

## APPLICATIONS

- Single gun wireline perforating operations

## FEATURES

- No electrical wiring
- No detonator to detonating cord crimping required
- Simple to use detonator
- Detonator is always shunted until properly armed
- Ideal for long gun strings with TCP transfer systems
- Arming procedures comply with API RP-67 electrical before ballistic arming (EBBA) recommendations

## BENEFITS

- Eliminates electrical wiring and detonator crimping problems
- More efficient perforating gun arming without compromising safety

Hunting has developed a simple to use Top Fire Detonator System that consists of a Quick Change Assembly<sup>†</sup> and a specialized, easy to use, detonator. This eliminates the use of any electrical wiring associated with bottom-fire gun systems or ported firing head adapters, which will improve the efficiency of single gun perforating operations.

Safe arming procedures comply with API RP-67 EBBA recommendations and are incorporated into the design of the Top Fire Detonator System:

- Attach the stem protector (shunt)
- Insert the specialized detonator
- Screw in the safety blast shield
- Remove the shunt and connect to the logging head (electrical arming)
- Remove the safety blast shield and connect to the perforating gun (ballistic arming)

Rigorous testing has been performed on this system to ensure that mechanical integrity is maintained due to the unlikely event of an unintentional surface detonation during the arming procedure. Contact your local Hunting representative for more information.



04 Accessories

## Hardware Specifications

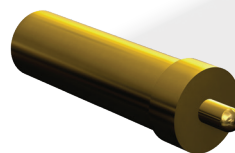
Part Number	TFA-156-000	TFA-275-000	TFA-312-000
Gun Size	1-9/16 - 2-1/2 in. (40-64 mm)	2-3/4 in. (40 - 64 mm) †	3-1/8 - 7 in. (79 - 178 mm) †
O.D. (in.)/[mm]	1.56 [40]	2.75 [70]	3.13 [79]
Max. Temperature (°F)/[°C]	475 [246]	475 [246]	475 [246]
Max. Pressure (9psi) [MPa]	20,000 [138]	20,000 [138]	20,000 [138]
Max. Voltage (VDC)	600	600	600
Max. Current (mA)	2,000	2,000	2,000
Max. Tension (lbf)/[kN]	72,000 [320]	126,000 [560]	126,000 [560]

† Quick Change Assembly style

## Detonator Specifications

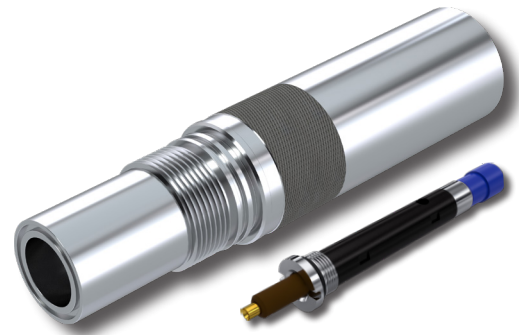
Part Number	DETO-3050-008
1 hr Temp Rating (°F) [°C]	475 [246]
No Fire Current (mA)	200
All Fire Current (mA)	800
Resistance (Ω)	51
Static Sensitivity	MIL-SPEC-322B
UN Number	UN0456
Hazard Class	1.4S
US DOT	EX-2011021343

Detonator DETO-3050-008



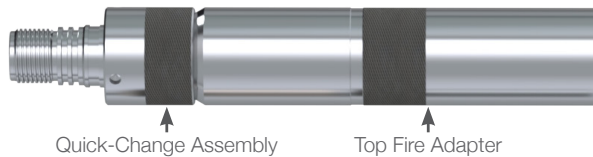
Screw-in safety blast shield.  
Tested to withstand unintentional detonations.

The Top Fire Adapter (TFA) harnesses the technology behind the H-1<sup>®</sup> Perforating Gun System to provide a wire-free and RF-Safe solution for conventional systems.

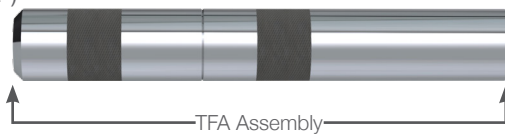


### Top Fire Adapter Available for Each Style of Quick-Change Assembly

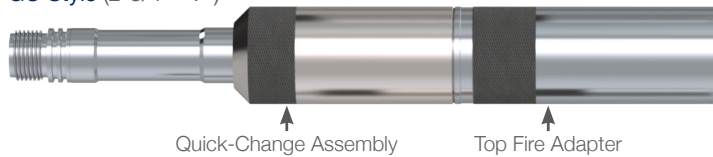
#### H-1 Style



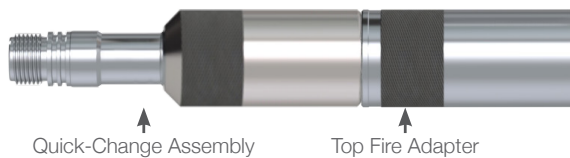
#### GO Style (2" & 2-1/2")



#### GO Style (2-3/4" - 7")



#### SIE Style



#### Hardware Specifications

Part Number	0222-TFA-100	0362-TFA-100	0362-TFA-110	0362-TFA-120	0363-TFA-100	0363-TFA-110	0363-TFA-120
Style	GO Style	GO Style	SIE Style	H-1 <sup>®</sup> Style	GO Style	SIE Style	H-1 <sup>®</sup> Style
Quick-Change Part Number	-	0271-100-040	0260-100-040	3271-275-030	0256-100-040	0260-100-000	3271-312-030
Gun Size	2 - 2-1/2 in. (51-64 mm)	2-3/4 in. - 2-7/8 in. (40 - 73 mm) †			3-1/8 - 7 in. (79 - 178 mm)		
O.D. (in.) [mm]	2.00 [51]	2.75 [70]			3.13 [79]		
Weight (lb) [kg]	8.00 [3.63]	12.93 [5.86]	10.58 [4.80]	16.36 [7.42]	18.38 [8.34]	12.81 [5.81]	21.59 [9.79]
Max. Temperature (°F) [°C]	350 [177]	350 [177]			350 [177]		
Max. Pressure (psi) [MPa]	20,000 [138]	20,000 [138]			20,000 [138]		
Max. Tension (lbf) [kN]	102,000 [454]	160,000 [712]			183,000 [814]		