

# T-81

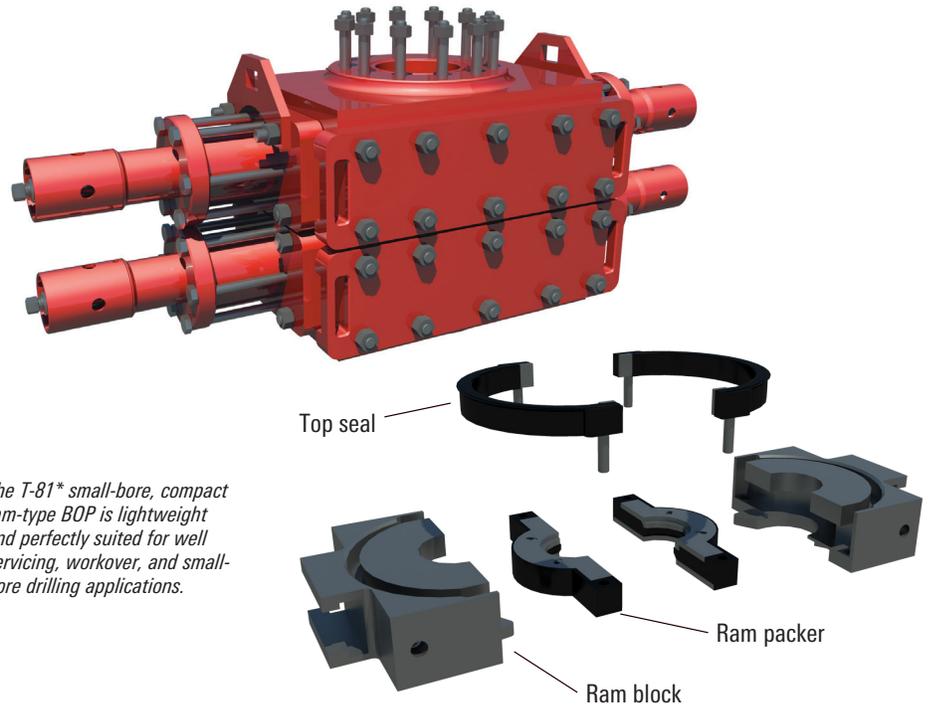
## Small-bore, compact ram-type BOP

### APPLICATIONS

- Onshore
  - Well servicing
  - Workover

### APPLICATIONS

- Monogramable to API 16A
- Pressure-energized rams
- Mechanical locks
- Bonnet studs



*The T-81\* small-bore, compact ram-type BOP is lightweight and perfectly suited for well servicing, workover, and small-bore drilling applications.*

Reliable BOPs are crucial for drilling a well safely. If the need arises to contain wellbore pressure, ram-type BOPs provide the ability to shear off the tubulars in the wellbore and seal the well.

The T-81 small-bore, ram-type BOP is compact, lightweight, and perfectly suited for well servicing, workover, and small-bore drilling applications. Its design offers easy operation and low maintenance. Both manual and hydraulic options are available.

### T-81 high-temperature seals

Schlumberger offers high-temperature seals for T-81 ram-type BOPs as an extension of its OEM elastomer product line. These seals have been tested in accordance with API 16A third edition, section 5.7.2.2 and high-temperature test per API 16A third edition, section 5.8.2. Both 7<sup>1</sup>/<sub>16</sub>-in 5,000 psi and 9-in 5,000 psi achieved 78 pressure cycles and maintained a seal at 5,000 psi for 9.5 h at 350 degF [177 degC] without any visible leaks. To achieve this performance, the high-temperature packers, high-temperature top seals, and high-temperature seal kits must be installed.

### T-81 Manual BOP is available in various sizes and pressure ratings

- 7<sup>1</sup>/<sub>16</sub> in × 3,000 psi
- 7<sup>1</sup>/<sub>16</sub> in × 5,000 psi
- 9 in × 3,000 psi

### T-81 Hydraulic BOP is available in various sizes and pressure ratings

- 7<sup>1</sup>/<sub>16</sub> in × 3,000 psi
- 7<sup>1</sup>/<sub>16</sub> in × 5,000 psi
- 9 in × 3,000 psi
- 9 in × 5,000 psi

### Available configurations

Single, double, and triple cavity options

### Available ram block sizes

- 7<sup>1</sup>/<sub>16</sub> in × 3,000 or 5,000 psi complete shutoff (CSO) (blind) to 5<sup>1</sup>/<sub>2</sub> in
- 9 in × 3,000 or 5,000 psi CSO (blind) to 7<sup>5</sup>/<sub>8</sub> in

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## Dimensions—T-81 Hydraulic Type BOP

Size, in [mm]	Style	7 <sup>1</sup> / <sub>16</sub> × 3,000 psi	7 <sup>1</sup> / <sub>16</sub> × 5,000 psi	9 × 3,000 psi	9 × 5,000 psi
Overall height studded (less studs), in [mm]	Single	12.75 [324]	12.75 [324]	13.00 [330]	12.94 [329]
	Double	21.25 [540]	21.25 [540]	21.44 [545]	21.44 [545]
	Triple	29.75 [756]	29.75 [756]	29.94 [760]	29.94 [760]
Overall height flanged, in [mm]	Single	18.13 [461]	19.94 [506]	17.75 [451]	19.59 [498]
	Double	26.00 [660]	27.79 [706]	26.28 [668]	28.09 [713]
	Triple	34.51 [877]	36.19 [919]	34.78 [883]	36.59 [929]
Overall length, in [mm]		63.37 [1,610]	64.87 [1,648]	70.62 [1,794]	70.62 [1,794]
Overall width, in [mm]		20.57 [522]	20.84 [529]	22.88 [581]	23.15 [588]
Opening through preventer, in [mm]		7 <sup>1</sup> / <sub>16</sub> [179]	7 <sup>1</sup> / <sub>16</sub> [179]	9 [229]	9 [229]
Working Pressure, psi [kPa]		3,000 [20,684]	5,000 [34,474]	3,000 [20,684]	5,000 [34,474]

## Weights, lbm [kg]—T-81 Hydraulic Type BOP

Single, lbm [kg]	Studded	1,544 [700]	1,647 [747]	1,818 [825]	1,912 [867]
	Flanged	1,657 [752]	1,764 [800]	1,931 [876]	2,079 [943]
Double, lbm [kg]	Studded	2,554 [1,158]	2,778 [1,260]	3,125 [1,417]	3,161 [1,434]
	Flanged	2,667 [1,210]	2,895 [1,313]	3,238 [1,469]	3,328 [1,510]
Triple, lbm [kg]	Studded	3,489 [1,583]	3,848 [1,745]	4,060 [1,842]	4,096 [1,858]
	Flanged	3,602 [1,634]	3,965 [1,798]	4,173 [1,893]	4,263 [1,934]

## BOP Capacities—T-81 Hydraulic Type BOP Only

Maximum operating pressure to open and close, psi [kPa]	1,500 [10,342]	1,500 [10,342]	1,500 [10,342]	1,500 [10,342]
Recommended operating pressure to open and close, psi [kPa]	1,500 [10,342]	1,500 [10,342]	1,500 [10,342]	1,500 [10,342]
Ratio to close	4.2:1	4.2:1	4.2:1	4.2:1
Volume of fluid to open, galUS [L]	0.56 [2.12]	0.56 [2.12]	0.66 [2.50]	0.66 [2.50]
Volume of fluid to close, galUS [L]	0.59 [2.24]	0.59 [2.24]	0.70 [2.65]	0.70 [2.65]

## Dimensions—T-81 Manual Type BOP

Size, in [mm]	Style	7 <sup>1</sup> / <sub>16</sub> × 3,000 psi	7 <sup>1</sup> / <sub>16</sub> × 5,000 psi	9 × 3,000 psi
Overall height studded (less studs), in [mm]	Single	12.75 [324]	12.75 [324]	13.00 [330]
	Double	21.25 [540]	21.25 [540]	21.25 [540]
	Triple	29.75 [756]	29.75 [756]	29.75 [756]
Overall height flanged, in [mm]	Single	18.13 [461]	19.31 [490]	17.75 [451]
	Double	26.00 [660]	27.38 [695]	26.28 [668]
	Triple	35.50 [902]	35.88 [911]	34.59 [879]
Overall length, in [mm]		52.36 [1,330]	52.36 [1,330]	59.10 [1,501]
Overall width, in [mm]		25.85 [657]	25.85 [657]	28.25 [718]
Opening through preventer, in [mm]		7 <sup>1</sup> / <sub>16</sub> [179]	7 <sup>1</sup> / <sub>16</sub> [179]	9 [229]
Working pressure, psi [kPa]		3,000 [20,684]	5,000 [34,474]	3,000 [20,684]

## Weights, lbm [kg]—T-81 Manual Type BOP

Single, lbm [kg]	Studded	1,551 [704]	1,605 [728]	1,824 [827]
	Flanged	1,664 [755]	1,718 [779]	1,991 [903]
Double, lbm [kg]	Studded	2,574 [1,168]	2,540 [1,152]	3,072 [1,393]
	Flanged	2,687 [1,219]	2,653 [1,203]	3,239 [1,469]
Triple, lbm [kg]	Studded	3,509 [1,592]	3,475 [1,576]	4,007 [1,818]
	Flanged	3,622 [1,643]	3,588 [1,627]	4,174 [1,893]

[products.slb.com/t-81](http://products.slb.com/t-81)