



TOOL-FLO



TOOL-FLO
CR-5B75-4E
TF22675 G50

TOOL-FLO
FLVLCR-163D
MADE IN THE USA

GP80

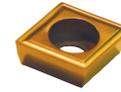
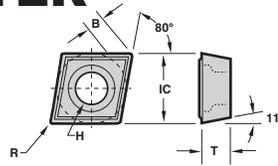
PROFILING

PROFILING



BORING SMALL DIAMETER

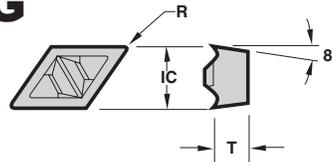
CPGM



Description	EDP Code	IC	R	T	B	H	TIN Coated		AITIN Coated	
							GP25	GP50	AC25	AC50
CPGM-21.50	SA20	.250	.004	.094	.0672	.110	●	●	●	●
CPGM-21.505	SA205	.250	.008	.094	.0650	.110	●	●	●	●
CPGM-21.51	SA21	.250	.015	.094	.0607	.110	●	●	●	●
CPGM-21.52	SA22	.250	.031	.094	.0521	.110	●	●	●	●
CPGM-32.50	SA30	.375	.004	.156	.1020	.173	●	●	●	●
CPGM-32.505	SA305	.375	.008	.156	.0998	.173	●	●	●	●
CPGM-32.51	SA31	.375	.015	.156	.0855	.173	●	●	●	●
CPGM-32.52	SA32	.375	.031	.156	.0868	.173	●	●	●	●

55° DIAMOND PROFILING

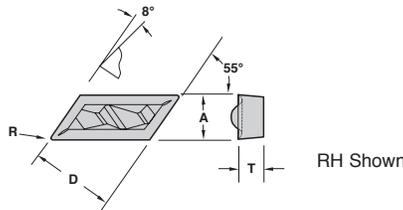
DPGR



Description	EDP Code	D	T	R	TIN Coated		AITIN Coated	
					GP25	GP50	AC25	AC50
DPGR-432	643432	.500	.187	.031	●	●	●	●

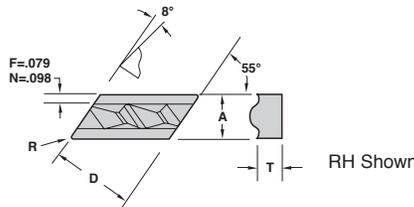
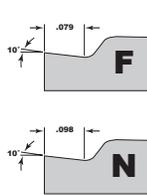
55° PARALLELOGRAM PROFILING

FLPGL/R



Description	EDP Code	D	T	A	R	TIN Coated		AITIN Coated	
						GP25	GP50	AC25	AC50
FLPGL-51	641G51	.375	.125	.250	.015	●	●	●	●
FLPGR-51	642G51	.375	.125	.250	.015	●	●	●	●
FLPGL-52	641G52	.375	.125	.250	.031	●	●	●	●
FLPGR-52	642G52	.375	.125	.250	.031	●	●	●	●

FLPL/R



Description	EDP Code	R	T	D	A	TIN Coated		AITIN Coated	
						GP25	GP50	AC25	AC50
FLPR-50.5	642505	.005	.125	.375	.250	●	●	●	●
FLPL-50.5	641505	.005	.125	.375	.250	●	●	●	●
FLPR-51	64251	.015	.125	.375	.250	●	●	●	●
FLPL-51	64151	.015	.125	.375	.250	●	●	●	●
FLPR-52	64252	.031	.125	.375	.250	●	●	●	●
FLPL-52	64152	.031	.125	.375	.250	●	●	●	●
FLPR-130.5	6421305	.005	.187	.500	.375	●	●	●	●
FLPL-130.5	6411305	.005	.187	.500	.375	●	●	●	●
FLPR-131F	642131F	.015	.187	.500	.375	●	●	●	●
FLPL-131F	641131F	.015	.187	.500	.375	●	●	●	●
FLPR-132F	642132F	.031	.187	.500	.375	●	●	●	●
FLPL-132F	641132F	.031	.187	.500	.375	●	●	●	●
FLPR-132N	642132N	.031	.187	.500	.375	●	●	●	●
FLPL-132N	641132N	.031	.187	.500	.375	●	●	●	●
FLPR-331N	642331N	.015	.187	.734	.375	●	●	●	●
FLPL-331N	641331N	.015	.187	.734	.375	●	●	●	●
FLPR-332F	642332F	.031	.187	.734	.375	●	●	●	●
FLPL-332F	641332F	.031	.187	.734	.375	●	●	●	●
FLPR-332N	642332N	.031	.187	.734	.375	●	●	●	●
FLPL-332N	641332N	.031	.187	.734	.375	●	●	●	●

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.

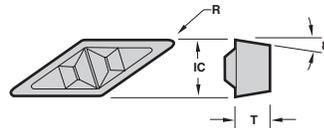
	GP25	GP50	AC25	AC50
Cast Iron	▲	●	●	●
Non-Ferrous	●	●	●	●
Stainless/High Temp	▲	●	●	●
Steel	●	▲	●	●



PROFILING

35° DIAMOND PROFILING

VPGR



Description	EDP Code	IC	T	R	GP25	GP50	AC25	AC50
VPGR-330.5	6443305	.375	.187	.008	●	●	●	●
VPGR-331	644331	.375	.187	.015	●	●	●	●
VPGR-332	644332	.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.

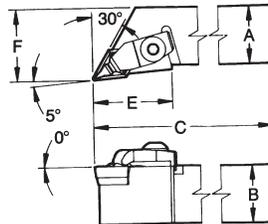
● High performance choice in optimal conditions.
▲ Recommended grade under general conditions.

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

EXTERNAL HOLDERS

FLDLPR/L

Profiling



RH SHOWN

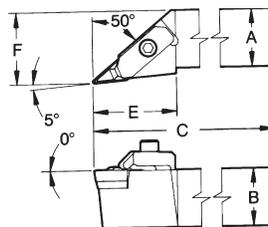
Most holders available with coolant port
(ie: Add CP to end of description)

PARTS

Description	EDP Code	Insert	A	B	C	E	F	Seat		Clamp	
								Seat	Screw	Clamp	Screw
FLDLPR-164D	92831625	DPGR-432	1	1	6	1.38	1.250	SM-414	S-111	CM116	S-532
FLDLPL-164D	92821625	DPGR-432	1	1	6	1.38	1.250	SM-414	S-111	CM117	S-532
FLDLPR-204D	92832025	DPGR-432	1-1/4	1-1/4	6	1.38	1.500	SM-414	S-111	CM116	S-532
FLDLPL-204D	92822025	DPGR-432	1-1/4	1-1/4	6	1.38	1.500	SM-414	S-111	CM117	S-532

FLVLCR/L

Profiling



RH SHOWN

Most holders available with coolant port
(ie: Add CP to end of description)

PARTS

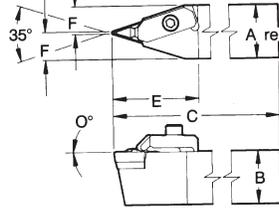
Description	EDP Code	Insert	A	B	C	E	F	Seat		Clamp	
								Seat	Screw	Clamp	Screw
FLVLCR-123B	93531226	VPGR-33	3/4	3/4	4-1/2	1.44	1.000	SM-412	S-959	CM113	S-412
FLVLCR-123B	93521226	VPGR-33	3/4	3/4	4-1/2	1.44	1.000	SM-412	S-959	CM114	S-412
FLVLCR-163D	93531626	VPGR-33	1	1	6	1.44	1.250	SM-412	S-959	CM113	S-412
FLVLCR-163D	93521626	VPGR-33	1	1	6	1.44	1.250	SM-412	S-959	CM114	S-412
FLVLCR-203D	93532026	VPGR-33	1-1/4	1-1/4	6	1.44	1.500	SM-412	S-959	CM113	S-412
FLVLCR-203D	93522026	VPGR-33	1-1/4	1-1/4	6	1.44	1.500	SM-412	S-959	CM114	S-412

PROFILING



EXTERNAL HOLDERS

FLVVCN Profiling

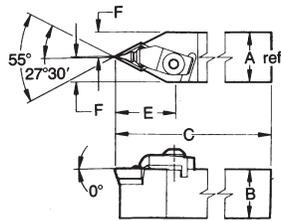


Most holders available with coolant port
(ie: Add CP to end of description)

PARTS

Description	EDP Code	Insert	A	B	C	E	F	Seat		Clamp	
								Seat	Screw	Clamp	Screw
FLVVCN-163D	93541626	VPGR-33	1	1	6	1.62	0.522	SM-412	S-959	CM113	S-412
FLVVCN-203D	93542026	VPGR-33	1-1/4	1-1/4	6	1.62	0.647	SM-412	S-959	CM113	S-412

FLDPPN Profiling

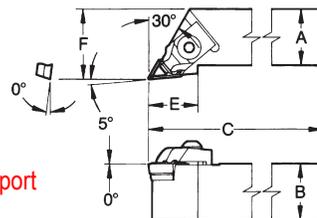


Most holders available with coolant port
(ie: Add CP to end of description)

PARTS

Description	EDP Code	Insert	A	B	C	E	F	Seat		Clamp	
								Seat	Screw	Clamp	Screw
FLDPPN-164D	92841625	DPGR-432	1	1	6	1.59	.519	SM-414	S-111	CM116	S-532
FLDPPN-204D	92842025	DPGR-432	1-1/4	1-1/4	6	1.59	.644	SM-414	S-111	CM116	S-532

FLKL Profiling



RH SHOWN

Most holders available with coolant port
(ie: Add CP to end of description)

PARTS

Description	EDP Code	Insert	A	B	C	F	E	Seat		Clamp	
								Seat	Screw	Clamp	Screw
FLKLCR-0805V	93130829	FLPR-5_*	1/2	1/2	3-1/2	.750	.875	SM-285	S-959	CM79	S-524
FLKLCL-0805V	93120829	FLPL-5_*	1/2	1/2	3-1/2	.750	.875	SM-286	S-959	CM71	S-524
FLKLCR-1205B	93131229	FLPR-5_*	3/4	3/4	4-1/2	1.000	.875	SM-285	S-959	CM68	S-524
FLKLCL-1205B	93121229	FLPL-5_*	3/4	3/4	4-1/2	1.000	.875	SM-286	S-959	CM68	S-524
FLKLNR-121B	93131230	FLPR-13_	3/4	3/4	4-1/2	1.000	1.250	SM-272	SL-344	CM66	S-625
FLKLNL-121B	93121230	FLPL-13_	3/4	3/4	4-1/2	1.000	1.250	SM-271	SL-344	CM66	S-625
FLKLNR-161C	93131630	FLPR-13_	1	1	5	.750	.875	SM-272	SL-344	CM66	S-625
FLKLNL-161C	93121630	FLPL-13_	1	1	5	.750	.875	SM-271	SL-344	CM66	S-625
FLKLNR-163D	93131631	FLPR-33_	1	1	6	1.500	.875	SM-268	SL-344	CM65	S-625
FLKLNL-163D	93121631	FLPL-33_	1	1	6	1.500	.875	SM-267	SL-344	CM65	S-625
FLKLNR-203D	93132031	FLPR-33_	1-1/4	1-1/4	6	1.500	1.438	SM-268	SL-344	CM65	S-625
FLKLNL-203D	93122031	FLPL-33_	1-1/4	1-1/4	6	1.500	1.438	SM-267	SL-344	CM65	S-625

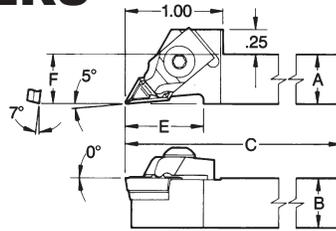
*Also used with inserts FLPGR/FLPGL.



PROFILING

EXTERNAL HOLDERS

FLKL-F
Profiling



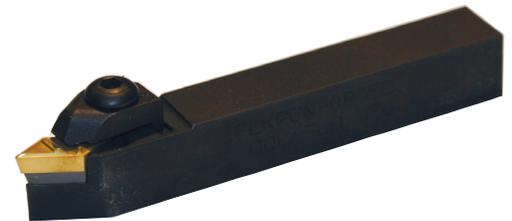
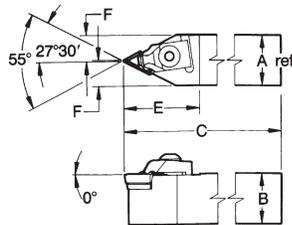
Most holders available with coolant port
(ie: Add CP to end of description)

PARTS

Description	EDP Code	Insert	A	B	C	E	F	Seat			Clamp Screw
								Seat	Screw	Clamp	
FLKLCRF-0805D	93150829	FLPR-5_*	1/2	1/2	6	.750	.500	SM-285	S-959	CM180	S-524
FLKLCLF-0805D	93140829	FLPL-5_*	1/2	1/2	6	.750	.500	SM-286	S-959	CM181	S-524
FLKLCRF-1005B	93151029	FLPR-5_*	5/8	5/8	4-1/2	.750	.625	SM-285	S-959	CM180	S-524
FLKLCLF-1005B	93141029	FLPL-5_*	5/8	5/8	4-1/2	.750	.625	SM-286	S-959	CM181	S-524

*Also used with inserts FLPGR/FLPGL.

FLKPCN
Profiling



Most holders available with coolant port
(ie: Add CP to end of description)

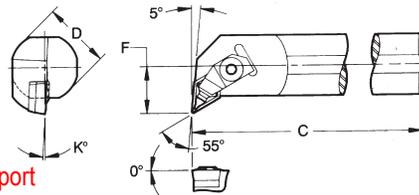
PARTS

Description	EDP Code	Insert	A	B	C	E	F	Seat			Clamp Screw
								Seat	Screw	Clamp	
FLKPCN-0805V	93160829V	FLPR-5_*	1/2	1/2	3-1/2	1.125	.260	SM-285	S-959	CM79	S-524
FLKPCN-0805D	93160829D	FLPR-5_*	1/2	1/2	6	1.125	.260	SM-285	S-959	CM79	S-524
FLKPCN-1205B	93161229	FLPR-5_*	3/4	3/4	4-1/2	1.125	.385	SM-285	S-959	CM68	S-524

*Also used with inserts FLPGR/FLPGL.

INTERNAL BARS

A-FLDL
Profiling



Most bars available with coolant port
(ie: Add CP to end of description)

PARTS

Description	EDP Code	Insert	D	C	F	K°	Min. Bore	Seat			Clamp Screw
								Seat	Screw	Clamp	
A20-FLDLPR4	90522025	DPGR-432	1.250	14	.875	3°	1.585	SM-414	S-111	CM118	S-532
A20-FLDLPL4	90502025	DPGR-432	1.250	14	.875	3°	1.585	SM-414	S-111	CM119	S-532
A24-FLDLPR4	90522425	DPGR-432	1.500	14	1.000	2°	1.835	SM-414	S-111	CM118	S-532
A24-FLDLPL4	90502425	DPGR-432	1.500	14	1.000	2°	1.835	SM-414	S-111	CM119	S-532
A28-FLDLPR4	90522825	DPGR-432	1.750	14	1.125	2°	2.120	SM-414	S-111	CM118	S-532
A28-FLDLPL4	90502825	DPGR-432	1.750	14	1.125	2°	2.120	SM-414	S-111	CM119	S-532
A32-FLDLPR4	90523225	DPGR-432	2.000	16	1.250	2°	2.400	SM-414	S-111	CM118	S-532
A32-FLDLPL4	90503225	DPGR-432	2.000	16	1.250	2°	2.400	SM-414	S-111	CM119	S-532

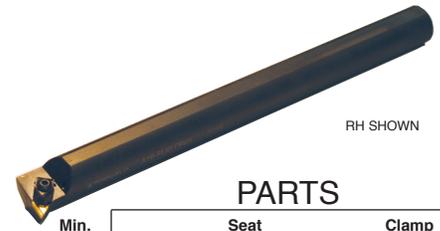
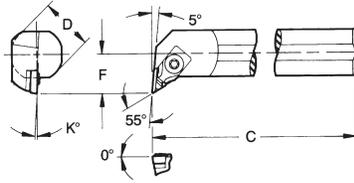
PROFILING



INTERNAL BARS

A-FLKL Profiling

Most bars available with coolant port
(ie: Add CP to end of description)

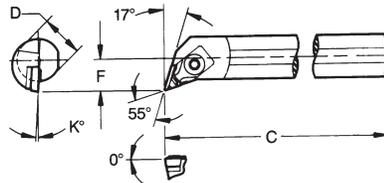


Description	EDP Code	Insert	D	C	F	K°	Min. Bore	PARTS			
								Seat	Seat Screw	Clamp	Clamp Screw
A10-FLKLCR05	90561029	FLPL-5_*	.625	10	.500	5°	.900	SM-286	S-959	CM79	S-524
A10-FLKLCL05	90541029	FLPR-5_*	.625	10	.500	5°	.900	SM-285	S-959	CM71	S-524
A12-FLKLCR05	90561229	FLPL-5_*	.750	10	.562	5°	.980	SM-286	S-959	CM79	S-524
A12-FLKLCL05	90541229	FLPR-5_*	.750	10	.562	5°	.980	SM-285	S-959	CM71	S-524
A16-FLKLCR05	90561629	FLPL-5_*	1.000	12	.750	3°	1.300	SM-286	S-959	CM68	S-524
A16-FLKLCL05	90541629	FLPR-5_*	1.000	12	.750	3°	1.300	SM-285	S-959	CM68	S-524
A20-FLKLCR05	90562029	FLPL-5_*	1.250	14	.875	3°	1.585	SM-286	S-959	CM68	S-524
A20-FLKLCL05	90542029	FLPR-5_*	1.250	14	.875	3°	1.585	SM-285	S-959	CM68	S-524
A24-FLKLCR05	90562429	FLPL-5_*	1.500	14	1.000	2°	1.835	SM-286	S-959	CM68	S-524
A24-FLKLCL05	90542429	FLPR-5_*	1.500	14	1.000	2°	1.835	SM-285	S-959	CM68	S-524
A32-FLKLCR05	90563229	FLPL-5_*	2.000	16	1.250	2°	2.400	SM-286	S-959	CM68	S-524
A32-FLKLCL05	90543229	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

Most bars available with coolant port
(ie: Add CP to end of description)

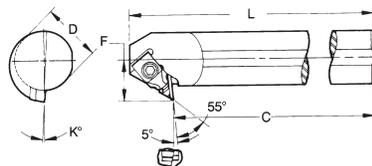


Description	EDP Code	Insert	D	C	F	K°	Min. Bore	PARTS			
								Seat	Seat Screw	Clamp	Clamp Screw
A08-FLKQCR05	90600829	FLPL-5_*	.500	8	.375	6°	.670	-	-	CM112	S-518
A08-FLKQCL05	90580829	FLPR-5_*	.500	8	.375	6°	.670	-	-	CM111	S-518
A12-FLKQCR05	90601229	FLPL-5_*	.750	10	.562	6°	.980	SM-286	S-959	CM68	S-524
A12-FLKQCL05	90581229	FLPR-5_*	.750	10	.562	6°	.980	SM-285	S-959	CM68	S-524
A16-FLKQCR05	90601629	FLPL-5_*	1.000	12	.750	3°	1.300	SM-286	S-959	CM68	S-524
A16-FLKQCL05	90581629	FLPR-5_*	1.000	12	.750	3°	1.300	SM-285	S-959	CM68	S-524

*Also used with inserts FLPR/FLPGL.

A-FLKX Profiling

Most bars available with coolant port
(ie: Add CP to end of description)

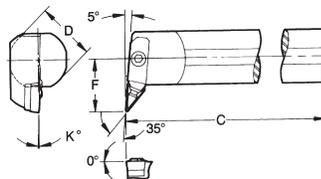


Description	EDP Code	Insert	D	C	L	F	K°	Min. Bore	PARTS			
									Seat	Seat Screw	Clamp	Clamp Screw
A12-FLKXCR05	90641229	FLPR-5_*	.750	10	10.70	.625	5°	1.060	SM-285	S-959	CM79	S-524
A12-FLKXCL05	90621229	FLPL-5_*	.750	10	10.70	.625	5°	1.060	SM-286	S-959	CM71	S-524
A16-FLKXCR05	90641629	FLPR-5_*	1.000	12	12.70	.750	5°	1.300	SM-285	S-959	CM79	S-524
A16-FLKXCL05	90621629	FLPL-5_*	1.000	12	12.70	.750	5°	1.300	SM-286	S-959	CM71	S-524

*Also used with inserts FLPR/FLPGL.

A-FLVL Profiling

Most bars available with coolant port
(ie: Add CP to end of description)



Description	EDP Code	Insert	D	C	F	K°	Min. Bore	PARTS			
								Seat	Seat Screw	Clamp	Clamp Screw
A20-FLVLCR3	90682026	VPGR-33	1.250	14	1.125	2°	1.830	SM-412	S-959	CM113	S-412
A20-FLVLCL3	90662026	VPGR-33	1.250	14	1.125	2°	1.830	SM-412	S-959	CM114	S-412
A24-FLVLCR3	90682426	VPGR-33	1.500	14	1.250	2°	2.120	SM-412	S-959	CM113	S-412
A24-FLVLCL3	90662426	VPGR-33	1.500	14	1.250	2°	2.120	SM-412	S-959	CM114	S-412
A32-FLVLCR3	90683226	VPGR-33	2.000	16	1.500	2°	2.620	SM-412	S-959	CM113	S-412
A32-FLVLCL3	90663226	VPGR-33	2.000	16	1.500	2°	2.620	SM-412	S-959	CM114	S-412