

# VICTREX™ PEEK Seal Ring Solutions



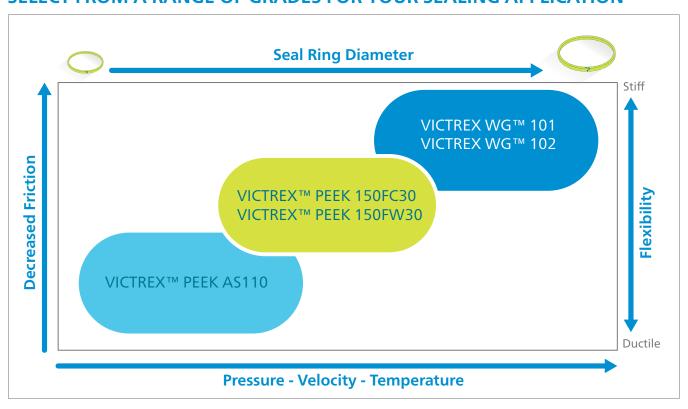
Reliable operation and improved efficiency in powertrain applications

Following the trends in the automotive industry, the key engineering requirements for sealing applications have become increasingly demanding. Selecting the right material is a key criteria to cost-effectively ensure reliable operation in high-load, high-temperature spaces, improve efficiency and enable smooth assembly.

Victrex's range of innovative VICTREX™ PEEK grades for use in transmission seal rings can meet these requirements and help enhance powertrain efficiency with minimal frictional losses and reliable operation, even under tough conditions:

- Excellent wear and frictional performance, even in low lubrication situations
- Stable operation in transmission temperature range -40°C to 150°C
- Dimensional stability under typical PV values of CVTs, wet DCTs and high-torque ATs
- ► Thermal expansion matching with cast aluminum housing
- Ability to operate on low-hardened transmission materials
- Chemically resistant against various ATFs with EP additives

## SELECT FROM A RANGE OF GRADES FOR YOUR SEALING APPLICATION





# HIGHLY EFFICIENT TRANSMISSION SEAL RING MATERIALS

Depending on your individual application requirements, Victrex offers a selection of grades for use in seal rings.

MATERIAL PROPERTIES (Check out the links to our <u>technical datasheets</u> and <u>MSDS</u> )				
	ISO 527 23°C	ISO 527 Break 23°C	ISO 604 Break 23°C	ISO 11359 along flow < Tg
	Tensile Modulus GPa	Elongation %	Compressive Strength MPa	CLTE ppm/K
VICTREX™ PEEK AS110	4.7	10	130	45
VICTREX™ PEEK 150FC30	13.5	2	170	12
VICTREX™ PEEK 150FW30	16	1.8	210	9
VICTREX WG™ 101	19.5	1.8	230	9
VICTREX WG™ 102	19.5	2	250	9

# CONTROLLED LEAKAGE PERFORMANCE WITHIN TIGHT TOLERANCES

Tight dimensional tolerances are a key requirement to ensure controlled leakage in reliable and high-performing seal rings. With a proven track record in transmission sealing applications, VICTREX™ PEEK polymer has been found to offer:



High-temperature resistance and low thermal expansion



Excellent compressive strength and wear properties



Efficient injection moulding process - no need for annealing



Ease of assembly – different grades for a range of diameter requirements



As a global high-performance polymer solutions provider, Victrex serves more than 40 geographies worldwide across the automotive, aerospace, medical, electronics, industrial and energy markets.

VICTREX™ PEEK is regarded as one of the highest performing engineering thermoplastics in the world, and is used by leading companies to develop fuel-efficient automobiles and aeroplanes, advanced medical devices, next generation technology and tools for the harshest environments.

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