



3.125 in. HERO® PerFRAC 0.30 in. EH, HMX, PFC-3116-430

TECHNICAL INFORMATION:

APPLICATION:

HERO®PerFRAC charges are specifically designed to have consistent entry hole sizes, regardless of gun position, to improve the efficiency of fracturing operations in today's unconventional reservoirs.

SPECIFICATIONS:

NET EXPLOSIVE WEIGHT:

16.0 grams

TOTAL CHARGE WEIGHT:

230.0 grams

TEMPERATURE RATING:

400°F - 1 hour
335°F - 24 hours
310°F - 100 hours

PACKAGING:

QUANTITY PER BOX:

50

NET ITEM WEIGHT:

800 grams

NET CHARGE WEIGHT:

11500 grams

TOTAL PACKAGE WEIGHT:

13314 grams

BOX DIMENSIONS:

14 in. W x 14 in. L x 9 in. D

SHELF LIFE:

5 years (left in original packaging)

PACKAGE TYPE:

Charges in foil bag with desiccant; inside cardboard box with cardboard spacers

SHIPPING:

CLASSIFICATION:

14D

DOT NUMBER:

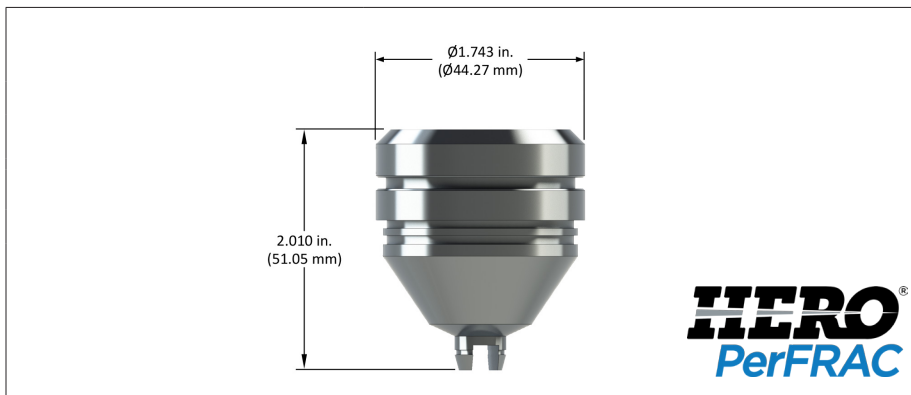
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CE NUMBER:

Not currently CE certified

UN NUMBER:

UN0440



HOLE SIZE DATA:

CASING	SHOT DENSITY / PHASING	AVG. HOLE SIZE (IN.)	MIN. HOLE SIZE (IN.)	MAX. HOLE SIZE (IN.)	HOLE VARIATION (STDEV)
4.50 in. 11.6# P-110	6 spf / 60°	0.31	0.30	0.32	2.2%
4.50 in. 13.5# P-110	6 spf / 60°	0.31	0.30	0.32	1.8%
4.50 in. 15.1# P-110	6 spf / 60°	0.31	0.30	0.32	1.7%
5.50 in. 17# P-110	6 spf / 60°	0.31	0.29	0.32	3.6%
5.50 in. 20# P-110	6 spf / 60°	0.30	0.28	0.31	4.6%
5.50 in. 23# P-110	6 spf / 60°	0.30	0.29	0.32	3.2%

PENETRATION DATA - API RP-19B SECTION 2:

FORMATION CORE TYPE	PENETRATION (IN.)	OVERBURDEN (PSI)	UCS (PSI)	POROSITY
Berea	6.88	9500	5990	21.1%
Shale	5.00	9500	19838	6.0%

SYSTEM TESTED:

3.125 in. 6 spf 60° in 5.50 in. 23# P-110

DEBRIS DATA - API RP-19B SECTION 5:

Weight of debris lost at detonation 13.33 grams per linear foot
Total weight of debris lost 55.00 grams per linear foot
Volume of total debris lost 22.87 cm³ per linear foot

GUN SWELL DATA - API RP-19B SECTION 6:

AIR (IN.)	FLUID (IN.)
3.26 (4 spf)	3.26 (6 spf)