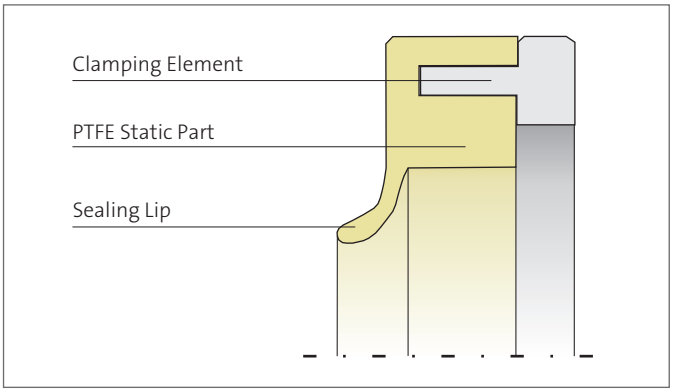
RADIAMATIC® HTS II
TYPE 9539 VL

Radiamatic® HTS II Type 9539 VL is a radial shaft seal made of PTFE with a stainless steel clamping element. Its sealing lip is positioned in front without dead space.



Applications
This rotary shaft seal is preferably used in the process industry. Its protruding sealing lip makes it particularly suitable for hygienic design requirements and the associated cleaning processes.

Material

PTFE Basic Part

Material	Approvals	Color
PTFE K212	-/-	Black
PTFE C104	-/-	Black
PTFE G116	EU 10/2011+ FDA	White
PTFE G223	EU 10/2011+ FDA + GB 4806 / 9685	White
PTFE G224	EU 10/2011+ FDA + GB 4806 / 9685	Blue
PTFE E202	EU 10/2011+ FDA	Beige
PTFE Y002	EU 10/2011+ FDA + GB 4806 / 9685 USP Class VI + 3A Sanitary Standard	Beige

Clamping Element

Material	Description	Color
Stainless Steel	1.4571	Silver

Other material combinations on request.

VALUE TO THE CUSTOMER

- Design for special requirements regarding cleaning and germ-free operation (minimum dead pockets)
- Ideal friction and wear behavior ensures a long service life
- Anti-adhesive, media only faces PTFE contact
- High media and temperature resistance
- Compliant with FDA, U 10/2011, GB 4806 / 9685, USP Class VI and 3A Sanitary Standard regulations
- Suitable for CIP and SIP and their typical cleaning agents
- Enables certification of the device in accordance with the **EHEDG guidelines**
- Allows protection class testing in accordance with **IP69k**
- Secure, self-retaining fit in the housing thanks to clamping ring technology
- Flexible adaptation to housing requirements without tooling cost

FEATURES AND TECHNICAL PROPERTIES

Operating Conditions	
Pressure*	up to 0,6 MPa
Temperature	-80 °C ... +200 °C
Sliding Speed	0 ... 18** m/s

* Type 9536 SL from the HTSII program is available for alternating pressure-vacuum operation.
** Up to 25 m/s @ pressureless operation

The maximum values shown in the table must not be applied simultaneously.

Tolerances

Area	Tolerances
Housing	ISO H8
Shaft	ISO h11
Max. Permitted Shaft Runout*	±0,05 mm

* A reduction in shaft runout is necessary as the speed increases

Surface Finish

Surfaces	Roughness / Hardness	Material Dependency
Housing	R_a ≤1,8 µm, $Rz1_{max}$ ≤10,0 µm	-/-
Shaft	R_a 0,1 ... 0,2 µm $Rz1_{max}$ ≤1,0 µm	-/-
Hardness	20 up to 25 HRC	G116, E202, Y002
	45 up to 65 HRC	K211, C104, G223, G224

Installation Diagram