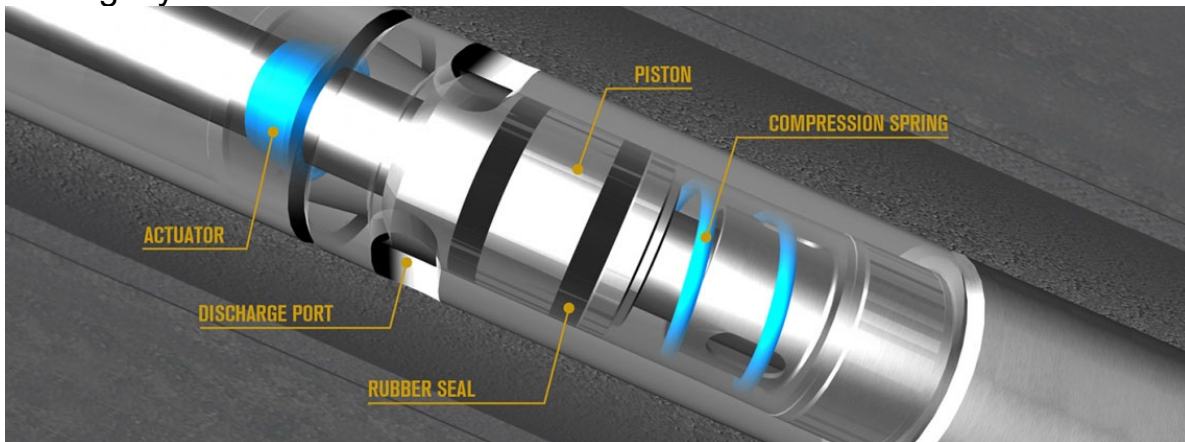


## PCP PAR Valve

The Republic Oil Tools Pressure Actuated Relief Valve (PAR Valve) is a proven tool used to prevent solids settling on top of a progressing cavity pump during a shut down. The PAR Valve is deployed on the tubing string above the PCP discharge and controls communication between the annulus and tubing. Upon stopping the system, the valve enables fluid and solids in the tubing to be diverted to the annulus without settling on top of the pump. This is achieved by the hydrostatic head in the tubing string actuating a spring loaded piston exposing the communication path. As soon as the pressure reaches equilibrium, the spring will repeat allowing the piston to reseat thereby isolating the tubing from the annulus. Unlike inferior technologies, the PAR Valve isolates the tubing from the annulus by default and does not rely on pump flow or pressure to obtain isolation. This eliminates recirculation by not letting solids settle in the communication path, a common failure with legacy automatic diverter valves.



Size	2-7/8"	3-1/2"
Housing Metallurgy	304 SS / 4140	
Thread Size	2-7/8" EUE 8rd	3-1/2" EUE 8rd
Outside Diameter (in)	4.5	5
Inside Diameter (in)	2.25	2.8
Actuator Diameter (in)	2.3	2.85
Actuator Material	ToughMet AT3-110	
Actuation Pressure (psi)	30	
Polished Rod Size (in)	1.25 or 1.50	
Length (in)	82.5	81.5
MU Torque (ft-lbs)	1650	2280
Temp Rating (F)	500	
Spring Metallurgy	17-7SS	