

PRODUCT FAMILY

FLEXIBLE CONFINED DETONATING CORD (FCDC)

Flexible Confined Detonating Cord (FCDC) assemblies are ordnance transfer lines which propagate a detonating explosive stimulus between moveable installation points in aircraft, spacecraft or tactical missile sequencing systems. This detonation velocity runs between 6,000-8,000 meters per second depending on the explosive used in the Mild Detonating Cord (MDC) train, i.e. HNS, RDX, PETN, etc. Typical construction of the FCDC consists of flexible braided multi-layer sheaths of fiberglass (or Kevlar) containing, at the center, 2.5 grains/ft MDC with aluminum, silver, tin or lead as the sheath material. The end termination for each FCDC includes internal pressed transition and booster charges in a ferrule with B-nuts for installation at the mating ports.



PERFORMANCE DATA Based on 841AS140 requirements for TF-18 FCDC

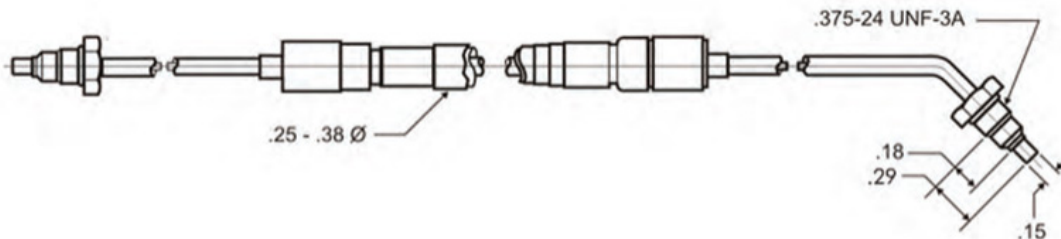
- Core Load: 2.5 grains/foot Hexanitrostilbene, WS5003F, Type ii, Grade A; end fittings Type i, Grade A HNS
- Detonation: 6500 +/- 500 meters/second
- Strength: End fittings: 350 lbs minimum applied at a rate .5 to 4 lbs minimum
- Dent Output: .04 inch (min) in 6061-T6 dent test blocks over the temperature range -65 °F to +200 °F per MIL-STD-331
- Containment: No ruptures - outgassing allowed.
- Flexibility: 20,000 flexure cycles around a bend angle of 180° over the temperature range of -65°F to +200°F at a rate of 6 cycles per minute
- Low Temperature: -65 °F
- High Temperature: +200 °F
- Shock: 20g, 11ms
- Vibration (Sine): 2-5g, 9 hours
- Salt Fog: 48 hours
- Sand and Dust: 28 hours @ +145 °F
- Impact: 10 lbs -16 ft. drop
- Tensile Strength: 650lbs. ultimate
- Mechanical Endurance: 20,000 cycles

ESTIMATED WEIGHT

.1 lbs/ft and .015 lbs per end fitting

APPLICATION

AH-1	Minuteman	Saturn/Apollo
AH-64	Peacekeeper	Titan
AV-8B	Poseidon	Trident
B-1B	Space Shuttle	Tomahawk
C-17	Star Motor	TF-18
F-14	C-101	TF-15
IUS	Castor	S-3A
T-45	Delta	
TA-7C	RSRA	



ENVELOPE & DIMENSIONS