

Purpose

The **Brico Mechanical Firing Head** is used to initiate the detonation of TCP perforating guns. Simple and economical, the firing head is an effective tool that is safe and easy to operate for TCP operations. Compatible with most existing perforating systems, a proven rugged design, this extremely compact firing head is simple to assemble and easy to field redress.

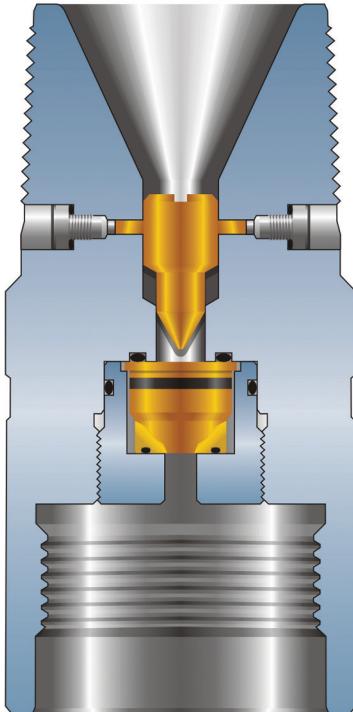
Operation

The **Mechanical Firing Head** is activated by means of a drop bar released from surface into the tubing or drill pipe once the operator has reached the required depth and ready to perforate. The drop bar impacts the top of the firing pin, which in turn shears the shear pin, this impact action detonates the explosive initiator. The initiator detonates a booster attached to detonating cord (located in the top gun sub) causing the guns to fire.

Always use compatible equipment - use a **Brico drop bar** to operate this firing head.

Important: The strike force required to shear the shear pin, impact the firing pin to detonate the initiator should be no less than 15ft.lbs. (2.07 Kgs/m) with velocity of 7ft. (2.14m) per second. It is also good practice to ensure the system is not run dry, 10 meters (30 feet) of fresh water should always be filled into the tubing/ drill pipe above the mechanical firing head system. The Brico Fill/Flow sub or some other type of debris barrier should always be installed 9m (30 feet) above the firing head system.

Special Note: For well bores in excess of 40 degrees deviation a special roller fitted drop bar is required.

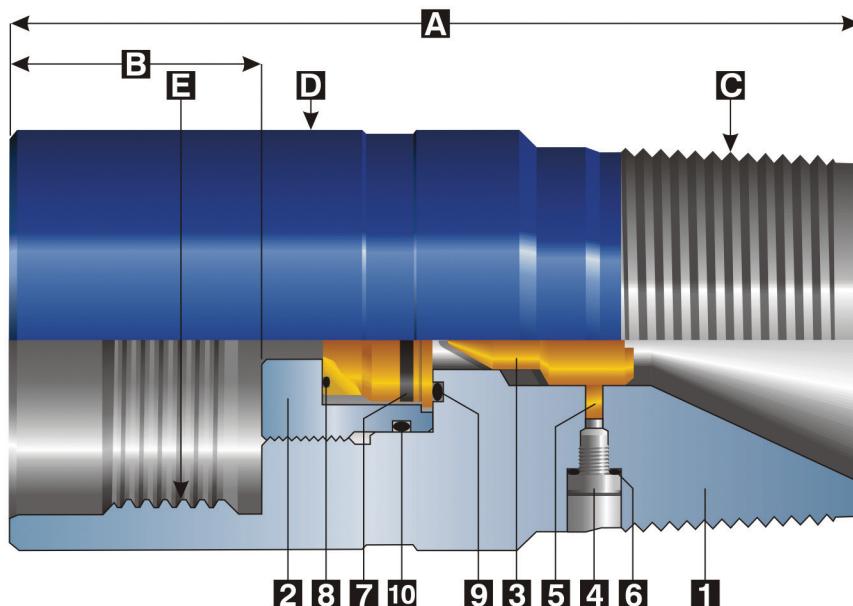


Specifications

Mechanical Firing Head (Product N° 30-01)			
Thread Size and Type	2 3/8" EUE Pin (60.33 mm)	2 7/8" EUE Pin (73.0 mm)	3 1/2" EUE Pin (88.9 mm)
Gun Connection	Standard	Standard	Standard
Assembly Number	30-0106041-00	30-0107341-00	30-0108941-00
Maximum OD	3.375" (86 mm)	3.375" (86 mm)	4.5" (114.3 mm)
Pressure Rating	20,000 psi (138 mPa)	20,000 psi (138 mPa)	20,000 psi (138 mPa)
Tensile Strength	Manufactured from P-110 / L-80 for H2S applications / API Material		
Maximum Temperature	400°F (204°C)	400°F (204°C)	400°F (204°C)
Overall Length	6.875" (174.6 mm)	6.875" (174.6 mm)	10.00" (254 mm)
Shipping Weight	10.3 lbs (4.67 kg)	12 lbs (5.44 kg)	28 lbs (12.7 kg)
Redress Kit Number	30-0106040-99		

30-01 Mechanical Firing Head, Dimensional Data

Dim	2 ³ / ₈ " EUE (60.33mm)		2 ⁷ / ₈ " EUE (73.0mm)		3 ¹ / ₂ " EUE (89.9mm)	
	30-0106041-00		30-0107341-00		30-0108941-00	
	In	mm	In	mm	In	mm
A	6.875	174	6.875	174	10.00	254
B	2.031	51.5	2.031	51.5	2.031	51.5
C	2 ³ / ₈ " EUE	60.33 EUE	2 ⁷ / ₈ " EUE	73.0 EUE	3 ¹ / ₂ " EUE	89.9 EUE
D	3.375	85.7	3.375	85.7	4.50	114.3
E	2.275" (57.785mm) Acme - 2G thread					



30-01 Mechanical Firing Head, Parts List

Item	Description	2 ³ / ₈ " EUE (60.33mm)	2 ⁷ / ₈ " EUE (73.0mm)	3 ¹ / ₂ " EUE (89.9mm)
		30-0106041-00	30-0107341-00	30-0108941-00
		Part Number		
1	Body	30-0106001-01	30-0107301-01	30-0108901-01
2	Initiator Retainer Nut	30-0106000-02	30-0106000-02	30-0106000-02
3	Firing Pin	30-0106000-03	30-0106000-03	30-0106000-03
4	Retaining Screw	30-0106000-05	30-0106000-05	30-0106000-05
5	Shear Pin	30-0106000-04	30-0106000-04	30-0106000-04
6	008 O-Ring - Viton 90	81-0008000-04	81-0008000-04	81-0008000-04
7	020 O-Ring - Viton 90	81-0020000-04	81-0020000-04	81-0020000-04
8	113 O-Ring - Viton 90	81-0113000-04	81-0113000-04	81-0113000-04
9	116 O-Ring - Viton 90	81-0116000-04	81-0116000-04	81-0116000-04
10	125 O-Ring - Viton 90	81-0125000-04	81-0125000-04	81-0125000-04