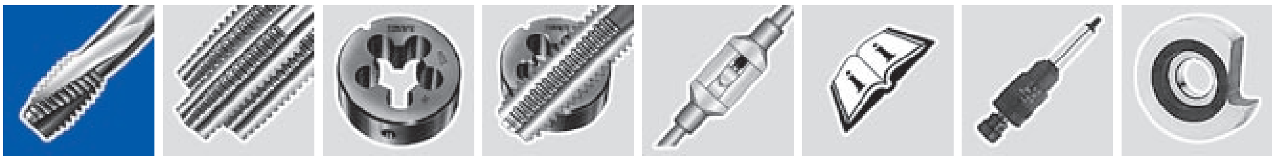
F

Litiny
Cast iron



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

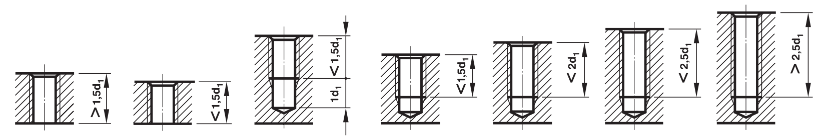
Norma Standard			Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
~ DIN 371	TiN		2064	UNC	5-40 ÷ 3/8-16	F2	◒	3; 4; 5; 6	6-8	E	66
~ DIN 376			4054	UNC	7/16-14 ÷ 1-7	F2	○	3; 4; 5; 6	4-7	E	68
~ DIN 376	TiN		4064	UNC	7/16-14 ÷ 1-7	F2	◒	3; 4; 5; 6	6-8	E	68
~ DIN 374			3005	UNF	5-44 ÷ 1 1/8-12	F1	○	1 ÷ 6	7-10	E	69
~ DIN 374	TiN		3015	UNF	5-44 ÷ 1 1/8-12	F1	◒	1 ÷ 6	8-12	E	69
~ DIN 374			3505	UNF	5-44 ÷ 1 1/8-12	F2	○	1; 2; 3	4-7	E	69
~ DIN 374	TiN		3515	UNF	5-44 ÷ 1 1/8-12	F2	○	1; 2; 3	6-8	E	69
~ DIN 374			4055	UNF	5-44 ÷ 1-12	F2	○	3; 4; 5; 6	4-7	E	70
~ DIN 374	TiN		4065	UNF	5-44 ÷ 1-12	F2	◒	3; 4; 5; 6	6-8	E	70



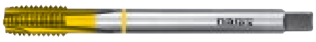
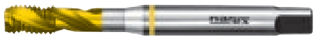
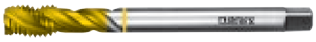
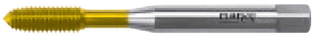
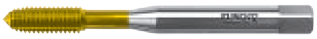
SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

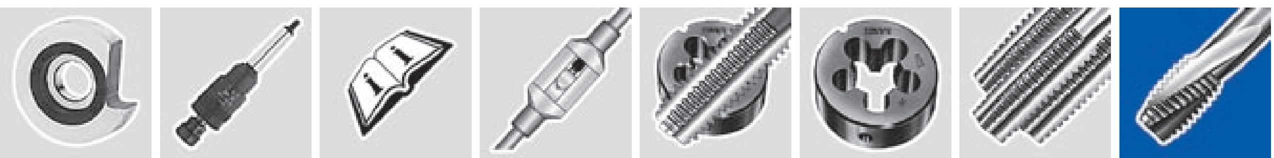
G

Hliník měkký
Unalloyed aluminium



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard			Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 371	TiN		1610	M	M3 ÷ M10	G	●	1; 2	15-35	E	47
DIN 376	TiN		3610	M	M3 ÷ M36	G	●	1; 2	15-35	E	48
DIN 371	TiN		2710	M	M3 ÷ M10	G	●	3; 4; 5	15-35	E / O	47
DIN 376	TiN		4710	M	M3 ÷ M36	G	●	3; 4; 5	15-35	E / O	48
DIN 2174	TiN		2910	M	M3 ÷ M12	G	○	1 ÷ 7	15-35	O	72
DIN 2174	TiN		2960	M	M3 ÷ M12	G	●	1 ÷ 7	15-35	O	72

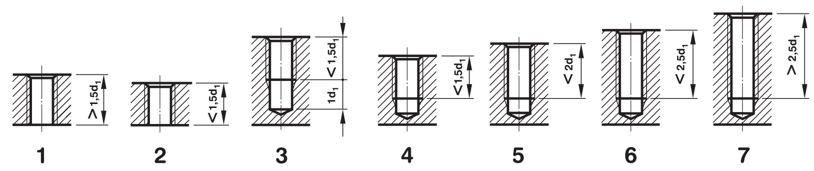


Volba závitníku dle obráběného materiálu
Tap Selection According To Material Groups

SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

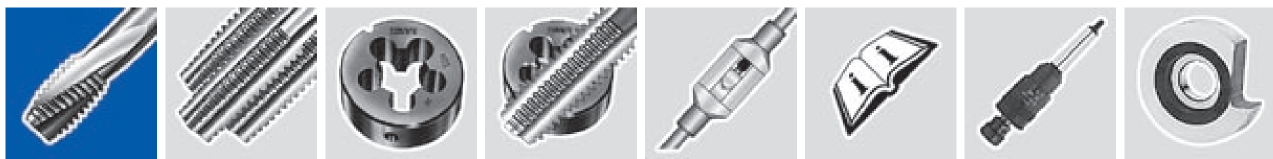
H

Hliník legovaný
Aluminium alloys



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min		Strana Page
DIN 371		1000	M	M3 ÷ M10	H1; H2	○	2	12 - 15	E	29
DIN 371	TiN	1010	M	M3 ÷ M10	H1 H2	○ ◒	2	12 - 15 14 - 20	E	29
DIN 376		3000	M	M3 ÷ M52	H1; H2	○	2	12 - 15	E	33
DIN 376	TiN	3010	M	M3 ÷ M52	H1 H2	○ ◒	2	12 - 15 14 - 20	E	33
DIN 371		1500	M	M3 ÷ M10	H1 H2	◒ ○	1; 2	14 - 20 12 - 15	E	30
DIN 371	TiN	1510	M	M3 ÷ M10	H1 H2	● ○	1; 2	15 - 30 14 - 20	E	30
DIN 371	OX	1540	M	M3 ÷ M10	H1 H2	◒ ○	1; 2	14 - 20 12 - 15	E	30
DIN 371		1750	M	M3 ÷ M10	H1 H2	◒ ○	2	14 - 20 12 - 15	E	30
DIN 376		3500	M	M3 ÷ M36	H1 H2	◒ ○	1; 2	14 - 20 12 - 15	E	34
DIN 376	TiN	3510	M	M3 ÷ M36	H1 H2	● ○	1; 2	15 - 30 14 - 20	E	34
DIN 376	OX	3540	M	M3 ÷ M36	H1 H2	◒ ○	1; 2	14 - 20 12 - 15	E	34
DIN 371		2050	M	M3 ÷ M10	H1 H2	◒ ○	3; 4; 5	14 - 20 12 - 15	E	31
DIN 371	TiN	2060	M	M3 ÷ M10	H1 H2	● ◒	3; 4; 5	15 - 30 14 - 20	E	31
DIN 371	OX	2090	M	M3 ÷ M10	H1 H2	◒ ○	3; 4; 5	14 - 20 12 - 15	E	31
DIN 376		4050	M	M3 ÷ M36	H1 H2	◒ ○	3; 4; 5	14 - 20 12 - 15	E	35
DIN 376	TiN	4060	M	M3 ÷ M36	H1 H2	● ◒	3; 4; 5	15 - 30 14 - 20	E	35
DIN 376	OX	4090	M	M3 ÷ M36	H1 H2	◒ ○	3; 4; 5	14 - 20 12 - 15	E	35
DIN 371	TiN	2360	M	M3 ÷ M10	H1	◒	3; 4; 5	14 - 20	E	32
DIN 371	OX	2390	M	M3 ÷ M10	H1	◒	3; 4; 5	14 - 20	E	32
DIN 376	TiN	4360	M	M3 ÷ M36	H1	◒	3; 4; 5	14 - 20	E	36
DIN 376	OX	4390	M	M3 ÷ M36	H1	◒	3; 4; 5	14 - 20	E	36
DIN 371	TiN	1710	M	M3 ÷ M10	H1; H2	◒	1; 2	12 - 20	E	37
DIN 376	TiN	3710	M	M12 ÷ M20	H1; H2	◒	1; 2	12 - 20	E	38
DIN 371	TiN	2210	M	M3 ÷ M10	H1; H2	◒	3; 4; 5	12 - 20	E	37
DIN 376	TiN	4210	M	M12 ÷ M20	H1; H2	◒	3; 4; 5	12 - 20	E	38
DIN 371	TiCN	1580	M	M3 ÷ M10	H2	●	1; 2	15 - 30	E	43
DIN 371	OX	1590	M	M3 ÷ M10	H2	○	1; 2	12 - 15	E	43
DIN 376	TiCN	3580	M	M3 ÷ M36	H2	●	1; 2	15 - 30	E	44

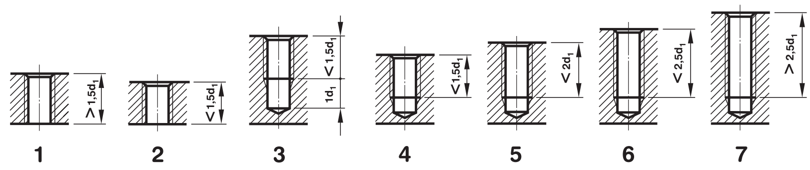


Volba závitníku dle obráběného materiálu
Tap Selection According To Material Groups

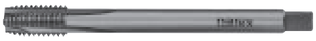
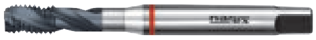
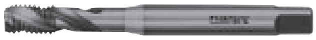
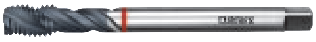
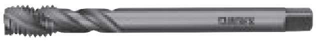
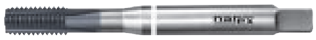
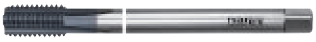
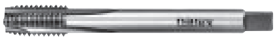
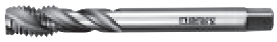
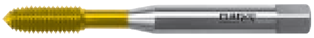
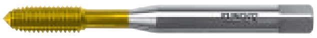
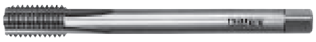
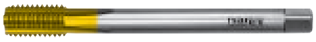
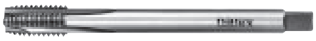
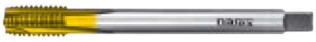
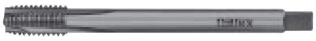
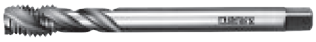
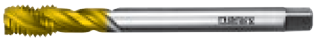
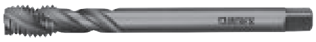
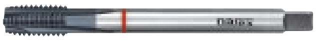
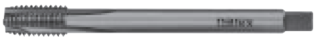
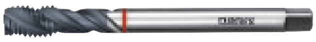
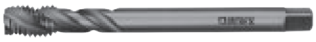
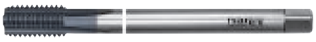
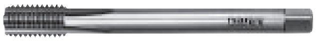
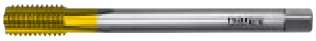
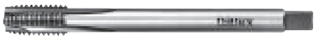
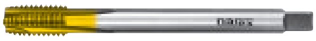
SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

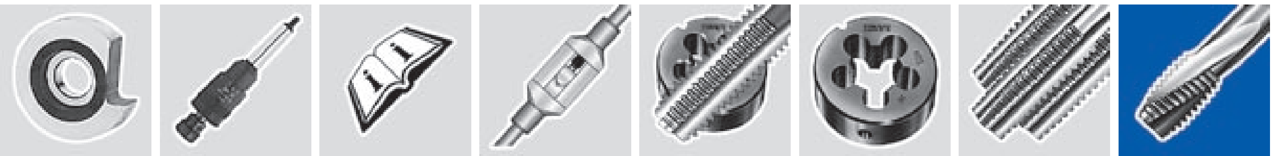
H

Hliník legovaný
Aluminium alloys



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard			Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application	Typ otvoru Hole type	V_c m/min		Strana Page
DIN 376	OX		3590	M	M3 ÷ M36	H2 ○	1; 2	12 - 15	E	44
DIN 371	TiCN		2680	M	M3 ÷ M10	H2 ◒	3; 4; 5; 6	12 - 20	E	43
DIN 371	OX		2690	M	M3 ÷ M10	H2 ○	3; 4; 5; 6	12 - 15	E	43
DIN 376	TiCN		4680	M	M3 ÷ M36	H2 ◒	3; 4; 5; 6	12 - 20	E	44
DIN 376	OX		4690	M	M3 ÷ M36	H2 ○	3; 4; 5; 6	12 - 15	E	44
DIN 371	TiCN		1080	M	M3 ÷ M10	H2 ◒	2; 3	12 - 20	E	49
DIN 376	TiCN		3080	M	M3 ÷ M36	H2 ◒	2; 3	12 - 20	E	50
DIN 352			0550	M	M3 ÷ M12	H1 ◒ H2 ○	1; 2	14 - 20 12 - 15	E	71
DIN 352			0600	M	M3 ÷ M12	H1 ◒ H2 ○	3; 4; 5	14 - 20 12 - 15	E	71
DIN 2174	TiN		2910	M	M3 ÷ M12	H1 ○	1 ÷ 7	12 - 15	E / O	72
DIN 2174	TiN		2960	M	M3 ÷ M12	H1 ●	1 ÷ 7	15 - 30	E / O	72
DIN 374			3000	MF	M3 ÷ M52	H1; H2 ○	2	12 - 15	E	51
DIN 374	TiN		3010	MF	M3 ÷ M52	H1 ○ H2 ◒	2	12 - 15 14 - 20	E	51
DIN 374			3500	MF	M3 ÷ M36	H1 ◒ H2 ○	1; 2	14 - 20 12 - 15	E	51
DIN 374	TiN		3510	MF	M3 ÷ M36	H1 ● H2 ○	1; 2	15 - 30 14 - 20	E	51
DIN 374	OX		3540	MF	M3 ÷ M36	H1 ◒ H2 ○	1; 2	14 - 20 12 - 15	E	51
DIN 374			4050	MF	M3 ÷ M36	H1 ◒ H2 ○	3; 4; 5	14 - 20 12 - 15	E	54
DIN 374	TiN		4060	MF	M3 ÷ M36	H1 ● H2 ◒	3; 4; 5	15 - 30 14 - 20	E	54
DIN 374	OX		4090	MF	M3 ÷ M36	H1 ◒ H2 ○	3; 4; 5	14 - 20 12 - 15	E	54
DIN 374	TiCN		3580	MF	M3 ÷ M36	H2 ●	1; 2	15 - 30	E	58
DIN 374	OX		3590	MF	M3 ÷ M36	H2 ○	1; 2	12 - 15	E	58
DIN 374	TiCN		4680	MF	M3 ÷ M36	H2 ◒	3; 4; 5; 6	12 - 20	E	58
DIN 374	OX		4690	MF	M3 ÷ M36	H2 ○	3; 4; 5; 6	12 - 15	E	58
DIN 374	TiCN		3080	MF	M3 ÷ M36	H2 ◒	2; 3	12 - 20	E	60
DIN 5156			3002	G	G1/16" ÷ G2"	H1; H2 ○	2	12 - 15	E	62
DIN 5156	TiN		3012	G	G1/16" ÷ G2"	H1 ○ H2 ◒	2	12 - 15 14 - 20	E	62
DIN 5156			3502	G	G1/16" ÷ G2"	H1 ◒ H2 ○	1; 2	14 - 20 12 - 15	E	62
DIN 5156	TiN		3512	G	G1/16" ÷ G2"	H1 ● H2 ○	1; 2	15 - 30 14 - 20	E	62

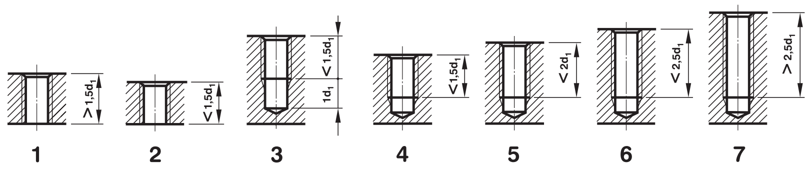


Volba závitníku dle obráběného materiálu
Tap Selection According To Material Groups

SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

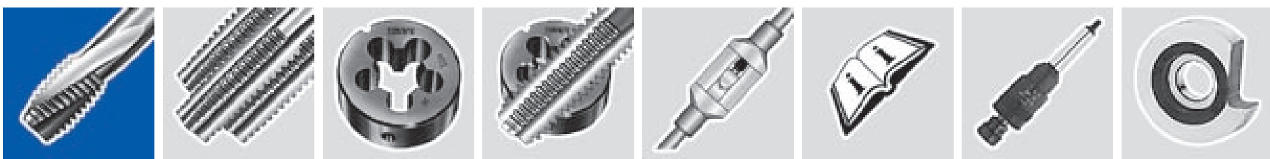
H

Hliník legovaný
Aluminium alloys



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

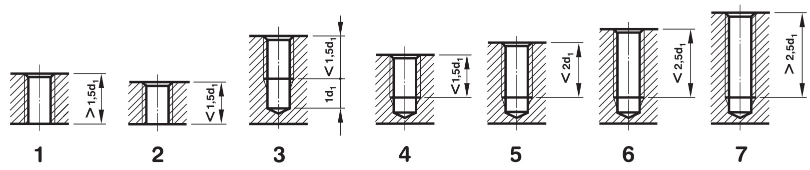
Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 5156		4052	G	G1/16" ÷ G2"	H1 H2	◒ ○	3; 4; 5	14 - 20 12 - 15	E	63
DIN 5156	TiN	4062	G	G1/16" ÷ G2"	H1 H2	● ◒	3; 4; 5	15 - 30 14 - 20	E	63
~ DIN 371		1004	UNC	5-40 ÷ 3/8-16	H1; H2	○	2	12 - 15	E	65
~ DIN 371	TiN	1014	UNC	5-40 ÷ 3/8-16	H1 H2	○ ◒	2	12 - 15 14 - 20	E	65
~ DIN 376		3004	UNC	7/16-14 ÷ 1 1/8-7	H1; H2	○	2	12 - 15	E	67
~ DIN 376	TiN	3014	UNC	7/16-14 ÷ 1 1/8-7	H1 H2	○ ◒	2	12 - 15 14 - 20	E	67
~ DIN 371		1504	UNC	5-40 ÷ 3/8-16	H1 H2	◒ ○	1; 2	14 - 20 12 - 15	E	65
~ DIN 371	TiN	1514	UNC	5-40 ÷ 3/8-16	H1 H2	● ○	1; 2	15 - 30 14 - 20	E	65
~ DIN 376		3504	UNC	7/16-14 ÷ 1 1/8-7	H1 H2	◒ ○	1; 2	14 - 20 12 - 15	E	67
~ DIN 376	TiN	3514	UNC	7/16-14 ÷ 1 1/8-7	H1 H2	● ○	1; 2	15 - 30 14 - 20	E	67
~ DIN 371		2054	UNC	5-40 ÷ 3/8-16	H1 H2	◒ ○	3; 4; 5	14 - 20 12 - 15	E	66
~ DIN 371	TiN	2064	UNC	5-40 ÷ 3/8-16	H1 H2	● ◒	3; 4; 5	15 - 30 14 - 20	E	66
~ DIN 376		4054	UNC	7/16-14 ÷ 1-8	H1 H2	◒ ○	3; 4; 5	14 - 20 12 - 15	E	68
~ DIN 376	TiN	4064	UNC	7/16-14 ÷ 1-8	H1 H2	● ◒	3; 4; 5	15 - 30 14 - 20	E	68
~ DIN 374		3005	UNF	5-44 ÷ 1 1/8-12	H1 H2	○	2	12 - 15	E	69
~ DIN 374	TiN	3015	UNF	5-44 ÷ 1 1/8-12	H1 H2	○ ◒	2	12 - 15 14 - 20	E	69
~ DIN 374		3505	UNF	5-44 ÷ 1 1/8-12	H1 H2	◒ ○	1; 2	14 - 20 12 - 15	E	69
~ DIN 374	TiN	3515	UNF	5-44 ÷ 1 1/8-12	H1 H2	● ○	1; 2	15 - 30 14 - 20	E	69
~ DIN 374		4055	UNF	5-44 ÷ 1-12	H1 H2	◒ ○	3; 4; 5	14 - 20 12 - 15	E	70
~ DIN 374	TiN	4065	UNF	5-44 ÷ 1-12	H1 H2	● ◒	3; 4; 5	15 - 30 14 - 20	E	70



SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

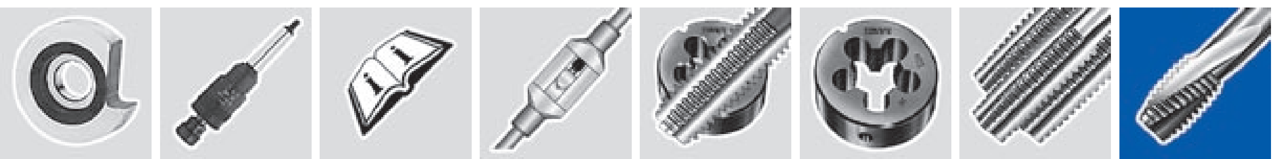
I

Měď čistá
Unalloyed copper



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 371	TiN	1510	M	M3 ÷ M10	I	○	1; 2	5 - 8	O	30
DIN 371	OX	1540	M	M3 ÷ M10	I	○	1; 2	5 - 8	O	30
DIN 376	TiN	3510	M	M3 ÷ M36	I	○	1; 2	5 - 8	O	34
DIN 376	OX	3540	M	M3 ÷ M36	I	○	1; 2	5 - 8	O	34
DIN 371	TiN	2060	M	M3 ÷ M10	I	○	3; 4; 5	5 - 8	O	31
DIN 376	TiN	4060	M	M3 ÷ M36	I	○	3; 4; 5	5 - 8	O	35
DIN 371	TiN	2360	M	M3 ÷ M10	I	○	3; 4; 5	5 - 8	O	32
DIN 371	OX	2390	M	M3 ÷ M10	I	○	3; 4; 5	5 - 8	O	32
DIN 376	TiN	4360	M	M3 ÷ M36	I	○	3; 4; 5	5 - 8	O	36
DIN 376	OX	4390	M	M3 ÷ M36	I	○	3; 4; 5	5 - 8	O	36
DIN 371	TiN	1710	M	M3 ÷ M10	I	◒	1; 2	8 - 12	O	37
DIN 376	TiN	3710	M	M12 ÷ M20	I	◒	1; 2	8 - 12	O	38
DIN 371	TiN	2210	M	M3 ÷ M10	I	◒	3; 4; 5	8 - 12	O	37
DIN 376	TiN	4210	M	M12 ÷ M20	I	◒	3; 4; 5	8 - 12	O	38
DIN 371	TiN	1660	M	M3 ÷ M10	I	●	1; 2	8 - 12	O	39
DIN 371	PM TiAlN	1870	M	M3 ÷ M10	I	●	1; 2	10 - 15	O	39
DIN 376	TiN	3660	M	M3 ÷ M10	I	●	1; 2	8 - 12	O	41
DIN 376	PM TiAlN	3870	M	M12	I	●	1; 2	10 - 15	O	41
DIN 371	TiN	2260	M	M3 ÷ M10	I	●	3; 4; 5	8 - 12	O	40
DIN 371	PM TiAlN	2320	M	M3 ÷ M10	I	●	3; 4; 5	10 - 15	O	40
DIN 376	TiN	4260	M	M3 ÷ M36	I	●	3; 4; 5	8 - 12	O	42
DIN 376	PM TiAlN	4320	M	M12	I	●	3; 4; 5	10 - 15	O	42
DIN 2174	TiN	2910	M	M3 ÷ M12	I	○	1 ÷ 7	15 - 25	O	72
DIN 2174	TiN	2960	M	M3 ÷ M12	I	●	1 ÷ 7	15 - 30	O	72
DIN 374	TiN	3510	MF	M3 ÷ M36	I	○	1; 2	5 - 8	O	51
DIN 374	OX	3540	MF	M3 ÷ M36	I	○	1; 2	5 - 8	O	51
DIN 374	TiN	4060	MF	M3 ÷ M36	I	○	3; 4; 5	5 - 8	O	54
DIN 374	TiN	3660	MF	M3 ÷ M36	I	●	1; 2	8 - 12	O	56



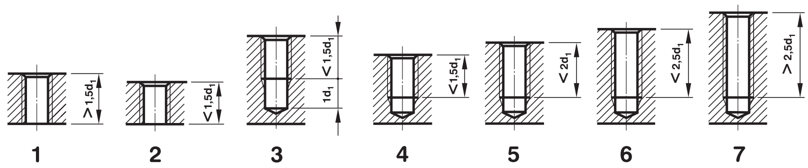
Stimer Ltd.

Volba závitníku dle obráběného materiálu
Tap Selection According To Material Groups

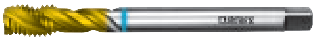
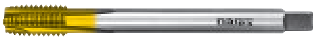
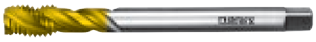
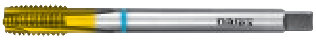
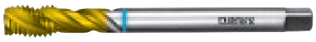
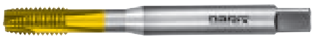
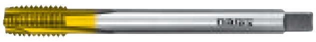
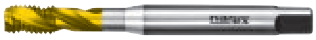
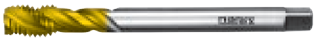
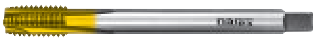
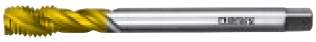
SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

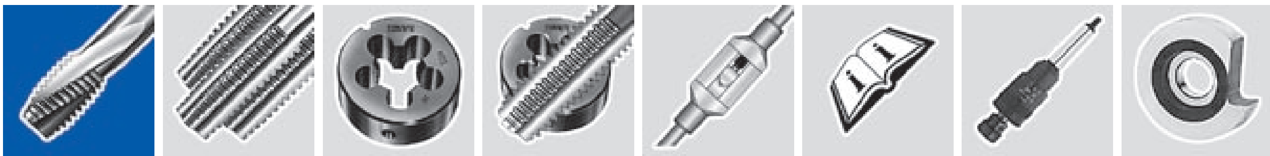
I

Měď čistá
Unalloyed copper



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

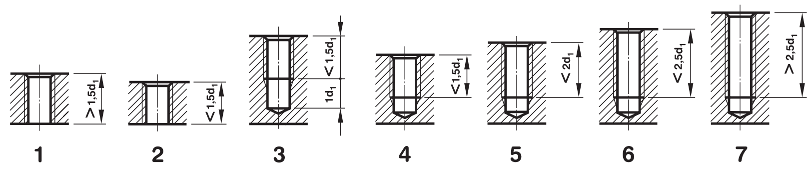
Norma Standard			Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application	Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 374	TiN		4260	MF	M3 ÷ M36	I ●	3; 4; 5	8 - 12	O	56
DIN 5156	TiN		3512	G	G1/16" ÷ G2"	I ○	1; 2	5 - 8	O	62
DIN 5156	TiN		4062	G	G1/16" ÷ G2"	I ○	3; 4; 5	5 - 8	O	63
DIN 5156	TiN		3662	G	G1/16" ÷ G1 1/2"	I ●	1; 2	8 - 12	O	64
DIN 5156	TiN		4262	G	G1/16" ÷ G1 1/2"	I ●	3; 4; 5	8 - 12	O	64
~ DIN 371	TiN		1514	UNC	5-40 ÷ 3/8-16	I ○	1; 2	5 - 8	O	65
~ DIN 376	TiN		3514	UNC	7/16-14 ÷ 1 1/8-7	I ○	1; 2	5 - 8	O	67
~ DIN 371	TiN		2064	UNC	5-40 ÷ 3/8-16	I ○	3; 4; 5	5 - 8	O	66
~ DIN 376	TiN		4064	UNC	7/16-14 ÷ 1-7	I ○	3; 4; 5	5 - 8	O	68
~ DIN 374	TiN		3515	UNF	5-44 ÷ 1 1/8-12	I ○	1; 2	5 - 8	O	69
~ DIN 374	TiN		4065	UNF	5-44 ÷ 1-12	I ○	3; 4; 5	5 - 8	O	70



SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

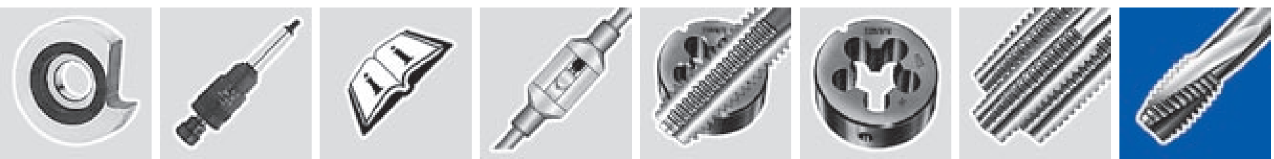
J

Slitiny mědi
Copper alloys



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 371		1000	M	M3 ÷ M10	J1	◒	2; 3	10 - 15	O / E	29
DIN 371	TiN	1010	M	M3 ÷ M10	J1	●	2; 3	15 - 25	O / E	29
DIN 376		3000	M	M3 ÷ M52	J1	◒	2; 3	10 - 15	O / E	33
DIN 376	TiN	3010	M	M3 ÷ M52	J1	●	2; 3	15 - 25	O / E	33
DIN 371		1500	M	M3 ÷ M10	J1 J2	○	1; 2	12 - 20 10 - 15	O / E O	30
DIN 371	TiN	1510	M	M3 ÷ M10	J1 J2	◒ ○	1; 2	15 - 25 12 - 20	O / E O	30
DIN 371	OX	1540	M	M3 ÷ M10	J1 J2	○	1; 2	10 - 15 6 - 10	O / E O	30
DIN 376		3500	M	M3 ÷ M36	J1 J2	○	1; 2	12 - 20 10 - 15	O / E O	34
DIN 376	TiN	3510	M	M3 ÷ M36	J1 J2	◒ ○	1; 2	15 - 25 12 - 20	O / E O	34
DIN 376	OX	3540	M	M3 ÷ M36	J1 J2	○	1; 2	10 - 15 6 - 10	O / E O	34
DIN 371		2050	M	M3 ÷ M10	J2	○	3; 4; 5	6 - 10	O	31
DIN 371	TiN	2060	M	M3 ÷ M10	J2	◒	3; 4; 5	10 - 15	O	31
DIN 371	OX	2090	M	M3 ÷ M10	J2	○	3; 4; 5	6 - 10	O	31
DIN 376		4050	M	M3 ÷ M36	J2	○	3; 4; 5	6 - 10	O	35
DIN 376	TiN	4060	M	M3 ÷ M36	J2	◒	3; 4; 5	10 - 15	O	35
DIN 376	OX	4090	M	M3 ÷ M36	J2	○	3; 4; 5	6 - 10	O	35
DIN 371		2400	M	M3 ÷ M10	J1	◒	3; 4; 5; 6	10 - 15	O / E	32
DIN 371	TiN	2410	M	M3 ÷ M10	J1	●	3; 4; 5; 6	12 - 20	O / E	32
DIN 376		4400	M	M3 ÷ M36	J1	◒	3; 4; 5; 6	10 - 15	O / E	36
DIN 376	TiN	4410	M	M3 ÷ M36	J1	●	3; 4; 5; 6	12 - 20	O / E	36
DIN 371	TiN	1710	M	M3 ÷ M10	J2	◒	1; 2	12 - 20	O	37
DIN 376	TiN	3710	M	M12 ÷ M20	J2	◒	1; 2	12 - 20	O	38
DIN 371	TiN	2210	M	M3 ÷ M10	J2	◒	3; 4; 5	12 - 20	O	37
DIN 376	TiN	4210	M	M12 ÷ M20	J2	◒	3; 4; 5	12 - 20	O	38
DIN 371	TiN	1660	M	M3 ÷ M10	J2	●	1; 2	10 - 15	O	39
DIN 371	PM TiAlN	1870	M	M3 ÷ M10	J2	●	1; 2	12 - 20	O	39
DIN 376	TiN	3660	M	M3 ÷ M36	J2	●	1; 2	10 - 15	O	41
DIN 376	PM TiAlN	3870	M	M12	J2	●	1; 2	12 - 20	O	41



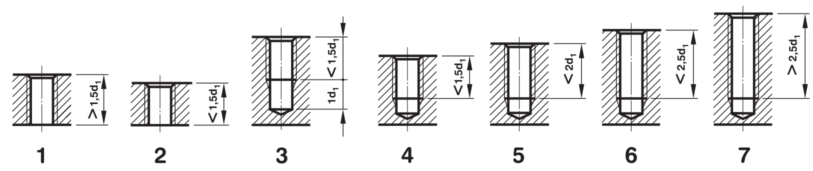
Stimer Ltd.

Volba závitníku dle obráběného materiálu
Tap Selection According To Material Groups

SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

J

Slitiny mědi
Copper alloys



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 371	TiN	2260	M	M3 ÷ M10	J2	●	3; 4; 5	10 - 15	O	40
DIN 371	PM TiAlN	2320	M	M3 ÷ M10	J2	●	3; 4; 5	12 - 20	O	40
DIN 376	TiN	4260	M	M3 ÷ M36	J2	●	3; 4; 5	10 - 15	O	42
DIN 376	PM TiAlN	4320	M	M12	J2	●	3; 4; 5	12 - 20	O	42
DIN 371	TiCN	1080	M	M3 ÷ M10	J1	○	2; 3	10 - 15	O / E	49
DIN 376	TiCN	3080	M	M3 ÷ M36	J1	○	2; 3	10 - 15	O / E	50
DIN 352		0550	M	M3 ÷ M12	J1 J2	○	1; 2	12 - 20 10 - 15	O / E O	71
DIN 352		0600	M	M3 ÷ M12	J2	○	3; 4; 5	6 - 10	O	71
DIN 374		3000	MF	M3 ÷ M52	J1	◒	2; 3	10 - 15	O / E	51
DIN 374	TiN	3010	MF	M3 ÷ M52	J1	●	2; 3	15 - 25	O / E	51
DIN 374		3500	MF	M3 ÷ M36	J1 J2	○	1; 2	12 - 20 10 - 15	O / E O	51
DIN 374	TiN	3510	MF	M3 ÷ M36	J1 J2	◒ ○	1; 2	15 - 25 12 - 20	O / E O	51
DIN 374	OX	3540	MF	M3 ÷ M36	J1 J2	○	1; 2	10 - 15 6 - 10	O / E O	51
DIN 374		4050	MF	M3 ÷ M36	J2	○	3; 4; 5	6 - 10	O	54
DIN 374	TiN	4060	MF	M3 ÷ M36	J2	◒	3; 4; 5	10 - 15	O	54
DIN 374	OX	4090	MF	M3 ÷ M36	J2	○	3; 4; 5	6 - 10	O	54
DIN 374	TiN	3660	MF	M3 ÷ M36	J2	●	1; 2	10 - 15	O	56
DIN 374	TiN	4260	MF	M3 ÷ M36	J2	●	3; 4; 5	10 - 15	O	56
DIN 374	TiCN	3080	MF	M3 ÷ M36	J1	○	2; 3	10 - 15	O / E	60
DIN 5156		3002	G	G1/16" ÷ G2"	J1	◒	2; 3	10 - 15	O / E	62
DIN 5156	TiN	3012	G	G1/16" ÷ G2"	J1	●	2; 3	15 - 25	O / E	62
DIN 5156		3502	G	G1/16" ÷ G2"	J1 J2	○	1; 2	12 - 20 10 - 15	O / E O	62
DIN 5156	TiN	3512	G	G1/16" ÷ G2"	J1 J2	◒ ○	1; 2	15 - 25 12 - 20	O / E O	62
DIN 5156		4052	G	G1/16" ÷ G2"	J2	○	3; 4; 5	6 - 10	O	63
DIN 5156	TiN	4062	G	G1/16" ÷ G2"	J2	◒	3; 4; 5	10 - 15	O	63
DIN 5156	TiN	3662	G	G1/16" ÷ G1 1/2"	J2	●	1; 2	10 - 15	O	64
DIN 5156	TiN	4262	G	G1/16" ÷ G1 1/2"	J2	●	3; 4; 5	10 - 15	O	64
~ DIN 371		1004	UNC	5-40 ÷ 3/8-16	J1	◒	2; 3	10 - 15	O / E	65

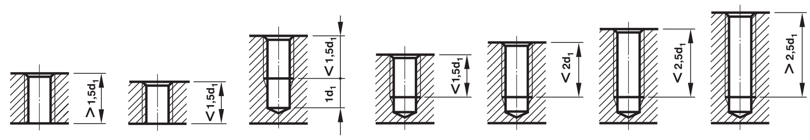
Volba závitníku dle obráběného materiálu
Tap Selection According To Material Groups

Stimer Ltd.

SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

J

Slitiny mědi
Copper alloys



● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard		Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
~ DIN 371	TiN	1014	UNC	5-40 ÷ 3/8-16	J1	●	2; 3	15 -25	O / E	65
~ DIN 376		3004	UNC	7/16-14 ÷ 1 1/8-7	J1	◒	2; 3	10 - 15	O / E	67
~ DIN 376	TiN	3014	UNC	7/16-14 ÷ 1 1/8-7	J1	●	2; 3	15 - 25	O / E	67
~ DIN 371		1504	UNC	5-40 ÷ 3/8-16	J1 J2	○	1; 2	12 - 20 10 - 15	O / E O	65
~ DIN 371	TiN	1514	UNC	5-40 ÷ 3/8-16	J1 J2	◒ ○	1; 2	15 - 25 12 - 20	O / E O	65
~ DIN 376		3504	UNC	7/16-14 ÷ 1 1/8-7	J1 J2	○	1; 2	12 - 20 10 - 15	O / E O	67
~ DIN 376	TiN	3514	UNC	7/16-14 ÷ 1 1/8-7	J1 J2	◒ ○	1; 2	15 - 25 12 - 20	O / E O	67
~ DIN 371		2054	UNC	5-40 ÷ 3/8-16	J2	○	3; 4; 5	6 - 10	O	66
~ DIN 371	TiN	2064	UNC	5-40 ÷ 3/8-16	J2	◒	3; 4; 5	10 - 15	O	66
~ DIN 376		4054	UNC	7/16-14 ÷ 1-7	J2	○	3; 4; 5	6 - 10	O	68
~ DIN 376	TiN	4064	UNC	7/16-14 ÷ 1-7	J2	◒	3; 4; 5	10 - 15	O	68
~ DIN 374		3005	UNF	5-44 ÷ 1 1/8-12	J1	◒	2; 3	10 - 15	O / E	69
~ DIN 374	TiN	3015	UNF	5-44 ÷ 1 1/8-12	J1	●	2; 3	15 - 25	O / E	69
~ DIN 374		3505	UNF	5-44 ÷ 1 1/8-12	J1 J2	○	1; 2	12 - 20 10 - 15	O / E O	69
~ DIN 374	TiN	3515	UNF	5-44 ÷ 1 1/8-12	J1 J2	◒ ○	1; 2	15 - 25 12 - 20	O / E O	69
~ DIN 374		4055	UNF	5-44 ÷ 1-12	J2	○	3; 4; 5	6 - 10	O	70
~ DIN 374	TiN	4065	UNF	5-44 ÷ 1-12	J2	◒	3; 4; 5	10 - 15	O	70

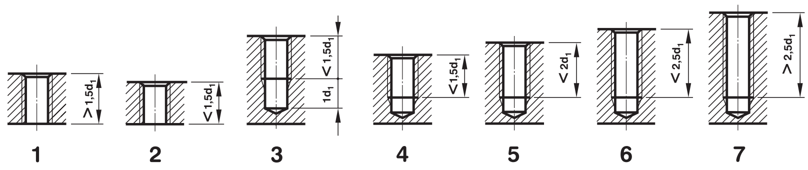
Stimer Ltd.

Volba závitníku dle obráběného materiálu
Tap Selection According To Material Groups

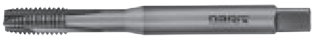
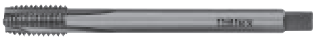
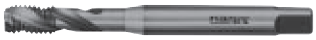
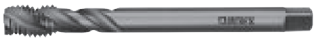
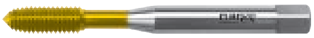
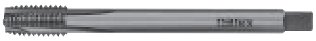
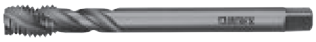
SKUPINA OBRÁBĚNÉHO MATERIÁLU
MATERIAL GROUP

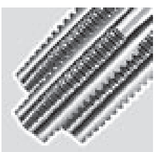
K

Zinek
Zinc

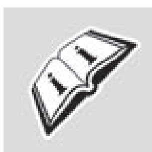


● doporučené užití / recommended use ◒ možno použít / possible use ○ omezené použití / alternative use

Norma Standard			Kat. č. Cat. No.	Závit Thread	Rozsah ∅-Range	Použití Application		Typ otvoru Hole type	V_c m/min	💧	Strana Page
DIN 371	OX		1540	M	M3 ÷ M10	K	●	1; 2	10 - 12	E	30
DIN 376	OX		3540	M	M3 ÷ M36	K	●	1; 2	10 - 12	E	34
DIN 371	OX		2090	M	M3 ÷ M10	K	●	3; 4; 5	8 - 10	E	31
DIN 376	OX		4090	M	M3 ÷ M36	K	●	3; 4; 5	8 - 10	E	35
DIN 2174	TiN		2910	M	M3 ÷ M12	K	●	1 ÷ 7	15 - 20	E	72
DIN 374	OX		3540	MF	M3 ÷ M36	K	●	1; 2	10 - 12	E	51
DIN 374	OX		4090	MF	M3 ÷ M36	K	●	3; 4; 5	8 - 10	E	54



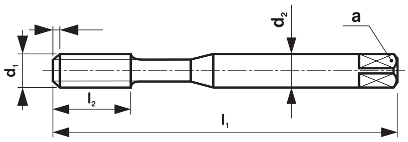


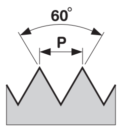
METRICKÝ ZÁVIT ISO
METRIC ISO THREAD **M**

DIN 371

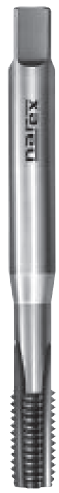
MATERIÁL / MATERIAL **HSSE**

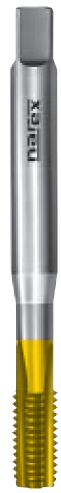
BEZ BAREVNÉHO OZNAČENÍ / NO RING





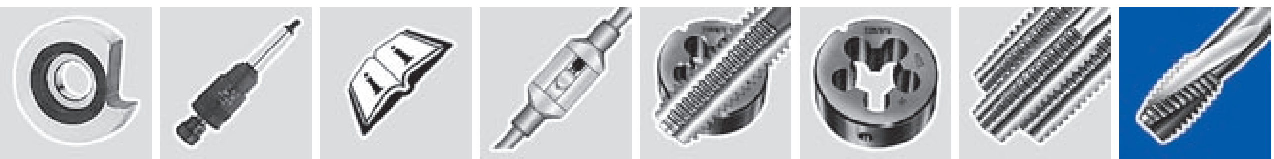
z = počet drážek / z = number of flutes





Provedení / Execution			TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials	
Použití Application	Doporučené / Recommended		**J1**
	Možné / Possible	**J1**	**F1, H2**
Katalogové číslo / Cat. No.		**1000**	**1010**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		C / 2P	C / 2P

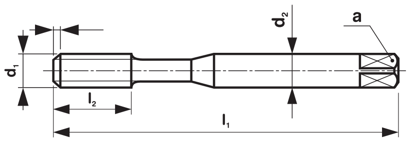
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223042	Code 223042
M 3	0,5	56	9	3,5	2,7	3	2,5	M3/1000	M3/1010
M 3,5	0,6	56	11	4	3	3	2,9	M3,5/1000	M3,5/1010
M 4	0,7	63	12	4,5	3,4	3	3,3	M4/1000	M4/1010
M 4,5	0,75	70	13	6	4,9	3	3,7	M4,5/1000	M4,5/1010
M 5	0,8	70	13	6	4,9	3	4,2	M5/1000	M5/1010
M 6	1	80	15	6	4,9	3	5	M6/1000	M6/1010
M 7	1	80	15	7	5,5	3	6	M7/1000	M7/1010
M 8	1,25	90	18	8	6,2	3	6,8	M8/1000	M8/1010
M 9	1,25	90	18	9	7	3	7,8	M9/1000	M9/1010
M 10	1,5	100	20	10	8	3	8,5	M10/1000	M10/1010

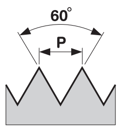


METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 371

MATERIÁL / MATERIAL HSSE



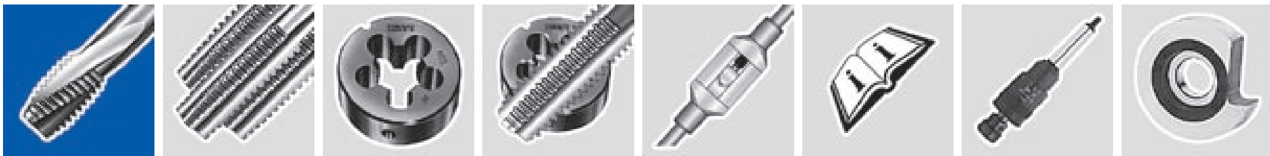


z = počet drážek / z = number of flutes

BEZ BAREVNÉHO OZNAČENÍ / NO RING

Provedení / Execution				TiN	OX	
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials				
Použití Application	Doporučené / Recommended			**A, B, H1**	**A, B1, B3, K**	
	Možné / Possible	**A, B, H1**	**A, B, H1**	**J1**	**B2, H1**	**H1**
Katalogové číslo / Cat. No.		**1500**	**1500**	**1510**	**1540**	**1750**
Lícování / Tolerance		ISO2 (6H)	ISO3 (6G)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		B / 4-6P	B / 4-6P	B / 4-6P	B / 4-6P	B / 4-6P

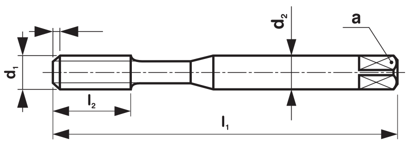
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223043**	Code **223043**	Code **223043**	Code **223043**	Code **223043**
M 2	0,4	45	8	2,8	2,1	3	1,6	M2/1500	M2/1500	M2/1510	M2/1540	M2/1750
M 2,5	0,45	50	9	2,8	2,1	3	2,05	M2,5/1500	M2,5/1500	M2,5/1510	M2,5/1540	M2,5/1750
M 3	0,5	56	9	3,5	2,7	3	2,5	M3/1500	M3/1500	M3/1510	M3/1540	M3/1750
M 3,5	0,6	56	11	4	3	3	2,9	M3,5/1500	M3,5/1500	M3,5/1510	M3,5/1540	M3,5/1750
M 4	0,7	63	12	4,5	3,4	3	3,3	M4/1500	M4/1500	M4/1510	M4/1540	M4/1750
M 4,5	0,75	70	13	6	4,9	3	3,7	M4,5/1500	M4,5/1500	M4,5/1510	M4,5/1540	M4,5/1750
M 5	0,8	70	13	6	4,9	3	4,2	M5/1500	M5/1500	M5/1510	M5/1540	M5/1750
M 6	1	80	15	6	4,9	3	5	M6/1500	M6/1500	M6/1510	M6/1540	M6/1750
M 7	1	80	15	7	5,5	3	6	M7/1500	M7/1500	M7/1510	M7/1540	M7/1750
M 8	1,25	90	18	8	6,2	3	6,8	M8/1500	M8/1500	M8/1510	M8/1540	M8/1750
M 9	1,25	90	18	9	7	3	7,8	M9/1500	M9/1500	M9/1510	M9/1540	M9/1750
M 10	1,5	100	20	10	8	3	8,5	M10/1500	M10/1500	M10/1510	M10/1540	M10/1750

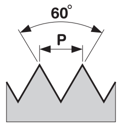


METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 371

MATERIÁL / MATERIAL HSSE



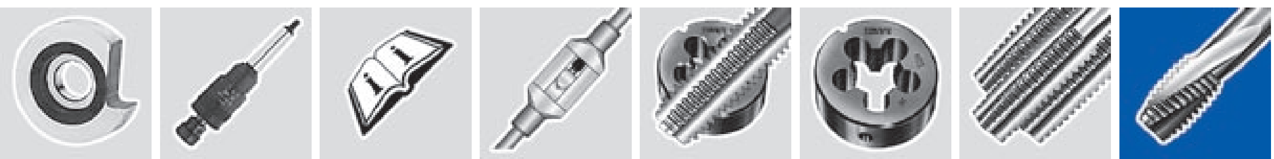


z = počet drážek / z = number of flutes

BEZ BAREVNÉHO OZNAČENÍ / NO RING

Provedení / Execution		cca 35°	cca 35°	cca 35° TiN	cca 35° OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů / See Register and corresponding group of materials			
Použití / Application	Doporučené / Recommended			**B2, B3, H1**	**K**
	Možné / Possible	**B2, B3, H1**	**B2, B3, H1**	**F2, H2, J2**	**B2, B3, H1**
Katalogové číslo / Cat. No.		**2050**	**2050**	**2060**	**2090**
Lícování / Tolerance		ISO2 (6H)	ISO3 (6G)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		C / 2,5P	C / 2,5P	C / 2,5P	C / 2,5P

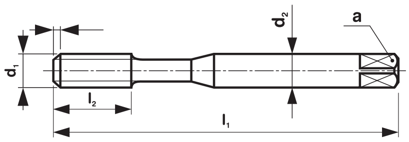
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223044	Code 223044	Code 223044	Code 223044
M 2	0,4	45	6	2,8	2,1	3	1,6	M2/2090	M2/2090	M2/2060	M2/2090
M 2,5	0,45	50	7,5	2,8	2,1	3	2,05	M2,5/2050	M2,5/2050	M2,5/2060	M2,5/2090
M 3	0,5	56	5	3,5	2,7	3	2,5	M3/2050	M3/2050	M3/2060	M3/2090
M 3,5	0,6	56	6	4	3	3	2,9	M3,5/2050	M3,5/2050	M3,5/2060	M3,5/2090
M 4	0,7	63	7	4,5	3,4	3	3,3	M4/2050	M4/2050	M4/2060	M4/2090
M 4,5	0,75	70	8	6	4,9	3	3,7	M4,5/2050	M4,5/2050	M4,5/2060	M4,5/2090
M 5	0,8	70	8	6	4,9	3	4,2	M5/2050	M5/2050	M5/2060	M5/2090
M 6	1	80	10	6	4,9	3	5	M6/2050	M6/2050	M6/2060	M6/2090
M 7	1	80	10	7	5,5	3	6	M7/2050	M7/2050	M7/2060	M7/2090
M 8	1,25	90	13	8	6,2	3	6,8	M8/2050	M8/2050	M8/2060	M8/2090
M 9	1,25	90	13	9	7	3	7,8	M9/2050	M9/2050	M9/2060	M9/2090
M 10	1,5	100	15	10	8	3	8,5	M10/2050	M10/2050	M10/2060	M10/2090

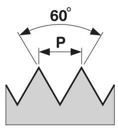


METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 371

MATERIÁL / MATERIAL — **HSSE**



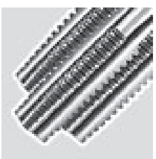


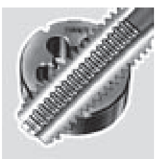
z = počet drážek / z = number of flutes

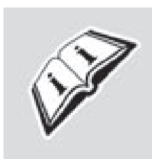
BEZ BAREVNÉHO OZNAČENÍ / NO RING

Provedení / Execution		cca 15°	cca 15° TiN	cca 35° TiN	cca 35° OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití / Application	Doporučené / Recommended		**J1**	**A, B1,**	**A, B1**
	Možné / Possible	**J1**	**B2**	**B2, H1**	**B2, H1**
Katalogové číslo / Cat. No.		**2400**	**2410**	**2360**	**2390**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		C / 3P	C / 3P	C / 2,5P	C / 2,5P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223044	Code 223044	Code 223044	Code 223044
M 3	0,5	56	5	3,5	2,7	3	2,5	M3/2400	M3/2410	M3/2360	M3/2390
M 3,5	0,6	56	6	4	3	3	2,9	M3,5/2400	M3,5/2410	M3,5/2360	M3,5/2390
M 4	0,7	63	7	4,5	3,4	3	3,3	M4/2400	M4/2410	M4/2360	M4/2390
M 4,5	0,75	70	8	6	4,9	3	3,7	M4,5/2400	M4,5/2410	M4,5/2360	M4,5/2390
M 5	0,8	70	8	6	4,9	3	4,2	M5/2400	M5/2410	M5/2360	M5/2390
M 6	1	80	10	6	4,9	3	5	M6/2400	M6/2410	M6/2360	M6/2390
M 7	1	80	10	7	5,5	3	6	M7/2400	M7/2410	M7/2360	M7/2390
M 8	1,25	90	13	8	6,2	3	6,8	M8/2400	M8/2410	M8/2360	M8/2390
M 9	1,25	90	13	9	7	3	7,8	M9/2400	M9/2410	M9/2360	M9/2390
M 10	1,5	100	15	10	8	3	8,5	M10/2400	M10/2410	M10/2360	M10/2390





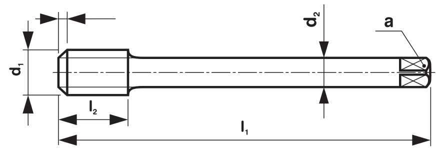
METRICKÝ ZÁVIT ISO
METRIC ISO THREAD

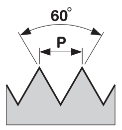
M

DIN 376

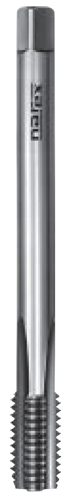
MATERIÁL / MATERIAL **HSSE**

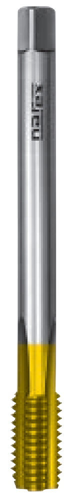
BEZ BAREVNÉHO OZNAČENÍ / NO RING

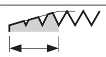




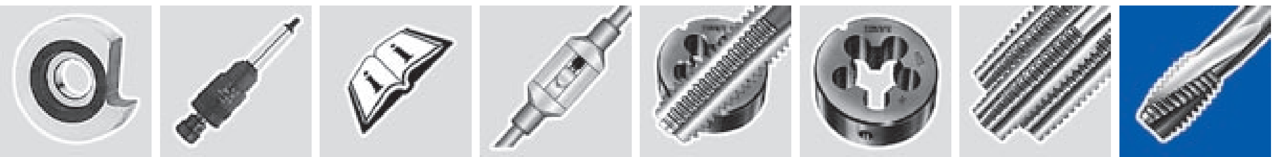
z = počet drážek / z = number of flutes





Provedení / Execution			TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials	
Použití Application	Doporučené / Recommended		**J1**
	Možné / Possible	**J1**	**F1, H2**
Katalogové číslo / Cat. No.		**3000**	**3010**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer 		C / 2P	C / 2P

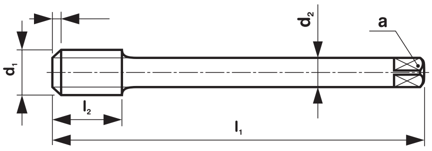
d_1	P	l_1	l_2	d_2	a	z	∅ mm	**Code 223042**	**Code 223042**
M 3	0,5	56	9	2,2	-	3	2,5	M3/3000	M3/3010
M 3,5	0,6	56	11	2,5	2,1	3	2,9	M3,5/3000	M3,5/3010
M 4	0,7	63	12	2,8	2,1	3	3,3	M4/3000	M4/3010
M 4,5	0,75	70	13	3,5	2,7	3	3,7	M4,5/3000	M4,5/3010
M 5	0,8	70	13	3,5	2,7	3	4,2	M5/3000	M5/3010
M 6	1	80	15	4,5	3,4	3	5	M6/3000	M6/3010
M 7	1	80	15	5,5	4,3	3	6	M7/3000	M7/3010
M 8	1,25	90	18	6	4,9	3	6,8	M8/3000	M8/3010
M 9	1,25	90	18	7	5,5	3	7,8	M9/3000	M9/3010
M 10	1,5	100	20	7	5,5	3	8,5	M10/3000	M10/3010
M 11	1,5	100	20	8	6,2	3	9,5	M11/3000	M11/3010
M 12	1,75	110	23	9	7	3	10,2	M12/3000	M12/3010
M 14	2	110	25	11	9	3	12	M14/3000	M14/3010
M 16	2	110	25	12	9	3	14	M16/3000	M16/3010
M 18	2,5	125	30	14	11	3	15,5	M18/3000	M18/3010
M 20	2,5	140	30	16	12	3	17,5	M20/3000	M20/3010
M 22	2,5	140	30	18	14,5	3	19,5	M22/3000	M22/3010
M 24	3	160	36	18	14,5	4	21	M24/3000	M24/3010
M 27	3	160	36	20	16	4	24	M27/3000	M27/3010
M 30	3,5	180	40	22	18	4	26,5	M30/3000	M30/3010
M 33	3,5	180	42	25	20	4	29,5	M33/3000	M33/3010
M 36	4	200	50	28	22	4	32	M36/3000	M36/3010
M 39	4	200	50	32	24	4	35	M39/3000	M39/3010
M 42	4,5	200	56	32	24	4	37,5	M42/3000	M42/3010
M 45	4,5	200	56	36	29	4	40,5	M45/3000	M45/3010
M 48	5	250	63	36	29	4	43	M48/3000	M48/3010
M 52	5	250	63	40	32	4	47	M52/3000	M52/3010

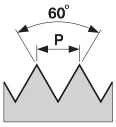


METRICKÝ ZÁVIT ISO
METRIC ISO THREAD **M**

DIN 376

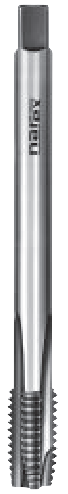
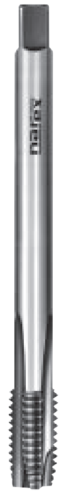
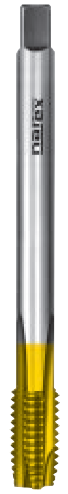
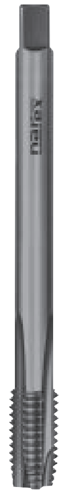
MATERIÁL / MATERIAL **HSSE**





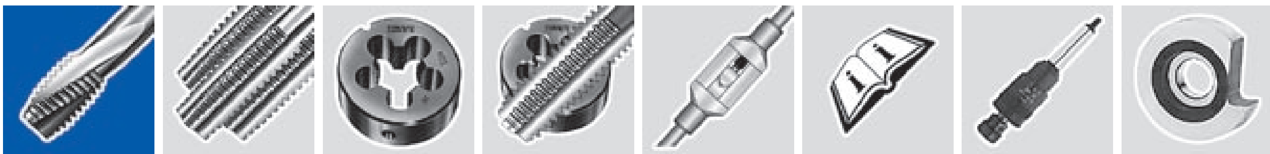
z = počet drážek / z = number of flutes

BEZ BAREVNÉHO OZNAČENÍ / NO RING

Provedení / Execution				TiN	OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití Application	Doporučené / Recommended			**A, B H1**	**A, B1, B3, K**
	Možné / Possible	**A, B, H1**	**A, B, H1**	**J1**	**B2, H1**
Katalogové číslo / Cat. No.		**3500**	**3500**	**3510**	**3540**
Lícování / Tolerance		ISO2 (6H)	ISO3 (6G)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		B / 4-6P	B / 4-6P	B / 4-6P	B / 4-6P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223043**	Code **223043**	Code **223043**	Code **223043**
M 3	0,5	56	9	2,2	-	3	2,5	M3/3500	M3/3500	M3/3510	M3/3540
M 3,5	0,6	56	11	2,5	2,1	3	2,9	M3,5/3500	M3,5/3500	M3,5/3510	M3,5/3540
M 4	0,7	63	12	2,8	2,1	3	3,3	M4/3500	M4/3500	M4/3510	M4/3540
M 4,5	0,75	70	13	3,5	2,7	3	3,7	M4,5/3500	M4,5/3500	M4,5/3510	M4,5/3540
M 5	0,8	70	13	3,5	2,7	3	4,2	M5/3500	M5/3500	M5/3510	M5/3540
M 6	1	80	15	4,5	3,4	3	5	M6/3500	M6/3500	M6/3510	M6/3540
M 7	1	80	15	5,5	4,3	3	6	M7/3500	M7/3500	M7/3510	M7/3540
M 8	1,25	90	18	6	4,9	3	6,8	M8/3500	M8/3500	M8/3510	M8/3540
M 9	1,25	90	18	7	5,5	3	7,8	M9/3500	M9/3500	M9/3510	M9/3540
M 10	1,5	100	20	7	5,5	3	8,5	M10/3500	M10/3500	M10/3510	M10/3540
M 11	1,5	100	20	8	6,2	3	9,5	M11/3500	M11/3500	M11/3510	M11/3540
M 12	1,75	110	23	9	7	3	10,2	M12/3500	M12/3500	M12/3510	M12/3540
M 14	2	110	25	11	9	3	12	M14/3500	M14/3500	M14/3510	M14/3540
M 16	2	110	25	12	9	3	14	M16/3500	M16/3500	M16/3510	M16/3540
M 18	2,5	125	30	14	11	3	15,5	M18/3500	M18/3500	M18/3510	M18/3540
M 20	2,5	140	30	16	12	3	17,5	M20/3500	M20/3500	M20/3510	M20/3540
M 22	2,5	140	30	18	14,5	3	19,5	M22/3500	M22/3500	M22/3510	M22/3540
M 24	3	160	36	18	14,5	4	21	M24/3500	M24/3500	M24/3510	M24/3540
M 27	3	160	36	20	16	4	24	M27/3500	M27/3500	M27/3510	M27/3540
M 30	3,5	180	40	22	18	4	26,5	M30/3500	M30/3500	M30/3510	M30/3540
M 33	3,5	180	42	25	20	4	29,5	M33/3500	M33/3500	M33/3510	M33/3540
M 36	4	200	50	28	22	4	32	M36/3500	M36/3500	M36/3510	M36/3540

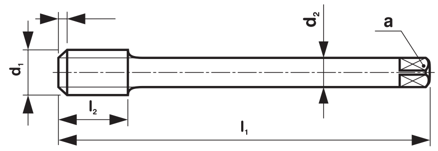


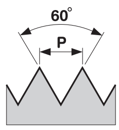
METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 376

MATERIÁL / MATERIAL — HSSE

BEZ BAREVNÉHO OZNAČENÍ / NO RING

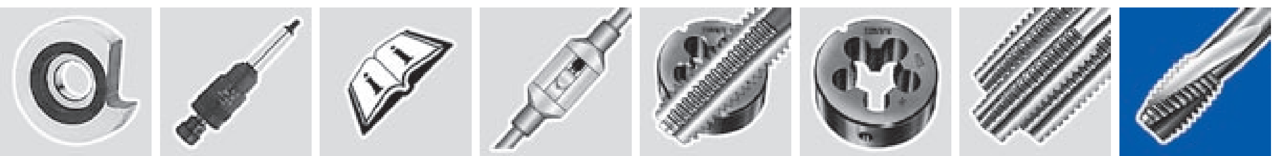




z = počet drážek / z = number of flutes

Provedení / Execution			cca 35°	cca 35° TiN	cca 35° OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití / Application	Doporučené / Recommended			**B2, B3, H1**	**K**
	Možné / Possible	**B2, B3, H1**	**B2, B3, H1**	**F2, H2, J2**	**B2, B3, H1**
Katalogové číslo / Cat. No.		**4050**	**4050**	**4060**	**4090**
Lícování / Tolerance		ISO2 (6H)	ISO3 (6G)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		C / 2,5P	C / 2,5P	C / 2,5P	C / 2,5P

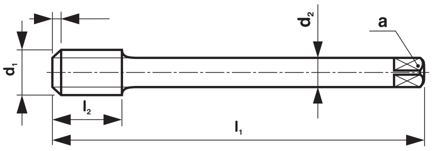
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223044**	Code **223044**	Code **223044**	Code **223044**
M 3	0,5	56	5	2,2	-	3	2,5	M3/4050	M3/4050	M3/4060	M3/4090
M 3,5	0,6	56	6	2,5	2,1	3	2,9	M3,5/4050	M3,5/4050	M3,5/4060	M3,5/4090
M 4	0,7	63	7	2,8	2,1	3	3,3	M4/4050	M4/4050	M4/4060	M4/4090
M 4,5	0,75	70	8	3,5	2,7	3	3,7	M4,5/4050	M4,5/4050	M4,5/4060	M4,5/4090
M 5	0,8	70	8	3,5	2,7	3	4,2	M5/4050	M5/4050	M5/4060	M5/4090
M 6	1	80	10	4,5	3,4	3	5	M6/4050	M6/4050	M6/4060	M6/4090
M 7	1	80	10	5,5	4,3	3	6	M7/4050	M7/4050	M7/4060	M7/4090
M 8	1,25	90	13	6	4,9	3	6,8	M8/4050	M8/4050	M8/4060	M8/4090
M 9	1,25	90	13	7	5,5	3	7,8	M9/4050	M9/4050	M9/4060	M9/4090
M 10	1,5	100	15	7	5,5	3	8,5	M10/4050	M10/4050	M10/4060	M10/4090
M 11	1,5	100	15	8	6,2	3	9,5	M11/4050	M11/4050	M11/4060	M11/4090
M 12	1,75	110	18	9	7	3	10,2	M12/4050	M12/4050	M12/4060	M12/4090
M 14	2	110	20	11	9	3	12	M14/4050	M14/4050	M14/4060	M14/4090
M 16	2	110	20	12	9	4	14	M16/4050	M16/4050	M16/4060	M16/4090
M 18	2,5	125	25	14	11	4	15,5	M18/4050	M18/4050	M18/4060	M18/4090
M 20	2,5	140	25	16	12	4	17,5	M20/4050	M20/4050	M20/4060	M20/4090
M 22	2,5	140	25	18	14,5	4	19,5	M22/4050	M22/4050	M22/4060	M22/4090
M 24	3	160	30	18	14,5	4	21	M24/4050	M24/4050	M24/4060	M24/4090
M 27	3	160	30	20	16	4	24	M27/4050	M27/4050	M27/4060	M27/4090
M 30	3,5	180	35	22	18	4	26,5	M30/4050	M30/4050	M30/4060	M30/4090
M 33	3,5	180	35	25	20	4	29,5	M33/4050	M33/4050	M33/4060	M33/4090
M 36	4	200	40	28	22	4	32	M36/4050	M36/4050	M36/4060	M36/4090

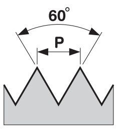


METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 376

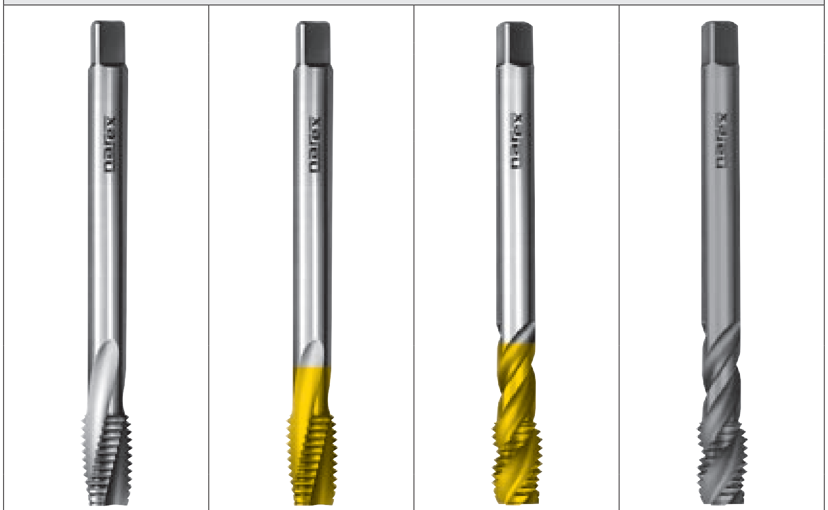
MATERIÁL / MATERIAL — HSSE

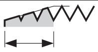




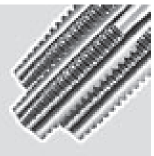
z = počet drážek / z = number of flutes

BEZ BAREVNÉHO OZNAČENÍ / NO RING

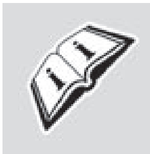


Provedení / Execution		cca 15°	cca 15° TiN	cca 35° TiN	cca 35° OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití / Application	Doporučené / Recommended		**J1**	**A, B1**	**A, B1**
	Možné / Possible	**J1**	**B2**	**B2, H1**	**B2, H1**
Katalogové číslo / Cat. No.		**4400**	**4410**	**4360**	**4390**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer 		C / 3P	C / 3P	C / 2,5P	C / 2,5P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223044	Code 223044	Code 223044	Code 223044
M 3	0,5	56	5	2,2	-	3	2,5	M3/4400	M3/4410	M3/4360	M3/4390
M 3,5	0,6	56	6	2,5	2,1	3	2,9	M3,5/4400	M3,5/4410	M3,5/4360	M3,5/4390
M 4	0,7	63	7	2,8	2,1	3	3,3	M4/4400	M4/4410	M4/4360	M4/4390
M 4,5	0,75	70	8	3,5	2,7	3	3,7	M4,5/4400	M4,5/4410	M4,5/4360	M4,5/4390
M 5	0,8	70	8	3,5	2,7	3	4,2	M5/4400	M5/4410	M5/4360	M5/4390
M 6	1	80	10	4,5	3,4	3	5	M6/4400	M6/4410	M6/4360	M6/4390
M 7	1	80	10	5,5	4,3	3	6	M7/4400	M7/4410	M7/4360	M7/4390
M 8	1,25	90	13	6	4,9	3	6,8	M8/4400	M8/4410	M8/4360	M8/4390
M 9	1,25	90	13	7	5,5	3	7,8	M9/4400	M9/4410	M9/4360	M9/4390
M 10	1,5	100	15	7	5,5	3	8,5	M10/4400	M10/4410	M10/4360	M10/4390
M 11	1,5	100	15	8	6,2	3	9,5	M11/4400	M11/4410	M11/4360	M11/4390
M 12	1,75	110	18	9	7	3	10,2	M12/4400	M12/4410	M12/4360	M12/4390
M 14	2	110	20	11	9	3	12	M14/4400	M14/4410	M14/4360	M14/4390
M 16	2	110	20	12	9	4	14	M16/4400	M16/4410	M16/4360	M16/4390
M 18	2,5	125	25	14	11	4	15,5	M18/4400	M18/4410	M18/4360	M18/4390
M 20	2,5	140	25	16	12	4	17,5	M20/4400	M20/4410	M20/4360	M20/4390
M 22	2,5	140	25	18	14,5	4	19,5	M22/4400	M22/4410	M22/4360	M22/4390
M 24	3	160	30	18	14,5	4	21	M24/4400	M24/4410	M24/4360	M24/4390
M 27	3	160	30	20	16	4	24	M27/4400	M27/4410	M27/4360	M27/4390
M 30	3,5	180	35	22	18	4	26,5	M30/4400	M30/4410	M30/4360	M30/4390
M 33	3,5	180	35	25	20	4	29,5	M33/4400	M33/4410	M33/4360	M33/4390
M 36	4	200	40	28	22	4	32	M36/4400	M36/4410	M36/4360	M36/4390

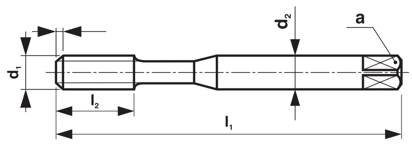


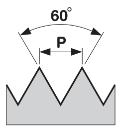


METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 371

MATERIÁL / MATERIAL HSSE

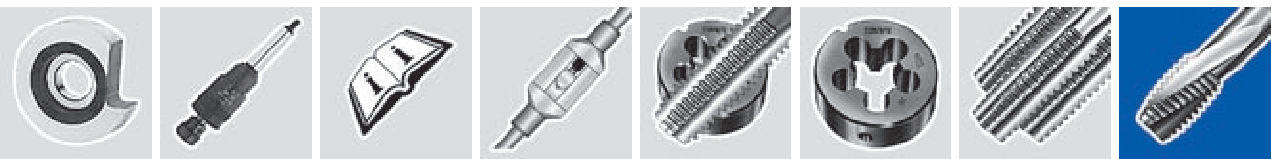




z = počet drážek / z = number of flutes

ZELENÝ PRUH / GREEN RING

Provedení / Execution									TiN	cca 35° TiN
Typ otvoru / Hole type									Viz Registr a příslušná skupina materiálů / See Register and corresponding group of materials	
Použití / Application	Doporučené / Recommended									
	Možné / Possible								**B, C, E, F, H, I, J2**	**B, C, E, F, H, I, J2**
Katalogové číslo / Cat. No.									**1710**	**2210**
Lícování / Tolerance									ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer									B / 4-6P	C / 2,5P
d_1	P	l_1	l_2	$l_{2R35°}$	d_2	a	z	∅ mm	Code **223043**	Code **223044**
M 3	0,5	56	9	5	3,5	2,7	3	2,5	M3/1710	M3/2210
M 3,5	0,6	56	11	6	4	3	3	2,9	M3,5/1710	M3,5/2210
M 4	0,7	63	12	7	4,5	3,4	3	3,3	M4/1710	M4/2210
M 4,5	0,75	70	13	8	6	4,9	3	3,7	M4,5/1710	M4,5/2210
M 5	0,8	70	13	8	6	4,9	3	4,2	M5/1710	M5/2210
M 6	1	80	15	10	6	4,9	3	5	M6/1710	M6/2210
M 7	1	80	15	10	7	5,5	3	6	M7/1710	M7/2210
M 8	1,25	90	18	13	8	6,2	3	6,8	M8/1710	M8/2210
M 9	1,25	90	18	13	9	7	3	7,8	M9/1710	M9/2210
M 10	1,5	100	20	15	10	8	3	8,5	M10/1710	M10/2210

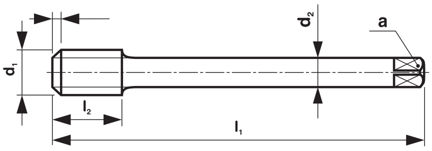


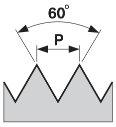
METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 376

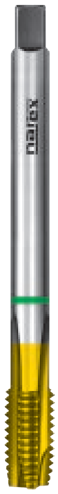
MATERIÁL / MATERIAL — HSSE

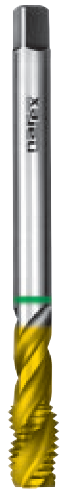
ZELENÝ PRUH / GREEN RING





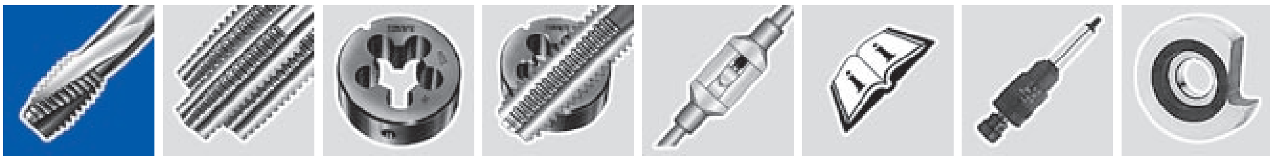
z = počet drážek / z = number of flutes





Provedení / Execution		TiN	cca 35° TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials	
Použití / Application	Doporučené / Recommended		
	Možné / Possible	**B, C, E, F, H, I, J2**	**B, C, E, F, H, I, J2**
Katalogové číslo / Cat. No.		**3710**	**4210**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		B / 4-6P	C / 2,5P

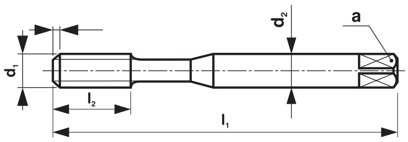
d_1	P	l_1	l_2	$l_{2R35°}$	d_2	a	z / $z_{R35°}$	∅ mm	Code **223043**	Code **223044**
M 3	0,5	56	9	5	2,2	-	3/3	2,5	M3/3710	M3/4210
M 3,5	0,6	56	11	6	2,5	2,1	3/3	2,9	M3,5/3710	M3,5/4210
M 4	0,7	63	12	7	2,8	2,1	3/3	3,3	M4/3710	M4/4210
M 4,5	0,75	70	13	8	3,5	2,7	3/3	3,7	M4,5/3710	M4,5/4210
M 5	0,8	70	13	8	3,5	2,7	3/3	4,2	M5/3710	M5/4210
M 6	1	80	15	10	4	3,4	3/3	5	M6/3710	M6/4210
M 7	1	80	15	10	4,5	4,3	3/3	6	M7/3710	M7/4210
M 8	1,25	90	18	13	6	4,9	3/3	6,8	M8/3710	M8/4210
M 9	1,25	90	18	13	7	5,5	3/3	7,8	M9/3710	M9/4210
M 10	1,5	100	20	15	7	5,5	3/3	8,5	M10/3710	M10/4210
M 11	1,5	100	20	15	8	6,2	3/3	9,5	M11/3710	M11/4210
M 12	1,75	110	23	18	9	7	3/3	10,2	M12/3710	M12/4210
M 14	2	110	25	20	11	9	3/3	12	M14/3710	M14/4210
M 16	2	110	25	20	12	9	3/4	14	M16/3710	M16/4210
M 18	2,5	125	30	25	14	11	3/4	15,5	M18/3710	M18/4210
M 20	2,5	140	30	25	16	12	3/4	17,5	M20/3710	M20/4210

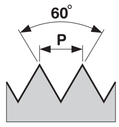


METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 371

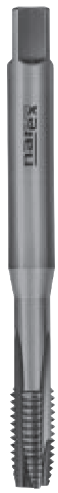
MATERIÁL / MATERIAL HSSE, HSSE PM





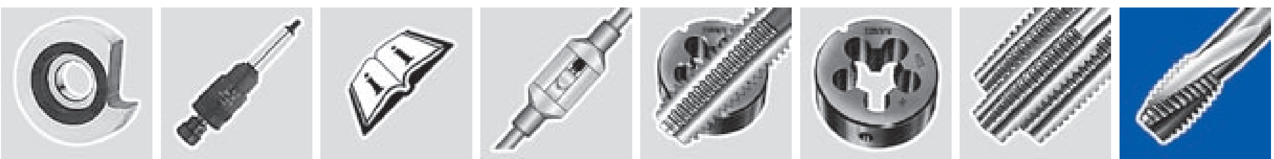
z = počet drážek / z = number of flutes

MODRÝ PRUH / BLUE RING


	TiN	OX	PM - TiAlN HL
Provedení / Execution	TiN	OX	PM - TiAlN HL
Typ otvoru / Hole type	Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials		
Použití / Application — Doporučené / Recommended	**C1, E, I, J2**		**C1, E, I, J2**
Použití / Application — Možné / Possible	**C2, C3**	**E**	**C2, C3**
Katalogové číslo / Cat. No.	**1660**	**1690**	**1870**
Lícování / Tolerance	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer	B / 4-6P	B / 4-6P	B / 4-6P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223043	Code 223043	Code 223043
M 3	0,5	56	9	3,5	2,7	3	2,5	M3/1660	M3/1690	M3/1870
M 3,5	0,6	56	11	4	3	3	2,9	M3,5/1660	M3,5/1690	M3,5/1870
M 4	0,7	63	12	4,5	3,4	3	3,3	M4/1660	M4/1690	M4/1870
M 4,5	0,75	70	13	6	4,9	3	3,7	M4,5/1660	M4,5/1690	M4,5/1870
M 5	0,8	70	13	6	4,9	3	4,2	M5/1660	M5/1690	M5/1870
M 6	1	80	15	6	4,9	3	5	M6/1660	M6/1690	M6/1870
M 7	1	80	15	7	5,5	3	6	M7/1660	M7/1690	M7/1870
M 8	1,25	90	18	8	6,2	3	6,8	M8/1660	M8/1690	M8/1870
M 9	1,25	90	18	9	7	3	7,8	M9/1660	M9/1690	M9/1870
M 10	1,5	100	20	10	8	3	8,5	M10/1660	M10/1690	M10/1870

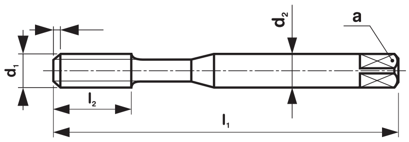


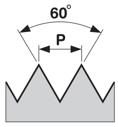
METRICKÝ ZÁVIT ISO
METRIC ISO THREAD

M

DIN 371

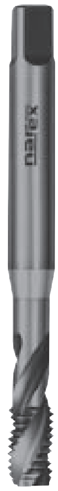
MATERIÁL / MATERIAL HSSE, HSSE PM





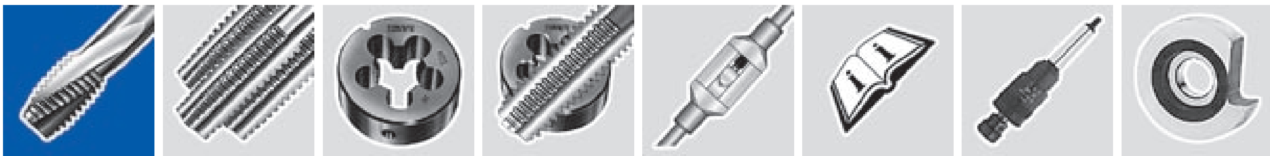
z = počet drážek / z = number of flutes

MODRÝ PRUH / BLUE RING


Provedení / Execution		cca 35° **TiN**	cca 35° **OX**	cca 35° **PM - TiAlN HL**
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials		
Použití Application	Doporučené / Recommended	**C1, C3, E, I, J2**		**C1, C3, E, I, J2**
	Možné / Possible	**C2**	**E**	**C2**
Katalogové číslo / Cat. No.		**2260**	**2290**	**2320**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		C / 2,5P	C / 2,5P	C / 2,5P

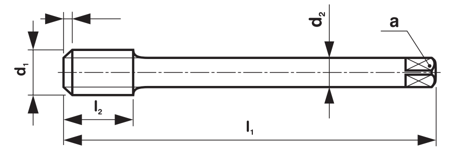
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223044	Code 223044	Code 223044
M 3	0,5	56	5	3,5	2,7	3	2,5	M3/2260	M3/2290	M3/2320
M 3,5	0,6	56	6	4	3	3	2,9	M3,5/2260	M3,5/2290	M3,5/2320
M 4	0,7	63	7	4,5	3,4	3	3,3	M4/2260	M4/2290	M4/2320
M 4,5	0,75	70	8	6	4,9	3	3,7	M4,5/2260	M4,5/2290	M4,5/2320
M 5	0,8	70	8	6	4,9	3	4,2	M5/2260	M5/2290	M5/2320
M 6	1	80	10	6	4,9	3	5	M6/2260	M6/2290	M6/2320
M 7	1	80	10	7	5,5	3	6	M7/2260	M7/2290	M7/2320
M 8	1,25	90	13	8	6,2	3	6,8	M8/2260	M8/2290	M8/2320
M 9	1,25	90	13	9	7	3	7,8	M9/2260	M9/2290	M9/2320
M 10	1,5	100	15	10	8	3	8,5	M10/2260	M10/2290	M10/2320

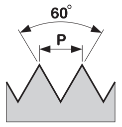


METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 376

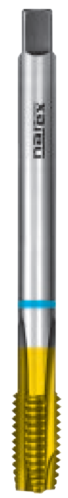
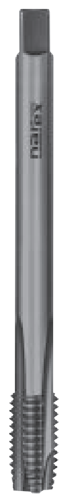
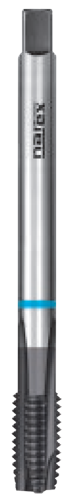
MATERIÁL / MATERIAL HSSE, HSSE PM





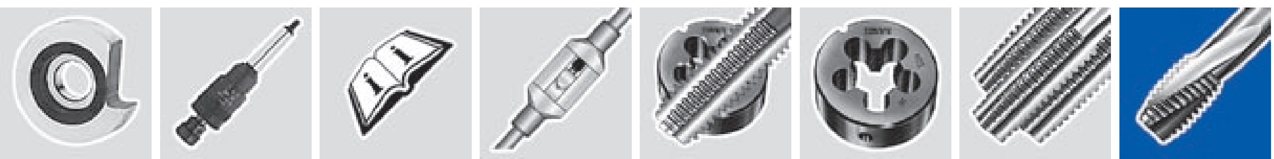
z = počet drážek / z = number of flutes

MODRÝ PRUH / BLUE RING

Provedení / Execution		TiN	OX	PM - TiAlN HL
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials		
Použití Application	Doporučené / Recommended	**C1, E, I, J2**		**C1, E, I, J2**
	Možné / Possible	**C2, C3**	**E**	**C2, C3**
Katalogové číslo / Cat. No.		**3660**	**3690**	**3870**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		B / 4-6P	B / 4-6P	B / 4-6P

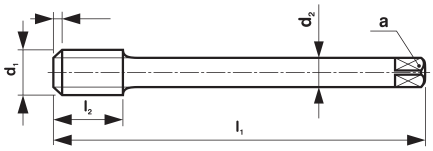
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223043**	Code **223043**	Code **223043**
M 3	0,5	56	9	2,2	-	3	2,5	M3/3660	M3/3690	M3/3870
M 3,5	0,6	56	11	2,5	2,1	3	2,9	M3,5/3660	M3,5/3690	M3,5/3870
M 4	0,7	63	12	2,8	2,1	3	3,3	M4/3660	M4/3690	M4/3870
M 4,5	0,75	70	13	3,5	2,7	3	3,7	M4,5/3660	M4,5/3690	M4,5/3870
M 5	0,8	70	13	3,5	2,7	3	4,2	M5/3660	M5/3690	M5/3870
M 6	1	80	15	4,5	3,4	3	5	M6/3660	M6/3690	M6/3870
M 7	1	80	15	5,5	4,3	3	6	M7/3660	M7/3690	M7/3870
M 8	1,25	90	18	6	4,9	3	6,8	M8/3660	M8/3690	M8/3870
M 9	1,25	90	18	7	5,5	3	7,8	M9/3660	M9/3690	M9/3870
M 10	1,5	100	20	7	5,5	3	8,5	M10/3660	M10/3690	M10/3870
M 11	1,5	100	20	8	6,2	3	9,5	M11/3660	M11/3690	M11/3870
M 12	1,75	110	23	9	7	3	10,2	M12/3660	M12/3690	M12/3870
M 14	2	110	25	11	9	3	12	M14/3660	M14/3690	M14/3870
M 16	2	110	25	12	9	3	14	M16/3660	M16/3690	M16/3870
M 18	2,5	125	30	14	11	3	15,5	M18/3660	M18/3690	M18/3870
M 20	2,5	140	30	16	12	3	17,5	M20/3660	M20/3690	M20/3870
M 22	2,5	140	30	18	14,5	3	19,5	M22/3660	M22/3690	M22/3870
M 24	3	160	36	18	14,5	4	21	M24/3660	M24/3690	M24/3870
M 27	3	160	36	20	16	4	24	M27/3660	M27/3690	M27/3870
M 30	3,5	180	40	22	18	4	26,5	M30/3660	M30/3690	M30/3870
M 33	3,5	180	42	25	20	4	29,5	M33/3660	M33/3690	M33/3870
M 36	4	200	50	28	22	4	32	M36/3660	M36/3690	M36/3870

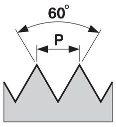


METRICKÝ ZÁVIT ISO
METRIC ISO THREAD M

DIN 376

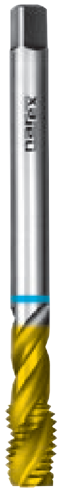
MATERIÁL / MATERIAL HSSE, HSSE PM

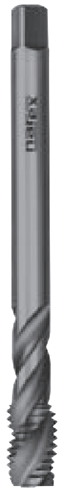


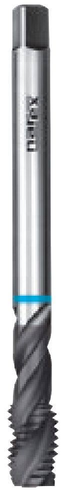


z = počet drážek / z = number of flutes

MODRÝ PRUH / BLUE RING

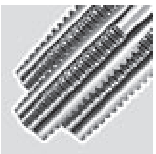


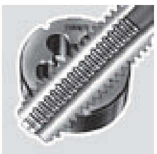


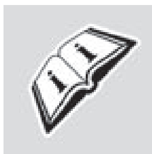


Provedení / Execution		cca 35° **TiN**	cca 35° **OX**	cca 35° **PM - TiAlN HL**
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials		
Použití Application	Doporučené / Recommended	**C1, C3, E, I, J2**		**C1, C3, E, I, J2**
	Možné / Possible	**C2**	**E**	**C2**
Katalogové číslo / Cat. No.		**4260**	**4290**	**4320**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		C / 2,5P	C / 2,5P	C / 2,5P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223044	Code 223044	Code 223044
M 3	0,5	56	5	2,2	-	3	2,5	M3/4260	M3/4290	M3/4320
M 3,5	0,6	56	6	2,5	2,1	3	2,9	M3,5/4260	M3,5/4290	M3,5/4320
M 4	0,7	63	7	2,8	2,1	3	3,3	M4/4260	M4/4290	M4/4320
M 4,5	0,75	70	8	3,5	2,7	3	3,7	M4,5/4260	M4,5/4290	M4,5/4320
M 5	0,8	70	8	3,5	2,7	3	4,2	M5/4260	M5/4290	M5/4320
M 6	1	80	10	4,5	3,4	3	5	M6/4260	M6/4290	M6/4320
M 7	1	80	10	5,5	4,3	3	6	M7/4260	M7/4290	M7/4320
M 8	1,25	90	13	6	4,9	3	6,8	M8/4260	M8/4290	M8/4320
M 9	1,25	90	13	7	5,5	3	7,8	M9/4260	M9/4290	M9/4320
M 10	1,5	100	15	7	5,5	3	8,5	M10/4260	M10/4290	M10/4320
M 11	1,5	100	15	8	6,2	3	9,5	M11/4260	M11/4290	M11/4320
M 12	1,75	110	18	9	7	3	10,2	M12/4260	M12/4290	M12/4320
M 14	2	110	20	11	9	3	12	M14/4260	M14/4290	M14/4320
M 16	2	110	20	12	9	4	14	M16/4260	M16/4290	M16/4320
M 18	2,5	125	25	14	11	4	15,5	M18/4260	M18/4290	M18/4320
M 20	2,5	140	25	16	12	4	17,5	M20/4260	M20/4290	M20/4320
M 22	2,5	140	25	18	14,5	4	19,5	M22/4260	M22/4290	M22/4320
M 24	3	160	30	18	14,5	4	21	M24/4260	M24/4290	M24/4320
M 27	3	160	30	20	16	4	24	M27/4260	M27/4290	M27/4320
M 30	3,5	180	35	22	18	4	26,5	M30/4260	M30/4290	M30/4320
M 33	3,5	180	35	25	20	4	29,5	M33/4260	M33/4290	M33/4320
M 36	4	200	40	28	22	4	32	M36/4260	M36/4290	M36/4320



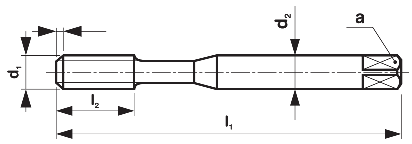


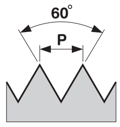


METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 371

MATERIÁL / MATERIAL HSSE



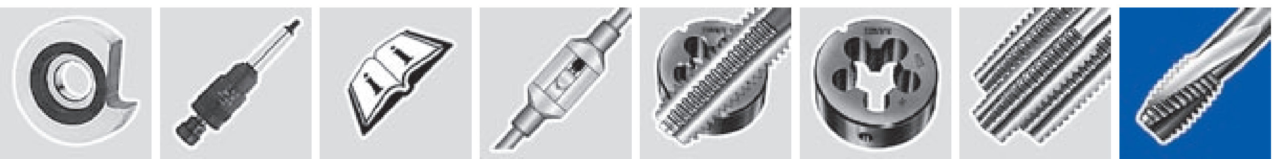


z = počet drážek / z = number of flutes

ČERVENÝ PRUH / RED RING

Provedení / Execution	TiCN	OX	cca 40° TiCN	cca 40° OX
Typ otvoru / Hole type	Viz Registr a příslušná skupina materiálů / See Register and corresponding group of materials			
Použití / Application — Doporučené / Recommended	**C2, C3, H2**		**C1, C2**	
Použití / Application — Možné / Possible	**C1**		**C3, H2**	
Katalogové číslo / Cat. No.	**1580**	**1590**	**2680**	**2690**
Lícování / Tolerance	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer	B / 4-6P	B / 4-6P	C / 2,5P	C / 2,5P

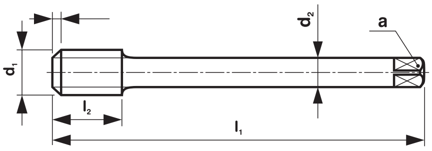
d_1	P	l_1	l_2	$l_{2R40°}$	d_2	a	z	∅ mm	Code **223043**	Code **223043**	Code **223044**	Code **223044**
M 3	0,5	56	9	5	3,5	2,7	3	2,5	M3/1580	M3/1590	M3/2680	M3/2690
M 3,5	0,6	56	11	6	4	3	3	2,9	M3,5/1580	M3,5/1590	M3,5/2680	M3,5/2690
M 4	0,7	63	12	7	4,5	3,4	3	3,3	M4/1580	M4/1590	M4/2680	M4/2690
M 4,5	0,75	70	13	8	6	4,9	3	3,7	M4,5/1580	M4,5/1590	M4,5/2680	M4,5/2690
M 5	0,8	70	13	8	6	4,9	3	4,2	M5/1580	M5/1590	M5/2680	M5/2690
M 6	1	80	15	10	6	4,9	3	5	M6/1580	M6/1590	M6/2680	M6/2690
M 7	1	80	15	10	7	5,5	3	6	M7/1580	M7/1590	M7/2680	M7/2690
M 8	1,25	90	18	13	8	6,2	3	6,8	M8/1580	M8/1590	M8/2680	M8/2690
M 9	1,25	90	18	13	9	7	3	7,8	M9/1580	M9/1590	M9/2680	M9/2690
M 10	1,5	100	20	15	10	8	3	8,5	M10/1580	M10/1590	M10/2680	M10/2690

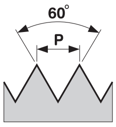


METRICKÝ ZÁVIT ISO
METRIC ISO THREAD **M**

DIN 376

MATERIÁL / MATERIAL HSSE



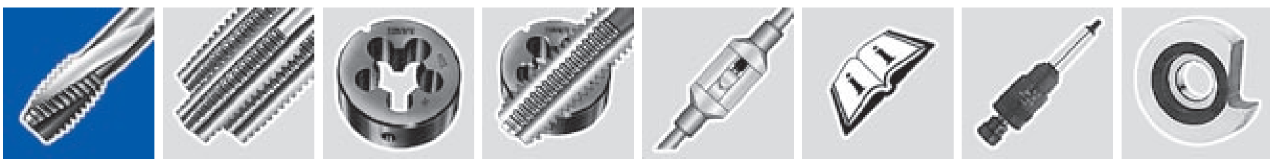


z = počet drážek / z = number of flutes

ČERVENÝ PRUH / RED RING

Provedení / Execution		TiCN	OX	cca 40° TiCN	cca 40° OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití Application	Doporučené / Recommended	**C2, C3, H2**		**C1, C2**	
	Možné / Possible	**C1**		**C3, H2**	
Katalogové číslo / Cat. No.		**3580**	**3590**	**4680**	**4690**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		B / 4-6P	B / 4-6P	C / 2,5P	C / 2,5P

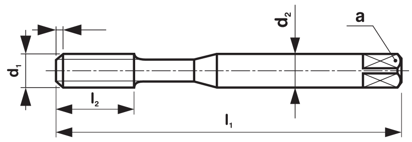
d_1	P	l_1	l_2	$l_{2R40°}$	d_2	a	z / $z_{R40°}$	∅ mm	Code 223043	Code 223043	Code 223044	Code 223044
M 3	0,5	56	9	5	2,2	-	3/3	2,5	M3/3580	M3/3590	M3/4680	M3/4690
M 3,5	0,6	56	11	6	2,5	2,1	3/3	2,9	M3,5/3580	M3,5/3590	M3,5/4680	M3,5/4690
M 4	0,7	63	12	7	2,8	2,1	3/3	3,3	M4/3580	M4/3590	M4/4680	M4/4690
M 4,5	0,75	70	13	8	3,5	2,7	3/3	3,7	M4,5/3580	M4,5/3590	M4,5/4680	M4,5/4690
M 5	0,8	70	13	8	3,5	2,7	3/3	4,2	M5/3580	M5/3590	M5/4680	M5/4690
M 6	1	80	15	10	4,5	3,4	3/3	5	M6/3580	M6/3590	M6/4680	M6/4690
M 7	1	80	15	10	5,5	4,3	3/3	6	M7/3580	M7/3590	M7/4680	M7/4690
M 8	1,25	90	18	13	6	4,9	3/3	6,8	M8/3580	M8/3590	M8/4680	M8/4690
M 9	1,25	90	18	13	7	5,5	3/3	7,8	M9/3580	M9/3590	M9/4680	M9/4690
M 10	1,5	100	20	15	7	5,5	3/3	8,5	M10/3580	M10/3590	M10/4680	M10/4690
M 11	1,5	100	20	15	8	6,2	3/3	9,5	M11/3580	M11/3590	M11/4680	M11/4690
M 12	1,75	110	23	18	9	7	3/4	10,2	M12/3580	M12/3590	M12/4680	M12/4690
M 14	2	110	25	20	11	9	3/4	12	M14/3580	M14/3590	M14/4680	M14/4690
M 16	2	110	25	20	12	9	3/4	14	M16/3580	M16/3590	M16/4680	M16/4690
M 18	2,5	125	30	25	14	11	3/4	15,5	M18/3580	M18/3590	M18/4680	M18/4690
M 20	2,5	140	30	25	16	12	3/4	17,5	M20/3580	M20/3590	M20/4680	M20/4690
M 22	2,5	140	30	25	18	14,5	3/4	19,5	M22/3580	M22/3590	M22/4680	M22/4690
M 24	3	160	36	30	18	14,5	4/4	21	M24/3580	M24/3590	M24/4680	M24/4690
M 27	3	160	36	30	20	16	4/4	24	M27/3580	M27/3590	M27/4680	M27/4690
M 30	3,5	180	40	35	22	18	4/5	26,5	M30/3580	M30/3590	M30/4680	M30/4690
M 33	3,5	180	42	35	25	20	4/5	29,5	M33/3580	M33/3590	M33/4680	M33/4690
M 36	4	200	50	40	28	22	4/5	32	M36/3580	M36/3590	M36/4680	M36/4690

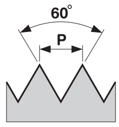


METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 371

MATERIÁL / MATERIAL HSSE PM





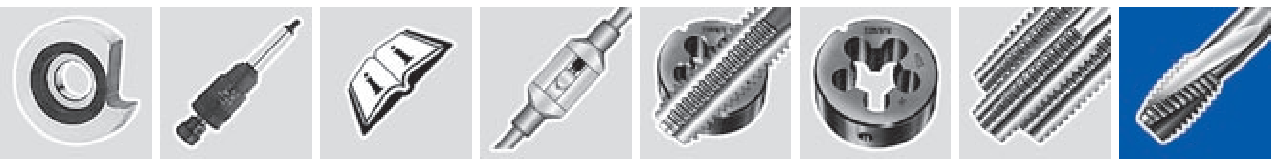
z = počet drážek / z = number of flutes

ČERNÝ PRUH / BLACK RING



Provedení / Execution	TiAlN FN	cca 15° TiAlN FN	cca 40° TiAlN FN
Typ otvoru / Hole type	Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials		
Použití / Application – Doporučené / Recommended	**D2**	**D2**	**D**
Použití / Application – Možné / Possible	**D1**	**D1**	
Katalogové číslo / Cat. No.	**1920**	**2820**	**2870**
Lícování / Tolerance	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer	B / 4-6P	D / 3,5P	C / 2,5P

d_1	P	l_1	l_2	l_{2RSP}	d_2	a	z	∅ mm	Code 223043	Code 223044	Code 223044
M 3	0,5	56	9	5	3,5	2,7	3	2,5	M3/1920	M3/2820	M3/2870
M 3,5	0,6	56	11	6	4	3	3	2,9	M3,5/1920	M3,5/2820	M3,5/2870
M 4	0,7	63	12	7	4,5	3,4	3	3,3	M4/1920	M4/2820	M4/2870
M 4,5	0,75	70	13	8	6	4,9	3	3,7	M4,5/1920	M4,5/2820	M4,5/2870
M 5	0,8	70	13	8	6	4,9	3	4,2	M5/1920	M5/2820	M5/2870
M 6	1	80	15	10	6	4,9	3	5	M6/1920	M6/2820	M6/2870
M 7	1	80	15	10	7	5,5	3	6	M7/1920	M7/2820	M7/2870
M 8	1,25	90	18	13	8	6,2	3	6,8	M8/1920	M8/2820	M8/2870
M 9	1,25	90	18	13	9	7	3	7,8	M9/1920	M9/2820	M9/2870
M 10	1,5	100	20	15	10	8	3	8,5	M10/1920	M10/2820	M10/2870

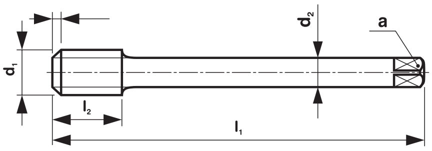


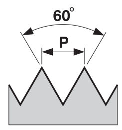
METRICKÝ ZÁVIT ISO
METRIC ISO THREAD

M

DIN 376

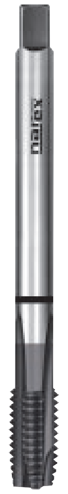
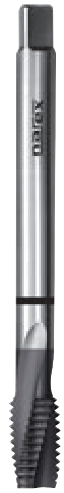
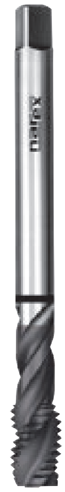
MATERIÁL / MATERIAL HSSE PM





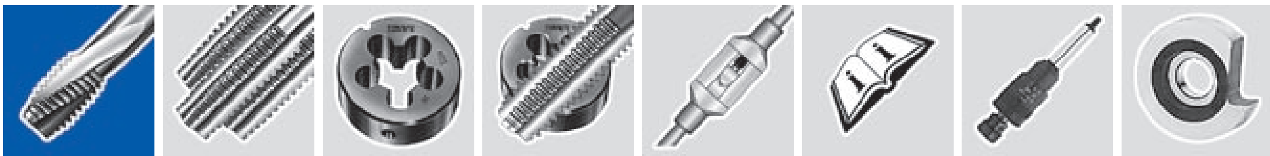
z = počet drážek / z = number of flutes

ČERNÝ PRUH / BLACK RING

Provedení / Execution		TiAlN FN	cca 15° TiAlN FN	cca 40° TiAlN FN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials		
Použití Application	Doporučené / Recommended	**D2**	**D2**	**D**
	Možné / Possible	**D1**	**D1**	
Katalogové číslo / Cat. No.		**3920**	**4820**	**4870**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		B / 4-6P	D / 3,5P	C / 2,5P

d_1	P	l_1	l_2	$l_{2R40°}$	d_2	a	z / $z_{R40°}$	∅ mm	Code 223043	Code 223044	Code 223044
M 12	1,75	110	23	18	9	7	3	10,2	M12/3920	M12/4820	M12/4870

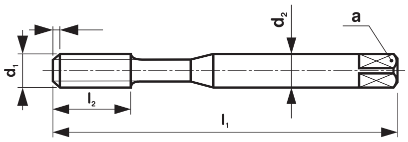


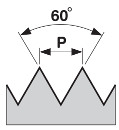
METRICKÝ ZÁVIT ISO
METRIC ISO THREAD

M

DIN 371

MATERIÁL / MATERIAL **HSSE**



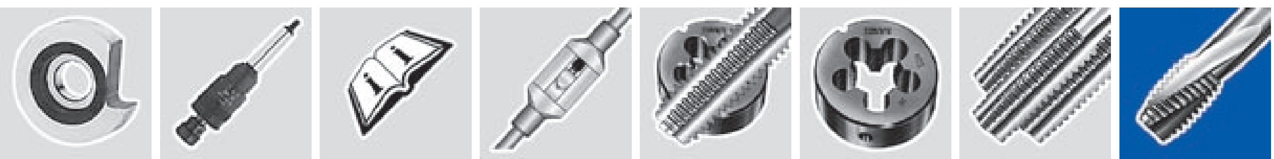


z = počet drážek / z = number of flutes

ŽLUTÝ PRUH / YELLOW RING

Provedení / Execution		TiN	cca 45° TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials	
Použití Application	Doporučené / Recommended	**G**	**G**
	Možné / Possible		
Katalogové číslo / Cat. No.		**1610**	**2710**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		B / 4-6P	C / 2,5P

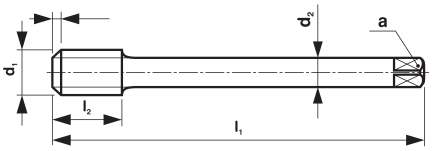
d_1	P	l_1	l_2	$l_{2R45°}$	d_2	a	z / $z_{R45°}$	∅ mm	Code **223043**	Code **223044**
M 3	0,5	56	9	5	3,5	2,7	3 / 2	2,5	M3/1610	M3/2710
M 3,5	0,6	56	11	6	4	3	3 / 2	2,9	M3,5/1610	M3,5/2710
M 4	0,7	63	12	7	4,5	3,4	3 / 2	3,3	M4/1610	M4/2710
M 4,5	0,75	70	13	8	6	4,9	3 / 2	3,7	M4,5/1610	M4,5/2710
M 5	0,8	70	13	8	6	4,9	3 / 2	4,2	M5/1610	M5/2710
M 6	1	80	15	10	6	4,9	3 / 2	5	M6/1610	M6/2710
M 7	1	80	15	10	7	5,5	3 / 2	6	M7/1610	M7/2710
M 8	1,25	90	18	13	8	6,2	3 / 2	6,8	M8/1610	M8/2710
M 9	1,25	90	18	13	9	7	3 / 2	7,8	M9/1610	M9/2710
M 10	1,5	100	20	15	10	8	3 / 2	8,5	M10/1610	M10/2710

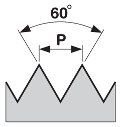


METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 376

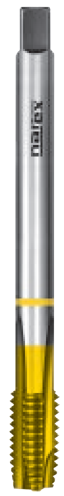
MATERIÁL / MATERIAL — HSSE

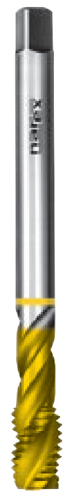




z = počet drážek / z = number of flutes

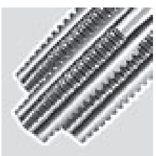
ŽLUTÝ PRUH / YELLOW RING



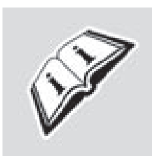


		3610	4710
Provedení / Execution		TiN	cca 45° TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů / See Register and corresponding group of materials	
Použití / Application	Doporučené / Recommended	G	G
	Možné / Possible		
Katalogové číslo / Cat. No.		3610	4710
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		B / 4-6P	C / 2,5P

d_1	P	l_1	l_2	$l_{2R45°}$	d_2	a	z / $z_{R45°}$	∅ mm	Code 223043	Code 223044
M 3	0,5	56	9	5	2,2	-	3/2	2,5	M3/3610	M3/4710
M 3,5	0,6	56	11	6	2,5	2,1	3/2	2,9	M3,5/3610	M3,5/4710
M 4	0,7	63	12	7	2,8	2,1	3/2	3,3	M4/3610	M4/4710
M 4,5	0,75	70	13	8	3,5	2,7	3/2	3,7	M4,5/3610	M4,5/4710
M 5	0,8	70	13	8	3,5	2,7	3/2	4,2	M5/3610	M5/4710
M 6	1	80	15	10	4,5	3,4	3/2	5	M6/3610	M6/4710
M 7	1	80	15	10	5,5	4,3	3/2	6	M7/3610	M7/4710
M 8	1,25	90	18	13	6	4,9	3/2	6,8	M8/3610	M8/4710
M 9	1,25	90	18	13	7	5,5	3/2	7,8	M9/3610	M9/4710
M 10	1,5	100	20	15	7	5,5	3/2	8,5	M10/3610	M10/4710
M 11	1,5	100	20	15	8	6,2	3/2	9,5	M11/3610	M11/4710
M 12	1,75	110	23	18	9	7	3/2	10,2	M12/3610	M12/4710
M 14	2	110	25	20	11	9	3/2	12	M14/3610	M14/4710
M 16	2	110	25	20	12	9	3/2	14	M16/3610	M16/4710
M 18	2,5	125	30	25	14	11	3/3	15,5	M18/3610	M18/4710
M 20	2,5	140	30	25	16	12	3/3	17,5	M20/3610	M20/4710
M 22	2,5	140	30	25	18	14,5	3/3	19,5	M22/3610	M22/4710
M 24	3	160	36	30	18	14,5	4/3	21	M24/3610	M24/4710
M 27	3	160	36	30	20	16	4/3	24	M27/3610	M27/4710
M 30	3,5	180	40	35	22	18	4/3	26,5	M30/3610	M30/4710
M 33	3,5	180	42	35	25	20	4/3	29,5	M33/3610	M33/4710
M 36	4	200	50	40	28	22	4/3	32	M36/3610	M36/4710

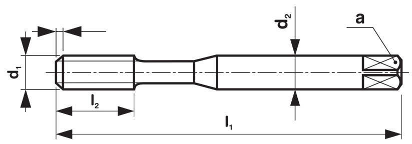


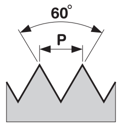


METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

DIN 371

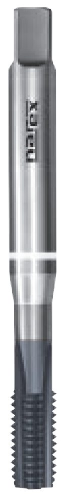
MATERIÁL / MATERIAL — HSSE





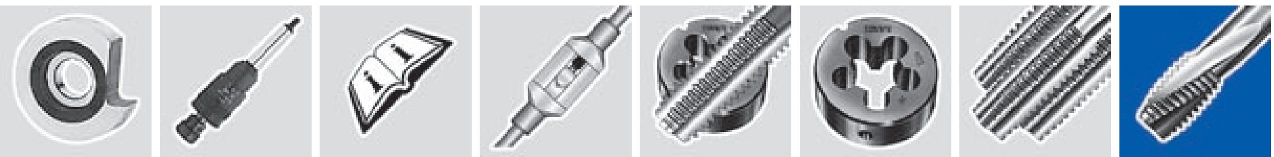
z = počet drážek / z = number of flutes

BÍLÝ PRUH / WHITE RING



Provedení / Execution		**TiCN**
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials
Použití Application	Doporučené / Recommended	**F**
	Možné / Possible	**H2**
Katalogové číslo / Cat. No.		**1080**
Lícování / Tolerance		ISO2 (6HX)
Řezný kužel / Chamfer		C / 2,5P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223042**
M 3	0,5	56	9	3,5	2,7	3	2,5	M3/1080
M 3,5	0,6	56	11	4	3	3	2,9	M3,5/1080
M 4	0,7	63	12	4,5	3,4	3	3,3	M4/1080
M 4,5	0,75	70	13	6	4,9	3	3,7	M4,5/1080
M 5	0,8	70	13	6	4,9	3	4,2	M5/1080
M 6	1	80	15	6	4,9	3	5	M6/1080
M 7	1	80	15	7	5,5	3	6	M7/1080
M 8	1,25	90	18	8	6,2	4	6,8	M8/1080
M 9	1,25	90	18	9	7	4	7,8	M9/1080
M 10	1,5	100	20	10	8	4	8,5	M10/1080

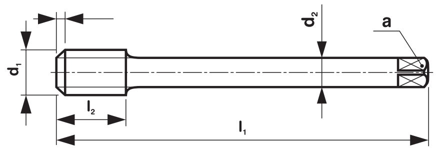


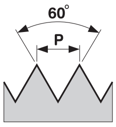
METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M

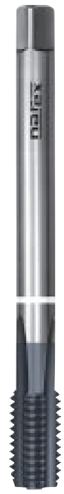
DIN 376

MATERIÁL / MATERIAL HSSE

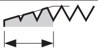
BÍLÝ PRUH / WHITE RING



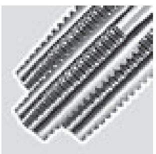


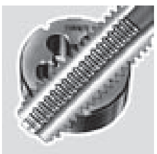


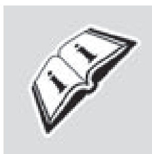
z = počet drážek / z = number of flutes

Provedení / Execution	TiCN
Typ otvoru / Hole type	Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials
Použití / Application — Doporučené / Recommended	**F**
Použití / Application — Možné / Possible	**H2**
Katalogové číslo / Cat. No.	**3080**
Lícování / Tolerance	ISO2 (6HX)
Řezný kužel / Chamfer 	C / 2,5P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223042**
M 3	0,5	56	9	2,2	-	3	2,5	M3/3080
M 3,5	0,6	56	11	2,5	2,1	3	2,9	M3,5/3080
M 4	0,7	63	12	2,8	2,1	3	3,3	M4/3080
M 4,5	0,75	70	13	3,5	2,7	3	3,7	M4,5/3080
M 5	0,8	70	13	3,5	2,7	3	4,2	M5/3080
M 6	1	80	15	4,5	3,4	3	5	M6/3080
M 7	1	80	15	5,5	4,3	3	6	M7/3080
M 8	1,25	90	18	6	4,9	4	6,8	M8/3080
M 9	1,25	90	18	7	5,5	4	7,8	M9/3080
M 10	1,5	100	20	7	5,5	4	8,5	M10/3080
M 11	1,5	100	20	8	6,2	4	9,5	M11/3080
M 12	1,75	110	23	9	7	4	10,2	M12/3080
M 14	2	110	25	11	9	4	12	M14/3080
M 16	2	110	25	12	9	4	14	M16/3080
M 18	2,5	125	30	14	11	4	15,5	M18/3080
M 20	2,5	140	30	16	12	4	17,5	M20/3080
M 22	2,5	140	30	18	14,5	4	19,5	M22/3080
M 24	3	160	36	18	14,5	4	21	M24/3080
M 27	3	160	36	20	16	4	24	M27/3080
M 30	3,5	180	40	22	18	4	26,5	M30/3080
M 33	3,5	180	42	25	20	5	29,5	M33/3080
M 36	4	200	50	28	22	5	32	M36/3080

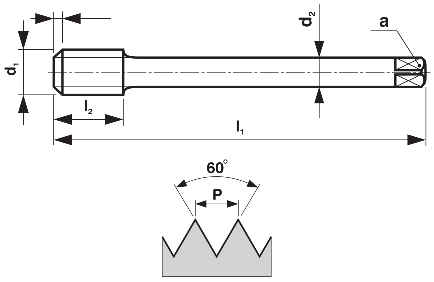




JEMNÝ METRICKÝ ZÁVIT ISO / METRIC ISO FINE THREAD — MF

DIN 374

MATERIÁL / MATERIAL — HSSE

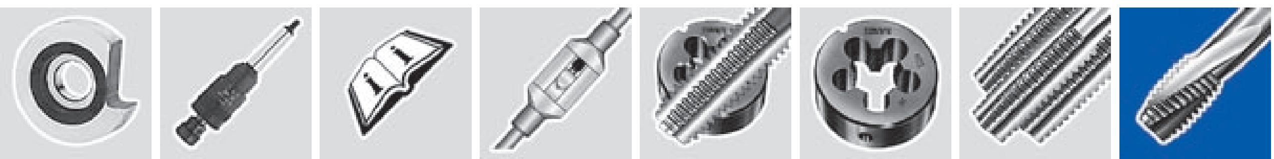


z = počet drážek / z = number of flutes

BEZ BAREVNÉHO OZNAČENÍ / NO RING

		3000	3010	3500	3510	3540
Provedení / Execution			TiN		TiN	OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials				
Použití Application	Doporučené / Recommended		J1		A, B, H1	A, B1, B3, K
	Možné / Possible	J1	F1, H2	A, B, H1	J1	B2, H1
Katalogové číslo / Cat. No.		3000	3010	3500	3510	3540
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		C / 2P	C / 2P	B / 4-6P	B / 4-6P	B / 4-6P

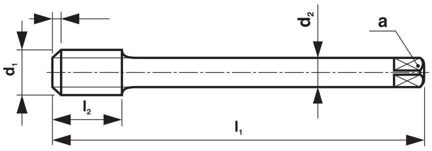
d_1	P	l_1	l_2	d_2	a	z	Ø mm	Code 223042	Code 223042	Code 223043	Code 223043	Code 223043
M 3	0,35	56	8	2,2	-	3	2,65	M3x0,35/3000	M3x0,35/3010	M3x0,35/3500	M3x0,35/3510	M3x0,35/3540
M 3,5	0,35	56	8	2,5	2,1	3	3,15	M3,5x0,35/3000	M3,5x0,35/3010	M3,5x0,35/3500	M3,5x0,35/3510	M3,5x0,35/3540
M 4	0,5	63	12	2,8	2,1	3	3,5	M4x0,5/3000	M4x0,5/3010	M4x0,5/3500	M4x0,5/3510	M4x0,5/3540
M 4	0,35	63	12	2,8	2,1	3	3,65	M4x0,35/3000	M4x0,35/3010	M4x0,35/3500	M4x0,35/3510	M4x0,35/3540
M 4,5	0,5	70	13	3,5	2,7	3	4	M4,5x0,5/3000	M4,5x0,5/3010	M4,5x0,5/3500	M4,5x0,5/3510	M4,5x0,5/3540
M 5	0,5	70	13	3,5	2,7	3	4,5	M5x0,5/3000	M5x0,5/3010	M5x0,5/3500	M5x0,5/3510	M5x0,5/3540
M 5,5	0,5	80	15	4	3	3	5	M5,5x0,5/3000	M5,5x0,5/3010	M5,5x0,5/3500	M5,5x0,5/3510	M5,5x0,5/3540
M 6	0,75	80	15	4,5	3,4	3	5,2	M6x0,75/3000	M6x0,75/3010	M6x0,75/3500	M6x0,75/3510	M6x0,75/3540
M 6	0,5	80	15	4,5	3,4	3	5,5	M6x0,5/3000	M6x0,5/3010	M6x0,5/3500	M6x0,5/3510	M6x0,5/3540
M 7	0,75	80	15	5,5	4,3	3	6,2	M7x0,75/3000	M7x0,75/3010	M7x0,75/3500	M7x0,75/3510	M7x0,75/3540
M 8	1	90	18	6	4,9	3	7	M8x1/3000	M8x1/3010	M8x1/3500	M8x1/3510	M8x1/3540
M 8	0,75	80	15	6	4,9	3	7,2	M8x0,75/3000	M8x0,75/3010	M8x0,75/3500	M8x0,75/3510	M8x0,75/3540
M 8	0,5	80	15	6	4,9	3	7,5	M8x0,5/3000	M8x0,5/3010	M8x0,5/3500	M8x0,5/3510	M8x0,5/3540
M 9	1	90	18	7	5,5	3	8	M9x1/3000	M9x1/3010	M9x1/3500	M9x1/3510	M9x1/3540
M 9	0,75	80	18	7	5,5	3	8,2	M9x0,75/3000	M9x0,75/3010	M9x0,75/3500	M9x0,75/3510	M9x0,75/3540
M 10	1,25	100	20	7	5,5	3	8,8	M10x1,25/3000	M10x1,25/3010	M10x1,25/3500	M10x1,25/3510	M10x1,25/3540
M 10	1	90	20	7	5,5	3	9	M10x1/3000	M10x1/3010	M10x1/3500	M10x1/3510	M10x1/3540
M 10	0,75	90	20	7	5,5	3	9,2	M10x0,75/3000	M10x0,75/3010	M10x0,75/3500	M10x0,75/3510	M10x0,75/3540
M 11	1	90	20	8	6,2	3	10	M11x1/3000	M11x1/3010	M11x1/3500	M11x1/3510	M11x1/3540
M 11	0,75	90	20	8	6,2	3	10,2	M11x0,75/3000	M11x0,75/3010	M11x0,75/3500	M11x0,75/3510	M11x0,75/3540
M 12	1,5	100	21	9	7	3	10,5	M12x1,5/3000	M12x1,5/3010	M12x1,5/3500	M12x1,5/3510	M12x1,5/3540
M 12	1,25	100	21	9	7	3	10,8	M12x1,25/3000	M12x1,25/3010	M12x1,25/3500	M12x1,25/3510	M12x1,25/3540
M 12	1	100	21	9	7	3	11	M12x1/3000	M12x1/3010	M12x1/3500	M12x1/3510	M12x1/3540
M 13	1	100	21	11	9	3	12	M13x1/3000	M13x1/3010	M13x1/3500	M13x1/3510	M13x1/3540
M 14	1,5	100	21	11	9	3	12,5	M14x1,5/3000	M14x1,5/3010	M14x1,5/3500	M14x1,5/3510	M14x1,5/3540
M 14	1,25	100	21	11	9	3	12,8	M14x1,25/3000	M14x1,25/3010	M14x1,25/3500	M14x1,25/3510	M14x1,25/3540
M 14	1	100	21	11	9	3	13	M14x1/3000	M14x1/3010	M14x1/3500	M14x1/3510	M14x1/3540
M 15	1,5	100	21	12	9	3	13,5	M15x1,5/3000	M15x1,5/3010	M15x1,5/3500	M15x1,5/3510	M15x1,5/3540
M 15	1	100	21	12	9	3	14	M15x1/3000	M15x1/3010	M15x1/3500	M15x1/3510	M15x1/3540
M 16	1,5	100	21	12	9	3	14,5	M16x1,5/3000	M16x1,5/3010	M16x1,5/3500	M16x1,5/3510	M16x1,5/3540
M 16	1	100	21	12	9	3	15	M16x1/3000	M16x1/3010	M16x1/3500	M16x1/3510	M16x1/3540
M 17	1,5	100	21	12	9	3	15,5	M17x1,5/3000	M17x1,5/3010	M17x1,5/3500	M17x1,5/3510	M17x1,5/3540
M 17	1	100	21	12	9	3	16	M17x1/3000	M17x1/3010	M17x1/3500	M17x1/3510	M17x1/3540
M 18	2	125	24	14	11	3	16	M18x2/3000	M18x2/3010	M18x2/3500	M18x2/3510	M18x2/3540
M 18	1,5	110	24	14	11	3	16,5	M18x1,5/3000	M18x1,5/3010	M18x1,5/3500	M18x1,5/3510	M18x1,5/3540
M 18	1	110	24	14	11	3	17	M18x1/3000	M18x1/3010	M18x1/3500	M18x1/3510	M18x1/3540
M 20	2	140	30	16	12	3	18	M20x2/3000	M20x2/3010	M20x2/3500	M20x2/3510	M20x2/3540
M 20	1,5	125	24	16	12	3	18,5	M20x1,5/3000	M20x1,5/3010	M20x1,5/3500	M20x1,5/3510	M20x1,5/3540
M 20	1	125	24	16	12	3	19	M20x1/3000	M20x1/3010	M20x1/3500	M20x1/3510	M20x1/3540
M 22	2	140	30	18	14,5	3	20	M22x2/3000	M22x2/3010	M22x2/3500	M22x2/3510	M22x2/3540

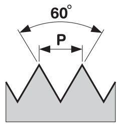


JEMNÝ METRICKÝ ZÁVIT ISO / METRIC ISO FINE THREAD — MF

DIN 374

MATERIÁL / MATERIAL — HSSE



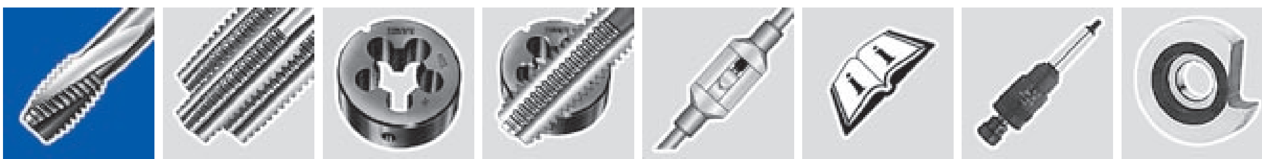


z = počet drážek / z = number of flutes

BEZ BAREVNÉHO OZNAČENÍ / NO RING

		3000	3010	3500	3510	3540
Provedení / Execution			TiN		TiN	OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials				
Použití / Application	Doporučené / Recommended		J1		A, B, H1	A, B1, B3, K
	Možné / Possible	J1	F1, H2	A, B, H1	J1	B2, H1
Katalogové číslo / Cat. No.		3000	3010	3500	3510	3540
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		C / 2P	C / 2P	B / 4-6P	B / 4-6P	B / 4-6P

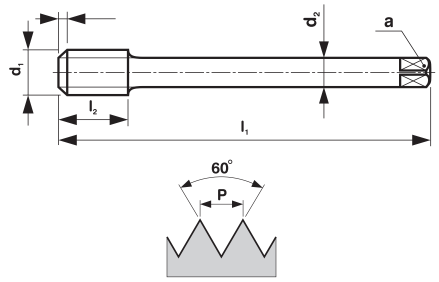
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223042	Code 223042	Code 223043	Code 223043	Code 223043
M 22	1,5	125	24	18	14,5	3	20,5	M22x1,5/3000	M22x1,5/3010	M22x1,5/3500	M22x1,5/3510	M22x1,5/3540
M 22	1	125	24	18	14,5	3	21	M22x1/3000	M22x1/3010	M22x1/3500	M22x1/3510	M22x1/3540
M 24	2	140	26	18	14,5	4	22	M24x2/3000	M24x2/3010	M24x2/3500	M24x2/3510	M24x2/3540
M 24	1,5	140	26	18	14,5	4	22,5	M24x1,5/3000	M24x1,5/3010	M24x1,5/3500	M24x1,5/3510	M24x1,5/3540
M 24	1	140	26	18	14,5	4	23	M24x1/3000	M24x1/3010	M24x1/3500	M24x1/3510	M24x1/3540
M 25	2	140	26	18	14,5	4	23	M25x2/3000	M25x2/3010	M25x2/3500	M25x2/3510	M25x2/3540
M 25	1,5	140	26	18	14,5	4	23,5	M25x1,5/3000	M25x1,5/3010	M25x1,5/3500	M25x1,5/3510	M25x1,5/3540
M 26	1,5	140	26	18	14,5	4	24,5	M26x1,5/3000	M26x1,5/3010	M26x1,5/3500	M26x1,5/3510	M26x1,5/3540
M 27	2	140	26	20	16	4	25	M27x2/3000	M27x2/3010	M27x2/3500	M27x2/3510	M27x2/3540
M 27	1,5	140	26	20	16	4	25,5	M27x1,5/3000	M27x1,5/3010	M27x1,5/3500	M27x1,5/3510	M27x1,5/3540
M 27	1	140	26	20	16	4	26	M27x1/3000	M27x1/3010	M27x1/3500	M27x1/3510	M27x1/3540
M 28	2	140	26	20	16	4	26	M28x2/3000	M28x2/3010	M28x2/3500	M28x2/3510	M28x2/3540
M 28	1,5	140	26	20	16	4	26,5	M28x1,5/3000	M28x1,5/3010	M28x1,5/3500	M28x1,5/3510	M28x1,5/3540
M 30	2	150	28	22	18	4	28	M30x2/3000	M30x2/3010	M30x2/3500	M30x2/3510	M30x2/3540
M 30	1,5	150	28	22	18	4	28,5	M30x1,5/3000	M30x1,5/3010	M30x1,5/3500	M30x1,5/3510	M30x1,5/3540
M 30	1	150	28	22	18	4	29	M30x1/3000	M30x1/3010	M30x1/3500	M30x1/3510	M30x1/3540
M 32	1,5	150	28	22	18	4	30,5	M32x1,5/3000	M32x1,5/3010	M32x1,5/3500	M32x1,5/3510	M32x1,5/3540
M 33	2	160	30	25	20	4	31	M33x2/3000	M33x2/3010	M33x2/3500	M33x2/3510	M33x2/3540
M 33	1,5	160	30	25	20	4	31,5	M33x1,5/3000	M33x1,5/3010	M33x1,5/3500	M33x1,5/3510	M33x1,5/3540
M 34	1,5	170	30	28	22	4	32,5	M34x1,5/3000	M34x1,5/3010	M34x1,5/3500	M34x1,5/3510	M34x1,5/3540
M 35	1,5	170	30	28	22	4	33,5	M35x1,5/3000	M35x1,5/3010	M35x1,5/3500	M35x1,5/3510	M35x1,5/3540
M 36	3	200	42	28	22	4	33	M36x3/3000	M36x3/3010	M36x3/3500	M36x3/3510	M36x3/3540
M 36	2	170	30	28	22	4	34	M36x2/3000	M36x2/3010	M36x2/3500	M36x2/3510	M36x2/3540
M 36	1,5	170	30	28	22	4	34,5	M36x1,5/3000	M36x1,5/3010	M36x1,5/3500	M36x1,5/3510	M36x1,5/3540
M 38	1,5	170	30	28	22	4	36,5	M38x1,5/3000	M38x1,5/3010	M38x1,5/3500	M38x1,5/3510	M38x1,5/3540
M 39	3	200	42	32	24	4	36	M39x3/3000	M39x3/3010	M39x3/3500	M39x3/3510	M39x3/3540
M 39	2	170	30	32	24	4	37	M39x2/3000	M39x2/3010	M39x2/3500	M39x2/3510	M39x2/3540
M 39	1,5	170	30	32	24	4	37,5	M39x1,5/3000	M39x1,5/3010	M39x1,5/3500	M39x1,5/3510	M39x1,5/3540
M 40	3	200	42	32	24	4	37	M40x3/3000	M40x3/3010	M40x3/3500	M40x3/3510	M40x3/3540
M 40	2	170	30	32	24	4	38	M40x2/3000	M40x2/3010	M40x2/3500	M40x2/3510	M40x2/3540
M 40	1,5	170	30	32	24	4	38,5	M40x1,5/3000	M40x1,5/3010	M40x1,5/3500	M40x1,5/3510	M40x1,5/3540
M 42	3	200	50	32	24	4	39	M42x3/3000	M42x3/3010	M42x3/3500	M42x3/3510	M42x3/3540
M 42	2	170	30	32	24	4	40	M42x2/3000	M42x2/3010	M42x2/3500	M42x2/3510	M42x2/3540
M 42	1,5	170	30	32	24	4	40,5	M42x1,5/3000	M42x1,5/3010	M42x1,5/3500	M42x1,5/3510	M42x1,5/3540
M 45	3	200	50	36	29	4	42	M45x3/3000	M45x3/3010	M45x3/3500	M45x3/3510	M45x3/3540
M 45	2	180	32	36	29	4	43	M45x2/3000	M45x2/3010	M45x2/3500	M45x2/3510	M45x2/3540
M 45	1,5	180	32	36	29	4	43,5	M45x1,5/3000	M45x1,5/3010	M45x1,5/3500	M45x1,5/3510	M45x1,5/3540
M 48	3	225	50	36	29	4	45	M48x3/3000	M48x3/3010	M48x3/3500	M48x3/3510	M48x3/3540
M 48	2	190	32	36	29	4	46	M48x2/3000	M48x2/3010	M48x2/3500	M48x2/3510	M48x2/3540
M 48	1,5	190	32	36	29	4	46,5	M48x1,5/3000	M48x1,5/3010	M48x1,5/3500	M48x1,5/3510	M48x1,5/3540



JEMNÝ METRICKÝ ZÁVIT ISO / METRIC ISO FINE THREAD — MF

DIN 374

MATERIÁL / MATERIAL — HSSE



z = počet drážek / z = number of flutes

BEZ BAREVNÉHO OZNAČENÍ / NO RING

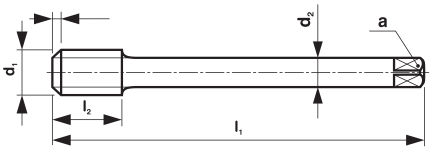
		3000	3010	3500	3510	3540
Provedení / Execution			TiN		TiN	OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials				
Použití Application	Doporučené / Recommended		J1		A, B, H1	A, B1, B3, K
	Možné / Possible	J1	F1, H2	A, B, H1	J1	B2, H1
Katalogové číslo / Cat. No.		3000	3010	3500	3510	3540
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		C / 2P	C / 2P	B / 4-6P	B / 4-6P	B / 4-6P

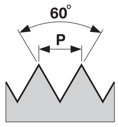
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223042	Code 223042	Code 223043	Code 223043	Code 223043
M 50	3	225	50	36	29	4	47	M50x3/3000	M50x3/3010	M50x3/3500	M50x3/3510	M50x3/3540
M 50	2	190	32	36	29	4	48	M50x2/3000	M50x2/3010	M50x2/3500	M50x2/3510	M50x2/3540
M 50	1,5	190	32	36	29	4	48,5	M50x1,5/3000	M50x1,5/3010	M50x1,5/3500	M50x1,5/3510	M50x1,5/3540
M 52	3	225	50	40	32	4	49	M52x3/3000	M52x3/3010	M52x3/3500	M52x3/3510	M52x3/3540
M 52	2	190	32	40	32	4	50	M52x2/3000	M52x2/3010	M52x2/3500	M52x2/3510	M52x2/3540
M 52	1,5	190	32	40	32	4	50,5	M52x1,5/3000	M52x1,5/3010	M52x1,5/3500	M52x1,5/3510	M52x1,5/3540

JEMNÝ METRICKÝ ZÁVIT ISO / METRIC ISO FINE THREAD — MF

DIN 374

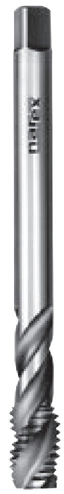
MATERIÁL / MATERIAL — HSSE

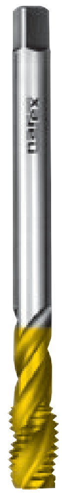


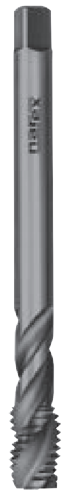


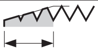
z = počet drážek / z = number of flutes

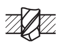
BEZ BAREVNÉHO OZNAČENÍ / NO RING

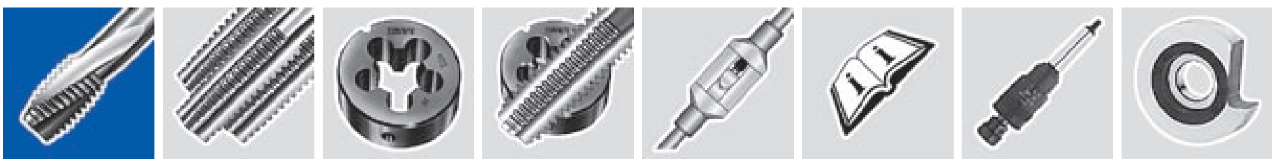






Provedení / Execution		cca 35°	cca 35° TiN	cca 35° OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials		
Použití / Application	Doporučené / Recommended		**B2, B3, H1**	**K**
	Možné / Possible	**B2, B3, H1**	**F2, H2, J2**	**B2, B3, H1**
Katalogové číslo / Cat. No.		**4050**	**4060**	**4090**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer 		C / 2,5P	C / 2,5P	C / 2,5P

d_1	P	l_1	l_2	d_2	a	z	 ∅ mm	Code 223044	Code 223044	Code 223044
M 3	0,35	56	5	2,2	-	3	2,65	M3x0,35/4050	M3x0,35/4060	M3x0,35/4090
M 3,5	0,35	56	6	2,5	2,1	3	3,15	M3,5x0,35/4050	M3,5x0,35/4060	M3,5x0,35/4090
M 4	0,5	63	7	2,8	2,1	3	3,5	M4x0,5/4050	M4x0,5/4060	M4x0,5/4090
M 4	0,35	63	7	2,8	2,1	3	3,65	M4x0,35/4050	M4x0,35/4060	M4x0,35/4090
M 4,5	0,5	70	8	3,5	2,7	3	4	M4,5x0,5/4050	M4,5x0,5/4060	M4,5x0,5/4090
M 5	0,5	70	8	3,5	2,7	3	4,5	M5x0,5/4050	M5x0,5/4060	M5x0,5/4090
M 5,5	0,5	80	7	4	3	3	5	M5,5x0,5/4050	M5,5x0,5/4060	M5,5x0,5/4090
M 6	0,75	80	10	4,5	3,4	3	5,2	M6x0,75/4050	M6x0,75/4060	M6x0,75/4090
M 6	0,5	80	10	4,5	3,4	3	5,5	M6x0,5/4050	M6x0,5/4060	M6x0,5/4090
M 7	0,75	80	10	5,5	4,3	3	6,2	M7x0,75/4050	M7x0,75/4060	M7x0,75/4090
M 8	1	90	13	6	4,9	3	7	M8x1/4050	M8x1/4060	M8x1/4090
M 8	0,75	80	10	6	4,9	3	7,2	M8x0,75/4050	M8x0,75/4060	M8x0,75/4090
M 8	0,5	80	10	6	4,9	3	7,5	M8x0,5/4050	M8x0,5/4060	M8x0,5/4090
M 9	1	90	13	7	5,5	3	8	M9x1/4050	M9x1/4060	M9x1/4090
M 9	0,75	80	10	7	5,5	3	8,2	M9x0,75/4050	M9x0,75/4060	M9x0,75/4090
M 10	1,25	100	15	7	5,5	3	8,8	M10x1,25/4050	M10x1,25/4060	M10x1,25/4090
M 10	1	90	12	7	5,5	3	9	M10x1/4050	M10x1/4060	M10x1/4090
M 10	0,75	90	12	7	5,5	3	9,2	M10x0,75/4050	M10x0,75/4060	M10x0,75/4090
M 11	1	90	12	8	6,2	3	10	M11x1/4050	M11x1/4060	M11x1/4090
M 11	0,75	90	12	8	6,2	3	10,2	M11x0,75/4050	M11x0,75/4060	M11x0,75/4090
M 12	1,5	100	14	9	7	3	10,5	M12x1,5/4050	M12x1,5/4060	M12x1,5/4090
M 12	1,25	100	14	9	7	3	10,8	M12x1,25/4050	M12x1,25/4060	M12x1,25/4090
M 12	1	100	14	9	7	3	11	M12x1/4050	M12x1/4060	M12x1/4090
M 13	1	100	15	11	9	3	12	M13x1/4050	M13x1/4060	M13x1/4090
M 14	1,5	100	16	11	9	3	12,5	M14x1,5/4050	M14x1,5/4060	M14x1,5/4090
M 14	1,25	100	16	11	9	3	12,8	M14x1,25/4050	M14x1,25/4060	M14x1,25/4090
M 14	1	100	16	11	9	3	13	M14x1/4050	M14x1/4060	M14x1/4090
M 15	1,5	100	17	12	9	3	13,5	M15x1,5/4050	M15x1,5/4060	M15x1,5/4090
M 15	1	100	16	12	9	3	14	M15x1/4050	M15x1/4060	M15x1/4090
M 16	1,5	100	16	12	9	4	14,5	M16x1,5/4050	M16x1,5/4060	M16x1,5/4090
M 16	1	100	16	12	9	4	15	M16x1/4050	M16x1/4060	M16x1/4090
M 17	1,5	100	17	12	9	4	15,5	M17x1,5/4050	M17x1,5/4060	M17x1,5/4090
M 17	1	100	16	12	9	4	16	M17x1/4050	M17x1/4060	M17x1/4090
M 18	2	125	20	14	11	4	16	M18x2/4050	M18x2/4060	M18x2/4090
M 18	1,5	110	20	14	11	4	16,5	M18x1,5/4050	M18x1,5/4060	M18x1,5/4090
M 18	1	110	20	14	11	4	17	M18x1/4050	M18x1/4060	M18x1/4090
M 20	2	140	20	16	12	4	18	M20x2/4050	M20x2/4060	M20x2/4090
M 20	1,5	125	20	16	12	4	18,5	M20x1,5/4050	M20x1,5/4060	M20x1,5/4090
M 20	1	125	20	16	12	4	19	M20x1/4050	M20x1/4060	M20x1/4090
M 22	2	140	20	18	14,5	4	20	M22x2/4050	M22x2/4060	M22x2/4090

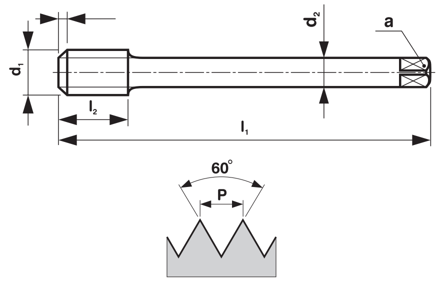


JEMNÝ METRICKÝ ZÁVIT ISO
METRIC ISO FINE THREAD

MF

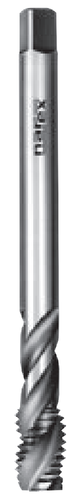
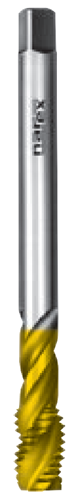
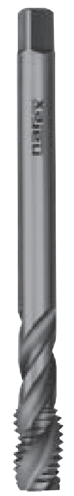
DIN 374

MATERIÁL / MATERIAL **HSSE**



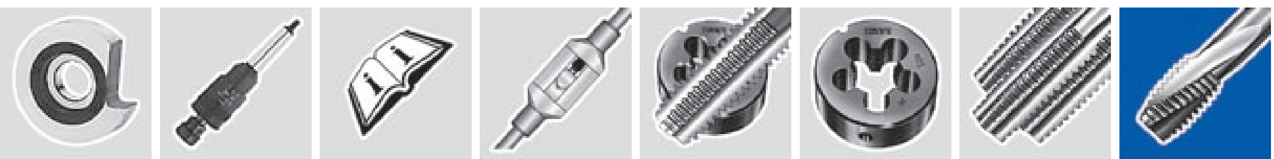
z = počet drážek / z = number of flutes

BEZ BAREVNÉHO OZNAČENÍ / NO RING

Provedení / Execution		cca 35°	cca 35° TiN	cca 35° OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials		
Použití Application	Doporučené / Recommended		**B2, B3, H1**	**K**
	Možné / Possible	**B2, B3, H1**	**F2, H2, J2**	**B2, B3, H1**
Katalogové číslo / Cat. No.		**4050**	**4060**	**4090**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		C / 2,5P	C / 2,5P	C / 2,5P

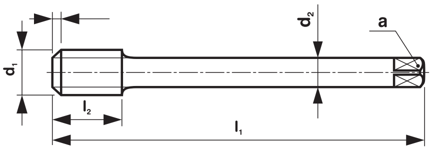
d_1	P	l_1	l_2	d_2	a	z	∅ mm	**Code 223044**	**Code 223044**	**Code 223044**
M 22	1,5	125	20	18	14,5	4	20,5	M22x1,5/4050	M22x1,5/4060	M22x1,5/4090
M 22	1	125	20	18	14,5	4	21	M22x1/4050	M22x1/4060	M22x1/4090
M 24	2	140	22	18	14,5	4	22	M24x2/4050	M24x2/4060	M24x2/4090
M 24	1,5	140	22	18	14,5	4	22,5	M24x1,5/4050	M24x1,5/4060	M24x1,5/4090
M 24	1	140	22	18	14,5	4	23	M24x1/4050	M24x1/4060	M24x1/4090
M 25	2	140	22	18	14,5	4	23	M25x2/4050	M25x2/4060	M25x2/4090
M 25	1,5	140	22	18	14,5	4	23,5	M25x1,5/4050	M25x1,5/4060	M25x1,5/4090
M 26	1,5	140	22	18	14,5	4	24,5	M26x1,5/4050	M26x1,5/4060	M26x1,5/4090
M 27	2	140	22	20	16	4	25	M27x2/4050	M27x2/4060	M27x2/4090
M 27	1,5	140	22	20	16	4	25,5	M27x1,5/4050	M27x1,5/4060	M27x1,5/4090
M 27	1	140	22	20	16	4	26	M27x1/4050	M27x1/4060	M27x1/4090
M 28	2	140	22	20	16	4	26	M28x2/4050	M28x2/4060	M28x2/4090
M 28	1,5	140	22	20	16	4	26,5	M28x1,5/4050	M28x1,5/4060	M28x1,5/4090
M 30	2	150	26	22	18	4	28	M30x2/4050	M30x2/4060	M30x2/4090
M 30	1,5	150	26	22	18	4	28,5	M30x1,5/4050	M30x1,5/4060	M30x1,5/4090
M 30	1	150	26	22	18	4	29	M30x1/4050	M30x1/4060	M30x1/4090
M 32	1,5	150	26	22	18	4	30,5	M32x1,5/4050	M32x1,5/4060	M32x1,5/4090
M 33	2	160	28	25	20	4	31	M33x2/4050	M33x2/4060	M33x2/4090
M 33	1,5	160	28	25	20	4	31,5	M33x1,5/4050	M33x1,5/4060	M33x1,5/4090
M 34	1,5	170	28	28	22	4	32,5	M34x1,5/4050	M34x1,5/4060	M34x1,5/4090
M 35	1,5	170	28	28	22	4	33,5	M35x1,5/4050	M35x1,5/4060	M35x1,5/4090
M 36	3	200	36	28	22	4	33	M36x3/4050	M36x3/4060	M36x3/4090
M 36	2	170	28	28	22	4	34	M36x2/4050	M36x2/4060	M36x2/4090
M 36	1,5	170	28	28	22	4	34,5	M36x1,5/4050	M36x1,5/4060	M36x1,5/4090

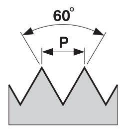


JEMNÝ METRICKÝ ZÁVIT ISO
METRIC ISO FINE THREAD
MF

DIN 374

MATERIÁL / MATERIAL HSSE



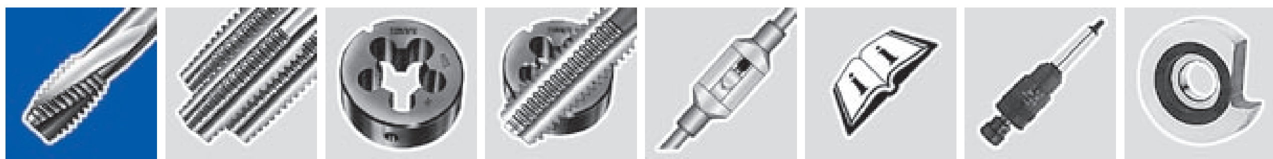


z = počet drážek / z = number of flutes

MODRÝ PRUH / BLUE RING

Provedení / Execution	TiN	OX	cca 35° TiN	cca 35° OX
Typ otvoru / Hole type	Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití / Application – Doporučené / Recommended	**C1, E, I, J2**		**C1, C3, E, I, J2**	
Použití / Application – Možné / Possible	**C2, C3**	**E**	**C2**	**E**
Katalogové číslo / Cat. No.	**3660**	**3690**	**4260**	**4290**
Lícování / Tolerance	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer	B / 4-6P	B / 4-6P	C / 2,5P	C / 2,5P

d_1	P	l_1	l_2	$l_{2R35°}$	d_2	a	z / $z_{R35°}$	∅ mm	Code 223043	Code 223043	Code 223044	Code 223044
M 3	0,35	56	8	5	2,2	-	3/3	2,65	M3x0,35/3660	M3x0,35/3690	M3x0,35/4260	M3x0,35/4290
M 3,5	0,35	56	8	6	2,5	2,1	3/3	3,15	M3,5x0,35/3660	M3,5x0,35/3690	M3,5x0,35/4260	M3,5x0,35/4290
M 4	0,5	63	12	7	2,8	2,1	3/3	3,5	M4x0,5/3660	M4x0,5/3690	M4x0,5/4260	M4x0,5/4290
M 4	0,35	63	12	7	2,8	2,1	3/3	3,65	M4x0,35/3660	M4x0,35/3690	M4x0,35/4260	M4x0,35/4290
M 4,5	0,5	70	13	8	3,5	2,7	3/3	4	M4,5x0,5/3660	M4,5x0,5/3690	M4,5x0,5/4260	M4,5x0,5/4290
M 5	0,5	70	13	8	3,5	2,7	3/3	4,5	M5x0,5/3660	M5x0,5/3690	M5x0,5/4260	M5x0,5/4290
M 5,5	0,5	80	15	7	4	3	3/3	5	M5,5x0,5/3660	M5,5x0,5/3690	M5,5x0,5/4260	M5,5x0,5/4290
M 6	0,75	80	15	10	4,5	3,4	3/3	5,2	M6x0,75/3660	M6x0,75/3690	M6x0,75/4260	M6x0,75/4290
M 6	0,5	80	15	10	4,5	3,4	3/3	5,5	M6x0,5/3660	M6x0,5/3690	M6x0,5/4260	M6x0,5/4290
M 7	0,75	80	15	10	5,5	4,3	3/3	6,2	M7x0,75/3660	M7x0,75/3690	M7x0,75/4260	M7x0,75/4290
M 8	1	90	18	13	6	4,9	3/3	7	M8x1/3660	M8x1/3690	M8x1/4260	M8x1/4290
M 8	0,75	80	15	10	6	4,9	3/3	7,2	M8x0,75/3660	M8x0,75/3690	M8x0,75/4260	M8x0,75/4290
M 8	0,5	80	15	10	6	4,9	3/3	7,5	M8x0,5/3660	M8x0,5/3690	M8x0,5/4260	M8x0,5/4290
M 9	1	90	18	13	7	5,5	3/3	8	M9x1/3660	M9x1/3690	M9x1/4260	M9x1/4290
M 9	0,75	80	18	10	7	5,5	3/3	8,2	M9x0,75/3660	M9x0,75/3690	M9x0,75/4260	M9x0,75/4290
M 10	1,25	100	20	15	7	5,5	3/3	8,8	M10x1,25/3660	M10x1,25/3690	M10x1,25/4260	M10x1,25/4290
M 10	1	90	20	12	7	5,5	3/3	9	M10x1/3660	M10x1/3690	M10x1/4260	M10x1/4290
M 10	0,75	90	20	12	7	5,5	3/3	9,2	M10x0,75/3660	M10x0,75/3690	M10x0,75/4260	M10x0,75/4290
M 11	1	90	20	12	8	6,2	3/3	10	M11x1/3660	M11x1/3690	M11x1/4260	M11x1/4290
M 11	0,75	90	20	12	8	6,2	3/3	10,2	M11x0,75/3660	M11x0,75/3690	M11x0,75/4260	M11x0,75/4290
M 12	1,5	100	21	14	9	7	3/3	10,5	M12x1,5/3660	M12x1,5/3690	M12x1,5/4260	M12x1,5/4290
M 12	1,25	100	21	14	9	7	3/3	10,8	M12x1,25/3660	M12x1,25/3690	M12x1,25/4260	M12x1,25/4290
M 12	1	100	21	14	9	7	3/3	11	M12x1/3660	M12x1/3690	M12x1/4260	M12x1/4290
M 13	1	100	21	15	11	9	3/3	12	M13x1/3660	M13x1/3690	M13x1/4260	M13x1/4290
M 14	1,5	100	21	16	11	9	3/3	12,5	M14x1,5/3660	M14x1,5/3690	M14x1,5/4260	M14x1,5/4290
M 14	1,25	100	21	16	11	9	3/3	12,8	M14x1,25/3660	M14x1,25/3690	M14x1,25/4260	M14x1,25/4290
M 14	1	100	21	16	11	9	3/3	13	M14x1/3660	M14x1/3690	M14x1/4260	M14x1/4290
M 15	1,5	100	21	17	12	9	3/3	13,5	M15x1,5/3660	M15x1,5/3690	M15x1,5/4260	M15x1,5/4290
M 15	1	100	21	16	12	9	3/3	14	M15x1/3660	M15x1/3690	M15x1/4260	M15x1/4290
M 16	1,5	100	21	16	12	9	3/4	14,5	M16x1,5/3660	M16x1,5/3690	M16x1,5/4260	M16x1,5/4290
M 16	1	100	21	16	12	9	3/4	15	M16x1/3660	M16x1/3690	M16x1/4260	M16x1/4290
M 17	1,5	100	21	17	12	9	3/4	15,5	M17x1,5/3660	M17x1,5/3690	M17x1,5/4260	M17x1,5/4290
M 17	1	100	21	16	12	9	3/4	16	M17x1/3660	M17x1/3690	M17x1/4260	M17x1/4290
M 18	2	125	24	20	14	11	3/4	16	M18x2/3660	M18x2/3690	M18x2/4260	M18x2/4290
M 18	1,5	110	24	20	14	11	3/4	16,5	M18x1,5/3660	M18x1,5/3690	M18x1,5/4260	M18x1,5/4290
M 18	1	110	24	20	14	11	3/4	17	M18x1/3660	M18x1/3690	M18x1/4260	M18x1/4290
M 20	2	140	30	20	16	12	3/4	18	M20x2/3660	M20x2/3690	M20x2/4260	M20x2/4290
M 20	1,5	125	24	20	16	12	3/4	18,5	M20x1,5/3660	M20x1,5/3690	M20x1,5/4260	M20x1,5/4290
M 20	1	125	24	20	16	12	3/4	19	M20x1/3660	M20x1/3690	M20x1/4260	M20x1/4290
M 22	2	140	30	20	18	14,5	3/4	20	M22x2/3660	M22x2/3690	M22x2/4260	M22x2/4290

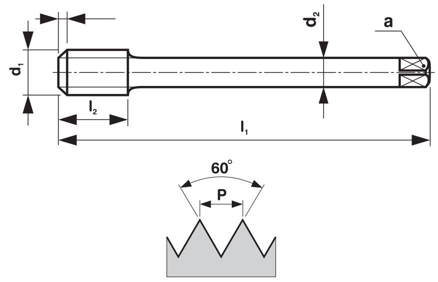


JEMNÝ METRICKÝ ZÁVIT ISO
METRIC ISO FINE THREAD

MF

DIN 374

MATERIÁL / MATERIAL **HSSE**

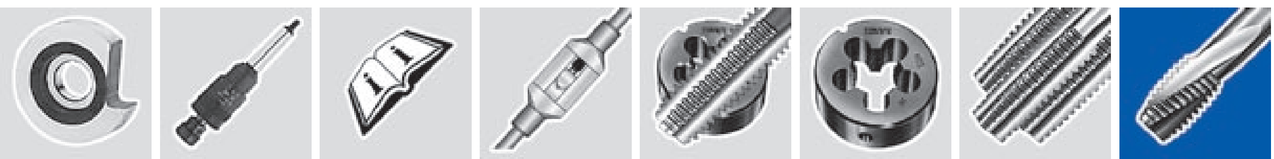


z = počet drážek / z = number of flutes

MODRÝ PRUH / BLUE RING

Provedení / Execution	TiN	OX	cca 35° TiN	cca 35° OX
Typ otvoru / Hole type	Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití Application — Doporučené / Recommended	**C1, E, I, J2**		**C1, C3, E, I, J2**	
Použití Application — Možné / Possible	**C2, C3**	**E**	**C2**	**E**
Katalogové číslo / Cat. No.	**3660**	**3690**	**4260**	**4290**
Lícování / Tolerance	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer	B / 4-6P	B / 4-6P	C / 2,5P	C / 2,5P

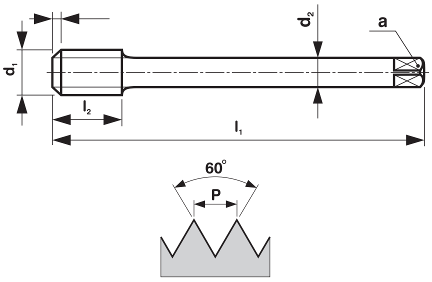
d_1	P	l_1	l_2	$l_{2R35°}$	d_2	a	z / $z_{R35°}$	∅ mm	Code **223043**	Code **223043**	Code **223044**	Code **223044**
M 22	1,5	125	24	20	18	14,5	3/4	20,5	M22x1,5/3660	M22x1,5/3690	M22x1,5/4260	M22x1,5/4290
M 22	1	125	24	20	18	14,5	3/4	21	M22x1/3660	M22x1/3690	M22x1/4260	M22x1/4290
M 24	2	140	26	22	18	14,5	4/4	22	M24x2/3660	M24x2/3690	M24x2/4260	M24x2/4290
M 24	1,5	140	26	22	18	14,5	4/4	22,5	M24x1,5/3660	M24x1,5/3690	M24x1,5/4260	M24x1,5/4290
M 24	1	140	26	22	18	14,5	4/4	23	M24x1/3660	M24x1/3690	M24x1/4260	M24x1/4290
M 25	2	140	26	22	18	14,5	4/4	23	M25x2/3660	M25x2/3690	M25x2/4260	M25x2/4290
M 25	1,5	140	26	22	18	14,5	4/4	23,5	M25x1,5/3660	M25x1,5/3690	M25x1,5/4260	M25x1,5/4290
M 26	1,5	140	26	22	18	14,5	4/4	24,5	M26x1,5/3660	M26x1,5/3690	M26x1,5/4260	M26x1,5/4290
M 27	2	140	26	22	20	16	4/4	25	M27x2/3660	M27x2/3690	M27x2/4260	M27x2/4290
M 27	1,5	140	26	22	20	16	4/4	25,5	M27x1,5/3660	M27x1,5/3690	M27x1,5/4260	M27x1,5/4290
M 27	1	140	26	22	20	16	4/4	26	M27x1/3660	M27x1/3690	M27x1/4260	M27x1/4290
M 28	2	140	26	22	20	16	4/4	26	M28x2/3660	M28x2/3690	M28x2/4260	M28x2/4290
M 28	1,5	140	26	22	20	16	4/4	26,5	M28x1,5/3660	M28x1,5/3690	M28x1,5/4260	M28x1,5/4290
M 30	2	150	28	26	22	18	4/4	28	M30x2/3660	M30x2/3690	M30x2/4260	M30x2/4290
M 30	1,5	150	28	26	22	18	4/4	28,5	M30x1,5/3660	M30x1,5/3690	M30x1,5/4260	M30x1,5/4290
M 30	1	150	28	26	22	18	4/4	29	M30x1/3660	M30x1/3690	M30x1/4260	M30x1/4290
M 32	1,5	150	28	26	22	18	4/4	30,5	M32x1,5/3660	M32x1,5/3690	M32x1,5/4260	M32x1,5/4290
M 33	2	160	30	28	25	20	4/4	31	M33x2/3660	M33x2/3690	M33x2/4260	M33x2/4290
M 33	1,5	160	30	28	25	20	4/4	31,5	M33x1,5/3660	M33x1,5/3690	M33x1,5/4260	M33x1,5/4290
M 34	1,5	170	30	28	28	22	4/4	32,5	M34x1,5/3660	M34x1,5/3690	M34x1,5/4260	M34x1,5/4290
M 35	1,5	170	30	28	28	22	4/4	33,5	M35x1,5/3660	M35x1,5/3690	M35x1,5/4260	M35x1,5/4290
M 36	3	200	42	36	28	22	4/4	33	M36x3/3660	M36x3/3690	M36x3/4260	M36x3/4290
M 36	2	170	30	28	28	22	4/4	34	M36x2/3660	M36x2/3690	M36x2/4260	M36x2/4290
M 36	1,5	170	30	28	28	22	4/4	34,5	M36x1,5/3660	M36x1,5/3690	M36x1,5/4260	M36x1,5/4290



JEMNÝ METRICKÝ ZÁVIT ISO / METRIC ISO FINE THREAD — MF

DIN 374

MATERIÁL / MATERIAL HSSE

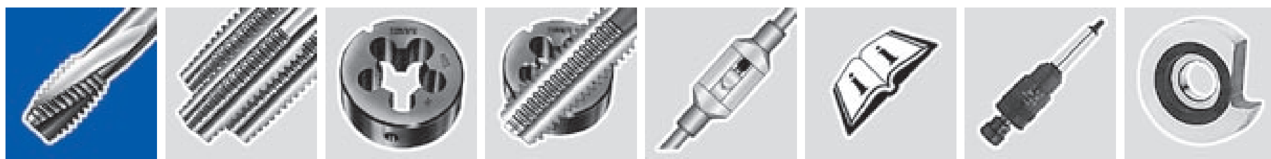


z = počet drážek / z = number of flutes

ČERVENÝ PRUH / RED RING

Provedení / Execution		TiCN	OX	cca 40° TiCN	cca 40° OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití Application	Doporučené / Recommended	**C2, C3, H2**		**C1, C2**	
	Možné / Possible	**C1**		**C3, H2**	
Katalogové číslo / Cat. No.		**3580**	**3590**	**4680**	**4690**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		B / 4-6P	B / 4-6P	C / 2,5P	C / 2,5P

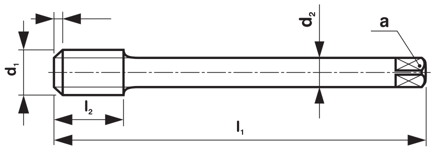
d_1	P	l_1	l_2	$l_{2R40°}$	d_2	a	z / $z_{R40°}$	∅ mm	Code 223043	Code 223043	Code 223044	Code 223044
M 3	0,35	56	8	5	2,2	-	3/3	2,65	M3x0,35/3580	M3x0,35/3590	M3x0,35/4680	M3x0,35/4690
M 3,5	0,35	56	8	6	2,5	2,1	3/3	3,15	M3,5x0,35/3580	M3,5x0,35/3590	M3,5x0,35/4680	M3,5x0,35/4690
M 4	0,5	63	12	7	2,8	2,1	3/3	3,5	M4x0,5/3580	M4x0,5/3590	M4x0,5/4680	M4x0,5/4690
M 4	0,35	63	12	7	2,8	2,1	3/3	3,65	M4x0,35/3580	M4x0,35/3590	M4x0,35/4680	M4x0,35/4690
M 4,5	0,5	70	13	8	3,5	2,7	3/3	4	M4,5x0,5/3580	M4,5x0,5/3590	M4,5x0,5/4680	M4,5x0,5/4690
M 5	0,5	70	13	8	3,5	2,7	3/3	4,5	M5x0,5/3580	M5x0,5/3590	M5x0,5/4680	M5x0,5/4690
M 5,5	0,5	80	15	7	4	3	3/3	5	M5,5x0,5/3580	M5,5x0,5/3590	M5,5x0,5/4680	M5,5x0,5/4690
M 6	0,75	80	15	10	4,5	3,4	3/3	5,2	M6x0,75/3580	M6x0,75/3590	M6x0,75/4680	M6x0,75/4690
M 6	0,5	80	15	10	4,5	3,4	3/3	5,5	M6x0,5/3580	M6x0,5/3590	M6x0,5/4680	M6x0,5/4690
M 7	0,75	80	15	10	5,5	4,3	3/3	6,2	M7x0,75/3580	M7x0,75/3590	M7x0,75/4680	M7x0,75/4690
M 8	1	90	18	13	6	4,9	3/3	7	M8x1/3580	M8x1/3590	M8x1/4680	M8x1/4690
M 8	0,75	80	15	10	6	4,9	3/3	7,2	M8x0,75/3580	M8x0,75/3590	M8x0,75/4680	M8x0,75/4690
M 8	0,5	80	15	10	6	4,9	3/3	7,5	M8x0,5/3580	M8x0,5/3590	M8x0,5/4680	M8x0,5/4690
M 9	1	90	18	13	7	5,5	3/3	8	M9x1/3580	M9x1/3590	M9x1/4680	M9x1/4690
M 9	0,75	80	18	10	7	5,5	3/3	8,2	M9x0,75/3580	M9x0,75/3590	M9x0,75/4680	M9x0,75/4690
M 10	1,25	100	20	15	7	5,5	3/4	8,8	M10x1,25/3580	M10x1,25/3590	M10x1,25/4680	M10x1,25/4690
M 10	1	90	20	12	7	5,5	3/4	9	M10x1/3580	M10x1/3590	M10x1/4680	M10x1/4690
M 10	0,75	90	20	12	7	5,5	3/4	9,2	M10x0,75/3580	M10x0,75/3590	M10x0,75/4680	M10x0,75/4690
M 11	1	90	20	12	8	6,2	3/4	10	M11x1/3580	M11x1/3590	M11x1/4680	M11x1/4690
M 11	0,75	90	20	12	8	6,2	3/4	10,2	M11x0,75/3580	M11x0,75/3590	M11x0,75/4680	M11x0,75/4690
M 12	1,5	100	21	14	9	7	3/4	10,5	M12x1,5/3580	M12x1,5/3590	M12x1,5/4680	M12x1,5/4690
M 12	1,25	100	21	14	9	7	3/4	10,8	M12x1,25/3580	M12x1,25/3590	M12x1,25/4680	M12x1,25/4690
M 12	1	100	21	14	9	7	3/4	11	M12x1/3580	M12x1/3590	M12x1/4680	M12x1/4690
M 13	1	100	21	15	11	9	3/4	12	M13x1/3580	M13x1/3590	M13x1/4680	M13x1/4690
M 14	1,5	100	21	16	11	9	3/4	12,5	M14x1,5/3580	M14x1,5/3590	M14x1,5/4680	M14x1,5/4690
M 14	1,25	100	21	16	11	9	3/4	12,8	M14x1,25/3580	M14x1,25/3590	M14x1,25/4680	M14x1,25/4690
M 14	1	100	21	16	11	9	3/4	13	M14x1/3580	M14x1/3590	M14x1/4680	M14x1/4690
M 15	1,5	100	21	17	12	9	3/4	13,5	M15x1,5/3580	M15x1,5/3590	M15x1,5/4680	M15x1,5/4690
M 15	1	100	21	16	12	9	3/4	14	M15x1/3580	M15x1/3590	M15x1/4680	M15x1/4690
M 16	1,5	100	21	16	12	9	3/5	14,5	M16x1,5/3580	M16x1,5/3590	M16x1,5/4680	M16x1,5/4690
M 16	1	100	21	16	12	9	3/5	15	M16x1/3580	M16x1/3590	M16x1/4680	M16x1/4690
M 17	1,5	100	21	17	12	9	3/5	15,5	M17x1,5/3580	M17x1,5/3590	M17x1,5/4680	M17x1,5/4690
M 17	1	100	21	16	12	9	3/5	16	M17x1/3580	M17x1/3590	M17x1/4680	M17x1/4690
M 18	2	125	24	20	14	11	3/5	16	M18x2/3580	M18x2/3590	M18x2/4680	M18x2/4690
M 18	1,5	110	24	20	14	11	3/5	16,5	M18x1,5/3580	M18x1,5/3590	M18x1,5/4680	M18x1,5/4690
M 18	1	110	24	20	14	11	3/5	17	M18x1/3580	M18x1/3590	M18x1/4680	M18x1/4690
M 20	2	140	30	20	16	12	3/5	18	M20x2/3580	M20x2/3590	M20x2/4680	M20x2/4690
M 20	1,5	125	24	20	16	12	3/5	18,5	M20x1,5/3580	M20x1,5/3590	M20x1,5/4680	M20x1,5/4690
M 20	1	125	24	20	16	12	3/5	19	M20x1/3580	M20x1/3590	M20x1/4680	M20x1/4690
M 22	2	140	30	20	18	14,5	3/5	20	M22x2/3580	M22x2/3590	M22x2/4680	M22x2/4690

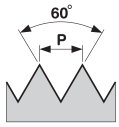


JEMNÝ METRICKÝ ZÁVIT ISO / METRIC ISO FINE THREAD — MF

DIN 374

MATERIÁL / MATERIAL — HSSE



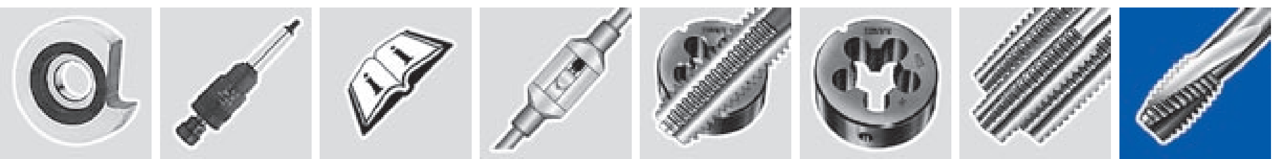


z = počet drážek / z = number of flutes

ČERVENÝ PRUH / RED RING

		3580	3590	4680	4690
Provedení / Execution		TiCN	OX	cca 40° TiCN	cca 40° OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů / See Register and corresponding group of materials			
Použití / Application	Doporučené / Recommended	C2, C3, H2		C1, C2	
	Možné / Possible	C1		C3, H2	
Katalogové číslo / Cat. No.		3580	3590	4680	4690
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		B / 4-6P	B / 4-6P	C / 2,5P	C / 2,5P

d_1	P	l_1	l_2	$l_{2R40°}$	d_2	a	z / $z_{R40°}$	∅ mm	Code 223043	Code 223043	Code 223044	Code 223044
M 22	1,5	125	24	20	18	14,5	3/5	20,5	M22x1,5/3580	M22x1,5/3590	M22x1,5/4680	M22x1,5/4690
M 22	1	125	24	20	18	14,5	3/5	21	M22x1/3580	M22x1/3590	M22x1/4680	M22x1/4690
M 24	2	140	26	22	18	14,5	4/5	22	M24x2/3580	M24x2/3590	M24x2/4680	M24x2/4690
M 24	1,5	140	26	22	18	14,5	4/5	22,5	M24x1,5/3580	M24x1,5/3590	M24x1,5/4680	M24x1,5/4690
M 24	1	140	26	22	18	14,5	4/5	23	M24x1/3580	M24x1/3590	M24x1/4680	M24x1/4690
M 25	2	140	26	22	18	14,5	4/5	23	M25x2/3580	M25x2/3590	M25x2/4680	M25x2/4690
M 25	1,5	140	26	22	18	14,5	4/5	23,5	M25x1,5/3580	M25x1,5/3590	M25x1,5/4680	M25x1,5/4690
M 26	1,5	140	26	22	18	14,5	4/5	24,5	M26x1,5/3580	M26x1,5/3590	M26x1,5/4680	M26x1,5/4690
M 27	2	140	26	22	20	16	4/5	25	M27x2/3580	M27x2/3590	M27x2/4680	M27x2/4690
M 27	1,5	140	26	22	20	16	4/5	25,5	M27x1,5/3580	M27x1,5/3590	M27x1,5/4680	M27x1,5/4690
M 27	1	140	26	22	20	16	4/5	26	M27x1/3580	M27x1/3590	M27x1/4680	M27x1/4690
M 28	2	140	26	22	20	16	4/5	26	M28x2/3580	M28x2/3590	M28x2/4680	M28x2/4690
M 28	1,5	140	26	22	20	16	4/5	26,5	M28x1,5/3580	M28x1,5/3590	M28x1,5/4680	M28x1,5/4690
M 30	2	150	28	26	22	18	4/5	28	M30x2/3580	M30x2/3590	M30x2/4680	M30x2/4690
M 30	1,5	150	28	26	22	18	4/5	28,5	M30x1,5/3580	M30x1,5/3590	M30x1,5/4680	M30x1,5/4690
M 30	1	150	28	26	22	18	4/5	29	M30x1/3580	M30x1/3590	M30x1/4680	M30x1/4690
M 32	1,5	150	28	26	22	18	4/5	30,5	M32x1,5/3580	M32x1,5/3590	M32x1,5/4680	M32x1,5/4690
M 33	2	160	30	28	25	20	4/5	31	M33x2/3580	M33x2/3590	M33x2/4680	M33x2/4690
M 33	1,5	160	30	28	25	20	4/5	31,5	M33x1,5/3580	M33x1,5/3590	M33x1,5/4680	M33x1,5/4690
M 34	1,5	170	30	28	28	22	4/5	32,5	M34x1,5/3580	M34x1,5/3590	M34x1,5/4680	M34x1,5/4690
M 35	1,5	170	30	28	28	22	4/5	33,5	M35x1,5/3580	M35x1,5/3590	M35x1,5/4680	M35x1,5/4690
M 36	3	200	42	36	28	22	4/5	33	M36x3/3580	M36x3/3590	M36x3/4680	M36x3/4690
M 36	2	170	30	28	28	22	4/5	34	M36x2/3580	M36x2/3590	M36x2/4680	M36x2/4690
M 36	1,5	170	30	28	28	22	4/5	34,5	M36x1,5/3580	M36x1,5/3590	M36x1,5/4680	M36x1,5/4690

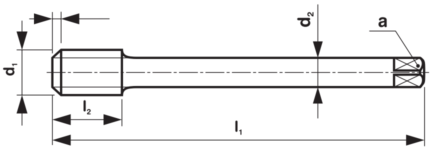


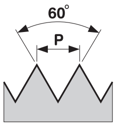
JEMNÝ METRICKÝ ZÁVIT ISO
METRIC ISO FINE THREAD MF

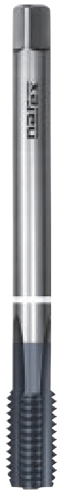
DIN 374

MATERIÁL / MATERIAL HSSE

BÍLÝ PRUH / WHITE RING



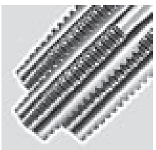




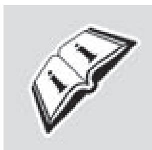
z = počet drážek / z = number of flutes

Provedení / Execution		TiCN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials
Použití Application	Doporučené / Recommended	**F**
	Možné / Possible	**H2**
Katalogové číslo / Cat. No.		**3080**
Lícování / Tolerance		ISO2 (6HX)
Řezný kužel / Chamfer		C / 2,5P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223042**
M 3	0,35	56	8	2,2	-	3	2,65	M3x0,35/3080
M 3,5	0,35	56	8	2,5	2,1	3	3,15	M3,5x0,35/3080
M 4	0,5	63	12	2,8	2,1	3	3,5	M4x0,5/3080
M 4	0,35	63	12	2,8	2,1	3	3,65	M4x0,35/3080
M 4,5	0,5	70	13	3,5	2,7	3	4	M4,5x0,5/3080
M 5	0,5	70	13	3,5	2,7	3	4,5	M5x0,5/3080
M 5,5	0,5	80	15	4	3	3	5	M5,5x0,5/3080
M 6	0,75	80	15	4,5	3,4	3	5,2	M6x0,75/3080
M 6	0,5	80	15	4,5	3,4	3	5,5	M6x0,5/3080
M 7	0,75	80	15	5,5	4,3	3	6,2	M7x0,75/3080
M 8	1	90	18	6	4,9	4	7	M8x1/3080
M 8	0,75	80	15	6	4,9	4	7,2	M8x0,75/3080
M 8	0,5	80	15	6	4,9	4	7,5	M8x0,5/3080
M 9	1	90	18	7	5,5	4	8	M9x1/3080
M 9	0,75	80	18	7	5,5	4	8,2	M9x0,75/3080
M 10	1,25	100	20	7	5,5	4	8,8	M10x1,25/3080
M 10	1	90	20	7	5,5	4	9	M10x1/3080
M 10	0,75	90	20	7	5,5	4	9,2	M10x0,75/3080
M 11	1	90	20	8	6,2	4	10	M11x1/3080
M 11	0,75	90	20	8	6,2	4	10,2	M11x0,75/3080
M 12	1,5	100	21	9	7	4	10,5	M12x1,5/3080
M 12	1,25	100	21	9	7	4	10,8	M12x1,25/3080
M 12	1	100	21	9	7	4	11	M12x1/3080
M 13	1	100	21	11	9	4	12	M13x1/3080
M 14	1,5	100	21	11	9	4	12,5	M14x1,5/3080
M 14	1,25	100	21	11	9	4	12,8	M14x1,25/3080
M 14	1	100	21	11	9	4	13	M14x1/3080
M 15	1,5	100	21	12	9	4	13,5	M15x1,5/3080
M 15	1	100	21	12	9	4	14	M15x1/3080
M 16	1,5	100	21	12	9	4	14,5	M16x1,5/3080
M 16	1	100	21	12	9	4	15	M16x1/3080
M 17	1,5	100	21	12	9	4	15,5	M17x1,5/3080
M 17	1	100	21	12	9	4	16	M17x1/3080
M 18	2	125	24	14	11	4	16	M18x2/3080
M 18	1,5	110	24	14	11	4	16,5	M18x1,5/3080
M 18	1	110	24	14	11	4	17	M18x1/3080
M 20	2	140	30	16	12	4	18	M20x2/3080
M 20	1,5	125	24	16	12	4	18,5	M20x1,5/3080
M 20	1	125	24	16	12	4	19	M20x1/3080
M 22	2	140	30	18	14,5	4	20	M22x2/3080



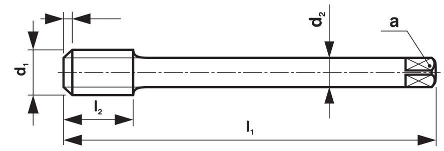


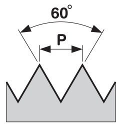
JEMNÝ METRICKÝ ZÁVIT ISO
METRIC ISO FINE THREAD

MF

DIN 374

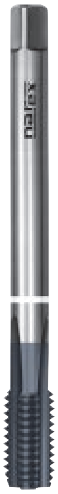
MATERIÁL / MATERIAL **HSSE**





z = počet drážek / z = number of flutes

BÍLÝ PRUH / WHITE RING



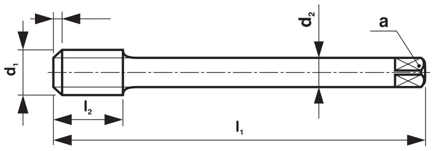
Provedení / Execution		**TiCN**
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials
Použití Application	Doporučené / Recommended	**F**
	Možné / Possible	**H2**
Katalogové číslo / Cat. No.		**3080**
Lícování / Tolerance		ISO2 (6HX)
Řezný kužel / Chamfer		C / 2,5P

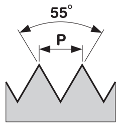
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223042**
M 22	1,5	125	24	18	14,5	4	20,5	M22x1,5/3080
M 22	1	125	24	18	14,5	4	21	M22x1/3080
M 24	2	140	26	18	14,5	4	22	M24x2/3080
M 24	1,5	140	26	18	14,5	4	22,5	M24x1,5/3080
M 24	1	140	26	18	14,5	4	23	M24x1/3080
M 25	2	140	26	18	14,5	4	23	M25x2/3080
M 25	1,5	140	26	18	14,5	4	23,5	M25x1,5/3080
M 26	1,5	140	26	18	14,5	4	24,5	M26x1,5/3080
M 27	2	140	26	20	16	4	25	M27x2/3080
M 27	1,5	140	26	20	16	4	25,5	M27x1,5/3080
M 27	1	140	26	20	16	4	26	M27x1/3080
M 28	2	140	26	20	16	4	26	M28x2/3080
M 28	1,5	140	26	20	16	4	26,5	M28x1,5/3080
M 30	2	150	28	22	18	4	28	M30x2/3080
M 30	1,5	150	28	22	18	4	28,5	M30x1,5/3080
M 30	1	150	28	22	18	4	29	M30x1/3080
M 32	1,5	150	28	22	18	5	30,5	M32x1,5/3080
M 33	2	160	30	25	20	5	31	M33x2/3080
M 33	1,5	160	30	25	20	5	31,5	M33x1,5/3080
M 34	1,5	170	30	28	22	5	32,5	M34x1,5/3080
M 35	1,5	170	30	28	22	5	33,5	M35x1,5/3080
M 36	3	200	42	28	22	5	33	M36x3/3080
M 36	2	170	30	28	22	5	34	M36x2/3080
M 36	1,5	170	30	28	22	5	34,5	M36x1,5/3080

TRUBKOVÝ ZÁVIT DIN ISO 228
PIPE THREAD DIN ISO 228 G

DIN 5156

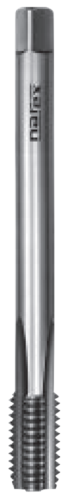
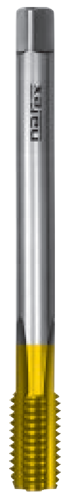
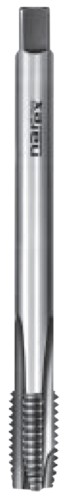
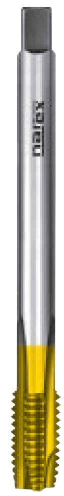
MATERIÁL / MATERIAL HSSE





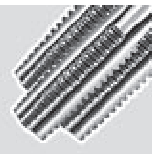
z = počet drážek / z = number of flutes

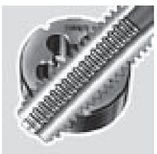
BEZ BAREVNÉHO OZNAČENÍ / NO RING

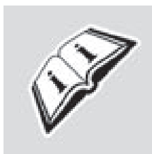





Provedení / Execution			TiN		TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití Application	Doporučené / Recommended		J1		A, B, H1
	Možné / Possible	J1	F1, H2	A, B, H1	J1
Katalogové číslo / Cat. No.		3002	3012	3502	3512
Lícování / Tolerance					
Řezný kužel / Chamfer		C / 2P	C / 2P	B / 4-6P	B / 4-6P

d_1	P	l_1	l_2	d_2	a	z	Ø mm	Code 223042	Code 223042	Code 223043	Code 223043
G 1/16"	28	90	18	6	4,9	3	6,8	G1/16/3002	G1/16/3012	G1/16/3502	G1/16/3512
G 1/8"	28	90	20	7	5,5	3	8,8	G1/8/3002	G1/8/3012	G1/8/3502	G1/8/3512
G 1/4"	19	100	21	11	9	3	11,8	G1/4/3002	G1/4/3012	G1/4/3502	G1/4/3512
G 3/8"	19	100	21	12	9	3	15,25	G3/8/3002	G3/8/3012	G3/8/3502	G3/8/3512
G 1/2"	14	125	24	16	12	3	19	G1/2/3002	G1/2/3012	G1/2/3502	G1/2/3512
G 5/8"	14	125	24	18	14,5	4	21	G5/8/3002	G5/8/3012	G5/8/3502	G5/8/3512
G 3/4"	14	140	26	20	16	4	24,5	G3/4/3002	G3/4/3012	G3/4/3502	G3/4/3512
G 7/8"	14	150	28	22	18	4	28,25	G7/8/3002	G7/8/3012	G7/8/3502	G7/8/3512
G 1"	11	160	30	25	20	4	30,75	G1/3002	G1/3012	G1/3502	G1/3512
G 1 1/8"	11	170	30	28	22	4	35,5	G1 1/8/3002	G1 1/8/3012	G1 1/8/3502	G1 1/8/3512
G 1 1/4"	11	170	30	32	24	4	39,5	G1 1/4/3002	G1 1/4/3012	G1 1/4/3502	G1 1/4/3512
G 1 1/2"	11	190	32	36	29	5	45,25	G1 1/2/3002	G1 1/2/3012	G1 1/2/3502	G1 1/2/3512
G 1 3/4"	11	190	32	40	32	5	51,3	G1 3/4/3002	G1 3/4/3012	G1 3/4/3502	G1 3/4/3512
G 2"	11	220	40	45	35	5	57,2	G2/3002	G2/3012	G2/3502	G2/3512



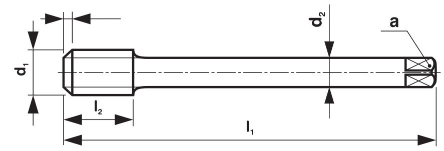


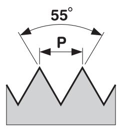
TRUBKOVÝ ZÁVIT DIN ISO 228 / PIPE THREAD DIN ISO 228 — G

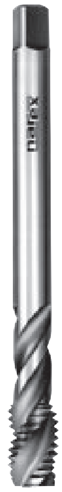
DIN 5156

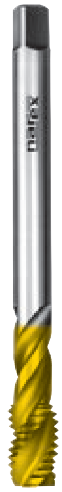
MATERIÁL / MATERIAL — HSSE

BEZ BAREVNÉHO OZNAČENÍ / NO RING





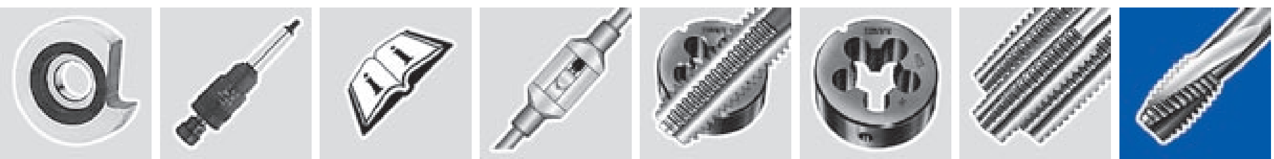




z = počet drážek / z = number of flutes

Provedení / Execution		cca 35°	cca 35° TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials	
Použití / Application	Doporučené / Recommended		**B2, B3, H1**
	Možné / Possible	**B2, B3, H1**	**F2, H2, J2**
Katalogové číslo / Cat. No.		**4052**	**4062**
Lícování / Tolerance			
Řezný kužel / Chamfer		C / 2,5P	C / 2,5P

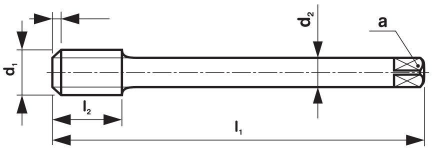
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223044	Code 223044
G 1/16"	28	90	13	6	4,9	3	6,8	G1/16/4052	G1/16/4062
G 1/8"	28	90	12	7	5,5	3	8,8	G1/8/4052	G1/8/4062
G 1/4"	19	100	16	11	9	3	11,8	G1/4/4052	G1/4/4062
G 3/8"	19	100	16	12	9	3	15,25	G3/8/4052	G3/8/4062
G 1/2"	14	125	20	16	12	4	19	G1/2/4052	G1/2/4062
G 5/8"	14	125	20	18	14,5	4	21	G5/8/4052	G5/8/4062
G 3/4"	14	140	22	20	16	4	24,5	G3/4/4052	G3/4/4062
G 7/8"	14	150	26	22	18	4	28,25	G7/8/4052	G7/8/4062
G 1"	11	160	30	25	20	4	30,75	G1/4052	G1/4062
G 1 1/8"	11	170	30	28	22	5	35,5	G1 1/8/4052	G1 1/8/4062
G 1 1/4"	11	170	30	32	24	5	39,5	G1 1/4/4052	G1 1/4/4062
G 1 1/2"	11	190	32	36	29	5	45,25	G1 1/2/4052	G1 1/2/4062
G 1 3/4"	11	190	32	40	32	5	51,3	G1 3/4/4052	G1 3/4/4062
G 2"	11	220	40	45	35	5	57,2	G2/4052	G2/4062

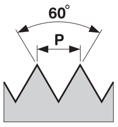


TRUBKOVÝ ZÁVIT DIN ISO 228
PIPE THREAD DIN ISO 228 **G**

DIN 5156

MATERIÁL / MATERIAL **HSSE**



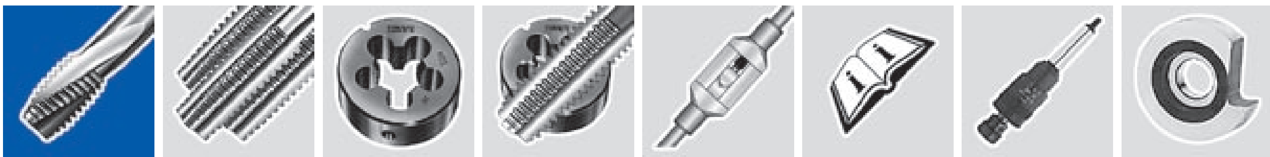


z = počet drážek / z = number of flutes

MODRÝ PRUH / BLUE RING

Provedení / Execution		TiN	OX	cca 35° TiN	cca 35° OX
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití Application	Doporučené / Recommended	**C1, E, I, J2**		**C1, C3, E, I, J2**	
	Možné / Possible	**C2, C3**	**E**	**C2**	**E**
Katalogové číslo / Cat. No.		**3662**	**3692**	**4262**	**4292**
Lícování / Tolerance					
Řezný kužel / Chamfer		B / 4-6P	B / 4-6P	C / 2,5P	C / 2,5P

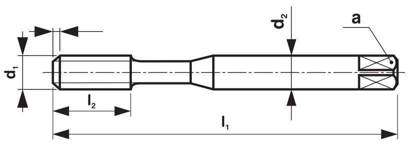
d_1	P	l_1	l_2	$l_{2R35°}$	d_2	a	z / $z_{R35°}$	∅ mm	Code 223043	Code 223043	Code 223044	Code 223044
G 1/16"	28	90	18	13	6	4,9	3 / 3	6,8	G1/16/3662	G1/16/3692	G1/16/4262	G1/16/4292
G 1/8"	28	90	20	12	7	5,5	3 / 3	8,8	G1/8/3662	G1/8/3692	G1/8/4262	G1/8/4292
G 1/4"	19	100	21	16	11	9	3 / 3	11,8	G1/4/3662	G1/4/3692	G1/4/4262	G1/4/4292
G 3/8"	19	100	21	16	12	9	3 / 3	15,25	G3/8/3662	G3/8/3692	G3/8/4262	G3/8/4292
G 1/2"	14	125	24	20	16	12	3 / 4	19	G1/2/3662	G1/2/3692	G1/2/4262	G1/2/4292
G 5/8"	14	125	24	20	18	14,5	4 / 4	21	G5/8/3662	G5/8/3692	G5/8/4262	G5/8/4292
G 3/4"	14	140	26	22	20	16	4 / 4	24,5	G3/4/3662	G3/4/3692	G3/4/4262	G3/4/4292
G 7/8"	14	150	28	26	22	18	4 / 4	28,25	G7/8/3662	G7/8/3692	G7/8/4262	G7/8/4292
G 1"	11	160	30	30	25	20	4 / 4	30,75	G1/3662	G1/3692	G1/4262	G1/4292
G 1 1/8"	11	170	30	30	28	22	4 / 5	35,5	G1 1/8/3662	G1 1/8/3692	G1 1/8/4262	G1 1/8/4292
G 1 1/4"	11	170	30	30	32	24	4 / 5	39,5	G1 1/4/3662	G1 1/4/3692	G1 1/4/4262	G1 1/4/4292
G 1 1/2"	11	190	32	32	36	29	6 / 5	45,25	G1 1/2/3662	G1 1/2/3692	G1 1/2/4262	G1 1/2/4292

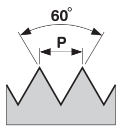


UNIFIKOVANÝ HRUBÝ ZÁVIT / UNIFIED COARSE THRED — UNC

~ DIN 371

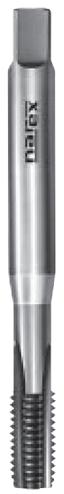
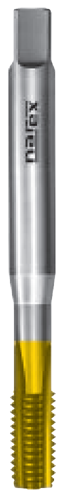
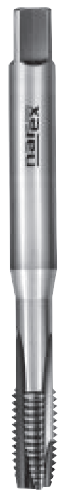
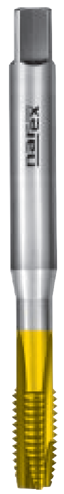
MATERIÁL / MATERIAL — HSSE





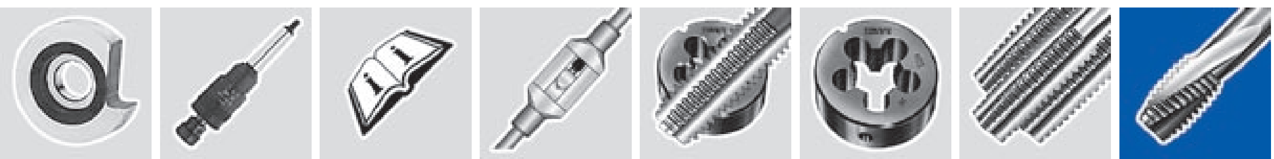
z = počet drážek / z = number of flutes

BEZ BAREVNÉHO OZNAČENÍ / NO RING

Provedení / Execution			TiN		TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití Application	Doporučené / Recommended		**J1**		**A, B, H1**
	Možné / Possible	**J1**	**F1, H2**	**A, B, H1**	**J1**
Katalogové číslo / Cat. No.		**1004**	**1014**	**1504**	**1514**
Lícování / Tolerance		2B	2B	2B	2B
Řezný kužel / Chamfer		C / 2P	C / 2P	B / 4-6P	B / 4-6P

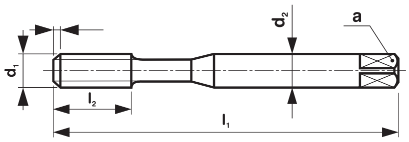
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223042**	Code **223042**	Code **223043**	Code **223043**
No. 5	40	56	9	3,5	2,7	3	2,6	UNC5-40/1004	UNC5-40/1014	UNC5-40/1504	UNC5-40/1514
No. 6	32	56	11	4	3	3	2,85	UNC6-32/1004	UNC6-32/1014	UNC6-32/1504	UNC6-32/1514
No. 8	32	63	12	4,5	3,4	3	3,5	UNC8-32/1004	UNC8-32/1014	UNC8-32/1504	UNC8-32/1514
No. 10	24	70	13	6	4,9	3	3,9	UNC10-24/1004	UNC10-24/1014	UNC10-24/1504	UNC10-24/1514
No. 12	24	80	15	6	4,9	3	4,5	UNC12-24/1004	UNC12-24/1014	UNC12-24/1504	UNC12-24/1514
1/4	20	80	15	7	5,2	3	5,2	UNC1/4-20/1004	UNC1/4-20/1014	UNC1/4-20/1504	UNC1/4-20/1514
5/16	18	90	18	8	6,2	3	6,6	UNC5/16-18/1004	UNC5/16-18/1014	UNC5/16-18/1504	UNC5/16-18/1514
3/8	16	90	20	9	7	3	8	UNC3/8-16/1004	UNC3/8-16/1014	UNC3/8-16/1504	UNC3/8-16/1514

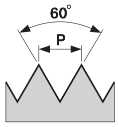


UNIFIKOVANÝ HRUBÝ ZÁVIT / UNIFIED COARSE THRED — UNC

~ DIN 371

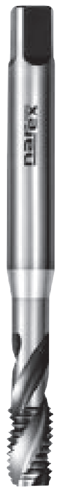
MATERIÁL / MATERIAL — **HSSE**

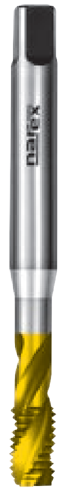




z = počet drážek / z = number of flutes

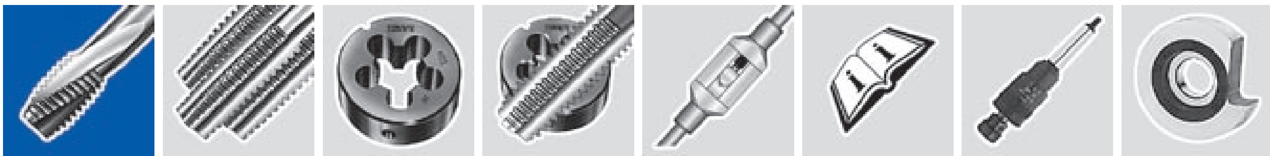
BEZ BAREVNÉHO OZNAČENÍ / NO RING





Provedení / Execution		cca 35°	cca 35° TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů / See Register and corresponding group of materials	
Použití / Application	Doporučené / Recommended		**B2, B3, H1**
	Možné / Possible	**B2, B3, H1**	**F2, H2, J2**
Katalogové číslo / Cat. No.		**2054**	**2064**
Lícování / Tolerance		2B	2B
Řezný kužel / Chamfer		C / 2,5P	C / 2,5P

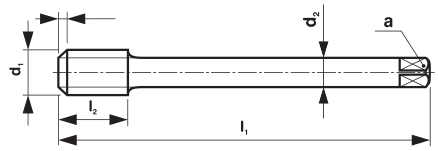
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223044	Code 223044
No. 5	40	56	5	3,5	2,7	3	2,6	UNC5-40/2054	UNC5-40/2064
No. 6	32	56	7	4	3	3	2,85	UNC6-32/2054	UNC6-32/2064
No. 8	32	63	7	4,5	3,4	3	3,5	UNC8-32/2054	UNC8-32/2064
No. 10	24	70	8	6	4,9	3	3,9	UNC10-24/2054	UNC10-24/2064
No. 12	24	80	10	6	4,9	3	4,5	UNC12-24/2054	UNC12-24/2064
1/4	20	80	10	7	5,2	3	5,2	UNC1/4-20/2054	UNC1/4-20/2064
5/16	18	90	13	8	6,2	3	6,6	UNC5/16-18/2054	UNC5/16-18/2064
3/8	16	90	15	9	7	3	8	UNC3/8-16/2054	UNC3/8-16/2064

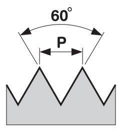


UNIFIKOVANÝ HRUBÝ ZÁVIT / UNIFIED COARSE THRED — UNC

~ DIN 376

MATERIÁL / MATERIAL HSSE



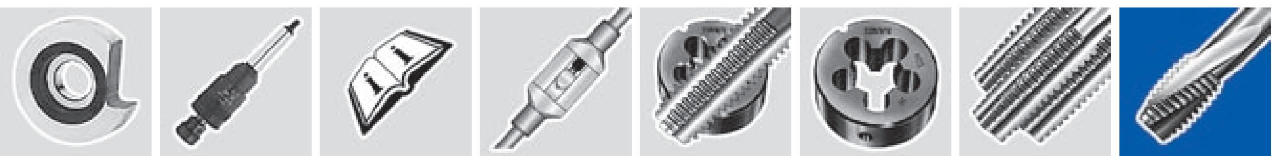


z = počet drážek / z = number of flutes

BEZ BAREVNÉHO OZNAČENÍ / NO RING

Provedení / Execution			TiN		TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití Application	Doporučené / Recommended		**J1**		**A, B, H1**
	Možné / Possible	**J1**	**F1, H2**	**A, B, H1**	**J1**
Katalogové číslo / Cat. No.		**3004**	**3014**	**3504**	**3514**
Lícování / Tolerance		2B	2B	2B	2B
Řezný kužel / Chamfer		C / 2P	C / 2P	B / 4-6P	B / 4-6P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223042**	Code **223042**	Code **223043**	Code **223043**
7/16	14	100	20	8	6,2	3	9,4	UNC7/16-14/3004	UNC7/16-14/3014	UNC7/16-14/3504	UNC7/16-14/3514
1/2	13	110	23	9	7	3	10,75	UNC1/2-13/3004	UNC1/2-13/3014	UNC1/2-13/3504	UNC1/2-13/3514
9/16	12	110	25	11	9	3	12,25	UNC9/16-12/3004	UNC9/16-12/3014	UNC9/16-12/3504	UNC9/16-12/3514
5/8	11	110	25	12	9	3	13,5	UNC5/8-11/3004	UNC5/8-11/3014	UNC5/8-11/3504	UNC5/8-11/3514
3/4	10	125	30	14	11	3	16,5	UNC3/4-10/3004	UNC3/4-10/3014	UNC3/4-10/3504	UNC3/4-10/3514
7/8	9	140	30	18	14,5	3	19,5	UNC7/8-9/3004	UNC7/8-9/3014	UNC7/8-9/3504	UNC7/8-9/3514
1	8	160	36	18	14,5	3	22,25	UNC1-8/3004	UNC1-8/3014	UNC1-8/3504	UNC1-8/3514
1 1/8	7	180	40	22	18	4	25	UNC1 1/8-7/3004	UNC1 1/8-7/3014	UNC1 1/8-7/3504	UNC1 1/8-7/3514

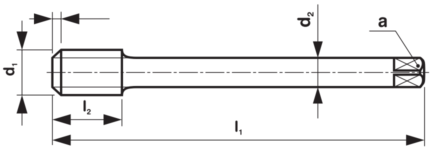


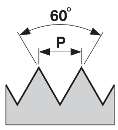
UNIFIKOVANÝ HRUBÝ ZÁVIT / UNIFIED COARSE THRED — UNC

~ DIN 376

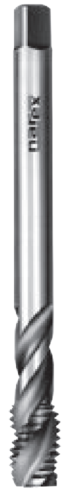
MATERIÁL / MATERIAL — **HSSE**

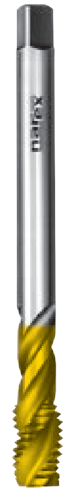
BEZ BAREVNÉHO OZNAČENÍ / NO RING





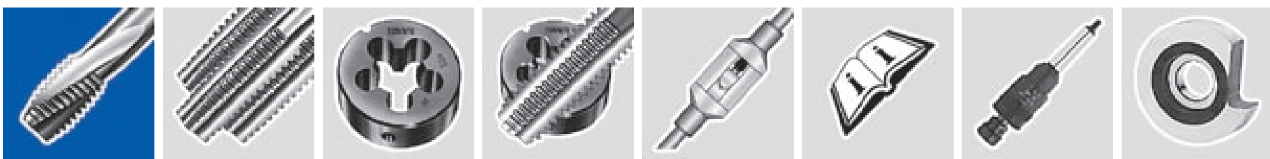
z = počet drážek / z = number of flutes





Provedení / Execution		ca 35°	ca 35° TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials	
Použití / Application	Doporučené / Recommended		**B2, B3, H1**
	Možné / Possible	**B2, B3, H1**	**F2, H2, J2**
Katalogové číslo / Cat. No.		**4054**	**4064**
Lícování / Tolerance		2B	2B
Řezný kužel / Chamfer		C / 2,5P	C / 2,5P

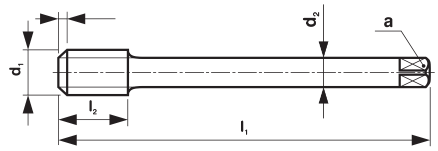
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223044**	Code **223044**
7/16	14	100	18	8	6,2	3	9,4	UNC7/16-14/4054	UNC7/16-14/4064
1/2	13	110	20	9	7	3	10,75	UNC1/2-13/4054	UNC1/2-13/4064
9/16	12	110	20	11	9	3	12,25	UNC9/16-12/4054	UNC9/16-12/4064
5/8	11	110	20	12	9	3	13,5	UNC5/8-11/4054	UNC5/8-11/4064
3/4	10	125	25	14	11	4	16,5	UNC3/4-10/4054	UNC3/4-10/4064
7/8	9	140	25	18	14,5	4	19,5	UNC7/8-9/4054	UNC7/8-9/4064
1	8	160	30	18	14,5	4	22,25	UNC1-8/4054	UNC1-8/4064

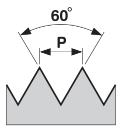


UNIFIKOVANÝ JEMNÝ ZÁVIT / UNIFIED FINE THRED — UNF

~ DIN 374

MATERIÁL / MATERIAL — **HSSE**



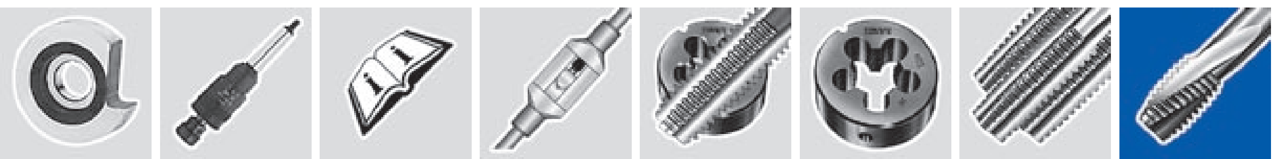


z = počet drážek / z = number of flutes

BEZ BAREVNÉHO OZNAČENÍ / NO RING

Provedení / Execution			TiN		TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití Application	Doporučené / Recommended		**J1**		**A, B, H1**
	Možné / Possible	**J1**	**F1, H2**	**A, B, H1**	**J1**
Katalogové číslo / Cat. No.		**3005**	**3015**	**3505**	**3515**
Lícování / Tolerance		2B	2B	2B	2B
Řezný kužel / Chamfer		C / 2P	C / 2P	B / 4-6P	B / 4-6P

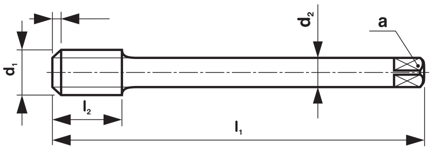
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223042**	Code **223042**	Code **223043**	Code **223043**
No. 5	44	56	9	2,2	-	3	2,7	UNF5-44/3005	UNF5-44/3015	UNF5-44/3505	UNF5-44/3515
No. 6	40	56	11	2,5	2,1	3	3	UNF6-40/3005	UNF6-40/3015	UNF6-40/3505	UNF6-40/3515
No. 8	36	63	12	2,8	2,1	3	3,5	UNF8-36/3005	UNF8-36/3015	UNF8-36/3505	UNF8-36/3515
No. 10	32	70	13	3,5	2,7	3	4,1	UNF10-32/3005	UNF10-32/3015	UNF10-32/3505	UNF10-32/3515
No. 12	28	80	15	4	3	3	4,65	UNF12-28/3005	UNF12-28/3015	UNF12-28/3505	UNF12-28/3515
1/4	28	80	15	4,5	3,4	3	5,5	UNF1/4-28/3005	UNF1/4-28/3015	UNF1/4-28/3505	UNF1/4-28/3515
5/16	24	90	18	6	4,9	3	6,9	UNF5/16-24/3005	UNF5/16-24/3015	UNF5/16-24/3505	UNF5/16-24/3515
3/8	24	90	20	7	5,5	3	8,5	UNF3/8-24/3005	UNF3/8-24/3015	UNF3/8-24/3505	UNF3/8-24/3515
7/16	20	100	20	8	6,2	3	9,9	UNF7/16-20/3005	UNF7/16-20/3015	UNF7/16-20/3505	UNF7/16-20/3515
1/2	20	100	21	9	7	3	11,5	UNF1/2-20/3005	UNF1/2-20/3015	UNF1/2-20/3505	UNF1/2-20/3515
9/16	18	100	21	11	9	3	12,9	UNF9/16-18/3005	UNF9/16-18/3015	UNF9/16-18/3505	UNF9/16-18/3515
5/8	18	100	21	12	9	3	14,5	UNF5/8-18/3005	UNF5/8-18/3015	UNF5/8-18/3505	UNF5/8-18/3515
3/4	16	110	24	14	11	3	17,5	UNF3/4-16/3005	UNF3/4-16/3015	UNF3/4-16/3505	UNF3/4-16/3515
7/8	14	125	24	18	14,5	3	20,5	UNF7/8-14/3005	UNF7/8-14/3015	UNF7/8-14/3505	UNF7/8-14/3515
1	12	140	26	18	14,5	3	23,25	UNF1-12/3005	UNF1-12/3015	UNF1-12/3505	UNF1-12/3515
1 1/8	12	150	28	22	18	4	26,5	UNF1 1/8-12/3005	UNF1 1/8-12/3015	UNF1 1/8-12/3505	UNF1 1/8-12/3515

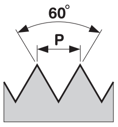


UNIFIKOVANÝ JEMNÝ ZÁVIT / UNIFIED FINE THRED — UNF

~ DIN 374

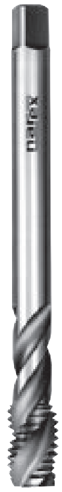
MATERIÁL / MATERIAL — **HSSE**

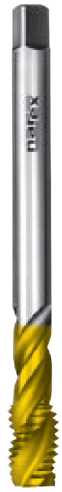




z = počet drážek / z = number of flutes

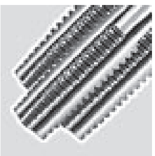
BEZ BAREVNÉHO OZNAČENÍ / NO RING

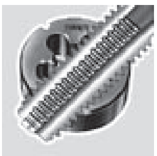




Provedení / Execution		ca 35°	ca 35° TiN
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials	
Použití / Application	Doporučené / Recommended		**B2, B3, H1**
	Možné / Possible	**B2, B3, H1**	**F2, H2, J2**
Katalogové číslo / Cat. No.		**4055**	**4065**
Lícování / Tolerance		2B	2B
Řezný kužel / Chamfer		C / 2,5P	C / 2,5P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223044**	Code **223044**
No. 5	44	56	5	2,2	-	3	2,7	UNF5-44/4055	UNF5-44/4065
No. 6	40	56	7	2,5	2,1	3	3	UNF6-40/4055	UNF6-40/4065
No. 8	36	63	7	2,8	2,1	3	3,5	UNF8-36/4055	UNF8-36/4065
No. 10	32	70	8	3,5	2,7	3	4,1	UNF10-32/4055	UNF10-32/4065
No. 12	28	80	10	4	3	3	4,65	UNF12-28/4055	UNF12-28/4065
1/4	28	80	10	4,5	3,4	3	5,5	UNF1/4-28/4055	UNF1/4-28/4065
5/16	24	90	13	6	4,9	3	6,9	UNF5/16-24/4055	UNF5/16-24/4065
3/8	24	90	15	7	5,5	3	8,5	UNF3/8-24/4055	UNF3/8-24/4065
7/16	20	100	15	8	6,2	3	9,9	UNF7/16-20/4055	UNF7/16-20/4065
1/2	20	100	14	9	7	3	11,5	UNF1/2-20/4055	UNF1/2-20/4065
9/16	18	100	16	11	9	3	12,9	UNF9/16-18/4055	UNF9/16-18/4065
5/8	18	100	16	12	9	3	14,5	UNF5/8-18/4055	UNF5/8-18/4065
3/4	16	110	20	14	11	4	17,5	UNF3/4-16/4055	UNF3/4-16/4065
7/8	14	125	20	18	14,5	4	20,5	UNF7/8-14/4055	UNF7/8-14/4065
1	12	125	22	18	14,5	4	23,25	UNF1-12/4055	UNF1-12/4065





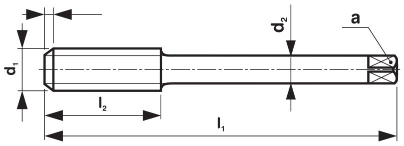
METRICKÝ ZÁVIT ISO
METRIC ISO THREAD

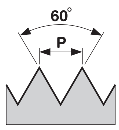
M

DIN 352

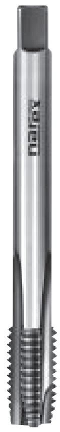
MATERIÁL / MATERIAL **HSSE**

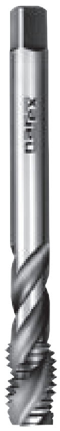
BEZ BAREVNÉHO OZNAČENÍ / NO RING





z = počet drážek / z = number of flutes

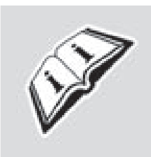


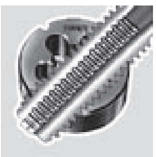


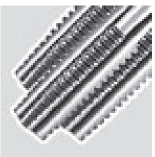
Provedení / Execution			ca 35°
Typ otvoru / Hole type		Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials	
Použití / Application	Doporučené / Recommended		
	Možné / Possible	**A, B, H1**	**B2, B3, H1**
Katalogové číslo / Cat. No.		**0550**	**0600**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		B / 4-6P	C / 2,5P

d_1	P	l_1	l_2	$l_{2R35°}$	d_2	a	z	∅ mm	Code **223043**	Code **223044**
M 3	0,5	40	9	5	3,5	2,7	3	2,5	M3/0550	M3/0600
M 4	0,7	45	12	7	4,5	3,4	3	3,3	M4/0550	M4/0600
M 5	0,8	50	13	8	6	4,9	3	4,2	M5/0550	M5/0600
M 6	1	56	15	10	6	4,9	3	5	M6/0550	M6/0600
M 8	1,25	63	18	13	6	4,9	3	6,8	M8/0550	M8/0600
M 10	1,5	70	20	15	7	5,5	3	8,5	M10/0550	M10/0600
M 12	1,75	75	23	18	9	7	3	10,2	M12/0550	M12/0600







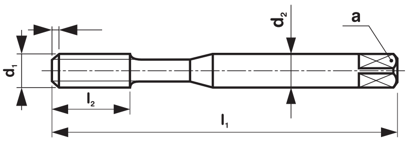


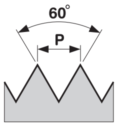

METRICKÝ ZÁVIT ISO
METRIC ISO THREAD

M

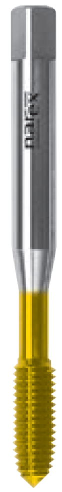
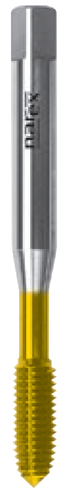
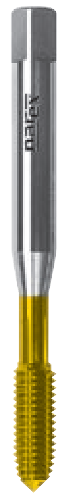
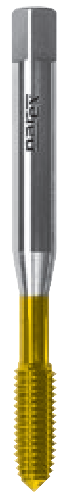
DIN 2174

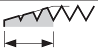
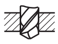
MATERIÁL / MATERIAL HSSE

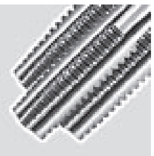


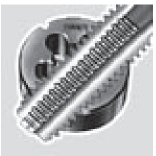


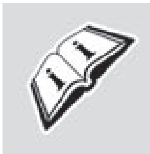
z = počet drážek / z = number of flutes

Provedení / Execution							TiN	TiN	TiN	TiN
Typ otvoru / Hole type							Viz Registr a příslušná skupina materiálů See Register and corresponding group of materials			
Použití Application	Doporučené / Recommended						K	K	A1, B2, G, H1, I	A1, B2, G, H1, I
	Možné / Possible						A1, B1, B2	A1, B1, B2	B1	B1
Katalogové číslo / Cat. No.							2910	2910	2960	2960
Lícování / Tolerance							ISO2 (6HX)	ISO3 (6GX)	ISO2 (6HX)	ISO3 (6GX)
Řezný kužel / Chamfer 							C / 3P	C / 3P	C / 3P	C / 3P
d_1	P	l_1	l_2	d_2	a	 ∅ mm	Code 223052	Code 223052	Code 223052	Code 223052
M 3	0,5	56	11	3,5	2,7	Viz str. 102 See page No. 102 Siehe Seite Nr. 102	M3/2910	M3/2910	M3/2960	M3/2960
M 3,5	0,6	56	12	4	3		M3,5/2910	M3,5/2910	M3,5/2960	M3,5/2960
M 4	0,7	63	13	4,5	3,4		M4/2910	M4/2910	M4/2960	M4/2960
M 5	0,8	70	16	6	4,9		M5/2910	M5/2910	M5/2960	M5/2960
M 6	1	80	19	6	4,9		M6/2910	M6/2910	M6/2960	M6/2960
M 8	1,25	90	22	8	6,2		M8/2910	M8/2910	M8/2960	M8/2960
M 10	1,5	100	24	10	8		M10/2910	M10/2910	M10/2960	M10/2960
M 12	1,75	110	28	9	7		M12/2910	M12/2910	M12/2960	M12/2960



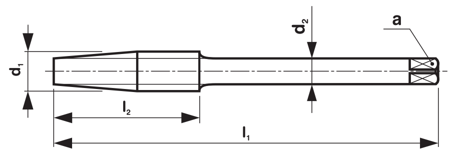


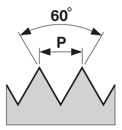
METRICKÝ ZÁVIT ISO
METRIC ISO THREAD

M

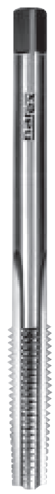
DIN 357

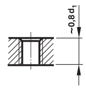
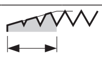
MATERIÁL / MATERIAL **HSS**

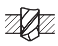


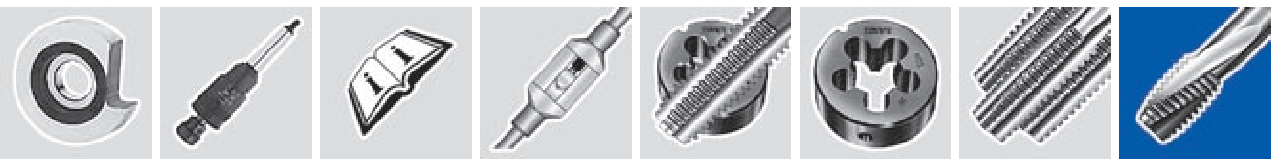


z = počet drážek / z = number of flutes



Provedení / Execution		
Typ otvoru / Hole type		
Použití Application	Doporučené / Recommended	**A, B1, B2**
	Možné / Possible	**H, J**
Katalogové číslo / Cat. No.		**5000**
Lícování / Tolerance		ISO2 (6H)
Řezný kužel / Chamfer 		0,7 l_2

d_1	P	l_1	l_2	d_2	a	z	 ∅ mm	Code **223070**
M 3	0,5	70	22	2,2	-	3	2,5	M3/5000
M 4	0,7	90	25	2,8	2,1	3	3,3	M4/5000
M 5	0,8	100	28	3,5	2,7	3	4,2	M5/5000
M 6	1	110	32	4,5	3,5	3	5	M6/5000
M 7	1	110	36	5,5	4,3	3	6	M7/5000
M 8	1,25	125	40	6	4,9	3	6,8	M8/5000
M 10	1,5	140	45	7	5,5	3	8,5	M10/5000
M 11	1,5	160	45	8	6,2	3	9,5	M11/5000
M 12	1,75	180	80	9	7	3	10,2	M12/5000
M 14	2	200	56	11	9	3	12	M14/5000
M 16	2	200	63	12	9	3	14	M16/5000
M 18	2,5	220	63	14	11	3	15,5	M18/5000
M 20	2,5	250	70	16	12	3	17,5	M20/5000

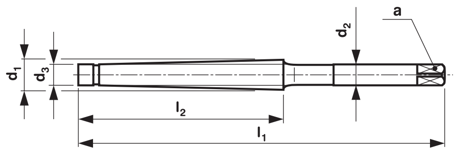


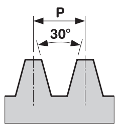
Maticové závitníky trapézové
Nuz Taps Trapez

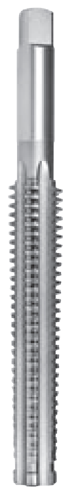
LICHOBĚŽNÍKOVÝ ZÁVIT ROVNORAMENNÝ TRAPEZTHREAD Tr

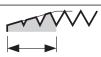
ČSN 223097

MATERIÁL / MATERIAL HSS

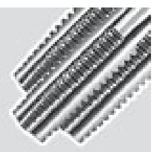




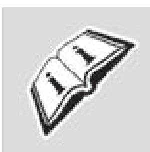


Provedení / Execution			LH
Typ otvoru / Hole type			
Použití Application	Doporučené / Recommended		
	Možné / Possible		
Katalogové číslo / Cat. No.			
Lícování / Tolerance		7H	7H
Řezný kužel / Chamfer			

d_1	P	l_1/l_2	d_2	d_3	a	Code 223097	
Tr 10	2	125/70	7,1	8	5	TR10x2	TR10x2L
Tr 12	3	140/84	8	9	6,3	TR12x3	TR12x3L
Tr 14	3	140/84	10	11	8	TR14x3	TR14x3L
Tr 16	4	220/142	11,2	12	9	TR16x4	TR16x4L
Tr 18	4	220/142	12,5	14	10	TR18x4	TR18x4L
Tr 20	4	220/142	14	16	11,2	TR20x4	TR20x4L
Tr 22	5	260/163	16	17	12,5	TR22x5	TR22x5L
Tr 24	5	260/163	18	19	14	TR24x5	TR24x5L
Tr 26	5	260/163	20	21	16	TR26x5	TR26x5L
Tr 28	5	260/163	22,4	23	18	TR28x5	TR28x5L
Tr 30	6	310/195	22,4	24	18	TR30x6	TR30x6L
Tr 32	6	310/195	25	26	20	TR32x6	TR32x6L
Tr 34	6	310/195	25	28	20	TR34x6	TR34x6L
Tr 36	6	310/195	28	30	22,4	TR36x6	TR36x6L
Tr 38	7	390/250	28	31	25	TR38x7	TR38x7L
Tr 40	7	390/250	31,5	33	25	TR40x7	TR40x7L
Tr 42	7	390/250	31,5	35	28	TR42x7	TR42x7L
Tr 44	7	390/250	35,5	37	28	TR44x7	TR44x7L
Tr 46	8	440/275	35,5	38	28	TR46x8	TR46x8L
Tr 48	8	440/27	35,5	40	28	TR48x8	TR48x8L
Tr 50	8	440/275	40	42	31,5	TR50x8	TR50x8L
Tr 52	8	440/275	40	44	31,5	TR52x8	TR52x8L



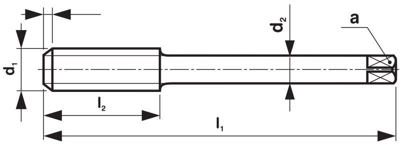


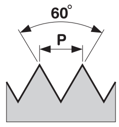
METRICKÝ ZÁVIT ISO
METRIC ISO THREAD

M

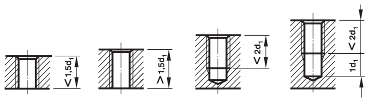
DIN 352

MATERIÁL / MATERIAL — **HSS**



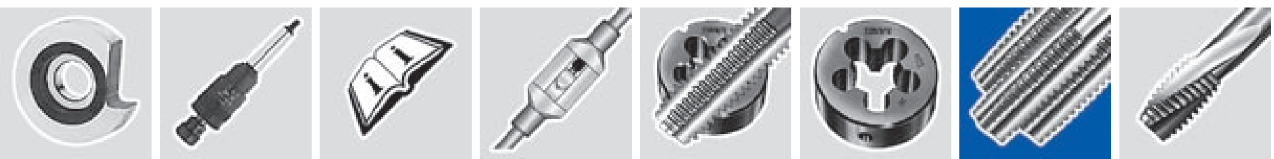


z = počet drážek / z = number of flutes

			LH
Provedení / Execution		3 ks v sadě / 3 pcs in set	3 ks v sadě / 3 pcs in set
Typ otvoru / Hole type			
Použití / Application	Doporučené / Recommended	**A, B, F, H1, J1**	**A, B, F, H1, J1**
	Možné / Possible	**H2**	**H2**
Katalogové číslo / Cat. No.		**0200**	**0200**
Lícování / Tolerance		ISO2 (6H)	ISO2 (6H)
Řezný kužel / Chamfer		C / 2P	C / 2P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223010	stupeň / serial number 1	2	3	Code 223010 (LH)	stupeň / serial number 1	2	3
M 3	0,5	40	11	3,5	2,7	3	2,5	M3/0200	x	x	x		x	x	x
M 3,5	0,6	45	12	4	3	3	2,9	M3,5/0200	x	x	x		x	x	x
M 4	0,7	45	13	4,5	3,4	3	3,3	M4/0200	x	x	x		x	x	x
M 4,5	0,75	50	16	6	4,9	3	3,7	M4,5/0200	x	x	x		x	x	x
M 5	0,8	50	16	6	4,9	3	4,2	M5/0200	x	x	x		x	x	x
M 6	1	56	19	6	4,9	3	5	M6/0200	x	x	x		x	x	x
M 7	1	56	19	6	4,9	3	6	M7/0200	x	x	x		x	x	x
M 8	1,25	63	22	6	4,9	3	6,8	M8/0200	x	x	x		x	x	x
M 9	1,25	63	22	7	5,5	3	7,8	M9/0200	x	x	x		x	x	x
M 10	1,5	70	24	7	5,5	3	8,5	M10/0200	x	x	x		x	x	x
M 11	1,5	70	24	8	6,2	3	9,5	M11/0200	x	x	x		x	x	x
M 12	1,75	75	28	9	7	3	10,2	M12/0200	x	x	x		x	x	x
M 14	2	80	30	11	9	4	12	M14/0200	x	x	x		x	x	x
M 16	2	80	32	12	9	4	14	M16/0200	x	x	x		x	x	x
M 18	2,5	95	34	14	11	4	15,5	M18/0200	x	x	x		x	x	x
M 20	2,5	95	34	16	12	4	17,5	M20/0200	x	x	x		x	x	x
M 22	2,5	100	34	18	14,5	4	19,5	M22/0200	x	x	x		x	x	x
M 24	3	110	38	18	14,5	4	21	M24/0200	x	x	x		x	x	x
M 27	3	110	38	20	16	4	24	M27/0200	x	x	x		x	x	x
M 30	3,5	125	45	22	18	4	26,5	M30/0200	x	x	x		x	x	x
M 33	3,5	125	50	25	20	4	29,5	M33/0200	x	x	x		x	x	x
M 36	4	150	56	28	22	4	32	M36/0200	x	x	x		x	x	x
M 39	4	150	60	32	24	4	35	M39/0200	x	x	x		x	x	x
M 42	4,5	150	60	32	24	4	37,5	M42/0200	x	x	x		x	x	x
M 45	4,5	160	65	36	29	6	40,5	M45/0200	x	x	x		x	x	x
M 48	5	180	70	36	29	6	43	M48/0200	x	x	x		x	x	x
M 52	5	180	70	40	32	6	47	M52/0200	x	x	x		x	x	x

x) V případě požadavku jednotlivých stupňů uveďte č.1, 2 nebo 3; příklad: M52C2/0200.
x) In case of single taps requirement indicate No. 1, 2, or 3; example: M52C2/0200.

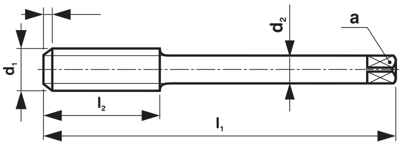


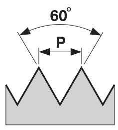
METRICKÝ ZÁVIT ISO
METRIC ISO THREAD

M

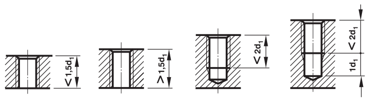
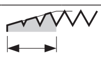
DIN 352

MATERIÁL / MATERIAL HSSE



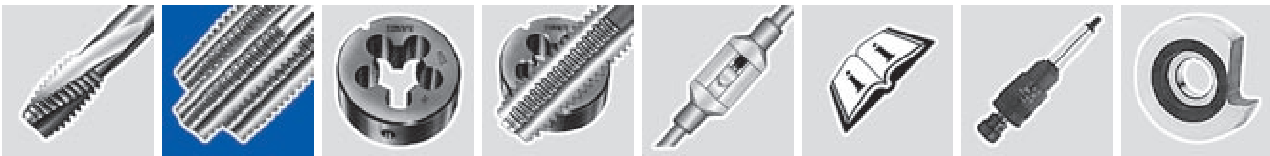


z = počet drážek / z = number of flutes

Provedení / Execution		**OX** 3 ks v sadě / 3 pcs in set
Typ otvoru / Hole type		
Použití Application	Doporučené / Recommended	**E**
	Možné / Possible	**F**
Katalogové číslo / Cat. No.		**0290**
Lícování / Tolerance		ISO2 (6H)
Řezný kužel / Chamfer 		C / 2P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223010**	stupeň / serial number **1**	**2**	**3**
M 3	0,5	40	11	3,5	2,7	3	2,5	M3/0290	x	x	x
M 3,5	0,6	45	12	4	3	3	2,9	M3,5/0290	x	x	x
M 4	0,7	45	13	4,5	3,4	3	3,3	M4/0290	x	x	x
M 4,5	0,75	50	16	6	4,9	3	3,7	M4,5/0290	x	x	x
M 5	0,8	50	16	6	4,9	3	4,2	M5/0290	x	x	x
M 6	1	56	19	6	4,9	3	5	M6/0290	x	x	x
M 7	1	56	19	6	4,9	3	6	M7/0290	x	x	x
M 8	1,25	63	22	6	4,9	3	6,8	M8/0290	x	x	x
M 9	1,25	63	22	7	5,5	3	7,8	M9/0290	x	x	x
M 10	1,5	70	24	7	5,5	3	8,5	M10/0290	x	x	x
M 11	1,5	70	24	8	6,2	3	9,5	M11/0290	x	x	x
M 12	1,75	75	29	9	7	3	10,2	M12/0290	x	x	x
M 14	2	80	30	11	9	4	12	M14/0290	x	x	x
M 16	2	80	32	12	9	4	14	M16/0290	x	x	x
M 18	2,5	95	40	14	11	4	15,5	M18/0290	x	x	x
M 20	2,5	95	40	16	12	4	17,5	M20/0290	x	x	x

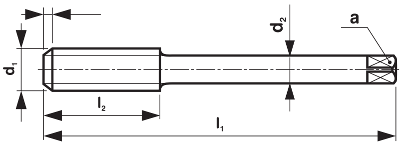
x) V případě požadavku jednotlivých stupňů uveďte č.1, 2 nebo 3; příklad: M20C3/0290.
x) In case of single taps requirement indicate No. 1, 2, or 3; example: M20C3/0290.

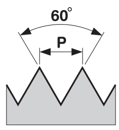


JEMNÝ METRICKÝ ZÁVIT ISO / METRIC ISO FINE THREAD — MF

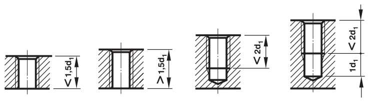
DIN 2181

MATERIÁL / MATERIAL — HSS



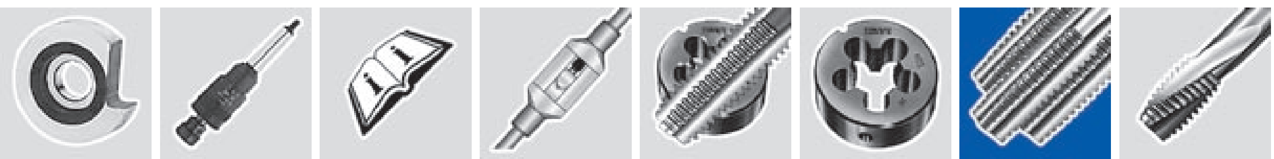


z = počet drážek / z = number of flutes

Provedení / Execution		2 ks v sadě / 2 pcs in set
Typ otvoru / Hole type		
Použití / Application	Doporučené / Recommended	**A, B, F, H1, J1**
	Možné / Possible	**H2**
Katalogové číslo / Cat. No.		**0300**
Lícování / Tolerance		ISO2 (6H)
Řezný kužel / Chamfer		C / 2P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223010**	stupeň / serial number 1	3
M 3	0,35	40	8	3,5	2,7	3	2,65	M3x0,35/0300	x	x
M 3,5	0,35	45	9	4	3	3	3,15	M3,5x0,35/0300	x	x
M 4	0,5	45	10	4,5	3,4	3	3,5	M4x0,5/0300	x	x
M 4	0,35	45	10	4,5	3,4	3	3,65	M4x0,35/0300	x	x
M 4,5	0,5	50	12	6	4,9	3	4	M4,5x0,5/0300	x	x
M 5	0,5	50	12	6	4,9	3	4,5	M5x0,5/0300	x	x
M 5,5	0,5	56	12	6	4,9	3	5	M5,5x0,5/0300	x	x
M 6	0,75	56	14	6	4,9	3	5,2	M6x0,75/0300	x	x
M 6	0,5	56	14	6	4,9	3	5,5	M6x0,5/0300	x	x
M 7	0,75	56	14	6	4,9	3	6,2	M7x0,75/0300	x	x
M 8	1	63	22	6	4,9	3	7	M8x1/0300	x	x
M 8	0,75	56	18	6	4,9	3	7,2	M8x0,75/0300	x	x
M 8	0,5	56	18	6	4,9	3	7,5	M8x0,5/0300	x	x
M 9	1	63	22	7	5,5	3	8	M9x1/0300	x	x
M 9	0,75	56	19	7	5,5	3	8,2	M9x0,75/0300	x	x
M 10	1,25	70	24	7	5,5	3	8,8	M10x1,25/0300	x	x
M 10	1	63	20	7	5,5	3	9	M10x1/0300	x	x
M 10	0,75	63	20	7	5,5	3	9,2	M10x0,75/0300	x	x
M 11	1	63	20	8	6,2	3	10	M11x1/0300	x	x
M 11	0,75	63	20	8	6,2	3	10,2	M11x0,75/0300	x	x
M 12	1,5	70	22	9	7	3	10,5	M12x1,5/0300	x	x
M 12	1,25	70	22	9	7	3	10,8	M12x1,25/0300	x	x
M 12	1	70	22	9	7	3	11	M12x1/0300	x	x
M 13	1	70	22	11	9	3	12	M13x1/0300	x	x
M 14	1,5	70	22	11	9	4	12,5	M14x1,5/0300	x	x
M 14	1,25	70	22	11	9	4	12,8	M14x1,25/0300	x	x
M 14	1	70	22	11	9	4	13	M14x1/0300	x	x
M 15	1,5	70	22	12	9	4	13,5	M15x1,5/0300	x	x
M 15	1	70	22	12	9	4	14	M15x1/0300	x	x
M 16	1,5	70	22	12	9	4	14,5	M16x1,5/0300	x	x
M 16	1	70	22	12	9	4	15	M16x1/0300	x	x
M 17	1,5	70	22	12	9	4	15,5	M17x1,5/0300	x	x
M 17	1	70	22	12	9	4	16	M17x1/0300	x	x
M 18	2	80	22	14	11	4	16	M18x2/0300	x	x
M 18	1,5	80	22	14	11	4	16,5	M18x1,5/0300	x	x
M 18	1	80	22	14	11	4	17	M18x1/0300	x	x
M 20	2	80	22	16	12	4	18	M20x2/0300	x	x
M 20	1,5	80	22	16	12	4	18,5	M20x1,5/0300	x	x

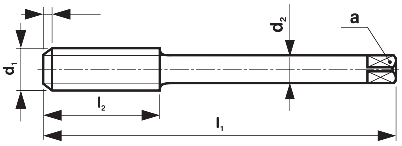
x) V případě požadavku jednotlivých stupňů uveďte č.1 nebo 3; příklad: M14x1,5C3/0300.
x) In case of single taps requirement indicate No. 1 or 3; example: M14x1,5C3/0300.

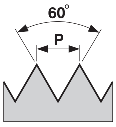


JEMNÝ METRICKÝ ZÁVIT ISO
METRIC ISO FINE THREAD
MF

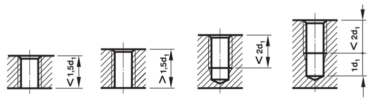
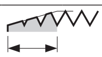
DIN 2181

MATERIÁL / MATERIAL **HSS**



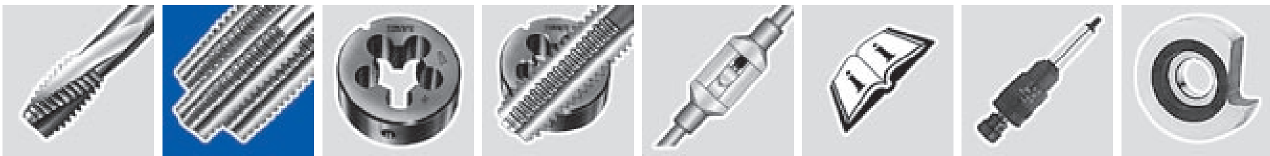


z = počet drážek / z = number of flutes

Provedení / Execution		2 ks v sadě / 2 pcs in set
Typ otvoru / Hole type		
Použití Application	Doporučené / Recommended	**A, B, F, H1, J1**
	Možné / Possible	**H2**
Katalogové číslo / Cat. No.		**0300**
Lícování / Tolerance		ISO2 (6H)
Řezný kužel / Chamfer 		C / 2P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223010**	stupeň / serial number **1**	**3**
M 20	1	80	22	16	12	4	19	M20x1/0300	x	x
M 22	2	80	22	18	14,5	4	20	M22x2/0300	x	x
M 22	1,5	80	22	18	14,5	4	20,5	M22x1,5/0300	x	x
M 22	1	80	22	18	14,5	4	21	M22x1/0300	x	x
M 24	2	90	22	18	14,5	4	22	M24x2/0300	x	x
M 24	1,5	90	22	18	14,5	4	22,5	M24x1,5/0300	x	x
M 24	1	90	22	18	14,5	4	23	M24x1/0300	x	x
M 25	2	90	22	18	14,5	4	23	M25x2/0300	x	x
M 25	1,5	90	22	18	14,5	4	23,5	M25x1,5/0300	x	x
M 26	1,5	90	22	18	14,5	4	24,5	M26x1,5/0300	x	x
M 27	2	90	22	20	16	4	25	M27x2/0300	x	x
M 27	1,5	90	22	20	16	4	25,5	M27x1,5/0300	x	x
M 27	1	90	22	20	16	4	26	M27x1/0300	x	x
M 28	2	90	22	20	16	4	26	M28x2/0300	x	x
M 28	1,5	90	22	20	16	4	26,5	M28x1,5/0300	x	x
M 30	2	90	22	22	18	4	28	M30x2/0300	x	x
M 30	1,5	90	22	22	18	4	28,5	M30x1,5/0300	x	x
M 30	1	90	22	22	18	4	29	M30x1/0300	x	x
M 32	1,5	90	22	22	18	4	30,5	M32x1,5/0300	x	x
M 33	2	100	25	25	20	4	31	M33x2/0300	x	x
M 33	1,5	100	25	25	20	4	31,5	M33x1,5/0300	x	x
M 34	1,5	100	25	28	22	4	32,5	M34x1,5/0300	x	x
M 35	1,5	100	25	28	22	4	33,5	M35x1,5/0300	x	x
M 36	3	125	40	28	22	4	33	M36x3/0300	x	x
M 36	2	125	40	28	22	4	34	M36x2/0300	x	x
M 36	1,5	100	25	28	22	4	34,5	M36x1,5/0300	x	x
M 38	1,5	100	25	28	22	4	36,5	M38x1,5/0300	x	x
M 39	3	125	40	32	24	4	36	M39x3/0300	x	x
M 39	2	125	40	32	24	4	37	M39x2/0300	x	x
M 39	1,5	110	25	32	24	4	37,5	M39x1,5/0300	x	x
M 40	3	125	40	32	24	4	37	M40x3/0300	x	x
M 40	2	125	40	32	24	4	38	M40x2/0300	x	x
M 40	1,5	110	25	32	24	4	38,5	M40x1,5/0300	x	x
M 42	3	125	40	32	24	4	39	M42x3/0300	x	x
M 42	2	125	40	32	24	4	40	M42x2/0300	x	x
M 42	1,5	110	25	32	24	4	40,5	M42x1,5/0300	x	x
M 45	3	125	40	36	29	6	42	M45x3/0300	x	x
M 45	2	125	40	36	29	6	43	M45x2/0300	x	x

x) V případě požadavku jednotlivých stupňů uveďte č.1 nebo 3; příklad: M14x1,5C3/0300.
x) In case of single taps requirement indicate No. 1 or 3; example: M14x1,5C3/0300.

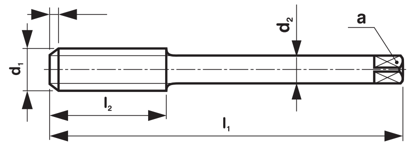


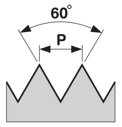
JEMNÝ METRICKÝ ZÁVIT ISO
METRIC ISO FINE THREAD

MF

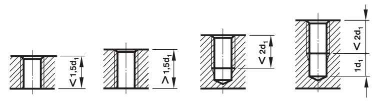
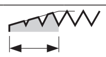
DIN 2181

MATERIÁL / MATERIAL **HSS**





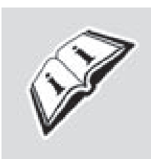
z = počet drážek / z = number of flutes

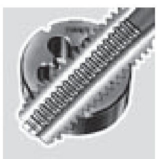
Provedení / Execution		2 ks v sadě / 2 pcs in set
Typ otvoru / Hole type		
Použití Application	Doporučené / Recommended	**A, B, F, H1, J1**
	Možné / Possible	**H2**
Katalogové číslo / Cat. No.		**0300**
Lícování / Tolerance		ISO2 (6H)
Řezný kužel / Chamfer		C / 2P

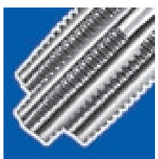
d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223010	stupeň / serial number 1	3
M 45	1,5	110	25	36	29	6	43,5	M45x1,5/0300	x	x
M 48	3	140	40	36	29	6	45	M48x3/0300	x	x
M 48	2	140	40	36	29	6	46	M48x2/0300	x	x
M 48	1,5	140	40	36	29	6	46,5	M48x1,5/0300	x	x
M 50	3	140	40	36	29	6	47	M50x3/0300	x	x
M 50	2	140	40	36	29	6	48	M50x2/0300	x	x
M 50	1,5	140	40	36	29	6	48,5	M50x1,5/0300	x	x
M 52	3	140	40	40	32	6	49	M52x3/0300	x	x
M 52	2	140	40	40	32	6	50	M52x2/0300	x	x
M 52	1,5	140	40	40	32	6	50,5	M52x1,5/0300	x	x

x) V případě požadavku jednotlivých stupňů uveďte č.1 nebo 3; příklad: M14x1,5C3/0300.
x) In case of single taps requirement indicate No. 1 or 3; example: M14x1,5C3/0300.







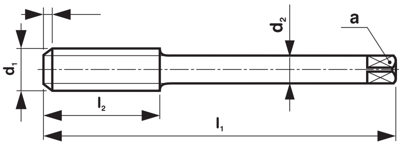


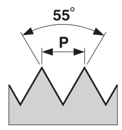

TRUBKOVÝ ZÁVIT DIN ISO 228
PIPE THREAD DIN ISO 228

G

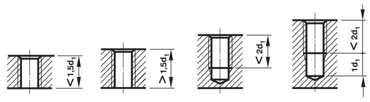
DIN 5157

MATERIÁL / MATERIAL **HSS**



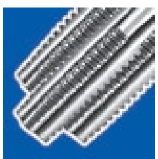


z = počet drážek / z = number of flutes

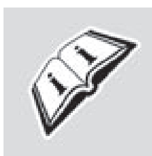
Provedení / Execution		
Typ otvoru / Hole type		
Použití Application	Doporučené / Recommended	**A, B, F, H1, J1**
	Možné / Possible	**H2**
Katalogové číslo / Cat. No.		**0302**
Lícování / Tolerance		
Řezný kužel / Chamfer		C / 2P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223012**	stupeň / serial number 1	3
G 1/16"	28	63	22	6	4,9	3	6,8	G1/16/0302	x	x
G 1/8"	28	63	20	7	5,5	4	8,8	G1/8/0302	x	x
G 1/4"	19	70	22	11	9	4	11,8	G1/4/0302	x	x
G 3/8"	19	70	22	12	9	4	15,25	G3/8/0302	x	x
G 1/2"	14	80	22	16	12	4	19	G1/2/0302	x	x
G 5/8"	14	80	22	18	14,5	4	21	G5/8/0302	x	x
G 3/4"	14	90	22	20	16	4	24,5	G3/4/0302	x	x
G 7/8"	14	90	22	22	18	4	28,25	G7/8/0302	x	x
G 1"	11	100	25	25	20	4	30,75	G1/0302	x	x
G 1 1/8"	11	125	40	28	22	4	35,5	G1 1/8/0302	x	x
G 1 1/4"	11	125	40	32	24	4	39,5	G1 1/4/0302	x	x
G 1 1/2"	11	140	40	36	29	6	45,25	G1 1/2/0302	x	x
G 1 3/4"	11	140	40	40	32	6	51,3	G1 3/4/0302	x	x
G 2"	11	160	40	45	35	6	57,2	G2/0302	x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x
									x	x

x) V případě požadavku jednotlivých stupňů uveďte č.1 nebo 3; příklad: G3/4C3/0302.
x) In case of single taps requirement indicate No. 1 or 3; example: G3/4C3/0302.



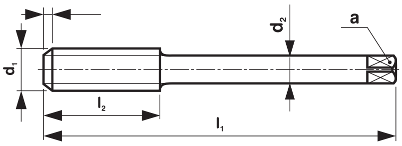


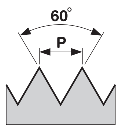
UNIFIKOVANÝ HRUBÝ ZÁVIT
UNIFIED COARSE THREAD

UNC

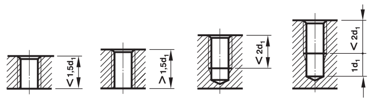
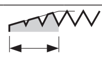
~ DIN 352

MATERIÁL / MATERIAL HSSE



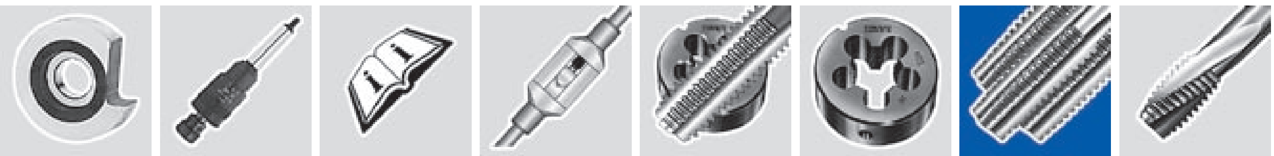


z = počet drážek / z = number of flutes

Provedení / Execution	3 ks v sadě / 3 pcs in set
Typ otvoru / Hole type	
Použití Application – Doporučené / Recommended	**A, B, F, H1, J1**
Použití Application – Možné / Possible	**H2**
Katalogové číslo / Cat. No.	**0204**
Lícování / Tolerance	2B
Řezný kužel / Chamfer 	C / 2P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code **223010**	stupeň / serial number 1	2	3
No. 5	40	40	11	3,5	2,7	3	2,6	UNC5-40/0204	x	x	x
No. 6	32	45	12	4	3	3	2,85	UNC6-32/0204	x	x	x
No. 8	32	45	13	4,5	3,4	3	3,5	UNC8-32/0204	x	x	x
No. 10	24	50	15	6	4,9	3	3,9	UNC10-24/0204	x	x	x
No. 12	24	56	17	6	4,9	3	4,5	UNC12-24/0204	x	x	x
1/4	20	56	19	6	4,9	3	5,2	UNC1/4-20/0204	x	x	x
5/16	18	63	22	6	4,9	3	6,6	UNC5/16-18/0204	x	x	x
3/8	16	70	24	7	5,5	3	8	UNC3/8-16/0204	x	x	x
7/16	14	70	24	8	6,2	3	9,4	UNC7/16-14/0204	x	x	x
1/2	13	75	28	9	7	3	10,75	UNC1/2-13/0204	x	x	x
9/16	12	80	30	11	9	3	12,25	UNC9/16-12/0204	x	x	x
5/8	11	80	32	12	9	3	13,5	UNC5/8-11/0204	x	x	x
3/4	10	95	34	14	11	4	16,5	UNC3/4-10/0204	x	x	x
7/8	9	100	34	18	14,5	4	19,5	UNC7/8-9/0204	x	x	x
1	8	110	38	18	14,5	4	22,25	UNC1-8/0204	x	x	x
									x	x	x

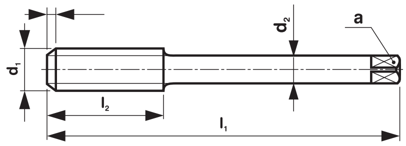
x) V případě požadavku jednotlivých stupňů uveďte č.1, 2 nebo 3; příklad: UNC5/16C3/0204.
x) In case of single taps requirement indicate No. 1, 2, or 3; example: UNC5/16C3/0204.

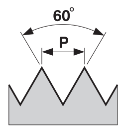


JEMNÝ UNIFIKOVANÝ ZÁVIT / UNIFIED FINE THREAD — UNF

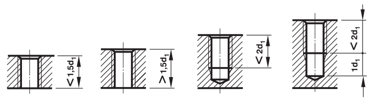
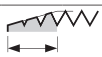
~ DIN 2181

MATERIÁL / MATERIAL — **HSS**



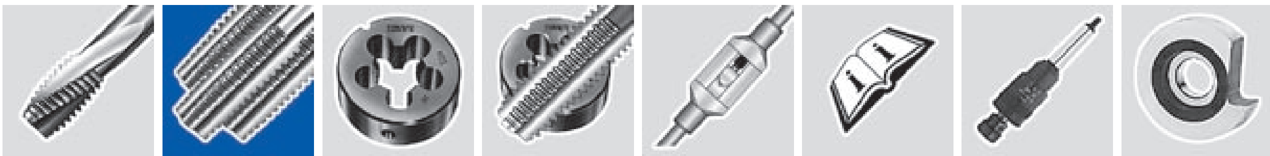


z = počet drážek / z = number of flutes

Provedení / Execution		2 ks v sadě / 2 pcs in set
Typ otvoru / Hole type		
Použití / Application	Doporučené / Recommended	**A, B, F, H1, J1**
	Možné / Possible	**H2**
Katalogové číslo / Cat. No.		**0305**
Lícování / Tolerance		2B
Řezný kužel / Chamfer 		C / 2P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223010	stupeň / serial number 1	3
No. 5	44	40	11	3,5	2,7	3	2,7	UNF5-44/0305	x	x
No. 6	40	45	12	4	3	3	3	UNF6-40/0305	x	x
No. 8	36	45	13	4,5	3,4	3	3,5	UNF8-36/0305	x	x
No. 10	32	50	16	6	4,9	3	4,1	UNF10-32/0305	x	x
No. 12	28	56	17	6	4,9	3	4,65	UNF12-28/0305	x	x
1/4	28	56	19	6	4,9	3	5,5	UNF1/4-28/0305	x	x
5/16	24	63	22	6	4,9	3	6,9	UNF5/16-24/0305	x	x
3/8	24	63	20	7	5,5	3	8,5	UNF3/8-24/0305	x	x
7/16	20	70	24	8	6,2	3	9,9	UNF7/16-20/0305	x	x
1/2	20	70	22	9	7	3	11,5	UNF1/2-20/0305	x	x
9/16	18	70	22	11	9	3	12,9	UNF9/16-18/0305	x	x
5/8	18	70	22	12	9	3	14,5	UNF5/8-18/0305	x	x
3/4	16	80	22	14	11	4	17,5	UNF3/4-16/0305	x	x
7/8	14	80	22	18	14,5	4	20,5	UNF7/8-14/0305	x	x
1	12	80	22	18	14,5	4	23,25	UNF1-12/0305	x	x

x) V případě požadavku jednotlivých stupňů uveďte č.1 nebo 3; příklad: UNF12C1/0305.
x) In case of single taps requirement indicate No. 1 or 3; example: UNF12C1/0305.

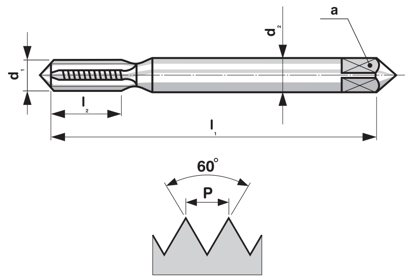


Ruční krátké sadové závitníky
Serial Short Hand Taps

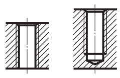
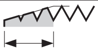
METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M, MF

223010

MATERIÁL / MATERIAL — HSSE

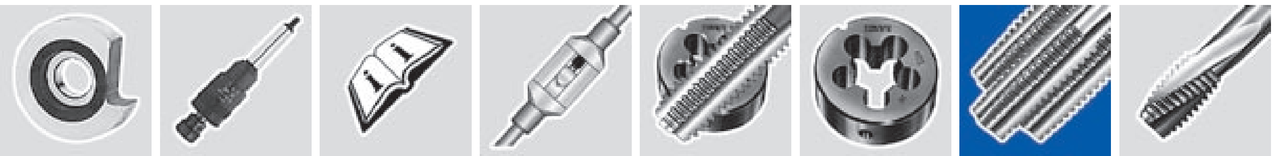


z = počet drážek / z = number of flutes

Provedení / Execution		**M** - 3 ks/pcs v sadě/in set **MF** - 2 ks/pcs v sadě/ in set	**LH - M** - 3 ks/pcs v sadě/in set **LH - MF** - 2 ks/pcs v sadě/ in set
Typ otvoru / Hole type			
Použití Application	Doporučené / Recommended		
	Možné / Possible		
Katalogové číslo / Cat. No.			
Lícování / Tolerance		ISO1, ISO2, ISO3	ISO1, ISO2, ISO3
Řezný kužel / Chamfer 		C / 2P	C / 2P

d_1	P	l_1	l_2	d_2	a	z	∅ mm	Code 223010	stupeň / serial number 1	2	3	Code 223010	stupeň / serial number 1	2	3
M 1	0,25	24	5,5	2,5	2			M1	x	x	x	M1L	x	x	x
M 1,1	0,25	24	5,5	2,5	2			M1,1	x	x	x	M1,1L	x	x	x
M 1,2	0,25	26	5,5	2,5	2			M1,2	x	x	x	M1,2L	x	x	x
M 1,4	0,3	30	7	2,5	2			M1,4	x	x	x	M1,4L	x	x	x
M 1,6	0,35	30	7	2,5	2			M1,6	x	x	x	M1,6L	x	x	x
M 1,7	0,35	34	8	2,5	2			M1,7	x	x	x	M1,7L	x	x	x
M 1,8	0,35	34	8	2,5	2			M1,8	x	x	x	M1,8L	x	x	x
M 2	0,4	34	8	2,5	2			M2	x	x	x	M2L	x	x	x
M 2,2	0,45	34	9	2,8	2,24			M2,2	x	x	x	M2,2L	x	x	x
M 2,5	0,45	34	10	2,8	2,24			M2,5	x	x	x	M2,5L	x	x	x
M 2,5	0,35	28	8	2,8	2,24			M2,5x0,35	x		x	M2,5x0,35L	x		x

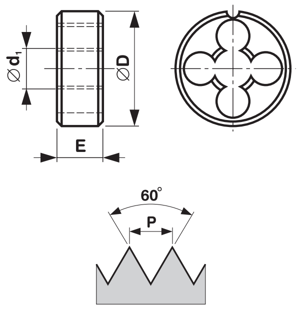
x) V případě požadavku jednotlivých stupňů uveďte č.1, 2 nebo 3; příklad: M1C1.
x) In case of single taps requirement indicate No. 1, 2, or 3; example: M1C1.



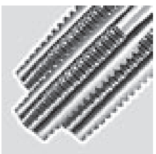
METRICKÝ ZÁVIT ISO / METRIC ISO THREAD — M, MF

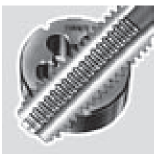
DIN EN 22 568 (ČSN 22 3210)

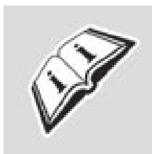
MATERIÁL / MATERIAL — HSS



Provedení / Execution				Závit lapovaný do M 26 Lapped thread up to M 26	S lamačem, závit lapovaný do M 26 With spiral point, lapped thread up to M 26
Katalogové číslo / Cat. No.				**9500**	**9550**
Lícování / Tolerance				6g	6g
d_1	P	D	E	**Code 223210**	**Code 223210**
M 2	0,4	16	5	M2/9500	M2/9550
M 2,2	0,45	16	5	M2,2/9500	M2,2/9550
M 2,5	0,45	16	5	M2,5/9500	M2,5/9550
M 3	0,5	20	5	M3/9500	M3/9550
M 3	0,35	20	5	M3,5/9500	M3,5/9550
M 3,5	0,6	20	5	M3,5/9500	M3,5/9550
M 3,5	0,35	20	5	M3,5x0,35/9500	M3,5x0,35/9550
M 4	0,7	20	5	M4/9500	M4/9550
M 4	0,5	20	5	M4x0,5/9500	M4x0,5/9550
M 4	0,35	20	5	M4x0,35/9500	M4x0,35/9550
M 4,5	0,75	20	5	M4,5/9500	M4,5/9550
M 4,5	0,5	20	5	M4,5x0,5/9500	M4,5x0,5/9550
M 5	0,8	20	7	M5/9500	M5/9550
M 5	0,5	20	5	M5x0,5/9500	M5x0,5/9550
M 5,5	0,5	20	5	M5,5x0,5/9500	M5,5x0,5/9550
M 6	1	20	7	M6/9500	M6/9550
M 6	0,75	20	7	M6x0,75/9500	M6x0,75/9550
M 6	0,5	20	5	M6x0,5/9500	M6x0,5/9550
M 7	1	25	9	M7/9500	M7/9550
M 7	0,75	25	9	M7x0,75/9500	M7x0,75/9550
M 8	1,25	25	9	M8/9500	M8/9550
M 8	1	25	9	M8x1/9500	M8x1/9550
M 8	0,75	25	9	M8x0,75/9500	M8x0,75/9550
M 8	0,5	25	9	M8x0,5/9500	M8x0,5/9550
M 9	1,25	25	9	M9/9500	M9/9550
M 9	1	25	9	M9x1/9500	M9x1/9550
M 9	0,75	25	9	M9x0,75/9500	M9x0,75/9550
M 10	1,5	30	11	M10/9500	M10/9550
M 10	1,25	30	11	M10x1,25/9500	M10x1,25/9550
M 10	1	30	11	M10x1/9500	M10x1/9550
M 10	0,75	30	11	M10x0,75/9500	M10x0,75/9550
M 11	1,5	30	11	M11/9500	M11/9550
M 11	1	30	11	M11x1/9500	M11x1/9550
M 11	0,75	30	11	M11x0,75/9500	M11x0,75/9550
M 12	1,75	38	14	M12/9500	M12/9550
M 12	1,5	38	10	M12x1,5/9500	M12x1,5/9550
M 12	1,25	38	10	M12x1,25/9500	M12x1,25/9550
M 12	1	38	10	M12x1/9500	M12x1/9550
M 13	1	38	10	M13x1/9500	M13x1/9550
M 14	2	38	14	M14/9500	M14/9550
M 14	1,5	38	10	M14x1,5/9500	M14x1,5/9550
M 14	1,25	38	10	M14x1,25/9500	M14x1,25/9550
M 14	1	38	10	M14x1/9500	M14x1/9550
M 15	1,5	38	10	M15x1,5/9500	M15x1,5/9550
M 15	1	38	10	M15x1/9500	M15x1/9550
M 16	2	45	18	M16/9500	M16/9550
M 16	1,5	45	14	M16x1,5/9500	M16x1,5/9550
M 16	1	45	14	M16x1/9500	M16x1/9550

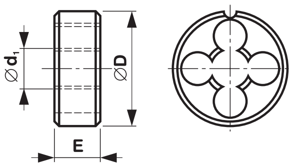


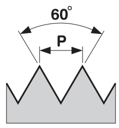


METRICKÝ ZÁVIT ISO
METRIC ISO THREAD
M, MF

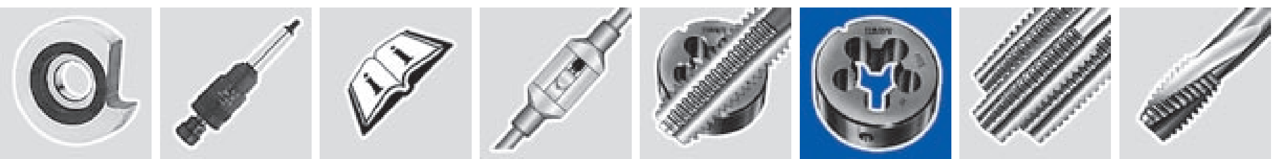
DIN EN 22 568 (ČSN 22 3210)

MATERIÁL / MATERIAL HSS





Provedení / Execution				Závit lapovaný do M 26 Lapped thread up to M 26	S lamačem, závit lapovaný do M 26 With spiral point, lapped thread up to M 26
Katalogové číslo / Cat. No.				**9500**	**9550**
Lícování / Tolerance				6g	6g
d_1	P	D	E	**Code 223210**	**Code 223210**
M 17	1,5	45	14	M17x1,5/9500	M17x1,5/9550
M 17	1	45	14	M17x1/9500	M17x1/9550
M 18	2,5	45	18	M18/9500	M18/9550
M 18	2	45	14	M18x2/9500	M18x2/9550
M 18	1,5	45	14	M18x1,5/9500	M18x1,5/9550
M 18	1	45	14	M18x1/9500	M18x1/9550
M 20	2,5	45	18	M20/9500	M20/9550
M 20	2	45	14	M20x2/9500	M20x2/9550
M 20	1,5	45	14	M20x1,5/9500	M20x1,5/9550
M 20	1	45	14	M20x1/9500	M20x1/9550
M 22	2,5	55	22	M22/9500	M22/9550
M 22	2	55	16	M22x2/9500	M22x2/9550
M 22	1,5	55	16	M22x1,5/9500	M22x1,5/9550
M 22	1	55	16	M22x1/9500	M22x1/9550
M 24	3	55	22	M24/9500	M24/9550
M 24	2	55	16	M24x2/9500	M24x2/9550
M 24	1,5	55	16	M24x1,5/9500	M24x1,5/9550
M 24	1	55	16	M24x1/9500	M24x1/9550
M 25	2	55	16	M25x2/9500	M25x2/9550
M 25	1,5	55	16	M25x1,5/9500	M25x1,5/9550
M 26	1,5	55	16	M26x1,5/9500	M26x1,5/9550
M 27	3	65	25	M27/9500	M27/9550
M 27	2	65	18	M2x27/9500	M2x27/9550
M 27	1,5	65	18	M27x1,5/9500	M27x1,5/9550
M 27	1	65	18	M27x1/9500	M27x1/9550
M 28	2	65	18	M28x2/9500	M28x2/9550
M 28	1,5	65	18	M28x1,5/9500	M28x1,5/9550
M 30	3,5	65	25	M30/9500	M30/9550
M 30	2	65	18	M30x2/9500	M30x2/9550
M 30	1,5	65	18	M30x1,5/9500	M30x1,5/9550
M 30	1	65	18	M30x1/9500	M30x1/9550
M 32	1,5	65	18	M32x1,5/9500	M32x1,5/9550
M 33	3,5	65	25	M33/9500	M33/9550
M 33	2	65	18	M33x2/9500	M33x2/9550
M 33	1,5	65	18	M33x1,5/9500	M33x1,5/9550
M 34	1,5	65	18	M34x1,5/9500	M34x1,5/9550
M 35	1,5	65	18	M35x1,5/9500	M35x1,5/9550
M 36	4	65	25	M36/9500	M36/9550
M 36	3	65	25	M36x3/9500	M36x3/9550
M 36	2	65	18	M36x2/9500	M36x2/9550
M 36	1,5	65	18	M36x1,5/9500	M36x1,5/9550
M 38	1,5	75	20	M38x1,5/9500	M38x1,5/9550
M 39	4	75	30	M39/9500	M39/9550
M 39	3	75	30	M39x3/9500	M39x3/9550
M 39	2	75	20	M39x2/9500	M39x2/9550
M 39	1,5	75	20	M39x1,5/9500	M39x1,5/9550
M 40	3	75	30	M40/9500	M40/9550
M 40	2	75	20	M40x2/9500	M40x2/9550

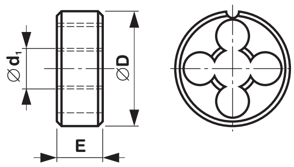


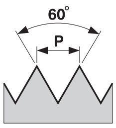
METRICKÝ ZÁVIT ISO
METRIC ISO THREAD

M, MF

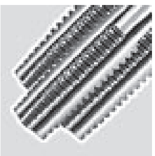
DIN EN 22 568 (ČSN 22 3210)

MATERIÁL / MATERIAL **HSS**





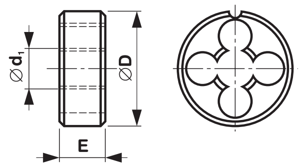
Provedení / Execution				Závit lapovaný do M 26 Lapped thread up to M 26	S lamačem, závit lapovaný do M 26 With spiral point, lapped thread up to M 26
Katalogové číslo / Cat. No.				**9500**	**9550**
Lícování / Tolerance				6g	6g
d_1	P	D	E	**Code 223210**	**Code 223210**
M 40	1,5	75	20	M40x1,5/9500	M40x1,5/9550
M 42	4,5	75	30	M42/9500	M42/9550
M 42	3	75	30	M42x3/9500	M42x3/9550
M 42	2	75	20	M42x2/9500	M42x2/9550
M 42	1,5	75	20	M42x1,5/9500	M42x1,5/9550
M 45	4,5	90	36	M45/9500	M45/9550
M 45	3	90	36	M45x3/9500	M45x3/9550
M 45	2	90	22	M45x2/9500	M45x2/9550
M 45	1,5	90	22	M45x1,5/9500	M45x1,5/9550
M 48	5	90	36	M48/9500	M48/9550
M 48	3	90	36	M48x3/9500	M48x3/9550
M 48	2	90	22	M48x2/9500	M48x2/9550
M 48	1,5	90	22	M48x1,5/95002	M48x1,5/95502
M 50	3	90	36	M50x3/9500	M50x3/9550
M 50	2	90	22	M50x2/9500	M50x2/9550
M 50	1,5	90	22	M50x1,5/9500	M50x1,5/9550
M 52	5	90	36	M52/9500	M52/9550
M 52	3	90	36	M52x3/9500	M52x3/9550
M 52	2	90	22	M52x2/9500	M52x2/9550
M 52	1,5	90	22	M52x1,5/9500	M52x1,5/9550

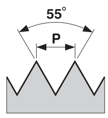


TRUBKOVÝ ZÁVIT DIN ISO 228
PIPE THREAD DIN ISO 228 — G

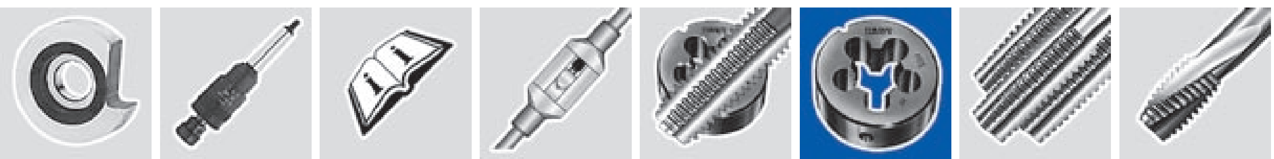
DIN EN 24 231 (ČSN 22 3212)

MATERIÁL / MATERIAL — HSS





Provedení / Execution				Závit lapovaný do G 3/4" Lapped thread up to G 3/4"	S lamačem, závit lapovaný do G 3/4" With spiral point, lapped thread up to G 3/4"
Katalogové číslo / Cat. No.				**9502**	**9552**
Lícování / Tolerance				A	A
d_1	P	D	E	**Code 223212**	**Code 223212**
G 1/16"	28	25	9	G1/16/9502	G1/16/9552
G 1/8"	28	30	11	G1/8/9502	G1/8/9552
G 1/4"	19	38	10	G1/4/9502	G1/4/9552
G 3/8"	19	45	14	G3/8/9502	G3/8/9552
G 1/2"	14	45	14	G1/2/9502	G1/2/9552
G 5/8"	14	55	16	G5/8/9502	G5/8/9552
G 3/4"	14	55	16	G3/4/9502	G3/4/9552
G 7/8"	14	65	18	G7/8/9502	G7/8/9552
G 1"	11	65	18	G1/9502	G1/9552
G 1 1/8"	11	75	20	G1 1/8/9502	G1 1/8/9552
G 1 1/4"	11	75	20	G1 1/4/9502	G1 1/4/9552
G 1 1/2"	11	90	22	G1 1/2/9502	G1 1/2/9552
G 1 3/4"	11	105	22	G1 3/4/9502	G1 3/4/9552
G 2"	11	105	22	G2/9502	G2/9552

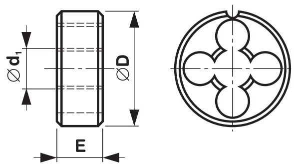


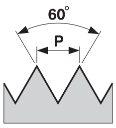
UNIFIKOVANÝ HRUBÝ ZÁVIT
UNIFIED COARSE THREAD

UNC

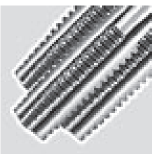
DIN EN 22 568

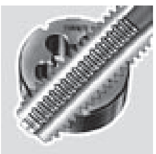
MATERIÁL / MATERIAL **HSS**

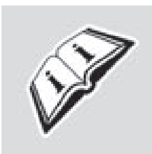




Provedení / Execution				Závit lapovaný Lapped thread	S lamačem, závit lapovaný With spiral point, lapped thread
Katalogové číslo / Cat. No.				**9504**	**9554**
Lícování / Tolerance				2A	2A
d_1	P	D	E	**Code 223210**	**Code 223210**
No. 4	40	16	5	UNC4-40/9504	UNC4-40/9554
No. 5	40	20	5	UNC5-40/9504	UNC5-40/9554
No. 6	32	20	7	UNC6-32/9504	UNC6-32/9554
No. 8	32	20	7	UNC8-32/9504	UNC8-32/9554
No. 10	24	20	7	UNC10-24/9504	UNC10-24/9554
No. 12	24	20	7	UNC12-24/9504	UNC12-24/9554
1/4	20	20	7	UNC1/4-20/9504	UNC1/4-20/9554
5/16	18	25	9	UNC5/16-18/9504	UNC5/16-18/9554
3/8	16	30	11	UNC3/8-16/9504	UNC3/8-16/9554
7/16	14	30	11	UNC7/16-14/9504	UNC7/16-14/9554
1/2	13	38	14	UNC1/2-13/9504	UNC1/2-13/9554
9/16	12	38	14	UNC9/16-12/9504	UNC9/16-12/9554
5/8	11	45	18	UNC5/8-11/9504	UNC5/8-11/9554
3/4	10	45	18	UNC3/4-10/9504	UNC3/4-10/9554
7/8	9	55	22	UNC7/8-9/9504	UNC7/8-9/9554
1	8	55	22	UNC1-8/9504	UNC1-8/9554



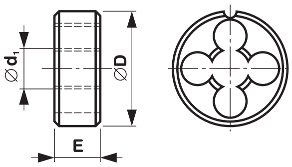


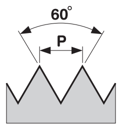
UNIFIKOVANÝ JEMNÝ ZÁVIT
UNIFIED FINE THREAD

UNF

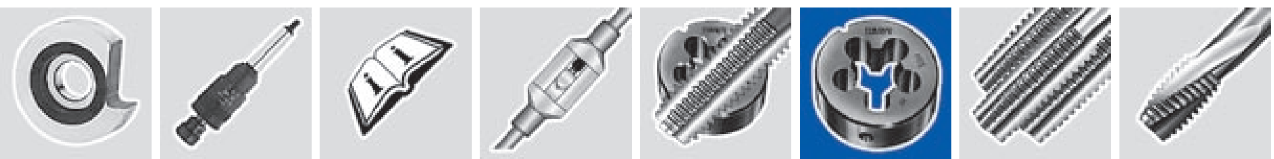
DIN EN 22 568

MATERIÁL / MATERIAL **HSS**





Provedení / Execution				Závit lapovaný Lapped thread	S lamačem, závit lapovaný With spiral pointed, lapped thread
Katalogové číslo / Cat. No.				**9505**	**9555**
Lícování / Tolerance				2A	2A
d_1	P	D	E	**Code 223210**	**Code 223210**
No. 4	48	16	5	UNC4-48/9505	UNC4-48/9555
No. 5	44	20	5	UNC5-44/9505	UNC5-44/9555
No. 6	40	20	7	UNC6-40/9505	UNC6-40/9555
No. 8	36	20	7	UNC8-36/9505	UNC8-36/9555
No. 10	32	20	7	UNC10-32/9505	UNC10-32/9555
No. 12	28	20	7	UNC12-28/9505	UNC12-28/9555
1/4	28	20	7	UNC1/4-28/9505	UNC1/4-28/9555
5/16	24	25	9	UNC5/16-24/9505	UNC5/16-24/9555
3/8	24	30	11	UNC3/8-24/9505	UNC3/8-24/9555
7/16	20	30	11	UNC7/16-20/9505	UNC7/16-20/9555
1/2	20	38	14	UNC1/2-20/9505	UNC1/2-20/9555
9/16	18	38	14	UNC9/16-18/9505	UNC9/16-18/9555
5/8	18	45	18	UNC5/8-18/9505	UNC5/8-18/9555
3/4	16	45	18	UNC3/4-16/9505	UNC3/4-16/9555
7/8	14	55	22	UNC7/8-14/9505	UNC7/8-14/9555
1	12	55	22	UNC1-12/9505	UNC1-12/9555

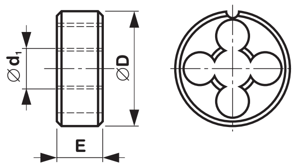


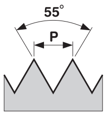
Závitové kruhové čelisti
Circular Screwing Dies

WHITWORTHŮV ZÁVIT / WHITWORTH THREAD — BSW

DIN EN 22 568 (ČSN 22 3211)

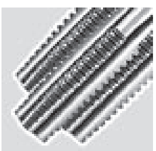
MATERIÁL / MATERIAL — HSS





Provedení / Execution	Závit lapovaný do BSW 1" Lapped thread up to BSW 1"
Katalogové číslo / Cat. No.	**9501**
Lícování / Tolerance	

d_1	P	D	E	Code **223211**
BSW 1/16"	60	16	3,5	W1/16/9501
BSW 3/32"	48	16	5	W3/32/9501
BSW 1/8"	40	20	5	W1/8/9501
BSW 3/16"	24	20	7	W3/16/9501
BSW 1/4"	20	20	7	W1/4/9501
BSW 5/16"	18	25	9	W5/16/9501
BSW 3/8"	16	30	11	W3/8/9501
BSW 7/16"	14	30	11	W7/16/9501
BSW 1/2"	12	38	14	W1/2/9501
BSW 9/16"	12	38	14	W9/16/9501
BSW 5/8"	11	45	18	W5/8/9501
BSW 3/4"	10	45	18	W3/4/9501
BSW 7/8"	9	55	22	W7/8/9501
BSW 1"	8	55	22	W1/9501
BSW 1 1/4"	7	65	25	W1 1/4/9501
BSW 1 1/2"	6	75	30	W1 1/2/9501
BSW 1 5/8"	5	75	30	W1 5/8/9501
BSW 1 3/4"	5	90	36	W1 3/4/9501
BSW 1 7/8"	4,5	90	36	W1 7/8/9501
BSW 2"	4,5	90	36	W2/9501



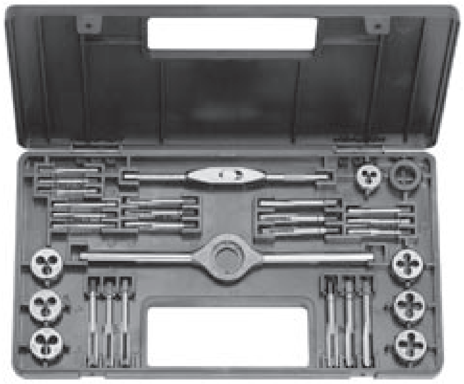


SADA ZÁVITOŘEZNÝCH NÁSTROJŮ M
TAP & DIE SET

M 0-II

	kg	axbxc mm	Code 238913.1	Code 228913.2
Materiál / Material: NO / CS, HSS	0,65	255x140x22	M0-II NO	M0-II HSS

Norma / Standard		Norma / Standard	
ČSN 22 3010	M 2,5; 3; 3, 5; 4; 5; 6; 7	ČSN 24 1521	∅ 20 / ∅ 16 mm
ČSN EN 22 568	M 2,5; 3; 3, 5; 4; 5; 6; 7	ČSN 24 1126	2-4,5 mm
ČSN 24 1520	∅ 20 mm		



SADA ZÁVITOŘEZNÝCH NÁSTROJŮ M
TAP & DIE SET

M 1-II

	kg	axbxc mm	Code 238914.1	Code 228914.2
Materiál / Material: NO / CS, HSS, HSS LH	2,15	345x200x32	M1-II NO	M1-II HSS M1-II HSS LH

Norma / Standard		Norma / Standard	
ČSN 22 3010	M 3; 4; 5; 6; 8; 10; 12	ČSN 24 1521	∅ 25 / ∅ 20 mm ∅ 38 / ∅ 30 mm
ČSN EN 22 568	M 3; 4; 5; 6; 8; 10; 12	DIN 1814	2,5 - 8 mm
ČSN 24 1520	∅ 25; 38 mm		

SADA ZÁVITOŘEZNÝCH NÁSTROJŮ M
TAP & DIE SET

M 1-D

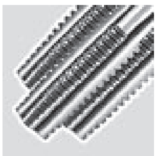
	kg	axbxc mm	Code 238914.1	Code 228914.2
Materiál / Material: NO / CS, HSS	2,50	355x270x35	M1-D NO	M1-D HSS

Norma / Standard		Norma / Standard	
ČSN 22 3010	M 3; 4; 5; 6; 8; 10; 12	ČSN 24 1521	∅ 25 / ∅ 20 mm ∅ 38 / ∅ 30 mm
ČSN EN 22 568	M 3; 4; 5; 6; 8; 10; 12	ČSN 24 1126	2-4,5 mm 3,55-9 mm
ČSN 24 1520	∅ 25; 38 mm		



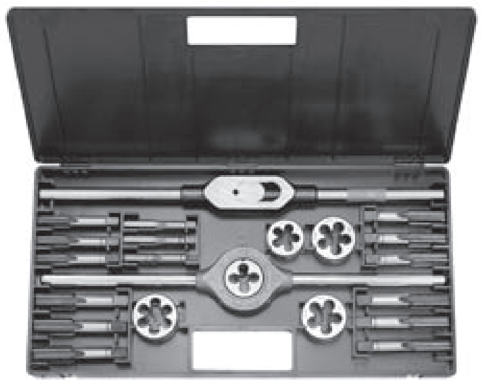







SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — M

M 2-II



	kg	axbxc mm	Code 238915.1	Code 238915.2
Materiál / Material: NO / CS HSS HSS LH	4,00	410x210x34	M2-II NO	M2-II HSS M2-II HSS LH

Norma / Standard		Norma / Standard	
ČSN 22 3010	M 12; 14; 16; 18; 20	ČSN 24 1521	∅ 45 / ∅ 38 mm
ČSN EN 22 568	M 12; 14; 16; 18; 20	ČSN 24 1126	5,6-16 mm
ČSN 24 1520	∅ 45 mm		

SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — M

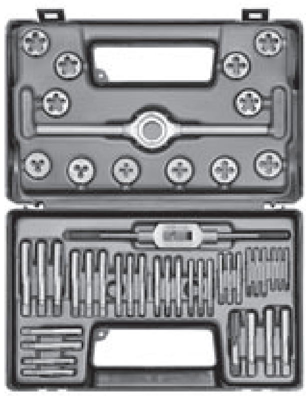
M 3

	kg	axbxc mm	Code 238912.1	Code 238912.2
Materiál / Material: NO / CS HSS	1,20	240x200x60	M3 NO-HOBBY	M3 HSS-HOBBY

Norma / Standard		Norma / Standard	
ČSN 22 3010	M 3; 4; 5; 6; 8; 10; 12	ČSN 24 1121	∅ 2,5; 3,3; 4,2; 5; 6,8; 8,5; 10,2
ČSN 8/3225	M 3; 4; 5; 6; 8; 10; 12	ČSN 23 0807	
ČSN 24 1520	∅ 25 mm	ON 22 6196	
ČSN 24 1126	2,5-9 mm	ČSN 25 4620	

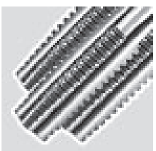
SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — M

M 1-QS

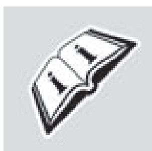


	kg	axbxc mm	Code 238914.1	Code 238914.2
Materiál / Material: NO / CS HSS	1,30	270x170x60	M1-QS NO	M1-QS HSS

Norma / Standard		Norma / Standard	
ČSN 22 3010	M 3; 4; 5; 6; 7; 8; 8x1; 10 10x1; 12; 12x1; 12x1,5	ČSN 24 1520	∅ 25 mm
PN 8/3225	M 3; 4; 5; 6; 7; 8; 8x1; 10 10x1; 12; 12x1; 12x1,5	DIN 1814	2,5 - 8 mm





SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — M

AUTO-1

	kg	axbxc mm	Code 238910.1	Code 238910.2
Materiál / Material: NO / CS HSS	5,20	440x185x60	AUTO-1 NO	AUTO-1 HSS

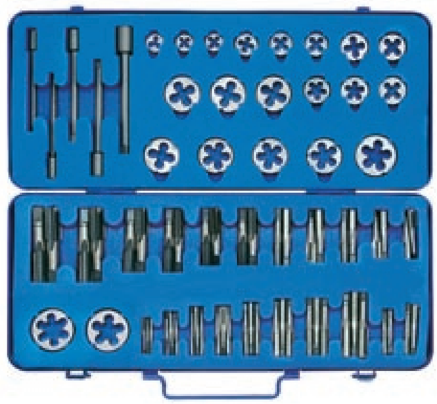
Norma / Standard		Norma / Standard	
ČSN 22 3010	M 7; 8x1; 10x1; 10x1, 25; 11; 11x1; 12x1; 12x1,25; 12x1,5; 14x1; 14x1,25; 14x1,5; 16x1; 16x1 L; 16x1,5; 18x1,5; 20x1,5; 22x1,5; 24x1,5	ČSN EN 22 568	M 7; 8x1; 10x1; 10x1, 25; 11; 11x1; 12x1; 12x1,25; 12x1,5; 14x1; 14x1,25; 14x1,5; 16x1; 16x1 L; 16x1,5; 18x1,5; 20x1,5; 22x1,5; 24x1,5
		ČSN 24 1151	□ 5; 5,6; 6,3; 7,1; 9 mm

SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — M

AUTO-2 ŠKODA

	kg	axbxc mm	Code 238910.1	Code 238910.2
Materiál / Material: NO / CS HSS	4,20	440x185x60	AUTO-2 NO	AUTO-2 HSS

Norma / Standard		Norma / Standard	
ČSN 22 3010	M 4; 5; 6; 7; 8; 10; 11; 12; 8x1; 10x1; 10x1,25; 11x1; 12x1; 12x1,25; 12x1,5; 14x1; 14x1,25; 14x1,5; 16x1; 18x1,5; 20x1,5	ČSN EN 22 568	M 4; 5; 6; 7; 8; 10; 11; 12; 8x1; 10x1; 10x1,25; 11x1; 12x1; 12x1,25; 12x1,5; 14x1; 14x1,25; 14x1,5; 16x1; 18x1,5; 20x1,5
		ČSN 24 1151	□ 5; 5,6; 6,3; 7,1; 9 mm

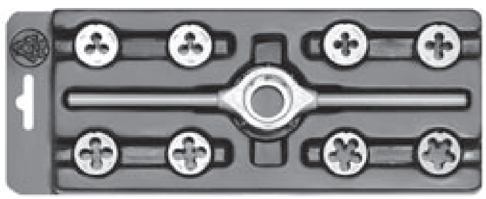


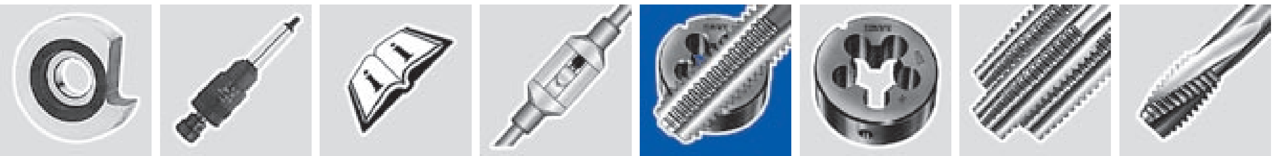
SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — M

MINI-1

	kg	axbxc mm	Code 238910.1	Code 238910.2
Materiál / Material: NO / CS HSS	0,40	260x100x15	MINI-1 NO	MINI-1 HSS

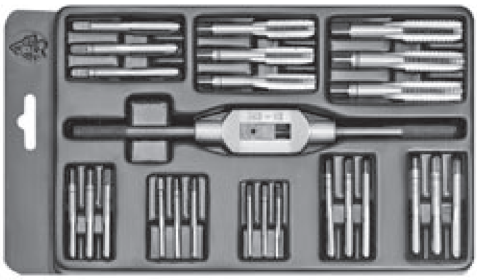
Norma / Standard		Norma / Standard	
PN 8/3225	M 3; 4; 5; 6; 7; 8; 10; 12	ČSN 24 1520	∅ 25 mm





SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — M

MINI-2



	kg	axbxc mm	Code 238910.1	Code 238910.2
Materiál / Material: NO / CS, HSS	4,00	250x150x15	MINI-2 NO	MINI-2 HSS

Norma / Standard		Norma / Standard	
ČSN 22 3010	M 3; 4; 5; 6; 7; 8; 10; 12	DIN 1814	2,5 -9 mm

SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — M

MINI-1D profi

	kg	axbxc mm	Code 238910.3	Code 238910.4
Materiál / Material: HSSE, HSSE VA	0,12	350x120x40	MINI-1D PROFI HSSE	MINI-1D PROFI HSSE-VA

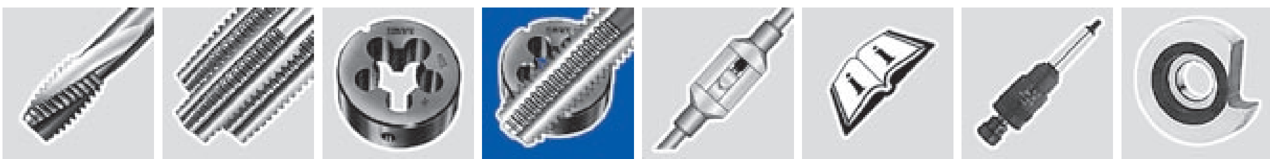
Norma / Standard		Norma / Standard	
ČSN EN 22 568	M 3; 4; 5; 6; 8; 10; 12	ČSN 24 1520	∅ 25 mm ∅ 38 mm
ČSN 24 1521	∅ 25 / ∅ 20 mm ∅ 38 / ∅ 30 mm		

SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — M

MINI-2D profi

	kg	axbxc mm	Code 238910.3
Materiál / Material: HSSE	1,27	365x165x40	MINI-2D PROFI

Norma / Standard		Norma / Standard	
ČSN 22 3043 PN 8/3044	M 3; 4; 5; 6; 7; 8; 10; 12	DIN 1814	2,5 -8 mm



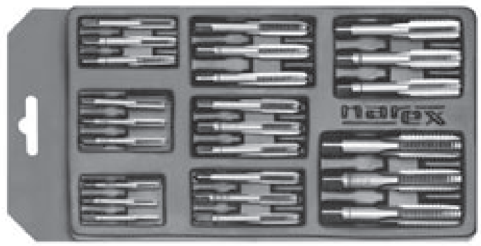
SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — M

MINI-2L

	kg	axbxc mm	Code 238910.1	Code 238910.2
Materiál / Material: NO / CS HSS	0,30	240x120x15	MINI-2L NO	MINI-2L HSS

Norma / Standard

ČSN 22 3010 — M 3L; 4L; 5L; 6L; 7L; 8L; 10L; 12L

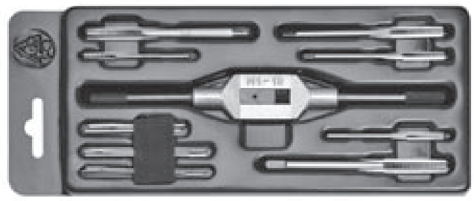


SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — M

MAT-1

	kg	axbxc mm	Code 238910.1	Code 238910.2
Materiál / Material: NO / CS HSS	0,20	230x100x15	MAT-1 NO	MAT-1 HSS

Norma / Standard		Norma / Standard	
PN 8/3074	M 2; 2,5	DIN 1814	2-6 mm
PN 8/3070	M 3; 3,5; 4; 5; 6; 7; 8		

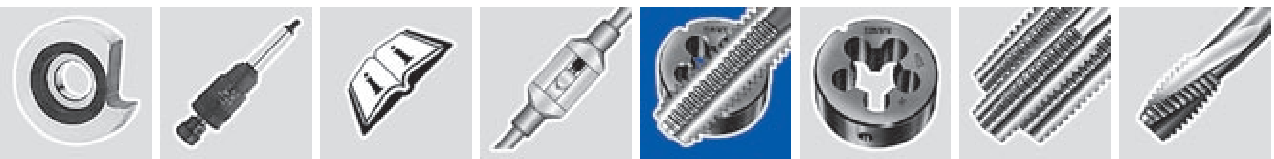


SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — M

N 3-II

	kg	axbxc mm	Code 238919.1
Materiál / Material: NO / CS	8,60	495x315x60	N3-II NO

Norma / Standard		Norma / Standard	
ČSN 22 3010	M 4x0,5; 5x0,5; 6x0,75; 8x0,75; 8x1; 9x1; 10x0,75; 10x1; 11x1; 12x1; 12x1,5; 14x1; 14x1,25; 14x1,5	ČSN 24 1520	∅ 20; 25; 30; 38 mm
ČSN EN 22 568	M 4x0,5; 5x0,5; 6x0,75; 8x0,75; 8x1; 9x1; 10x0,75; 10x1; 11x1; 12x1; 12x1,5; 14x1; 14x1,25; 14x1,5	ČSN 24 1126	2-4,5; 3,15-6,3; 3,55-9mm
ČSN 24 1121	∅ 2; 3; 3,5; 4,5; 5,2; 7; 7,2; 8; 9; 9,2; 10; 10,5; 11; 12,5; 12,8	PN 23 8990	č. 1; 2; 3; 4
ČSN 24 1151	3,15; 3,55; 4; 5; 5,6; 6,3; 7,1; 9 mm		



SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — G

G 1-II

	kg	axbxc mm	Code 238918.1
Materiál / Material: NO / CS	12,60	670x330x90	G1-II NO

Norma / Standard		Norma / Standard	
ČSN 22 3012	G 1/8"; 1/4"; 3/8"; 1/2"; 5/8"; 3/4"; 7/8"; 1"	ČSN 24 1521	∅ 45 / ∅ 30 mm ∅ 45 / ∅ 38 mm ∅ 65 / ∅ 55 mm
ČSN EN 24 231	G 1/8"; 1/4"; 3/8"; 1/2"; 5/8"; 3/4"; 7/8"; 1"	ČSN 24 1120	18x20 mm
ČSN 24 1520	∅ 45; 65 mm	ČSN 24 1126	5,6-16 mm

SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — W

W 1-II

	kg	axbxc mm	Code 238916.1	Code 238916.2
Materiál / Material: NO / CS HSS	2,53	350x270x30	W1-II NO	W1-II HSS

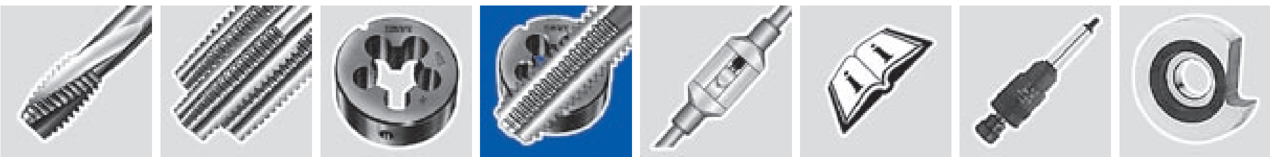
Norma / Standard		Norma / Standard	
PN 8/3011	W 1/8"; 3/16"; 1/4"; 5/16"; 3/8"; 7/16"; 1/2"	ČSN 24 1521	∅ 25 / ∅ 20 mm ∅ 38 / ∅ 30 mm
PN 8/3211	W 1/8"; 3/16"; 1/4"; 5/16"; 3/8"; 7/16"; 1/2"	ČSN 24 1126	2-4,5 mm 3,55-9 mm
ČSN 24 1520	∅ 25; 38 mm		

SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — W

W 2-II

	kg	axbxc mm	Code 238917.1
Materiál / Material: NO / CS	7,40	535x275x70	W2-II

Norma / Standard		Norma / Standard	
PN 8/3011	W 1/2"; 9/16"; 5/8"; 3/4"; 7/8"; 1"	ČSN 24 1521	∅ 55 / ∅ 38 mm ∅ 55 / ∅ 45 mm
PN 8/3211	W 1/2"; 9/16"; 5/8"; 3/4"; 7/8"; 1"	ČSN 24 1126	5,6-16 mm
ČSN 24 1520	∅ 55 mm		



SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — UNC

UNC 0

	kg	axbxc mm	Code 238911	Code 238911
Materiál / Material: NO / CS HSS	1,70	355x270x35	UNC0 NO	UNC0 HSS

Norma / Standard		Norma / Standard	
PN 8/3015 - NO; DIN 352 - HSS	5-40; 6-32; 8-32; 10-24; 12-24	ČSN 24 1126	2,5-7,1 mm
ČSN EN 22 568	5-40; 6-32; 8-32; 10-24; 12-24	ČSN 24 1520	∅ 20 mm

SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — UNC

UNC 1

	kg	axbxc mm	Code 238911.1	Code 238911.1
Materiál / Material: NO / CS HSS	2,04	350x270x40	UNC1 NO	UNC1 HSS

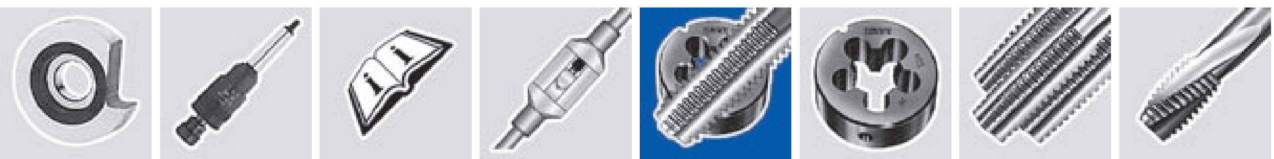
Norma / Standard		Norma / Standard	
PN 8/3015 - NO; DIN 352 - HSS	1/4 - 20; 5/16 - 18; 3/8 - 16; 7/16 - 14; 1/2 - 13	ČSN 24 1521	∅ 25 / ∅ 20 mm; ∅ 38 / ∅ 30 mm
ČSN EN 22 568	1/4 - 20; 5/16 - 18; 3/8 - 16; 7/16 - 14; 1/2 - 13	ČSN 24 1126	2,5-7,1 mm
ČSN 24 1520	∅ 25; 38 mm		

SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — UNC

UNC 2

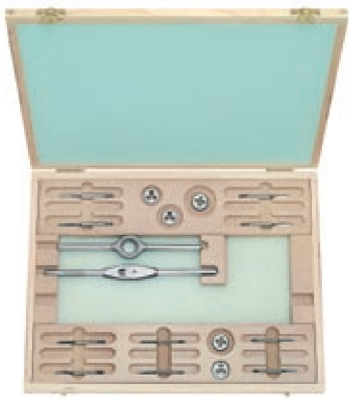
	kg	axbxc mm	Code 238911.2
Materiál / Material: NO / CS	6,54	510x350x40	UNC2

Norma / Standard		Norma / Standard	
PN 8/3015	1/2 - 13; 5/8 - 11; 3/4 - 10; 7/8 - 9; 1 - 8	ČSN 24 1521	∅ 55 / ∅ 38 mm; ∅ 55 / ∅ 45 mm
ČSN EN 22 568	1/2 - 13; 5/8 - 11; 3/4 - 10; 7/8 - 9; 1 - 8	ČSN 24 1126	5,6-16 mm
ČSN 24 1520	∅ 55 mm		



SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — UNF

UNF 0



	kg	axbxc mm	Code 238911	Code 238911
Materiál / Material: NO / CS HSS	1,58	355x270x35	UNF0 NO	UNF0 HSS

Norma / Standard		Norma / Standard	
PN 8/3015 - NO DIN 2181 - HSS	5-44; 6-40; 8-36; 10-32; 12-28	ČSN 24 1126	2,5-7,1 mm
ČSN EN 22 568	5-44; 6-40; 8-36; 10-32; 12-28	ČSN 24 1520	∅ 20 mm

SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — UNF

UNF 1

	kg	axbxc mm	Code 238911.3	Code 238911.3
Materiál / Material: NO / CS HSS	2,38	350x270x40	UNF1 NO	UNF1 HSS

Norma / Standard		Norma / Standard	
PN 8/3015 - NO DIN 2181 - HSS	1/4 - 28; 5/16 - 24; 3/8 - 24; 7/16 - 20; 1/2 - 20	ČSN 24 1521	∅ 25 / ∅ 20 mm ∅ 38 / ∅ 30 mm
ČSN EN 22 568	1/4 - 28; 5/16 - 24; 3/8 - 24; 7/16 - 20; 1/2 - 20	ČSN 24 1126	2,5-7,1 mm
ČSN 24 1520	∅ 25; 38 mm		

SADA ZÁVITOŘEZNÝCH NÁSTROJŮ TAP & DIE SET — UNF

UNF 2

	kg	axbxc mm	Code 238911.4
Materiál / Material: NO / CS	6,38	510x350x40	UNF2

Norma / Standard		Norma / Standard	
PN 8/3015	1/2 - 20; 5/8 - 18; 3/4 - 16; 7/8 - 14; 1 - 12	ČSN 24 1521	∅ 55 / ∅ 38 mm ∅ 55 / ∅ 45 mm
ČSN EN 22 568	1/2 - 20; 5/8 - 18; 3/4 - 16; 7/8 - 14; 1 - 12	ČSN 24 1126	5,6-16 mm
ČSN 24 1520	∅ 55 mm		

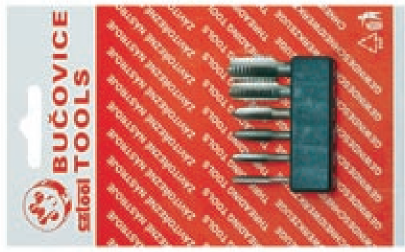
SADY ZÁVITOŘEZNÝCH BITŮ / SCREWDRIVER-BITS SETS — M

BIT 1

		kg	axbxc mm	Code BIT
Materiál / Material: HSS	BIT 1 M3-M8	0,05	155x90	M3-M8/948100
	BIT 1 M3-M10	0,05	155x90	M3-M10/948110
	BIT 1 M4-M12	0,07	155x90	M4-M12/948120

Norma / Standard

BIT 1 M3-M8 PN 8/3016	M 3; 4; 5; 6; 8
BIT 1 M3-M10 PN 8/3016	M 3; 4; 5; 6; 8; 10
BIT 1 M4-M12 PN 8/3016	M 4; 5; 6; 8; 10; 12

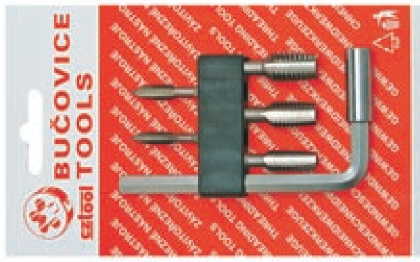


SADY ZÁVITOŘEZNÝCH BITŮ / SCREWDRIVER-BITS SETS — M

BIT 2

		kg	axbxc mm	Code BIT
Materiál / Material: HSS	BIT 2 M3-M8	0,08	155x90	M3-M8/948200
	BIT 2 M4-M10	0,09	155x90	M4-M10/948210
	BIT 2 M5-M12	0,10	155x90	M5-M12/948220

Norma / Standard		Norma / Standard
BIT 2 M3-M8 PN 8/3016	M 3; 4; 5; 6; 8	zástrčný klíč 1/4" / Hex-key spanner 1/4" // magnetický držák / Magnetic holder
BIT 2 M4-M10 PN 8/3016	M 4; 5; 6; 8; 10	zástrčný klíč 1/4" / Hex-key spanner 1/4" // magnetický držák / Magnetic holder
BIT 2 M5-M12 PN 8/3016	M 5; 6; 8; 10; 12	zástrčný klíč 1/4" / Hex-key spanner 1/4" // magnetický držák / Magnetic holder



SADY ZÁVITOŘEZNÝCH BITŮ / SCREWDRIVER-BITS SETS — M

BIT 3

		kg	axbxc mm	Code BIT
Materiál / Material: HSS	BIT 3 M4-M12	0,17	155x90	M4-M12/948300
	BIT 3 M3-M10	0,16	155x90	M3-M10/948310

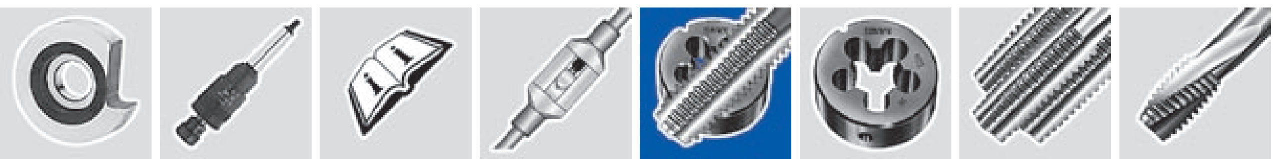
Norma / Standard		Norma / Standard
BIT 3 M4-M12 PN 8/3016	M 4; 5; 6; 8; 10; 12	šroubovák s „T“ rukojetí / Screwdriver with „T“ holder
BIT 3 M3-M10 PN 8/3016	M 3; 4; 5; 6; 8; 10	šroubovák s „T“ rukojetí / Screwdriver with „T“ holder

SADY ZÁVITOŘEZNÝCH BITŮ / SCREWDRIVER-BITS SETS — M

BIT 4

		kg	axbxc mm	Code BIT
Materiál / Material: HSS	BIT 4 M4-M12	0,22	155x90	M4-M12/948400
	BIT 4 M3-M10	0,21	155x90	M3-M10/948410

Norma / Standard		Norma / Standard
BIT 4 M4-M12 PN 8/3016	M 4; 5; 6; 8; 10; 12	vratidlo s ráčnou / tap wrench with ratchet
BIT 4 M3-M10 PN 8/3016	M 3; 4; 5; 6; 8; 10	vratidlo s ráčnou / tap wrench with ratchet



SADA STROJNÍCH ZÁVITNÍKŮ MACHINE TAPS SETS — M

C

		kg	axbxc mm	Code 238925
Materiál / Material: HSS	C - 1	0,10	73x17x133	C-1
	C - 2	0,14	73x17x133	C-2
	C - 3	0,19	73x17x133	C-3
	C - 4	018	73x17x133	C-4

Norma / Standard		Norma / Standard	
Typ C - 1	M 3; 4; 5; 6; 8	Typ C - 3	M 5; 6; 8; 10; 12
Typ C - 2	M 4; 5; 6; 8; 10	Typ C - 4	M 4; 6; 8; 10; 12

SADA STROJNÍCH ZÁVITNÍKŮ MACHINE TAPS SETS — M

B

		kg	axbxc mm	Code 238925
Materiál / Material: HSS	B - 1	0,10	73x17x133	B-1
	B - 2	0,14	73x17x133	B-2
	B - 3	0,19	73x17x133	B-3
	B - 4	018	73x17x133	B-4

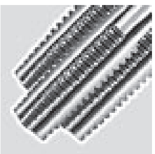
Norma / Standard		Norma / Standard	
Typ B - 1	M 3; 4; 5; 6; 8	Typ B - 3	M 5; 6; 8; 10; 12
Typ B - 2	M 4; 5; 6; 8; 10	Typ B - 4	M 4; 6; 8; 10; 12

SADA STROJNÍCH ZÁVITNÍKŮ MACHINE TAPS SETS — M

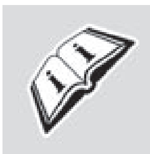
C/35

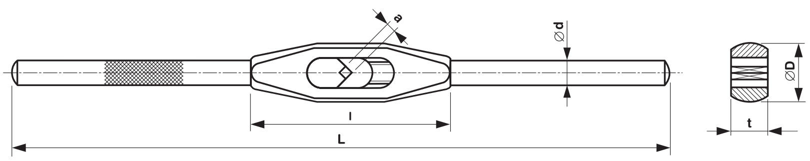
		kg	axbxc mm	Code 238925
Materiál / Material: HSS	C/35 - 1	0,10	73x17x133	C/35-1
	C/35 - 2	0,14	73x17x133	C/35-2
	C/35 - 3	0,19	73x17x133	C/35-3
	C/35 - 4	018	73x17x133	C/35-4

Norma / Standard		Norma / Standard	
Typ C/35 - 1	M 3; 4; 5; 6; 8	Typ C/35 - 3	M 5; 6; 8; 10; 12
Typ C/35 - 2	M 4; 5; 6; 8; 10	Typ C/35 - 4	M 4; 6; 8; 10; 12

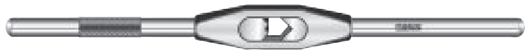




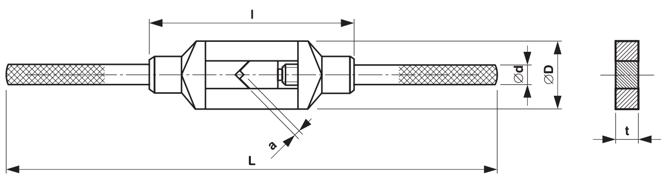


VRATIDLA RUČNÍ NASTAVITELNÁ
ADJUSTABLE TAP WRENCHES

ČSN 241126

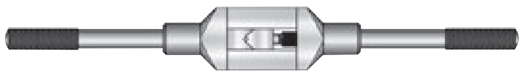


Velikost Size	a	t	∅D	∅d	l	L	Code 241126
č. 1	2 - 4,5	7	12	5	49	125	2-4,5
č. 2	2,5 - 7,1	10	18	8	65	210	2,5-7,1
č. 3	3,5 - 9	14	27	11	96	310	3,5-9
č. 4	5,6 - 16	22	40	15	134	400	5,6-16

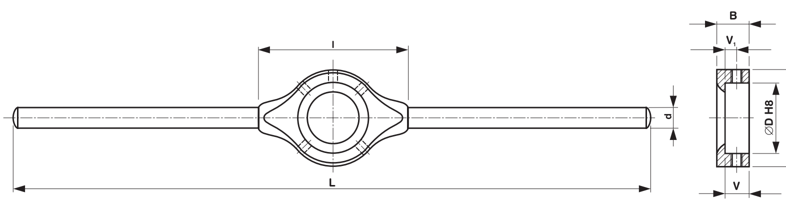


VRATIDLA RUČNÍ NASTAVITELNÁ
ADJUSTABLE TAP WRENCHES

DIN 1814



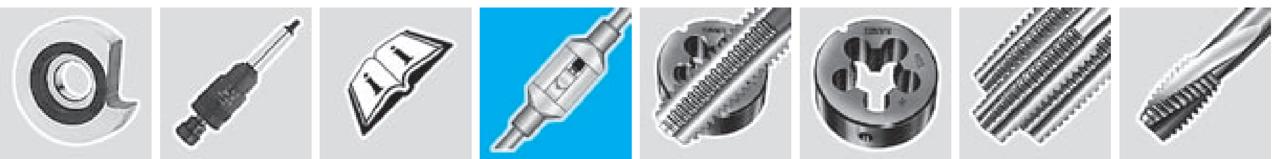
Velikost Size	a	t	∅D	∅d	l	L	Code 241126
č. 1	2 - 6	8	24	7	73	175	2-6
č. 1,5	2,5 - 8	9	25	8	75	200	2,5-8
č. 3	4,9 - 12	16	45	14	132	370	4,9-12



VRATIDLA PRO ZÁVITOVÉ KRUHOVÉ ČELISTI
CIRCULAR DIE STOCKS

ČSN 241520

∅DH8	∅D_1	B	V	V_1	∅d	L	l	Code 241520
16	24	7,5	5	3,15	5	140	36,5	16
20	30	9	7	3,25	8	180	44	20
25	36	12	9	4	10	220	54	25
30	42	14	11	5	10	280	64	30
38	56	16	12	6,25	12	330	80	38
45	64	20	16	8,25	14	400	94	45
55	75,5	23	19	10,25	14	480	110	55
65	90	26	21,5	11,5	18	560	130	65



Tváření vnitřních závitů je jednou z technologií výroby závitů. Závit při ní není řezán, ale beztřískově tvářen vytlačováním materiálu. Tato technologie je vhodná pro výrobu závitů do materiálů dobře tvářitelných za studena s minimální tažností 10%.

Výhody tvářeného závitu proti řezanému závitu:
- nevznikají třísky, odpadá nebezpečí jejich vzpříčení v závitovaném otvoru
- lepší kvalita povrchu na bocích vytvářeného závitu
- čistý závit, žádné stopy na povrchu závitu
- rovnoměrná kalibrace závitu
- nepřerušený průběh vlákna materiálu a tím zvýšená pevnost šroubového spojení
- větší odolnost nástroje proti lomu a tím i vyšší životnost nástroje
- vyšší tvářecí rychlost zvyšuje produktivitu

Podmínky použití technologie tváření závitu:
- dodržení požadovaného průměru předvrtání otvoru; menší otvor může způsobit zalomení nástroje, větší otvor znamená nedotvářený malý průměr závitu
- dostatečné mazání; při tváření vzniká vysoké tření, proto je doporučeno použití kvalitního mazacího oleje

Thread forming of internal threads is one of the technologies of threads production. This technology could be used for thread production in materials with minimal ductility 10%.

Advantages of formed thread:
- no chips during threading process
- higher surface quality on thread flanks, very clean thread
- uniform calibration of thread
- higher strengh of screw connection
- higher mechanical resistance of forming taps – longer tool life
- higher speed = higher productivity

Operating conditions:
- optimal diameter of drilled hole
- sufficient cooling
- sufficient spindle/tap revolutions

DOPORUČENÉ PŘEDVRTÁNÍ OTVORŮ PRO TVÁŘENÍ ZÁVITŮ
RECOMMENDED HOLE DIAMETERS FOR FORMING OF THE THREADS

Metrický závit ISO - hrubý / Metric ISO - coarse thread

Rozměr závitu / Thread size		Předvrtaný otvor - ∅ / Hole diameter - ∅	
∅ mm	P mm	min mm	max mm
M 3	0,5	2,77	2,82
M 3,5	0,6	3,23	3,28
M 4	0,7	3,68	3,73
M 4,5	0,75	4,15	4,21
M 5	0,8	4,63	4,68
M 6	1	5,51	5,59
M 7	1	6,51	6,59
M 8	1,25	7,39	7,48
M 9	1,25	8,39	8,48
M 10	1,5	9,25	9,35
M 11	1,5	10,25	10,35
M 12	1,75	11,12	11,25
M 14	2	13,0	13,15
M 16	2	15,0	15,15
M 18	2,5	16,72	16,9
M 20	2,5	18,72	18,9

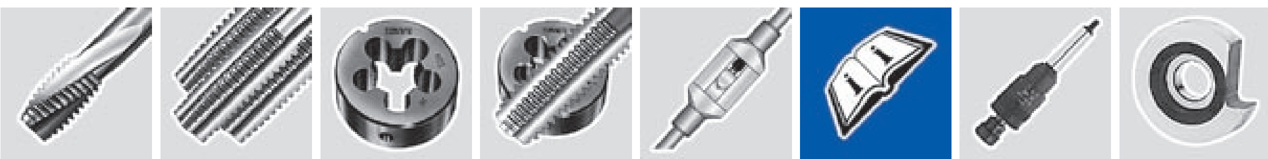
Trubkový závit / Whitworth pipe thread

Rozměr závitu / Thread size		Předvrtaný otvor - ∅ / Hole diameter - ∅	
∅" mm	P/1" mm	min mm	max mm
G 1/8"	28	9,25	9,32
G 1/4"	19	12,43	12,53
G 3/8"	19	15,94	16,04
G 1/2"	14	19,96	20,1
G 5/8"	14	21,92	22,08
G 3/4"	14	25,45	25,60
G 7/8"	14	29,2	29,35
G 1"	11	31,97	32,15

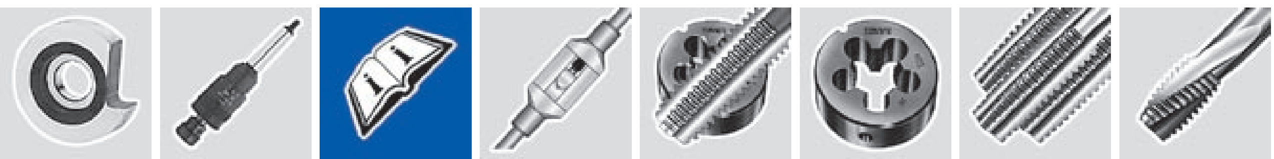
Uvedené hodnoty je nutné vždy ověřit s ohledem na tažnost tvářeného materiálu.
Check the value in consideration of roll formed material ductility.

Metrický závit ISO - jemný / Metric ISO - fine thread

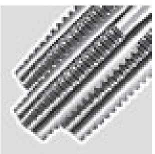
Rozměr závitu / Thread size	Předvrtaný otvor - ∅ / Hole diameter - ∅	
∅xP mm	min mm	max mm
M 3,5 x 0,5	3,27	3,32
M 4 x 0,5	3,77	3,82
M 4,5 x 0,5	4,27	4,32
M 5 x 0,5	4,77	4,82
M 5,5 x 0,5	5,27	5,32
M 6 x 0,5	5,78	5,83
M 6 x 0,75	5,65	5,71
M 7 x 0,75	6,65	6,71
M 8 x 0,75	7,65	7,71
M 9 x 0,75	8,65	8,71
M 10 x 0,75	9,65	9,71
M 11 x 0,75	10,65	10,71
M 8 x 1	7,51	7,59
M 9 x 1	8,51	8,59
M 10 x 1	9,51	9,59
M 11 x 1	10,51	10,59
M 12 x 1	11,52	11,60
M 14 x 1	13,52	13,60
M 15 x 1	14,52	14,60
M 16 x 1	15,52	15,60
M 18 x 1	17,52	17,60
M 20 x 1	19,52	19,60
M 10 x 1,25	9,39	9,48
M 12 x 1,25	11,40	11,49
M 14 x 1,25	13,40	13,49
M 12 x 1,5	11,26	11,36
M 14 x1,5	13,26	13,36
M 16 x 1,5	15,26	15,36
M 18 x 1,5	17,26	17,36
M 20 x 1,5	19,26	19,36
M 22 x 1,5	21,26	21,36
M 24 x 1,5	23,26	23,38
M 25 x 1,5	24,26	24,38
M 26 x 1,5	25,26	25,38
M 28 x 1,5	27,26	27,38
M 30 x 1,5	29,26	29,38
M 18 x 2	17,0	17,15
M 20 x 2	19,0	19,15
M 22 x 2	21,0	21,15
M 24 x 2	23,01	23,16
M 27 x 2	26,01	26,16
M 30 x 2	29,01	29,16

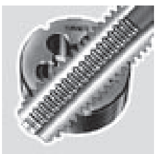


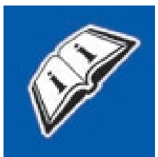
Rozměr nástroje / Diameter of tools			Řezná rychlost m/min / Cutting speed m/min																									
			1	2	3	4	5	6	7	8	9	10	12	14	15	16	18	20	22	24	25	26	28	30	32	34	35	40
M	G	UN	Otáčky/min. / Revolutions per minute																									
2			159	318	478	637	796	955	1115	1274	1433	1592	1911	2229	2389	2548	2866	3185	3503	3822	3981	4140	4459	4777	5096	5414	5573	6369
2,5			127	255	382	510	637	764	892	1019	1146	1274	1529	1783	1911	2038	2293	2548	2803	3057	3185	3312	3567	3822	4076	4331	4459	5096
3		No.5	106	212	318	425	531	637	743	849	955	1062	1274	1466	1592	1699	1911	2123	2335	2548	2654	2760	2972	3185	3397	3609	3715	4246
4		No.8	80	159	239	318	398	478	557	637	717	796	955	1115	1194	1274	1433	1592	1752	1911	1990	2070	2229	2389	2548	2707	2787	3185
5		No.10	64	127	191	255	318	382	446	510	573	637	764	892	955	1019	1146	1274	1401	1529	1592	1656	1783	1911	2038	2166	2229	2546
6		1/4	53	106	159	212	265	318	372	425	478	531	637	743	796	849	955	1062	1168	1274	1327	1380	1486	1592	1699	1805	1858	2123
7			45	91	136	182	227	273	318	364	409	455	546	637	682	728	819	910	1001	1092	1137	1183	1274	1365	1456	1547	1592	1820
8	1/16"	5/16	40	80	119	159	199	239	279	318	358	398	478	557	597	637	717	796	876	955	995	1035	1115	1194	1274	1354	1393	1592
9		3/8	35	71	106	142	177	212	248	283	318	354	425	495	531	566	637	708	778	849	885	620	991	1062	1132	1203	1238	1415
10	1/8"	7/16	32	64	96	127	159	191	223	255	287	318	382	446	478	510	573	637	701	764	796	828	892	955	1019	1083	1115	1274
12	1/4"	1/2	27	53	80	106	133	159	186	212	239	265	318	372	398	425	478	531	584	637	663	690	743	796	849	902	929	1062
14		9/16	23	45	68	91	114	136	159	182	205	227	273	318	341	364	409	455	500	546	569	591	637	682	728	773	796	910
16	3/8"	5/8	20	40	60	80	100	119	139	159	179	199	239	279	299	316	358	398	438	478	498	518	557	597	637	677	697	796
18		3/4	18	35	53	71	88	106	124	142	159	177	212	248	265	283	318	354	389	425	442	460	495	531	566	602	619	708
20	1/2"		16	32	48	64	80	96	111	127	143	159	191	223	239	255	287	318	350	382	398	414	446	478	510	541	557	637
22	5/8"	7/8	14	29	43	58	72	87	101	116	130	145	174	203	217	232	261	290	318	347	362	376	405	434	463	492	507	579
24		1	13	27	40	53	66	80	93	106	119	133	159	186	199	212	239	265	292	318	332	345	372	398	425	451	464	531
27	3/4"	1 1/8	12	24	35	47	59	71	83	94	106	118	142	165	177	189	212	236	259	283	295	307	330	354	377	401	413	472
30	7/8"		11	21	32	42	53	64	74	85	96	106	127	149	159	170	191	212	234	255	265	276	297	318	340	361	372	425
33	1"	1 1/4	10	19	29	39	48	58	68	77	87	97	116	135	145	154	174	193	212	232	241	251	270	290	309	328	338	386
36		1 3/8	9	18	27	35	44	53	62	71	80	88	106	124	133	142	159	177	195	212	221	230	248	265	283	301	310	354
39	1 1/8"	1 1/2	8	16	24	33	41	49	57	65	73	82	98	114	122	131	147	163	180	196	204	212	229	245	261	278	286	327
42	1 1/4"		8	15	23	30	38	45	53	61	68	76	91	106	114	121	136	152	167	182	190	197	212	227	243	258	265	303
45	1 3/8"	1 3/4	7	14	21	28	35	42	50	57	64	71	85	99	106	113	127	142	156	170	177	184	198	212	226	241	248	283
48	1 1/2"		7	13	20	27	33	40	46	53	60	66	80	93	100	106	119	133	146	159	166	173	186	199	212	226	232	265
52		2	6	12	18	24	31	37	43	49	55	61	73	86	92	98	110	122	135	147	153	159	171	184	196	208	214	245



Přehled katalogavých čísel
Indes of Catalogue Numbers





ZÁVITOŘEZNÉ HLAVY BEZPEČNOSTNÍ
SAFETY THREAD-CUTTING HEADS

Zhb, Zhb A

UŽITÍ HLAV

Hlavy se používají na soustruzích, vrtačkách, vyvrtávačkách, frézkách apod. - stroj musí využívat zpětné otáčky vřetena pro vytáčení závitníků z otvoru.

Hlavy jsou určeny pro upínání závitníků při řezání vnitřních pravochodých i levochodých závitů v průchozích i slepých otvorech.

Nastavitelná bezpečnostní spojka chrání závitník před ulomením při náhlém nárůstu krouticího momentu.

Osové vyrovnávání kompenzuje rozdíl mezi stoupáním závitu a posuvem vřetena stroje.

Rychlá výměna závitníků, upnutých ve vyměnitelných pouzdrech RVK a NVH, u provedení hlav "A".

APPLICATION OF HEADS

These heads are applicable on lathes, drilling-, boring- and milling machines etc. - the backward running of the spindle is necessary for backing out of taps.

These heads are designed for chucking of taps for tapping of right- and left-hand threads in clear and blind holes.

The adjustable safety clutch protects the tap from the breakage by sudden increase of the torque.

The axial compensation compensates the difference between thread pitch and machine spindle feed.

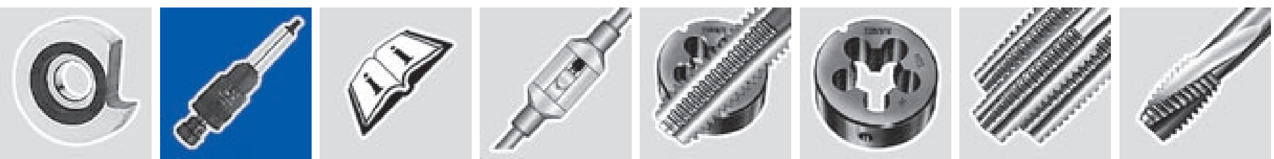
The heads facilitate the rapid change of taps being chucked in exchangeable bushes RVK and NVH (for modifications "A" only).

ŘEZÁNÍ VNITŘNÍCH ZÁVITŮ - ROZSAHY POUŽITÍ HLAV / TAPPING

Typ Type	M, MF	W	G	UNC, UNF
Zhb 21 Zhb 21A	M2 ÷ M8	W1/8" ÷ W5/16"	G1/16"	1/4" ÷ 5/16"
Zhb 31 Zhb 31A	M5 ÷ M16	W3/16" ÷ W5/8"	G1/16" ÷ G3/8"	1/4" ÷ 5/8"
Zhb 41 Zhb 41A	M16 ÷ M30	W5/8" ÷ W1"	G3/8" ÷ G7/8"	5/8" ÷ 1"
Zhb 51	M30 ÷ M52	W11/4" ÷ W2"	G7/8" ÷ G11/2"	13/16" ÷ 2"

ŘEZÁNÍ VNĚJŠÍCH ZÁVITŮ / EXTERNAL THREAD CUTTING

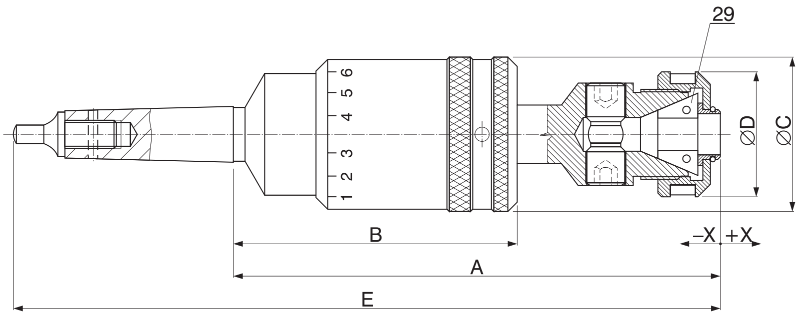
Typ Type	Typ výměnného pouzdra Type of exchangeable bush mm	Metrický závit Thread diameter mm	L_{MAX} (mm)
Zhb 21A	NKC 12	M3 ÷ M8	35
Zhb 31A	NKC 12	M3 ÷ M12	33



Závitořezné hlavy bezpečnostní
Safety Thread-Cutting Heads

ZÁKLADNÍ PROVEDENÍ
BASIC MODEL

Zhb



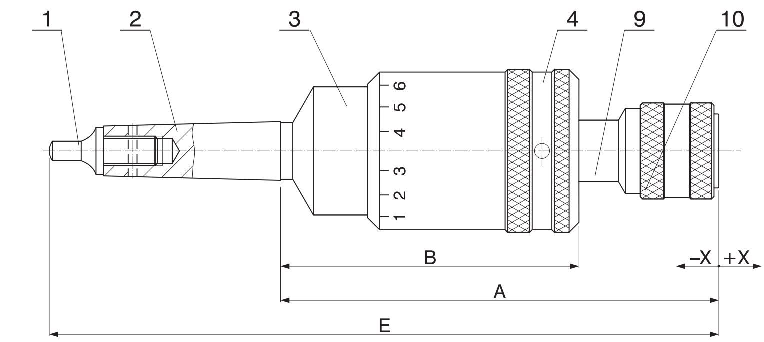
Legenda - Legend
- **29** - kleština JACOBS - Collet
- **M_k** - kroutící moment - Torque
- **n** - otáčky hlavy - Speed
- **–X** - zasunutí pouzdra - Shift-in
- **+X** - vysunutí pouzdra - Shift out

Typ Type	Upínací stopka Shank	Kleština Collet	Rozměry - Dimensions (mm) A	B	C	D	E	X	M_k Nm	n_{max} min^{-1}	kg	Code ZHB
Zhb 21	W20 x 50						196				1,03	21/W20x50-KOMPLET
Zhb 21	Mk2 DIN 228B	J 423, J 420	144	92	37	54	219	+7,5 -7,5	7,5	600	1,09	21/MK2DIN228B-KOMPLET
Zhb 21	Mk3 x M12						238				1,29	21/MK3xM12-KOMPLET
Zhb 31	W25 x 65						251				2,90	31/W25x65-KOMPLET
Zhb 31	Mk2 DIN 228B	J 443, J 440	195	118	50	66	275	+10 -10	50	300	2,85	31/MK2DIN228B-KOMPLET
Zhb 31	Mk3 x M12 v.v.						294				3,05	31/MK3xM12-KOMPLET
Zhb 41	W25 x 65						307				5,40	41/W25x65-KOMPLET
Zhb 41	Mk3 x M12 v.v.	J 461, J 462	255	165	62	78	349	+12	175	200	5,56	41/MK3xM12-KOMPLET
Zhb 41	Mk4 x M16 v.v.						380	-12			6,00	41/MK4xM16-KOMPLET
Zhb 41	Mk5 x M20 v.v.						441				6,75	41/MK5xM20-KOMPLET

Doplňkové příslušenství hlav str. 108, 109 / Supplementary accessories of heads page 108, 109
Způsob objednávání viz str. 110 / Instruction of order see page 110

MODEL S VÝMĚN. UPÍNACÍM POUZDREM
MODEL WITH THE EXCHANGEABLE BUSH

Zhb A



Legenda - Legend
- **1** - vyjímatený vyražeč (v.v.) - Removable Tang
- **9** - nástavec - Adapter
- **10** - objímka - Sleeve
- **M_k** - kroutící moment - Torque
- **n** - otáčky hlavy - Speed
- **–X** - zasunutí pouzdra - Shift-in
- **+X** - vysunutí pouzdra - Shift out

Typ Type	Upínací stopka Shank	Pouzdro Bush	Rozměry - Dimensions (mm) A	B	C	D	E	X	M_k Nm	n_{max} min^{-1}	kg	Code ZHB
Zhb 21A	W20 x 50						203				1,26	21A/W20x50-KOMPLET
Zhb 21A	Mk2 DIN 228B	RVK 21, NVH 2, NKC 12	151	95	37	54	226	+7,5 -7,5	7,5	600	1,32	21A/MK2DIN228B-KOMPLET
Zhb 21A	Mk3 x M12 v.v.						245				1,52	21A/MK3xM12-KOMPLET
Zhb 31A	W25 x 65	RVK 31, NVH 2, NKC 12	176	120	50	66	232	+10	50	300	3,33	31A/W25x65-KOMPLET
Zhb 31A	Mk3 x M12 v.v.						275	-10			3,48	31A/Mk3xM12-KOMPLET
Zhb 41A	W25 x 65						300				6,32	41A/W25x65-KOMPLET
Zhb 41A	Mk3 x M12 v.v.	RVK 41, NVH 3	248	169	62	78	342	+12 -12	175	200	6,48	41A/MK3xM12-KOMPLET
Zhb 41A	Mk4 x M16 v.v.						373				6,92	41A/MK4xM16-KOMPLET

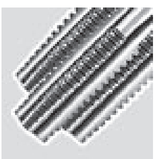
Doplňkové příslušenství hlav str. 108, 109 / Supplementary accessories of heads page 108, 109
Způsob objednávání viz str. 110 / Instruction of order see page 110

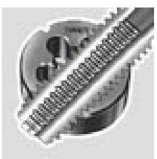
NABÍDKA UPÍNACÍCH STOPEK

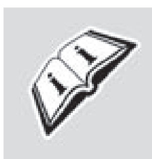
1. Válcová - systém WELDON dle DIN 1835; značení: průměr x délka [mm]
2. Kuželová MORSE - velikosti 3, 4, 5 a 6 s vyjímatelným vyražečem; značení: velikost kužele x velikost vnitřního závitu [mm] v.v.
3. Kuželová stopka MORSE - velikost 2 s pevným vyrážečem dle ČSN 22-0424 (DIN 228B); značení: velikost kužele

OFFER OF SHANKS

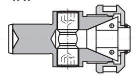
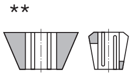
1. Straight shank - system WELDON according to DIN 1835; Marking: diameter x length [mm]
2. Taper shank MORSE - size 3, 4, 5 and 6 with removable tang; Marking: taper size x internal thread diameter [mm]
3. Taper shank MORSE - size 2 with fixed tang according to ČSN 22 0424 (DIN 228B); Marking: taper size





Objednávání závitořezných hlav bezpečnostních
Ordering of the safety thread-cutting heads

Typ Type	Zhb 21 Komplet Set		Zhb 31 Komplet Set		Zhb 41 Komplet Set		Zhb 51 Komplet Set		Zhb 21A RVK Komplet Set		Zhb 21A NVH Komplet Set		Zhb 31A RVK Komplet Set		Zhb 31A NVH Komplet Set		Zhb 41A RVK Komplet Set		Zhb 41A NVH Komplet Set	
	vel. size	ks pcs	vel. size	ks pcs	vel. size	ks pcs	vel. size	ks pcs	vel. size	ks pcs	vel. size	ks pcs	vel. size	ks pcs	vel. size	ks pcs	vel. size	ks pcs	vel. size	ks pcs
* 	5	1	6	1	6 3	1 1	4 6	1 1	5	1	4	1	6	1	4	1	6 3	1 1	6 3	1 1
* 	30-35 50-55	1 1	50-55 60-68	1 1	75-80 60-68	1 1	110-115	1	30-35 50-55	1 1	50-55	1	50-55 60-68	1 1	60-68	1	75-80 60-68	1 1	75-80	1
** 	--	-	--	-	--	-	--	-	RVK 21	2	NVH 2	2	RVK 31	2	NVH 2	2	RVK 41	2	NVH 3	2
** 	J 420 J 423	1 1	J 440 J 443	1 1	J 461 J 462	1 1	-	-	J 420 J 423	2 2	P 10	2	J 440 J 443	2 2	P 10	2	J 461 J 462	2 2	P 20	2

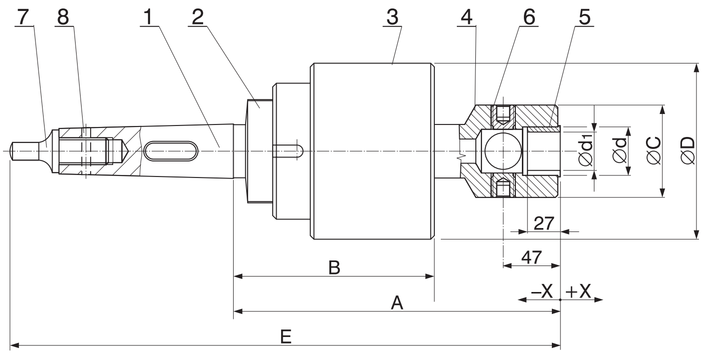
* Základní příslušenství - Basic accessories
** Doplňkové příslušenství - Supplementary accessories

Způsob objednávání viz str. 110 / Instruction of order see page 110

Doplňkové příslušenství bude dodáno, bude-li objednáno.
The supplementary accessories are delivered only, if they are specified as a separate item in the order entire set is ordered.

ZÁKLADNÍ PROVEDENÍ
BASIC MODEL

Zhb 51



Legenda - Legend

1 - upínací stopka - Taper Shank
2 - těleso - Body
3 - objímka - Sleeve
4 - pouzdro - Sleeve
5 - redukční vložka - Reduction Sleeve
6 - šroub - Screw
7 - vyjímatelný vyrážeč - Removable Tang
8 - kolík - Locking Pin

Typ Type	Upínací stopka Shank	Rozměry - Dimensions (mm) A	B	C	D	d	E	X	M_k Nm	n_{max} min^{-1}	kg	Code ZHB
Zhb 51	Mk 5 x M20	277	172	76	145	40	427	+20	600	150	17,0	51/MK5xM20
Zhb 51	Mk 6 x M24						488	-20			20,9	51/MK6xM24

Redukční vložky (standardní výbava) - Reduction sleeves (basic equipment)

∅ d1 [mm]	Standard	20	22	22,4	25	28	31,5	32	36

Způsob objednávání viz str. 110 / Instruction of order see page 110

ZÁVITOŘEZNÉ HLAVY REVERZAČNÍ
REVERSIBLE THREAD-CUTTING HEADS

RTH

UŽITÍ HLAV

Tyto hlavy jsou přístroje určené pro standardní řezání pravochodných závitů na vrtačkách bez použití strojního posuvu vřetena. Pro levochodný závit lze na vyžádání hlavy upravit.

APPLICATION OF HEADS

These heads are designed for usual tapping of right-handed threads on drilling machines without using of power feed. These heads may be adapted for left-handed threads on request.

ZÁKLADNÍ VLASTNOSTI

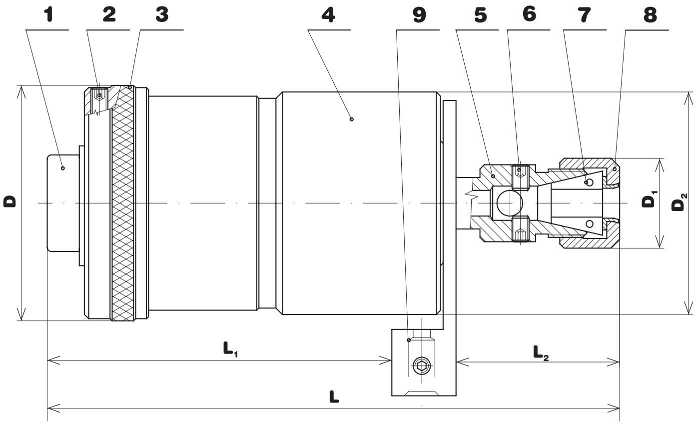
- jednoduchý přístroj s jednoduchou obsluhou
- snadné upnutí hlavy do vřetena vrtačky
- snadná fixace zadržovací tyče
- jednoduchá obsluha
- jednoduché řazení funkcí
- osové vyrovnávání

ELEMENTARY PROPERTIES

- simple device with simple manipulation
- easy clamping of the head in the spindle of drilling machine
- easy fixation of the stopping bar
- simple manipulation
- simple change of working operations
- axial compensation

Legenda - Legend

1 - upínací dutina - Hollow taper
2 - pojišťovací šroub - Locking screw
3 - matice spojky - Nut of the clutch
4 - těleso - Body
5 - pouzdro - Sleeve
6 - stavěcí šroub - Locking screw
7 - kleština - Spring collet
8 - upínací matice kleštiny- Locking nut
9 - držák zastavovací tyče - Holder of the stopping bar



ZÁKLADNÍ TECHNICKÁ DATA / MAIN TECHNICAL DATA

Typ Type	d	Prac. rozsah Working range	Kleština Collet	Rozměry - Dimension (mm) D/D2	D_1	L	L_1	L_2	max. min^{-1} rpm	Mk Nm	A/T mm	i	kg	Code RTH
RTH 22 BJ	B16	M2 ÷ M7	BJ032, BJ034	55/52	23	130	80	35	1500	10	3,8/13	1,6	1,0	22BJB16
RTH 32 BJ	B16	M5 ÷ M12	BJ036, BJ038	75/74	28	156	93	44	1000	25	4,5/14,5	1,75	2,2	32BJB16
RTH 42 BJ	M20	M8 ÷ M20	BJ042, BJ044	91/91	38	199	112	62	600	80	6,0/18	1,7	5,1	42BJM20

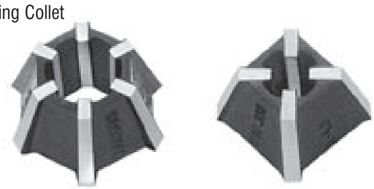
i převodový poměr zpětných otáček / ratio of gear for reverse speed

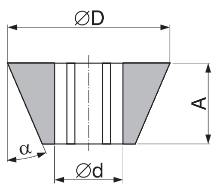
UPOZORNĚNÍ: Hlavy se dodávájí bez kleštin a upínacích trnů. Tyto je třeba objednat samostatně. / **NOTICE:** The heads are delivered without collets and taper shanks. It is necessary to order these parts as separate items

DOPLŇKOVÉ PŘÍSLUŠENSTVÍ HLAV
SUPPLEMENTARY ACCESSORIES OF HEADS

Zhb, RTH

Upínací kleština
Spring Collet



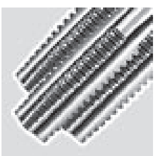


Hlavy Zhb, Zhb A - Kleštiny RUBBER FLEX JACOBS - J
Heads Zhb, Zhb A - Collets RUBBER FLEX JACOBS - J

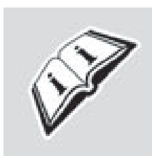
Typ Type	Rozsah - Range d [mm]	Rozměry - Dimensions D	A	α°	Code KLESTINA
J 423 J 420	2,0 ÷ 4,5 4,5 ÷ 8,0	23	13	20	J-423 J-420
J 443 J 440	2,8 ÷ 7,0 7,0 ÷ 13,0	32,5	16	22,5	J-443 J-440
J 461 J 462	10,0 ÷ 16,0 16,0 ÷ 23,0	47	20	25	J-461 J-462

Hlavy RTH - Kleštiny RUBBER FLEX JACOBS - J
Heads RTH - Collets RUBBER FLEX JACOBS - J

Typ Type	Rozsah - Range d [mm]	Rozměry - Dimensions D	A	α°	Code KLESTINA
BJ032 BJ034	2,0 ÷ 4,5 4,5 ÷ 6,3	14	11	20	BJ-032 BJ-034
BJ036 BJ038	3,0 ÷ 6,3 5,0 ÷ 9,5	21	13	20	BJ-036 BJ-038
BJ042 BJ044	5,0 ÷ 9,5 9,5 ÷ 14,0	27	15	20	BJ-042 BJ-044





DOPLŇKOVÉ PŘÍSLUŠENSTVÍ HLAV
SUPPLEMENTARY ACCESSORIES OF HEADS

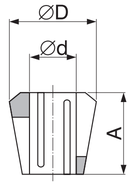
Zhb, RTH

Hlavy Zhb A - Kleštiny PLASTIC - P
Heads Zhb A - Collets PLASTIC - P

Typ Type	Rozsah - Range d [mm]	Rozměry - Dimensions D	 A	 $\alpha°$	Code **KLESTINA**
P10	SADA, SET				P10-SADA
P11	3,5 ÷ 4,0				P11/3,5-4,0
P12	4,5 ÷ 5,0				P12/4,5-5,0
P13	5,6 ÷ 6,3	19	18	10	P13/5,6-6,3
P14	7,1 ÷ 8,0				P14/7,1-8,0
P15	9,0 ÷ 10,0				P15/9,0-10,0
P16	11,2 ÷ 12,5				P16/11,2-12,5
P20	SADA, SET				P20-SADA
P21	9,0 ÷ 10,0				P21/9,0-10
P22	11,2 ÷ 12,5				P22/11,2-12,5
P23	14,0	32	31	10	P23/14,0
P24	16,0				P24/16,0
P25	18,0				P25/18,0
P26	20,0				P26/20,0

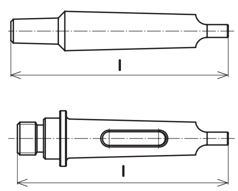
Kleštiny lze použít pro hlavy GB 2 a GB 3.

Středicí kleština
Collet for centring



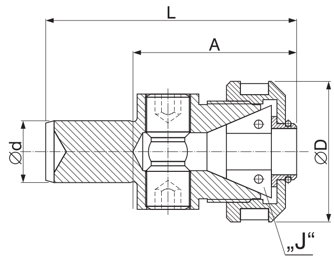
Hlavy RTH - Upínací trny
Heads RTH - Shanks

Typ Type	l mm	kg	Code **241329**
B16 x Mk1	97	0,087	B16x1
B16 x Mk2	109	0,157	B16x2
B16 x Mk3	133	0,320	B16x3
			Code **POUZDRO**
M20 x Mk3	129	0,310	M20x3
M20 x Mk4	154	0,570	M20x4



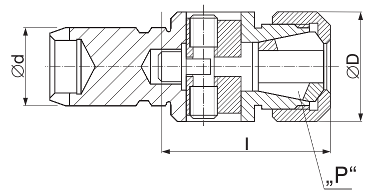
Hlavy Zhb A - Výměnné pouzdro přesné - kleština RUBBER FLEX "J"
Heads Zhb A - Exchangeable precise bush - collet RUBBER FLEX "J"

Typ Type	Rozměry - Dimensions (mm) A	 L	 D	 d	"J"	kg	Code **RVK**
RVK 21	34	68	36	22	J423, J420	0,23	21
RVK 31	54	89,5	50	22	J443, J440	0,43	31
RVK 41	67	115	62	33	J461, J462	0,92	41



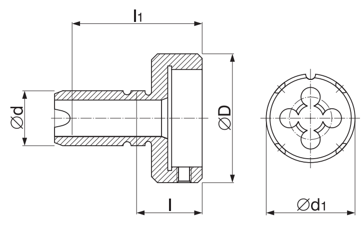
Hlavy Zhb A - Výměnné pouzdro - plastová středicí kleština PLASTIC "P"
Heads Zhb A - Exchangeable bush - plastic centring collet PLASTIC "P"

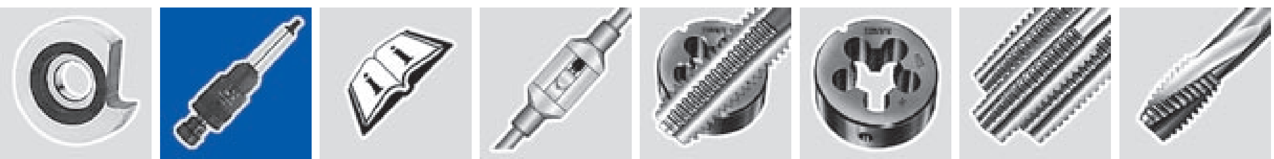
Typ Type	Rozměry - Dimensions (mm) d	 D	 l	"P"	kg	Code **NVH**
NVH 2	22	40	53	P11, P12, P13 P14, P15, P16	0,38	2
NVH 3	33	49	66	P21, P22, P23 P24, P25, P26	1,05	3



Hlavy Zhb A, - Výměnné pouzdro pro závitovou čelist
Heads Zhb A - Exchangeable bush for circular die

Typ Type	Rozměry - Dimensions (mm) d	 D	 l	 l_1	d_1 mm	kg	Code **NKC**
NKC 12	22	50	20	45	∅ 20/25/30/38 M3 ÷ M12	0,31	12





ZPŮSOB OBJEDNÁVÁNÍ
INSTRUCTION OF ORDER

Zhb

Při objednávání použijeme tabulek s technickými parametry, kde jsou uvedena kódová čísla.

Při objednávání je třeba vypsat do objednávky všechny objednávané položky, které budou popsány kódovým číslem a typem.

V případě, že je objednávána hlava s kompletním základním a doplňkovým příslušenstvím, je možno použít zápisu v jedné řádce, jak uvádí grafické schéma objednávky. Zápis je třeba doplnit kódovým číslem, které specifikuje upínací stopku hlavy.

Při objednávání náhradních dílů nutno uvést typ hlavy, název dílu a číslo jeho posice.

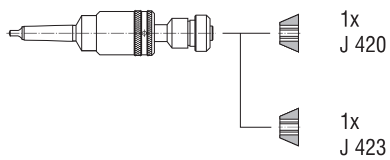
The tables with technical parameters are applied for determining of the code numbers.

It is necessary to specify all ordered items by the code number and type.

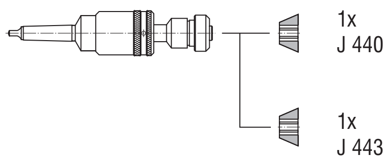
If the head with complete basic and supplementary accessories are ordered, it is possible to use the description in the one line according to the graphic diagram of the order. The specification has to be completed with the code number determining the shank.

For the order of spare parts, it is necessary to specify the type of the head, the name of the part and the position number.

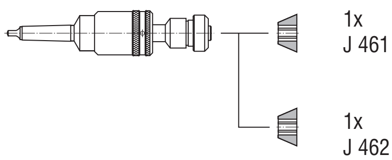
Zhb 21 - komplet - set



Zhb 31 - komplet - set

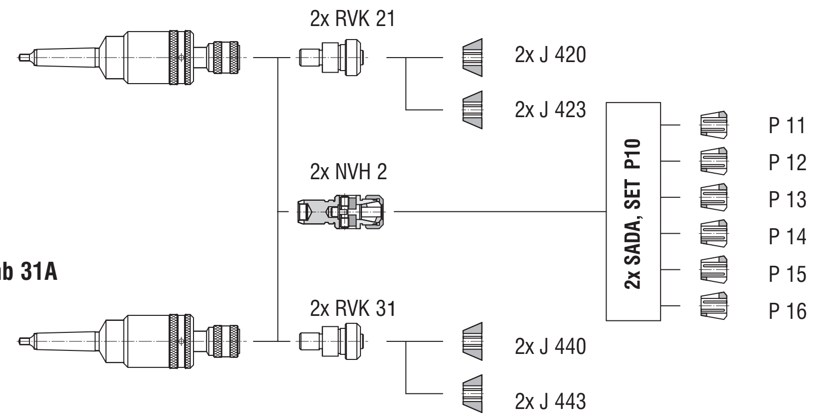


Zhb 41 - komplet - set



Zhb 21A

Zhb 31A



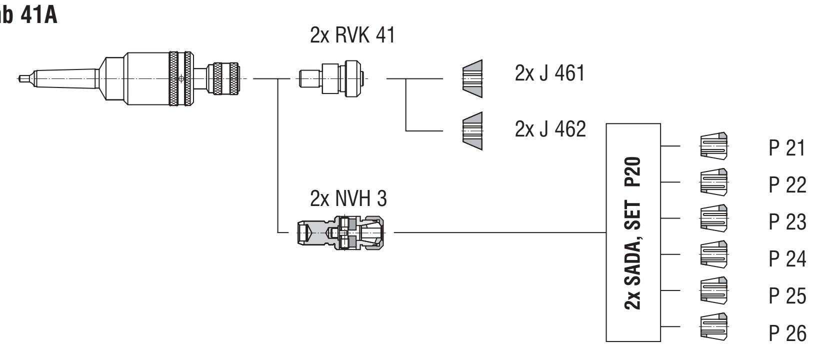
Zhb 21A / RVK / komplet - set

Zhb 21A / NVH / komplet - set

Zhb 31A / NVH / komplet - set

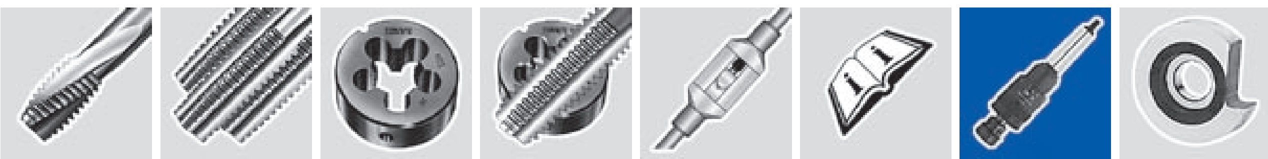
Zhb 31A / RVK / komplet - set

Zhb 41A



Zhb 41A / RVK / komplet - set

Zhb 41A / NVH / komplet - set



ZÁVITOVÉ VÁLCOVACÍ HLAVY
THREAD-ROLLING DIE HEADS

Zhv, Zhvu

ZÁVITOVÉ VÁLCOVACÍ HLAVY

vysoce produktivní nástroje, určené pro výrobu vnějších jednochodných závitů válcováním za studena axiálním způsobem. (Dvouchodých závitů pouze specielní hlavou.)

SORTIMENT VÁLCOVACÍCH HLAV

Hlavy jsou konstruovány jako stojící, mechanicky natahovací s režimem samočinného otevření hlavy při doválcování závitu. Válcovací kotouče jsou valivě uloženy na excentrických čepech, otvírání obstarává pružina.

HLAVY JSOU VYRÁBĚNY VE DVOU PROVEDENÍCH:

Zhv – provedení pevné s pevně nastaveným sklonem závitových kotoučů pro válcování pravochodých ostrých závitů.
Zhvu – provedení univerzální s-možností souvisle měnit sklon závitových kotoučů v-rozsahu +5°-až -5° dle úhlu stoupání šroubovice daného závitu. Hlavy lze použít pro válcování všech uvedených pravochodých i levochodých závitů, včetně lichoběžníkových.

POUŽITÍ HLAV

na univerzálních soustruzích, revolverech, vrtačkách a na soustružnických automatech

OSAZENÍ HLAVY VÁLCOVACÍMI KOTOUČI

Před válcováním určitého závitu nutno hlavu osadit sadou válcovacích kotoučů a seřídit ji na hodnotu jeho středního průměru.

UPÍNÁNÍ HLAV NA OBRÁBĚCÍ STROJ

- za válcovou stopku ∅dg6 do revolverové hlavy stroje
- prostřednictvím držáku Dzh do nožové hlavy soustruhu
- do speciálního držáku - pro hlavy Zhv 30–60

OBJEDNÁVÁNÍ

Hlavy se dodávají se sadou ložiskových válečků, bez válcovacích kotoučů. Válcovací kotouče je nutno v objednávce specifikovat velikostí závitu a typem hlavy. Držáky Dzh se dodávají pouze při jejich objednání.

THREAD-ROLLING DIE HEADS

high effective tools intended for manufacturing of the outer threads through the cold rolling - axial method. (Double threads are possible to manufacture by special head only.)

ASSORTMENT OF THE ROLLING HEADS

Heads are designed as a stand type with mechanical winding up and with automatic mode of the head opening at the completion of the thread rolling. The rollers are carried in bearings on the eccentric pins. Opening is provided by a spring.

HEADS ARE MANUFACTURED IN TWO TYPES:

Zhv – stable design with the fix adjusted incline of the rollers for rolling of the right-hand threads.
Zhvu - general-purpose design with possibility of continuous change of the incline of the rollers within the range of +5° to -5° degrees according to the helix angle of the specific thread. Heads can be applied for rolling of all mentioned right-hand and left-hand threads, including trapezoidal threads.

APPLICATION OF HEADS

on the general-purpose lathes, turret lathes, drilling machines and automatic lathes

FITTING OF THE HEAD WITH ROLLERS

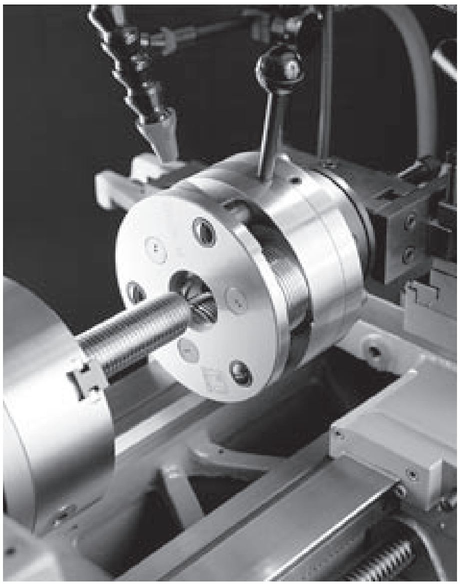
The head must be fitted with the set of appropriate rollers prior to rolling of a specific thread. The head must be also adjusted to a value of the pitch diameter.

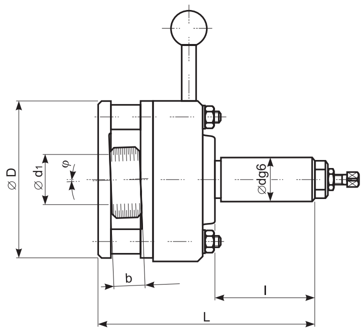
CLAMPING OF THE HEADS ON THE MACHINE-TOOL

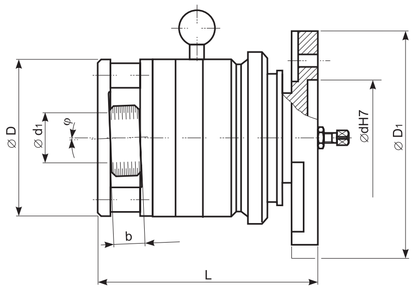
- behind by the straight shank ∅dg6 into the turret head
- using the Dzh holder into the lathe tool post
- into a special holder - for heads Zhv 30–60

ORDERING

Heads are delivered with a set of bearing rollers without rollers. Size of the threads and head type must be specified in the purchase order. Holders Dzh are supplied only when ordered.

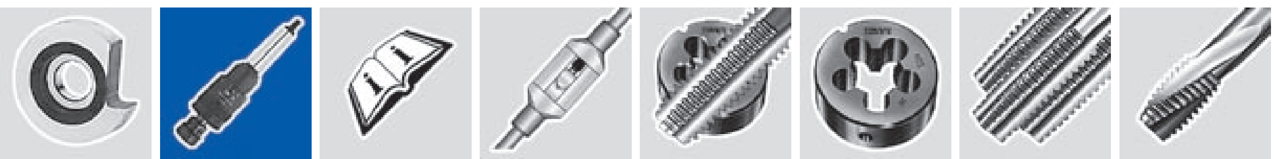






úhel φ - sklon kotoučů
- incline of roller axis

Typ Type	φ	∅D mm	L mm	∅dg6, ∅dH7 mm	$\varnothing d_1$ mm	$\varnothing D_1$ mm	l mm	b mm	kg	Code ZHV
Zhv 3-5	3°	55	98	25	8		50	6	0,27	3-5
Zhv 6-10	2°30’	65	98	20	18		40	14	0,85	6-10
Zhv 8-16	2°10’	88	125	25	22		50	18	2,7	8-16
Zhv 12-20	2°30’	117	136	32	38		60	22	5,4	12-20
Zhv 20-30	1°40’	145	197	40	48		70	24	8,1	20-30
Zhv 30-60	1°40’ 0°45’	245	220	110	86	170	–	40	51,0	30-60/1 30-60/2
										Code ZHVU
Zhvu 12-20	-5° – +5°	120	190	32	34		55	22	5,9	12-20
Zhvu 20-30	-5° – +5°	146	237	40	48		70	24	8,55	20-30
Zhvu 30-60	-5° – +5°	245	250	110	86	170	–	40	54,0	30-60



SORTIMENT KOTOUČŮ PRO Zhv A Zhvu
ROLLER ASSORTMENT FOR Zhv A Zhvu

Typ hlavy / Type of Head	Závit - rozsah / Thread - Range
Zhv 3-5 (RK)	M 3 x 0,35
Zhv 3-5 (RK)	M 3,5 x 0,35
Zhv 3-5 (RK)	M 3 x 0,5
Zhv 3-5 (RK)	M 4 x 0,5
Zhv 3-5 (RK)	M 4,5 x 0,5
Zhv 3-5 (RK)	M 5 x 0,5
Zhv 3-5 (RK)	M 3,5 x 0,6
Zhv 3-5 (RK)	M 4 x 0,7
Zhv 3-5 (RK)	M 4,5 x 0,75
Zhv 3-5 (RK)	M 5 x 0,8
Zhv 6-10 (RK)	M 6-8 x 0,5
Zhv 6-10 (RK)	M 8-10 x 0,5
Zhv 6-10 (RK)	M 6-8 x 0,75
Zhv 6-10 (RK)	M 8-10 x 0,75
Zhv 6-10 (RK)	M 6-7 x 1
Zhv 6-10 (RK)	M 8-10 x 1
Zhv 6-10 (RK)	M 8-9 x 1,25
Zhv 6-10 (RK)	M 10 x 1,25
Zhv 6-10 (RK)	M 10 x 1,5
Zhv 6-10 (RK)	G 1/8 x 28
Zhv 8-16 (RK)	M 8-10 x 0,5
Zhv 8-16 (RK)	M 11-13 x 0,5
Zhv 8-16 (RK)	M 14-16 x 0,5
Zhv 8-16 (RK)	M 8-10 x 0,75
Zhv 8-16 (RK)	M 11-13 x 0,75
Zhv 8-16 (RK)	M 14-16 x 0,75
Zhv 8-16 (RK)	M 8-10 x 1
Zhv 8-16 (RK)	M 11-13 x 1
Zhv 8-16 (RK)	M 14-16 x 1
Zhv 8-16 (RK)	M 8-9 x 1,25
Zhv 8-16 (RK)	M 10-12 x 1,25
Zhv 8-16 (RK)	M 14-16 x 1,25
Zhv 8-16 (RK)	M 10-12 x 1,5
Zhv 8-16 (RK)	M 14-16 x 1,5
Zhv 8-16 (RK)	M 12 x 1,75
Zhv 8-16 (RK)	M 14-16 x 2
Zhv 8-16 (RK)	G 1/8 x 28
Zhv 8-16 (RK)	G 3/8 x 19
Zhv 8-16 (RK)	G 1/4 x 19
Zhv 8-16 (RK)	G 1/2 x 14
Zhv 12-20	M 12-14 x 1
Zhv 12-20	M 15-17 x 1
Zhv 12-20	M 18-20 x 1
Zhv 12-20	M 12-14 x 1,5
Zhv 12-20	M 15-17 x 1,5
Zhv 12-20	M 18-20 x 1,5
Zhv 12-20	M 12 x 1,75
Zhv 12-20	M 14-16 x 2
Zhv 12-20	M 18-20 x 2,5

Typ hlavy / Type of Head	Závit - rozsah / Thread - Range
Zhvu 12-20 (RK)	M 12-16 x 1
Zhvu 12-20 (RK)	M 16-20 x 1
Zhvu 12-20 (RK)	M 12-14 x 1,25
Zhvu 12-20 (RK)	M 12-16 x 1,5
Zhvu 12-20 (RK)	M 12 x 1,75
Zhvu 12-20 (RK)	M 14-16 x 2
Zhvu 12-20 (RK)	M 18-20 x 2
Zhvu 12-20 (RK)	M 18-20 x 2,5
Zhvu 12-20 (RK)	G 1/4 - 3/8 x 19
Zhvu 12-20 (RK)	G 1/2 x 14
Zhvu 12-20 (RK)	Rd 18-20 x 8
Zhvu 12-20 (RK)	M 12-16 x 0,5
Zhvu 12-20 (RK)	M 16-20 x 0,5
Zhvu 12-20 (RK)	M 12-16 x 0,75
Zhvu 12-20 (RK)	M 16-20 x 0,75
Zhvu 12-20 (RK)	Tr 12-16 x 3
Zhvu 12-20 (RK)	Tr 16-20 x 3
Zhvu 12-20 (RK)	Tr 14-16 x 4
Zhvu 12-20 (RK)	Tr 18-20 x 4

Každá položka tabulky představuje jednu samostatnou sadu kotoučů (1 sada = 3 kusy).

Every item of the table presents 1 complete set of rollers (1 set = 3 pcs).

Code

typ hlavy / požadovaný závit
type of head / required thread

Příklad obj. / Example of order:
ZHV8-16/M10-12x1,5

Typ hlavy / Type of Head	Závit - rozsah / Thread - Range
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	M 14-18 x 1,5
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	M 18-22 x 1,5
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	M 22-26 x 1,5
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	M 14-16 x 2
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	M 18-22 x 2
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	M 22-26 x 2
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	M 26- 30 x 2
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	M 18-22 x 2,5
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	M 24-27 x 3
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	M 30 x 3
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	M 30 x 3,5
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	G 3/8 x 19
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	G 1/2 - 5/8 x 14
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	G 3/4 - 7/8 x 14
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	Rd 20-22 x 8
Zhvu 20-30 (RK) / Zhv 20-30 (RK)	Rd 24-26 x 8
Zhvu 20-30 (RK)	M 14-18 x 0,5
Zhvu 20-30 (RK)	M 18-22 x 0,5
Zhvu 20-30 (RK)	M 14-18 x 0,75
Zhvu 20-30 (RK)	M 18-22 x 0,75
Zhvu 20-30 (RK)	M 22-26 x 0,75
Zhvu 20-30 (RK)	M 26-30 x 0,75
Zhvu 20-30 (RK)	M 14-18 x 1
Zhvu 20-30 (RK)	M 18-22 x 1
Zhvu 20-30 (RK)	M 22-26 x 1
Zhvu 20-30 (RK)	M 26-30 x 1
Zhvu 20-30 (RK)	Tr 16-20 x 3
Zhvu 20-30 (RK)	Tr 20-24 x 3
Zhvu 20-30 (RK)	Tr 26-30 x 3
Zhvu 20-30 (RK)	Tr 18-20 x 4
Zhvu 20-30 (RK)	Tr 22-24 x 4
Zhvu 20-30 (RK)	Tr 26-28 x 4
Zhvu 20-30 (RK)	Tr 22-24 x 5
Zhvu 20-30 (RK)	Tr 26-28 x 5

Typ hlavy / Type of Head	Závit - rozsah / Thread - Range
Zhvu 30-60 (RK¨) 1°40'	M 30-36 x 3
Zhvu 30-60 (RK¨) 1°40'	M 39-45 x 3
Zhvu 30-60 (RK¨) 1°40'	M 48-52 x 3
Zhvu 30-60 (RK¨) 1°40'	M 55-60 x 3
Zhvu 30-60 (RK¨) 1°40'	M 30-33 x 3,5
Zhvu 30-60 (RK¨) 1°40'	M 36-39 x 4
Zhvu 30-60 (RK¨) 1°40'	M 42-45 x 4
Zhvu 30-60 (RK¨) 1°40'	M 48-52 x 4
Zhvu 30-60 (RK¨) 1°40'	M 55-60 x 4
Zhvu 30-60 (RK¨) 1°40'	M 42-45 x 4,5
Zhvu 30-60 (RK¨) 1°40'	M 48-52 x 5
Zhvu 30-60 (RK¨) 1°40'	M 56-60 x 5,5
Zhvu 30-60 (RK¨) 1°40'	M 40 x 5
Zhvu 30-60 (RK¨) 1°40'	Rd 30 x 8
Zhvu 30-60 (RK¨) 1°40'	Rd 32-34 x 8
Zhvu 30-60 (RK¨) 1°40'	Rd 36-38 x 8
Zhvu 30-60 (RK¨) 1°40'	Rd 40-42 x 6
Zhvu 30-60 (RK¨) 1°40'	Rd 42-44 x 6
Zhvu 30-60 (RK¨) 1°40'	Rd 46-48 x 6
Zhvu 30-60 (RK¨) 1°40'	Rd 50-52 x 6
Zhvu 30-60 (RK¨) 1°40'	Rd 52-55 x 6
Zhvu 30-60 (RK¨) 1°40'	Rd 55-58 x 6
Zhvu 30-60 (RK¨) 1°40'	Rd 58-60 x 6
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	M 30-33 x 0,75
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	M 30-36 x 1,5
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	M 39-45 x 1,5
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	M 48-52 x 1,5
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	M 55-60 x 1,5
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	M 30-36 x 2
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	M 39-45 x 2
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	M 48-52 x 2
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	M 55-60 x 2
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	G 7/8 x 14
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	G 1 - 1 1/8 x 11
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	G 1 1/4 - 1 1/2 x 11
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	G 1 5/8 - 1 3/4 x 11
Zhvu 30-60 (RK¨) / Zhvu 30-60 (RK¨) 0°45'	G 2 x 11
Zhvu 30-60 (RK¨)	Tr 30-34 x 3
Zhvu 30-60 (RK¨)	Tr 36-40 x 3
Zhvu 30-60 (RK¨)	Tr 42-46 x 3
Zhvu 30-60 (RK¨)	Tr 48-52 x 3
Zhvu 30-60 (RK¨)	Tr 55-60 x 3
Zhvu 30-60 (RK¨)	Tr 30-33 x 4
Zhvu 30-60 (RK¨)	Tr 33-36 x 4
Zhvu 30-60 (RK¨)	Tr 30-34 x 5
Zhvu 30-60 (RK¨)	Tr 40-45 x 5
Zhvu 30-60 (RK¨)	Tr 46-50 x 5
Zhvu 30-60 (RK¨)	Tr 50-55 x 5
Zhvu 30-60 (RK¨)	Tr 30-32 x 6
Zhvu 30-60 (RK¨)	Tr 34-36 x 6
Zhvu 30-60 (RK¨)	Tr 38-40 x 7
Zhvu 30-60 (RK¨)	Tr 42-44 x 7
Zhvu 30-60 (RK¨)	Tr 46-48 x 8
Zhvu 30-60 (RK¨)	Tr 50-52 x 8
Zhvu 30-60 (RK¨)	Tr 55x9
Zhvu 30-60 (RK¨)	Tr 58-60 x 9
Zhvu 30-60 (RK¨)	Tr 55 x 7

PRO AUTOMATICKÉ ZÁVITOVÉ HLAVY
FOR AUTOMATIC THREADING DIE HEADS

223260

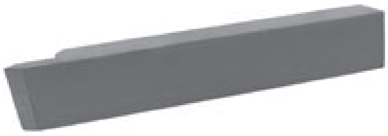
Průměr závitu x stoupání Size of thread x lead	Hlavní rozměry čelisti Dimension of die výška height	šířka width	Velikost závitové hlavy Size of dia head ČSN 24 1540	ČSN 241541	Code 223260
M 8 x 1,25				-	M8x1,25A3
M 8 x 1				-	M8x1A3
M 8 x 0,75				-	M8x0,75A3
M 10 x 1,5				-	M10x1,5A3
M 10 x 1				-	M10x1A3
M 12 x 1,75				-	M12x1,75A3
M 12 x 1,5				-	M12x1,5A3
M 12 x 1				-	M12x1A3
M 14 x 2					M14x2A3
M 14 x 1,5					M14x1,5A3
M 14 x 1					M14x1A3
M 15 x 1,5					M15x1,5A3
M 16 x 2	7,915	19,03	III	III	M16x2A3
M 16 x 1,5					M16x1,5A3
M 18 x 2,5					M18x2,5A3
M 18 x 1,5					M18x1,5A3
M 18 x 1					M18x1A3
M 20 x 2,5					M20x2,5A3
M 20 x 1,5					M20x1,5A3
M 20 x 1					M20x1A3
M 22 x 1,5					M22x1,5A3
M 22 x 1					M22x1A3
M 24 x 3			-		M24x3A3
M 24 x 2			-		M24x2A3
M 24 x 1,5			-		M24x1,5A3
M 25 x 1,5			-		M25x1,5A3
M 26 x 1,5			-		M26x1,5A3
M 10 x 1,5					M10x1,5A4
M 10 x 1					M10x1A4
M 12 x 1,75					M12x1,75A4
M 12 x 1,5					M12x1,5A4
M 14 x 2					M14x2A4
M 14 x 1,5					M14x1,5A4
M 16 x 2					M16x2A4
M 16 x 1,5					M16x1,5A4
M 18 x 2,5					M18x2,5A4
M 18 x 1,5					M18x1,5A4
M 20 x 2,5	9,505	22,30	IV	-	M20x2,5A4
M 20 x 1,5					M20x1,5A4
M 22 x 2,5					M22x2,5A4
M 22 x 1,5					M22x1,5A4
M 22 x 1					M22x1A4
M 24 x 3					M24x3A4
M 24 x 2					M24x2A4
M 24 x 1,5					M24x1,5A4
M 25 x 1,5					M25x1,5A4
M 26 x 1,5					M26x1,5A4
M 27 x 2					M27x2A4
M 27 x 1,5					M27x1,5A4

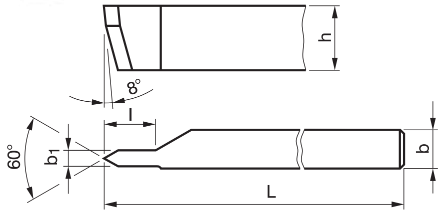
Průměr závitu x stoupání Size of thread x lead	Hlavní rozměry čelisti Dimension of die výška height	šířka width	Velikost závitové hlavy Size of dia head ČSN 24 1540	ČSN 241541	Code 223260
M 12 x 1,75					M12x1,75A5
M 12 x 1,5					M12x1,5A5
M 14 x 2					M14x2A5
M 14 x 1,5					M14x1,5A5
M 16 x 2					M16x2A5
M 16 x 1,5					M16x1,5A5
M 18 x 2,5					M18x2,5A5
M 20 x 2,5					M20x2,5A5
M 20 x 1,5					M20x1,5A5
M 22 x 2,5					M22x2,5A5
M 22 x 1,5					M22x1,5A5
M 24 x 3	11,095	25,38	V	-	M24x3A5
M 24 x 2					M24x2A5
M 24 x 1,5					M24x1,5A5
M 27 x 3					M27x3A5
M 27 x 2					M27x2A5
M 27 x 1,5					M27x1,5A5
M 28 x 1,5					M28x1,5A5
M 30 x 3,5					M30x3,5A5
M 30 x 2					M30x2A5
M 30 x 1,5					M30x1,5A5
M 33 x 3,5					M33x3,5A5
M 33 x 2					M33x2A5
M 33 x 1,5					M33x1,5A5

Poznámka: čelisti pro hlavy I a II do vyprodání zásob.
Note: threading dies for die heads I. and II. till selling-out of stock only.

SOUSTRUŽNICKÝ NŮŽ NA VNĚJŠÍ ZÁVITY
OUTSIDE THREADING TOOL

223312, 223313



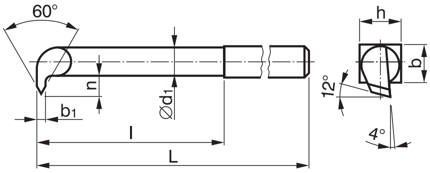


h mm	b mm	l mm	b_1 mm	L mm	Code 223312	Code 223313
16	10	14	4	110	16×10×110	16×10×110
20	12	16	5	125	20×12×125	20×12×125
25	16	20	6	140	25×16×140	25×16×140
32	20	25	8	170	32×20×170	32×20×170

Pozn.: 223312 – pravé provedení / right-hand execution
223313 – levé provedení / left-hand execution

SOUSTRUŽNICKÝ NŮŽ NA VNITŘNÍ ZÁVITY
INSIDE THREADING TOOL

223316

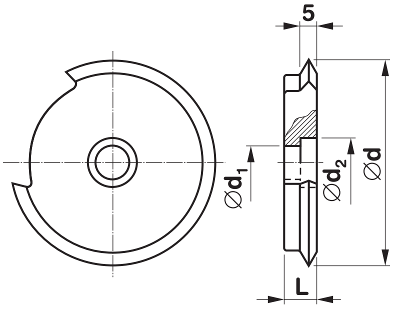


h mm	b mm	$\varnothing d_1$ mm	l mm	n mm	b_1 mm	L mm	Code 223316
10	10	8	40	6	4	100	10×10×100
12	12	10	50	8	5	125	12×12×125
16	16	14	63	10	6	140	16×16×140
20	20	18	80	12	8	160	20×20×160
25	25	22	100	16	10	200	25×25×200
32	32	30	125	18	12	250	32×32×250

Pozn.: na metrické závity / for metric threads

ZÁVITOVÉ KOTOUČOVÉ NOŽE HŘEBÍNKOVÉ NÁSTRČNÉ NA METRICKÉ ZÁVITY VNĚJŠÍ
OUTSIDE CHASER (SHELL TYPE) FOR METRIC THREADS

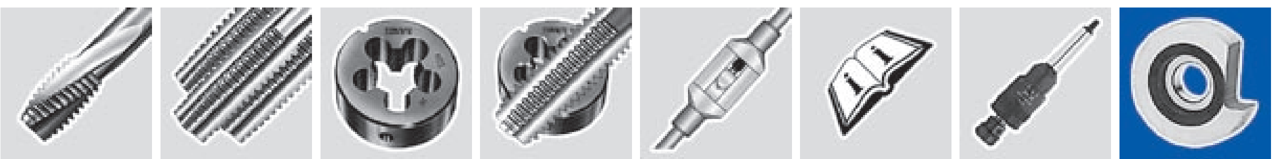
223335



s mm	L h16 mm	$\varnothing$d H7 mm	$\varnothing d_1$ H7 mm	$\varnothing d_2$ H12 mm	l mm	kg	Code 223335
0,75	10	63	20	30	3	0,30	M63×0,75
0,8	10	63	20	30	3	0,30	M63×0,8
0,9	10	63	20	30	5	0,30	M63×0,09
1,0	10	63	20	30	5	0,30	M63×1
1,25	10	63	20	30	6	0,34	M63×1,25
1,5	12	63	20	30	7	0,34	M63×1,5
1,75	14	63	20	30	8	0,34	M63×1,75
2,0	15	63	20	30	9	0,34	M63×2
2,5	17	63	20	30	10	0,54	M63×2,5
3,0	18	63	20	30	10	0,54	M63×3
3,5	19	63	20	30	10	0,54	M63×3,5
4,0	20	63	20	30	10	0,54	M63×4
4,5	21	63	20	30	11	0,54	M63×4,5
5,0	23	63	20	30	12	0,54	M63×5

Nože jsou vyráběny z výkonné rychlořezné oceli (HSS) nebo z vysokovýkonné rychlořezné oceli (HSSE). Nože jsou určeny k řezání vnějších pravých závitů. Upínají se na držáky ON 241582.

These tools are made of high speed steel (HSS) or high efficient speed steel (HSSE). They are specified for chasing of right-hand threads. The chasers are clamped on holders ON 241582.



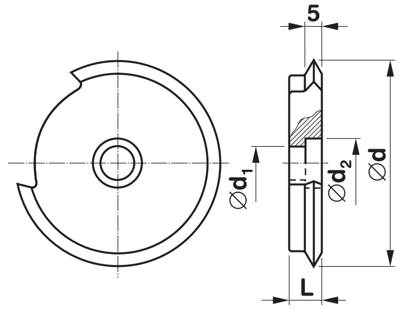
ZÁVITOVÉ KOTOUČOVÉ NOŽE NÁSTRČNÉ NA METR. ZÁVITY VNĚJŠÍ
CIRCULAR THREADING TOOLS FOR METRIC THREADS

223350

s mm	L h16 mm	∅d H7 mm	∅d_1 H7 mm	∅d_2 H12 mm	A mm	kg	Code 223350
0,5	10	63	20	30	5,5	0,22	M63×0,5
0,6	10	63	20	30	5,5	0,22	M63×0,6
0,7	10	63	20	30	5,5	0,22	M63×0,7
0,75	10	63	20	30	5,5	0,22	M63×0,75
0,8	10	63	20	30	5,5	0,22	M63×0,8
0,9	10	63	20	30	5,5	0,22	M63×0,9
1,0	10	63	20	30	5,5	0,22	M63×1
1,25	10	63	20	30	5,5	0,22	M63×1,25
1,5	10	63	20	30	5,5	0,22	M63×1,5
1,75	10	63	20	30	5,5	0,22	M63×1,75
2,0	10	63	20	30	5,5	0,22	M63×2
2,5	10	63	20	30	5,5	0,22	M63×2,5
3,0	10	63	20	30	5,5	0,22	M63×3
3,5	10	63	20	30	5,5	0,22	M63×3,5
4,0	11	63	20	30	5,5	0,24	M63×4
4,5	11	63	20	30	5,5	0,24	M63×4,5
5,0	11	63	20	30	5,5	0,24	M63×5
5,5	11	63	20	30	5,5	0,24	M63×5,5
6,0	11	63	20	30	5,5	0,24	M63×6

Nože jsou vyráběny z výkonné rychlořezné oceli (HSS) nebo z vysokovýkonné rychlořezné oceli (HSSE). Nože jsou určeny k řezání vnějších pravých i levých závitů s výhodou dořezávání až do čela. Upínají se na držáky ON 241582.

These tools are made of high speed steel (HSS) or high efficient speed steel (HSSE). They are specified for cutting of external right-hand and left-hand threads. The chasers are clamped on holders ON 241582.



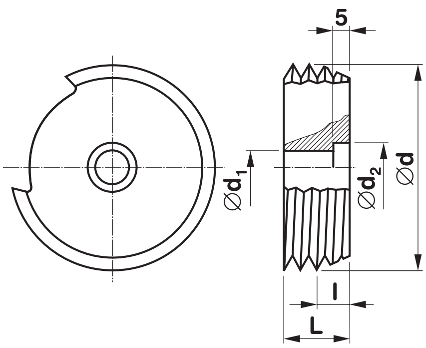
ZÁVITOVÉ KOTOUČOVÉ NOŽE NÁSTRČNÉ NA WHITWORTHŮV A TRUBKOVÝ ZÁVIT
CIRCULAR THREADING TOOLS FOR WHITWORT AND PIPE THREADS

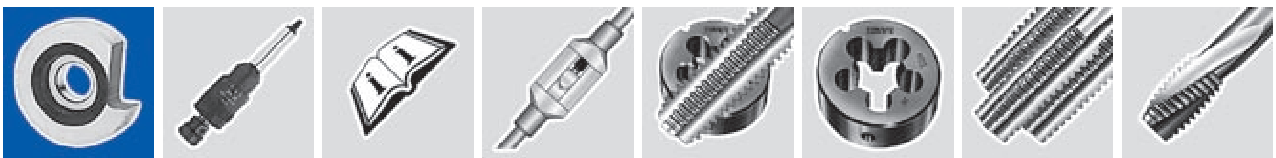
223352

s inch	L h16 mm	∅d H7 mm	∅d_1 H7 mm	∅d_2 H12 mm	A mm	kg	Code 223352
28	10	63	20	30	5,5	0,22	W63×28
20	10	63	20	30	5,5	0,22	W63×20
19	10	63	20	30	5,5	0,22	W63×29
18	10	63	20	30	5,5	0,22	W63×18
16	10	63	20	30	5,5	0,22	W63×16
14	10	63	20	30	5,5	0,22	W63×14
12	10	63	20	30	5,5	0,22	W63×12
11	10	63	20	30	5,5	0,22	W63×11
10	10	63	20	30	5,5	0,22	W63×10
9	10	63	20	30	5,5	0,22	W63×9
8	10	63	20	30	5,5	0,22	W63×8
7	11	63	20	30	5,5	0,24	W63×7
6	11	63	20	30	5,5	0,24	W63×6
5	11	63	20	30	5,5	0,24	W63×5
4 1/2	11	63	20	30	5,5	0,24	W63×4-1/2
4	11	63	20	30	5,5	0,24	W63×4

Nože jsou vyráběny z výkonné rychlořezné oceli (HSS) nebo z vysokovýkonné rychlořezné oceli (HSSE). Nože jsou určeny k řezání vnějších pravých i levých závitů s výhodou dořezávání až do čela. Upínají se na držáky ON 241582 a ON 241583.

These tools are made of high speed steel (HSS) or high efficient speed steel (HSSE). They are specified for cutting of external right-hand and left-hand threads. The chasers are clamped on holders ON 241582 and ON 241583.





POZNÁMKY
NOTES