

PREMIUM-UNIVERSAL-TAPS

made of high-purity HSSE-PM special steel with innovative cutting geometry and multi-layer APT-NEOX®-coating for universal application!

96 UNIVERSAL-TAPS IN 6 SPECIFICATIONS

METRIC COARSE- AND FINE PITCH

EX WORKS FROM OSNABRÜCK/GERMANY

DELIVERY IN 3-5 WORKING DAYS (SUBJECT TO AVAILABILITY)
WITHOUT MINIMUM ORDER VALUE
WITHOUT MINIMUM ORDER QUANTITY

CONSISTENTLY DYNAMIC!

... that is ABRAMS INDUSTRIES®.

New product line ABRAMS PREMIUM ALUMINIUM®	2020						
New product line Hart-Präz®	2018	Expansion to 70 PREMIUM steel grades and 32.629 dimensions					
New product line ABRAMS® PREMIUM TOOLS	2015						
	2011	Expansion to 52 PREMIUM steel grades and 21.078 dimensions					
The ABRAMS STEEL GUIDE® going live	2010						
	2009	Expansion to 35 PREMIUM steel grades and 8.259 dimensions					
	2008	Expansions to 32 PREMIUM steel grades and 7.155 dimensions					
	2007	Expansion to 22 PREMIUM steel grades and 5.954 dimensions					
Print of the first ABRAMS® art calendar	2006						
	2005	Expansion to 10 Premium steel grades and 3.649 dimensions					
Market launch of ABRAMS PREMIUM STEEL®	2003	Launch of 8 PREMIUM steel grades and 2.805 dimensions					
Formation	2002	PDAMC®					
Founding of ABRAMS®							

Registration: ABRAMS Engineering Services GmbH & Co. KG

After rebranding in 2020: ABRAMS Industries GmbH & Co. KG

Yours sincerely,

Dr. Järgen Abrams Managing Director

HEART AND SOUL - now also in aluminium!

VERSATILE







PREMIUM-UNIVERSAL-TAPS

- 96 items in 6 categories
- Metric standard thread
 - For clearance holes
 - M-DIN 371-Form B
 - _____
 - M-DIN 376-Form B
- Metric fine thread
 - For clearnace holes

 MF-DIN 374-Form B
- For blind holes
- M-DIN 371-Form C
- M-DIN 376-Form C
- For blind holes
- MF-DIN 374-Form C

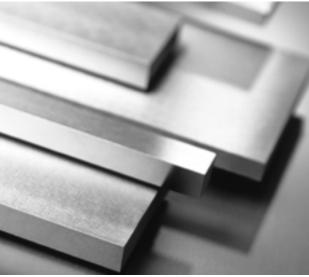
PREMIUM STEEL

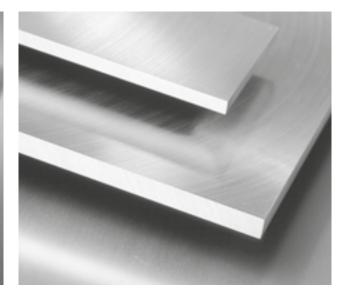
- 70 steel grades in 30.937 dimensions
- PRECISION FLAT STEEL with / without machining allowance
- €co-Präz® Standardized precision blanks
- Hart-Präz® Hardened precision plates
- PRECISION ROUND STEEL
 with / without machining allowance
- ROUND STEEL
- EROSION BLOCK annealed / hardened
- WITHOUT MINIMUM ORDER VALUE OR QUANTITY
- SPECIAL CUSTOM DIMENSIONS SAWN MILLED GROUND

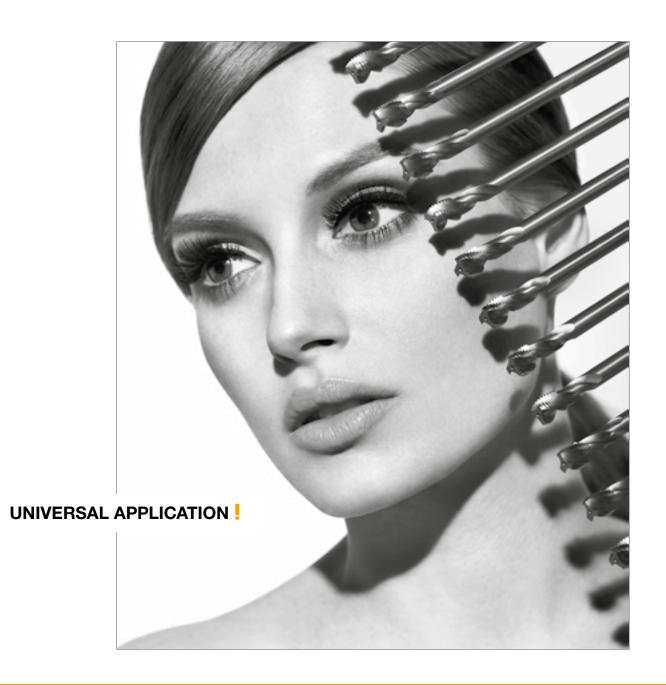
PREMIUM-ALUMINIUM

- 8 alloys in 4.307 dimensions
- In 3 specifications
 - ALU-PRÄZ®
 - PRECISION ROUND ALUMINIUM
 - ROUND ALUMINIUM









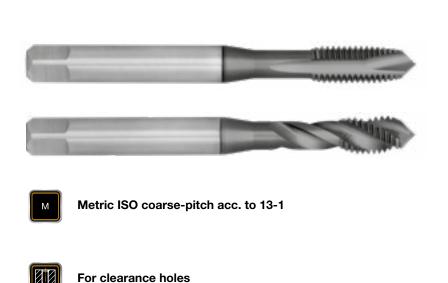
PRODUCT RANGE

Our product range consists of **96 articles** in the following categories:

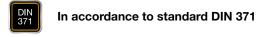
	Metric co	Metric fine pitch		
Clearance hole	M - DIN 371 - Form B with spiral point and reinforced shank M3 bis M10	M - DIN 376 - Form B with spiral point and reduced shank Ø M3 bis M24	MF - DIN 374 - Form B with spiral point and reduced shank Ø M4 x 0.5 bis M24 x 2	
Blind hole	M - DIN 371 - Form C spiral fluted, RSP 35° and reinforced shank Ø M3 bis M10	M - DIN 376 - Form C spiral fluted, RSP 35° and reduced shank Ø M3 bis M24	MF - DIN 374 - Form C spiral fluted, RSP 35° and reduced shank Ø M4 x 0.5 bis M24 x 2	



ABBREVIATION LEGEND - DIN 371

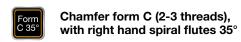


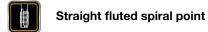






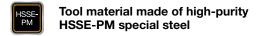
Chamfer form B (4-5 threads), with spiral point



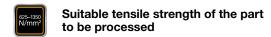


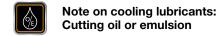














M - DIN 371 - Form B (with spiral point)





















M - DIN 371 Form B

APT-NEOX® HSSE-PM machine tap for the production of ISO metric coarse pitch Specification: reinforced shank, straight fluted with spiral point

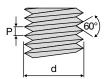
			Dime	Flute	Available [●]				
Ød	Р	d ₁	а	L	l ₁	l ₂	d _k	Z	
М3	0,5	3,5	2,7	56	11	18	2,5	3	•
M4	0,7	4,5	3,4	63	13	21	3,3	3	•
M5	0,8	6,0	4,9	70	16	25	4,2	3	•
М6	1,0	6,0	4,9	80	19	30	5,0	3	•
M8	1,25	8,0	6,2	90	22	35	6,8	3	•
M10	1,5	10,0	8,0	100	24	39	8,5	3	•

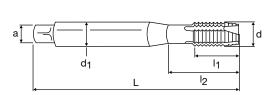


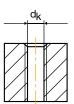
Thread and tool data

		1
Classification	n	Metric ISO coarse-pitch (DIN 13-1)
Hole form		Clearance hole
Standard		DIN 371 (DIN 2184-1)
Tolerance		ISO2/6H
Chamfer		Form B (4-5 threads)
Specification	1	with reinforced shank
Flute form		straight fluted with spiral point
Rotational di	rection	right
max. depth		≤ 2,5 x Ø
Cutting mate	erial	made of high-purity HSSE-PM special stee
Coating		APT-NEOX® (multi-layer)











Recommendations:

Tensile strength	625-1.350 N/mm ²				
Cutting speed	2-35 m/min, material dependent (see table on page 24/25)				
Coolant	Emulsion or oil, material dependent (see table on page 24/25)				



Applications:

This PREMIUM-UNIVERSAL-TAP is in principal universally applicable for all ABRAMS PREMIUM STEEL®-material grades. A more specific, material dependent overview of suitability can be found on page 24/25.



Contact us

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Direct access to our online shop:

www.premium-gewindebohrer.eu/DIN371-B-1



DIN 371 - Form B - all at a glance!

Datasheets and online shop: www.premium-gewindebohrer.eu/DIN371-B



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M - DIN 371 - Form C (with right hand spiral flutes 35°)



















APT-NEOX® HSSE-PM machine tap for the production of ISO metric coarse pitch Specification: reinforced shank, twisted flutes (RSP 35°)

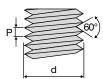
200			Dime	Flute	Available [●]				
Ød	Р	d ₁	а	L	l ₁	l ₂	d _k	Z	
M3	0,5	3,5	2,7	56	6	18	2,5	3	•
M4	0,7	4,5	3,4	63	7	21	3,3	3	•
M5	0,8	6,0	4,9	70	8	25	4,2	3	•
M6	1,0	6,0	4,9	80	10	30	5,0	3	•
M8	1,25	8,0	6,2	90	14	35	6,8	3	•
M10	1,5	10,0	8,0	100	16	39	8,5	3	•

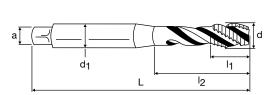


Thread and tool data:

Classification	Metric ISO coarse-pitch (DIN 13-1)
Hole form	Blind hole
Standard	DIN 371 (DIN 2184-1)
Tolerance	ISO2/6H
Chamfer	Form C (2-3 threads)
Specification	with reinforced shank
Flute form	spiral fluted, RSP 35°
Rotational direction	right
max. depth	≤ 2,5 x Ø
Cutting material	made of high-purity HSSE-PM special steel
Coating	APT-NEOX® (multi-layer)
	-











Recommendations:

Tensile strength	625-1.350 N/mm²				
Cutting speed	2-35 m/min, material dependent (see table on page 24/25)				
Coolant	Emulsion or oil, material dependent (see table on page 24/25)				



Applications:

This PREMIUM-UNIVERSAL-TAP is in principal universally applicable for all ABRAMS PREMIUM STEEL®-material grades. A more specific, material dependent overview of suitability can be found on page 24/25.

M - DIN 371 Form C RSP 35°

M - DIN 371



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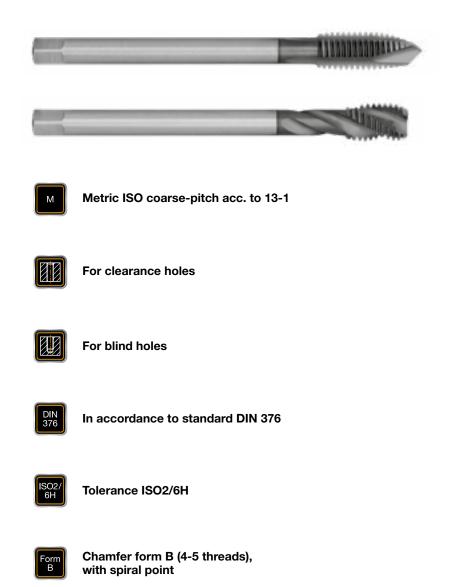


DIN 371 - Form C - all at a glance!

Datasheets and online shop: www.premium-gewindebohrer.eu/DIN371-C



ABBREVIATION LEGEND - DIN 376





Chamfer form C (2-3 threads), with right hand spiral flutes 35°



Straight fluted spiral point



Twisted flutes, right hand spiral



Rotational direction right



Tool material made of high-purity HSSE-PM special steel



Multi-layer APT-NEOX®-coating



Suitable tensile strength of the part to be processed



Note on cooling lubricants: Cutting oil or emulsion



M - DIN 376 - Form B (with spiral point)

















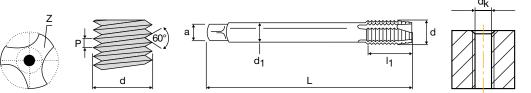




M - DIN 376 Form B

APT-NEOX® HSSE-PM machine tap for the production of ISO metric coarse pitch Specification: reduced shank, straight fluted with spiral point

			Dimension	Flute	Available [●]			
Ød	Р	d ₁	а	L	l ₁	d _k	Z	
M3	0,5	2,2	1,8	56	11	2,5	3	•
M4	0,7	2,8	2,1	63	13	3,3	3	•
M5	0,8	3,5	2,7	70	16	4,2	3	•
M6	1,0	4,5	3,4	80	19	5,0	3	•
M 8	1,25	6,0	4,9	90	22	6,8	3	•
M10	1,5	7,0	5,5	100	24	8,5	3	•
M12	1,75	9,0	7,0	110	29	10,2	3	•
M14	2,0	11,0	9,0	110	30	12,0	3	•
M16	2,0	12,0	9,0	110	32	14,0	3	•
M18	2,5	14,0	11,0	125	34	15,5	4	•
M20	2,5	16,0	12,0	140	34	17,5	4	•
M22	2,5	18,0	14,5	140	34	19,5	4	•
M24	3,0	18,0	14,5	160	38	21,0	4	•





Thread and tool data:

Classification	Metric ISO coarse-pitch (DIN 13-1)
Hole form	Clearance hole
Standard	DIN 376 (DIN 2184-1)
Tolerance	ISO2/6H
Chamfer	Form B (4-5 threads)
Specification	with reduced shank
Flute form	straight fluted with spiral point
Rotational direction	right
max. depth	≤ 2,5 x Ø
Cutting material	made of high-purity HSSE-PM special steel
Coating	APT-NEOX® (multi-layer)



Recommendations:

Tensile strength	625-1.350 N/mm ²				
Cutting speed	2-35 m/min, material dependent (see table on page 24/25)				
Coolant	Emulsion or oil, material dependent (see table on page 24/25)				



Applications:

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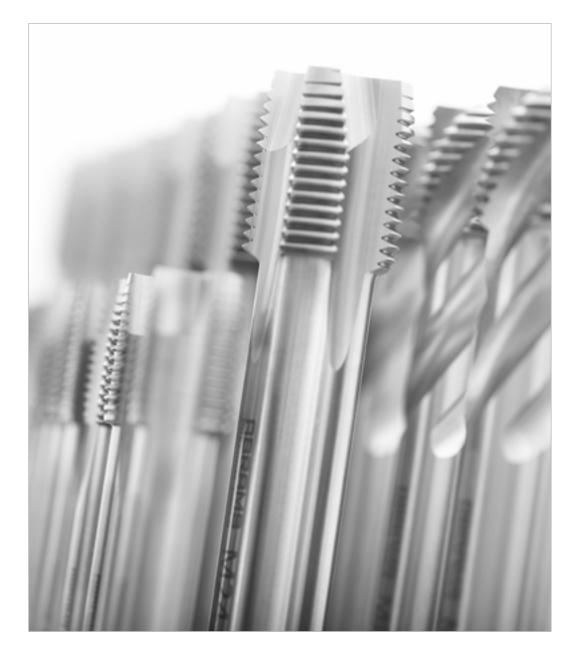
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DIN 376 - Form B - all at a glance!

Datasheets and online shop: www.premium-gewindebohrer.eu/DIN376-B









M - DIN 376 - Form C (with right hand spiral flutes 35°)

















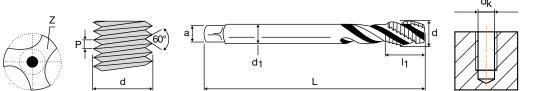




APT-NEOX® HSSE-PM machine tap for the production of ISO metric coarse pitch Specification: reduced shank, twisted flutes (RSP 35°)

			Dimensio	Flute	Available [●]			
Ød	Р	d ₁	а	L	l ₁	d _k	Z	
M 3	0,5	2,2	_	56	6	2,5	3	•
M4	0,7	2,8	2,1	63	7	3,3	3	•
M5	0,8	3,5	2,7	70	9	4,2	3	•
M6	1,0	4,5	3,4	80	10	5,0	3	•
M 8	1,25	6,0	4,9	90	14	6,8	3	•
M10	1,5	7,0	5,5	100	16	8,5	3	•
M12	1,75	9,0	7,0	110	18	10,2	3	•
M14	2,0	11,0	9,0	110	20	12,0	3	•
M16	2,0	12,0	9,0	110	22	14,0	3	•
M18	2,5	14,0	11,0	125	25	15,5	4	•
M20	2,5	16,0	12,0	140	25	17,5	4	•
M22	2,5	18,0	14,5	140	27	19,5	4	•
M24	3,0	18,0	14,5	160	30	21,0	4	•

ABRAMS® PREMIUM TOOLS





Thread and tool data:

Classification	Metric ISO coarse-pitch (DIN 13-1)
Hole form	Blind hole
Standard	DIN 376 (DIN 2184-1)
Tolerance	ISO2/6H
Chamfer	Form C (2-3 threads)
Specification	with reduced shank
Flute form	spiral fluted, RSP 35°
Rotational direction	right
max. depth	≤ 2,5 x Ø
Cutting material	made of high-purity HSSE-PM special steel
Coating	APT-NEOX® (multi-layer)
	-



Recommendations:

Tensile strength	625-1.350 N/mm²
Cutting speed	2-35 m/min, material dependent (see table on page 24/25)
Coolant	Emulsion or oil, material dependent (see table on page 24/25)



Applications:

This PREMIUM-UNIVERSAL-TAP is in principal universally applicable for all ABRAMS PREMIUM STEEL®-material grades. A more specific, material dependent overview of suitability can be found on page 24/25.



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DIN 376 - Form C - all at a glance!

Datasheets and online shop: www.premium-gewindebohrer.eu/DIN376-C



via smartphone/tablet:

M - DIN 376

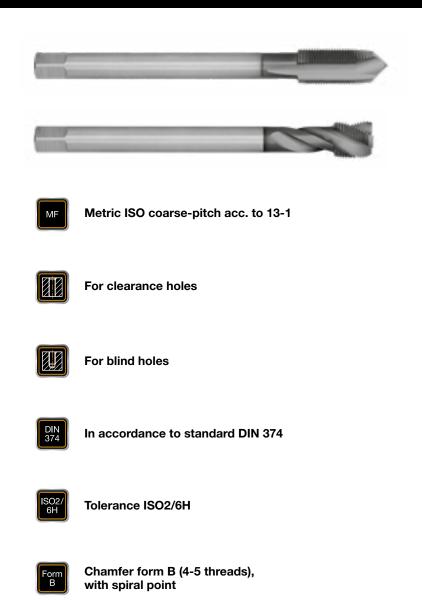
Form C

RSP 35°

M - DIN 376

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ABBREVIATION LEGEND - DIN 374





Note on cooling lubricants: Cutting oil or emulsion



MF - DIN 374 - Form B (with spiral point)





















APT-NEOX® HSSE-PM machine tap for the production of ISO metric fine pitch Specification: reduced shank, straight fluted with spiral point

	Dimensions [mm]					Flute	Available [●]
ØdxP	d ₁	а	L	l ₁	d _k	Z	
M4 x 0,5	2,8	2,1	63	10	3,5	3	•
M5 x 0,5	3,5	2,7	70	12	4,5	3	•
M6 x 0,5	4,5	3,4	80	14	5,5	3	•
M6 x 0,75	4,5	3,4	80	14	5,25	3	•
M8 x 0,75	6,0	4,9	80	19	7,25	3	•
M8 x 1	6,0	4,9	90	22	7,0	3	•
M10 x 0,75	7,0	5,5	90	20	9,25	3	•
M10 x 1	7,0	5,5	90	20	9,0	3	•
M10 x 1,25	7,0	5,5	100	24	8,75	3	•
M12 x 1	9,0	7,0	100	22	11,0	3	•
M12 x 1,25	9,0	7,0	100	22	10,75	3	•
M12 x 1,5	9,0	7,0	100	22	10,5	3	•
M14 x 1	11,0	9,0	100	22	13,0	3	•
M14 x 1,25	11,0	9,0	100	22	12,75	3	•
M14 x 1,5	11,0	9,0	100	22	12,5	3	•
>>							



Thread and tool data:

Metric ISO fine-pitch (DIN 13-2)
Clearance hole
DIN 374 (DIN 2184-1)
ISO2/6H
Form B (4-5 threads)
with reduced shank
straight fluted with spiral point
right
≤ 2,5 x Ø
made of high-purity HSSE-PM special steel
APT-NEOX® (multi-layer)



Recommendations:

Tensile strength	625-1.350 N/mm²				
Cutting speed	2-35 m/min, material dependent (see table on page 24/25)				
Coolant	Emulsion or oil, material dependent (see table on page 24/25)				



Applications:

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DIN 374 - Form B - all at a glance!

Datasheets and online shop: www.premium-gewindebohrer.eu/DIN374-B



MF - DIN 374 - Form B (with spiral point)















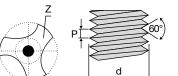




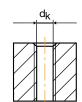


APT-NEOX® HSSE-PM machine tap for the production of ISO metric fine pitch Specification: reduced shank, straight fluted with spiral point

	Dimensions [mm]					Flute	Available [●]
ØdxP	d ₁	а	L	l ₁	d _k	Z	
M16 x 1	12,0	9,0	100	22	15,0	3	•
M16 x 1,25	12,0	9,0	100	22	14,75	3	•
M16 x 1,5	12,0	9,0	100	22	14,5	3	•
M18 x 1	14,0	11,0	110	25	17,0	4	•
M18 x 1,25	14,0	11,0	110	25	16,75	4	•
M18 x 1,5	14,0	11,0	110	25	16,5	4	•
M20 x 1,25	16,0	12,0	125	25	18,75	4	•
M20 x 1,5	16,0	12,0	125	25	18,5	4	•
M20 x 2	16,0	12,0	140	34	18,0	4	•
M22 x 1,25	18,0	14,5	125	25	20,75	4	•
M22 x 1,5	18,0	14,5	125	25	20,5	4	•
M22 x 2	18,0	14,5	140	34	20,0	4	•
M24 x 1,5	18,0	14,5	140	28	22,5	4	•
M24 x 2	18,0	14,5	140	28	22,0	4	•









Thread and tool data:

Classification	Metric ISO fine-pitch (DIN 13-2)
Hole form	Clearance hole
Standard	DIN 374 (DIN 2184-1)
Tolerance	ISO2/6H
Chamfer	Form B (4-5 threads)
Specification	with reduced shank
Flute form	straight fluted with spiral point
Rotational direction	right
max. depth	≤ 2,5 x Ø
Cutting material	made of high-purity HSSE-PM special steel
Coating	APT-NEOX® (multi-layer)



Recommendations:

Tensile strength	625-1.350 N/mm ²			
Cutting speed	2-35 m/min, material dependent (see table on page 24/25)			
Coolant	Emulsion or oil, material dependent (see table on page 24/25)			



Applications:

This PREMIUM-UNIVERSAL-TAP is in principal universally applicable for all ABRAMS PREMIUM STEEL®-material grades. A more specific, material dependent overview of suitability can be found on page 24/25.



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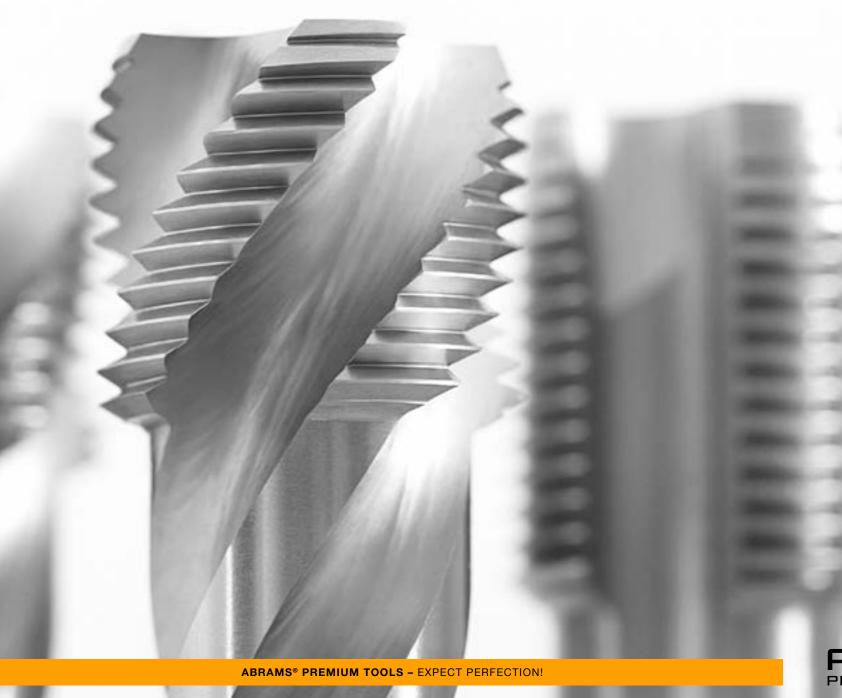
DIN 374 - Form B - all at a glance!

Datasheets and online shop: www.premium-gewindebohrer.eu/DIN374-B



MF-DIN 374 Form B





PREMIUM TOOLS

MF - DIN 374 - Form C (with right hand spiral flutes 35°)





















APT-NEOX® HSSE-PM machine tap for the production of ISO metric fine pitch Specification: reduced shank, twisted flutes (RSP 35°)

	Dimensions [mm]					Flute	Available [●]
ØdxP	d ₁	а	L	l ₁	d _k	Z	
M4 x 0,5	2,8	2,1	63	5	3,5	3	•
M5 x 0,5	3,5	2,7	70	5	4,5	3	•
M6 x 0,5	4,5	3,4	80	5	5,5	3	•
M6 x 0,75	4,5	3,4	80	8	5,25	3	•
M8 x 0,75	6,0	4,9	80	8	7,25	3	•
M8 x 1	6,0	4,9	90	10	7,0	3	•
M10 x 0,75	7,0	5,5	90	10	9,25	3	•
M10 x 1	7,0	5,5	90	10	9,0	3	•
M10 x 1,25	7,0	5,5	100	16	8,75	3	•
M12 x 1	9,0	7,0	100	11	11,0	3	•
M12 x 1,25	9,0	7,0	100	15	10,75	3	•
M12 x 1,5	9,0	7,0	100	15	10,5	3	•
M14 x 1	11,0	9,0	100	11	13,0	3	•
M14 x 1,25	11,0	9,0	100	15	12,75	3	•
M14 x 1,5	11,0	9,0	100	15	12,5	3	•
>>							



Thread and tool data:

Classification	Metric ISO fine-pitch (DIN 13-2)
Hole form	Blind hole
Standard	DIN 374 (DIN 2184-1)
Tolerance	ISO2/6H
Chamfer	Form C (2-3 threads)
Specification	with reduced shank
Flute form	spiral fluted, RSP 35°
Rotational direction	right
max. depth	≤ 2,5 x Ø
Cutting material	made of high-purity HSSE-PM special steel
Coating	APT-NEOX® (multi-layer)
	·



Recommendations:

Tensile strength	625-1.350 N/mm²				
Cutting speed	2-35 m/min, material dependent (see table on page 24/25)				
Coolant	Emulsion or oil, material dependent (see table on page 24/25)				



Applications:

This PREMIUM-UNIVERSAL-TAP is in principal universally applicable for all ABRAMS PREMIUM STEEL®-material grades. A more specific, material dependent overview of suitability can be found on page 24/25.



Contact us

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Direct access to our online shop:

www.premium-gewindebohrer.eu/DIN374-C-2



DIN 374 - Form C - all at a glance!

Datasheets and online shop: www.premium-gewindebohrer.eu/DIN374-0



MF - DIN 374 - Form C (with right hand spiral flutes 35°)













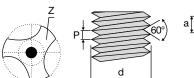






APT-NEOX® HSSE-PM machine tap for the production of ISO metric fine pitch Specification: reduced shank, twisted flutes (RSP 35°)

	Dimensions [mm]					Flute	Available [●]
ØdxP	d ₁	а	L	l ₁	d _k	Z	
M16 x 1	12,0	9,0	100	12	15,0	3	•
M16 x 1,25	12,0	9,0	100	15	14,75	3	•
M16 x 1,5	12,0	9,0	100	15	14,5	3	•
M18 x 1	14,0	11,0	110	13	17,0	4	•
M18 x 1,25	14,0	11,0	110	15	16,75	4	•
M18 x 1,5	14,0	11,0	110	17	16,5	4	•
M20 x 1,25	16,0	12,0	125	17	18,75	4	•
M20 x 1,5	16,0	12,0	125	17	18,5	4	•
M20 x 2	16,0	12,0	140	20	18,0	4	•
M22 x 1,25	18,0	14,5	125	17	20,75	4	•
M22 x 1,5	18,0	14,5	125	17	20,5	4	•
M22 x 2	18,0	14,5	140	20	20,0	4	•
M24 x 1,5	18,0	14,5	140	20	22,5	4	•
M24 x 2	18,0	14,5	140	20	22,0	4	•









Thread and tool data:

Classification	Metric ISO fine-pitch (DIN 13-2)		
Hole form	Blind hole		
Standard	DIN 374 (DIN 2184-1)		
Tolerance	ISO2/6H		
Chamfer	Form C (2-3 threads)		
Specification	with reduced shank		
Flute form	spiral fluted, RSP 35°		
Rotational direction	right		
max. depth	≤ 2,5 x Ø		
Cutting material	made of high-purity HSSE-PM special steel		
Coating	APT-NEOX® (multi-layer)		
	•		



Recommendations:

Tensile strength	trength 625-1.350 N/mm²		
Cutting speed	2-35 m/min, material dependent (see table on page 24/25)		
Coolant	Emulsion or oil, material dependent (see table on page 24/25)		



Applications:

This PREMIUM-UNIVERSAL-TAP is in principal universally applicable for all ABRAMS PREMIUM STEEL®-material grades. A more specific, material dependent overview of suitability can be found on page 24/25.



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Direct access to our online shop:

www.premium-gewindebohrer.eu/DIN374-C-2



DIN 374 - Form C - all at a glance!

Datasheets and online shop: www.premium-gewindebohrer.eu/DIN374-C



via smartphone/tablet:

MF-DIN 374

MF-DIN 374 Form C RSP 35°

RECOMMENDATION FOR CUTTING VALUES AND COOLANT!

The table below should give you an indication of the setting of the optimal cutting values and the use of the appropriate cooling lubricant for the ABRAMS®-Taps.

Due to the complexity of parameters (machine tool, work piece, lubrication, diameter and depth) that have to be observed whilst tapping, it is necessary that the user adapts speed and lubricant in accordance to the specific case and circumstances as and where needed. A warranty for the recommended cutting values requires in each individual case an evaluation as well as an expressly written agreement from us.

e processed material grade	Tensile strength of the material grade (approx.)	Suitability	Cutting speed (Vc)	Coolant
1.2990 mod.	850 N/mm ²	****	15-25 m/min	Emulsion
1.2842/1.2510	770 N/mm²	****	15-25 m/min	Emulsion
1.2826	750 N/mm²	****	10-25 m/min	Emulsion
1.2767	880 N/mm²	****	10-25 m/min	Cutting oil
1.2767 ESU	880 N/mm²	****	10-25 m/min	Cutting oil
1.2738	1.100 N/mm²	****	10-20 m/min	Emulsion
1.2714	850 N/mm²	****	10-25 m/min	Cutting oil
1.2714+QT*	1.350 N/mm²	****	2-10 m/min*	Cutting oil*
1.2709 ESU**	1.100 N/mm²	not suitablet**	not suitable**	not suitable**
1.2550	770 N/mm²	****	10-20 m/min	Emulsion
1.2436	860 N/mm²	****	10-20 m/min	Emulsion
1.2379	860 N/mm²	****	15-30 m/min	Emulsion
1.2367	770 N/mm²	****	5-25 m/min	Schneidöl
1.2365	770 N/mm²	****	5-25 m/min	Schneidöl
1.2363	815 N/mm²	****	15-25 m/min	Emulsion
1.2361	900 N/mm²	****	5-15 m/min	Emulsion
1.2360/mod.	850 N/mm²	****	20-35 m/min	Emulsion
1.2358	1.100 N/mm²	****	10-25 m/min	Emulsion/Cutting
1.2344	770 N/mm²	****	10-25 m/min	Cutting oil
1.2344 ESU	770 N/mm²	****	5-20 m/min	Cutting oil
1.2343	770 N/mm²	****	10-25 m/min	Cutting oil
1.2343 ESU	770 N/mm²	****	5-20 m/min	Cutting oil
1.2316	1.100 N/mm ²	****	10-20 m/min	Emulsion
1.2312	1.100 N/mm²	****	5-15 m/min	Emulsion
1.2311	1.100 N/mm²	****	5-15 m/min	Emulsion
1.2294	1.125 N/mm²	****	20-35 m/min	Emulsion
1.2210	750 N/mm²	****	10-25 m/min	Emulsion
1.2162	720 N/mm ²	****	15-25 m/min	Emulsion
1.2099	1.125 N/mm²	****	20-35 m/min	Emulsion
1.2085	1.125 N/mm²	****	10-15 m/min	Emulsion
1.2083	815 N/mm²	****	5-15 m/min	Cutting oil
1.2083 ESU	815 N/mm²	****	5-15 m/min	Cutting oil
1.2080 mod.	850 N/mm²	****	20-35 m/min	Emulsion
1.2067/1.3505	750 N/mm²	****	10-20 m/min	Emulsion
1.1730	650 N/mm²	****	15-30 m/min	Emulsion
1.0570	625 N/mm ²	****	10-30 m/min	Emulsion

RECOMMENDATION FOR CUTTING VALUES AND COOLANT!

e processed material grade	Tensile strength of the material grade (approx.)	Suitability	Cutting speed (Vc)	Coolant
Toolox 33	1.125 N/mm²	****	5-15 m/min	Cutting oil
Toolox 44*	1.350 N/mm²	****	2-10 m/min*	Cutting oil*
1.3343	920 N/mm²	****	10-20 m/min	Emulsion/Cutting o
PM 30	995 N/mm²	****	15-30 m/min	Emulsion/Cutting o
PM 23	920 N/mm²	****	15-25 m/min	Emulsion/Cutting o
PM 4	920 N/mm²	****	15-25 m/min	Emulsion/Cutting of
1.4841**	755 N/mm²	not suitable**	not suitable**	not suitable**
1.4571**	690 N/mm²	not suitable**	not suitable**	not suitable**
1.4418*	1.095 N/mm²	****	2-10 m/min	Cutting oil
1.4404/1.4401	690 N/mm²	****	10-25 m/min	Cutting oil
1.4305	800 N/mm²	****	2-15 m/min	Cutting oil
1.4301	690 N/mm²	****	2-15 m/min	Cutting oil
1.4125	965 N/mm²	****	10-30 m/min	Cutting oil
1.4122	1.100 N/mm²	****	10-20 m/min	Emulsion
1.4112	925 N/mm²	****	5-15 m/min	Emulsion
1.4104	860 N/mm²	****	10-20 m/min	Cutting oil
1.4057	1.050 N/mm²	****	5-10 m/min	Cutting oil
1.4034	815 N/mm²	****	5-15 m/min	Cutting oil
1.4031	815 N/mm²	****	5-15 m/min	Cutting oil
1.4021	850 N/mm²	****	5-15 m/min	Cutting oil
1.4006	850 N/mm²	****	10-20 m/min	Cutting oil
1.8550	1.095 N/mm²	****	10-30 m/min	Emulsion/Cutting of
1.8519	1.100 N/mm ²	****	15-30 m/min	Emulsion/Cutting of
1.7227	720 N/mm²	****	10-25 m/min	Emulsion
1.7225	720 N/mm²	****	10-25 m/min	Emulsion
1.7225+QT*	1.300 N/mm²	****	2-10 m/min*	Cutting oil
1.7147	720 N/mm²	****	15-25 m/min	Emulsion
1.7131	720 N/mm²	****	15-25 m/min	Emulsion
1.6587	770 N/mm²	****	20-45 m/min	Emulsion/Cutting of
1.6582	1.200 N/mm²	****	20-35 m/min	Emulsion/Cutting of
1.6580	1.200 N/mm ²	****	20-35 m/min	Emulsion/Cutting of



^{*} Our product is, due to the cutting properties of this steel grade, unsuitable for the diameters 3 and 4. In accordance to the recommendation of the manufacturer of this steel, we recommend thread milling for these diameters.

^{**} Due to the machining properties of this steel grade the application of our product is not suitable.



TRANSPARENCY IN ALL DETAIL

Information regarding our portfolio (valid as of January 2023):

This product catalogue gives you an overview of our 96 items in 6 categories.

For our current prices please refer to our online shop.

Minimum order value:

Any quatity - however small - there is no minimum order value for you!

Packaging Fees:

All products are carefully packaged. The packaging is free of charge!

Handeling and Delivery Fees:

- Simple orders (only Taps)

Handeling and delivery fees on request for simple orders.

- Mixed orders (Taps and Steel- and/or Aluminium products)

When ordering taps and steel and/or aluminium products together, ABRAMS PREMIUM STEEL® known handeling and delivery terms apply:

Consignments of up to 40 kg are dispached via parcel; above 40 kg via freight forwarders. We base all our shipping costs on the pricipale that they are as transparent as possible. Handeling and delivery fees on request for mixed orders.

Subject to change without notice (see www.premium-gewindebohrer.eu/ deliveryfees).

For deliveries on Saturdays or express delivery services (guaranteed date and time) please contact us.

Delivery time:

Standard products defined in our programme will be delivered as quickly as possibel from stock:

Delivery time: on request

Conditions of payment:

Within 14 days net from invoice (subject to a positve credit screening)

ABRAMS® PREMIUM TOOLS		ABRAMS INDUSTRIES®	
ABRAMS® PREMIUM TOOLS	www.premium-gewindebohrer.eu	ABRAMS INDUSTRIES®	www.abrams-industries.eu
ABRAMS® PREMIUM TOOLS Shop	www.premium-gewindebohrer.eu/shop	ABRAMS® News	www.abrams-industries.eu/news
Tools price list	www.premium-gewindebohrer.eu/pricelist	ABRAMS® GTC	www.abrams-industries.eu/gtc
Tools specifications	www.premium-gewindebohrer.eu/specifications	ABRAMS PREMIUM STEEL®	www.premium-steel.eu
Tools cutting values	www.premium-gewindebohrer.eu/cuttingvalues	ABRAMS STEEL GUIDE®	www.steel-guide.eu
Current delivery informations	www.premium-gewindebohrer.eu/deliveryfees	ABRAMS PREMIUM ALUMINIUM®	www.premium-aluminium.eu
		ABRAMS® ARTPROJECTS	www.abrams-artprojects.eu

The price list gives an overview of the general attributes and possible applications of aluminium which will support your choice of product depending on the various applications of the products, a guarantee of specific attributes and values must be confirmed contractually.

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