

# HSS



High Performance Cutting Tools



# HAND TAPS

## HSS HAND TAPS



These are straight flute general purpose taps which can be used for both machine or hand tapping. They are generally the most economical tool for use on production runs, but are best on materials that produce chips, or where the swarf breaks readily. Where deep holes are to be tapped, in materials which produce stringy swarf, other types of taps may be needed, especially for coarse threads.

Hand taps can be supplied in sets of three; bottom, second and taper leads, or individually.

**BOTTOM TAPS** have a chamfer (lead) of 1–2 threads, the angle of the lead being around 18 degrees per side. They are used to produce threads close to the bottom of blind holes.

**SECOND TAPS** have a lead of 3-5 threads at 8 degrees per side. They are the most popular and can be used for through holes, or blind holes where the thread does not need to go right to the bottom.

**TAPER TAPS** have a lead of 7-10 threads at 5 degrees per side. The taper lead distributes the cutting force over a large area, and the taper shape helps the thread to start. They can therefore be used to start a thread prior to use of second or bottom leads, or for through holes.



## HSS HAND TAPS

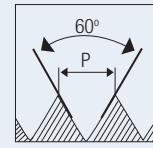
|   | THREAD FORM | BLANK STANDARD | APPLICATION | CHAMFER     | COATING | PAGE |
|---|-------------|----------------|-------------|-------------|---------|------|
|    | M           | ISO            | 6H          | T/S/B       | Bright  | 114  |
|    | MF          | ISO            | 6H          | T/B         | Bright  | 116  |
|    | M           | ISO Long Shank | 6H          | T           | Bright  | 119  |
|    | M           | ISO Long Shank | 6H          | S           | Bright  | 120  |
|    | M/MF        | ISO Long Shank | 6H          | B           | Bright  | 121  |
|    | M/MF        | ISO Long Shank | 6H          | B/4-4.5P    | Bright  | 123  |
|    | M           | ISO            | 6H          | Serial Form | Bright  | 124  |
|    | BSW         | ISO            | 6H          | T/S/B       | Bright  | 125  |
|  | BSF         | ISO            | 6H          | T/S/B       | Bright  | 127  |
|  | BA          | ISO            | 6H          | T/S/B       | Bright  | 128  |
|  | BSB         | ISO            | 6H          | T/S/B       | Bright  | 129  |
|  | BS Con      | ISO            | 6H          | T/B         | Bright  | 130  |
|  | ME          | ISO            | 6H          | T/S/B       | Bright  | 131  |
|  | BSP         | ISO 2284       | 6H          | T/B         | Bright  | 132  |
|  | BSPT        | ISO 2284       | 6H          | T/B         | Bright  | 133  |
|  | UNC         | ISO            | 2B          | T/S/B       | Bright  | 134  |
|  | UNF         | ISO            | 2B          | T/S/B       | Bright  | 136  |
|  | NPT         | ANSI           | 6H          | T/B         | Bright  | 138  |
|  | NPS         | ANSI           | 6H          | T/B         | Bright  | 139  |



## HSS Hand Taps

M

## Metric coarse threads



HOLE TYPE



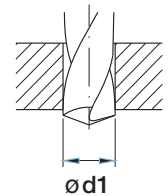
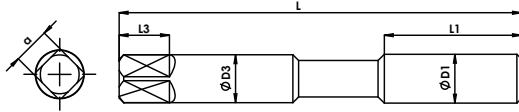
HSS

ISO  
529

6H

T/S/B

BF

Reinforced Shank (M3 - M10)  
Male Centre upto M5

Unit : mm

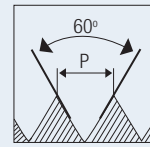
| Nominal Diameter | Pitch | EDP No.    | Overall Length | Thread Length | Shank Diameter | Square Size | Square Length | Tapping Drill Diameter |
|------------------|-------|------------|----------------|---------------|----------------|-------------|---------------|------------------------|
| ØD1              | p     |            | L              | L1            | ØD3            | a           | L3            | Ød1                    |
| M 1.6            | 0.35  | FAA0201729 | 41             | 8             | 2.5            | 2           | 4             | 1.25                   |
| M 2              | 0.4   | FAA0201745 | 41             | 8             | 2.5            | 2           | 4             | 1.6                    |
| M 2.2            | 0.45  | FAA0201761 | 44.5           | 9.5           | 2.8            | 2.24        | 5             | 1.75                   |
| M 2.3            | 0.4   | FAA0201766 | 44.5           | 9.5           | 2.8            | 2.24        | 5             | 1.9                    |
| M 2.5            | 0.45  | FAA0201771 | 44.5           | 9.5           | 2.8            | 2.24        | 5             | 2.05                   |
| M 2.6            | 0.45  | FAA0201782 | 44.5           | 9.5           | 2.8            | 2.24        | 5             | 2.15                   |
| M 3              | 0.5   | FAA0201787 | 48             | 11            | 3.15           | 2.5         | 5             | 2.5                    |
| M 3.5            | 0.6   | FAA0201828 | 50             | 13            | 3.55           | 2.8         | 5             | 2.9                    |
| M 4              | 0.7   | FAA0201847 | 53             | 13            | 4              | 3.15        | 6             | 3.3                    |
| M 4.5            | 0.75  | FAA0201889 | 53             | 13            | 4.5            | 3.55        | 6             | 3.75                   |
| M 5              | 0.8   | FAA0201897 | 58             | 16            | 5              | 4           | 7             | 4.2                    |
| M 6              | 1     | FAA0201939 | 66             | 19            | 6.3            | 5           | 8             | 5                      |
| M 7              | 1     | FAA0201985 | 66             | 19            | 7.1            | 5.6         | 8             | 6                      |
| M 8              | 1.25  | FAA0202003 | 72             | 22            | 8              | 6.3         | 9             | 6.75                   |
| M 9              | 1.25  | FAA0202051 | 72             | 22            | 9              | 7.1         | 10            | 7.75                   |
| M 10             | 1.5   | FAA0202072 | 80             | 24            | 10             | 8           | 11            | 8.5                    |
| M 11             | 1.5   | FAA0202123 | 85             | 25            | 8              | 6.3         | 9             | 9.5                    |



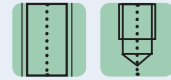
## HSS Hand Taps



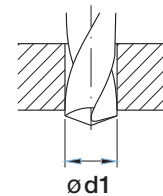
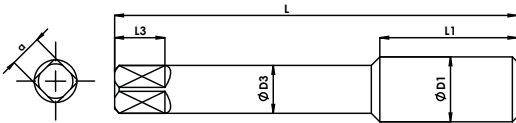
### Metric coarse threads



HOLE TYPE



HSS
ISO 529
6H
T/S/B
BF



Reduced Shank (M12 - M56)

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 12             | 1.75  | FAA0202141 | 89             | 29            | 9              | 7.1         | 10            | 10.25                  |
| M 14             | 2     | FAA0202177 | 95             | 30            | 11.2           | 9           | 12            | 12                     |
| M 16             | 2     | FAA0202204 | 102            | 32            | 12.5           | 10          | 13            | 14                     |
| M 18             | 2.5   | FAA0202247 | 112            | 37            | 14             | 11.2        | 14            | 15.5                   |
| M 20             | 2.5   | FAA0202265 | 112            | 37            | 14             | 11.2        | 14            | 17.5                   |
| M 22             | 2.5   | FAA0202302 | 118            | 38            | 16             | 12.5        | 16            | 19.5                   |
| M 24             | 3     | FAA0202325 | 130            | 45            | 18             | 14          | 18            | 21                     |
| M 27             | 3     | FAA0202360 | 135            | 45            | 20             | 16          | 20            | 24                     |
| M 30             | 3.5   | FAA0202381 | 138            | 48            | 20             | 16          | 20            | 26.5                   |
| M 33             | 3.5   | FAA0202405 | 151            | 51            | 22.4           | 18          | 22            | 29.5                   |
| M 36             | 4     | FAA0202418 | 162            | 57            | 25             | 20          | 24            | 32                     |
| M 39             | 4     | FAA0202440 | 170            | 60            | 28             | 22.4        | 26            | 35                     |
| M 42             | 4.5   | FAA0202449 | 170            | 60            | 28             | 22.4        | 26            | 37.5                   |
| M 45             | 4.5   | FAA0202459 | 187            | 67            | 31.5           | 25          | 28            | 40.5                   |
| M 48             | 5     | FAA0202468 | 187            | 67            | 31.5           | 25          | 28            | 43                     |
| M 52             | 5     | FAA0202477 | 200            | 70            | 35.5           | 28          | 31            | 47                     |
| M 56             | 5.5   | FAA0202481 | 200            | 70            | 35.5           | 28          | 31            | 50.5                   |

HSS TAPS

DIES

END MILLS

DRILLS

CARBIDE BURRS

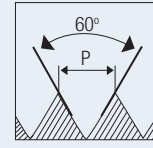
CS TAPS



HSS Hand Taps

MF

## Metric fine threads



HOLE TYPE



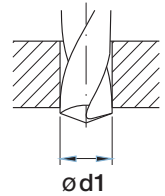
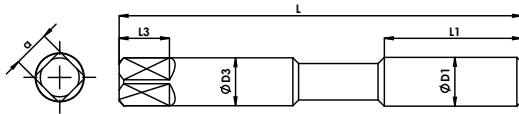
HSS

ISO  
529

6H

T/B

BF

Reinforced Shank (M3 - M10)  
Male Centre upto M5

Unit : mm

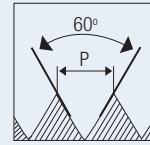
| Nominal Diameter | Pitch | EDP No.    | Overall Length | Thread Length | Shank Diameter | Square Size | Square Length | Tapping Drill Diameter |
|------------------|-------|------------|----------------|---------------|----------------|-------------|---------------|------------------------|
| ØD1              | p     |            | L              | L1            | ØD3            | a           | L3            | Ød1                    |
| M 3              | 0.35  | FAA0202535 | 48             | 11            | 3.15           | 2.5         | 5             | 2.12                   |
| M 3              | 0.6   | FAA0202541 | 48             | 11            | 3.15           | 2.5         | 5             | 2.12                   |
| M 4              | 0.5   | FAA0202564 | 53             | 13            | 4              | 3.15        | 6             | 2.8                    |
| M 4              | 0.75  | FAA0202575 | 53             | 13            | 4              | 3.15        | 6             | 2.8                    |
| M 5              | 0.5   | FAA0202588 | 58             | 16            | 5              | 4           | 7             | 3.55                   |
| M 5.5            | 0.9   | FAA0202614 | 62             | 17            | 5.6            | 4.5         | 7             | 4                      |
| M 6              | 0.5   | FAA0202626 | 66             | 19            | 6.3            | 5           | 8             | 4.5                    |
| M 6              | 0.75  | FAA0202633 | 66             | 19            | 6.3            | 5           | 8             | 4.5                    |
| M 7              | 0.75  | FAA0202665 | 66             | 19            | 7.1            | 5.6         | 8             | 5.3                    |
| M 8              | 1     | FAA0202697 | 69             | 19            | 8              | 6.3         | 9             | 6                      |
| M 9              | 1     | FAA0202731 | 69             | 19            | 9              | 7.1         | 10            | 7.1                    |
| M 10             | 1     | FAA0202758 | 76             | 20            | 10             | 8           | 11            | 7.5                    |
| M 10             | 1.25  | FAA0202786 | 76             | 20            | 10             | 8           | 11            | 7.5                    |
| M 11             | 1.25  | FAA0202829 | 82             | 22            | 8              | 6.3         | 9             | 9.75                   |
| M 12             | 1     | FAA0202845 | 80             | 24            | 9              | 7.1         | 10            | 11                     |
| M 12             | 1.25  | FAA0202869 | 84             | 24            | 9              | 7.1         | 10            | 10.8                   |
| M 12             | 1.5   | FAA0202893 | 89             | 29            | 9              | 7.1         | 10            | 10.5                   |
| M 14             | 1     | FAA0202945 | 87             | 22            | 11.2           | 9           | 12            | 13                     |
| M 14             | 1.25  | FAA0202966 | 90             | 25            | 11.2           | 9           | 12            | 12.8                   |
| M 14             | 1.5   | FAA0202988 | 95             | 30            | 11.2           | 9           | 12            | 13.5                   |
| M 16             | 1     | FAA0203041 | 92             | 22            | 12.5           | 10          | 13            | 15                     |



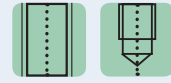
## HSS Hand Taps

# MF

## Metric fine threads



HOLE TYPE



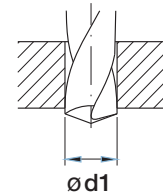
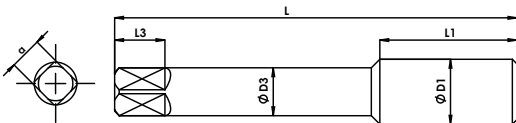
HSS

ISO 529

6H

T/B

BF



Reduced Shank (M12 - M56)

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 16             | 1.5   | FAA0203063 | 102            | 32            | 12.5           | 10          | 13            | 14.5                   |
| M 18             | 1     | FAA0203097 | 97             | 22            | 14             | 11.2        | 14            | 17                     |
| M 18             | 1.5   | FAA0203106 | 104            | 29            | 14             | 11.2        | 14            | 16.5                   |
| M 18             | 2     | FAA0203129 | 112            | 37            | 14             | 11.2        | 14            | 16                     |
| M 20             | 1     | FAA0203146 | 102            | 27            | 14             | 11.2        | 14            | 19                     |
| M 20             | 1.5   | FAA0203155 | 104            | 29            | 14             | 11.2        | 14            | 18.5                   |
| M 20             | 2     | FAA0203180 | 112            | 37            | 14             | 11.2        | 14            | 18                     |
| M 22             | 1     | FAA0203195 | 109            | 29            | 16             | 12.5        | 16            | 21                     |
| M 22             | 1.5   | FAA0203201 | 113            | 33            | 16             | 12.5        | 16            | 20.5                   |
| M 22             | 2     | FAA0203218 | 118            | 38            | 16             | 12.5        | 16            | 20                     |
| M 24             | 1     | FAA0203227 | 114            | 29            | 18             | 14          | 18            | 23                     |
| M 24             | 1.5   | FAA0203233 | 120            | 35            | 18             | 14          | 18            | 22.5                   |
| M 24             | 2     | FAA0203253 | 120            | 35            | 18             | 14          | 18            | 22                     |
| M 25             | 1     | FAA0203266 | 114            | 29            | 18             | 14          | 18            | 24                     |
| M 25             | 1.5   | FAA0203273 | 120            | 35            | 18             | 14          | 18            | 23.5                   |
| M 27             | 1.5   | FAA0203306 | 127            | 37            | 20             | 16          | 20            | 25.5                   |
| M 27             | 2     | FAA0203315 | 127            | 37            | 20             | 16          | 20            | 25                     |
| M 28             | 1.5   | FAA0203328 | 127            | 37            | 20             | 16          | 20            | 26.5                   |
| M 30             | 1.5   | FAA0203343 | 127            | 37            | 20             | 16          | 20            | 28.5                   |
| M 30             | 2     | FAA0203358 | 127            | 37            | 20             | 16          | 20            | 28                     |

HSS TAPS

DIES

END MILLS

DRILLS

CARBIDE BURRS

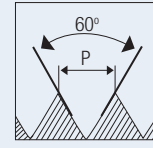
CS TAPS



## HSS Hand Taps

MF

## Metric fine threads



HOLE TYPE



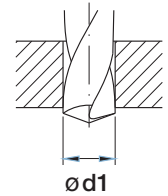
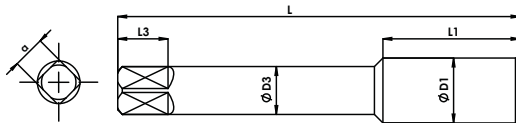
HSS

ISO  
529

6H

T/B

BF



Reduced Shank (M12 - M56)

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 30             | 3     | FAA0203370 | 138            | 48            | 20             | 16          | 20            | 27                     |
| M 32             | 1.5   | FAA0203384 | 137            | 37            | 22.4           | 18          | 22            | 30.5                   |
| M 33             | 1.5   | FAA0203397 | 137            | 37            | 22.4           | 18          | 22            | 31.5                   |
| M 33             | 2     | FAA0203402 | 137            | 37            | 22.4           | 18          | 22            | 31                     |
| M 33             | 3     | FAA0203408 | 151            | 51            | 22.4           | 18          | 22            | 30                     |
| M 36             | 1.5   | FAA0203434 | 144            | 39            | 25             | 20          | 24            | 34.5                   |
| M 36             | 2     | FAA0203441 | 144            | 39            | 25             | 20          | 24            | 34                     |
| M 36             | 3     | FAA0203449 | 162            | 57            | 25             | 20          | 24            | 33                     |
| M 39             | 1.5   | FAA0203463 | 149            | 39            | 28             | 22.4        | 26            | 37.5                   |
| M 39             | 2     | FAA0203466 | 149            | 39            | 28             | 22.4        | 26            | 37                     |
| M 39             | 3     | FAA0203469 | 170            | 60            | 28             | 22.4        | 26            | 36                     |
| M 40             | 1.5   | FAA0203476 | 149            | 39            | 28             | 22.4        | 26            | 38.5                   |
| M 42             | 1.5   | FAA0203489 | 149            | 39            | 28             | 22.4        | 26            | 40.5                   |
| M 42             | 3     | FAA0203499 | 170            | 60            | 28             | 22.4        | 26            | 39                     |
| M 45             | 1.5   | FAA0203520 | 165            | 45            | 31.5           | 25          | 28            | 43.5                   |
| M 45             | 3     | FAA0203528 | 187            | 67            | 31.5           | 25          | 28            | 42                     |
| M 48             | 1.5   | FAA0203532 | 165            | 45            | 31.5           | 25          | 28            | 46.5                   |
| M 48             | 2     | FAA0203538 | 165            | 45            | 31.5           | 25          | 28            | 46                     |
| M 48             | 3     | FAA0203545 | 187            | 67            | 31.5           | 25          | 28            | 45                     |

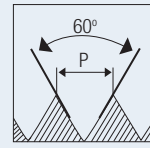




## HSS Hand Taps



### Metric coarse threads - long shank

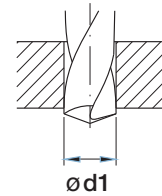
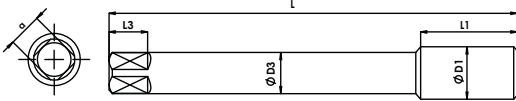


(Taper-Type A)

HOLE TYPE



HSS
ISO 2283
6H
T
BF



Unit : mm

| Nominal Diameter | Pitch | EDP No.    | Overall Length | Thread Length | Shank Diameter | Square Size | Square Length | Tapping Drill Diameter |
|------------------|-------|------------|----------------|---------------|----------------|-------------|---------------|------------------------|
| ØD1              | TPI   |            | L              | L1            | ØD3            | a           | L3            | Ød1                    |
| M 3              | 0.5   | FAA0203714 | 66             | 11            | 2.24           | 1.8         | 4             | 2.5                    |
| M 4              | 0.7   | FAA0203721 | 73             | 13            | 3.15           | 2.5         | 5             | 3.3                    |
| M 5              | 0.8   | FAA0203738 | 79             | 16            | 4              | 3.15        | 6             | 4.2                    |
| M 6              | 1     | FAA0203747 | 89             | 19            | 4.5            | 3.55        | 6             | 5                      |
| M 8              | 1.25  | FAA0203770 | 97             | 22            | 6.3            | 5           | 8             | 6.75                   |
| M 10             | 1.5   | FAA0203794 | 108            | 24            | 8              | 6.3         | 9             | 8.5                    |
| M 12             | 1.75  | FAA0203816 | 119            | 29            | 9              | 7.1         | 10            | 10.25                  |
| M 14             | 2     | FAA0207063 | 127            | 30            | 11.2           | 9           | 12            | 12.5                   |
| M 16             | 2     | FAA0203852 | 137            | 32            | 12.5           | 10          | 13            | 14                     |
| M 18             | 2.5   | FAA0203867 | 149            | 37            | 14             | 11.2        | 14            | 15.5                   |
| M 20             | 2.5   | FAA0203884 | 149            | 37            | 14             | 11.2        | 14            | 17.5                   |

HSS TAPS

DIES

END MILLS

DRILLS

CARBIDE BURRS

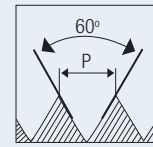
CS TAPS



## HSS Hand Taps

M

## Metric coarse threads - long shank



(Second-Type D)

HOLE TYPE



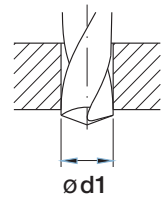
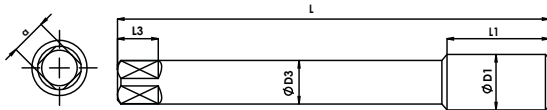
HSS

ISO  
2283

6H

S

BF



Unit : mm

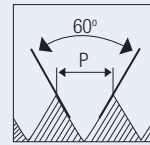
| Nominal Diameter | Pitch | EDP No.    | Overall Length | Thread Length | Shank Diameter | Square Size | Square Length | Tapping Drill Diameter |
|------------------|-------|------------|----------------|---------------|----------------|-------------|---------------|------------------------|
| ØD1              | p     |            | L              | L1            | ØD3            | a           | L3            | Ød1                    |
| M 3              | 0.5   | FAA0203715 | 66             | 11            | 2.24           | 1.8         | 4             | 2.5                    |
| M 4              | 0.7   | FAA0203722 | 73             | 13            | 3.15           | 2.5         | 5             | 3.3                    |
| M 5              | 0.8   | FAA0203739 | 79             | 16            | 4              | 3.15        | 6             | 4.2                    |
| M 6              | 1     | FAA0203748 | 89             | 19            | 4.5            | 3.55        | 6             | 5                      |
| M 8              | 1.25  | FAA0203771 | 97             | 22            | 6.3            | 5           | 8             | 6.75                   |
| M 10             | 1.5   | FAA0203795 | 108            | 24            | 8              | 6.3         | 9             | 8.5                    |
| M 12             | 1.75  | FAA0203817 | 119            | 29            | 9              | 7.1         | 10            | 10.25                  |
| M 14             | 2     | FAA0207305 | 127            | 30            | 11.2           | 9           | 12            | 12                     |
| M 16             | 2     | FAA0203853 | 137            | 32            | 12.5           | 10          | 13            | 14                     |
| M 18             | 2.5   | FAA0207306 | 149            | 37            | 14             | 11.2        | 14            | 15.5                   |
| M 20             | 2.5   | FAA0203885 | 149            | 37            | 14             | 11.2        | 14            | 17.5                   |



## HSS Hand Taps

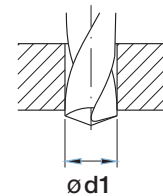
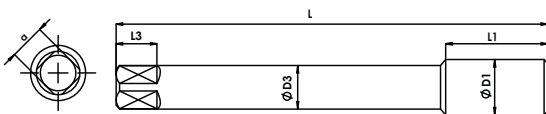
# M/MF

## Metric coarse & fine threads - long shank



(Bottom-Type C)

HOLE TYPE



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   | FAA0203716 | 66             | 11            | 2.24           | 1.8         | 4             | 2.5                    |
| M 3.5            | 0.6   | FAA0203719 | 68             | 13            | 2.5            | 2           | 4             | 2.9                    |
| M 4              | 0.7   | FAA0203723 | 73             | 13            | 3.15           | 2.5         | 5             | 3.3                    |
| M 5              | 0.8   | FAA0203740 | 79             | 16            | 4              | 3.15        | 6             | 4.2                    |
| M 6              | 1     | FAA0203749 | 89             | 19            | 4.5            | 3.55        | 6             | 5                      |
| M 7              | 1     | FAA0203759 | 89             | 19            | 5.6            | 4.5         | 7             | 6                      |
| M 8              | 1     | FAA0203767 | 97             | 19            | 6.3            | 5           | 8             | 7                      |
| M 8              | 1.25  | FAA0203772 | 97             | 22            | 6.3            | 5           | 8             | 6.75                   |
| M 9              | 1.25  | FAA0203781 | 97             | 22            | 7.1            | 5.6         | 8             | 7.75                   |
| M 10             | 1     | FAA0203786 | 108            | 20            | 8              | 6.3         | 9             | 9                      |
| M 10             | 1.25  | FAA0203792 | 108            | 20            | 8              | 6.3         | 9             | 8.75                   |
| M 10             | 1.5   | FAA0203796 | 108            | 24            | 8              | 6.3         | 9             | 8.5                    |
| M 12             | 1.25  | FAA0203808 | 119            | 24            | 9              | 7.1         | 10            | 10.75                  |
| M 12             | 1.5   | FAA0203813 | 119            | 29            | 9              | 7.1         | 10            | 10.5                   |

HSS TAPS

DIES

END MILLS

DRILLS

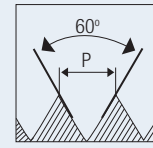
CARBIDE BURRS

CS TAPS



## HSS Hand Taps

M/MF

Metric coarse & fine threads  
- long shank

(Bottom-Type C)

HOLE TYPE



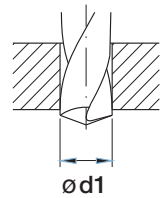
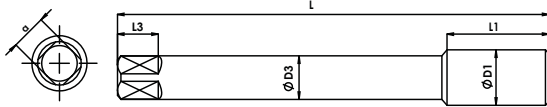
HSS

ISO  
2283

6H

B

BF



Unit : mm

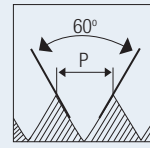
| Nominal Diameter | Pitch | EDP No.    | Overall Length | Thread Length | Shank Diameter | Square Size | Square Length | Tapping Drill Diameter |
|------------------|-------|------------|----------------|---------------|----------------|-------------|---------------|------------------------|
| ØD1              | p     |            | L              | L1            | ØD3            | a           | L3            | Ød1                    |
| M 12             | 1.75  | FAA0203818 | 119            | 29            | 9              | 7.1         | 10            | 10.25                  |
| M 14             | 1.25  | FAA0203828 | 127            | 25            | 11.2           | 9           | 12            | 12.75                  |
| M 14             | 1.5   | FAA0203832 | 127            | 30            | 11.2           | 9           | 12            | 12.5                   |
| M 14             | 2     | FAA0203841 | 127            | 30            | 11.2           | 9           | 12            | 12                     |
| M 16             | 1.5   | FAA0203849 | 137            | 32            | 12.5           | 10          | 13            | 14.5                   |
| M 16             | 2     | FAA0203854 | 137            | 32            | 12.5           | 10          | 13            | 14                     |
| M 18             | 1.5   | FAA0203864 | 149            | 29            | 14             | 11.2        | 14            | 16.5                   |
| M 18             | 2.5   | FAA0203868 | 149            | 37            | 14             | 11.2        | 14            | 15.5                   |
| M 20             | 1.5   | FAA0203875 | 149            | 29            | 14             | 11.2        | 14            | 18.5                   |
| M 20             | 2.5   | FAA0203886 | 149            | 37            | 14             | 11.2        | 14            | 17.5                   |
| M 22             | 2.5   | FAA0203902 | 158            | 38            | 16             | 12.5        | 16            | 19.5                   |
| M 24             | 3     | FAA0203918 | 172            | 45            | 18             | 14          | 18            | 21                     |
| M 27             | 3     | FAA0203940 | 180            | 45            | 20             | 16          | 20            | 24                     |
| M 30             | 3.5   | FAA0203955 | 183            | 48            | 20             | 16          | 20            | 26.5                   |



## HSS Hand Taps

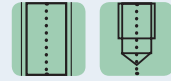
# M/MF

## Metric coarse & fine threads - long shank



(SPPT-Type B)

HOLE TYPE

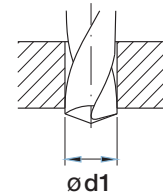
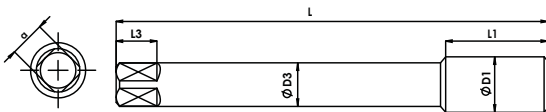


HSS

ISO 2283

6H

BF



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   | FAA0203717 | 66             | 11            | 2.24           | 1.8         | 4             | 2.5                    |
| M 3.5            | 0.6   | FAA0203720 | 68             | 13            | 2.5            | 2           | 4             | 2.9                    |
| M 4              | 0.7   | FAA0203726 | 73             | 13            | 3.15           | 2.5         | 5             | 3.3                    |
| M 5              | 0.8   | FAA0203743 | 79             | 16            | 4              | 3.15        | 6             | 4.2                    |
| M 6              | 1     | FAA0203753 | 89             | 19            | 4.5            | 3.55        | 6             | 5                      |
| M 8              | 1.25  | FAA0203775 | 97             | 22            | 6.3            | 5           | 8             | 6.75                   |
| M 10             | 1.25  | FAA0203793 | 108            | 20            | 8              | 6.3         | 9             | 8.75                   |
| M 10             | 1.5   | FAA0203798 | 108            | 24            | 8              | 6.3         | 9             | 8.5                    |
| M 12             | 1.5   | FAA0203815 | 119            | 29            | 9              | 7.1         | 10            | 10.5                   |
| M 12             | 1.75  | FAA0203821 | 119            | 29            | 9              | 7.1         | 10            | 10.25                  |
| M 14             | 1.5   | FAA0203835 | 127            | 30            | 11.2           | 9           | 12            | 12.5                   |
| M 14             | 2     | FAA0203842 | 127            | 30            | 11.2           | 9           | 12            | 12                     |
| M 16             | 1.5   | FAA0203851 | 137            | 32            | 12.5           | 10          | 13            | 14.5                   |
| M 16             | 2     | FAA0203857 | 137            | 32            | 12.5           | 10          | 13            | 14                     |
| M 18             | 1.5   | FAA0203865 | 142            | 29            | 14             | 11.2        | 14            | 16.5                   |
| M 18             | 2.5   | FAA0203869 | 149            | 37            | 14             | 11.2        | 14            | 15.5                   |
| M 20             | 1.5   | FAA0203878 | 142            | 29            | 14             | 11.2        | 14            | 18.5                   |
| M 20             | 2.5   | FAA0203888 | 149            | 37            | 14             | 11.2        | 14            | 17.5                   |
| M 22             | 2.5   | FAA0203903 | 158            | 38            | 16             | 12.5        | 16            | 19.5                   |
| M 24             | 3     | FAA0203920 | 172            | 45            | 18             | 14          | 18            | 21                     |

HSS TAPS

DIES

END MILLS

DRILLS

CARBIDE BURRS

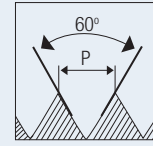
CS TAPS



## HSS Hand Taps

M

## Metric coarse threads - serial form



HOLE TYPE



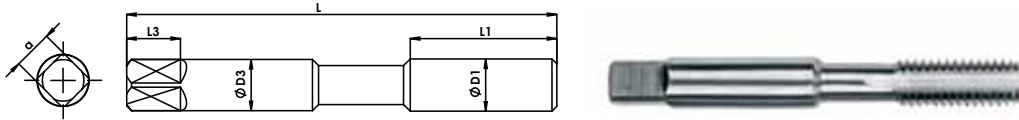
HSS

ISO  
529

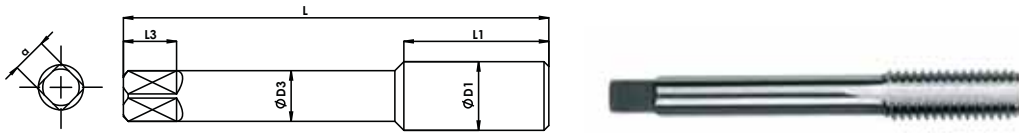
6H

T/S/B

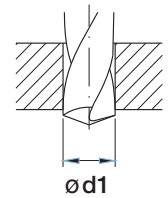
BF



Reinforced Shank (M3 - M10)



Reduced Shank (M12 - M30)



Unit : mm

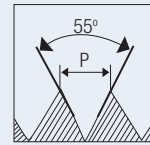
| Nominal Diameter | Pitch | EDP No.    | Overall Length | Thread Length | Shank Diameter | Square Size | Square Length | Tapping Drill Diameter |
|------------------|-------|------------|----------------|---------------|----------------|-------------|---------------|------------------------|
| ØD1              | p     |            | L              | L1            | ØD3            | a           | L3            | Ød1                    |
| M 3              | 0.5   | FAA0201820 | 48             | 11            | 3.15           | 2.5         | 5             | 2.5                    |
| M 4              | 0.7   | FAA0201880 | 53             | 13            | 4              | 3.15        | 6             | 3.3                    |
| M 5              | 0.8   | FAA0201931 | 58             | 16            | 5              | 4           | 7             | 4.2                    |
| M 6              | 1     | FAA0201976 | 66             | 19            | 6.3            | 5           | 8             | 5                      |
| M 8              | 1.25  | FAA0202036 | 72             | 22            | 8              | 6.3         | 9             | 6.75                   |
| M 10             | 1.5   | FAA0202107 | 80             | 24            | 10             | 8           | 11            | 8.5                    |
| M 12             | 1.75  | FAA0202170 | 89             | 29            | 9              | 7.1         | 10            | 10.25                  |
| M 14             | 2     | FAA0202197 | 95             | 30            | 11.2           | 9           | 12            | 12                     |
| M 16             | 2     | FAA0202232 | 102            | 32            | 12.5           | 10          | 13            | 14                     |
| M 18             | 2.5   | FAA0202262 | 112            | 37            | 14             | 11.2        | 14            | 15.5                   |
| M 20             | 2.5   | FAA0202292 | 112            | 37            | 14             | 11.2        | 14            | 17.5                   |
| M 22             | 2.5   | FAA0202321 | 118            | 38            | 16             | 12.5        | 16            | 19.5                   |
| M 24             | 3     | FAA0202348 | 130            | 45            | 18             | 14          | 18            | 21                     |
| M 27             | 3     | FAA0202375 | 135            | 45            | 20             | 16          | 20            | 24                     |
| M 30             | 3.5   | FAA0202400 | 138            | 48            | 20             | 16          | 20            | 26.5                   |



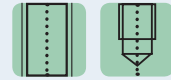
## HSS Hand Taps

# BSW

## Whitworth coarse threads



HOLE TYPE



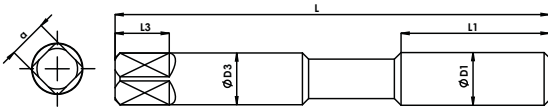
HSS

ISO 529

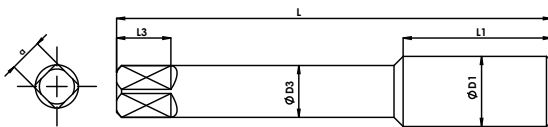
6H



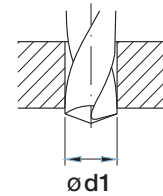
BF



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



Reduced Shank (7/16" - 2")



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                    |
| 1/8"             | 40  | FAA0200009 | 48             | 11            | 3.15           | 2.5         | 5             | 2.55                   |
| 5/32"            | 32  | FAA0200020 | 53             | 13            | 4              | 3.15        | 6             | 3.2                    |
| 3/16"            | 24  | FAA0200034 | 58             | 16            | 5              | 4           | 7             | 3.7                    |
| 1/4"             | 20  | FAA0200061 | 66             | 19            | 6.3            | 5           | 8             | 5.1                    |
| 5/16"            | 18  | FAA0200094 | 72             | 22            | 8              | 6.3         | 9             | 6.5                    |
| 3/8"             | 16  | FAA0200115 | 80             | 24            | 10             | 8           | 11            | 7.9                    |
| 7/16"            | 14  | FAA0200139 | 85             | 25            | 8              | 6.3         | 9             | 9.3                    |
| 1/2"             | 12  | FAA0200159 | 89             | 29            | 9              | 7.1         | 10            | 10.5                   |
| 9/16"            | 12  | FAA0200177 | 95             | 30            | 11.2           | 9           | 12            | 12.1                   |
| 5/8"             | 11  | FAA0200189 | 102            | 32            | 12.5           | 10          | 13            | 13.5                   |
| 11/16"           | 11  | FAA0200230 | 112            | 37            | 14             | 11.2        | 14            | 15.1                   |

HSS TAPS

DIES

END MILLS

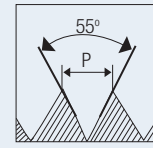
DRILLS

CARBIDE BURRS

CS TAPS



## HSS Hand Taps

**BSW****Whitworth coarse threads**

HOLE TYPE



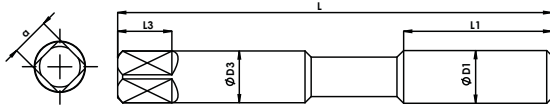
HSS

ISO  
529

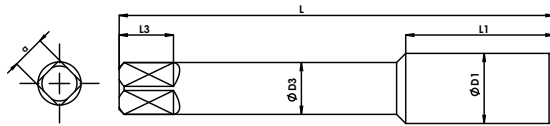
6H

T/S/B

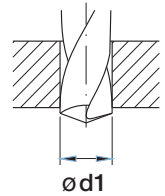
BF



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



Reduced Shank (7/16" - 2")



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                    |
| 3/4"             | 10  | FAA0200211 | 112            | 37            | 14             | 11.2        | 14            | 16.25                  |
| 7/8"             | 9   | FAA0200235 | 118            | 38            | 16             | 12.5        | 16            | 19.25                  |
| 1"               | 8   | FAA0200254 | 130            | 45            | 18             | 14          | 18            | 22                     |
| 1.1/8"           | 7   | FAA0200274 | 138            | 48            | 20             | 16          | 20            | 24.75                  |
| 1.1/4"           | 7   | FAA0200281 | 151            | 51            | 22.4           | 18          | 22            | 28                     |
| 1.3/8"           | 6   | FAA0200290 | 162            | 57            | 25             | 20          | 24            | 30.1                   |
| 1.1/2"           | 6   | FAA0200294 | 170            | 60            | 28             | 22.4        | 26            | 33.5                   |
| 1.5/8"           | 5   | FAA0200302 | 170            | 60            | 28             | 22.4        | 26            | 35.7                   |
| 1.3/4"           | 5   | FAA0200304 | 187            | 67            | 31.5           | 25          | 28            | 39                     |
| 1.7/8"           | 4.5 | FAA0200308 | 187            | 67            | 31.5           | 25          | 28            | 41.3                   |
| 2"               | 4.5 | FAA0200312 | 200            | 70            | 35.5           | 28          | 31            | 44.5                   |

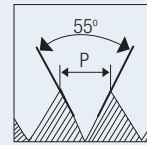




## HSS Hand Taps

# BSF

## Whitworth fine threads



HOLE TYPE



HSS TAPS

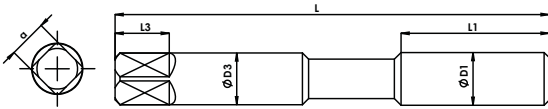
DIES

END MILLS

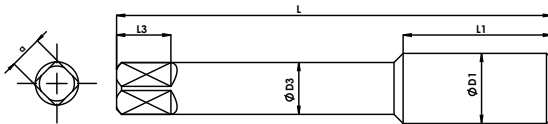
DRILLS

CARBIDE BURRS

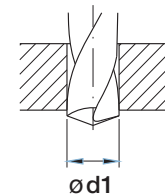
CS TAPS



Reinforced Shank (3/16" - 3/8")



Reduced Shank (7/16" - 2")



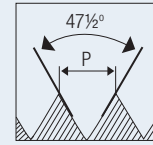
Unit : mm

| 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                    |
| 3/16"            | 32  | FAA0200346 | 58             | 16            | 5              | 4           | 7             | 4                      |
| 1/4"             | 26  | FAA0200360 | 66             | 19            | 6.3            | 5           | 8             | 5.3                    |
| 5/16"            | 22  | FAA0200381 | 72             | 22            | 8              | 6.3         | 9             | 6.8                    |
| 3/8"             | 20  | FAA0200394 | 80             | 24            | 10             | 8           | 11            | 8.3                    |
| 7/16"            | 18  | FAA0200407 | 85             | 25            | 8              | 6.3         | 9             | 9.7                    |
| 1/2"             | 16  | FAA0200419 | 89             | 29            | 9              | 7.1         | 10            | 11.1                   |
| 9/16"            | 16  | FAA0200431 | 95             | 30            | 11.2           | 9           | 12            | 12.7                   |
| 5/8"             | 14  | FAA0200437 | 102            | 32            | 12.5           | 10          | 13            | 14                     |
| 11/16"           | 14  | FAA0200450 | 112            | 37            | 14             | 11.2        | 14            | 15.5                   |
| 3/4"             | 12  | FAA0200454 | 112            | 37            | 14             | 11.2        | 14            | 16.75                  |
| 7/8"             | 11  | FAA0200462 | 118            | 38            | 16             | 12.5        | 16            | 19.75                  |
| 1"               | 10  | FAA0200470 | 130            | 45            | 18             | 14          | 18            | 22.75                  |
| 1.1/8"           | 9   | FAA0200478 | 138            | 48            | 20             | 16          | 20            | 25.5                   |
| 1.1/4"           | 9   | FAA0200482 | 151            | 51            | 22.4           | 18          | 22            | 28.5                   |
| 1.3/8"           | 8   | FAA0200486 | 162            | 57            | 25             | 20          | 24            | 31.5                   |
| 1.1/2"           | 8   | FAA0200490 | 170            | 60            | 28             | 22.4        | 26            | 34.5                   |
| 1.5/8"           | 8   | FAA0200494 | 170            | 60            | 28             | 22.4        | 26            | 37.7                   |
| 1.3/4"           | 7   | FAA0200495 | 187            | 67            | 31.5           | 25          | 28            | 41                     |
| 2"               | 7   | FAA0200497 | 200            | 70            | 35.5           | 28          | 31            | 47                     |



BA

## British association threads



HOLE TYPE



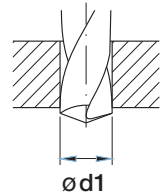
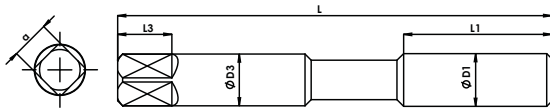
HSS

ISO  
529

6H

T/S/B

BF



Unit : mm

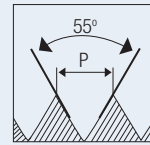
| Nominal Diameter | TPI  | EDP No.    | Overall Length | Thread Length | Shank Diameter | Square Size | Square Length | Tapping Drill Diameter |
|------------------|------|------------|----------------|---------------|----------------|-------------|---------------|------------------------|
| ØD1              |      |            | L              | L1            | ØD3            | a           | L3            | Ød1                    |
| # 12             | 90.9 | FAA0200646 | 40             | 7             | 2.5            | 2           | 4             | 1.05                   |
| # 11             | 81.9 | FAA0200642 | 41             | 8             | 2.5            | 2           | 4             | 1.2                    |
| # 10             | 72.6 | FAA0200632 | 41             | 8             | 2.5            | 2           | 4             | 1.4                    |
| # 9              | 65.1 | FAA0200623 | 41             | 8             | 2.5            | 2           | 4             | 1.55                   |
| # 8              | 59.1 | FAA0200613 | 44.5           | 9.5           | 2.8            | 2.24        | 5             | 1.8                    |
| # 7              | 52.9 | FAA0200601 | 44.5           | 9.5           | 2.8            | 2.24        | 5             | 2.05                   |
| # 6              | 47.9 | FAA0200588 | 44.5           | 9.5           | 2.8            | 2.24        | 5             | 2.3                    |
| # 5              | 43   | FAA0200576 | 48             | 11            | 3.15           | 2.5         | 5             | 2.65                   |
| # 4              | 38.5 | FAA0200562 | 50             | 13            | 3.55           | 2.8         | 5             | 3                      |
| # 3              | 34.8 | FAA0200552 | 53             | 13            | 4.5            | 3.55        | 6             | 3.4                    |
| # 2              | 31.4 | FAA0200539 | 58             | 16            | 5              | 4           | 7             | 4                      |
| # 1              | 28.2 | FAA0200527 | 62             | 17            | 5.6            | 4.5         | 7             | 4.5                    |
| # 0              | 25.4 | FAA0200515 | 66             | 19            | 6.3            | 5           | 8             | 5.1                    |



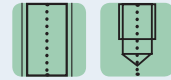
## HSS Hand Taps

# BSB

## British standard brass threads



HOLE TYPE



HSS
ISO 529
6H
T/S/B
BF

HSS TAPS

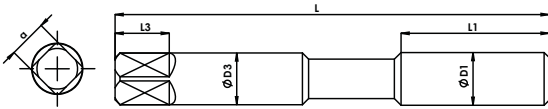
DIES

END MILLS

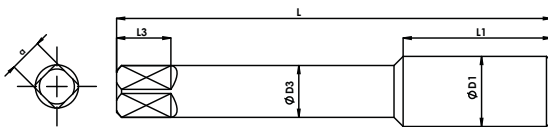
DRILLS

CARBIDE BURRS

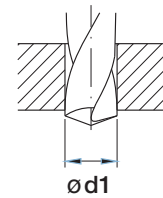
CS TAPS



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



Reduced Shank (7/16" - 2")

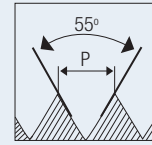


Unit : mm

| 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"             | 26  | FAA0200651 | 66             | 19            | 6.3            | 5           | 8             | 5.3                    |
| 5/16"            | 26  | FAA0200656 | 69             | 19            | 8              | 6.3         | 9             | 5.8                    |
| 3/8"             | 26  | FAA0200661 | 76             | 20            | 10             | 8           | 11            | 8.4                    |
| 7/16"            | 26  | FAA0200666 | 82             | 22            | 8              | 6.3         | 9             | 10                     |
| 1/2"             | 26  | FAA0200671 | 84             | 24            | 9              | 7.1         | 10            | 11.5                   |
| 9/16"            | 26  | FAA0200676 | 90             | 25            | 11.2           | 9           | 12            | 13.1                   |
| 5/8"             | 26  | FAA0200681 | 95             | 25            | 12.5           | 10          | 13            | 14.7                   |
| 3/4"             | 26  | FAA0200686 | 104            | 29            | 14             | 11.2        | 14            | 17.8                   |
| 7/8"             | 26  | FAA0200690 | 113            | 33            | 16             | 12.5        | 16            | 21                     |
| 1"               | 26  | FAA0207315 | 120            | 35            | 18             | 14          | 18            | 24.2                   |



HSS Hand Taps

**BS Con****British standard conduit threads**

HOLE TYPE



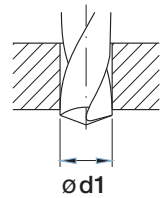
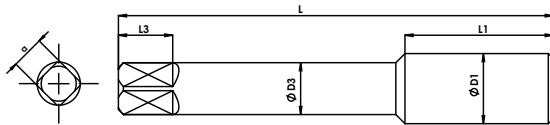
HSS

ISO  
529

6H

T/B

BF



Unit : mm

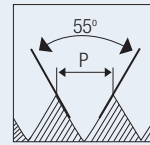
| Nominal Diameter | TPI | EDP No.    | Overall Length | Thread Length | Shank Diameter | Square Size | Square Length | Tapping Drill Diameter |
|------------------|-----|------------|----------------|---------------|----------------|-------------|---------------|------------------------|
| ØD1              |     |            | L              | L1            | ØD3            | a           | L3            | Ød1                    |
| 1/2"             | 18  | FAA0200696 | 84             | 24            | 9              | 7.1         | 10            | 11.5                   |
| 5/8"             | 18  | FAA0200699 | 95             | 25            | 12.5           | 10          | 13            | 14.2                   |
| 3/4"             | 16  | FAA0200701 | 104            | 29            | 14             | 11.2        | 14            | 17.5                   |
| 1"               | 16  | FAA0200706 | 120            | 35            | 18             | 14          | 18            | 23.8                   |



## HSS Hand Taps



# Model engineers threads



HOLE TYPE



HSS
ISO 529
6H
T/S/B
BF

HSS TAPS

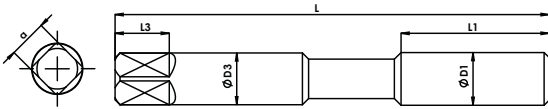
DIES

END MILLS

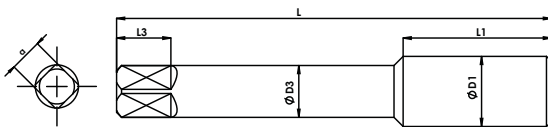
DRILLS

CARBIDE BURRS

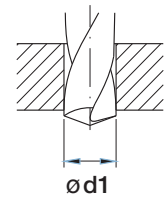
CS TAPS



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



Reduced Shank (7/16" - 2")

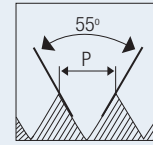


Unit : mm

| 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                    |
| 1/8"             | 40  | FAA0207317 | 48             | 11            | 3.15           | 2.5         | 5             | 2.55                   |
| 5/32"            | 40  | FAA0200718 | 53             | 13            | 4              | 3.15        | 6             | 3.3                    |
| 3/16"            | 40  | FAA0200723 | 58             | 16            | 5              | 4           | 7             | 4                      |
| 7/32"            | 40  | FAA0200727 | 62             | 17            | 5.6            | 4.5         | 7             | 4.8                    |
| 1/4"             | 40  | FAA0200732 | 66             | 13            | 6.3            | 5           | 8             | 5.5                    |
| 9/32"            | 32  | FAA0200737 | 66             | 19            | 7.1            | 5.6         | 8             | 6.1                    |
| 5/16"            | 32  | FAA0200742 | 66             | 16            | 8              | 6.3         | 9             | 7                      |
| 3/8"             | 32  | FAA0200746 | 73             | 16            | 10             | 8           | 11            | 8.6                    |
| 7/16"            | 32  | FAA0207320 | 80             | 20            | 8              | 6.3         | 9             | 10.3                   |
| 1/2"             | 32  | FAA0207324 | 80             | 20            | 9              | 10          | 7.1           | 11.9                   |



## HSS Hand Taps

**BSP****British standard pipe threads**

HOLE TYPE



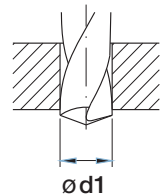
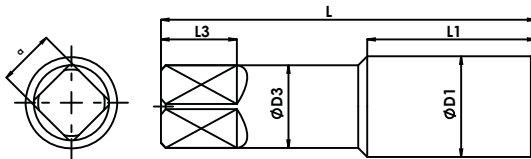
HSS

ISO  
2284

6H

T/B

BF



Unit : mm

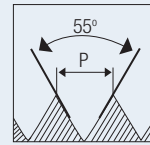
| Nominal Diameter | TPI | EDP No.    | Overall Length | Thread Length | Shank Diameter | Square Size | Square Length | Tapping Drill Diameter |
|------------------|-----|------------|----------------|---------------|----------------|-------------|---------------|------------------------|
| ØD1              |     |            | L              | L1            | ØD3            | a           | L3            | Ød1                    |
| 1/8"             | 28  | FAA0204602 | 59             | 15            | 8              | 6.3         | 9             | 8.8                    |
| 1/4"             | 19  | FAA0204623 | 67             | 19            | 10             | 8           | 11            | 11.8                   |
| 3/8"             | 19  | FAA0204644 | 75             | 21            | 12.5           | 10          | 13            | 15.25                  |
| 1/2"             | 14  | FAA0204662 | 87             | 26            | 16             | 12.5        | 16            | 19                     |
| 5/8"             | 14  | FAA0204678 | 91             | 26            | 18             | 14          | 18            | 21                     |
| 3/4"             | 14  | FAA0204686 | 96             | 28            | 20             | 16          | 20            | 24.5                   |
| 7/8"             | 14  | FAA0204700 | 102            | 29            | 22.4           | 18          | 22            | 28.25                  |
| 1"               | 11  | FAA0204706 | 109            | 33            | 25             | 20          | 24            | 30.75                  |
| 1.1/4"           | 11  | FAA0204721 | 119            | 36            | 31.5           | 25          | 28            | 39.5                   |
| 1.1/2"           | 11  | FAA0204732 | 125            | 37            | 35.5           | 28          | 31            | 45                     |
| 1.3/4"           | 11  | FAA0204742 | 132            | 39            | 35.5           | 28          | 31            | 51                     |
| 2"               | 11  | FAA0204745 | 140            | 41            | 40             | 31.5        | 34            | 57                     |



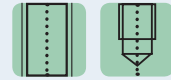
## HSS Hand Taps

# BSPT

## British standard taper pipe threads



HOLE TYPE



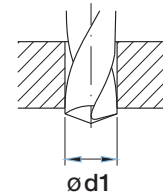
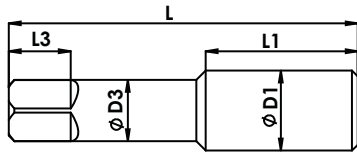
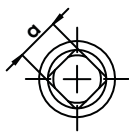
HSS

ISO 2284

6H

T/B

BF



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                    |
| 1/8"             | 28  | FAA0204833 | 59             | 15            | 8              | 6.3         | 9             | 8.8                    |
| 1/4"             | 19  | FAA0204846 | 67             | 19            | 10             | 8           | 11            | 11.8                   |
| 3/8"             | 19  | FAA0204855 | 75             | 21            | 12.5           | 10          | 13            | 15.25                  |
| 1/2"             | 14  | FAA0204863 | 87             | 26            | 16             | 12.5        | 16            | 19                     |
| 3/4"             | 14  | FAA0204871 | 96             | 28            | 20             | 16          | 20            | 24.5                   |
| 1"               | 11  | FAA0204880 | 109            | 33            | 25             | 20          | 24            | 30.75                  |
| 1.1/4"           | 11  | FAA0204889 | 119            | 36            | 31.5           | 25          | 28            | 39.5                   |
| 1.1/2"           | 11  | FAA0204892 | 125            | 37            | 35.5           | 28          | 31            | 45                     |
| 2"               | 11  | FAA0204895 | 140            | 41            | 40             | 31.5        | 34            | 57                     |

HSS TAPS

DIES

END MILLS

DRILLS

CARBIDE BURRS

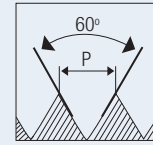
CS TAPS



## HSS Hand Taps

UNC

## Unified coarse threads



HOLE TYPE



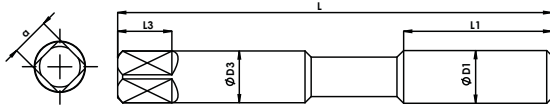
HSS

ISO  
529

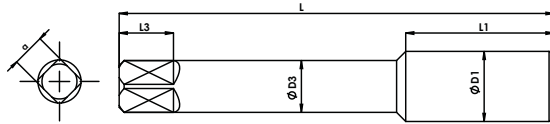
2B

T/S/B

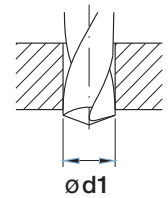
BF



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



Reduced Shank (7/16" - 2")



Ød1

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  | FAA0200875 | 66             | 19            | 6.3            | 5           | 8             | 5.1                    |
| 5/16"            | 18  | FAA0200907 | 72             | 22            | 8              | 6.3         | 9             | 6.6                    |
| 3/8"             | 16  | FAA0200940 | 80             | 24            | 10             | 8           | 11            | 8                      |
| 7/16"            | 14  | FAA0200980 | 85             | 25            | 8              | 6.3         | 9             | 9.4                    |
| 1/2"             | 13  | FAA0201007 | 89             | 29            | 9              | 7.1         | 10            | 10.8                   |
| 9/16"            | 12  | FAA0201042 | 95             | 30            | 11.2           | 9           | 12            | 12.2                   |
| 5/8"             | 11  | FAA0201058 | 102            | 32            | 12.5           | 10          | 13            | 13.5                   |
| 3/4"             | 10  | FAA0201092 | 112            | 37            | 14             | 11.2        | 14            | 16.5                   |
| 7/8"             | 9   | FAA0201125 | 118            | 38            | 16             | 12.5        | 16            | 19.5                   |
| 1"               | 8   | FAA0201151 | 130            | 45            | 18             | 14          | 18            | 22.25                  |
| 1.1/8"           | 7   | FAA0201181 | 138            | 48            | 20             | 16          | 20            | 25                     |
| 1.1/4"           | 7   | FAA0201192 | 151            | 51            | 22.4           | 18          | 22            | 28                     |
| 1.3/8"           | 6   | FAA0201200 | 162            | 57            | 25             | 20          | 24            | 30.75                  |
| 1.1/2"           | 6   | FAA0201208 | 170            | 60            | 28             | 22.4        | 26            | 34                     |
| 1.3/4"           | 5   | FAA0201219 | 187            | 67            | 31.5           | 25          | 28            | 39.5                   |
| 2"               | 4.5 | FAA0201224 | 200            | 70            | 35.5           | 28          | 31            | 45                     |

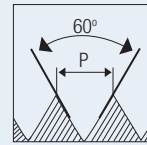




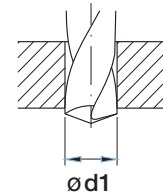
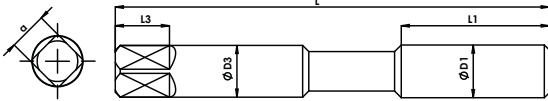
## HSS Hand Taps

# UNC

## Unified coarse threads



HOLE TYPE



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              | 64  | FAA0200810 | 41             | 8             | 2.5            | 2           | 4             | 1.55                   |
| # 2              | 56  | FAA0200814 | 44.5           | 9.5           | 2.8            | 2.24        | 5             | 1.85                   |
| # 3              | 48  | FAA0200819 | 44.5           | 9.5           | 2.8            | 2.24        | 5             | 2.1                    |
| # 4              | 40  | FAA0200824 | 48             | 11            | 3.15           | 2.5         | 5             | 2.35                   |
| # 5              | 40  | FAA0200833 | 48             | 11            | 3.15           | 2.5         | 5             | 2.65                   |
| # 6              | 32  | FAA0200838 | 50             | 13            | 3.55           | 2.8         | 5             | 2.85                   |
| # 8              | 32  | FAA0200845 | 53             | 13            | 4.5            | 3.55        | 6             | 3.5                    |
| # 10             | 24  | FAA0200855 | 58             | 16            | 5              | 4           | 7             | 3.9                    |
| # 12             | 24  | FAA0200866 | 62             | 17            | 5.6            | 4.5         | 7             | 4.5                    |

HSS TAPS

DIES

END MILLS

DRILLS

CARBIDE BURRS

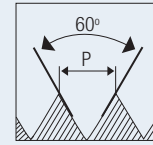
CS TAPS



## HSS Hand Taps

UNF

## Unified fine threads



HOLE TYPE



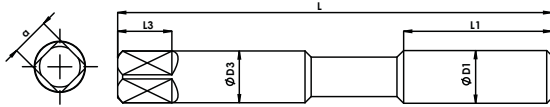
HSS

ISO  
529

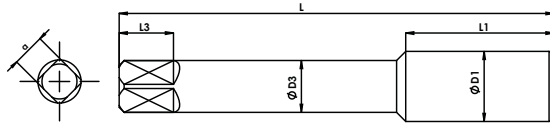
2B

T/S/B

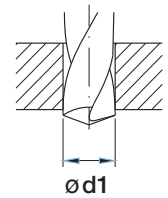
BF



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



Reduced Shank (7/16" - 2")



Unit : mm

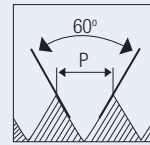
| Nominal Diameter | TPI | EDP No.    | Overall Length | Thread Length | Shank Diameter | Square Size | Square Length | Tapping Drill Diameter |
|------------------|-----|------------|----------------|---------------|----------------|-------------|---------------|------------------------|
| ØD1              |     |            | L              | L1            | ØD3            | a           | L3            | Ød1                    |
| 1/4"             | 28  | FAA0201315 | 66             | 19            | 6.3            | 5           | 8             | 5.5                    |
| 5/16"            | 24  | FAA0201349 | 69             | 19            | 8              | 6.3         | 9             | 6.9                    |
| 3/8"             | 24  | FAA0201390 | 76             | 20            | 10             | 8           | 11            | 8.5                    |
| 7/16"            | 20  | FAA0201430 | 82             | 22            | 8              | 6.3         | 9             | 9.9                    |
| 1/2"             | 20  | FAA0201455 | 84             | 24            | 9              | 7.1         | 10            | 11.5                   |
| 9/16"            | 18  | FAA0201488 | 90             | 25            | 11.2           | 9           | 12            | 12.9                   |
| 5/8"             | 18  | FAA0201503 | 95             | 25            | 12.5           | 10          | 13            | 14.5                   |
| 3/4"             | 16  | FAA0201528 | 104            | 29            | 14             | 11.2        | 14            | 17.5                   |
| 7/8"             | 14  | FAA0201555 | 113            | 33            | 16             | 12.5        | 16            | 20.4                   |
| 1"               | 12  | FAA0201586 | 120            | 35            | 18             | 14          | 18            | 23.25                  |
| 1.1/8"           | 12  | FAA0201610 | 127            | 37            | 20             | 16          | 20            | 26.5                   |
| 1.1/4"           | 12  | FAA0201622 | 137            | 37            | 22.4           | 18          | 22            | 29.5                   |
| 1.3/8"           | 12  | FAA0201629 | 144            | 37            | 25             | 20          | 24            | 32.75                  |
| 1.1/2"           | 12  | FAA0201637 | 149            | 39            | 28             | 22.4        | 26            | 36                     |



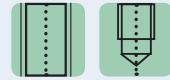
## HSS Hand Taps

# UNF

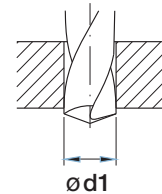
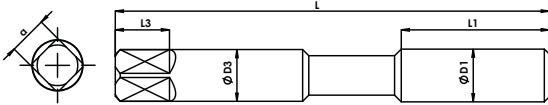
## Unified fine threads



HOLE TYPE



HSS
ISO 529
2B
T/S/B
BF



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                    |
| # 0              | 80  | FAA0201236 | 41             | 8             | 2.5            | 2           | 4             | 1.25                   |
| # 1              | 72  | FAA0201240 | 41             | 8             | 2.5            | 2           | 4             | 1.55                   |
| # 2              | 64  | FAA0201243 | 44.5           | 9.5           | 2.8            | 2.24        | 5             | 1.9                    |
| # 3              | 56  | FAA0201248 | 44.5           | 9.5           | 2.8            | 2.24        | 5             | 2.15                   |
| # 4              | 48  | FAA0201253 | 48             | 11            | 3.15           | 2.5         | 5             | 2.4                    |
| # 5              | 44  | FAA0201258 | 48             | 11            | 3.15           | 2.5         | 5             | 2.7                    |
| # 6              | 40  | FAA0201263 | 50             | 13            | 3.55           | 2.8         | 5             | 2.95                   |
| # 8              | 36  | FAA0201268 | 53             | 13            | 4.5            | 3.55        | 6             | 3.5                    |
| # 10             | 32  | FAA0201275 | 58             | 16            | 5              | 4           | 7             | 4.1                    |
| # 12             | 28  | FAA0201302 | 62             | 17            | 5.6            | 4.5         | 7             | 4.7                    |

HSS TAPS

DIES

END MILLS

DRILLS

CARBIDE BURRS

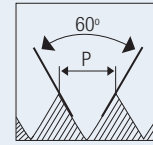
CS TAPS



## HSS Hand Taps

NPT

## National taper pipe threads



HOLE TYPE



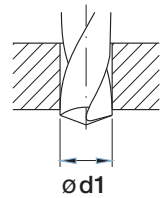
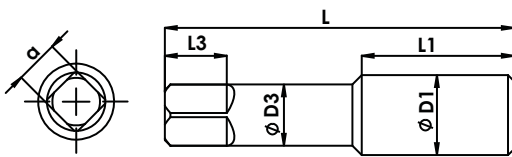
HSS

ANSI  
94.9

6H

T/B

BF



Unit : mm

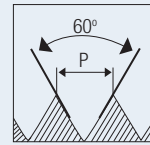
| Nominal Diameter | TPI  | EDP No.    | Overall Length | Thread Length | Shank Diameter | Square Size | Square Length | Tapping Drill Diameter |
|------------------|------|------------|----------------|---------------|----------------|-------------|---------------|------------------------|
| ØD1              |      |            | L              | L1            | ØD3            | a           | L3            | Ød1                    |
| 1/16"            | 27   | FAA0204896 | 2.1/8          | 11/16         | 0.3125         | 0.234       | 3/8           | 6.3                    |
| 1/8"             | 27   | FAA0204899 | 2.1/8          | 3/4           | 0.4375         | 0.328       | 3/8           | 8.7                    |
| 1/4"             | 18   | FAA0204909 | 2.7/16         | 1.1/16        | 0.5625         | 0.421       | 7/16          | 11.1                   |
| 3/8"             | 18   | FAA0204919 | 2.9/16         | 1.1/16        | 0.7            | 0.531       | 1/2           | 14.5                   |
| 1/2"             | 14   | FAA0204928 | 3.1/8          | 1.3/8         | 0.6875         | 0.515       | 5/8           | 18                     |
| 3/4"             | 14   | FAA0204942 | 3.1/4          | 1.3/8         | 0.9063         | 0.679       | 11/16         | 23.25                  |
| 1"               | 11.5 | FAA0204950 | 3.3/4          | 1.3/4         | 1.125          | 0.843       | 13/16         | 29                     |
| 1.1/4"           | 11.5 | FAA0204957 | 4              | 1.3/4         | 1.3125         | 0.984       | 15/16         | 38                     |
| 1.1/2"           | 11.5 | FAA0204962 | 4.1/4          | 1.3/4         | 1.5            | 1.125       | 1             | 44                     |
| 2"               | 11.5 | FAA0204967 | 4.1/2          | 1.3/4         | 1.875          | 1.406       | 1.1/8         | 56                     |
| 2.1/2"           | 8    | FAA0204970 | 5.1/2          | 2.9/16        | 2.25           | 1.687       | 1.1/4         | -                      |
| 3"               | 8    | FAA0207340 | 6              | 2.5/8         | 2.625          | 1.968       | 1.3/8         | -                      |



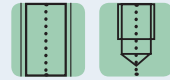
HSS Hand Taps

**NPS**

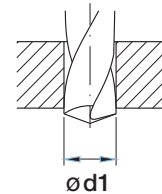
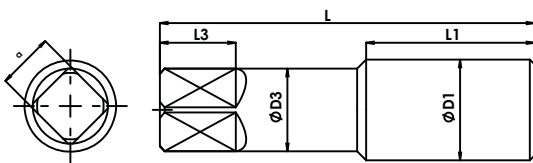
**National pipe straight threads**



HOLE TYPE



HSS
ANSI 94.9
6H
T/B
BF



Unit : mm

| Nominal Diameter | TPI  | EDP No.    | Overall Length | Thread Length | Shank Diameter | Square Size | Square Length | Tapping Drill Diameter |
|------------------|------|------------|----------------|---------------|----------------|-------------|---------------|------------------------|
| Ø D              |      |            | L              | L1            | ØD3            | a           | L3            | Ø d1                   |
| 1/16"            | 27   | FAA0207341 | 2.1/8          | 11/16         | 0.3125         | 0.234       | 3/8           | 6.3                    |
| 1/8"             | 27   | FAA0205002 | 2.1/8          | 3/4           | 0.4375         | 0.328       | 3/8           | 8.7                    |
| 1/4"             | 18   | FAA0207342 | 2.7/16         | 1.1/16        | 0.5625         | 0.421       | 7/16          | 11.1                   |
| 3/8"             | 18   | FAA0207343 | 2.9/16         | 1.1/16        | 0.7            | 0.531       | 1/2           | 14.5                   |
| 1/2"             | 14   | FAA0207344 | 3.1/8          | 1.3/8         | 0.6875         | 0.515       | 5/8           | 18                     |
| 3/4"             | 14   | FAA0207345 | 3.1/4          | 1.3/8         | 0.9063         | 0.679       | 11/16         | 23.25                  |
| 1"               | 11.5 | FAA0207346 | 3.3/4          | 1.3/4         | 1.125          | 0.843       | 13/16         | 29                     |
| 1.1/4"           | 11.5 | FAA0207349 | 4              | 1.3/4         | 1.3125         | 0.984       | 15/16         | 38                     |
| 1.1/2"           | 11.5 | FAA0207351 | 4.1/4          | 1.3/4         | 1.5            | 1.125       | 1             | 44                     |
| 2"               | 11.5 | FAA0207354 | 4.1/2          | 1.3/4         | 1.875          | 1.406       | 1.1/8         | 56                     |

HSS TAPS

DIES

END MILLS

DRILLS

CARBIDE BURRS

CS TAPS