

LMS20B / LMS20BT



COMPONENTS:

- 1 Rotating contact surface
- 2 Stationary contact surface
- 3 O-rings
- 3T PTFE wedge
- 3a O-rings
- 3Ta PTFE gasket
- 4 Springs
- 5 Metal frame
- 5a Set screws
- 5b Ring

SECTORS:



CHARACTERISTICS:

- **Balanced.**
- System attached to the shaft by allen screws.
- **Not dependent on the rotation direction.**

OPERATING LIMITS:

$d_1 = 14 \div 100 \text{ mm}$ $p = 60 \text{ kg/cm}^2$

$v = 25 \text{ m/s}$

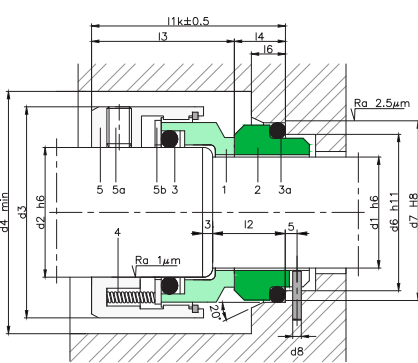
$t = -15 \div +200^\circ\text{C}$ (*)

(*) The temperature resistance depends on the material of the secondary seals used.

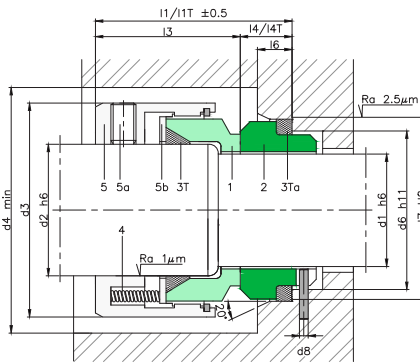
The operating limits are defined by the PV factor which is determined for the sealing system characteristics and those of the application.

DESCRIPTION:

The balanced contact surface design allows the mechanical seal to be used in applications with high pressures without suffering premature wear. The set of springs placed around the contact surface of the rotating part generates a more uniform load than in models with a single spring. It can be supplied with PTFE wedge for highly aggressive chemicals with high temperatures. Seal compliant with standard EN 12756 (KB).



TYPE LMS20B



TYPE LMS20BT

DIMENSIONS CHART

Dimensions in mm

| Shaft | Rotary part | | | | Stationary part | | | | | | | Total length |
|-------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|---------------------------------|----------------|----------------|--------------|
| | d ₂ | d ₃ | d ₄ | l ₃ | d ₆ | d ₇ | d ₈ | l ₂ | l ₄ /l _{4T} | l ₆ | l ₇ | |
| 14 | 18 | 32 | 34 | 30,5 | 21 | 25 | 3 | 18 | 12 | 5,5 | 8,5 | 42,5 |
| 16 | 20 | 34 | 36 | 30,5 | 23 | 27 | 3 | 18 | 12 | 5,5 | 8,5 | 42,5 |
| 18 | 22 | 36 | 38 | 31,5 | 27 | 33 | 3 | 20 | 13,5 | 7 | 9 | 45 |
| 20 | 24 | 38 | 40 | 31,5 | 29 | 35 | 3 | 20 | 13,5 | 7 | 9 | 45 |
| 22 | 26 | 40 | 42 | 31,5 | 31 | 37 | 3 | 20 | 13,5 | 7 | 9 | 45 |
| 24 | 28 | 42 | 44 | 34,2 | 33 | 39 | 3 | 20 | 13,3 | 7 | 9 | 47,5 |
| 25 | 30 | 44 | 46 | 34,5 | 34 | 40 | 3 | 20 | 13 | 7 | 9 | 47,5 |
| 28 | 33 | 47 | 49 | 37,5 | 37 | 43 | 3 | 20 | 12,5 | 7 | 9 | 50 |
| 30 | 35 | 49 | 51 | 38 | 39 | 45 | 3 | 20 | 12 | 7 | 9 | 50 |
| 32 | 38 | 54 | 58 | 38 | 42 | 48 | 3 | 20 | 12 | 7 | 9 | 50 |
| 33 | 38 | 54 | 58 | 38 | 42 | 48 | 3 | 23 | 12 | 7 | 9 | 50 |
| 35 | 40 | 56 | 60 | 38 | 44 | 50 | 3 | 23 | 12 | 7 | 9 | 50 |
| 38 | 43 | 59 | 63 | 39,5 | 49 | 56 | 4 | 23 | 13 | 8 | 9 | 52,5 |
| 40 | 45 | 61 | 65 | 39,5 | 51 | 58 | 4 | 23 | 13 | 8 | 9 | 52,5 |
| 43 | 48 | 64 | 68 | 39,5 | 54 | 61 | 4 | 23 | 13 | 8 | 9 | 52,5 |
| 45 | 50 | 66 | 70 | 39,5 | 56 | 63 | 4 | 23 | 13 | 8 | 9 | 52,5 |
| 48 | 53 | 69 | 73 | 39,5 | 59 | 66 | 4 | 23 | 13 | 8 | 9 | 52,5 |
| 50 | 55 | 71 | 75 | 44 | 62 | 70 | 4 | 25 | 13,5 | 8,5 | 9 | 57,5 |
| 53 | 58 | 78 | 83 | 44 | 65 | 73 | 4 | 25 | 13,5 | 8,5 | 9 | 57,5 |
| 55 | 60 | 80 | 85 | 44 | 67 | 75 | 4 | 25 | 13,5 | 8,5 | 9 | 57,5 |
| 58 | 63 | 83 | 88 | 49 | 70 | 78 | 4 | 25 | 13,5 | 8,5 | 9 | 62,5 |
| 60 | 65 | 85 | 90 | 49 | 72 | 80 | 4 | 25 | 13,5 | 8,5 | 9 | 62,5 |
| 65 | 70 | 90 | 95 | 49 | 77 | 85 | 4 | 25 | 13,5 | 8,5 | 9 | 62,5 |
| 70 | 75 | 95 | 104 | 55,5 | 83 | 92 | 4 | 28 | 14,5 | 9,5 | 9 | 70 |
| 75 | 80 | 104 | 109 | 55,5 | 88 | 97 | 4 | 28 | 14,5 | 9,5 | 9 | 70 |
| 80 | 85 | 109 | 114 | 55 | 95 | 105 | 4 | 28 | 15 | 10 | 9 | 70 |
| 85 | 90 | 114 | 119 | 60 | 100 | 110 | 4 | 28 | 15 | 10 | 9 | 75 |
| 90 | 95 | 119 | 124 | 60 | 105 | 115 | 4 | 28 | 15 | 10 | 9 | 75 |
| 95 | 100 | 124 | 129 | 60 | 110 | 120 | 4 | 28 | 15 | 10 | 9 | 75 |
| 100 | 105 | 129 | 134 | 60 | 115 | 125 | 4 | 28 | 15 | 10 | 9 | 75 |

Dimensions subject to changes or modifications.

Dimensions in inches

| Shaft | Rotary part | | | | Stationary part | | | | | | | Total length |
|-------|-------------|-------|--------------------|-------------------|-----------------|----------------|----------------|----------------|----------------|----------------|-----------------|--------------|
| | (") | mm | d ₂ (") | d ₂ mm | d ₃ | d ₄ | l ₃ | d ₆ | d ₇ | l ₄ | l _{4T} | |
| 0,875 | 22,23 | 1,000 | 25,40 | 39,67 | 41,67 | 33,32 | 36,3 | 41,3 | 6,6 | 11,1 | 39,92 | 44,42 |
| 1,000 | 25,40 | 1,125 | 28,58 | 42,85 | 44,85 | 34,93 | 39,5 | 44,5 | 6,6 | 11,1 | 41,53 | 46,03 |
| 1,125 | 28,58 | 1,250 | 31,75 | 47,63 | 35,75 | 34,93 | 42,6 | 47,6 | 6,6 | 11,1 | 41,53 | 46,03 |
| 1,125 | 28,58 | 1,375 | 34,93 | 50,8 | 38,93 | 36,5 | 45,8 | 50,8 | 6,6 | 11,1 | 43,1 | 47,6 |
| 1,250 | 31,75 | 1,500 | 38,10 | 53,98 | 42,10 | 36,5 | 47,6 | 54 | 7,5 | 11,1 | 44 | 47,6 |
| 1,375 | 34,93 | 1,625 | 41,28 | 60,33 | 45,28 | 44,45 | 53,9 | 60,3 | 8,2 | 12,7 | 52,65 | 57,15 |
| 1,500 | 38,10 | 1,750 | 44,45 | 63,5 | 48,45 | 44,45 | 57,1 | 63,5 | 8,2 | 12,7 | 52,65 | 57,15 |
| 1,625 | 41,28 | 1,875 | 47,63 | 66,68 | 51,63 | 44,45 | 60,3 | 66,7 | 8,2 | 12,7 | 52,65 | 57,15 |
| 1,750 | 44,45 | 2,000 | 50,80 | 69,85 | 54,80 | 44,45 | 63,5 | 69,9 | 8,2 | 12,7 | 52,65 | 57,15 |
| 1,875 | 47,63 | 2,125 | 53,98 | 76,2 | 58,98 | 52,37 | 69,8 | 76,2 | 9,5 | 14,3 | 61,87 | 66,67 |
| 2,000 | 50,80 | 2,250 | 57,15 | 79,38 | 62,15 | 52,37 | 73 | 79,4 | 9,5 | 14,3 | 61,87 | 66,67 |
| 1,125 | 28,58 | 2,375 | 60,33 | 82,55 | 65,33 | 52,37 | 76,2 | 82,6 | 9,5 | 14,3 | 61,87 | 66,67 |
| 2,250 | 57,15 | 2,500 | 63,50 | 85,73 | 68,50 | 52,37 | 79,3 | 85,7 | 9,5 | 14,3 | 61,87 | 66,67 |
| 2,375 | 60,33 | 2,625 | 66,68 | 88,9 | 71,68 | 52,37 | 79,3 | 85,7 | 9,5 | 15,9 | 61,87 | 68,27 |
| 2,500 | 63,50 | 2,750 | 69,85 | 92,08 | 74,85 | 52,37 | 82,5 | 88,9 | 9,5 | 15,9 | 61,87 | 68,27 |
| 2,625 | 66,68 | 2,875 | 73,03 | 95,25 | 78,03 | 52,37 | 85,3 | 95,3 | 11,3 | 15,9 | 63,67 | 68,27 |
| 2,750 | 69,85 | 3,000 | 76,20 | 96,82 | 81,20 | 52,37 | 88,4 | 98,4 | 11,3 | 15,9 | 63,67 | 68,27 |
| 2,875 | 73,03 | 3,125 | 79,38 | 100 | 84,38 | 52,37 | 91,6 | 101,6 | 14,3 | 19,8 | 66,67 | 72,17 |
| 3,000 | 76,20 | 3,250 | 82,55 | 104,78 | 87,55 | 52,37 | 94,8 | 104,8 | 14,3 | 19,8 | 66,67 | 72,17 |
| 3,125 | 79,38 | 3,375 | 85,73 | 107,95 | 90,73 | 52,37 | 98 | 108 | 14,3 | 19,8 | 66,67 | 72,17 |
| 3,250 | 82,55 | 3,500 | 88,90 | 111,13 | 93,90 | 52,37 | 101,1 | 111,1 | 14,3 | 19,8 | 66,67 | 72,17 |
| 3,375 | 85,73 | 3,625 | 92,08 | 114,3 | 97,08 | 52,37 | 104,3 | 114,3 | 14,3 | 19,8 | 66,67 | 72,17 |
| 3,500 | 88,90 | 3,750 | 95,25 | 117,48 | 100,25 | 52,37 | 107,5 | 117,5 | 14,3 | 19,8 | 66,67 | 72,17 |
| 3,625 | 92,08 | 3,875 | 98,43 | 120,65 | 103,43 | 52,37 | 110,7 | 120,7 | 14,3 | 19,8 | 66,67 | 72,17 |
| 3,750 | 95,25 | 4,000 | 101,60 | 123,83 | 106,60 | 52,37 | 113,8 | 123,8 | 14,3 | 19,8 | 66,67 | 72,17 |