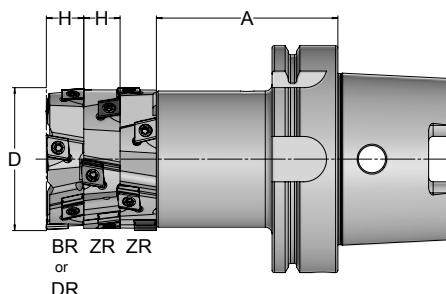


MULTIRING EM90



Modular disc design
 Custom cutting lengths up to 2.5 x D
 Dual positive/negative helix reduces the axial impact of tractive and compressive forces



Tool holders EM90

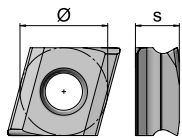
D	SK60 DIN69871	A	kg	SK50 DIN69871	A	kg	HSK-A100	A	kg
63	-	-	-	09A.5063.008	49	3.21	09E.1063.1080	80	3.11
63	-	-	-	09A.5063.031	100	4.30	-	-	-
63	-	-	-	09A.5063.021	150	5.36	-	-	-
80	-	-	-	09A.5080.006	49	3.56	09E.1080.1080	80	3.77
80	-	-	-	09A.5080.025	100	5.35	-	-	-
100	-	-	-	09A.5010.002	49	3.75	09E.1010.1100	110	6.20
100	09A.6010.002	75	11.11	09A.5010.023	100	5.45	-	-	-

Intermediate rings ZR | bottom rings BR | double cutting rings DR EM90

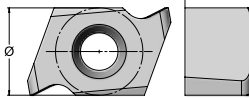
D	ZR Article	H	Z _{eff}	BR Article	H	Z _{eff}	INS Article	Qty.	DR Article	H	Z _{eff}	INS Article	Qty.	Weight per ring in kg
63	12E.6317.001	16	3	12E.6317.002	16.5	3	ENHQ090400.R	3	12E.6322.002	22	3	ENHQ090400.R	3	< 0.5
							ENHQ090408.L	3				ENHQ120610.L	3	
												LNEX200710.R	3	
80	12E.8023.001	22	3	12E.8023.002	23.2	3	ENHQ120600.R	3	12E.8025.002	25	3	ENHQ120600.R	3	< 1.0
							ENHQ120610.L	3				ENHQ120610.L	3	
												LNEX200710.R	3	
100	12E.1023.003	22	4	12E.1023.004	23.2	4	ENHQ120600.R	4	12E.1026.001	26.7	4	ENHQ120600.R	4	< 1.5
							ENHQ120610.L	4				ENHQ120610.L	4	
												LNEX250625.R	4	

Other dimensions upon request

INS SHAPE EN | LN



EN				
AS	Ø		s	
4	09	12	04	06
	9.52	12.7	4.76	6.35



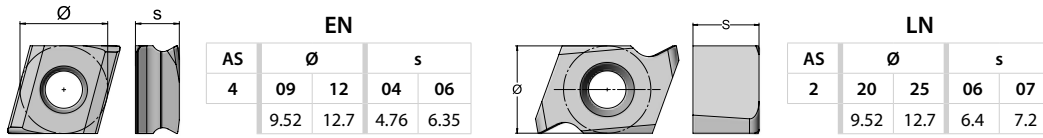
LN				
AS	Ø		s	
2	20	25	06	07
	9.52	12.7	6.4	7.2

Matching of machining parameters
with the AV material groups

Article	Designation	Recomm. a_e $0.2 \times D$	Steel							
			A22	A21	A20	A19	A18	A17	A16	
EN..0904..	EN.0904.017.26 SKY77	ENHQ 090408 SL-28V	h_{max}	0.17	0.17	0.17	0.15	0.14	0.12	-
		v_c	200-280	190-230	180-220	160-210	140-180	110-140	-	
	EN.0904.016.25 SKY77	ENHQ 090400 SR-28V	h_{max}	0.17	0.17	0.17	0.15	0.14	0.12	-
		v_c	200-280	190-230	180-220	160-210	140-180	110-140	-	
	EN.0904.003.54 SKY77	ENHQ 090408 SL-30	h_{max}	-	-	-	-	0.12	0.11	0.10
		v_c	-	-	-	-	140-180	110-140	80-110	
	EN.0904.002.55 SKY77	ENHQ 090400 SR-30	h_{max}	-	-	-	-	0.12	0.11	0.10
		v_c	-	-	-	-	140-180	110-140	80-110	
EN..1206..	EN.1206.027.18 SKY77	ENHQ 120610 SL-25V	h_{max}	0.23	0.21	0.20	0.18	0.16	-	-
		v_c	200-280	190-230	180-220	160-210	140-180	-	-	
	EN.1206.026.19 SKY77	ENHQ 120600 SR-25V	h_{max}	0.23	0.21	0.20	0.18	0.16	-	-
		v_c	200-280	190-230	180-220	160-210	140-180	-	-	
	EN.1206.029.13 SKY77	ENHQ 120610 SL-28W	h_{max}	0.20	0.20	0.18	0.16	0.14	0.12	-
		v_c	200-280	190-230	180-220	160-210	140-180	110-140	-	
	EN.1206.026.20 SKY77	ENHQ 120600 SR-28V	h_{max}	0.20	0.20	0.18	0.16	0.14	0.12	-
		v_c	200-280	190-230	180-220	160-210	140-180	110-140	-	
	EN.1206.003.52 SKY77	ENHQ 120610 SL-28	h_{max}	0.20	0.20	0.18	0.16	0.14	0.12	-
		v_c	200-280	190-230	180-220	160-210	140-180	110-140	-	
	EN.1206.002.53 SKY77	ENHQ 120600 SR-28	h_{max}	0.20	0.20	0.18	0.16	0.14	0.12	-
		v_c	200-280	190-230	180-220	160-210	140-180	110-140	-	
	EN.1206.003.54 SKY77	ENHQ 120610 SL-30	h_{max}	-	-	-	-	0.12	0.11	0.10
		v_c	-	-	-	-	140-180	110-140	80-110	
EN.1206.002.55 SKY77	ENHQ 120600 SR-30	h_{max}	-	-	-	-	0.12	0.11	0.10	
	v_c	-	-	-	-	140-180	110-140	80-110		
LN..2007..	LN.2007.009.03 SKY77	LNEX 200710 TR-25	h_{max}	0.23	0.21	0.20	0.18	0.16	0.14	-
		v_c	200-280	190-230	180-220	160-210	140-180	110-140	-	
LN..2506..	LN.2506.004.05 SKY77	LNEX 250625 TR-25	h_{max}	0.23	0.21	0.20	0.18	0.16	0.14	-
		v_c	200-280	190-230	180-220	160-210	140-180	110-140	-	

Parameters vibration-/surface-dependent

INS SHAPE EN | LN

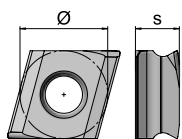


Matching of machining parameters with the AV material groups

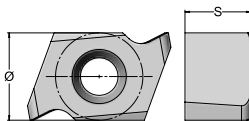
Article	Designation	Recomm. a_e 0.2 x D	Cast iron						
			D21	D20	D19	D18	D17	D16	
EN..0904..	EN.0904.017.26 SKY77 ENHQ 090408 SL-28V	h_{max}	0.18	0.18	0.16	0.14	0.11	0.10	
		v_c	200-280	200-260	180-230	170-210	160-190	140-180	
	EN.0904.017.26 NERO26 ENHQ 090408 SL-28V	h_{max}	0.18	0.18	0.16	0.14	0.11	0.10	
		v_c	240-300	240-300	220-260	200-240	180-210	140-180	
EN..0904..	EN.0904.016.25 SKY77 ENHQ 090400 SR-28V	h_{max}	0.18	0.18	0.16	0.14	0.11	0.10	
		v_c	200-280	200-260	180-230	170-210	160-190	140-180	
	EN.0904.016.25 NERO26 ENHQ 090400 SR-28V	h_{max}	0.18	0.18	0.16	0.14	0.11	0.10	
		v_c	240-300	240-300	220-260	200-240	180-210	140-180	
EN..1206..	EN.1206.027.18 SKY77 ENHQ 120610 SL-25V	h_{max}	0.25	0.25	0.23	0.20	0.18	0.16	
		v_c	200-280	200-260	180-230	170-210	160-190	140-180	
	EN.1206.027.18 NERO26 ENHQ 120610 SL-25V	h_{max}	0.25	0.25	0.23	0.20	0.18	0.16	
		v_c	240-300	240-300	220-260	200-240	180-210	140-180	
	EN.1206.026.19 SKY77 ENHQ 120600 SR-25V	h_{max}	0.25	0.25	0.23	0.20	0.18	0.16	
		v_c	200-280	200-260	180-230	170-210	160-190	140-180	
	EN.1206.026.19 NERO26 ENHQ 120600 SR-25V	h_{max}	0.25	0.25	0.23	0.20	0.18	0.16	
		v_c	240-300	240-300	220-260	200-240	180-210	140-180	
	EN..1206..	EN.1206.029.13 SKY77 ENHQ 120610 SL-28W	h_{max}	0.23	0.23	0.20	0.18	0.16	0.14
			v_c	200-280	200-260	180-230	170-210	160-190	140-180
		EN.1206.029.13 NERO26 ENHQ 120610 SL-28W	h_{max}	0.23	0.23	0.20	0.18	0.16	0.14
	v_c		240-300	240-300	220-260	200-240	180-210	140-180	
	EN..1206..	EN.1206.026.20 SKY77 ENHQ 120600 SR-28V	h_{max}	0.23	0.23	0.20	0.18	0.16	0.14
			v_c	200-280	200-260	180-230	170-210	160-190	140-180
		EN.1206.026.20 NERO26 ENHQ 120600 SR-28V	h_{max}	0.23	0.23	0.20	0.18	0.16	0.14
			v_c	240-300	240-300	220-260	200-240	180-210	140-180
EN..1206..	EN.1206.003.52 SKY77 ENHQ 120610 SL-28	h_{max}	0.23	0.23	0.20	0.18	0.16	0.14	
		v_c	200-280	200-260	180-230	170-210	160-190	140-180	
	EN.1206.002.53 SKY77 ENHQ 120600 SR-28	h_{max}	0.23	0.23	0.20	0.18	0.16	0.14	
		v_c	200-280	200-260	180-230	170-210	160-190	140-180	

Parameters vibration-/surface-dependent

INS SHAPE EN | LN



EN				
AS	Ø		s	
4	09	12	04	06
	9.52	12.7	4.76	6.35



LN				
AS	Ø		s	
2	20	25	06	07
	9.52	12.7	6.4	7.2

Matching of machining parameters
with the AV material groups

	Article	Designation	Recomm. a_e $0.2 \times D$	Cast iron					
				D21	D20	D19	D18	D17	D16
LN..2007..	LN.2007.009.03 SKY77	LNEX 200710 TR-25	h_{max}	0.25	0.25	0.23	0.20	0.18	0.16
			v_c	200-280	200-260	180-230	170-210	160-190	140-180
LN..2506..	LN.2506.004.05 SKY77	LNEX 250625 TR-25	h_{max}	0.25	0.25	0.23	0.20	0.18	0.16
			v_c	200-280	200-260	180-230	170-210	160-190	140-180

Parameters vibration-/surface-dependent

INS



EN..0904...	08B.3511.7991	TX215
EN..1206...	08B.0513.7991	TX220
LN..2007...	08B.3511.7991	TX215
LN..2506...	08B.4511.7991	TX220