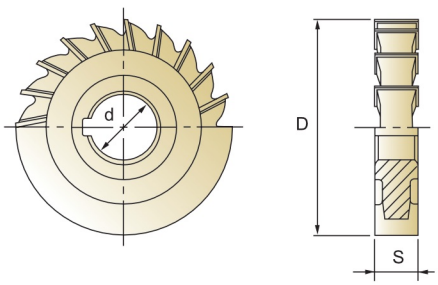
HSS-E, SIDE AND FACE MILLING CUTTERS with STRAIGHT TEETH

HSS-E, SCHEIBENFRÄSER MIT GERADEVERZAHNT
FRAISE HSS-E 3 TAILLES, DENTURE DROITE
FRESE A DISCO A TRE TAGLI - DENTI DRITTI

▶ The tools are used for general purpose side and straddle milling where deep cut is not required.

▶ Diese Werkzeuge werden bei allgemeinen Seiten-und Breitfräsen eingesetzt, wo Tiefschnitte nicht vorkommen.



HSS-E | DIN 885-B | H | UNCOATED

p.C796

Unit : mm

EDP No.	Cutter Diameter D_1(js14)	Width of Face S(k11)	Internal Diameter d(H7)	No. of Teeth Z
ML09205001	**50.0**	4	16	18
ML09205002	**50.0**	5	16	18
ML09205003	**50.0**	6	16	18
ML09205004	**50.0**	8	16	16
ML09205005	**50.0**	10	16	16
ML09206301	**63.0**	5	22	22
ML09206302	**63.0**	6	22	22
ML09206303	**63.0**	8	22	20
ML09206304	**63.0**	10	22	20
ML09206305	**63.0**	12	22	20
ML09208001	**80.0**	6	22	24
ML09208002	**80.0**	8	22	24
ML09208003	**80.0**	10	22	24
ML09208004	**80.0**	12	22	20
ML09208005	**80.0**	6	27	24
ML09208006	**80.0**	8	27	24
ML09208007	**80.0**	10	27	24
ML09208008	**80.0**	12	27	20
ML09210001	**100.0**	6	27	26
ML09210002	**100.0**	8	27	26

Tolerances according to DIN 7160 & 7161

	Nominal-Diameter in mm							
	over 3 to 6	over 6 to 10	over 10 to 18	over 18 to 30	over 30 to 50	over 50 to 80	over 80 to 120	over 120 to 180
	Tolerance range in mm							
js14	± 0.15	± 0.18	± 0.215	± 0.26	± 0.31	± 0.37	± 0.435	± 0.50
	Tolerance range in μm							
k11	+ 75 0	+ 90 0	+ 110 0	+ 130 0	+ 160 0	+ 190 0	+ 220 0	+ 250 0
H7	+ 12 0	+ 15 0	+ 18 0	+ 21 0	+ 25 0	+ 30 0	+ 35 0	+ 40 0

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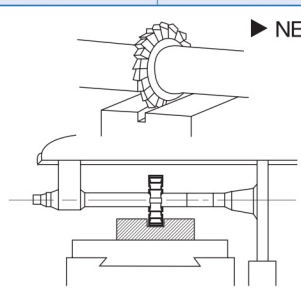

◎ : Excellent ○ : Good

ISO	P											M			K					
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	○	◎	○									

ISO	N										S							H			
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	○	○	○	○	○																

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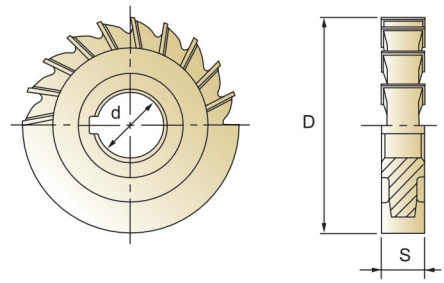

HSS-E | DIN 885-B | H | UNCOATED

p.C796

Unit : mm

EDP No.	Cutter Diameter	Width of Face	Internal Diameter	No. of Teeth
	D_1(js14)	S(k11)	d(H7)	Z
ML09210003	**100.0**	10	27	22
ML09210004	**100.0**	6	32	26
ML09210005	**100.0**	8	32	26
ML09210006	**100.0**	10	32	22
ML09210007	**100.0**	12	32	22
ML09212501	**125.0**	8	32	30
ML09212502	**125.0**	10	32	30
ML09212503	**125.0**	12	32	24

Tolerances according to DIN 7160 & 7161

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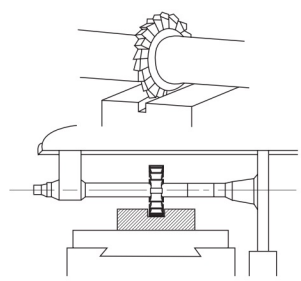
	Tolerance range in mm							
js14	± 0.15	± 0.18	± 0.215	± 0.26	± 0.31	± 0.37	± 0.435	± 0.50
	Tolerance range in μm							
k11	+ 75 0	+ 90 0	+ 110 0	+ 130 0	+ 160 0	+ 190 0	+ 220 0	+ 250 0
H7	+ 12 0	+ 15 0	+ 18 0	+ 21 0	+ 25 0	+ 30 0	+ 35 0	+ 40 0



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Recommended	○	○	○	○	○																