

MZ-Xpress Screen and Valve Assembly

Cased hole, single-trip, multizone gravel and frac packing

SYSTEM APPLICATIONS

- Multizone completions
- Frac-packing operations
- Gravel-packing operations
- Land and offshore environments, including deep water
- Vertical or deviated wells

SYSTEM BENEFITS

- Cost and time savings due to
 - reduced rig time
 - high-flow-rate and proppant capacity

SCREEN AND VALVE FEATURES

- Modular design tailored for variations in zone length and productivity
- Integrated fluid loss and production control
- Adequate annular clearance for proper gravel placement and fishability

The MZ-Xpress* screen and valve assemblies are modular, allowing for variations in interval lengths and productivity rates.

MZ-Xpress screens

The MZ-Xpress screens are constructed of a direct-wrapped wire jacket and high rib wires. The slot openings can be tailored for appropriate gravel or proppant sizes. The basepipe is unperforated, providing complete isolation when adjacent valve assemblies are closed.

Production and circulating flow paths along and between screen joints are possible because of high rib wires and specially designed connectors. A termination cap is installed at the bottom of each screen interval, with an equalizing screen assembly installed at the top of each screen interval. A shoulder on the upper end of the screen assembly allows it to be handled with a standard screen table.

MZ-Xpress valve assemblies

The MZ-Xpress valve assemblies are used for isolation and circulation during sandface completion installation and for selective production. Depending on expected production rates, multiple valve assemblies can be incorporated into each zone—below, between, or above the MZ-Xpress screen joints. These valve assemblies were designed and qualified according to production sliding sleeve requirements.

While the MZ-Xpress system is being run in hole, all valve assemblies are closed, permitting all packers to be set when the MZ-Xpress assembly has been inserted into the sump packer. During the gravel-pack treatment, the lowest valve assembly in the respective zone is opened to allow for circulation at the bottom of the interval. During frac-pack treatments, this valve is opened to permit pressure monitoring via a live annulus.

All valve assemblies within adjacent zones remained closed, ensuring isolation of these perforated intervals. When all zones have been successfully gravel packed or frac packed, all the valve assemblies are closed, allowing for fluid loss control while the MZ-Xpress service tool is removed from the well and the production tubing is installed.



MZ-Xpress screen assembly.

MZ-Xpress Screen Specifications

Basepipe OD, in	3.500	5.500
System ID, in	2.813	4.562
Screen OD, in	4.750	7.125
Filter type	Direct-wrapped wire	Direct-wrapped wire