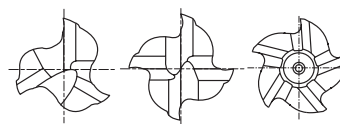


PREMIUM HSS-PM, MULTI FLUTE SHORT LENGTH ROUGHING - COARSE
PREMIUM HSS-PM, MULTI SCHNEIDEN KURZ SCHRUPFRÄSER - GROB

- ▶ Suitable for high-feed roughing milling.
- ▶ Designed to machine carbon steels, alloyed steels, stainless steels.
- ▶ YG-1's new developed TANK-POWER Coating suitable for high speed cutting.
- ▶ up to $\varnothing 20$: center cut, over $\varnothing 20$: non center cut
- ▶ Geeignet zum HSC - Schrupp - Fräsen.
- ▶ Geeignet zum Fräsen von Stahl, legiertem Stahl und rostfreier Stahl.
- ▶ Neuentwickelte Beschichtung für Hochgeschwindigkeitsfräsen.
- ▶ Bis $D \leq 20\text{mm}$: mit Zentrumschnitt, über $D > 20\text{mm}$: Ohne Zentrumschnitt.



up to $\varnothing 9$ $\varnothing 10 \sim \varnothing 20$ over $\varnothing 20$

YPM DIN 844 COARSE 3-5 30° DIN 1835B $\sim \varnothing 20$ $\varnothing 22 \sim$ P.894

Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute
UNCOATED	TANK-POWER COATED	js12	h6			
E9A33060	GAA33060	6.0	6	13	57	3
E9A33070	GAA33070	7.0	10	16	66	3
E9A33080	GAA33080	8.0	10	19	69	3
E9A33090	GAA33090	9.0	10	19	69	3
E9A33100	GAA33100	10.0	10	22	72	4
E9A33120	GAA33120	12.0	12	26	83	4
E9A33140	GAA33140	14.0	12	26	83	4
E9A33160	GAA33160	16.0	16	32	92	4
E9A33180	GAA33180	18.0	16	32	92	4
E9A33200	GAA33200	20.0	20	38	104	4
E9A33220	GAA33220	22.0	20	38	104	5
E9A33250	GAA33250	25.0	25	45	121	5

Tolerances according to DIN 7160 & 7161
Toleranzen nach DIN 7160 & 7161

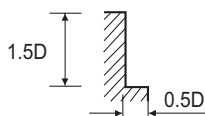
Tolerance range in μm / Toleranzwerte in μm						
Nominal-Diameter in mm / Nennmaßbereich in mm						
	from 1 to 3 von 1 bis 3	over 3 to 6 über 3 bis 6	over 6 to 10 über 6 bis 10	over 10 to 18 über 10 bis 18	over 18 to 30 über 18 bis 30	over 30 to 50 über 30 bis 50
js12	± 50	± 60	± 75	± 90	± 105	± 125
h6	$\begin{matrix} 0 \\ -6 \end{matrix}$	$\begin{matrix} 0 \\ -8 \end{matrix}$	$\begin{matrix} 0 \\ -9 \end{matrix}$	$\begin{matrix} 0 \\ -11 \end{matrix}$	$\begin{matrix} 0 \\ -13 \end{matrix}$	$\begin{matrix} 0 \\ -16 \end{matrix}$

◎ : Excellent ○ : Good

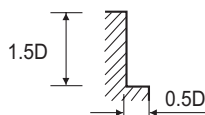
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRC30~40	HRc40~45	HRc45~55	HRc55~70							
◎	◎	○				○		◎				

**PREMIUM HSS-PM, MULTI FLUTE ROUGHING - SIDE CUTTING
PREMIUM HSS-PM, MULTI SCHNEIDEN SCHRUPFRÄSER - SEITENFRÄSEN****GA941, GAA35, GAA33, GAA34, GAA26 SERIES**

MATERIAL	STRUCTURAL STEELS CARBON STEELS		STRUCTURAL STEELS CARBON STEELS CAST IRONS		CARBON STEELS ALLOY STEELS TOOL STEELS		PREHARDENED STEELS ALLOY STEELS TOOL STEELS	
HARDNESS			~ HRc20		HRc20 ~ HRc30		HRc30 ~ HRc40	
STRENGTH	~ 500N/mm ²		500 ~ 800N/mm ²		800 ~ 1000N/mm ²		1000 ~ 1300N/mm ²	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
6.0	2800	230	2200	180	1600	115	1300	105
8.0	2400	290	1900	230	1400	160	1050	125
10.0	1900	415	1500	315	1050	195	890	160
12.0	1600	415	1200	330	900	230	740	180
14.0	1400	415	1050	330	760	230	630	180
16.0	1200	415	950	330	660	230	550	180
18.0	1050	415	890	330	610	230	490	180
20.0	960	425	760	330	530	230	440	180
22.0	890	425	650	330	470	230	400	180
25.0	790	415	600	315	420	220	360	180

RPM = rev./min.
FEED = mm/min.**PREMIUM HSS-PM, MULTI FLUTE ROUGHING - SIDE CUTTING
PREMIUM HSS-PM, MULTI SCHNEIDEN SCHRUPFRÄSER - SEITENFRÄSEN****E9941, E9A35, E9A33, E9A34, E9A26 SERIES**

MATERIAL	STRUCTURAL STEELS CARBON STEELS		STRUCTURAL STEELS CARBON STEELS CAST IRONS		CARBON STEELS ALLOY STEELS TOOL STEELS		PREHARDENED STEELS ALLOY STEELS TOOL STEELS	
HARDNESS			~ HRc20		HRc20 ~ HRc30		HRc30 ~ HRc40	
STRENGTH	~ 500N/mm ²		500 ~ 800N/mm ²		800 ~ 1000N/mm ²		1000 ~ 1300N/mm ²	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
6.0	1900	140	1500	110	1050	70	900	65
8.0	1600	180	1300	140	900	100	740	80
10.0	1300	260	1000	195	710	125	600	100
12.0	1100	260	820	205	600	140	500	110
14.0	930	260	710	205	510	140	430	110
16.0	820	260	640	205	450	140	370	110
18.0	710	260	610	205	410	140	330	110
20.0	660	265	510	205	360	140	300	110
22.0	610	265	440	205	320	140	270	110
25.0	540	260	400	195	280	135	240	110

RPM = rev./min.
FEED = mm/min.