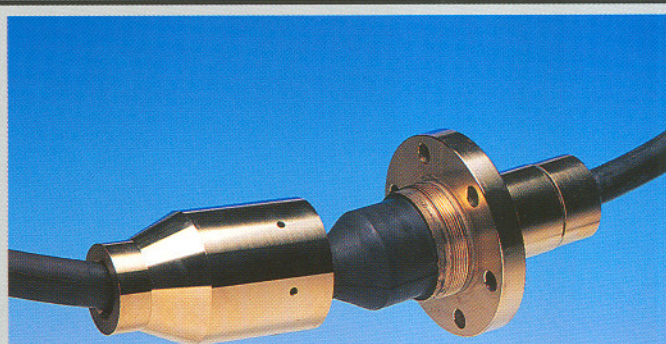


PHP

Pressure Hull Penetration



PHP vulcanized with chloroprene cable

- Customer designed
- Pressure tested up to 90 bar
- 100% tested and inspected before delivery
- EMP-sealed version



WWW.CABLEJOINTS.CO.UK
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PHP

Pressure Hull Penetration

Description

The PHP longitudinal cable penetration is used as protection against incoming over pressure media/water through the pressure hull, vessels or barriers via the cables which have been damaged or cut.

Application dimensions and cable types for the PHP are decided by the customer.

Generally the PHP provides the same requirements as the cable.

PHP penetrations are currently used in both submarines and oil platforms.

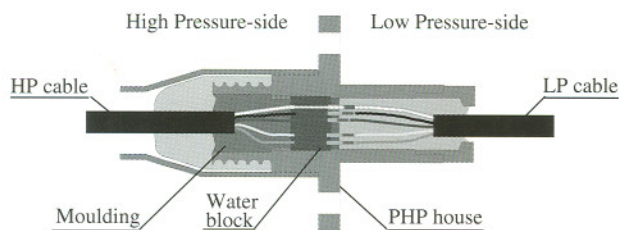
Metal parts can be supplied in different materials according to customers requirement.

Two types of PHP are available:

LVT Longitudinal sealed

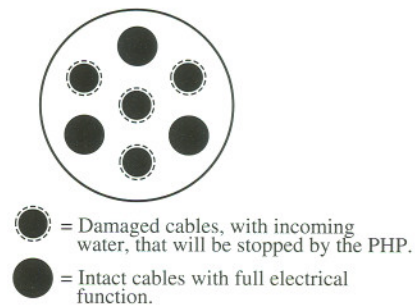
The basic type of PHP. When a cable on the high pressure side (HP) is cut off, PHP stops incoming water and protects the low pressure side (LP) from over pressure and water.

The LVT protection is intact even when the whole moulding on the HP side has been cut off.



LVT Longitudinal and cross sealed

If one or more of the cables on the HP side are damaged or cut off, these cables will be blocked, while the un-damaged cables are still intact.



Both types described above can be supplied with built-in protection against EMP (electromagnetic pulse due to lightning and nuclear blast)

Technical Data

Hydrostatic pressure: Test pressure: 9 MPa (90 bar) or acc. to the cable specification

Shock: Mechanical: 2000 g acc. to IEC 68-2-27 (1987)
Hydrostatic: 213 bar / 6 ms

Work temp. range: Min. -40°C, Max.+70°C

EMP: Peak 1 kA, raise and fall time 30 ns

Longitudinal seal: Min. 10⁻⁶ cc/s air with 1 bar diff.

Testing and inspection

- Dimension inspection and general investigation
- Inspection and test of cable termination and conductor connections.
- Radiographic examination of moulding
- Leak detection test
- Hydrostatic pressure test
- High voltage test
- Insulation resistance test
- Conductor continuity test
- Result verification and inspection report/certificate