

**Product:**

**Lip Seal HPS - Automotive Water Pump Seal**

The Lip Seal HPS (*High Pressure Sleeve*) for automotive water pump applications is an optimized lip seal with high pressure support features and optimized sealing materials to reduce wear and friction under extreme conditions.

Due to a modular design the LS-HPS is available for standard automotive water pump shaft and bore dimensions.

**Operation conditions:**

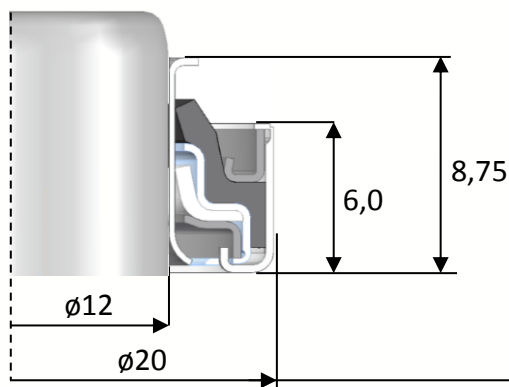
Item	Range	Unit
Medium	Coolant / water solution	[-]
Coolant Mixture	40 - 60	%
Pressure - nominal	0 till 0,5	MPa.g
Pressure – peak	-0,1 till 0,6	MPa.g
Temperature - nominal	-20 till +120	°C
Temperature - peak	-40 till +140	°C
Speed - nominal	0 - 8.000	Min <sup>-1</sup>
Speed – peak	15.000	Min <sup>-1</sup>
Elastomer materials	HNBR / PTFE	[-]

**Assembly dimensions:**

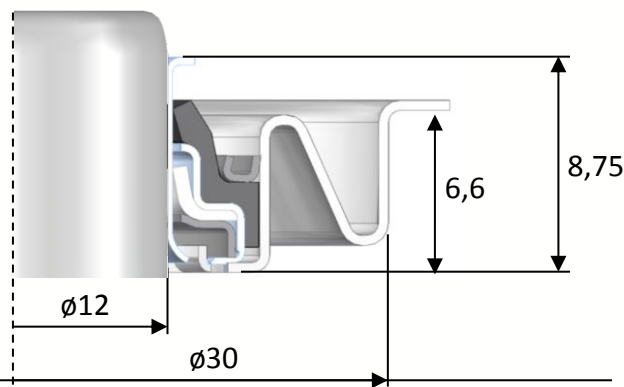
Item	Range	Unit
Shaft diameter	8/12	mm
Shaft roughness	6,3	µmRz
Shaft hardness	n.a.	[-]
Bore diameter	20 /30	mm
Bore roughness	≤1,6	µmRa
Total height	8,75	mm
Mounting depth	6/6,6	mm



**LS-HPS 1220**



**LS-HPS 1230**



*Developing small things that make a big difference.*