

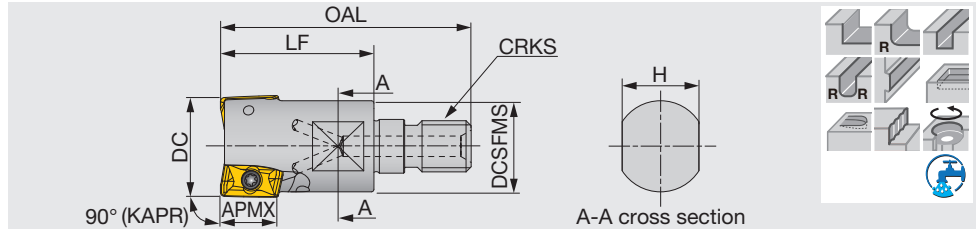


TUNGREC

HPO11-M

High precision square shoulder endmill, modular type, for ASMT/ASGT11 inserts (TungFlex)

GAMP = +8.7° ~ +18°, GAMF = -5.3° ~ -19.4°

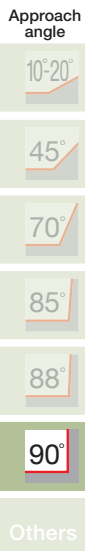


Designation1	APMX	DC	CICT	OAL	LF	H	DCSFMS	CRKS	WT(kg)	Air hole	Insert
HPO11R020MM10-02	10.6	20	2	49	30	15	17.8	M10	0.06	With	AS*T11T3...
HPO11R025MM12-03	10.6	25	3	57	35	17	20.8	M12	0.1	With	AS*T11T3...
HPO11R032MM16-03	10.6	32	3	63	40	22	28.8	M16	0.2	With	AS*T11T3...

SPARE PARTS

Designation	Clamping screw	Lubricant	Wrench
HPO11R020MM10-02	CSPB-2.5S	M-1000	IP-8D
HPO11R025, 032...	CSPB-2.5	M-1000	IP-8D

*Recommended clamping torque (N·m) : CSPB-2.5/CSPB-2.5S=1.3

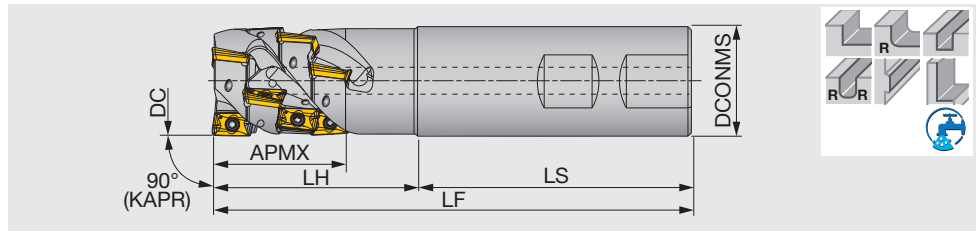


TUNGREC

ELS11

High efficiency roughing endmill, shank type, for ASMT/ASGT11 inserts

GAMP = +8.7° ~ +18°, GAMF = -5.3° ~ -19.4°



Designation	APMX	DC	ZEFP	CICT	DCONMS	LS	LH	LF	WT(kg)	Air hole	Insert
ELS11R025M25.0W02	30.4	25	2	6	25	80	40	120	0.4	With	AS*T11T3...
ELS11R032M32.0W03	39.4	32	3	12	32	80	60	140	0.8	With	AS*T11T3...
ELS11R040M42.0W03	40	40	3	12	42	90	60	150	1.4	With	AS*T11T3...

SPARE PARTS

Designation	Clamping screw	Lubricant	Wrench
ELS11...	CSPB-2.5	M-1000	IP-8D

*Recommended clamping torque (N·m) : CSPB-2.5=1.3

Reference pages: Inserts → [H149](#), Standard cutting conditions → [H150 - H151](#), Tung Flex → [H210](#)