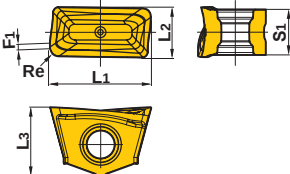
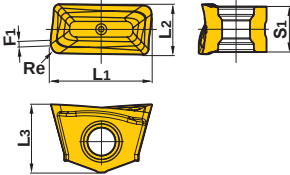
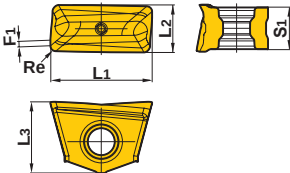


INSERTS

Shape	Order Number	Stock			Dimensions (mm)						Geometry
		Coated			L1	L2	L3	S1	F1	Re	
		MP9030	MP9130								
	XNMU190912R-MS	●			19.1	9.5	12.7	8.5	1.0	1.2	
	190916R-MS	●			19.1	9.5	12.7	8.5	1.0	1.6	
	190924R-MS	●			19.1	9.5	12.7	8.5	1.0	2.4	
	*1 190932R-MS	●			20.2	9.5	12.7	8.5	—	3.2	
	*1 190940R-MS	●			21.8	9.5	12.7	8.5	—	4.0	
	*1 190950R-MS	●			21.8	9.5	12.7	8.5	—	5.0	
	XNMU190912R-HS	●			19.1	9.5	12.7	8.5	1.0	1.2	
	XNMU190912R-LS	●			19.1	9.5	12.7	8.5	1.0	1.2	

★1 Note for insert with a corner radius of 3.2 and above, as corner radius increases the L1 dimension increases.

Corner radius 3.2: L1+0.7mm Corner radius 4.0: L1+1.5mm Corner radius 5.0: L1+1.5mm



RECOMMENDED CUTTING CONDITIONS

VFX6

Work Material	Cutting Edge Diameter (mm)	Number of Flutes	Recommended Insert	vc (m/min)	n (min ⁻¹)	apmax (mm)	ae (mm)	fz (mm/tooth)	vf (mm/min)	Q (cm ³ /min)	Pc (kW)	Expected Torque (Nm)	TL (%)
S Titanium Alloy (Ti-Al-4V)	φ63	4	LS	40	202	60	63	0.10	81	306	13.4	634	40
		4	MS	50	253	60	38	0.10	101	229	9.5	357	60
		4	MS	60	303	60	25	0.10	121	183	7.2	228	80
		4	HS	60	303	60	13	0.12	146	110	4.7	148	100
	φ80	5	LS	40	159	75	80	0.10	80	477	20.8	1250	40
		5	MS	50	199	75	48	0.10	99	358	14.7	705	60
		5	MS	60	239	75	32	0.10	119	286	11.2	449	80
		5	HS	60	239	75	16	0.12	143	172	7.3	291	100
	φ100	6	LS	40	127	90	100	0.10	76	688	29.6	2218	40
		6	MS	50	159	90	60	0.10	95	516	20.9	1252	60
		6	MS	60	191	90	40	0.10	115	413	16.0	798	80
		6	HS	60	191	90	20	0.12	138	248	10.3	517	100
Titanium Alloy (Ti-5Al-5V-5Mo-3Cr)	φ63	4	LS	25	126	60	63	0.08	40	153	7.0	527	30
		4	MS	25	126	60	38	0.08	40	92	4.0	303	50
		4	MS	30	152	60	25	0.10	61	92	3.8	241	70
		4	HS	30	152	60	13	0.10	61	46	2.1	133	80
	φ80	5	LS	25	99	75	80	0.08	40	239	10.8	1038	30
		5	MS	25	99	75	48	0.08	40	143	6.2	597	50
		5	MS	30	119	75	32	0.10	60	143	5.9	475	70
		5	HS	30	119	75	16	0.10	60	72	3.3	263	80
	φ100	6	LS	25	80	90	100	0.08	38	344	15.3	1841	30
		6	MS	25	80	90	60	0.08	38	206	8.8	1059	50
		6	MS	30	95	90	40	0.10	57	206	8.4	844	70
		6	HS	30	95	90	20	0.10	57	103	4.7	466	80

★1 Please note that machining performance differs according to conditions such as the rigidity of the machinery used, workpiece clamping rigidity, the coolant supply system pressure and flow.

★2 Internal coolant is recommended. For the tool holder, use an FMH arbor with a through coolant system. Use with external lubricating coolant is also effective.

★3 TL: Based on ae= outer diameter x 20%

★4 Maximum depth of cut, ap should be changed depending on machine rigidity and power.

● : Inventory maintained.

SPARE PARTS > M001
TECHNICAL DATA > N001