



# AGT<sup>®</sup> S+ RINGS

## HIGH-SQUEEZE AGT RINGS FOR STATIC APPLICATIONS UTILIZING AS5857 GLANDS

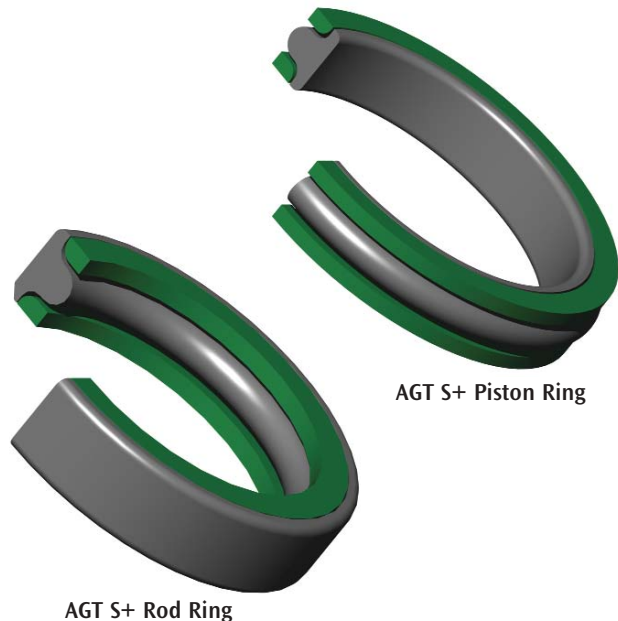
Greene, Tweed's AGT<sup>®</sup> S+ rings have been specifically designed in response to the current SAE AS5857 standard. The AS5857 specification details gland designs that work efficiently and effectively in both high- and low-pressure static applications that require high-squeeze sealing.

A high-squeeze seal can be utilized to overcome demanding application requirements such as:

- The need for efficient low-pressure sealing
- Frequent cold temperature excursions
- Low seal swell conditions
- Excessive hardware laydown or eccentricities

The AGT S+ is based on the classic AGT geometry that has been successfully used in a variety of Aerospace applications, and with this high-squeeze option, performance and reliability are now assured.

The separation of the sealing and anti-extrusion components allows Greene, Tweed to finely tune the large range material properties available from our formulated elastomer, Avalon<sup>®</sup> (PTFE) and Arlon<sup>®</sup> (PEEK) ranges to ensure optimum sealing and extrusion resistance in the most challenging and harsh environments.



## FEATURES & BENEFITS

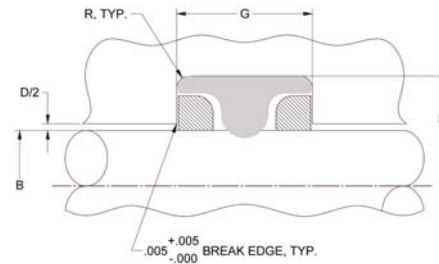
- Increased squeeze levels as compared to AS4716 in order to provide more effective static sealing in low-temperature (and low swell) conditions
- Superior stability, extrusion resistance and service life over standard O-ring seals for extended service life
- Suitable for a wide range of temperature environments, including cold temperature excursions
- Equally effective as both a bidirectional or unidirectional seal, offering user more versatility
- Extrusion resistance even in “O” back-up ring width grooves, allowing for use in smaller gland widths
- Suitable for system pressures up to 8,000 psi (552 bar), allowing for use in newer application designs
- Designed specifically for AS5857 glands

As with the AGT® ring, service life and stability are far greater with this seal arrangement than with O-ring alternatives. This specific seal geometry allows the flange section of the elastomer to continuously support and energize the back-up ring components ensuring constant extrusion resistance and providing a very responsive sealing format.

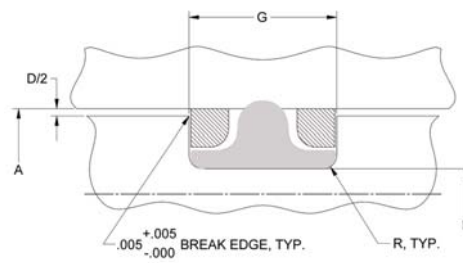
## AGT S+ RING CONFIGURATIONS

### Gland Dimensions

#### Rod



#### Piston

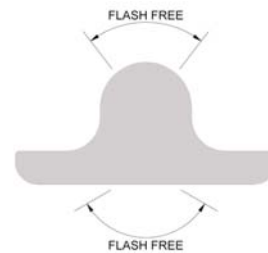


## AGT S+ RING OPTIONS

### “Flash Free” Option

Typical O-ring and generic “T” rings are molded with a parting line around the critical ID and OD sealing surfaces. This inherent interruption on the contact surface can lead to bypass seepage when sealing low molecular weight gases and liquids in low-pressure accumulators/reservoir applications. Greene, Tweed offers an “E” type Flash free AGT® ring for users requiring the highest level of sealing efficiency.

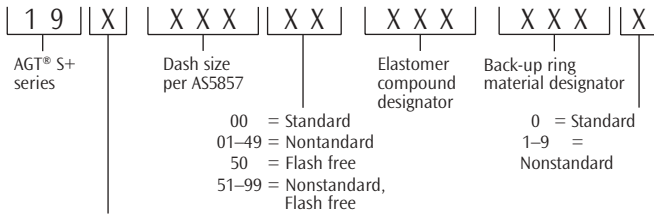
#### Flash Free AGT S+ Ring



\*Note: The ID of the flash free option cannot be less than 0.422 in.

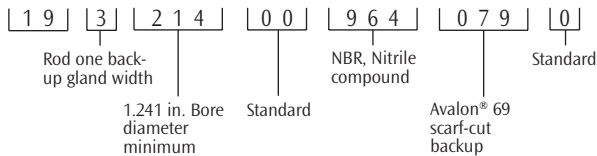
## AGT® S+ PART NUMBERING SYSTEM

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

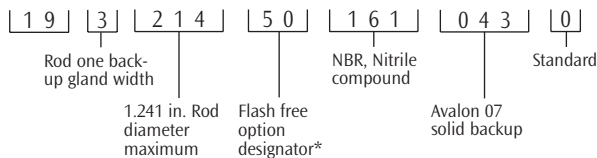


ROD	PISTON	GLAND WIDTH
1	2	Zero back-up gland width
3	4	One back-up gland width
5	6	Two back-up gland width

### General Part Numbering Example



### Flash Free Part Numbering Example



\*Note: The ID of the flash free option cannot be less than 0.422 in.

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
410	FVMQ, Fluorosilicone
731	FKM, Fluorocarbon
772	FKM, Fluorocarbon
952	EPM, Ethylene Propylene
954	EPDM, Ethylene Propylene
964	NBR, Nitrile
965	HNBR, Hydrogenated Nitrile
987	NBR, Nitrile

BACK-UP MATERIAL		
SPLIT CODE (SCARF-CUT)	SOLID CODE	MATERIAL
001	301	Avalon 01
042	043	Avalon 07
016	019	Avalon 09
044	344	Avalon 44
057	357	Avalon 57
079	379	Avalon 69
089	389	Avalon 89
006	018	NWR
045	046	Arlon® 1000
038	039	Arlon 1330
035	036	Arlon 1555
STAGED CODE		MATERIAL
070		Avalon 09/Arlon 1330
504		Avalon 01/NWR
SPLIT-LOCK CODE		MATERIAL
551		Avalon 56/Arlon 1305

See GT Surface Finish guidelines.



### Contact Us

Greene, Tweed & Co.  
Aerospace  
Kulpsville, PA, USA

Tel: +1.215.256.9521  
Tel: +1.800.220.4733  
Fax: +1.215.513.9411

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