

12 SPF (39 SPM) GUNFACTS®

Gun Body Material:	Heat treated, seamless steel tubing
Gun Body Configuration:	Threaded and scalloped
Charge Positioning Method:	Round steel tube
Mode of Fire:	Simultaneous or selective firing systems like EBFire® and ControlFire®
Type of Tandem Connection:	Booster-to-booster (no splice)
Initiation Point:	Top or bottom fired options available for wireline and TCP
Recommended Detonating Cord:	80 grains/foot
O-Ring Material:	Nitrile – 90 Durometer (Viton – 95 Durometer for temperatures >325°F [163°C])
O-Ring Size:	0111-346-090 / 0111-346-V95

Phasing	135°/45°
Assembly Part Number	0451-C** -12D† 0551-C** -12D‡
Nominal O.D. (in)[mm]	5.13 [130]
Nominal Thickness (in)[mm]	0.44 [11.2]
Typical Gun Swell at Ambient Conditions (in)[mm]	5.33 [135]
Ambient Liquid. 32.0g	Not Recommended
Ambient Gas	
Min. Recommended Restriction (in)[mm]	5.68 [144]
Drift Gauge O.D. for Gun Body I.D. (in)[mm]	4.19 [106] using Gauge Length 12in [305]
Min. Recommended Washover Pipe Clearance:	
Casing Drift I.D. to Nom. Washover O.D. (in)[mm]	0.38 [10]
Washover Drift I.D. to Nom. Gun O.D. (in)[mm]	0.31 [8]
Max. Hardware Temperature (°F)[°C]	500 [260]
Max. Pressure (psi)[MPa]	17,000 [117]
Min. Detonating Cord Velocity (ft/s)[m/s]	24,750 [7,500]
Typical Length (ft)[m]	
4 ft (36 shots)	4.00 [1.22]
7 ft (72 shots)	7.00 [2.13]
11 ft (120 shots)	11.00 [3.35]
21 ft (240 shots)	21.00 [6.40]
Gun End to Center of First Scalloped Distance (in)[mm]	6.50 [165]
Approximate Weight Fully Loaded (lb/ft)[kg/m]	29.0 [13.2]
Max. Tension (lbf)[kN]	500,000 [2,224]
Upper/Lower Head Connection	4-1/2" – 6 Acme

† Threaded gun ‡ Threaded gun compatible with boost-to-booster tandem transfer kit

** Gun length. Example: Use "07" for 7ft gun; etc.

API PERFORMANCE OF CHARGES COMPATIBLE WITH 5-1/8IN, 12 SPF GUN SYSTEM

Charge Name	Charge Type	Charge Part Number†	Explosive Weight (g)	Gun O.D. (in)[mm]	Shot Density (spf)[spm], Phasing	Entrance Hole (in)[mm]	Penetration (in)[cm]	Burr Height (in)[cm]	Casing Size (in)[mm]	Target Strength (psi)[MPa]
PERFECTA	BH CF	FLO-5130-311CF	30.0	5-1/8 [130]	12 [39], 135/45°	0.86 [22]	8.25 [20.96]	0.05 [0.13]	7 [178]	5,210 [35.9]
PERFECTA	BH CFLD	FLO-5128-311CFZ	28.0	5-1/8 [130]	12 [39], 135/45°	0.79 [20]	9.11 [23.14]	0.04 [0.10]	7 [178]	5,210 [35.9]

Note: All charges available with RDX, HMX and HNS. Table displays charges that have been API-19B or API RP-43 certified

Bold indicates API-19B certification. Italics indicate API RP-43 certification

† xxx-xxxx-3xxx for RDX, xxx-xxxx-4xxx for HMX, xxx-xxxx-5xxx for HNS

5-1/8 in (130mm) Scalloped Hollow Carrier Gun

16 SPF (52 SPM) GUNFACTS®

Gun Body Material:	Heat treated, seamless steel tubing
Gun Body Configuration:	Threaded and scalloped
Charge Positioning Method:	Round steel tube
Mode of Fire:	Simultaneous or selective firing systems like EBFire® and ControlFire®
Type of Tandem Connection:	Booster-to-booster (no splice)
Initiation Point:	Top or bottom fired options available for wireline and TCP
Recommended Detonating Cord:	80 grains/foot
O-Ring Material:	Nitrile – 90 Durometer (Viton – 95 Durometer for temperatures >325°F [163°C])
O-Ring Size:	0111-346-090 / 0111-346-V95

Phasing	135°/45°
Assembly Part Number	0451-C**-16D† 0551-C**-16D‡
Nominal O.D. (in)[mm]	5.13 [130]
Nominal Thickness (in)[mm]	0.44 [11.2]
Typical Gun Swell at Ambient Conditions (in)[mm]	
Ambient Liquid. 22.7g	5.33 [135]
Ambient Gas	Not Recommended
Min. Recommended Restriction (in)[mm]	5.68 [144]
Drift Gauge O.D. for Gun Body I.D. (in)[mm]	4.19 [106] using Gauge Length 12in [305]
Min. Recommended Washover Pipe Clearance:	
Casing Drift I.D. to Nom. Washover O.D. (in)[mm]	0.38 [10]
Washover Drift I.D. to Nom. Gun O.D. (in)[mm]	0.31 [8]
Max. Hardware Temperature (°F)[°C]	500 [260]
Max. Pressure (psi)[MPa]	16,500 [114]
Min. Detonating Cord Velocity (ft/s)[m/s]	24,750 [7,500]
Typical Length (ft)[m]	
4 ft (47 shots)	4.00 [1.22]
7 ft (95 shots)	7.00 [2.13]
11 ft (159 shots)	11.00 [3.35]
21 ft (319 shots)	21.00 [6.40]
Gun End to Center of First Scallop Distance (in)[mm]	6.75 [171]
Approximate Weight Fully Loaded (lb/ft)[kg/m]	29.0 [13.2]
Max. Tension (lbf)[kN]	500,000 [2,224]
Upper/Lower Head Connection	4-1/2" – 6 Acme

† Threaded gun ‡ Threaded gun compatible with boost-to-booster tandem transfer kit
 ** Gun length. Example: Use "07" for 7ft gun; etc.

API PERFORMANCE OF CHARGES COMPATIBLE WITH 5-1/8IN, 16 SPF GUN SYSTEM

Charge Name	Charge Type	Charge Part Number†	Explosive Weight (g)	Gun O.D. (in)[mm]	Shot Density (spf)[spm], Phasing	Entrance Hole (in)[mm]	Penetration (in)[cm]	Burr Height (in)[cm]	Casing Size (in)[mm]	Target Strength (psi)[MPa]
PERFECTA	BH CFLD	FLO-4623-411CFZ	22.7	4-5/8 [117]	1 [52], 140/20°	0.75 [19]	6.11 [15.52]	0.05 [0.13]	7 [178]	6,070 [41.9]

Note: All charges available with RDX, HMX and HNS. Table displays charges that have been API-19B or API RP-43 certified

Bold indicates API-19B certification. *Italics indicate API RP-43 certification*

† xxx-xxx-3xxx for RDX, xxx-xxx-4xxx for HMX, xxx-xxx-5xxx for HNS