

## HIGH FLOW TRAVELING/STANDING VALVE

**Sandmaster Cyclone SandCheck  
Valve Rod Guide / (Required)**

Pump Barrel

**Cyclone Top Adapter**

Radial Ported Vanes

**Cyclone Ported Adapter**

Axial Evacuation Ports

Acceleration Chamber

API Pump Plunger

**High Flow Cyclone  
Travelling Valve**

**Cyclone Seat Plug**  
Evacuation Accumulator

**High Flow Cyclone  
Standing Valve**

Seating Nipple

Cyclone Nipple (Strainer/ Gas Anchor)

Eagle's patented traveling/standing valve's **Radial Cyclone Cage** is the latest technology in the advancement of the rod pump valve design. This tool is formulated with a one-piece cage, Eagle's radial design allows 30% more fluid to flow thru the valve using a laminar pattern. That eliminates violent ball action within the cage, thereby excluding the need for a hard liner. The Eagle Radial Cyclone technology, with its ball containment, enables the ball to gently place itself into a cradle, allowing the fluid to pass around the ball next to the cage wall, this action permits a greater flow and eliminates the need for expensive hard lined cages. The radial design features an option in the cradle. The Eagle Radial Cyclone technology creates a low pressure zone in the center of the cage and allows the high pressure fluid to move around the ball. The ball falls faster and directly back onto the seat. This prevents slow valve closure and increases the pump effectiveness. The energized containment quickly places the ball back onto the seat ensuring increased pump efficiency. This speed is especially valuable with high flow standing valve cages in heavy crude applications. The new technology is also tailored for heavy solids fluid as it eliminates the ball and containment from sticking in the cage.

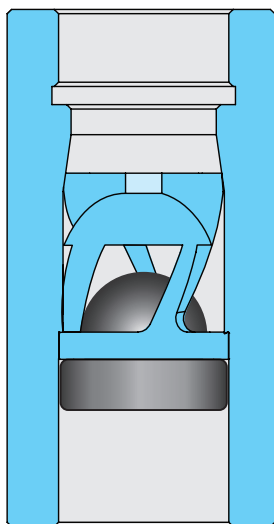
Eagle's Radial **Cyclone Standing Valve** has the same features and benefits as the Radial Traveling Valve plus two additional features: the standing valve cage is designed with a near zero space between the ball and the traveling valve compressive area. This assists in gassy conditions where gas locking could become problematic. In addition, the Eagle Cyclone Technology plays a key role in the proper filling of the pump barrel since the radial design allows for a faster fluid passage with greater flow capacity. This cyclone design forces solids within the fluid away from the seat area. As a result, the ball seats with less debris interference and provides the ball and seat a longer run life. The new High Flow Radial Cyclone Cage technology gives the operator a stronger, longer lasting pump.

### BENEFITS INCLUDE:

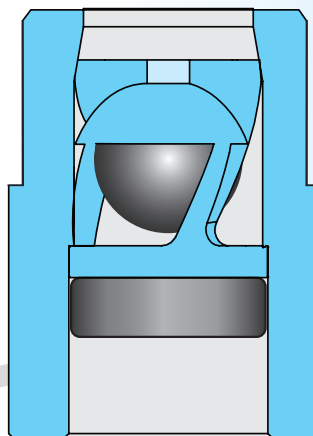
LONGER RUN TIME  
INCREASED PRODUCTION  
HIGHER EFFICIENCY PUMP  
INCREASED REVENUE  
REDUCTION IN REPAIRS



# HIGH FLOW TRAVELING/STANDING VALVE

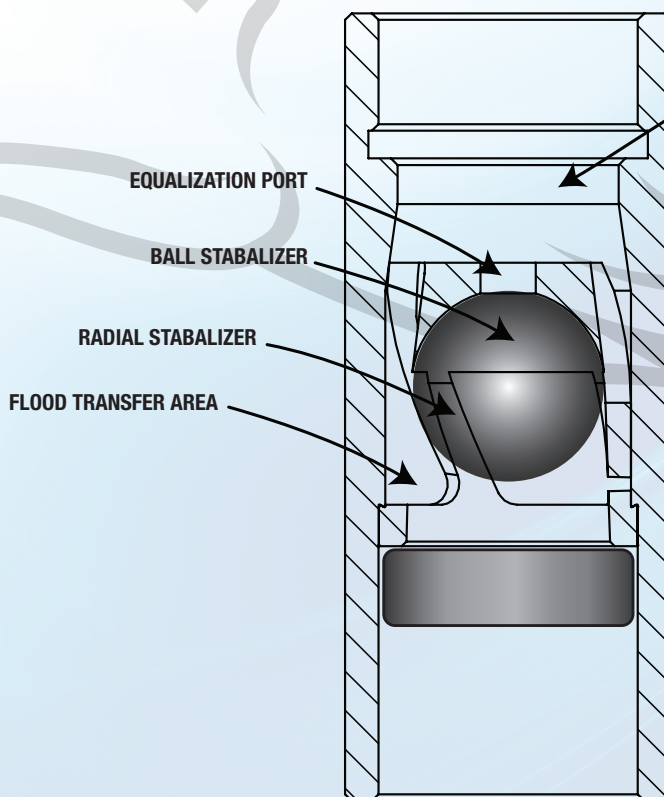


**Travelling**



**Standing**

**AVAILABLE IN ALL STANDARD CONFIGURATIONS**



## **BALL TRAVEL CHARACTERISTICS**

- Top Cage Stabilizer Ball  
.001 Tolerance
- Mid Travel Ball  
.010 Tolerance
- Seated Ball  
.020 Tolerance
- Radial Cradle  
Cage Technology  
Taper Tolerance  
+/- .001

**Material Construction:**  
316 Stainless Steel

US and Canada Patents  
World Wide Patents Pending  
Revised 05.30.14 © Eagle Innovations



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