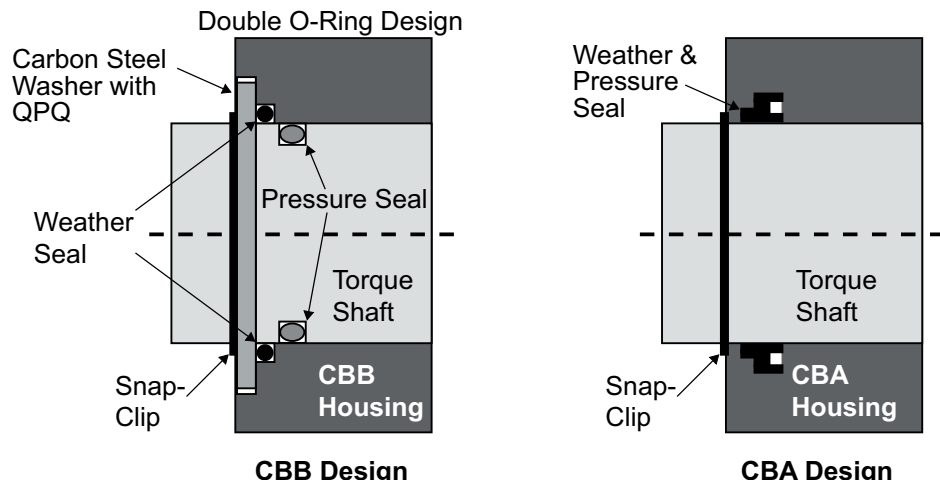


# CBB Key Features

CBA utilizes a Lip seal design utilizing a wider contact surface that doubles as a weather seal and pressure seal. There is one lip seal on each end of the torque shaft.

CBB utilizes a dual o-ring design. There is an o-ring weather seal and o-ring pressure seal on each end of the torque shaft. There is also a QPQ coated carbon steel washer protecting the weather seal at each end of the torque shaft. This design improves pressure seal protection from the elements and separates the pressure seal from the weather seal.



KEY FEATURE	CBB	CBA
<b>Housing</b>	The housing material and casting are identical between the CBA and CBB.	
	The CBB housing can not be retrofit with a CBA torque shaft. The CBB housing is machined differently in the Torque Shaft opening.	The CBA housing can not be retrofit with a CBB torque shaft.
<b>Torque Shaft</b>	The CBB Torque Shaft is machined for the pressure seal.	The CBA Torque Shaft does not have a machined groove. It is smooth on the pressure/ weather sealing surface.
<b>Piston</b>	The CBB utilizes the ductile iron piston as standard. There is not an option for an aluminum piston. By offering only one style piston, ordering, filed upgrades, and service is simplified as there is no requirement to constantly verify the piston material for differing service applications.	The CBA options two piston materials. The standard piston material is aluminum with an optional ductile iron piston. The high temperature trim includes a ductile iron piston by default when a high temperature trim actuator is ordered from the factory. The ductile iron piston may be ordered for any configuration of the actuator. To retrofit a standard actuator to high temperature trim, the piston must be upgraded to ductile iron.

# Data Sheet

Sheet No.: CB 01.02 Addendum

Date: December 2009

# CBB-Series

KEY FEATURE	CBB	CBA
<b>Temperature trims</b>	The CBB is available in three main temperature trims. These are: Standard Temperature (-00) - -20°F to +200°F (-29°C to +93°C). Low Temperature (-11) - -40°F to +180°F (-40°C to +82°C) non-PED. High Temperature (-10) - 0°F to +350°F (-18°C to +177°C). All three trims include are standard with the ductile iron piston.	The CBA is available in three main temperature trims. These are: Standard Temperature (-00) - -20°F to +200°F (-29°C to +93°C). Low Temperature (-11) - -40°F to +180°F (-40°C to +82°C) non-PED. High Temperature (-10) - 0°F to +350°F (-18°C to +177°C). The High Temperature trim includes the optional ductile iron piston.
<b>Travel Stop Seal</b>	Housing seal for Spring Return models, Housing and Cylinder seals for Double Acting models for both CBA and CBB.	
	CBB utilizes a thread seal design to ease Travel Stop setup and increase seal life.	CBA utilizes an o-ring design on the pressurized Travel Stop.
<b>Jackscrew Seal</b>	CBB utilizes a thread seal design to ease jackscrew operation and increase seal life during operation.	CBA utilizes an o-ring design.
<b>Torque Output</b>	An identically sized CBA and CBB actuator will have the same torque outputs.	
<b>Operating Pressure</b>	Operating pressures for CBA and CBB are from 40 to 150 PSIG (3 to 10 BAR) An identically sized CBA and CBB actuator, will maintain the operating pressure ratings, MAWP, and MSP.	
<b>Dimensions</b>	The CBA and CBB have the same dimensions.	
<b>Service Kits</b>	CBB service kits will be available on re-release of the CBB.	CBA service kits are still available.
	The service kits are not interchangeable between the CBA and CBB.	
<b>Standard Accessory Mounting Pad</b>	The CBA and CBB have the same location, size, and bolt holes for the accessory mounting pad.	
<b>Dual Valve Mounting Interface</b>	The CBA and CBB utilize the same design dual valve mounting interface to permit flexibility for changing the actuator fail mode, without disassembly, by simply inverting the actuator. The actuators may be installed in any position; parallel or at right angles to the flow line, in the vertical or the horizontal plane.	
<b>Water Ingress Protection</b>	The CBA and CBB are rated for to IP 66 and IP67M.	
<b>Agency Approvals</b>	The CBA and CBB have the same agency approvals. Lloyds Atex ABS PED 97/23/EC Compliant	
<b>Warranty</b>	CBA and CBB have 5 year material and workmanship.	
<b>Ordering/Model Designation</b>	The difference in ordering a CBA vs a CBB is a change in the third character from an "A" to a "B". All other model nomenclature is the same.	

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