



## Marzocchi FTP Gear Pumps for Low Pressure Applications

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Marzocchi's new FTP Gear Pump is ideal for low pressure and lubrication applications where low viscosity fluids are required. Specifically, the gear pumps are geared towards liquids such as fire resistant fluids, water - oil or water and glycol emulsions.

Marzocchi FTP pumps are based on ELIKA Gear Technology which reduces the noise level by an average of 15 dBA compared with a conventional external gear pump. Typical applications of these pumps include use in large lubrication systems, lubrication of the guides of machine tools and the lubrication and cooling of the tools themselves. Fire-resistant hydraulic fluids are specially formulated lubricants that are more difficult to ignite and do not propagate a flame from an ignition source.

There are several types of fire-resistant fluids and they are generally classified as follows: oil and water emulsions, water Polymer solutions, anhydrous Synthetics. The only fire-resistant fluids that are completely incompatible with gear pumps are the HFDR ones; for all the others, it is possible to obtain a configuration that makes them compatible. To avoid fast wear of the sliding contact parts, the FTP pumps can be supplied, depending on the type of application with bronze or bronze/PTFE thrust plates.

Since Marzocchi FTP gear pumps are based on ELIKA technology, the helical gears ensure the continuity of the motion, despite the low number of teeth. The low number of teeth reduces the fundamental frequencies of the pump noise, producing a more pleasant sound. ELIKA tooth profile, without encapsulation, also significantly reduces pressure-oscillations and vibrations produced by the pump and transmitted to the other components, reducing the noise of the hydraulic system. Specific compensation areas in the flange and cover, insulated by special gaskets reinforced with anti-extrusion, allow for fully free axial and radial movement of the bushings. FTP pumps are perfectly interchangeable with standard gear pumps.

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