

Solid carbide drill plain shank DIN 6535 HA 180°, TiAIN, Ø DC m7: 12 mm



Order data

Order number	122793 12
GTIN	4045197745293
Item class	11E

Description

Version:

Special point geometry for generating **180° flat-bottomed holes.** Low radial forces even when spot drilling on faces with up to 15° slope. Flute geometry for optimum chip evacuation. With 4 guide chamfers to stabilise the drill in the hole.

Advantage:

The 180° point angle permits drilling and counterboring in a single operation.

Recommendation:

When using the solid carbide 180° drill it is absolutely essential for process reliability:

- when spot drilling on flat surfaces to drill a pilot hole 1×D using pilot drill No. 122736.
- when spot drilling on sloping surfaces up to max. 15°: reduce the feed rate f to 25% of the stated value. After spot drilling, the normal feed rate value can be used.

Note:

Flute length $L_c = L_2 + 1.5 \times D_c$.

Form HB and HE supplied at the same price as HA.

Form **HB**: order with **No. 122793 + 129100HB**.

Form **HE:** order with **No. 122793 + 129100HE**.

180° solid carbide drills for machining aluminium available on request.

Not suitable for generating counterbores for socket-head screws to DIN974-1.

Standard: Manufacturer's standard

Tolerance nominal Ø: m7 Number of cutting edges Z: 2 Tolerance nominal Ø: m7

recommended maximum drilling depth L₂: 51 mm

Overall length L: 116 mm Shank Ø D_s: 12 mm

Feed f in steel < 900 N/mm²: 0.15 mm/rev.

Technical description

Tolerance nominal \varnothing m7 Shank \varnothing D _s 12 mm Shank tolerance h6 Nominal \varnothing D _c 12 mm Number of cutting edges Z 2 Overall length L 116 mm Feed f in steel < 900 N/mm² 0.15 mm/rev. Flute length L _c 69 mm recommended maximum drilling depth L₂ 51 mm Coating TiAlN Tool material Solid carbide Drill depth up to 5×D Point angle 180 degrees Shank DIN 6535 HA to h6 Use for drilling limited convexity Use for drilling limited cross-drilling Through-coolant yes, with 25 bar Pilot drill required yes Colour ring green Type of product Jobber drill	Standard	Manufacturer's standard
Shank tolerance h6 Nominal Ø Dc 12 mm Number of cutting edges Z 2 Overall length L 116 mm Feed f in steel < 900 N/mm² 0.15 mm/rev. Flute length L₂ 69 mm recommended maximum drilling depth L₂ 51 mm Coating TiAlN Tool material Solid carbide Drill depth up to 5×D Point angle 180 degrees Shank DIN 6535 HA to h6 Use for drilling limited convexity Use for drilling limited cross-drilling Use for drilling limited oblique spot drilling Through-coolant yes, with 25 bar Pilot drill required yes, pilot drill Semi-Standard yes Colour ring green	Tolerance nominal Ø	m7
Nominal Ø Dc 12 mm Number of cutting edges Z 2 Overall length L 116 mm Feed f in steel < 900 N/mm²	Shank Ø D _s	12 mm
Number of cutting edges Z Overall length L Feed f in steel < 900 N/mm² Flute length L₂ Flute length L₂ Coating TiAlN Tool material Solid carbide Drill depth up to Point angle Shank DIN 6535 HA to h6 Use for drilling Use for drilling Use for drilling Through-coolant Pilot drill required Semi-Standard Yes Colour ring 116 mm 0.15 mm/rev. 69 mm TiAlN Solid carbide 5×D Pilot drill required Solid carbide DIN 6535 HA to h6 Use for drilling Use for drilling Use for drilling Semi-Standard Yes, pilot drill Semi-Standard Yes Colour ring Through-coolant Yes TiAlN Solid carbide Iimited corbide Din 6535 HA to h6 Use for drilling Use for drilling Use for drilling Use for drilling Iimited oblique spot drilling Through-coolant Yes, pilot drill Semi-Standard Yes Colour ring	Shank tolerance	h6
Overall length L 116 mm Feed f in steel < 900 N/mm²	Nominal Ø D _C	12 mm
Feed f in steel < 900 N/mm² Flute length L₂ Flute lengt	Number of cutting edges Z	2
Flute length L _c recommended maximum drilling depth L ₂ 51 mm Coating TiAIN Tool material Solid carbide Drill depth up to 5×D Point angle 180 degrees Shank DIN 6535 HA to h6 Use for drilling limited convexity Use for drilling Use for drilling Ilimited oblique spot drilling Through-coolant Pilot drill required Semi-Standard yes, pilot drill Semi-Standard yes Colour ring green	Overall length L	116 mm
recommended maximum drilling depth L2 51 mm Coating TiAIN Tool material Solid carbide Drill depth up to 5×D Point angle 180 degrees Shank DIN 6535 HA to h6 Use for drilling limited convexity Use for drilling limited cross-drilling Use for drilling limited oblique spot drilling Through-coolant yes, with 25 bar Pilot drill required yes, pilot drill Semi-Standard yes Colour ring green	Feed f in steel < 900 N/mm ²	0.15 mm/rev.
Coating TiAlN Tool material Solid carbide Drill depth up to 5×D Point angle 180 degrees Shank DIN 6535 HA to h6 Use for drilling limited convexity Use for drilling Use for drilling limited cross-drilling Through-coolant yes, with 25 bar Pilot drill required Semi-Standard yes Colour ring green	Flute length L _c	69 mm
Tool material Drill depth up to 5×D Point angle 180 degrees Shank DIN 6535 HA to h6 Use for drilling Use for drilling Use for drilling Use for drilling Iimited convexity Use for drilling Use for drilling Through-coolant Pilot drill required Solid carbide 5×D 180 degrees DIN 6535 HA to h6 Use for drilling Iimited convexity Use for drilling Ves, drilling Yes, with 25 bar Pilot drill required Yes, pilot drill Semi-Standard yes Colour ring green	recommended maximum drilling depth L ₂	51 mm
Drill depth up to5×DPoint angle180 degreesShankDIN 6535 HA to h6Use for drillinglimited convexityUse for drillinglimited cross-drillingUse for drillinglimited oblique spot drillingThrough-coolantyes, with 25 barPilot drill requiredyes, pilot drillSemi-StandardyesColour ringgreen	Coating	TiAlN
Point angle 180 degrees Shank DIN 6535 HA to h6 Use for drilling limited convexity Use for drilling limited cross-drilling Use for drilling limited oblique spot drilling Through-coolant yes, with 25 bar Pilot drill required yes, pilot drill Semi-Standard yes Colour ring green	Tool material	Solid carbide
Shank Use for drilling Ilimited cross-drilling Ilimited oblique spot drilling Through-coolant Pilot drill required Semi-Standard Yes, pilot drill Semi-Standard yes Colour ring Green	Drill depth up to	5×D
Use for drilling Ilimited cross-drilling Ilimited oblique spot drilling Through-coolant Pilot drill required Semi-Standard Yes, pilot drill yes Colour ring green	Point angle	180 degrees
Use for drilling Use for drilling Ilimited cross-drilling Use for drilling Through-coolant Pilot drill required Semi-Standard Colour ring Ilimited cross-drilling Ilimited oblique spot drilling yes, with 25 bar yes, pilot drill yes green	Shank	DIN 6535 HA to h6
Use for drilling Through-coolant Pilot drill required Semi-Standard Colour ring limited oblique spot drilling yes, with 25 bar yes, pilot drill yes green	Use for drilling	limited convexity
Through-coolant yes, with 25 bar Pilot drill required yes, pilot drill Semi-Standard yes Colour ring green	Use for drilling	limited cross-drilling
Pilot drill required yes, pilot drill Semi-Standard yes Colour ring green	Use for drilling	limited oblique spot drilling
Semi-Standard yes Colour ring green	Through-coolant	yes, with 25 bar
Colour ring green	Pilot drill required	yes, pilot drill
-	Semi-Standard	yes
Type of product Jobber drill	Colour ring	green
	Type of product	Jobber drill

Services

Shank grinding Type HE	129100 HE
Shank grinding Type HB	129100 HB

