

Hydril Pressure Control GXP™ 18-10

Annular Blowout Preventer

Expect more closures, stripping and uptime

Product description

The GX Plus (GXP) design represents the continually improved, best in class Annular Blow Out Preventer built on 70+ years of experience creating drilling equipment the industry counts on for safe well installations. Rig operators have called the Hydril Pressure Control Annular “the best annular in the business” for one reason: exceptional uptime. Its single packing unit has provided continuous service for as long as a year, and it has continued to hold pressure after exposure to extreme temperatures and extensive stripping. The GXP can strip and seal on all pipe sizes and achieve complete shutoff. In the field and in laboratory tests, GXP packing units have:

- Passed third party (ABS) witnessed, 10,000 psi API extreme temperature pressure test at 270°F (132°C)
- Stripped 30,600 ft of 5” drill pipe with API 5DP 19.50S IEU NC 50 (6 3/8”) tool joints before failure
- Held pressure in the field after 328 closing cycles plus stripping



Key features

The GXP enhancements increase seal life and reduce piston scoring which extends the interval between required maintenance and overhauls. The GXP utilizes the same annular body and packing units as the GX. The primary differences are the incorporation of the opening chamber head into the annular head to permit the addition of a wellbore piston wiper and piston centralizing wear band.

- Uses same body and packing unit as GX annular
- Available GX pistons can be converted to GXP design
- Footprint is identical to GX
- Open/Close volume is identical to GX
- Includes a wellbore piston wiper to reduce debris that can damage piston and seals
- Includes centralizing bands for both head and piston to reduce scouring caused by off-center side loading
- Only two moving parts, the piston and packing unit, for less wear
- A latched head for fast, easy access to the packing unit, wear plate and seals
- Utilizes a field-replaceable packing unit wear plate to extend head life by eliminating metal-to-metal contact
- A pressure balanced piston that ensures consistent sealing characteristics in surface and subsea applications
- Performs CSO and closes/seals on any pipe size up to 18.5”
- GXP head incorporates an excluder/wiper seal, bi-directional T-seal, and centralizer wear band
- Available with standard or optional premium Alloy 625 inlays
- Qualified per API 16A, 4th Edition PR2
- Upgrade from GX to GXP on the rig

Benefits

The packing unit for the GXP annular BOP can hold full-rated working pressure after more closing cycles and stripping than any other unit available. The GXP produces extra uptime from a significantly larger reservoir of engineered elastomer, and a BOP design that precisely controls the position of unique, flanged steel inserts.

When the GXP closes, the packing unit rubber drives the inserts inward, where they quickly reach a fixed position and form a steel ring that prevents the elastomer from extruding upward under wellbore pressure. After the ring is formed, feedable elastomer continues to flow inward around the inserts to create a seal on the drill string or open hole. Because the elastomer is primarily in compression, it resists tears, cuts and abrasions.

When stripping, the steel inserts again remain fixed. As various diameters of pipe and tool joints pass through the closed unit, the elastomer flows in and out. Even at higher wellbore pressures, the GXP packing unit maintains precise control of seal-off tightness to permit a slight passage of drilling fluid that provides lubrication, enhances pull-through forces and further prolongs packer life.

No matter what type of severe service awaits your BOPs, expect more from the genuine Hydril Pressure Control GXP Annular.

Technical specifications

Specification		Measurement	
Bore (inches)		18.75	
Working pressure (psi)		10,000	
Hydraulic operating pressure (psi)		1,500/3,000	
Gal. to close (U.S. gal.)		58	
Gal. to open (U.S. gal.)		58	
Clearance diameter (inches)		84.00	
Stud to flange height (inches)	Flanged bottom	10 m	80.16
		15 m	84.89
Stud to flange weight (pounds)	Flanged bottom	10 m	-
		15 m	58,310
Temperature ratings (°F)	Extreme low temp	20	
	Continuous hot temp	150	
	Extreme hot temp	270	
API 16A Compliance status		4th Ed., PR2	

Data is subject to confirmation by the manufacturer.

