

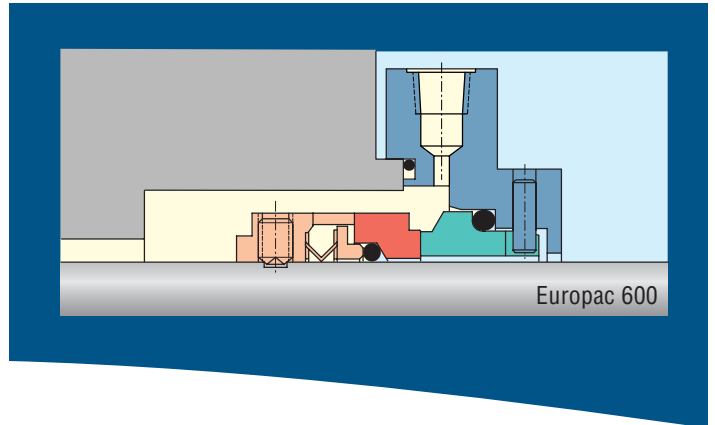


Europac Safety with economy

Standard Mechanical Seals for various industries



Experience In Motion



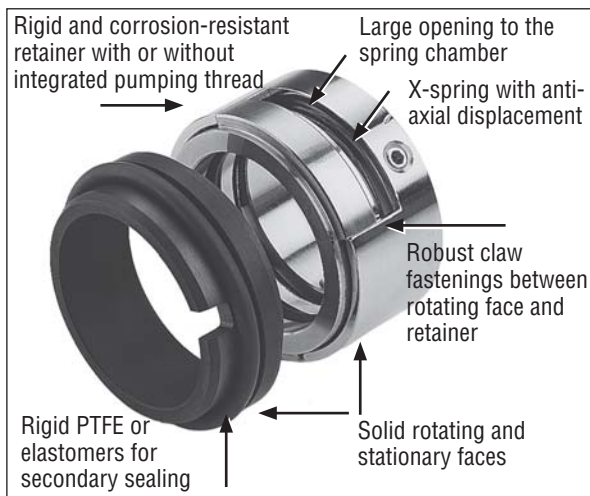
Europac - a versatile mechanical seal according DIN standards

Europac 600

Single, unbalanced single wavy spring seal designed according to the metric DIN EN 12 756 standard to L1k. This seal is applied on a wide range of duties, primarily in the chemical industry where DIN standard pumps are used.

Europac 610: balanced design needing stepped shaft.

Features

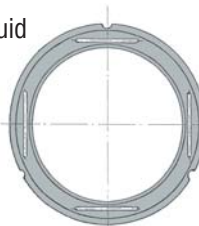


Europac 615

Single mechanical seal, bi-directional, balanced, single spring. For hot water services without additional cooling.

„Lube groove” - seal face

With conventional mechanical seal faces, the fluid film between the seal faces has a consistent pressure profile across the seal faces which, with hot water at some radial portion, gives vaporisation. This vaporisation causes the seal faces to open and leakage to pass across the open faces. The Flowserve „lube groove” seal has tangential placed grooves in one seal face. These grooves are not connected directly to either the outside diameter (pressure side) or the inside diameter (atmospheric side) of the seal face.

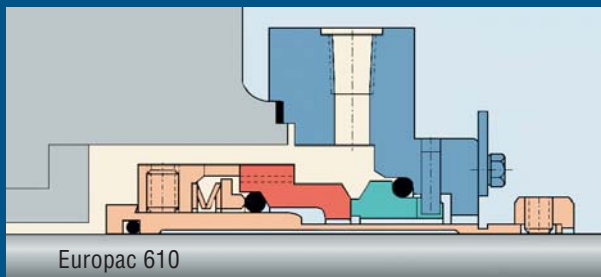


Benefits Europac 615

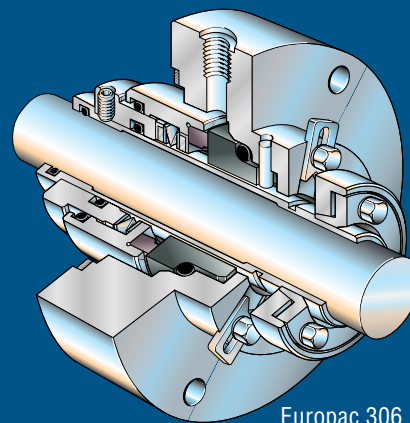
- Provides customers with lube groove technology in a DIN package
- Maximum interchangeability with the Europac range for lowest cost
- No external water cooler required for hot water services, saving cost

Standard Materials of Construction

Europac	600, 610	615	306
Rotating face:	Silicon carbide; Tungsten carbide; Chrome steel casting; Aluminium oxide	Silicon carbide	Silicon carbide; Tungsten carbide
Stationary face:	Silicon carbide; Tungsten carbide; Resin or metal impregnated carbon	Antimon impregnated carbon	Silicon carbide; Tungsten carbide; Resin or metal impregnated carbon
Gaskets:	Ethylene Propylene; Fluorocarbon; PTFE; PTFE-encapsulated; Perfluoroelastomer	Ethylene Propylene; Fluorocarbon	Ethylene Propylene; Fluorocarbon; PTFE; PTFE-encapsulated; Perfluoroelastomer
Spring:	316 TI stainless steel; 1.4310; AlloyC	G55 - 316 TI stainless steel	316 TI stainless steel; 1.4310; AlloyC
Metal parts:	316 TI stainless steel; AlloyC	G30 - 316 TI stainless steel	316 TI stainless steel; AlloyC



Europac 610



Europac 306

Europac 306

Single mechanical seal, bi-directional, balanced, single spring.

Features Europac 306

- Also suitable for mediums containing solid particles
- Springs outside of the pumped product: eliminates clogging
- No shaft step required

Features Europac 615

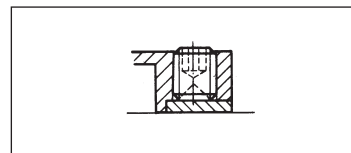
- Designed for hot water services
- No additional cooling required
- Uses lub grooves, proven technology with many field installations
- Based on the proven Europac 610 balanced DIN seal
- Dimensions correspond with DIN EN 12 756 KB (short form length K, form B)

Standard Operating Limits

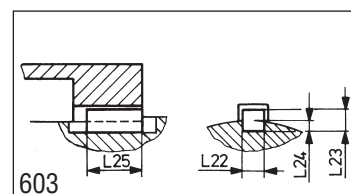
Europac	306	600	610	615
Shaft sizes (mm):	18 - 100	10 - 100	10 - 100	10-100
Surface speed (m/sec.):	up to 25	up to 25	up to 50	up to 25
Temperature (°C):	up to 180	up to 220	up to 220	up to 170
Max. pressure (bar):	up to 25	up to 10	up to 50	17,5 dyn. 25 stat. SiC/CarbonA
Min. pressure (bar):				2 above vapor pressure

Special designs

Alternative retainers



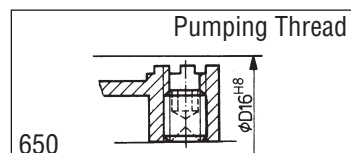
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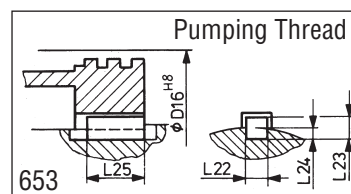
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Alternative retainers with pumping devices



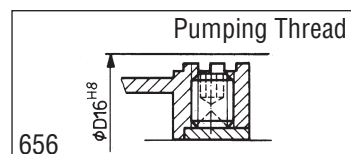
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