



Perforating Gun System Summary

With

- > Gun System Summary Chart**
- > Shaped Charge / Gun System Compatibility Chart**
- > Gun System / Shaped Charge Compatibility Chart**
- Including "Salt & Pepper" Compatibility
- > Shipping & Regulatory Information**
- > Circulation Charge Performance & Compatibility Chart**

*See our website for the latest updates
or to download API RP-43 Data Sheets*

**Your Worldwide
Perforating Solution**

TABLE OF CONTENTS

Gun System Summary Chart	1 – 6
Find shaped charges and gun system performance for standard gun system configurations.	
Shaped Charge / Gun System Compatibility Chart	7 – 15
Find standard gun system configurations available for each shaped charge.	
Gun System / Shaped Charge Compatibility Chart	16 – 24
“Salt & Pepper” configurations. Find shaped charges that fit same gun hardware.	
Shipping and Regulatory Information	25 – 28
Find shipping and regulatory information for each shaped charge.	
Circulation Charges	29 – 32
Find test results and gun system compatibility	
Shaped Charge Part Numbering Scheme	Inside of back cover
Understand part numbering scheme	

Gun System Summary Chart Standard Gun System Configurations

Pages 2 – 6

*Find shaped charges and gun system performance
for standard gun system configurations.*

Gun System Summary Chart Standard Gun System Configurations

Systems Also Available in Other SPF/Phasing Configurations - Call Titan Sales for Details

See Titan GunFacts™ For Complete Specifications

Tubing Gun Systems -- Capsule Strip (CAP)

Gun Size, O.D.	SPF	Type	Charge P/N	Charge Grams	Performance (English Units, in.)				Performance (Metric Units, mm)				Data Type	API Target	
					EH	Pen	Normalized Pen (see Note 6)		EH	Pen	Normalized Pen (see Note 6)			Casing	Compr Str (psi)
							SPE27424	5%/1000 psi			SPE27424	5%/1000 psi			
1-11/16" (42.9 mm)	4, 6	SDP	CAP-1708-320T	8.0	0.24	19.10	20.70	21.28	6.10	485.1	525.8	540.4	2	4-1/2"	7,280
		BH	CAP-1708-310B	8.0	0.59	5.01	5.23	5.31	14.99	127.3	132.8	135.0	1	4-1/2"	6,215
2-1/8" (54.0 mm)	4, 6	SDP	CAP-2115-320T	15.0	0.27	31.23	34.65	35.84	6.86	793.2	880.1	910.2	2	5-1/2"	7,950
		BH	CAP-2115-310B	15.0	0.63	6.18	6.45	6.56	16.00	157.0	163.8	166.5	1	5-1/2"	6,215

Tubing Gun Systems -- Retrievable Hollow Carrier (RTG)

Gun Size, O.D.	SPF	Type	Charge P/N	Charge Grams	Performance (English Units, in.)				Performance (Metric Units, mm)				Data Type	API Target	
					EH	Pen	Normalized Pen (see Note 6)		EH	Pen	Normalized Pen (see Note 6)			Casing	Compr Str (psi)
							SPE27424	5%/1000 psi			SPE27424	5%/1000 psi			
1-3/8" (34.9 mm)	4	DP	RTG-1302-400	1.8	0.17	4.70	4.94	5.04	4.32	119.4	125.5	128.0	3	4-1/2"	6,440
1-9/16" (39.7 mm)	4, 6	SDP	RTG-1603-320T	3.2	0.20	10.91	10.97	10.99	5.08	277.1	278.6	279.2	3	4-1/2"	5,150
	4, 6	DP	RTG-1603-300	3.2	0.23	6.62	7.18	7.38	5.84	168.1	182.4	187.6	1	2-3/8"	7,310
	4, 6	BH	FLO-1603-310	3.2	0.41	3.23	3.57	3.69	10.41	82.0	90.7	93.6	3	4-1/2"	7,825
2" (50.8 mm)	4, 6	SDP	RTG-2106-321T	6.5	0.27	25.05	26.84	27.51	6.86	636.3	681.7	698.8	2	2-7/8"	6,965
	4, 6	GH	RTG-2106-331	6.5	0.36	11.82	12.12	12.25	9.14	300.2	307.8	311.0	1	2-7/8"	5,720
	4, 6	BH	FLO-2106-310	6.5	0.51	4.14	4.72	4.90	12.95	105.2	119.9	124.3	1	4-1/2"	8,650
	8	DP	RTG-1603-300	3.2	0.22	6.56	---	---	5.59	166.6	---	---	4	---	---
2-1/2" (63.5 mm)	4, 6	SDP	RTG-2511-322T	11.0	0.32	30.52	32.52	33.27	8.13	775.2	826.0	845.0	2	3-1/2"	6,800
	4, 6	DP	RTG-2511-301	11.0	0.41	17.61	17.99	18.15	10.41	447.3	456.9	460.9	1	3-1/2"	5,610
	4, 6	BH	FLO-2511-310B	11.0	0.59	4.85	4.91	4.93	14.99	123.2	124.7	125.3	1	4-1/2"	5,340

Ported Casing Gun Systems (PPG)

Gun Size, O.D.	SPF	Type	Charge P/N	Charge Grams	Performance (English Units, in.)				Performance (Metric Units, mm)				Data Type	API Target	
					EH	Pen	Normalized Pen (see Note 6)		EH	Pen	Normalized Pen (see Note 6)			Casing	Compr Str (psi)
							SPE27424	5%/1000 psi			SPE27424	5%/1000 psi			
3-1/8" (79.4 mm) (also fits 3-3/8" 85.7 mm)	4	SDP	PPG-3112-321T	12.0	0.34	22.40	23.82	24.35	8.64	569.0	605.0	618.5	1	4-1/2"	6,740
	4	BH	PPG-3112-310B	12.0	0.55	5.16	---	---	13.97	131.1	---	---	4	---	---
	4	GH	PPG-3111-331	11.0	0.41	19.15	21.74	22.59	10.41	486.4	552.2	573.8	3	4-1/2"	8,595
	4	SDP	PPG-3111-321	11.0	0.27	17.54	19.08	19.63	6.86	445.5	484.6	498.5	1	4-1/2"	7,380
	4	DP	PPG-3111-301	11.0	0.36	16.82	17.50	17.76	9.14	427.2	444.5	451.2	1	4-1/2"	6,120
	4	BH	PPG-3111-311	11.0	0.54	15.71	16.15	16.32	13.72	399.0	410.2	414.6	1	4-1/2"	5,780
4" (101.6 mm)	4	SDP	PPG-4023-321T	22.7	0.40	33.68	33.74	33.76	10.16	855.5	857.0	857.6	1	5-1/2"	5,050
	4	SDP	PPG-4019-321T	19.0	0.40	23.74	24.59	26.47	10.16	603.0	624.6	672.3	3	5-1/2"	7,300
	4	DP	PPG-4022-301	22.0	0.47	21.42	23.31	23.99	11.94	544.1	592.1	609.4	1	5-1/2"	7,400
	4	DP	PPG-4019-301	19.0	0.46	24.35	20.76	26.41	11.68	618.5	527.3	670.8	1	5-1/2"	6,690
	4	BH	PPG-4022-310B	22.0	0.62	6.50	7.16	7.40	15.75	165.1	181.9	187.9	1	5-1/2"	7,760

Note: All PPG charges are shipped without alignment sleeves.

Data Type: 1. API RP-43 Fifth Edition performance data, using RDX charges.
2. API RP-43 Fifth Edition performance data, using HMX charges.
3. Unofficial / tentative API RP-43 Fifth Edition performance data.

4. Quality control data in API concrete sonotube target.
5. Data extrapolated from similar gun configuration.
6. Normalized to 5,000 psi compressive strength target.

Economical Expendable Casing Gun Systems (EEG)

Gun Size, O.D.	SPF	Type	Charge P/N	Charge Grams	Performance (English Units, in.)				Performance (Metric Units, mm)				Data Type	API Target	
					EH	Pen	Normalized Pen (see Note 6)		EH	Pen	Normalized Pen (see Note 6)			Casing	Compr Str (psi)
							SPE27424	5%/1000 psi			SPE27424	5%/1000 psi			
3-1/8" (79.4 mm)	4	SDP	EXP-3319-322T	19.0	0.40	38.87	40.32	40.89	10.16	987.3	1,024.1	1,038.6	1	4-1/2"	6,040
	4	GH	EXP-3319-331	19.0	0.49	21.92	23.29	23.79	12.45	556.8	591.6	604.4	3	4-1/2"	6,710
	4	DP	EXP-3319-302	19.0	0.41	20.01	20.30	20.42	10.41	508.3	515.6	518.7	5	4-1/2"	5,410
	6	SDP	EXP-2715-322T	15.0	0.31	32.15	32.45	32.58	7.87	816.6	824.2	827.5	2	4-1/2"	5,266
	6	SDP	RTG-2511-322T	11.0	0.31	25.79	27.48	28.11	7.87	655.1	698.0	714.0	5	4-1/2"	6,800
	6	DP	RTG-2511-301	11.0	0.41	14.60	14.92	15.05	10.41	370.8	379.0	382.2	5	4-1/2"	5,610
4" (101.6 mm)	4	SDP	EXP-4032-301	32.0	0.51	34.37	---	---	12.95	873.0	---	---	4	---	---
	4, 6	SDP	EXP-3325-321T	25.0	0.41	43.58	45.22	45.86	10.41	1,106.9	1,148.6	1,164.8	5	5-1/2"	6,045
	4, 6	GH	EXP-3325-331	25.0	0.56	34.37	35.66	36.17	14.22	873.0	905.8	918.6	5	5-1/2"	6,045
	4, 6	SDP	EXP-3323-322T	22.7	0.42	34.08	36.42	37.28	10.67	865.6	925.1	947.0	5	5-1/2"	6,880
	4, 6	SDP	EXP-3323-301T	22.7	0.44	22.86	28.17	29.63	11.18	580.6	715.5	752.5	5	5-1/2"	10,920
	4, 6	GH	EXP-3323-331	22.7	0.49	29.88	30.81	31.18	12.45	759.0	782.6	792.0	5	5-1/2"	5,870
	4, 6	DP	EXP-3323-302	22.0	0.43	19.56	20.62	21.02	10.92	496.8	523.7	533.8	5	5-1/2"	6,490
	4, 6	DP	EXP-3319-322T	19.0	0.39	39.39	40.01	40.26	9.91	1,000.5	1,016.3	1,022.5	5	5-1/2"	5,440

Expendable Casing Gun Systems (EXP)

Gun Size, O.D.	SPF	Type	Charge P/N	Charge Grams	Performance (English Units, in.)				Performance (Metric Units, mm)				Data Type	API Target	
					EH	Pen	Normalized Pen (see Note 6)		EH	Pen	Normalized Pen (see Note 6)			Casing	Compr Str (psi)
							SPE27424	5%/1000 psi			SPE27424	5%/1000 psi			
2-3/4" (69.9 mm)	4, 6	SDP	EXP-2715-322T	15.0	0.35	32.92	33.01	33.05	8.89	836.2	838.5	839.5	2	4-1/2"	5,080
	4, 6	BH	FLO-2715-310B	15.0	0.72	4.67	5.70	5.99	18.29	118.6	144.8	152.1	1	4-1/2"	10,640
	4, 6	SDP	RTG-2511-322T	11.0	0.37	26.15	---	---	9.40	664.2	---	---	4	---	---
	4, 6	DP	RTG-2511-301	11.0	0.40	20.62	---	---	10.16	523.7	---	---	4	---	---
	4, 6	BH	FLO-2511-310B	11.0	0.67	5.25	---	---	17.02	133.4	---	---	4	---	---
	2-7/8" (73.3 mm)	6	SDP	EXP-2715-322T	15.0	0.35	32.92	33.01	33.05	8.89	836.2	838.5	839.5	5	4-1/2"
6		BH	FLO-2715-310B	15.0	0.72	4.67	5.70	5.99	18.29	118.6	144.8	152.1	5	4-1/2"	10,640
3-1/8" (79.4 mm)	4, 6	SDP	EXP-3323-322T	22.7	0.42	35.10	38.39	39.56	10.67	891.5	975.1	1,004.8	2	4-1/2"	7,540
	4, 6	SDP	EXP-3323-301T	22.7	0.43	23.54	29.01	30.51	10.92	597.9	736.9	774.9	3	4-1/2"	10,920
	4, 6	GH	EXP-3323-331	22.7	0.56	26.26	---	---	14.22	667.0	---	---	4	---	---
	4, 6	DP	EXP-3323-361T	22.7	0.35	33.78	37.11	38.29	8.89	858.0	942.6	972.6	5	4-1/2"	7,670
	4, 6	DP	EXP-3323-302	22.7	0.43	20.15	21.24	21.65	10.92	511.8	539.5	549.9	5	4-1/2"	6,490
	4, 6	BH	FLO-3323-310B	22.7	0.69	6.01	6.65	6.88	17.53	152.7	168.9	174.6	5	4-1/2"	7,880
	4, 6	SDP	EXP-3319-322T	19.0	0.39	40.56	41.19	41.45	9.91	1,030.2	1,046.2	1,052.9	1	4-1/2"	5,440
	4, 6	GH	EXP-3319-331	19.0	0.51	26.77	---	---	12.95	680.0	---	---	4	---	---
	4, 6	DP	EXP-3319-302	19.0	0.40	20.89	21.19	21.32	10.16	530.6	538.2	541.5	5	4-1/2"	5,410
	8, 12	DP	EXP-3112-321T	12.0	0.31	19.82	23.61	24.74	7.87	503.4	599.7	628.3	3	5"	9,960
8, 12	BH	FLO-3112-310B	12.0	0.60	5.73	6.12	6.26	15.24	145.5	155.4	159.0	2	5"	6,850	

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 2. API RP-43 Fifth Edition performance data, using HMX charges.
 3. Unofficial / tentative API RP-43 Fifth Edition performance data.

4. Quality control data in API concrete sonotube target.
 5. Data extrapolated from similar gun configuration.
 6. Normalized to 5,000 psi compressive strength target.

Expendable Casing Gun Systems (EXP) - continued

Gun Size, O.D.	SPF	Type	Charge P/N	Charge Grams	Performance (English Units, in.)				Performance (Metric Units, mm)				Data Type	API Target	
					EH	Pen	Normalized Pen (see Note 6)		EH	Pen	Normalized Pen (see Note 6)			Casing	Compr Str (psi)
							SPE27424	5%/1000 psi			SPE27424	5%/1000 psi			
3-3/8" (85.7 mm)	4, 6	SDP	EXP-3325-321T	25.0	0.42	47.36	49.77	50.69	10.67	1,202.9	1,264.2	1,287.5	2	4-1/2"	6,405
	4, 6	GH	EXP-3325-331	25.0	0.57	29.81	30.76	31.14	14.48	757.2	781.3	790.9	1	4-1/2"	5,890
	4, 6	SDP	EXP-3323-322T	22.7	0.43	37.02	39.56	40.50	10.92	940.3	1,004.8	1,028.7	2	4-1/2"	6,880
	4, 6	DP	EXP-3323-301T	22.7	0.45	24.84	30.61	32.19	11.43	630.9	777.5	817.7	5	4-1/2"	10,920
	4, 6	DP	EXP-3323-361T	22.7	0.36	35.63	39.15	40.39	9.14	905.0	994.4	1,025.8	2	4-1/2"	7,670
	4, 6	GH	EXP-3323-331	22.7	0.54	20.61	21.85	22.32	13.72	523.5	555.0	566.9	3	4-1/2"	6,660
	4, 6	DP	EXP-3323-302	22.7	0.44	21.25	22.40	22.83	11.18	539.8	569.0	580.0	1	4-1/2"	6,490
	4, 6	BH	FLO-3323-310B	22.0	0.70	6.18	6.84	7.07	17.78	157.0	173.7	179.6	1	4-1/2"	7,880
	4, 6	SDP	EXP-3319-322T	19.0	0.40	42.79	43.46	43.73	10.16	1,086.9	1,103.9	1,110.8	5	4-1/2"	5,440
	4, 6	DP	EXP-3319-302	19.0	0.41	22.04	22.36	22.49	10.41	559.8	567.9	571.3	1	4-1/2"	5,410
	8, 12	DP	EXP-3112-321T	12.0	0.32	20.91	24.91	26.10	8.13	531.1	632.7	662.8	5	5-1/2"	9,960
8, 12	BH	FLO-3112-310B	12.0	0.61	5.89	6.21	6.33	15.49	149.6	157.7	160.9	2	5-1/2"	6,510	
3-1/2" (88.9 mm)	Charges from 3-3/8" EXP also fit 3-1/2" gun systems.														
4" (101.6 mm)	4	SDP	EXP-4539-324T	38.5	0.52	52.13	---	---	13.21	1,324.1	---	---	4	---	---
	4	SDP	EXP-4039-321T	38.5	0.43	54.58	57.73	58.92	10.92	1,386.3	1,466.3	1,496.5	2	5-1/2"	6,590
	4	BH	FLO-4039-311CF	38.5	0.53	6.50	---	---	13.46	165.1	---	---	4	---	---
	4, 5	DP	EXP-4036-301	36.0	0.50	27.16	---	---	12.70	689.9	---	---	4	---	---
	4, 5	BH	FLO-4036-311B	36.0	0.89	7.24	---	---	22.61	183.9	---	---	4	---	---
	4, 5	DP	EXP-4032-301	32.0	0.51	34.37	---	---	12.95	873.0	---	---	4	---	---
	4, 5	BH	FLO-4032-311B	32.0	0.93	7.51	---	---	23.62	190.8	---	---	4	---	---
	4, 6	SDP	EXP-3325-321T	25.0	0.41	45.16	46.86	47.52	10.41	1,147.1	1,190.2	1,207.0	2	5-1/2"	6,045
	4, 6	GH	EXP-3325-331	25.0	0.56	35.61	36.95	37.47	14.22	904.5	938.5	951.8	1	5-1/2"	6,045
	4, 6	SDP	EXP-3323-322T	22.7	0.42	35.31	37.73	38.63	10.67	896.9	958.3	981.2	5	5-1/2"	6,880
	4, 6	DP	EXP-3323-301T	22.7	0.44	23.69	29.19	30.70	11.18	601.7	741.4	779.8	5	5-1/2"	10,920
	4, 6	DP	EXP-3323-302	22.7	0.43	20.27	21.36	21.78	10.92	514.9	542.5	553.2	5	5-1/2"	6,490
	4, 6	DP	EXP-3323-361T	22.7	0.35	33.99	37.35	38.53	8.89	863.3	948.7	978.6	5	5-1/2"	7,670
	4, 6	GH	EXP-3323-331	22.7	0.49	30.97	31.93	32.32	12.45	786.6	811.0	820.9	1	5-1/2"	5,870
	8	SDP	EXP-4521-322T	21.0	0.36	35.05	---	---	9.14	890.3	---	---	4	---	---
8	GH	EXP-4521-331	21.0	0.58	23.75	---	---	14.73	603.3	---	---	4	---	---	
8	BH	FLO-4521-310B	21.0	0.67	5.49	---	---	17.02	139.4	---	---	4	---	---	
8	BH	FLO-4521-310CF	21.0	0.82	5.40	---	---	20.83	137.2	---	---	4	---	---	

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 2. API RP-43 Fifth Edition performance data, using HMX charges.
 3. Unofficial / tentative API RP-43 Fifth Edition performance data

4. Quality control data in API concrete sonotube target.
 5. Data extrapolated from similar gun configuration.
 6. Normalized to 5,000 psi compressive strength target

Expendable Casing Gun Systems (EXP) - continued

Gun Size, O.D.	SPF	Type	Charge P/N	Charge Grams	Performance (English Units, in.)				Performance (Metric Units, mm)				Data Type	API Target	
					EH	Pen	Normalized Pen (see Note 6)		EH	Pen	Normalized Pen (see Note 6)			Casing	Compr Str (psi)
							SPE27424	5%/1000 psi			SPE27424	5%/1000 psi			
4-1/2" (114.3 mm)	4, 5	SDP	EXP-4539-324T	38.5	0.44	53.80	59.28	61.20	11.18	1,366.5	1,505.7	1,554.4	2	7"	7,750
	4, 5	SDP	EXP-4039-321T	38.5	0.43	54.58	---	---	10.92	1,386.3	---	---	4	---	---
	4, 5	BH	FLO-4039-311CF	38.5	0.53	6.50	---	---	13.46	165.1	---	---	4	---	---
	4, 5	DP	EXP-4036-301	36.0	0.50	27.16	---	---	12.70	689.9	---	---	4	---	---
	4, 5	BH	FLO-4036-311B	36.0	0.89	7.24	---	---	22.61	183.9	---	---	4	---	---
	4, 5	DP	EXP-4032-301	32.0	0.51	34.37	---	---	12.95	873.0	---	---	4	---	---
	4, 5	BH	FLO-4032-311B	32.0	0.93	7.51	---	---	23.62	190.8	---	---	4	---	---
	8, 12	SDP	EXP-4521-322T	21.0	0.34	30.22	31.63	32.17	8.64	767.6	803.4	817.1	2	7"	6,290
	8, 12	GH	EXP-4521-331	21.0	0.58	23.75	---	---	14.73	603.3	---	---	4	---	---
	8, 12	BH	FLO-4524-311CF	24.0	0.75	7.03	7.51	7.68	19.05	178.6	190.8	195.2	1	7"	6,860
	8, 12	BH	FLO-4521-310B	21.0	0.67	5.49	5.69	5.77	17.02	139.4	144.5	146.6	1	7"	6,025
	8, 12	BH	FLO-4521-310CF	21.0	0.82	5.40	---	---	20.83	137.2	---	---	4	---	---
	12, 16	BH	FLO-4620-311CFZ	20.0	0.73	7.85	8.46	8.69	18.54	199.4	214.9	220.6	3	7"	7,130
	18	BH	FLO-4617-311CFZ	17.0	0.71	7.30	7.30	8.08	18.03	185.4	185.4	205.2	3	7"	7,130
4-5/8" (117.5 mm)	4, 5	SDP	EXP-4539-324T	38.5	0.52	52.13	---	---	13.21	1,324.1	---	---	4	---	---
	4, 5	SDP	EXP-4039-321T	38.5	0.43	54.58	---	---	10.92	1,386.3	---	---	4	---	---
	4, 5	BH	FLO-4039-311CF	38.5	0.53	6.50	---	---	13.46	165.1	---	---	4	---	---
	4, 5	DP	EXP-4036-301	36.0	0.50	27.16	---	---	12.70	689.9	---	---	4	---	---
	4, 5	BH	FLO-4036-311B	36.0	0.89	7.24	---	---	22.61	183.9	---	---	4	---	---
	4, 5	DP	EXP-4032-301	32.0	0.51	34.37	---	---	12.95	873.0	---	---	4	---	---
	4, 5	BH	FLO-4032-311B	32.0	0.93	7.51	---	---	23.62	190.8	---	---	4	---	---
	8, 12	GH	EXP-4521-331	21.0	0.58	23.75	---	---	14.73	603.3	---	---	4	---	---
	8, 12	BH	FLO-4524-311CF	24.0	0.80	7.32	7.78	7.95	20.32	185.9	197.6	202.0	1	7"	6,730
	8, 12	BH	FLO-4521-310B	21.0	0.67	5.49	5.69	5.77	17.02	139.4	144.5	146.6	1	7"	6,025
	8, 12	BH	FLO-4521-310CF	21.0	0.82	5.40	---	---	20.83	137.2	---	---	4	---	---
	8, 12	BH	FLO-5028-310B	28.0	0.95	6.50	---	---	24.13	165.1	---	---	4	---	---
	12, 16	BH	FLO-4620-311CFZ	20.0	0.77	7.08	---	---	19.56	179.8	---	---	4	---	---
	18	CJBH	FLO-4621-311CF	21.0	0.85	6.54	7.05	7.24	21.59	166.1	179.1	183.9	3	7"	7,140
18	BH	FLO-4617-311CFZ	17.0	0.82	6.60	---	---	20.83	167.6	---	---	4	---	---	

Data Type: 1. API RP-43 Fifth Edition performance data, using RDX charges.
 2. API RP-43 Fifth Edition performance data, using HMX charges.
 3. Unofficial / tentative API RP-43 Fifth Edition performance data.

4. Quality control data in API concrete sonotube target.
 5. Data extrapolated from similar gun configuration.
 6. Normalized to 5,000 psi compressive strength target.

Expendable Casing Gun Systems (EXP) - continued

Gun Size, O.D.	SPF	Type	Charge P/N	Charge Grams	Performance (English Units, in.)				Performance (Metric Units, mm)				Data Type	API Target	
					EH	Pen	Normalized Pen (see Note 6)		EH	Pen	Normalized Pen (see Note 6)			Casing	Compr Str (psi)
							SPE27424	5%/1000 psi			SPE27424	5%/1000 psi			
5" (127.0 mm)	4, 5	SDP	EXP-4539-324T	38.5	0.52	52.13	---	---	13.21	1,324.1	---	---	4	---	---
	4, 5	SDP	EXP-4039-321T	38.5	0.43	54.58	---	---	10.92	1,386.3	---	---	4	---	---
	4, 5	BH	FLO-4039-311CF	38.5	0.53	6.50	---	---	13.46	165.1	---	---	4	---	---
	4, 5	DP	EXP-4036-301	36.0	0.50	27.16	---	---	12.70	689.9	---	---	4	---	---
	4, 5	BH	FLO-4036-311B	36.0	0.89	7.24	---	---	22.61	183.9	---	---	4	---	---
	4, 5	DP	EXP-4032-301	32.0	0.51	34.37	---	---	12.95	873.0	---	---	4	---	---
	4, 5	BH	FLO-4032-311B	32.0	0.93	7.51	---	---	23.62	190.8	---	---	4	---	---
	8, 12	SDP	EXP-4521-322T	21.0	0.36	35.05	---	---	9.14	890.3	---	---	4	---	---
	8, 12	GH	EXP-4521-331	21.0	0.58	23.75	---	---	14.73	603.3	---	---	4	---	---
6" (152.4 mm)	12	BH	FLO-5028-310B	28.0	0.80	8.22	8.32	8.36	20.32	208.8	211.3	212.3	1	7"	5,340
	18	CJBH	FLO-4621-311CF	21.0	0.85	7.11	---	---	21.59	180.6	---	---	4	---	---
	12	CJDP	EXP-6034-300	34.0	0.54	19.60	---	---	13.72	497.8	---	---	4	---	---
7" (177.8 mm)	12	CJBH	FLO-6034-310B	34.0	1.04	5.97	---	---	26.42	151.6	---	---	4	---	---
	12	DP	EXP-4039-321T	38.5	0.38	41.62	42.85	43.33	9.65	1,057.1	1,088.4	1,100.6	1	9-5/8"	5,823
	12	GH	EXP-7039-331	38.5	0.75	28.54	28.89	29.03	19.05	724.9	733.8	737.4	1	9-5/8"	5,345
	12	GH	EXP-7039-332	38.5	0.78	24.51	24.81	24.93	19.81	622.6	630.2	633.3	1	9-5/8"	5,345
	12	BH	Call												

Data Type: 1. API RP-43 Fifth Edition performance data, using RDX charges.
 2. API RP-43 Fifth Edition performance data, using HMX charges.
 3. Unofficial / tentative API RP-43 Fifth Edition performance data.

4. Quality control data in API concrete sonotube target.
 5. Data extrapolated from similar gun configuration.
 6. Normalized to 5,000 psi compressive strength target.

Shaped Charge / Gun System Compatibility Chart Standard Gun System Configurations

Pages 8 – 15

*Find standard gun system configurations
available for each shaped charge.*

	<u>Pages</u>
CAP Capsule Gun Strip Systems	
SDP & BH charges	8
RTG, EXP & EEG Gun Systems	
SDP, DP & GH charges	8 – 12
BH charges	13 – 14
PPG Gun Systems	
SDP, DP & BH charges	15

Shaped Charge / Gun System Compatibility Chart
Standard Gun System Configurations
Systems Also Available in Other SPF/Phasing Configurations - Call Titan Sales for Details
See Titan GunFacts™ For Complete Specifications

SDP & BH Charges for CAP Capsule Strip Systems

Charge P/N	Type	Grams	Fits Gun Assembly								Notes ⁽³⁾	Det Cord min. V.O.D. m/sec
			Gun O.D.		Shot Density		Phasing	Type	Series Number			
			in.	mm	SPF	SPM			Bolted	Threaded		
CAP-1708-310B	BH	8.0	1-11/16"	42.9	4	13	0	CAP	---	---	F, G	7000
					6	20	0	CAP	---	---	F, G	7500
CAP-1708-320T	SDP	8.0	1-11/16"	42.9	4	13	0	CAP	---	---	F, G	7000
					6	20	0	CAP	---	---	F, G	7500
CAP-2115-310B	BH	15.0	2-1/8"	54.0	4	13	0	CAP	---	---	F, G	7000
					6	20	0	CAP	---	---	F, G	7500
CAP-2115-320T	SDP	15.0	2-1/8"	54.0	4	13	0	CAP	---	---	F, G	7000
					6	20	0	CAP	---	---	F, G	7500

SDP, DP & GH Charges for RTG, EXP & EEG Gun Systems

Charge P/N	Type	Grams	Fits Gun Assembly								Notes ⁽³⁾	Det Cord min. V.O.D. m/sec				
			Gun O.D.		Shot Density		Phasing (LS = Low Side)	Type	Series Number							
			in.	mm	SPF	SPM			Bolted	Threaded						
RTG-1302-400	DP	1.8 HMX	1-3/8"	34.9	4	13	0	RTG	0327-A00-041	---	F	6400				
							180	RTG	0327-A00-042	---	F	6400				
RTG-1603-300	DP	3.2	1-9/16"	39.7	4	13	0	RTG	0320-A00-041	0220-A00-041	F, G	6400				
							60	RTG	0320-A00-046	0220-A00-046	F, G	6400				
							90	RTG	0320-A00-044	0220-A00-044	F, G	6400				
							120	RTG	0320-A00-043	0220-A00-043	F, G	6400				
							180	RTG	0320-A00-042	0220-A00-042	F, G	6400				
							2 bank LS	RTG	0320-A00-D4**	0220-A00-D4**	F, G	6400				
							3 bank LS	RTG	0320-A00-L4**	0220-A00-L4**	F, G	6400				
					6	20	0	RTG	0320-A00-061	0220-A00-061	F	6700				
							60	RTG	0320-A00-066	0220-A00-066	F	6700				
							180	RTG	0320-A00-062	0220-A00-062	F	6700				
							2 bank LS	RTG	0320-A00-D4**	0220-A00-D6**	F	6700				
							3 bank LS	RTG	0320-A00-L4**	0220-A00-L6**	F	6700				
							2"	50.8	8	26	90	RTG	0321-B00-084	0222-B00-084	F, G	6700
							RTG-1603-320T <i>Prospector®</i>	SDP	3.2	1-9/16"	39.7	4	13	0	RTG	0320-A00-041
60	RTG	0320-A00-046	0220-A00-046	F, G	6400											
90	RTG	0320-A00-044	0220-A00-044	F, G	6400											
120	RTG	0320-A00-043	0220-A00-043	F, G	6400											
180	RTG	0320-A00-042	0220-A00-042	F, G	6400											
2 bank LS	RTG	0320-A00-D4**	0220-A00-D4**	F, G	6400											
3 bank LS	RTG	0320-A00-L4**	0220-A00-L4**	F, G	6400											
6	20	0	RTG	0320-A00-061	0220-A00-061	F						6700				
		60	RTG	0320-A00-066	0220-A00-066	F						6700				
		180	RTG	0320-A00-062	0220-A00-062	F						6700				
		2 bank LS	RTG	0320-A00-D4**	0220-A00-D6**	F						6700				
		3 bank LS	RTG	0320-A00-L4**	0220-A00-L6**	F						6700				
		2"	50.8	8	26	90						RTG	0321-B00-084	0222-B00-084	F, G	6700
		RTG-2106-321T <i>Gunslinger®</i>	SDP	6.5	2"	50.8						4	13	0	RTG	0321-A00-041
60	RTG						0321-A00-046	0222-A00-046	F, G	6400						
90	RTG						0321-A00-044	0222-A00-044	F, G	6400						
120	RTG						0321-A00-043	0222-A00-043	F, G	6400						
180	RTG						0321-A00-042	0222-A00-042	F, G	6400						
2 bank LS	RTG						0321-A00-D4**	0222-A00-D4**	F, G	6400						
3 bank LS	RTG						0321-A00-L4**	0222-A00-L4**	F, G	6400						
6	20						0	RTG	0321-A00-061	0222-A00-061	F	6700				
							60	RTG	0321-A00-066	0222-A00-066	F	6700				
							180	RTG	0321-A00-062	0222-A00-062	F	6700				
							2 bank LS	RTG	0321-A00-D6**	0222-A00-D6**	F	6700				
							3 bank LS	RTG	0321-A00-L6**	0222-A00-L6**	F	6700				

NOTES:

- ** Enter low side shot to shot angle desired: 15, 30, 45 or 60 deg. (Enter digits only; eg. Enter 15 for 15 degree)
- 1. Series Number is for wireline conveyed, hreaded gun assembly
- 2. Series Number is for TCP conveyed, threaded gun assembly
- 3. "F" indicates that system is recommended for applications in which the perforator is fired in fluid
- "G" indicates that system is recommended for applications in which the perforator is fired in gas.

SDP, DP & GH Charges for RTG, EXP & EEG Gun Systems - continued

Charge P/N	Type	Grams	Fits Gun Assembly								Notes ⁽³⁾	Det Cord min. V.O.D. m/sec									
			Gun O.D.		Shot Density		Phasing (LS = Low Side)	Type	Series Number												
			in.	mm	SPF	SPM			Bolted	Threaded											
RTG-2106-331 Outlaw®	GH	6.5	2"	50.8	4	13	0	RTG	0321-A00-041	0222-A00-041	F, G	6400									
							60	RTG	0321-A00-046	0222-A00-046	F, G	6400									
							90	RTG	0321-A00-044	0222-A00-044	F, G	6400									
							120	RTG	0321-A00-043	0222-A00-043	F, G	6400									
							180	RTG	0321-A00-042	0222-A00-042	F, G	6400									
							2 bank LS	RTG	0321-A00-D4**	0222-A00-D4**	F, G	6400									
							3 bank LS	RTG	0321-A00-L4**	0222-A00-L4**	F, G	6400									
					6	20	0	RTG	0321-A00-061	0222-A00-061	F	6700									
							60	RTG	0321-A00-066	0222-A00-066	F	6700									
							180	RTG	0321-A00-062	0222-A00-062	F	6700									
							2 bank LS	RTG	0321-A00-D6**	0222-A00-D6**	F	6700									
							3 bank LS	RTG	0321-A00-L6**	0222-A00-L6**	F	6700									
							RTG-2511-301 Prospector®	DP	11.0	2-1/2"	63.5	4	13	0	RTG	0328-A00-041	0228-A00-041	F, G	6400		
														60	RTG	0328-A00-046	0228-A00-046	F, G	6400		
90	RTG	0328-A00-044	0228-A00-044	F, G	6400																
120	RTG	0328-A00-043	0228-A00-043	F, G	6400																
180	RTG	0328-A00-042	0228-A00-042	F, G	6400																
2 bank LS	RTG	0328-A00-D4**	0228-A00-D4**	F, G	6400																
3 bank LS	RTG	0328-A00-L4**	0228-A00-L4**	F, G	6400																
6	20	60	RTG	0328-A00-066	0228-A00-066	F						6700									
		2 bank LS	RTG	0328-A00-D6**	0228-A00-D6**	F						6700									
		3 bank LS	RTG	0328-A00-L6**	0228-A00-L6**	F						6700									
		2-3/4"	69.9	4	13	60						EXP	0362-B00-046 ⁽¹⁾	0462-B00-046 ⁽²⁾	F, G	6400					
						90						EXP	0362-B00-044 ⁽¹⁾	0462-B00-044 ⁽²⁾	F, G	6400					
				6	20	60						EXP	0362-B00-066 ⁽¹⁾	0462-B00-066 ⁽²⁾	F, G	6700					
						60						EEG	---	0631-B00-066 ⁽¹⁾	F	6700					
RTG-2511-322T Gunslinger®	SDP	11.0	2-1/2"	63.5	4	13	0	RTG	0328-A00-041	0228-A00-041	F, G	6400									
							60	RTG	0328-A00-046	0228-A00-046	F, G	6400									
							90	RTG	0328-A00-044	0228-A00-044	F, G	6400									
							120	RTG	0328-A00-043	0228-A00-043	F, G	6400									
							180	RTG	0328-A00-042	0228-A00-042	F, G	6400									
							2 bank LS	RTG	0328-A00-D4**	0228-A00-D4**	F, G	6400									
							3 bank LS	RTG	0328-A00-L4**	0228-A00-L4**	F, G	6400									
					6	20	60	RTG	0328-A00-066	0228-A00-066	F	6700									
							2 bank LS	RTG	0328-A00-D6**	0228-A00-D6**	F	6700									
							3 bank LS	RTG	0328-A00-L6**	0228-A00-L6**	F	6700									
							2-3/4"	69.9	4	13	60	EXP	0362-B00-046 ⁽¹⁾	0462-B00-046 ⁽²⁾	F, G	6400					
											90	EXP	0362-B00-044 ⁽¹⁾	0462-B00-044 ⁽²⁾	F, G	6400					
									6	20	60	EXP	0362-B00-066 ⁽¹⁾	0462-B00-066 ⁽²⁾	F, G	6700					
											60	EEG	---	0631-B00-066 ⁽¹⁾	F	6700					
EXP-2715-322T Gunslinger®	SDP	15.0	2-3/4"	69.9	4	13	60	EXP	0362-B00-046	0462-B00-046	F, G	6400									
							90	EXP	0362-B00-044	0462-B00-044	F, G	6400									
							6	20	60	EXP	0362-B00-066	0462-B00-066	F, G	6700							
							6	20	60	EXP	0364-B00-066	0464-B00-066	F, G	6700							
					3-1/8"	79.4	6	20	60	EEG	0631-B00-066	---	F	6700							
									EXP-3112-321T Gunslinger®	DP	12.0	3-1/8"	79.4	12	39	140/20	EXP	0363-G00-12E	0402-G00-12E	F	7500
																140/20	EXP	0365-G00-12E	0403-G00-12E	F	7500
																140/20	EXP	0350-G00-12E	0415-G00-12E	F	7500

NOTES: ** Enter low side shot to shot angle desired: 15, 30, 45 or 60 deg. (Enter digits only: eg. Enter 15 for 15 degree)
 1. Series Number is for wireline conveyed, threaded gun assembly
 2. Series Number is for TCP conveyed, threaded gun assembly
 3. "F" indicates that system is recommended for applications in which the perforator is fired in fluid
 "G" indicates that system is recommended for applications in which the perforator is fired in gas.

SDP, DP & GH Charges for RTG, EXP & EEG Gun Systems - continued

Charge P/N	Type	Grams	Fits Gun Assembly							Notes ⁽³⁾	Det Cord min. V.O.D. m/sec	
			Gun O.D.		Shot Density		Phasing	Type	Series Number			
			in.	mm	SPF	SPM			Wireline			TCP
EXP-3319-302	DP	19.0	3-1/8"	79.4	4	13	60	EEG	0631-A00-046	---	F	6400
								EXP	0363-B00-046	0402-B00-046	F, G	6400
							90	EEG	0631-A00-044	---	F	6400
								EXP	0631-A400-044 ⁽⁴⁾	---	F	6400
							60	EXP	0363-B00-044	0402-B00-044	F, G	6400
								EXP	0363-B00-066	0402-B00-066	F, G	6700
			3-3/8"	85.7	4	13	60	EXP	0365-B00-046	0403-B00-046	F, G	6400
							90	EXP	0365-B00-044	0403-B00-044	F, G	6400
							60	EXP	0365-B00-066	0403-B00-066	F, G	6700
			3-1/2"	88.9	6	20	60	EXP	0350-B00-066	0415-B00-066	F, G	6700
			4"	101.6	4	13	90	EEG	0640-A400-044	---	F, G	6400
								EXP	0400-C00-044	0404-C00-044	F, G	6400
60	EEG	0640-B00-066					---	F, G	6700			
	EXP	0400-C00-066	0404-C00-066	F, G	6700							
EXP-3319-322T <i>Prospector®</i>	SDP	19.0	3-1/8"	79.4	4	13	60	EEG	0631-A00-046	---	F	6400
								EXP	0363-B00-046	0402-B00-046	F, G	6400
							90	EEG	0631-A00-044	---	F	6400
								EXP	0631-A400-044 ⁽⁴⁾	---	F	6400
							60	EXP	0363-B00-044	0402-B00-044	F, G	6400
								EXP	0363-B00-066	0402-B00-066	F, G	6700
			3-3/8"	85.7	4	13	60	EXP	0365-B00-046	0403-B00-046	F, G	6400
							90	EXP	0365-B00-044	0403-B00-044	F, G	6400
							60	EXP	0365-B00-066	0403-B00-066	F, G	6700
			3-1/2"	88.9	6	20	60	EXP	0350-B00-066	0415-B00-066	F, G	6700
			4"	101.6	4	13	90	EEG	0640-A400-044	---	F, G	6400
								EXP	0400-C00-044	0404-C00-044	F, G	6400
60	EEG	0640-B00-066					---	F, G	6700			
	EXP	0400-C00-066	0404-C00-066	F, G	6700							
EXP-3319-331 <i>Outlaw®</i>	GH	19.0	3-1/8"	79.4	4	13	60	EEG	0631-A00-046	---	F	6400
								EXP	0363-B00-046	0402-B00-046	F, G	6400
							90	EEG	0631-A00-044	---	F	6400
								EXP	0631-A400-044 ⁽⁴⁾	---	F	6400
							60	EXP	0363-B00-044	0402-B00-044	F, G	6400
								EXP	0363-B00-066	0402-B00-066	F, G	6700
			3-3/8"	85.7	4	13	60	EXP	0365-B00-046	0403-B00-046	F, G	6400
							90	EXP	0365-B00-044	0403-B00-044	F, G	6400
							60	EXP	0365-B00-066	0403-B00-066	F, G	6700
			3-1/2"	88.9	6	20	60	EXP	0350-B00-066	0415-B00-066	F, G	6700
			4"	101.6	4	13	90	EEG	0640-A400-044	---	F, G	6400
								EXP	0400-C00-044	0404-C00-044	F, G	6400
60	EEG	0640-B00-066					---	F, G	6700			
	EXP	0400-C00-066	0404-C00-066	F, G	6700							
EXP-3323-301T <i>Prospector®</i>	SDP	22.7	3-1/8"	79.4	4	13	60	EXP	0363-B00-046	0402-B00-046	F, G	6400
								EXP	0363-B00-044	0402-B00-044	F, G	6400
							60	EXP	0363-B00-066	0402-B00-066	F ⁽⁵⁾	6700
								EXP	0365-B00-046	0403-B00-046	F, G	6400
							90	EXP	0365-B00-044	0403-B00-044	F, G	6400
								60	EXP	0365-B00-066	0403-B00-066	F, G
			3-1/2"	88.9	6	20	60	EXP	0350-B00-066	0415-B00-066	F, G	6700
			4"	101.6	4	13	90	EEG	0640-A400-044	---	F, G	6400
								EXP	0400-C00-044	0404-C00-044	F, G	6400
							60	EEG	0640-B00-066	---	F, G	6700
			EXP	0400-C00-066	0404-C00-066	F, G		6700				

- NOTES:
- "F" indicates that system is recommended for applications in which the perforator is fired in fluid
 - "G" indicates that system is recommended for applications in which the perforator is fired in gas.
 - System uses twisted strip charge carrier instead of round charge tube.
 - Minimum 500 psi fluid pressure (at perforator) required at firing.
 - Minimum 1,500 psi fluid pressure (at perforator) required at firing.

SDP, DP & GH Charges for RTG, EXP & EEG Gun Systems - continued

Charge P/N	Type	Grams	Fits Gun Assembly								Notes ⁽³⁾	Det Cord min. V.O.D. m/sec						
			Gun O.D.		Shot Density		Phasing	Type	Series Number									
			in.	mm	SPF	SPM			Wireline	TCP								
EXP-3323-302	DP	22.0	3-1/8"	79.4	4	13	60	EXP	0363-B00-046	0402-B00-046	F, G	6400						
							90	EXP	0363-B00-044	0402-B00-044	F, G	6400						
							6	20	60	EXP	0363-B00-066	0402-B00-066	F ⁽⁵⁾	6700				
					3-3/8"	85.7	4	13	60	EXP	0365-B00-046	0403-B00-046	F, G	6400				
									90	EXP	0365-B00-044	0403-B00-044	F, G	6400				
									6	20	60	EXP	0365-B00-066	0403-B00-066	F, G	6700		
			3-1/2"	88.9	6	20	60	EXP	0350-B00-066	0415-B00-066	F, G	6700						
							4"	101.6	4	13	90	EEG	0640-A400-044	---	F, G	6400		
											60	EXP	0400-C00-044	0404-C00-044	F, G	6400		
			6	20	60	EEG	0640-B00-066	---	F, G	6700								
			6	20	60	EXP	0400-C00-066	0404-C00-066	F, G	6700								
			EXP-3323-322T <i>Gunslinger®</i>	SDP	22.7	3-1/8"	79.4	4	13	60	EXP	0363-B00-046	0402-B00-046	F, G	6400			
90	EXP	0363-B00-044								0402-B00-044	F, G	6400						
6	20	60								EXP	0363-B00-066	0402-B00-066	F ⁽⁵⁾	6700				
3-3/8"	85.7	4						13	60	EXP	0365-B00-046	0403-B00-046	F, G	6400				
									90	EXP	0365-B00-044	0403-B00-044	F, G	6400				
									6	20	60	EXP	0365-B00-066	0403-B00-066	F, G	6700		
3-1/2"	88.9	6				20	60	EXP	0350-B00-066	0415-B00-066	F, G	6700						
							4"	101.6	4	13	90	EEG	0640-A400-044	---	F, G	6400		
											60	EXP	0400-C00-044	0404-C00-044	F, G	6400		
6	20	60				EEG	0640-B00-066	---	F, G	6700								
6	20	60				EXP	0400-C00-066	0404-C00-066	F, G	6700								
EXP-3323-331 <i>Outlaw®</i>	GH	22.7				3-1/8"	79.4	4	13	60	EXP	0363-B00-046	0402-B00-046	F, G	6400			
			90	EXP	0363-B00-044					0402-B00-044	F, G	6400						
			6	20	60					EXP	0363-B00-066	0402-B00-066	F ⁽⁵⁾	6700				
			3-3/8"	85.7	4			13	60	EXP	0365-B00-046	0403-B00-046	F, G	6400				
									90	EXP	0365-B00-044	0403-B00-044	F, G	6400				
									6	20	60	EXP	0365-B00-066	0403-B00-066	F, G	6700		
			3-1/2"	88.9	6	20	60	EXP	0350-B00-066	0415-B00-066	F, G	6700						
							4"	101.6	4	13	90	EEG	0640-A400-044	---	F, G	6400		
											60	EXP	0400-C00-044	0404-C00-044	F, G	6400		
			6	20	60	EEG	0640-B00-066	---	F, G	6700								
			6	20	60	EXP	0400-C00-066	0404-C00-066	F, G	6700								
			EXP-3323-361T <i>Prospector®</i>	DP	22.7	3-1/8"	79.4	4	13	60	EXP	0363-B00-046	0402-B00-046	F, G	6400			
90	EXP	0363-B00-044								0402-B00-044	F, G	6400						
6	20	60								EXP	0363-B00-066	0402-B00-066	F ⁽⁵⁾	6700				
3-3/8"	85.7	4						13	60	EXP	0365-B00-046	0403-B00-046	F, G	6400				
									90	EXP	0365-B00-044	0403-B00-044	F, G	6400				
									6	20	60	EXP	0365-B00-066	0403-B00-066	F, G	6700		
3-1/2"	88.9	6				20	60	EXP	0350-B00-066	0415-B00-066	F, G	6700						
							4"	101.6	4	13	90	EEG	0640-A400-044	---	F, G	6400		
											60	EXP	0400-C00-044	0404-C00-044	F, G	6400		
6	20	60				EEG	0640-B00-066	---	F, G	6700								
6	20	60				EXP	0400-C00-066	0404-C00-066	F, G	6700								
EXP-3325-321T <i>Gunslinger®</i>	SDP	25.0				3-3/8"	85.7	4	13	60	EXP	0365-1A00-046	0403-1A00-046	F, G	7200			
			90	EXP	0365-1A00-044					0403-1A00-044	F, G	7200						
			6	20	60					EXP	0365-1A00-066	0403-1A00-066	F	7200				
			3-1/2"	88.9	6			20	60	EXP	0350-1A00-066	0415-1A00-066	F	7200				
									4"	101.6	4	13	90	EEG	0640-A400-044	---	F, G	6400
													60	EXP	0400-C00-044	0404-C00-044	F, G	6400
			6	20	60	EEG	0640-B00-066	---	F, G	6700								
			6	20	60	EXP	0400-C00-066	0404-C00-066	F, G	6700								
			4-1/2"	114.3	6	20	60	EXP	0445-C00-066	0414-C00-066	F, G	6700						
							60	EXP	0446-C00-066	0416-C00-066	F, G	6700						
			EXP-3325-331 <i>Outlaw®</i>	GH	25.0	3-3/8"	85.7	4	13	60	EXP	0365-1A00-046	0403-1A00-046	F, G	7200			
										90	EXP	0365-1A00-044	0403-1A00-044	F, G	7200			
6	20	60								EXP	0365-1A00-066	0403-1A00-066	F	7200				
3-1/2"	88.9	6						20	60	EXP	0350-1A00-066	0415-1A00-066	F	7200				
									4"	101.6	4	13	90	EEG	0640-A400-044	---	F, G	6400
													60	EXP	0400-C00-044	0404-C00-044	F, G	6400
6	20	60				EEG	0640-B00-066	---	F, G	6700								
6	20	60				EXP	0400-C00-066	0404-C00-066	F, G	6700								
4-1/2"	114.3	6				20	60	EXP	0445-C00-066	0414-C00-066	F, G	6700						
							60	EXP	0446-C00-066	0416-C00-066	F, G	6700						

- Notes:
- "F" indicates that system is recommended for applications in which the perforator is being fired in fluid.
 - "G" indicates that system is recommended for applications in which the perforator is being fired in gas
 - System uses twisted strip charge carrier instead of round charge tube.
 - Minimum 500 psi fluid pressure (at perforator) required at firing.
 - Minimum 1,500 psi fluid pressure (at perforator) required at firing.

SDP, DP & GH Charges for RTG, EXP & EEG Gun Systems - continued

Charge P/N	Type	Grams	Fits Gun Assembly							Notes ⁽³⁾	Det Cord min. V.O.D. m/sec	
			Gun O.D.		Shot Density		Phasing	Type	Series Number			
			in.	mm	SPF	SPM			Wireline			TCP
EXP-4032-301 <i>Prospector®</i>	DP	32.0	4"	101.6	4	13	90	EXP	0400-A00-044	0404-A00-044	F, G	6700
					5	16	60	EXP	0400-A00-056	0404-A00-056	F	7500
			4-1/2"	114.3	4	13	90	EXP	0445-A00-044	0414-A00-044	F, G	6700
					5	16	60	EXP	0445-A00-056	0414-A00-056	F, G	7500
			4-5/8"	117.5	4	13	90	EXP	0446-A00-044	0416-A00-044	F, G	6700
					5	16	60	EXP	0446-A00-056	0416-A00-056	F, G	7500
EXP-4036-301 <i>Prospector®</i>	DP	36.0	4"	101.6	4	13	90	EXP	0400-A00-044	0404-A00-044	F, G	6700
					5	16	60	EXP	0400-A00-056	0404-A00-056	F	7500
			4-1/2"	114.3	4	13	90	EXP	0445-A00-044	0414-A00-044	F, G	6700
					5	16	60	EXP	0445-A00-056	0414-A00-056	F, G	7500
			4-5/8"	117.5	4	13	90	EXP	0446-A00-044	0416-A00-044	F, G	6700
					5	16	60	EXP	0446-A00-056	0416-A00-056	F, G	7500
EXP-4039-321T <i>Gunslinger®</i>	SDP	38.5	4"	101.6	4	13	90	EXP	0400-A00-044	0404-A00-044	F, G	6700
					4	13	90	EXP	0445-A00-044	0414-A00-044	F, G	6700
			4-1/2"	114.3	5	16	60	EXP	0445-A00-056	0414-A00-056	F	7500
					4	13	90	EXP	0446-A00-044	0416-A00-044	F, G	6700
			4-5/8"	117.5	5	16	60	EXP	0446-A00-056	0416-A00-056	F, G	7500
					4	13	90	EXP	0336-A00-044	0405-A00-044	F, G	6700
5	16	60	EXP	0336-A00-056	0405-A00-056	F, G	7500					
EXP-4521-322T <i>Gunslinger®</i>	SDP	21.0	3-1/8"	79.4	4	13	90	EXP	0363-A00-044	0402-A00-044	F, G	6400
					6	20	60	EXP	0365-C00-066	0403-C00-066	F, G	6700
			4"	101.6	8	26	135/45	EXP	0400-1D00-08D	0404-1D00-08D	F, G	7000
					8	26	135/45	EXP	0445-1D00-08D	0414-1D00-08D	F, G	7000
			4-1/2"	114.3	12	39	135/45	EXP	0445-1K00-12D	0414-1K00-12D	F	7500
					8	26	135/45	EXP	0446-1D00-08D	0416-1D00-08D	F, G	7000
4-5/8"	117.5	12	39	135/45	EXP	0446-1K00-12D	0416-1K00-12D	F	7500			
EXP-4521-331 <i>Outlaw®</i>	GH	21.0	3-1/8"	79.4	4	13	90	EXP	0363-A00-044	0402-A00-044	F, G	6400
					6	20	60	EXP	0365-C00-066	0403-C00-066	F, G	6700
			4"	101.6	8	26	135/45	EXP	0400-1D00-08D	0404-1D00-08D	F, G	7000
					8	26	135/45	EXP	0445-1D00-08D	0414-1D00-08D	F, G	7000
			4-1/2"	114.3	12	39	135/45	EXP	0445-1K00-12D	0414-1K00-12D	F	7500
					8	26	135/45	EXP	0446-1D00-08D	0416-1D00-08D	F, G	7000
4-5/8"	117.5	12	39	135/45	EXP	0446-1K00-12D	0416-1K00-12D	F	7500			
EXP-4539-324T <i>Gunslinger®</i>	SDP	38.5	4"	101.6	4	13	90	EXP	0400-1A00-044	0404-1A00-044	F, G	6700
					4	13	90	EXP	0445-1A00-044	0414-1A00-044	F, G	6700
			4-1/2"	114.3	5	16	60	EXP	0445-1A00-056	0414-1A00-056	F	7500
					4	13	90	EXP	0446-1A00-044	0416-1A00-044	F, G	6700
			4-5/8"	117.5	5	16	60	EXP	0446-1A00-056	0416-1A00-056	F, G	7500
					4	13	90	EXP	0336-1A00-044	0405-1A00-044	F, G	6700
5	16	60	EXP	0336-1A00-056	0405-1A00-056	F, G	7500					
EXP-6034-300	CJDP	34.0	6"	152.4	12	39	60	EXP	0337-K00-126	0406-K00-126	F	6400
EXP-7039-331 <i>Outlaw®</i>	GH	38.5	7"	177.8	12	39	135/45	EXP	0338-1D00-12D	0407-1D00-12D	F	7000
EXP-7039-332 <i>Outlaw® II</i>	GH	38.5	7"	177.8	12	39	135/45	EXP	0338-1D00-12D	0407-1D00-12D	F	7000

Notes:

3. "F" indicates that system is recommended for applications in which the perforator is being fired in fluid.
- "G" indicates that system is recommended for applications in which the perforator is being fired in gas
4. System uses twisted strip charge carrier instead of round charge tube.
5. Minimum 500 psi fluid pressure (at perforator) required at firing.
6. Minimum 1,500 psi fluid pressure (at perforator) required at firing.

BH Charges for RTG, EXP & EEG Gun Systems

Charge P/N	Type	Grams	Fits Gun Assembly								Notes ⁽³⁾	Det Cord min. V.O.D. m/sec							
			Gun O.D.		Shot Density		Phasing	Type	Series Number										
			in.	mm	SPF	SPM			Bolted	Threaded									
FLO-1603-310 <i>Prospector®</i>	BH	3.2	1-9/16"	39.7	4	13	0	RTG	0320-A00-041	0220-A00-041	F, G	6400							
							60	RTG	0320-A00-046	0220-A00-046	F, G	6400							
							90	RTG	0320-A00-044	0220-A00-044	F, G	6400							
							120	RTG	0320-A00-043	0220-A00-043	F, G	6400							
							180	RTG	0320-A00-042	0220-A00-042	F, G	6400							
							2 bank LS	RTG	0320-A00-D4**	0220-A00-D4**	F, G	6400							
							3 bank LS	RTG	0320-A00-L4**	0220-A00-L4**	F, G	6400							
					6	20	0	RTG	0320-A00-061	0220-A00-061	F	6700							
							60	RTG	0320-A00-066	0220-A00-066	F	6700							
							180	RTG	0320-A00-062	0220-A00-062	F	6700							
							2 bank LS	RTG	0320-A00-D4**	0220-A00-D6**	F	6700							
							3 bank LS	RTG	0320-A00-L4**	0220-A00-L6**	F	6700							
							FLO-2106-310	BH	6.5	2"	50.8	4	13	0	RTG	0321-A00-041	0222-A00-041	F, G	6400
														60	RTG	0321-A00-046	0222-A00-046	F, G	6400
90	RTG	0321-A00-044	0222-A00-044	F, G	6400														
120	RTG	0321-A00-043	0222-A00-043	F, G	6400														
180	RTG	0321-A00-042	0222-A00-042	F, G	6400														
2 bank LS	RTG	0321-A00-D4**	0222-A00-D4**	F, G	6400														
3 bank LS	RTG	0321-A00-L4**	0222-A00-L4**	F, G	6400														
6	20	0	RTG	0321-A00-061	0222-A00-061	F						6700							
		60	RTG	0321-A00-066	0222-A00-066	F						6700							
		180	RTG	0321-A00-062	0222-A00-062	F						6700							
		2 bank LS	RTG	0321-A00-D6**	0222-A00-D6**	F						6700							
		3 bank LS	RTG	0321-A00-L6**	0222-A00-L6**	F						6700							
		FLO-2511-310B	BH	11.0	2-1/2"	63.5						4	13	0	RTG	0328-A00-041	0228-A00-041	F, G	6400
														60	RTG	0328-A00-046	0228-A00-046	F, G	6400
90	RTG						0328-A00-044	0228-A00-044	F, G	6400									
120	RTG						0328-A00-043	0228-A00-043	F, G	6400									
180	RTG						0328-A00-042	0228-A00-042	F, G	6400									
2 bank LS	RTG						0328-A00-D4**	0228-A00-D4**	F, G	6400									
3 bank LS	RTG						0328-A00-L4**	0228-A00-L4**	F, G	6400									
6	20						60	RTG	0328-A00-066	0228-A00-066	F	6700							
							2 bank LS	RTG	0328-A00-D6**	0228-A00-D6**	F	6700							
							3 bank LS	RTG	0328-A00-L6**	0228-A00-L6**	F	6700							
							2-3/4"	69.9	4	13	60	EXP	0362-B00-046 ⁽¹⁾	0462-B00-046 ⁽²⁾	F, G	6400			
											90	EXP	0362-B00-044 ⁽¹⁾	0462-B00-044 ⁽²⁾	F, G	6400			
									6	20	60	EXP	0362-B00-066 ⁽¹⁾	0462-B00-066 ⁽²⁾	F, G	6700			

Charge P/N	Type	Grams	Gun O.D.	mm	SPF	SPM	Phasing	Type	Wireline		TCP			
FLO-2715-310B <i>BountyHunter®</i>	BH	15.0	2-3/4"	69.9	4	13	60	EXP	0362-B00-046	0462-B00-046	F, G	6400		
							90	EXP	0362-B00-044	0462-B00-044	F, G	6400		
							6	20	60	EXP	0362-B00-066	0462-B00-066	F, G	6700
							2-7/8"	73.0	6	20	60	EXP	0364-B00-066	0464-B00-066
FLO-3112-310B	BH	12.0	3-1/8"	79.4	12	39	140/20	EXP	0363-G00-12E	0402-G00-12E	F	7500		
			3-3/8"	85.7	12	39	140/20	EXP	0365-G00-12E	0403-G00-12E	F	7500		
			3-1/2"	88.9	12	39	140/20	EXP	0350-G00-12E	0415-G00-12E	F	7500		
FLO-3323-310B	BH	22.0	3-1/8"	79.4	4	13	60	EXP	0363-B00-046	0402-B00-046	F, G	6400		
							90	EXP	0363-B00-044	0402-B00-044	F, G	6400		
							6	20	60	EXP	0363-B00-066	0402-B00-066	F ⁽⁵⁾	6700
					3-3/8"	85.7	4	13	60	EXP	0365-B00-046	0403-B00-046	F, G	6400
									90	EXP	0365-B00-044	0403-B00-044	F, G	6400
									6	20	60	EXP	0365-B00-066	0403-B00-066
3-1/2"	88.9	6	20	60	EXP	0350-B00-066	0415-B00-066	F, G	6700					

- NOTES:
- Series Number is for wireline conveyed, threaded gun assembly
 - Series Number is for TCP conveyed, threaded gun assembly
 - "F" indicates that system is recommended for applications in which the perforator is fired in fluid
"G" indicates that system is recommended for applications in which the perforator is fired in gas.
 - System uses twisted strip charge carrier instead of round charge tube.
 - Minimum 500 psi fluid pressure (at perforator) required at firing.
 - Minimum 1,500 psi fluid pressure (at perforator) required at firing.

BH Charges for RTG, EXP & EEG Gun Systems - continued

Charge P/N	Type	Grams	Fits Gun Assembly								Notes ⁽³⁾	Det Cord min. V.O.D. m/sec
			Gun O.D.		Shot Density		Phasing	Type	Series Number			
			in.	mm	SPF	SPM			Wireline	TCP		
FLO-4032-311B <i>BountyHunter®</i>	BH	32 0	4"	101.6	4	13	90	EXP	0400-A00-044	0404-A00-044	F, G	6700
					5	16	60	EXP	0400-A00-056	0404-A00-056	F	7500
			4-1/2"	114.3	4	13	90	EXP	0445-A00-044	0414-A00-044	F, G	6700
					5	16	60	EXP	0445-A00-056	0414-A00-056	F, G	7500
			4-5/8"	117.5	4	13	90	EXP	0446-A00-044	0416-A00-044	F, G	6700
					5	16	60	EXP	0446-A00-056	0416-A00-056	F, G	7500
FLO-4036-311B <i>BountyHunter®</i>	BH	36 0	4"	101.6	4	13	90	EXP	0400-A00-044	0404-A00-044	F, G	6700
					5	16	60	EXP	0400-A00-056	0404-A00-056	F	7500
			4-1/2"	114.3	4	13	90	EXP	0445-A00-044	0414-A00-044	F, G	6700
					5	16	60	EXP	0445-A00-056	0414-A00-056	F, G	7500
			4-5/8"	117.5	4	13	90	EXP	0446-A00-044	0416-A00-044	F, G	6700
					5	16	60	EXP	0446-A00-056	0416-A00-056	F, G	7500
FLO-4039-311CF <i>BountyHunter®</i>	BH	38 5	4"	101.6	4	13	90	EXP	0400-A00-044	0404-A00-044	F, G	6700
					5	16	60	EXP	0445-A00-056	0414-A00-056	F, G	7500
			4-1/2"	114.3	4	13	90	EXP	0445-A00-044	0414-A00-044	F, G	6700
					5	16	60	EXP	0445-A00-056	0414-A00-056	F, G	7500
			4-5/8"	117.5	4	13	90	EXP	0446-A00-044	0416-A00-044	F, G	6700
					5	16	60	EXP	0446-A00-056	0416-A00-056	F, G	7500
FLO-4521-310B <i>BountyHunter®</i>	BH	21 0	3-1/8"	79.4	4	13	90	EXP	0363-A00-044	0402-A00-044	F, G	6400
					6	20	60	EXP	0365-C00-066	0403-C00-066	F, G	6700
			4"	101.6	8	26	135/45	EXP	0400-1D00-08D	0404-1D00-08D	F, G	7000
					8	26	135/45	EXP	0445-1D00-08D	0414-1D00-08D	F, G	7000
			4-1/2"	114.3	12	39	135/45	EXP	0445-1K00-12D	0414-1K00-12D	F	7500
					8	26	135/45	EXP	0446-1D00-08D	0416-1D00-08D	F, G	7000
			4-5/8"	117.5	12	39	135/45	EXP	0446-1K00-12D	0416-1K00-12D	F	7500
					8	26	135/45	EXP	0446-1D00-08D	0416-1D00-08D	F, G	7000
FLO-4521-310CF <i>BountyHunter®</i>	BH	21 0	3-1/8"	79.4	4	13	90	EXP	0363-A00-044	0402-A00-044	F, G	6400
					6	20	60	EXP	0365-C00-066	0403-C00-066	F, G	6700
			4"	101.6	8	26	135/45	EXP	0400-1D00-08D	0404-1D00-08D	F, G	7000
					8	26	135/45	EXP	0445-1D00-08D	0414-1D00-08D	F, G	7000
			4-1/2"	114.3	12	39	135/45	EXP	0445-1K00-12D	0414-1K00-12D	F	7500
					8	26	135/45	EXP	0446-1D00-08D	0416-1D00-08D	F, G	7000
			4-5/8"	117.5	12	39	135/45	EXP	0446-1K00-12D	0416-1K00-12D	F	7500
					8	26	135/45	EXP	0446-1D00-08D	0416-1D00-08D	F, G	7000
FLO-4524-311CF <i>BountyHunter®</i>	BH CF	24 0	4-1/2"	114.3	8	26	135/45	EXP	0445-2D00-08D	0414-2D00-08D	F, G	7000
					12	39	135/45	EXP	0445-2K00-12D	0414-2K00-12D	F	7000
			4-5/8"	117.5	8	26	135/45	EXP	0446-2D00-08D	0416-2D00-08D	F, G	7000
					12	39	135/45	EXP	0446-2K00-12D	0416-2K00-12D	F	7000
FLO-4617-311CFZ <i>BountyHunter®</i>	BH CFLD	17 0	4-1/2"	114.3	18	59	140/20	EXP	0445-D00-18G	0414-D00-18G	F ⁽⁶⁾	7500
					18	59	140/20	EXP	0446-D00-18G	0416-D00-18G	F ⁽⁶⁾	7500
FLO-4620-311CFZ <i>BountyHunter®</i>	BH CFLD	20 0	4-1/2"	114.3	12	39	135/45	EXP	0445-C00-12D	0414-C00-12D	F	7500
					16	52	140/20	EXP	0445-C00-16G	0414-C00-16G	F ⁽⁶⁾	7500
			4-5/8"	117.5	12	39	135/45	EXP	0446-C00-12D	0416-C00-12D	F	7500
					16	52	140/20	EXP	0446-C00-16G	0416-C00-16G	F ⁽⁶⁾	7500
FLO-4621-311CF <i>BountyHunter®</i>	CJBH CF	21 0	4-1/2"	114.3	12	39	60	EXP	0445-J00-126	0414-J00-126	F	6400
					18	59	55/5	EXP	0446-K00-1855	0416-K00-1855	F	6700
			5"	127.0	18	59	55/5	EXP	0336-K00-1855	0405-K00-1855	F	6700
FLO-5028-310B <i>BountyHunter®</i>	BH	28 0	4-5/8"	117.5	8	26	135/45	EXP	0446-2D00-08D	0416-2D00-08D	F	7000
					12	39	135/45	EXP	0446-2K00-12D	0416-2K00-12D	F	7000
			5"	127.0	8	26	135/45	EXP	0336-2K00-08D	0405-2K00-08D	F, G	7000
					12	39	135/45	EXP	0336-2K00-12D	0405-2K00-12D	F	7000
FLO-6034-310B	CJBH	34.0	6"	152.4	12	39	60	EXP	0337-K00-126	0406-K00-126	F	6400

- Notes:
- "F" indicates that system is recommended for applications in which the perforator is being fired in fluid.
 - "G" indicates that system is recommended for applications in which the perforator is being fired in gas.
 - System uses twisted strip charge carrier instead of round charge tube.
 - Minimum 500 psi fluid pressure (at perforator) required at firing.
 - Minimum 1,500 psi fluid pressure (at perforator) required at firing.

Casing Gun Charges, Port Plug Guns (PPG)

Charge P/N	Type	Grams	Fits Gun Assembly								Notes ⁽³⁾	Det Cord min. V.O.D. m/sec
			Gun O.D.		Shot Density		Phasing	Type	Series Number			
			in.	mm	SPF	SPM			Wireline	TCP		
PPG-3111-301 <i>Prospector</i> ®	DP	11 0	3-1/8"	79.4	4	13	90	PPG	0330	---	F, G	6400
			120	PPG	0330	---	F, G	6400				
			3-3/8"	85.7	4	13	90	PPG	0334	---	F, G	6400
			120	PPG	0334	---	F, G	6400				
PPG-3111-311 <i>Prospector</i> ®	BH	11 0	3-1/8"	79.4	4	13	90	PPG	0330	---	F, G	6400
			120	PPG	0330	---	F, G	6400				
			3-3/8"	85.7	4	13	90	PPG	0334	---	F, G	6400
			120	PPG	0334	---	F, G	6400				
PPG-3111-321 <i>Prospector</i> ®	SDP	11 0	3-1/8"	79.4	4	13	90	PPG	0330	---	F, G	6400
			120	PPG	0330	---	F, G	6400				
			3-3/8"	85.7	4	13	90	PPG	0334	---	F, G	6400
			120	PPG	0334	---	F, G	6400				
PPG-3111-331 <i>Outlaw</i> ®	GH	11 0	3-1/8"	79.4	4	13	90	PPG	0330	---	F, G	6400
			120	PPG	0330	---	F, G	6400				
			3-3/8"	85.7	4	13	90	PPG	0334	---	F, G	6400
			120	PPG	0334	---	F, G	6400				
PPG-3112-310B <i>Prospector</i> ®	BH	12 0	3-1/8"	79.4	4	13	90	PPG	0330	---	F, G	6400
			120	PPG	0330	---	F, G	6400				
			3-3/8"	85.7	4	13	90	PPG	0334	---	F, G	6400
			120	PPG	0334	---	F, G	6400				
PPG-3112-321T <i>Prospector</i> ®	SDP	12 0	3-1/8"	79.4	4	13	90	PPG	0330	---	F, G	6400
			120	PPG	0330	---	F, G	6400				
			3-3/8"	85.7	4	13	90	PPG	0334	---	F, G	6400
			120	PPG	0334	---	F, G	6400				
PPG-4019-301 <i>Prospector</i> ®	DP	19 0	4"	101.6	4	13	90	PPG	0331	---	F, G	6400
120	PPG	0331	---	F, G	6400							
PPG-4019-321T <i>Prospector</i> ®	SDP	19 0	4"	101.6	4	13	90	PPG	0331	---	F, G	6400
120	PPG	0331	---	F, G	6400							
PPG-4022-301	DP	22.0	4"	101.6	4	13	90	PPG	0331	---	F, G	6400
120	PPG	0331	---	F, G	6400							
PPG-4022-310B	BH	22 0	4"	101.6	4	13	90	PPG	0331	---	F, G	6400
120	PPG	0331	---	F, G	6400							
PPG-4023-321T <i>Prospector</i> ®	SDP	22.7	4"	101.6	4	13	90	PPG	0331	---	F, G	6400
120	PPG	0331	---	F, G	6400							

Notes:

3. "F" indicates that system is recommended for applications in which the perforator is being fired in fluid.
- "G" indicates that system is recommended for applications in which the perforator is being fired in gas
4. System uses twisted strip charge carrier instead of round charge tube.
5. Minimum 500 psi fluid pressure (at perforator) required at firing.
6. Minimum 1,500 psi fluid pressure (at perforator) required at firing.

Gun System / Shaped Charge Compatibility Chart
Standard Gun System Configurations

“Salt & Pepper” Compatibility Chart

Pages 17 – 24

Find shaped charges that fit same gun hardware.

Gun System / Shaped Charge Compatibility Chart
Standard Gun System Configurations
Find Shaped Charges That Fit in Same Gun Hardware ("salt & pepper" or other)
(Charges That Use Same Gun Assembly Series Number Will Fit In Same Gun Assembly)

Systems Also Available in Other SPF/Phasing Configurations - Call Titan Sales for Details
 See Titan GunFacts™ For Complete Specifications

**Caution: When combining different charges in same gun assembly,
 use most restrictive values listed in "Notes" & "Det Cord min. V.O.D."**

Tubeing Gun Charges -- Retrievable Hollow Carrier Gun Systems (RTG)

Fits Gun Assembly								Type	Shaped Charge Part Number	Grams	Notes ⁽¹⁾	Det Cord min. V.O.D. m/sec	
Gun O.D.		Shot Density		Phasing (LS Low Side)	Series Number								
in.	mm	SPF	SPM		Wireline Bolted	Wireline Threaded	TCP Threaded						
1-3/8"	34.9	4	13	0	0327-A00-041			DP	RTG-1302-400	1.8 HMX	F	6400	
								C R	CIR-1302-4T25	1.8 HMX	F	6400	
								C R	CIR-1302-4T38	1.8 HMX	F	6400	
								C R	C R-1302-4C50	1.8 HMX	F	6400	
								C R	C R-1302-4C63	1.8 HMX	F	6400	
				180	0327-A00-042			DP	RTG-1302-400	1.8 HMX	F	6400	
1-9/16"	39.7	4	13	0	0320-A00-041	0220-A00-041		SDP	RTG-1603-320T	Prospector®	3.2	F, G	6400
								DP	RTG-1603-300		3.2	F, G	6400
								BH	FLO-1603-310	Prospector®	3.2	F, G	6400
								C R	CIR-1603-4T25		3.2 HMX	F, G	6400
								C R	CIR-1603-4T38		3.2 HMX	F, G	6400
								C R	C R-1603-4C50		3.2 HMX	F, G	6400
								C R	C R-1603-4C63		3.2 HMX	F, G	6400
								SDP	RTG-1603-320T	Prospector®	3.2	F, G	6400
								DP	RTG-1603-300		3.2	F, G	6400
								BH	FLO-1603-310	Prospector®	3.2	F, G	6400
								SDP	RTG-1603-320T	Prospector®	3.2	F, G	6400
								DP	RTG-1603-300		3.2	F, G	6400
		BH	FLO-1603-310	Prospector®	3.2	F, G	6400						
		SDP	RTG-1603-320T	Prospector®	3.2	F, G	6400						
		DP	RTG-1603-300		3.2	F, G	6400						
		BH	FLO-1603-310	Prospector®	3.2	F, G	6400						
		SDP	RTG-1603-320T	Prospector®	3.2	F, G	6400						
		DP	RTG-1603-300		3.2	F, G	6400						
		BH	FLO-1603-310	Prospector®	3.2	F, G	6400						
		SDP	RTG-1603-320T	Prospector®	3.2	F, G	6400						
		DP	RTG-1603-300		3.2	F, G	6400						
		BH	FLO-1603-310	Prospector®	3.2	F, G	6400						
		SDP	RTG-1603-320T	Prospector®	3.2	F, G	6400						
		DP	RTG-1603-300		3.2	F, G	6400						
BH	FLO-1603-310	Prospector®	3.2	F, G	6400								
		6	20	0	0320-A00-061	0220-A00-061		SDP	RTG-1603-320T	Prospector®	3.2	F	6700
DP	RTG-1603-300								3.2	F	6700		
BH	FLO-1603-310							Prospector®	3.2	F	6700		
C R	CIR-1603-4T25								3.2 HMX	F	6700		
C R	CIR-1603-4T38								3.2 HMX	F	6700		
C R	C R-1603-4C50								3.2 HMX	F	6700		
C R	C R-1603-4C63								3.2 HMX	F	6700		
SDP	RTG-1603-320T							Prospector®	3.2	F	6700		
DP	RTG-1603-300								3.2	F	6700		
BH	FLO-1603-310							Prospector®	3.2	F	6700		
SDP	RTG-1603-320T							Prospector®	3.2	F	6700		
DP	RTG-1603-300								3.2	F	6700		
BH	FLO-1603-310	Prospector®	3.2	F	6700								
SDP	RTG-1603-320T	Prospector®	3.2	F	6700								
DP	RTG-1603-300		3.2	F	6700								
BH	FLO-1603-310	Prospector®	3.2	F	6700								
SDP	RTG-1603-320T	Prospector®	3.2	F	6700								
DP	RTG-1603-300		3.2	F	6700								
BH	FLO-1603-310	Prospector®	3.2	F	6700								
SDP	RTG-1603-320T	Prospector®	3.2	F	6700								
DP	RTG-1603-300		3.2	F	6700								
BH	FLO-1603-310	Prospector®	3.2	F	6700								

Notes: ** Enter low side shot to shot angle desired: 15, 30, 45 or 60 deg. (Enter digits only; eg. Enter 15 for 15 degree)
 1. "F" indicates that system is recommended for applications in which the perforator is being fired in fluid.
 "G" indicates that system is recommended for applications in which the perforator is being fired in gas.
 2. Minimum 500 psi fluid pressure (at perforator) required at firing.
 3. Minimum 1,500 psi fluid pressure (at perforator) required at firing.

Tubeing Gun Charges -- Retrievable Hollow Carrier Gun Systems (RTG) -- continued

Gun O.D.		Shot Density		Fits Gun Assembly			Type	Shaped Charge Part Number	Grams	Notes ⁽¹⁾	Det Cord min. V.O.D. m/sec		
in.	mm	SPF	SPM	Phasing (LS Low Side)	Series Number							TCP Threaded	
					Wireline Bolted	Wireline Threaded							
2"	50.8	4	13	0	0321-A00-041	0222-A00-041		SDP	RTG-2106-321T	<i>Gunslinger®</i>	6.5	F, G	6400
								GH	RTG-2106-331	<i>Outlaw®</i>	6.5	F, G	6400
								BH	FLO-2106-310		6.5	F, G	6400
				60	0321-A00-046	0222-A00-046		SDP	RTG-2106-321T	<i>Gunslinger®</i>	6.5	F, G	6400
								GH	RTG-2106-331	<i>Outlaw®</i>	6.5	F, G	6400
								BH	FLO-2106-310		6.5	F, G	6400
				90	0321-A00-044	0222-A00-044		SDP	RTG-2106-321T	<i>Gunslinger®</i>	6.5	F, G	6400
								GH	RTG-2106-331	<i>Outlaw®</i>	6.5	F, G	6400
								BH	FLO-2106-310		6.5	F, G	6400
				120	0321-A00-043	0222-A00-043		SDP	RTG-2106-321T	<i>Gunslinger®</i>	6.5	F, G	6400
								GH	RTG-2106-331	<i>Outlaw®</i>	6.5	F, G	6400
								BH	FLO-2106-310		6.5	F, G	6400
		180	0321-A00-042	0222-A00-042		SDP	RTG-2106-321T	<i>Gunslinger®</i>	6.5	F, G	6400		
						GH	RTG-2106-331	<i>Outlaw®</i>	6.5	F, G	6400		
						BH	FLO-2106-310		6.5	F, G	6400		
		2 bank LS	0321-A00-D4**	0222-A00-D4**		SDP	RTG-2106-321T	<i>Gunslinger®</i>	6.5	F, G	6400		
						GH	RTG-2106-331	<i>Outlaw®</i>	6.5	F, G	6400		
						BH	FLO-2106-310		6.5	F, G	6400		
		3 bank LS	0321-A00-L4**	0222-A00-L4**		SDP	RTG-2106-321T	<i>Gunslinger®</i>	6.5	F, G	6400		
						GH	RTG-2106-331	<i>Outlaw®</i>	6.5	F, G	6400		
						BH	FLO-2106-310		6.5	F, G	6400		
		6	20	0	0321-A00-061	0222-A00-061		SDP	RTG-2106-321T	<i>Gunslinger®</i>	6.5	F	6700
								GH	RTG-2106-331	<i>Outlaw®</i>	6.5	F	6700
								BH	FLO-2106-310		6.5	F	6700
60	0321-A00-066			0222-A00-066		SDP	RTG-2106-321T	<i>Gunslinger®</i>	6.5	F	6700		
						GH	RTG-2106-331	<i>Outlaw®</i>	6.5	F	6700		
						BH	FLO-2106-310		6.5	F	6700		
180	0321-A00-062			0222-A00-062		SDP	RTG-2106-321T	<i>Gunslinger®</i>	6.5	F	6700		
						GH	RTG-2106-331	<i>Outlaw®</i>	6.5	F	6700		
						BH	FLO-2106-310		6.5	F	6700		
2 bank LS	0321-A00-D6**			0222-A00-D6**		SDP	RTG-2106-321T	<i>Gunslinger®</i>	6.5	F	6700		
						GH	RTG-2106-331	<i>Outlaw®</i>	6.5	F	6700		
						BH	FLO-2106-310		6.5	F	6700		
3 bank LS	0321-A00-L6**	0222-A00-L6**		SDP	RTG-2106-321T	<i>Gunslinger®</i>	6.5	F	6700				
				GH	RTG-2106-331	<i>Outlaw®</i>	6.5	F	6700				
				BH	FLO-2106-310		6.5	F	6700				
8	26	90	0321-B00-084	0222-B00-084		SDP	RTG-1603-320T	<i>Prospector®</i>	3.2	F, G	6700		
						DP	RTG-1603-300		3.2	F, G	6700		

- Notes: ** Enter low side shot to shot angle desired: 15, 30, 45 or 60 deg. (Enter digits only; eg. Enter 15 for 15 degree)
 1. "F" indicates that system is recommended for applications in which the perforator is being fired in fluid.
 "G" indicates that system is recommended for applications in which the perforator is being fired in gas.
 2. Minimum 500 psi fluid pressure (at perforator) required at firing.
 3. Minimum 1,500 psi fluid pressure (at perforator) required at firing.

Tubeing Gun Charges -- Retrievable Hollow Carrier Gun Systems (RTG) -- continued

Gun O.D.		Shot Density		Fits Gun Assembly				Type	Shaped Charge Part Number		Grams	Notes ⁽¹⁾	Det Cord min. V.O.D. m/sec
in.	mm	SPF	SPM	Phasing (LS Low Side)	Wireline Bolted	Wireline Threaded	TCP Threaded						
2-1/2"	63.5	4	13	0	0328-A00-041	0228-A00-041		SDP	RTG-2511-322T	<i>Gunslinger®</i>	11.0	F, G	6400
								DP	RTG-2511-301	<i>Prospector®</i>	11.0	F, G	6400
								BH	FLO-2511-310B		11.0	F, G	6400
				60	0328-A00-046	0228-A00-046		SDP	RTG-2511-322T	<i>Gunslinger®</i>	11.0	F, G	6400
								DP	RTG-2511-301	<i>Prospector®</i>	11.0	F, G	6400
								BH	FLO-2511-310B		11.0	F, G	6400
				90	0328-A00-044	0228-A00-044		SDP	RTG-2511-322T	<i>Gunslinger®</i>	11.0	F, G	6400
								DP	RTG-2511-301	<i>Prospector®</i>	11.0	F, G	6400
								BH	FLO-2511-310B		11.0	F, G	6400
		120	0328-A00-043	0228-A00-043		SDP	RTG-2511-322T	<i>Gunslinger®</i>	11.0	F, G	6400		
						DP	RTG-2511-301	<i>Prospector®</i>	11.0	F, G	6400		
						BH	FLO-2511-310B		11.0	F, G	6400		
		180	0328-A00-042	0228-A00-042		SDP	RTG-2511-322T	<i>Gunslinger®</i>	11.0	F, G	6400		
						DP	RTG-2511-301	<i>Prospector®</i>	11.0	F, G	6400		
						BH	FLO-2511-310B		11.0	F, G	6400		
		2 bank LS	0328-A00-D4**	0228-A00-D4**		SDP	RTG-2511-322T	<i>Gunslinger®</i>	11.0	F, G	6400		
						DP	RTG-2511-301	<i>Prospector®</i>	11.0	F, G	6400		
						BH	FLO-2511-310B		11.0	F, G	6400		
3 bank LS	0328-A00-L4**	0228-A00-L4**		SDP	RTG-2511-322T	<i>Gunslinger®</i>	11.0	F, G	6400				
				DP	RTG-2511-301	<i>Prospector®</i>	11.0	F, G	6400				
				BH	FLO-2511-310B		11.0	F, G	6400				
6	20	60			0328-A00-066	0228-A00-066		SDP	RTG-2511-322T	<i>Gunslinger®</i>	11.0	F	6700
								DP	RTG-2511-301	<i>Prospector®</i>	11.0	F	6700
								BH	FLO-2511-310B		11.0	F	6700
		2 bank LS	0328-A00-D6**	0228-A00-D6**		SDP	RTG-2511-322T	<i>Gunslinger®</i>	11.0	F	6700		
						DP	RTG-2511-301	<i>Prospector®</i>	11.0	F	6700		
						BH	FLO-2511-310B		11.0	F	6700		
3 bank LS	0328-A00-L6**	0228-A00-L6**		SDP	RTG-2511-322T	<i>Gunslinger®</i>	11.0	F	6700				
				DP	RTG-2511-301	<i>Prospector®</i>	11.0	F	6700				
				BH	FLO-2511-310B		11.0	F	6700				

- Notes: ** Enter low side shot to shot angle desired: 15, 30, 45 or 60 deg. (Enter digits only; eg. Enter 15 for 15 degree)
 1. "F" indicates that system is recommended for applications in which the perforator is being fired in fluid.
 "G" indicates that system is recommended for applications in which the perforator is being fired in gas.
 2. Minimum 500 psi fluid pressure (at perforator) required at firing.
 3. Minimum 1,500 psi fluid pressure (at perforator) required at firing.

Casing Gun Charges -- Port Plug Guns (PPG)

Fits Gun Assembly								Type	Shaped Charge Part Number		Grams	Notes ⁽¹⁾	Det Cord min. V.O.D. m/sec
Gun O.D.		Shot Density		Phasing (LS Low Side)	Series Number								
in.	mm	SPF	SPM		Wireline Bolted	Wireline Threaded	TCP Threaded						
3-1/8"	79.4	4	13	90		0330		SDP	PPG-3111-321	Prospector®	11.0	F, G	6400
								SDP	PPG-3112-321T	Prospector®	12.0	F, G	6400
								DP	PPG-3111-301	Prospector®	11.0	F, G	6400
								GH	PPG-3111-331	Outlaw®	11.0	F, G	6400
								BH	PPG-3111-311	Prospector®	11.0	F, G	6400
								BH	PPG-3112-310B	Prospector®	12.0	F, G	6400
	120		0330		SDP	PPG-3111-321	Prospector®	11.0	F, G	6400			
					SDP	PPG-3112-321T	Prospector®	12.0	F, G	6400			
					DP	PPG-3111-301	Prospector®	11.0	F, G	6400			
					GH	PPG-3111-331	Outlaw®	11.0	F, G	6400			
					BH	PPG-3111-311	Prospector®	11.0	F, G	6400			
					BH	PPG-3112-310B	Prospector®	12.0	F, G	6400			
3-3/8"	85.7	4	13	90		0334		SDP	PPG-3111-321	Prospector®	11.0	F, G	6400
								SDP	PPG-3112-321T	Prospector®	12.0	F, G	6400
								DP	PPG-3111-301	Prospector®	11.0	F, G	6400
								GH	PPG-3111-331	Outlaw®	11.0	F, G	6400
								BH	PPG-3111-311	Prospector®	11.0	F, G	6400
								BH	PPG-3112-310B	Prospector®	12.0	F, G	6400
	120		0334		SDP	PPG-3111-321	Prospector®	11.0	F, G	6400			
					SDP	PPG-3112-321T	Prospector®	12.0	F, G	6400			
					DP	PPG-3111-301	Prospector®	11.0	F, G	6400			
					GH	PPG-3111-331	Outlaw®	11.0	F, G	6400			
					BH	PPG-3111-311	Prospector®	11.0	F, G	6400			
					BH	PPG-3112-310B	Prospector®	12.0	F, G	6400			
4"	101.6	4	13	90		0331		SDP	PPG-4019-321T	Prospector®	19.0	F, G	6400
								SDP	PPG-4023-321T	Prospector®	22.7	F, G	6400
								DP	PPG-4019-301	Prospector®	19.0	F, G	6400
								DP	PPG-4022-301	Prospector®	22.0	F, G	6400
								BH	PPG-4022-310B	Prospector®	22.0	F, G	6400
								120		0331		SDP	PPG-4019-321T
	SDP	PPG-4023-321T	Prospector®	22.7	F, G	6400							
	DP	PPG-4019-301	Prospector®	19.0	F, G	6400							
	DP	PPG-4022-301	Prospector®	22.0	F, G	6400							
	BH	PPG-4022-310B	Prospector®	22.0	F, G	6400							
	BH	PPG-4022-310B	Prospector®	22.0	F, G	6400							

Economical Expendable Casing Gun Systems (EEG)

Fits Gun Assembly								Type	Shaped Charge Part Number		Grams	Notes ⁽¹⁾	Det Cord min. V.O.D. m/sec						
Gun O.D.		Shot Density		Phasing (LS Low Side)	Series Number														
in.	mm	SPF	SPM		Wireline Bolted	Wireline Threaded	TCP Threaded												
3-1/8"	79.4	4	13	60		0631-A00-046	---	SDP	EXP-3319-322T	Prospector®	19.0	F	6400						
								DP	EXP-3319-302		19.0	F	6400						
								GH	EXP-3319-331	Outlaw®	19.0	F	6400						
								90		0631-A00-044	---	SDP	EXP-3319-322T	Prospector®	19.0	F	6400		
												DP	EXP-3319-302		19.0	F	6400		
												GH	EXP-3319-331	Outlaw®	19.0	F	6400		
	6	20	60	---	0631-A400-044 ⁽⁴⁾	---	SDP	EXP-3319-322T	Prospector®	19.0	F	6400							
							DP	EXP-3319-302		19.0	F	6400							
							GH	EXP-3319-331	Outlaw®	19.0	F	6400							
	4"	101.6	4	13	90		0640-A400-044	---	SDP	RTG-2511-322T	Gunslinger®	11.0	F	6700					
									SDP	EXP-2715-322T	Gunslinger®	15.0	F	6700					
									DP	RTG-2511-301	Prospector®	11.0	F	6700					
6									20	60	---	0640-B00-066	---	SDP	EXP-3325-321T	Gunslinger®	25.0	F, G	6400
														GH	EXP-3325-331	Outlaw®	25.0	F, G	6400
														SDP	EXP-3323-322T	Gunslinger®	22.7	F, G	6400
90			0640-A400-044	---	SDP	EXP-3323-301T	Prospector®	22.7	F, G	6400									
					DP	EXP-3323-361T	Prospector®	22.7	F, G	6400									
					GH	EXP-3323-302		22.0	F, G	6400									
6		20	60	---	0640-B00-066	---	SDP	EXP-3323-331	Outlaw®	22.7	F, G	6400							
							SDP	EXP-3319-322T	Prospector®	19.0	F, G	6400							
							DP	EXP-3319-302		19.0	F, G	6400							
	GH						EXP-3319-331	Outlaw®	19.0	F, G	6400								
	90							0640-A400-044	---	SDP	EXP-3325-321T	Gunslinger®	25.0	F, G	6700				
										GH	EXP-3325-331	Outlaw®	25.0	F, G	6700				
SDP		EXP-3323-322T	Gunslinger®	22.7	F, G	6700													
6	20	60	---	0640-B00-066	---	SDP	EXP-3323-301T	Prospector®	22.7	F, G	6700								
						DP	EXP-3323-361T	Prospector®	22.7	F, G	6700								
						GH	EXP-3323-302		22.0	F, G	6700								
90		0640-A400-044	---	SDP	EXP-3323-331	Outlaw®	22.7	F, G	6700										
				SDP	EXP-3319-322T	Prospector®	19.0	F, G	6700										
				DP	EXP-3319-302		19.0	F, G	6700										
6	20	60	---	0640-B00-066	---	SDP	EXP-3319-322T	Prospector®	19.0	F, G	6700								
						DP	EXP-3319-302		19.0	F, G	6700								
						GH	EXP-3319-331	Outlaw®	19.0	F, G	6700								

Notes: 1. "F" indicates that system is recommended for applications in which the perforator is being fired in fluid.
"G" indicates that system is recommended for applications in which the perforator is being fired in gas.

Expendable Gun Systems (EXP)

Fits Gun Assembly								Type	Shaped Charge Part Number	Grams	Notes ⁽¹⁾	Det Cord min. V.O.D. m/sec								
Gun O.D.		Shot Density		Phasing (LS Low Side)	Series Number															
in.	mm	SPF	SPM		Wireline Bolted	Wireline Threaded	TCP Threaded													
2-3/4"	69.9	4	13	60		0362-B00-046	0462-B00-046	SDP	RTG-2511-322T	<i>Gunslinger</i> ®	11.0	F, G	6400							
								SDP	EXP-2715-322T	<i>Gunslinger</i> ®	15.0	F, G	6400							
								DP	RTG-2511-301	<i>Prospector</i> ®	11.0	F, G	6400							
								BH	FLO-2511-310B		11.0	F, G	6400							
								BH	FLO-2715-310B	<i>BountyHunter</i> ®	15.0	F, G	6400							
								BH	FLO-2715-310B	<i>BountyHunter</i> ®	15.0	F, G	6400							
	6	20	60	60		0362-B00-066	0462-B00-066	SDP	EXP-2715-322T	<i>Gunslinger</i> ®	15.0	F, G	6700							
								SDP	RTG-2511-322T	<i>Gunslinger</i> ®	11.0	F, G	6700							
								DP	RTG-2511-301	<i>Prospector</i> ®	11.0	F, G	6700							
								BH	FLO-2511-310B		11.0	F, G	6700							
								BH	FLO-2715-310B	<i>BountyHunter</i> ®	15.0	F, G	6700							
								BH	FLO-2715-310B	<i>BountyHunter</i> ®	15.0	F, G	6700							
2-7/8"	73.0	6	20	60		0364-B00-066	0464-B00-066	SDP	EXP-2715-322T	<i>Gunslinger</i> ®	15.0	F, G	6700							
								BH	FLO-2715-310B	<i>BountyHunter</i> ®	15.0	F, G	6700							
3-1/8"	79.4	4	13	60		0363-B00-046	0402-B00-046	SDP	EXP-3319-322T	<i>Prospector</i> ®	19.0	F, G	6400							
								SDP	EXP-3323-301T	<i>Prospector</i> ®	22.7	F, G	6400							
								SDP	EXP-3323-322T	<i>Gunslinger</i> ®	22.7	F, G	6400							
								DP	EXP-3319-302		19.0	F, G	6400							
								DP	EXP-3323-302		22.0	F, G	6400							
								DP	EXP-3323-361T	<i>Prospector</i> ®	22.7	F, G	6400							
		90	60	60	60		0363-B00-044	0402-B00-044	GH	EXP-3319-331	<i>Outlaw</i> ®	19.0	F, G	6400						
									GH	EXP-3323-331	<i>Outlaw</i> ®	22.7	F, G	6400						
									BH	FLO-3323-310B		22.0	F, G	6400						
									SDP	EXP-4521-322T	<i>Gunslinger</i> ®	21.0	F, G	6400						
									GH	EXP-4521-331	<i>Outlaw</i> ®	21.0	F, G	6400						
									BH	FLO-4521-310B	<i>BountyHunter</i> ®	21.0	F, G	6400						
	6	20	60	60		0363-B00-066	0402-B00-066	BH	FLO-4521-310CF	<i>BountyHunter</i> ®	21.0	F, G	6400							
								SDP	EXP-3319-322T	<i>Prospector</i> ®	19.0	F, G	6400							
								SDP	EXP-3323-301T	<i>Prospector</i> ®	22.7	F, G	6400							
								SDP	EXP-3323-322T	<i>Gunslinger</i> ®	22.7	F, G	6400							
								DP	EXP-3319-302		19.0	F, G	6400							
								DP	EXP-3323-302		22.0	F, G	6400							
								DP	EXP-3323-361T	<i>Prospector</i> ®	22.7	F, G	6400							
								GH	EXP-3319-331	<i>Outlaw</i> ®	19.0	F, G	6400							
								GH	EXP-3323-331	<i>Outlaw</i> ®	22.7	F, G	6400							
								BH	FLO-3323-310B		22.0	F, G	6400							
								12	39	140/20	60		0363-G00-12E	0402-G00-12E	SDP	EXP-3319-322T	<i>Prospector</i> ®	19.0	F, G	6700
															SDP	EXP-3323-301T	<i>Prospector</i> ®	22.7	F ⁽²⁾	6700
SDP	EXP-3323-322T	<i>Gunslinger</i> ®	22.7	F ⁽²⁾	6700															
DP	EXP-3319-302		19.0	F, G	6700															
DP	EXP-3323-302		22.0	F ⁽²⁾	6700															
DP	EXP-3323-361T	<i>Prospector</i> ®	22.7	F ⁽²⁾	6700															
12	39	140/20	60		0363-G00-12E	0402-G00-12E	GH	EXP-3319-331	<i>Outlaw</i> ®	19.0	F, G	6700								
							BH	FLO-3323-310B		22.7	F ⁽²⁾	6700								
12	39	140/20	60		0363-G00-12E	0402-G00-12E	DP	EXP-3112-321T	<i>Gunslinger</i> ®	12.0	F	7500								
							BH	FLO-3112-310B		12.0	F	7500								

- Notes:
- "F" indicates that system is recommended for applications in which the perforator is being fired in fluid. "G" indicates that system is recommended for applications in which the perforator is being fired in gas.
 - Minimum 500 psi fluid pressure (at perforator) required at firing.
 - Minimum 1,500 psi fluid pressure (at perforator) required at firing.

Expendable Gun Systems (EXP)

Fits Gun Assembly								Type	Shaped Charge Part Number		Grams	Notes ⁽¹⁾	Det Cord min. V.O.D. m/sec
Gun O.D.		Shot Density		Phasing (LS Low Side)	Series Number								
in.	mm	SPF	SPM		Wireline Bolted	Wireline Threaded	TCP Threaded						
4"	101.6	4	13	90	0400-1A00-044	0404-1A00-044	SDP	EXP-4539-324T	<i>Gunslinger®</i>	38.5	F, G	6700	
							SDP	EXP-4039-321T	<i>Gunslinger®</i>	38.5	F, G	6700	
							BH	FLO-4039-311CF	<i>BountyHunter®</i>	38.5	F, G	6700	
							DP	EXP-4036-301	<i>Prospector®</i>	36.0	F, G	6700	
							BH	FLO-4036-311B	<i>BountyHunter®</i>	36.0	F, G	6700	
							DP	EXP-4032-301	<i>Prospector®</i>	32.0	F, G	6700	
					BH	FLO-4032-311B	<i>BountyHunter®</i>	32.0	F, G	6700			
					SDP	EXP-3325-321T	<i>Gunslinger®</i>	25.0	F, G	6400			
					GH	EXP-3325-331	<i>Outlaw®</i>	25.0	F, G	6400			
					SDP	EXP-3323-322T	<i>Gunslinger®</i>	22.7	F, G	6400			
					SDP	EXP-3323-301T	<i>Prospector®</i>	22.7	F, G	6400			
					DP	EXP-3323-361T	<i>Prospector®</i>	22.7	F, G	6400			
		DP	EXP-3323-302		22.0	F, G	6400						
		GH	EXP-3323-331	<i>Outlaw®</i>	22.7	F, G	6400						
		SDP	EXP-3319-322T	<i>Prospector®</i>	19.0	F, G	6400						
		DP	EXP-3319-302		19.0	F, G	6400						
		GH	EXP-3319-331	<i>Outlaw®</i>	19.0	F, G	6400						
		DP	EXP-4036-301	<i>Prospector®</i>	36.0	F	7500						
		BH	FLO-4036-311B	<i>BountyHunter®</i>	36.0	F	7500						
		DP	EXP-4032-301	<i>Prospector®</i>	32.0	F	7500						
		BH	FLO-4032-311B	<i>BountyHunter®</i>	32.0	F	7500						
		SDP	EXP-3325-321T	<i>Gunslinger®</i>	25.0	F, G	7200						
		GH	EXP-3325-331	<i>Outlaw®</i>	25.0	F, G	7200						
		SDP	EXP-3323-322T	<i>Gunslinger®</i>	22.7	F, G	6700						
SDP	EXP-3323-301T	<i>Prospector®</i>	22.7	F, G	6700								
DP	EXP-3323-361T	<i>Prospector®</i>	22.7	F, G	6700								
DP	EXP-3323-302		22.0	F, G	6700								
GH	EXP-3323-331	<i>Outlaw®</i>	22.7	F, G	6700								
SDP	EXP-3319-322T	<i>Prospector®</i>	19.0	F, G	6700								
DP	EXP-3319-302		19.0	F, G	6700								
GH	EXP-3319-331	<i>Outlaw®</i>	19.0	F, G	6700								
SDP	EXP-4521-322T	<i>Gunslinger®</i>	21.0	F, G	7000								
GH	EXP-4521-331	<i>Outlaw®</i>	21.0	F, G	7000								
BH	FLO-4521-310B	<i>BountyHunter®</i>	21.0	F, G	7000								
BH	FLO-4521-310CF	<i>BountyHunter®</i>	21.0	F, G	7000								
4-1/2"	114.3	4	13	90	0445-1A00-044	0414-1A00-044	SDP	EXP-4539-324T	<i>Gunslinger®</i>	38.5	F, G	6700	
							SDP	EXP-4039-321T	<i>Gunslinger®</i>	38.5	F, G	6700	
							BH	FLO-4039-311CF	<i>BountyHunter®</i>	38.5	F, G	6700	
							DP	EXP-4036-301	<i>Prospector®</i>	36.0	F, G	6700	
							BH	FLO-4036-311B	<i>BountyHunter®</i>	36.0	F, G	6700	
							DP	EXP-4032-301	<i>Prospector®</i>	32.0	F, G	6700	
					BH	FLO-4032-311B	<i>BountyHunter®</i>	32.0	F, G	6700			
					SDP	EXP-4539-324T	<i>Gunslinger®</i>	38.5	F	7500			
					SDP	EXP-4039-321T	<i>Gunslinger®</i>	38.5	F	7500			
					BH	FLO-4039-311CF	<i>BountyHunter®</i>	38.5	F, G	7500			
					DP	EXP-4036-301	<i>Prospector®</i>	36.0	F, G	7500			
					BH	FLO-4036-311B	<i>BountyHunter®</i>	36.0	F, G	7500			
		DP	EXP-4032-301	<i>Prospector®</i>	32.0	F, G	7500						
		BH	FLO-4032-311B	<i>BountyHunter®</i>	32.0	F, G	7500						
		BH CF	FLO-4524-311CF	<i>BountyHunter®</i>	24.0	F, G	7000						
		SDP	EXP-4521-322T	<i>Gunslinger®</i>	21.0	F, G	7000						
		GH	EXP-4521-331	<i>Outlaw®</i>	21.0	F, G	7000						
		BH	FLO-4521-310B	<i>BountyHunter®</i>	21.0	F, G	7000						
		BH	FLO-4521-310CF	<i>BountyHunter®</i>	21.0	F, G	7000						
		CJBH CF	FLO-4621-311CF	<i>BountyHunter®</i>	21.0	F	6400						
		BH CF	FLO-4524-311CF	<i>BountyHunter®</i>	24.0	F	7000						
		BH CFLD	FLO-4620-311CFZ	<i>BountyHunter®</i>	20.0	F	7500						
		SDP	EXP-4521-322T	<i>Gunslinger®</i>	21.0	F	7500						
		GH	EXP-4521-331	<i>Outlaw®</i>	21.0	F	7500						
BH	FLO-4521-310B	<i>BountyHunter®</i>	21.0	F	7500								
BH	FLO-4521-310CF	<i>BountyHunter®</i>	21.0	F	7500								
BH CFLD	FLO-4620-311CFZ	<i>BountyHunter®</i>	20.0	F ⁽³⁾	7500								
BH CFLD	FLO-4617-311CFZ	<i>BountyHunter®</i>	17.0	F ⁽³⁾	7500								

- Notes: 1. "F" indicates that system is recommended for applications in which the perforator is being fired in fluid.
 "G" indicates that system is recommended for applications in which the perforator is being fired in gas.
 2. Minimum 500 psi fluid pressure (at perforator) required at firing.
 3. Minimum 1,500 psi fluid pressure (at perforator) required at firing.

Expendable Gun Systems (EXP)

Fits Gun Assembly					Type	Shaped Charge Part Number		Grams	Notes ⁽¹⁾	Det Cord min. V.O.D. m/sec					
Gun O.D.		Shot Density		Phasing (LS Low Side)							Series Number				
in.	mm	SPF	SPM								Wireline Bolted	Wireline Threaded	TCP Threaded		
4-5/8"	117.5	4	13	90		0446-1A00-044	0416-1A00-044	SDP	EXP-4539-324T	<i>Gunslinger</i> ®	38.5	F, G	6700		
									SDP	EXP-4039-321T	<i>Gunslinger</i> ®	38.5	F, G	6700	
									BH	FLO-4039-311CF	<i>BountyHunter</i> ®	38.5	F, G	6700	
									DP	EXP-4036-301	<i>Prospector</i> ®	36.0	F, G	6700	
									BH	FLO-4036-311B	<i>BountyHunter</i> ®	36.0	F, G	6700	
									DP	EXP-4032-301	<i>Prospector</i> ®	32.0	F, G	6700	
						BH	FLO-4032-311B	<i>BountyHunter</i> ®	32.0	F, G	6700				
				5	16	60		0446-1A00-056	0416-1A00-056	SDP	EXP-4539-324T	<i>Gunslinger</i> ®	38.5	F, G	7500
									SDP	EXP-4039-321T	<i>Gunslinger</i> ®	38.5	F, G	7500	
									BH	FLO-4039-311CF	<i>BountyHunter</i> ®	38.5	F, G	7500	
									DP	EXP-4036-301	<i>Prospector</i> ®	36.0	F, G	7500	
									BH	FLO-4036-311B	<i>BountyHunter</i> ®	36.0	F, G	7500	
									DP	EXP-4032-301	<i>Prospector</i> ®	32.0	F, G	7500	
						BH	FLO-4032-311B	<i>BountyHunter</i> ®	32.0	F, G	7500				
				8	26	135/45		0446-2D00-08D	0416-2D00-08D	BH	FLO-5028-310B	<i>BountyHunter</i> ®	28.0	F	7000
									BH CF	FLO-4524-311CF	<i>BountyHunter</i> ®	24.0	F, G	7000	
									SDP	EXP-4521-322T	<i>Gunslinger</i> ®	21.0	F, G	7000	
									GH	EXP-4521-331	<i>Outlaw</i> ®	21.0	F, G	7000	
									BH	FLO-4521-310B	<i>BountyHunter</i> ®	21.0	F, G	7000	
									BH	FLO-4521-310CF	<i>BountyHunter</i> ®	21.0	F, G	7000	
				12	39	135/45		0446-2K00-12D	0416-2K00-12D	BH	FLO-5028-310B	<i>BountyHunter</i> ®	28.0	F	7000
									BH CF	FLO-4524-311CF	<i>BountyHunter</i> ®	24.0	F	7000	
									SDP	EXP-4521-322T	<i>Gunslinger</i> ®	21.0	F	7500	
									GH	EXP-4521-331	<i>Outlaw</i> ®	21.0	F	7500	
							BH	FLO-4521-310B	<i>BountyHunter</i> ®	21.0	F	7500			
							BH	FLO-4521-310CF	<i>BountyHunter</i> ®	21.0	F	7500			
		16	52	140/20		0446-C00-12D	0416-C00-12D	BH CFLD	FLO-4620-311CFZ	<i>BountyHunter</i> ®	20.0	F	7500		
						0446-C00-16G	0416-C00-16G	BH CFLD	FLO-4620-311CFZ	<i>BountyHunter</i> ®	20.0	F ⁽³⁾	7500		
		18	59	140/20		0446-D00-18G	0416-D00-18G	BH CFLD	FLO-4617-311CFZ	<i>BountyHunter</i> ®	17.0	F ⁽³⁾	7500		
				55/5				0446-K00-1855	0416-K00-1855	CJBH CF	FLO-4621-311CF	<i>BountyHunter</i> ®	21.0	F	6700
5"	127.0	4	13	90		0336-1A00-044	0405-1A00-044	SDP	EXP-4539-324T	<i>Gunslinger</i> ®	38.5	F, G	6700		
									SDP	EXP-4039-321T	<i>Gunslinger</i> ®	38.5	F, G	6700	
		5	16	60			0336-1A00-056	0405-1A00-056	SDP	EXP-4539-324T	<i>Gunslinger</i> ®	38.5	F, G	7500	
									SDP	EXP-4039-321T	<i>Gunslinger</i> ®	38.5	F, G	7500	
		8	26	135/45			0336-2D00-08D	0405-2D00-08D	BH	FLO-5028-310B	<i>BountyHunter</i> ®	28.0	F, G	7000	
									BH	FLO-5028-310B	<i>BountyHunter</i> ®	28.0	F	7000	
		12	39	135/45			0336-2K00-12D	0405-2K00-12D	SDP	EXP-4521-322T	<i>Gunslinger</i> ®	21.0	F, G	7500	
									GH	EXP-4521-331	<i>Outlaw</i> ®	21.0	F, G	7500	
18	59	55/5			0336-K00-1855	0405-K00-1855	CJBH CF	FLO-4621-311CF	<i>BountyHunter</i> ®	21.0	F	6700			
6"	152.4	12	39	60		0337-K00-126	0406-K00-126	CJDP	EXP-6034-300		34.0	F	6400		
									CJBH	FLO-6034-310B		34.0	F	6400	
7"	177.8	12	39	135/45		0338-1D00-12D	0407-1D00-12D	SDP	EXP-4039-321T	<i>Gunslinger</i> ®	38.5	F	6700		
									GH	EXP-7039-331	<i>Outlaw</i> ®	38.5	F	7000	
									GH	EXP-7039-332	<i>Outlaw</i> ® II	38.5	F	7000	

- Notes: 1. "F" indicates that system is recommended for applications in which the perforator is being fired in fluid.
 "G" indicates that system is recommended for applications in which the perforator is being fired in gas.
 2. Minimum 500 psi fluid pressure (at perforator) required at firing.
 3. Minimum 1,500 psi fluid pressure (at perforator) required at firing.

Shipping & Regulatory Information

Pages 26 – 28

*Find shipping and regulatory information
for each shaped charge.*

Shaped Charge Shipping & Regulatory Information

Proper Shipping Name (applies to all entries): Charges, Shaped
 ECCN: 1C992 US DOT Packing Instructions (applies to all entries): 137

Charge P/N	Description	Product Number	UN Number	Hazard Class	US DOT CA (EX-number)	Weight per Package (One complete package, as ready to ship)					Weight per Unit (One shaped charge)	
						Qty. per Package	Gross Weight (Weight of box, inner pkg., and products)		Net Quantity (Weight of products only, without box and inner pkg)		Net Explosive Wt. (Weight of explosive content of single unit)	Gross Weight (Total weight of one unit)
							Kg	Lbs	Kg	Lbs		
CAP-1708-310B	CHARGE 1-11/16" 8G RDX BH REN	1201	UN0441	1.4S	2007120133	50	6.9	15.3	6 0	13.1	8.0	119.1
CAP-1708-410B	CHARGE 1-11/16" 8G HMX BH REN	1201	UN0441	1.4S	2007120133	50	6.9	15.3	6 0	13.1	8.0	119.1
CAP-1708-320T	CHARGE 1-11/16" 8G RDX SDP REN	1201	UN0441	1.4S	2007120133	50	6.9	15.3	6 0	13.1	8.0	119.1
CAP-1708-420T	CHARGE 1-11/16" 8G HMX SDP REN	1201	UN0441	1.4S	2007120133	50	6.9	15.3	6 0	13.1	8.0	119.1
CAP-2115-310B	CHARGE 2-1/8" 15G RDX BH REN	1201	UN0441	1.4S	2007120133	50	9.6	21.2	9.1	20 0	15.0	181.8
CAP-2115-410B	CHARGE 2-1/8" 15G HMX BH REN	1201	UN0441	1.4S	2007120133	50	9.6	21.2	9.1	20 0	15.0	181.8
CAP-2115-320T	CHARGE 2-1/8" 15G RDX SDP REN	1201	UN0441	1.4S	2007120133	50	11.5	25.4	10.1	22 3	15.0	202.7
CAP-2115-420T	CHARGE 2-1/8" 15G HMX SDP REN	1201	UN0441	1.4S	2007120133	50	11.3	24.9	10.1	22 3	15.0	202.7
CIR-1302-4C50	CHARGE 1-3/8 1.8G HMX CIRC CSG 1/2" (Green)	1109	UN0441	1.4S	1994090001	30	1.7	3.8	0 8	1.7	1.8	25.0
CIR-1302-4C63	CHARGE 1-3/8 1.8G HMX CIRC CSG 5/8" (Blue)	1109	UN0441	1.4S	1994090001	30	1.7	3.7	0 7	1 6	1.8	24.3
CIR-1302-4T25	CHARGE 1-3/8 1.8G HMX CIRC TBG 1/4" (Lt.Brown)	1109	UN0441	1.4S	1994090001	30	1.8	3.9	0 8	1 8	1.8	27.3
CIR-1302-4T38	CHARGE 1-3/8 1.8G HMX CIRC TBG 3/8" (Orange)	1109	UN0441	1.4S	1994090001	30	1.8	3.9	0 8	1 8	1.8	27.3
CIR-1603-4C50	CHARGE 1-9/16 3 2G HMX C R CSG 1/2" (Green)	1109	UN0441	1.4S	1994090001	30	2.5	5.5	1 5	3 3	3.2	50.4
CIR-1603-4C63	CHARGE 1-9/16 3 2G HMX C R CSG 5/8" (Blue)	1109	UN0441	1.4S	1994090001	30	2.4	5.2	1 4	3 1	3.2	46.4
CIR-1603-4T25	CHARGE 1-9/16 3 2G HMX C R TBG 1/4" (Lt.Brown)	1109	UN0441	1.4S	1994090001	30	2.6	5.7	1 6	3 5	3.2	53.4
CIR-1603-4T38	CHARGE 1-9/16 3 2G HMX C R TBG 3/8" (Orange)	1109	UN0441	1.4S	1994090001	30	2.6	5.7	1 6	3 5	3.2	53.4
CIR-2106-4C50	CHARGE 2" 6.5G HMX CIRC CSG 1/2" (Green)	1109	UN0441	1.4S	1994090001	30	4.1	9.0	3.1	6 8	6.5	106.4
CIR-2106-4C63	CHARGE 2" 6.5G HMX CIRC CSG 5/8" (Blue)	1109	UN0441	1.4S	1994090001	30	3.8	8.5	2 9	6.4	6.5	106.4
CIR-2106-4T25	CHARGE 2" 6.5G HMX CIRC TBG 1/4" (Lt.Brown)	1109	UN0441	1.4S	1994090001	30	4.1	9.0	3.1	6 8	6.5	103.1
CIR-2106-4T38	CHARGE 2" 6.5G HMX CIRC TBG 3/8" (Orange)	1109	UN0441	1.4S	1994090001	30	4.1	9.0	3.1	6 8	6.5	106.4
EXP-2715-322T	CHARGE 2-3/4 15G RDX DP GUNSLINGER®	1109	UN0441	1.4S	1994090001	50	9.3	20.6	8 2	18 0	15.0	163.2
EXP-2715-422T	CHARGE 2-3/4 15G HMX DP GUNSLINGER®	1109	UN0441	1.4S	1994090001	50	9.2	20.3	8 0	17.7	15.0	160.2
EXP-2715-522T	CHARGE 2-3/4 15G HNS DP GUNSLINGER®	1109	UN0441	1.4S	1994090001	50	9.2	20.3	8 0	17.7	15.0	160.2
EXP-3112-321T	CHARGE 3-1/8 12G RDX SDP GUNSLINGER®	1109	UN0441	1.4S	1994090001	50	9.2	20.2	8 0	17 6	12.0	151.7
EXP-3112-421T	CHARGE 3-1/8 12G HMX SDP GUNSLINGER®	1109	UN0441	1.4S	1994090001	50	9.2	20.2	8 0	17 6	12.0	151.7
EXP-3112-521T	CHARGE 3-1/8 12G HNS SDP GUNSLINGER®	1109	UN0441	1.4S	1994090001	50	7.7	17.0	6 5	14.4	12.0	115.9
EXP-3319-302	CHARGE 3-3/8" 19G RDX DP EXP	1109	UN0441	1.4S	1994090001	50	14.6	32.3	13 5	29.7	19.0	269.1
EXP-3319-322T	CHARGE 3-3/8" 19G RDX SDP PROEX	1109	UN0441	1.4S	1994090001	50	15.6	34.4	14.4	31 8	19.0	279.1
EXP-3319-331	CHARGE 3-3/8" 19G RDX GH PRO	1109	UN0441	1.4S	1994090001	50	14.8	32.7	13.7	30.1	19.0	273.1
EXP-3319-402	CHARGE 3-3/8" 19G HMX DP EXP	1109	UN0441	1.4S	1994090001	50	14.6	32.3	13 5	29.7	19.0	269.1
EXP-3319-422T	CHARGE 3-3/8" 19G HMX SDP PROEX	1109	UN0441	1.4S	1994090001	50	15.6	34.4	14.4	31 8	19.0	276.2
EXP-3319-431	CHARGE 3-3/8" 19G HMX GH PRO	1109	UN0441	1.4S	1994090001	50	14.5	31.9	13 3	29 3	19.0	266.2
EXP-3323-301T	CHARGE 3-3/8" 22.7G RDX DP PROEX	1109	UN0441	1.4S	1994090001	50	15.6	34.4	14.4	31 8	22.7	276.8
EXP-3323-302	CHARGE 3-3/8" 22G RDX DP EXP	1109	UN0441	1.4S	1994090001	50	14.8	32.6	16 6	30 0	22.0	272.8
EXP-3323-322T	CHARGE 3-3/8" 22.7G RDX SDP PRO	1109	UN0441	1.4S	1994090001	50	15.3	33.8	14.1	31 2	22.7	279.9
EXP-3323-331	CHARGE 3-3/8" 22.7G RDX GH PRO	1109	UN0441	1.4S	1994090001	50	15.0	33.1	13 8	30 5	22.7	276.8
EXP-3323-361T	CHARGE 3-3/8" 22.7G RDX SDP PRO (.35)	1109	UN0441	1.4S	1994090001	50	15.6	34.4	14.4	31 8	22.7	288.9
EXP-3323-401T	CHARGE 3-3/8" 22.7G HMX DP PROEX	1109	UN0441	1.4S	1994090001	50	15.2	33.4	14 0	30 8	22.7	279.8
EXP-3323-402	CHARGE 3-3/8" 22.7G HMX DP EXP	1109	UN0441	1.4S	1994090001	50	14.8	32.6	16 6	30 0	22.0	272.8

Charge P/N	Description	Product Number	UN Number	Hazard Class	US DOT CA (EX-number)	Weight per Package (One complete package, as ready to ship)					Weight per Unit (One shaped charge)	
						Qty. per Package	Gross Weight (Weight of box, inner pkg., and products)		Net Quantity (Weight of products only, without box and inner pkg)		Net Explosive Wt. (Weight of explosive content of single unit)	Gross Weight (Total weight of one unit)
							Kg	Lbs	Kg	Lbs		
EXP-3323-422T	CHARGE 3-3/8" 22.7G HMX SDP PRO	1109	UN0441	1.4S	1994090001	50	15.3	33.8	14.1	31.2	22.7	279.9
EXP-3323-431	CHARGE 3-3/8" 22.7G HMX GH PRO	1109	UN0441	1.4S	1994090001	50	14.9	32.8	13.7	30.2	22.7	273.9
EXP-3323-461T	CHARGE 3-3/8" 22.7G HMX SDP PRO	1109	UN0441	1.4S	1994090001	50	15.6	34.5	14.5	31.9	22.7	288.9
EXP-3323-522T	CHARGE 3-3/8" 22.7G HNS SDP PROEX	1109	UN0441	1.4S	1994090001	50	15.3	33.8	14.1	31.2	22.7	279.9
EXP-3325-321T	CHARGE 3-3/8" 25G RDX SDP PRO	1110	UN0440	1.4D	1994090002	50	15.3	33.8	14.1	31.2	25.0	282.6
EXP-3325-331	CHARGE 3-3/8" 25G RDX GH PRO	1110	UN0440	1.4D	1994090002	50	14.7	32.4	13.5	29.8	25.0	270.6
EXP-3325-421T	CHARGE 3-3/8" 25G HMX SDP PRO	1110	UN0440	1.4D	1994090002	50	15.3	33.8	14.1	31.2	25.0	282.6
EXP-3325-431	CHARGE 3-3/8" 25G HMX GH PRO	1110	UN0440	1.4D	1994090002	50	14.7	32.4	13.5	29.8	25.0	270.6
EXP-4032-301	CHARGE 4" 32G RDX DP EXP	1110	UN0440	1.4D	1994090002	50	24.3	53.5	22.3	49.1	32.0	445.4
EXP-4036-301	CHARGE 4" 36G RDX DP EXP	1110	UN0440	1.4D	1994090002	50	24.5	53.9	22.5	49.5	36.0	449.4
EXP-4039-321T	CHARGE 4" 38 5G RDX SDP GUNSLINGER®	1110	UN0440	1.4D	1994090002	50	25.5	56.2	23.5	51.8	38.5	454.9
EXP-4039-421T	CHARGE 4" 38 5G HMX SDP GUNSLINGER®	1110	UN0440	1.4D	1994090002	50	25.5	56.2	23.5	51.8	38.5	454.9
EXP-4521-322T	CHARGE 4-1/2" 21G RDX SDP PROEX	1109	UN0441	1.4S	1994090001	50	12.5	27.6	11.3	25.0	21.0	226.9
EXP-4521-331	CHARGE 4-1/2" 21G RDX DP EXP	1109	UN0441	1.4S	1994090001	50	12.1	26.6	10.9	24.0	21.0	217.9
EXP-4521-422T	CHARGE 4-1/2" 21G HMX SDP PROEX	1109	UN0441	1.4S	1994090001	50	12.5	27.6	11.3	25.0	21.0	226.9
EXP-4521-431	CHARGE 4-1/2" 21G HMX DP EXP	1109	UN0441	1.4S	1994090001	50	12.1	26.6	10.9	24.0	21.0	217.9
EXP-4521-522T	CHARGE 4-1/2" 21G HNS SDP PROEX	1109	UN0441	1.4S	1994090001	50	12.5	27.6	11.3	25.0	21.0	226.9
EXP-4521-531	CHARGE 4-1/2" 21G HNS DP EXP	1109	UN0441	1.4S	1994090001	50	12.1	26.6	10.9	24.0	21.0	217.9
EXP-4539-324T	CHARGE 4-1/2" 38.5G RDX SDP PRO	1110	UN0440	1.4D	1994090002	50	27.2	59.9	25.2	55.5	38.5	503.2
EXP-4539-424T	CHARGE 4-1/2" 38.5G HMX SDP GUNSLINGER®	1110	UN0440	1.4D	1994090002	50	27.4	60.5	25.4	56.1	38.5	503.2
EXP-6034-300	CHARGE 6" 34G RDX CJDP	1110	UN0440	1.4D	1994090002	50	19.1	42.1	17.1	37.7	34.0	342.2
EXP-7039-331	CHARGE 7" 38 5G RDX GH OUTLAW®	1110	UN0440	1.4D	1994090002	50	23.5	51.7	21.5	47.3	38.5	429.4
EXP-7039-332	CHARGE 7" 38 5G RDX GH OUTLAW® II	1110	UN0440	1.4D	1994090002	50	23.2	51.2	21.2	46.8	38.5	423.5
FLO-1603-310	CHARGE 1-9/16" 3.2G RDX BH RTG	1109	UN0441	1.4S	1994090001	50	3.2	7.0	2.2	4.8	3.2	43.7
FLO-1603-410	CHARGE 1-9/16" 3.2G HMX BH RTG	1109	UN0441	1.4S	1994090001	50	3.2	6.9	2.2	4.8	3.2	43.7
FLO-2106-310	CHARGE 2" 6.5G RDX BH RTG	1109	UN0441	1.4S	1994090001	50	5.3	11.6	4.3	9.5	6.5	85.8
FLO-2106-410	CHARGE 2" 6.5G HMX BH RTG	1109	UN0441	1.4S	1994090001	50	5.2	11.5	4.3	9.4	6.5	85.3
FLO-2106-510	CHARGE 2" 6.5G HNS BH RTG	1109	UN0441	1.4S	1994090001	50	5.2	11.5	4.3	9.4	6.5	85.3
FLO-2511-310B	CHARGE 2-1/2" 11G RDX BH	1109	UN0441	1.4S	1994090001	50	7.8	17.1	6.6	14.5	11.0	131.0
FLO-2511-410B	CHARGE 2-1/2" 11G RDX BH	1109	UN0441	1.4S	1994090001	50	7.8	17.1	6.6	14.5	11.0	131.0
FLO-2715-310B	CHARGE 2-3/4" 15G RDX BH EXP BTY	1109	UN0441	1.4S	1994090001	50	8.0	17.6	6.8	15.0	15.0	135.7
FLO-2715-410B	CHARGE 2-3/4" 15G HMX BH EXP BTY	1109	UN0441	1.4S	1994090001	50	8.0	17.6	6.8	15.0	15.0	135.7
FLO-3112-310B	CHARGE 3-1/8" 12G RDX BH	1109	UN0441	1.4S	1994090001	50	6.6	14.5	5.4	11.9	12.0	94.6
FLO-3112-410B	CHARGE 3-1/8" 12G HMX BH	1109	UN0441	1.4S	1994090001	50	6.6	14.5	5.4	11.9	12.0	94.6
FLO-3323-310B	CHARGE 3-3/8" 22G RDX BH EXP	1109	UN0441	1.4S	1994090001	50	13.8	30.6	12.6	27.8	22.0	251.8
FLO-3323-410B	CHARGE 3-3/8" 22G HMX BH EXP	1109	UN0441	1.4S	1994090001	50	13.8	30.4	12.6	27.8	22.0	251.8
FLO-3323-510B	CHARGE 3-3/8" 22G HNS BH BTY	1109	UN0441	1.4S	1994090001	50	13.6	30.0	12.5	27.4	22.0	248.9
FLO-4032-311B	CHARGE 4" 32G RDX BH EXP	1110	UN0440	1.4D	1994090002	50	21.6	47.7	19.6	43.3	32.0	392.7
FLO-4032-411B	CHARGE 4" 32G HMX BH EXP	1110	UN0440	1.4D	1994090002	50	21.6	47.7	19.6	43.3	32.0	392.7

Charge P/N	Description	Product Number	UN Number	Hazard Class	US DOT CA (EX-number)	Weight per Package (One complete package, as ready to ship)					Weight per Unit (One shaped charge)	
						Qty. per Package	Gross Weight (Weight of box, inner pkg., and products)		Net Quantity (Weight of products only, without box and inner pkg)		Net Explosive Wt. (Weight of explosive content of single unit)	Gross Weight (Total weight of one unit)
							Kg	Lbs	Kg	Lbs		
FLO-4036-311B	CHARGE 4" 36G RDX BH EXP	1110	UN0440	1.4D	199409002	50	22.0	48.6	20 0	44 2	36.0	396.6
FLO-4039-311CF	CHARGE 4" 38 5G RDX BH CF BTY	1110	UN0440	1.4D	1994090002	50	22.0	48.5	20 0	44.1	38.5	399.7
FLO-4521-310B	CHARGE 4-1/2" 21G RDX BH BTY	1109	UN0441	1.4S	1994090001	50	11.1	24.6	9 6	21 2	21.0	192.3
FLO-4521-310CF	CHARGE 4-1/2" 21G RDX BH CF BTY	1109	UN0441	1.4S	1994090001	50	10.8	23.8	9 6	21 2	21.0	192.3
FLO-4524-311CF	CHARGE 4-1/2" 24G RDX CJBH CF BTY	1110	UN0440	1.4D	1994090002	50	13.5	29.7	11 5	25 3	24.0	230.0
FLO-4617-311CFZ	CHARGE 4-5/8" 17G RDX BH CFLD BTY	1109	UN0441	1.4S	1994090001	50	7.7	17.0	6 5	14.4	17.0	91.1
FLO-4620-311CFZ	CHARGE 4-5/8" 20G RDX BH CFLD BTY	1109	UN0441	1.4S	1994090001	50	8.5	18.7	6 5	14 3	20.0	110.3
FLO-4621-311CF	CHARGE 4-5/8" 21G RDX CJBH (CF) BTY	1109	UN0441	1.4S	1994090001	50	10.4	22.8	9 2	20 2	21.0	183.7
FLO-4621-411CF	CHARGE 4-5/8" 21G HMX CJBH (CF) BTY	1109	UN0441	1.4S	1994090001	50	10.4	22.8	9 2	20 2	21.0	183.7
FLO-5028-310B	CHARGE 5" 28G RDX BH EXP BTY	1110	UN0440	1.4D	1994090002	50	14.0	30.8	12 0	26.4	28.0	233.4
FLO-5028-410B	CHARGE 5" 28G HMX BH EXP BTY	1110	UN0440	1.4D	1994090002	50	13.7	30.1	11.7	25.7	28.0	233.4
FLO-6034-310B	CHARGE 6" 34G RDX CJBH BRASS LINER	1110	UN0440	1.4D	1994090002	50	17.1	37.7	15.1	33 3	34.0	302.5
PPG-3111-301	CHARGE 3-1/8" 11G RDX DP PRO WO/SLV	1109	UN0441	1.4S	1994090001	50	7.6	16.8	6.4	14 2	11.0	128.7
PPG-3111-311	CHARGE 3-1/8" 11G RDX BH	1109	UN0441	1.4S	1994090001	50	7.4	16.2	6 2	13 6	11.0	119.7
PPG-3111-321	CHARGE 3-1/8" 11G RDX SDP PRO WO/SLV	1109	UN0441	1.4S	1994090001	50	7.6	16.8	6.4	14 2	11.0	128.7
PPG-3111-331	CHARGE 3-1/8" 11G RDX GH PRO WO/SLV	1109	UN0441	1.4S	1994090001	50	7.9	17.3	6.7	14.7	11.0	133.7
PPG-3111-401	CHARGE 3-1/8" 11G HMX DP PRO WO/SLV	1109	UN0441	1.4S	1994090001	50	7.6	16.8	6.4	14 2	11.0	128.7
PPG-3111-411	CHARGE 3-1/8" 11G HMX BH	1109	UN0441	1.4S	1994090001	50	7.4	16.2	6 2	13 6	11.0	119.7
PPG-3111-421	CHARGE 3-1/8" 11G HMX SDP PRO WO/SLV	1109	UN0441	1.4S	1994090001	50	7.6	16.8	6.4	14 2	11.0	128.7
PPG-3112-310B	CHARGE 3-1/8" 12G RDX BH PPG WO/SLV	1109	UN0441	1.4S	1994090001	50	7.5	16.6	6.4	14 0	12.0	127.4
PPG-3112-321T	CHARGE 3-1/8" 12G RDX SDP PRO WO/SLV	1109	UN0441	1.4S	1994090001	50	7.7	17.0	6 5	14.4	12.0	130.7
PPG-3112-421T	CHARGE 3-1/8" 12G HMX SDP PRO WO/SLV	1109	UN0441	1.4S	1994090001	50	7.7	17.0	6 5	14.4	12.0	130.7
PPG-4019-301	CHARGE 4" 19G RDX DP PPG	1109	UN0441	1.4S	1994090001	50	17.3	38.2	15 3	33 8	19.0	306.9
PPG-4019-321T	CHARGE 4" 19G RDX SDP PRO WO/SLV	1109	UN0441	1.4S	1994090001	50	16.8	37.0	14 8	32 6	19.0	296.1
PPG-4022-301	CHARGE 4" 22G RDX DP PPG WO/S	1109	UN0441	1.4S	1994090001	50	17.5	38.6	15 5	34 2	22.0	309.9
PPG-4022-310B	CHARGE 4" 22G RDX BH PPG WO/SLV	1109	UN0441	1.4S	1994090001	50	16.5	36.3	14 5	31 9	22.0	289.6
PPG-4023-321T	CHARGE 4" 22.7G RDX SDP PRO WO/SLV	1109	UN0441	1.4S	1994090001	50	17.0	37.4	15 0	33 0	22.7	299.8
PPG-4023-421T	CHARGE 4" 22.7G HMX SDP PRO WO/SLV	1109	UN0441	1.4S	1994090001	50	17.0	37.4	15 0	33 0	22.7	299.8
RTG-1302-400	CHARGE 1-3/8" 1.8G HMX DP RTG	1109	UN0441	1.4S	1994090001	50	3.6	4.9	1 3	2 8	1.8	24.0
RTG-1603-300	CHARGE 1-9/16" 3.2G RDX RTG	1109	UN0441	1.4S	1994090001	50	3.3	7.2	2 3	5 0	3.2	45.7
RTG-1603-320T	CHARGE 1-9/16" 3.2G RDX SDP RTG PRO	1109	UN0441	1.4S	1994090001	50	3.4	7.6	2 5	5.4	3.2	49.4
RTG-1603-400	CHARGE 1-9/16" 3.2G HMX RTG	1109	UN0441	1.4S	1994090001	50	3.3	7.2	2 3	5 0	3.2	45.7
RTG-1603-420T	CHARGE 1-9/16" 3.2G HMX SDP RTG PRO	1109	UN0441	1.4S	1994090001	50	3.4	7.6	2 5	5.4	3.2	49.4
RTG-1603-520T	CHARGE 1-9/16" 3.2G HNS SDP RTG PRO	1109	UN0441	1.4S	1994090001	50	3.4	7.6	2 5	5.4	3.2	49.4
RTG-2106-321T	CHARGE 2" 6.5G RDX SDP GUNSLINGER®	1109	UN0441	1.4S	1994090001	50	5.9	13.1	5 0	11 0	6.5	95.4
RTG-2106-331	CHARGE 2" 6.5G RDX GH OUTLAW ®	1109	UN0441	1.4S	1994090001	50	5.7	12.6	5 0	10 5	6.5	48.1
RTG-2106-421T	CHARGE 2" 6.5G HMX SDP GUNSLINGER®	1109	UN0441	1.4S	1994090001	50	5.9	13.1	5 0	11 0	6.5	95.4
RTG-2106-431	CHARGE 2" 6.5G HMX GH OUTLAW ®	1109	UN0441	1.4S	1994090001	50	5.7	12.6	5 0	10 5	6.5	48.1
RTG-2106-521T	CHARGE 2" 6.5G HNS SDP GUNSLINGER®	1109	UN0441	1.4S	1994090001	50	5.7	12.7	4 8	10 5	6.5	95.4
RTG-2106-531	CHARGE 2" 6.5G HNS GH OUTLAW ®	1109	UN0441	1.4S	1994090001	50	5.7	12.6	5 0	10 5	6.0	48.1
RTG-2511-301	CHARGE 2-1/2" 11G RDX DP PRO	1109	UN0441	1.4S	1994090001	50	9.3	20.5	8.1	17 9	11.0	146.2
RTG-2511-322T	CHARGE 2-1/2" 11G RDX SDP PROEX	1109	UN0441	1.4S	1994090001	50	9.1	20.1	8 0	17 5	11.0	159.2
RTG-2511-401	CHARGE 2-1/2" 11G HMX DP PRO	1109	UN0441	1.4S	1994090001	50	9.3	20.5	8.1	17 9	11.0	146.2
RTG-2511-422T	CHARGE 2-1/2" 11G HMX SDP	1109	UN0441	1.4S	1994090001	50	9.1	20.1	8 0	17 5	11.0	159.2

Circulation Charges

Pages 30 – 32

*Find test results and gun system compatibility
for circulation charges.*



Color Code Changes – Circulation Charges Effective January 2008

Type	New Color Code (Charges built after January 1, 2008)	Old Color Code (Charges built prior to January 1, 2008)	Applies to Part Numbers
Tubing Puncher "1/4 in. steel"	Brown with Green Stripe	Lt. Brown with Red Stripe	CIR-1302-4T25 CIR-1603-4T25 CIR-2106-4T25
Tubing Puncher "3/8 in. steel"	Orange with Green Stripe	Orange with Red Stripe	CIR-1302-4T38 CIR-1603-4T38 CIR-2106-4T38
Casing Puncher "1/2 in. steel"	Red with Green Stripe	Green with Red Stripe	CIR-1302-4C50 CIR-1603-4C50 CIR-2106-4C50
Casing Puncher "5/8 in. steel"	Blue with Green Stripe	Blue with Red Stripe	CIR-1302-4C63 CIR-1603-4C63 CIR-2106-4C63

* Color Code marking on charge, is used to distinguish charge specification. Manufactured in HMX explosive only. See technical details in the Titan Perforating Gun System Summary book, Circulation Charge section.

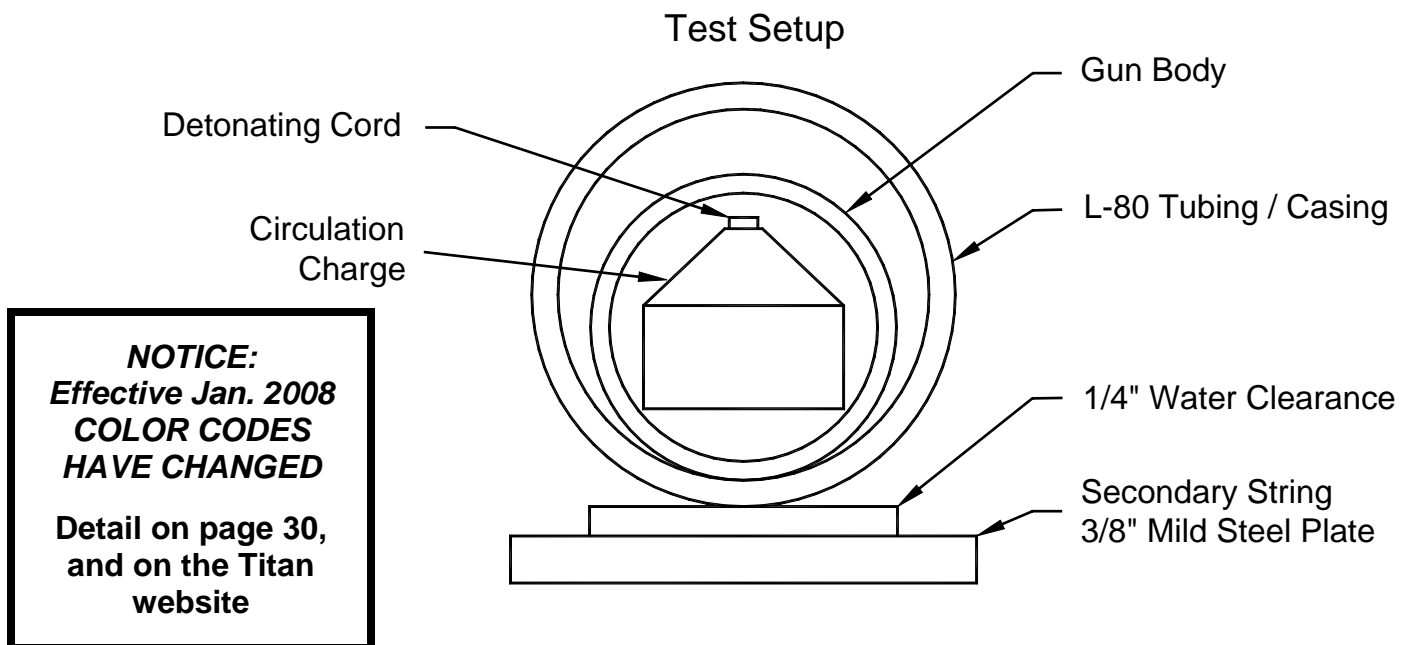


Test Results – Circulation Charges

Type		1-3/8" Puncher, HMX	1-9/16" Puncher, HMX	2" Puncher, HMX
Tubing Puncher "1/4 in. steel" "Brown with Green Stripe"	P/N	CIR-1302-4T25	CIR-1603-4T25	CIR-2106-4T25
	Hole diameter thru 1/4" wall L-80 tubing	0.17 in. 4.32 mm	0.20 in. 5.08 mm	0.32 in. 8.13 mm
	Penetration in secondary string	0.03 in. 0.76 mm	0.03 in. 0.76 mm	0.05 in. 1.27 mm
Tubing Puncher "3/8 in. steel" "Orange with Green Stripe"	P/N	CIR-1302-4T38	CIR-1603-4T38	CIR-2106-4T38
	Hole diameter thru 3/8" wall L-80 tubing	0.19 in. 4.83 mm	0.23 in. 5.84 mm	0.33 in. 8.38 mm
	Penetration in secondary string	0.02 in. 0.51 mm	0.02 in. 0.51 mm	0.07 in. 1.78 mm
Casing Puncher "1/2 in. steel" "Red with Green Stripe"	P/N	CIR-1302-4C50	CIR-1603-4C50	CIR-2106-4C50
	Hole diameter thru 1/2" wall L-80 tubing	0.19 in. 4.83 mm	0.20 in. 5.08 mm	0.31 in. 7.87 mm
	Penetration in secondary string	0.06 in. 1.52 mm	0.05 in. 1.27 mm	0.08 in. 2.03 mm
Casing Puncher "5/8 in. steel" "Blue with Green Stripe"	P/N	CIR-1302-4C63	CIR-1603-4C63	CIR-2106-4C63
	Hole diameter thru 5/8" wall L-80 tubing	0.13 in. 3.30 mm	0.14 in. 3.56 mm	0.30 in. 7.62 mm
	Penetration in secondary string	0.02 in. 0.51 mm	0.03 in. 0.76 mm	0.06 in. 1.52 mm

* Color Code marking on charge, is used to distinguish charge specification. Manufactured in HMX explosive only.

Titan Circulation Charges are tested at ambient temperature in the configuration shown. Many factors such as gun positioning, tubing/casing condition, and tubing/casing positioning can significantly affect downhole performance results, and therefore we can make no claims regarding actual downhole performance.



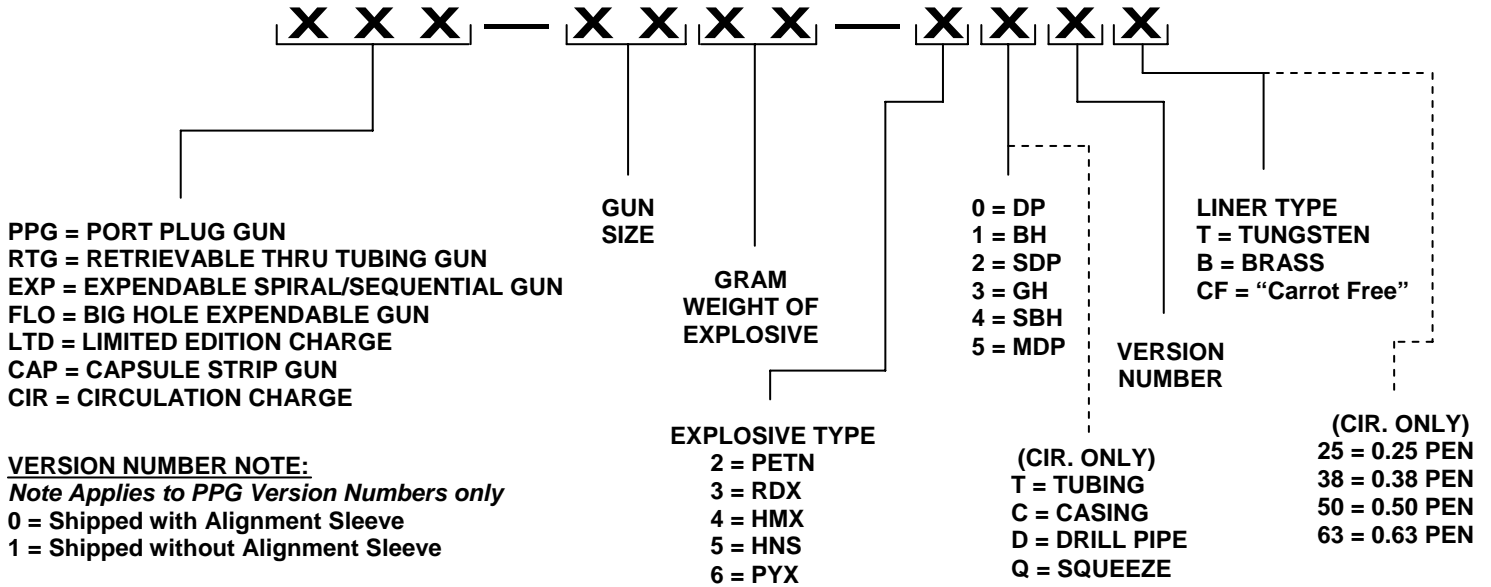
Circulation Charges (RTG)

Charge P/N	Type	Grams	Fits Gun Assembly								Notes ⁽¹⁾	Det Cord min. V.O.D. m/sec
			Gun O.D.		Shot Density		Phasing	Type	Series Number			
			in.	mm	SPF	SPM			Bolted	Threaded		
CIR-1302-4T25	CIR	1.8 HMX	1-3/8"	34.9	4	13	0	RTG	0327-A00-041	---	F	6400
CIR-1302-4T38	CIR	1.8 HMX	1-3/8"	34.9	4	13	0	RTG	0327-A00-041	---	F	6400
CIR-1302-4C50	CIR	1.8 HMX	1-3/8"	34.9	4	13	0	RTG	0327-A00-041	---	F	6400
CIR-1302-4C63	CIR	1.8 HMX	1-3/8"	34.9	4	13	0	RTG	0327-A00-041	---	F	6400
CIR-1603-4T25	CIR	3.2 HMX	1-9/16"	39.7	4	13	0	RTG	0320-A00-041	0220-A00-041	F, G	6400
					6	20	0	RTG	---	0220-A00-061	F	6700
CIR-1603-4T38	CIR	3.2 HMX	1-9/16"	39.7	4	13	0	RTG	0320-A00-041	0220-A00-041	F, G	6400
					6	20	0	RTG	---	0220-A00-061	F	6700
CIR-1603-4C50	CIR	3.2 HMX	1-9/16"	39.7	4	13	0	RTG	0320-A00-041	0220-A00-041	F, G	6400
					6	20	0	RTG	---	0220-A00-061	F	6700
CIR-1603-4C63	CIR	3.2 HMX	1-9/16"	39.7	4	13	0	RTG	0320-A00-041	0220-A00-041	F, G	6400
					6	20	0	RTG	---	0220-A00-061	F	6700
CIR-2106-4T25	CIR	6.5 HMX	2"	50.8	4	13	0	RTG	0321-A00-041	0222-A00-041	F, G	6400
					6	20	0	RTG	0321-A00-061	0222-A00-061	F	6700
CIR-2106-4T38	CIR	6.5 HMX	2"	50.8	4	13	0	RTG	0321-A00-041	0222-A00-041	F, G	6400
					6	20	0	RTG	0321-A00-061	0222-A00-061	F	6700
CIR-2106-4C50	CIR	6.5 HMX	2"	50.8	4	13	0	RTG	0321-A00-041	0222-A00-041	F, G	6400
					6	20	0	RTG	0321-A00-061	0222-A00-061	F	6700
CIR-2106-4C63	CIR	6.5 HMX	2"	50.8	4	13	0	RTG	0321-A00-041	0222-A00-041	F, G	6400
					6	20	0	RTG	0321-A00-061	0222-A00-061	F	6700

Notes: 1. "F" indicates that system is recommended for applications in which the perforator is being fired in fluid.
 "G" indicates that system is recommended for applications in which the perforator is being fired in gas

Shaped Charge Part Numbering Scheme

EXPLOSIVE ASSEMBLIES



ABREVIATION KEY:

DP = Deep Penetrating Charge
 SDP = Super Deep Penetrating Charge
 GH = Good Hole Charge
 BH = Big Hole Charge
 SBH = Super Big Hole Charge
 CJ = Cluster Jet

LD = Low Debris
 CF = "Carrot Free" Low Debris Liner with Steel Charge Case
 CFZ = "Carrot Free" Low Debris Liner with Low Debris Zinc Charge Case
 Z = Zinc Charge Case

Temperature Ratings of Explosives

