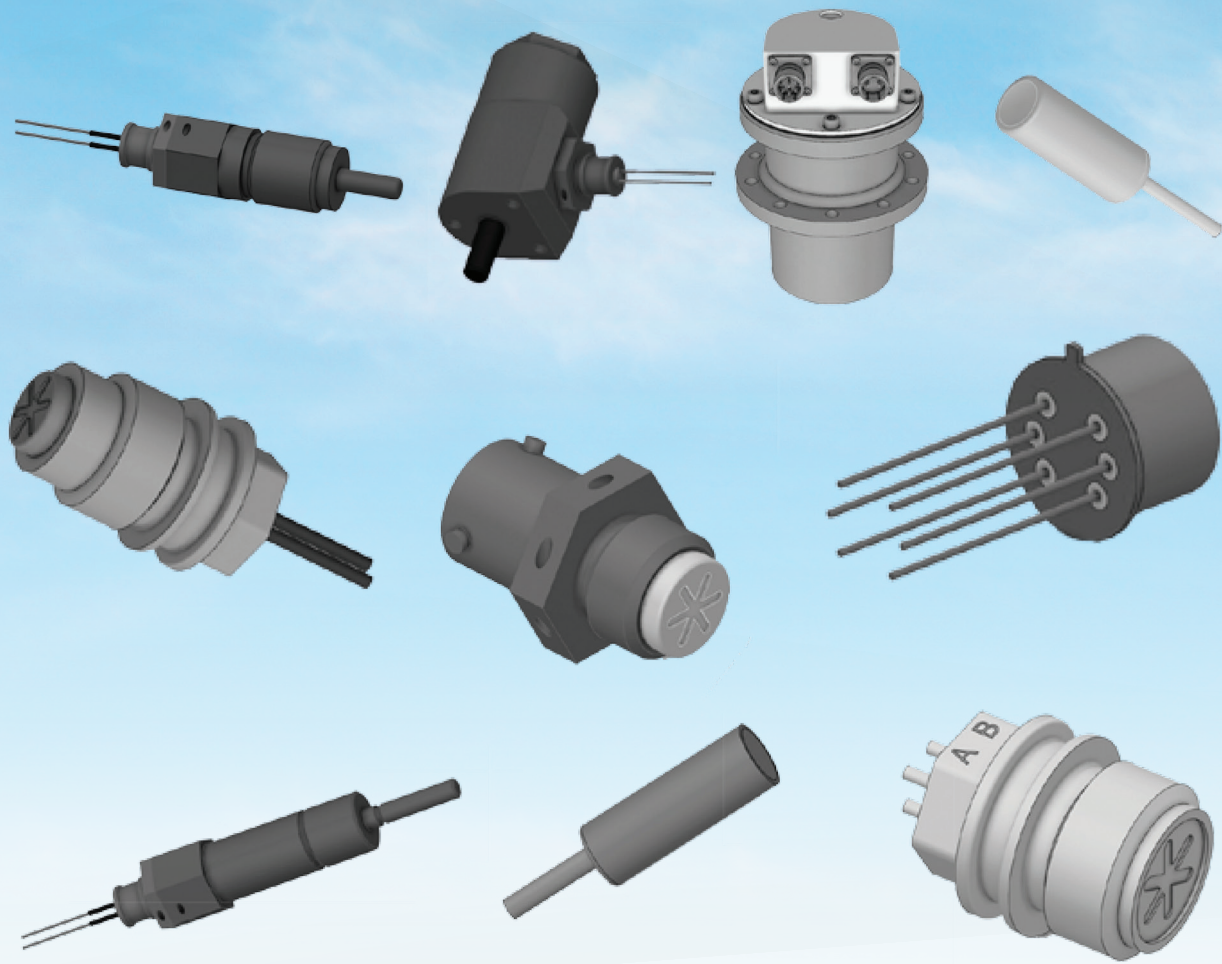


PYROTECHNIC SYSTEMS



PYROTECHNIC SYSTEMS

ROCKET MOTOR IGNITERS

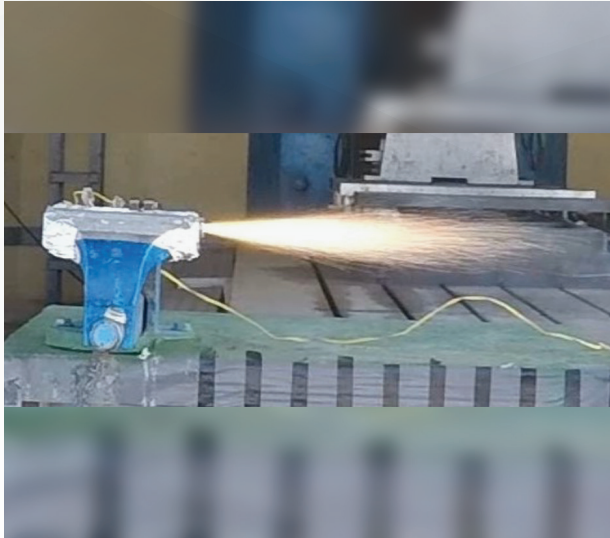
SAFE & ARM DEVICES

INITIATORS & CARTRIDGES

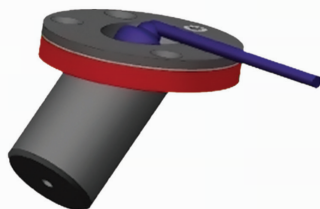
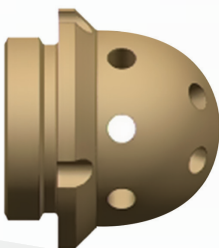
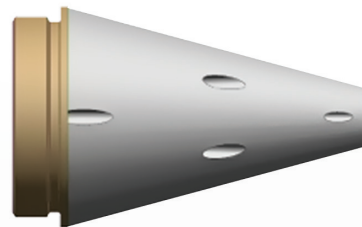
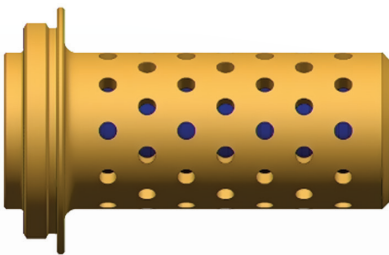
DETONATION SYSTEMS

PYROTECHNIC DEVICES

ROCKET MOTOR IGNITERS



IGNITERS OF VARIOUS ROCKET MOTORS



ROCKET MOTOR IGNITERS

Designed for Solid Propellant Rocket Motors [with or without SAD]

Designed for Turbojet Motors

Complies with MIL-STD-1901A, MIL-STD-1576 and STANAG 4368

Protected against Electrostatic Discharge [AECTP-500]

Complies with Electromagnetic Compatibility Standards [MIL-STD-464A/461F]

1W/1A/5 Minutes No Fire, High Reliability

SAFE AND ARM DEVICES [SAD]

SAFE AND ARM DEVICES [SAD]

Arm - Safe Electrical Signals

Arm - Safe Indicator

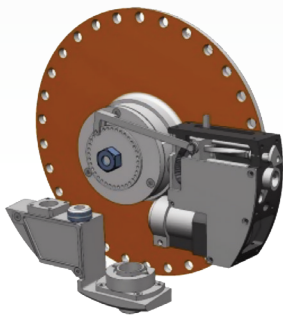
Manual / Remote Control

Arming Time for EM-SADs <250 ms

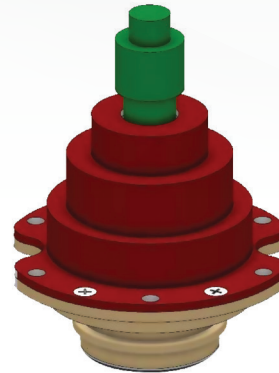
-40 to +70°C Operation Temperature

Adjustable Interfaces [Mechanical or Electrical]

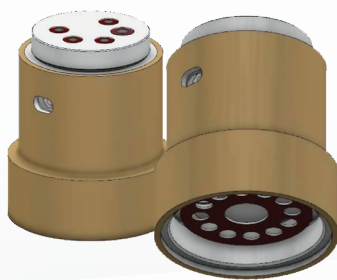
EM-EKM100



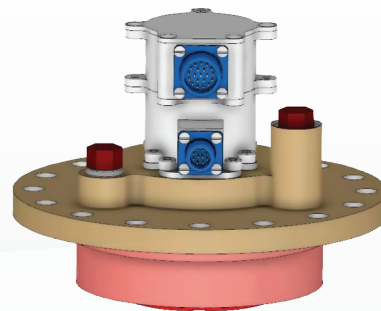
E-EKM400



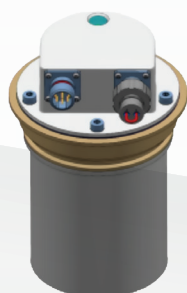
EM-EKM200



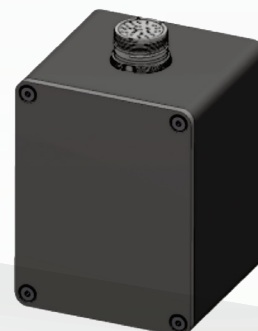
EM-EKM500



EM-EKM300



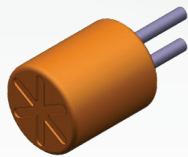
EM-EKM600



INITIATORS & POWER CARTRIDGES

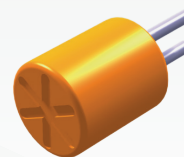
INITIATORS & POWER CARTRIDGES

Highly reliable, low cost and light weight low-voltage hot-bridgewire explosives [initiators and power cartridges]; are used for the initiation of rocket motor igniters, gas generators and pyrotechnic devices.



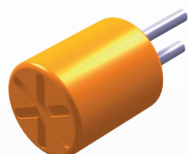
RSKM-100 [SQUIB]

Bridgewire Resistance	1,1 ± 0,1 Ω
Max. No-Fire [5 min.]	1 A / 1 W
All Firing Current	3,5 A [50 ms]
Function Time	< 5 ms
Output [16.4 cc chamber]	1,5 MPa
Electrical Interface	Pin Type
Operational Temperature	[-60 °C] - [+70 °C]
Environmental Tests	MIL - DTL - 23659



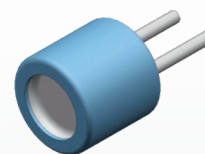
RSKT-200 [SQUIB]

Bridgewire Resistance	2,15 ± 0,15 Ω
Max. No-Fire [5 min.]	0,35 A
All Firing Current	1,2 A [10 ms]
Function Time	< 10 ms
Output [16.4 cc chamber]	1,5 MPa
Electrical Interface	Pin Type
Operational Temperature	[-35 °C] - [+60 °C]
Environmental Tests	MIL DTL 23659



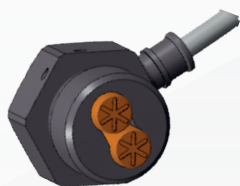
RSKU-100 [SQUIB]

Bridgewire Resistance	0,6 ± 0,1 Ω
Max. No-Fire [5 min.]	1 A / 1 W
All Firing Current	3,5 A [50 ms]
Function Time	< 25 ms
Output [16.4 cc chamber]	1,5 MPa
Electrical Interface	Pin Type
Operational Temperature	[-60 °C] - [+70 °C]
Environmental Tests	MIL- DTL - 23659



RSKKOM-100 [SQUIB]

Bridgewire Resistance	1,15±0,1 Ω
Max. No-Fire [5 min.]	1 A / 1 W
All Firing Current	3,5 A [50 ms]
Function Time	< 5 ms
Output [16.4 cc chamber]	0,7 MPa
Electrical Interface	Pin Type
Operational Temperature	[-60 °C] - [+70 °C]
Environmental Tests	MIL - DTL - 23659



TECHNICAL SPECIFICATIONS OF RS-GK600 [POWER CARTRIDGES]

Bridgewire Resistance	1,15±0,15 Ω [Dual BW]
Max. No-Fire [5 min.]	1 A / 1 W [Each BW]
All Firing Current	3,5 A - 50 ms [Each BW]
Function Time	< 5 ms
Output [16.4 cc chamber]	2 MPa
Electrical Interface	Shielded Twisted Pair Cable
Operational Temperature	[-40 °C] - [+60 °C]
Environmental Tests	MIL - DTL - 23659



RS-GK100 [POWER CARTRIDGES]

Bridgewire Resistance	1,15 ± 0,2 Ω [Dual BW]
Max. No-Fire [5 min.]	1 A / 1 W [Each BW]
All Firing Current	3,5 A - 50 ms [Each BW]
Function Time	< 10 ms
Output [16.4 cc chamber]	1 MPa
Electrical Interface	MS3111P8-4P Connector Per MIL-DTL-26482
Operational Temperature	[-60 °C] - [+70 °C]
Operational Temperature	MIL - DTL - 23659



RS-GK200 [POWER CARTRIDGES]

Bridgewire Resistance	1,15 ± 0,2 Ω [Dual BW]
Max. No-Fire [5 min.]	1 A / 1 W [Each BW]
All Firing Current	3,5 A - 50 ms [Each BW]
Function Time	< 10 ms
Output [16.4 cc chamber]	1 MPa
Electrical Interface	Pin Type
Operational Temperature	[-60 °C] - [+70 °C]
Environmental Tests	MIL - DTL - 23659

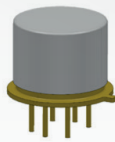


RS-GK400 [POWER CARTRIDGES]

Bridgewire Resistance	1,15 ± 0,2 Ω [Dual BW]
Max. No-Fire [5 min.]	1 A / 1 W [Each BW]
All Firing Current	3,5 A - 50 ms [Each BW]
Function Time	< 10 ms
Output [16.4 cc chamber]	1 MPa
Electrical Interface	Shielded Twisted
Operational Temperature	[-60 °C] - [+70 °C]
Environmental Tests	MIL - DTL - 23659

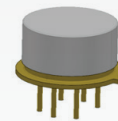
DETONATION SYSTEMS

Detonation Systems are Exploding Foil Initiators [EFI] and Low Energy Exploding Foil Initiators [LEEFI] used to activate the warheads or rocket motors. Systems are resistant to electromagnetic interference and are activated with high voltage.



RS-EFI300 LOW ENERGY EXPLODING FOIL INITIATOR

Properties	316L Steel Withness Plate 0.4 mm Deep Dent
Function Time	< 2 μ s
Operating Temperature	[-54 °C] - [+71 °C]
Shelf Life	20 Years
Igniter Type	Electrical Detonator



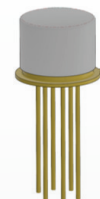
RS-EFI301 LOW ENERGY EXPLODING FOIL INITIATOR

Properties	316L Steel Withness Plate 0.25 mm Deep Dent
Function Time	< 2 μ s
Operating Temperature	[-54 °C] - [+71 °C]
Shelf Life	20 Years
Igniter Type	Electrical Detonator



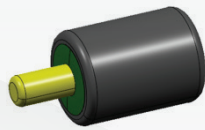
RS-EFI302 LOW ENERGY EXPLODING FOIL INITIATOR

Properties	316L Steel Withness Plate 0.8 mm Deep Dent
Function Time	< 2 μ s
Operating Temperature	[-54 °C] - [+71 °C]
Shelf Life	20 Years
Igniter Type	Electrical Detonator



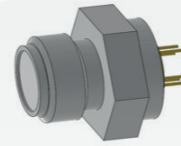
RS-EFI310 LOW ENERGY EXPLODING FOIL INITIATOR

Properties	316L Steel Withness Plate 0.4 mm Deep Dent
Function Time	< 2 μ s
Operating Temperature	[-54 °C] - [+71 °C]
Shelf Life	20 Years
Igniter Type	Electrical Detonator



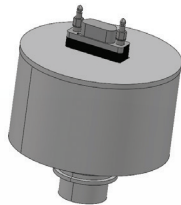
DET130 DETONATOR

Properties	70-95 HRB Steel Withness Plate, Minimum 0.4 mm Deep Dent
Function Time	< 100 μ s
Operating Temperature	[-54 °C] - [+71 °C]
Shelf Life	10 Years
Igniter Type	Electrical Detonator



TBI100 THROUGH BULKHEAD INITIATOR

Properties	10 cc Pressure Chamber Minimum 3 MPa, Maximum 9 MPa Pressure
Function Time	< 10 ms
Operational Temperature Range	[-54 °C] - [+71 °C]
Shelf Life	10 Years
Igniter Type	Electrical Detonator



RS-ISD300

Power	28V input, max. 1400V High Voltage
High Voltage Time	Max. 20ms
Communication Protocol	RS-485 Port
Operating Temperature	[-40 °C] - [+85 °C]
Environmental Tests	MIL-STD-1901 and MIL-STD-331
Status	Verification

PYROTECHNIC DEVICES



RS-PC160 EXPLOSIVE BOLT [NON-FRAGMENTING]

Properties	Tensile Load ≥ 91.000 N
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years
Igniter Type	Electrical Squib



RS-PC110 EXPLOSIVE BOLT [NON-FRAGMENTING]

Properties	Tensile Load ≥ 10.000 N
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years
Igniter Type	Electrical Squib



RS-PC100 EJECTION DEVICE

Properties	Tensile Load ≥ 20.000 N Min Force: 10.000 N
Function Time	< 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years
Igniter Type	Electrical Squib



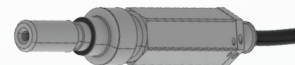
RS-PC1785 EXPLOSIVE BOLT [NON-FRAGMENTING]

Properties	Tensile Load ≥ 5000 N
Function Time	0 - 15 ms
Operational Temperature Range	$-54^{\circ}\text{C} - +71^{\circ}\text{C}$
Shelf Life	15 Years
Igniter Type	Electrical Squib



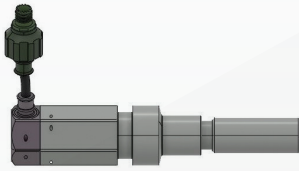
RS-PC163 EXPLOSIVE BOLT [NON-FRAGMENTING]

Properties	Tensile Load ≥ 91000 N
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years
Igniter Type	Electrical Squib



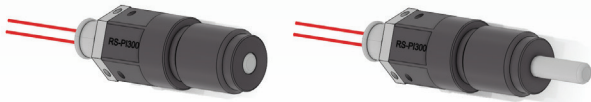
RS-PC130 EXPLOSIVE BOLT [NON-FRAGMENTING]

Properties	Tensile Load ≥ 30000 N
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years
Igniter Type	Electrical Squib



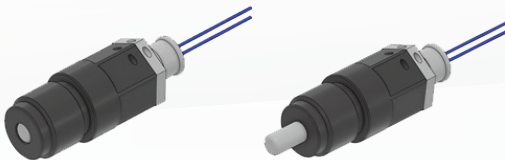
RS-PC165 EXPLOSIVE BOLT [NON-FRAGMENTING]

Properties	Tensile Load ≥ 91000 N
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years
Igniter Type	Electrical Squib



RS-PI300 PIN PUSHER

Properties	Stroke: 15mm Min. Force: 3500N
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years
Igniter Type	Electrical Squib



RS-PI310 PIN PUSHER

Properties	Stroke: 10mm Min. Force: 3500N
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years
Igniter Type	Electrical Squib



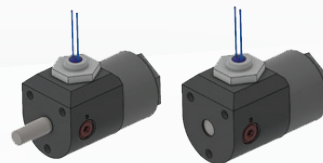
RS-PI172 PIN PUSHER

Properties	Cutting 6061-T6 Aluminum Pin with radius of 0.05" [1,27 mm]
Function Time	< 1 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	10 Years
Igniter Type	Electrical Squib



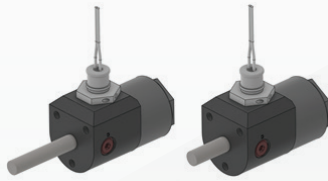
RS-mPI0623 PIN PUSHER

Properties	Stroke: 15mm Min. Force: 400N
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	10 Years
Igniter Type	Electrical Squib



PS-PCK3564 PIN PULLER

Properties	Stroke: 13mm Radial Load on Pin ≤ 1000 N
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years



RS-PCK130 PIN PULLER

Properties	Stroke: 13mm [negative] Radial Load on Pin $\leq 1000\text{N}$
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years
Igniter Type	Electrical Squib



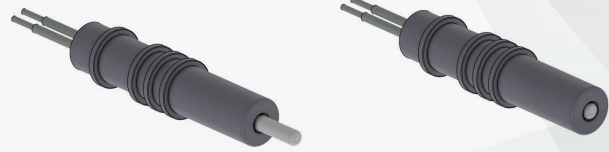
RS-PV105 PYROTECHNIC VALVE

Properties	3/8" 316 SS 400 Bar Normally Closed
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years
Igniter Type	Electrical Squib



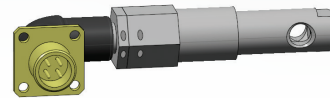
RS-AS100 SEPERATION NUT [NON-FRAGMENTING]

Properties	Tensile Load $\geq 100000\text{ N}$
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years
Igniter Type	Electrical Squib



RS-mPCK0420 PIN PULLER

Properties	Strok=3mm Radial Load on Pin $< 5\text{N}$
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	10 Years
Igniter Type	Electrical Squib



RS-KK1990 CABLE CUTTER

Properties	Used for Cutting 3mm AISI 302/304 SS wire
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	15 Years
Igniter Type	Electrical Squib



RS-mKM0825 BELLOWS ACTUATOR

Properties	Stroke: 25mm Min. Force: 100N
Function Time	0 - 15 ms
Operational Temperature Range	$[-54^{\circ}\text{C}] - [+71^{\circ}\text{C}]$
Shelf Life	10 Years
Igniter Type	Electrical Squib



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