

SM TYPE

– Standard Type –



part number structure

example **SMS 25 G UU -P**

specification
SM: standard
SMS: anti-corrosion

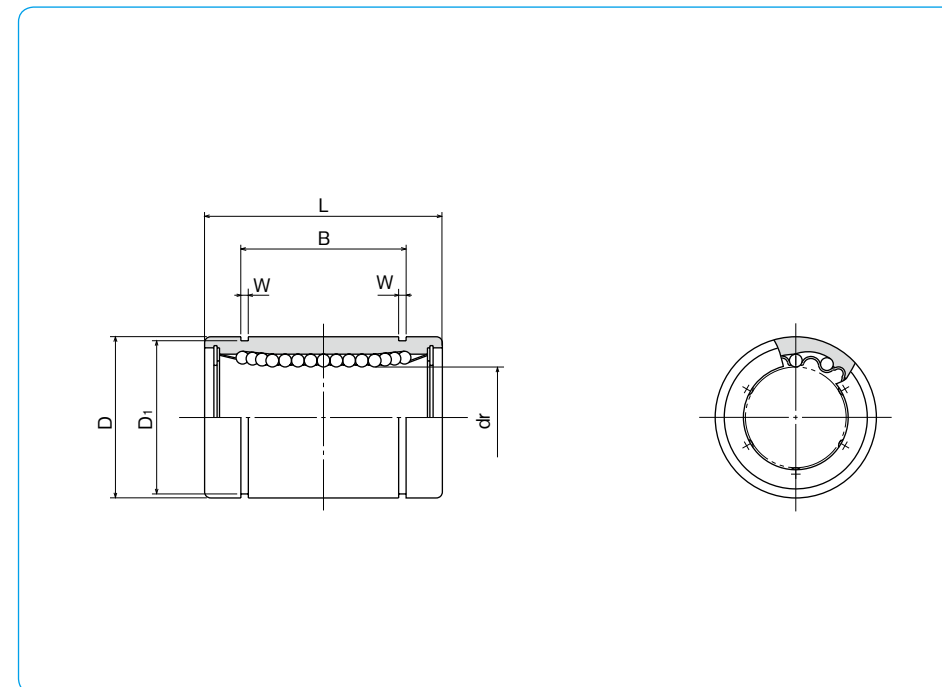
inner contact diameter (dr)

retainer material
blank: standard/steel
G: anti-corrosion/stainless steel
resin

accuracy grade
blank: high
P: precision

seal
blank: without seal
U: seal on one side
UU: seals on both sides
Z: doublelip-seal on one side
ZZ: doublelip-seals on both sides

Doublelip-seal is available for size 6 to 30.



| part number | | | | number of ball circuits | major dimensions | | | | |
|----------------|----------------|--------------------|----------------|-------------------------|------------------|----------------------------|-------|---------------------------|-------|
| standard | | anti-corrosion | | | mm | dr tolerance μm | | D tolerance μm | |
| steel retainer | resin retainer | stainless retainer | resin retainer | | | precision | high | mm | mm |
| SM 3 | SM 3G | SMS 3 | SMS 3G | 4 | 3 | | | 7 | 0 |
| SM 4 | SM 4G | SMS 4 | SMS 4G | 4 | 4 | 0 | 0 | 8 | 0 |
| SM 5 | SM 5G | SMS 5 | SMS 5G | 4 | 5 | -5 | -8 | 10 | -9 |
| SM 6 | SM 6G | SMS 6 | SMS 6G | 4 | 6 | | | 12 | 0 |
| SM 8s | SM 8sG | SMS 8s | SMS 8sG | 4 | 8 | | | 15 | -11 |
| SM 8 | SM 8G | SMS 8 | SMS 8G | 4 | 8 | | | 15 | |
| SM 10 | SM10G | SMS10 | SMS10G | 4 | 10 | 0 | 0 | 19 | 0 |
| SM 12 | SM12G | SMS12 | SMS12G | 4 | 12 | -6 | -9 | 21 | 0 |
| SM 13 | SM13G | SMS13 | SMS13G | 4 | 13 | | | 23 | -13 |
| SM 16 | SM16G | SMS16 | SMS16G | 4 | 16 | | | 28 | |
| SM 20 | SM20G | SMS20 | SMS20G | 5 | 20 | | | 32 | 0 |
| SM 25 | SM25G | SMS25 | SMS25G | 6 | 25 | -7 | -10 | 40 | -16 |
| SM 30 | SM30G | SMS30 | SMS30G | 6 | 30 | | | 45 | |
| SM 35 | SM35G | SMS35 | SMS35G | 6 | 35 | | | 52 | 0 |
| SM 40 | SM40G | SMS40 | SMS40G | 6 | 40 | 0 | 0 | 60 | 0 |
| SM 50 | SM50G | SMS50 | SMS50G | 6 | 50 | -8 | -12 | 80 | -19 |
| SM 60 | SM60G | SMS60 | SMS60G | 6 | 60 | 0 | 0 | 90 | 0 |
| SM 80 | SM80G | SMS80 | SMS80G | 6 | 80 | -9 | -15 | 120 | -22 |
| SM100 | - | - | - | 6 | 100 | 0 | 0 | 150 | 0 |
| SM120 | - | - | - | 8 | 120 | -10 | -20 | 180 | -25 |
| SM150 | - | - | - | 8 | 150 | 0/-13 | 0/-25 | 210 | 0/-29 |

| mm | L tolerance mm | B tolerance mm | | W mm | D1 mm | eccentricity | | radial clearance (maximum) μm | basic load rating | | mass g | shaft diameter mm |
|-----|----------------|----------------|------|------|-------|-------------------------|--------------------|--|-------------------|--------|--------|-------------------|
| | | mm | mm | | | precision μm | high μm | | C N | Co N | | |
| 10 | | - | - | - | - | | | | 69 | 105 | 1.4 | 3 |
| 12 | 0 | - | - | - | - | 4 | 8 | | 88 | 127 | 2.0 | 4 |
| 15 | -0.12 | 10.2 | | 1.1 | 9.6 | | | -3 | 167 | 206 | 4.0 | 5 |
| 19 | | 13.5 | | 1.1 | 11.5 | | | | 206 | 265 | 8.5 | 6 |
| 17 | | 11.5 | | 1.1 | 14.3 | | | | 176 | 216 | 11 | 8 |
| 24 | | 17.5 | | 1.1 | 14.3 | | | | 274 | 392 | 17 | 8 |
| 29 | 0 | 22 | 0 | 1.3 | 18 | 8 | 12 | | 372 | 549 | 36 | 10 |
| 30 | -0.2 | 23 | -0.2 | 1.3 | 20 | | | -4 | 510 | 784 | 42 | 12 |
| 32 | | 23 | | 1.3 | 22 | | | | 510 | 784 | 49 | 13 |
| 37 | | 26.5 | | 1.6 | 27 | | | | 774 | 1,180 | 76 | 16 |
| 42 | | 30.5 | | 1.6 | 30.5 | | | -6 | 882 | 1,370 | 100 | 20 |
| 59 | | 41 | | 1.85 | 38 | 10 | 15 | | 980 | 1,570 | 240 | 25 |
| 64 | | 44.5 | | 1.85 | 43 | | | -8 | 1,570 | 2,740 | 270 | 30 |
| 70 | 0 | 49.5 | 0 | 2.1 | 49 | | | | 1,670 | 3,140 | 425 | 35 |
| 80 | -0.3 | 60.5 | -0.3 | 2.1 | 57 | 12 | 20 | -10 | 2,160 | 4,020 | 654 | 40 |
| 100 | | 74 | | 2.6 | 76.5 | | | -13 | 3,820 | 7,940 | 1,700 | 50 |
| 110 | | 85 | | 3.15 | 86.5 | | | | 4,700 | 10,000 | 2,000 | 60 |
| 140 | | 105.5 | | 4.15 | 116 | 17 | 25 | | 7,350 | 16,000 | 4,520 | 80 |
| 175 | 0 | 125.5 | 0 | 4.15 | 145 | | | -20 | 14,100 | 34,800 | 8,600 | 100 |
| 200 | -0.4 | 158.6 | -0.4 | 4.15 | 175 | 20 | 30 | -25 | 16,400 | 40,000 | 15,000 | 120 |
| 240 | | 170.6 | | 5.15 | 204 | 25 | 40 | | 21,100 | 54,300 | 20,250 | 150 |

1N=0.102kgf