

Well Intervention and Integrity

eXequir™ Trigger System

Introducing Expro's new, unique, eXequir™ trigger system.

Designed with the highest possible degree of safety and control for a memory-based tool. With single use, field replaceable electronics modules the eXequir™ trigger system provides “New Tool Every Run” confidence.

Available for Slickline deployment in memory trigger configuration or as a surface commanded, Slick-E-Line deployed, Safe Activation System. Both configurations are capable of initiating a multitude of explosive and non-explosive devices.

The trigger can be deployed without hazardous materials when powered by bespoke Alkaline battery packs (service specific.) On board flash memory logs time, status, pressure, temperature, axial and radial acceleration (tilt and shock) and output voltage for post-job analysis. May be programmed with logging rates up to 500 samples/sec during activation period for monitoring of fast pressure transients.

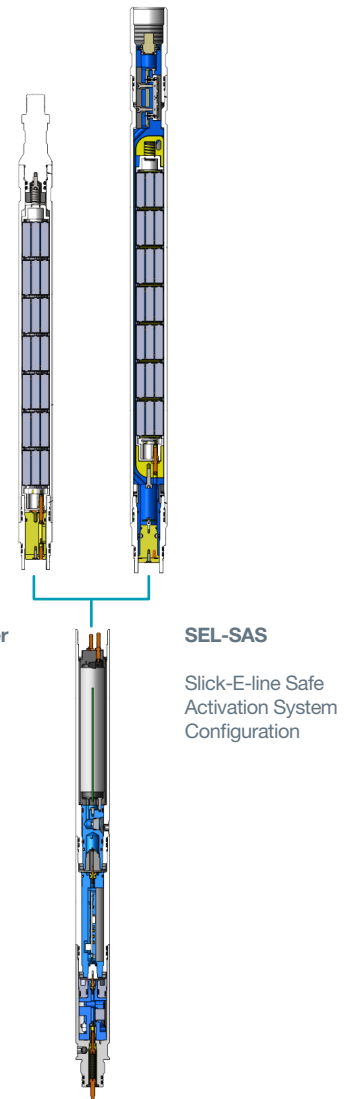
Applications

- Perforating gun
- Punch gun
- Stim gun / Stim tube
- Tubing cutter
- Split shot
- String Shot
- Plug setting
- Dump bailer
- Sampler
- Acid Stimulation devices
- Non explosive punch and cutting devices
- Non-explosive setting tool

Features and Benefits

- Unique, multiple service activation capability
- “New Tool Every Run”
- Single use modules throughout
- Simple field replaceable modules
- Alkaline and Lithium battery pack options
- Modular design
- Realtime control and multi-fire options using SEL-SAS configuration

Note: Other sizes, configurations and pressure ratings are available to meet most applications, for more information contact your local Expro representative or email wellintervention@expro.com





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Specifications		
	Slickline: eXequir™	Slick E-Line: SEL-SAS
Maximum outside diameter	1.69"	1.81"
Maximum overall length	43.15" (1095.9mm)	48.68" (1236.4mm)
Upper head mechanical connection	15/16"-10 SR PIN	ACME 1.475" - 10
Upper head electrical connection	N/A	4-way Concentric LEMO
Lower head mechanical connection	1-3/16"-12 UN	
Lower head electrical connection	4mm pin	
Tensile capacity	≥ 20,000 lbs	
Maximum pressure	15,000 psi	
Maximum temperature	160°C (with Lithium Battery Pack) 135°C (with Alkaline Battery Pack)	
Pressure port connections	3/8-24 UNF	
Pressure sensor accuracy	+/- 0.2% of FS	
Pressure sensor resolution	< 1.0 psi	
Temperature sensor accuracy	± 1.0 °C	
Temperature sensor resolution	< 0.1°C	
Memory capacity	≥ 1, 000,000 data sets	
Sample rate	0.1sec to 1 min (ln 0.1 second increments)	
PC connection	USB compatible	
Operational lifetime	24 hours cumulative at 165 °C	

Technical specifications	
Data storage	Continuous logging power on to power off
Initial time delay	No actions during initial programmed duration
Pressure detection	Safe pressure window for firing, optional pressure pulse activation
Temperature detection	Safe temperature window for firing
Motion detection	3-axis motion sensor. Algorithms allow shoot now or abort functionality
Final time delay	Pause before firing
Fire delay	Time delay between fire attempts
Fire attempts	Programmable number of fire attempts up to a maximum of 5
Slick E-Line SAS interface	Top connection adaptor suitable to interface with Paradigm Slick-E-Line (or other digital slickline vendors) toolstring for surface commanded activation
Confidence check	Will indicate a visual confidence check to the user when the battery has been attached. Continuous real-time data when deployed in Slick-E-Line Safe Activation System configuration.