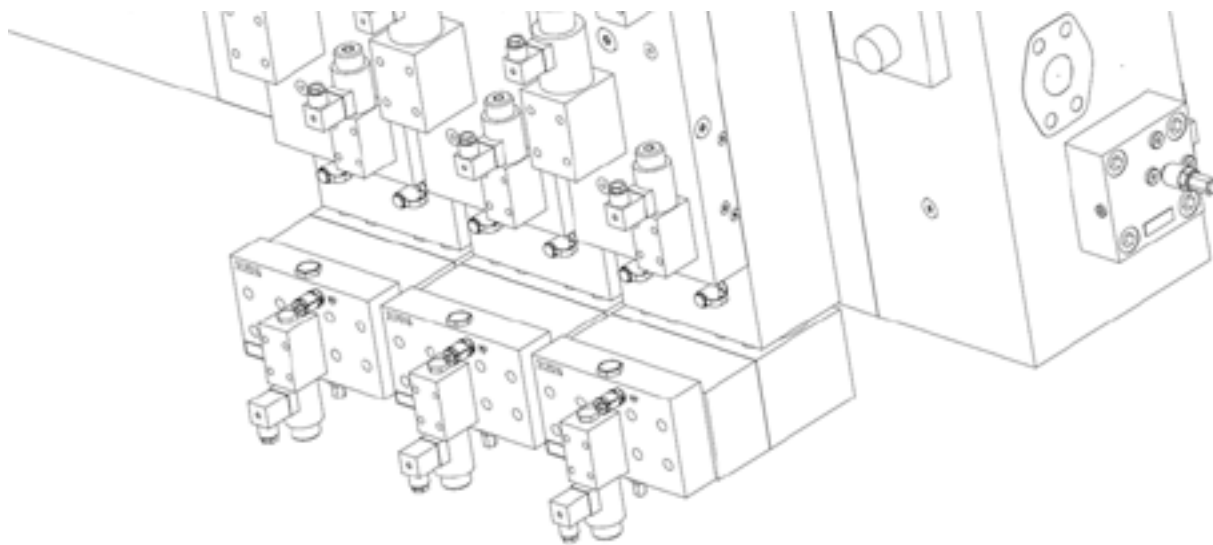


# Pump manifold upgrade

## Pump manifold safety valve block



### Reduced risk of pump manifold damage

In the rare case where failure of one of the multiple pump controllers occurs in combination with a defined set of user parameters, or as a result of or in combination with a power failure, excessive pressure may be experienced in the pump manifold.

To avoid this scenario that can damage your pump manifold we are now offering a pump manifold safety valve block.

The newly designed Pump Manifold Safety Valve Block (PMSVB) is designed to reduce the risk of pump manifold damage and is to be mounted directly on the pump manifold in between the pump and pump manifold. A typical "Semi-Active" AHC crane may utilize from 4 to 8 PMSVBs. The valve block is fitted with sensors that will detect if a valve is opening.

MacGregor shapes the offshore and marine industries by offering world-leading engineering solutions and services with a strong portfolio of MacGregor, Hatlapa, Porsgrunn, Pusnes and Triplex brands.

*MacGregor is part of Cargotec (Nasdaq Helsinki: CGCBV).*

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