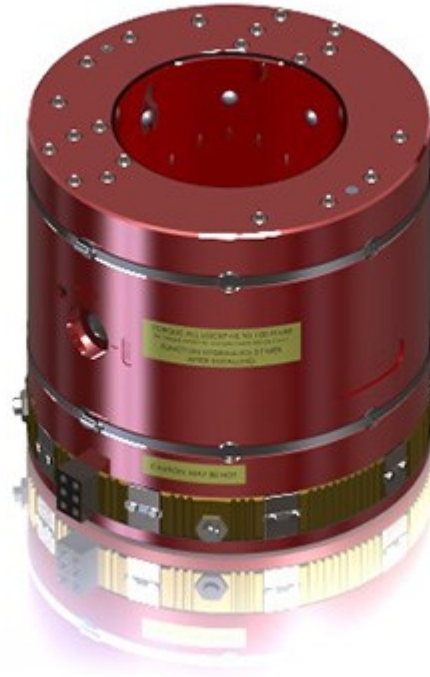


ROTARY HYDRAULIC ACTUATORS

Our patented Rotary hydraulic Actuators are designed to operate our Drill Stem safety Valves (DSSV) for mud saving operations, but additionally can be sized to provide enough torque to function our valves under maximum bore pressures in case of emergency. Using hydraulic racks and pinions, we can provide high torque, compact, rugged actuation solutions for top drive manufacturers.



DESIGN FEATURES INCLUDE:

- Low maintenance, bearing supported hydraulic systems can accept non-rotating hydraulic or air over hydraulic
- Hydraulic pressure is not required to maintain position
- Compact, low profile
- High torque hydraulic rack and pinion configuration can be sized to operate valve up to maximum bore pressure if required
- Rugged exterior mounting system allows the actuator to be stripped from the valve in either direction
- Available in four sizes and adaptable to a wide variety of DSSVs
- Reliable, field proven, serviceable design

Series	ID (")	OD (")	Length (")	Max Hyd. Pressure (psig)	Torque Output (ft-lbs)	Weight (lbs.)
3086-TDA-SER-C	5.38	10.13	12.55	2,000	660	185
3197-TDA-SER	6.02	10.13	12.55	2,000	700	151
4186-TDA-SER-F	6.96	11.63	12.55	2,000	660	224
4187-TDA-SER-A	6.96	11.63	12.55	2,000	1,320	242
5187-TDA-SER-C	7.77	12.25	12.55	2,000	1,320	250
6186-TDA-SER	10.02	17.63	16.91	2,000	3,000	621
6187-TDA-SER	10.02	17.63	16.91	2,000	6,000	650
7187-TDA-SER	9.02	16.63	16.91	2,000	1,220	575

***Contact Hi-Kalibre Equipment for custom rotary hydraulic actuator sizes or configurations