

K2P API COUPLER - HOW IT WORKS

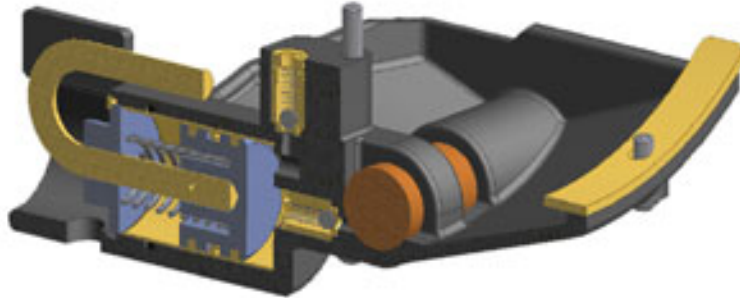


PATENTED TECHNOLOGY

CAPTURE – STORE - RECOVER

When loading is complete and the K2P is uncoupled from the adapter, the loss at disconnect is captured in the sump at the bottom of the coupler. The captured product is drawn from the holding sump, through a filter cartridge, and is then held in the pump cylinder. When the K2P is next used, the product that was held in the pump cylinder is returned to the process flow.

The action of coupling and uncoupling the K2P from the adapter causes the sleeve to move forward and back. This motion is transferred to the pump push rod to create the pumping action.



TWO CHECK VALVES CONTROL THE PUMP FLOW

A stainless steel ball bearing check valve, located between the sump and the pump, opens when the sleeve is retracted and draws product from the sump. The ball check is spring loaded to close when there is no further draw from the pump. The check valve prevents accumulated product from being returned to the catchment sump.

Another stainless steel ball bearing check valve is located between the coupler and the pump. This check valve opens when the sleeve moves forward and allows the accumulated product to be returned to the flow stream. The ball check is spring loaded to close, to prevent product from entering the pump during loaded. This ball check also isolates the pump from damage due to thermal expansion if the system is not properly relieved.

EMCO WHEATON™

A SYLTONE COMPANY



2501 Constant Comment Place
Louisville, KY 40299-USA
Tel: (800) 285-3626
Int'l: +1 (502) 266-8767
Fax: +1 (502) 266-5873
email: sales@syltone.com
Web: www.emcowheaton.com