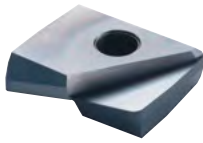




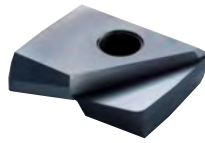
PACKED
1 PIECE

List 78PFR

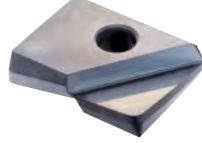
OSG PHOENIX® PFR INSERTS



Multi-Purpose



Strengthened Edge



Diamond Coated

EDP Number	Designation	Specification	Number of Cutting Edges	Insert Size					Grade
				D (Inch)	R (Inch)	T (mm)	Lc (Inch)	L (mm)	
52201029	PFR0250R015A-ST	Multi-Purpose	2	0.250	0.015	2.00	0.078	5.00	XP3225
52201030	PFR0250R030A-ST	Multi-Purpose	2	0.250	0.030	2.00	0.078	5.00	XP3225
52201031	PFR0250R060A-ST	Multi-Purpose	2	0.250	0.060	2.00	0.078	5.00	XP3225
52201000	PFR0375R015A-ST	Multi-Purpose	2	0.375	0.015	2.60	0.130	8.50	XP3225
52201001	PFR0375R030A-ST	Multi-Purpose	2	0.375	0.030	2.60	0.130	8.50	XP3225
52201002	PFR0375R060A-ST	Multi-Purpose	2	0.375	0.060	2.60	0.130	8.50	XP3225
52201003	PFR0375R090A-ST	Multi-Purpose	2	0.375	0.090	2.60	0.130	8.50	XP3225
52201004	PFR0500R015A-ST	Multi-Purpose	2	0.500	0.015	3.00	0.157	10.00	XP3225
52201005	PFR0500R030A-ST	Multi-Purpose	2	0.500	0.030	3.00	0.157	10.00	XP3225
52201006	PFR0500R060A-ST	Multi-Purpose	2	0.500	0.060	3.00	0.157	10.00	XP3225
52201007	PFR0500R090A-ST	Multi-Purpose	2	0.500	0.090	3.00	0.157	10.00	XP3225
52201008	PFR0500R120A-ST	Multi-Purpose	2	0.500	0.120	3.00	0.157	10.00	XP3225
52201009	PFR0625R015A-ST	Multi-Purpose	2	0.625	0.015	4.00	0.208	12.00	XP3225
52201010	PFR0625R030A-ST	Multi-Purpose	2	0.625	0.030	4.00	0.208	12.00	XP3225
52201011	PFR0625R060A-ST	Multi-Purpose	2	0.625	0.060	4.00	0.208	12.00	XP3225
52201012	PFR0625R090A-ST	Multi-Purpose	2	0.625	0.090	4.00	0.208	12.00	XP3225
52201013	PFR0625R120A-ST	Multi-Purpose	2	0.625	0.120	4.00	0.208	12.00	XP3225
52201014	PFR0750R015A-ST	Multi-Purpose	2	0.750	0.015	5.00	0.264	15.00	XP3225
52201015	PFR0750R030A-ST	Multi-Purpose	2	0.750	0.030	5.00	0.264	15.00	XP3225
52201016	PFR0750R060A-ST	Multi-Purpose	2	0.750	0.060	5.00	0.264	15.00	XP3225
52201017	PFR0750R090A-ST	Multi-Purpose	2	0.750	0.090	5.00	0.264	15.00	XP3225
52201018	PFR0750R120A-ST	Multi-Purpose	2	0.750	0.120	5.00	0.264	15.00	XP3225
52201019	PFR1000R015A-ST	Multi-Purpose	2	1.000	0.015	6.00	0.327	18.50	XP3225
52201020	PFR1000R030A-ST	Multi-Purpose	2	1.000	0.030	6.00	0.327	18.50	XP3225
52201021	PFR1000R060A-ST	Multi-Purpose	2	1.000	0.060	6.00	0.327	18.50	XP3225
52201022	PFR1000R090A-ST	Multi-Purpose	2	1.000	0.090	6.00	0.327	18.50	XP3225
52201023	PFR1000R120A-ST	Multi-Purpose	2	1.000	0.120	6.00	0.327	18.50	XP3225
52201024	PFR1250R015A-ST	Multi-Purpose	2	1.250	0.015	7.00	0.405	23.50	XP3225
52201025	PFR1250R030A-ST	Multi-Purpose	2	1.250	0.030	7.00	0.405	23.50	XP3225
52201026	PFR1250R060A-ST	Multi-Purpose	2	1.250	0.060	7.00	0.405	23.50	XP3225
52201027	PFR1250R090A-ST	Multi-Purpose	2	1.250	0.090	7.00	0.405	23.50	XP3225
52201028	PFR1250R120A-ST	Multi-Purpose	2	1.250	0.120	7.00	0.405	23.50	XP3225
52201079	PFR0250R015A-SH	Strengthened Edge	2	0.250	0.015	2.00	0.078	5.00	XP3310
52201080	PFR0250R030A-SH	Strengthened Edge	2	0.250	0.030	2.00	0.078	5.00	XP3310
52201081	PFR0250R060A-SH	Strengthened Edge	2	0.250	0.060	2.00	0.078	5.00	XP3310
52201050	PFR0375R015A-SH	Strengthened Edge	2	0.375	0.015	2.60	0.130	8.50	XP3310
52201051	PFR0375R030A-SH	Strengthened Edge	2	0.375	0.030	2.60	0.130	8.50	XP3310
52201052	PFR0375R060A-SH	Strengthened Edge	2	0.375	0.060	2.60	0.130	8.50	XP3310
52201053	PFR0375R090A-SH	Strengthened Edge	2	0.375	0.090	2.60	0.130	8.50	XP3310
52201054	PFR0500R015A-SH	Strengthened Edge	2	0.500	0.015	3.00	0.157	10.00	XP3310
52201055	PFR0500R030A-SH	Strengthened Edge	2	0.500	0.030	3.00	0.157	10.00	XP3310
52201056	PFR0500R060A-SH	Strengthened Edge	2	0.500	0.060	3.00	0.157	10.00	XP3310
52201057	PFR0500R090A-SH	Strengthened Edge	2	0.500	0.090	3.00	0.157	10.00	XP3310
52201058	PFR0500R120A-SH	Strengthened Edge	2	0.500	0.120	3.00	0.157	10.00	XP3310
52201059	PFR0625R015A-SH	Strengthened Edge	2	0.625	0.015	4.00	0.208	12.00	XP3310
52201060	PFR0625R030A-SH	Strengthened Edge	2	0.625	0.030	4.00	0.208	12.00	XP3310
52201061	PFR0625R060A-SH	Strengthened Edge	2	0.625	0.060	4.00	0.208	12.00	XP3310
52201062	PFR0625R090A-SH	Strengthened Edge	2	0.625	0.090	4.00	0.208	12.00	XP3310
52201063	PFR0625R120A-SH	Strengthened Edge	2	0.625	0.120	4.00	0.208	12.00	XP3310
52201064	PFR0750R015A-SH	Strengthened Edge	2	0.750	0.015	5.00	0.264	15.00	XP3310
52201065	PFR0750R030A-SH	Strengthened Edge	2	0.750	0.030	5.00	0.264	15.00	XP3310
52201066	PFR0750R060A-SH	Strengthened Edge	2	0.750	0.060	5.00	0.264	15.00	XP3310
52201067	PFR0750R090A-SH	Strengthened Edge	2	0.750	0.090	5.00	0.264	15.00	XP3310

● Stocked ○ Available Upon Request; MOQ May Apply ▲ Globally Stocked



ABOUT OSG

DRILLING

THREADING

MILLING

HOLDERS

INDEX





List 78PFR (Continued)

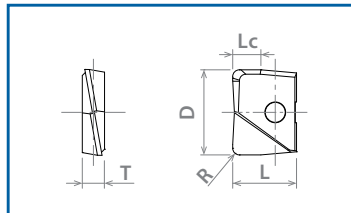
OSG PHOENIX® PFR INSERTS

PACKED
1 PIECE

EDP Number	Designation	Specification	Number of Cutting Edges	Insert Size					Grade
				D (Inch)	R (Inch)	T (mm)	Lc (Inch)	L (mm)	
52201068	● PFR0750R120A-SH	Strengthened Edge	2	0.750	0.120	5.00	0.264	15.00	XP3310
52201069	● PFR1000R015A-SH	Strengthened Edge	2	1.000	0.015	6.00	0.327	18.50	XP3310
52201070	● PFR1000R030A-SH	Strengthened Edge	2	1.000	0.030	6.00	0.327	18.50	XP3310
52201071	● PFR1000R060A-SH	Strengthened Edge	2	1.000	0.060	6.00	0.327	18.50	XP3310
52201072	● PFR1000R090A-SH	Strengthened Edge	2	1.000	0.090	6.00	0.327	18.50	XP3310
52201073	● PFR1000R120A-SH	Strengthened Edge	2	1.000	0.120	6.00	0.327	18.50	XP3310
52201074	● PFR1250R015A-SH	Strengthened Edge	2	1.250	0.015	7.00	0.405	23.50	XP3310
52201075	● PFR1250R030A-SH	Strengthened Edge	2	1.250	0.030	7.00	0.405	23.50	XP3310
52201076	● PFR1250R060A-SH	Strengthened Edge	2	1.250	0.060	7.00	0.405	23.50	XP3310
52201077	● PFR1250R090A-SH	Strengthened Edge	2	1.250	0.090	7.00	0.405	23.50	XP3310
52201078	● PFR1250R120A-SH	Strengthened Edge	2	1.250	0.120	7.00	0.405	23.50	XP3310
52201114	● PFR0250R015A-D	Diamond Coated	2	0.250	0.015	2.00	0.078	5.00	XC4505
52201115	● PFR0250R030A-D	Diamond Coated	2	0.250	0.030	2.00	0.078	5.00	XC4505
52201116	● PFR0250R060A-D	Diamond Coated	2	0.250	0.060	2.00	0.078	5.00	XC4505
52201100	● PFR0375R015A-D	Diamond Coated	2	0.375	0.015	2.60	0.130	8.50	XC4505
52201101	● PFR0375R030A-D	Diamond Coated	2	0.375	0.030	2.60	0.130	8.50	XC4505
52201102	● PFR0375R060A-D	Diamond Coated	2	0.375	0.060	2.60	0.130	8.50	XC4505
52201103	● PFR0500R015A-D	Diamond Coated	2	0.500	0.015	3.00	0.157	10.00	XC4505
52201104	● PFR0500R030A-D	Diamond Coated	2	0.500	0.030	3.00	0.157	10.00	XC4505
52201105	● PFR0500R060A-D	Diamond Coated	2	0.500	0.060	3.00	0.157	10.00	XC4505
52201106	● PFR0625R015A-D	Diamond Coated	2	0.625	0.015	4.00	0.208	12.00	XC4505
52201107	● PFR0625R030A-D	Diamond Coated	2	0.625	0.030	4.00	0.208	12.00	XC4505
52201108	● PFR0625R060A-D	Diamond Coated	2	0.625	0.060	4.00	0.208	12.00	XC4505
52201109	● PFR0750R015A-D	Diamond Coated	2	0.750	0.015	5.00	0.264	15.00	XC4505
52201110	● PFR0750R030A-D	Diamond Coated	2	0.750	0.030	5.00	0.264	15.00	XC4505
52201111	● PFR0750R060A-D	Diamond Coated	2	0.750	0.060	5.00	0.264	15.00	XC4505
52201112	● PFR1000R060A-D	Diamond Coated	2	1.000	0.060	6.00	0.327	18.50	XC4505
52201113	● PFR1250R060A-D	Diamond Coated	2	1.250	0.060	7.00	0.405	23.50	XC4505

● Stocked ○ Available Upon Request; MOQ May Apply ▲ Globally Stocked

PXI



DESIGNATION EXPLANATION

PFR 0250 R 015 A-ST XP3225



See Full Detail on Pages 1522-1523

CONTINUED ➔

Insert Grade	P	M	K	N	S	H
	Steel	Stainless Steel	Cast Iron	Non-Ferrous	HRSA	Hardened Steel
XC4505				⊙		
XP3225	⊙	⊙	○	⊙	⊙	○
XP3310	○	○	⊙			⊙

XP3225 best recommended when L/D ≥ 5.

XP3310 best recommended for interrupted cutting.

XP3225 best recommended for aluminum applications.

XP4505 best recommended for graphite & CFRP applications.

○ Good ⊙ Best

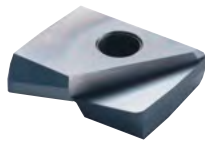




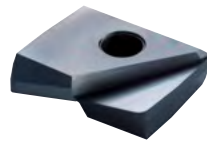
List 78PFR (Continued)

PACKED

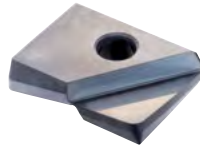
1 PIECE



Multi-Purpose



Strengthened Edge



Diamond Coated

EDP Number	Designation	Specification	Number of Cutting Edges	Insert Size					Grade	
				D (mm)	R (mm)	T (mm)	Lc (mm)	L (mm)		
7820350	●	PFR060R03-ST	Multi-Purpose	2	6.00	0.30	2.00	2.00	5.00	XP3225
7820351	●	PFR060R05-ST	Multi-Purpose	2	6.00	0.50	2.00	2.00	5.00	XP3225
7820352	●	PFR060R10-ST	Multi-Purpose	2	6.00	1.00	2.00	2.00	5.00	XP3225
7820353	●	PFR070R03-ST	Multi-Purpose	2	7.00	0.30	2.00	2.00	5.50	XP3225
7820354	●	PFR070R05-ST	Multi-Purpose	2	7.00	0.50	2.00	2.00	5.50	XP3225
7820355	●	PFR070R10-ST	Multi-Purpose	2	7.00	1.00	2.00	2.00	5.50	XP3225
7820200	●	PFR080R03-ST	Multi-Purpose	2	8.00	0.30	2.40	2.70	7.00	XP3225
7820201	●	PFR080R05-ST	Multi-Purpose	2	8.00	0.50	2.40	2.70	7.00	XP3225
7820202	●	PFR080R10-ST	Multi-Purpose	2	8.00	1.00	2.40	2.70	7.00	XP3225
7820203	●	PFR080R20-ST	Multi-Purpose	2	8.00	2.00	2.40	2.70	7.00	XP3225
7820204	●	PFR100R03-ST	Multi-Purpose	2	10.00	0.30	2.60	3.30	8.50	XP3225
7820205	●	PFR100R05-ST	Multi-Purpose	2	10.00	0.50	2.60	3.30	8.50	XP3225
7820206	●	PFR100R10-ST	Multi-Purpose	2	10.00	1.00	2.60	3.30	8.50	XP3225
7820207	●	PFR100R20-ST	Multi-Purpose	2	10.00	2.00	2.60	3.30	8.50	XP3225
7820356	●	PFR110R03-ST	Multi-Purpose	2	11.00	0.30	2.60	3.30	8.50	XP3225
7820357	●	PFR110R05-ST	Multi-Purpose	2	11.00	0.50	2.60	3.30	8.50	XP3225
7820358	●	PFR110R10-ST	Multi-Purpose	2	11.00	1.00	2.60	3.30	8.50	XP3225
7820359	●	PFR110R20-ST	Multi-Purpose	2	11.00	2.00	2.60	3.30	8.50	XP3225
7820208	●	PFR120R03-ST	Multi-Purpose	2	12.00	0.30	3.00	4.00	10.00	XP3225
7820209	●	PFR120R05-ST	Multi-Purpose	2	12.00	0.50	3.00	4.00	10.00	XP3225
7820210	●	PFR120R10-ST	Multi-Purpose	2	12.00	1.00	3.00	4.00	10.00	XP3225
7820211	●	PFR120R20-ST	Multi-Purpose	2	12.00	2.00	3.00	4.00	10.00	XP3225
7820212	●	PFR120R30-ST	Multi-Purpose	2	12.00	3.00	3.00	4.00	10.00	XP3225
7820360	●	PFR130R03-ST	Multi-Purpose	2	13.00	0.30	3.00	4.00	10.00	XP3225
7820361	●	PFR130R05-ST	Multi-Purpose	2	13.00	0.50	3.00	4.00	10.00	XP3225
7820362	●	PFR130R10-ST	Multi-Purpose	2	13.00	1.00	3.00	4.00	10.00	XP3225
7820363	●	PFR130R20-ST	Multi-Purpose	2	13.00	2.00	3.00	4.00	10.00	XP3225
7820213	●	PFR160R03-ST	Multi-Purpose	2	16.00	0.30	4.00	5.30	12.00	XP3225
7820214	●	PFR160R05-ST	Multi-Purpose	2	16.00	0.50	4.00	5.30	12.00	XP3225
7820215	●	PFR160R10-ST	Multi-Purpose	2	16.00	1.00	4.00	5.30	12.00	XP3225
7820216	●	PFR160R20-ST	Multi-Purpose	2	16.00	2.00	4.00	5.30	12.00	XP3225
7820217	●	PFR160R30-ST	Multi-Purpose	2	16.00	3.00	4.00	5.30	12.00	XP3225
7820364	●	PFR170R03-ST	Multi-Purpose	2	17.00	0.30	4.00	5.30	12.00	XP3225
7820365	●	PFR170R05-ST	Multi-Purpose	2	17.00	0.50	4.00	5.30	12.00	XP3225
7820366	●	PFR170R10-ST	Multi-Purpose	2	17.00	1.00	4.00	5.30	12.00	XP3225
7820367	●	PFR170R20-ST	Multi-Purpose	2	17.00	2.00	4.00	5.30	12.00	XP3225
7820218	●	PFR200R03-ST	Multi-Purpose	2	20.00	0.30	5.00	6.70	15.00	XP3225
7820219	●	PFR200R05-ST	Multi-Purpose	2	20.00	0.50	5.00	6.70	15.00	XP3225
7820220	●	PFR200R10-ST	Multi-Purpose	2	20.00	1.00	5.00	6.70	15.00	XP3225
7820221	●	PFR200R20-ST	Multi-Purpose	2	20.00	2.00	5.00	6.70	15.00	XP3225
7820222	●	PFR200R30-ST	Multi-Purpose	2	20.00	3.00	5.00	6.70	15.00	XP3225
7820368	●	PFR210R03-ST	Multi-Purpose	2	21.00	0.30	5.00	6.70	15.00	XP3225
7820369	●	PFR210R05-ST	Multi-Purpose	2	21.00	0.50	5.00	6.70	15.00	XP3225
7820370	●	PFR210R10-ST	Multi-Purpose	2	21.00	1.00	5.00	6.70	15.00	XP3225
7820371	●	PFR210R20-ST	Multi-Purpose	2	21.00	2.00	5.00	6.70	15.00	XP3225
7820223	●	PFR250R03-ST	Multi-Purpose	2	25.00	0.30	6.00	8.30	18.50	XP3225
7820224	●	PFR250R05-ST	Multi-Purpose	2	25.00	0.50	6.00	8.30	18.50	XP3225
7820225	●	PFR250R10-ST	Multi-Purpose	2	25.00	1.00	6.00	8.30	18.50	XP3225
7820226	●	PFR250R20-ST	Multi-Purpose	2	25.00	2.00	6.00	8.30	18.50	XP3225
7820227	●	PFR250R30-ST	Multi-Purpose	2	25.00	3.00	6.00	8.30	18.50	XP3225
7820372	●	PFR260R03-ST	Multi-Purpose	2	26.00	0.30	6.00	8.30	18.50	XP3225

● Stocked ○ Available Upon Request; MOQ May Apply ▲ Globally Stocked



ABOUT OSG

DRILLING

THREADING

MILLING

HOLDERS

INDEX





List 78PFR (Continued)

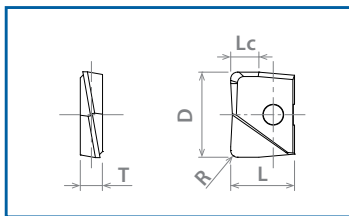
OSG PHOENIX® PFR INSERTS

PACKED
1 PIECE

EDP Number	Designation	Specification	Number of Cutting Edges	Insert Size					Grade
				D (mm)	R (mm)	T (mm)	Lc (mm)	L (mm)	
7820373	● PFR260R05-ST	Multi-Purpose	2	26.00	0.50	6.00	8.30	18.50	XP3225
7820374	● PFR260R10-ST	Multi-Purpose	2	26.00	1.00	6.00	8.30	18.50	XP3225
7820375	● PFR260R20-ST	Multi-Purpose	2	26.00	2.00	6.00	8.30	18.50	XP3225
7820228	● PFR300R03-ST	Multi-Purpose	2	30.00	0.30	7.00	10.00	22.50	XP3225
7820229	● PFR300R05-ST	Multi-Purpose	2	30.00	0.50	7.00	10.00	22.50	XP3225
7820230	● PFR300R10-ST	Multi-Purpose	2	30.00	1.00	7.00	10.00	22.50	XP3225
7820231	● PFR300R20-ST	Multi-Purpose	2	30.00	2.00	7.00	10.00	22.50	XP3225
7820232	● PFR300R30-ST	Multi-Purpose	2	30.00	3.00	7.00	10.00	22.50	XP3225
7820233	● PFR320R03-ST	Multi-Purpose	2	32.00	0.30	7.00	10.30	23.50	XP3225
7820234	● PFR320R05-ST	Multi-Purpose	2	32.00	0.50	7.00	10.30	23.50	XP3225
7820235	● PFR320R10-ST	Multi-Purpose	2	32.00	1.00	7.00	10.30	23.50	XP3225
7820236	● PFR320R20-ST	Multi-Purpose	2	32.00	2.00	7.00	10.30	23.50	XP3225
7820237	● PFR320R30-ST	Multi-Purpose	2	32.00	3.00	7.00	10.30	23.50	XP3225
7820400	● PFR060R03-SH	Strengthened Edge	2	6.00	0.30	2.00	2.00	5.00	XP3310
7820401	● PFR060R05-SH	Strengthened Edge	2	6.00	0.50	2.00	2.00	5.00	XP3310
7820402	● PFR060R10-SH	Strengthened Edge	2	6.00	1.00	2.00	2.00	5.00	XP3310
7820403	● PFR070R03-SH	Strengthened Edge	2	7.00	0.30	2.00	2.00	5.50	XP3310
7820404	● PFR070R05-SH	Strengthened Edge	2	7.00	0.50	2.00	2.00	5.50	XP3310
7820405	● PFR070R10-SH	Strengthened Edge	2	7.00	1.00	2.00	2.00	5.50	XP3310
7820250	● PFR080R03-SH	Strengthened Edge	2	8.00	0.30	2.40	2.70	7.00	XP3310
7820251	● PFR080R05-SH	Strengthened Edge	2	8.00	0.50	2.40	2.70	7.00	XP3310
7820252	● PFR080R10-SH	Strengthened Edge	2	8.00	1.00	2.40	2.70	7.00	XP3310
7820253	● PFR080R20-SH	Strengthened Edge	2	8.00	2.00	2.40	2.70	7.00	XP3310
7820254	● PFR100R03-SH	Strengthened Edge	2	10.00	0.30	2.60	3.30	8.50	XP3310
7820255	● PFR100R05-SH	Strengthened Edge	2	10.00	0.50	2.60	3.30	8.50	XP3310
7820256	● PFR100R10-SH	Strengthened Edge	2	10.00	1.00	2.60	3.30	8.50	XP3310

● Stocked ○ Available Upon Request; MOQ May Apply ▲ Globally Stocked

PXI



DESIGNATION EXPLANATION

PFR 0250 R 015 A-ST XP3225



See Full Detail on Pages 1522-1523

CONTINUED ➔

Insert Grade	P	M	K	N	S	H
	Steel	Stainless Steel	Cast Iron	Non-Ferrous	HRSA	Hardened Steel
XC4505						
XP3225	⊙	⊙	○	⊙	⊙	○
XP3310	○	○	⊙			⊙

XP3225 best recommended when L/D ≥ 5.

XP3310 best recommended for interrupted cutting.

XP3225 best recommended for aluminum applications.

XP4505 best recommended for graphite & CFRP applications.

○ Good ⊙ Best

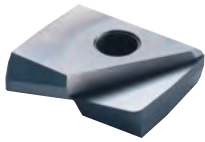




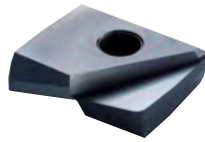
List 78PFR (Continued)

PACKED
1 PIECE

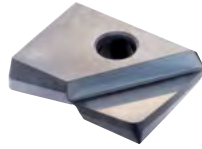
OSG PHOENIX® PFR INSERTS



Multi-Purpose



Strengthened Edge



Diamond Coated

EDP Number	Designation	Specification	Number of Cutting Edges	Insert Size					Grade
				D (mm)	R (mm)	T (mm)	Lc (mm)	L (mm)	
7820257	PFR100R20-SH	Strengthened Edge	2	10.00	2.00	2.60	3.30	8.50	XP3310
7820406	PFR110R03-SH	Strengthened Edge	2	11.00	0.30	2.60	3.30	8.50	XP3310
7820407	PFR110R05-SH	Strengthened Edge	2	11.00	0.50	2.60	3.30	8.50	XP3310
7820408	PFR110R10-SH	Strengthened Edge	2	11.00	1.00	2.60	3.30	8.50	XP3310
7820409	PFR110R20-SH	Strengthened Edge	2	11.00	2.00	2.60	3.30	8.50	XP3310
7820258	PFR120R03-SH	Strengthened Edge	2	12.00	0.30	3.00	4.00	10.00	XP3310
7820259	PFR120R05-SH	Strengthened Edge	2	12.00	0.50	3.00	4.00	10.00	XP3310
7820260	PFR120R10-SH	Strengthened Edge	2	12.00	1.00	3.00	4.00	10.00	XP3310
7820261	PFR120R20-SH	Strengthened Edge	2	12.00	2.00	3.00	4.00	10.00	XP3310
7820262	PFR120R30-SH	Strengthened Edge	2	12.00	3.00	3.00	4.00	10.00	XP3310
7820410	PFR130R03-SH	Strengthened Edge	2	13.00	0.30	3.00	4.00	10.00	XP3310
7820411	PFR130R05-SH	Strengthened Edge	2	13.00	0.50	3.00	4.00	10.00	XP3310
7820412	PFR130R10-SH	Strengthened Edge	2	13.00	1.00	3.00	4.00	10.00	XP3310
7820413	PFR130R20-SH	Strengthened Edge	2	13.00	2.00	3.00	4.00	10.00	XP3310
7820263	PFR160R03-SH	Strengthened Edge	2	16.00	0.30	4.00	5.30	12.00	XP3310
7820264	PFR160R05-SH	Strengthened Edge	2	16.00	0.50	4.00	5.30	12.00	XP3310
7820265	PFR160R10-SH	Strengthened Edge	2	16.00	1.00	4.00	5.30	12.00	XP3310
7820266	PFR160R20-SH	Strengthened Edge	2	16.00	2.00	4.00	5.30	12.00	XP3310
7820267	PFR160R30-SH	Strengthened Edge	2	16.00	3.00	4.00	5.30	12.00	XP3310
7820414	PFR170R03-SH	Strengthened Edge	2	17.00	0.30	4.00	5.30	12.00	XP3310
7820415	PFR170R05-SH	Strengthened Edge	2	17.00	0.50	4.00	5.30	12.00	XP3310
7820416	PFR170R10-SH	Strengthened Edge	2	17.00	1.00	4.00	5.30	12.00	XP3310
7820417	PFR170R20-SH	Strengthened Edge	2	17.00	2.00	4.00	5.30	12.00	XP3310
7820268	PFR200R03-SH	Strengthened Edge	2	20.00	0.30	5.00	6.70	15.00	XP3310
7820269	PFR200R05-SH	Strengthened Edge	2	20.00	0.50	5.00	6.70	15.00	XP3310
7820270	PFR200R10-SH	Strengthened Edge	2	20.00	1.00	5.00	6.70	15.00	XP3310
7820271	PFR200R20-SH	Strengthened Edge	2	20.00	2.00	5.00	6.70	15.00	XP3310
7820272	PFR200R30-SH	Strengthened Edge	2	20.00	3.00	5.00	6.70	15.00	XP3310
7820418	PFR210R03-SH	Strengthened Edge	2	21.00	0.30	5.00	6.70	15.00	XP3310
7820419	PFR210R05-SH	Strengthened Edge	2	21.00	0.50	5.00	6.70	15.00	XP3310
7820420	PFR210R10-SH	Strengthened Edge	2	21.00	1.00	5.00	6.70	15.00	XP3310
7820421	PFR210R20-SH	Strengthened Edge	2	21.00	2.00	5.00	6.70	15.00	XP3310
7820273	PFR250R03-SH	Strengthened Edge	2	25.00	0.30	6.00	8.30	18.50	XP3310
7820274	PFR250R05-SH	Strengthened Edge	2	25.00	0.50	6.00	8.30	18.50	XP3310
7820275	PFR250R10-SH	Strengthened Edge	2	25.00	1.00	6.00	8.30	18.50	XP3310
7820276	PFR250R20-SH	Strengthened Edge	2	25.00	2.00	6.00	8.30	18.50	XP3310
7820277	PFR250R30-SH	Strengthened Edge	2	25.00	3.00	6.00	8.30	18.50	XP3310
7820422	PFR260R03-SH	Strengthened Edge	2	26.00	0.30	6.00	8.30	18.50	XP3310
7820423	PFR260R05-SH	Strengthened Edge	2	26.00	0.50	6.00	8.30	18.50	XP3310
7820424	PFR260R10-SH	Strengthened Edge	2	26.00	1.00	6.00	8.30	18.50	XP3310
7820425	PFR260R20-SH	Strengthened Edge	2	26.00	2.00	6.00	8.30	18.50	XP3310
7820278	PFR300R03-SH	Strengthened Edge	2	30.00	0.30	7.00	10.00	22.50	XP3310
7820279	PFR300R05-SH	Strengthened Edge	2	30.00	0.50	7.00	10.00	22.50	XP3310
7820280	PFR300R10-SH	Strengthened Edge	2	30.00	1.00	7.00	10.00	22.50	XP3310
7820281	PFR300R20-SH	Strengthened Edge	2	30.00	2.00	7.00	10.00	22.50	XP3310
7820282	PFR300R30-SH	Strengthened Edge	2	30.00	3.00	7.00	10.00	22.50	XP3310
7820283	PFR320R03-SH	Strengthened Edge	2	32.00	0.30	7.00	10.30	23.50	XP3310
7820284	PFR320R05-SH	Strengthened Edge	2	32.00	0.50	7.00	10.30	23.50	XP3310
7820285	PFR320R10-SH	Strengthened Edge	2	32.00	1.00	7.00	10.30	23.50	XP3310
7820286	PFR320R20-SH	Strengthened Edge	2	32.00	2.00	7.00	10.30	23.50	XP3310
7820287	PFR320R30-SH	Strengthened Edge	2	32.00	3.00	7.00	10.30	23.50	XP3310

● Stocked ○ Available Upon Request; MOQ May Apply ▲ Globally Stocked





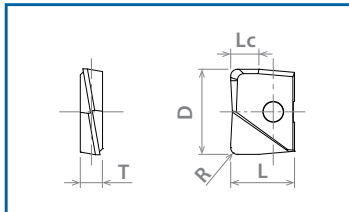
List 78PFR (Continued)

OSG PHOENIX® PFR INSERTS

PACKED
1 PIECE

EDP Number	Designation	Specification	Number of Cutting Edges	Insert Size					Grade
				D (mm)	R (mm)	T (mm)	Lc (mm)	L (mm)	
7820450	● PFR060R03-D	Diamond Coated	2	6.00	0.30	2.00	2.00	5.00	XC4505
7820451	● PFR060R05-D	Diamond Coated	2	6.00	0.50	2.00	2.00	5.00	XC4505
7820452	● PFR060R10-D	Diamond Coated	2	6.00	1.00	2.00	2.00	5.00	XC4505
7820300	● PFR080R03-D	Diamond Coated	2	8.00	0.30	2.40	2.70	7.00	XC4505
7820301	● PFR080R05-D	Diamond Coated	2	8.00	0.50	2.40	2.70	7.00	XC4505
7820302	● PFR080R10-D	Diamond Coated	2	8.00	1.00	2.40	2.70	7.00	XC4505
7820303	● PFR100R03-D	Diamond Coated	2	10.00	0.30	2.60	3.30	8.50	XC4505
7820304	● PFR100R05-D	Diamond Coated	2	10.00	0.50	2.60	3.30	8.50	XC4505
7820305	● PFR100R10-D	Diamond Coated	2	10.00	1.00	2.60	3.30	8.50	XC4505
7820306	● PFR120R03-D	Diamond Coated	2	12.00	0.30	3.00	4.00	10.00	XC4505
7820307	● PFR120R05-D	Diamond Coated	2	12.00	0.50	3.00	4.00	10.00	XC4505
7820308	● PFR120R10-D	Diamond Coated	2	12.00	1.00	3.00	4.00	10.00	XC4505
7820309	● PFR160R03-D	Diamond Coated	2	16.00	0.30	4.00	5.30	12.00	XC4505
7820310	● PFR160R05-D	Diamond Coated	2	16.00	0.50	4.00	5.30	12.00	XC4505
7820311	● PFR160R10-D	Diamond Coated	2	16.00	1.00	4.00	5.30	12.00	XC4505
7820312	● PFR200R03-D	Diamond Coated	2	20.00	0.30	5.00	6.70	15.00	XC4505
7820313	● PFR200R05-D	Diamond Coated	2	20.00	0.50	5.00	6.70	15.00	XC4505
7820314	● PFR200R10-D	Diamond Coated	2	20.00	1.00	5.00	6.70	15.00	XC4505

● Stocked ○ Available Upon Request; MOQ May Apply ▲ Globally Stocked



DESIGNATION EXPLANATION

PFR 0250 R 015 A-ST XP3225



See Full Detail on Pages 1522-1523

Insert Grade	P	M	K	N	S	H
	Steel	Stainless Steel	Cast Iron	Non-Ferrous	HRSA	Hardened Steel
XC4505						
XP3225	○	○	○	○	○	○
XP3310	○	○	○	○	○	○

XP3225 best recommended when L/D ≥ 5.
 XP3310 best recommended for interrupted cutting.
 XP3225 best recommended for aluminum applications.
 XP4505 best recommended for graphite & CFRP applications.

○ Good ○ Best

