What is the Maximum Working Pressure?

The maximum working pressure of a manifold depends on several engineering factors, including pipe diameter, wall thickness, branch configuration, material grade, operating temperature, flange rating, and applicable design standards.

YuRong Pull-Out Manifolds are manufactured from high-quality stainless steel materials, typically SS304 or SS316, and are designed according to recognized engineering practices and customer specifications. For booster system applications, manifolds can be engineered to meet a wide range of operating pressures. Each design is individually evaluated to ensure adequate safety margins and long-term reliability.

Key Factors Affecting Maximum Working Pressure

Engineering Parameter	Technical Scope & Impact
Header Dimensions	Header pipe diameter and wall thickness directly influence structural pressure threshold capabilities.
Branch Configuration	Branch size, quantity, and spacing layout dictate stress concentrations on the parent manifold.
Material Grade	Selection of premium Stainless Steel 304 vs. Stainless Steel 316 and specific operating temperatures.
Connection Types	Flange rating and connection configurations specify the ultimate seal threshold.
Dynamic Fluctuations	System pressure fluctuations and cyclic loading constraints over long-term system lifespans.

Custom Engineering Projects

For projects requiring higher pressures, YuRong engineering can provide customized manifold designs with appropriate material thicknesses and connection configurations to meet specific application requirements.

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