



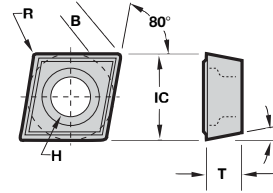
TOOL FLO



**PRO
FLING**

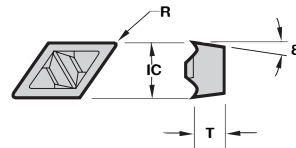


BORNING SMALL DIAMETER CPGM



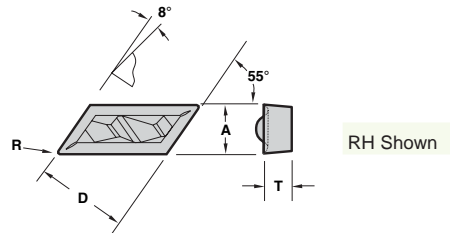
Insert Description	IC	R	T	B	H	TIN Coated		AITIN Coated	
						GP25	GP50	AT25	AT50
CPGM-21.50	.250	.004	.094	.0672	.110	●	●	●	●
CPGM-21.505	.250	.008	.094	.0650	.110	●	●	●	●
CPGM-21.51	.250	.015	.094	.0607	.110	●	●	●	●
CPGM-21.52	.250	.031	.094	.0521	.110	●	●	●	●
CPGM-32.50	.375	.004	.156	.1020	.173	●	●	●	●
CPGM-32.505	.375	.008	.156	.0998	.173	●	●	●	●
CPGM-32.51	.375	.015	.156	.0855	.173	●	●	●	●
CPGM-32.52	.375	.031	.156	.0868	.173	●	●	●	●

55° DIAMOND PROFILING DPGR



Insert Description	D	T	R	TIN Coated		AITIN Coated	
				GP25	GP50	AT25	AT50
DPGR-432	.500	.187	.031	●	●	●	●

55° PARALLELOGRAM PROFILING FLPGL/R



Insert Description	D	T	A	R	TIN Coated		AITIN Coated	
					GP25	GP50	AT25	AT50
FLPGL-51	.375	.125	.250	.015	●	●	●	●
FLPGR-51	.375	.125	.250	.015	●	●	●	●
FLPGL-52	.375	.125	.250	.031	●	●	●	●
FLPGR-52	.375	.125	.250	.031	●	●	●	●

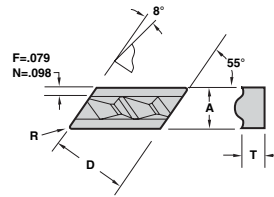
In an effort to improve our stock standard grade offering, there are periodic changes. Please see current price list for up to date grade offering.

● High performance choice in optimal conditions.
▲ Recommended grade under general conditions.

	Cast Iron	Non-Ferrous	Stainless/High Temp	Steel
▲	●	●	●	●
▲	●	●	●	●
▲	●	●	●	●

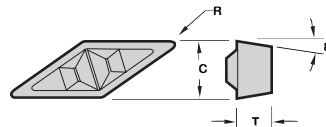


55° PARALLELOGRAM PROFILING FLPL/R



Insert Description	R	T	D	A	TIN Coated		AITIN Coated	
					GP25	GP50	AT25	AT50
FLPR-50.5	.005	.125	.375	.250	●	●	●	●
FLPL-50.5	.005	.125	.375	.250	●	●	●	●
FLPR-51	.015	.125	.375	.250	●	●	●	●
FLPL-51	.015	.125	.375	.250	●	●	●	●
FLPR-52	.031	.125	.375	.250	●	●	●	●
FLPL-52	.031	.125	.375	.250	●	●	●	●
FLPR-130.5	.005	.187	.500	.375	●	●	●	●
FLPL-130.5	.005	.187	.500	.375	●	●	●	●
FLPR-131F	.015	.187	.500	.375	●	●	●	●
FLPL-131F	.015	.187	.500	.375	●	●	●	●
FLPR-132F	.031	.187	.500	.375	●	●	●	●
FLPL-132F	.031	.187	.500	.375	●	●	●	●
FLPR-132N	.031	.187	.500	.375	●	●	●	●
FLPL-132N	.031	.187	.500	.375	●	●	●	●
FLPR-331N	.015	.187	.734	.375	●	●	●	●
FLPL-331N	.015	.187	.734	.375	●	●	●	●
FLPR-332F	.031	.187	.734	.375	●	●	●	●
FLPL-332F	.031	.187	.734	.375	●	●	●	●
FLPR-332N	.031	.187	.734	.375	●	●	●	●
FLPL-332N	.031	.187	.734	.375	●	●	●	●

35° DIAMOND PROFILING VPGR



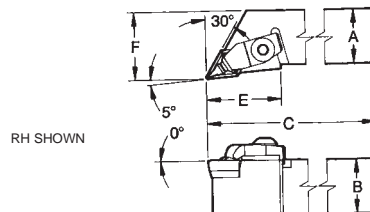
Insert Description	D	T	R	TIN Coated		AITIN Coated	
				GP25	GP50	AT25	AT50
VPGR-330.5	.375	.187	.008	●	●	●	●
VPGR-331	.375	.187	.015	●	●	●	●
VPGR-332	.375	.187	.031	●	●	●	●

In an effort to improve our stock standard grade offering, there are periodic changes. Please see current price list for up to date grade offering.

- High performance choice in optimal conditions.
- ▲ Recommended grade under general conditions.

Cast Iron	▲	●	●	●
Non-Ferrous	▲	●	●	●
Stainless/High Temp	▲	●	●	●
Steel	▲	●	●	●

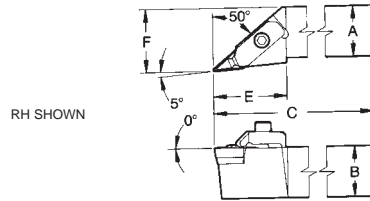
EXTERNAL HOLDER FLDLPR/L Profiling



Holder Description	Insert	A	B	C	E	F	PARTS			
							Seat	Seat Screw	Clamp	Clamp Screw
FLDLPR-164D	DPGR-432	1	1	5	1.38	1.250	SM-414	S-111	CM116	S-532
FLDLPL-164D	DPGR-432	1	1	5	1.38	1.250	SM-414	S-111	CM117	S-532
FLDLPR-204D	DPGR-432	1-1/4	1-1/4	6	1.38	1.500	SM-414	S-111	CM116	S-532
FLDLPL-204D	DPGR-432	1-1/4	1-1/4	6	1.38	1.500	SM-414	S-111	CM117	S-532



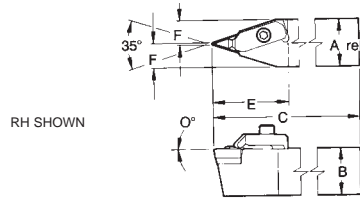
FLVL Profiling



PARTS

Holder Description	Insert	A	B	C	E	F	PARTS			
							Seat	Seat Screw	Clamp	Clamp Screw
FLVLCR-123B	VPGR-33_	3/4	3/4	4-1/2	1.44	1.000	SM-412	S-959	CM113	S-412
FLVLCL-123B	VPGR-33_	3/4	3/4	4-1/2	1.44	1.000	SM-412	S-959	CM114	S-412
FLVLCR-163D	VPGR-33_	1	1	6	1.44	1.250	SM-412	S-959	CM113	S-412
FLVLCL-163D	VPGR-33_	1	1	6	1.44	1.250	SM-412	S-959	CM114	S-412
FLVLCR-204D	VPGR-33_	1-1/4	1-1/4	6	1.44	1.500	SM-412	S-959	CM113	S-412
FLVLCL-204D	VPGR-33_	1-1/4	1-1/4	6	1.44	1.500	SM-412	S-959	CM114	S-412

FLVV Profiling

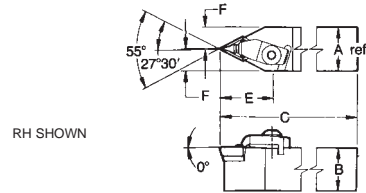


PARTS

Holder Description	Insert	A	B	C	E	F	PARTS			
							Seat	Seat Screw	Clamp	Clamp Screw
FLVVCN-163D	VPGR-33_	1	1	6	1.62	0.522	SM-412	S-959	CM113	S-412
FLVVCN-204D	VPGR-33_	1-1/4	1-1/4	6	1.62	0.647	SM-412	S-959	CM113	S-412

EXTERNAL HOLDER

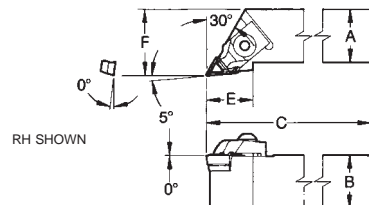
FLDP Profiling



PARTS

Holder Description	Insert	A	B	C	E	F	PARTS			
							Seat	Seat Screw	Clamp	Clamp Screw
FLDPPN-164D	DPGR-432	1	1	6	1.59	.519	SM-414	S-111	CM116	S-532
FLDPPN-204D	DPGR-432	1-1/4	1-1/4	6	1.59	.644	SM-414	S-111	CM116	S-532

FLKL Profiling



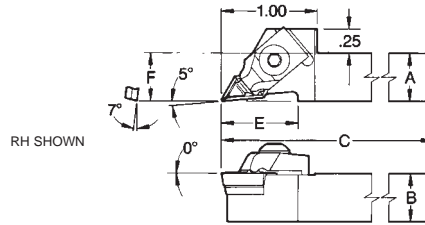
PARTS

Holder Description	Insert	A	B	C	F	E	PARTS			
							Seat	Seat Screw	Clamp	Clamp Screw
FLKLCR-0805V	FLPR-5_*	1/2	1/2	3-1/2	.750	.875	SM-285	S-959	CM79	S-524
FLKLCL-0805V	FLPL-5_*	1/2	1/2	3-1/2	.750	.875	SM-286	S-959	CM71	S-524
FLKLCR-1205B	FLPR-5_*	3/4	3/4	4-1/2	1.000	.875	SM-285	S-959	CM68	S-524
FLKLCL-1205B	FLPL-5_*	3/4	3/4	4-1/2	1.000	.875	SM-286	S-959	CM68	S-524
FLKLN-121B	FLPR-13_	3/4	3/4	4-1/2	1.000	1.250	SM-272	SL-344	CM66	S-625
FLKLN-121B	FLPL-13_	3/4	3/4	4-1/2	1.000	1.250	SM-271	SL-344	CM66	S-625
FLKLN-161C	FLPR-13_	1	1	5	.750	.875	SM-272	SL-344	CM66	S-625
FLKLN-161C	FLPL-13_	1	1	5	.750	.875	SM-271	SL-344	CM66	S-625
FLKLN-163D	FLPR-33_	1	1	6	1.500	.875	SM-268	SL-344	CM65	S-625
FLKLN-163D	FLPL-33_	1	1	6	1.500	.875	SM-267	SL-344	CM65	S-625
FLKLN-203D	FLPR-33_	1-1/4	1-1/4	6	1.500	1.438	SM-268	SL-344	CM65	S-625
FLKLN-203D	FLPL-33_	1-1/4	1-1/4	6	1.500	1.438	SM-267	SL-344	CM65	S-625

*Also used with inserts FLPR/FLPL.



FLKL-F
Profiling

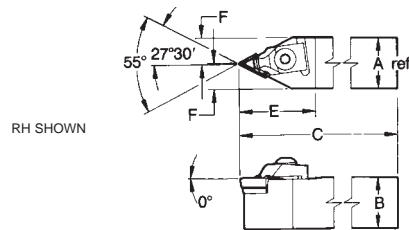


PARTS

Holder Description	Insert	A	B	C	E	F	PARTS			
							Seat	Seat Screw	Clamp	Clamp Screw
FLKLCRF-0805D	FLPR-5_*	1/2	1/2	6	.750	.500	SM-285	S-959	CM180	S-524
FLKLCLF-0805D	FLPL-5_*	1/2	1/2	6	.750	.500	SM-286	S-959	CM181	S-524
FLKLCRF-1005B	FLPR-5_*	5/8	5/8	4-1/2	.750	.625	SM-285	S-959	CM180	S-524
FLKLCLF-1005B	FLPL-5_*	5/8	5/8	4-1/2	.750	.625	SM-286	S-959	CM181	S-524

*Also used with inserts FLPR/FLPL.

FLKP
Profiling

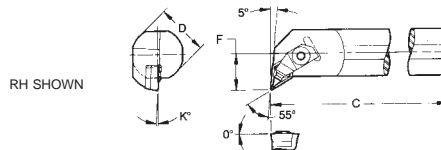


PARTS

Holder Description	Insert	A	B	C	E	F	PARTS			
							Seat	Seat Screw	Clamp	Clamp Screw
FLKPCN-0805V	FLPR-5_	1/2	1/2	3-1/2	1.125	.260	SM-285	S-959	CM79	S-524
FLKPCN-0805D	FLPR-5_	1/2	1/2	6	1.125	.260	SM-285	S-959	CM79	S-524
FLKPCN-1205B	FLPR-5_	3/4	3/4	4-1/2	1.125	.385	SM-285	S-959	CM68	S-524

INTERNAL BAR

A-FLDL
Profiling



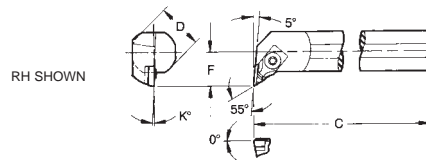
PARTS

Holder Description	Insert	D	C	F	K*	Min. Bore	PARTS			
							Seat	Seat Screw	Clamp	Clamp Screw
A20-FLDLPR4	DPGR-432	1.250	14	.875	3°	1.585	SM-414	S-111	CM118	S-532
A20-FLDLPL4	DPGR-432	1.250	14	.875	3°	1.585	SM-414	S-111	CM119	S-532
A24-FLDLPR4	DPGR-432	1.500	14	1.000	2°	1.835	SM-414	S-111	CM118	S-532
A24-FLDLPL4	DPGR-432	1.500	14	1.000	2°	1.835	SM-414	S-111	CM119	S-532
A28-FLDLPR4	DPGR-432	1.750	14	1.125	2°	2.120	SM-414	S-111	CM118	S-532
A28-FLDLPL4	DPGR-432	1.750	14	1.125	2°	2.120	SM-414	S-111	CM119	S-532
A32-FLDLPR4	DPGR-432	2.000	16	1.250	2°	2.400	SM-414	S-111	CM118	S-532
A32-FLDLPL4	DPGR-432	2.000	16	1.250	2°	2.400	SM-414	S-111	CM119	S-532



A-FLKL

Profiling



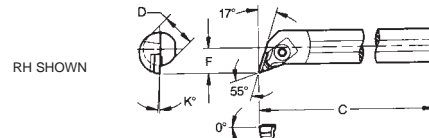
PARTS

Holder Description	Insert	D	C	F	K*	Min. Bore	PARTS			
							Seat	Seat Screw	Clamp	Clamp Screw
A10-FLKLCR05	FLPL-5_*	.625	10	.500	5°	.900	SM-286	S-959	CM79	S-524
A10-FLKLCL05	FLPR-5_*	.625	10	.500	5°	.900	SM-285	S-959	CM71	S-524
A12-FLKLCR05	FLPL-5_*	.750	10	.562	5°	.980	SM-286	S-959	CM68	S-524
A12-FLKLCL05	FLPR-5_*	.750	10	.562	5°	.980	SM-285	S-959	CM68	S-524
A16-FLKLCR05	FLPL-5_*	1.000	12	.750	3°	1.300	SM-286	S-959	CM68	S-524
A16-FLKLCL05	FLPR-5_*	1.000	12	.750	3°	1.300	SM-285	S-959	CM68	S-524
A20-FLKLCR05	FLPL-5_*	1.250	14	.875	3°	1.585	SM-286	S-959	CM68	S-524
A20-FLKLCL05	FLPR-5_*	1.250	14	.875	3°	1.585	SM-285	S-959	CM68	S-524
A24-FLKLCR05	FLPL-5_*	1.500	14	1.000	2°	1.835	SM-286	S-959	CM68	S-524
A24-FLKLCL05	FLPR-5_*	1.500	14	1.000	2°	1.835	SM-285	S-959	CM68	S-524
A32-FLKLCR05	FLPL-5_*	2.000	16	1.250	2°	2.400	SM-286	S-959	CM68	S-524
A32-FLKLCL05	FLPR-5_*	2.000	16	1.250	2°	2.400	SM-285	S-959	CM68	S-524

*Also used with inserts FLPR/FLPGL.

A-FLKQ

Profiling



PARTS

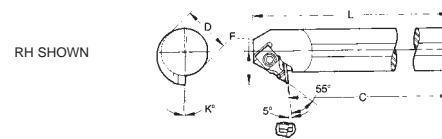
Holder Description	Insert	D	C	F	K*	Min. Bore	PARTS			
							Seat	Seat Screw	Clamp	Clamp Screw
A08-FLKQCR05	FLPL-5_*	.500	8	.375	6°	.670	-	-	CM112	S-518
A08-FLKQCL05	FLPR-5_*	.500	8	.375	6°	.670	-	-	CM111	S-518
A12-FLKQCR05	FLPL-5_*	.750	10	.562	6°	.980	SM-286	S-959	CM68	S-524
A12-FLKQCL05	FLPR-5_*	.750	10	.562	6°	.980	SM-285	S-959	CM68	S-524
A16-FLKQCR05	FLPL-5_*	1.000	12	.750	3°	1.300	SM-286	S-959	CM68	S-524
A16-FLKQCL05	FLPR-5_*	1.000	12	.750	3°	1.300	SM-285	S-959	CM68	S-524

*Also used with inserts FLPR/FLPGL.

INTERNAL BAR

A-FLKX

Profiling



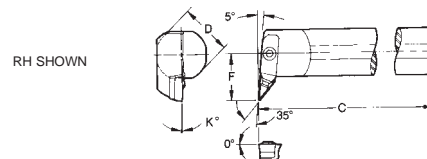
PARTS

Holder Description	Insert	D	C	L	F	K*	Min. Bore	PARTS			
								Seat	Seat Screw	Clamp	Clamp Screw
A12-FLKXCR05	FLPR-5_*	.750	10	10.00	.625	5°	1.060	SM-285	S-959	CM79	S-524
A12-FLKXCL05	FLPL-5_*	.750	10	10.00	.625	5°	1.060	SM-286	S-959	CM71	S-524
A16-FLKXCR05	FLPR-5_*	1.000	12	12.00	.750	5°	1.300	SM-285	S-959	CM79	S-524
A16-FLKXCL05	FLPL-5_*	1.000	12	12.00	.750	5°	1.300	SM-286	S-959	CM71	S-524

*Also used with inserts FLPR/FLPGL.

A-FLVL

Profiling



PARTS

Holder Description	Insert	D	C	F	K*	Min. Bore	PARTS			
							Seat	Seat Screw	Clamp	Clamp Screw
A20-FLVLCR3	VPGR-33_	1.250	14	1.125	2°	1.830	SM-412	S-959	CM113	S-412
A20-FLVLCL3	VPGR-33_	1.250	14	1.125	2°	1.830	SM-412	S-959	CM114	S-412
A24-FLVLCR3	VPGR-33_	1.500	14	1.250	2°	2.120	SM-412	S-959	CM113	S-412
A24-FLVLCL3	VPGR-33_	1.500	14	1.250	2°	2.120	SM-412	S-959	CM114	S-412
A32-FLVLCR3	VPGR-33_	2.000	16	2.000	2°	2.620	SM-412	S-959	CM113	S-412
A32-FLVLCL3	VPGR-33_	2.000	16	2.000	2°	2.620	SM-412	S-959	CM114	S-412