



HSS-Handreibbahlen, Maschinenreibbahlen, Kegelreibbahlen

E HSS hand reamers, machine reamers,
taper pin reamers

I HSS alesatori a mano, alesatori a macchina,
alesatori per spine coniche



HSS-Reibbahlen
HSS reamers
HSS alesatori

D Übersicht
HSS-Reibahlen

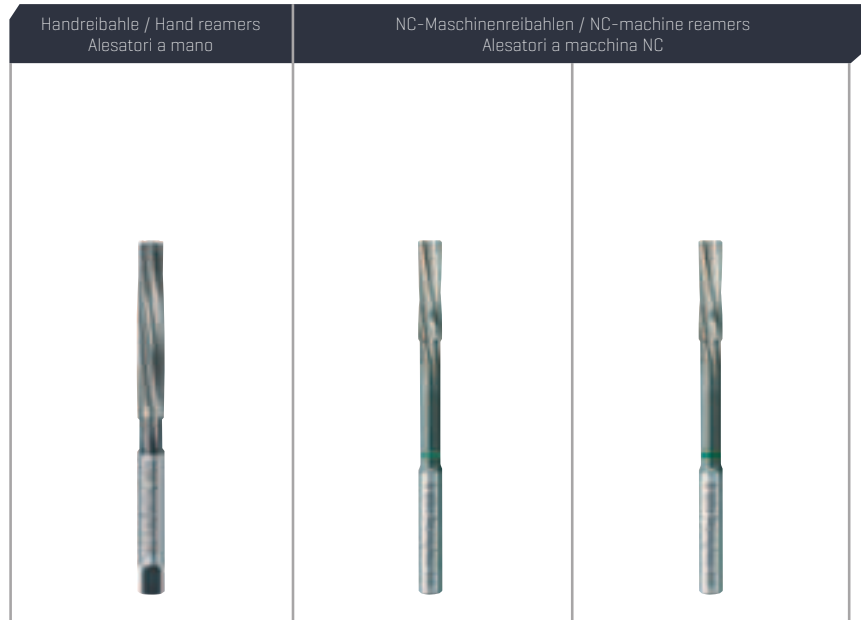
E Overview
HSS reamers

I Sommario
alesatori HSS







































D Die Schnittwerte für alle Werkzeuge entnehmen Sie bitte unserem separaten Zerspanungshandbuch.

E You will find the cutting conditions for all tools in our separate cutting manual.

I Per i parametri di lavorazione per tutti gli utensili richiedete il nostro manuale tecnico.




































Norm / Standard	DIN 206	~ DIN 212, WN	
Form / Forma	B	links / left hand / sinistra	links / left hand / sinistra
Schneidstoff / Cutting material / Acciaio punta	HSS	HSS-E	HSS-E
Ø mm	2-20	1,5-20	1-12,03
Code / Codice	3020	3080	3082
Seite / Page / Pagina	368	369	371

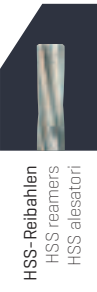
Geeignet für / Suitable for / Adatte per			
 Stähle < 400 N/mm² Steels < 400 N/mm² Acciai < 400 N/mm²			
 Stähle < 850 N/mm² Steels < 850 N/mm² Acciai < 850 N/mm²			
 Stähle < 1.100 N/mm² Steels < 1.100 N/mm² Acciai < 1.100 N/mm²			
 Stähle < 1.300 N/mm² Steels < 1.300 N/mm² Acciai < 1.300 N/mm²			
 Stähle > 45 HRC Steels > 45 HRC Acciai > 45 HRC			
 Rostfreie Stähle < 850 N/mm² Stainless steels < 850 N/mm² Acciai inossidabili < 850 N/mm²			
 Rostfreie Stähle > 850 N/mm² Stainless steels > 850 N/mm² Acciai inossidabili > 850 N/mm²			
 Grauguss, Temperguss Cast iron, malleable cast iron Ghisa grigia, ghisa malleabile			
 Titan- und Titanlegierung Titanium and titanium alloys Titanio e leghe di Titanio			
 Kupfer, Messing Copper, brass Rame, ottone			
 Aluminium Aluminium Alluminio			
 Kunststoffe Plastics Materie plastiche			

D **Übersicht**
HSS-Reibbahlen

E **Overview**
HSS reamers

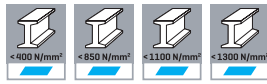
I **Sommario**
alesatori HSS

NC-Maschinenreibbahlen / NC-machine reamers Alesatori a macchina NC		Kegelreibbahlen / Taper pin reamers Alesatori per ferri di spine coniche
		
DIN 208	DIN 9	DIN 2179
B	B	
HSS-E	HSS	HSS-E
10-30	3-12	5-10
3130	3300	3320
373	374	375
		
		
		
		
		
		
		
		
		
		



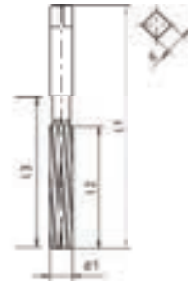
D Handreibahlen
DIN 206 B

Einsatzbereich:
Drallgenutete Ausführung für alle E- und NE-Metalle sowie Kunststoffe hart und weich. Besonders bei unterbrochenen Schnitten zu empfehlen, z. B. Keilnuten, Querbohrungen u.ä.



E Hand reamers
DIN 206 B

Range of application:
For ferrous and non-ferrous metals, synthetic materials soft and hard. Slow helix type suitable for interrupted borings, slots, cross-borings etc.



I Alesatori a mano
DIN 206 B

Impiego:
Alesatori con taglienti elicoidali adatti per tutti i materiali ferrosi, non ferrosi, plastiche dure e dolci, termoidurenti. Particolarmente adatti per lavorazioni di cave longitudinali, fori trasversali ecc.



d1 _{H7} mm	l1 mm	l2 mm	l3 mm	a _{H12} mm	Z		Code 3020 Art.-Nr.
2,00	50	25	30	1,60	4	Ø 1,90 mm	0 3020002001 00
2,50	58	29	34	2,10	4	Ø 2,40 mm	0 3020002501 00
3,00	62	31	36	2,10	6	Ø 2,90 mm	0 3020003001 00
3,50	71	35	43	2,70	6	Ø 3,40 mm	0 3020003501 00
4,00	76	38	46	3,00	6	Ø 3,90 mm	0 3020004001 00
4,50	81	41	49	3,40	6	Ø 4,40 mm	0 3020004501 00
5,00	87	44	54	3,80	6	Ø 4,90 mm	0 3020005001 00
5,50	93	47	57	4,30	6	Ø 5,30 mm	0 3020005501 00
6,00	93	47	57	4,30	6	Ø 5,80 mm	0 3020006001 00
7,00	107	54	66	5,50	6	Ø 6,80 mm	0 3020007001 00
8,00	115	58	70	6,20	6	Ø 7,80 mm	0 3020008001 00
9,00	124	62	74	7,00	6	Ø 8,80 mm	0 3020009001 00
10,00	133	66	78	8,00	6	Ø 9,80 mm	0 3020010001 00
11,00	142	71	86	9,00	6	Ø 10,80 mm	0 3020011001 00
12,00	152	76	91	10,00	6	Ø 11,80 mm	0 3020012001 00
13,00	152	76	91	10,00	6	Ø 12,80 mm	0 3020013001 00
14,00	163	81	96	11,00	6	Ø 13,80 mm	0 3020014001 00
15,00	163	81	96	11,00	6	Ø 14,80 mm	0 3020015001 00
16,00	175	87	107	12,00	6	Ø 15,80 mm	0 3020016001 00
18,00	188	93	113	14,50	6	Ø 17,80 mm	0 3020018001 00
20,00	201	100	120	16,00	6	Ø 19,80 mm	0 3020020001 00

D NC-Maschinenreibbahlen

Linksspirale, ähnlich
DIN 212

E NC-machine reamers

left hand spiral,
similar to DIN 212

I Alesatori a macchina NC

tagliante elic. sinistri,
simile DIN 212

Einsatzbereich:

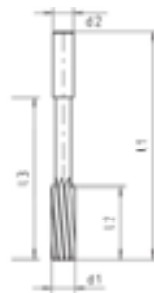
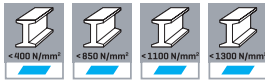
NC-gerechte Ausführung ähnl. DIN 212 mit geradem Schaftdurchmesser für die standardisierte Aufnahme speziell in Hydro-Dehnspannfuttern oder Hochgenauigkeitsspannfuttern. Drallgenutete Ausführung, Linksspirale für alle E- und NE-Metalle geeignet.


Range of application:

Specificly designed for CNC-operations, sim. DIN 212, with reinforced shank for shrink fit systems. For ferrous and non-ferrous metals. Slow helix type (8° left hand). Suitable for individual and mass production.

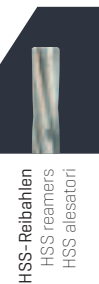
Impiego:


Alesatori con taglienti elicoidali, elica sinistra simili DIN 212, codolo nominale, per mandrini idraulici e di alta precisione. Adatti per tutti i materiali ferrosi, non ferrosi.



d1 H7 mm	d2 h6 mm	l1 mm	l2 mm	l3 mm	Z		Code 3080 Art.-Nr.
1,50	2,00	40	8	22	3	Ø 1,40 mm	0 3080001501 00
1,60	2,00	43	9	23	3	Ø 1,50 mm	0 3080001601 00
1,70	2,00	43	9	23	3	Ø 1,60 mm	0 3080001701 00
1,80	2,00	46	10	24	4	Ø 1,70 mm	0 3080001801 00
1,90	2,00	46	10	24	4	Ø 1,80 mm	0 3080001901 00
2,00	2,00	49	11	27	4	Ø 1,90 mm	0 3080002001 00
2,10	2,00	49	11	27	4	Ø 2,00 mm	0 3080002101 00
2,20	3,00	53	12	27	4	Ø 2,10 mm	0 3080002201 00
2,30	3,00	53	12	27	4	Ø 2,20 mm	0 3080002301 00
2,40	3,00	57	14	28	4	Ø 2,30 mm	0 3080002401 00
2,50	3,00	57	14	28	4	Ø 2,40 mm	0 3080002501 00
2,60	3,00	57	14	28	4	Ø 2,50 mm	0 3080002601 00
2,70	3,00	61	15	30	6	Ø 2,60 mm	0 3080002701 00
2,80	3,00	61	15	30	6	Ø 2,70 mm	0 3080002801 00
2,90	3,00	61	15	30	6	Ø 2,80 mm	0 3080002901 00
3,00	3,00	61	15	30	6	Ø 2,90 mm	0 3080003001 00
3,10	4,00	65	16	34	6	Ø 3,00 mm	0 3080003101 00
3,20	4,00	65	16	34	6	Ø 3,10 mm	0 3080003201 00
3,30	4,00	65	16	34	6	Ø 3,20 mm	0 3080003301 00
3,40	4,00	70	18	35	6	Ø 3,30 mm	0 3080003401 00
3,50	4,00	70	18	35	6	Ø 3,40 mm	0 3080003501 00
3,60	4,00	70	18	35	6	Ø 3,50 mm	0 3080003601 00
3,70	4,00	70	18	35	6	Ø 3,60 mm	0 3080003701 00
3,80	4,00	75	19	47	6	Ø 3,70 mm	0 3080003801 00
3,90	4,00	75	19	47	6	Ø 3,80 mm	0 3080003901 00
4,00	4,00	75	19	47	6	Ø 3,90 mm	0 3080004001 00
4,10	4,00	75	19	47	6	Ø 4,00 mm	0 3080004101 00
4,20	4,00	75	19	47	6	Ø 4,10 mm	0 3080004201 00
4,30	5,00	80	21	52	6	Ø 4,20 mm	0 3080004301 00
4,40	5,00	80	21	52	6	Ø 4,30 mm	0 3080004401 00
4,50	5,00	80	21	52	6	Ø 4,40 mm	0 3080004501 00
4,60	5,00	80	21	52	6	Ø 4,50 mm	0 3080004601 00
4,70	5,00	80	21	52	6	Ø 4,60 mm	0 3080004701 00
4,80	5,00	86	23	58	6	Ø 4,70 mm	0 3080004801 00

* ganzzahliger Schaftdurchmesser / nominal shank / diam. codolo nominale



d1 _{H7} mm	d2 _{h6} mm	l1 mm	l2 mm	l3 mm	Z		Code 3080 Art.-Nr.
4,90	5,00	86	23	58	6	Ø 4,80 mm	0 3080004901 00
5,00	5,00	86	23	58	6	Ø 4,90 mm	0 3080005001 00
5,10	5,00	86	23	58	6	Ø 4,90 mm	0 3080005101 00
5,20	5,00	86	23	58	6	Ø 5,00 mm	0 3080005201 00
5,30	5,00	86	23	58	6	Ø 5,10 mm	0 3080005301 00
5,40	6,00	93	26	57	6	Ø 5,20 mm	0 3080005401 00
5,50	6,00	93	26	57	6	Ø 5,30 mm	0 3080005501 00
5,60	6,00	93	26	57	6	Ø 5,40 mm	0 3080005601 00
5,70	6,00	93	26	57	6	Ø 5,50 mm	0 3080005701 00
5,80	6,00	93	26	57	6	Ø 5,60 mm	0 3080005801 00
5,90	6,00	93	26	57	6	Ø 5,70 mm	0 3080005901 00
6,00	6,00	93	26	57	6	Ø 5,80 mm	0 3080006001 00
6,10	6,00	101	28	65	6	Ø 5,90 mm	0 3080006101 00
6,20	6,00	101	28	65	6	Ø 6,00 mm	0 3080006201 00
6,30	6,00	101	28	65	6	Ø 6,10 mm	0 3080006301 00
6,40	6,00	101	28	65	6	Ø 6,20 mm	0 3080006401 00
6,50	6,00	101	28	65	6	Ø 6,30 mm	0 3080006501 00
6,60	6,00	101	28	65	6	Ø 6,40 mm	0 3080006601 00
6,70	6,00	101	28	65	6	Ø 6,50 mm	0 3080006701 00
6,80	8,00	109	31	73	6	Ø 6,60 mm	0 3080006801 00
6,90	8,00	109	31	73	6	Ø 6,70 mm	0 3080006901 00
7,00	8,00	109	31	73	6	Ø 6,80 mm	0 3080007001 00
7,10	8,00	109	31	73	6	Ø 6,90 mm	0 3080007101 00
7,20	8,00	109	31	73	6	Ø 7,00 mm	0 3080007201 00
7,30	8,00	109	31	73	6	Ø 7,10 mm	0 3080007301 00
7,40	8,00	109	31	73	6	Ø 7,20 mm	0 3080007401 00
7,50	8,00	109	31	73	6	Ø 7,30 mm	0 3080007501 00
7,60	8,00	117	33	81	6	Ø 7,40 mm	0 3080007601 00
7,70	8,00	117	33	81	6	Ø 7,50 mm	0 3080007701 00
7,80	8,00	117	33	81	6	Ø 7,60 mm	0 3080007801 00
7,90	8,00	117	33	81	6	Ø 7,70 mm	0 3080007901 00
8,00	8,00	117	33	81	6	Ø 7,80 mm	0 3080008001 00
8,10	8,00	117	33	81	6	Ø 7,90 mm	0 3080008101 00
8,20	8,00	117	33	81	6	Ø 8,00 mm	0 3080008201 00
8,30	8,00	117	33	81	6	Ø 8,10 mm	0 3080008301 00
8,40	8,00	117	33	81	6	Ø 8,20 mm	0 3080008401 00
8,50	8,00	117	33	81	6	Ø 8,30 mm	0 3080008501 00
8,60	10,00	125	36	85	6	Ø 8,40 mm	0 3080008601 00
8,70	10,00	125	36	85	6	Ø 8,50 mm	0 3080008701 00
8,80	10,00	125	36	85	6	Ø 8,60 mm	0 3080008801 00
8,90	10,00	125	36	85	6	Ø 8,70 mm	0 3080008901 00
9,00	10,00	125	36	85	6	Ø 8,80 mm	0 3080009001 00
9,10	10,00	125	36	85	6	Ø 8,90 mm	0 3080009101 00
9,20	10,00	125	36	85	6	Ø 9,00 mm	0 3080009201 00
9,30	10,00	125	36	85	6	Ø 9,10 mm	0 3080009301 00
9,40	10,00	125	36	85	6	Ø 9,20 mm	0 3080009401 00
9,50	10,00	125	36	85	6	Ø 9,30 mm	0 3080009501 00
9,60	10,00	133	38	93	6	Ø 9,40 mm	0 3080009601 00
9,70	10,00	133	38	93	6	Ø 9,50 mm	0 3080009701 00
9,80	10,00	133	38	93	6	Ø 9,60 mm	0 3080009801 00
9,90	10,00	133	38	93	6	Ø 9,70 mm	0 3080009901 00
10,00	10,00	133	38	93	6	Ø 9,80 mm	0 3080010001 00
11,00	10,00	142	41	102	6	Ø 10,80 mm	0 3080011001 00
12,00	10,00	151	44	111	6	Ø 11,80 mm	0 3080012001 00
13,00	10,00	151	44	111	6	Ø 12,80 mm	0 3080013001 00
14,00	14,00	160	47	120	8	Ø 13,80 mm	0 3080014001 00
15,00	14,00	162	50	122	8	Ø 14,80 mm	0 3080015001 00
16,00	14,00	170	52	130	8	Ø 15,80 mm	0 3080016001 00
17,00	14,00	175	54	135	8	Ø 16,80 mm	0 3080017001 00
18,00	14,00	182	56	142	8	Ø 17,80 mm	0 3080018001 00
19,00	16,00	189	58	149	8	Ø 18,80 mm	0 3080019001 00
20,00	16,00	195	60	155	8	Ø 19,80 mm	0 3080020001 00

D NC-Werkzeugmacherreibbahlen, ganzzahliger Schaftdurchmesser, ähnlich DIN 212

E NC-machine reamers with nominal shank, similar to DIN 212

I Alesatori a macchina NC taglienti elicoidali, diam. codolo nominale, simile DIN 212

Einsatzbereich:

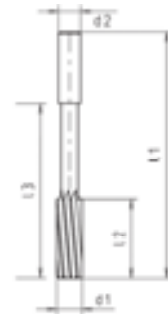
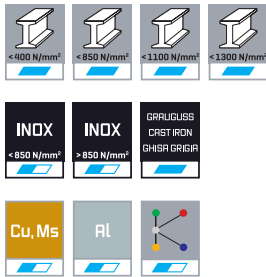
NC-gerechte Ausführung ähnl. DIN 212 mit geradem Schaftdurchmesser für die standardisierte Aufnahme speziell in Hydrodehn- oder Hochgenauigkeitsfutter für höchste Rundlaufgenauigkeit und Prozesssicherheit. Drallgenutete Ausführung (8° Linksspirale). Für den Werkzeug- und Formenbau, um Bohrungen mit Unter-/Übermaß herzustellen.

Range of application:

Specifically designed for CNC-operations, similar DIN 212, with nominal shank for shrink fit systems, especially for highest precision of radial runout and process-safety. Slow helix type (8° left hand). Specially suitable for the tool and mold industry, to achieve undersized and oversized holes.

Impiego:


Alesatori simili DIN 212 codolo nominale per mandrini idraulici e di alta precisione, per una migliore coassialità e sicurezza di processo. Elica sinistra 8°. Per lavorazioni di utensili e di stampi di fori sotto o sopra misura.



d1 mm	d2 h6 mm	l1 mm	l2 mm	l3 mm	Z		Code 3082 Art.-Nr.
1,00	1,00	35	6	17	3	Ø 0,90 mm	0 3082001001 00
1,01	1,00	35	6	17	3	Ø 0,90 mm	0 3082001011 00
1,02	1,00	35	6	17	3	Ø 0,90 mm	0 3082001021 00
1,03	1,00	35	6	17	3	Ø 0,90 mm	0 3082001031 00
1,51	2,00	43	9	23	3	Ø 1,40 mm	0 3082001511 00
1,52	2,00	43	9	23	3	Ø 1,40 mm	0 3082001521 00
1,53	2,00	43	9	23	3	Ø 1,40 mm	0 3082001531 00
1,97	2,00	49	11	27	4	Ø 1,90 mm	0 3082001971 00
1,98	2,00	49	11	27	4	Ø 1,90 mm	0 3082001981 00
1,99	2,00	49	11	27	4	Ø 1,90 mm	0 3082001991 00
2,01	2,00	49	11	27	4	Ø 1,90 mm	0 3082002011 00
2,02	2,00	49	11	27	4	Ø 1,90 mm	0 3082002021 00
2,03	2,00	49	11	27	4	Ø 1,90 mm	0 3082002031 00
2,47	3,00	57	14	28	4	Ø 2,40 mm	0 3082002471 00
2,48	3,00	57	14	28	4	Ø 2,40 mm	0 3082002481 00
2,49	3,00	57	14	28	4	Ø 2,40 mm	0 3082002491 00
2,51	3,00	57	14	28	4	Ø 2,40 mm	0 3082002511 00
2,52	3,00	57	14	28	4	Ø 2,40 mm	0 3082002521 00
2,53	3,00	57	14	28	4	Ø 2,40 mm	0 3082002531 00
2,97	3,00	61	15	30	6	Ø 2,90 mm	0 3082002971 00
2,98	3,00	61	15	30	6	Ø 2,90 mm	0 3082002981 00
2,99	3,00	61	15	30	6	Ø 2,90 mm	0 3082002991 00
3,01	4,00	65	16	34	6	Ø 2,90 mm	0 3082003011 00
3,02	4,00	65	16	34	6	Ø 2,90 mm	0 3082003021 00
3,03	4,00	65	16	34	6	Ø 2,90 mm	0 3082003031 00
3,97	4,00	75	19	47	6	Ø 3,90 mm	0 3082003971 00
3,98	4,00	75	19	47	6	Ø 3,90 mm	0 3082003981 00
3,99	4,00	75	19	47	6	Ø 3,90 mm	0 3082003991 00
4,01	4,00	75	19	47	6	Ø 3,90 mm	0 3082004011 00
4,02	4,00	75	19	47	6	Ø 3,90 mm	0 3082004021 00



HSS-Reibbahlen
HSS reamers
HSS alesatori

d1 mm	d2 _{h6} mm	l1 mm	l2 mm	l3 mm	Z		Code 3082 Art.-Nr.
4,03	4,00	75	19	47	6	Ø 3,90 mm	0 3082004031 00
4,97	5,00	86	23	58	6	Ø 4,90 mm	0 3082004971 00
4,98	5,00	86	23	58	6	Ø 4,90 mm	0 3082004981 00
4,99	5,00	86	23	58	6	Ø 4,90 mm	0 3082004991 00
5,01	5,00	86	23	58	6	Ø 4,80 mm	0 3082005011 00
5,02	5,00	86	23	58	6	Ø 4,80 mm	0 3082005021 00
5,03	5,00	86	23	58	6	Ø 4,80 mm	0 3082005031 00
5,97	6,00	93	26	57	6	Ø 5,80 mm	0 3082005971 00
5,98	6,00	93	26	57	6	Ø 5,80 mm	0 3082005981 00
5,99	6,00	93	26	57	6	Ø 5,80 mm	0 3082005991 00
6,01	6,00	101	28	65	6	Ø 5,80 mm	0 3082006011 00
6,02	6,00	101	28	65	6	Ø 5,80 mm	0 3082006021 00
6,03	6,00	101	28	65	6	Ø 5,80 mm	0 3082006031 00
7,97	8,00	117	33	81	6	Ø 7,80 mm	0 3082007971 00
7,98	8,00	117	33	81	6	Ø 7,80 mm	0 3082007981 00
7,99	8,00	117	33	81	6	Ø 7,80 mm	0 3082007991 00
8,01	8,00	117	33	81	6	Ø 7,80 mm	0 3082008011 00
8,02	8,00	117	33	81	6	Ø 7,80 mm	0 3082008021 00
8,03	8,00	117	33	81	6	Ø 7,80 mm	0 3082008031 00
9,01	10,00	125	36	85	6	Ø 8,80 mm	0 3082009011 00
9,02	10,00	125	36	85	6	Ø 8,80 mm	0 3082009021 00
9,03	10,00	125	36	85	6	Ø 8,80 mm	0 3082009031 00
9,97	10,00	133	38	93	6	Ø 9,80 mm	0 3082009971 00
9,98	10,00	133	38	93	6	Ø 9,80 mm	0 3082009981 00
9,99	10,00	133	38	93	6	Ø 9,80 mm	0 3082009991 00
10,01	10,00	133	38	93	6	Ø 9,80 mm	0 3082010011 00
10,02	10,00	133	38	93	6	Ø 9,80 mm	0 3082010021 00
10,03	10,00	133	38	93	6	Ø 9,80 mm	0 3082010031 00
11,97	10,00	151	44	111	6	Ø 11,80 mm	0 3082011971 00
11,98	10,00	151	44	111	6	Ø 11,80 mm	0 3082011981 00
11,99	10,00	151	44	111	6	Ø 11,80 mm	0 3082011991 00
12,01	10,00	151	44	111	6	Ø 11,80 mm	0 3082012011 00
12,02	10,00	151	44	111	6	Ø 11,80 mm	0 3082012021 00
12,03	10,00	151	44	111	6	Ø 11,80 mm	0 3082012031 00

D Maschinenreibbahlen
mit Morsekegel,
DIN 208 B

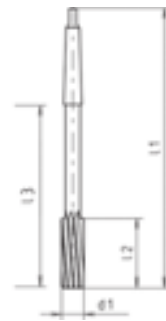
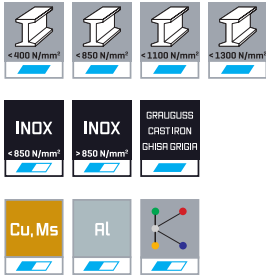
Einsatzbereich:
Drallgenutete Ausführung mit 8° Linksspirale für alle E- und NE-Metalle geeignet.

E Machine reamers
with morse taper shank,
DIN 208 B

Range of application:
For ferrous and non-ferrous metals. Slow helix type 8° left hand spiral.

I Alesatori a macchina
cono morse,
DIN 208 B

Impiego:
Alesatori con taglienti elicoidali, elica sinistra ca. 8°. Adatti per tutti i materiali ferrosi, non ferrosi.



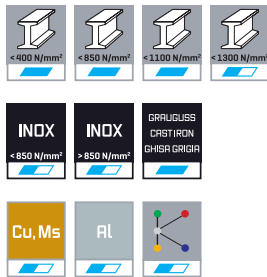
d1 mm	l1 mm	l2 mm	l3 mm	Z	Ø	Code 3130 Art.-Nr.
10,00	168	38	102,50	1	6 Ø 9,80 mm	0 3130010001 00
11,00	175	41	109,50	1	6 Ø 10,80 mm	0 3130011001 00
12,00	182	44	116,50	1	6 Ø 11,80 mm	0 3130012001 00
13,00	182	44	116,50	1	6 Ø 12,80 mm	0 3130013001 00
14,00	189	47	123,50	1	8 Ø 13,80 mm	0 3130014001 00
15,00	204	50	124,00	2	8 Ø 14,80 mm	0 3130015001 00
16,00	210	52	130,00	2	8 Ø 15,80 mm	0 3130016001 00
17,00	214	54	134,00	2	8 Ø 16,80 mm	0 3130017001 00
18,00	219	56	139,00	2	8 Ø 17,80 mm	0 3130018001 00
19,00	223	58	143,00	2	8 Ø 18,80 mm	0 3130019001 00
20,00	228	60	148,00	2	8 Ø 19,80 mm	0 3130020001 00
21,00	232	62	152,00	2	8 Ø 20,60 mm	0 3130021001 00
22,00	237	64	157,00	2	8 Ø 21,60 mm	0 3130022001 00
23,00	241	66	161,00	2	8 Ø 22,60 mm	0 3130023001 00
24,00	268	68	169,00	3	8 Ø 23,60 mm	0 3130024001 00
25,00	268	68	169,00	3	8 Ø 24,60 mm	0 3130025001 00
26,00	273	70	174,00	3	8 Ø 25,60 mm	0 3130026001 00
27,00	277	71	178,00	3	8 Ø 26,60 mm	0 3130027001 00
28,00	277	71	178,00	3	8 Ø 27,60 mm	0 3130028001 00
30,00	281	73	182,00	3	10 Ø 29,60 mm	0 3130030001 00



HSS-Reibbahlen
HSS reamers
HSS alesatori

D Hand-Kegelreibahlen
drallgenutet, Kegel 1:50,
DIN 9 B

Einsatzbereich:
Drallgenutete Ausführung für E- und NE-Metalle,
Kunststoffe hart und weich. Einsatz bei Einzel-
und Reparaturfertigung, geeignet.

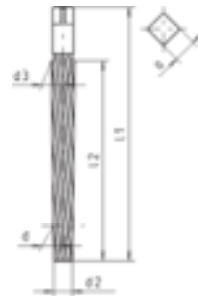


E Hand taper pin reamers
slow helix, taper 1:50,
DIN 9 B

Range of application:
For ferrous and non-ferrous metals, synthetic
materials soft and hard. Slow helix type suitable
for interrupted conical borings.

I Alesatori a mano per fori di
spine coniche,
taglienti elicoidali, conicità
1:50, DIN 9 B

Impiego:
Alesatori con taglienti elicoidali, adatti per
tutti i materiali ferrosi, non ferrosi, materie plastiche
dolci, termoidurenti, in lavorazioni singole o per
riparazioni.



d mm	d2 mm	d3 mm	l1 mm	l2 mm	a _{h12} mm	Z	Code 3300 Art.-Nr.
3,00	2,90	4,06	80	58	3,00	5	0 3300003001 00
4,00	3,90	5,26	93	68	3,00	5	0 3300004001 00
5,00	4,90	6,36	100	73	4,90	5	0 3300005001 00
6,00	5,90	8,00	135	105	6,20	6	0 3300006001 00
7,00	6,90	9,50	160	130	6,20	6	0 3300007001 00
8,00	7,90	10,80	180	145	8,00	6	0 3300008001 00
10,00	9,90	13,40	215	175	10,00	6	0 3300010001 00
12,00	11,80	16,00	255	210	11,00	8	0 3300012001 00

D Maschinen-Kegel-Schälreibbahlen
Kegel 1:50, DIN 2179

E Machine taper pin reamers
high helix, taper 1:50,
DIN 2179

I Alesatori a macchina per fori di spine coniche
a forte torsione, conicità 1:50,
DIN 2179

Einsatzbereich:

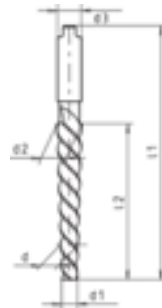
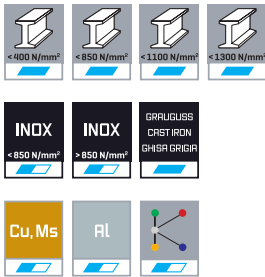
Stark spiralgenutete Ausführung (45°) für E- und NE-Metalle, Kunststoffe hart und weich. Der Schneidenteil weist eine Kegeltoleranz AT 8 nach DIN 7178 Teil 1 auf. Einsatz bei Einzel- und Serienfertigung mit hoher Zerspanungsleistung zum Reiben von Bohrungen für Kegelstifte.

Range of application:

For ferrous and non-ferrous metals, synthetic materials soft and hard. Quick helix type (45°) suitable for reaming of taper pin borings (1:50). The cutting part has a taper tolerance corresponding to the Taper Angle-Tolerances Class AT 8 according to DIN 7178 Part 1. Suitable for individual and mass production with high cutting efficiency.

Impiego:

Alesatori a forte torsione (45°), adatti per tutti i materiali ferrosi, non ferrosi, materie plastiche dolci, termoindurenti, sia per lavorazioni singole che di serie, con elevata capacità di asportazione. Alesatura di fori per spine coniche. Il tagliente ha una tolleranza di conicità AT 8 secondo DIN 7178 parte 1.



d mm	d1 mm	d2 mm	d3 mm	l1 mm	l2 mm	Z	Code 3320 Art.-Nr.
5,00	4,90	6,36	6,30	122	73	3	0 3320005001 00
6,00	5,90	8,00	8,00	160	105	3	0 3320006001 00
8,00	7,90	10,80	10,00	207	145	3	0 3320008001 00
10,00	9,90	13,40	12,50	245	175	3	0 3320010001 00



HSS-Reibbahlen
HSS reamers
HSS alesatori