



# ACGT™/ACGTL™ Rings

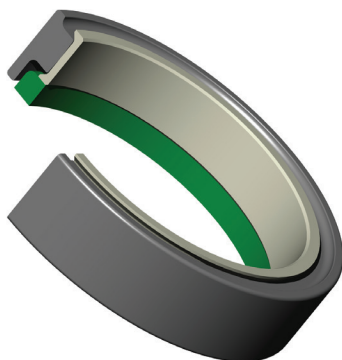
Effective Sealing in Extreme Pressures and Temperatures



ACGT Piston



ACGT Rod



ACGTL Rod

## Capped GT and GTL Seals

With Greene Tweed's ACGT™/ACGTL™ rings seal extrusion gaps and high pressures are not a problem. Both are designed for effective, long-sealing life in high and low-pressure environments. Additionally, both are engineered to handle a broad range of temperature extremes and fluid media, as well as larger than normal clearance gaps. Systems experiencing 8,000 psi (550 bar) are not uncommon for ACGT or ACGTL seals.

The key to the seals' outstanding performance is the separation of the sealing and anti-extrusion functions. This allows the optimum selection of materials with specific characteristics, such as a high modulus elastomer for static side/seal energizer, high shear strength material for anti-extrusion rings and long-wearing, low-friction material for caps.

The ACGT is a double-acting, bidirectional seal especially suited to long-stroke, high-speed applications such as heavy-duty utility and flight control actuators and landing gear systems.

The ACGTL is a single-acting, unidirectional seal for applications such as long-life/high-pressure utility and flight control actuators and landing gear systems.

## Features and Benefits

- Cap elements using Avalon® materials provide low friction and extend service life over elastomer contact seals such as AGT® and O-rings
- Hydromechanically activated anti-extrusion rings provide effective sealing in both high- and low- pressure environments resulting in longer seal life
- Designed for retrofitting into existing MIL-G-5514/AS4716 and AS4832 glands for ease of maintenance

## Applications

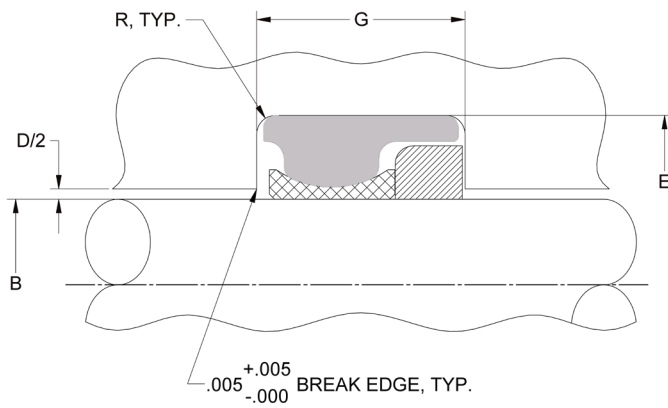
- Landing gear shock struts
- Heavy duty utility actuators
- Long stroke actuators (e.g., door actuators, retract actuators)
- Extremely long-life, high-pressure systems
- Flight control actuators



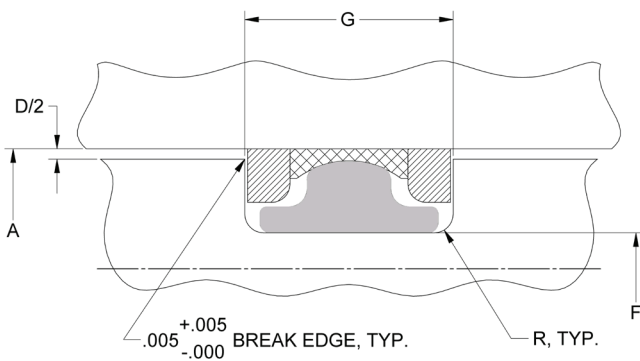
## ACGT™/ACGTL™ Configurations

### Gland Dimensions

#### ACGTL Rod











#### ACGT Piston



## Part Numbering System

The part numbering system requires the use of the material designator tables found on the next page. For nonstandard designs contact GT engineering.

2	6	X	X	X	X	X	X	X	X	X	X
ACGT/ACGTL series		Dash size per MIL-G-5514/AS4716/AS4832				Elastomer compound designator			Cap/back-up ring material designator		
		<b>XX</b>		<b>Standard*</b>		<b>Rod</b>		<b>Piston</b>		0 = Standard 1-9 = Nonstandard	
		00		Standard							
		01-69		Nonstandard							
		70		Standard							
		71-99		Nonstandard							

Gland width

Rod	Piston	Gland Width
3	4	One back-up gland width
5	6	Two back-up gland width

#### Part Numbering Examples—Rod-Type ACGTL

2	6	3	4	2	5	0	0	7	7	2	6	0	1	0	
		4.497 in. Rod diameter maximum				Standard "L" type		FKM, Fluorocarbon compound			Avalon® 89 Cap with NWR backup			Standard	
		Rod one back-up gland width													

#### Part Numbering Examples—Piston-Type ACGT

2	6	6	2	1	0	0	0	1	6	0	6	0	6	0	0
		0.991 in. Bore diameter minimum				Standard "T" type		NBR, Nitrile compound			Avalon® 89 Cap with Arlon® 1330 backup			Standard	
		Piston two back-up gland width													

Contact your local Greene Tweed representative for specific recommendations to suit higher performance requirements.



## Material Designator Tables

Code	Elastomer Compound
160	NBR, Nitrile
161	NBR, Nitrile
409	FVMQ, Fluorosilicone
731	FKM, Fluorocarbon
772	FKM, Fluorocarbon
952	EPM, Ethylene Propylene
954	EPDM, Ethylene Propylene
964	NBR, Nitrile

Code	Cap/Back-Up Material
116	Avalon® 09 Cap/Arlon® 1330 Backup
120	Avalon® 09 Cap/NWR Backup
601	Avalon® 89 Cap/NWR Backup
605	Avalon® 50 Cap/Arlon® 1330 Backup
606	Avalon® 89 Cap/Arlon® 1330 Backup
608	Avalon® 89 Cap/Avalon® 69 Backup

*Note: All back-up rings are scarf cut. For solid back-up rings contact GT engineering.*

*See GT Surface Finish guidelines.*



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