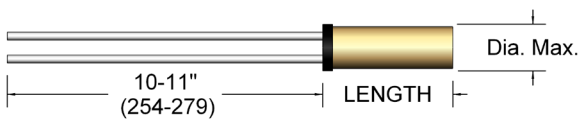




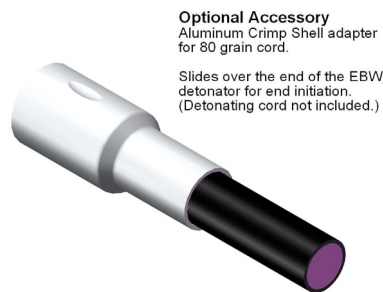
Exploding Bridgewire Detonators (EBWs) were originally developed for use in military applications. They require a very fast rising, high-current pulse for successful initiations, such as the output provided by the Ecosse PX-1. Unlike conventional blasting caps and resistorized detonators normally used in oilfield perforating operations, EBWs do not contain sensitive primary explosives such as lead azide.

The greatest advantage of EBW detonators for oilfield use is the fact that they are extremely insensitive to accidental initiation. They are effectively immune to the radio frequency (RF) sources and stray voltages found on well sites and offshore platforms, which means radio transmitters, electric welding and cathodic protection equipments need not be turned off during perforating and other wireline explosive operations. EBWs are currently available using RDX, HMX, or CP explosives, giving them useful temperature ratings of 325°F to 400°F respectively.

OWEN DESC. OR NAME	OWEN PART NUMBER	NOMINAL DIAMETER (IN)	SHELL LENGTH (IN)	TEMP. RATING 1HR (DEG F)	EXP. LOAD (G)	THRESHOLD BURST CURRENT (AMPS)	THRESHOLD VOLTAGE (V)	THRESHOLD VOLTAGE STD. DEV. (VMAX.)	FUNCTION TIME (MS)	FUNCTION TIME STD. DEV. (MSMAX.)	NOTES
EBW Detonators											
RP-800	EBW-RISI-800	.295	.824	302	0.203	180	500	75	2.65	0.125	All RDX
RP-8000	EBW-RISI-8000	.295	.824	400	0.203	180	500	75	2.65	0.125	All HMX
RP-810	EBW-RISI-810	.295	1.000	295	0.53	180	500	75	5.38	0.125	Equivalent output of #8 blasting cap
RP-830	EBW-RISI-830	.280	1.560	295	1.111	180	500	75	5.38	0.125	
RP-880	EBW-RISI-880	.280	1.800	295	0.659	450	800	--	10.5	--	Fluid Sensitive
CP EBW	2-300180-3	.29	.85	400	0.28	--	--	--	--	--	
EBW Igniters											
SQ-80	EBW-RISI-BK80	0.360	.815	400	0.450	190	500	50	--	--	Capable of igniting standard propellants and pyrotechnics at distances exceeding 5".

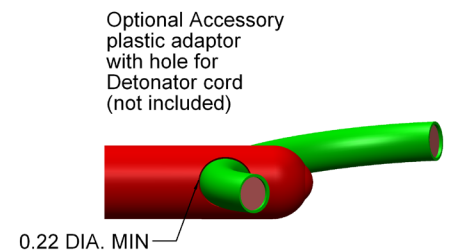


EBW Detonator External Configuration.



Optional Accessory
Aluminum Crimp Shell adapter for 80 grain cord.
Slides over the end of the EBW detonator for end initiation. (Detonating cord not included.)

EBW-SHEL-800



Optional Accessory plastic adaptor with hole for Detonator cord (not included)

0.22 DIA. MIN

EBW-RISI-000

Caution: Detonators are necessarily dangerous. Do not cut into, crush, hammer, pull wires, nor abuse in any way. Always arm the detonator electrically before ballistically with detonator in safety shield; attach a detonator to the firing cable with detonator before attaching on explosive device. See Do's and Don'ts, API RP-67, and IME Pamphlet 20 for more information on safety.

All information and ratings are subject to change without notice.