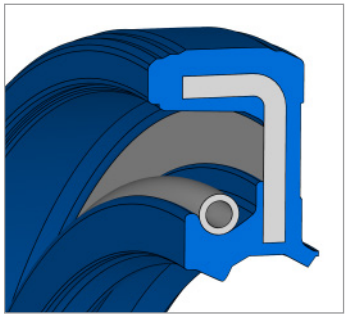
SIMMERRING® PPS (PREMIUM PRESSURE SEAL)



Simmerring® PPS

MATERIAL

Material	Fluoro rubber
Code	75 FKM 595
Colour	Brown
Hardness	75 Shore A

Components

Metal insert	Unalloyed steel DIN EN 10027-1
Spring	Spring steel DIN EN 10270-1

PRODUCT DESCRIPTION

Pressure-resistant type for use without back-up ring in pressurised units such as hydraulic pumps and motors as well as hydrodynamic couplings. With additional dust lip to protect against exterior soiling.

PRODUCT ADVANTAGES

- Used in pressurised units only
- Patented seal design for usage in medium pressure applications (p = 1 to 10 bar)
- Pulse pressure max. 25 bar
- Up to 50% less friction torque than usual pressure seal designs
- Sliding speeds up to 15 m/s possible
- pv-value up to max. 40 m*bar/s possible
- Additional dust lip as additional seal against moderate to medium dust and dirt ingress from outside
- Reliable sealing of the housing bore, even with increased roughness of the bore, thermal expansion and split housings

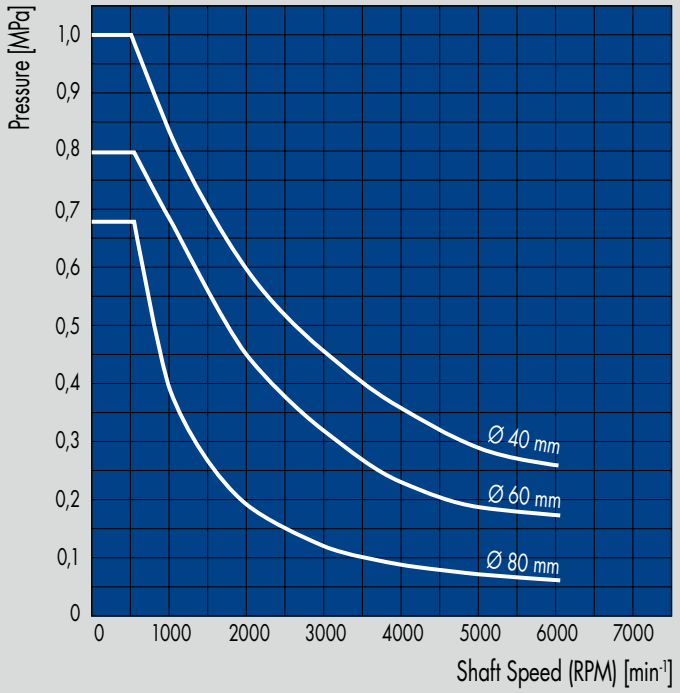
PRODUCT PROPERTIES

- Outer casing: elastomer
- Short, flexible, spring-loaded sealing lip
- Additional dust lip
- Sealing lip profile, finished sealing lip

APPLICATION

- Hydrostatic drives (pumps, engines of all kinds)

OPERATING CONDITIONS

Media	Hydraulic Oils < ISO VG 68 *
T	-30 ... +100°C, short term up to +120°C
p	

Permissible pressure in the unit for Simmerrings (type PPS)

* Case-by-case review necessary for fire resisting as well as biodegradable fluids.

Max. permissible values depend on the other operating conditions.

FITTING & INSTALLATION

Shaft

Tolerance	ISO h 11
Runout	IT 8
Roughness	R_a = 0,2 ... 0,4 µm
	R_z = 1,0 ... 3,0 µm
	R_{max} ≤ 6,3 µm
Hardness	45 ... 60 HRC
Finish	No lead; preferably plunge ground

Housing bore

Tolerance	ISO H8
Roughness metal bore surface	R_z = 10 ... 25 µm

Careful assembly according to DIN 3760 is a prerequisite for the correct function of the seal ➔ Technical Manual.