

1-11/16 DIFFERENTIAL PRESSURE COIL TUBING FIRING HEAD ASSEMBLY

DESCRIPTION

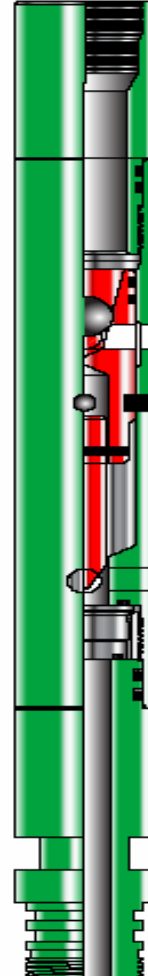
The GEODynamics 1-11/16 Differential Firing Head is used to initiate the detonation of the Tubing Conveyed Perforating (TCP) Guns or other devices. This firing head functions by creating a differential pressure between the annulus and work string (coil tubing). This is accomplished by pumping a ball bearing down the coil tubing.

ADVANTAGES

- Safe, economical, simple and reliable
- Firing head and coil tubing are equal to annulus pressure while tripping into the well
- Easily adapts to perforating guns, jet cutters, chemical cutters, drill collar severing tools and hydraulic setting tools
- Ideal for highly deviated wells, horizontal wells, wells with heavy fluids and wells with open perforations
- No shear stud calculations
- Uses industry standard initiators

OPERATION

The firing head body has a set of ports that allow equal pressure above and below the firing head piston/firing pin assembly. The piston assembly is sealed between the ports by o-rings and is secured to the firing head body by brass shear screws. When the ball bearing seats onto the piston the upper ports are closed off to the annulus, creating the differential. Continued increased pump pressure shears the brass shear screws driving the piston/firing pin assembly into the initiator initiating the explosive train. After the piston assembly shifts the upper ports are once again open to the annulus allowing communication between the coil tubing and annulus.



SPECIFICATIONS

DESCRIPTION	3/8 PISTON TYPE	9/16 PISTON TYPE
TOP CONNECTION	1.0 in, CS HYDRIL BOX	1.0 in, CS HYDRIL BOX
BOTTOM CONNECTION	ACME PIN	ACME PIN
TOOL OD	1-11/16 in	1-11/16 in
PISTON SEAT SIZE	3/8 in	9/16 in
SHEAR SCREW RATING (1 SCREW)	1400 psi	1400 psi
MAXIMUM TEMPERATURE *	450 F	450 F
LENGTH	14.0 in	14.0 in
WEIGHT	7.0 lbs	7.0 lbs
ASSEMBLY PART NUMBER	11.DIFA.116.C138	11.DIFA.116.C196
O-RING REDRESS KIT	11.DIRK.116.9999	11.DIRK.116.9999
PISTON PART NUMBER	11.DIFC.038.PSTN	11.DIFC.916.PSTN

* USE VITON 90 DURO O-RINGS