

# HSS-E



High Performance Cutting Tools



## SPIRAL POINT MACHINE TAPS

## SPIRAL POINTED TAP - SA SERIES



SPIRAL POINT is also known as 'gun nose' or 'bull nose' or chipdriver. These taps are dimensionally the same as a hand tap, second lead, but have the cutting face ground back relative to the axis of the tap, for the lead portion.

This gives the flute a better cutting action, requiring less power, and pushes the cut material forward, allowing free flow of coolant along the flutes to the cutting edge.

The flutes are not ground as deeply as for hand taps, giving the tap greater strength. It can therefore be run at higher speeds. Spiral point taps are ideal for machine tapping of through holes, or blind holes where there is enough clearance beyond the threaded portion to accommodate the swarf.

Advantages :

- Thread Chamfer is of 4.5 threads & cutting load is distributed
- Shallow flute depth, hence stronger tap
- Chip clogging is eliminated as the tap pushes the chip forward and thus enhancing tool life.




## SPIRAL POINT TAPS

SERIES		THREAD FORM	BLANK STANDARD	APPLICATION	CHAMFER	COATING	PAGE
SA1		M	DIN371/ DIN376	General Steel	B/4-4.5P	Bright	9
SA3		M	DIN371/ DIN376	General Steel	B/4-4.5P	TiN	10
SA4		M	DIN371/ DIN376	General Steel	B/4-4.5P	TiAlN	11
SAF3		M	DIN371/ DIN376	Forged Steel	B/4-4.5P	TiN	12
SAF5		M	DIN371/ DIN376	Forged Steel	B/4-4.5P	TiCN	13
SA1		MF	DIN374	General Steel	B/4-4.5P	Bright	14
SA3		MF	DIN374	General Steel	B/4-4.5P	TiN	15
SA4		MF	DIN374	General Steel	B/4-4.5P	TiAlN	16
SA1		UNC	DIN371/ DIN376	General Steel	B/4-4.5P	Bright	17
SA3		UNC	DIN371/ DIN376	General Steel	B/4-4.5P	TiN	18
SA4		UNC	DIN371/ DIN376	General Steel	B/4-4.5P	TiAlN	19
SA1		UNF	DIN374	General Steel	B/4-4.5P	Bright	20
SA3		UNF	DIN374	General Steel	B/4-4.5P	TiN	21
SA4		UNF	DIN374	General Steel	B/4-4.5P	TiAlN	22



## SPIRAL POINT TAPS

SERIES		THREAD FORM	BLANK STANDARD	APPLICATION	CHAMFER	COATING	PAGE
SA1		M	ISO	General Steel	B/4-4.5P	Bright	23
SA3		M	ISO	General Steel	B/4-4.5P	TiN	24
SA4		M	ISO	General Steel	B/4-4.5P	TiAlN	25
SAF3		M	ISO	Forged Steel	B/4-4.5P	TiN	26
SAF5		M	ISO	Forged Steel	B/4-4.5P	TiCN	27
SAS4		M	ISO	Stainless Steel	B/4-4.5P	TiAlN	28
SAS5		M	ISO	Stainless Steel	B/4-4.5P	TiCN	29
SA1		MF	ISO	General Steel	B/4-4.5P	Bright	30
SA3		MF	ISO	General Steel	B/4-4.5P	TiN	31
SA4		MF	ISO	General Steel	B/4-4.5P	TiAlN	32
SAF3		MF	ISO	Forged Steel	B/4-4.5P	TiN	33
SAF5		MF	ISO	Forged Steel	B/4-4.5P	TiCN	34
SA1L		M/MF	ISO Long Shank	General Steel	B/4-4.5P	Bright	35
SA3L		M/MF	ISO Long Shank	General Steel	B/4-4.5P	TiN	36
SA1		UNC	ISO	General Steel	B/4-4.5P	Bright	37
SA3		UNC	ISO	General Steel	B/4-4.5P	TiN	38
SA1		UNF	ISO	General Steel	B/4-4.5P	Bright	39
SA3		UNF	ISO	General Steel	B/4-4.5P	TiN	40

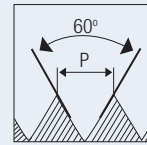


## Spiral Point Machine Taps

## SA1 Series



### Metric coarse threads



HOLE TYPE



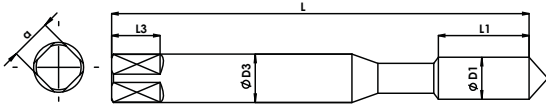
HSS-E

DIN  
371/376

6HX

8/4-4.5P

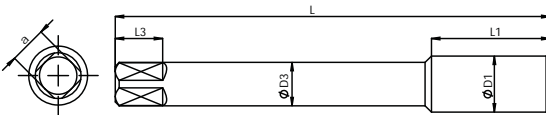
BF



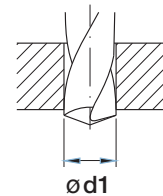
Reinforced Shank DIN371 (M3 - M10)



P0-P1



Reduced Shank DIN376 (M12 - M20)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 3	0.5	FAB0203112	56	11	3.5	2.7	6	2.5
M 3.5	0.6	FAB0203113	56	12	4	3	6	2.9
M 4	0.7	FAB0203114	63	13	4.5	3.4	6	3.3
M 5	0.8	FAB0203115	70	16	6	4.9	7	4.2
M 6	1	FAB0203116	80	19	6	4.9	7	5
M 8	1.25	FAB0203118	90	22	8	6.2	9	6.8
M 10	1.5	FAB0203119	100	24	10	8	11	8.5
M 12	1.75	FAB0203120	110	28	9	7	10	10.3
M 14	2	FAB0203121	110	30	11	9	12	12
M 16	2	FAB0203122	110	32	12	9	12	14
M 18	2.5	FAB0204201	125	34	14	11	14	15.5
M 20	2.5	FAB0204202	140	34	16	12	15	17.5

HSS TAPS

DIES

END MILLS

DRILLS

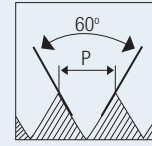
CARBIDE BURRS

CS TAPS



M

## Metric coarse threads



HOLE TYPE



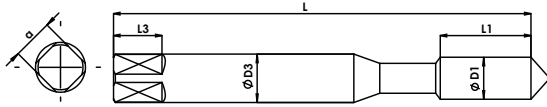
HSS-E

DIN  
371/376

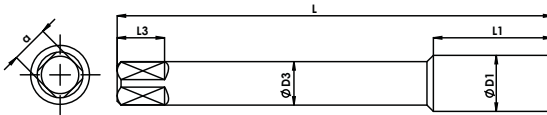
6HX

B/4-4.5P

TiN



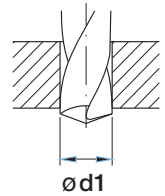
Reinforced Shank DIN371 (M3 - M10)



Reduced Shank DIN376 (M12 - M20)

P0-P2

K1-K2



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 3	0.5	FAB0203123	56	11	3.5	2.7	6	2.5
M 3.5	0.6	FAB0203124	56	12	4	3	6	2.9
M 4	0.7	FAB0203125	63	13	4.5	3.4	6	3.3
M 5	0.8	FAB0203126	70	16	6	4.9	7	4.2
M 6	1	FAB0203127	80	19	6	4.9	7	5
M 8	1.25	FAB0203129	90	22	8	6.2	9	6.8
M 10	1.5	FAB0203130	100	24	10	8	11	8.5
M 12	1.75	FAB0203131	110	28	9	7	10	10.3
M 14	2	FAB0203132	110	30	11	9	12	12
M 16	2	FAB0203133	110	32	12	9	12	14
M 18	2.5	FAB0204203	125	34	14	11	14	15.5
M 20	2.5	FAB0204204	140	34	16	12	15	17.5

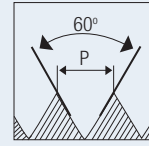


## Spiral Point Machine Taps

## SA4 Series



### Metric coarse threads



HOLE TYPE



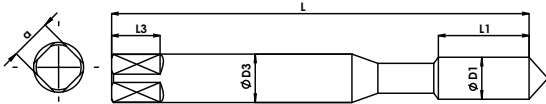
HSS-E

DIN  
371/376

6HX

B/4-4.5P

TiAIN

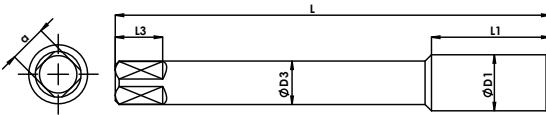


Reinforced Shank DIN371 (M 3 - M 10)

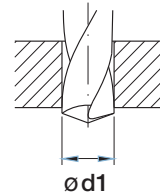


P0-P2

K1-K3



Reduced Shank DIN376 (M 12 - M 20)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 3	0.5	FAB0204205	56	11	3.5	2.7	6	2.5
M 3.5	0.6	FAB0204206	56	12	4	3	6	2.9
M 4	0.7	FAB0204207	63	13	4.5	3.4	6	3.3
M 5	0.8	FAB0204208	70	16	6	4.9	7	4.2
M 6	1	FAB0204209	80	19	6	4.9	7	5
M 8	1.25	FAB0204210	90	22	8	6.2	9	6.8
M 10	1.5	FAB0204211	100	24	10	8	11	8.5
M 12	1.75	FAB0204212	110	28	9	7	10	10.3
M 14	2	FAB0204213	110	30	11	9	12	12
M 16	2	FAB0204214	110	32	12	9	12	14
M 18	2.5	FAB0204215	125	34	14	11	14	15.5
M 20	2.5	FAB0204216	140	34	16	12	15	17.5

HSS TAPS

DIES

END MILLS

DRILLS

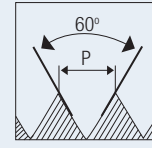
CARBIDE BURRS

CS TAPS



M

## Metric coarse threads



HOLE TYPE



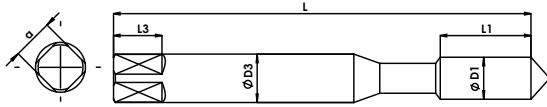
HSS-E

DIN  
371/376

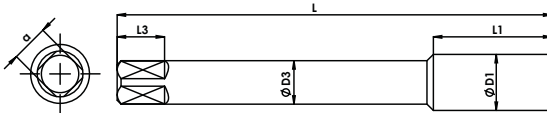
6HX

B/4-4.5P

TiN

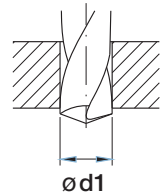


Reinforced Shank DIN371 (M 3 - M 10)



Reduced Shank DIN376 (M 12 - M 20)

P2-P3



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 3	0.5	FAB0204217	56	11	3.5	2.7	6	2.5
M 3.5	0.6	FAB0204218	56	12	4	3	6	2.9
M 4	0.7	FAB0204219	63	13	4.5	3.4	6	3.3
M 5	0.8	FAB0204220	70	16	6	4.9	7	4.2
M 6	1	FAB0204221	80	19	6	4.9	7	5
M 8	1.25	FAB0204222	90	22	8	6.2	9	6.8
M 10	1.5	FAB0204223	100	24	10	8	11	8.5
M 12	1.75	FAB0204224	110	28	9	7	10	10.3
M 14	2	FAB0204225	110	30	11	9	12	12
M 16	2	FAB0204226	110	32	12	9	12	14
M 18	2.5	FAB0204227	125	34	14	11	14	15.5
M 20	2.5	FAB0204228	140	34	16	12	15	17.5



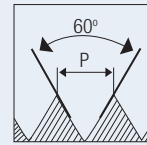


## Spiral Point Machine Taps

## SAF5 Series



### Metric coarse threads



HOLE TYPE



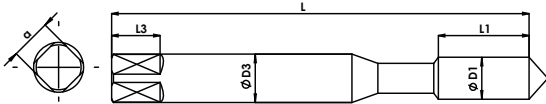
HSS-E

DIN  
371/376

6HX

B/4-4.5P

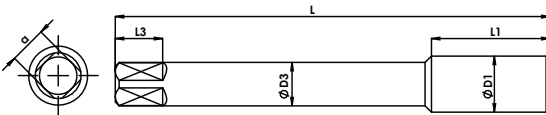
TiCN



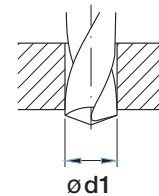
Reinforced Shank DIN371 (M 3 - M 10)



P2-P4



Reduced Shank DIN376 (M 12 - M 20)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 3	0.5	FAB0204229	56	11	3.5	2.7	6	2.5
M 3.5	0.6	FAB0204230	56	12	4	3	6	2.9
M 4	0.7	FAB0204231	63	13	4.5	3.4	6	3.3
M 5	0.8	FAB0204232	70	16	6	4.9	7	4.2
M 6	1	FAB0204233	80	19	6	4.9	7	5
M 8	1.25	FAB0204234	90	22	8	6.2	9	6.8
M 10	1.5	FAB0204235	100	24	10	8	11	8.5
M 12	1.75	FAB0204236	110	28	9	7	10	10.3
M 14	2	FAB0204237	110	30	11	9	12	12
M 16	2	FAB0204238	110	32	12	9	12	14
M 18	2.5	FAB0204239	125	34	14	11	14	15.5
M 20	2.5	FAB0204240	140	34	16	12	15	17.5

HSS TAPS

DIES

END MILLS

DRILLS

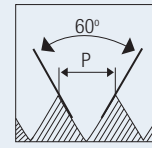
CARBIDE BURRS

CS TAPS



MF

## Metric fine threads



HOLE TYPE



HSS-E

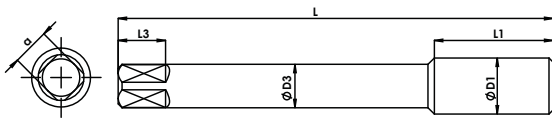
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374

6HX

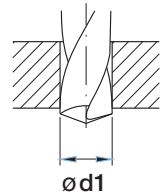
B/4-4.5P

BF

P0-P1



Male Centre (M6 - M10)  
Female Centre (M12 - M20)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 6	0.75	FAB0204241	80	14	4.5	3.4	6	5.2
M 8	1	FAB0204242	90	18	6	4.9	7	7
M 10	1.25	FAB0204243	100	22	7	5.5	8	8.8
M 10	1	FAB0204244	90	18	7	5.5	8	9
M 12	1.5	FAB0204245	100	22	9	7	10	10.5
M 12	1.25	FAB0204246	100	22	9	7	10	10.8
M 14	1.5	FAB0204247	100	22	11	9	12	12.5
M 14	1.25	FAB0204248	100	22	11	9	12	12.8
M 16	1.5	FAB0204249	100	22	12	11	12	14.5
M 18	1.5	FAB0204250	110	25	14	12	14	16.5
M 20	1.5	FAB0204251	125	25	16	14.5	15	18.5

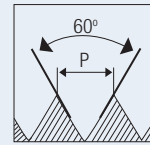


## Spiral Point Machine Taps

## SA3 Series

# MF

### Metric fine threads



HOLE TYPE



HSS-E

DIN 374

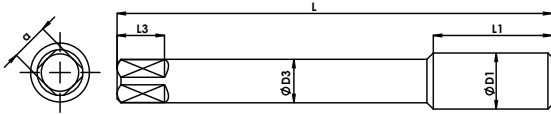
6HX

B/4-4.5P

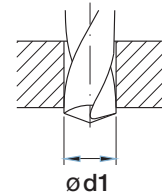
TiN

P0-P2

K1-K2



Male Centre (M6 - M10)  
Female Centre (M12 - M20)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 6	0.75	FAB0204252	80	13	4.5	3.4	6	5.2
M 8	1	FAB0204253	90	17	6	4.9	7	7
M 10	1.25	FAB0204254	100	22	7	5.5	8	8.8
M 10	1	FAB0204255	90	18	7	5.5	8	9
M 12	1.5	FAB0204256	100	22	9	7	10	10.5
M 12	1.25	FAB0204257	100	22	9	7	10	10.8
M 14	1.5	FAB0204258	100	22	11	9	12	12.5
M 14	1.25	FAB0204259	100	22	11	9	12	12.8
M 16	1.5	FAB0204260	100	22	12	11	12	14.5
M 18	1.5	FAB0204261	110	25	14	12	14	16.5
M 20	1.5	FAB0204262	125	25	16	14.5	15	18.5

HSS TAPS

DIES

END MILLS

DRILLS

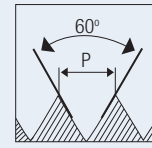
CARBIDE BURRS

CS TAPS



MF

## Metric fine threads



HOLE TYPE



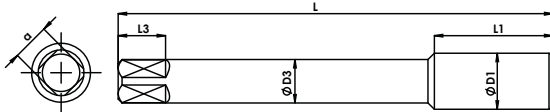
HSS-E

DIN  
374

6HX

B/4-4.5P

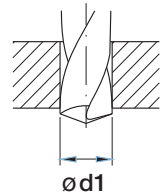
TiAIN



Male Centre (M6 - M10)  
Female Centre (M12 - M20)

P0-P2

K1-K3



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 6	0.75	FAB0204263	80	14	4.5	3.4	6	5.2
M 8	1	FAB0204264	90	18	6	4.9	7	7
M 10	1.25	FAB0204265	100	22	7	5.5	8	8.8
M 10	1	FAB0204266	90	18	7	5.5	8	9
M 12	1.5	FAB0204267	100	22	9	7	10	10.5
M 12	1.25	FAB0204268	100	22	9	7	10	10.8
M 14	1.5	FAB0204269	100	22	11	9	12	12.5
M 14	1.25	FAB0204270	100	22	11	9	12	12.8
M 16	1.5	FAB0204271	100	22	12	11	12	14.5
M 18	1.5	FAB0204272	110	25	14	12	14	16.5
M 20	1.5	FAB0204273	125	25	16	14.5	15	18.5

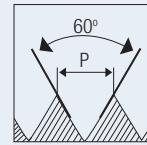


**Spiral Point Machine Taps**

**SA1 Series**

**UNC**

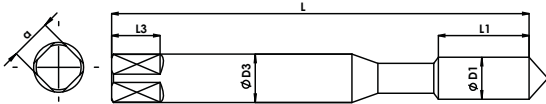
**Unified coarse threads**



HOLE TYPE



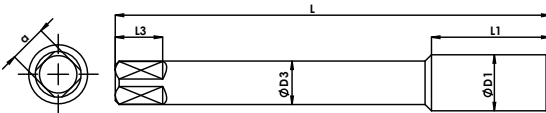
HSS-E
DIN 371/376
2B
8/4-4.5P
BF



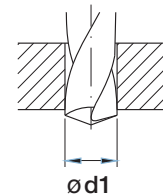
Reinforced Shank DIN371 (1/4" - 3/8")



**P0-P1**



Reduced Shank DIN376 (7/16" - 1")



Unit : mm

Nominal Diameter	TPI	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1			L	L1	ØD3	a	L3	Ød1
1/4"	20	FAB0204274	80	19	7	5.5	8	5.2
5/16"	18	FAB0204275	90	22	8	6.2	9	6.6
3/8"	16	FAB0204276	100	24	10	8	11	8
7/16"	14	FAB0204277	100	24	8	6.2	9	9.4
1/2"	13	FAB0204278	110	28	9	7	10	10.8
5/8"	11	FAB0204279	110	32	12	9	12	13.5
3/4"	10	FAB0204280	125	34	14	11	14	16.5
7/8"	9	FAB0204281	140	34	18	14.5	17	19.5
1"	8	FAB0204282	160	38	18	14.5	17	22.25

HSS TAPS

DIES

END MILLS

DRILLS

CARBIDE BURRS

CS TAPS

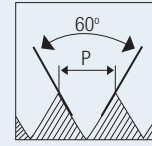


## Spiral Point Machine Taps

## SA3 Series

# UNC

## Unified coarse threads



HOLE TYPE



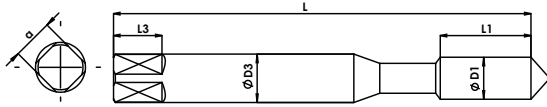
HSS-E

DIN  
371/376

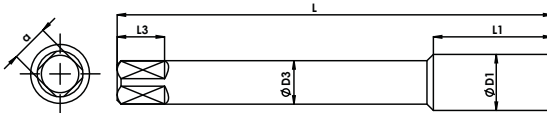
2B

B/4-4.5P

TiN



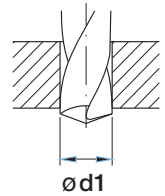
Reinforced Shank DIN371 (1/4" - 3/8")



Reduced Shank DIN376 (7/16" - 1")

P0-P2

K1-K2



Unit : mm

Nominal Diameter	TPI	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1			L	L1	ØD3	a	L3	Ød1
1/4"	20	FAB0204283	80	19	7	5.5	8	5.2
5/16"	18	FAB0204284	90	22	8	6.2	9	6.6
3/8"	16	FAB0204285	100	24	10	8	11	8
7/16"	14	FAB0204286	100	24	8	6.2	9	9.4
1/2"	13	FAB0204287	110	28	9	7	10	10.8
5/8"	11	FAB0204288	110	32	12	9	12	13.5
3/4"	10	FAB0204289	125	34	14	11	14	16.5
7/8"	9	FAB0204290	140	34	18	14.5	17	19.5
1"	8	FAB0204291	160	38	18	14.5	17	22.25

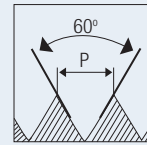


## Spiral Point Machine Taps

## SA4 Series

# UNC

### Unified coarse threads



HOLE TYPE



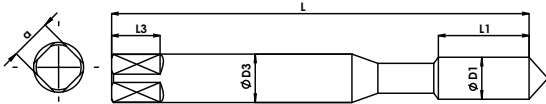
HSS-E

DIN  
371/376

2B



TiAIN

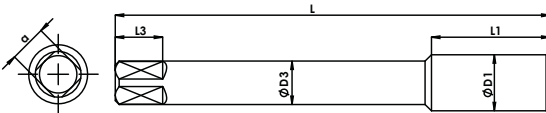


Reinforced Shank DIN371 (1/4" - 3/8")

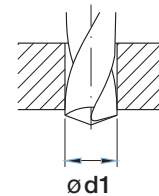


P0-P2

K1-K3



Reduced Shank DIN376 (7/16" - 1")



Unit : mm

Nominal Diameter	TPI	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
			L	L1	ØD3	a	L3	Ød1
1/4"	20	FAB0204292	80	19	7	5.5	8	5.2
5/16"	18	FAB0204293	90	22	8	6.2	9	6.6
3/8"	16	FAB0204294	100	24	10	8	11	8
7/16"	14	FAB0204295	100	24	8	6.2	9	9.4
1/2"	13	FAB0204296	110	28	9	7	10	10.8
5/8"	11	FAB0204297	110	32	12	9	12	13.5
3/4"	10	FAB0204298	125	34	14	11	14	16.5
7/8"	9	FAB0204299	140	34	18	14.5	17	19.5
1"	8	FAB0204300	160	38	18	14.5	17	22.25

HSS TAPS

DIES

END MILLS

DRILLS

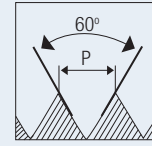
CARBIDE BURRS

CS TAPS



UNF

Unified fine threads



HOLE TYPE



HSS-E

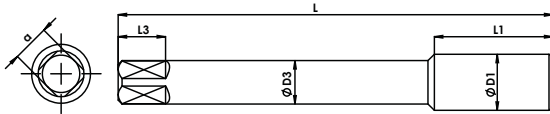
DIN  
374

2B

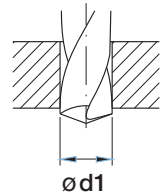
B/4-4.5P

BF

P0-P1



Male Centre (1/4" - 3/8")  
Female Centre (7/16" - 1")



Unit : mm

Nominal Diameter	TPI	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1			L	L1	ØD3	a	L3	Ød1
1/4"	28	FAB0204301	80	19	5.5	4.3	7	5.5
5/16"	24	FAB0204302	90	20	6	4.9	8	6.9
3/8"	24	FAB0204303	100	20	7	5.5	8	8.5
7/16"	20	FAB0204304	100	22	8	6.2	9	9.9
1/2"	20	FAB0204305	100	22	9	7	10	11.5
5/8"	18	FAB0204306	100	22	12	9	12	14.5
3/4"	16	FAB0204307	110	25	14	11	14	17.5
7/8"	14	FAB0204308	125	25	18	14.5	17	20.5
1"	12	FAB0204309	140	28	18	14.5	17	23.25



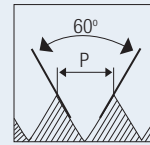


**Spiral Point Machine Taps**

**SA3 Series**

**UNF**

**Unified fine threads**



HOLE TYPE



HSS-E

DIN 374

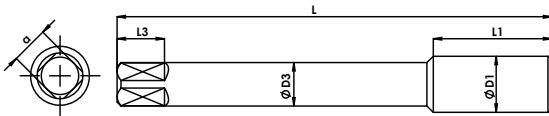
2B

8/4-4.5P

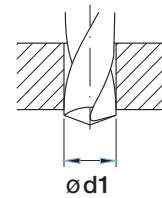
TiN

P0-P2

K1-K2



Male Centre (1/4" - 3/8")  
Female Centre (7/16" - 1")



Unit : mm

Nominal Diameter	TPI	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1			L	L1	ØD3	a	L3	Ød1
1/4"	28	FAB0204310	80	19	5.5	4.3	7	5.5
5/16"	24	FAB0204311	90	20	6	4.9	8	6.9
3/8"	24	FAB0204312	100	20	7	5.5	8	8.5
7/16"	20	FAB0204313	100	22	8	6.2	9	9.9
1/2"	20	FAB0204314	100	22	9	7	10	11.5
5/8"	18	FAB0204315	100	22	12	9	12	14.5
3/4"	16	FAB0204316	110	25	14	11	14	17.5
7/8"	14	FAB0204317	125	25	18	14.5	17	20.5
1"	12	FAB0204318	140	28	18	14.5	17	23.25

HSS TAPS

DIES

END MILLS

DRILLS

CARBIDE BURRS

CS TAPS

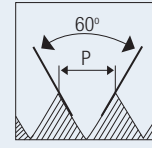


## Spiral Point Machine Taps

## SA4 Series

UNF

## Unified fine threads



HOLE TYPE



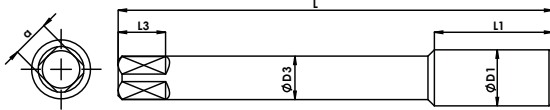
HSS-E

DIN  
374

2B

B/4-4.5P

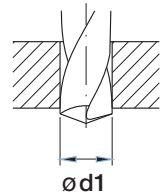
TiAIN



Male Centre (1/4" - 3/8")  
Female Centre (7/16" - 1")

P0-P2

K1-K3



Unit : mm

Nominal Diameter	TPI	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1			L	L1	ØD3	a	L3	Ød1
1/4"	28	FAB0204319	80	19	5.5	4.3	7	5.5
5/16"	24	FAB0204320	90	20	6	4.9	8	6.9
3/8"	24	FAB0204321	100	20	7	5.5	8	8.5
7/16"	20	FAB0204322	100	22	8	6.2	9	9.9
1/2"	20	FAB0204323	100	22	9	7	10	11.5
5/8"	18	FAB0204324	100	22	12	9	12	14.5
3/4"	16	FAB0204325	110	25	14	11	14	17.5
7/8"	14	FAB0204326	125	25	18	14.5	17	20.5
1"	12	FAB0204327	140	28	18	14.5	17	23.25

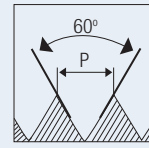


## Spiral Point Machine Taps

## SA1 Series



### Metric coarse threads



HOLE TYPE



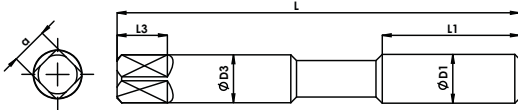
HSS-E

ISO 529

6HX

8/4-4.5P

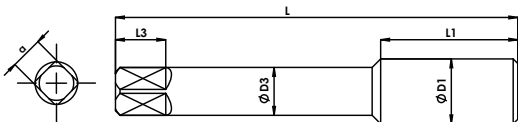
BF



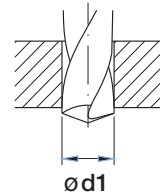
Reinforced Shank (M3 - M10)  
Male Centre upto M5



PO-P1



Reduced Shank (M12 - M20)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 3	0.5	FAB0200647	48	11	3.15	2.5	5	2.5
M 3.5	0.6	FAB0200653	50	13	3.55	2.8	5	2.9
M 4	0.7	FAB0200659	53	13	4	3.15	6	3.3
M 5	0.8	FAB0200671	58	16	5	4	7	4.2
M 6	1	FAB0200682	66	19	6.3	5	8	5
M 7	1	FAB0203033	66	19	7.1	5.6	8	6
M 8	1.25	FAB0200694	72	22	8	6.3	9	6.8
M 10	1.5	FAB0200718	80	24	10	8	11	8.5
M 12	1.75	FAB0200748	89	29	9	7.1	10	10.3
M 14	2	FAB0200778	95	30	11.2	9	12	12
M 16	2	FAB0200799	102	32	12.5	10	13	14
M 18	2.5	FAB0203037	112	37	14	11.2	14	15.5
M 20	2.5	FAB0203039	112	37	14	11.2	14	17.5

HSS TAPS

DIES

END MILLS

DRILLS

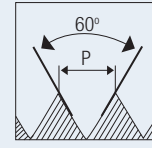
CARBIDE BURRS

CS TAPS



M

## Metric coarse threads



HOLE TYPE



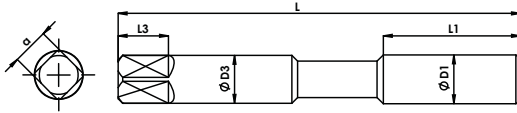
HSS-E

ISO  
529

6HX

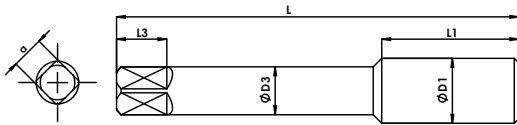
B/4-4.5P

TiN

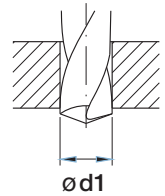
Reinforced Shank (M3 - M10)  
Male Centre upto M5

P0-P2

K1-K2



Reduced Shank (M12 - M20)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 3	0.5	FAB0200648	48	11	3.15	2.5	5	2.5
M 3.5	0.6	FAB0200654	50	13	3.55	2.8	5	2.9
M 4	0.7	FAB0200661	53	13	4	3.15	6	3.3
M 5	0.8	FAB0200673	58	16	5	4	7	4.2
M 6	1	FAB0200684	66	19	6.3	5	8	5
M 7	1	FAB0203040	66	19	7.1	5.6	8	6
M 8	1.25	FAB0200696	72	22	8	6.3	9	6.8
M 10	1.5	FAB0200720	80	24	10	8	11	8.5
M 12	1.75	FAB0200751	89	29	9	7.1	10	10.3
M 14	2	FAB0200780	95	30	11.2	9	12	12
M 16	2	FAB0200801	102	32	12.5	10	13	14
M 18	2.5	FAB0203043	112	37	14	11.2	14	15.5
M 20	2.5	FAB0200810	112	37	14	11.2	14	17.5

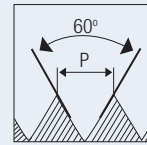


## Spiral Point Machine Taps

## SA4 Series



### Metric coarse threads



HOLE TYPE



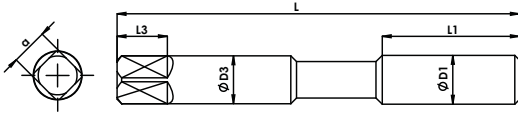
HSS-E

ISO 529

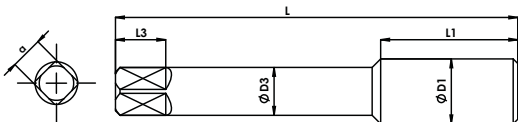
6HX

8/4-4.5P

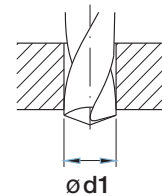
TiAIN



Reinforced Shank (M3 - M10)  
Male Centre upto M5



Reduced Shank (M12 - M20)



P0-P2

K1-K3

Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 3	0.5	FAB0203044	48	11	3.15	2.5	5	2.5
M 3.5	0.6	FAB0203045	50	13	3.55	2.8	5	2.9
M 4	0.7	FAB0200662	53	13	4	3.15	6	3.3
M 5	0.8	FAB0203046	58	16	5	4	7	4.2
M 6	1	FAB0200685	66	19	6.3	5	8	5
M 7	1	FAB0203047	66	19	7.1	5.6	8	6
M 8	1.25	FAB0200697	72	22	8	6.3	9	6.8
M 10	1.5	FAB0200721	80	24	10	8	11	8.5
M 12	1.75	FAB0203052	89	29	9	7.1	10	10.3
M 14	2	FAB0203054	95	30	11.2	9	12	12
M 16	2	FAB0203055	102	32	12.5	10	13	14
M 18	2.5	FAB0203057	112	37	14	11.2	14	15.5
M 20	2.5	FAB0203059	112	37	14	11.2	14	17.5

HSS TAPS

DIES

END MILLS

DRILLS

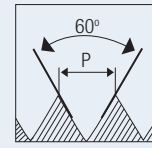
CARBIDE BURRS

CS TAPS



M

## Metric coarse threads



HOLE TYPE



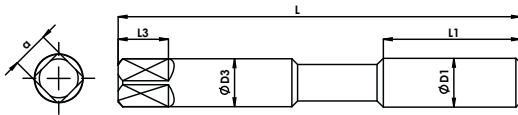
HSS-E

ISO  
529

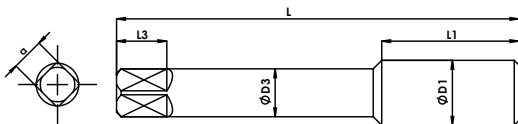
6HX

B/4-4.5P

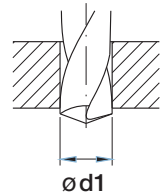
TiN

Reinforced Shank (M3 - M10)  
Male Centre upto M5

P2-P3



Reduced Shank (M12 - M16)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 3	0.5	FAB0203060	48	11	3.15	2.5	5	2.5
M 4	0.7	FAB0203061	53	13	4	3.15	6	3.3
M 5	0.8	FAB0203062	58	16	5	4	7	4.2
M 6	1	FAB0203063	66	19	6.3	5	8	5
M 8	1.25	FAB0203065	72	22	8	6.3	9	6.8
M 10	1.5	FAB0203068	80	24	10	8	11	8.5
M 12	1.75	FAB0203070	89	29	9	7.1	10	10.3
M 14	2	FAB0203072	95	30	11.2	9	12	12
M 16	2	FAB0203074	102	32	12.5	10	13	14

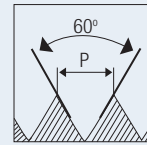


## Spiral Point Machine Taps

## SAF5 Series



### Metric coarse threads



HOLE TYPE



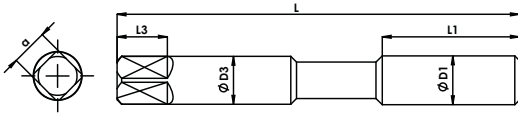
HSS-E

ISO 529

6HX

B/4-4.5P

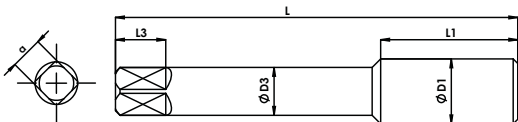
TiCN



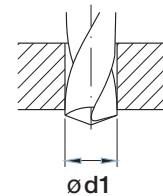
Reinforced Shank (M3 - M10)  
Male Centre upto M5



P2-P4



Reduced Shank (M12 - M16)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 3	0.5	FAB0203077	48	11	3.15	2.5	5	2.5
M 4	0.7	FAB0203078	53	13	4	3.15	6	3.3
M 5	0.8	FAB0203079	58	16	5	4	7	4.2
M 6	1	FAB0203080	66	19	6.3	5	8	5
M 8	1.25	FAB0203082	72	22	8	6.3	9	6.8
M 10	1.5	FAB0203085	80	24	10	8	11	8.5
M 12	1.75	FAB0203087	89	29	9	7.1	10	10.3
M 14	2	FAB0203089	95	30	11.2	9	12	12
M 16	2	FAB0203091	102	32	12.5	10	13	14

HSS TAPS

DIES

END MILLS

DRILLS

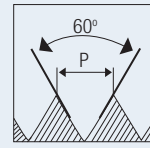
CARBIDE BURRS

CS TAPS



M

## Metric coarse threads



HOLE TYPE



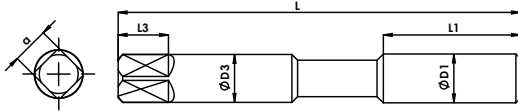
HSS-E

ISO  
529

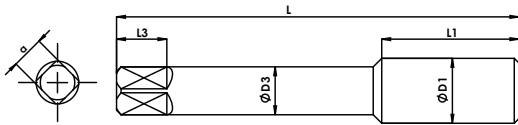
6HX

B/4-4.5P

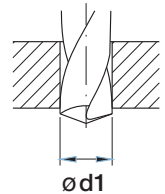
TiAIN

Reinforced Shank (M3 - M10)  
Male Centre upto M5

M1-M3



Reduced Shank (M12 - M16)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD	p		L	L1	ØD3	a	L3	Ød1
M 3	0.5	FAB0203094	48	11	3.15	2.5	5	2.5
M 4	0.7	FAB0203095	53	13	4	3.15	6	3.3
M 5	0.8	FAB0203096	58	16	5	4	7	4.2
M 6	1	FAB0203097	66	19	6.3	5	8	5
M 8	1.25	FAB0203098	72	22	8	6.3	9	6.8
M 10	1.5	FAB0203099	80	24	10	8	11	8.5
M 12	1.75	FAB0203100	89	29	9	7.1	10	10.3
M 14	2	FAB0203101	95	30	11.2	9	12	12
M 16	2	FAB0203102	102	32	12.5	10	13	14



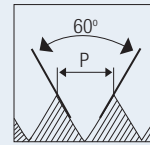


## Spiral Point Machine Taps

## SAS5 Series



### Metric coarse threads



HOLE TYPE



HSS-E

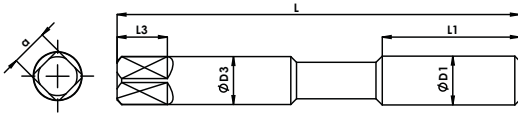
ISO 529

6HX

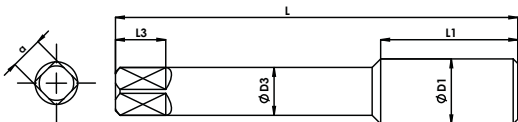
B/4-4.5P

TiCN

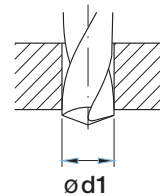
M1-M3



Reinforced Shank (M3 - M10)  
Male Centre upto M5



Reduced Shank (M12 - M16)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 3	0.5	FAB0203103	48	11	3.15	2.5	5	2.5
M 4	0.7	FAB0203104	53	13	4	3.15	6	3.3
M 5	0.8	FAB0203105	58	16	5	4	7	4.2
M 6	1	FAB0203106	66	19	6.3	5	8	5
M 8	1.25	FAB0203107	72	22	8	6.3	9	6.8
M 10	1.5	FAB0203108	80	24	10	8	11	8.5
M 12	1.75	FAB0203109	89	29	9	7.1	10	10.3
M 14	2	FAB0203110	95	30	11.2	9	12	12
M 16	2	FAB0203111	102	32	12.5	10	13	14

HSS TAPS

DIES

END MILLS

DRILLS

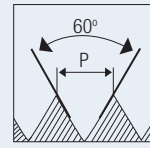
CARBIDE BURRS

CS TAPS



MF

Metric fine threads



HOLE TYPE



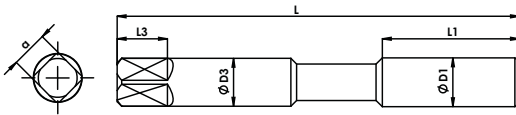
HSS-E

ISO  
529

6HX

B/4-4.5P

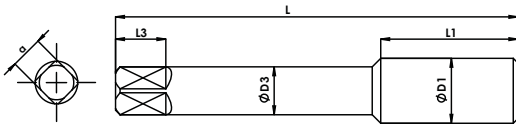
BF



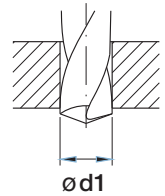
Reinforced Shank (M8 - M10)



P0-P1



Reduced Shank (M12 - M20)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 8	1	FAB0203034	69	19	8	6.3	9	7
M 10	1	FAB0203035	76	20	10	8	11	9
M 10	1.25	FAB0200708	76	20	10	8	11	8.8
M 12	1.5	FAB0200738	89	29	9	7.1	10	10.5
M 14	1.5	FAB0200769	95	30	11.2	9	12	12.5
M 16	1.5	FAB0200787	102	32	12.5	10	13	14.5
M 18	1.5	FAB0203036	104	29	14	11.2	14	16.5
M 20	1.5	FAB0203038	104	29	14	11.2	14	18.5

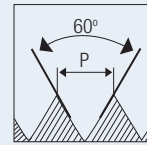


## Spiral Point Machine Taps

## SA3 series



### Metric fine threads



HOLE TYPE



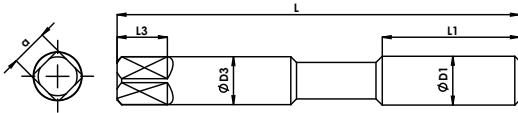
HSS-E

ISO 529

6HX

B/4-4.5P

TiN

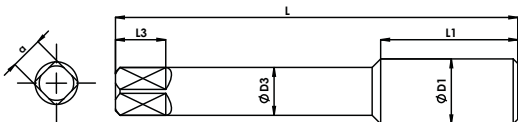


Reinforced Shank (M8 - M10)

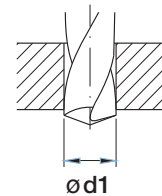


P1-P2

K1-K2



Reduced Shank (M12 - M20)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD	p		L	L1	ØD3	a	L3	Ød1
M 8	1	FAB0203041	69	19	8	6.3	9	7
M 10	1	FAB0200702	76	20	10	8	11	9
M 10	1.25	FAB0200710	76	20	10	8	11	8.8
M 12	1.5	FAB0200740	89	29	9	7.1	10	10.5
M 14	1.5	FAB0200771	95	30	11.2	9	12	12.5
M 16	1.5	FAB0200789	102	32	12.5	10	13	14.5
M 18	1.5	FAB0203042	104	29	14	11.2	14	16.5
M 20	1.5	FAB0200807	104	29	14	11.2	14	18.5

HSS TAPS

DIES

END MILLS

DRILLS

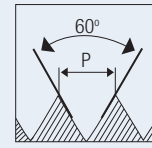
CARBIDE BURRS

CS TAPS



MF

## Metric fine threads



HOLE TYPE



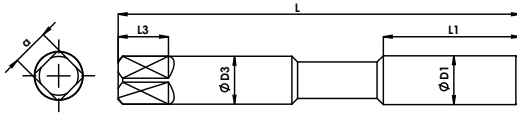
HSS-E

ISO  
529

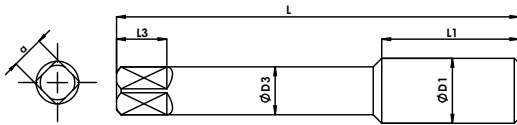
6HX

B/4-4.5P

TiAIN



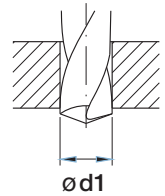
Reinforced Shank (M8 - M10)



Reduced Shank (M12 - M20)

P0-P2

K1-K3



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD	p		L	L1	ØD3	a	L3	Ød1
M 8	1	FAB0203048	69	19	8	6.3	9	7
M 10	1	FAB0203049	76	20	10	8	11	9
M 10	1.25	FAB0203050	76	20	10	8	11	8.8
M 12	1.5	FAB0203051	89	29	9	7.1	10	10.5
M 14	1.5	FAB0203053	95	30	11.2	9	12	12.5
M 16	1.5	FAB0200790	102	32	12.5	10	13	14.5
M 18	1.5	FAB0203056	104	29	14	11.2	14	16.5
M 20	1.5	FAB0203058	104	29	14	11.2	14	18.5

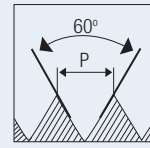


## Spiral Point Machine Taps

## SAF3 Series



### Metric fine threads



HOLE TYPE



HSS-E

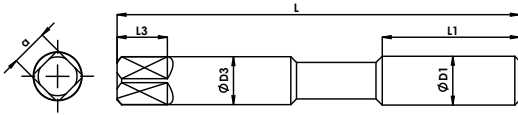
ISO 529

6HX

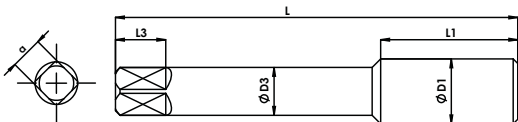
B/4-4.5P

TiN

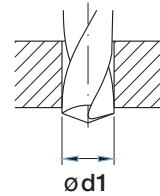
P2-P3



Reinforced Shank (M8 - M10)



Reduced Shank (M12 - M20)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 8	1	FAB0203064	69	19	8	6.3	9	7
M 10	1	FAB0203066	76	20	10	8	11	9
M 10	1.25	FAB0203067	76	20	10	8	11	8.8
M 12	1.5	FAB0203069	89	29	9	7.1	10	10.5
M 14	1.5	FAB0203071	95	30	11.2	9	12	12.5
M 16	1.5	FAB0203073	102	32	12.5	10	13	14.5
M 18	1.5	FAB0203075	104	29	14	11.2	14	16.5
M 20	1.5	FAB0203076	104	29	14	11.2	14	18.5

HSS TAPS

DIES

END MILLS

DRILLS

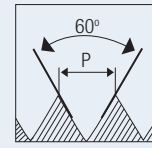
CARBIDE BURRS

CS TAPS



MF

Metric fine threads



HOLE TYPE



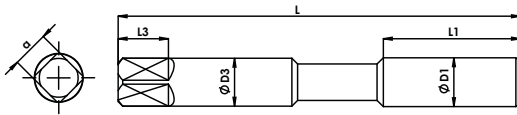
HSS-E

ISO  
529

6HX

B/4-4.5P

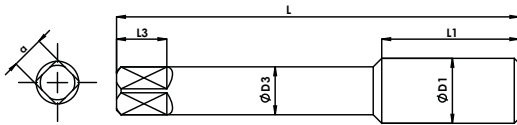
TiCN



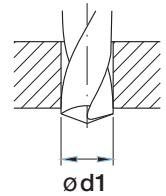
Reinforced Shank (M8 - M10)



P2-P4



Reduced Shank (M12 - M20)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 8	1	FAB0203081	69	19	8	6.3	9	7
M 10	1	FAB0203083	76	20	10	8	11	9
M 10	1.25	FAB0203084	76	20	10	8	11	8.8
M 12	1.5	FAB0203086	89	29	9	7.1	10	10.5
M 14	1.5	FAB0203088	95	30	11.2	9	12	12.5
M 16	1.5	FAB0203090	102	32	12.5	10	13	14.5
M 18	1.5	FAB0203092	104	29	14	11.2	14	16.5
M 20	1.5	FAB0203093	104	29	14	11.2	14	18.5

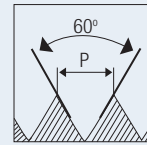


## Spiral Point Machine Taps

## SA1L Series

# M/MF

### Metric coarse & fine threads - long shank

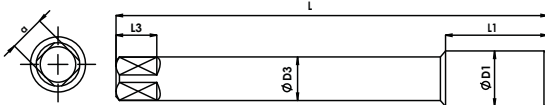


HOLE TYPE

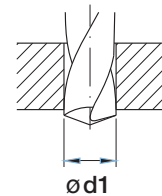


HSS-E
ISO 529
6HX
B/4-4.5P
BF

**P0-P1**



Male centre (M4 - M5)  
Female centre (M6 - M16)



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 4	0.7	FAB0200818	73	13	3.15	2.5	5	3.3
M 5	0.8	FAB0200822	79	16	4	3.15	6	4.2
M 6	1	FAB0200832	89	19	4.5	3.55	6	5
M 8	1.25	FAB0200843	97	22	6.3	5	8	6.8
M 10	1.5	FAB0200854	108	24	8	6.3	9	8.5
M 12	1.5	FAB0200865	119	29	9	7.1	10	10.5
M 12	1.75	FAB0200876	119	29	9	7.1	10	10.3
M 14	1.5	FAB0200886	127	30	11.2	9	12	12.5
M 14	2	FAB0203264	127	30	11.2	9	12	12
M 16	1.5	FAB0203265	137	32	12.5	10	13	14.5
M 16	2	FAB0203266	137	32	12.5	10	13	14

HSS TAPS

DIES

END MILLS

DRILLS

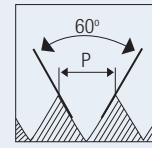
CARBIDE BURRS

CS TAPS



## Spiral Point Machine Taps

## SA3L Series

**M/MF****Metric coarse & fine threads -  
long shank**

HOLE TYPE



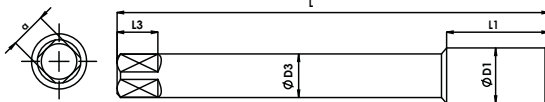
HSS-E

ISO  
529

6HX

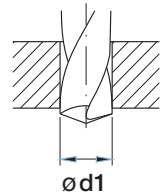
B/4-4.5P

TiN

Male centre (M4 - M5)  
Female centre (M6 - M16)

P0-P2

K1-K2



Unit : mm

Nominal Diameter	Pitch	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1	p		L	L1	ØD3	a	L3	Ød1
M 4	0.7	FAB0200820	73	13	3.15	2.50	5	3.3
M 5	0.8	FAB0200824	79	16	4	3.15	6	4.2
M 6	1	FAB0200834	89	19	4.5	3.55	6	5
M 8	1.25	FAB0200845	97	22	6.3	5.00	8	6.8
M 10	1.5	FAB0200856	108	24	8	6.30	9	8.5
M 12	1.5	FAB0200867	119	29	9	7.10	10	10.5
M 12	1.75	FAB0200878	119	29	9	7.10	10	10.3
M 14	1.5	FAB0200888	127	30	11.2	9.00	12	12.5
M 14	2	FAB0203267	127	30	11.2	9.00	12	12
M 16	1.5	FAB0203268	137	32	12.5	10.00	13	14.5
M 16	2	FAB0203269	137	32	12.5	10.00	13	14



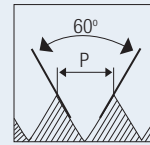


**Spiral Point Machine Taps**

**SA1 Series**

**UNC**

**Unified coarse threads**

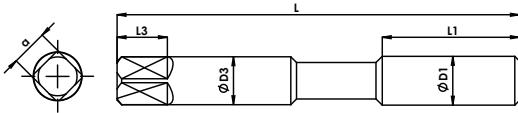


HOLE TYPE

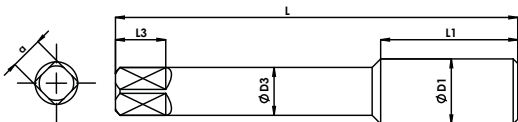


HSS-E
ISO 529
2B
8/4-4.5P
BF

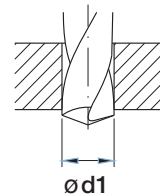
**P0-P1**



Reinforced Shank (1/4" - 3/8")



Reduced Shank (7/16" - 3/4")



Unit : mm

Nominal Diameter	TPI	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1			L	L1	ØD3	a	L3	Ød1
1/4"	20	FAB0200573	66	19	6.3	5	8	3.2
5/16"	18	FAB0200582	72	22	8	6.3	9	6.6
3/8"	16	FAB0200593	80	24	10	8	11	8
7/16"	14	FAB0200603	85	25	8	6.3	9	9.4
1/2"	13	FAB0200614	89	29	9	7.1	10	10.8
5/8"	11	FAB0200627	102	32	12.5	10	13	13.5
3/4"	10	FAB0200638	112	37	14	11.2	14	16.5

HSS TAPS

DIES

END MILLS

DRILLS

CARBIDE BURRS

CS TAPS

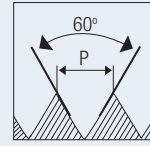


## Spiral Point Machine Taps

## SA3 Series

UNC

Unified coarse threads



HOLE TYPE



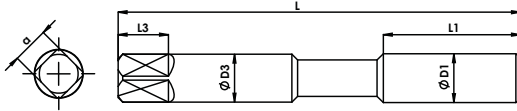
HSS-E

ISO  
529

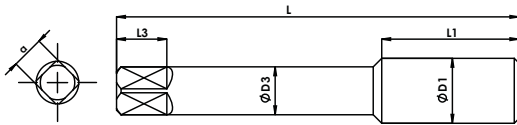
2B

B/4-4.5P

TiN



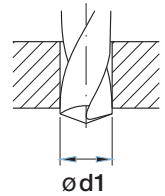
Reinforced Shank (1/4" - 3/8")



Reduced Shank (7/16" - 3/4")

P0-P2

K1-K2



Unit : mm

Nominal Diameter	TPI	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1			L	L1	ØD3	a	L3	Ød1
1/4"	20	FAB0200575	66	19	6.3	5	8	3.2
5/16"	18	FAB0200584	72	22	8	6.3	9	6.6
3/8"	16	FAB0200595	80	24	10	8	11	8
7/16"	14	FAB0200605	85	25	8	6.3	9	9.4
1/2"	13	FAB0200616	89	29	9	7.1	10	10.8
5/8"	11	FAB0200629	102	32	12.5	10	13	13.5
3/4"	10	FAB0200640	112	37	14	11.2	14	16.5

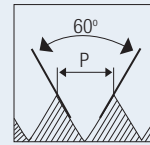


**Spiral Point Machine Taps**

**SA1 Series**

**UNF**

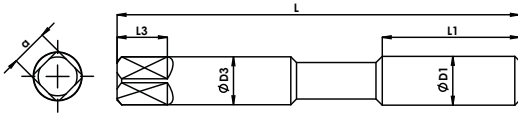
**Unified fine threads**



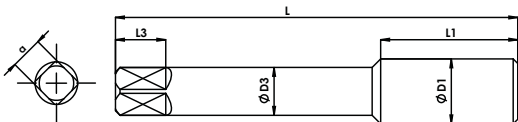
HOLE TYPE



HSS-E
ISO 529
2B
8/4-4.5P
BF

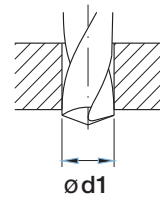


Reinforced Shank (1/4" - 3/8")



Reduced Shank (7/16" - 3/4")

**P0-P1**



Unit : mm

Nominal Diameter	TPI	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1			L	L1	ØD3	a	L3	Ød1
1/4"	28	FAB0200497	66	19	6.3	5	8	5.5
5/16"	24	FAB0200506	69	19	8	6.3	9	6.9
3/8"	24	FAB0200517	76	20	10	8	11	8.5
7/16"	20	FAB0200528	82	22	8	6.3	9	9.9
1/2"	20	FAB0200539	84	24	9	7.1	10	11.5
5/8"	18	FAB0200552	95	25	12.5	10	13	14.5
3/4"	16	FAB0200563	104	29	14	11.2	14	17.5

HSS TAPS

DIES

END MILLS

DRILLS

CARBIDE BURRS

CS TAPS

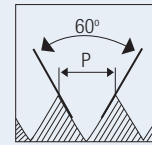


## Spiral Point Machine Taps

## SA3 Series

UNF

Unified fine threads



HOLE TYPE



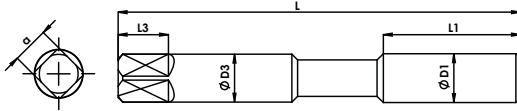
HSS-E

ISO  
529

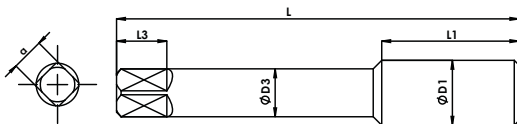
2B

B/4-4.5P

TiN



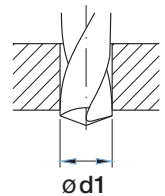
Reinforced Shank (1/4" - 3/8")



Reduced Shank (7/16" - 3/4")

P0-P2

K1-K2



Unit : mm

Nominal Diameter	TPI	EDP No.	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	Tapping Drill Diameter
ØD1			L	L1	ØD3	a	L3	Ød1
1/4"	28	FAB0200499	66	19	6.3	5	8	5.5
5/16"	24	FAB0200508	69	19	8	6.3	9	6.9
3/8"	24	FAB0200519	76	20	10	8	11	8.5
7/16"	20	FAB0200530	82	22	8	6.3	9	9.9
1/2"	20	FAB0200541	84	24	9	7.1	10	11.5
5/8"	18	FAB0200554	95	25	12.5	10	13	14.5
3/4"	16	FAB0200565	104	29	14	11.2	14	17.5