

Benefits and features

- For drilling to finishing
- Pencil design enabling machining in deep cavities and complex components
- High clamping force

**PENCIL
DESIGN**

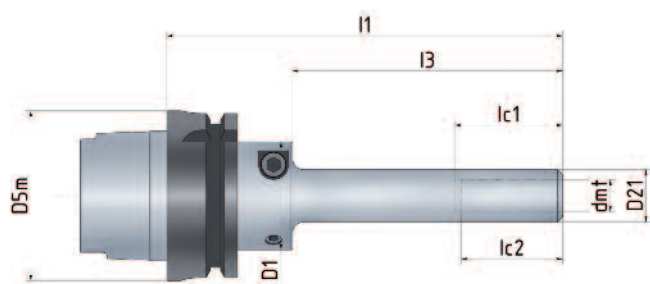


ETP HYDRO-GRIP[®] PENCIL HSK 63F

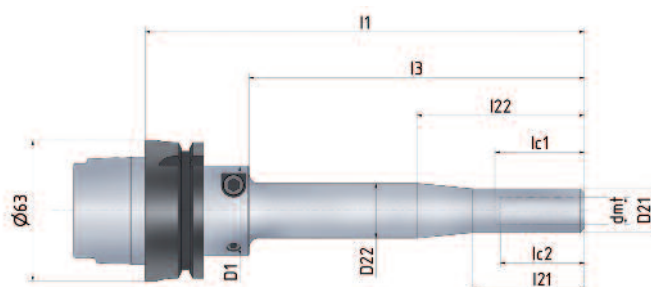
Hydraulic high precision toolholder – Pencil version

ETP HYDRO-GRIP[®] PENCIL is with its extreme slim design one of the most versatile holder on the market. An extensive range of standard dimensions and lengths optimizes your productivity when machining deep cavities and complex components.

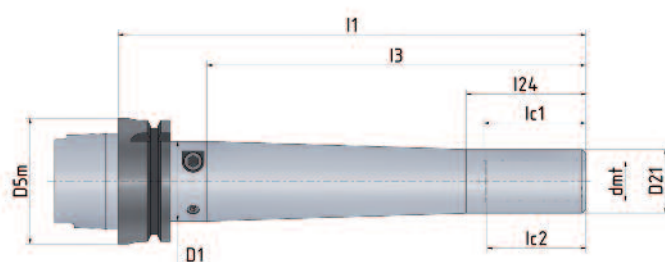
- Runout accuracy < 0.004 mm at $2.5 \times dm_t$ (max. 50 mm)
< 0.007 mm at $2.5 \times dm_t$ at length $l_1 > 125$ mm
- Balancing grade: G 2.5 at 25 000 rpm
- Tool shank h6 or h7 can be used
- Can be used with reducing sleeve



Design 1



Design 2



Design 3

ETP HYDRO-GRIP® PENCIL

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Technical Specification HSK 63F

Dimensions, mm

Design	Part no.	Item description	D_{5m}	dm_t	D_1	D_{21}	D_{22}	l_1	l_3	l_{21}	l_{22}	l_{24}	l_{c1}	l_{c2}
○ 1	684400	HG PENCIL-6x50/HSK63F	63	6	40	12		94	50				40	30
○ 1	684440	HG PENCIL-12x50/HSK63F	63	12	40	19,5		94	50				40	37
● 1	684450	HG PENCIL-12x100/HSK63F	63	12	40	19,5		144	100				40	37
○ 2	684460	HG PENCIL-12x150/HSK63F	63	12	40	19,5	24,5	194	150	50	75		40	37
● 3	684490	HG PENCIL-20x110/HSK63F	63	20	40	32		154	110			60	52	49
○ 3	684500	HG PENCIL-20x190/HSK63F	63	20	40	32		234	190			60	52	49
○ 1	684540	HG PENCIL-1/2"x50/HSK63F	63	12,7	40	19,5		94	50				40	37
● 1	684550	HG PENCIL-1/2"x100/HSK63F	63	12,7	40	19,5		144	100				40	37
○ 2	684560	HG PENCIL-1/2"x150/HSK63F	63	12,7	40	19,5	24,5	194	150	50	75		40	37
● 3	684590	HG PENCIL-3/4"x110/HSK63F	63	19,05	40	32		154	110			60	52	49
○ 3	684600	HG PENCIL-3/4"x190/HSK63F	63	19,05	40	32		234	190			60	52	49

l_1 = programming length

- From stock.
- ◐ Short delivery time.
- On request.

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