WALTER
Engineering Kompetenz

Holemaking, threading, milling

**Perform line – catalogue**
Edition 2021

_ MACHINING EXPERTISE.

# Perform line catalogue

# How to find and order your standard tools:

**Personal – worldwide**
You can contact us by phone, fax or e-mail. The contact details for your local contact can be found on our website at: **walter-tools.com**

**The Walter General Catalogue 2017**
contains the entire standard range of our competence brands Walter, Walter Titex and Walter Prototyp. It is supplemented regularly with the latest Product Innovations catalogue.

**At walter-tools.com, you can access and order your Walter products quickly and conveniently online – via smartphone, tablet or PC. The benefit for you: Direct access from any device, displayed in an optimised form, at any time.**

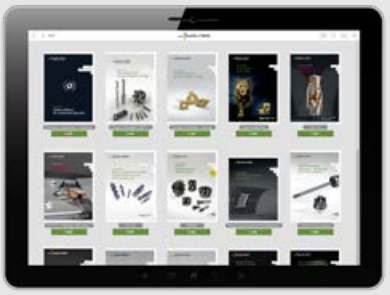
## Walter online catalogue

**Tool-specific search**
You can find products in the Walter online catalogue using the familiar structure of our product catalogue as well as filter and search functions. Other features: A shopping function and links to drawings and models.

## Walter GPS

**Application-based search**
With Walter GPS, it takes just a few steps to find the optimum machining solution for your component, online and offline – and the solution can be transferred directly to the Walter TOOLSHOP if required.

## Walter eLibrary



**Document-based search**
The Walter eLibrary app provides you with all the information you need on your mobile devices within a matter of seconds: E.g. brochures and catalogues – online and offline, in 17 languages.

## Digital ordering methods

TOOLSHOP

EDI B2B

**Walter TOOLSHOP & EDI**
The Walter TOOLSHOP offers customers opportunities to find information and place orders quickly.
EDI (electronic data interchange) also makes it possible to exchange documents (e.g. orders) – even special tools can be ordered.

# Walter Perform line

# Table of contents

# The Walter Perform line – Benchmark for reliability and cost-efficiency.

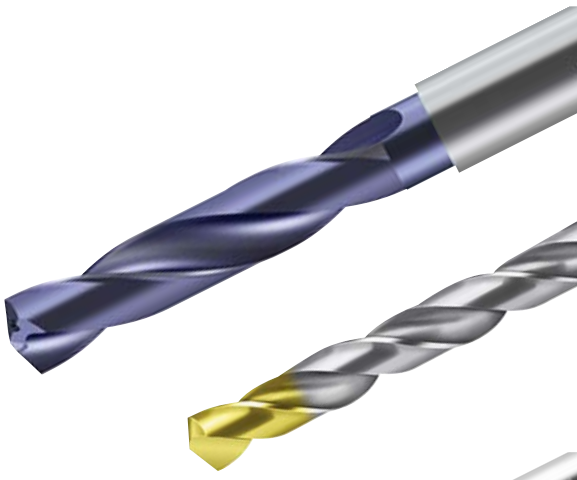
**Frequently, what users with a wide range of materials are most looking for is a tool that provides flexibility and cost-efficiency. The Perform line from Walter offers tailored solutions – developed specially for achieving high-quality results efficiently.**


All Walter tools are distinguished by maximum precision and process reliability. You can create real added value by finding a product range which precisely meets all of your requirements. Walter has the right answer to what you're looking for – with three product lines in the premium segment: The Perform line for maximum cost-efficiency and reliability, the Advance line for cost-efficient machining, and the Supreme line for maximum performance with optimised cutting data and tool life.

## HOLEMAKING

**DA110 and DC150 Perform – 100% process reliability**

Do you have to overcome specific challenges such as frequently changing materials and machining conditions? Then you need tools that are flexible to use and are optimised for a wide range of applications. The Walter DC150 and DA110 solid carbide and HSS drills in the Perform line are available in all common dimensions, reduce your tool stocks and provide a high level of machine flexibility thanks to their universal use. Proven Walter quality – at a reasonable price.



## THREADING

**Process reliability – with tailor-made cost-efficiency**

Thread machining with the TC115 and TC216 taps from the Walter Perform line stands for reliability and cost-efficiency. This is because reliable processes and tools that can be used universally are the prerequisite for drilling threads efficiently. Depending on the material and workpiece, machining conditions may vary greatly. The TC115 and TC216 Perform taps meet this challenge – with tailored coatings and geometries.

## MILLING

**Can be used universally – in ISO P, M and K materials**

The Walter MC232 Perform product range achieves high cost-efficiency with universal use and medium cutting data: The solid carbide milling cutters are suitable for a wide range of milling operations and materials. They impress with their long tool life and high level of wear resistance in a wide range of applications and diameters. The simple programme selection and low inventory costs make the milling cutters an excellent choice for almost all applications.

# Walter Titex DC150 Perform – flexible in use and very wear-resistant.

## THE APPLICATION

- ISO material groups P, M, K, N, S, H, O
- Can be used with emulsion, oil
- Areas of use: General mechanical engineering, mould and die making, energy and automotive industries

## THE TOOL

- Solid carbide twist drill
- Grades: WJ30RE and WJ30TA
- 140° point angle
- Dia. 1.5–20 mm

## THE DIMENSIONS

**With internal coolant:**

- 3 × $D_C$, in accordance with DIN 6537 short, with HA and HB/HE shank
- 5 × $D_C$, in accordance with DIN 6537 long, with HA and HB/HE shank
- 8 × $D_C$, in accordance with Walter standard, with HA shank
- 12 × $D_C$, in accordance with Walter standard, with HA shank

**Without internal coolant:**

- 3 × $D_C$, in accordance with DIN 6539, with shank = cutting edge diameter
- 3 × $D_C$, in accordance with DIN 6537 short, with HA and HB/HE shank
- 5 × $D_C$, in accordance with DIN 6537 long, with HA shank


**Walter Titex DC150 Perform** **Fig.:** DC150-08-08.500A1-WJ30TA

## BENEFITS FOR YOU

- Cost-efficient machining of small and medium batch sizes
- Can be used universally with various different materials
- Shank variants for all adaptors typically used in drilling, such as: Whistle notch chuck, hydro-expansion chuck, collet chuck, shrink-fit chuck, power chuck, Weldon chuck

# DA110 Perform HSS drill – cost-effective in all materials.

### THE APPLICATION

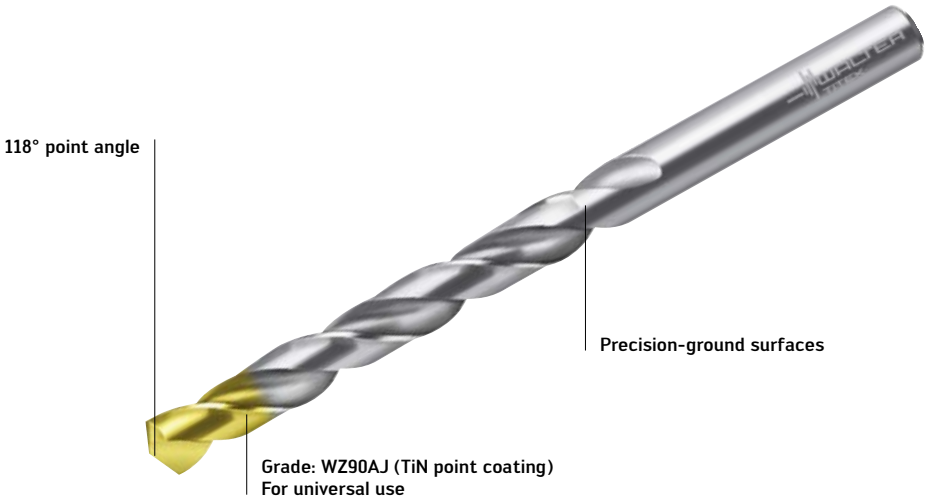
- ISO material groups P, M, K, N, S, H, O
- Can be used with emulsion, oil
- Areas of use: General mechanical engineering, mould and die making, energy and automotive industries

### THE TOOL

- HSS twist drills
- Type N
- Grade: WZ90AJ
- 118° point angle
- Dia. 1–16 mm

### THE DIMENSIONS

- In accordance with DIN 338
- 2 sets also available:
  - 1–10.5 mm diameter (DA110-SET-1-10.5-WZ90AJ)
  - 1–13 mm diameter (DA110-SET-1-13-WZ90AJ)




**DA110 Perform HSS drill** **Fig.:** DA110-08-08.500U0-WZ90AJ

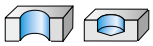
### BENEFITS FOR YOU

- Maximum accuracy on the component thanks to precision-ground surfaces
- Can be used universally with various different materials
- Tip geometry for optimum centring accuracy

B 1

## Product range overview of solid carbide drilling and reaming tools

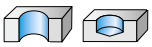
### Solid carbide drills – with internal coolant

| Machining |  | | | |
|---|---|---|---|---|
| **Drilling depth** | **3 x $D_c$** | **5 x $D_c$** | **8 x $D_c$** | **12 x $D_c$** |
| **Designation** | **DC150 Perform** | **DC150 Perform** | **DC150 Perform** | **DC150 Perform** |
| Standard | DIN 6537 K | DIN 6537 L | Walter | Walter |
| Dia. range [mm] | 3–20 | 3–20 | 3–20 | 3–20 |
| Page | 9 | 13 | 19 | 22 |
| |  |  |  |  |

### Without internal coolant

| Machining |  | | |
|---|---|---|---|
| **Drilling depth** | **3 x $D_c$** | | **5 x $D_c$** |
| **Designation** | **DC150 Perform** | **DC150 Perform** | **DC150 Perform** |
| Standard | DIN 6539 | DIN 6537 K | DIN 6537 L |
| Dia. range [mm] | 1,5–2,9 | 3–20 | 3–20 |
| Page | 25 | 26 | 31 |
| |  |  |  |

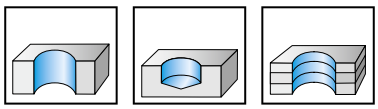
## Product range overview of HSS drilling and reaming tools

| Machining |  | |
|---|---|---|
| **Drilling depth** | **~8 × $D_c$** | **Twist drill set** |
| **Designation** | **DA110 Perform** | **DA110 Perform** |
| Standard | DIN 338 | DIN 338 |
| Dia. range [mm] | 1–16 | 1–10,5<br>1–13 |
| Page | 34 | 37 |
| |  |  |

# Solid carbide drills with coolant-through
# DC150 Perform

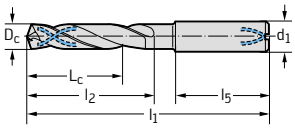


3×$D_c$ | DIN 6537 K | 140°



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30RE | ●● | ● | ●● | ●● | ●● | ● | ● |

Shank DIN 6535 HA




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|
| DC150-03-03.000A1- | 3 | | 14 | 62 | 20 | 36 | 6 | ● |
| DC150-03-03.100A1- | 3,1 | | 14 | 62 | 20 | 36 | 6 | ● |
| DC150-03-03.175A1- | 3,175 | 1/8" | 14 | 62 | 20 | 36 | 6 | ● |
| DC150-03-03.200A1- | 3,2 | | 14 | 62 | 20 | 36 | 6 | ● |
| DC150-03-03.250A1- | 3,25 | | 14 | 62 | 20 | 36 | 6 | ● |
| DC150-03-03.300A1- | 3,3 | | 14 | 62 | 20 | 36 | 6 | ● |
| DC150-03-03.400A1- | 3,4 | | 14 | 62 | 20 | 36 | 6 | ● |
| DC150-03-03.500A1- | 3,5 | | 14 | 62 | 20 | 36 | 6 | ● |
| DC150-03-03.572A1- | 3,572 | 9/64" | 14 | 62 | 20 | 36 | 6 | ● |
| DC150-03-03.600A1- | 3,6 | | 14 | 62 | 20 | 36 | 6 | ● |
| DC150-03-03.650A1- | 3,65 | | 14 | 62 | 20 | 36 | 6 | ● |
| DC150-03-03.700A1- | 3,7 | | 14 | 62 | 20 | 36 | 6 | ● |
| DC150-03-03.800A1- | 3,8 | | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-03.900A1- | 3,9 | | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-03.969A1- | 3,969 | 5/32" | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-04.000A1- | 4 | | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-04.100A1- | 4,1 | | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-04.200A1- | 4,2 | | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-04.300A1- | 4,3 | | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-04.366A1- | 4,366 | 11/64" | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-04.400A1- | 4,4 | | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-04.500A1- | 4,5 | | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-04.600A1- | 4,6 | | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-04.650A1- | 4,65 | | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-04.700A1- | 4,7 | | 17 | 66 | 24 | 36 | 6 | ● |
| DC150-03-04.763A1- | 4,763 | 3/16" | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-04.800A1- | 4,8 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-04.900A1- | 4,9 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.000A1- | 5 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.100A1- | 5,1 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.159A1- | 5,159 | 13/64" | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.200A1- | 5,2 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.300A1- | 5,3 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.400A1- | 5,4 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.500A1- | 5,5 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.550A1- | 5,55 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.556A1- | 5,556 | 7/32" | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.600A1- | 5,6 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.700A1- | 5,7 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.800A1- | 5,8 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.900A1- | 5,9 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.953A1- | 5,953 | 15/64" | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-06.000A1- | 6 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-06.100A1- | 6,1 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.200A1- | 6,2 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.300A1- | 6,3 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.350A1- | 6,35 | 1/4" | 24 | 79 | 34 | 36 | 8 | ● |

Ordering example for the WJ30RE grade: DC150-03-03.000A1-WJ30RE

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B 1

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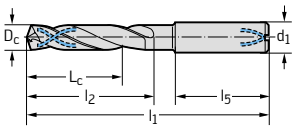
Shank DIN 6535 HA




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|
| DC150-03-06.400A1- | 6,4 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.500A1- | 6,5 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.600A1- | 6,6 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.700A1- | 6,7 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.747A1- | 6,747 | 17/64" | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.800A1- | 6,8 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.900A1- | 6,9 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-07.000A1- | 7 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-07.100A1- | 7,1 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.144A1- | 7,144 | 9/32" | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.200A1- | 7,2 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.300A1- | 7,3 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.400A1- | 7,4 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.500A1- | 7,5 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.541A1- | 7,541 | 19/64" | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.600A1- | 7,6 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.700A1- | 7,7 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.800A1- | 7,8 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.900A1- | 7,9 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.938A1- | 7,938 | 5/16" | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-08.000A1- | 8 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-08.100A1- | 8,1 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.200A1- | 8,2 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.300A1- | 8,3 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.334A1- | 8,334 | 21/64" | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.400A1- | 8,4 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.500A1- | 8,5 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.600A1- | 8,6 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.700A1- | 8,7 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.731A1- | 8,731 | 11/32" | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.800A1- | 8,8 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.900A1- | 8,9 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.000A1- | 9 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.100A1- | 9,1 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.128A1- | 9,128 | 23/64" | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.200A1- | 9,2 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.300A1- | 9,3 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.400A1- | 9,4 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.500A1- | 9,5 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.525A1- | 9,525 | 3/8" | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.600A1- | 9,6 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.700A1- | 9,7 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.800A1- | 9,8 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.900A1- | 9,9 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.922A1- | 9,922 | 25/64" | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-10.000A1- | 10 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-10.100A1- | 10,1 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.200A1- | 10,2 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.300A1- | 10,3 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.319A1- | 10,319 | 13/32" | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.400A1- | 10,4 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.500A1- | 10,5 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.600A1- | 10,6 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.700A1- | 10,7 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.716A1- | 10,716 | 27/64" | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.800A1- | 10,8 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.900A1- | 10,9 | | 40 | 102 | 55 | 45 | 12 | ● |

Ordering example for the WJ30RE grade: DC150-03-03.000A1-WJ30RE

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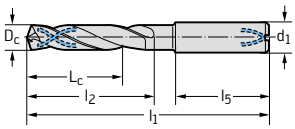
Shank DIN 6535 HA




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|
| DC150-03-11.000A1- | 11 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.100A1- | 11,1 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.113A1- | 11,113 | 7/16" | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.200A1- | 11,2 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.300A1- | 11,3 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.400A1- | 11,4 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.500A1- | 11,5 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.509A1- | 11,509 | 29/64" | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.600A1- | 11,6 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.700A1- | 11,7 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.800A1- | 11,8 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.900A1- | 11,9 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.906A1- | 11,906 | 15/32" | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-12.000A1- | 12 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-12.100A1- | 12,1 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-12.200A1- | 12,2 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-12.300A1- | 12,3 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-12.303A1- | 12,303 | 31/64" | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-12.500A1- | 12,5 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-12.600A1- | 12,6 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-12.700A1- | 12,7 | 1/2" | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-12.800A1- | 12,8 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-12.900A1- | 12,9 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-13.000A1- | 13 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-13.100A1- | 13,1 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-13.200A1- | 13,2 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-13.300A1- | 13,3 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-13.494A1- | 13,494 | 17/32" | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-13.500A1- | 13,5 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-13.800A1- | 13,8 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-14.000A1- | 14 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-14.100A1- | 14,1 | | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-14.200A1- | 14,2 | | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-14.288A1- | 14,288 | 9/16" | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-14.500A1- | 14,5 | | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-14.600A1- | 14,6 | | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-14.700A1- | 14,7 | | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-15.000A1- | 15 | | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-15.100A1- | 15,1 | | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-15.300A1- | 15,3 | | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-15.500A1- | 15,5 | | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-15.700A1- | 15,7 | | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-15.800A1- | 15,8 | | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-15.875A1- | 15,875 | 5/8" | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-16.000A1- | 16 | | 45 | 115 | 65 | 48 | 16 | ● |
| DC150-03-16.300A1- | 16,3 | | 51 | 123 | 73 | 48 | 18 | ● |
| DC150-03-16.500A1- | 16,5 | | 51 | 123 | 73 | 48 | 18 | ● |
| DC150-03-16.700A1- | 16,7 | | 51 | 123 | 73 | 48 | 18 | ● |
| DC150-03-17.000A1- | 17 | | 51 | 123 | 73 | 48 | 18 | ● |
| DC150-03-17.500A1- | 17,5 | | 51 | 123 | 73 | 48 | 18 | ● |
| DC150-03-18.000A1- | 18 | | 51 | 123 | 73 | 48 | 18 | ● |
| DC150-03-18.500A1- | 18,5 | | 55 | 131 | 79 | 50 | 20 | ● |
| DC150-03-19.000A1- | 19 | | 55 | 131 | 79 | 50 | 20 | ● |
| DC150-03-19.050A1- | 19,05 | 3/4" | 55 | 131 | 79 | 50 | 20 | ● |
| DC150-03-20.000A1- | 20 | | 55 | 131 | 79 | 50 | 20 | ● |

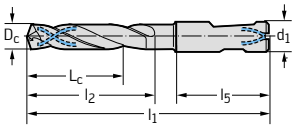
Ordering example for the WJ30RE grade: DC150-03-03.000A1-WJ30RE

Continued

Continued

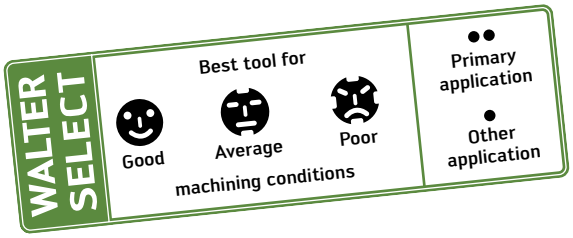
B 1

DIN 6535 HE,
turned 180°
DIN 6535 HB




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|
| DC150-03-03.000D1- | 3 | | 14 | 62 | 20 | 36 | 6 | ●● |
| DC150-03-03.300D1- | 3,3 | | 14 | 62 | 20 | 36 | 6 | ●● |
| DC150-03-03.400D1- | 3,4 | | 14 | 62 | 20 | 36 | 6 | ●● |
| DC150-03-03.500D1- | 3,5 | | 14 | 62 | 20 | 36 | 6 | ●● |
| DC150-03-03.700D1- | 3,7 | | 14 | 62 | 20 | 36 | 6 | ●● |
| DC150-03-03.800D1- | 3,8 | | 17 | 66 | 24 | 36 | 6 | ●● |
| DC150-03-04.000D1- | 4 | | 17 | 66 | 24 | 36 | 6 | ●● |
| DC150-03-04.200D1- | 4,2 | | 17 | 66 | 24 | 36 | 6 | ●● |
| DC150-03-04.300D1- | 4,3 | | 17 | 66 | 24 | 36 | 6 | ●● |
| DC150-03-04.500D1- | 4,5 | | 17 | 66 | 24 | 36 | 6 | ●● |
| DC150-03-04.800D1- | 4,8 | | 20 | 66 | 28 | 36 | 6 | ●● |
| DC150-03-05.000D1- | 5 | | 20 | 66 | 28 | 36 | 6 | ●● |
| DC150-03-05.100D1- | 5,1 | | 20 | 66 | 28 | 36 | 6 | ●● |
| DC150-03-05.300D1- | 5,3 | | 20 | 66 | 28 | 36 | 6 | ●● |
| DC150-03-05.500D1- | 5,5 | | 20 | 66 | 28 | 36 | 6 | ●● |
| DC150-03-06.000D1- | 6 | | 20 | 66 | 28 | 36 | 6 | ●● |
| DC150-03-06.500D1- | 6,5 | | 24 | 79 | 34 | 36 | 8 | ●● |
| DC150-03-06.700D1- | 6,7 | | 24 | 79 | 34 | 36 | 8 | ●● |
| DC150-03-06.800D1- | 6,8 | | 24 | 79 | 34 | 36 | 8 | ●● |
| DC150-03-07.000D1- | 7 | | 24 | 79 | 34 | 36 | 8 | ●● |
| DC150-03-07.500D1- | 7,5 | | 29 | 79 | 41 | 36 | 8 | ●● |
| DC150-03-07.800D1- | 7,8 | | 29 | 79 | 41 | 36 | 8 | ●● |
| DC150-03-08.000D1- | 8 | | 29 | 79 | 41 | 36 | 8 | ●● |
| DC150-03-08.500D1- | 8,5 | | 35 | 89 | 47 | 40 | 10 | ●● |
| DC150-03-08.600D1- | 8,6 | | 35 | 89 | 47 | 40 | 10 | ●● |
| DC150-03-08.800D1- | 8,8 | | 35 | 89 | 47 | 40 | 10 | ●● |
| DC150-03-09.000D1- | 9 | | 35 | 89 | 47 | 40 | 10 | ●● |
| DC150-03-10.000D1- | 10 | | 35 | 89 | 47 | 40 | 10 | ●● |
| DC150-03-10.200D1- | 10,2 | | 40 | 102 | 55 | 45 | 12 | ●● |
| DC150-03-10.300D1- | 10,3 | | 40 | 102 | 55 | 45 | 12 | ●● |
| DC150-03-10.500D1- | 10,5 | | 40 | 102 | 55 | 45 | 12 | ●● |
| DC150-03-10.800D1- | 10,8 | | 40 | 102 | 55 | 45 | 12 | ●● |
| DC150-03-11.000D1- | 11 | | 40 | 102 | 55 | 45 | 12 | ●● |
| DC150-03-11.800D1- | 11,8 | | 40 | 102 | 55 | 45 | 12 | ●● |
| DC150-03-12.000D1- | 12 | | 40 | 102 | 55 | 45 | 12 | ●● |
| DC150-03-12.200D1- | 12,2 | | 43 | 107 | 60 | 45 | 14 | ●● |
| DC150-03-12.500D1- | 12,5 | | 43 | 107 | 60 | 45 | 14 | ●● |
| DC150-03-13.000D1- | 13 | | 43 | 107 | 60 | 45 | 14 | ●● |
| DC150-03-14.000D1- | 14 | | 43 | 107 | 60 | 45 | 14 | ●● |
| DC150-03-15.000D1- | 15 | | 45 | 115 | 65 | 48 | 16 | ●● |
| DC150-03-15.500D1- | 15,5 | | 45 | 115 | 65 | 48 | 16 | ●● |
| DC150-03-16.000D1- | 16 | | 45 | 115 | 65 | 48 | 16 | ●● |
| DC150-03-16.500D1- | 16,5 | | 51 | 123 | 73 | 48 | 18 | ●● |
| DC150-03-17.000D1- | 17 | | 51 | 123 | 73 | 48 | 18 | ●● |
| DC150-03-17.500D1- | 17,5 | | 51 | 123 | 73 | 48 | 18 | ●● |
| DC150-03-18.000D1- | 18 | | 51 | 123 | 73 | 48 | 18 | ●● |
| DC150-03-19.000D1- | 19 | | 55 | 131 | 79 | 50 | 20 | ●● |
| DC150-03-20.000D1- | 20 | | 55 | 131 | 79 | 50 | 20 | ●● |

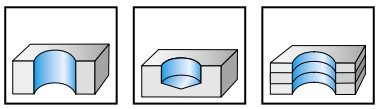
Ordering example for the WJ30RE grade: DC150-03-03.000A1-WJ30RE



# Solid carbide drills with coolant-through
# DC150 Perform

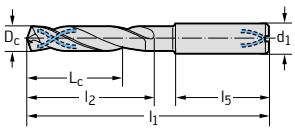


5×$D_c$ | DIN 6537 L | 140°



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30RE | ●● | ● | ●● | ●● | ●● | ● | ● |

Shank DIN 6535 HA




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|
| DC150-05-03.000A1- | 3 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.100A1- | 3,1 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.175A1- | 3,175 | 1/8" | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.200A1- | 3,2 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.250A1- | 3,25 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.300A1- | 3,3 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.400A1- | 3,4 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.500A1- | 3,5 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.572A1- | 3,572 | 9/64" | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.600A1- | 3,6 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.650A1- | 3,65 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.700A1- | 3,7 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.800A1- | 3,8 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-03.900A1- | 3,9 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-03.969A1- | 3,969 | 5/32" | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.000A1- | 4 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.100A1- | 4,1 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.200A1- | 4,2 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.300A1- | 4,3 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.366A1- | 4,366 | 11/64" | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.400A1- | 4,4 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.500A1- | 4,5 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.600A1- | 4,6 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.650A1- | 4,65 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.700A1- | 4,7 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.763A1- | 4,763 | 3/16" | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-04.800A1- | 4,8 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-04.900A1- | 4,9 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.000A1- | 5 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.100A1- | 5,1 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.159A1- | 5,159 | 13/64" | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.200A1- | 5,2 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.300A1- | 5,3 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.400A1- | 5,4 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.500A1- | 5,5 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.550A1- | 5,55 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.556A1- | 5,556 | 7/32" | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.600A1- | 5,6 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.700A1- | 5,7 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.800A1- | 5,8 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.900A1- | 5,9 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.953A1- | 5,953 | 15/64" | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-06.000A1- | 6 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-06.100A1- | 6,1 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.200A1- | 6,2 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.300A1- | 6,3 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.350A1- | 6,35 | 1/4" | 43 | 91 | 53 | 36 | 8 | ● |

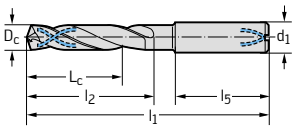
Ordering example for the WJ30RE grade: DC150-05-03.000A1-WJ30RE

Continued

B 1

Continued

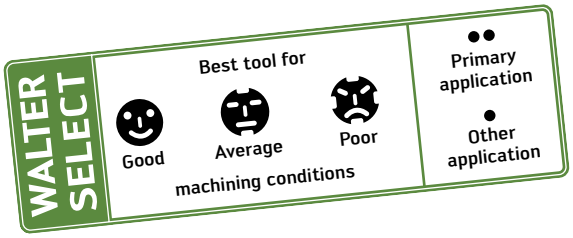
Shank DIN 6535 HA




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|
| DC150-05-06.400A1- | 6,4 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-06.500A1- | 6,5 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-06.600A1- | 6,6 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-06.700A1- | 6,7 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-06.747A1- | 6,747 | 17/64" | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-06.800A1- | 6,8 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-06.900A1- | 6,9 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.000A1- | 7 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.100A1- | 7,1 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.144A1- | 7,144 | 9/32" | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.200A1- | 7,2 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.300A1- | 7,3 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.400A1- | 7,4 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.500A1- | 7,5 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.541A1- | 7,541 | 19/64" | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.550A1- | 7,55 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.600A1- | 7,6 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.700A1- | 7,7 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.800A1- | 7,8 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.900A1- | 7,9 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.938A1- | 7,938 | 5/16" | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-08.000A1- | 8 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-08.100A1- | 8,1 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.200A1- | 8,2 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.300A1- | 8,3 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.334A1- | 8,334 | 21/64" | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.400A1- | 8,4 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.500A1- | 8,5 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.600A1- | 8,6 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.700A1- | 8,7 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.731A1- | 8,731 | 11/32" | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.800A1- | 8,8 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.900A1- | 8,9 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.000A1- | 9 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.100A1- | 9,1 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.128A1- | 9,128 | 23/64" | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.200A1- | 9,2 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.300A1- | 9,3 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.400A1- | 9,4 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.500A1- | 9,4 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.525A1- | 9,525 | 3/8" | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.550A1- | 9,55 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.600A1- | 9,6 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.700A1- | 9,7 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.800A1- | 9,8 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.900A1- | 9,9 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.922A1- | 9,922 | 25/64" | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-10.000A1- | 10 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-10.100A1- | 10,1 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.200A1- | 10,2 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.300A1- | 10,3 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.319A1- | 10,319 | 13/32" | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.400A1- | 10,4 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.500A1- | 10,5 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.600A1- | 10,6 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.700A1- | 10,7 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.716A1- | 10,716 | 27/64" | 56 | 118 | 71 | 45 | 12 | ☹ |

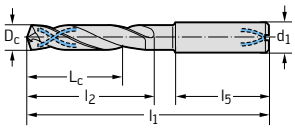
Ordering example for the WJ30RE grade: DC150-05-03.000A1-WJ30RE

Continued



Continued

Shank DIN 6535 HA



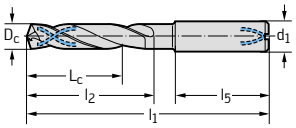
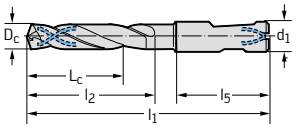

| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|
| DC150-05-10.800A1- | 10,8 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-10.900A1- | 10,9 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.000A1- | 11 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.100A1- | 11,1 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.113A1- | 11,113 | 7/16" | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.200A1- | 11,2 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.300A1- | 11,3 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.400A1- | 11,4 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.500A1- | 11,5 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.509A1- | 11,509 | 29/64" | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.600A1- | 11,6 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.700A1- | 11,7 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.800A1- | 11,8 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.900A1- | 11,9 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.906A1- | 11,906 | 15/32" | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-12.000A1- | 12 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-12.100A1- | 12,1 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.200A1- | 12,2 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.250A1- | 12,25 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.300A1- | 12,3 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.303A1- | 12,303 | 31/64" | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.400A1- | 12,4 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.500A1- | 12,5 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.600A1- | 12,6 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.700A1- | 12,7 | 1/2" | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.800A1- | 12,8 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.900A1- | 12,9 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.000A1- | 13 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.100A1- | 13,1 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.200A1- | 13,2 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.300A1- | 13,3 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.400A1- | 13,4 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.494A1- | 13,494 | 17/32" | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.500A1- | 13,5 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.600A1- | 13,6 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.700A1- | 13,7 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.800A1- | 13,8 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.900A1- | 13,9 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-14.000A1- | 14 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-14.100A1- | 14,1 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-14.200A1- | 14,2 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-14.288A1- | 14,288 | 9/16" | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-14.300A1- | 14,3 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-14.500A1- | 14,5 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-14.600A1- | 14,6 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-14.700A1- | 14,7 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-14.750A1- | 14,75 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-14.800A1- | 14,8 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-15.000A1- | 15 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-15.100A1- | 15,1 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-15.200A1- | 15,2 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-15.300A1- | 15,3 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-15.500A1- | 15,5 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-15.600A1- | 15,6 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-15.700A1- | 15,7 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-15.800A1- | 15,8 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-15.875A1- | 15,875 | 5/8" | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-16.000A1- | 16 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-16.100A1- | 16,1 | | 71 | 143 | 93 | 48 | 18 | ● |
| DC150-05-16.200A1- | 16,2 | | 71 | 143 | 93 | 48 | 18 | ● |
| DC150-05-16.300A1- | 16,3 | | 71 | 143 | 93 | 48 | 18 | ● |

Ordering example for the WJ30RE grade: DC150-05-03.000A1-WJ30RE

Continued

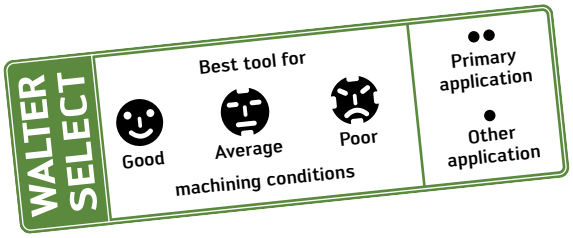
Continued

B 1

| | Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|---|
| Shank DIN 6535 HA  | DC150-05-16.500A1- | 16,5 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-16.700A1- | 16,7 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-16.750A1- | 16,75 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-17.000A1- | 17 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-17.100A1- | 17,1 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-17.200A1- | 17,2 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-17.300A1- | 17,3 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-17.500A1- | 17,5 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-17.600A1- | 17,6 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-17.700A1- | 17,7 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-17.800A1- | 17,8 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-17.900A1- | 17,9 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-18.000A1- | 18 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| | DC150-05-18.500A1- | 18,5 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| | DC150-05-18.900A1- | 18,9 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| | DC150-05-19.000A1- | 19 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| | DC150-05-19.050A1- | 19,05 | 3/4“ | 77 | 153 | 101 | 50 | 20 | ☹ |
| | DC150-05-19.300A1- | 19,3 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| | DC150-05-19.500A1- | 19,5 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| | DC150-05-19.700A1- | 19,7 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| | DC150-05-19.800A1- | 19,8 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| | DC150-05-20.000A1- | 20 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| DIN 6535 HE, turned 180° DIN 6535 HB  | DC150-05-03.000D1- | 3 | | 23 | 66 | 28 | 36 | 6 | ☹ |
| | DC150-05-03.100D1- | 3,1 | | 23 | 66 | 28 | 36 | 6 | ☹ |
| | DC150-05-03.200D1- | 3,2 | | 23 | 66 | 28 | 36 | 6 | ☹ |
| | DC150-05-03.300D1- | 3,3 | | 23 | 66 | 28 | 36 | 6 | ☹ |
| | DC150-05-03.400D1- | 3,4 | | 23 | 66 | 28 | 36 | 6 | ☹ |
| | DC150-05-03.500D1- | 3,5 | | 23 | 66 | 28 | 36 | 6 | ☹ |
| | DC150-05-03.600D1- | 3,6 | | 23 | 66 | 28 | 36 | 6 | ☹ |
| | DC150-05-03.700D1- | 3,7 | | 23 | 66 | 28 | 36 | 6 | ☹ |
| | DC150-05-03.800D1- | 3,8 | | 29 | 74 | 36 | 36 | 6 | ☹ |
| | DC150-05-03.900D1- | 3,9 | | 29 | 74 | 36 | 36 | 6 | ☹ |
| | DC150-05-04.000D1- | 4 | | 29 | 74 | 36 | 36 | 6 | ☹ |
| | DC150-05-04.100D1- | 4,1 | | 29 | 74 | 36 | 36 | 6 | ☹ |
| | DC150-05-04.200D1- | 4,2 | | 29 | 74 | 36 | 36 | 6 | ☹ |
| | DC150-05-04.300D1- | 4,3 | | 29 | 74 | 36 | 36 | 6 | ☹ |
| | DC150-05-04.400D1- | 4,4 | | 29 | 74 | 36 | 36 | 6 | ☹ |
| | DC150-05-04.500D1- | 4,5 | | 29 | 74 | 36 | 36 | 6 | ☹ |
| | DC150-05-04.600D1- | 4,6 | | 29 | 74 | 36 | 36 | 6 | ☹ |
| | DC150-05-04.650D1- | 4,65 | | 29 | 74 | 36 | 36 | 6 | ☹ |
| | DC150-05-04.700D1- | 4,7 | | 29 | 74 | 36 | 36 | 6 | ☹ |
| | DC150-05-04.800D1- | 4,8 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-04.900D1- | 4,9 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-05.000D1- | 5 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-05.100D1- | 5,1 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-05.200D1- | 5,2 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-05.300D1- | 5,3 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-05.400D1- | 5,4 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-05.500D1- | 5,5 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-05.550D1- | 5,55 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-05.600D1- | 5,6 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-05.700D1- | 5,7 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-05.800D1- | 5,8 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-05.900D1- | 5,9 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-06.000D1- | 6 | | 35 | 82 | 44 | 36 | 6 | ☹ |
| | DC150-05-06.100D1- | 6,1 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| | DC150-05-06.200D1- | 6,2 | | 43 | 91 | 53 | 36 | 8 | ☹ |

Ordering example for the WJ30RE grade: DC150-05-03.000A1-WJ30RE

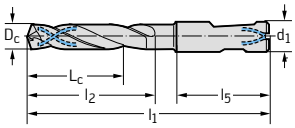
Continued



B 1

Continued

DIN 6535 HE,
turned 180°
DIN 6535 HB




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|
| DC150-05-06.300D1- | 6,2 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.400D1- | 6,4 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.500D1- | 6,5 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.600D1- | 6,6 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.700D1- | 6,7 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.800D1- | 6,8 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.900D1- | 6,9 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-07.000D1- | 7 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-07.100D1- | 7,1 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-07.200D1- | 7,2 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-07.300D1- | 7,3 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-07.400D1- | 7,4 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-07.500D1- | 7,5 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-07.600D1- | 7,6 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-07.700D1- | 7,7 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-07.800D1- | 7,8 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-07.900D1- | 7,9 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-08.000D1- | 8 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-08.100D1- | 8,1 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-08.200D1- | 8,2 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-08.300D1- | 8,3 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-08.400D1- | 8,4 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-08.500D1- | 8,5 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-08.600D1- | 8,6 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-08.700D1- | 8,7 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-08.800D1- | 8,8 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-09.000D1- | 9 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-09.100D1- | 9,1 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-09.200D1- | 9,2 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-09.300D1- | 9,3 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-09.400D1- | 9,4 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-09.500D1- | 9,5 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-09.600D1- | 9,6 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-09.700D1- | 9,7 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-09.800D1- | 9,8 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-09.900D1- | 9,9 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-10.000D1- | 10 | | 49 | 103 | 61 | 40 | 10 | ● |
| DC150-05-10.100D1- | 10,1 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-10.200D1- | 10,2 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-10.300D1- | 10,3 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-10.400D1- | 10,4 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-10.500D1- | 10,5 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-10.600D1- | 10,6 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-10.800D1- | 10,8 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.000D1- | 11 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.100D1- | 11,1 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.200D1- | 11,2 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.300D1- | 11,3 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.500D1- | 11,5 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.600D1- | 11,6 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.700D1- | 11,7 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.800D1- | 11,8 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.900D1- | 11,9 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-12.000D1- | 12 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-12.100D1- | 12,1 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.200D1- | 12,2 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.300D1- | 12,3 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.400D1- | 12,4 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.500D1- | 12,5 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.700D1- | 12,7 | 1/2" | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.800D1- | 12,8 | | 60 | 124 | 77 | 45 | 14 | ● |

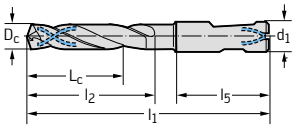
Ordering example for the WJ30RE grade: DC150-05-03.000A1-WJ30RE

Continued

B 1

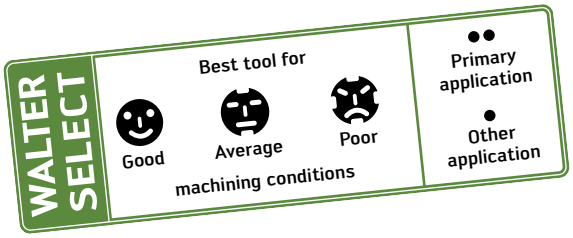
Continued

DIN 6535 HE,
turned 180°
DIN 6535 HB



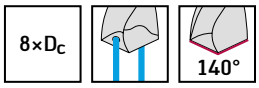

| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|
| DC150-05-13.000D1- | 13 | | 60 | 124 | 77 | 45 | 14 | ☹ |
| DC150-05-13.100D1- | 13,1 | | 60 | 124 | 77 | 45 | 14 | ☹ |
| DC150-05-13.200D1- | 13,2 | | 60 | 124 | 77 | 45 | 14 | ☹ |
| DC150-05-13.500D1- | 13,5 | | 60 | 124 | 77 | 45 | 14 | ☹ |
| DC150-05-13.800D1- | 13,8 | | 60 | 124 | 77 | 45 | 14 | ☹ |
| DC150-05-14.000D1- | 14 | | 60 | 124 | 77 | 45 | 14 | ☹ |
| DC150-05-14.100D1- | 14,1 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-14.200D1- | 14,2 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-14.300D1- | 14,3 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-14.500D1- | 14,5 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-14.600D1- | 14,6 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-14.800D1- | 14,8 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-15.000D1- | 15 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-15.100D1- | 15,1 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-15.200D1- | 15,2 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-15.300D1- | 15,3 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-15.500D1- | 15,5 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-15.600D1- | 15,6 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-15.700D1- | 15,7 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-15.800D1- | 15,8 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-16.000D1- | 16 | | 63 | 133 | 83 | 48 | 16 | ☹ |
| DC150-05-16.500D1- | 16,5 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| DC150-05-16.600D1- | 16,6 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| DC150-05-17.000D1- | 17 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| DC150-05-17.200D1- | 17,2 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| DC150-05-17.300D1- | 17,3 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| DC150-05-17.500D1- | 17,5 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| DC150-05-17.700D1- | 17,7 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| DC150-05-17.800D1- | 17,8 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| DC150-05-18.000D1- | 18 | | 71 | 143 | 93 | 48 | 18 | ☹ |
| DC150-05-18.100D1- | 18,1 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| DC150-05-18.500D1- | 18,5 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| DC150-05-18.800D1- | 18,8 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| DC150-05-19.000D1- | 19 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| DC150-05-19.500D1- | 19,5 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| DC150-05-19.700D1- | 19,7 | | 77 | 153 | 101 | 50 | 20 | ☹ |
| DC150-05-20.000D1- | 20 | | 77 | 153 | 101 | 50 | 20 | ☹ |

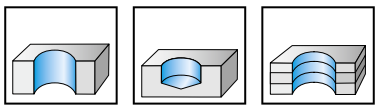
Ordering example for the WJ30RE grade: DC150-05-03.000A1-WJ30RE



# Solid carbide drills with coolant-through
# DC150 Perform

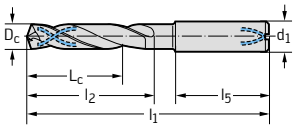
B 1



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30TA | ●● | ● | ●● | ●● | ●● | ● | ● |

Shank DIN 6535 HA




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30TA |
|---|---|---|---|---|---|---|---|---|
| DC150-08-03.000A1- | 3 | | 28 | 74 | 34 | 36 | 6 | ● |
| DC150-08-03.100A1- | 3,1 | | 28 | 74 | 34 | 36 | 6 | ● |
| DC150-08-03.175A1- | 3,175 | 1/8" | 28 | 74 | 34 | 36 | 6 | ● |
| DC150-08-03.200A1- | 3,2 | | 28 | 74 | 34 | 36 | 6 | ● |
| DC150-08-03.300A1- | 3,3 | | 28 | 74 | 34 | 36 | 6 | ● |
| DC150-08-03.400A1- | 3,4 | | 28 | 74 | 34 | 36 | 6 | ● |
| DC150-08-03.500A1- | 3,5 | | 28 | 74 | 34 | 36 | 6 | ● |
| DC150-08-03.572A1- | 3,572 | 9/64" | 28 | 74 | 34 | 36 | 6 | ● |
| DC150-08-03.600A1- | 3,6 | | 28 | 74 | 34 | 36 | 6 | ● |
| DC150-08-03.700A1- | 3,7 | | 28 | 74 | 34 | 36 | 6 | ● |
| DC150-08-03.800A1- | 3,8 | | 37 | 85 | 45 | 36 | 6 | ● |
| DC150-08-03.900A1- | 3,9 | | 37 | 85 | 45 | 36 | 6 | ● |
| DC150-08-03.969A1- | 3,969 | 5/32" | 37 | 85 | 45 | 36 | 6 | ● |
| DC150-08-04.000A1- | 4 | | 37 | 85 | 45 | 36 | 6 | ● |
| DC150-08-04.100A1- | 4,1 | | 37 | 85 | 45 | 36 | 6 | ● |
| DC150-08-04.200A1- | 4,2 | | 37 | 85 | 45 | 36 | 6 | ● |
| DC150-08-04.300A1- | 4,3 | | 37 | 85 | 45 | 36 | 6 | ● |
| DC150-08-04.366A1- | 4,366 | 11/64" | 37 | 85 | 45 | 36 | 6 | ● |
| DC150-08-04.400A1- | 4,4 | | 37 | 85 | 45 | 36 | 6 | ● |
| DC150-08-04.500A1- | 4,5 | | 37 | 85 | 45 | 36 | 6 | ● |
| DC150-08-04.600A1- | 4,6 | | 37 | 85 | 45 | 36 | 6 | ● |
| DC150-08-04.700A1- | 4,7 | | 37 | 85 | 45 | 36 | 6 | ● |
| DC150-08-04.763A1- | 4,763 | 3/16" | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-04.800A1- | 4,8 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-04.900A1- | 4,9 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.000A1- | 5 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.100A1- | 5,1 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.159A1- | 5,159 | 13/64" | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.200A1- | 5,2 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.300A1- | 5,3 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.400A1- | 5,4 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.500A1- | 5,5 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.556A1- | 5,556 | 7/32" | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.600A1- | 5,6 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.700A1- | 5,7 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.800A1- | 5,8 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.900A1- | 5,9 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-05.953A1- | 5,953 | 15/64" | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-06.000A1- | 6 | | 48 | 97 | 57 | 36 | 6 | ● |
| DC150-08-06.100A1- | 6,1 | | 55 | 106 | 66 | 36 | 8 | ● |
| DC150-08-06.200A1- | 6,2 | | 55 | 106 | 66 | 36 | 8 | ● |
| DC150-08-06.300A1- | 6,3 | | 55 | 106 | 66 | 36 | 8 | ● |
| DC150-08-06.350A1- | 6,35 | 1/4" | 55 | 106 | 66 | 36 | 8 | ● |
| DC150-08-06.400A1- | 6,4 | | 55 | 106 | 66 | 36 | 8 | ● |
| DC150-08-06.500A1- | 6,5 | | 55 | 106 | 66 | 36 | 8 | ● |
| DC150-08-06.600A1- | 6,6 | | 55 | 106 | 66 | 36 | 8 | ● |
| DC150-08-06.700A1- | 6,7 | | 55 | 106 | 66 | 36 | 8 | ● |

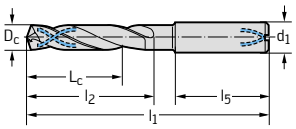
Ordering example for the WJ30TA grade: DC150-08-03.000A1-WJ30TA

Continued

B 1

Continued

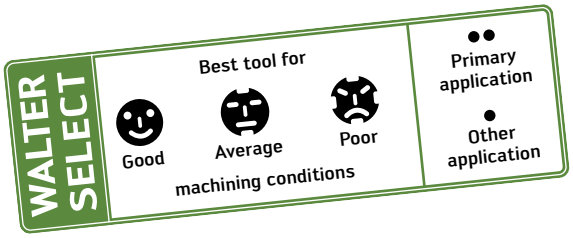
Shank DIN 6535 HA




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30TA |
|---|---|---|---|---|---|---|---|---|
| DC150-08-06.747A1- | 6,747 | 17/64" | 55 | 106 | 66 | 36 | 8 | ☹ |
| DC150-08-06.800A1- | 6,8 | | 55 | 106 | 66 | 36 | 8 | ☹ |
| DC150-08-06.900A1- | 6,9 | | 55 | 106 | 66 | 36 | 8 | ☹ |
| DC150-08-07.000A1- | 7 | | 55 | 106 | 66 | 36 | 8 | ☹ |
| DC150-08-07.100A1- | 7,1 | | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-07.144A1- | 7,144 | 9/32" | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-07.200A1- | 7,2 | | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-07.300A1- | 7,3 | | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-07.400A1- | 7,4 | | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-07.500A1- | 7,5 | | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-07.541A1- | 7,541 | 19/64" | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-07.600A1- | 7,6 | | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-07.700A1- | 7,7 | | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-07.800A1- | 7,8 | | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-07.900A1- | 7,9 | | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-07.938A1- | 7,938 | 5/16" | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-08.000A1- | 8 | | 64 | 116 | 76 | 36 | 8 | ☹ |
| DC150-08-08.100A1- | 8,1 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-08.200A1- | 8,2 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-08.300A1- | 8,3 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-08.334A1- | 8,334 | 21/64" | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-08.400A1- | 8,4 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-08.500A1- | 8,5 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-08.600A1- | 8,6 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-08.700A1- | 8,7 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-08.731A1- | 8,731 | 11/32" | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-08.800A1- | 8,8 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-08.900A1- | 8,9 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.000A1- | 9 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.100A1- | 9,1 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.128A1- | 9,128 | 23/64" | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.200A1- | 9,2 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.300A1- | 9,3 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.400A1- | 9,4 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.500A1- | 9,5 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.525A1- | 9,525 | 3/8" | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.600A1- | 9,6 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.700A1- | 9,7 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.800A1- | 9,8 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.900A1- | 9,9 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-09.922A1- | 9,922 | 25/64" | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-10.000A1- | 10 | | 80 | 139 | 95 | 40 | 10 | ☹ |
| DC150-08-10.100A1- | 10,1 | | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-10.200A1- | 10,2 | | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-10.300A1- | 10,3 | | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-10.319A1- | 10,319 | 13/32" | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-10.400A1- | 10,4 | | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-10.500A1- | 10,5 | | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-10.700A1- | 10,7 | | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-10.716A1- | 10,716 | 27/64" | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-10.800A1- | 10,8 | | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-10.900A1- | 10,9 | | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-11.000A1- | 11 | | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-11.100A1- | 11,1 | | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-11.113A1- | 11,113 | 7/16" | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-11.200A1- | 11,2 | | 96 | 163 | 114 | 45 | 12 | ☹ |
| DC150-08-11.300A1- | 11,3 | | 96 | 163 | 114 | 45 | 12 | ☹ |

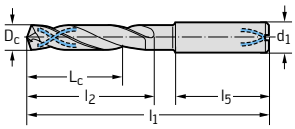
Ordering example for the WJ30TA grade: DC150-08-03.000A1-WJ30TA

Continued



Continued

Shank DIN 6535 HA

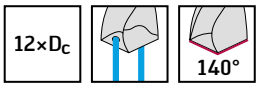


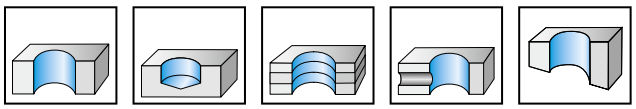

| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30TA |
|---|---|---|---|---|---|---|---|---|
| DC150-08-11.500A1- | 11,5 | | 96 | 163 | 114 | 45 | 12 | ● |
| DC150-08-11.600A1- | 11,6 | | 96 | 163 | 114 | 45 | 12 | ● |
| DC150-08-11.700A1- | 11,7 | | 96 | 163 | 114 | 45 | 12 | ● |
| DC150-08-11.800A1- | 11,8 | | 96 | 163 | 114 | 45 | 12 | ● |
| DC150-08-11.900A1- | 11,9 | | 96 | 163 | 114 | 45 | 12 | ● |
| DC150-08-11.906A1- | 11,906 | 15/32" | 96 | 163 | 114 | 45 | 12 | ● |
| DC150-08-12.000A1- | 12 | | 96 | 163 | 114 | 45 | 12 | ● |
| DC150-08-12.303A1- | 12,303 | 31/64" | 119 | 182 | 133 | 45 | 14 | ● |
| DC150-08-12.500A1- | 12,5 | | 119 | 182 | 133 | 45 | 14 | ● |
| DC150-08-12.700A1- | 12,7 | 1/2" | 119 | 182 | 133 | 45 | 14 | ● |
| DC150-08-13.000A1- | 13 | | 119 | 182 | 133 | 45 | 14 | ● |
| DC150-08-13.494A1- | 13,494 | 17/32" | 119 | 182 | 133 | 45 | 14 | ● |
| DC150-08-13.500A1- | 13,5 | | 119 | 182 | 133 | 45 | 14 | ● |
| DC150-08-14.000A1- | 14 | | 119 | 182 | 133 | 45 | 14 | ● |
| DC150-08-14.288A1- | 14,288 | 9/16" | 136 | 204 | 152 | 48 | 16 | ● |
| DC150-08-14.500A1- | 14,5 | | 136 | 204 | 152 | 48 | 16 | ● |
| DC150-08-15.000A1- | 15 | | 136 | 204 | 152 | 48 | 16 | ● |
| DC150-08-15.500A1- | 15,5 | | 136 | 204 | 152 | 48 | 16 | ● |
| DC150-08-15.875A1- | 15,875 | 5/8" | 136 | 204 | 152 | 48 | 16 | ● |
| DC150-08-16.000A1- | 16 | | 136 | 204 | 152 | 48 | 16 | ● |
| DC150-08-16.500A1- | 16,5 | | 153 | 223 | 171 | 48 | 18 | ● |
| DC150-08-17.000A1- | 17 | | 153 | 223 | 171 | 48 | 18 | ● |
| DC150-08-17.500A1- | 17,5 | | 153 | 223 | 171 | 48 | 18 | ● |
| DC150-08-18.000A1- | 18 | | 153 | 223 | 171 | 48 | 18 | ● |
| DC150-08-18.500A1- | 18,5 | | 170 | 244 | 190 | 50 | 20 | ● |
| DC150-08-19.000A1- | 19 | | 170 | 244 | 190 | 50 | 20 | ● |
| DC150-08-19.050A1- | 19,05 | 3/4" | 170 | 244 | 190 | 50 | 20 | ● |
| DC150-08-19.500A1- | 19,5 | | 170 | 244 | 190 | 50 | 20 | ● |
| DC150-08-20.000A1- | 20 | | 170 | 244 | 190 | 50 | 20 | ● |

Ordering example for the WJ30TA grade: DC150-08-03.000A1-WJ30TA

# Solid carbide drills with coolant-through DC150 Perform

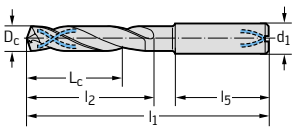
B 1



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30TA | ●● | ● | ●● | ●● | ●● | ●● | ● |

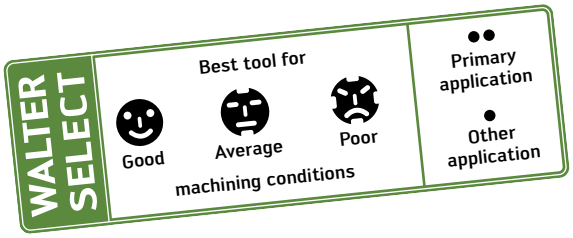
Shank DIN 6535 HA




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30TA |
|---|---|---|---|---|---|---|---|---|
| DC150-12-03.000A1- | 3 | | 48 | 92 | 54 | 36 | 6 | ●● |
| DC150-12-03.100A1- | 3,1 | | 48 | 92 | 54 | 36 | 6 | ●● |
| DC150-12-03.175A1- | 3,175 | 1/8" | 48 | 92 | 54 | 36 | 6 | ●● |
| DC150-12-03.200A1- | 3,2 | | 48 | 92 | 54 | 36 | 6 | ●● |
| DC150-12-03.300A1- | 3,3 | | 48 | 92 | 54 | 36 | 6 | ●● |
| DC150-12-03.400A1- | 3,4 | | 48 | 92 | 54 | 36 | 6 | ●● |
| DC150-12-03.500A1- | 3,5 | | 48 | 92 | 54 | 36 | 6 | ●● |
| DC150-12-03.572A1- | 3,572 | 9/64" | 48 | 92 | 54 | 36 | 6 | ●● |
| DC150-12-03.600A1- | 3,6 | | 48 | 92 | 54 | 36 | 6 | ●● |
| DC150-12-03.700A1- | 3,7 | | 48 | 92 | 54 | 36 | 6 | ●● |
| DC150-12-03.800A1- | 3,8 | | 56 | 102 | 64 | 36 | 6 | ●● |
| DC150-12-03.900A1- | 3,9 | | 56 | 102 | 64 | 36 | 6 | ●● |
| DC150-12-03.969A1- | 3,969 | 5/32" | 56 | 102 | 64 | 36 | 6 | ●● |
| DC150-12-04.000A1- | 4 | | 56 | 102 | 64 | 36 | 6 | ●● |
| DC150-12-04.100A1- | 4,1 | | 56 | 102 | 64 | 36 | 6 | ●● |
| DC150-12-04.200A1- | 4,2 | | 56 | 102 | 64 | 36 | 6 | ●● |
| DC150-12-04.300A1- | 4,3 | | 56 | 102 | 64 | 36 | 6 | ●● |
| DC150-12-04.366A1- | 4,366 | 11/64" | 56 | 102 | 64 | 36 | 6 | ●● |
| DC150-12-04.400A1- | 4,4 | | 56 | 102 | 64 | 36 | 6 | ●● |
| DC150-12-04.500A1- | 4,5 | | 56 | 102 | 64 | 36 | 6 | ●● |
| DC150-12-04.600A1- | 4,6 | | 56 | 102 | 64 | 36 | 6 | ●● |
| DC150-12-04.700A1- | 4,7 | | 56 | 102 | 64 | 36 | 6 | ●● |
| DC150-12-04.763A1- | 4,763 | 3/16" | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-04.800A1- | 4,8 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-04.900A1- | 4,9 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.000A1- | 5 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.100A1- | 5,1 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.159A1- | 5,159 | 13/64" | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.200A1- | 5,2 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.300A1- | 5,3 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.400A1- | 5,4 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.500A1- | 5,5 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.550A1- | 5,55 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.556A1- | 5,556 | 7/32" | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.600A1- | 5,6 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.700A1- | 5,7 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.800A1- | 5,8 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-05.900A1- | 5,9 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-06.000A1- | 6 | | 74 | 121 | 83 | 36 | 6 | ●● |
| DC150-12-06.100A1- | 6,1 | | 98 | 148 | 110 | 36 | 8 | ●● |
| DC150-12-06.200A1- | 6,2 | | 98 | 148 | 110 | 36 | 8 | ●● |
| DC150-12-06.300A1- | 6,3 | | 98 | 148 | 110 | 36 | 8 | ●● |
| DC150-12-06.350A1- | 6,35 | 1/4" | 98 | 148 | 110 | 36 | 8 | ●● |

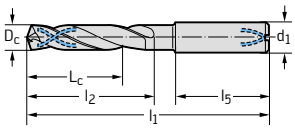
Ordering example for the WJ30TA grade: DC150-12-03.000A1-WJ30TA

Continued



Continued

Shank DIN 6535 HA



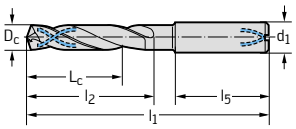

| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30TA |
|---|---|---|---|---|---|---|---|---|
| DC150-12-06.400A1- | 6,4 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-06.500A1- | 6,5 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-06.600A1- | 6,6 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-06.700A1- | 6,7 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-06.747A1- | 6,747 | 17/64" | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-06.800A1- | 6,8 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-06.900A1- | 6,9 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-07.000A1- | 7 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-07.100A1- | 7,1 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-07.144A1- | 7,144 | 9/32" | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-07.200A1- | 7,2 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-07.300A1- | 7,3 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-07.400A1- | 7,4 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-07.500A1- | 7,5 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-07.541A1- | 7,541 | 19/64" | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-07.800A1- | 7,8 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-07.900A1- | 7,9 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-07.938A1- | 7,938 | 5/16" | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-08.000A1- | 8 | | 98 | 148 | 110 | 36 | 8 | ● |
| DC150-12-08.100A1- | 8,1 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-08.200A1- | 8,2 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-08.300A1- | 8,3 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-08.400A1- | 8,4 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-08.500A1- | 8,5 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-08.600A1- | 8,6 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-08.700A1- | 8,7 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-08.731A1- | 8,731 | 11/32" | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-08.800A1- | 8,8 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-09.000A1- | 9 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-09.128A1- | 9,128 | 23/64" | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-09.200A1- | 9,2 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-09.300A1- | 9,3 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-09.500A1- | 9,5 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-09.525A1- | 9,525 | 3/8" | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-09.600A1- | 9,6 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-09.700A1- | 9,7 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-09.800A1- | 9,8 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-09.922A1- | 9,922 | 25/64" | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-10.000A1- | 10 | | 123 | 180 | 138 | 40 | 10 | ● |
| DC150-12-10.100A1- | 10,1 | | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-10.200A1- | 10,2 | | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-10.300A1- | 10,3 | | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-10.319A1- | 10,319 | 13/32" | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-10.500A1- | 10,5 | | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-10.716A1- | 10,716 | 27/64" | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-10.800A1- | 10,8 | | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-11.000A1- | 11 | | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-11.100A1- | 11,1 | | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-11.113A1- | 11,113 | 7/16" | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-11.200A1- | 11,2 | | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-11.500A1- | 11,5 | | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-11.509A1- | 11,509 | 29/64" | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-11.700A1- | 11,7 | | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-11.800A1- | 11,8 | | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-11.906A1- | 11,906 | 15/32" | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-12.000A1- | 12 | | 140 | 206 | 158 | 45 | 12 | ● |
| DC150-12-12.100A1- | 12,1 | | 168 | 230 | 182 | 45 | 14 | ● |
| DC150-12-12.200A1- | 12,2 | | 168 | 230 | 182 | 45 | 14 | ● |
| DC150-12-12.300A1- | 12,3 | | 168 | 230 | 182 | 45 | 14 | ● |
| DC150-12-12.303A1- | 12,303 | 31/64" | 168 | 230 | 182 | 45 | 14 | ● |
| DC150-12-12.500A1- | 12,5 | | 168 | 230 | 182 | 45 | 14 | ● |

Ordering example for the WJ30TA grade: DC150-12-03.000A1-WJ30TA

Continued

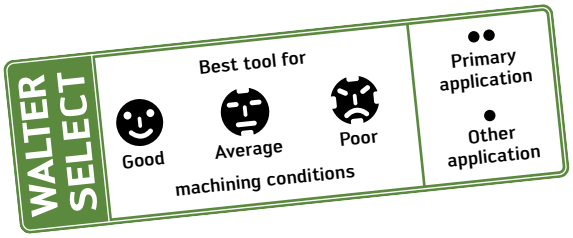
Continued

Shank DIN 6535 HA




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30TA |
|---|---|---|---|---|---|---|---|---|
| DC150-12-12.600A1- | 12,6 | | 168 | 230 | 182 | 45 | 14 | ☹ |
| DC150-12-12.700A1- | 12,7 | 1/2" | 168 | 230 | 182 | 45 | 14 | ☹ |
| DC150-12-13.000A1- | 13 | | 168 | 230 | 182 | 45 | 14 | ☹ |
| DC150-12-13.494A1- | 13,494 | 17/32" | 168 | 230 | 182 | 45 | 14 | ☹ |
| DC150-12-13.500A1- | 13,5 | | 168 | 230 | 182 | 45 | 14 | ☹ |
| DC150-12-14.000A1- | 14 | | 168 | 230 | 182 | 45 | 14 | ☹ |
| DC150-12-14.288A1- | 14,288 | 9/16" | 192 | 260 | 208 | 48 | 16 | ☹ |
| DC150-12-14.500A1- | 14,5 | | 192 | 260 | 208 | 48 | 16 | ☹ |
| DC150-12-15.000A1- | 15 | | 192 | 260 | 208 | 48 | 16 | ☹ |
| DC150-12-15.500A1- | 15,5 | | 192 | 260 | 208 | 48 | 16 | ☹ |
| DC150-12-15.875A1- | 15,875 | 5/8" | 192 | 260 | 208 | 48 | 16 | ☹ |
| DC150-12-16.000A1- | 16 | | 192 | 260 | 208 | 48 | 16 | ☹ |
| DC150-12-16.500A1- | 16,5 | | 216 | 285 | 234 | 48 | 18 | ☹ |
| DC150-12-17.000A1- | 17 | | 216 | 285 | 234 | 48 | 18 | ☹ |
| DC150-12-17.500A1- | 17,5 | | 216 | 285 | 234 | 48 | 18 | ☹ |
| DC150-12-18.000A1- | 18 | | 216 | 285 | 234 | 48 | 18 | ☹ |
| DC150-12-19.000A1- | 19 | | 238 | 310 | 258 | 50 | 20 | ☹ |
| DC150-12-20.000A1- | 20 | | 238 | 310 | 258 | 50 | 20 | ☹ |

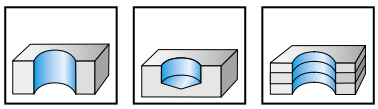
Ordering example for the WJ30TA grade: DC150-12-03.000A1-WJ30TA



# Solid carbide twist drills
# DC150 Perform



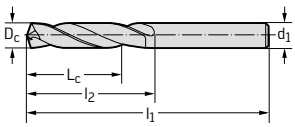
– Up to 1.9 mm dimensions in accordance with DIN 1897



3×$D_c$ | DIN 6539 |  |  140°

| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30RE | ●● | ● | ●● | ● | ● | ● | ● |

Shank DIN 6535 HA



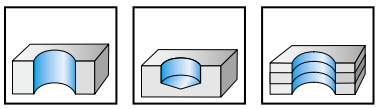

| Designation | $D_c$ h7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|
| DC150-03-01.500U0- | 1,5 | | 6 | 32 | 9 | 1,5 | ● |
| DC150-03-01.588U0- | 1,588 | 1/16" | 7 | 34 | 10 | 1,588 | ● |
| DC150-03-01.600U0- | 1,6 | | 7 | 34 | 10 | 1,6 | ● |
| DC150-03-01.700U0- | 1,7 | | 7 | 34 | 10 | 1,7 | ● |
| DC150-03-01.800U0- | 1,8 | | 8 | 36 | 11 | 1,8 | ● |
| DC150-03-01.820U0- | 1,82 | | 8 | 36 | 11 | 1,82 | ● |
| DC150-03-01.900U0- | 1,9 | | 8 | 36 | 11 | 1,9 | ● |
| DC150-03-01.984U0- | 1,984 | 5/64" | 8 | 38 | 12 | 1,984 | ● |
| DC150-03-02.000U0- | 2 | | 8 | 38 | 12 | 2 | ● |
| DC150-03-02.050U0- | 2,05 | | 8 | 38 | 12 | 2,05 | ● |
| DC150-03-02.100U0- | 2,1 | | 8 | 38 | 12 | 2,1 | ● |
| DC150-03-02.200U0- | 2,2 | | 9 | 40 | 13 | 2,2 | ● |
| DC150-03-02.300U0- | 2,3 | | 9 | 40 | 13 | 2,3 | ● |
| DC150-03-02.381U0- | 2,381 | 3/32" | 10 | 43 | 14 | 2,381 | ● |
| DC150-03-02.400U0- | 2,4 | | 10 | 43 | 14 | 2,4 | ● |
| DC150-03-02.500U0- | 2,5 | | 10 | 43 | 14 | 2,5 | ● |
| DC150-03-02.600U0- | 2,6 | | 10 | 43 | 14 | 2,6 | ● |
| DC150-03-02.700U0- | 2,7 | | 11 | 46 | 16 | 2,7 | ● |
| DC150-03-02.778U0- | 2,778 | 7/64" | 11 | 46 | 16 | 2,778 | ● |
| DC150-03-02.800U0- | 2,8 | | 11 | 46 | 16 | 2,8 | ● |
| DC150-03-02.900U0- | 2,9 | | 11 | 46 | 16 | 2,9 | ● |

Ordering example for the WJ30RE grade: DC150-03-01.500U0-WJ30RE

# Solid carbide twist drills
# DC150 Perform

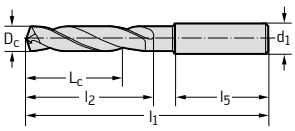
B 1

3×$D_c$ | DIN 6537 K | 140°



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30RE | ●● | ● | ●● | ● | ● | ● | ● |

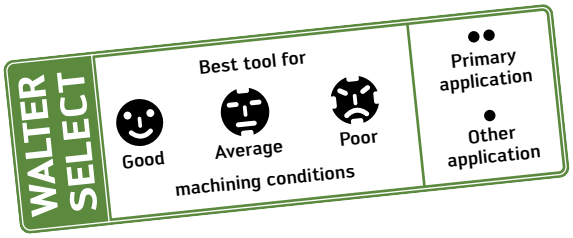
Shank DIN 6535 HA




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|
| DC150-03-03.000A0- | 3 | | 14 | 62 | 20 | 36 | 6 | ☹ |
| DC150-03-03.100A0- | 3,1 | | 14 | 62 | 20 | 36 | 6 | ☹ |
| DC150-03-03.175A0- | 3,175 | 1/8" | 14 | 62 | 20 | 36 | 6 | ☹ |
| DC150-03-03.200A0- | 3,2 | | 14 | 62 | 20 | 36 | 6 | ☹ |
| DC150-03-03.250A0- | 3,25 | | 14 | 62 | 20 | 36 | 6 | ☹ |
| DC150-03-03.300A0- | 3,3 | | 14 | 62 | 20 | 36 | 6 | ☹ |
| DC150-03-03.400A0- | 3,4 | | 14 | 62 | 20 | 36 | 6 | ☹ |
| DC150-03-03.500A0- | 3,5 | | 14 | 62 | 20 | 36 | 6 | ☹ |
| DC150-03-03.572A0- | 3,572 | 9/64" | 14 | 62 | 20 | 36 | 6 | ☹ |
| DC150-03-03.600A0- | 3,6 | | 14 | 62 | 20 | 36 | 6 | ☹ |
| DC150-03-03.700A0- | 3,7 | | 14 | 62 | 20 | 36 | 6 | ☹ |
| DC150-03-03.800A0- | 3,8 | | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-03.900A0- | 3,9 | | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-03.969A0- | 3,969 | 5/32" | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-04.000A0- | 4 | | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-04.100A0- | 4,1 | | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-04.200A0- | 4,2 | | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-04.300A0- | 4,3 | | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-04.366A0- | 4,366 | 11/64" | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-04.400A0- | 4,4 | | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-04.500A0- | 4,5 | | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-04.600A0- | 4,6 | | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-04.650A0- | 4,65 | | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-04.700A0- | 4,7 | | 17 | 66 | 24 | 36 | 6 | ☹ |
| DC150-03-04.763A0- | 4,763 | 3/16" | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-04.800A0- | 4,8 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-04.900A0- | 4,9 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.000A0- | 5 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.100A0- | 5,1 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.159A0- | 5,159 | 13/64" | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.200A0- | 5,2 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.300A0- | 5,3 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.400A0- | 5,4 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.500A0- | 5,5 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.550A0- | 5,55 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.556A0- | 5,556 | 7/32" | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.600A0- | 5,6 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.700A0- | 5,7 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.800A0- | 5,8 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.900A0- | 5,9 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-05.953A0- | 5,953 | 15/64" | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-06.000A0- | 6 | | 20 | 66 | 28 | 36 | 6 | ☹ |
| DC150-03-06.100A0- | 6,1 | | 24 | 79 | 34 | 36 | 8 | ☹ |

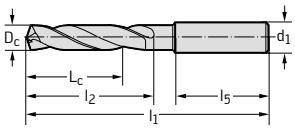
Ordering example for the WJ30RE grade: DC150-03-03.000A0-WJ30RE

Continued



Continued

Shank DIN 6535 HA



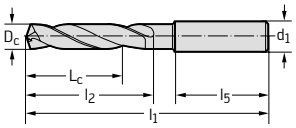
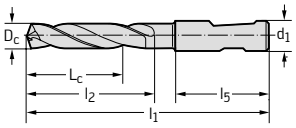

| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|
| DC150-03-06.200A0- | 6,2 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.300A0- | 6,3 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.350A0- | 6,35 | 1/4" | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.400A0- | 6,4 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.500A0- | 6,5 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.600A0- | 6,6 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.700A0- | 6,7 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.747A0- | 6,747 | 17/64" | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.800A0- | 6,8 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.900A0- | 6,9 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-07.000A0- | 7 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-07.100A0- | 7,1 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.144A0- | 7,144 | 9/32" | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.200A0- | 7,2 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.300A0- | 7,3 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.400A0- | 7,4 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.500A0- | 7,5 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.541A0- | 7,541 | 19/64" | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.600A0- | 7,6 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.700A0- | 7,7 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.800A0- | 7,8 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.900A0- | 7,9 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.938A0- | 7,938 | 5/16" | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-08.000A0- | 8 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-08.100A0- | 8,1 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.200A0- | 8,2 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.300A0- | 8,3 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.334A0- | 8,334 | 21/64" | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.400A0- | 8,4 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.500A0- | 8,5 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.600A0- | 8,6 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.700A0- | 8,7 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.731A0- | 8,731 | 11/32" | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.800A0- | 8,8 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.900A0- | 8,9 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.000A0- | 9 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.100A0- | 9,1 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.200A0- | 9,2 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.300A0- | 9,3 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.400A0- | 9,4 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.500A0- | 9,5 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.525A0- | 9,525 | 3/8" | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.600A0- | 9,6 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.700A0- | 9,7 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.800A0- | 9,8 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.900A0- | 9,9 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.922A0- | 9,922 | 25/64" | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-10.000A0- | 10 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-10.100A0- | 10,1 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.200A0- | 10,2 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.300A0- | 10,3 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.319A0- | 10,319 | 13/32" | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.400A0- | 10,4 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.500A0- | 10,5 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.600A0- | 10,6 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.716A0- | 10,716 | 27/64" | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.800A0- | 10,8 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.000A0- | 11 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.100A0- | 11,1 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.113A0- | 11,113 | 7/16" | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.200A0- | 11,2 | | 40 | 102 | 55 | 45 | 12 | ● |

Ordering example for the WJ30RE grade: DC150-03-03.000A0-WJ30RE

Continued

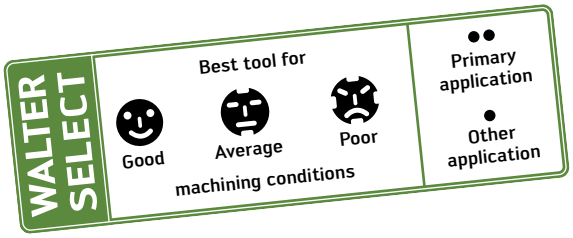
Continued

B 1

| | Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|---|
| Shank DIN 6535 HA  | DC150-03-11.300A0- | 11,3 | | 40 | 102 | 55 | 45 | 12 | ●● |
| | DC150-03-11.400A0- | 11,4 | | 40 | 102 | 55 | 45 | 12 | ●● |
| | DC150-03-11.500A0- | 11,5 | | 40 | 102 | 55 | 45 | 12 | ●● |
| | DC150-03-11.509A0- | 11,509 | 29/64" | 40 | 102 | 55 | 45 | 12 | ●● |
| | DC150-03-11.700A0- | 11,7 | | 40 | 102 | 55 | 45 | 12 | ●● |
| | DC150-03-11.800A0- | 11,8 | | 40 | 102 | 55 | 45 | 12 | ●● |
| | DC150-03-11.900A0- | 11,9 | | 40 | 102 | 55 | 45 | 12 | ●● |
| | DC150-03-12.000A0- | 12 | | 40 | 102 | 55 | 45 | 12 | ●● |
| | DC150-03-12.100A0- | 12,1 | | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-12.200A0- | 12,2 | | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-12.250A0- | 12,25 | | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-12.300A0- | 12,3 | | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-12.303A0- | 12,303 | 31/64" | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-12.500A0- | 12,5 | | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-12.700A0- | 12,7 | 1/2" | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-12.800A0- | 12,8 | | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-13.000A0- | 13 | | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-13.100A0- | 13,1 | | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-13.300A0- | 13,3 | | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-13.494A0- | 13,494 | 17/32" | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-13.500A0- | 13,5 | | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-14.000A0- | 14 | | 43 | 107 | 60 | 45 | 14 | ●● |
| | DC150-03-14.200A0- | 14,2 | | 45 | 115 | 65 | 48 | 16 | ●● |
| | DC150-03-14.288A0- | 14,288 | 9/16" | 45 | 115 | 65 | 48 | 16 | ●● |
| | DC150-03-14.500A0- | 14,5 | | 45 | 115 | 65 | 48 | 16 | ●● |
| | DC150-03-14.700A0- | 14,7 | | 45 | 115 | 65 | 48 | 16 | ●● |
| | DC150-03-14.800A0- | 14,8 | | 45 | 115 | 65 | 48 | 16 | ●● |
| | DC150-03-15.000A0- | 15 | | 45 | 115 | 65 | 48 | 16 | ●● |
| | DC150-03-15.100A0- | 15,1 | | 45 | 115 | 65 | 48 | 16 | ●● |
| | DC150-03-15.500A0- | 15,5 | | 45 | 115 | 65 | 48 | 16 | ●● |
| | DC150-03-15.800A0- | 15,8 | | 45 | 115 | 65 | 48 | 16 | ●● |
| | DC150-03-15.875A0- | 15,875 | 5/8" | 45 | 115 | 65 | 48 | 16 | ●● |
| | DC150-03-16.000A0- | 16 | | 45 | 115 | 65 | 48 | 16 | ●● |
| | DC150-03-16.500A0- | 16,5 | | 51 | 123 | 73 | 48 | 18 | ●● |
| | DC150-03-16.750A0- | 16,75 | | 51 | 123 | 73 | 48 | 18 | ●● |
| | DC150-03-17.000A0- | 17 | | 51 | 123 | 73 | 48 | 18 | ●● |
| | DC150-03-17.500A0- | 17,5 | | 51 | 123 | 73 | 48 | 18 | ●● |
| | DC150-03-17.800A0- | 17,8 | | 51 | 123 | 73 | 48 | 18 | ●● |
| | DC150-03-18.000A0- | 18 | | 51 | 123 | 73 | 48 | 18 | ●● |
| | DC150-03-19.000A0- | 19 | | 55 | 131 | 79 | 50 | 20 | ●● |
| | DC150-03-20.000A0- | 20 | | 55 | 131 | 79 | 50 | 20 | ●● |
| DIN 6535 HE, turned 180° DIN 6535 HB  | DC150-03-03.000D0- | 3 | | 14 | 62 | 20 | 36 | 6 | ●● |
| | DC150-03-03.100D0- | 3,1 | | 14 | 62 | 20 | 36 | 6 | ●● |
| | DC150-03-03.200D0- | 3,2 | | 14 | 62 | 20 | 36 | 6 | ●● |
| | DC150-03-03.300D0- | 3,3 | | 14 | 62 | 20 | 36 | 6 | ●● |
| | DC150-03-03.400D0- | 3,4 | | 14 | 62 | 20 | 36 | 6 | ●● |
| | DC150-03-03.500D0- | 3,5 | | 14 | 62 | 20 | 36 | 6 | ●● |
| | DC150-03-03.600D0- | 3,6 | | 14 | 62 | 20 | 36 | 6 | ●● |
| | DC150-03-03.700D0- | 3,7 | | 14 | 62 | 20 | 36 | 6 | ●● |
| | DC150-03-03.800D0- | 3,8 | | 17 | 66 | 24 | 36 | 6 | ●● |
| | DC150-03-03.900D0- | 3,9 | | 17 | 66 | 24 | 36 | 6 | ●● |
| | DC150-03-04.000D0- | 4 | | 17 | 66 | 24 | 36 | 6 | ●● |
| | DC150-03-04.200D0- | 4,2 | | 17 | 66 | 24 | 36 | 6 | ●● |
| | DC150-03-04.300D0- | 4,3 | | 17 | 66 | 24 | 36 | 6 | ●● |
| | DC150-03-04.500D0- | 4,5 | | 17 | 66 | 24 | 36 | 6 | ●● |
| | DC150-03-04.650D0- | 4,65 | | 17 | 66 | 24 | 36 | 6 | ●● |
| | DC150-03-04.700D0- | 4,7 | | 17 | 66 | 24 | 36 | 6 | ●● |

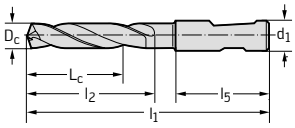
Ordering example for the WJ30RE grade: DC150-03-03.000A0-WJ30RE

Continued



Continued

DIN 6535 HE,
turned 180°
DIN 6535 HB



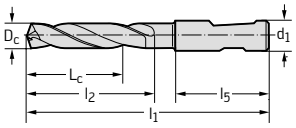

| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|
| DC150-03-04.800D0- | 4,8 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.000D0- | 5 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.100D0- | 5,1 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.300D0- | 5,3 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.500D0- | 5,5 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.550D0- | 5,55 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.600D0- | 5,6 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-05.800D0- | 5,8 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-06.000D0- | 6 | | 20 | 66 | 28 | 36 | 6 | ● |
| DC150-03-06.100D0- | 6,1 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.200D0- | 6,2 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.300D0- | 6,3 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.500D0- | 6,5 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.600D0- | 6,6 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.700D0- | 6,7 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-06.800D0- | 6,8 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-07.000D0- | 7 | | 24 | 79 | 34 | 36 | 8 | ● |
| DC150-03-07.100D0- | 7,1 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.400D0- | 7,4 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.500D0- | 7,5 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.600D0- | 7,6 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-07.800D0- | 7,8 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-08.000D0- | 8 | | 29 | 79 | 41 | 36 | 8 | ● |
| DC150-03-08.100D0- | 8,1 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.200D0- | 8,2 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.300D0- | 8,3 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.400D0- | 8,4 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.500D0- | 8,5 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.600D0- | 8,6 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.700D0- | 8,7 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-08.800D0- | 8,8 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.000D0- | 9 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.100D0- | 9,1 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.500D0- | 9,5 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.700D0- | 9,5 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-09.800D0- | 9,8 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-10.000D0- | 10 | | 35 | 89 | 47 | 40 | 10 | ● |
| DC150-03-10.100D0- | 10,1 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.200D0- | 10,2 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.300D0- | 10,3 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.400D0- | 10,4 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.500D0- | 10,5 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.600D0- | 10,6 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.800D0- | 10,8 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-10.900D0- | 10,9 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.000D0- | 11 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.100D0- | 11,1 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.200D0- | 11,2 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.300D0- | 11,3 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.500D0- | 11,5 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.600D0- | 11,6 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-11.800D0- | 11,8 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-12.000D0- | 12 | | 40 | 102 | 55 | 45 | 12 | ● |
| DC150-03-12.200D0- | 12,2 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-12.300D0- | 12,3 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-12.500D0- | 12,5 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-13.000D0- | 13 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-13.200D0- | 13,2 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-13.300D0- | 13,3 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-13.400D0- | 13,4 | | 43 | 107 | 60 | 45 | 14 | ● |
| DC150-03-13.500D0- | 13,5 | | 43 | 107 | 60 | 45 | 14 | ● |

Ordering example for the WJ30RE grade: DC150-03-03.000A0-WJ30RE

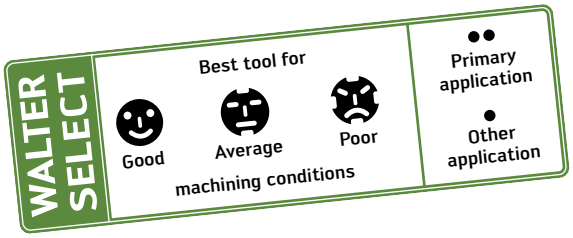
Continued

B 1

Continued

| | Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30RE |
|---|---|---|---|---|---|---|---|---|---|
| DIN 6535 HE, turned 180° DIN 6535 HB   | DC150-03-13.600D0- | 13,6 | | 43 | 107 | 60 | 45 | 14 | ● |
| | DC150-03-13.800D0- | 13,8 | | 43 | 107 | 60 | 45 | 14 | ● |
| | DC150-03-14.000D0- | 14 | | 43 | 107 | 60 | 45 | 14 | ● |
| | DC150-03-14.500D0- | 14,5 | | 45 | 115 | 65 | 48 | 16 | ● |
| | DC150-03-15.000D0- | 15 | | 45 | 115 | 65 | 48 | 16 | ● |
| | DC150-03-15.100D0- | 15,1 | | 45 | 115 | 65 | 48 | 16 | ● |
| | DC150-03-16.000D0- | 16 | | 45 | 115 | 65 | 48 | 16 | ● |
| | DC150-03-16.500D0- | 16,5 | | 51 | 123 | 73 | 48 | 18 | ● |
| | DC150-03-17.000D0- | 17 | | 51 | 123 | 73 | 48 | 18 | ● |
| | DC150-03-17.500D0- | 17,5 | | 51 | 123 | 73 | 48 | 18 | ● |
| | DC150-03-18.000D0- | 18 | | 51 | 123 | 73 | 48 | 18 | ● |
| | DC150-03-18.500D0- | 18,5 | | 55 | 131 | 79 | 50 | 20 | ● |
| | DC150-03-19.000D0- | 19 | | 55 | 131 | 79 | 50 | 20 | ● |
| | DC150-03-20.000D0- | 20 | | 55 | 131 | 79 | 50 | 20 | ● |

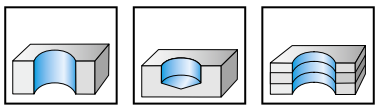
Ordering example for the WJ30RE grade: DC150-03-03.000A0-WJ30RE



# Solid carbide twist drills
# DC150 Perform

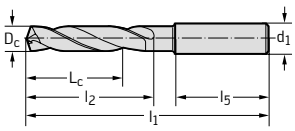
B 1

5×$D_C$ | DIN 6537 L | 140°



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30TA | ●● | ● | ●● | ● | ● | ● | ● |

Shank DIN 6535 HA




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30TA |
|---|---|---|---|---|---|---|---|---|
| DC150-05-03.000A0- | 3 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.100A0- | 3,1 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.175A0- | 3,175 | 1/8" | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.200A0- | 3,2 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.250A0- | 3,25 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.300A0- | 3,3 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.400A0- | 3,4 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.500A0- | 3,5 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.600A0- | 3,6 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.650A0- | 3,65 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.700A0- | 3,7 | | 23 | 66 | 28 | 36 | 6 | ● |
| DC150-05-03.800A0- | 3,8 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-03.900A0- | 3,9 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-03.969A0- | 3,969 | 5/32" | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.000A0- | 4 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.100A0- | 4,1 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.200A0- | 4,2 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.300A0- | 4,3 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.366A0- | 4,366 | 11/64" | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.400A0- | 4,4 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.500A0- | 4,5 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.600A0- | 4,6 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.650A0- | 4,65 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.700A0- | 4,7 | | 29 | 74 | 36 | 36 | 6 | ● |
| DC150-05-04.763A0- | 4,763 | 3/16" | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-04.800A0- | 4,8 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-04.900A0- | 4,9 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.000A0- | 5 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.100A0- | 5,1 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.159A0- | 5,159 | 13/64" | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.200A0- | 5,2 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.300A0- | 5,3 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.400A0- | 5,4 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.500A0- | 5,5 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.550A0- | 5,55 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.556A0- | 5,556 | 7/32" | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.600A0- | 5,6 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.700A0- | 5,7 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.800A0- | 5,8 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.900A0- | 5,9 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-05.953A0- | 5,953 | 15/64" | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-06.000A0- | 6 | | 35 | 82 | 44 | 36 | 6 | ● |
| DC150-05-06.100A0- | 6,1 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.200A0- | 6,2 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.300A0- | 6,3 | | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.350A0- | 6,35 | 1/4" | 43 | 91 | 53 | 36 | 8 | ● |
| DC150-05-06.400A0- | 6,4 | | 43 | 91 | 53 | 36 | 8 | ● |

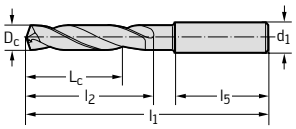
Ordering example for the WJ30TA grade: DC150-05-03.000A0-WJ30TA

Continued

Continued

B 1

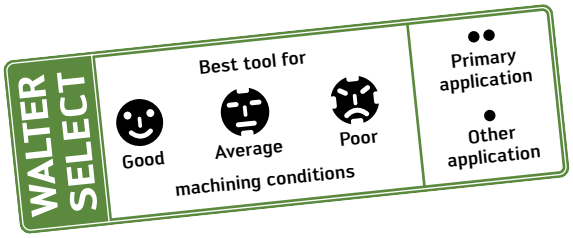
Shank DIN 6535 HA




| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30TA |
|---|---|---|---|---|---|---|---|---|
| DC150-05-06.500A0- | 6,5 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-06.600A0- | 6,6 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-06.700A0- | 6,7 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-06.747A0- | 6,747 | 17/64" | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-06.800A0- | 6,8 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-06.900A0- | 6,9 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.000A0- | 7 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.100A0- | 7,1 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.144A0- | 7,144 | 9/32" | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.200A0- | 7,2 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.300A0- | 7,3 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.400A0- | 7,4 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.500A0- | 7,5 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.600A0- | 7,6 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.700A0- | 7,7 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.800A0- | 7,8 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.900A0- | 7,9 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-07.938A0- | 7,938 | 5/16" | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-08.000A0- | 8 | | 43 | 91 | 53 | 36 | 8 | ☹ |
| DC150-05-08.100A0- | 8,1 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.200A0- | 8,2 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.300A0- | 8,3 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.334A0- | 8,334 | 21/64" | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.400A0- | 8,4 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.500A0- | 8,5 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.600A0- | 8,6 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.700A0- | 8,7 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.731A0- | 8,731 | 11/32" | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.800A0- | 8,8 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-08.900A0- | 8,9 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.000A0- | 9 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.100A0- | 9,1 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.128A0- | 9,128 | 23/64" | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.200A0- | 9,2 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.300A0- | 9,3 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.400A0- | 9,4 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.500A0- | 9,5 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.525A0- | 9,525 | 3/8" | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.600A0- | 9,6 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.700A0- | 9,7 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.800A0- | 9,8 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.900A0- | 9,9 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-09.922A0- | 9,922 | 25/64" | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-10.000A0- | 10 | | 49 | 103 | 61 | 40 | 10 | ☹ |
| DC150-05-10.100A0- | 10,1 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.200A0- | 10,2 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.300A0- | 10,3 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.319A0- | 10,319 | 13/32" | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.400A0- | 10,4 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.500A0- | 10,5 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.600A0- | 10,6 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.700A0- | 10,7 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.716A0- | 10,716 | 27/64" | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-10.800A0- | 10,8 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-11.000A0- | 11 | | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-11.113A0- | 11,113 | 7/16" | 56 | 118 | 71 | 45 | 12 | ☹ |
| DC150-05-11.200A0- | 11,2 | | 56 | 118 | 71 | 45 | 12 | ☹ |

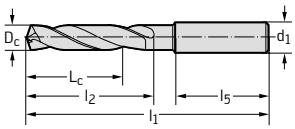
Ordering example for the WJ30TA grade: DC150-05-03.000A0-WJ30TA

Continued



Continued

Shank DIN 6535 HA



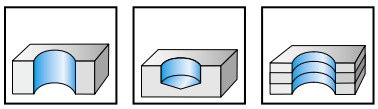

| Designation | $D_c$ m7 mm | $D_c$ Inch/no. | $L_c$ mm | $l_1$ mm | $l_2$ mm | $l_5$ mm | $d_1$ h6 mm | WJ30TA |
|---|---|---|---|---|---|---|---|---|
| DC150-05-11.500A0- | 11,5 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.800A0- | 11,8 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-11.906A0- | 11,906 | 15/32" | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-12.000A0- | 12 | | 56 | 118 | 71 | 45 | 12 | ● |
| DC150-05-12.200A0- | 12,2 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.300A0- | 12,3 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.400A0- | 12,4 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.500A0- | 12,5 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.600A0- | 12,6 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-12.700A0- | 12,7 | 1/2" | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.000A0- | 13 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.200A0- | 13,2 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.494A0- | 13,494 | 17/32" | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.500A0- | 13,5 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-13.800A0- | 13,8 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-14.000A0- | 14 | | 60 | 124 | 77 | 45 | 14 | ● |
| DC150-05-14.200A0- | 14,2 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-14.288A0- | 14,288 | 9/16" | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-14.500A0- | 14,5 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-15.000A0- | 15 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-15.500A0- | 15,5 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-15.800A0- | 15,8 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-16.000A0- | 16 | | 63 | 133 | 83 | 48 | 16 | ● |
| DC150-05-16.500A0- | 16,5 | | 71 | 143 | 93 | 48 | 18 | ● |
| DC150-05-17.000A0- | 17 | | 71 | 143 | 93 | 48 | 18 | ● |
| DC150-05-17.500A0- | 17,5 | | 71 | 143 | 93 | 48 | 18 | ● |
| DC150-05-18.000A0- | 18 | | 71 | 143 | 93 | 48 | 18 | ● |
| DC150-05-19.000A0- | 19 | | 77 | 153 | 101 | 50 | 20 | ● |
| DC150-05-19.500A0- | 19,5 | | 77 | 153 | 101 | 50 | 20 | ● |
| DC150-05-20.000A0- | 20 | | 77 | 153 | 101 | 50 | 20 | ● |

Ordering example for the WJ30TA grade: DC150-05-03.000A0-WJ30TA

# HSS twist drills
# DA110 Perform

B 1

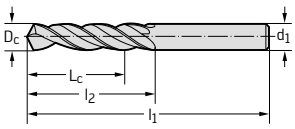
– Available as set
– Type N



~8×$D_c$ | DIN 338 | 118°

| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WZ90AJ | ●● | ● | ●● | ● | | | ● |

Parallel shank



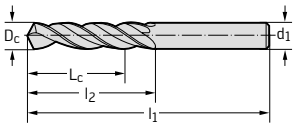

| Designation | $D_c$ h8 mm | $L_c$ mm | $l_1$ mm | $l_2$ mm | $d_1$ f11 mm | WZ90AJ |
|---|---|---|---|---|---|---|
| DA110-08-01.000U0- | 1 | 10 | 34 | 12 | 1 | ● |
| DA110-08-01.100U0- | 1,1 | 12 | 36 | 14 | 1,1 | ● |
| DA110-08-01.200U0- | 1,2 | 14 | 38 | 16 | 1,2 | ● |
| DA110-08-01.300U0- | 1,3 | 14 | 38 | 16 | 1,3 | ● |
| DA110-08-01.400U0- | 1,4 | 15 | 40 | 18 | 1,4 | ● |
| DA110-08-01.500U0- | 1,5 | 15 | 40 | 18 | 1,5 | ● |
| DA110-08-01.600U0- | 1,6 | 17 | 43 | 20 | 1,6 | ● |
| DA110-08-01.700U0- | 1,7 | 17 | 43 | 20 | 1,7 | ● |
| DA110-08-01.800U0- | 1,8 | 19 | 46 | 22 | 1,8 | ● |
| DA110-08-01.900U0- | 1,9 | 19 | 46 | 22 | 1,9 | ● |
| DA110-08-02.000U0- | 2 | 20 | 49 | 24 | 2 | ● |
| DA110-08-02.100U0- | 2,1 | 20 | 49 | 24 | 2,1 | ● |
| DA110-08-02.200U0- | 2,2 | 23 | 53 | 27 | 2,2 | ● |
| DA110-08-02.300U0- | 2,3 | 23 | 53 | 27 | 2,3 | ● |
| DA110-08-02.400U0- | 2,4 | 26 | 57 | 30 | 2,4 | ● |
| DA110-08-02.500U0- | 2,5 | 26 | 57 | 30 | 2,5 | ● |
| DA110-08-02.600U0- | 2,6 | 26 | 57 | 30 | 2,6 | ● |
| DA110-08-02.700U0- | 2,7 | 28 | 61 | 33 | 2,7 | ● |
| DA110-08-02.800U0- | 2,8 | 28 | 61 | 33 | 2,8 | ● |
| DA110-08-02.900U0- | 2,9 | 28 | 61 | 33 | 2,9 | ● |
| DA110-08-03.000U0- | 3 | 28 | 61 | 33 | 3 | ● |
| DA110-08-03.100U0- | 3,1 | 30 | 65 | 36 | 3,1 | ● |
| DA110-08-03.200U0- | 3,2 | 30 | 65 | 36 | 3,2 | ● |
| DA110-08-03.300U0- | 3,3 | 30 | 65 | 36 | 3,3 | ● |
| DA110-08-03.400U0- | 3,4 | 33 | 70 | 39 | 3,4 | ● |
| DA110-08-03.500U0- | 3,5 | 33 | 70 | 39 | 3,5 | ● |
| DA110-08-03.600U0- | 3,6 | 33 | 70 | 39 | 3,6 | ● |
| DA110-08-03.700U0- | 3,7 | 33 | 70 | 39 | 3,7 | ● |
| DA110-08-03.800U0- | 3,8 | 36 | 75 | 43 | 3,8 | ● |
| DA110-08-03.900U0- | 3,9 | 36 | 75 | 43 | 3,9 | ● |
| DA110-08-04.000U0- | 4 | 36 | 75 | 43 | 4 | ● |
| DA110-08-04.100U0- | 4,1 | 36 | 75 | 43 | 4,1 | ● |
| DA110-08-04.200U0- | 4,2 | 36 | 75 | 43 | 4,2 | ● |
| DA110-08-04.300U0- | 4,3 | 39 | 80 | 47 | 4,3 | ● |
| DA110-08-04.400U0- | 4,4 | 39 | 80 | 47 | 4,4 | ● |
| DA110-08-04.500U0- | 4,5 | 39 | 80 | 47 | 4,5 | ● |
| DA110-08-04.600U0- | 4,6 | 39 | 80 | 47 | 4,6 | ● |
| DA110-08-04.700U0- | 4,7 | 39 | 80 | 47 | 4,7 | ● |
| DA110-08-04.800U0- | 4,8 | 44 | 86 | 52 | 4,8 | ● |
| DA110-08-04.900U0- | 4,9 | 44 | 86 | 52 | 4,9 | ● |
| DA110-08-05.000U0- | 5 | 44 | 86 | 52 | 5 | ● |
| DA110-08-05.100U0- | 5,1 | 44 | 86 | 52 | 5,1 | ● |
| DA110-08-05.200U0- | 5,2 | 44 | 86 | 52 | 5,2 | ● |
| DA110-08-05.300U0- | 5,3 | 44 | 86 | 52 | 5,3 | ● |
| DA110-08-05.400U0- | 5,4 | 48 | 93 | 57 | 5,4 | ● |
| DA110-08-05.500U0- | 5,5 | 48 | 93 | 57 | 5,5 | ● |
| DA110-08-05.600U0- | 5,6 | 48 | 93 | 57 | 5,6 | ● |

Ordering example for the WZ90AJ grade: DA110-08-01.000U0-WZ90AJ

Continued

Continued

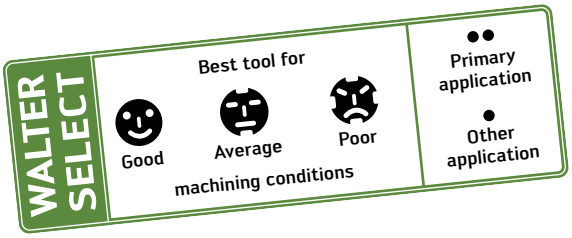
Parallel shank



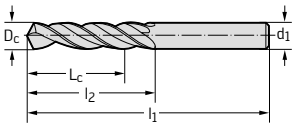

| Designation | $D_c$ h8 mm | $L_c$ mm | $l_1$ mm | $l_2$ mm | $d_1$ f11 mm | WZ90AJ |
|---|---|---|---|---|---|---|
| DA110-08-05.700U0- | 5,7 | 48 | 93 | 57 | 5,7 | ●● |
| DA110-08-05.800U0- | 5,8 | 48 | 93 | 57 | 5,8 | ●● |
| DA110-08-05.900U0- | 5,9 | 48 | 93 | 57 | 5,9 | ●● |
| DA110-08-06.000U0- | 6 | 48 | 93 | 57 | 6 | ●● |
| DA110-08-06.100U0- | 6,1 | 52 | 101 | 63 | 6,1 | ●● |
| DA110-08-06.200U0- | 6,2 | 52 | 101 | 63 | 6,2 | ●● |
| DA110-08-06.300U0- | 6,3 | 52 | 101 | 63 | 6,3 | ●● |
| DA110-08-06.400U0- | 6,4 | 52 | 101 | 63 | 6,4 | ●● |
| DA110-08-06.500U0- | 6,5 | 52 | 101 | 63 | 6,5 | ●● |
| DA110-08-06.600U0- | 6,6 | 52 | 101 | 63 | 6,6 | ●● |
| DA110-08-06.700U0- | 6,7 | 52 | 101 | 63 | 6,7 | ●● |
| DA110-08-06.800U0- | 6,8 | 57 | 109 | 69 | 6,8 | ●● |
| DA110-08-06.900U0- | 6,9 | 57 | 109 | 69 | 6,9 | ●● |
| DA110-08-07.000U0- | 7 | 57 | 109 | 69 | 7 | ●● |
| DA110-08-07.100U0- | 7,1 | 57 | 109 | 69 | 7,1 | ●● |
| DA110-08-07.200U0- | 7,2 | 57 | 109 | 69 | 7,2 | ●● |
| DA110-08-07.300U0- | 7,3 | 57 | 109 | 69 | 7,3 | ●● |
| DA110-08-07.400U0- | 7,4 | 57 | 109 | 69 | 7,4 | ●● |
| DA110-08-07.500U0- | 7,5 | 57 | 109 | 69 | 7,5 | ●● |
| DA110-08-07.600U0- | 7,6 | 62 | 117 | 75 | 7,6 | ●● |
| DA110-08-07.700U0- | 7,7 | 62 | 117 | 75 | 7,7 | ●● |
| DA110-08-07.800U0- | 7,8 | 62 | 117 | 75 | 7,8 | ●● |
| DA110-08-07.900U0- | 7,9 | 62 | 117 | 75 | 7,9 | ●● |
| DA110-08-08.000U0- | 8 | 62 | 117 | 75 | 8 | ●● |
| DA110-08-08.100U0- | 8,1 | 62 | 117 | 75 | 8,1 | ●● |
| DA110-08-08.200U0- | 8,2 | 62 | 117 | 75 | 8,2 | ●● |
| DA110-08-08.300U0- | 8,3 | 62 | 117 | 75 | 8,3 | ●● |
| DA110-08-08.400U0- | 8,4 | 62 | 117 | 75 | 8,4 | ●● |
| DA110-08-08.500U0- | 8,5 | 62 | 117 | 75 | 8,5 | ●● |
| DA110-08-08.600U0- | 8,6 | 66 | 125 | 81 | 8,6 | ●● |
| DA110-08-08.700U0- | 8,7 | 66 | 125 | 81 | 8,7 | ●● |
| DA110-08-08.800U0- | 8,8 | 66 | 125 | 81 | 8,8 | ●● |
| DA110-08-08.900U0- | 8,9 | 66 | 125 | 81 | 8,9 | ●● |
| DA110-08-09.000U0- | 9 | 66 | 125 | 81 | 9 | ●● |
| DA110-08-09.100U0- | 9,1 | 66 | 125 | 81 | 9,1 | ●● |
| DA110-08-09.200U0- | 9,2 | 66 | 125 | 81 | 9,2 | ●● |
| DA110-08-09.300U0- | 9,3 | 66 | 125 | 81 | 9,3 | ●● |
| DA110-08-09.400U0- | 9,4 | 66 | 125 | 81 | 9,4 | ●● |
| DA110-08-09.500U0- | 9,5 | 66 | 125 | 81 | 9,5 | ●● |
| DA110-08-09.600U0- | 9,6 | 71 | 133 | 87 | 9,6 | ●● |
| DA110-08-09.700U0- | 9,7 | 71 | 133 | 87 | 9,7 | ●● |
| DA110-08-09.800U0- | 9,8 | 71 | 133 | 87 | 9,8 | ●● |
| DA110-08-09.900U0- | 9,9 | 71 | 133 | 87 | 9,9 | ●● |
| DA110-08-10.000U0- | 10 | 71 | 133 | 87 | 10 | ●● |
| DA110-08-10.100U0- | 10,1 | 71 | 133 | 87 | 10,1 | ●● |
| DA110-08-10.200U0- | 10,2 | 71 | 133 | 87 | 10,2 | ●● |
| DA110-08-10.300U0- | 10,3 | 71 | 133 | 87 | 10,3 | ●● |
| DA110-08-10.400U0- | 10,4 | 71 | 133 | 87 | 10,4 | ●● |
| DA110-08-10.500U0- | 10,5 | 71 | 133 | 87 | 10,5 | ●● |
| DA110-08-10.700U0- | 10,7 | 76 | 142 | 94 | 10,7 | ●● |
| DA110-08-10.800U0- | 10,8 | 76 | 142 | 94 | 10,8 | ●● |
| DA110-08-11.000U0- | 11 | 76 | 142 | 94 | 11 | ●● |
| DA110-08-11.100U0- | 11,1 | 76 | 142 | 94 | 11,1 | ●● |
| DA110-08-11.300U0- | 11,3 | 76 | 142 | 94 | 11,3 | ●● |
| DA110-08-11.500U0- | 11,5 | 76 | 142 | 94 | 11,5 | ●● |
| DA110-08-11.800U0- | 11,8 | 76 | 142 | 94 | 11,8 | ●● |
| DA110-08-12.000U0- | 12 | 87 | 151 | 101 | 12 | ●● |

Ordering example for the WZ90AJ grade: DA110-08-01.000U0-WZ90AJ

Continued



Continued

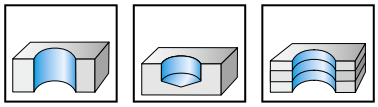
| | Designation | $D_c$ h8 mm | $L_c$ mm | $l_1$ mm | $l_2$ mm | $d_1$ f11 mm | WZ90AJ |
|---|---|---|---|---|---|---|---|
| Parallel shank | DA110-08-12.100U0- | 12,1 | 87 | 151 | 101 | 12,1 | ✱ |
|  | DA110-08-12.200U0- | 12,2 | 87 | 151 | 101 | 12,2 | ✱ |
| | DA110-08-12.500U0- | 12,5 | 87 | 151 | 101 | 12,5 | ✱ |
| | DA110-08-13.000U0- | 13 | 87 | 151 | 101 | 13 | ✱ |
| | DA110-08-13.500U0- | 13,5 | 94 | 160 | 108 | 13,5 | ✱ |
| | DA110-08-13.700U0- | 13,7 | 94 | 160 | 108 | 13,7 | ✱ |
| | DA110-08-14.000U0- | 14 | 94 | 160 | 108 | 14 | ✱ |
| | DA110-08-14.500U0- | 14,5 | 99 | 169 | 114 | 14,5 | ✱ |
| | DA110-08-15.000U0- | 15 | 99 | 169 | 114 | 15 | ✱ |
| | DA110-08-15.500U0- | 15,5 | 104 | 178 | 120 | 15,5 | ✱ |
| | DA110-08-16.000U0- | 16 | 104 | 178 | 120 | 16 | ✱ |



Ordering example for the WZ90AJ grade: DA110-08-01.000U0-WZ90AJ

# DA110 Perform HSS twist drill – sets
# DA110-SET-1-10.5-WZ90AJ
# DA110-SET-1-13-WZ90AJ

– Type N




| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WZ90AJ | ●● | ● | ●● | ● | | | ● |

| | Designation | Sets Dia. mm | Including core-hole drill [mm] | Pitch | Quantity |
|---|---|---|---|---|---|
|  | DA110-SET-1-10.5-WZ90AJ | 1,0–10,5 | 3,3<br>4,2<br>6,8<br>10,2 | 0,5 | 24 |

| | Designation | Sets Dia. mm | Pitch | Quantity |
|---|---|---|---|---|
|  | DA110-SET-1-13-WZ90AJ | 1,0–13,0 | 0,5 | 25 |

For the dimensions for the DA110 Perform twist drill, please see the ordering page.

B 1

# Cutting data for solid carbide drilling and reaming tools
## Solid carbide drills – with internal coolant

= Wet machining (E = emulsion, O = oil)
= Dry machining is possible (M = MQL, L = dry)
The cutting data must be selected from Walter GPS

$v_c$ = Cutting speed
VRR = Feed rate chart, see page 41
* The classification of the machining groups can be found in the material group comparison table

| Material group | Overview of the main material groups and code letters | | | Brinell hardness HB | Tensile strength $R_m$ [N/mm²] | Machining group * | Drilling depth | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 3 x $D_c$ | | | | 5 x $D_c$ | | | |
| | | | | | | | Designation | | DC150 Perform | | DC150 Perform | | | |
| | | | | | | | Standard | | DIN 6537 K | | DIN 6537 L | | | |
| | | | | | | | Coating/grade | | WJ30RE | | WJ30RE | | | |
| | | | | | | | Dia. range [mm] | | 3–20 | | 3–20 | | | |
| | | | | | | | Page | | 9 | | 13 | | | |
| | | | | | | | | |  | |  | | | |
| | | | | | | | $v_c$ | VRR | | | $v_c$ | VRR | | |
| P | Non-alloyed steel | C ≤ 0.25% | Annealed | 125 | 62 | P1 | 120 | 12 | E O | | 110 | 12 | E O | |
| | | C > 0.25 to ≤ 0.55% | Annealed | 190 | 93 | P2 | 100 | 10 | E O | | 100 | 10 | E O | |
| | | C > 0.25 to ≤ 0.55% | Heat-treated | 210 | 103 | P3 | 80 | 9 | E O | | 80 | 9 | E O | |
| | | C > 0.55% | Annealed | 190 | 93 | P4 | 90 | 9 | E O | | 90 | 9 | E O | |
| | | C > 0.55% | Heat-treated | 300 | 146 | P5 | 71 | 8 | E O | | 71 | 8 | E O | |
| | | Free-machining steel (short-chipping) | Annealed | 220 | 109 | P6 | 120 | 12 | E O | | 110 | 12 | E O | |
| | Low-alloy steel | Annealed | | 175 | 86 | P7 | 100 | 12 | E O | | 100 | 12 | E O | |
| | | Heat-treated | | 285 | 139 | P8 | 71 | 9 | E O | | 71 | 9 | E O | |
| | | Heat-treated | | 380 | 186 | P9 | 45 | 6 | E O | | 45 | 6 | E O | |
| | | Heat-treated | | 430 | 215 | P10 | 40 | 4 | E O | | 36 | 4 | E O | |
| | High-alloy steel and high-alloy tool steel | Annealed | | 200 | 99 | P11 | 80 | 9 | E O | | 80 | 9 | E O | |
| | | Hardened and tempered | | 300 | 146 | P12 | 63 | 10 | E O | | 63 | 10 | E O | |
| | | Hardened and tempered | | 380 | 186 | P13 | 50 | 6 | E O | | 50 | 6 | E O | |
| | Stainless steel | Ferritic/martensitic, annealed | | 200 | 99 | P14 | 80 | 10 | E O | | 80 | 10 | E O | |
| | | Martensitic, heat-treated | | 330 | 161 | P15 | 50 | 9 | E O | | 50 | 9 | E O | |
| M | Stainless steel | Austenitic, quench hardened | | 200 | 99 | M1 | 40 | 5 | E O | | 40 | 5 | E O | |
| | | Austenitic, precipitation hardened (PH) | | 300 | 146 | M2 | 56 | 6 | E O | | 56 | 6 | E O | |
| | | Austenitic/ferritic, duplex | | 230 | 113 | M3 | 32 | 4 | E O | | 32 | 4 | E O | |
| K | Malleable cast iron | Ferritic | | 200 | 58 | K1 | 100 | 16 | E O | | 100 | 16 | E O | |
| | | Pearlitic | | 260 | 102 | K2 | 71 | 16 | E O | | 71 | 16 | E O | |
| | Grey cast iron | Low tensile strength | | 180 | 29 | K3 | 110 | 16 | E O | | 110 | 16 | E O | |
| | | High tensile strength/austenitic | | 245 | 51 | K4 | 90 | 16 | E O | | 90 | 16 | E O | |
| | Cast iron with spheroidal graphite | Ferritic | | 155 | 58 | K5 | 110 | 16 | E O | | 100 | 16 | E O | |
| | | Pearlitic | | 265 | 102 | K6 | 71 | 16 | E O | | 71 | 16 | E O | |
| | GGV (CGI) | | | 230 | 58 | K7 | 80 | 16 | E O | | 80 | 16 | E O | |
| N | Wrought aluminium alloys | Not hardenable | | 30 | - | N1 | 400 | 16 | E O | | 400 | 16 | E O | |
| | | Hardenable, hardened | | 100 | 49 | N2 | 400 | 16 | E O | | 400 | 16 | E O | |
| | Cast aluminium alloys | ≤ 12% Si, not hardenable | | 75 | 38 | N3 | 250 | 16 | E O | M | 250 | 16 | E O | M |
| | | ≤ 12% Si, hardenable, hardened | | 90 | 45 | N4 | 220 | 16 | E O | M | 220 | 16 | E O | M |
| | | > 12% Si, not hardenable | | 130 | 65 | N5 | 200 | 16 | E O | M | 200 | 16 | E O | M |
| | Magnesium-based alloys | | | 70 | 36 | N6 | | | | | | | | |
| | Copper and copper alloys (bronze/brass) | Unalloyed, electrolytic copper | | 100 | 49 | N7 | 180 | 8 | E O | | 180 | 8 | E O | |
| | | Brass, bronze, red brass | | 90 | 45 | N8 | 160 | 10 | E O | | 160 | 10 | E O | |
| | | Cu alloys, short-chipping | | 110 | 55 | N9 | 180 | 16 | E O | | 180 | 16 | E O | |
| | | High tensile, Ampco | | 300 | 146 | N10 | 45 | 5 | E O | | 45 | 5 | E O | |
| S | Heat-resistant alloys | Fe-based | Annealed | 200 | 99 | S1 | 32 | 4 | E O | | 32 | 4 | E O | |
| | | | Hardened | 280 | 136 | S2 | 22 | 3 | E O | | 22 | 3 | E O | |
| | | Ni- or Co-based | Annealed | 250 | 122 | S3 | 32 | 4 | E O | | 32 | 4 | E O | |
| | | | Hardened | 350 | 171 | S4 | 11 | 3 | E O | | 11 | 3 | E O | |
| | | | Cast | 320 | 157 | S5 | 18 | 3 | E O | | 18 | 3 | E O | |
| | Titanium alloys | Pure titanium | | 200 | 99 | S6 | 45 | 6 | E O | | 45 | 6 | E O | |
| | | α and β alloys, hardened | | 375 | 183 | S7 | 32 | 4 | E O | | 32 | 4 | E O | |
| | | β alloys | | 410 | 203 | S8 | 28 | 4 | E O | | 25 | 4 | E O | |
| | Tungsten alloys | | | 300 | 146 | S9 | 18 | 3 | E O | | 18 | 3 | E O | |
| | Molybdenum alloys | | | 300 | 146 | S10 | 18 | 3 | E O | | 18 | 3 | E O | |
| H | Hardened steel | Hardened and tempered | | 50 HRC | - | H1 | 28 | 3 | O E | | 28 | 3 | O E | |
| | | Hardened and tempered | | 55 HRC | - | H2 | | | | | | | | |
| | | Hardened and tempered | | 60 HRC | - | H3 | | | | | | | | |
| | Hardened cast iron | Hardened and tempered | | 55 HRC | - | H4 | | | | | | | | |
| O | Thermoplastics | Without abrasive fillers | | | | O1 | 90 | 16 | E O | | 90 | 16 | E O | |
| | Thermosets | Without abrasive fillers | | | | O2 | | | | | | | | |
| | Plastic, glass-fibre reinforced | GFRP | | | | O3 | | | | | | | | |
| | Plastic, carbon-fibre reinforced | CFRP | | | | O4 | | | | | | | | |
| | Plastic, aramid-fibre reinforced | AFRP | | | | O5 | | | | | | | | |
| | Graphite (technical) | | | 80 Shore | | O6 | | | | | | | | |

# – Without internal coolant



The specified cutting data represents average standard values.
For specific applications, adjustment is recommended.

| | 8 x $D_c$ | | | | 12 x $D_c$ | | | | | 3 x $D_c$ | | | | 3 x $D_c$ | | | | 5 x $D_c$ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **DC150 Perform** | | | | **DC150 Perform** | | | | | **DC150 Perform** | | | | **DC150 Perform** | | | | **DC150 Perform** | | | |
| | Walter | | | | Walter | | | | | DIN 6539 | | | | DIN 6537 K | | | | DIN 6537 L | | | |
| | WJ30TA | | | | WJ30TA | | | | | WJ30RE | | | | WJ30RE | | | | WJ30TA | | | |
| | 3–20 | | | | 3–20 | | | | | 1,5–2,9 | | | | 3–20 | | | | 3–20 | | | |
| | 19 | | | | 22 | | | | | 25 | | | | 26 | | | | 31 | | | |
| |  | | | |  | | | | |  | | | |  | | | |  | | | |
| | $v_c$ | VRR | | | $v_c$ | VRR | | | | $v_c$ | VRR | | | $v_c$ | VRR | | | $v_c$ | VRR | | |
| | 110 | 12 | **E** O | | 100 | 12 | **E** O | | | 80 | 12 | **E** O | | 90 | 12 | **E** O | | 80 | 12 | **E** O | |
| | 90 | 10 | **E** O | | 80 | 10 | **E** O | | | 80 | 10 | **E** O | | 80 | 10 | **E** O | | 80 | 10 | **E** O | |
| | 71 | 9 | **E** O | | 63 | 9 | **E** O | | | 71 | 10 | **E** O | | 80 | 10 | **E** O | | 71 | 10 | **E** O | |
| | 80 | 9 | **E** O | | 71 | 9 | **E** O | | | 71 | 9 | **E** O | | 71 | 9 | **E** O | | 71 | 9 | **E** O | |
| | 71 | 9 | **E** O | | 63 | 9 | **E** O | | | 56 | 8 | **E** O | | 56 | 8 | **E** O | | 56 | 8 | **E** O | |
| | 110 | 12 | **E** O | | 100 | 12 | **E** O | | | 80 | 12 | **E** O | | 90 | 12 | **E** O | | 80 | 12 | **E** O | |
| | 90 | 12 | **E** O | | 80 | 12 | **E** O | | | 80 | 12 | **E** O | | 80 | 12 | **E** O | | 80 | 12 | **E** O | |
| | 63 | 9 | **E** O | | 50 | 9 | **E** O | | | 45 | 8 | **E** O | | 50 | 8 | **E** O | | 45 | 8 | **E** O | |
| | 36 | 7 | **E** O | | 25 | 7 | **E** O | | | 32 | 6 | **E** O | | 36 | 6 | **E** O | | 32 | 6 | **E** O | |
| | 28 | 6 | **E** O | | 22 | 6 | **E** O | | | 25 | 4 | **E** O | | 28 | 4 | **E** O | | 25 | 4 | **E** O | |
| | 80 | 9 | **E** O | | 71 | 9 | **E** O | | | 63 | 9 | **E** O | | 63 | 9 | **E** O | | 63 | 9 | **E** O | |
| | 50 | 10 | **E** O | | 36 | 10 | **E** O | | | 56 | 8 | **E** O | | 56 | 8 | **E** O | | 56 | 8 | **E** O | |
| | 45 | 7 | **E** O | | 40 | 7 | **E** O | | | 40 | 6 | **E** O | | 40 | 6 | **E** O | | 40 | 6 | **E** O | |
| | 90 | 10 | **E** O | | 80 | 10 | **E** O | | | 71 | 10 | **E** O | | 71 | 10 | **E** O | | 71 | 10 | **E** O | |
| | 45 | 9 | **E** O | | 36 | 9 | **E** O | | | 50 | 8 | **E** O | | 56 | 8 | **E** O | | 50 | 8 | **E** O | |
| | 40 | 5 | **E** O | | 36 | 5 | **E** O | | | | | | | | | | | | | | |
| | 50 | 6 | **E** O | | 45 | 6 | **E** O | | | 40 | 5 | **E** O | | 40 | 5 | **E** O | | 40 | 5 | **E** O | |
| | 32 | 4 | **E** O | | 28 | 4 | **E** O | | | | | | | | | | | | | | |
| | 90 | 16 | **E** O | | 80 | 16 | **E** O | | | 71 | 16 | **E** O | | 71 | 16 | **E** O | | 71 | 16 | **E** O | |
| | 71 | 16 | **E** O | | 63 | 16 | **E** O | | | 50 | 12 | **E** O | | 56 | 12 | **E** O | | 56 | 12 | **E** O | |
| | 110 | 16 | **E** O | | 90 | 16 | **E** O | | | 80 | 16 | **E** O | | 90 | 16 | **E** O | | 80 | 16 | **E** O | |
| | 90 | 16 | **E** O | | 80 | 16 | **E** O | | | 71 | 16 | **E** O | | 71 | 16 | **E** O | | 71 | 16 | **E** O | |
| | 90 | 16 | **E** O | | 71 | 16 | **E** O | | | 71 | 16 | **E** O | | 80 | 16 | **E** O | | 71 | 16 | **E** O | |
| | 63 | 16 | **E** O | | 50 | 16 | **E** O | | | 50 | 12 | **E** O | | 56 | 12 | **E** O | | 56 | 12 | **E** O | |
| | 71 | 16 | **E** O | | 50 | 16 | **E** O | | | 56 | 12 | **E** O | | 63 | 12 | **E** O | | 56 | 12 | **E** O | |
| | 400 | 16 | **E** O | M | 360 | 16 | **E** O | M | | 250 | 10 | **E** O | M | 250 | 10 | **E** O | M | 250 | 10 | **E** O | M |
| | 400 | 16 | **E** O | M | 360 | 16 | **E** O | M | | 250 | 10 | **E** O | M | 250 | 10 | **E** O | M | 250 | 10 | **E** O | M |
| | 250 | 16 | **E** O | M | 220 | 16 | **E** O | M | | 200 | 16 | **E** O | M | 220 | 16 | **E** O | M | 220 | 16 | **E** O | M |
| | 220 | 16 | **E** O | M | 200 | 16 | **E** O | M | | 180 | 16 | **E** O | M | 200 | 16 | **E** O | M | 200 | 16 | **E** O | M |
| | 200 | 16 | **E** O | M | 180 | 16 | **E** O | M | | 140 | 12 | **E** O | M | 160 | 12 | **E** O | M | 160 | 12 | **E** O | M |
| | | | | | | | | | | | | | | | | | | | | | |
| | 160 | 8 | **E** O | | 120 | 8 | **E** O | | | 140 | 6 | **E** O | | 160 | 6 | **E** O | | 160 | 6 | **E** O | |
| | 140 | 10 | **E** O | | 110 | 10 | **E** O | | | 140 | 10 | **E** O | | 140 | 10 | **E** O | | 140 | 10 | **E** O | |
| | 180 | 12 | **E** O | | 160 | 12 | **E** O | | | 160 | 16 | **E** O | | 180 | 16 | **E** O | | 180 | 16 | **E** O | |
| | 45 | 5 | **E** O | | 40 | 5 | **E** O | | | 50 | 5 | **E** O | | 45 | 5 | **E** O | | 45 | 5 | **E** O | |
| | 36 | 4 | **E** O | | 32 | 4 | **E** O | | | | | | | | | | | | | | |
| | 22 | 3 | **E** O | | 22 | 3 | **E** O | | | | | | | | | | | | | | |
| | 32 | 4 | **E** O | | 28 | 4 | **E** O | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | 18 | 3 | **E** O | | 16 | 3 | **E** O | | | | | | | | | | | | | | |
| | 45 | 6 | **E** O | | 36 | 6 | **E** O | | | 28 | 5 | **E** O | | 32 | 5 | **E** O | | 28 | 5 | **E** O | |
| | 28 | 4 | **E** O | | 20 | 4 | **E** O | | | 20 | 3 | **E** O | | 22 | 3 | **E** O | | 20 | 3 | **E** O | |
| | 22 | 4 | **E** O | | 16 | 4 | **E** O | | | 18 | 3 | **E** O | | 20 | 3 | **E** O | | 18 | 3 | **E** O | |
| | 18 | 3 | **E** O | | 16 | 3 | **E** O | | | | | | | | | | | | | | |
| | 18 | 3 | **E** O | | 16 | 3 | **E** O | | | | | | | | | | | | | | |
| | 25 | 3 | **O** E | | 18 | 3 | **O** E | | | 20 | 3 | **O** E | | 22 | 3 | **O** E | | 20 | 3 | **O** E | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | 90 | 16 | **E** O | | 80 | 16 | **E** O | | | 90 | 16 | **E** O | | 90 | 16 | **E** O | | 90 | 16 | **E** O | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |

B 1

# Cutting data for HSS drilling and reaming tools
## HSS drills

= Wet machining (E = emulsion, O = oil)

= Dry machining is possible (M = MQL, L = dry)
The cutting data must be selected from Walter GPS

$v_c$ = Cutting speed
VRR = Feed rate chart, see page 41

* The classification of the machining groups can be found in the material group comparison table

| Material group | Overview of the main material groups and code letters | | | Brinell hardness HB | Tensile strength $R_m$ (N/mm²) | Machining group * | $v_c$ | VRR | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Drilling depth | | | | | | ~8 × $D_c$ | | | |
| | Designation | | | | | | DA110 Perform | | | |
| | Standard | | | | | | DIN 338 | | | |
| | Coating/grade | | | | | | WZ90AJ | | | |
| | Dia. range [mm] | | | | | | 1–16 | | | |
| | Page | | | | | | 52 | | | |
| P | Non-alloyed steel | C ≤ 0.25% | Annealed | 125 | 62 | P1 | 29 | 9 | **E** O | |
| | | C > 0.25 to ≤ 0.55% | Annealed | 190 | 93 | P2 | 29 | 10 | **E** O | |
| | | C > 0.25 to ≤ 0.55% | Heat-treated | 210 | 103 | P3 | 23 | 10 | **E** O | |
| | | C > 0.55% | Annealed | 190 | 93 | P4 | 22 | 8 | **E** O | |
| | | C > 0.55% | Heat-treated | 300 | 146 | P5 | 15 | 8 | **E** O | |
| | | Free-machining steel (short-chipping) | Annealed | 220 | 109 | P6 | 29 | 10 | **E** O | |
| | Low-alloy steel | Annealed | | 175 | 86 | P7 | 29 | 10 | **E** O | |
| | | Heat-treated | | 285 | 139 | P8 | 13 | 8 | **E** O | |
| | | Heat-treated | | 380 | 186 | P9 | 9 | 3 | **E** O | |
| | | Heat-treated | | 430 | 215 | P10 | | | | |
| | High-alloy steel and high-alloy tool steel | Annealed | | 200 | 99 | P11 | 9 | 4 | **E** O | |
| | | Hardened and tempered | | 300 | 146 | P12 | 15 | 8 | **E** O | |
| | | Hardened and tempered | | 380 | 186 | P13 | 7 | 3 | **E** O | |
| | Stainless steel | Ferritic/martensitic, annealed | | 200 | 99 | P14 | 24 | 10 | **E** O | |
| | | Martensitic, heat-treated | | 330 | 161 | P15 | 15 | 8 | **E** O | |
| M | Stainless steel | Austenitic, quench hardened | | 200 | 99 | M1 | 5 | 4 | **O** E | |
| | | Austenitic, precipitation hardened (PH) | | 300 | 146 | M2 | 8 | 5 | **E** O | |
| | | Austenitic/ferritic, duplex | | 230 | 113 | M3 | | | | |
| K | Malleable cast iron | Ferritic | | 200 | 58 | K1 | 22 | 12 | **E** O | |
| | | Pearlitic | | 260 | 102 | K2 | 17 | 10 | **E** O | |
| | Grey cast iron | Low tensile strength | | 180 | 29 | K3 | 28 | 12 | **E** O | |
| | | High tensile strength/austenitic | | 245 | 51 | K4 | 22 | 12 | **E** O | |
| | Cast iron with spheroidal graphite | Ferritic | | 155 | 58 | K5 | 25 | 12 | **E** O | |
| | | Pearlitic | | 265 | 102 | K6 | 17 | 10 | **E** O | |
| | GGV (CGI) | | | 230 | 58 | K7 | 20 | 10 | **E** O | |
| N | Wrought aluminium alloys | Not hardenable | | 30 | - | N1 | | | | |
| | | Hardenable, hardened | | 100 | 49 | N2 | | | | |
| | Cast aluminium alloys | ≤ 12% Si, not hardenable | | 75 | 38 | N3 | | | | |
| | | ≤ 12% Si, hardenable, hardened | | 90 | 45 | N4 | | | | |
| | | > 12% Si, not hardenable | | 130 | 65 | N5 | | | | |
| | Magnesium-based alloys | | | 70 | 36 | N6 | | | | |
| | Copper and copper alloys (bronze/brass) | Unalloyed, electrolytic copper | | 100 | 49 | N7 | 41 | 5 | **E** O | |
| | | Brass, bronze, red brass | | 90 | 45 | N8 | | | | |
| | | Cu alloys, short-chipping | | 110 | 55 | N9 | 51 | 12 | **E** O | |
| | | High tensile, Ampco | | 300 | 146 | N10 | | | | |
| S | Heat-resistant alloys | Fe-based | Annealed | 200 | 99 | S1 | 4 | 3 | **O** E | |
| | | | Hardened | 280 | 136 | S2 | | | | |
| | | Ni- or Co-based | Annealed | 250 | 122 | S3 | | | | |
| | | | Hardened | 350 | 171 | S4 | | | | |
| | | | Cast | 320 | 157 | S5 | | | | |
| | Titanium alloys | Pure titanium | | 200 | 99 | S6 | | | | |
| | | α and β alloys, hardened | | 375 | 183 | S7 | | | | |
| | | β alloys | | 410 | 203 | S8 | | | | |
| | Tungsten alloys | | | 300 | 146 | S9 | | | | |
| | Molybdenum alloys | | | 300 | 146 | S10 | | | | |
| H | Hardened steel | Hardened and tempered | | 50 HRC | - | H1 | | | | |
| | | Hardened and tempered | | 55 HRC | - | H2 | | | | |
| | | Hardened and tempered | | 60 HRC | - | H3 | | | | |
| | Hardened cast iron | Hardened and tempered | | 55 HRC | - | H4 | | | | |
| O | Thermoplastics | Without abrasive fillers | | | | O1 | 25 | 12 | **E** O | |
| | Thermosets | Without abrasive fillers | | | | O2 | 28 | 8 | | **L** |
| | Plastic, glass-fibre reinforced | GFRP | | | | O3 | | | | |
| | Plastic, carbon-fibre reinforced | CFRP | | | | O4 | | | | |
| | Plastic, aramid-fibre reinforced | AFRP | | | | O5 | | | | |
| | Graphite (technical) | | | 80 Shore | | O6 | | | | |

The specified cutting data represents average standard values.
For specific applications, adjustment is recommended.

# VRR: Feed rate charts for solid carbide and HSS drilling and reaming tools

| | Feed f [mm] for diameter [mm] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| VRR | 1,5 | 2 | 2,5 | 4 | 5 | 6 | 8 | 10 | 12 | 15 | 20 |
| 1 | 0,005 | 0,007 | 0,008 | 0,013 | 0,017 | 0,018 | 0,021 | 0,024 | 0,026 | 0,029 | 0,033 |
| 2 | 0,010 | 0,013 | 0,017 | 0,027 | 0,033 | 0,037 | 0,042 | 0,047 | 0,052 | 0,058 | 0,067 |
| 3 | 0,015 | 0,020 | 0,025 | 0,040 | 0,050 | 0,055 | 0,063 | 0,071 | 0,077 | 0,087 | 0,10 |
| 4 | 0,020 | 0,027 | 0,033 | 0,053 | 0,067 | 0,073 | 0,084 | 0,094 | 0,10 | 0,12 | 0,13 |
| 5 | 0,025 | 0,033 | 0,042 | 0,067 | 0,083 | 0,091 | 0,11 | 0,12 | 0,13 | 0,14 | 0,17 |
| 6 | 0,030 | 0,040 | 0,050 | 0,080 | 0,10 | 0,11 | 0,13 | 0,14 | 0,15 | 0,17 | 0,20 |
| 7 | 0,035 | 0,047 | 0,058 | 0,093 | 0,12 | 0,13 | 0,15 | 0,16 | 0,18 | 0,20 | 0,23 |
| 8 | 0,040 | 0,053 | 0,067 | 0,11 | 0,13 | 0,15 | 0,17 | 0,19 | 0,21 | 0,23 | 0,27 |
| 9 | 0,045 | 0,060 | 0,075 | 0,12 | 0,15 | 0,16 | 0,19 | 0,21 | 0,23 | 0,26 | 0,30 |
| 10 | 0,050 | 0,067 | 0,083 | 0,13 | 0,17 | 0,18 | 0,21 | 0,24 | 0,26 | 0,29 | 0,33 |
| 12 | 0,060 | 0,080 | 0,10 | 0,16 | 0,20 | 0,22 | 0,25 | 0,28 | 0,31 | 0,35 | 0,40 |
| 16 | 0,080 | 0,11 | 0,13 | 0,21 | 0,27 | 0,29 | 0,34 | 0,38 | 0,41 | 0,46 | 0,53 |
| 20 | 0,10 | 0,13 | 0,17 | 0,27 | 0,33 | 0,37 | 0,42 | 0,47 | 0,52 | 0,58 | 0,67 |
| 25 | 0,125 | 0,167 | 0,21 | 0,33 | 0,42 | 0,46 | 0,53 | 0,59 | 0,65 | 0,72 | 0,83 |
| 30 | 0,150 | 0,200 | 0,25 | 0,40 | 0,50 | 0,55 | 0,63 | 0,71 | 0,77 | 0,87 | 1,00 |

# Walter Prototyp TC115 – ideal for a wide range of different materials.

## THE APPLICATION

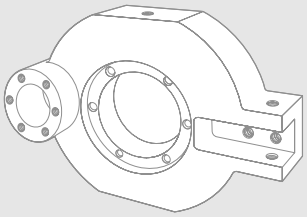
- Blind hole threads
- Dimension ranges:
  - M1.6–M20
  - MF: M8 ×1–M18 × 1.5
  - UNC: UNC6–UNC¾
  - UNF: UNF6–UNF½
- Primary application:
  - ISO P: 350–1000 N/mm²
  - ISO M: < 800 N/mm²
  - ISO K: GJS (GGG)
- Secondary application:
  - ISO N: Al wrought alloy, AlSi < 4% silicon

## THE TOOL

- HSS-E machine taps
- For blind holes up to 3 × $D_N$
- Tolerances ISO 2/6H and 2B
- Chamfer form C and E
- Two variants: TiN-coated or vaporised

## APPLICATION EXAMPLE

**Component: Toolholder**

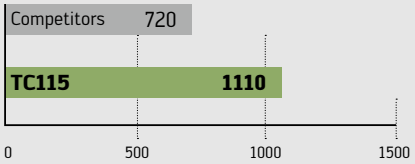


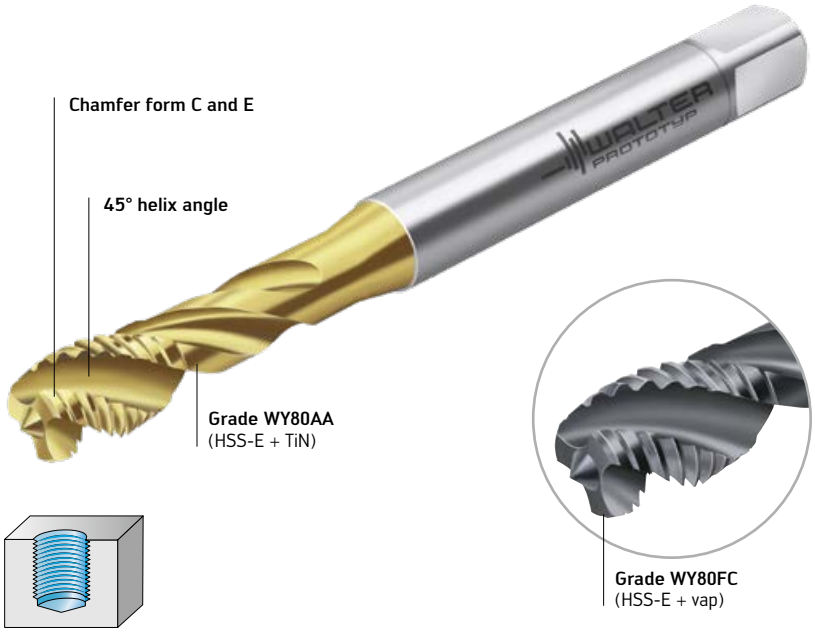
| | |
|---|---|
| **Material:** | 20 MnCr5 |
| **Tool:** | TC115-M10-C0-WY80AA |
| **Hole type:** | Blind hole |
| **Tensile strength:** | 700 N/mm² |
| **Coating:** | TiN |
| **Thread depth:** | 25 mm (2,5 x $D_N$) |
| **Coolant:** | Emulsion |

**Cutting data:**

| Competitors | **TC115** |
|---|---|
| n = 159 rpm | n = 317 rpm |
| $v_c$ = 5 m/min | $v_c$ = 10 m/min |

**Comparison: Tool life (number of threads)**




**Walter Prototyp TC115 Perform blind hole tap**

**Fig.: TC115-M10-C0-WY80AA (left)**
**TC115-M10-C0-WY80FC (right)**

## BENEFITS FOR YOU

- TiN coating: For a long tool life
- Vaporised: For excellent chip control; minimises weld formations
- Flexibility thanks to a wide range of uses in a variety of materials
- High process reliability

# Walter Prototyp TC216 – excellent performance for all batch sizes.

## THE APPLICATION

- Through-hole threads
- Dimension ranges:
  - M1.6–M20
  - MF: M8 × 1–M18 × 1.5
  - UNC: UNC6–UNC¾
  - UNF: UNF6–UNF½
- Primary application:
  - ISO P: 350–1000 N/mm²
  - ISO M: < 800 N/mm²
  - ISO K: GJS (GGG)
  - ISO N: Al wrought alloy, AlSi < 4% silicon

## THE TOOL

- HSS-E machine taps
- For through holes up to 3.5 × $D_N$
- Tolerances ISO 2/6H and 2B
- Chamfer form B
- Two variants: TiN-coated or vaporised


**Walter Prototyp TC216 Perform through-hole tap**

**Fig.: TC216-M10-CO-WY80AA (left)**
**TC216-M10-CO-WY80FC (right)**

## BENEFITS FOR YOU

- TiN coating: For a long tool life
- Vaporised: For excellent chip control; minimises weld formations
- Flexibility thanks to a wide range of uses in a variety of materials
- High process reliability

C1

# Product range overview of HSS-E taps
# M – Metric thread

| Machining |  | | |  | | |
|---|---|---|---|---|---|---|
| **Thread depth** | **3 x $D_N$** | | | **3 x $D_N$** | | |
| **Designation** | **TC216 Perform** | **TC216 Perform set 1** | **TC216 + DA110 Perform set 2*** | **TC115 Perform** | **TC115 Perform set 1** | **TC115 + DA110 Perform set 2*** |
| Dimension range | M 1.6-M 20 | M 3-M 12 | M 3-M 12 | M 1.6–M 20 | M 3-M 12 | M 3-M 12 |
| Tolerance | 6H | 6H | 6H | 6H | 6H | 6H |
| Coolant supply | External | External | External | External | External | External |
| Chamfer form | B | B | B | C / E | C | C |
| Coating/grade | WY80FC / WY80AA | WY80FC / WY80AA | WY80FC / WY80AA | WY80FC / WY80AA | WY80FC / WY80AA | WY80FC / WY80AA |
| Page | 45 | 46 | 47 | 48 | 50 | 51 |
| |  |  |  |  |  |  |

## MF – Metric fine-pitch thread

| Machining |  |  |
|---|---|---|
| **Thread depth** | **3 x $D_N$** | **3 x $D_N$** |
| **Designation** | **TC216 Perform** | **TC115 Perform** |
| Dimension range | MF 8x1–<br>MF 18x1.5 | MF 8x1–<br>MF 18x1.5 |
| Tolerance | 6H | 6H |
| Coolant supply | External | External |
| Chamfer form | B | C |
| Coating/grade | WY80FC / WY80AA | WY80FC / WY80AA |
| Page | 52 | 53 |
| |  |  |

## UNC/UNF

| Machining |  |  |  |  |
|---|---|---|---|---|
| **Thread depth** | **3 x $D_N$** | **3 x $D_N$** | **3 x $D_N$** | **3 x $D_N$** |
| **Designation** | **TC216 Perform** | **TC115 Perform** | **TC216 Perform** | **TC115 Perform** |
| Dimension range | UNC 6-32–<br>UNC 3/4-10 | UNC 6-32–<br>UNC 3/4-10 | UNF 6-40–<br>UNF 1/2-20 | UNF 6-40–<br>UNF 1/2-20 |
| Tolerance | 2B | 2B | 2B | 2B |
| Coolant supply | External | External | External | External |
| Chamfer form | B | C | B | C |
| Coating/grade | WY80AA | WY80AA | WY80AA | WY80AA |
| Page | 54 | 55 | 56 | 57 |
| |  |  |  |  |

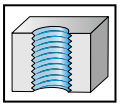
* Incl. core-hole drill

# HSS-E machine taps
## TC216 Perform mm

– For long-chipping materials

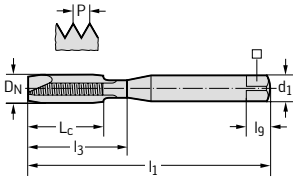
**M**
**DIN 13**

**ISO2/6H**



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ●● | | | |
| WY80FC | ●● | ●● | ●● | ●● | | | |

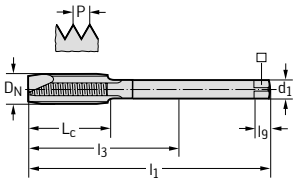
## DIN 371




| Designation | $D_N$ | P mm | $l_1$ mm | $L_c$ mm | $l_3$ mm | $d_1$ h9 mm | □ mm | $l_9$ mm | N | WY80AA | WY80FC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TC216-M1.6-C0- | M 1.6 | 0,35 | 40 | 7 | 7 | 2,5 | 2,1 | 5 | 2 | ●● | ●● |
| TC216-M2-C0- | M 2 | 0,4 | 45 | 6 | 9 | 2,8 | 2,1 | 5 | 2 | ●● | ●● |
| TC216-M2.5-C0- | M 2.5 | 0,45 | 50 | 8 | 12,5 | 2,8 | 2,1 | 5 | 2 | ●● | ●● |
| TC216-M3-C0- | M 3 | 0,5 | 56 | 9 | 18 | 3,5 | 2,7 | 6 | 2 | ●● | ●● |
| TC216-M4-C0- | M 4 | 0,7 | 63 | 12 | 21 | 4,5 | 3,4 | 6 | 3 | ●● | ●● |
| TC216-M5-C0- | M 5 | 0,8 | 70 | 13 | 25 | 6 | 4,9 | 8 | 3 | ●● | ●● |
| TC216-M6-C0- | M 6 | 1 | 80 | 15 | 30 | 6 | 4,9 | 8 | 3 | ●● | ●● |
| TC216-M8-C0- | M 8 | 1,25 | 90 | 18 | 35 | 8 | 6,2 | 9 | 3 | ●● | ●● |
| TC216-M10-C0- | M 10 | 1,5 | 100 | 20 | 39 | 10 | 8 | 11 | 3 | ●● | ●● |

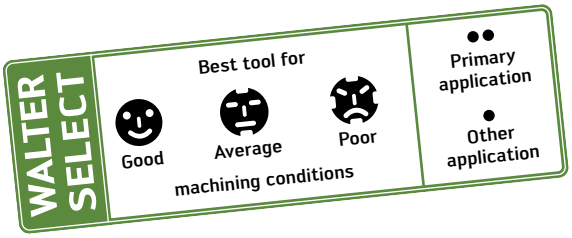
Ordering example for the WY80FC grade: TC216-M3-C0-WY80FC

## DIN 376




| Designation | $D_N$ | P mm | $l_1$ mm | $L_c$ mm | $l_3$ mm | $d_1$ h9 mm | □ mm | $l_9$ mm | N | WY80AA | WY80FC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TC216-M12-L0- | M 12 | 1,75 | 110 | 23 | 83 | 9 | 7 | 10 | 3 | ●● | ●● |
| TC216-M14-L0- | M 14 | 2 | 110 | 25 | 81 | 11 | 9 | 12 | 4 | ●● | ●● |
| TC216-M16-L0- | M 16 | 2 | 110 | 25 | 68 | 12 | 9 | 12 | 4 | ●● | ●● |
| TC216-M20-L0- | M 20 | 2,5 | 140 | 30 | 95 | 16 | 12 | 15 | 4 | ●● | ●● |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Ordering example for the WY80FC grade: TC216-M12-L0-WY80FC



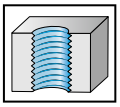
# HSS-E tap set 1
# TC216 Perform mm

C1

– Universal tap set

**M**
DIN 13

ISO2/6H



≤ 3×$D_N$ | B=3,5-5 | 32HRC 1000 –350 N/mm²

| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ●● | | | |

## Tool

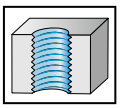
| | Designation | $D_N$ mm | | Quantity | WY80AA |
|---|---|---|---|---|---|
|  | TC216-SET1-M3-M12- | M3<br>M4<br>M5<br>M6<br>M8<br>M10<br>M12 | | 7 | ★ |

Ordering example for the WY80AA grade: TC216-SET1-M3-M12-WY80AA

– Universal tap set

**M**
DIN 13

ISO2/6H



≤ 3×$D_N$ | B=3,5-5 | 32HRC 1000 –350 N/mm²

| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80FC | ●● | ●● | ●● | ●● | | | |

## Tool

| | Designation | $D_N$ mm | | Quantity | WY80FC |
|---|---|---|---|---|---|
|  | TC216-SET1-M3-M12- | M3<br>M4<br>M5<br>M6<br>M8<br>M10<br>M12 | | 7 | ★ |

Ordering example for the WY80FC grade: TC216-SET1-M3-M12-WY80FC

Please refer to the corresponding order pages for the tool dimensions and suitability for the intended application.

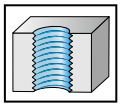
★ New addition to the product range

# HSS-E tap set 2
# TC216 + DA110 Perform mm

– Universal tap set
– Incl. core-hole drill

≤ 3×$D_N$ | B=3,5-5 | 32HRC 1000 –350 N/mm²

**M** DIN 13 | ISO2/6H



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ●● | | | |

## Tool

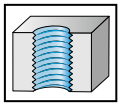
| Designation | $D_N$ mm | Core hole dia. mm | Quantity | WY80AA |
|---|---|---|---|---|
| TC216-SET2-M3-M12- | M3 | 2,5 | 14 | ⊠ |
| | M4 | 3,3 | | |
| | M5 | 4,2 | | |
| | M6 | 5,0 | | |
| | M8 | 6,8 | | |
| | M10 | 8,5 | | |
| | M12 | 10,2 | | |

Ordering example for the WY80AA grade: TC216-SET2-M3-M12-WY80AA

– Universal tap set
– Incl. core-hole drill

≤ 3×$D_N$ | B=3,5-5 | 32HRC 1000 –350 N/mm²

**M** DIN 13 | ISO2/6H



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80FC | ●● | ●● | ●● | ●● | | | |

## Tool

| Designation | $D_N$ mm | Core hole dia. mm | Quantity | WY80FC |
|---|---|---|---|---|
| TC216-SET2-M3-M12- | M3 | 2,5 | 14 | ⊠ |
| | M4 | 3,3 | | |
| | M5 | 4,2 | | |
| | M6 | 5,0 | | |
| | M8 | 6,8 | | |
| | M10 | 8,5 | | |
| | M12 | 10,2 | | |

Ordering example for the WY80FC grade: TC216-SET1-M3-M12-WY80FC

Please refer to the corresponding order pages for the tool dimensions and suitability for the intended application.

# HSS-E machine taps
## TC115 Perform mm

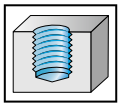
– For long-chipping materials

≤ 3×$D_N$ | C=2-3 | 45° | 32HRC 1000 –350 N/mm²

C1

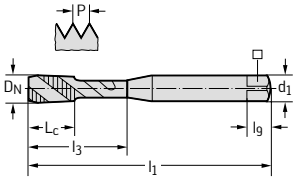
**M**
DIN 13

ISO2/6H



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ● | | | |
| WY80FC | ●● | ●● | ●● | ● | | | |

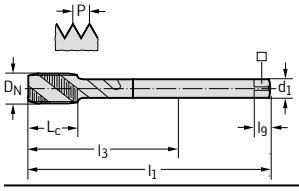
## DIN 371




| Designation | $D_N$ | P mm | $l_1$ mm | $L_c$ mm | $l_3$ mm | $d_1$ h9 mm | □ mm | $l_9$ mm | N | WY80AA | WY80FC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TC115-M1.6-C0- | M 1.6 | 0,35 | 40 | 6 | 6 | 2,5 | 2,1 | 5 | 2 | ✖ | ✖ |
| TC115-M2-C0- | M 2 | 0,4 | 45 | 4 | 9 | 2,8 | 2,1 | 5 | 3 | ✖ | ✖ |
| TC115-M2.5-C0- | M 2.5 | 0,45 | 50 | 4 | 12,5 | 2,8 | 2,1 | 5 | 3 | ✖ | ✖ |
| TC115-M3-C0- | M 3 | 0,5 | 56 | 6 | 18 | 3,5 | 2,7 | 6 | 3 | ✖ | ✖ |
| TC115-M4-C0- | M 4 | 0,7 | 63 | 7 | 21 | 4,5 | 3,4 | 6 | 3 | ✖ | ✖ |
| TC115-M5-C0- | M 5 | 0,8 | 70 | 8 | 25 | 6 | 4,9 | 8 | 3 | ✖ | ✖ |
| TC115-M6-C0- | M 6 | 1 | 80 | 10 | 30 | 6 | 4,9 | 8 | 3 | ✖ | ✖ |
| TC115-M8-C0- | M 8 | 1,25 | 90 | 12 | 35 | 8 | 6,2 | 9 | 3 | ✖ | ✖ |
| TC115-M10-C0- | M 10 | 1,5 | 100 | 15 | 39 | 10 | 8 | 11 | 3 | ✖ | ✖ |

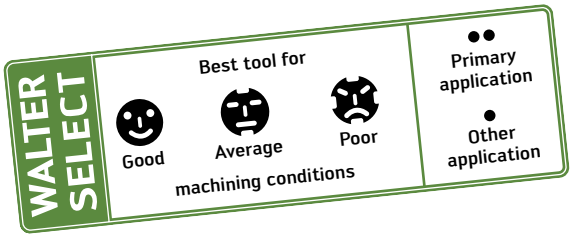
Ordering example for the WY80FC grade: TC115-M3-C0-WY80FC

## DIN 376




| Designation | $D_N$ | P mm | $l_1$ mm | $L_c$ mm | $l_3$ mm | $d_1$ h9 mm | □ mm | $l_9$ mm | N | WY80AA | WY80FC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TC115-M12-L0- | M 12 | 1,75 | 110 | 16 | 83 | 9 | 7 | 10 | 3 | ✖ | ✖ |
| TC115-M14-L0- | M 14 | 2 | 110 | 20 | 81 | 11 | 9 | 12 | 3 | ✖ | ✖ |
| TC115-M16-L0- | M 16 | 2 | 110 | 20 | 68 | 12 | 9 | 12 | 3 | ✖ | ✖ |
| TC115-M20-L0- | M 20 | 2,5 | 140 | 25 | 95 | 16 | 12 | 15 | 4 | ✖ | ✖ |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Ordering example for the WY80FC grade: TC115-M12-L0-WY80FC



# HSS-E machine taps
## TC115 Perform mm

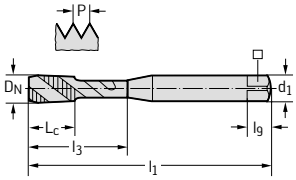
– For long-chipping materials

| M DIN 13 | ISO2/6H | |
|---|---|---|

≤ 3×$D_N$ | E=1,5-2 | 45° | 32HRC 1000 –350 N/mm²

| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ● | | | |

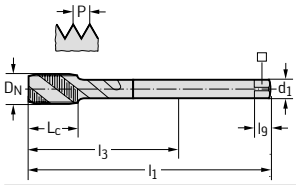
### DIN 371




| Designation | $D_N$ | P mm | $l_1$ mm | $L_c$ mm | $l_3$ mm | $d_1$ h9 mm | □ mm | $l_9$ mm | N | WY80AA |
|---|---|---|---|---|---|---|---|---|---|---|
| TC115-M3-CE- | M 3 | 0,5 | 56 | 6 | 18 | 3,5 | 2,7 | 6 | 3 | ⊠ |
| TC115-M4-CE- | M 4 | 0,7 | 63 | 7 | 21 | 4,5 | 3,4 | 6 | 3 | ⊠ |
| TC115-M5-CE- | M 5 | 0,8 | 70 | 8 | 25 | 6 | 4,9 | 8 | 3 | ⊠ |
| TC115-M6-CE- | M 6 | 1 | 80 | 10 | 30 | 6 | 4,9 | 8 | 3 | ⊠ |
| TC115-M8-CE- | M 8 | 1,25 | 90 | 12 | 35 | 8 | 6,2 | 9 | 3 | ⊠ |
| TC115-M10-CE- | M 10 | 1,5 | 100 | 15 | 39 | 10 | 8 | 11 | 3 | ⊠ |

Ordering example for the WY80AA grade: TC115-M3-CE-WY80AA

### DIN 376




| Designation | $D_N$ | P mm | $l_1$ mm | $L_c$ mm | $l_3$ mm | $d_1$ h9 mm | □ mm | $l_9$ mm | N | WY80AA |
|---|---|---|---|---|---|---|---|---|---|---|
| TC115-M12-LE- | M 12 | 1,75 | 110 | 16 | 83 | 9 | 7 | 10 | 3 | ⊠ |
| TC115-M14-LE- | M 14 | 2 | 110 | 20 | 81 | 11 | 9 | 12 | 3 | ⊠ |
| TC115-M16-LE- | M 16 | 2 | 110 | 20 | 68 | 12 | 9 | 12 | 3 | ⊠ |
| TC115-M20-LE- | M 20 | 2,5 | 140 | 25 | 95 | 16 | 12 | 15 | 4 | ⊠ |

Ordering example for the WY80AA grade: TC115-M12-LE-WY80AA

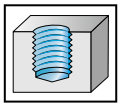
# HSS-E tap set 1
# TC115 Perform mm

C1

– Universal tap set

**M**
DIN 13

ISO2/6H



≤ 3×$D_N$ | C=2-3 | 45° | 32HRC 1000 –350 N/mm²

| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ● | | | |

## Tool

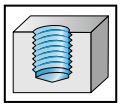
| Designation | $D_N$ | Quantity | WY80AA |
|---|---|---|---|
| TC115-SET1-M3-M12- | M3<br>M4<br>M5<br>M6<br>M8<br>M10<br>M12 | 7 | ☹ |

Ordering example for the WY80AA grade: TC115-SET1-M3-M12-WY80AA

– Universal tap set

**M**
DIN 13

ISO2/6H



≤ 3×$D_N$ | C=2-3 | 45° | 32HRC 1000 –350 N/mm²

| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80FC | ●● | ●● | ●● | ● | | | |

## Tool

| Designation | $D_N$ | Quantity | WY80FC |
|---|---|---|---|
| TC115-SET1-M3-M12- | M3<br>M4<br>M5<br>M6<br>M8<br>M10<br>M12 | 7 | ☹ |

Ordering example for the WY80FC grade: TC115-SET1-M3-M12-WY80FC

Please refer to the corresponding order pages for the tool dimensions and suitability for the intended application.

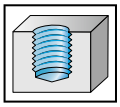
☺ ☹ / ★ New addition to the product range

# HSS-E tap set 2
# TC115 + DA110 Perform mm

– Universal tap set
– Incl. core-hole drill

≤ 3×$D_N$ | C=2-3 | 45° | 32HRC 1000 –350 N/mm²

**M** DIN 13 | ISO2/6H



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ● | | | |

## Tool

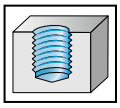
| Designation | $D_N$ | Core hole dia. mm | Quantity | WY80AA |
|---|---|---|---|---|
| TC115-SET2-M3-M12- | M3 | 2,5 | 14 | ⊠ |
| | M4 | 3,3 | | |
| | M5 | 4,2 | | |
| | M6 | 5,0 | | |
| | M8 | 6,8 | | |
| | M10 | 8,5 | | |
| | M12 | 10,2 | | |

Ordering example for the WY80AA grade: TC115-SET2-M3-M12-WY80AA

– Universal tap set
– Incl. core-hole drill

≤ 3×$D_N$ | C=2-3 | 45° | 32HRC 1000 –350 N/mm²

**M** DIN 13 | ISO2/6H



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80FC | ●● | ●● | ●● | ● | | | |

## Tool

| Designation | $D_N$ | Core hole dia. mm | Quantity | WY80FC |
|---|---|---|---|---|
| TC115-SET2-M3-M12- | M3 | 2,5 | 14 | ⊠ |
| | M4 | 3,3 | | |
| | M5 | 4,2 | | |
| | M6 | 5,0 | | |
| | M8 | 6,8 | | |
| | M10 | 8,5 | | |
| | M12 | 10,2 | | |

Ordering example for the WY80FC grade: TC115-SET2-M3-M12-WY80FC

Please refer to the corresponding order pages for the tool dimensions and suitability for the intended application.

# HSS-E machine taps
## TC216 Perform mm

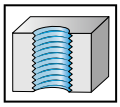
– For long-chipping materials

≤ 3×$D_N$ | B=3,5-5 | 32HRC, 1000 –350 N/mm²

C1

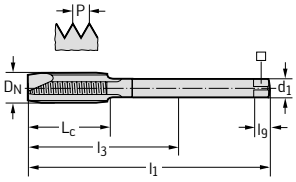
**MF**
DIN 13

ISO2/6H



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ●● | | | |
| WY80FC | ●● | ●● | ●● | ●● | | | |

## DIN 374




| Designation | $D_N$ | P mm | $l_1$ mm | $L_c$ mm | $l_3$ mm | $d_1$ h9 mm | □ mm | $l_9$ mm | N | WY80AA | WY80FC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TC216-M8X1-L0- | MF 8x1 | 1 | 90 | 18 | 67 | 6 | 4,9 | 8 | 3 | ⊠ | ⊠ |
| TC216-M10X1-L0- | MF 10x1 | 1 | 90 | 20 | 67 | 7 | 5,5 | 8 | 3 | ⊠ | ⊠ |
| TC216-M10X1.25-L0- | MF 10x1.25 | 1,25 | 100 | 20 | 77 | 7 | 5,5 | 8 | 3 | ⊠ | ⊠ |
| TC216-M12X1.25-L0- | MF 12x1.25 | 1,25 | 100 | 21 | 73 | 9 | 7 | 10 | 4 | ⊠ | ⊠ |
| TC216-M12X1.5-L0- | MF 12x1.5 | 1,5 | 100 | 21 | 73 | 9 | 7 | 10 | 4 | ⊠ | ⊠ |
| TC216-M14X1.5-L0- | MF 14x1.5 | 1,5 | 100 | 21 | 71 | 11 | 9 | 12 | 4 | ⊠ | ⊠ |
| TC216-M16X1.5-L0- | MF 16x1.5 | 1,5 | 100 | 21 | 58 | 12 | 9 | 12 | 4 | ⊠ | ⊠ |
| TC216-M18X1.5-L0- | MF 18x1.5 | 1,5 | 110 | 24 | 66 | 14 | 11 | 14 | 4 | ⊠ | ⊠ |

Ordering example for the WY80FC grade: TC216-M8X1-L0-WY80FC

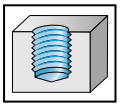
# HSS-E machine taps
## TC115 Perform mm

– For long-chipping materials

≤ 3×$D_N$ | C=2-3 | 45° | 32HRC 1000 –350 N/mm²

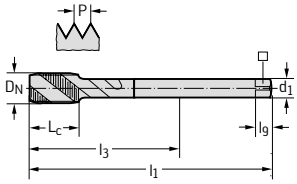
**MF**
**DIN 13**

**ISO2/6H**



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ● | | | |
| WY80FC | ●● | ●● | ●● | ● | | | |

## DIN 374




| Designation | $D_N$ | P mm | $l_1$ mm | $L_c$ mm | $l_3$ mm | $d_1$ h9 mm | □ mm | $l_9$ mm | N | WY80AA | WY80FC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TC115-M8X1-L0- | MF 8x1 | 1 | 90 | 12 | 67 | 6 | 4,9 | 8 | 3 | ✖ | ✖ |
| TC115-M10X1-L0- | MF 10x1 | 1 | 90 | 12 | 67 | 7 | 5,5 | 8 | 3 | ✖ | ✖ |
| TC115-M10X1.25-L0- | MF 10x1.25 | 1,25 | 100 | 15 | 77 | 7 | 5,5 | 8 | 3 | ✖ | ✖ |
| TC115-M12X1.25-L0- | MF 12x1.25 | 1,25 | 100 | 13 | 73 | 9 | 7 | 10 | 4 | ✖ | ✖ |
| TC115-M12X1.5-L0- | MF 12x1.5 | 1,5 | 100 | 13 | 73 | 9 | 7 | 10 | 4 | ✖ | ✖ |
| TC115-M14X1.5-L0- | MF 14x1.5 | 1,5 | 100 | 15 | 71 | 11 | 9 | 12 | 4 | ✖ | ✖ |
| TC115-M16X1.5-L0- | MF 16x1.5 | 1,5 | 100 | 15 | 58 | 12 | 9 | 12 | 4 | ✖ | ✖ |
| TC115-M18X1.5-L0- | MF 18x1.5 | 1,5 | 110 | 17 | 66 | 14 | 11 | 14 | 4 | ✖ | ✖ |

Ordering example for the WY80FC grade: TC115-M8X1-L0-WY80FC

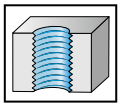
# HSS-E machine taps
## TC216 Perform mm

– For long-chipping materials

C1

**UNC**
ASME B1.1

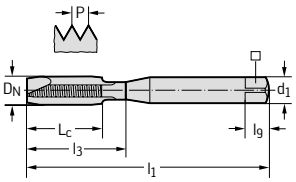
2B



≤ 3×$D_N$ | B=3,5-5 | 32HRC, 1000 – 350 N/mm²

| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ●● | | | |

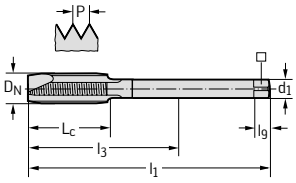
## DIN 371




| Designation | $D_N$-P | $D_N$ mm | $l_1$ h9 mm | $L_c$ mm | $l_3$ mm | $d_1$ mm | □ mm | $l_9$ mm | N | WY80AA |
|---|---|---|---|---|---|---|---|---|---|---|
| TC216-UNC6-C0- | UNC 6-32 | 3,505 | 56 | 11 | 20 | 4 | 3 | 6 | 3 | ●● |
| TC216-UNC8-C0- | UNC 8-32 | 4,166 | 63 | 12 | 21 | 4,5 | 3,4 | 6 | 3 | ●● |
| TC216-UNC10-C0- | UNC 10-24 | 4,826 | 70 | 13 | 25 | 6 | 4,9 | 8 | 3 | ●● |
| TC216-UNC1/4-C0- | UNC 1/4-20 | 6,35 | 80 | 15 | 30 | 7 | 5,5 | 8 | 3 | ●● |
| TC216-UNC5/16-C0- | UNC 5/16-18 | 7,938 | 90 | 18 | 35 | 8 | 6,2 | 9 | 3 | ●● |
| TC216-UNC3/8-C0- | UNC 3/8-16 | 9,525 | 100 | 20 | 39 | 10 | 8 | 11 | 3 | ●● |

Ordering example for the WY80AA grade: TC216-UNC6-C0-WY80AA

## DIN 376

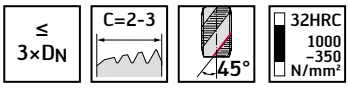



| Designation | $D_N$-P | $D_N$ mm | $l_1$ h9 mm | $L_c$ mm | $l_3$ mm | $d_1$ mm | □ mm | $l_9$ mm | N | WY80AA |
|---|---|---|---|---|---|---|---|---|---|---|
| TC216-UNC1/2-L0- | UNC 1/2-13 | 12,7 | 110 | 23 | 83 | 9 | 7 | 10 | 4 | ●● |
| TC216-UNC5/8-L0- | UNC 5/8-11 | 15,875 | 110 | 25 | 68 | 12 | 9 | 12 | 4 | ●● |
| TC216-UNC3/4-L0- | UNC 3/4-10 | 19,05 | 125 | 30 | 81 | 14 | 11 | 14 | 4 | ●● |

Ordering example for the WY80AA grade: TC216-UNC1/2-L0-WY80AA

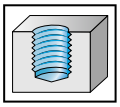
# HSS-E machine taps
## TC115 Perform mm

– For long-chipping materials



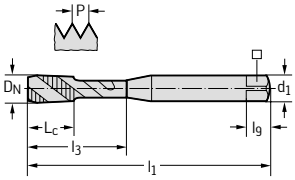

**UNC**
ASME B1.1

2B



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ● | | | |

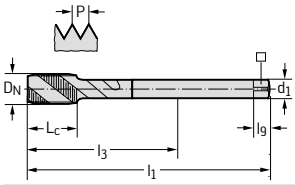
## DIN 371




| Designation | DN-P | DN mm | l1 mm | Lc mm | l3 mm | d1 h9 mm | □ mm | l9 mm | N | WY80AA |
|---|---|---|---|---|---|---|---|---|---|---|
| TC115-UNC6-C0- | UNC 6-32 | 3,505 | 56 | 6,5 | 20 | 4 | 3 | 6 | 3 | ⊠ |
| TC115-UNC8-C0- | UNC 8-32 | 4,166 | 63 | 7 | 21 | 4,5 | 3,4 | 6 | 3 | ⊠ |
| TC115-UNC10-C0- | UNC 10-24 | 4,826 | 70 | 8 | 25 | 6 | 4,9 | 8 | 3 | ⊠ |
| TC115-UNC1/4-C0- | UNC 1/4-20 | 6,35 | 80 | 10 | 30 | 7 | 5,5 | 8 | 3 | ⊠ |
| TC115-UNC5/16-C0- | UNC 5/16-18 | 7,938 | 90 | 12 | 35 | 8 | 6,2 | 9 | 3 | ⊠ |
| TC115-UNC3/8-C0- | UNC 3/8-16 | 9,525 | 100 | 15 | 39 | 10 | 8 | 11 | 3 | ⊠ |

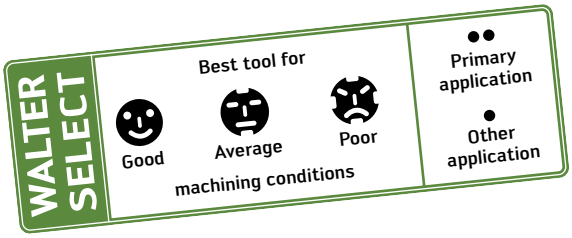
Ordering example for the WY80AA grade: TC115-UNC6-C0-WY80AA

## DIN 376




| Designation | DN-P | DN mm | l1 mm | Lc mm | l3 mm | d1 h9 mm | □ mm | l9 mm | N | WY80AA |
|---|---|---|---|---|---|---|---|---|---|---|
| TC115-UNC1/2-L0- | UNC 1/2-13 | 12,7 | 110 | 18 | 83 | 9 | 7 | 10 | 3 | ⊠ |
| TC115-UNC5/8-L0- | UNC 5/8-11 | 15,875 | 110 | 20 | 68 | 12 | 9 | 12 | 3 | ⊠ |
| TC115-UNC3/4-L0- | UNC 3/4-10 | 19,05 | 125 | 25 | 81 | 14 | 11 | 14 | 4 | ⊠ |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Ordering example for the WY80AA grade: TC115-UNC1/2-L0-WY80AA



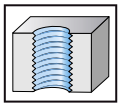
# HSS-E machine taps
## TC216 Perform mm

– For long-chipping materials

≤ 3×$D_N$ | B=3.5-5 | 300HB / 100HB

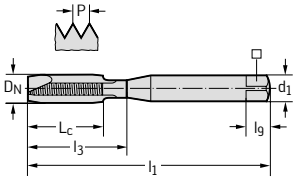
**UNF**
ASME B1.1

2B



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ●● | | | |

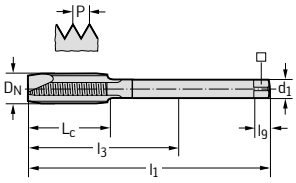
### DIN 371




| Designation | $D_N$-P | $D_N$ mm | $l_1$ h9 mm | $L_c$ mm | $l_3$ mm | $d_1$ mm | □ mm | $l_9$ mm | N | WY80AA |
|---|---|---|---|---|---|---|---|---|---|---|
| TC216-UNF6-C0- | UNF 6-40 | 3.505 | 56 | 11 | | 4 | 3 | 6 | 3 | ✱ |
| TC216-UNF10-C0- | UNF 10-32 | 4.826 | 70 | 13 | | 6 | 4.9 | 8 | 3 | ✱ |
| TC216-UNF1/4-C0- | UNF 1/4-28 | 6.35 | 80 | 15 | | 7 | 5.5 | 8 | 3 | ✱ |
| TC216-UNF5/16-C0- | UNF 5/16-24 | 7.938 | 90 | 18 | | 8 | 6.2 | 9 | 3 | ✱ |
| TC216-UNF3/8-C0- | UNF 3/8-24 | 9.525 | 100 | 20 | | 10 | 8 | 11 | 3 | ✱ |
| | | | | | | | | | | |
| | | | | | | | | | | |

Ordering example for the WY80AA grade: TC216-UNF6-C0-WY80AA

### DIN 376




| Designation | $D_N$-P | $D_N$ mm | $l_1$ h9 mm | $L_c$ mm | $l_3$ mm | $d_1$ mm | □ mm | $l_9$ mm | N | WY80AA |
|---|---|---|---|---|---|---|---|---|---|---|
| TC216-UNF7/16-L0- | UNF 7/16-20 | 11.113 | 100 | 20 | 76 | 8 | 6.2 | 9 | 3 | ✱ |
| TC216-UNF1/2-L0- | UNF 1/2-20 | 12.7 | 100 | 21 | 73 | 9 | 7 | 10 | 4 | ✱ |
| | | | | | | | | | | |
| | | | | | | | | | | |
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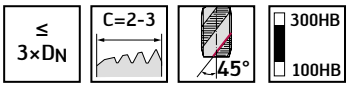
| | | | | | | | | | | |

Ordering example for the WY80AA grade: TC216-UNF7/16-L0-WY80AA

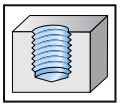
# HSS-E machine taps
## TC115 Perform mm

– For long-chipping materials



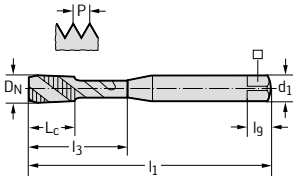

**UNF**
ASME B1.1

2B



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WY80AA | ●● | ●● | ●● | ● | | | |

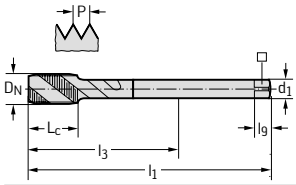
## DIN 371




| Designation | $D_N$-P | $D_N$ mm | $l_1$ mm | $L_c$ mm | $l_3$ mm | $d_1$ h9 mm | □ mm | $l_9$ mm | N | WY80AA |
|---|---|---|---|---|---|---|---|---|---|---|
| TC115-UNF6-C0- | UNF 6-40 | 3.505 | 56 | 6.5 | 20 | 4 | 3 | 6 | 3 | ✕ |
| TC115-UNF10-C0- | UNF 10-32 | 4.826 | 70 | 8 | 25 | 6 | 4.9 | 8 | 3 | ✕ |
| TC115-UNF1/4-C0- | UNF 1/4-28 | 6.35 | 80 | 10 | 30 | 7 | 5.5 | 8 | 3 | ✕ |
| TC115-UNF5/16-C0- | UNF 5/16-24 | 7.938 | 90 | 12 | 35 | 8 | 6.2 | 9 | 3 | ✕ |
| TC115-UNF3/8-C0- | UNF 3/8-24 | 9.525 | 100 | 15 | 39 | 10 | 8 | 11 | 3 | ✕ |
| | | | | | | | | | | |
| | | | | | | | | | | |

Ordering example for the WY80AA grade: TC115-UNF6-C0-WY80AA

## DIN 376




| Designation | $D_N$-P | $D_N$ mm | $l_1$ mm | $L_c$ mm | $l_3$ mm | $d_1$ h9 mm | □ mm | $l_9$ mm | N | WY80AA |
|---|---|---|---|---|---|---|---|---|---|---|
| TC115-UNF7/16-L0- | UNF 7/16-20 | 11.113 | 100 | 15 | 76 | 8 | 6.2 | 9 | 3 | ✕ |
| TC115-UNF1/2-L0- | UNF 1/2-20 | 12.7 | 100 | 13 | 73 | 9 | 7 | 10 | 4 | ✕ |
| | | | | | | | | | | |
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| | | | | | | | | | | |

Ordering example for the WY80AA grade: TC115-UNF7/16-L0-WY80AA

# Cutting data
# Thread tapping

C1

The specified cutting data represents average standard values.
For specific applications, adjustment is recommended.

| Material group | = Coolant recommended<br>**E** = Emulsion<br>**O** = Oil<br>$v_c$ = Cutting speed<br>Overview of the main material groups and code letters | | | Brinell hardness HB | Tensile strength $R_m$ N/mm² | Machining group [1] | HSS-E(-PM) taps | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Coated | | | |
| | | | | | | | | $v_c$ [m/min] | | |
| | | | | | | | | 1,5 × $D_N$ | 2 × $D_N$ | 2,5 × $D_N$ |
| P | Non-alloyed steel | C ≤ 0.25% | Annealed | 125 | 430 | P1 | E | 37 | 30 | 26 |
| | | C > 0.25 to ≤ 0.55% | Annealed | 190 | 640 | P2 | E | 37 | 31 | 26 |
| | | C > 0.25 to ≤ 0.55% | Heat-treated | 210 | 710 | P3 | E | 23 | 19 | 17 |
| | | C > 0.55% | Annealed | 190 | 640 | P4 | E | 23 | 19 | 16 |
| | | C > 0.55% | Heat-treated | 300 | 1010 | P5 | E | 14 | 12 | 10 |
| | | Free-machining steel (short-chipping) | Annealed | 220 | 750 | P6 | E | 23 | 19 | 16 |
| | Low-alloy steel | Annealed | | 175 | 590 | P7 | E | 37 | 30 | 26 |
| | | Heat-treated | | 285 | 960 | P8 | E | 12 | 10 | 9 |
| | | Heat-treated | | 380 | 1280 | P9 | E | 7 | 6 | 5 |
| | | Heat-treated | | 430 | 1480 | P10 | O | 5 | | |
| | High-alloy steel and high-alloy tool steel | Annealed | | 200 | 680 | P11 | E | 23 | 19 | 16 |
| | | Hardened and tempered | | 300 | 1010 | P12 | E | 14 | 12 | 10 |
| | | Hardened and tempered | | 380 | 1280 | P13 | O | 7 | 6 | 5 |
| | Stainless steel | Ferritic/martensitic, annealed | | 200 | 680 | P14 | E | 7 | 6 | 5 |
| | | Martensitic, heat-treated | | 330 | 1110 | P15 | E | 5 | 4 | 3 |
| M | Stainless steel | Austenitic, quench hardened | | 200 | 680 | M1 | E | 8 | 7 | 6 |
| | | Austenitic, precipitation hardened (PH) | | 300 | 1010 | M2 | E | 5 | 4 | 3 |
| | | Austenitic/ferritic, duplex | | 230 | 780 | M3 | E | 6 | 5 | 4 |
| K | Malleable cast iron | Ferritic | | 200 | 400 | K1 | E | 22 | 18 | 16 |
| | | Pearlitic | | 260 | 700 | K2 | E | 11 | 9 | 8 |
| | Grey cast iron | Low tensile strength | | 180 | 200 | K3 | E | 44 | 36 | 32 |
| | | High tensile strength/austenitic | | 245 | 350 | K4 | E | 17 | 14 | 12 |
| | Cast iron with spheroidal graphite | Ferritic | | 155 | 400 | K5 | E | 22 | 18 | 16 |
| | | Pearlitic | | 265 | 700 | K6 | E | 12 | 10 | 9 |
| | GGV (CGI) | | | 230 | 400 | K7 | E | 10 | 8 | 7 |
| N | Wrought aluminium alloys | Not hardenable | | 30 | – | N1 | E | 8 | 7 | 6 |
| | | Hardenable, hardened | | 100 | 340 | N2 | E | 32 | 26 | 22 |
| | Cast aluminium alloys | ≤ 12% Si, not hardenable | | 75 | 260 | N3 | E | 22 | 18 | 16 |
| | | ≤ 12% Si, hardenable, hardened | | 90 | 310 | N4 | E | 22 | 18 | 16 |
| | | > 12% Si, not hardenable | | 130 | 450 | N5 | E | 25 | 21 | 18 |
| | Magnesium-based alloys | | | 70 | 250 | N6 | O | 34 | 28 | 24 |
| | Copper and copper alloys (bronze/brass) | Unalloyed, electrolytic copper | | 100 | 340 | N7 | E | 14 | 12 | 10 |
| | | Brass, bronze, red brass | | 90 | 310 | N8 | E | 36 | 29 | 25 |
| | | Cu alloys, short-chipping | | 110 | 380 | N9 | E | 48 | 40 | 34 |
| | | High tensile, Ampco | | 300 | 1010 | N10 | E | | | |
| S | Heat-resistant alloys | Fe-based | Annealed | 200 | 680 | S1 | E | | | |
| | | | Hardened | 280 | 940 | S2 | E | 3 | | |
| | | Ni- or Co-based | Annealed | 250 | 840 | S3 | E | | | |
| | | | Hardened | 350 | 1180 | S4 | O | 3 | | |
| | | | Cast | 320 | 1080 | S5 | O | 3 | | |
| | Titanium alloys | Pure titanium | | 200 | 680 | S6 | E | 8 | 7 | 6 |
| | | α and β alloys, hardened | | 375 | 1260 | S7 | O | 4 | 4 | |
| | | β alloys | | 410 | 1400 | S8 | O | 4 | 4 | |
| | Tungsten alloys | | | 300 | 1010 | S9 | O | 2 | 2 | |
| | Molybdenum alloys | | | 300 | 1010 | S10 | O | 7 | 5 | |
| H | Hardened steel | Hardened and tempered | | 50 HRC | – | H1 | O | | | |
| | | Hardened and tempered | | 55 HRC | – | H2 | O | | | |
| | | Hardened and tempered | | 60 HRC | – | H3 | O | | | |
| | Hardened cast iron | Hardened and tempered | | 55 HRC | – | H4 | O | | | |
| O | Thermoplastics | Without abrasive fillers | | | | O1 | E | 22 | 18 | 15 |
| | Thermosets | Without abrasive fillers | | | | O2 | E | 13 | 10 | 9 |
| | Plastic, glass-fibre reinforced | GFRP | | | | O3 | E | 8 | 6 | 5 |
| | Plastic, carbon-fibre reinforced | CFRP | | | | O4 | E | 8 | 6 | 5 |
| | Plastic, aramid-fibre reinforced | AFRP | | | | O5 | E | 8 | 6 | 5 |
| | Graphite (technical) | | | 80 Shore | | O6 | E | 19 | 16 | 13 |

[1] The classification of the machining groups can be found from page B 1174 onwards in the Walter General Catalogue 2017.
[3] Water-miscible coolants must not be used when machining magnesium-based alloys.
*For materials with a hardness of more than 63 HRC, reduce the cutting speed by 50–75%.


WALTER
PROTOTYP

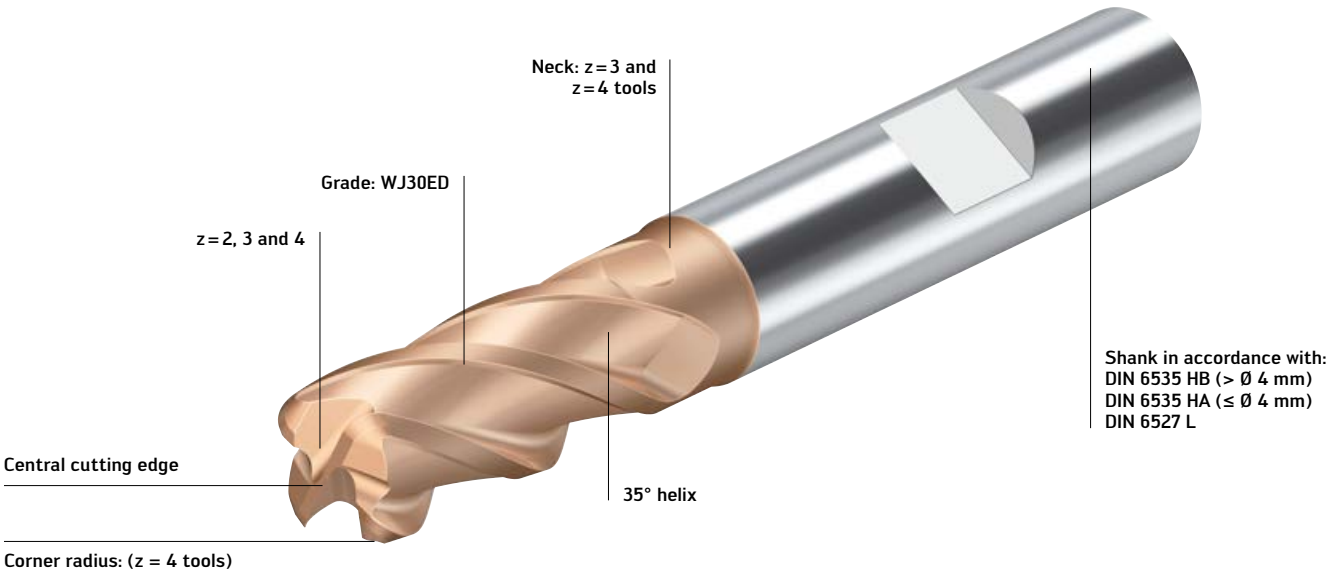
# Uniquely efficient – for universal use in ISO P, M and K.

## THE TOOLS

- Solid carbide milling cutters from the Perform line
- Metric and inch
- With and without reduced neck (z = 3 and z = 4 tools)
- With and without corner radius (z = 4 tools)
- 1 family; 126 dimensions
- With 2, 3 or 4 cutting edges
- Dia. 2–20 mm; 1/8–3/4"

## THE APPLICATION

- ISO material groups P, M and K
- Shoulder milling, full slotting, pocket milling, helical plunging, ramping
- Areas of use: General mechanical engineering, mould and die making, automotive and energy industries



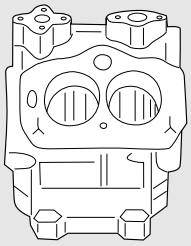

**Walter Prototyp MC232 Perform** **Fig.:** MC232-12.0W4B200C-WJ30ED

## BENEFITS FOR YOU

- Can be used universally for diverse milling strategies with various different materials
- Wide range of applications thanks to tools with reduced neck and corner radii
- High level of cost-efficiency with universal use and medium cutting data
- Simple programme selection
- Low storage costs
- One range for machining almost all material groups

## APPLICATION EXAMPLE

### Turbocharger

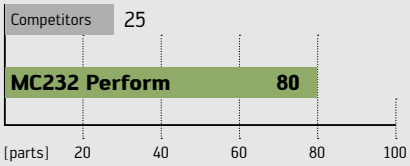


| | |
|---|---|
| **Material:** | ISO M;<br>stainless steel 1.4848 |
| **Tool:** | MC232-10.0W4B-WJ30ED |
| **Machining:** | Plunging and<br>shoulder milling |
| **Tensile strength:** | HB 220 |

**Cutting data:**

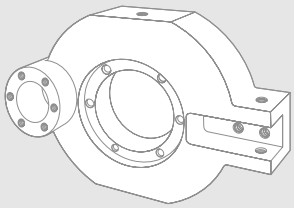
| | Competitors | **MC232 Perform** |
|---|---|---|
| Ø | 10 mm | 10 mm |
| $z$ | 4 | 4 |
| $a_e$ | 0.25 – 2 mm | 0.25 – 2 mm |
| $a_p$ | 12 mm | 12 mm |
| $v_c$ | 31 m/min | 35 m/min |
| $f_z$ | 0.05 mm | 0.08 mm |
| Tool life quantity | 25 parts | 80 parts |

**Comparison: Tool life quantity**




## APPLICATION EXAMPLE

### Component holder

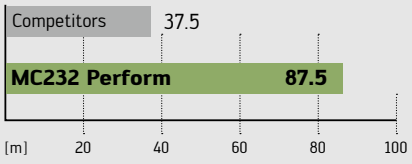


| | |
|---|---|
| **Material:** | ISO P; C45 |
| **Tool:** | MC232-10.0W4B-WJ30ED |
| **Machining:** | Shoulder milling |
| **Tensile strength:** | Tensile strength $R_m$<br>680 N/mm² |

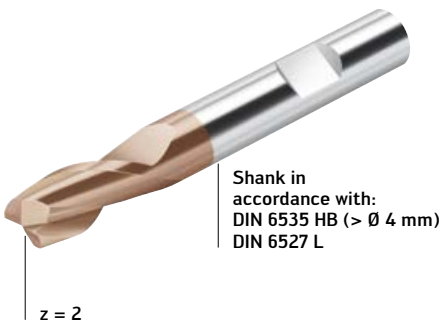
**Cutting data:**

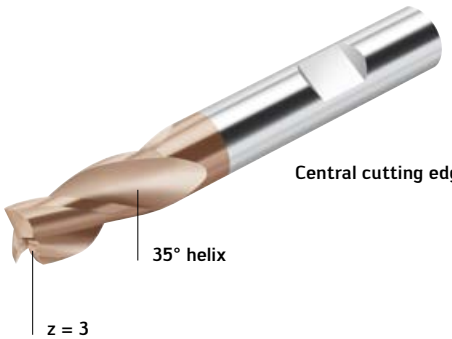
| | Competitors | **MC232 Perform** |
|---|---|---|
| Ø | 10 mm | 10 mm |
| $z$ | 4 | 4 |
| $a_e$ | 2 mm | 2 mm |
| $a_p$ | 10 mm | 10 mm |
| $v_c$ | 285 m/min | 285 m/min |
| $f_z$ | 0.096 mm | 0.096 mm |
| Tool life | 37.5 m | 87.5 m |

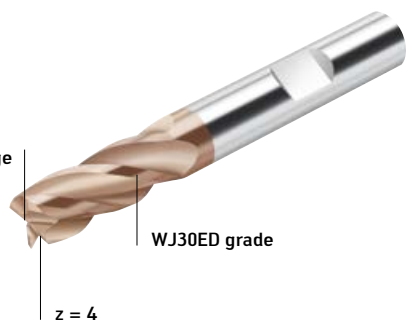
**Comparison: Tool life**



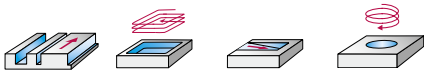


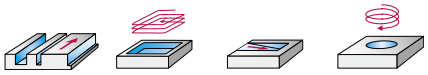



# Product range overview of solid carbide milling tools
# Shoulder/slot milling cutters – metric

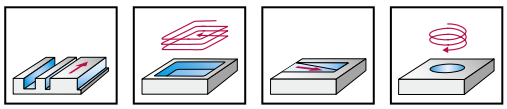
| Machining |  | | |
|---|---|---|---|
| **Helix angle** | **35°** | | |
| **Designation** | **MC232 Perform** | | |
| Dia. range [mm] | 2–20 | 2–20 | 2–20 |
| Z | 2 | 3 | 4 |
| Corner radius [mm] | 0 | 0 | 0,2–4 |
| Page | 63 | 64 | 66 |
| |  |  |  |

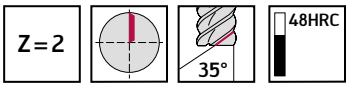
D 1

# Shoulder/slot milling cutters – inch

| Machining |  | | |
|---|---|---|---|
| **Helix angle** | **35°** | | |
| **Designation** | **MC232 Perform** | | |
| Diameter range [inch] | 1/8–3/4 | 1/8–3/4 | 1/8–3/4 |
| Z | 2 | 3 | 4 |
| Corner radius [inch] | 0 | 0 | 0.015–0.125 |
| Page | 63 | 65 | 67 |
| |  |  |  |

# Solid carbide shoulder/slot milling cutters
## MC232 Perform mm /
## MC232 Perform inch






| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30ED | ●● | ● | ● | | | | |

### DIN 6527 L

| Designation | $D_c$ h12 mm | $L_c$ mm | $l_1$ mm | $l_4$ mm | $d_1$ h6 mm | Z | WJ30ED |
|---|---|---|---|---|---|---|---|
| Shank DIN 6535 HA | | | | | | | |
| MC232-02.0A2B- | 2 | 6 | 57 | 29 | 4 | 2 | ● |
| MC232-02.5A2B- | 2,5 | 7 | 57 | 29 | 4 | 2 | ● |
| MC232-03.0A2B- | 3 | 7 | 57 | 29 | 4 | 2 | ● |
| MC232-03.5A2B- | 3,5 | 7 | 57 | 29 | 4 | 2 | ● |
| MC232-04.0A2B- | 4 | 8 | 57 | 29 | 4 | 2 | ● |
| Shank DIN 6535 HB | | | | | | | |
| MC232-05.0W2B- | 5 | 10 | 57 | 21 | 6 | 2 | ● |
| MC232-06.0W2B- | 6 | 10 | 57 | 21 | 6 | 2 | ● |
| MC232-08.0W2B- | 8 | 16 | 63 | 27 | 8 | 2 | ● |
| MC232-10.0W2B- | 10 | 19 | 72 | 32 | 10 | 2 | ● |
| MC232-12.0W2B- | 12 | 22 | 83 | 38 | 12 | 2 | ● |
| MC232-16.0W2B- | 16 | 26 | 92 | 44 | 16 | 2 | ● |
| MC232-20.0W2B- | 20 | 32 | 104 | 54 | 20 | 2 | ● |

Slot milling $a_p \leq 0.5 \times D_c$
Shoulder milling $a_e \leq 0.5 \times D_c$
Ordering example for the WJ30ED grade: MC232-02.0A2B-WJ30ED

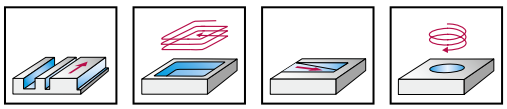
### STANDARD

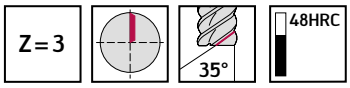
| Designation | $D_c$ h12 Inch/no. | $L_c$ inch | $l_1$ inch | $l_4$ inch | $d_1$ h6 inch | Z | WJ30ED |
|---|---|---|---|---|---|---|---|
| Shank DIN 6535 HA | | | | | | | |
| MC232.3.18A2D- | 1/8" | 0,500 | 2,500 | 1,083 | 0,250 | 2 | ● |
| MC232.6.35A2D- | 1/4" | 0,750 | 2,500 | 1,083 | 0,250 | 2 | ● |
| Shank DIN 6535 HB | | | | | | | |
| MC232.9.53W2D- | 3/8" | 0,875 | 3,000 | 1,437 | 0,375 | 2 | ● |
| MC232.12.7W2D- | 1/2" | 1,000 | 3,500 | 1,717 | 0,500 | 2 | ● |
| MC232.15.9W2D- | 5/8" | 1,250 | 3,500 | 1,594 | 0,625 | 2 | ● |
| MC232.19.1W2D- | 3/4" | 1,500 | 4,000 | 1,969 | 0,750 | 2 | ● |

Slot milling $a_p \leq 0.5 \times D_c$
Shoulder milling $a_e \leq 0.5 \times D_c$
Ordering example for the WJ30ED grade: MC232.3.18A2D-WJ30ED

# Solid carbide shoulder/slot milling cutters
## MC232 Perform mm

– Long reach





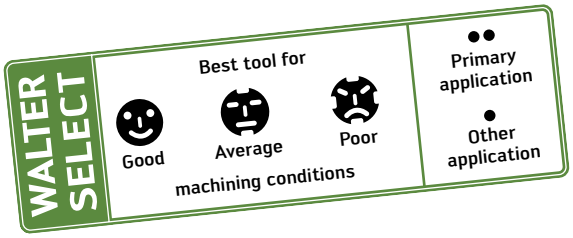

| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30ED | ●● | ● | ● | | | | |

D 1

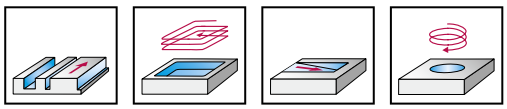
## DIN 6527 L

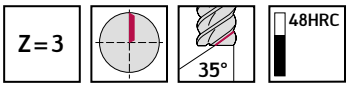
| | Designation | $D_c$ h12 mm | $L_c$ mm | $l_3$ mm | $d_2$ mm | $l_1$ mm | $l_4$ mm | $d_1$ h6 mm | Z | WJ30ED |
|---|---|---|---|---|---|---|---|---|---|---|
| Shank DIN 6535 HA | MC232-02.0A3BC- | 2 | 6 | 11 | 1,9 | 57 | 29 | 4 | 3 | ●● |
| | MC232-02.5A3BC- | 2,5 | 7 | 12 | 2,4 | 57 | 29 | 4 | 3 | ●● |
| | MC232-03.0A3BC- | 3 | 7 | 12 | 2,9 | 57 | 29 | 4 | 3 | ●● |
| | MC232-03.5A3BC- | 3,5 | 7 | 15 | 3,3 | 57 | 29 | 4 | 3 | ●● |
| | MC232-04.0A3BC- | 4 | 8 | 15 | 3,8 | 57 | 29 | 4 | 3 | ●● |
| Shank DIN 6535 HB | MC232-05.0W3BC- | 5 | 10 | 18 | 4,8 | 57 | 21 | 6 | 3 | ●● |
| | MC232-06.0W3BC- | 6 | 10 | 19 | 5,7 | 57 | 21 | 6 | 3 | ●● |
| | MC232-08.0W3BC- | 8 | 16 | 25 | 7,6 | 63 | 27 | 8 | 3 | ●● |
| | MC232-10.0W3BC- | 10 | 19 | 30 | 9,5 | 72 | 32 | 10 | 3 | ●● |
| | MC232-12.0W3BC- | 12 | 22 | 36 | 11,4 | 83 | 38 | 12 | 3 | ●● |
| | MC232-16.0W3BC- | 16 | 26 | 42 | 15,2 | 92 | 44 | 16 | 3 | ●● |
| | MC232-20.0W3BC- | 20 | 32 | 52 | 19 | 104 | 54 | 20 | 3 | ●● |

Slot milling $a_p \leq 0.5 \times D_c$
Shoulder milling $a_e \leq 0.5 \times D_c$
Ordering example for the WJ30ED grade: MC232-02.0A3BC-WJ30ED



# Solid carbide shoulder/slot milling cutters
## MC232 Perform mm /
## MC232 Perform inch

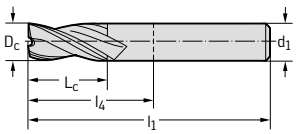


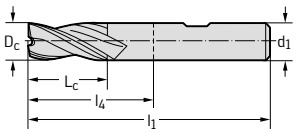



| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30ED | ●● | ● | ● | | | | |

### DIN 6527 L

| Designation | $D_c$ h12 mm | $L_c$ mm | $l_1$ mm | $l_4$ mm | $d_1$ h6 mm | Z | WJ30ED |
|---|---|---|---|---|---|---|---|
| Shank DIN 6535 HA | | | | | | | |
| MC232-02.0A3B- | 2 | 6 | 57 | 29 | 4 | 3 | ● |
| MC232-02.5A3B- | 2,5 | 7 | 57 | 29 | 4 | 3 | ● |
| MC232-03.0A3B- | 3 | 7 | 57 | 29 | 4 | 3 | ● |
| MC232-03.5A3B- | 3,5 | 7 | 57 | 29 | 4 | 3 | ● |
| MC232-04.0A3B- | 4 | 8 | 57 | 29 | 4 | 3 | ● |
| Shank DIN 6535 HB | | | | | | | |
| MC232-05.0W3B- | 5 | 10 | 57 | 21 | 6 | 3 | ● |
| MC232-06.0W3B- | 6 | 10 | 57 | 21 | 6 | 3 | ● |
| MC232-08.0W3B- | 8 | 16 | 63 | 27 | 8 | 3 | ● |
| MC232-10.0W3B- | 10 | 19 | 72 | 32 | 10 | 3 | ● |
| MC232-12.0W3B- | 12 | 22 | 83 | 38 | 12 | 3 | ● |
| MC232-16.0W3B- | 16 | 26 | 92 | 44 | 16 | 3 | ● |
| MC232-20.0W3B- | 20 | 32 | 104 | 54 | 20 | 3 | ● |

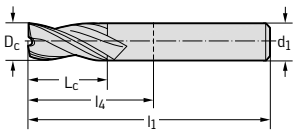


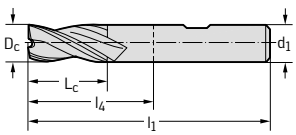




Slot milling $a_p \leq 0.5 \times D_c$
Shoulder milling $a_e \leq 0.5 \times D_c$
Ordering example for the WJ30ED grade: MC232-02.0A3B-WJ30ED

### STANDARD

| Designation | $D_c$ h12 Inch/no. | $L_c$ inch | $l_1$ inch | $l_4$ inch | $d_1$ h6 inch | Z | WJ30ED |
|---|---|---|---|---|---|---|---|
| Shank DIN 6535 HA | | | | | | | |
| MC232.3.18A3D- | 1/8" | 0,500 | 2,500 | 1,083 | 0,250 | 3 | ● |
| MC232.6.35A3D- | 1/4" | 0,750 | 2,500 | 1,083 | 0,250 | 3 | ● |
| Shank DIN 6535 HB | | | | | | | |
| MC232.9.53W3D- | 3/8" | 0,875 | 3,000 | 1,437 | 0,375 | 3 | ● |
| MC232.12.7W3D- | 1/2" | 1,000 | 3,500 | 1,717 | 0,500 | 3 | ● |
| MC232.15.9W3D- | 5/8" | 1,250 | 3,500 | 1,594 | 0,625 | 3 | ● |
| MC232.19.1W3D- | 3/4" | 1,500 | 4,000 | 1,969 | 0,750 | 3 | ● |

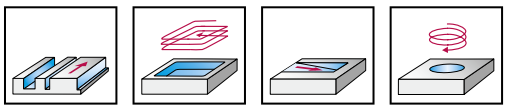


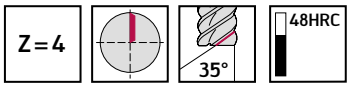




Slot milling $a_p \leq 0.5 \times D_c$
Shoulder milling $a_e \leq 0.5 \times D_c$
Ordering example for the WJ30ED grade: MC232.3.18A3D-WJ30ED

# Solid carbide shoulder/slot milling cutters
# MC232 Perform mm / MC232 Perform inch

– Long reach






| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30ED | ●● | ● | ● | | | | |

D 1

## DIN 6527 L

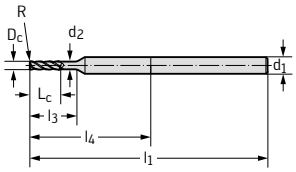
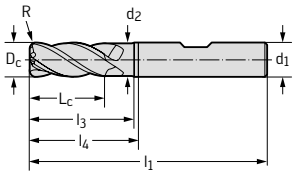
| | Designation | $D_c$ h12 mm | R mm | $L_c$ mm | $l_3$ mm | $d_2$ mm | $l_1$ mm | $l_4$ mm | $d_1$ h6 mm | Z | WJ30ED |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Shank DIN 6535 HA | MC232-02.0A4B020C- | 2 | 0,2 | 7 | 11 | 1,85 | 57 | 29 | 4 | 4 | ● |
| | MC232-03.0A4B030C- | 3 | 0,3 | 8 | 12 | 2,85 | 57 | 29 | 4 | 4 | ● |
| | MC232-04.0A4B050C- | 4 | 0,5 | 11 | 15 | 3,8 | 57 | 29 | 4 | 4 | ● |
| Shank DIN 6535 HB | MC232-05.0W4B050C- | 5 | 0,5 | 13 | 18 | 4,75 | 57 | 21 | 6 | 4 | ● |
| | MC232-06.0W4B050C- | 6 | 0,5 | 13 | 19 | 5,7 | 57 | 21 | 6 | 4 | ● |
| | MC232-06.0W4B080C- | 6 | 0,8 | 13 | 19 | 5,7 | 57 | 21 | 6 | 4 | ● |
| | MC232-06.0W4B100C- | 6 | 1 | 13 | 19 | 5,7 | 57 | 21 | 6 | 4 | ● |
| | MC232-08.0W4B050C- | 8 | 0,5 | 19 | 25 | 7,6 | 63 | 27 | 8 | 4 | ● |
| | MC232-08.0W4B080C- | 8 | 0,8 | 19 | 25 | 7,6 | 63 | 27 | 8 | 4 | ● |
| | MC232-08.0W4B100C- | 8 | 1 | 19 | 25 | 7,6 | 63 | 27 | 8 | 4 | ● |
| | MC232-08.0W4B150C- | 8 | 1,5 | 19 | 25 | 7,6 | 63 | 27 | 8 | 4 | ● |
| | MC232-08.0W4B200C- | 8 | 2 | 19 | 25 | 7,6 | 63 | 27 | 8 | 4 | ● |
| | MC232-10.0W4B050C- | 10 | 0,5 | 22 | 30 | 9,5 | 72 | 32 | 10 | 4 | ● |
| | MC232-10.0W4B080C- | 10 | 0,8 | 22 | 30 | 9,5 | 72 | 32 | 10 | 4 | ● |
| | MC232-10.0W4B100C- | 10 | 1 | 22 | 30 | 9,5 | 72 | 32 | 10 | 4 | ● |
| | MC232-10.0W4B150C- | 10 | 1,5 | 22 | 30 | 9,5 | 72 | 32 | 10 | 4 | ● |
| | MC232-10.0W4B200C- | 10 | 2 | 22 | 30 | 9,5 | 72 | 32 | 10 | 4 | ● |
| | MC232-12.0W4B050C- | 12 | 0,5 | 26 | 36 | 11,4 | 83 | 38 | 12 | 4 | ● |
| | MC232-12.0W4B080C- | 12 | 0,8 | 26 | 36 | 11,4 | 83 | 38 | 12 | 4 | ● |
| | MC232-12.0W4B100C- | 12 | 1 | 26 | 36 | 11,4 | 83 | 38 | 12 | 4 | ● |
| | MC232-12.0W4B150C- | 12 | 1,5 | 26 | 36 | 11,4 | 83 | 38 | 12 | 4 | ● |
| | MC232-12.0W4B200C- | 12 | 2 | 26 | 36 | 11,4 | 83 | 38 | 12 | 4 | ● |
| | MC232-12.0W4B250C- | 12 | 2,5 | 26 | 36 | 11,4 | 83 | 38 | 12 | 4 | ● |
| | MC232-12.0W4B300C- | 12 | 3 | 26 | 36 | 11,4 | 83 | 38 | 12 | 4 | ● |
| | MC232-16.0W4B050C- | 16 | 0,5 | 32 | 42 | 15,2 | 92 | 44 | 16 | 4 | ● |
| | MC232-16.0W4B100C- | 16 | 1 | 32 | 42 | 15,2 | 92 | 44 | 16 | 4 | ● |
| | MC232-16.0W4B200C- | 16 | 2 | 32 | 42 | 15,2 | 92 | 44 | 16 | 4 | ● |
| | MC232-16.0W4B250C- | 16 | 2,5 | 32 | 42 | 15,2 | 92 | 44 | 16 | 4 | ● |
| | MC232-16.0W4B300C- | 16 | 3 | 32 | 42 | 15,2 | 92 | 44 | 16 | 4 | ● |
| | MC232-16.0W4B400C- | 16 | 4 | 32 | 42 | 15,2 | 92 | 44 | 16 | 4 | ● |
| | MC232-20.0W4B050C- | 20 | 0,5 | 38 | 52 | 19 | 104 | 54 | 20 | 4 | ● |
| | MC232-20.0W4B100C- | 20 | 1 | 38 | 52 | 19 | 104 | 54 | 20 | 4 | ● |
| | MC232-20.0W4B200C- | 20 | 2 | 38 | 52 | 19 | 104 | 54 | 20 | 4 | ● |
| | MC232-20.0W4B250C- | 20 | 2,5 | 38 | 52 | 19 | 104 | 54 | 20 | 4 | ● |
| | MC232-20.0W4B300C- | 20 | 3 | 38 | 52 | 19 | 104 | 54 | 20 | 4 | ● |
| | MC232-20.0W4B400C- | 20 | 4 | 38 | 52 | 19 | 104 | 54 | 20 | 4 | ● |

Continued

Slot milling $a_p \leq 0.5 \times D_c$
Shoulder milling $a_e \leq 0.5 \times D_c$
Ordering example for the WJ30ED grade: MC232-02.0A4B020C-WJ30ED

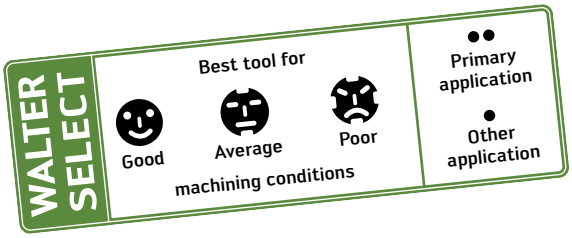
Continued

## STANDARD

| | Designation | $D_c$ h12 Inch/no. | R inch | $L_c$ inch | $l_3$ inch | $d_2$ inch | $l_1$ inch | $l_4$ inch | $d_1$ h6 inch | Z | WJ30ED |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Shank DIN 6535 HA | MC232.3.18A4D038C- | 1/8" | 0,015 | 0,500 | 0,625 | 0,119 | 2,500 | 1,083 | 0,250 | 4 | |
|  | MC232.6.35A4D038C- | 1/4" | 0,015 | 0,750 | 1,000 | 0,237 | 2,500 | 1,083 | 0,250 | 4 | |
| | MC232.6.35A4D076C- | 1/4" | 0,030 | 0,750 | 1,000 | 0,237 | 2,500 | 1,083 | 0,250 | 4 | |
| Shank DIN 6535 HB | MC232.9.53W4D038C- | 3/8" | 0,015 | 0,875 | 1,125 | 0,356 | 3,000 | 1,437 | 0,375 | 4 | |
|  | MC232.9.53W4D076C- | 3/8" | 0,030 | 0,875 | 1,125 | 0,356 | 3,000 | 1,437 | 0,375 | 4 | |
| | MC232.12.7W4D038C- | 1/2" | 0,015 | 1,000 | 1,500 | 0,475 | 3,500 | 1,717 | 0,500 | 4 | |
| | MC232.12.7W4D076C- | 1/2" | 0,030 | 1,000 | 1,500 | 0,475 | 3,500 | 1,717 | 0,500 | 4 | |
| | MC232.12.7W4D152C- | 1/2" | 0,060 | 1,000 | 1,500 | 0,475 | 3,500 | 1,717 | 0,500 | 4 | |
| | MC232.12.7W4D318C- | 1/2" | 0,125 | 1,000 | 1,500 | 0,475 | 3,500 | 1,717 | 0,500 | 4 | |
| | MC232.15.9W4D318C- | 5/8" | 0,125 | 1,250 | 1,563 | 0,594 | 3,500 | 1,594 | 0,625 | 4 | |
| | MC232.19.1W4D076C- | 3/4" | 0,030 | 1,500 | 1,875 | 0,713 | 4,000 | 1,969 | 0,750 | 4 | |
| | MC232.19.1W4D318C- | 3/4" | 0,125 | 1,500 | 1,875 | 0,713 | 4,000 | 1,969 | 0,750 | 4 | |

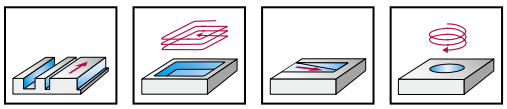
Slot milling $a_p \leq 0.5 \times D_c$
Shoulder milling $a_e \leq 0.5 \times D_c$
Ordering example for the WJ30ED grade: MC232.3.18A4D038C-WJ30ED

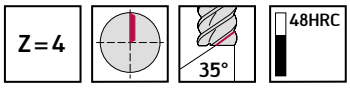




# Solid carbide shoulder/slot milling cutters
## MC232 Perform mm

– Long reach



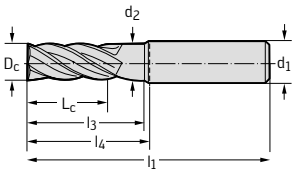


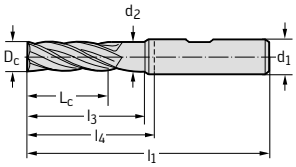

| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30ED | ●● | ● | ● | | | | |

D 1

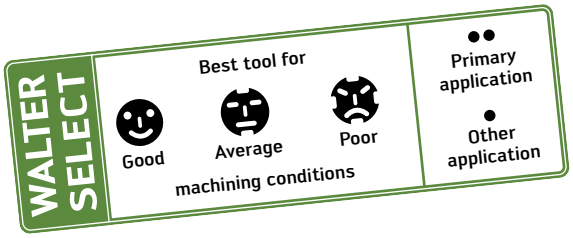
## DIN 6527 L

| | Designation | $D_c$ h12 mm | $L_c$ mm | $l_3$ mm | $d_2$ mm | $l_1$ mm | $l_4$ mm | $d_1$ h6 mm | Z | WJ30ED |
|---|---|---|---|---|---|---|---|---|---|---|
| Shank DIN 6535 HA | MC232-02.0A4BC- | 2 | 7 | 11 | 1,9 | 57 | 29 | 4 | 4 | ●● |
| | MC232-02.5A4BC- | 2,5 | 8 | 12 | 2,4 | 57 | 29 | 4 | 4 | ●● |
| | MC232-03.0A4BC- | 3 | 8 | 12 | 2,9 | 57 | 29 | 4 | 4 | ●● |
| | MC232-03.5A4BC- | 3,5 | 10 | 15 | 3,3 | 57 | 29 | 4 | 4 | ●● |
| | MC232-04.0A4BC- | 4 | 11 | 15 | 3,8 | 57 | 29 | 4 | 4 | ●● |
| Shank DIN 6535 HB | MC232-05.0W4BC- | 5 | 13 | 18 | 4,8 | 57 | 21 | 6 | 4 | ●● |
| | MC232-06.0W4BC- | 6 | 13 | 19 | 5,7 | 57 | 21 | 6 | 4 | ●● |
| | MC232-08.0W4BC- | 8 | 19 | 25 | 7,6 | 63 | 27 | 8 | 4 | ●● |
| | MC232-10.0W4BC- | 10 | 22 | 30 | 9,5 | 72 | 32 | 10 | 4 | ●● |
| | MC232-12.0W4BC- | 12 | 26 | 36 | 11,4 | 83 | 38 | 12 | 4 | ●● |
| | MC232-16.0W4BC- | 16 | 32 | 42 | 15,2 | 92 | 44 | 16 | 4 | ●● |
| | MC232-20.0W4BC- | 20 | 38 | 52 | 19 | 104 | 54 | 20 | 4 | ●● |

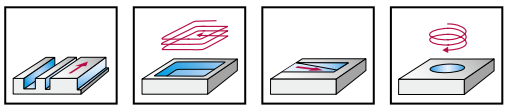


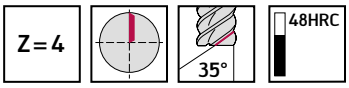




Slot milling $a_p \leq 0.5 \times D_c$
Shoulder milling $a_e \leq 0.5 \times D_c$
Ordering example for the WJ30ED grade: MC232-02.0A4BC-WJ30ED



# Solid carbide shoulder/slot milling cutters
## MC232 Perform mm / MC232 Perform inch

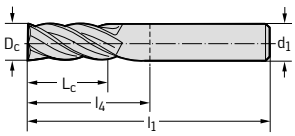





| | P | M | K | N | S | H | O |
|---|---|---|---|---|---|---|---|
| WJ30ED | ●● | ● | ● | | | | |

### DIN 6527 L

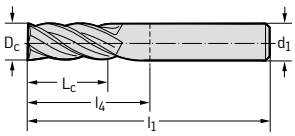
| Designation | $D_c$ h12 mm | $L_c$ mm | $l_1$ mm | $l_4$ mm | $d_1$ h6 mm | Z | WJ30ED |
|---|---|---|---|---|---|---|---|
| Shank DIN 6535 HA | | | | | | | |
| MC232-02.0A4B- | 2 | 7 | 57 | 29 | 4 | 4 | ● |
| MC232-02.5A4B- | 2,5 | 8 | 57 | 29 | 4 | 4 | ● |
| MC232-03.0A4B- | 3 | 8 | 57 | 29 | 4 | 4 | ● |
| MC232-03.5A4B- | 3,5 | 10 | 57 | 29 | 4 | 4 | ● |
| MC232-04.0A4B- | 4 | 11 | 57 | 29 | 4 | 4 | ● |
| Shank DIN 6535 HB | | | | | | | |
| MC232-05.0W4B- | 5 | 13 | 57 | 21 | 6 | 4 | ● |
| MC232-06.0W4B- | 6 | 13 | 57 | 21 | 6 | 4 | ● |
| MC232-08.0W4B- | 8 | 19 | 63 | 27 | 8 | 4 | ● |
| MC232-10.0W4B- | 10 | 22 | 72 | 32 | 10 | 4 | ● |
| MC232-12.0W4B- | 12 | 26 | 83 | 38 | 12 | 4 | ● |
| MC232-16.0W4B- | 16 | 32 | 92 | 44 | 16 | 4 | ● |
| MC232-20.0W4B- | 20 | 38 | 104 | 54 | 20 | 4 | ● |




Slot milling $a_p \leq 0.5 \times D_c$
Shoulder milling $a_e \leq 0.5 \times D_c$
Ordering example for the WJ30ED grade: MC232-02.0A4B-WJ30ED

### STANDARD

| Designation | $D_c$ h12 Inch/no. | $L_c$ inch | $l_1$ inch | $l_4$ inch | $d_1$ h6 inch | Z | WJ30ED |
|---|---|---|---|---|---|---|---|
| Shank DIN 6535 HA | | | | | | | |
| MC232.3.18A4D- | 1/8" | 0,500 | 2,500 | 1,083 | 0,250 | 4 | ● |
| MC232.6.35A4D- | 1/4" | 0,750 | 2,500 | 1,083 | 0,250 | 4 | ● |
| Shank DIN 6535 HB | | | | | | | |
| MC232.9.53W4D- | 3/8" | 0,875 | 3,000 | 1,437 | 0,375 | 4 | ● |
| MC232.12.7W4D- | 1/2" | 1,000 | 3,500 | 1,717 | 0,500 | 4 | ● |
| MC232.15.9W4D- | 5/8" | 1,250 | 3,500 | 1,594 | 0,625 | 4 | ● |
| MC232.19.1W4D- | 3/4" | 1,500 | 4,000 | 1,969 | 0,750 | 4 | ● |




Shoulder milling $a_e \leq 0.5 \times D_c$
Slot milling $a_p \leq 0.5 \times D_c$
Ordering example for the WJ30ED grade: MC232.3.18A4D-WJ30ED

# Cutting data for shoulder/slot milling cutters



| | | | | | | | Product family | | λ |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | MC232 Perform | | 35° |
| Material group | Overview of the main material groups and code letters | | | Brinell hardness HB | Tensile strength $R_m$ N/mm² | Machining group [1] | Ø 2–20 mm / 1/8–3/4 Inch<br>z = 2–4<br>WJ30ED<br>Starting values for cutting speed $v_c$ [m/min]<br>$a_e$ / $D_c$ 1/1 | 1/2 | 1/10 | VT [2] |
| P | Non-alloyed steel | C ≤ 0.25% | Annealed | 125 | 430 | P1 | 89 | 111 | 158 | A |
| | | C > 0.25 to ≤ 0.55% | Annealed | 190 | 640 | P2 | 122 | 151 | 216 | A |
| | | C > 0.25 to ≤ 0.55% | Heat-treated | 210 | 710 | P3 | 104 | 130 | 185 | A |
| | | C > 0.55% | Annealed | 190 | 640 | P4 | 104 | 130 | 185 | A |
| | | C > 0.55% | Heat-treated | 300 | 1010 | P5 | 74 | 92 | 131 | A |
| | | Free-machining steel (short-chipping) | Annealed | 220 | 750 | P6 | 104 | 130 | 185 | A |
| | Low-alloy steel | Annealed | | 175 | 590 | P7 | 104 | 130 | 185 | A |
| | | Heat-treated | | 285 | 960 | P8 | 65 | 81 | 115 | A |
| | | Heat-treated | | 380 | 1280 | P9 | 61 | 76 | 108 | A |
| | | Heat-treated | | 430 | 1480 | P10 | 52 | 64 | 92 | A |
| | High-alloy steel and high-alloy tool steel | Annealed | | 200 | 680 | P11 | 104 | 130 | 185 | A |
| | | Hardened and tempered | | 300 | 1010 | P12 | 77 | 92 | 131 | A |
| | | Hardened and tempered | | 380 | 1280 | P13 | 63 | 76 | 108 | A |
| | Stainless steel | Ferritic/martensitic, annealed | | 200 | 680 | P14 | 44 | 55 | 79 | A |
| | | Martensitic, heat-treated | | 330 | 1110 | P15 | 31 | | 52 | A |
| M | Stainless steel | Austenitic, quench hardened | | 200 | 680 | M1 | 62 | 77 | 110 | B |
| | | Austenitic, precipitation hardened (PH) | | 300 | 1010 | M2 | 32 | 40 | 55 | B |
| | | Austenitic/ferritic, duplex | | 230 | 780 | M3 | 42 | 52 | 75 | B |
| K | Malleable cast iron | Ferritic | | 200 | 400 | K1 | 120 | 149 | 213 | A |
| | | Pearlitic | | 260 | 700 | K2 | 94 | 117 | 167 | A |
| | Grey cast iron | Low tensile strength | | 180 | 200 | K3 | 120 | 149 | 213 | A |
| | | High tensile strength/austenitic | | 245 | 350 | K4 | 101 | 125 | 179 | A |
| | Cast iron with spheroidal graphite | Ferritic | | 155 | 400 | K5 | 120 | 149 | 213 | A |
| | | Pearlitic | | 265 | 700 | K6 | 94 | 117 | 167 | A |
| | GGV (CGI) | | | 230 | 400 | K7 | 80 | 100 | 142 | A |
| N | Wrought aluminium alloys | Not hardenable | | 30 | – | N1 | | | | |
| | | Hardenable, hardened | | 100 | 340 | N2 | | | | |
| | Cast aluminium alloys | ≤ 12% Si, not hardenable | | 75 | 260 | N3 | | | | |
| | | ≤ 12% Si, hardenable, hardened | | 90 | 310 | N4 | | | | |
| | | > 12% Si, not hardenable | | 130 | 450 | N5 | | | | |
| | Magnesium-based alloys | | | 70 | 250 | N6 | | | | |
| | Copper and copper alloys (bronze/brass) | Unalloyed, electrolytic copper | | 100 | 340 | N7 | | | | |
| | | Brass, bronze, red brass | | 90 | 310 | N8 | | | | |
| | | Cu alloys, short-chipping | | 110 | 380 | N9 | | | | |
| | | High tensile, Ampco | | 300 | 1010 | N10 | | | | |
| S | Heat-resistant alloys | Fe-based | Annealed | 200 | 680 | S1 | | | | |
| | | | Hardened | 280 | 940 | S2 | | | | |
| | | Ni- or Co-based | Annealed | 250 | 840 | S3 | | | | |
| | | | Hardened | 350 | 1180 | S4 | | | | |
| | | | Cast | 320 | 1080 | S5 | | | | |
| | Titanium alloys | Pure titanium | | 200 | 680 | S6 | | | | |
| | | α and β alloys, hardened | | 375 | 1260 | S7 | | | | |
| | | β alloys | | 410 | 1400 | S8 | | | | |
| | Tungsten alloys | | | 300 | 1010 | S9 | | | | |
| | Molybdenum alloys | | | 300 | 1010 | S10 | | | | |
| H | Hardened steel | Hardened and tempered | | 50 HRC | – | H1 | | | | |
| | | Hardened and tempered | | 55 HRC | – | H2 | | | | |
| | | Hardened and tempered | | 60 HRC | – | H3 | | | | |
| | Hardened cast iron | Hardened and tempered | | 55 HRC | – | H4 | | | | |
| O | Thermoplastics | Without abrasive fillers | | | | O1 | | | | |
| | Thermosets | Without abrasive fillers | | | | O2 | | | | |
| | Plastic, glass-fibre reinforced | GFRP | | | | O3 | | | | |
| | Plastic, carbon-fibre reinforced | CFRP | | | | O4 | | | | |
| | Plastic, aramid-fibre reinforced | AFRP | | | | O5 | | | | |
| | Graphite (technical) | | | 80 Shore | | O6 | | | | |

[1] The classification of the machining groups can be found in the General Catalogue from page C671 onwards.

[2] The corresponding feed values can be found in the General Catalogue from page C256 onwards.

# Feed determination for milling

The specified cutting data represents average standard values.
For specific applications, adjustment is recommended.

## A ISO P, ISO K material groups

| | Feed per tooth $f_z$ [mm] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| $a_e$ [mm]* | Ø 2 mm | Ø 3 mm | Ø 4 mm | Ø 6 mm | Ø 8 mm | Ø 10 mm | Ø 12 mm | Ø 16 mm | Ø 20 mm |
| **0,01** | 0,06 | 0,09 | 0,12 | 0,15 | 0,15 | 0,20 | | | |
| **0,05** | 0,04 | 0,07 | 0,10 | 0,12 | 0,15 | 0,20 | | | |
| **0,1** | 0,03 | 0,05 | 0,08 | 0,10 | 0,15 | 0,20 | 0,20 | 0,20 | |
| **0,2** | 0,03 | 0,04 | 0,06 | 0,08 | 0,15 | 0,18 | 0,20 | 0,20 | 0,25 |
| **0,5** | 0,02 | 0,03 | 0,05 | 0,07 | 0,12 | 0,15 | 0,15 | 0,15 | 0,25 |
| **1** | 0,02 | 0,03 | 0,04 | 0,06 | 0,09 | 0,12 | 0,12 | 0,12 | 0,20 |
| **2** | 0,02 | 0,03 | 0,03 | 0,05 | 0,08 | 0,11 | 0,12 | 0,12 | 0,20 |
| **3** | | 0,02 | 0,02 | 0,04 | 0,07 | 0,10 | 0,12 | 0,12 | 0,18 |
| **5** | | | 0,02 | 0,04 | 0,07 | 0,10 | 0,12 | 0,12 | 0,15 |
| **6** | | | | 0,03 | 0,06 | 0,08 | 0,10 | 0,12 | 0,15 |
| **8** | | | | | 0,05 | 0,07 | 0,09 | 0,12 | 0,15 |
| **10** | | | | | | 0,06 | 0,08 | 0,12 | 0,14 |
| **12** | | | | | | | 0,07 | 0,11 | 0,14 |
| **14** | | | | | | | | 0,10 | 0,13 |
| **16** | | | | | | | | 0,09 | 0,12 |
| **18** | | | | | | | | | 0,11 |
| **20** | | | | | | | | | 0,10 |
| **25** | | | | | | | | | |
| **32** | | | | | | | | | |
| **40** | | | | | | | | | |
| **50** | | | | | | | | | |
| **63** | | | | | | | | | |
| **80** | | | | | | | | | |
| **100** | | | | | | | | | |
| **160** | | | | | | | | | |
| **200** | | | | | | | | | |

## B ISO M material groups

| | Feed per tooth $f_z$ [mm] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| $a_e$ [mm]* | Ø 2 mm | Ø 3 mm | Ø 4 mm | Ø 6 mm | Ø 8 mm | Ø 10 mm | Ø 12 mm | Ø 16 mm | Ø 20 mm |
| **0,01** | 0,05 | 0,07 | 0,10 | 0,12 | 0,12 | 0,16 | | | |
| **0,05** | 0,03 | 0,06 | 0,08 | 0,10 | 0,12 | 0,16 | | | |
| **0,1** | 0,03 | 0,04 | 0,06 | 0,08 | 0,12 | 0,16 | 0,16 | 0,16 | |
| **0,2** | 0,02 | 0,03 | 0,05 | 0,06 | 0,12 | 0,14 | 0,16 | 0,16 | 0,20 |
| **0,5** | 0,02 | 0,02 | 0,04 | 0,06 | 0,10 | 0,12 | 0,12 | 0,12 | 0,20 |
| **1** | 0,02 | 0,02 | 0,03 | 0,05 | 0,07 | 0,10 | 0,10 | 0,10 | 0,16 |
| **2** | 0,02 | 0,02 | 0,02 | 0,04 | 0,06 | 0,09 | 0,10 | 0,10 | 0,16 |
| **3** | | 0,02 | 0,02 | 0,04 | 0,06 | 0,08 | 0,10 | 0,10 | 0,14 |
| **5** | | | 0,02 | 0,03 | 0,06 | 0,08 | 0,10 | 0,10 | 0,12 |
| **6** | | | | 0,02 | 0,05 | 0,06 | 0,08 | 0,10 | 0,12 |
| **8** | | | | | 0,04 | 0,06 | 0,07 | 0,10 | 0,12 |
| **10** | | | | | | 0,05 | 0,06 | 0,10 | 0,11 |
| **12** | | | | | | | 0,06 | 0,09 | 0,11 |
| **14** | | | | | | | | 0,08 | 0,10 |
| **16** | | | | | | | | 0,07 | 0,10 |
| **18** | | | | | | | | | 0,09 |
| **20** | | | | | | | | | 0,08 |
| **25** | | | | | | | | | |
| **32** | | | | | | | | | |
| **40** | | | | | | | | | |
| **50** | | | | | | | | | |
| **63** | | | | | | | | | |
| **80** | | | | | | | | | |
| **100** | | | | | | | | | |
| **160** | | | | | | | | | |
| **200** | | | | | | | | | |

* Radial feed in mm

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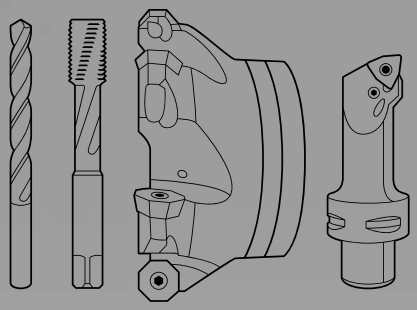

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