

# Well Flow Management

## Well Testing | Well control

### Choke Manifold

**The choke manifold is used to maintain back pressure on the well formation and control the flow rate before produced fluids enter the main elements of the processing package.**

The Expro standard choke manifolds are component designs consisting of four, five or eight manual valves. Positioned on one side of the flow path, an adjustable choke allows variable flow control for flexibility during clean-up. On the other side, a fixed orifice allows a more accurate flow control for pre-determined flow rates.

The choke allows the operator to control the well flow by enabling progressive manual, powered, or fixed control of the well stream by opening, closing or selecting a fixed orifice. Well parameters such as pressure and temperature can be monitored through ports positioned upstream and downstream of the manifold.

A variety of choke manifold configurations and sizes are available for different pressures and temperatures to suit specific requirements and well conditions. Single and dual isolation valve assemblies can be supplied in T, L, U, Diamond or Square arrangements, dependant on valve quantity and configuration.

Expro recommends however a double barrier policy between process fluids and the atmosphere when changing chokes in harsh environments, such as sand clean-up and high-pressure applications.

There are also variations to the adjustable choke make and type. Larger bore units and high-pressure manifolds have a production choke installed rather than the traditional needle and seat type.



#### Applications

- Onshore and offshore oil and gas well testing and clean-up operations
- Flow back after stimulation operations and work-overs
- High pressure, high temperature operations

#### Features and benefits

- Incorporates the latest adjustable choke technology
- Meets applicable industry standards
- Two flow paths: one adjustable and one fixed
- Allows fast choke changes without interrupting the flow
- Pressure and temperature rated to meet hostile environments
- Small footprint

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Technical specifications					
Nominal ID inches (mm)	Working pressure psi (bar)	Temperature rating °F (°C)	Weight (dry) lbs (kgs)	Dimensions (L x W x H) ft. (m)	Configuration
3 (76.2)	5,000 (345)	-20 to 250 (-29 to 121)	2,250 (1,020)	5.2 x 9 x 3 (1.6 x 2.7 x 0.9)	4 or 5 valve
3 (76.2)	10,000 (690)	-20 to 250 (-29 to 121)	5,550 (2,517)	5.7 x 10 x 3.4 (1.7 x 3.1 x 1)	4 or 5 valve
3 (76.2)	10,000 (690)	-20 to 250 (-29 to 121)	8,158 (3,700)	4.7 x 7 x 3.5 (1.4 x 2.1 x 1)	5 valve solid block
3 (76.2)	10,000 (690)	-20 to 250 (-29 to 121)	7,716 (3,500)	6 x 11.5 x 3.1 (1.8 x 3.5 x 0.9)	8 valve dual isolation
4 (101.6)	10,000 (690)	-20 to 250 (-29 to 121)	5,550 (2,517)	5.6 x 10 x 3.3 (1.7 x 3.1 x 1)	4 valve
5 (127)	10,000 (690)	-20 to 250 (-29 to 121)	11,000 (13,700)	8.5 x 8 x 8.5 (2.6 x 2.44 x 2.6)	8 valve dual isolation 'C' layout
3 (76.2)	15,000 (1,035)	-20 to 250 (-29 to 121)	11,000 (5,000)	4.3 x 16.3 x 5 (1.3 x 4.9 x 1.5)	5 valve, 2-9/16"
3 (76.2)	15,000 (1,035)	-20 to 250 (-29 to 121)	11,025 (5,000)	5.6 x 8 x 4.7 (1.7 x 2.5 x 1.4)	5 valve, 2-9/16"
3 (76.2)	5,000 (345)	-20 to 350 (-29 to 177)	5,335 (2,420)	7.05 x 6.43 x 3.02 (2.15 x 1.96 x 0.92)	4 or 5 valve
3 (76.2)	10,000 (690)	-20 to 350 (-29 to 177)	12,125 (5,500)	8.00 x 6.43 x 3.41 (2.44 x 1.96 x 1.04)	4 or 5 valve
4 (101.6)	10,000 (690)	-20 to 350 (-29 to 177)	9,315 (4,225)	7.22 x 7.22 x 3.28 (2.20 x 2.20 x 1.00)	4 or 5 valve
3 (76.2)	15,000 (1,035)	-20 to 350 (-29 to 177)	17,637 (8,000)	7.55 x 8.00 x 6.66 (2.3 x 2.44 x 2.03)	5 valve, 2-9/16"
3 (76.2)	10,000 (690)	-20 to 350 (-29 to 177)	13,228 (6,000)	12.47 x 8.50 x 4.43 (3.80 x 2.59 x 1.35)	8 valve dual isolation
4 (101.6)	10,000 (690)	-20 to 350 (-29 to 177)	28,660 (13,000)	9.51 x 8.86 x 8.50 (2.90 x 2.70 x 2.59)	8 valve dual isolation
5 (127)	10,000 (690)	-20 to 350 (-29 to 177)	30,865 (14,000)	10.83 x 8.40 x 6.66 (3.30 x 2.56 x 2.03)	8 valve dual isolation
3 (76.2)	15,000 (1,035)	-20 to 350 (-29 to 177)	26,445 (12,000)	9.84 x 9.84 x 8.20 (3.00 x 3.00 x 2.50)	8 valve dual isolation

Note: All Choke Manifolds are designed and fabricated to API 6A, ANSI B31.3 and NACE MR-01-75 as our minimum standard and for guideline purposes only.

For choke specific information and additional codes applicable to comply with region specific standards, please contact your local Expro representative or email [welltesting@expro.com](mailto:welltesting@expro.com)

[expro.com/welltesting](http://expro.com/welltesting)

Date 03/2023 | Revision 1.0