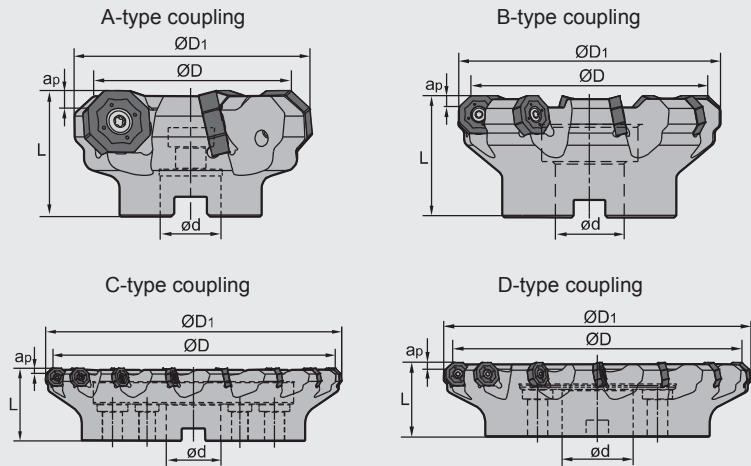


## Face milling tools

Kr:45°



**FMA07** **P** **M** **K**



### Specification of tools

Type	Stock		Basic dimensions(mm)					Number of teeth Z	Style of coupling	Weight (kg)
	R	L	ØD	ØD <sub>1</sub>	Ød	L	a <sub>pmax</sub>			
<b>FMA07</b> -050-A22-ON06-05	▲	△	50	62	22	40	4	5	A	0.3
-063-A22-ON06-06	▲	△	63	75	22	40	4	6	A	0.5
-080-B27-ON06-07	▲	△	80	92	27	50	4	7	B	1.0
-100-B32-ON06-08	▲	△	100	112	32	63	4	8	B	1.9
-125-B40-ON06-09	▲	△	125	137	40	63	4	9	B	3.5
-160-C40-ON06-11	▲	△	160	172	40	63	4	11	C	4.3
-200-C60-ON06-13	▲	△	200	212	60	63	4	13	C	6.4
-250-C60-ON06-15	▲	△	250	262	60	63	4	15	C	13.4
-315-D60-ON06-17	▲	△	315	327	60	80	4	17	D	21.9
-063-A22-ON08-05	▲	△	63	78	22	40	5	5	A	0.5
-080-B27-ON08-06	▲	△	80	95	27	50	5	6	B	0.9
-100-B32-ON08-07	▲	△	100	115	32	63	5	7	B	1.8
-125-B40-ON08-08	▲	△	125	140	40	63	5	8	B	3.1
-160-C40-ON08-10	▲	△	160	175	40	63	5	10	C	4.1
-200-C60-ON08-12	▲	△	200	215	60	63	5	12	C	6.1
-250-C60-ON08-14	▲	△	250	265	60	63	5	14	C	12.0
-315-D60-ON08-16	▲	△	315	330	60	80	5	16	D	21.0

▲Stock available    △Make-to-order

### Spare parts

Diameter ØD	Inserts	Insert screw	Wrench	
Ø50 -Ø315	ONHU06□□□□-PF/PM/W	I60M4×10	--	WT15IS
Ø63 -Ø315	ONHU08□□□□-PF/PM/W	I60M5×13	WT20IT	--

Tools code key  
B24-B25

Grade selection guide  
B19-B23

Technical data  
B210-B216

Indexable milling tools

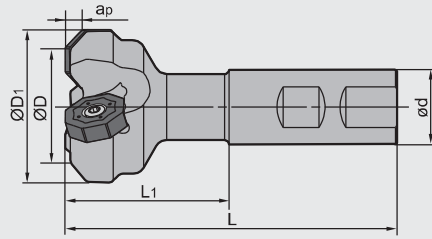
Face milling tools

### Face milling tools

Kr:45°



**FMA07** P M K



#### Specification of tools

Type	Stock		Basic dimensions(mm)						Number of teeth Z	Weight (kg)
	R	L	ØD	ØD <sub>1</sub>	Ød	L	L <sub>1</sub>	a <sub>pmax</sub>		
<b>FMA07</b> -025-XP20-ON06-02	▲	△	25	37	20	95	45	4	2	0.2
-040-XP25-ON06-03	▲	△	40	52	25	106	50	4	3	0.4
-032-XP25-ON08-02	▲	△	32	47	25	111	55	5	2	0.4
-040-XP25-ON08-03	▲	△	40	55	25	111	55	5	3	0.5
-050-XP25-ON08-04	▲	△	50	65	25	111	55	5	4	0.6

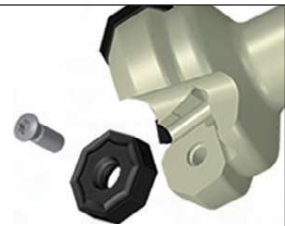
▲ Stock available    △ Make-to-order

Indexable milling tools

Face milling tools

#### Spare parts

Diameter ØD	Inserts	Insert screw	Wrench	
Ø25 - Ø40	ONHU06□□□□-PF/PM/W	I60M4×10	--	WT15IS
Ø32 - Ø50	ONHU08□□□□-PF/PM/W	I60M5×13	WT20IT	--



Tools code key

B24-B25

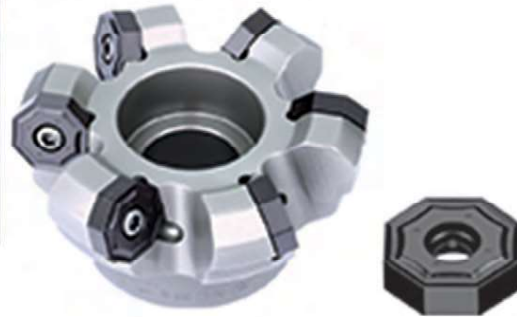
Grade selection guide

B19-B23

Technical data

B210-B216

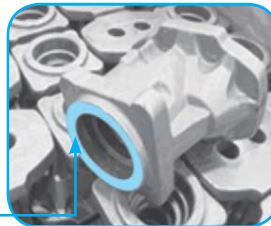
Case for FMA07



Tool type: FMA07-100-B32-ON08-07

Insert type/grade: ONHU08T508-PM/YBD152

Part: Gear pump body  
 Workpiece material: HT400  
 Hardness: HRC22  
 Cooling system: Dry cutting  
 Machine: Vertical machining center  
 Cutting parameters:  $V_c=267\text{m/min}$   
 $a_p=1.5\text{mm}$   
 $f_z=0.42\text{mm/z}$   
 $a_e=80\text{mm}$   
 Milling style: Down milling  
 Area of machining: End surface



Indexable milling tools

Face milling tools

● Comparison of insert abrasion

Abrasion on rake face



ZCC-CT



similar product of company A

Abrasion on clearance face



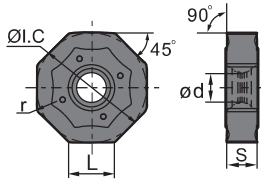
ZCC-CT



similar product of company A

# B MILLING Indexable Milling Tools

## Selection of inserts



😊 Good working condition    😊 Normal working condition    😞 Bad working condition

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Non-ferrous metal	S Heat resistant alloy, Ti alloy
P Steel	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
M Stainless steel	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
K Cast iron	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
N Non-ferrous metal	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
S Heat resistant alloy, Ti alloy	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊

Insert shape	Type	Basic dimensions(mm)					CVD Coating					PVD Coating				Cermet		Cemented carbide								
		L	ØI.C	S	ød	r	YBC301	YBC302	YBM251	YBM253	YBM351	YBD152	YBD252	YBG102	YBG202	YBG205	YBG302	YBG152	YBG252	YNG151	YNG151C	YC30S	YD051	YD101	YD201	
	ONHU060408-PF	6.58	15.875	4.76	4.4	0.83	★					★														
	ONHU08T508-PF	8.37	20.2	5.77	5.3	0.83	★				★															
	ONHU060408-PM	6.58	15.875	4.76	4.4	0.83	★		★		★															
	ONHU08T508-PM	8.37	20.2	5.79	5.3	0.83	★		★		★															
	ONHU08T5-W	6.9	20.5	6.00	5.3		★				★		★	★												

★ Recommended grade (always stock available)    ● Available grade (always stock available)    ○ Make-to-order

Indexable milling tools

Face milling tools

## Recommended cutting parameters

Workpiece material	Hardness HB	Insert grade	Cutting parameters				
			Vc(m/min)	fz(mm/z)	apmax(mm)		
					ONHU06□□□□-PF/PM	ONHU08□□□□-PF/PM/W	
<b>P</b> Low-carbon steel, Soft steel	≤ 180	YBG102 YBM253 YBG202 YBC302 YBG205	270 (220-350)	0.2 (0.1-0.4)	4	5	
		YBG102 YBM253 YBG202 YBC302 YBG205	260 (200-320)	0.2 (0.1-0.4)	4	5	
		YBG102 YBM253 YBG202 YBC302 YBG205	240 (180-300)	0.2 (0.1-0.4)	4	5	
<b>M</b> Stainless steel	≤ 270	YBM253 YBG205	230(180-300)	0.2(0.1-0.3)	4	5	
<b>K</b> Cast iron	180-250	YBD152	270 (150-300)	0.4 (0.1-0.5)	4	5	

Note: The recommended feed rate per tooth for inserts with wiper fz ≤ 0.25mm/z.