

TENSA PHC IL70 PASSIVE HEAVE COMPENSATOR

The TENSA in Line Passive Heave Compensator is used to provide compliant support to a load suspended from a crane or winch. This capability is used in the following situations:

- supporting a load which is held stationary on the seabed from a heaving vessel
- lowering a load onto a stationary support (eg seabed or fixed platform) from a heaving winch or crane
- connecting to and lifting a load from a stationery base (eg seabed or fixed platform) using a heaving winch or crane
- to minimize load variations when lowering an object through the wave zone
- to maintain tension in a fixed line from a vessel to seabed eg quidewire or umbilical

The PHC IL70 is a fluid damped air spring with a low spring rate. This achieved using gas - fluid accumulators. The unit is suitable for subsea operation.

For applications where only dynamic load factor reduction is required, we provide a similar product with performance characteristics tailored to maximize energy absorption when subjected to a shock loading. This is the TENSA DLR 70 Dynamic Load Reducer. Refer to separate documentation for this product.

A key advantage of the TENSA PHC IL70 is its ability to provide compensated support at different loads. For example on the IL70-30, 1.5m of stroke could be used to compensate at a load of 50 tonnes for use when lifting from a boat and lowering through the wave zone and the remaining 1.5m stroke could be used to compensate at 45 tonnes which might be the submerged weight of the object when it is landed out at depth.

Design is in accordance with API spec 2C Specification for Offshore Cranes and other relevant API and AS codes covering the mechanical construction. Purchasers may request design and fabrication approval from DnV, ABS or other recognized certification organisation.

The TENSA PHC IL70 is rugged and simple to set up and use.

The TENSA PHC series are modular and can be adapted quickly to different strokes and operating conditions. 2 units can be used in parallel to double the capacity or in series to double the stroke. Additional accumulators can be added to further improve the operating performance for extreme conditions.



SPECIFICATIONS:

SWL for on platform lifts: 67 tonnes

Test load: 134 tonnes

Operating Stroke: 1500mm(IL70-15), 3000mm (IL70-30)

Longer stroke by special order. Alternatively 2 x units can be used in series to double stroke.

Hydraulic Fluid: Glycol/water based

Overall Dimensions: 3000/4500 x 1000 x 320

Weight: approx 1300 kg (IL70-15), 1660 kg (IL70-30)

Surface Treatment: Marine coating

Operating Temperature: 0° C-+50° C (-10° C opt)

phc IL70 ver02