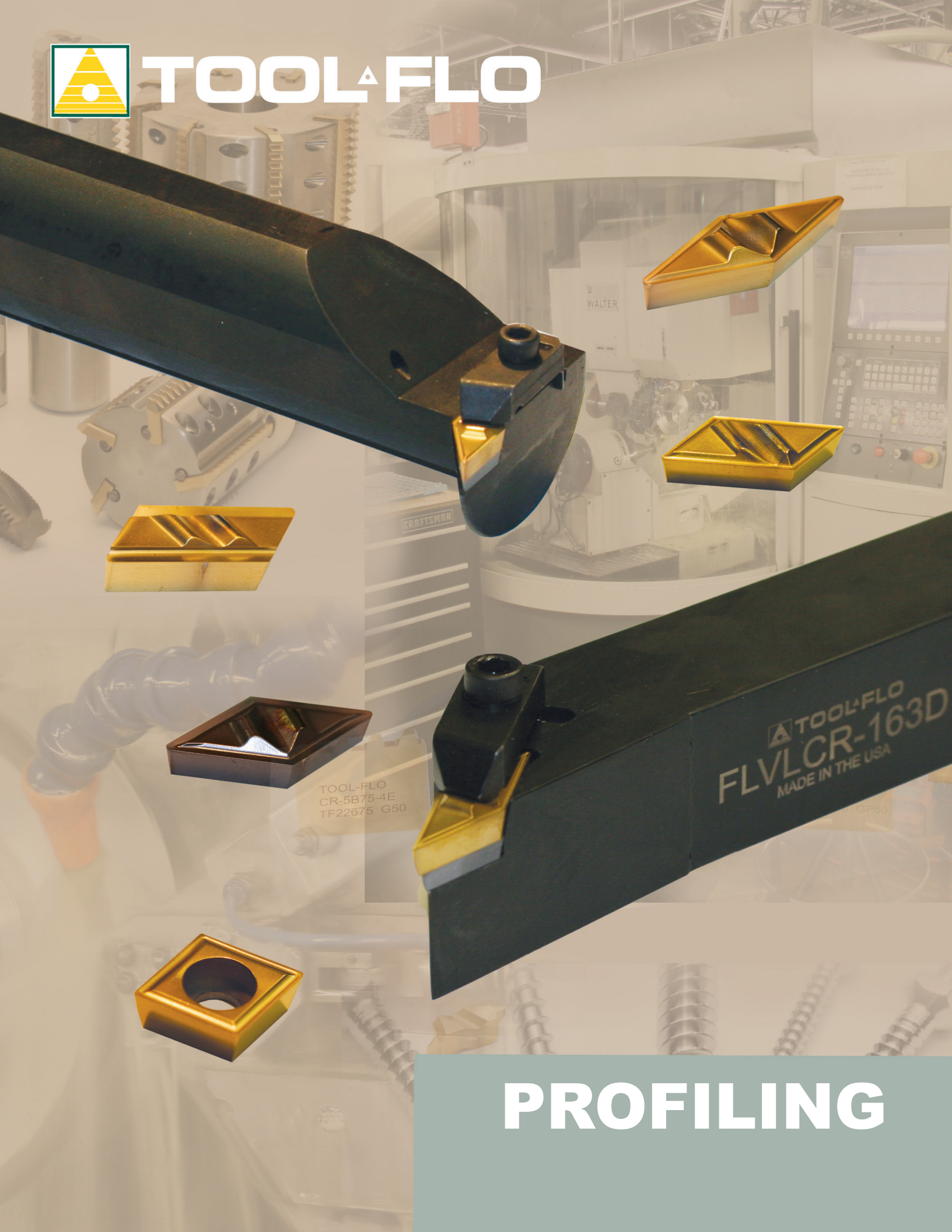




TOOL-FLO



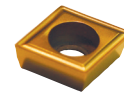
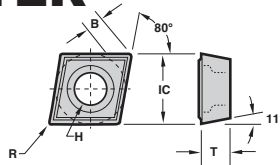
PROFILING

PROFILING



BORING SMALL DIAMETER

CPGM

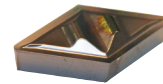
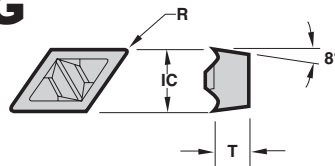


Description	EDP Code	IC	R	T	B	H	GP25	GP50	AC25	AC50
CPGM-21.50	SA20	.250	.004	.094	.0672	.110	●	●	●	●
CPGM-21.505	SA205	.250	.008	.094	.0650	.110	●	●	●	●
CPGM-21.51	SA21	.250	.015	.094	.0607	.110	●	●	●	●
CPGM-21.52	SA22	.250	.031	.094	.0521	.110	●	●	●	●
CPGM-32.50	SA30	.375	.004	.156	.1020	.173	●	●	●	●
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	●	●	●	●

TIN Coated	AITIN Coated
GP25	AC25
GP50	AC50

55° DIAMOND PROFILING

DPGR

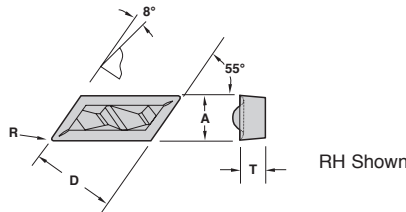


Description	EDP Code	D	T	R
DPGR-432	643432	.500	.187	.031

TIN Coated	AITIN Coated
GP25	AC25
GP50	AC50

55° PARALLELOGRAM PROFILING

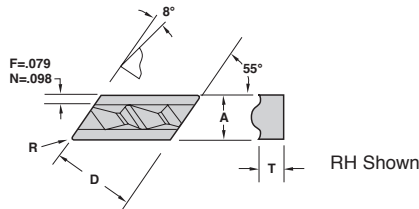
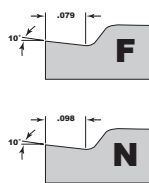
FLPGL/R



Description	EDP Code	D	T	A	R
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

TIN Coated	AITIN Coated
GP25	AC25
GP50	AC50

FLPL/R



Description	EDP Code	R	T	D	A
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

TIN Coated	AITIN Coated
GP25	AC25
GP50	AC50

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.

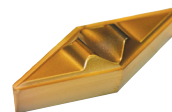
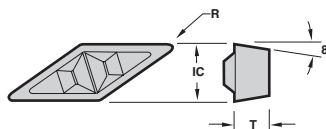
Cast Iron	▲	●
Non-Ferrous	▲	●
Stainless/High Temp	▲	●
Steel	▲	●



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.

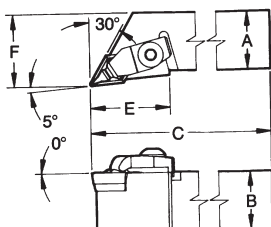
● High performance choice in optimal conditions.
▲ Recommended grade under general conditions.

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

EXTERNAL HOLDERS

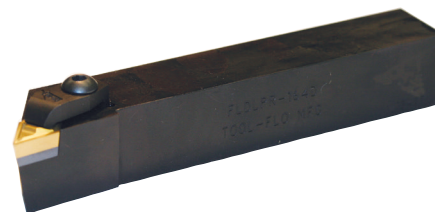
FLDLPR/L

Profiling



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

RH SHOWN

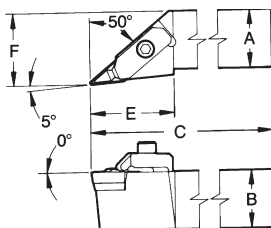


PARTS

Description	EDP Code	Insert	A	B	C	E	F	Seat	Seat Screw	Clamp	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



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

RH SHOWN



PARTS

Description	EDP Code	Insert	A	B	C	E	F	Seat	Seat Screw	Clamp	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
FLVLCL-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
FLVLCL-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
FLVLCL-203D	93522026	VPGR-33	1-1/4	1-1/4	6	1.44	1.500	SM-412	S-959	CM114	S-412

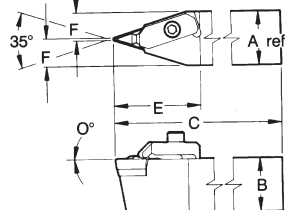
PROFILING



EXTERNAL HOLDERS

FLVVCN

Profiling



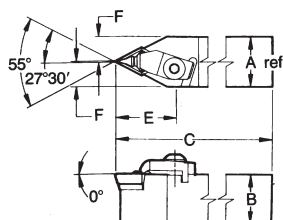
Most holders available with coolant port
(ie: Add CP to end of description)

PARTS

Description	EDP Code	Insert	A	B	C	E	F	Parts			
								Seat	Seat Screw	Clamp	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



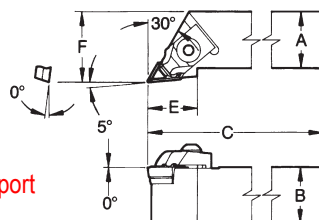
Most holders available with coolant port
(ie: Add CP to end of description)

PARTS

Description	EDP Code	Insert	A	B	C	E	F	Parts			
								Seat	Seat Screw	Clamp	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	Parts			
								Seat	Seat Screw	Clamp	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
FLKLN-121B	93131230	FLPR-13	3/4	3/4	4-1/2	1.000	1.250	SM-272	SL-344	CM66	S-625
FLKLN-121B	93121230	FLPL-13	3/4	3/4	4-1/2	1.000	1.250	SM-271	SL-344	CM66	S-625
FLKLN-161C	93131630	FLPR-13	1	1	5	.750	.875	SM-272	SL-344	CM66	S-625
FLKLN-161C	93121630	FLPL-13	1	1	5	.750	.875	SM-271	SL-344	CM66	S-625
FLKLN-163D	93131631	FLPR-33	1	1	6	1.500	.875	SM-268	SL-344	CM65	S-625
FLKLN-163D	93121631	FLPL-33	1	1	6	1.500	.875	SM-267	SL-344	CM65	S-625
FLKLN-203D	93132031	FLPR-33	1-1/4	1-1/4	6	1.500	1.438	SM-268	SL-344	CM65	S-625
FLKLN-203D	93122031	FLPL-33	1-1/4	1-1/4	6	1.500	1.438	SM-267	SL-344	CM65	S-625

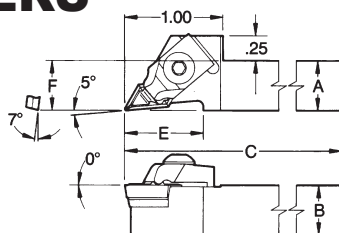
*Also used with inserts FLPR/FLPL.



PROFILING

EXTERNAL HOLDERS

FLKL-F Profiling



RH SHOWN

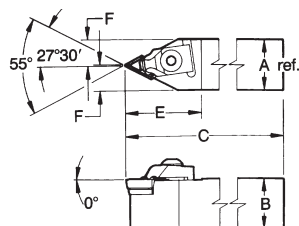
Most holders available with coolant port
(ie: Add CP to end of description)

PARTS

Description	EDP Code	Insert	A	B	C	E	F	Seat			
								Seat	Screw	Clamp	Clamp Screw
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)

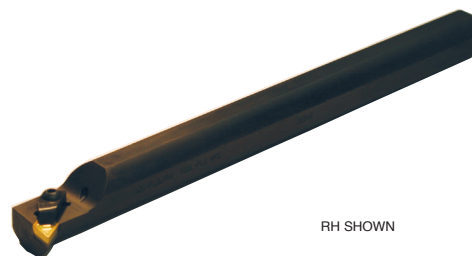
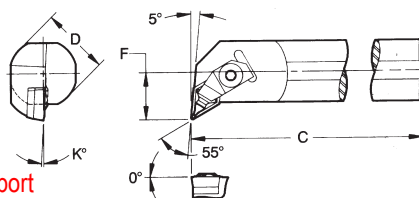
PARTS

Description	EDP Code	Insert	A	B	C	E	F	Seat			
								Seat	Screw	Clamp	Clamp Screw
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



RH SHOWN

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			
								Seat	Screw	Clamp	Clamp Screw
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	CM118	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

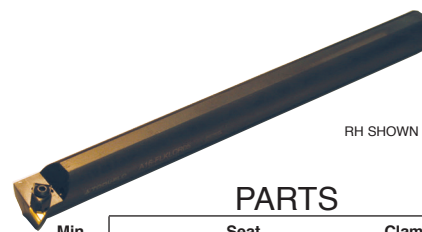
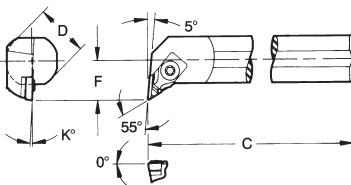


INTERNAL BARS

A-FLKL

Profiling

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



PARTS

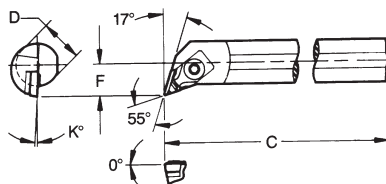
Description	EDP Code	Insert	D	C	F	K°	Min. Bore	PARTS			
								Seat	Seat Screw	Clamp	Clamp Screw
A10-FLKLCR05	90561029	FLPL-5_*	.625	10	.500	5°	.900	SM-286	S-959	CM79	S-524
A10-FLKLCL05	90541029	FLPR-5_*	.625	10	.500	5°	.900	SM-285	S-959	CM71	S-524
A12-FLKLCR05	90561229	FLPL-5_*	.750	10	.562	5°	.980	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)



PARTS

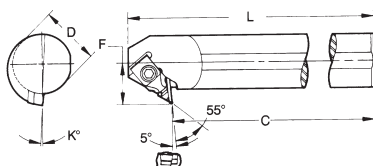
Description	EDP Code	Insert	D	C	F	K°	Min. Bore	PARTS			
								Seat	Seat Screw	Clamp	Clamp Screw
A08-FLKQCR05	90600829	FLPL-5_*	.500	8	.375	6°	.670	-	-	CM112	S-518
A08-FLKQCL05	90580829	FLPR-5_*	.500	8	.375	6°	.670	-	-	CM111	S-518
A12-FLKQCR05	90601229	FLPL-5_*	.750	10	.562	6°	.980	SM-286	S-959	CM68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



PARTS

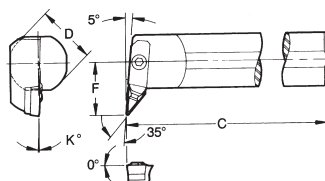
Description	EDP Code	Insert	D	C	L	F	K°	Min. Bore	PARTS			
									Seat	Seat Screw	Clamp	Clamp Screw
A12-FLKXCR05	90641229	FLPR-5_*	.750	10	10.70	.625	5°	1.060	SM-285	S-959	CM79	S-524
A12-FLKXCL05	90621229	FLPL-5_*	.750	10	10.70	.625	5°	1.060	SM-286	S-959	CM71	S-524
A16-FLKXCR05	90641629	FLPR-5_*	1.000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



PARTS

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