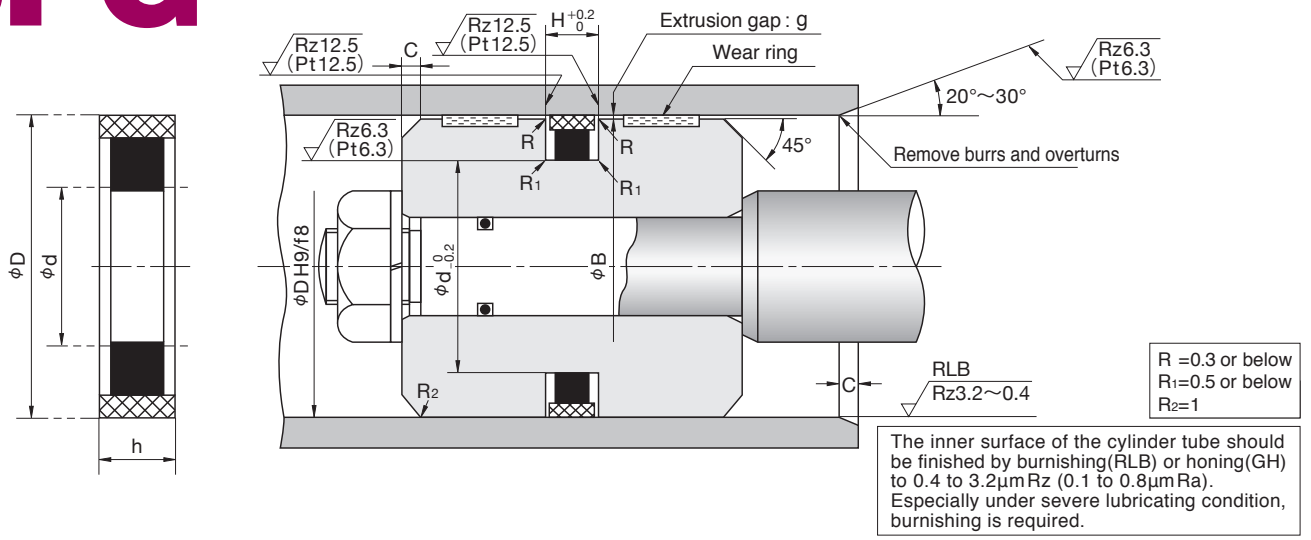




# SPG TYPE SPECIAL PACKINGS FOR PISTON SEALS

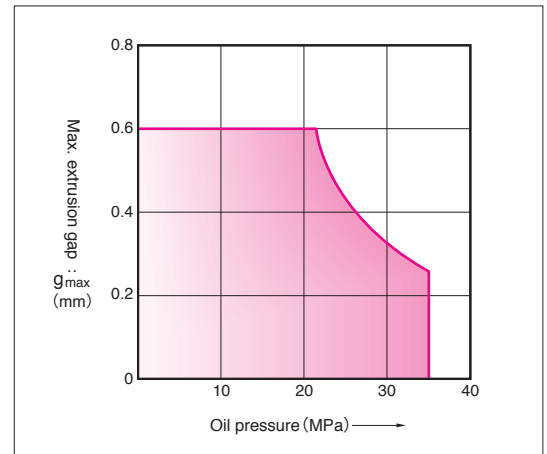


| Nominal Number | Nominal Size of Packing, and Housing dimensions |      |          |     |          | NOK Part Number |          |
|----------------|---|------|----------|-----|----------|-----------------|----------|
|                | d   | D    | h        | H   | C        |                 |          |
| SPG 30         | 20.5  | 30   | 4.3      | 4.5 | 2        | GS0327V0        |          |
| 31.5           | 22  | 31.5 |          |     |          | GS0328V0        |          |
| 32             | 22.5  | 32   |          |     |          | GS0329V0        |          |
| 35             | 25.5  | 35   |          |     |          | GS0330V0        |          |
| 35.5           | 26  | 35.5 |          |     |          | GS0331V0        |          |
| 40             | 30  | 40   |          |     | 4        | 3.5             | GS0332V0 |
| 45             | 35  | 45   |          |     |          |                 | GS0333V0 |
| 50             | 40  | 50   |          |     |          |                 | GS0334V0 |
| 55             | 45  | 55   |          |     |          |                 | GS0335V0 |
| 56             | 46  | 56   |          |     |          |                 | GS0336V0 |
| 60             | 50  | 60   | GS0337V0 |     |          |                 |          |
| 63             | 48  | 63   | GS0338V0 |     |          |                 |          |
| 65             | 50  | 65   | GS0339V0 |     |          |                 |          |
| 69             | 54  | 69   | GS0340V0 |     |          |                 |          |
| 70             | 55  | 70   | 5        | 4   |          |                 | GS0341V0 |
| 71             | 56  | 71   |          |     | GS0342V0 |                 |          |
| 75             | 60  | 75   |          |     | GS0343V0 |                 |          |
| 80             | 65  | 80   |          |     | GS0344V0 |                 |          |
| 85             | 70  | 85   |          |     | GS0345V0 |                 |          |
| 90             | 75  | 90   |          |     | GS0310V0 |                 |          |
| 95             | 80  | 95   |          |     | GS0346V0 |                 |          |
| 100            | 85  | 100  |          |     | GS0347V0 |                 |          |
| 105            | 90  | 105  |          |     | GS3509V0 |                 |          |
| 108            | 92  | 108  |          |     | GS0348V0 |                 |          |
| 110            | 94  | 110  | 6.5      | 5   | GS0311V0 |                 |          |
| 112            | 96  | 112  |          |     | GS0349V0 |                 |          |
| 120            | 104   | 120  |          |     | GS0350V0 |                 |          |

SPG DIMENSION

### HOW TO DETERMINE B DIMENSION

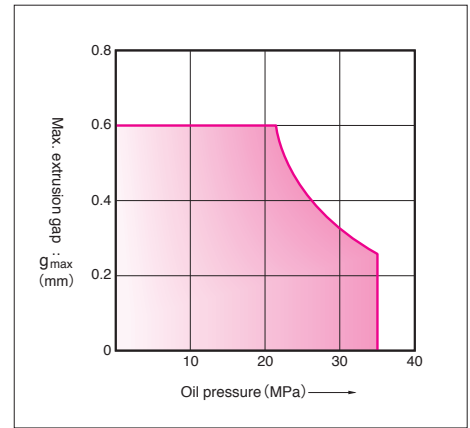
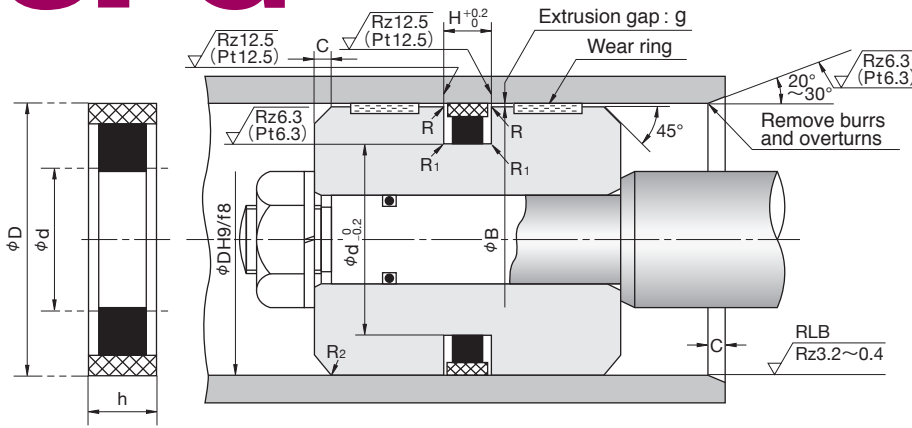
To determine B dimension, please refer to the graph in the right for the maximum extrusion gap (one side) considering the eccentricity of operating condition of the piston.



| Nominal Number | Nominal Size of Packing, and Housing dimensions |     |      |     |          | NOK Part Number |
|----------------|---|-----|------|-----|----------|-----------------|
|                | d   | D   | h    | H   | C        |                 |
| SPG 125        | 109   | 125 | 7.3  | 7.5 | 6.5      | GS0351V0        |
| 130            | 114   | 130 |      |     |          | GS0352V0        |
| 135            | 119   | 135 |      |     |          | GS0806V1        |
| 140            | 124   | 140 |      |     |          | GS0353V0        |
| 145            | 129   | 145 |      |     |          | GS0885V0        |
| 150            | 134   | 150 |      |     |          | GS0354V0        |
| 155            | 139   | 155 |      |     |          | GS3133V1        |
| 160            | 144   | 160 |      |     |          | GS0355V0        |
| 170            | 148   | 170 |      |     |          | GS0356V0        |
| 180            | 158   | 180 |      |     |          | GS0357V0        |
| 190            | 168   | 190 | 10.8 | 11  | GS0358V0 |                 |
| 200            | 178   | 200 |      |     | GS0359V0 |                 |
| 204            | 182   | 204 |      |     | GS0360V0 |                 |
| 210            | 188   | 210 |      |     | GS0361V0 |                 |
| 215            | 193   | 215 |      |     | GS0548V0 |                 |
| 220            | 198   | 220 |      |     | GS0842V0 |                 |
| 224            | 202   | 224 |      |     | GS0362V0 |                 |
| 225            | 203   | 225 |      |     | GS0363V0 |                 |
| 230            | 208   | 230 |      |     | GS0364V0 |                 |
| 240            | 218   | 240 |      |     | GS0365V0 |                 |
| 250            | 228   | 250 | 11.7 | 12  | GS0366V0 |                 |
| 260            | 236   | 260 |      |     | GS0700V0 |                 |
| 270            | 246   | 270 |      |     | GS0701V0 |                 |
| 280            | 256   | 280 |      |     | GS0702V0 |                 |
| 290            | 266   | 290 |      |     | GS0703V0 |                 |
| 300            | 276   | 300 |      |     | GS0704V0 |                 |
| 310            | 286   | 310 |      |     | GS0705V0 |                 |
| 320            | 296   | 320 |      |     | GS0706V0 |                 |

E  
DIMENSION  
SPG

# SPG TYPE SPECIAL PACKINGS FOR PISTON SEALS (LARGE DIMENSION)



The inner surface of the cylinder tube should be finished by burnishing(RLB) or honing(GH) to 0.4 to  $3.2\mu m Rz$  ( $0.1$  to  $0.8\mu m Ra$ ). Especially under severe lubricating condition, burnishing is required.

$R = 0.3$  or below  
 $R_1 = 0.5$  or below  
 $R_2 = 1$

●The roughness is JIS B 0601 : 2001. When regulation length cannot be kept, apply Pt.

## HOW TO DETERMINE B DIMENSION

To determine B dimension, please refer to the graph in the right for the maximum extrusion gap (one side) considering the eccentricity of operating condition of the piston.

| Nominal Number | Nominal Size of Packing, and Housing dimensions |      |          |      |          | NOK Part Number |          |
|----------------|---|------|----------|------|----------|-----------------|----------|
|                | d   | D    | h        | H    | C        |                 |          |
| SPG 330        | 308   | 330  | 9.75     | 10   | 10       | GS0408V0        |          |
| 360            | 336   | 360  | 11.7     | 12   |          | GS0917V0        |          |
| 400            | 376   | 400  |          |      |          | GS3361V0        |          |
| 485            | 455   | 485  | 14.8     | 15   |          | GS0504V1        |          |
| 500            | 470   | 500  |          |      |          | GS0261V2        |          |
| 550            | 515   | 550  | 17.2     | 17.5 |          | GS0379V2        |          |
| 600            | 570   | 600  | 14.8     | 15   |          | GS0324V2        |          |
| 650            | 620   | 650  |          |      | GS0527V0 |                 |          |
| 720            | 690   | 720  |          |      | GS0492V0 |                 |          |
| 800            | 785   | 800  |          |      | 12.7     | 13              | GS0520V0 |
| 900            | 870   | 900  |          |      | 24.5     | 25              | GS0407V2 |
| 930            | 890   | 930  |          |      | 19       | 20              | GS0466V1 |
| 935            | 920   | 935  |          |      | 12.7     | 13              | GS0521V0 |
| 950            | 925   | 950  | 17.7     | 18   | GS0285V2 |                 |          |
| 1000           | 960   | 1000 | 19.7     | 20   | GS0512V0 |                 |          |
| 1060           | 1020  | 1060 |          |      | GS0587V0 |                 |          |
| 1120           | 1080  | 1120 |          |      | GS0584V0 |                 |          |
| 1150           | 1110  | 1150 |          |      | GS3007V0 |                 |          |
| 1180           | 1130  | 1180 |          |      | GS0599V1 |                 |          |
| 1210           | 1170  | 1210 |          |      | 19       | GS0465V0        |          |
| 1250           | 1210  | 1250 |          |      | 19.7     | 20              | GS0281V1 |
| 1260           | 1220  | 1260 | GS0851V0 |      |          |                 |          |
| 1400           | 1350  | 1400 | GS0402V0 |      |          |                 |          |
| 1500           | 1460  | 1500 | GS0852V0 |      |          |                 |          |
| 1650           | 1600  | 1650 | 24       | 25   |          |                 | GS0579V0 |

E DIMENSION SPG