



Reduction sleeves for hydraulic chucks

Outstanding runout accuracy and highest clamping force for peripheral or internal cooling applications



High performance reduction sleeves for hydro chucks HS-CF HS-MB Micro-Bore



High performance reduction sleeves

Reduction sleeves are designed to fit hydro chucks of different manufacturers. They are specially suited for high-precision clamping of cylindrical tool shanks.

Reduction sleeves for hydro chucks Our reduction sleeves are designed to fit hydro chucks of different manufacturers. They are specially suited for high-precision clamping of cylindrical tool shanks per DIN 6535 form HA, HB and HE, as well as tool shanks per DIN 1835 form B, C, D and E.

The special design of REGO-FIX reduction sleeves allows an efficient use of coolant through cutting tools. This self-sealing system works with the most common hydraulic expansion chucks.

Correct assembly Improper assembly can damage the concentricity of the reduction sleeve.

- // Insert tools the full length of the reduction sleeve
- // Only clamp h6 tool shanks
- "Do not clamp reduction sleeve without a tool, as this could result in a damaged reduction sleeve

Reductions sleeves for hydro chucks HS

Features and benefits

Accurate precision

Runout TIR ≤3µm

High flexibility

Clamp different sleeve shank diameters in hydro chucks: 6, 8, 12, 20, 25 and 32 mm.

Standard version HS suited for internal cooling

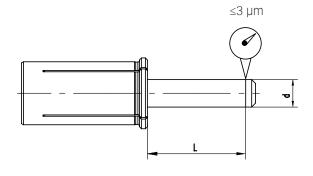
Metal-to-metal seal for cutting tools with internal coolant channels.

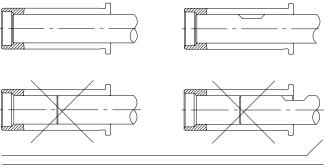
HS-CF suited for peripheral cooling

The coolant flush reduction sleeves HS-CF can be used for peripheral cooling due to their coolant channels.

Concentricity (TIR) of REGO-FIX HS reduction sleeves

Clamp	max. TIR		
> d	≤d	L	[mm]
3,0	6,0	16	0,003
6,0	10,0	25	0,003
10,0	18,0	40	0,003
18,0	26,0	50	0,003





Comparison of transferable torque at Ø 20 mm



Direct clamping Shank Ø 20 mm in toolholder Ø 20 mm **Reduction sleeve 32/20** Shank Ø 20 mm in toolholder Ø 32 mm

Reduction sleeves HS, HS-CF and HS-MB

A wide standard range of high-precision reduction sleeves: cutting tools with shanks from 1.0 mm to 25 mm can be reliably and securely clamped in any hydraulic chuck.

Metric

	HS 6	HS 8	HS 12-MB	HS 12	HS 12-CF	HS 20	HS 20-CF	HS 25	HS 32	HS 32-CF
Outer diameter	Ø 6	Ø 8	Ø 12	Ø 12	Ø 12	Ø 20	Ø 20	Ø 25	Ø 32	Ø 32
Shank diameter	1-4 mm	6mm	1-2.5mm	3-10 mm	3-8 mm	3-18mm	3-16 mm	3-20 mm	3-25 mm	6-25 mm
Shank tolerance [mm]		All reduct	ion sleeves	are design	ed for tools	with shan	k tolerance	h6 or more	e accurate	
For internal coolant	•	•		•	-	•	-	•	•	
For peripheral coolant			•		•		•			•
Technical illustrations of cooling										
Safety note	Never clamp reduction sleeves without a tool, it can be permanently damaged									

Inch

	HS 12	HS 20	HS 25	HS 32	HS 1/2"	HS 3/4"	HS 1"	HS 1 1/4"
Outer diameter	Ø 12 mm	Ø 20 mm	Ø 25 mm	Ø 32 mm	Ø 1/2"	Ø 3/4"	Ø 1"	Ø 1 1/4"
Shank diameter	1/8-3/8"	1/8-5/8"	1/8-13/16"	3/16-1"	1/8-3/8"	1/8-5/8"	1/8-3/4"	3/16-1"
Shank tolerance [mm]	Al	II reduction sl	eeves are desi	gned for tools	with shank to	olerance h6 or	r more accura	ite
For internal coolant	•	•	•	•	•	•	•	•
Technical illustrations of cooling								
Safety note	Never clamp reduction sleeves without a tool, it can be permanently damaged							

Reduction sleeves HS and HS-CF [metric]

Ø bore										Part no.
[mm]	HS 6	HS 8	HS 12-MB	HS 12	HS 12-CF	HS 20	HS 20-CF	HS 25	HS 32	HS 32-CF
1,0	1906.01000		1912.01009*	_	_	_	_	_	-	_
1,5			1912.01509*							
2,0	1906.02000		1912.02009*							
2,5			1912.02509*							
3,0	1906.03000			1912.03000	1912.03002	1920.03000	1920.03002	1925.03000	1932.03000	
4,0	1906.04000	_	_	1912.04000	1912.04002	1920.04000	1920.04002	1925.04000	1932.04000	_
5,0		_	_	1912.05000	1912.05002	1920.05000	1920.05002	1925.05000	1932.05000	_
6,0		1908.06000	_	1912.06000	1912.06002	1920.06000	1920.06002	1925.06000	1932.06000	1932.06002
7,0				1912.07000		1920.07000		1925.07000	1932.07000	
8,0				1912.08000	1912.08002	1920.08000	1920.08002	1925.08000	1932.08000	1932.08002
9,0				1912.09000		1920.09000		1925.09000	1932.09000	
10,0				1912.10000		1920.10000	1920.10002	1925.10000	1932.10000	1932.10002
11,0		_	_	_	_	1920.11000	_	_	1932.11000	_
12,0		_	_	_	_	1920.12000	1920.12002	1925.12000	1932.12000	193212002
13,0		_	_	_	_	1920.13000	_	_	1932.13000	_
14,0		_		_	_	1920.14000	1920.14002	1925.14000	1932.14000	1932.14002
15,0		_	_	_	_	1920.15000	_	_	1932.15000	_
16,0		_	_	_	_	1920.16000	1920.16002	1925.16000	1932.16000	1932.16002
17,0		_	_	_	_	_	_	_	1932.17000	_
18,0		_	_	_	_	1920.18000	_	1925.18000	1932.18000	1932.18002
19,0									1932.19000	
20,0								1925.20000	1932.20000	1932.20002
22,0									1932.22000	
25,0									1932.25000	1932.25002

^{*}not metallic sealing





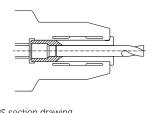


Reduction sleeves HS [inch]

	Ø bore				Part no.
[[decimal "]]	[inch]	HS 12	HS 20	HS 25	HS 32
0,125	1/8"	1912.03181	1920.03181	1925.03181	_
0,1875	3/16"	1912.04761	1920.04761	1925.04761	1932.04761
0,25	1/4"	1912.06351	1920.06351	1925.06351	1932.06351
0,3125	5/16"	1912.07941	1920.07941	1925.07941	1932.07941
0,375	3/8"	1912.09521	1920.09521	1925.09521	1932.09521
0,4375	7/16"	_	1920.11111	1925.11111	1932.11111
0,5	1/2"	_	1920.12701	1925.12701	1932.12701
0,5625	9/16"	_	1920.14291	1925.14291	1932.14291
0,625	5/8"	_	1920.15881	1925.15881	1932.15881
0,6875	11/16"	_	_	1925.17461	1932.17461
0,75	3/4"	_	_	1925.19051	1932.19051
0,8125	13/16"	_	_	1925.20631	1932.20631
0,875	7/8"	_	_	_	1932.22221
0,9375	15/16"	_	_	_	1932.23811
1,0	1"		_	_	1932.25401

Expert advice

The outer diameter of the reduction sleeves corresponds to each type, e.g. HS 12 equals diameter 12 mm.



HS section drawing

	Ø bore				Part no.
[decimal "]	[inch]	HS 1/2"	HS 3/4"	HS 1"	HS 1 1/4"
0,125	1/8"	1913.03182	1919.03182	1926.03182	_
0,1875	3/16"	1913.04762	1919.04762	1926.04762	1931.04762
0,25	1/4"	1913.06352	1919.06352	1926.06352	1931.06352
0,3125	5/16"	1913.07942	1919.07942	1926.07942	1931.07942
0,375	3/8"	1913.09522	1919.09522	1926.09522	1931.09522
0,4375	7/16"	_	1919.11112	1926.11112	1931.11112
0,5	1/2"	_	1919.12702	1926.12702	1931.12702
0,5625	9/16"	_	1919.14292	1926.14292	1931.14292
0,625	5/8"	_	1919.15882	1926.15882	1931.15882
0,6875	11/16"	_	_	1926.17462	1931.17462
0,75	3/4"	_	_	1926.19052	1931.19052
0,8125	13/16"	_			_
0,875	7/8"	_			_
0,9375	15/16"	_	_		_
1,0	1"	_	_	_	1931.25402

$\underline{\text{Expert advice}}$

Our chip cover is ideally suited for the removal of chips. The cover can simply be clicked-in at the head of our reduction sleeves.

Expert advice

The coolant flush reductions sleeves HS-CF can be used for peripheral cooling due to their coolant channels.

Easy removing of the reduction sleeve from hydro chucks thanks to the extractor EHS.



