



 **Bray** CONTROLS

---

**BRAY / McCANNALOK**  
Cryogenic & Low Temperature  
High Performance Butterfly Valves

**Polar Seat™**





# BRAY / McCANNALOK

## Cryogenic & Low Temperature High Performance Butterfly Valves



### FEATURES

- ◆ Wafer, Lug and Double Flanged bodies
- ◆ ASME Class 150 3" - 12" (80 - 300mm) Unique composite seat design
- ◆ High-strength, one-piece stem
- ◆ Anti-blowout design
- ◆ Easily accessible and adjustable stem packing
- ◆ Disc engineered to maximize flow

Cryogenic Bray/McCannalok (White Polar Seat)



Bray's unique field replaceable Polar Seat, engineered for the Bray/McCannalok, meets industry requirements and standards for cryogenic and low temperature High Performance Butterfly Valves. Cryogenic service valves utilize the white Polar Seat and an extended bonnet which positions the packing system and the actuator away from the extremely low temperatures. Valves for low temperature service utilize the Blue Polar Seat and do not require an extended bonnet.

■ **White Seat** with extended bonnet  
-320°F to 250°F (-196°C to 121°C)

■ **Blue Seat** without extended bonnet  
-60°F to 250°F (-51°C to 121°C)

### Specification Compliance:

Certified to British Standard-6364, the Bray/McCannalok raises the bar and exceeds the performance of competitive valves by holding pressure at cryogenic, low and ambient temperatures.

■ ANSI B16.34

■ API 598

■ BS 6364

■ ANSI B16.25

■ API 609

■ CE/PED

### Double Offset Stem & Disc Design:

For over 40 years the reliability of the Bray/McCannalok has been conclusively proven, both in lab tests and thousands of field applications. The Bray/McCannalok's unique, patented design received Chemical Processing's Vaaler Award for Best Product shortly after it was introduced. When open, the disc does not contact the seat, therefore seat service life is extended and operating torques are reduced.



Bray raises the bar with in-house cryogenic testing capabilities combined with clean room facilities and parametric analysis tools to ensure consistent quality and design excellence.



### Industries and Applications:

- Aerospace
- Air Separation
- Food Processing
- Gas-To-Liquids
- Liquid Hydrogen
- Liquid Nitrogen
- Liquid Helium
- LNG Liquefaction
- LNG Receiving Terminals
- LPG Handling
- Oxygen
- Petrochemical

## CRYOGENIC MATERIALS OF CONSTRUCTION

(White Polar Seat & Extended Bonnet)

Body: Stainless Steel, ASTM A351 GR CF8M or ASTM A240 GR 316

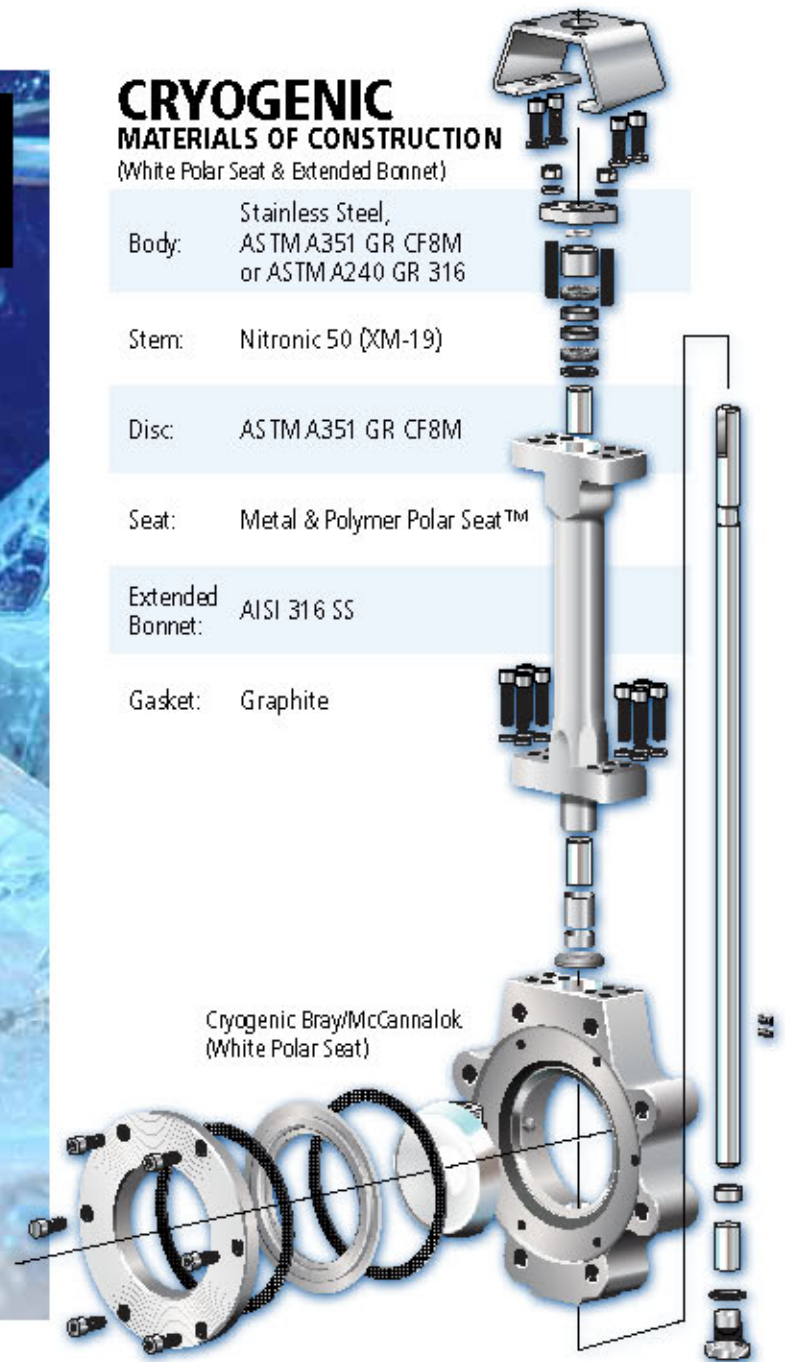
Stem: Nitronic 50 (XM-19)

Disc: ASTM A351 GR CF8M

Seat: Metal & Polymer Polar Seat™

Extended Bonnet: AISI 316 SS

Gasket: Graphite



Cryogenic Bray/McCannalok (White Polar Seat)



Double Flanged Low Temperature Bray/McCannalok (Blue Polar Seat)

Stem: 17-4 PH SS, ASTM A564-Type 630

Seat: Metal & Polymer Polar Seat™



Wafer Low Temperature Bray/McCannalok (Blue Polar Seat)