


# GUHRING




The Tool Company

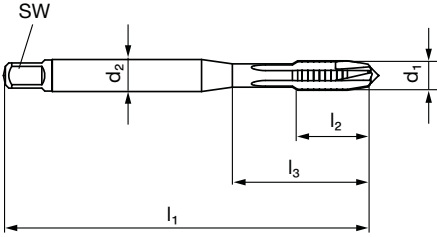
## UNJ Thread Taps for Nickel and Titanium Alloys



# UNJC - Ti/Ni



-  through holes
-  TiCN coated
-  external cooling



**Series** **1059**


**Standard** **DIN 2184-1**

**Standard** **DIN 371**

**Tool Material** **HSS-E PM**

**Flute** **Spiral Point**

**Chamfer Form** **B (3.5 - 5)**







**Class of Fit** **3BX**

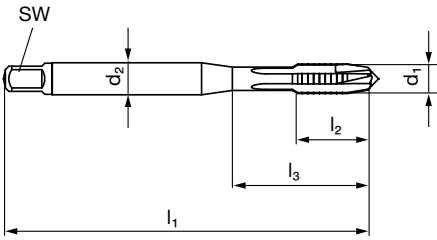
**Cutting Direction** **right-hand**

d1 - P	Number of Flutes	d2	SW	Minor Diameter Range mm	l1	l2	l3	Order Code	EDP Number
inch		mm	mm		mm	mm	mm		
6 - 32	3	4.00	3.00	2.733 - 2.939	56.00	12.00	20.00	3.505	9010590035050
8 - 32	3	4.50	3.40	3.393 - 3.599	63.00	13.00	25.00	4.166	9010590041660
10 - 24	3	6.00	4.90	3.795 - 4.064	70.00	14.00	25.00	4.826	9010590048260
12 - 24	3	6.00	4.90	4.455 - 4.704	80.00	16.00	30.00	5.486	9010590054860
1/4" - 20	4	7.00	5.50	5.113 - 5.387	80.00	16.00	30.00	6.350	9010590063500
5/16" - 18	4	8.00	6.20	6.563 - 6.833	90.00	18.00	35.00	7.938	9010590079380
3/8" - 16	4	10.00	8.00	7.978 - 8.255	100.00	20.00	39.00	9.525	9010590095250
7/16" - 14	4	8.00	6.20	9.346 - 9.639	100.00	22.00	42.00	11.113	9010590111130
1/2" - 13	4	9.00	7.00	10.798 - 11.095	110.00	25.00	49.00	12.700	9010590127000
5/8" - 11	4	12.00	9.00	13.627 - 13.904	110.00	30.00	53.00	15.875	9010590158750

# UNJF - Ti/Ni



-  through holes
-  TiCN coated
-  external cooling



**Series** **1060**


**Standard** **DIN 2184-1**

**Standard** **DIN 371**

**Tool Material** **HSS-E PM**

**Flute** **Spiral Point**

**Chamfer Form** **B (3.5 - 5)**

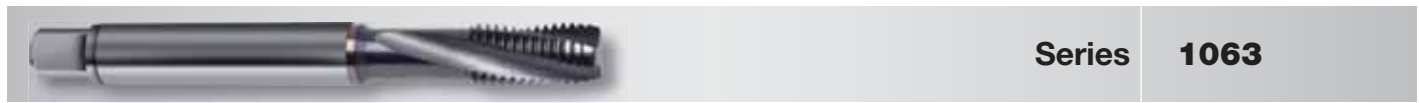


**Class of Fit** **3BX**




**Cutting Direction** **right-hand**

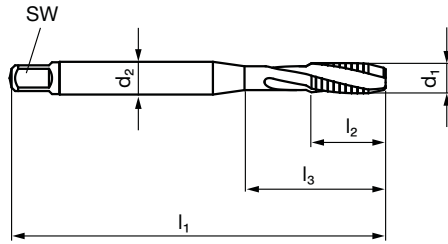
d1 - P	Number of Flutes	d2	SW	Minor Diameter Range mm	l1	l2	l3	Order Code	EDP Number
inch		mm	mm		mm	mm	mm		
6 - 40	3	4.00	3.00	2.888 - 3.053	56.00	12.00	20.00	3.505	9010600035050
8 - 36	3	4.50	3.40	3.480 - 3.663	63.00	13.00	25.00	4.166	9010600041660
10 - 32	3	6.00	4.90	4.054 - 4.255	70.00	14.00	25.00	4.826	9010600048260
12 - 28	3	6.00	4.90	4.602 - 4.816	80.00	16.00	30.00	5.486	9010600054860
1/4" - 28	4	7.00	5.50	5.466 - 5.662	80.00	16.00	30.00	6.350	9010600063500
5/16" - 24	4	8.00	6.20	6.906 - 7.109	90.00	18.00	35.00	7.938	9010600079380
3/8" - 24	4	10.00	8.00	8.494 - 8.679	100.00	20.00	39.00	9.525	9010600095250
7/16" - 20	4	8.00	6.20	9.876 - 10.084	100.00	22.00	42.00	11.113	9010600111130
1/2" - 20	4	9.00	7.00	11.463 - 11.661	100.00	20.00	40.00	12.700	9010600127000
5/8" - 18	4	12.00	9.00	14.501 - 14.702	100.00	22.00	44.00	15.875	9010600158750

# UNJC - Ti



**Series 1063**

-  blind holes
-  TiCN coated
-  external cooling



**Standard DIN 2184-1**

**Standard DIN 371**

**Tool Material HSS-E PM**

**Flute RH 15° Spiral**

**Chamfer Form C (2-3)**

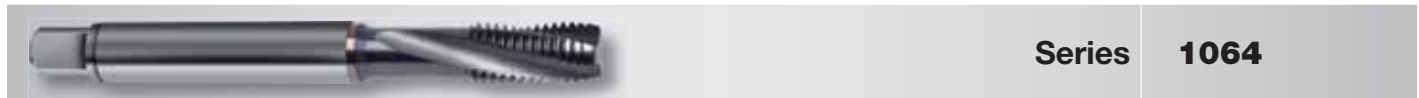


**Class of Fit 3BX**


**Cutting Direction right-hand**

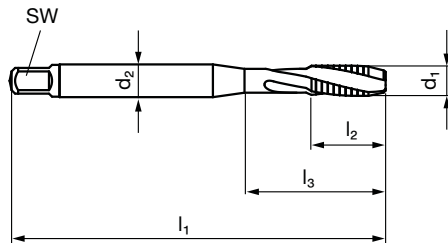
d1 - P inch	Number of Flutes	d2 mm	SW mm	Minor Diameter Range mm	l1 mm	l2 mm	l3 mm	Order Code	EDP Number
6 - 32	3	4.00	3.00	2.733 - 2.939	56.00	12.00	20.00	3.505	9010630035050
8 - 32	3	4.50	3.40	3.393 - 3.599	63.00	13.00	25.00	4.166	9010630041660
10 - 24	3	6.00	4.90	3.795 - 4.064	70.00	14.00	25.00	4.826	9010630048260
12 - 24	3	6.00	4.90	4.455 - 4.704	80.00	16.00	30.00	5.486	9010630054860
1/4" - 20	3	7.00	5.50	5.113 - 5.387	80.00	16.00	30.00	6.350	9010630063500
5/16" - 18	3	8.00	6.20	6.563 - 6.833	90.00	18.00	35.00	7.938	9010630079380
3/8" - 16	3	10.00	8.00	7.978 - 8.255	100.00	20.00	39.00	9.525	9010630095250
7/16" - 14	4	8.00	6.20	9.346 - 9.639	100.00	22.00	42.00	11.113	9010630111130
1/2" - 13	4	9.00	7.00	10.798 - 11.095	110.00	25.00	49.00	12.700	9010630127000
5/8" - 11	4	12.00	9.00	13.627 - 13.904	110.00	30.00	53.00	15.875	9010630158750

# UNJF - Ti



**Series 1064**

-  blind holes
-  TiCN coated
-  external cooling



**Standard DIN 2184-1**

**Standard DIN 371**

**Tool Material HSS-E PM**

**Flute RH 15° Spiral**

**Chamfer Form C (2-3)**



**Class of Fit 3BX**

**Cutting Direction right-hand**

d1 - P inch	Number of Flutes	d2 inch	SW inch	Minor Diameter Range mm	l1 inch	l2 inch	l3 inch	Order Code	EDP Number
6 - 40	3	4.00	3.00	2.888 - 3.053	56.00	12.00	20.00	3.505	9010640035050
8 - 36	3	4.50	3.40	3.480 - 3.663	63.00	13.00	25.00	4.166	9010640041660
10 - 32	3	6.00	4.90	4.054 - 4.255	70.00	14.00	25.00	4.826	9010640048260
12 - 28	3	6.00	4.90	4.602 - 4.816	80.00	16.00	30.00	5.486	9010640054860
1/4" - 28	3	7.00	5.50	5.466 - 5.662	80.00	16.00	30.00	6.350	9010640063500
5/16" - 24	3	8.00	6.20	6.906 - 7.109	90.00	18.00	35.00	7.938	9010640079380
3/8" - 24	3	10.00	8.00	8.494 - 8.679	100.00	20.00	39.00	9.525	9010640095250
7/16" - 20	4	8.00	6.20	9.876 - 10.084	100.00	22.00	42.00	11.113	9010640111130
1/2" - 20	4	9.00	7.00	11.463 - 11.661	100.00	20.00	40.00	12.700	9010640127000
5/8" - 18	4	12.00	9.00	14.501 - 14.702	100.00	22.00	44.00	15.875	9010640158750

# UNJC - Ni



**Series 1067**

**Standard DIN 2184-1**

**Standard DIN 371/376**

**Tool Material HSS-E PM**

**Flute RH 10° Spiral**

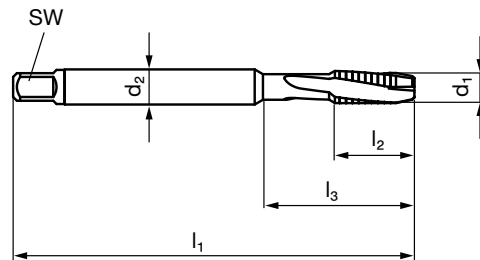
**Chamfer Form C (2-3)**



**Class of Fit 3BX**

**Cutting Direction right-hand**

-  blind holes
-  TiAlN coated
-  external cooling



d1 - P inch	Number of Flutes	d2 mm	SW mm	Minor Diameter Range mm	l1 mm	l2 mm	l3 mm	Order Code	EDP Number
6 - 32	3	4.00	3.00	2.733 - 2.939	56.00	12.00	20.00	3.505	9010670035050
8 - 32	3	4.50	3.40	3.393 - 3.599	63.00	13.00	25.00	4.166	9010670041660
10 - 24	3	6.00	4.90	3.795 - 4.064	70.00	14.00	25.00	4.826	9010670048260
12 - 24	3	6.00	4.90	4.455 - 4.704	80.00	16.00	30.00	5.486	9010670054860
1/4" - 20	3	7.00	5.50	5.113 - 5.387	80.00	16.00	30.00	6.350	9010670063500
5/16" - 18	3	8.00	6.20	6.563 - 6.833	90.00	18.00	35.00	7.938	9010670079380
3/8" - 16	3	10.00	8.00	7.978 - 8.255	100.00	20.00	39.00	9.525	9010670095250
7/16" - 14	4	8.00	6.20	9.346 - 9.639	100.00	22.00	42.00	11.113	9010670111130
1/2" - 13	4	9.00	7.00	10.798 - 11.095	110.00	25.00	49.00	12.700	9010670127000
5/8" - 11	4	12.00	9.00	13.627 - 13.904	110.00	30.00	53.00	15.875	9010670158750

# UNJF - Ni



**Series 1068**

**Standard DIN 2184-1**

**Standard DIN 371/374**

**Tool Material HSS-E PM**



**Flute RH 10° Spiral**

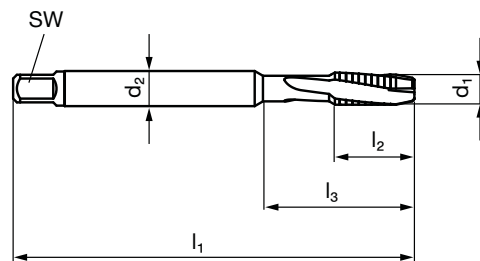
**Chamfer Form C (2-3)**



**Class of Fit 3BX**

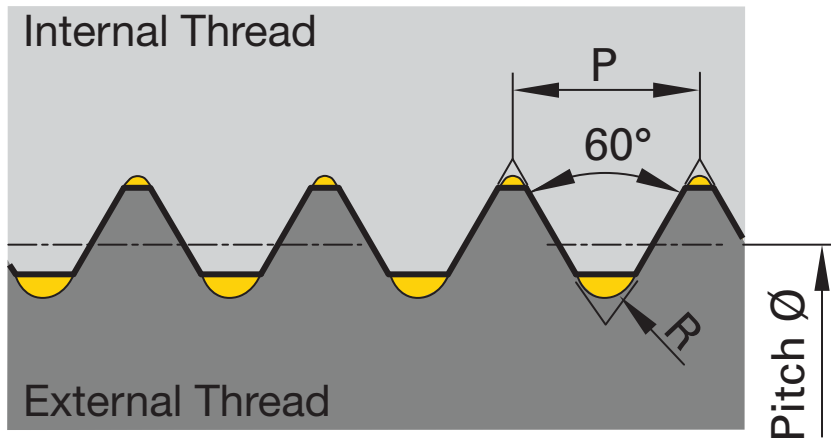
**Cutting Direction right-hand**

-  blind holes
-  TiAlN coated
-  external cooling



d1 - P mm	Number of Flutes	d2 mm	SW mm	Minor Diameter Range mm	l1 mm	l2 mm	l3 mm	Order Code	EDP Number
6 - 40	3	4.00	3.00	2.888 - 3.053	56.00	12.00	20.00	3.505	9010680035050
8 - 36	3	4.50	3.40	3.480 - 3.663	63.00	13.00	25.00	4.166	9010680041660
10 - 32	3	6.00	4.90	4.054 - 4.255	70.00	14.00	25.00	4.826	9010680048260
12 - 28	3	6.00	4.90	4.602 - 4.816	80.00	16.00	30.00	5.486	9010680054860
1/4" - 28	3	7.00	5.50	5.466 - 5.662	80.00	16.00	30.00	6.350	9010680063500
5/16" - 24	3	8.00	6.20	6.906 - 7.109	90.00	18.00	35.00	7.938	9010680079380
3/8" - 24	3	10.00	8.00	8.494 - 8.679	100.00	20.00	39.00	9.525	9010680095250
7/16" - 20	4	8.00	6.20	9.876 - 10.084	100.00	22.00	42.00	11.113	9010680111130
1/2" - 20	4	9.00	7.00	11.463 - 11.661	100.00	20.00	40.00	12.700	9010680127000
5/8" - 18	4	12.00	9.00	14.501 - 14.702	100.00	22.00	44.00	15.875	9010680158750

## Characteristics of J thread Types



The external (male) thread is manufactured with radii in the root of the thread for improved fastener strength.

The internal (female) thread is manufactured to the 3B class of fit for the pitch diameter, with a larger minor diameter to accommodate the radius in the root of the male thread.

## SFM recommendations for cut taps

Material	Approximate Hardness	HSS-E_PM, Hard Coated
Titanium Alloys	140 - 275 Brinell	20 - 30 sfm
	300 - 380 Brinell	10 - 20 sfm
Nickel Alloys	200 - 300 Brinell	10 - 20 sfm
	> 300 Brinell	6 - 12 sfm

UP TO 30% BETTER  
PERFORMANCE AT  
A POWER PRICE

Allows for 0.3 mm of compensation for up to 75% reduction in axial forces

Offers internal, peripheral or MQL lubrication

Extreme concentricity and application speed

First tapping chuck to offer combination of steel and polymer components for independent axial and torsional force dampening

Quick and simple handling, slim design

Maximum tool life and thread accuracy



The new **GÜHROSynC** tapping chuck

Synchro and hydraulic clamping technology intelligently combined

by **GUHRING**

**GÜHROSynC**



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