

## API BOTTOM LOADING COUPLER

### The Safer, Cleaner, Faster Way To Load Your Transports



The 1005E3/1004D3 is the latest generation in API bottom-loading couplers from OPW. A proven performer at major oil terminals around the world, the 1005E3 incorporates several new features that make it the most user-friendly coupler on the market.

### Safer

#### 5-Cam Design

Ensures easy alignment; tight connection to adaptor and resists side forces during loading

#### Fully Interlocked

Dual interlocks ensure that the 1005E3 cannot be opened unless it is properly connected to an API adaptor

### Cleaner

#### Superior Sealing

Simple and reliable smart-seal design consisting of dual high-performance O-rings

#### High-Performance Seals

Special Fluorocarbon seal compound provides compatibility across most products including gasoline, diesel, biodiesel and ethanol\*

### Faster

#### Maintenance

- All *pins* and *small threads* have been eliminated to provide quick, easy access to all critical components
- Nose seal can be replaced easily without having to remove coupler from rack
- No special tools required
- Can be completely rebuilt in minutes

#### Operation

New stainless steel "ergo" handle design provides easy, smooth operation

\*other seals available upon request



Patent pending  
1005E3 (small handles for European market)

### Design Parameters

<b>Design Pressure</b>	8.6 bar(g)	125 psi(g)
<b>Max Allowable Working Pressure*</b>	5 bar(g)	75 psi(g)
<b>Max Flow Rate</b>	135 M <sup>3</sup> /hr	600GPM
<b>Temperature Range</b>	Fluorocarbon	-29°C to 204°C -20°F to 400°F
	Buna	-29°C to 121°C -20°F to 250°F
	EPT	-46°C to 107°C -50°F to 225°F
	Kalrez <sup>®</sup>	-18°C to 260°C 0°F to 500 °F
<b>Weight</b>	9.5 Kg	21 lbs
<b>Pressure Drop (@ Max Flow Rate)</b>	0.24 bar(g)	2-5 psi(g)

\* Unit tested to 21 bar (300 psi) in closed position to withstand excessive thermal expansion pressures.  
Reference API standard RP-1004 for additional information.

### Materials

Body	Aluminium
Sleeve	Aluminium
Poppet	Aluminium
Shaft	Stainless Steel
Cam Arms	Stainless Steel
Interlocks	Stainless Steel
Drive Link	Stainless Steel
Handle	Stainless Steel
Cylinder	Aluminium