

# UPI TYPE

PACKINGS FOR BOTH PISTON  
AND ROD SEALS  
IRON RUBBER (AU)



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

(Example) Order for the packing as a single piece

• Type Dimensions	UPI	6.3	16.3	8	
	└─ Type Sign		└─ Nominal Size of Packing described in order of inner diameter(d), outer diameter(D), and height(h)		
• Part Number	FU0024D0				

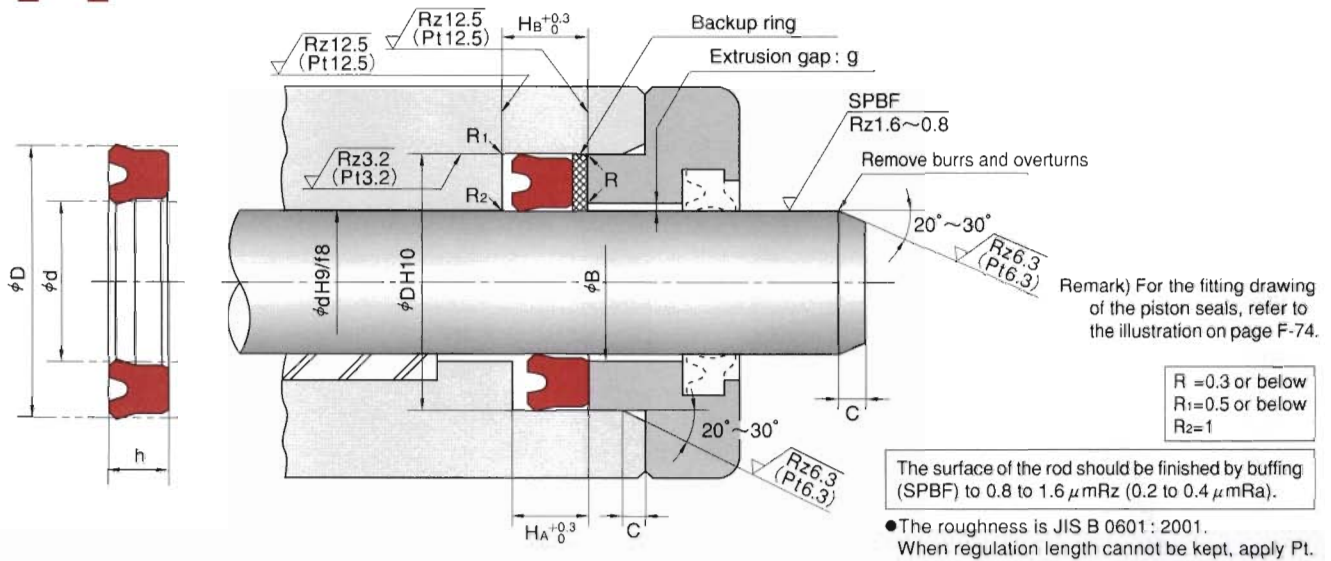
※ When placing orders for backup rings used in combination with packing, designate the NOK part number and the model size.

• 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 <sub>B</sub> - H <sub>A</sub> (Housing dimensions)

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

<b>Material</b>	NOK U801
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# UPI TYPE PACKINGS FOR BOTH PISTON AND ROD SEALS



Nominal Size of Packing, and Housing dimensions							Packing Part Number	Combination Backup Ring Part Number	
d	D	h	H <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	C		BRT3(Endless) 19YF	BRN3(Endless) 80NP
6.3	16.3	8			15.3		FU0024D0	GN0720V0	GN982300
7.1	17.1	8			16.1		FU0030D0	GN0723V0	GN986800
8	18	8			17		FU0043D0	GN0725V0	GN910101
9	19	8			18		FU0054D0	GN0728V0	GN982600
10	20	8			19		FU0069D0	GN0733V0	GN910201
11.2	21.2	8	9	11	20.2	2.5	FU0081D0	GN0736V0	GN982800
12	25	8			24		FU0093D0	GN6005V0	GN986900
12.5	22.5	8			21.5		FU0102D0	GN0741V0	GN983000
14	24	8			23		FU0122D0	GN0745V0	GN910301
15	25	8			24		FU0135D0	GN0749V0	GN973801
16	26	8			25		FU0157D0	GN0751V0	GN910501
	32	10	11	13	31		FU0161D0	GN7288V0	GN987000
18	28	8	9	11	27		FU0182D0	GN0757V0	GN983300
	31	10	11	13	30		FU0186D0	GN6446V0	GN910701
20	30	8	9	11	29		FU0215D0	GN0762V0	GN910901
	33	10	11	13	32		FU0221D0	GN6448V0	GN911001
	35	10			34		FU0224D0	GN7289V0	GN987100
21.5	31.5	8	9	11	30.5		FU0239D0	GN0767V0	GN979700
22	32	8			31		FU0246D0	GN7290V0	GN987200
	35	10	11	13	34		FU0249D0	GN6449V0	GN911101
22.4	30	5	5.7	7.7	29		FU0260D0	GN6450V0	GN911201
	32.4	8			31.4		FU0263D0	GN0771V0	GN983400
25	35	8	9	11	34	3.5	FU0282D0	GN0781V0	GN911501
	38	8			37		FU0287D0	GN6453V0	GN911601
	40	10	11	13	39		FU0292D0	GN6591V0	GN980000
	45	12	13	15	44		FU0301D0	GN7291V0	GN987300
25.5	35.5	8	9	11	34.5		FU0309D1	GN6454V0	GN911701
28	35.5	5	5.7	8.7	34.5		FU0320D1	GN6456V0	GN911901
	40	10			39		FU0330D0	GN6457V0	GN912001
	43	10			42		FU0340D0	GN0791V0	GN983600
30	45	10			44		FU0368D0	GN7061V0	GN980100
	46	10	11	14	45		FU0369D0	GN7292V0	GN987400
31.5	46.5	10			45.5		FU0387D0	GN0805V0	GN983700
32	46	10			45		FU0403D0	GN6035V0	GN987500
35	50	10			49		FU0437D0	GN0816V0	GN912801
35.5	45	6	7	10	44		FU0451D0	GN6464V0	GN912901
	50.5	10			49.5		FU0456D0	GN0820V0	GN995400
38	52	10			51	4	FU0470D0	GN6046V0	GN987600
40	55	10	11	14	54		FU0505D0	GN6759V0	GN994800
	56	10			55		FU0508D0	GN6466V0	GN913201
	60	12	13	16	59		FU0514D0	GN7293V0	GN987700
41	56	10	11	14	55		FU0523D0	GN0835V0	GN994900

## HOW TO DETERMINE B DIMENSION

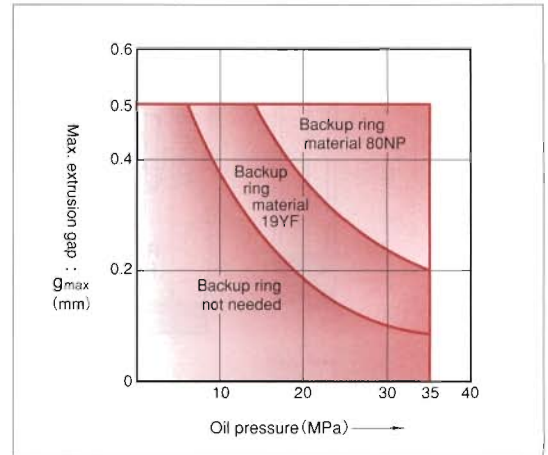
### ■ When using backup ring

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	14MPa	21MPa	35MPa	35MPa	
Material of Backup ring	19YF			80NP	
Dimension	For rod	$B \leq \phi d + 1.0$	$B \leq \phi d + 0.5$	$B \leq \phi d + 0.2$	$B \leq \phi d + 0.8$
	For piston	$B \geq \phi D - 1.0$	$B \geq \phi D - 0.5$	$B \geq \phi D - 0.2$	$B \geq \phi D - 0.8$

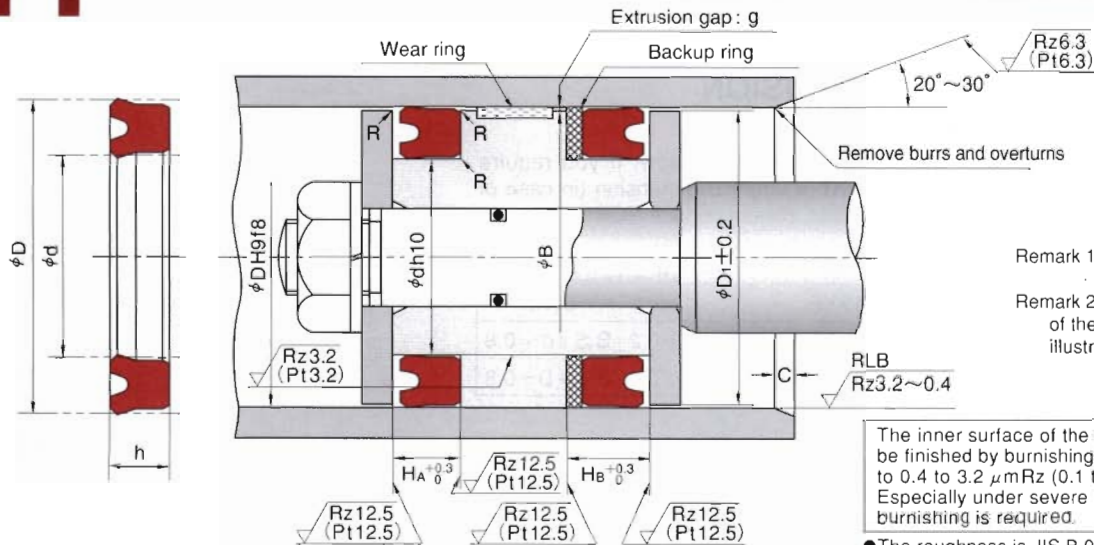
### ■ When not using backup ring

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							Packing Part Number	Combination Backup Ring Part Number	
d	D	h	H <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	C		BRT3(Endless)	BRN3(Endless)
								19YF	80NP
45	56	7	8	11	55	4	FU0572D1	GN6468V0	GN9134O1
	60	10	11	14	59		FU0577D0	GN0845V0	GN9950O0
	61	10			59		FU0579D0	GN6469V0	GN9135O1
46	60	10	11	14	59		FU0588D0	GN7294V0	GN9878O0
48	63	10			59		FU0601D0	GN0853V0	GN9951O0
50	65	10	13	16	64		FU0631D0	GN6439V0	GN9952O0
	66	12			65		FU0635D0	GN6329V0	GN9139O1
	70	12			69		FU0639D0	GN6592V0	GN9529O0
51	71	12	13	16	70		FU0669D0	GN0862V0	GN9805O0
53	73	12			72		FU0683D0	GN0869V0	GN9879O0
55	71	12	16	19	70		FU0704D0	GN6473V0	GN9142O1
	75	12			74		FU0708D0	GN7249V0	GN9807O0
	80	15			79		FU0712D0	GN6072V0	GN9880O0
56	72	12	13	16	71		FU0727D0	GN7009V0	GN9838O0
	76	12			75	FU0728D0	GN0877V0	GN9839O0	
58	78	12	13	16	77	FU0736D0	GN7296V0	GN9881O0	
60	71	7			8	11	70	FU0750D0	GN6475V0
		80	12	13	16	79	FU0761D0	GN0886V1	GN9953O0
62	82	12	81			FU0777D0	GN6371V0	GN9882O0	
63	83	12	13	16	82	FU0793D0	GN0893V1	GN9842O0	
65	85	12			84	FU0819D0	GN0899V0	GN9810O0	
67	87	12	13	16	86	FU0831D0	GN0904V0	GN9844O0	
70	90	12			89	FU0862D0	GN0910V0	GN9151O1	
71	80	6	7	10	79	FU0879D1	GN6481V0	GN9152O1	
		91	12	13	16	90	FU0884D0	GN0914V0	GN9846O0
75	95	12	94			FU0910D0	GN0920V0	GN9154O1	
80	100	12	16	19	98	FU0948D0	GN0927V0	GN9156O1	
		100			15	98	FU0949D0	GN0927V0	GN9156O1
85	100	9	10	13	98	FU0984D1	GN6484V0	GN9091O1	
		105	12	13	16	103	FU0989D0	GN0932V0	GN9157O1
90	110	12	108			FU1030D0	GN0939V0	GN9159O1	
92	112	12	13	16	110	FU1042D0	GN0940V0	GN9811O0	
95	115	12			113	FU1056D0	GN0945V0	GN9161O1	
		120	15	16	19	118	FU1061D0	GN6716V0	GN9883O0
98	112	9	10	13	110	FU1068D0	GN6487V0	GN9162O1	
100	120	12	13	16	118	FU1089D0	GN0952V0	GN9164O1	
		125	15	17	20	123	FU1096D0	GN7297V0	GN9884O0
105	125	15	123			FU1129D0	GN0959V0	GN9165O1	
106	120	8.5	9.5	12.5	118	FU1135D1	GN6489V0	GN9166O1	
		126	15	17	20	124	FU1138D0	GN0961V0	GN9847O0
110	130	15	128			FU1165D0	GN6790V0	GN9694O0	
112	132	15			130	FU1182D0	GN0970V0	GN9168O1	

# UPI TYPE PACKINGS FOR BOTH PISTON AND ROD SEALS



Remark 1) For B dimension, refer to page F-53.  
 Remark 2) For the fitting drawing of the rod seals, refer to the illustration on page F-72.

The inner surface of the cylinder tube should be finished by burnishing (RLB) or honing (GH) to 0.4 to 3.2  $\mu\text{m Rz}$  (0.1 to 0.8  $\mu\text{m Ra}$ ). 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							Packing Part Number	Combination Backup Ring Part Number		
d	D	h	H <sub>A</sub>	H <sub>B</sub>	$\phi D_1$	C		BRT3(Endless) 19YF	BRN3(Endless) 80NP	
115	135	15	17	20	133	5	FU1198D0	GN0974V0	GN9778O1	
118	132	9	10	13	130		FU1932D0	GN7298V0	GN9885O0	
	138	15	17	20	136		FU1207D0	GN0978V0	GN9849O0	
120	140	15			138		FU1224D0	GN0982V0	GN9169O1	
125	145	15			143		FU1257D0	GN0986V0	GN9850O0	
130	150	15			148		FU1284D0	GN6925V0	GN9335O1	
132	152	15	10	13	150		FU1292D0	GN0994V0	GN9886O0	
135	155	15			153		FU1305D0	GN0998V0	GN9769O0	
136	150	9			148		FU1933D0	GN6493V0	GN9173O1	
140	160	15			158		FU1327D0	GN1002V0	GN9668O0	
	165	15			163	FU1330D0	GN6494V0	GN9174O1		
145	165	15			17	20	163	FU1344D0	GN1007V0	GN9887O0
150	170	15					168	FU1363D0	GN1011V0	GN9672O1
	175	15					173	FU1365D0	GN7014V0	GN9645O1
155	180	15					178	FU1391D0	GN1016V0	GN9179O1
160	185	15			21	21	183	FU1413D0	GN1020V0	GN9181O1
165	190	15	188	FU1431D0			GN1023V0	GN9815O0		
170	195	15	193	FU1448D0			GN1027V0	GN9852O0		
175	200	15	198	FU1461D0			GN1031V0	GN9186O1		
180	205	15	203	FU1490D0			GN1035V0	GN9188O1		
185	210	15	6.5	21			208	FU1504D0	GN1039V0	GN9817O0
190	215	15					213	FU1519D0	GN1042V0	GN9818O0
199	224	15					222	FU1532D0	GN1047V0	GN9820O0
200	225	15					223	FU1547D0	GN1050V0	GN9192O1
	225	18					223	FU1549D0	GN1050V0	GN9192O1
205	235	18			20	24	233	FU1565D0	GN7302V0	GN9888O0
210	235	18					233	FU1579D0	GN1057V0	GN9854O0
212	237	18					235	FU1584D0	GN1058V0	GN9665O1
220	245	18					243	FU1599D0	GN1063V0	GN9670O0
224	249	18					247	FU1612D0	GN7282V0	GN9856O0
225	250	18	248	FU1625D0			GN1065V0	GN9045O1		
230	254	18	252	FU1639D0			GN7304V0	GN9890O0		
	255	18	253	FU1641D0			GN1069V0	GN9857O0		
236	261	18	259	FU1648D0			GN6191V0	GN9891O0		
240	265	18	263	FU1662D0			GN1073V0	GN9858O0		
250	275	18	273	FU1682D0	GN1078V0	GN9200O1				
260	290	18	288	FU1706D0	GN1083V0	GN9431O1				
265	295	18	293	FU1713D0	GN1085V0	GN9892O0				
270	300	18	298	FU1722D0	GN1089V0	GN9206O1				
280	310	18	308	FU1735D0	GN1093V0	GN9859O0				
290	320	18	318	FU1750D0	GN1098V0	GN9860O0				
300	330	18	328	FU1764D0	GN1103V0	GN9235O1				

## UPI 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							Packing Part Number	Combination Backup Ring Part Number		
d	D	h	H <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	C		BRT3(Endless) 19YF	BRN3(Endless) 80NP	
310	340	22	24	28	338	10	FU1773D0			
315	345	22	24	28	343		FU1775D0			
320	350	15	17	21	348		FU1778D0			
	350	18	20	24	348		FU1779D0			
	350	22	24	28	348		FU1780D0			
	360	25	27	31	358		FU1781D0			
323	355	24	26	30	353		FU1784D0			
330	360	20	22	26	358		FU1788D0			
	360	22	24	28	358		FU1789D0			
	370	28	30	34	368		FU1791D0			
340	370	22	24	28	368		FU1795D0			
350	380	22	24	28	378		FU1799D0			
	390	28			34		388	FU2016D0		
355	385	22			383		FU1801D0			
370	400	22			398		FU1809D0			
375	405	22			403		FU1812D0			
380	410	22			408		FU1816D0			
385	415	22			413		FU1993D0			
390	420	22			418		FU1818D0			
400	425	22			423		FU1822D0			
	430	22			428	FU1823D0				
405	440	25	27	32	438	FU1827D0				
410	445	25			443	FU1829D0				
		460	35	37	42	458	FU1830D0			
415	450	25	27	32	448	FU1831D0				
420	455	25			453	FU1833D0				
425	460	25			458	FU2223D0				
430	460	22			24	29	458	FU1977D0		
	465	25			27	32	463	FU2013D0		
431	457.2	18			20	25	455	FU1839D1		
435	470	25			27	32	468	FU1841D0		
440	470	19			21	26	468	FU1842D0		
440	475	28			30	35	473	FU1976D0		
445	480	25			27	32	478	FU2428D0		
450	485	25	27	32	483	FU1845D0				
						15				

Remark 1) Regarding the products of large size (the inner diameter (d) exceeding classification 300mm), contact NOK to check if we have them in stock.

Remark 2) When placing orders for backup ring on this large size (the inner diameter (d) exceeding classification 300mm), please consult NOK.

# UPI 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							Packing Part Number	Combination Backup Ring Part Number		
d	D	h	H <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	C		BRT3(Endless)	BRN3(Endless)	
								19YF	80NP	
456	490	30	32	37	488	15	FU1847D1			
460	495	25	27	32	493		FU1849D0			
465	500	26.5	28.5	33.5	498		FU2648D0			
470	505	25	27	32	503		FU1851D0			
475	510	25			508		FU1854D0			
480	515	25			513		FU2025D0			
490	530	25			528		FU1855D0			
500	535	25			533		FU1856D0			
	540	25			538		FU1857D0			
507	547	28			30		35	545	FU1858D0	
525	565	28						563	FU2743D0	
530	570	25	27	32	568		FU2718D0			
540	575	23	25	30	573		FU2376D0			
560	600	28	30	35	598		FU1865D0			
595	640	28			638		FU1986D0			
600	650	32			34	39	648	FU2017D0		
650	690	25	27	32	688	FU2003D0				
660	700	32	34	39	698	FU1870D0				
680	720	32			718	FU1871D0				
695	745	32			743	FU2398D0				
700	750	35			37	42	748	FU1874D0		
730	750	30			32	37	748	FU2078D0		
755	800	32			34	39	798	FU1876D0		
800	830	20	22	27	828	FU1978D0				
	850	35	37	42	848	FU1881D0				
850	900	35			898	FU2219D0				
870	900	20			22	27	898	FU1979D0		
920	970	35	37	42	968	FU1888D1				
1050	1100	30	32	37	1098	FU2391D0				
1096	1146	30			1144	FU2558D0				
1150	1200	30			1198	FU2229D0				
1380	1430	30			1428	FU2392D0				

Remark) When placing orders for the backup ring on this large size (the inner diameter (d) exceeding classification 300mm), please consult NOK.

F DIMENSION UPI

# USI TYPE

PACKINGS FOR BOTH PISTON  
AND ROD SEALS  
IRON RUBBER (AU)



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

(Example) Order for the packing as a single piece

• Type Dimensions	USI	10	18	5	
	└─ Type Sign				└─ Nominal Size of Packing described in order of inner diameter(d), outer diameter(D), and height(h)
• Part Number	FU0064S0				

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

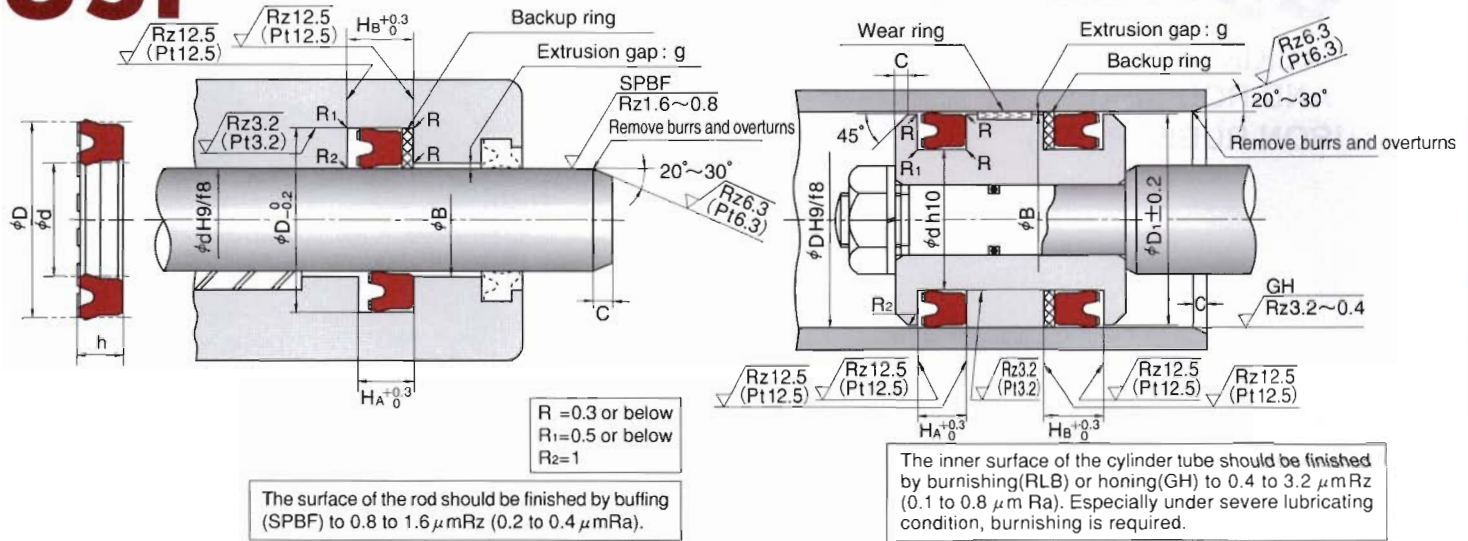
• Type Dimensions	BRT2	10	18	2	
	└─ Type Sign				└─ Nominal Size of Backup ring described in order of inner diameter(d), outer diameter(D), and thickness(t)*
• Part Number	GN5418V0				

\* t = H<sub>B</sub> - H<sub>A</sub> (Housing dimensions)

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

<b>Material</b>	NOK U593
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# USI TYPE PACKINGS FOR BOTH PISTON AND ROD SEALS (INSTALLED WITH INTERNAL GROOVE)



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

Nominal Size of Packing, and Housing dimensions							Packing Part Number	Combination Backup Ring Part Number	
d	D	h	H <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	C		BRT2 (Biascut)	19YF
10	18	5			17		●FU0064S0	GN5418V0	
12	20	5			19		●FU2464S0	GN5723V0	
12.5	20	5			19		●FU2465S0	GN5724V0	
14	22	5			21		○FU0116S0	GN5719V0	
16	24	5	5.7	7.7	23		○FU0150S0	GN5720V0	
17	25	5			24		○FU2466S0	GN5725V0	
18	26	5			25	2	○FU0180S0	GN4778V0	
20	28	5			27		○FU0212S0	GN4780V0	
	30	6	7	9	29		○FU0214S0	GN4781V0	
22	30	5			29		○FU2467S0	GN5726V0	
22.4	30	5			29		○FU0260S0	GN4784V0	
23.5	31.5	5	5.7	7.7	30.5		○FU0267S0	GN4786V0	
24	32	5			31		○FU2468S0	GN5727V0	
25	33	5			32		○FU0276S0	GN5019V1	
	35	6	7	9	34		○FU0279S0	GN4787V0	
26	34	5			33		○FU2469S0	GN5728V0	
27	35	5			34		FU2470S0	GN5707V0	
28	35.5	5	5.7	8.7	34.5		FU0320S0	GN4791V0	
	36	5			35		FU0321S0	GN5715V0	
30	38	5			37		FU0355S0	GN5729V0	
	40	6			39		FU0357S0	GN4794V0	
31.5	41.5	6			40.5		FU0382S0	GN4796V0	
32	42	6			41		FU2055S0	GN5730V0	
33	43	6			42		FU2471S0	GN5731V0	
34	44	6			43		FU2263S0	GN5732V0	
35	45	6			44		FU0424S0	GN4799V0	
35.5	45	6	7	10	44		FU0451S0	GN4801V0	
	45.5	6			44.5	2.5	FU0452S0	GN5716V0	
36	46	6			45		FU2472S0	GN5733V0	
38	48	6			47		FU2240S0	GN5365V0	
40	50	6			49		FU0497S0	GN4050V0	
45	55	6			54		FU0567S0	GN4804V0	
	56	7	8	11	55		FU0572S0	GN4805V0	
46	56	6			55		FU2662S0	GN5709V0	
50	60	6			59		FU0619S0	GN4335V0	
53	63	6			62		FU0679S0	GN4693V0	
55	65	6	7	10	64		FU0694S0	GN4810V0	
56	66	6			65		FU0722S0	GN4766V0	
58	68	6			67		FU2473S0	GN5641V0	
60	70	6			69		FU0746S0	GN4676V0	
	71	7	8	11	70		FU0750S0	GN4812V0	

Remark ) When using packings with mark ● as rod packing, provide separate grooves.  
 When using packings with marks ●○ as piston packing, provide separate grooves.

## HOW TO DETERMINE B DIMENSION

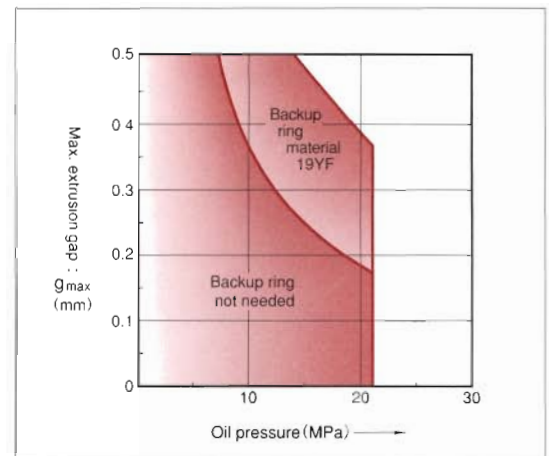
### ■ When using backup ring

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	14MPa	21MPa	
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							Packing Part Number	Combination Backup Ring Part Number		
d	D	h	H <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	C		BRT2(Biascut)	19YF	
61	71	6	7	10	70	2.5	FU2474S0	GN4629V0		
63	73	6			72		FU0786S0	GN4814V0		
65	75	6			74		FU0809S0	GN4816V0		
67	77	6			76		FU0828S0	GN4697V0		
70	80	6			79		FU0849S0	GN4651V0		
71	80	6			79		FU0879S0	GN4818V0		
75	85	6			84		FU0901S0	GN4692V0		
80	90	6			89		FU0939S0	GN4820V0		
	95	9			10		13	94	FU0942S0	GN5023V0
85	95	6			7		10	94	FU2475S0	GN4757V0
	100	9	10	13	99	FU0984S0	GN4687V0			
86	100	8.5	9.5	12.5	99	FU2476S0	GN4982V1			
89	104	9	10	13	103	FU2372S0	GN5734V0			
90	100	6	7	10	99	FU1021S0	GN5735V0			
	105	9	10	13	104	FU1024S0	GN4698V0			
95	110	9			109	FU1051S0	GN4822V0			
96	111	9			110	FU2477S0	GN5736V0			
98	112	8.5			9.5	12.5	111	FU1067S0	GN4824V0	
100	115	9	10	13	113	FU1082S0	GN4512V0			
105	120	9			118	FU1125S0	GN5198V0			
106	120	8.5			9.5	12.5	118	FU1135S0	GN4826V0	
110	125	9			123	FU1157S0	GN4480V0			
112	125	9			123	FU1179S0	GN4827V0			
115	130	9			128	FU1195S0	GN4593V0			
118	132	8.5			9.5	12.5	130	FU1204S0	GN5414V0	
125	140	9			10	13	138	FU1252S0	GN4481V0	
132	145	8.5			9.5	12.5	143	FU1291S0	GN5737V0	
136	150	8.5					148	FU1306S0	GN4830V0	
145	160	9	10	13			158	FU1343S0	GN4551V0	

# 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.

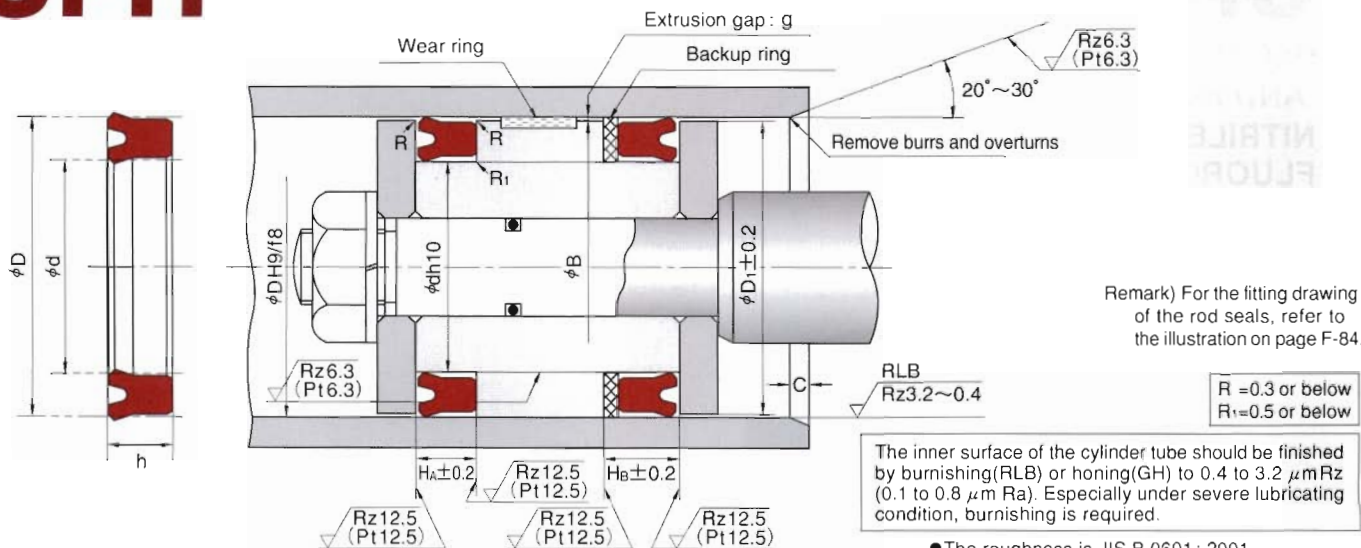
• Type Dimensions	BRT3	6.3	16.3	2
	└─ Type Sign	└─ Nominal Size of Backup ring described in order of inner diameter(d), outer diameter(D), and thickness(t)*		
• Part Number	GN0720V0			

\*t = H<sub>B</sub> - H<sub>A</sub> (Housing dimensions)

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

<b>Material</b>	Standard : NOK A505 Heat resistant type : NOK F357
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# UPH TYPE PACKINGS FOR BOTH PISTON AND ROD SEALS



●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 <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	C	Packing Part Number	Nominal Number	Packing Part Number	Nominal Number	BRT3 (Endless)
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	
	35	10	11	13	34	CU0249D0	UPH-22			GN6449V0	
22.4	32.4	8	9	11	31.4	CU0263D0	UPH-22.4A	CU0263D3	UPH-22.4AF	GN0771V0	
	35.4	10	11	13	34.4	CU0265D1	UPH-22.4			GN6017V0	
25	35	8	9	11	34	CU0282D2	UPH-25A	CU0282D3	UPH-25AF	GN0781V0	
	38	10	11	13	37	CU0288D0	UPH-25			GN6453V0	
	40	10	11	13	39	CU0292D0	UPH-25B	CU0292D4	UPH-25BF	GN6591V0	
	45	12	13	15	44	CU0301D0	UPH-25C			GN7291V0	
25.5	35.5	8	9	12	34.5	CU0309D0	UPH-25.5			GN6454V0	
	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

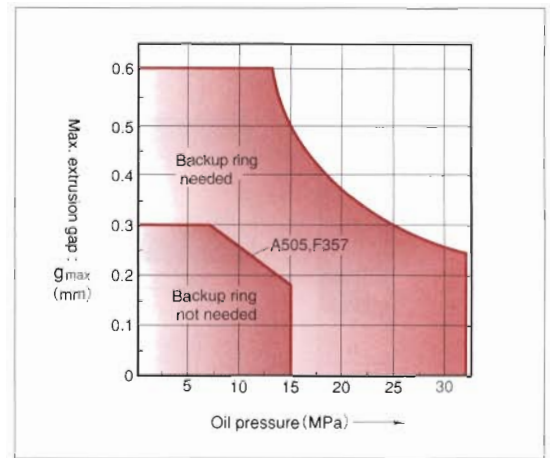
### ■ When using backup ring

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

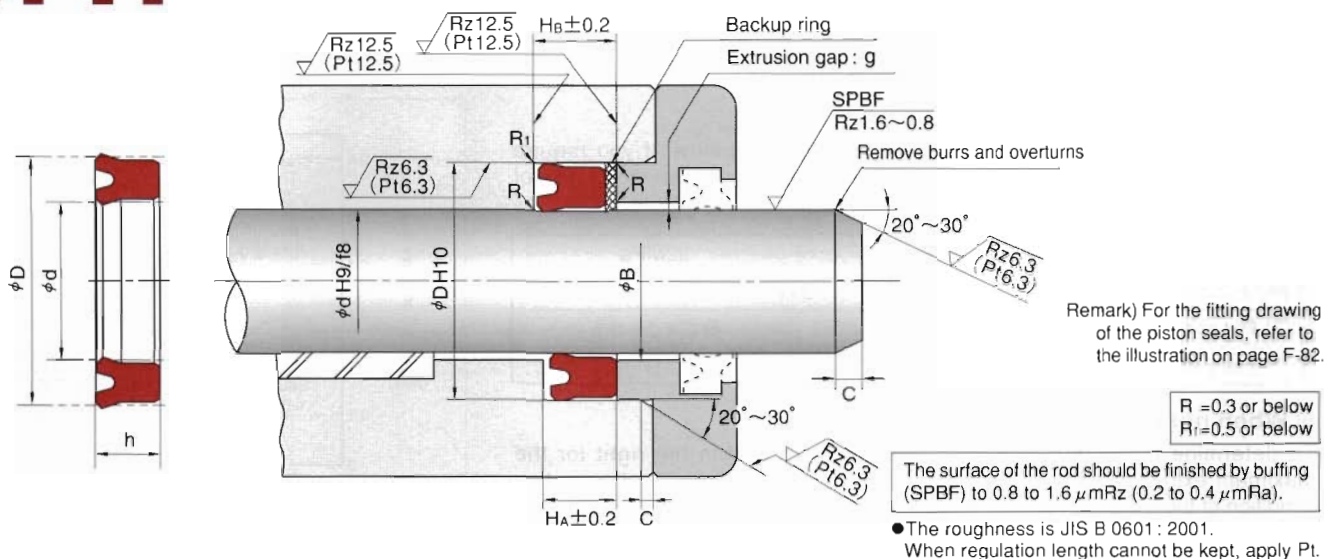
To determine B dimension, please refer to the graph in the right for the maximum extrusion gap (one side) considering the eccentricity of operating condition of the piston or rod.



Nominal Size of Packing, and Housing dimensions							Standard (A505)		Heat resistant type (F357)		Combination Backup Ring Part Number
d	D	h	H <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	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	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



Nominal Size of Packing, and Housing dimensions							Standard (A505)		Heat resistant type (F357)		Combination Backup Ring Part Number
d	D	h	H <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	C	Packing Part Number	Nominal Number	Packing Part Number	Nominal Number	BRT3 (Endless)
											19YF
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

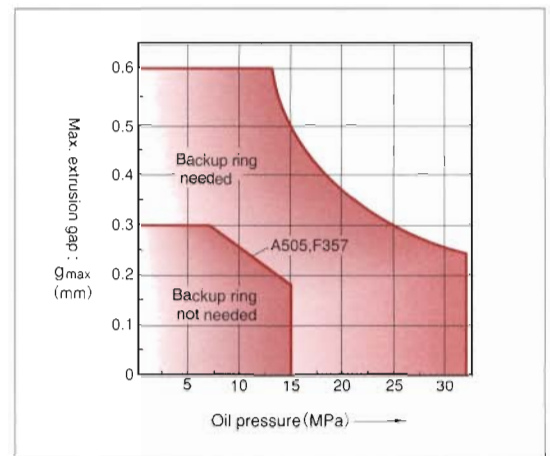
### ■ When using backup ring

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 <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	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 <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	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			
	360	22	24	28	358		CU1789D0	UPH-330			
335	355	14	15	19	353		CU1793D1	UPH-335A			
	367	24	26	30	365		CU2197D0	UPH-335			
340	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 <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	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.

# USH 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	USH	12	20	5	
	└ Type Sign		└ Nominal Size of Packing described in order of inner diameter(d), outer diameter(D), and height(h)		
• Part Number	CU3248K0				

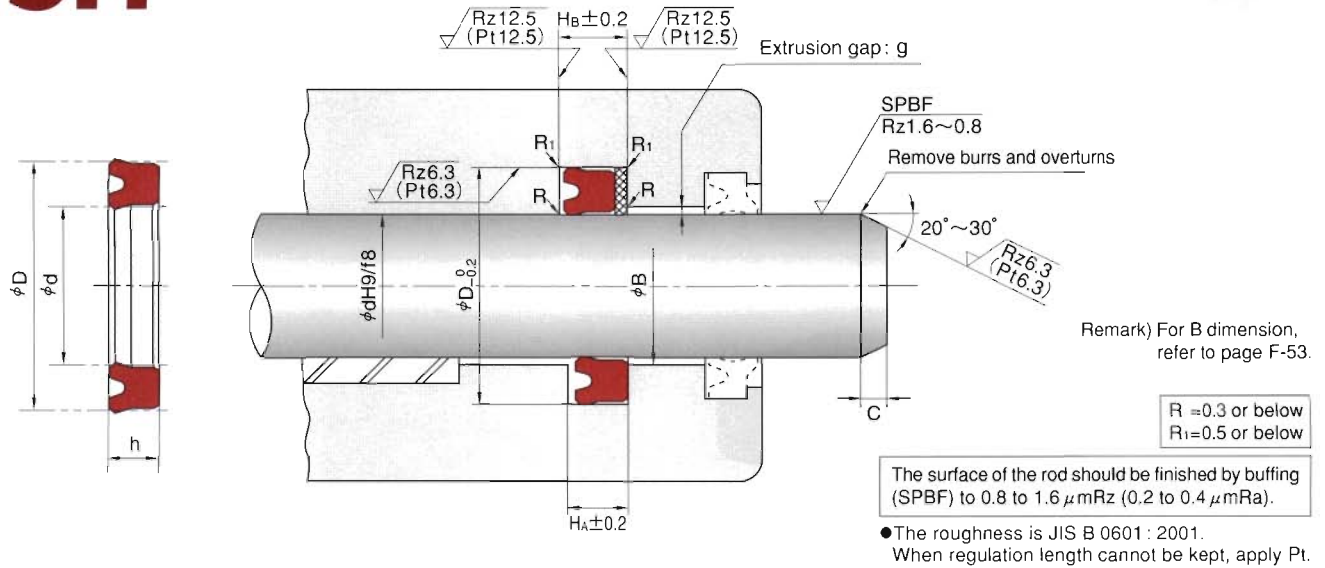
※ When placing orders for backup rings used in combination with packing, designate the NOK part number and the model size.

• Type Dimensions	BRT2	12	20	2	
	└ Type Sign		└ Nominal Size of Backup ring described in order of inner diameter(d), outer diameter(D), and thickness(t)*		
• Part Number	GN5723V0				*t = H <sub>B</sub> - H <sub>A</sub> (Housing dimensions)

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

<b>Material</b>	Standard : NOK A505 Heat resistant type : NOK F357
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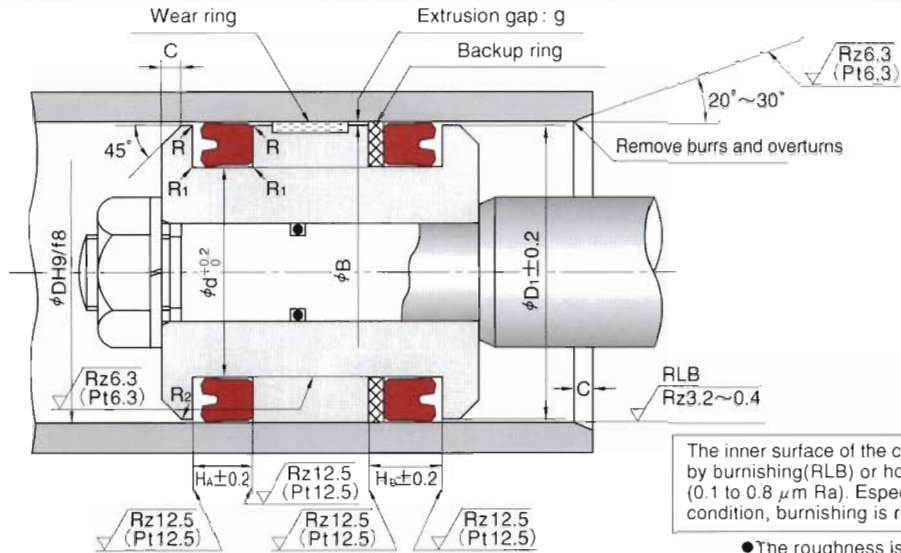
# USH TYPE PACKINGS FOR BOTH PISTON AND ROD SEALS (INSTALLED WITH INTERNAL GROOVE)



Nominal Size of Packing, and Housing dimensions							Standard (A505)		Heat resistant type (F357)		Combination Backup Ring Part Number
d	D	h	H <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	C	Packing Part Number	Nominal Number	Packing Part Number	Nominal Number	BRT2 (Biascut) 19YF
12	20	5	5.7	7.7	19	2	●CU3248K0	USH-12			GN5723V0
14	22	5	5.7	7.7	21		●CU2692K0	USH-14			GN5719V0
16	24	5	5.7	7.7	23		●CU2548K0	USH-16	●CU2548K2	USH-16F	GN5720V0
18	26	5	5.7	7.7	25		CU0180K0	USH-18	CU0180K6	USH-18F	GN4778V0
20	28	5	5.7	7.7	27		CU0212K0	USH-20	CU0212K4	USH-20F	GN4780V0
22	30	5	5.7	7.7	29		CU3017K0	USH-22	CU3017K3	USH-22F	GN5726V0
22.4	30	5	5.7	7.7	29		CU0260K0	USH-22.4	CU0260K3	USH-22.4F	GN4784V0
23.5	31.5	5	5.7	7.7	30.5		CU0267K0	USH-23.5			GN4786V0
24	32	5	5.7	7.7	31		CU2971K0	USH-24	CU2971K1	USH-24F	GN5727V0
25	33	5	5.7	7.7	32		CU0276K0	USH-25	CU0276K3	USH-25F	GN5019V1
27	35	5	5.7	8.7	34		CU3187K0	USH-27			GN5707V0
28	35.5	5	5.7	8.7	34.5		CU0320K0	USH-28	CU0320K2	USH-28F	GN4791V0
	36	5	5.7	8.7	35		CU2536K0	USH-28A			GN5715V0
30	40	6	7	10	39		CU0357K0	USH-30	CU0357K6	USH-30F	GN4794V0
31.5	41.5	6	7	10	40.5	CU0382K0	USH-31.5	CU0382K1	USH-31.5F	GN4796V0	
32	42	6	7	10	41	CU2819K0	USH-32			GN5730V0	
35	45	6	7	10	44	CU0424K0	USH-35	CU0424K3	USH-35F	GN4799V0	
35.5	45	6	7	10	44	CU0451K0	USH-35.5	CU0451K1	USH-35.5F	GN4801V0	
	45.5	6	7	10	44.5	CU3253K0	USH-35.5A			GN5716V0	
36	46	6	7	10	45	CU3040K1	USH-36			GN5733V0	
40	50	6	7	10	49	CU0497K0	USH-40	CU0497K3	USH-40F	GN4050V0	
45	55	6	7	10	54	CU0567K0	USH-45	CU0567K4	USH-45F	GN4804V0	
	56	7	8	11	55	CU0572K0	USH-45A	CU0572K1	USH-45AF	GN4805V0	
50	60	6	7	10	59	CU0619K0	USH-50	CU0619K4	USH-50F	GN4335V0	
53	63	6	7	10	62	CU0679K0	USH-53	CU0679K4	USH-53F	GN4693V0	
55	65	6	7	10	64	CU0694K0	USH-55			GN4810V0	
56	66	6	7	10	65	CU0722K0	USH-56	CU0722K2	USH-56F	GN4766V0	
58	68	6	7	10	67	CU3255K0	USH-58			GN5641V0	
60	70	6	7	10	69	CU0746K0	USH-60	CU0746K3	USH-60F	GN4676V0	
	71	7	8	11	70	CU0750K0	USH-60A			GN4812V0	
63	73	6	7	10	72	CU0786K0	USH-63	CU0786K2	USH-63F	GN4814V0	
65	75	6	7	10	74	CU0809K0	USH-65	CU0809K2	USH-65F	GN4816V0	
67	77	6	7	10	76	CU0828K0	USH-67	CU0828K1	USH-67F	GN4697V0	
70	80	6	7	10	79	CU0849K0	USH-70	CU0849K4	USH-70F	GN4651V0	
71	80	6	7	10	79	CU0879K0	USH-71	CU0879K1	USH-71F	GN4818V0	
75	85	6	7	10	84	CU0901K0	USH-75			GN4692V0	
80	90	6	7	10	89	CU0939K0	USH-80	CU0939K3	USH-80F	GN4820V0	
85	95	6	7	10	94	CU1959K0	USH-85A			GN4757V0	
	100	9	10	13	98	CU0984K0	USH-85	CU0984K4	USH-85F	GN4687V0	
90	105	9	10	13	103	CU1024K0	USH-90	CU1024K4	USH-90F	GN4698V0	
95	110	9	10	13	108	CU1051K0	USH-95	CU1051K3	USH-95F	GN4822V0	

Remark 1) When using packings with mark ● as rod packing, provide separate grooves.

Remark 2) The Part number and the one stamped on the product might be different in case of heat resistant type.



Remark) For B dimension, refer to page F-17.

R = 0.3 or below  
R<sub>1</sub> = 0.5 or below  
R<sub>2</sub> = 1

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)		Combination Backup Ring Part Number
d	D	h	H <sub>A</sub>	H <sub>B</sub>	φD <sub>1</sub>	C	Packing Part Number	Nominal Number	Packing Part Number	Nominal Number	BRT2 (Biacsut) 19YF
98	112	8.5	9.5	12.5	110	4	CU1067K0	USH-98	CU1067K2	USH-98F	GN4824V0
100	115	9	10	13	113		CU1082K0	USH-100	CU1082K3	USH-100F	GN4512V0
106	120	8.5	9.5	12.5	118		CU1135K0	USH-106	CU1135K1	USH-106F	GN4826V0
110	125	9	10	13	123		CU1157K0	USH-110			GN4480V0
112	125	8.5	9.5	12.5	123		CU1178K0	USH-112	CU1178K1	USH-112F	GN4827V0
	125	9	10	13	123		CU1179K0	USH-112A			GN4827V0
115	130	8.5	9.5	12.5	128		CU3259K0	USH-115			GN4593V0
118	132	8.5	9.5	12.5	130		CU1204K0	USH-118			GN5414V0
125	140	9	10	13	138		CU1252K0	USH-125	CU1252K2	USH-125F	GN4481V0
130	145	9	10	13	143		CU1280K0	USH-130			GN4628V1
132	145	8.5	9.5	12.5	143		CU1291K0	USH-132			GN5737V0
136	150	8.5	9.5	12.5	148		CU1306K0	USH-136	CU1306K3	USH-136F	GN4830V0
140	155	9	10	13	153		CU1323K0	USH-140	CU1323K1	USH-140F	GN4526V0
145	160	9	10	13	158		CU1343K0	USH-145	CU1343K2	USH-145F	GN4551V0
150	165	9	10	13	163		CU1359K0	USH-150	CU1359K1	USH-150F	GN4833V0
155	170	9	10	14	168		CU3261K0	USH-155			GN4834V0
160	175	9	10	14	173		CU1406K0	USH-160	CU1406K2	USH-160F	GN4835V0
165	180	9	10	14	178		CU1429K0	USH-165	CU1429K2	USH-165F	GN4836V0
170	185	9	10	14	183		CU3262K0	USH-170			GN5464V0
175	190	9	10	14	188		CU3038K0	USH-175			GN4839V0
180	200	12	13	17	198		CU1483K0	USH-180	CU1483K2	USH-180F	GN4470V0
190	210	12	13	17	208		CU2516K0	USH-190	CU2516K1	USH-190F	GN4841V0
195	215	12	13	17	213		CU3263K0	USH-195			GN5746V0
200	220	12	13	17	218		CU1543K0	USH-200	CU1543K1	USH-200F	GN4385V0
204	224	12	13	17	222		CU1563K0	USH-204	CU1563K1	USH-204F	GN4842V0
220	240	12	13	17	238		CU1596K0	USH-220			GN4444V0
224	244	12	13	17	242		CU1609K0	USH-224			GN5132V0
230	250	12	13	17	248		CU1637K0	USH-230	CU1637K1	USH-230F	GN4635V0
240	260	12	13	17	258	CU1657K0	USH-240			GN4845V0	
250	270	12	13	17	268	CU1678K0	USH-250			GN4459V0	
260	280	14	15	19	278	CU1702K0	USH-260	CU1702K1	USH-260F	GN5563V0	
280	300	14	15	19	298	CU1962K0	USH-280			GN5459V0	
295	315	14	15	19	313	CU1756K0	USH-295			GN5738V0	
300	320	12	13	17	318	CU3267K0	USH-300			GN5581V0	
335	355	14	15	19	353	CU1793K0	USH-335				
355	375	14	15	19	373	CU3270K0	USH-355				
380	400	14	15	19	398	CU2002K0	USH-380				
400	420	14	15	19	418	CU3271K0	USH-400				
450	470	14	15	20	468	CU3273K0	USH-450				
500	525	17	18	23	523	6.5	CU3275K0	USH-500			

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

Remark 2) The Part number and the one stamped on the product might be different in case of heat resistant type.

Remark 3) When placing orders for the backup ring on this large size, please consult NOK.