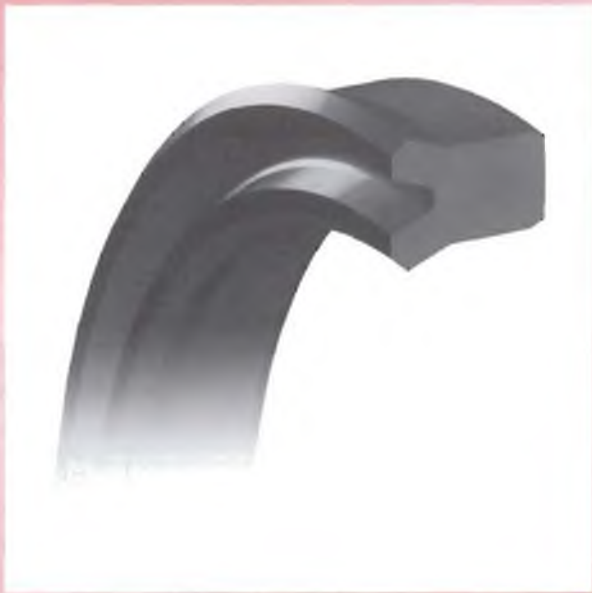


UPH TYPE

PACKINGS FOR BOTH PISTON
AND ROD SEALS

NITRILE RUBBER (NBR)

FLUORORUBBER (FKM)



● Please designate NOK Part number and type & size on your order.

(Example) Order for the packing as a single piece

| | | | | | |
|-------------------|--------------|--|------|-----|--|
| • Type Dimensions | UPH | 6.3 | 16.3 | 7.5 | |
| | └─ Type Sign | └─ Nominal Size of Packing described in order of inner diameter(d), outer diameter(D), and height(h) | | | |
| • Part Number | CU3308D0 | | | | |

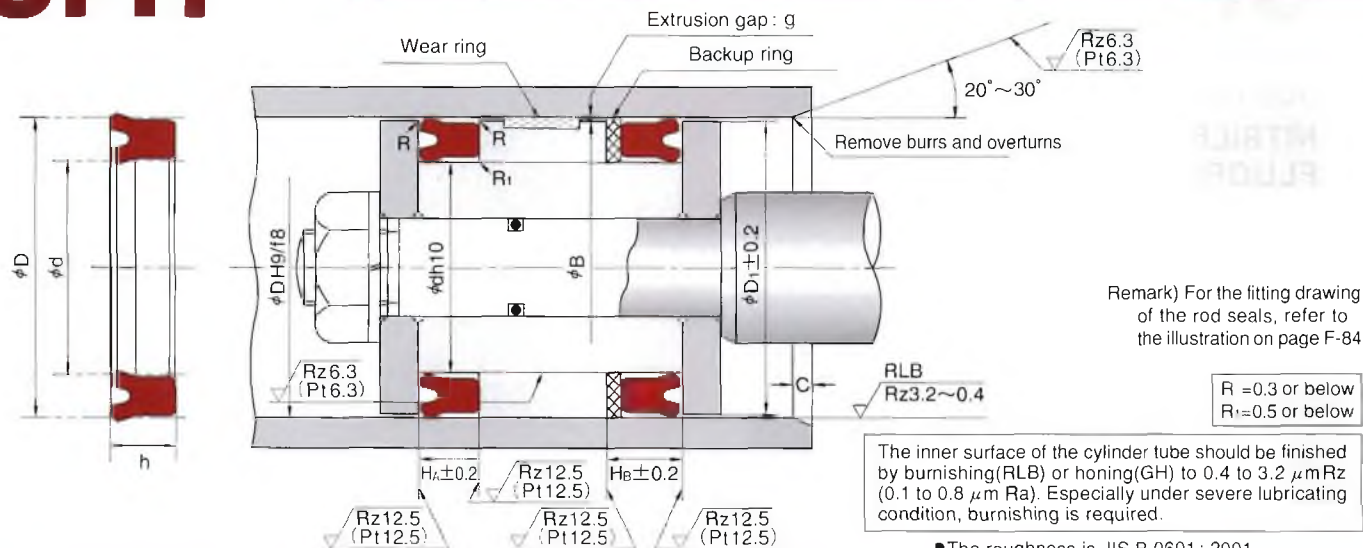
※ When placing orders for backup rings used in combination with packing, designate the NOK part number and the model size.

| | | | | | |
|-------------------|--------------|--|------|---|---|
| • Type Dimensions | BRT3 | 6.3 | 16.3 | 2 | |
| | └─ Type Sign | └─ Nominal Size of Backup ring described in order of inner diameter(d), outer diameter(D), and thickness(t)* | | | |
| • Part Number | GN0720V0 | | | | *t = H _B - H _A (Housing dimensions) |

● Please check the application range on pages 14 and 15 before selecting the type.

| | |
|-----------------|---|
| Material | Standard : NOK A505 Heat resistant type : NOK F357 |
|-----------------|---|

UPH TYPE PACKINGS FOR BOTH PISTON AND ROD SEALS



Remark) For the fitting drawing of the rod seals, refer to the illustration on page F-84.

R = 0.3 or below
R₁ = 0.5 or below

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

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

| Nominal Size of Packing, and Housing dimensions | | | | | | | Standard (A505) | | Heat resistant type (F357) | | Combustion Backup Ring Part Number |
|---|------|-----|----------------|----------------|-----------------|----------|---------------------|----------------|----------------------------|----------------|------------------------------------|
| d | D | h | H _A | H _B | φD ₁ | C | Packing Part Number | Nominal Number | Packing Part Number | Nominal Number | BRT3 (Endless) 19YF |
| 6.3 | 16.3 | 7.5 | 8.5 | 10.5 | 15.3 | 2.5 | CU3308D0 | UPH-6.3 | | | GN0720V0 |
| | 16.3 | 8 | 9 | 11 | 15.3 | | CU0024D0 | UPH-6.3A | | | GN0720V0 |
| 7.1 | 17.1 | 7.5 | 8.5 | 10.5 | 16.1 | | CU3309D0 | UPH-7.1 | | | GN0723V0 |
| | 17.1 | 8 | 9 | 11 | 16.1 | | CU0030D0 | UPH-7.1A | | | GN0723V0 |
| 8 | 18 | 7.5 | 8.5 | 10.5 | 17 | | CU0042D0 | UPH-8 | | | GN0725V0 |
| | 18 | 8 | 9 | 11 | 17 | | CU0043D1 | UPH-8A | CU0043D2 | UPH-8AF | GN0725V0 |
| 9 | 19 | 7.5 | 8.5 | 10.5 | 18 | | CU3310D0 | UPH-9 | | | GN0728V0 |
| | 19 | 8 | 9 | 11 | 18 | | CU0054D0 | UPH-9A | | | GN0728V0 |
| 10 | 20 | 7.5 | 8.5 | 10.5 | 19 | | CU0068D0 | UPH-10 | | | GN0733V0 |
| | 20 | 8 | 9 | 11 | 19 | | CU0069D1 | UPH-10A | | | GN0733V0 |
| 11.2 | 21.2 | 7.5 | 8.5 | 10.5 | 20.2 | | CU3311D0 | UPH-11.2 | | | GN0736V0 |
| | 21.2 | 8 | 9 | 11 | 20.2 | | CU0081D0 | UPH-11.2A | | | GN0736V0 |
| 12 | 25 | 8 | 9 | 11 | 24 | | CU0093D0 | UPH-12 | CU0093D3 | UPH-12F | GN6005V0 |
| 12.5 | 22.5 | 7.5 | 8.5 | 10.5 | 21.5 | | CU3312D0 | UPH-12.5 | | | GN0741V0 |
| | 22.5 | 8 | 9 | 11 | 21.5 | | CU0102D0 | UPH-12.5A | | | GN0741V0 |
| 14 | 24 | 7.5 | 8.5 | 10.5 | 23 | | CU0121D0 | UPH-14 | | | GN0745V0 |
| | 24 | 8 | 9 | 11 | 23 | | CU0122D0 | UPH-14A | CU0122D3 | UPH-14AF | GN0745V0 |
| 15 | 25 | 8 | 9 | 11 | 24 | | CU0135D0 | UPH-15A | | | GN0749V0 |
| | 28 | 10 | 11 | 13 | 27 | | CU0137D0 | UPH-15 | | | GN6445V0 |
| 16 | 26 | 7.5 | 8.5 | 10.5 | 25 | | CU0156D0 | UPH-16 | CU0156D2 | UPH-16F | GN0751V0 |
| | 26 | 8 | 9 | 11 | 25 | | CU0157D1 | UPH-16A | | | GN0751V0 |
| | 32 | 10 | 11 | 13 | 31 | | CU0161D0 | UPH-16B | | | GN7288V0 |
| 18 | 28 | 8 | 9 | 11 | 27 | | CU0182D0 | UPH-18A | CU0182D4 | UPH-18AF | GN0757V0 |
| | 31 | 10 | 11 | 13 | 30 | | CU0186D0 | UPH-18 | | | GN6446V0 |
| | 33 | 10 | 11 | 13 | 32 | CU2196D0 | UPH-18B | | | GN7354V0 | |
| 18.5 | 31.5 | 10 | 11 | 13 | 30.5 | CU3313D0 | UPH-18.5 | CU3313D1 | UPH-18.5F | GN7240V0 | |
| 20 | 30 | 8 | 9 | 11 | 29 | CU0215D1 | UPH-20A | CU0215D2 | UPH-20AF | GN0762V0 | |
| | 33 | 10 | 11 | 13 | 32 | CU0221D0 | UPH-20 | | | GN6448V0 | |
| | 35 | 10 | 11 | 13 | 34 | CU0224D0 | UPH-20B | | | GN7289V0 | |
| 21.5 | 31.5 | 8 | 9 | 11 | 30.5 | CU0239D0 | UPH-21.5 | | | GN0767V0 | |
| 22 | 35 | 10 | 11 | 13 | 34 | CU0249D0 | UPH-22 | | | GN6449V0 | |
| | 35.4 | 8 | 9 | 11 | 31.4 | CU0263D0 | UPH-22.4A | CU0263D3 | UPH-22.4AF | GN0771V0 | |
| 22.4 | 35.4 | 10 | 11 | 13 | 34.4 | CU0265D1 | UPH-22.4 | | | GN6017V0 | |
| | 35 | 8 | 9 | 11 | 34 | CU0282D2 | UPH-25A | CU0282D3 | UPH-25AF | GN0781V0 | |
| | 38 | 10 | 11 | 13 | 37 | CU0288D0 | UPH-25 | | | GN6453V0 | |
| 25 | 40 | 10 | 11 | 13 | 39 | CU0292D0 | UPH-25B | CU0292D4 | UPH-25BF | GN6591V0 | |
| | 45 | 12 | 13 | 15 | 44 | CU0301D0 | UPH-25C | | | GN7291V0 | |
| | 35.5 | 8 | 9 | 12 | 34.5 | CU0309D0 | UPH-25.5 | | | GN6454V0 | |
| 27 | 40 | 10 | 11 | 14 | 39 | CU2347D0 | UPH-27 | | | GN6455V0 | |
| 28 | 40 | 10 | 11 | 14 | 39 | CU0330D2 | UPH-28A | CU0330D6 | UPH-28AF | GN6457V0 | |
| | 41 | 10 | 11 | 14 | 40 | CU0335D0 | UPH-28 | | | GN6458V0 | |
| | 43 | 10 | 11 | 14 | 42 | CU0340D0 | UPH-28B | | | GN0791V0 | |

Remark) The Part number and the one stamped on the product might be different in case of heat resistant type.

HOW TO DETERMINE B DIMENSION

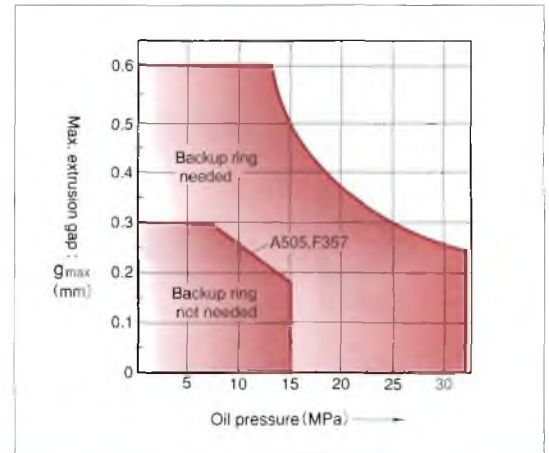
■ When using backup ring

Please determine B dimension according to the table below. If you require smaller B dimension (in case of piston seals) or larger B dimension (in case of rod seals) because of the cylinder configuration, please consult NOK.

| | | | |
|--------------------------|------------|-----------------------|-----------------------|
| Maximum Service Pressure | 15MPa | 32MPa | |
| Material of Backup ring | 19YF | | |
| Dimension B | For rod | $B \leq \phi d + 1.0$ | $B \leq \phi d + 0.5$ |
| | For piston | $B \geq \phi D - 1.0$ | $B \geq \phi D - 0.5$ |

■ When not using backup ring

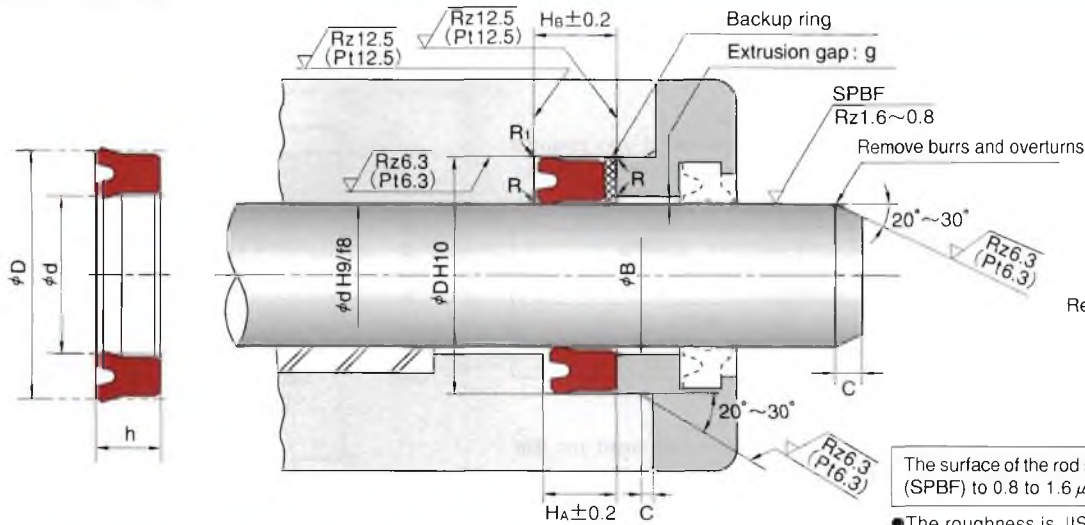
To determine B dimension, please refer to the graph in the right for the maximum extrusion gap (one side) considering the eccentricity of operating condition of the piston or rod.



| Nominal Size of Packing, and Housing dimensions | | | | | | | Standard (A505) | | Heat resistant type (F357) | | Combination Backup Ring Part Number |
|---|------|----|----------------|----------------|-----------------|----------|---------------------|----------------|----------------------------|----------------|-------------------------------------|
| d | D | h | H _A | H _B | φD ₁ | C | Packing Part Number | Nominal Number | Packing Part Number | Nominal Number | BRT3 (Endless) 19YF |
| 30 | 43 | 10 | 11 | 14 | 42 | 3.5 | CU0364D0 | UPH-30 | CU0364D2 | UPH-30F | GN6459V0 |
| | 45 | 10 | 11 | 14 | 44 | | CU0368D2 | UPH-30A | CU0368D8 | UPH-30AF | GN7061V0 |
| 31.5 | 44.5 | 10 | 11 | 14 | 43.5 | | CU0385D0 | UPH-31.5 | | | GN6461V0 |
| | 46.5 | 10 | 11 | 14 | 45.5 | | CU0387D1 | UPH-31.5A | | | GN0805V0 |
| 32 | 45 | 10 | 11 | 14 | 44 | | CU2451D0 | UPH-32 | | | GN7242V0 |
| | 46 | 10 | 11 | 14 | 45 | | CU0403D0 | UPH-32A | | | GN6035V0 |
| | 48 | 10 | 11 | 14 | 47 | | CU0404D0 | UPH-32B | | | GN7356V0 |
| 34 | 50 | 12 | 13 | 16 | 49 | | CU0408D0 | UPH-34 | | | GN6462V0 |
| 35 | 50 | 10 | 11 | 14 | 49 | | CU0437D4 | UPH-35B | CU0437D5 | UPH-35BF | GN0816V0 |
| | 50 | 12 | 13 | 16 | 49 | | CU0438D0 | UPH-35 | | | GN0816V0 |
| | 51 | 12 | 13 | 16 | 50 | | CU0441D0 | UPH-35A | | | GN7006V0 |
| 35.5 | 50.5 | 10 | 11 | 14 | 49.5 | | CU0456D2 | UPH-35.5A | CU0456D6 | UPH-35.5AF | GN0820V0 |
| | 51.5 | 12 | 13 | 16 | 50.5 | CU0458D0 | UPH-35.5 | CU0458D2 | UPH-35.5F | GN6330V0 | |
| 38 | 52 | 10 | 11 | 14 | 51 | CU0470D1 | UPH-38 | | | GN6046V0 | |
| 40 | 55 | 10 | 11 | 14 | 54 | CU0505D3 | UPH-40A | CU0505D2 | UPH-40AF | GN6759V0 | |
| | 56 | 10 | 11 | 14 | 55 | CU0508D0 | UPH-40B | | | GN6466V0 | |
| | 56 | 12 | 13 | 16 | 55 | CU0509D0 | UPH-40 | | | GN6466V0 | |
| | 60 | 12 | 13 | 16 | 59 | CU0514D0 | UPH-40C | | | GN7293V0 | |
| 41 | 56 | 10 | 11 | 14 | 55 | CU0523D0 | UPH-41 | | | GN0835V0 | |
| 45 | 60 | 10 | 11 | 14 | 59 | CU0577D5 | UPH-45A | CU0577D9 | UPH-45AF | GN0845V0 | |
| | 60 | 12 | 13 | 16 | 59 | CU0578D0 | UPH-45B | | | GN0845V0 | |
| | 61 | 12 | 13 | 16 | 60 | CU0580D0 | UPH-45 | CU0580D3 | UPH-45F | GN6469V0 | |
| 47 | 63 | 12 | 13 | 16 | 62 | CU0591D0 | UPH-47 | | | GN6471V0 | |
| 48 | 63 | 10 | 11 | 14 | 62 | CU0601D1 | UPH-48 | CU0601D4 | UPH-48F | GN0853V0 | |
| 50 | 65 | 10 | 11 | 14 | 64 | CU0631D2 | UPH-50A | CU0631D7 | UPH-50AF | GN6439V0 | |
| | 66 | 12 | 13 | 16 | 65 | CU0635D0 | UPH-50 | CU0635D3 | UPH-50F | GN6329V0 | |
| | 70 | 12 | 13 | 16 | 69 | CU0639D3 | UPH-50B | CU0639D4 | UPH-50BF | GN6592V0 | |
| 51 | 71 | 12 | 13 | 16 | 70 | CU0669D0 | UPH-51 | | | GN0862V0 | |
| 53 | 69 | 12 | 13 | 16 | 68 | CU3317D0 | UPH-53 | | | GN7008V0 | |
| | 73 | 12 | 13 | 16 | 72 | CU0683D0 | UPH-53A | | | GN0869V0 | |
| 55 | 71 | 12 | 13 | 16 | 70 | CU0704D1 | UPH-55 | | | GN6473V0 | |
| | 75 | 12 | 13 | 16 | 74 | CU0708D2 | UPH-55A | CU0708D6 | UPH-55AF | GN7249V0 | |
| | 80 | 15 | 16 | 19 | 79 | CU0712D0 | UPH-55B | | | GN6072V0 | |
| 56 | 72 | 12 | 13 | 16 | 71 | CU0727D0 | UPH-56 | CU0727D2 | UPH-56F | GN7009V0 | |
| | 76 | 12 | 13 | 16 | 75 | CU0728D1 | UPH-56A | CU0728D4 | UPH-56AF | GN0877V0 | |
| 60 | 76 | 12 | 13 | 16 | 75 | CU0757D1 | UPH-60 | | | GN6476V0 | |
| | 80 | 12 | 13 | 16 | 79 | CU0761D1 | UPH-60A | CU0761D6 | UPH-60AF | GN0886V1 | |
| 63 | 79 | 12 | 13 | 16 | 78 | CU0791D0 | UPH-63 | | | GN7010V0 | |
| | 83 | 12 | 13 | 16 | 82 | CU0793D1 | UPH-63A | CU0793D3 | UPH-63AF | GN0893V1 | |
| 64 | 80 | 12 | 13 | 16 | 79 | CU2123D1 | UPH-64 | CU2123D2 | UPH-64F | GN6478V0 | |
| 65 | 81 | 12 | 13 | 16 | 80 | CU3318D0 | UPH-65 | | | GN7011V0 | |
| | 85 | 12 | 13 | 16 | 84 | CU0819D1 | UPH-65A | CU0819D2 | UPH-65AF | GN0899V0 | |

Remark) The Part number and the one stamped on the product might be different in case of heat resistant type.

UPH TYPE PACKINGS FOR BOTH PISTON AND ROD SEALS



Remark) For the fitting drawing of the piston seals, refer to the illustration on page F-82.

R = 0.3 or below
R_i = 0.5 or below

The surface of the rod should be finished by buffing (SPBF) to 0.8 to 1.6 μmRz (0.2 to 0.4 μmRa).

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

| Nominal Size of Packing, and Housing dimensions | | | | | | | Standard (A505) | | Heat resistant type (F357) | | Combination Backup Ring Part Number |
|---|-----|------|----------------|----------------|-----------------|----------|---------------------|----------------|----------------------------|----------------|-------------------------------------|
| d | D | h | H _A | H _B | #D ₁ | C | Packing Part Number | Nominal Number | Packing Part Number | Nominal Number | BRT3 (Endless) |
| 67 | 87 | 12 | 13 | 16 | 86 | 5 | CU0831D0 | UPH-67A | CU0831D3 | UPH-67AF | GN0904V0 |
| | 87 | 15 | 16 | 19 | 86 | | CU3319D0 | UPH-67 | | | GN0904V0 |
| 70 | 90 | 12 | 13 | 16 | 89 | | CU0862D1 | UPH-70A | CU0862D4 | UPH-70AF | GN0910V0 |
| | 90 | 15 | 16 | 19 | 89 | | CU0864D0 | UPH-70 | CU0864D2 | UPH-70F | GN0910V0 |
| 71 | 91 | 12 | 13 | 16 | 90 | | CU0884D1 | UPH-71A | CU0884D3 | UPH-71AF | GN0914V0 |
| | 91 | 15 | 16 | 19 | 90 | | CU0885D0 | UPH-71 | | | GN0914V0 |
| 75 | 95 | 12 | 13 | 16 | 94 | | CU0910D1 | UPH-75A | | | GN0920V0 |
| | 95 | 15 | 16 | 19 | 94 | | CU0911D1 | UPH-75 | CU0911D2 | UPH-75F | GN0920V0 |
| 80 | 100 | 12 | 13 | 16 | 99 | | CU0948D1 | UPH-80A | CU0948D9 | UPH-80AF | GN0927V0 |
| | 100 | 15 | 16 | 19 | 99 | | CU0949D2 | UPH-80 | CU0949D3 | UPH-80F | GN0927V0 |
| 85 | 105 | 12 | 13 | 16 | 104 | | CU0989D1 | UPH-85A | CU0989D3 | UPH-85AF | GN0932V0 |
| | 105 | 15 | 16 | 19 | 104 | | CU0990D0 | UPH-85 | | | GN0932V0 |
| 90 | 110 | 12 | 13 | 16 | 109 | | CU1030D3 | UPH-90A | CU1030D7 | UPH-90AF | GN0939V0 |
| | 110 | 15 | 16 | 19 | 109 | | CU1031D0 | UPH-90 | CU1031D3 | UPH-90F | GN0939V0 |
| 92 | 112 | 12 | 13 | 16 | 111 | | CU1042D1 | UPH-92A | | | GN0940V0 |
| | 112 | 15 | 16 | 19 | 111 | | CU2132D1 | UPH-92 | CU2132D2 | UPH-92F | GN0940V0 |
| 95 | 115 | 12 | 13 | 16 | 114 | | CU1056D0 | UPH-95A | CU1056D4 | UPH-95AF | GN0945V0 |
| | 115 | 15 | 16 | 19 | 114 | | CU1057D1 | UPH-95 | CU1057D3 | UPH-95F | GN0945V0 |
| 100 | 120 | 15 | 16 | 19 | 118 | | CU1061D0 | UPH-95B | | | GN6716V0 |
| | 120 | 12 | 13 | 16 | 118 | | CU1089D3 | UPH-100A | CU1089D7 | UPH-100AF | GN0952V0 |
| | 120 | 15 | 16 | 19 | 118 | CU1091D0 | UPH-100 | CU1091D3 | UPH-100F | GN0952V0 | |
| | 125 | 15 | 16 | 19 | 123 | CU1096D0 | UPH-100B | CU1096D3 | UPH-100BF | GN7297V0 | |
| 105 | 125 | 15 | 16 | 19 | 123 | CU1129D2 | UPH-105 | CU1129D4 | UPH-105F | GN0959V0 | |
| 106 | 126 | 15 | 16 | 19 | 124 | CU1138D0 | UPH-106 | | | GN0961V0 | |
| 110 | 130 | 15 | 16 | 19 | 128 | CU1165D1 | UPH-110 | CU1165D4 | UPH-110F | GN6790V0 | |
| 112 | 132 | 15 | 16 | 19 | 130 | CU1182D0 | UPH-112 | CU1182D3 | UPH-112F | GN0970V0 | |
| 115 | 135 | 15 | 16 | 19 | 133 | CU1198D0 | UPH-115 | | | GN0974V0 | |
| 118 | 138 | 15 | 16 | 19 | 136 | CU1207D0 | UPH-118 | CU1207D2 | UPH-118F | GN0978V0 | |
| 120 | 140 | 15 | 16 | 19 | 138 | CU1224D2 | UPH-120 | CU1224D1 | UPH-120F | GN0982V0 | |
| 125 | 145 | 15 | 16 | 19 | 143 | CU1257D0 | UPH-125A | | | GN0986V0 | |
| | 150 | 19 | 20 | 23 | 148 | CU1933D0 | UPH-125 | CU1933D2 | UPH-125F | GN6135V0 | |
| 130 | 150 | 15 | 16 | 19 | 148 | CU1284D2 | UPH-130A | CU1284D4 | UPH-130AF | GN6925V0 | |
| | 155 | 19 | 20 | 23 | 153 | CU3320D0 | UPH-130 | | | GN7012V0 | |
| 132 | 152 | 15 | 16 | 19 | 150 | CU1292D0 | UPH-132A | | | GN0994V0 | |
| | 157 | 19 | 20 | 23 | 155 | CU2703D1 | UPH-132 | CU2703D2 | UPH-132F | GN7013V0 | |
| 135 | 155 | 15 | 16 | 19 | 153 | CU1305D0 | UPH-135B | | | GN0998V0 | |
| | 160 | 15.7 | 17 | 20 | 158 | CU3322D0 | UPH-135A | | | GN6492V0 | |
| | 160 | 19 | 20 | 23 | 158 | CU1960D0 | UPH-135 | | | GN6492V0 | |
| 140 | 160 | 15 | 16 | 19 | 158 | CU1327D1 | UPH-140A | CU1327D4 | UPH-140AF | GN1002V0 | |
| | 165 | 19 | 20 | 23 | 163 | CU1332D2 | UPH-140 | | | GN6494V0 | |
| 145 | 165 | 15 | 16 | 19 | 163 | CU1344D0 | UPH-145A | | | GN1007V0 | |
| | 170 | 19 | 20 | 23 | 168 | CU2348D0 | UPH-145 | CU2348D1 | UPH-145F | GN6496V0 | |

Remark) The Part number and the one stamped on the product might be different in case of heat resistant type.

HOW TO DETERMINE B DIMENSION

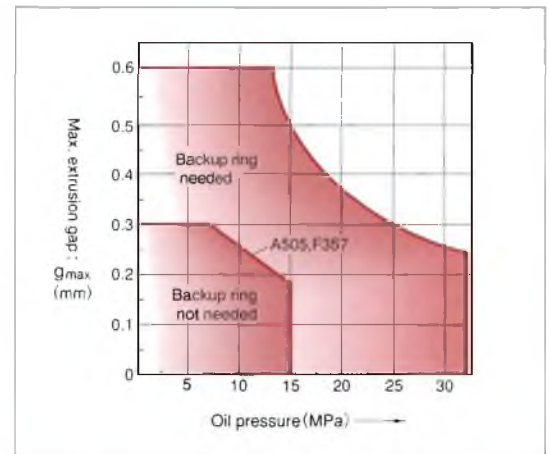
■ When using backup ring

Please determine B dimension according to the table below. If you require smaller B dimension (in case of piston seals) or larger B dimension (in case of rod seals) because of the cylinder configuration, please consult NOK.

| | | | |
|--------------------------|------------|-----------------------|-----------------------|
| Maximum Service Pressure | 15MPa | 32MPa | |
| Material of Backup ring | 19YF | | |
| Dimension B | For rod | $B \leq \phi d + 1.0$ | $B \leq \phi d + 0.5$ |
| | For piston | $B \geq \phi D - 1.0$ | $B \geq \phi D - 0.5$ |

■ When not using backup ring

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 or rod.



| Nominal Size of Packing, and Housing dimensions | | | | | | | Standard (A505) | | Heat resistant type (F357) | | Combination Backup Ring Part Number |
|---|-----|------|----------------|----------------|-----------------|----------|---------------------|----------------|----------------------------|----------------|-------------------------------------|
| d | D | h | H _A | H _B | φD ₁ | C | Packing Part Number | Nominal Number | Packing Part Number | Nominal Number | BRT3 (Endless) 19YF |
| 150 | 170 | 15 | 16 | 19 | 168 | 6.5 | CU1363D2 | UPH-150A | CU1363D3 | UPH-150AF | GN1011V0 |
| | 175 | 19 | 20 | 23 | 173 | | CU1367D0 | UPH-150 | | | GN7014V0 |
| 155 | 180 | 15 | 16 | 20 | 178 | | CU1391D2 | UPH-155B | CU1391D4 | UPH-155BF | GN1016V0 |
| | 180 | 15.7 | 17 | 21 | 178 | | CU3323D0 | UPH-155A | | | GN1016V0 |
| | 180 | 19 | 20 | 24 | 178 | | CU1393D0 | UPH-155 | | | GN1016V0 |
| 160 | 185 | 15 | 16 | 20 | 183 | | CU1413D0 | UPH-160A | CU1413D3 | UPH-160AF | GN1020V0 |
| | 185 | 19 | 20 | 24 | 183 | | CU2349D0 | UPH-160 | | | GN1020V0 |
| 165 | 190 | 15 | 16 | 20 | 188 | | CU1431D0 | UPH-165A | | | GN1023V0 |
| | 190 | 19 | 20 | 24 | 188 | | CU3324D0 | UPH-165 | | | GN1023V0 |
| 170 | 195 | 15 | 16 | 20 | 193 | | CU1448D1 | UPH-170A | CU1448D3 | UPH-170AF | GN1027V0 |
| | 195 | 19 | 20 | 24 | 193 | | CU3325D0 | UPH-170 | | | GN1027V0 |
| 175 | 200 | 15 | 16 | 20 | 198 | | CU1461D2 | UPH-175B | CU1461D3 | UPH-175BF | GN1031V0 |
| | 200 | 15.7 | 17 | 21 | 198 | | CU3326D0 | UPH-175A | | | GN1031V0 |
| | 200 | 19 | 20 | 24 | 198 | | CU1463D1 | UPH-175 | | | GN1031V0 |
| 180 | 205 | 15 | 16 | 20 | 203 | | CU1490D0 | UPH-180A | | | GN1035V0 |
| | 205 | 19 | 20 | 24 | 203 | | CU1492D0 | UPH-180 | | | GN1035V0 |
| 185 | 210 | 15 | 16 | 20 | 208 | | CU1504D0 | UPH-185 | | | GN1039V0 |
| 190 | 215 | 15 | 16 | 20 | 213 | | CU1519D0 | UPH-190A | CU1519D2 | UPH-190AF | GN1042V0 |
| | 215 | 19 | 20 | 24 | 213 | | CU3327D0 | UPH-190 | | | GN1042V0 |
| 199 | 224 | 15 | 16 | 20 | 222 | | CU1532D0 | UPH-199B | | | GN1047V0 |
| | 224 | 15.7 | 17 | 21 | 222 | | CU3329D0 | UPH-199A | | | GN1047V0 |
| | 224 | 19 | 20 | 24 | 222 | | CU1535D0 | UPH-199 | | | GN1047V0 |
| 200 | 225 | 15 | 16 | 20 | 223 | | CU1547D0 | UPH-200A | CU1547D4 | UPH-200AF | GN1050V0 |
| | 225 | 19 | 20 | 24 | 223 | | CU2350D0 | UPH-200 | | | GN1050V0 |
| 210 | 235 | 18 | 19 | 23 | 233 | | CU1579D0 | UPH-210 | | | GN1057V0 |
| 212 | 237 | 19 | 20 | 24 | 235 | | CU1585D0 | UPH-212 | | | GN1058V0 |
| 215 | 240 | 19 | 20 | 24 | 238 | | CU3331D0 | UPH-215 | | | GN7256V0 |
| 224 | 249 | 19 | 20 | 24 | 247 | | CU2926D0 | UPH-224 | CU2926D1 | UPH-224F | GN7282V0 |
| 225 | 250 | 18 | 19 | 23 | 248 | | CU1625D0 | UPH-225A | | | GN1065V0 |
| | 250 | 19 | 20 | 24 | 248 | | CU1626D0 | UPH-225 | CU1626D1 | UPH-225F | GN1065V0 |
| 236 | 261 | 19 | 20 | 24 | 259 | CU1649D1 | UPH-236 | | | GN6191V0 | |
| 250 | 275 | 19 | 20 | 24 | 273 | CU1683D1 | UPH-250 | | | GN1078V0 | |
| 255 | 280 | 19 | 20 | 24 | 278 | CU1694D0 | UPH-255 | CU1694D3 | UPH-255F | GN6513V0 | |
| 265 | 297 | 24 | 26 | 30 | 295 | CU1714D0 | UPH-265 | | | GN6515V0 | |
| 270 | 300 | 18 | 19 | 23 | 298 | CU1722D0 | UPH-270A | | | GN1089V0 | |
| | 300 | 24 | 26 | 30 | 298 | CU1725D0 | UPH-270 | CU1725D1 | UPH-270F | GN1089V0 | |
| 280 | 310 | 22 | 24 | 28 | 308 | CU2774D0 | UPH-280A | | | GN1093V0 | |
| | 312 | 24 | 26 | 30 | 310 | CU2166D0 | UPH-280 | CU2166D1 | UPH-280F | GN6519V0 | |
| 283 | 315 | 24 | 26 | 30 | 313 | CU1918D0 | UPH-283 | | | GN7358V0 | |
| 290 | 320 | 18 | 19 | 23 | 318 | CU1750D0 | UPH-290A | | | GN1098V0 | |
| | 320 | 22 | 24 | 28 | 318 | CU1752D0 | UPH-290 | | | GN1098V0 | |
| 300 | 332 | 24 | 26 | 30 | 330 | CU2351D0 | UPH-300 | | | GN6522V0 | |

Remark) The Part number and the one stamped on the product might be different in case of heat resistant type.

F DIMENSION UPH

UPH TYPE PACKINGS FOR BOTH PISTON AND ROD SEALS

[Large size dimension table]

■ When using packings on this large size, please consult NOK.

| Nominal Size of Packing, and Housing dimensions | | | | | | | Standard (A505) | | Heat resistant type (F357) | | Combination Backup Ring Part Number |
|---|-----|----|----------------|----------------|-----------------|----|---------------------|----------------|----------------------------|----------------|-------------------------------------|
| d | D | h | H _A | H _B | φD _i | C | Packing Part Number | Nominal Number | Packing Part Number | Nominal Number | BRT3 (Endless) 19YF |
| 310 | 340 | 18 | 19 | 23 | 338 | 10 | CU1772D0 | UPH-310A | | | |
| | 340 | 22 | 24 | 28 | 338 | | CU1773D0 | UPH-310 | CU1773D2 | UPH-310F | |
| 315 | 347 | 24 | 26 | 30 | 345 | | CU3064D0 | UPH-315 | | | |
| 320 | 340 | 12 | 13 | 17 | 338 | | CU2101D0 | UPH-320A | | | |
| | 350 | 22 | 24 | 28 | 348 | | CU1780D0 | UPH-320 | | | |
| 323 | 355 | 24 | 26 | 30 | 353 | | CU1784D0 | UPH-323 | | | |
| 330 | 355 | 16 | 17 | 21 | 353 | | CU1786D0 | UPH-330A | | | |
| | 356 | 20 | 22 | 26 | 354 | | CU1787D0 | UPH-330B | | | |
| 335 | 360 | 22 | 24 | 28 | 358 | | CU1789D0 | UPH-330 | | | |
| | 355 | 14 | 15 | 19 | 353 | | CU1793D1 | UPH-335A | | | |
| 340 | 367 | 24 | 26 | 30 | 365 | | CU2197D0 | UPH-335 | | | |
| | 370 | 22 | 24 | 28 | 368 | | CU1795D0 | UPH-340 | | | |
| 345 | 365 | 14 | 15 | 19 | 363 | | CU2243D0 | UPH-345 | | | |
| 348 | 380 | 24 | 26 | 30 | 378 | | CU2087D1 | UPH-348 | | | |
| 350 | 370 | 14 | 15 | 19 | 368 | | CU2302D0 | UPH-350A | | | |
| | 380 | 22 | 24 | 28 | 378 | | CU1799D2 | UPH-350 | | | |
| 355 | 385 | 22 | 24 | 28 | 383 | | CU1801D0 | UPH-355A | | | |
| | 387 | 24 | 26 | 30 | 385 | | CU1916D0 | UPH-355 | | | |
| 360 | 390 | 22 | 24 | 28 | 388 | | CU1803D0 | UPH-360 | CU1803D2 | UPH-360F | |
| 365 | 395 | 22 | 24 | 28 | 393 | | CU1805D0 | UPH-365 | | | |
| 368 | 400 | 24 | 26 | 30 | 398 | | CU1807D0 | UPH-368 | CU1807D1 | UPH-368F | |
| 370 | 400 | 23 | 25 | 29 | 398 | | CU1810D0 | UPH-370A | | | |
| | 400 | 25 | 27 | 31 | 398 | | CU1811D0 | UPH-370 | | | |
| 371 | 396 | 16 | 17 | 21 | 394 | | CU2303D0 | UPH-371 | | | |
| 375 | 407 | 24 | 26 | 30 | 405 | | CU3357D0 | UPH-375 | | | |
| 380 | 400 | 15 | 16 | 20 | 398 | | CU1813D0 | UPH-380A | | | |
| | 410 | 15 | 16 | 20 | 408 | | CU1815D0 | UPH-380B | | | |
| | 420 | 30 | 32 | 36 | 418 | | CU2162D0 | UPH-380 | | | |
| 390 | 420 | 22 | 24 | 28 | 418 | | CU1818D0 | UPH-390 | | | |
| 395 | 425 | 22 | 24 | 28 | 423 | | CU1819D0 | UPH-395 | | | |
| 400 | 430 | 22 | 24 | 28 | 428 | | CU1823D0 | UPH-400A | | | |
| | 430 | 25 | 27 | 31 | 428 | | CU2007D0 | UPH-400B | | | |
| | 432 | 24 | 26 | 30 | 430 | | CU3358D0 | UPH-400 | | | |

Remark 1) When using packings on this large size, please consult NOK.

Remark 2) When placing orders for the backup ring on this large size, please consult NOK.

| Nominal Size of Packing, and Housing dimensions | | | | | | | Standard (A505) | | Heat resistant type(F357) | | Combination Backup Ring Part Number |
|---|------|------|----------------|----------------|-----------------|----------|---------------------|----------------|---------------------------|----------------|-------------------------------------|
| d | D | h | H _A | H _B | φD ₁ | C | Packing Part Number | Nominal Number | Packing Part Number | Nominal Number | BRT3(Endless) 19YF |
| 420 | 455 | 25 | 27 | 32 | 453 | 10 | CU1833D0 | UPH-420 | | | |
| 425 | 457 | 24 | 26 | 31 | 455 | | CU1917D0 | UPH-425 | | | |
| 430 | 470 | 20 | 22 | 27 | 468 | | CU1837D0 | UPH-430 | | | |
| 435 | 470 | 25 | 27 | 32 | 468 | | CU1841D0 | UPH-435 | | | |
| 440 | 480 | 35 | 37 | 42 | 478 | | CU1843D0 | UPH-440 | | | |
| 445 | 470 | 18 | 19 | 24 | 468 | | CU2244D0 | UPH-445 | | | |
| 450 | 480 | 22 | 24 | 29 | 478 | | CU1844D0 | UPH-450A | | | |
| | 482 | 24 | 26 | 31 | 480 | | CU3359D0 | UPH-450 | | | |
| 460 | 500 | 20 | 22 | 27 | 498 | | CU1850D0 | UPH-460 | | | |
| 475 | 507 | 24 | 26 | 31 | 505 | | CU1853D0 | UPH-475 | | | |
| 480 | 505 | 18 | 19 | 24 | 503 | | CU2245D0 | UPH-480A | | | |
| 490 | 530 | 25 | 27 | 32 | 528 | | CU1855D0 | UPH-490 | | | |
| 520 | 550 | 17 | 18 | 23 | 548 | | CU2189D0 | UPH-520A | | | |
| 525 | 555 | 15 | 16 | 21 | 553 | | CU1860D0 | UPH-525 | | | |
| 530 | 570 | 20 | 22 | 27 | 568 | | CU2084D0 | UPH-530A | | | |
| 540 | 560 | 14 | 15 | 20 | 558 | | CU2037D0 | UPH-540 | | | |
| 570 | 600 | 17 | 18 | 23 | 598 | | CU2190D0 | UPH-570A | | | |
| 600 | 630 | 20 | 22 | 27 | 628 | | CU2160D0 | UPH-600A | | | |
| | 630 | 28 | 30 | 35 | 628 | | CU2036D0 | UPH-600B | | | |
| | 640 | 30 | 32 | 37 | 638 | | CU1868D0 | UPH-600 | | | |
| 640 | 685 | 25 | 27 | 32 | 683 | CU2284D0 | UPH-640 | | | | |
| 700 | 730 | 15 | 16 | 21 | 728 | CU1873D0 | UPH-700A | | | | |
| 760 | 800 | 34 | 36 | 41 | 798 | CU1877D0 | UPH-760 | | | | |
| 768 | 800 | 30 | 32 | 37 | 798 | CU1878D0 | UPH-768 | | | | |
| 818 | 850 | 24 | 26 | 31 | 848 | CU1882D1 | UPH-818 | | | | |
| 825 | 850 | 15.5 | 16.5 | 21.5 | 848 | CU1883D0 | UPH-825A | | | | |
| | 860 | 27 | 29 | 34 | 858 | CU2124D0 | UPH-825 | | | | |
| 925 | 950 | 14 | 15 | 20 | 948 | CU2325D0 | UPH-925 | | | | |
| 950 | 980 | 20 | 22 | 27 | 978 | CU1892D0 | UPH-950 | | | | |
| 1020 | 1050 | 18 | 19 | 24 | 1048 | CU1894D0 | UPH-1020A | | | | |
| 1025 | 1055 | 15 | 16 | 21 | 1053 | CU1895D0 | UPH-1025 | | | | |
| 1100 | 1140 | 20 | 22 | 27 | 1138 | CU2192D0 | UPH-1100 | | | | |
| 1220 | 1280 | 30 | 32 | 37 | 1278 | CU1899D0 | UPH-1220 | | | | |
| 1560 | 1600 | 20 | 22 | 27 | 1598 | CU2191D0 | UPH-1560 | | | | |
| 1620 | 1680 | 30 | 32 | 37 | 1678 | CU1904D0 | UPH-1620 | | | | |

Remark 1) When using packings on this large size, please consult NOK.

Remark 2) When placing orders for the backup ring on this large size, please consult NOK.