

Choke manifold

The choke manifold is used to reduce well pressure and control the flow rate before the flow enters the processing equipment.

Expro's 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 predetermined 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 number of choke manifold configurations and sizes are available for different pressures and temperatures to suite specific requirements and well conditions. Both single and dual isolation valve arrangements can be supplied. Expro recommend 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. The larger bore units and high pressure manifolds have a production choke installed rather than the traditional needle and seat type. We can also incorporate our PowerChokes® adjustable choke, designed for severe service environments.



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

Applications

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

Technical specifications

Working pressure psi (bar)	Nominal diameter inches (mm)	Temp. rating °F (°C)	Inlet - outlet connection	Weight lbs (kg)	Dimensions h x l x w ft (m)	Special features	Design code & service
5,000 (345)	3" (76.2)	-20/250 (-29/121)	3" fig 602	2,250 (1,020)	3 x 5.2 x 9 (0.9 x 1.6 x 2.7)	4/5 valve design	API 6A ANSI B31.3 NACE MR-01-75
10,000 (690)	3" (76.2)	-20/250 (-29/121)	3" fig 1502	5,550 (2,517)	3.4 x 5.7 x 10 (1 x 1.7 x 3.1)	4/5 valve	API 6A ANSI B31.3 NACE MR-01-75
10,000 (690)	3" (76.2)	-20/250 (-29/121)	3" fig 1502	8,158 (3,700)	3.5 x 4.7 x 7 (1 x 1.4 x 2.1)	5 valve solid block	API 6A ANSI B31.3 NACE MR-01-75
10,000 (690)	3" (76.2)	-20/250 (-29/121)	3" fig 1502	7,716 (3,500)	3.1 x 6 x 11.5 (0.9 x 1.8 x 3.5)	8 valve dual isolation	API 6A ANSI B31.3 NACE MR-01-75
10,000 (690)	4" (101.6)	-20/250 (-29/121)	4" fig 1502	5,550 (2,517)	3.3 x 5.6 x 10 (1 x 1.7 x 3.1)	4 valve	API 6A ANSI B31.3 NACE MR-01-75
10,000 (690)	5" (127)	-20/250 (-29/121)	5. 1/8" API Flange	30200 (13700)	6.9 x 8.4 x 11.3 (2.1 x 2.5 x 3.4)	8 valve dual isolation 'C' layout	API 6A ANSI B31.3 NACE MR-01-75
15,000 (1,035)	3" (76.2)	-20/250 (-29/121)	Cameron hubs	11,000 (5,000) <i>approx.</i>	5 x 4.3 x 16.3 (1.5 x 1.3 x 4.9) <i>approx.</i>	5 valve 2-9/16" gate valves	API 6A ANSI B31.3 NACE MR-01-75
15,000 (1,035)	3" (76.2)	-20/250 (-29/121)	3" C-25 Graylok	11,025 (5,000)	4.7 x 5.6 x 8 (1.4 x 1.7 x 2.5)	5 valve solid block 2-9/16" gate valves	API 6A ANSI B31.3 NACE MR-01-75
15,000 (1,035)	3" (76.2)	-50/400 (-45/204)	H4-27R Techlok	5,500 (2,500)	4.5 x 6.6 x 7 (1.4 x 2 x 2.1)	4 valve or 8 valve dual isolation 2-3/4" max choke	API 6A ANSI B31.3 NACE MR-01-75

The above referred design codes are our minimum standard and for guideline purposes only for choke specific information and additional codes applicable to comply with region specific standards, please consult your local Expro representative.