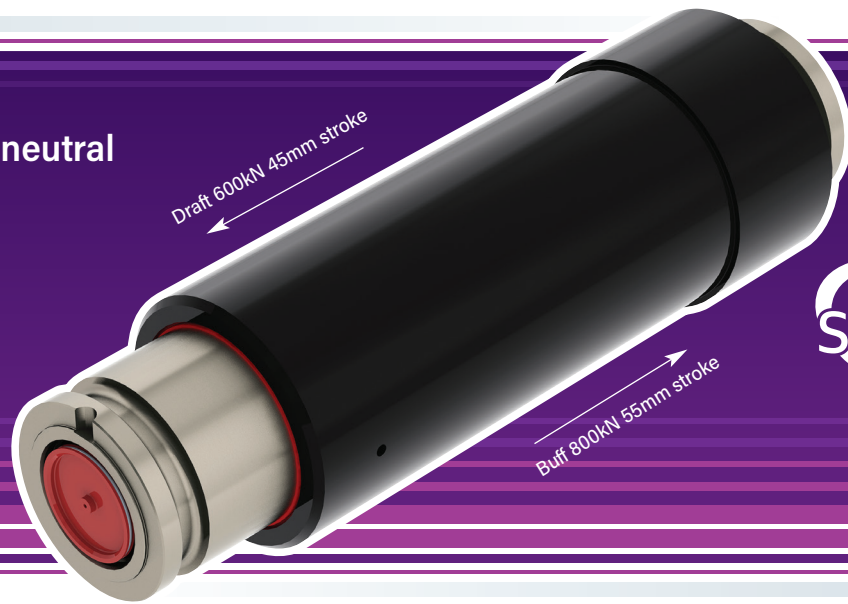


Buff & draft stroke from neutral  
LRV & Metro couplers



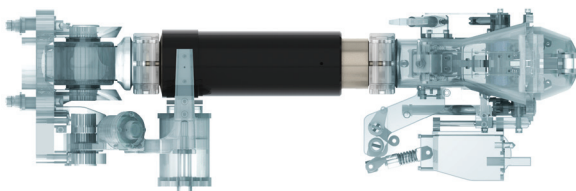
### Sentry™ Two-Way Energy Absorber

Delivering the high energy absorption capacity of Oleo's gas-hydraulic technology in a light weight and small packaging envelope.

The unit is available with clamp to clamp mounting for Metro applications and yoke arrangement for LRV foldable couplers.

Integration of the Sentry™ 800 device into the coupler system removes the need for EFG devices. With more than double the energy absorption of EFG solutions, two EFG3 devices can be replaced by one Sentry™ 800 (2 for 1) per interface, saving train weight and cost.

By reducing the variety and complexity, this can allow for lower project costs per train coupling system whilst also offering higher coupling speeds, significant weight savings and reduced life cycle costs.



### Applications



Metro



Light Rail



Locomotive & Freight



High Speed



Mainline

### Product Details

- Two-Way Buff and Draft Gas Hydraulic energy absorption from neutral position.
- Better performance than two EFG3 devices combined.
- Maximum Force range up to 800KN.
- Protection against draft overload events.
- Fully customisable force/stroke characteristics at no extra cost.
- Integral anti-rotation system.
- All units tested by Oleo with validated mathematical models in accordance with EN15227. Plug in elements available for Radioss and LS-Dyna finite element software.
- The system used by OLEO for the mathematical modelling of crash scenarios is approved by a European Rail Authority as being accurate, appropriate and properly controlled.

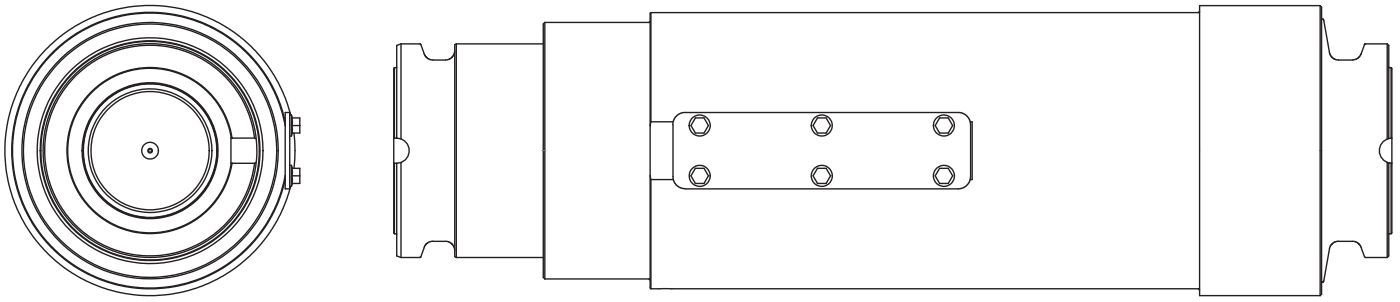
### Product Advantages

Oleo's Sentry™ 800 Two-Way Energy Absorption Device enables:

- Buff and Draft Functions in one Compact Unit.
- Lower Price Per Train Set.
- Lower Life Cycle Cost.
- Light Weight.
- Small Space Envelope.
- Faster Coupling Speeds.
- Reduced Potential Impact Damage.
- Increased Passenger Protection.
- Performance optimisation at no additional cost with Oleo 1D Train™.
- Higher recoverable energy absorption than any EFG solution.
- Standardised modular design with clamp connections for ease of service.
- Maintenance free between major train overhaul periods.
- Fully tested standard unit.
- No Non Recurring Costs, short lead time.

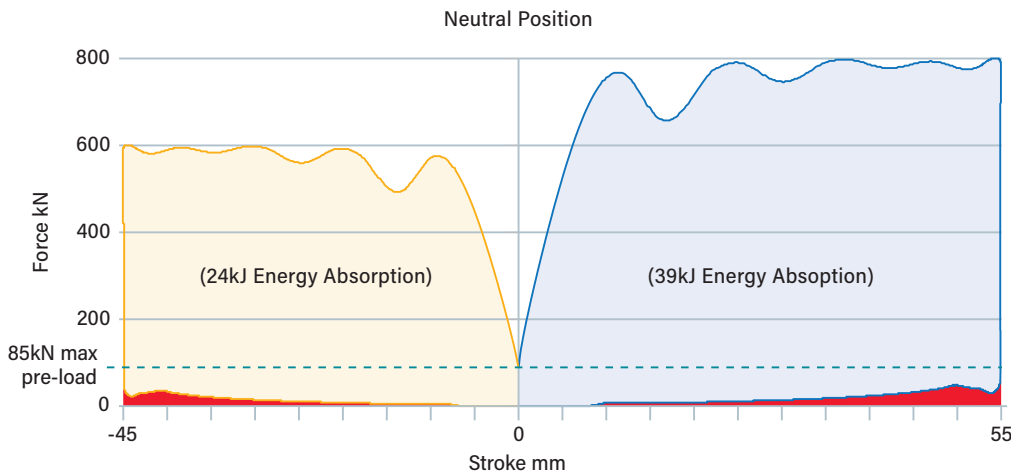


# Sentry™ 800 Two-Way Energy Absorber Specification



Buff				Draft				Operating Temperature
Stroke	Pre Load	Force	Energy Absorption	Stroke	Pre Load	Force	Energy Absorption	
55mm	Up to 85kN	800kN	39kJ	45mm	Up to 85kN	600kN	24kJ	+60°C -40°C

## Dynamic Performance of Sentry™ 800 Two-Way Idealised Curve



Sentry™ 800 Two-Way has more than twice the energy absorption compared to EFG3.

Two heavy EFG3 units can be replaced by one Sentry™ 800 (2 for 1).

Almost no recoil energy compared to 50% energy return by EFG devices.

## Range of available Quasi-Static Characteristics at 4mm/second.

