

CARBIDE / HSS



Being the best through innovation



REAMERS

REIBAHLEN

- Carbide NC Machine Reamers, HSS Hand Reamers, HSS-E Chucking Reamers
- VHM, NC-maschinenreibahlen, HSS Handreibahlen, HSS-E Maschinenreibahlen

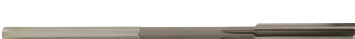
SELECTION GUIDE

ITEM	MODEL	DESCRIPTION	SIZE		PAGE
			MIN	MAX	

CARBIDE

K4101		CARBIDE, NC MACHINE REAMERS - STRAIGHT FLUTES VHM, NC-MASCHINENREIBAHLEN - GERADEGENUTET	D2.0	D20.0	1311
K4111		CARBIDE, NC MACHINE REAMERS - LH SPIRAL FLUTES VHM, NC-MASCHINENREIBAHLEN - SPIRALGENUTET mit LINKSDRALL	D2.0	D20.0	1312

HSS

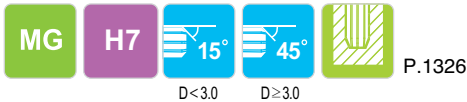
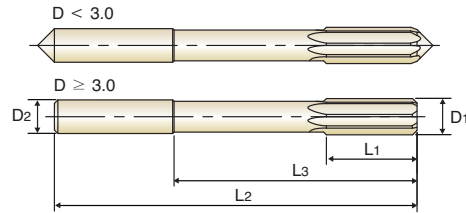
K1143		HSS, HAND REAMERS - STRAIGHT FLUTES HSS, HANDREIBAHLEN - GERADEGENUTET	D2.0	D60.0	1313
K1153		HSS, HAND REAMERS - LH SPIRAL FLUTES HSS, HANDREIBAHLEN - SPIRALGENUTET mit LINKSDRALL	D2.0	D60.0	1315
K2101		HSS-E, STRAIGHT SHANK CHUCKING REAMERS - STRAIGHT FLUTES HSS-E, MASCHINENREIBAHLE mit ZYLINDERSCHAFT - GERADEGENUTET	D2.0	D20.0	1317
K2111		HSS-E, STRAIGHT SHANK CHUCKING REAMERS - LH SPIRAL FLUTES HSS-E, MASCHINENREIBAHLE mit ZYLINDERSCHAFT - SPIRALGENUTET mit LINKSDRALL	D2.0	D20.0	1318
K2121		HSS-E, STRAIGHT SHANK CHUCKING REAMERS - LH SPIRAL FLUTES(QUICK SPIRAL) HSS-E, MASCHINEN - SCHÄLREIBAHLE mit ZYLINDERSCHAFT - SPIRALGENUTET mit LINKSDRALL	D4.0	D20.0	1319
K2102		HSS-E, MORSE TAPER SHANK CHUCKING REAMERS - STRAIGHT FLUTES HSS-E, MASCHINENREIBAHLE mit MK - GERADEGENUTET	D10.0	D50.0	1320
K2112		HSS-E, MORSE TAPER SHANK CHUCKING REAMERS - LH SPIRAL FLUTES HSS-E, MASCHINENREIBAHLE mit MK - SPIRALGENUTET mit LINKSDRALL	D10.0	D50.0	1321
K21B1		HSS-E, NC MACHINE REAMERS WITH WHOLE-NUMBER SHANK Ø HSS-E, NC-MASCHINENREIBAHLEN mit GERADZÄHLIGEN SCHAFT Ø	D2.0	D20.0	1322
RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN					1326


K4101 SERIES

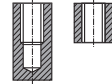
CARBIDE, NC MACHINE REAMERS - STRAIGHT FLUTES VHM, NC-MASCHINENREIBAHLEN - GERADEGENUTET

- Material - Up to Ø12.0 : Solid Carbide
- Over Ø12.0 : Carbide Head Brazed
- Straight Flutes, Right Hand Cut
- Unequal Flute Spacing
- O.D. Tolerances : DIN 1420 for H7
- Shank : DIN 6535-HA
- Chamfer Angle - D < 3.0 : 15°
- D ≥ 3.0 : 45°

- Material - bis Ø12,0 : VHM
- über Ø12,0 : gelötete VHM-Köpfe
- geradegenutet, rechtsschneidend
- Ungleichteilung
- Ø Toleranzen : DIN 1420 für H7
- Schaft : DIN 6535-HA
- Anschnittwinkel - bis Ø3,75 : 15°
- über Ø3,75 : 45°



Hole type



Unit : mm

EDP No.	Nominal SIZE	Shank Diameter	Cutting Length	Neck Length	Overall Length	No. of Flutes
	D1	D2	L1	L3	L2	
K410100200	2.0	4	11	20	50	4
K410100250	2.5	4	14	26	57	4
K410100300	3.0	4	15	31	61	6
K410100350	3.5	4	18	36	70	6
K410100400	4.0	4	19	42	75	6
K410100450	4.5	6	21	46	80	6
K410100500	5.0	6	23	51	86	6
K410100550	5.5	6	26	56	93	6
K410100600	6.0	6	26	56	93	6
K410100650	6.5	8	28	62	101	6
K410100700	7.0	8	31	68	109	6
K410100750	7.5	8	31	68	109	6
K410100800	8.0	8	33	74	117	6
K410100850	8.5	10	33	74	117	6
K410100900	9.0	10	36	80	125	6
K410100950	9.5	10	36	80	125	6
K410101000	10.0	10	38	86	133	6
K410101050	10.5	12	38	86	133	6
K410101100	11.0	12	41	95	142	6
K410101200	12.0	12	44	104	151	6
K410101300	13.0	16	44	104	151	6
K410101400	14.0	16	47	108	160	8
K410101500	15.0	16	50	110	162	8
K410101600	16.0	16	52	118	170	8
K410101700	17.0	20	54	121	175	8
K410101800	18.0	20	56	128	182	8
K410101900	19.0	20	58	129	189	8
K410102000	20.0	20	60	135	195	8



CARBIDE, NC MACHINE REAMERS - LH SPIRAL FLUTES

VHM, NC-MASCHINENREIBAHLEN - SPIRALGENUTET mit LINKSDRALL

- Material - Up to Ø12.0 : Solid Carbide
- Over Ø12.0 : Carbide Head Brazed

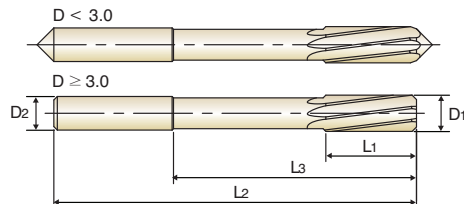
- Left Spiral Flutes, Right Hand Cut
- Unequal Flute Spacing
- O.D. Tolerances : DIN 1420 for H7
- Shank : DIN 6535-HA

- Chamfer Angle - $D < 3.0$: 15°
- $D \geq 3.0$: 45°

- Material - bis Ø12,0 : VHM
- über Ø12,0 : gelötete VHM-Köpfe

- linksspiralig, rechtsschneidend
- Ungleichteilung
- Ø Toleranzen : DIN 1420 für H7
- Schaft : DIN 6535-HA

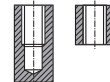
- Anschnittwinkel - bis Ø3,75 : 15°
- über Ø3,75 : 45°



P.1326

D<3.0 D≥3.0

Hole type



Unit : mm

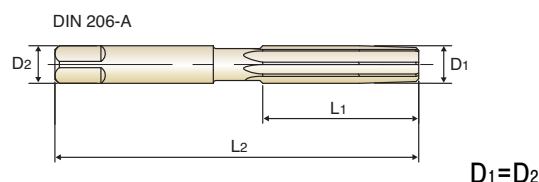
EDP No.	Nominal SIZE	Shank Diameter	Cutting Length	Neck Length	Overall Length	No. of Flutes
	D1	D2	L1	L3	L2	
K411100200	2.0	4	11	20	50	4
K411100250	2.5	4	14	26	57	4
K411100300	3.0	4	15	31	61	6
K411100350	3.5	4	18	36	70	6
K411100400	4.0	4	19	42	75	6
K411100450	4.5	6	21	46	80	6
K411100500	5.0	6	23	51	86	6
K411100550	5.5	6	26	56	93	6
K411100600	6.0	6	26	56	93	6
K411100650	6.5	8	28	62	101	6
K411100700	7.0	8	31	68	109	6
K411100750	7.5	8	31	68	109	6
K411100800	8.0	8	33	74	117	6
K411100850	8.5	10	33	74	117	6
K411100900	9.0	10	36	80	125	6
K411100950	9.5	10	36	80	125	6
K411101000	10.0	10	38	86	133	6
K411101050	10.5	12	38	86	133	6
K411101100	11.0	12	41	95	142	6
K411101200	12.0	12	44	104	151	6
K411101300	13.0	16	44	104	151	6
K411101400	14.0	16	47	108	160	8
K411101500	15.0	16	50	110	162	8
K411101600	16.0	16	52	118	170	8
K411101700	17.0	20	54	121	175	8
K411101800	18.0	20	56	128	182	8
K411101900	19.0	20	58	129	189	8
K411102000	20.0	20	60	135	195	8

HSS, HAND REAMERS - STRAIGHT FLUTES

HSS, HANDREIBAHLEN - GERADEGENUTET

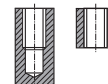
- ▶ O.D. Tolerances : DIN 1420 for H7
- ▶ Shank Diameter $\approx$ Nominal Reamer Diameter
- ▶ Straight Flutes / Right Hand Cut
- ▶ Chamfer Angle - tapered
- ▶ Type of center - Up to $\varnothing 3.75$: external centers
- Over $\varnothing 3.75$: internal centers

- ▶ Schneiden- $\varnothing$ Toleranzen : DIN 1420 für H7
- ▶ Schaft- $\varnothing$ = Nomineller Reibahlen- $\varnothing$
- ▶ Geradenutet / Rechtsschneident
- ▶ Anschnittwinkel - Konisch
- ▶ Zentrierungsart - bis $\varnothing 3,75$ mm : Zentrierungszapfen
- über $\varnothing 3,75$ mm : Zentrierung



HSS DIN 206 H7

Hole type



Unit : mm

EDP No.	Nominal SIZE	Flute Length	Overall Length	No. of Flutes
	D	L1	L2	
K114300200	2.0	25	50	4
K114300220	2.2	27	54	4
K114300250	2.5	29	58	4
K114300280	2.8	31	62	4
K114300300	3.0	31	62	6
K114300320	3.2	33	66	6
K114300350	3.5	35	71	6
K114300400	4.0	38	76	6
K114300450	4.5	41	81	6
K114300500	5.0	44	87	6
K114300550	5.5	47	93	6
K114300600	6.0	47	93	6
K114300700	7.0	54	107	6
K114300800	8.0	58	115	6
K114300900	9.0	62	124	6
K114301000	10.0	66	133	6
K114301100	11.0	71	142	6
K114301200	12.0	76	152	6
K114301300	13.0	76	152	6
K114301400	14.0	81	163	8
K114301500	15.0	81	163	8
K114301600	16.0	87	175	8
K114301700	17.0	87	175	8
K114301800	18.0	93	188	8
K114301900	19.0	93	188	8
K114302000	20.0	100	201	8
K114302200	22.0	107	215	8
K114302400	24.0	115	231	8



REAMERS

K1143 SERIES

HSS, HAND REAMERS - STRAIGHT FLUTES

HSS, HANDREIBAHLEN - GERADEGENUTET

► O.D. Tolerances : DIN 1420 for H7

► Shank Diameter $\approx$ Nominal Reamer Diameter

► Straight Flutes / Right Hand Cut

► Chamfer Angle - tapered

► Type of center - Up to $\varnothing 3.75$: external centers
- Over $\varnothing 3.75$: internal centers

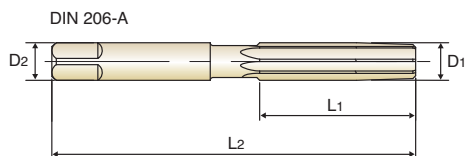
► Schneiden- $\varnothing$ Toleranzen : DIN 1420 für H7

► Schaft- $\varnothing$ = Nomineller Reibahlen- $\varnothing$

► Geradenutet / Rechtsschneiden†

► Anschnittwinkel - Konisch

► Zentrierungsart - bis $\varnothing 3,75$ mm : Zentrierungszapfen
- über $\varnothing 3,75$ mm : Zentrierung

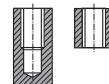
D₁=D₂

HSS

DIN
206

H7

Hole type



Unit : mm

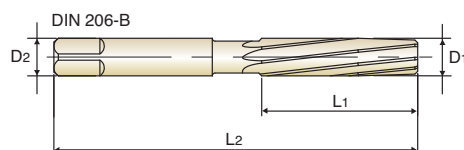
EDP No.	Nominal SIZE	Flute Length	Overall Length	No. of Flutes
	D	L ₁	L ₂	
K114302500	25.0	115	231	8
K114302600	26.0	115	231	8
K114302700	27.0	124	247	10
K114302800	28.0	124	247	10
K114302900	29.0	124	247	10
K114303000	30.0	124	247	10
K114303100	31.0	133	265	10
K114303200	32.0	133	265	10
K114303300	33.0	133	265	10
K114303400	34.0	142	284	10
K114303500	35.0	142	284	10
K114303600	36.0	142	284	10
K114303700	37.0	142	284	10
K114303800	38.0	152	305	10
K114303810	38.1	152	305	10
K114303900	39.0	152	305	10
K114304000	40.0	152	305	10
K114304100	41.0	152	305	12
K114304200	42.0	152	305	12
K114304300	43.0	163	326	12
K114304400	44.0	163	326	12
K114304500	45.0	163	326	12
K114304600	46.0	163	326	12
K114304700	47.0	163	326	12
K114304800	48.0	174	347	12
K114304900	49.0	174	347	12
K114305200	52.0	174	347	12
K114306000	60.0	184	367	12

HSS, HAND REAMERS - LH SPIRAL FLUTES

HSS, HANDREIBAHLEN - SPIRALGENUTET mit LINKSDRALL

- ▶ O.D. Tolerances : DIN 1420, H7
- ▶ Shank Diameter $\approx$ Nominal Reamer Diameter
- ▶ LH Spiral Flutes / Right Hand Cut
- ▶ Chamfer Angle - tapered
- ▶ Type of center - Up to $\varnothing 3.75$: external centers
- Over $\varnothing 3.75$: internal centers

- ▶ Schneiden- $\varnothing$ Toleranzen : DIN 1420 für H7
- ▶ Schaft- $\varnothing$ = Nomineller Reibahlen- $\varnothing$
- ▶ Spiralgenutet mit Linksdraht / Rechtsschneident
- ▶ Anschnittwinkel - Konisch
- ▶ Zentrierungsart - bis $\varnothing 3,75$ mm : Zentrierungszapfen
- über $\varnothing 3,75$ mm : Zentrierung


 $D_1 = D_2$


Hole type



Unit : mm

EDP No.	Nominal SIZE	Flute Length	Overall Length	No. of Flutes
	D	L1	L2	
K115300200	2.0	25	50	4
K115300220	2.2	27	54	4
K115300250	2.5	29	58	4
K115300280	2.8	31	62	4
K115300300	3.0	31	62	6
K115300320	3.2	33	66	6
K115300350	3.5	35	71	6
K115300400	4.0	38	76	6
K115300450	4.5	41	81	6
K115300500	5.0	44	87	6
K115300550	5.5	47	93	6
K115300600	6.0	47	93	6
K115300700	7.0	54	107	6
K115300800	8.0	58	115	6
K115300900	9.0	62	124	6
K115301000	10.0	66	133	6
K115301100	11.0	71	142	6
K115301200	12.0	76	152	6
K115301300	13.0	76	152	6
K115301400	14.0	81	163	8
K115301500	15.0	81	163	8
K115301600	16.0	87	175	8
K115301700	17.0	87	175	8
K115301800	18.0	93	188	8
K115301900	19.0	93	188	8
K115302000	20.0	100	201	8
K115302200	22.0	107	215	8
K115302400	24.0	115	231	8



REAMERS

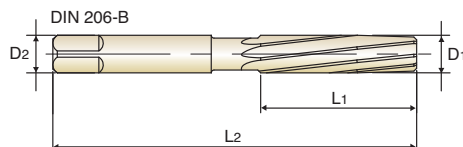
K1153 SERIES

HSS, HAND REAMERS - LH SPIRAL FLUTES

HSS, HANDREIBAHLEN - SPIRALGENUTET mit LINKSDRALL

- ▶ O.D. Tolerances : DIN 1420, H7
- ▶ Shank Diameter $\approx$ Nominal Reamer Diameter
- ▶ LH Spiral Flutes / Right Hand Cut
- ▶ Chamfer Angle - tapered
- ▶ Type of center - Up to $\varnothing 3.75$: external centers
- Over $\varnothing 3.75$: internal centers

- ▶ Schneiden- $\varnothing$ Toleranzen : DIN 1420 für H7
- ▶ Schaft- $\varnothing$ = Nomineller Reibahlen- $\varnothing$
- ▶ Geradenutet / Rechtsschneident
- ▶ Anschnittwinkel - Konisch
- ▶ Zentrierungsart - bis $\varnothing 3,75$ mm : Zentrierungszapfen
- über $\varnothing 3,75$ mm : Zentrierung

 $D_1 = D_2$ 

Hole type



Unit : mm

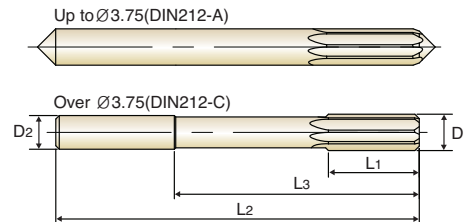
EDP No.	Nominal SIZE	Flute Length	Overall Length	No. of Flutes
	D	L1	L2	
K115302500	25.0	115	231	8
K115302600	26.0	115	231	8
K115302700	27.0	124	247	10
K115302800	28.0	124	247	10
K115302900	29.0	124	247	10
K115303000	30.0	124	247	10
K115303100	31.0	133	265	10
K115303200	32.0	133	265	10
K115303300	33.0	133	265	10
K115303400	34.0	142	284	10
K115303500	35.0	142	284	10
K115303600	36.0	142	284	10
K115303700	37.0	142	284	10
K115303800	38.0	152	305	10
K115303810	38.1	152	305	10
K115303900	39.0	152	305	10
K115304000	40.0	152	305	10
K115304100	41.0	152	305	12
K115304200	42.0	152	305	12
K115304300	43.0	163	326	12
K115304400	44.0	163	326	12
K115304500	45.0	163	326	12
K115304600	46.0	163	326	12
K115304700	47.0	163	326	12
K115304800	48.0	174	347	12
K115304900	49.0	174	347	12
K115305200	52.0	174	347	12
K115306000	60.0	184	367	12


K2101 SERIES

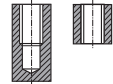
HSS-E, STRAIGHT SHANK CHUCKING REAMERS - STRAIGHT FLUTES HSS-E, MASCHINENREIBAHLE mit ZYLINDERSCHAFT - GERADEGENUTET

- ▶ O.D. Tolerances : DIN 1420 for H7
- ▶ Shank Diameter Tolerances : h8
- ▶ Straight Flute / Right Hand Cut
- ▶ Chamfer Angle - Up to Ø3.75 : 15°
- Over Ø3.75 : 45°

- ▶ Schneiden-Ø Toleranzen : DIN 1420 für H7
- ▶ Schaft-Ø Toleranzen : h8
- ▶ Geradenutet / Rechtsschneident
- ▶ Anschnittwinkel - bis Ø3,75 mm : 15°
- über Ø3,75 mm : 45°



Hole type



Unit : mm

EDP No.	Nominal SIZE	Shank Diameter	Cutting Length	Neck Length	Overall Length	No. of Flutes
	D1	D2	L1	L3	L2	
K210100200	2.0	2	11	-	49	4
K210100220	2.2	2.2	12	-	53	4
K210100250	2.5	2.5	14	-	57	4
K210100260	2.6	2.6	14	-	57	4
K210100280	2.8	2.8	15	-	61	4
K210100300	3.0	3	15	-	61	6
K210100310	3.1	3.1	16	-	65	6
K210100320	3.2	3.2	16	-	65	6
K210100350	3.5	3.5	18	-	70	6
K210100360	3.6	3.6	18	-	70	6
K210100370	3.7	3.7	18	-	70	6
K210100400	4.0	4	19	42	75	6
K210100430	4.3	4.5	21	46	80	6
K210100450	4.5	4.5	21	46	80	6
K210100460	4.6	4.5	21	46	80	6
K210100500	5.0	5	23	51	86	6
K210100550	5.5	5.6	26	56	93	6
K210100560	5.6	5.6	26	56	93	6
K210100600	6.0	5.6	26	56	93	6
K210100650	6.5	6.3	28	62	101	6
K210100700	7.0	7.1	31	68	109	6
K210100720	7.2	7.1	31	68	109	6
K210100800	8.0	8	33	74	117	6
K210100830	8.3	8	33	74	117	6
K210100850	8.5	8	33	74	117	6
K210100900	9.0	9	36	80	125	6
K210100950	9.5	9	36	80	125	6
K210101000	10.0	10	38	86	133	6
K210101050	10.5	10	38	86	133	6
K210101100	11.0	10	41	95	142	6
K210101200	12.0	10	44	104	151	6
K210101300	13.0	10	44	104	151	6
K210101400	14.0	12.5	47	108	160	8
K210101500	15.0	12.5	50	110	162	8
K210101600	16.0	12.5	52	118	170	8
K210101700	17.0	14	54	121	175	8
K210101800	18.0	14	56	128	182	8
K210101900	19.0	16	58	129	189	8
K210102000	20.0	16	60	135	195	8



REAMERS

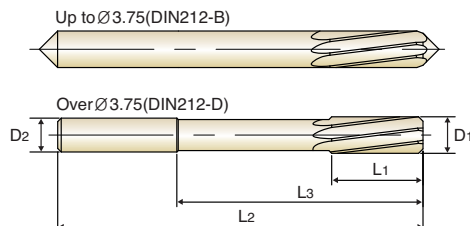
K2111 SERIES

HSS-E, STRAIGHT SHANK CHUCKING REAMERS - LH SPIRAL FLUTES

HSS-E, MASCHINENREIBAHLE mit ZYLINDERSCHAFT - SPIRALGENUTET mit LINKSDRALL

- ▶ O.D. Tolerances : DIN 1420 for H7
- ▶ Shank Diameter Tolerances : h8
- ▶ LH Spiral Flutes / Right Hand Cut
- ▶ Chamfer Angle - Up to Ø3.75 : 15°
- Over Ø3.75 : 45°

- ▶ Schneiden-Ø Toleranzen : DIN 1420 für H7
- ▶ Schaft-Ø Toleranzen : h8
- ▶ Spiralgenutet mit Linksdraht / Rechtsschneident
- ▶ Anschnittwinkel - bis Ø3,75 mm : 15°
- über Ø3,75 mm : 45°



HSS-E

DIN
212

H7



1327

up to Ø3.75 over Ø3.75

Hole type



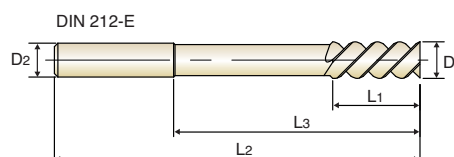
Unit : mm

EDP No.	Nominal SIZE	Shank Diameter	Cutting Length	Neck Length	Overall Length	No. of Flutes
	D1	D2	L1	L3	L2	
K211100200	2.0	2	11	-	49	4
K211100220	2.2	2.2	12	-	53	4
K211100250	2.5	2.5	14	-	57	4
K211100260	2.6	2.6	14	-	57	4
K211100280	2.8	2.8	15	-	61	4
K211100300	3.0	3	15	-	61	6
K211100310	3.1	3.1	16	-	65	6
K211100320	3.2	3.2	16	-	65	6
K211100350	3.5	3.5	18	-	70	6
K211100360	3.6	3.6	18	-	70	6
K211100370	3.7	3.7	18	-	70	6
K211100400	4.0	4	19	42	75	6
K211100430	4.3	4.5	21	46	80	6
K211100450	4.5	4.5	21	46	80	6
K211100460	4.6	4.5	21	46	80	6
K211100500	5.0	5	23	51	86	6
K211100550	5.5	5.6	26	56	93	6
K211100560	5.6	5.6	26	56	93	6
K211100600	6.0	5.6	26	56	93	6
K211100650	6.5	6.3	28	62	101	6
K211100700	7.0	7.1	31	68	109	6
K211100720	7.2	7.1	31	68	109	6
K211100800	8.0	8	33	74	117	6
K211100830	8.3	8	33	74	117	6
K211100850	8.5	8	33	74	117	6
K211100900	9.0	9	36	80	125	6
K211100950	9.5	9	36	80	125	6
K211101000	10.0	10	38	86	133	6
K211101050	10.5	10	38	86	133	6
K211101100	11.0	10	41	95	142	6
K211101200	12.0	10	44	104	151	6
K211101300	13.0	10	44	104	151	6
K211101400	14.0	12.5	47	108	160	8
K211101500	15.0	12.5	50	110	162	8
K211101600	16.0	12.5	52	118	170	8
K211101700	17.0	14	54	121	175	8
K211101800	18.0	14	56	128	182	8
K211101900	19.0	16	58	129	189	8
K211102000	20.0	16	60	135	195	8

HSS-E, STRAIGHT SHANK CHUCKING REAMERS - LH SPIRAL FLUTES(QUICK SPIRAL) HSS-E, MASCHINEN - SCHÄLREIBAHLE mit ZYLINDERSCHAFT - SPIRALGENUTET mit LINKSDRAL

- ▶ O.D. Tolerances : DIN 1420 for H7
- ▶ Shank Diameter Tolerances : h8
- ▶ Chamfer Angle - tapered
- ▶ LH High Spiral Flutes / Right Hand Cut

- ▶ Schneiden-Ø Toleranzen : DIN 1420 für H7
- ▶ Schaft-Ø Toleranzen : h8
- ▶ Anschnittwinkel - Konisch
- ▶ Spiralgenutet mit Linksdrall / Rechtsschneident



HSS-E DIN 212 H7 LH45° FORM E 1327

Hole type 

Unit : mm
Unit : mm

EDP No.	Nominal SIZE	Shank Diameter	Cutting Length	Neck Length	Overall Length	No. of Flutes
	D1	D2	L1	L3	L2	
K212100400	4.0	4	19	42	75	3
K212100450	4.5	4.5	21	46	80	3
K212100500	5.0	5	23	51	86	3
K212100550	5.5	5.6	26	56	93	3
K212100600	6.0	5.6	26	56	93	3
K212100650	6.5	6.3	28	62	101	3
K212100700	7.0	7.1	31	68	109	3
K212100800	8.0	8	33	74	117	3
K212100850	8.5	8	33	74	117	3
K212100900	9.0	9	36	80	125	3
K212100950	9.5	9	36	80	125	3
K212101000	10.0	10	38	86	133	3
K212101100	11.0	10	41	95	142	3
K212101200	12.0	10	44	104	151	3
K212101300	13.0	10	44	104	151	3
K212101400	14.0	12.5	47	108	160	4
K212101500	15.0	12.5	50	110	162	4
K212101600	16.0	12.5	52	118	170	4
K212101700	17.0	14	54	121	175	4
K212101800	18.0	14	56	128	182	4
K212101900	19.0	16	58	129	189	4
K212102000	20.0	16	60	135	195	4



REAMERS

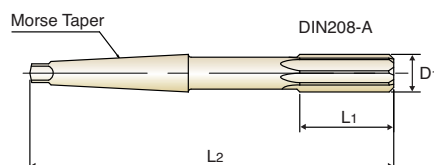
K2102 SERIES

HSS-E, MORSE TAPER SHANK CHUCKING REAMERS - STRAIGHT FLUTES

HSS-E, MASCHINENREIBAHLE mit MK - GERADEGENUTET

- ▶ O.D. Tolerances : DIN 1420 for H7
- ▶ Straight Flute / Right Hand Cut
- ▶ Chamfer Angle : 45°

- ▶ Schneiden-Ø Toleranzen : DIN 1420 für H7
- ▶ Geradenutet / Rechtsschneiden†
- ▶ Anschnittwinkel : 45°



HSS-E

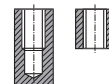
DIN
208

H7



1327

Hole type



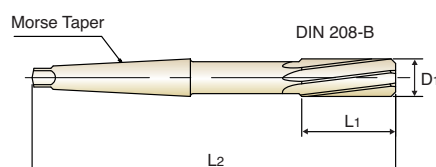
Unit : mm

EDP No.	Nominal SIZE D1	No. of Morse Taper	Cutting Length L1	Overall Length L2	No. of Flutes
K210201000	10.0	1	38	168	6
K210201100	11.0	1	41	175	6
K210201200	12.0	1	44	182	6
K210201300	13.0	1	44	182	6
K210201400	14.0	1	47	189	8
K210201500	15.0	2	50	204	8
K210201600	16.0	2	52	210	8
K210201700	17.0	2	54	214	8
K210201800	18.0	2	56	219	8
K210201900	19.0	2	58	223	8
K210202000	20.0	2	60	228	8
K210202100	21.0	2	62	232	8
K210202200	22.0	2	64	237	8
K210202300	23.0	2	66	241	8
K210202400	24.0	3	68	268	8
K210202500	25.0	3	68	268	8
K210202600	26.0	3	70	273	8
K210202700	27.0	3	71	277	10
K210202800	28.0	3	71	277	10
K210202900	29.0	3	73	281	10
K210203000	30.0	3	73	281	10
K210203100	31.0	3	75	285	10
K210203200	32.0	4	77	317	10
K210203400	34.0	4	78	321	10
K210203500	35.0	4	78	321	10
K210203600	36.0	4	79	325	10
K210203800	38.0	4	81	329	10
K210204000	40.0	4	81	329	10
K210204100	41.0	4	82	333	12
K210204200	42.0	4	82	333	12
K210204300	43.0	4	83	336	12
K210204400	44.0	4	83	336	12
K210204500	45.0	4	83	336	12
K210204600	46.0	4	84	340	12
K210204700	47.0	4	84	340	12
K210204800	48.0	4	86	344	12
K210205000	50.0	4	86	344	12

HSS-E, MORSE TAPER SHANK CHUCKING REAMERS - LH SPIRAL FLUTES HSS-E, MASCHINENREIBAHLE mit MK - SPIRALGENUTET mit LINKSDRALL

- ▶ O.D. Tolerances : DIN 1420 for H7
- ▶ LH Spiral Flutes / Right Hand Cut
- ▶ Chamfer Angle : 45°

- ▶ Schneiden-Ø Toleranzen : DIN 1420 für H7
- ▶ Spiralgenutet mit Linksdraht / Rechtsschneident
- ▶ Anschnittwinkel : 45°



1327



Unit : mm

EDP No.	Nominal SIZE D1	No. of Morse Taper	Cutting Length L1	Overall Length L2	No. of Flutes
K211201000	10.0	1	38	168	6
K211201100	11.0	1	41	175	6
K211201200	12.0	1	44	182	6
K211201300	13.0	1	44	182	6
K211201400	14.0	1	47	189	8
K211201500	15.0	2	50	204	8
K211201600	16.0	2	52	210	8
K211201700	17.0	2	54	214	8
K211201800	18.0	2	56	219	8
K211201900	19.0	2	58	223	8
K211202000	20.0	2	60	228	8
K211202100	21.0	2	62	232	8
K211202200	22.0	2	64	237	8
K211202300	23.0	2	66	241	8
K211202400	24.0	3	68	268	8
K211202500	25.0	3	68	268	8
K211202600	26.0	3	70	273	8
K211202700	27.0	3	71	277	10
K211202800	28.0	3	71	277	10
K211202900	29.0	3	73	281	10
K211203000	30.0	3	73	281	10
K211203100	31.0	3	75	285	10
K211203200	32.0	4	77	317	10
K211203400	34.0	4	78	321	10
K211203500	35.0	4	78	321	10
K211203600	36.0	4	79	325	10
K211203800	38.0	4	81	329	10
K211204000	40.0	4	81	329	10
K211204100	41.0	4	82	333	12
K211204200	42.0	4	82	333	12
K211204300	43.0	4	83	336	12
K211204400	44.0	4	83	336	12
K211204500	45.0	4	83	336	12
K211204600	46.0	4	84	340	12
K211204700	47.0	4	84	340	12
K211204800	48.0	4	86	344	12
K211205000	50.0	4	86	344	12



REAMERS

K21B1 SERIES

HSS-E, NC MACHINE REAMERS WITH WHOLE-NUMBER SHANK Ø

HSS-E, NC-MASCHINENREIBAHLEN mit GERADZÄHLIGEN SCHAFT Ø

► O.D. Tolerances

Whole-number Ø and 1/10 size : DIN 1420 for H7

1/100 size : from Ø2.01 to Ø5.03 : +0.004/-0.000mm
from Ø5.97 to Ø12.03 : +0.005/-0.000mm

► Shank Diameter Tolerances : h6

► LH Spiral Flutes / Right Hand Cut

► Chamfer Angle - Up to Ø3.75 : 15°
- Over Ø3.75 : 45°

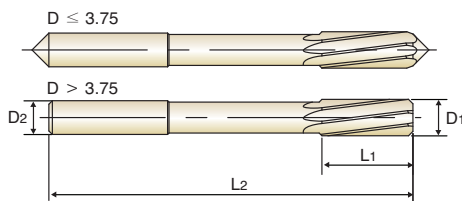
► Ø Tolerances:

ganzzahlige Ø und 1/10 Größen : DIN 1420 für H7

1/100 Größen : ab Ø2,01 bis Ø5,03 : +0.004/-0.000mm
von Ø5,97 bis Ø12,03 : +0.005/-0.000mm

► Schaft-Durchmesser Toleranzen : h6

► linksspiralig/ rechtsscheidend

► Anschnittwinkel - bis Ø3,75 : 15°
- über Ø3,75 : 45°

up to Ø3.75 over Ø3.75

Hole type



Unit : mm

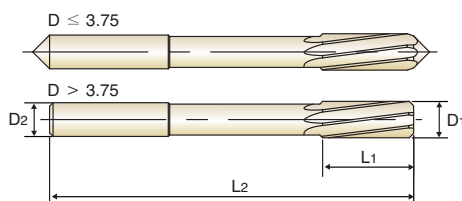
EDP No.	Nominal SIZE	Shank Diameter	Flute Length	Overall Length
	D1	D2	L1	L2
K21B100200	2.0	2	11	49
K21B100201	2.01	2	11	49
K21B100202	2.02	2	11	49
K21B100203	2.03	2	11	49
K21B100210	2.1	2	11	49
K21B100220	2.2	3	12	53
K21B100230	2.3	3	12	53
K21B100240	2.4	3	14	57
K21B100247	2.47	3	14	57
K21B100248	2.48	3	14	57
K21B100249	2.49	3	14	57
K21B100250	2.5	3	14	57
K21B100251	2.51	3	14	57
K21B100252	2.52	3	14	57
K21B100253	2.53	3	14	57
K21B100260	2.6	3	14	57
K21B100270	2.7	3	15	61
K21B100280	2.8	3	15	61
K21B100290	2.9	3	15	61
K21B100297	2.97	3	15	61
K21B100298	2.98	3	15	61
K21B100299	2.99	3	15	61
K21B100300	3.0	3	15	61
K21B100301	3.01	4	16	65
K21B100302	3.02	4	16	65
K21B100303	3.03	4	16	65
K21B100310	3.1	4	16	65
K21B100320	3.2	4	16	65
K21B100330	3.3	4	16	65
K21B100340	3.4	4	18	70
K21B100350	3.5	4	18	70
K21B100360	3.6	4	18	70
K21B100370	3.7	4	18	70
K21B100380	3.8	4	19	75
K21B100390	3.9	4	19	75
K21B100397	3.97	4	19	75
K21B100398	3.98	4	19	75

HSS-E, NC MACHINE REAMERS WITH WHOLE-NUMBER SHANK Ø

HSS-E, NC-MASCHINENREIBAHLEN mit GERADZÄHLIGEN SCHAFT Ø

- ▶ O.D. Tolerances
Whole-number Ø and 1/10 size : DIN 1420 for H7
1/100 size : from Ø2.01 to Ø5.03 : +0.004/-0.000mm
from Ø5.97 to Ø12.03 : +0.005/-0.000mm
- ▶ Shank Diameter Tolerances : h6
- ▶ LH Spiral Flutes / Right Hand Cut
- ▶ Chamfer Angle - Up to Ø3.75 : 15°
- Over Ø3.75 : 45°

- ▶ Ø Toleranzen:
ganzzahlige Ø und 1/10 Größen : DIN 1420 für H7
1/100 Größen : ab Ø2,01 bis Ø5,03 : +0.004/-0.000mm
von Ø5,97 bis Ø12,03 : +0.005/-0.000mm
- ▶ Schaft-Durchmesser Toleranzen : h6
- ▶ linksspiralig/ rechtsscheidend
- ▶ Anschnittwinkel - bis Ø3,75 : 15°
- über Ø3,75 : 45°



Unit : mm

EDP No.	Nominal SIZE	Shank Diameter	Flute Length	Overall Length
	D1	D2	L1	L2
K21B100399	3.99	4	19	75
K21B100400	4.0	4	19	75
K21B100401	4.01	4	19	75
K21B100402	4.02	4	19	75
K21B100403	4.03	4	19	75
K21B100410	4.1	4	19	75
K21B100420	4.2	4	19	75
K21B100430	4.3	5	21	80
K21B100440	4.4	5	21	80
K21B100450	4.5	5	21	80
K21B100460	4.6	5	21	80
K21B100470	4.7	5	21	80
K21B100480	4.8	5	23	86
K21B100490	4.9	5	23	86
K21B100497	4.97	5	23	86
K21B100498	4.98	5	23	86
K21B100499	4.99	5	23	86
K21B100500	5.0	5	23	86
K21B100501	5.01	5	23	86
K21B100502	5.02	5	23	86
K21B100503	5.03	5	23	86
K21B100510	5.1	5	23	86
K21B100520	5.2	5	23	86
K21B100530	5.3	5	23	86
K21B100540	5.4	6	26	93
K21B100550	5.5	6	26	93
K21B100560	5.6	6	26	93
K21B100570	5.7	6	26	93
K21B100580	5.8	6	26	93
K21B100590	5.9	6	26	93
K21B100597	5.97	6	26	93
K21B100598	5.98	6	26	93
K21B100599	5.99	6	26	93
K21B100600	6.0	6	26	93
K21B100601	6.01	6	28	101
K21B100602	6.02	6	28	101
K21B100603	6.03	6	28	101



REAMERS

K21B1 SERIES

HSS-E, NC MACHINE REAMERS WITH WHOLE-NUMBER SHANK Ø

HSS-E, NC-MASCHINENREIBAHLEN mit GERADZÄHLIGEN SCHAFT Ø

► O.D. Tolerances

Whole-number Ø and 1/10 size : DIN 1420 for H7

1/100 size : from Ø2.01 to Ø5.03 : +0.004/-0.000mm
from Ø5.97 to Ø12.03 : +0.005/-0.000mm

► Shank Diameter Tolerances : h6

► LH Spiral Flutes / Right Hand Cut

► Chamfer Angle - Up to Ø3.75 : 15°
- Over Ø3.75 : 45°

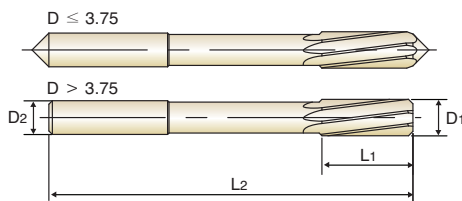
► Ø Tolerances:

ganzzahlige Ø und 1/10 Größen : DIN 1420 für H7

1/100 Größen : ab Ø2,01 bis Ø5,03 : +0.004/-0.000mm
von Ø5,97 bis Ø12,03 : +0.005/-0.000mm

► Schaft-Durchmesser Toleranzen : h6

► linksspiralig/ rechtsscheidend

► Anschnittwinkel - bis Ø3,75 : 15°
- über Ø3,75 : 45°

up to Ø3.75 over Ø3.75

1327

Hole type



Unit : mm

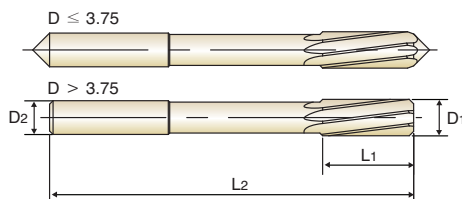
EDP No.	Nominal SIZE	Shank Diameter	Flute Length	Overall Length
	D1	D2	L1	L2
K21B100610	6.1	6	28	101
K21B100620	6.2	6	28	101
K21B100630	6.3	6	28	101
K21B100640	6.4	6	28	101
K21B100650	6.5	6	28	101
K21B100660	6.6	6	28	101
K21B100670	6.7	6	28	101
K21B100680	6.8	8	31	109
K21B100690	6.9	8	31	109
K21B100700	7.0	8	31	109
K21B100710	7.1	8	31	109
K21B100720	7.2	8	31	109
K21B100730	7.3	8	31	109
K21B100740	7.4	8	31	109
K21B100750	7.5	8	31	109
K21B100760	7.6	8	33	117
K21B100770	7.7	8	33	117
K21B100780	7.8	8	33	117
K21B100790	7.9	8	33	117
K21B100797	7.97	8	33	117
K21B100798	7.98	8	33	117
K21B100799	7.99	8	33	117
K21B100800	8.0	8	33	117
K21B100801	8.01	8	33	117
K21B100802	8.02	8	33	117
K21B100803	8.03	8	33	117
K21B100810	8.1	8	33	117
K21B100820	8.2	8	33	117
K21B100830	8.3	8	33	117
K21B100840	8.4	8	33	117
K21B100850	8.5	8	33	117
K21B100860	8.6	10	36	125
K21B100870	8.7	10	36	125
K21B100880	8.8	10	36	125
K21B100890	8.9	10	36	125
K21B100900	9.0	10	36	125

HSS-E, NC MACHINE REAMERS WITH WHOLE-NUMBER SHANK Ø

HSS-E, NC-MASCHINENREIBAHLEN mit GERADZÄHLIGEN SCHAFT Ø

- ▶ O.D. Tolerances
Whole-number Ø and 1/10 size : DIN 1420 for H7
1/100 size : from Ø2.01 to Ø5.03 : +0.004/-0.000mm
from Ø5.97 to Ø12.03 : +0.005/-0.000mm
- ▶ Shank Diameter Tolerances : h6
- ▶ LH Spiral Flutes / Right Hand Cut
- ▶ Chamfer Angle - Up to Ø3.75 : 15°
- Over Ø3.75 : 45°

- ▶ Ø Toleranzen:
ganzahlige Ø und 1/10 Größen : DIN 1420 für H7
1/100 Größen : ab Ø2,01 bis Ø5,03 : +0.004/-0.000mm
von Ø5,97 bis Ø12,03 : +0.005/-0.000mm
- ▶ Schaft-Durchmesser Toleranzen : h6
- ▶ linksspiralig/ rechtsscheidend
- ▶ Anschnittwinkel - bis Ø3,75 : 15°
- über Ø3,75 : 45°



Unit : mm

EDP No.	Nominal SIZE	Shank Diameter	Flute Length	Overall Length
	D1	D2	L1	L2
K21B100901	9.01	10	36	125
K21B100902	9.02	10	36	125
K21B100903	9.03	10	36	125
K21B100910	9.1	10	36	125
K21B100920	9.2	10	36	125
K21B100930	9.3	10	36	125
K21B100940	9.4	10	36	125
K21B100950	9.5	10	36	125
K21B100960	9.6	10	38	133
K21B100970	9.7	10	38	133
K21B100980	9.8	10	38	133
K21B100990	9.9	10	38	133
K21B100997	9.97	10	38	133
K21B100998	9.98	10	38	133
K21B100999	9.99	10	38	133
K21B101000	10.0	10	38	133
K21B101001	10.01	10	38	133
K21B101002	10.02	10	38	133
K21B101003	10.03	10	38	133
K21B101100	11.0	10	41	142
K21B101197	11.97	10	41	151
K21B101198	11.98	10	41	151
K21B101199	11.99	10	41	151
K21B101200	12.0	10	44	151
K21B101201	12.01	10	44	151
K21B101202	12.02	10	44	151
K21B101203	12.03	10	44	151
K21B101300	13.0	10	44	151
K21B101400	14.0	14	47	160
K21B101500	15.0	14	50	162
K21B101600	16.0	14	52	170
K21B101700	17.0	14	54	175
K21B101800	18.0	14	56	182
K21B101900	19.0	16	58	189
K21B102000	20.0	16	60	195



CARBIDE, NC MACHINE REAMER

VHM, NC-MASCHINENREIBAHLEN

Material	Cutting Speed (m/min.)	Feed(mm/rev.)				
		Up to Ø4	Ø4 ~ Ø8	Ø8 ~ Ø12	Ø12 ~ Ø16	Ø16 ~ Ø20
Structural and Low carbon steel	15~18	0.10~0.12	0.12~0.20	0.20~0.25	0.25~0.30	0.30~0.40
Carbon Steels < 500N/mm ²	15~18	0.10~0.12	0.12~0.20	0.20~0.25	0.25~0.30	0.30~0.40
Alloy Steels 500-1000N/mm ²	12~14	0.08~0.10	0.10~0.16	0.16~0.20	0.20~0.25	0.25~0.30
Hardened Steels ~ HRc40	10~12	0.08~0.10	0.10~0.16	0.16~0.20	0.20~0.25	0.25~0.30
Cast Iron < 200HB	15~20	0.10~0.12	0.12~0.20	0.20~0.25	0.25~0.30	0.30~0.40
> 200HB	12~15	0.10~0.12	0.12~0.20	0.20~0.25	0.25~0.30	0.30~0.40
Aluminium and Al-alloys	20~30	0.12~0.16	0.16~0.25	0.25~0.30	0.30~0.40	0.40~0.50
Magnesium alloys	20~30	0.10~0.12	0.12~0.20	0.20~0.25	0.25~0.30	0.30~0.40
Copper, Brass	20~25	0.10~0.12	0.12~0.20	0.20~0.25	0.25~0.30	0.30~0.40
Stainless Steels	6~8	0.08~0.10	0.10~0.16	0.16~0.20	0.20~0.25	0.25~0.30
Plastics	15~20	0.12~0.16	0.16~0.25	0.25~0.30	0.30~0.40	0.40~0.50

HSS-E, STRAIGHT & LH SPIRAL FLUTE CHUCKING REAMER, NC MACHINE REAMER
HSS-E, GERADEGENUTETE MASCHINENREIBAHLEN, SPIRALGENUTETE MASCHINENREIBAHLEN

Material	Cutting Speed	Feed(mm/rev.)					
	(m/min.)	Ø2 ~ Ø4	Ø4 ~ Ø8	Ø8 ~ Ø13	Ø13 ~ Ø20	Ø20 ~ Ø30	> Ø30
Steels < 500N/mm ²	12 ~ 16	0.05~0.15	0.10~0.20	0.15~0.25	0.20~0.30	0.25~0.40	0.35~0.50
Steels 500-700N/mm ²	10 ~ 12	0.05~0.15	0.10~0.20	0.15~0.25	0.20~0.30	0.25~0.40	0.35~0.50
Steels 700-800N/mm ²	6 ~ 8	0.05~0.10	0.08~0.16	0.10~0.20	0.15~0.25	0.20~0.30	0.30~0.40
Alloy Steel or Carbon Steel castings < 500N/mm ²	6 ~ 10	0.05~0.10	0.08~0.16	0.10~0.20	0.15~0.25	0.20~0.30	0.30~0.40
Alloy Steel or Carbon Steel castings > 500N/mm ²	4 ~ 6	0.05~0.10	0.08~0.16	0.10~0.20	0.15~0.25	0.20~0.30	0.30~0.40
Alloy Steel or Carbon Steel forgings	4 ~ 6	0.03~0.08	0.06~0.10	0.08~0.15	0.10~0.20	0.15~0.25	0.20~0.30
Cast Iron < 200HB	12 ~ 14	0.05~0.15	0.10~0.20	0.15~0.25	0.20~0.30	0.25~0.40	0.35~0.50
Cast Iron > 200HB	10 ~ 12	0.05~0.10	0.08~0.16	0.10~0.20	0.15~0.25	0.20~0.30	0.30~0.40
Aluminum or Aluminum Alloy	16 ~ 20	0.10~0.20	0.15~0.25	0.20~0.30	0.25~0.40	0.35~0.50	0.40~0.60
Magnesium or Magnesium Alloy	10 ~ 16	0.10~0.20	0.15~0.25	0.20~0.30	0.25~0.40	0.35~0.50	0.40~0.60
Copper, Brass	16 ~ 18	0.10~0.20	0.15~0.25	0.20~0.30	0.25~0.40	0.35~0.50	0.40~0.60
Stainless Steels	4 ~ 6	0.03~0.08	0.06~0.10	0.08~0.15	0.10~0.20	0.15~0.25	0.20~0.30
Plastics	8 ~ 12	0.10~0.20	0.20~0.30	0.30~0.40	0.40~0.50	0.50~0.60	0.60~0.80

HSS-E, CHUCKING REAMER-QUICK SPIRAL
HSS-E, MASCHINEN - SCHÄLREIBAHLEN

Material	Cutting Speed	Feed(mm/rev.)			
	(m/min.)	Ø2 ~ Ø4	Ø4 ~ Ø8	Ø8 ~ Ø13	Ø13 ~ Ø20
Steels < 500N/mm ²	16 ~ 18	0.08~0.16	0.16~0.25	0.20~0.30	0.30~0.40
Steels 500-700N/mm ²	14 ~ 16	0.08~0.16	0.16~0.25	0.20~0.30	0.30~0.40
Aluminum or Aluminum Alloy	18 ~ 22	0.10~0.20	0.20~0.30	0.30~0.40	0.40~0.60
Magnesium or Magnesium Alloy	10 ~ 16	0.08~0.16	0.16~0.25	0.20~0.30	0.30~0.40
Copper, Brass	16 ~ 20	0.08~0.16	0.16~0.25	0.20~0.30	0.30~0.40
Plastics	12 ~ 14	0.10~0.20	0.20~0.30	0.30~0.40	0.40~0.60