

#### **Downhole Control Valves**

# WXON and WXAN Standard Sliding Sleeves

Weatherford's WXON and WXAN circulating sliding sleeves are non-elastomeric versions of the traditional WXO and WXA sleeves. The sliding sleeves are downhole flow-control valves that can be installed in the production string to provide communication between the tubing/casing annulus. These sleeves are economical, versatile options with high availability.

The WXON sleeve is opened and closed using standard wireline methods; the inner sleeve is shifted *downward* to open the tool and *upward* to close it. The WXAN sleeve is also opened and closed using standard wireline methods, but the inner sleeve is shifted *upward* to open the tool and *downward* to close it.

Both the WXON and WXAN sliding sleeves are designed with a "WX" nipple profile on the upper sub to accommodate flow-control locks.

### **Applications**

- Lifting gas
- Circulating inhibitors for corrosion control
- · Displacing fluids in the tubing and annulus
- · Controlling multiple-zone production through a single string

### Features, Advantages and Benefits

- The WXON and WXAN sliding sleeves allow simple, positive control of the tubing and annulus for economical zonal control.
- With a versatile design adaptable to many completion configurations, multiple sleeves can be run to isolate and produce multiple zones, providing greater control over production.
- Non-elastomeric carbon/Teflon<sup>®</sup> chevron seal stacks with Teflon encapsulated O-rings provide long service life, reducing workover cost associated with equipment failure.





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## **Specifications**

| Size (in.)                         | 2-3/8   | 2-7/8                   | 3-1/2                        |
|------------------------------------|---|-------------------------|------------------------------|
| Standard seal bores (in./mm)       | 1.812 / 1.875<br>46.0 / 47.6                            | 2.312<br>58.7           | 2.750 / 2.812<br>69.9 / 71.4 |
| Burst pressure rating (psi/MPa)    | 8,500<br>58.6   | 8,000<br>55.1           | 7,100<br><i>48.9</i>         |
| Collapse pressure rating (psi/Mpa) |   |                         |                              |
| Maximum temperature rating (°F/°C) | 325°<br>163°  |                         |                              |
| Tensile rating (lbf/KN)            | 93,000<br><i>413.7</i>                                  | 104,600<br><i>465.3</i> | 191,300<br><i>850.9</i>      |
| Maximum OD (in./mm)                | 3.078<br>78.2   | 3.683<br>93.5           | 4.500<br><i>114.3</i>        |
| Seal material                      | PEEK <sup>™</sup> , Teflon, and Nitrile (thread O-ring) |                         |                              |

# **Options**

• The WXON and WXAN sliding sleeves can accommodate premium threads and alternative profiles for flow-control nipples of all sizes.

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For Internal Use Link to Endeca assembly part numbers: <u>WXON and WXAN Sliding Sleeves</u>

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