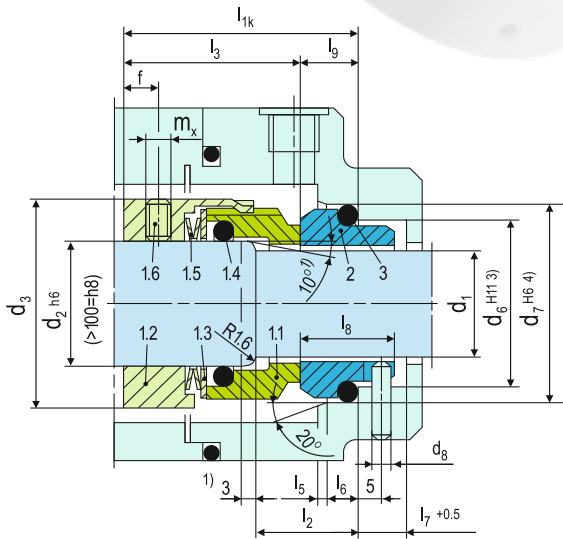


## Sealmatic Delivers B750F Mechanical Seal For Hot Water Application At United Phosphorous Ltd

Sealmatic B750F mechanical seals have been performing satisfactorily for hot water at 180 degree Celsius at United Phosphorous Ltd for their Sulzer pump.



Water is normally considered a good lubricant and can do an adequate job of providing lubrication between the lapped faces of a mechanical seal, but water at an elevated temperature of 180-degree Celsius, the lubricating film is not thick enough to separate the sliding surfaces of the seal faces. Cold water has a film thickness of about one micron which will keep lapped seal faces separated most of the time. Hot water has a film thickness of only one third to one half of that amount depending upon the temperature. At some combination of temperature and pressure the water will vaporize, expand, and open up the lapped seal faces. When this occurs: Hot water is dangerous. The leakage will be invisible as it flashes to steam.

In order to seal hot water effectively, Sealmatic has designed its B750F series of mechanical seals which are versatile and can withstand high temperatures.

### Performance Capabilities

Sizes:  $d_1$  = Upto 100 mm (Upto 4.000")  
 (Single spring:  $d_1$  = max. Upto 100 mm  
 (Upto 4.000"))

Pressure:

$p_1$  = 80 bar (1160 PSI) for  $d_1$  = 14 ... 100 mm,  
 $p_1$  = 25 bar (363 PSI) for  $d_1$  = 100 ... 200 mm,  
 $p_1$  = 16 bar (232 PSI) for  $d_1$  > 200 mm

Temperature:  $t$  = -50 °C...+220 °C  
 (-58 °F...+428 °F)

Speed = 20 m/s (66 ft/s)

Permissible axial movement:

$d_1$  up to 22 mm: ± 1.0 mm  
 $d_1$  24 up to 58 mm: ± 1.5 mm  
 $d_1$  from 60 mm: ± 2.0 mm

API SPEC Q1 . API . ISO 9001:2015 . EU 1935:2004 . ATEX - 2014/34/EU . ISO 9001:2015 . ISO 14001:2015 . BS-OHSAS 18001:2007 . PED-CE

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