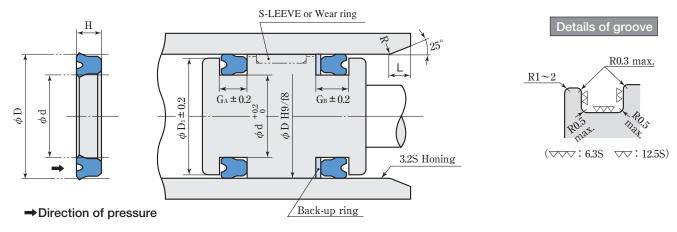
# **SKY-Packings**

# Hydraulic packings for pistons and rods (Installable in one-piece groove)



#### Dimension table



- Note: Packings should be installed in the direction specified in the above schematic.
  - Consider adopting divided grooves if one piece groove is technically adverse.
  - Use divided grooves for packings smaller than SKY-18 in size.

  - • D H9/f8 would be modified according to the variation of the bearing structure.

     • For applications installed together with wear rings, refer to the dimension table of the applicable wear ring.
  - For information on preferred values of surface finish (roughness), see page 14.

### Dimension table of SKY-Packings

(Unit:mm)

	Р	ack	ing 8	G Gro	ove (	dimensior	าร		Part No.					
٦	_	11				dı )		0	Standard material	SKY-Packin	Low temperature-	HN	IBR	Combination back-up ring
d	D	Н	GΑ	Gв	Dı	(Reference)	L	l	(RN906)	resistant material (RF905) (RF907)	resistant material (RN903)	(RP902)	(RP903)	(PT111)
10 12 12.5 14 16	18 20 20 22 24	5 5 5 5 5	5.7 5.7 5.7 5.7 5.7	6.7 6.7 6.7 6.7 6.7	17 19 19 21 23	10.4 12.4 12.9 14.4 16.4	3 3 3 3	1.5 1.5 1.5 1.5 1.5	SKY-0010001N906 SKY-0012001N906 SKY-12.5 SKY-14 SKY-16	SKY-14F SKY-16F		•	•	TBC-0010007T111 TBC-0012003T111 TCS-20 ×12.5 TCS-22 ×14 TCS-24 ×16
17 18 20 20 22	25 26 28 30 30	5 5 5 6 5	5.7 5.7 5.7 7 5.7	6.7 6.7 6.7 8.5 6.7	24 25 27 29 29	17.4 18.4 20.4 20.4 22.4	3 3 3 3	1.5 1.5 1.5 1.5 1.5	SKY-0017001N906 SKY-18 SKY-20 SKY-0020001N906 SKY-22	SKY-18F SKY-20F SKY-22F	SKY-20N	•	•	TCS-25 ×17 TCS-26 ×18 TCS-28 ×20 TBC-0020006T111 TCS-30 ×22
22.4 23.5 24 25 26	30 31.5 32 33 34	5 5 5 5 5	5.7 5.7 5.7 5.7 5.7	6.7 6.7 6.7 6.7	29 30.5 31 32 33	22.8 23.9 24.4 25.4 26.4	3 3 3 3	1.5 1.5 1.5 1.5 1.5	SKY-22.4 SKY-23.5 SKY-0024002N906 SKY-25 SKY-0026001N906	SKY-22.4F SKY-23.5F SKY-25F	SKY-25N	•	•	TCS-30 ×22.4 TCS-31.5×23.5 TCS-32 ×24 TCS-33 ×25 TBC-0026005T111
27 28 28 30 30	35 35.5 36 38 40	5 5 5 5 6	5.7 5.7 5.7 5.7 7	6.7 6.7 6.7 6.7 8.5	34 34.5 35 37 39	27.4 28.4 28.4 30.5 30.5	3 3 3.5 3.5	1.5 1.5 1.5 3 3	SKY-0027001N906 SKY-28 SKY-28A SKY-0030001N906 SKY-30	SKY-28F SKY-30F	SKY-28N SKY-30N	•	•	TCS-35 × 27 TCS-35.5×28 TCS-36 × 28 TBC-0030005T111 TCS-40 × 30
31.5 32 35 35.5 35.5	41.5 42 45 45 45.5	6 6 6 6	7 7 7 7 7	8.5 8.5 8.5 8.5 8.5	40.5 41 44 44 44.5	32.0 32.5 35.5 36.0 36.0	3.5 3.5 3.5 3.5 3.5	3 3 3 3	SKY-31.5 SKY-32 SKY-35 SKY-35.5 SKY-35.5A	SKY-31.5F SKY-35F SKY-35.5F	SKY-35N SKY-35.5N	•	•	TCS-41.5×31.5 TCS-42 × 32 TCS-45 × 35 TCS-45 × 35.5 TCS-45.5×35.5
36 38 40	46 48 50	6 6 6	7 7 7	8.5 8.5 8.5	45 47 49	36.5 38.5 40.5	3.5 3.5 3.5	3 3 3	SKY-36 SKY-0038001N906 SKY-40	SKY-36F SKY-40F	SKY-40N		•	TCS-46 ×36 TBC-0038003T111 TCS-50 ×40

\*Orders and inquiries are accepted on part numbers.

\*Products with the part numbers in blue back ground are stock items.

\*Products with the part numbers in blue back ground are stock items.

\*Packings with the part numbers in light Italic require the confirmation of the existence of the tooling prior to ordering. These items are subject to the abolishment without notice. Reclamation of an abolished product requires to newly produce the tooling at your expense.

\*Packings are adequately packaged for the optimum storage. Refer to "Cautions" in page 2 for the handling and the storage.

\*The heat resistant material for the products larger than the SKY-300F is RF907.

\*Inquires for HNBR materials:

\*Please specify material code RP903 or RP902 in addition to the standard part number.

RP903 is applicable to high temperature operation and to water polyglycol operating fluid.

RP902 is the material applicable to both high and low temperature operating conditions.

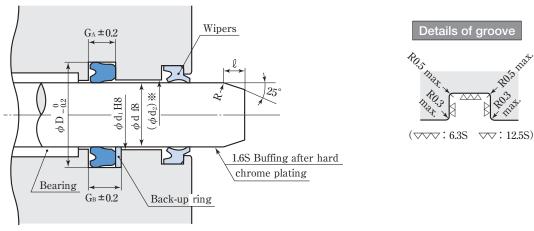
\*All HNBR products are manufactured on a made-to-order base.

\*Indicates manufacturable items. For those items without \*© indication, please inquire of us.

\*Engraved marks may be variant because some dimensions/items are manufactured by using toolings for different materials.

Related products: SDR-Wipers, SCK-Wipers, SCB-Wipers, SW-Wear rings, S-LEEVE and PG-Rings

### Dimension table



## Dimension table of SKY-Packings

(Unit:mm)

	P	ack	ing 8	Gro	ove o	dimensior	าร		Part No.				
d	D	Н	GA	Gв	Dı	d <sub>1</sub> (Reference)	L	e	Standard material (RN906)	SKY-Packin High temperature- resistant material (RF905) (RF907)	Low temperature- resistant material (RN903) (RP902)		Combination back-up ring (PT111)
45 45 50 53 55	55 56 60 63 65	6 7 6 6	7 8 7 7	8.5 9.5 8.5 8.5 8.5	54 55 59 62 64	45.5 45.5 50.5 53.6 55.6	3.5 3.5 3.5 3.5 3.5	3	SKY- 45 SKY- 45A SKY- 50 SKY- 53 SKY- 55	SKY- 45F SKY- 45AF SKY- 50F SKY- 53F SKY- 55F	SKY-45N SKY-45AN SKY-50N	•	TCS- 55× 45 TCS- 56× 45 TCS- 60× 50 TCS- 63× 53 TCS- 65× 55
56 58 60 60 61	66 68 70 71 71	6 6 7 6	7 7 7 8 7	8.5 8.5 8.5 9.5 8.5	65 67 69 70 70	56.6 58.6 60.6 60.6 61.6	3.5 3.5 3.5 3.5 3.5	3 3 3 3 3	SKY- 56 SKY-0058001N906 SKY- 60 SKY- 60A SKY-0061001N906	SKY- 56F SKY- 60F SKY- 60AF	SKY-60N	•	TCS- 66 × 56 TBC-0058004T111 TCS- 70 × 60 TCS- 71 × 60 TC-Part No. of packings
63 65 67 70 71	73 75 77 80 80	6 6 6 6	7 7 7 7	8.5 8.5 8.5 8.5 8.5	72 74 76 79 79	63.6 65.6 67.6 70.6 71.6	3.5 3.5 3.5 3.5 3.5	3	SKY- 63 SKY- 65 SKY- 67 SKY- 70 SKY- 71	SKY- 63F SKY- 65F SKY- 67F SKY- 70F SKY- 71F	SKY-63N SKY-65N SKY-70N	•	TCS- 73 × 63 TCS- 75 × 65 TCS- 77 × 67 TCS- 80 × 70 TCS- 80 × 71
75 80 85 85 86	85 90 95 100 100	6 6 6 9 8.5	7 7 7 10 9.5	8.5 8.5 8.5 12 11.5	84 89 94 98 98	75.6 80.6 85.6 85.6 86.6	3.5 3.5 3.5 4 4	3 3 4 4	SKY- 75 SKY- 80 SKY-0085002N906 SKY- 85 SKY- 86	SKY- 75F SKY- 80F SKY- 85F SKY- 86F	SKY-75N SKY-80N SKY-85N	•	TCS- 85 × 75 TCS- 90 × 80 TBC-0085001T111 TCS-100 × 85 TCS-100 × 86
89 90 90 95 96	104 100 105 110 111	9 6 9 9	10 7 10 10	12 8.5 12 12 12	102 99 103 108 109	89.6 90.6 90.6 95.6 96.6	4 4 4 4	4 4 4 4 4	SKY-0089001N906 SKY-0090001N906 SKY- 90 SKY- 95 SKY-0096001N906	SKY- 90F SKY- 95F	SKY-90N	•	TBC-0089001T111 TBC-0090013T111 TCS-105 × 90 TCS-110 × 95 TBC-0096001T111
98 100 105 106 110	112 115 120 120 125	8.5 9 9 8.5 9	9.5 10 10 9.5 10	11.5 12 12 11.5 12	110 113 118 118 123	98.6 100.6 105.6 106.6 110.6	4 4 4 4 4	4	SKY- 98 SKY-100 SKY-0105002N906 SKY-106 SKY-0110003N906	SKY- 98F SKY-100F SKY-106F	SKY-100N • SKY-106N	•	TCS-112× 98 TCS-115×100 TBC-0105001T111 TCS-120×106 TBC-0110001T111

- ★ Orders and inquiries are accepted on part numbers.

  ★ Products with the part numbers in blue back ground are stock items.

  ★ Packings with the part numbers in light Italic require the confirmation of the existence of the tooling prior to ordering. These items are subject to the abolishment without notice. Reclamation of an abolished product requires to newly produce the tooling at your expense.

  ★ Packings are adequately packaged for the optimum storage. Refer to "Cautions" in page 2 for the handling and the storage.

  ★ The heat resistant material for the products larger than the SKY-300F is RF907.

  ★ Inquiries for HNBR materials:

  Please specify material code RP903 or RP902 in addition to the standard part number.

  RP903 is applicable to high temperature operation and to water polyglycol operating fluid.

  RP902 is the material applicable to both high and low temperature operating conditions.

  All HNBR products are manufactured on a made-to-order base.

   Indicates manufacturable items. For those items without indication, please inquire of us.

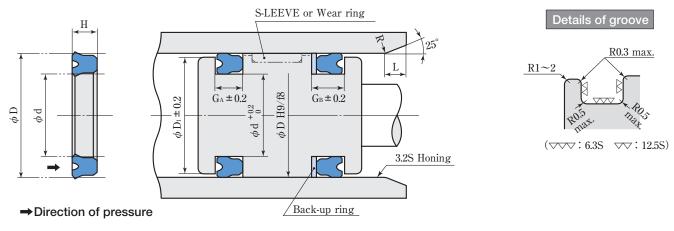
   Engraved marks may be variant because some dimensions/items are manufactured by using toolings for different materials.

# **SKY-Packings**

# Hydraulic packings for pistons and rods (Installable in one-piece groove)



#### Dimension table



- Note: Packings should be installed in the direction specified in the above schematic.
  - Consider adopting divided grooves if one piece groove is technically adverse.

  - \$ D H9/f8 would be modified according to the variation of the bearing structure.
     For applications installed together with wear rings, refer to the dimension table of the applicable wear ring.
  - For information on preferred values of surface finish (roughness), see page 14.

### Dimension table of SKY-Packings

(Unit:mm)

	Р	ackir	ng &	Groov	/e din	nensions			Part No.						
									SKY-Packings				Combination		
d	D	Н	G₄	Gв	Dı	d 1 (Reference)	L	l	Standard material (RN906)	High temperature- resistant material (RF905)(RF907)	Low temperature- resistant material (RN903)	HN (RP902)		back-up ring (PT111)	
112 112 115 118 119	125 125 130 132 133	8.5 9 8.5 8.5 8.5	9.5 10 9.5 9.5 9.5	11.5 12 11.5 11.5 11.5	123 123 128 130 131	112.6 112.6 115.6 118.6 119.6	4 4 4 4	4 4 4 4	SKY-112 SKY-112A SKY-0115002N906 SKY-118 SKY-0119001N906	SKY-112F SKY-112AF SKY-118F	SKY-0115001N903 SKY-118N	•	•	TCS-125×112 TCS-125×112 TBC-0115002T111 TCS-132×118 TBC-0119001T111	
120 125 130 132 136	135 140 145 145 150	9 9 9 8.5 8.5	10 10 10 9.5 9.5	12 12 12 11.5 11.5	133 138 143 143 148	120.6 125.6 130.6 132.6 136.6	4 4 4 4	4 4 4 4	SKY-0120002N906 SKY-125 SKY-0130001N906 SKY-132 SKY-136	SKY-125F SKY-132F SKY-136F	SKY-125N	•	•	TBC-0120001T111 TCS-140×125 TBC-0130001T111 TCS-145×132 TCS-150×136	
140 145 150 155 160	155 160 165 170 175	9 9 9 9	10 10 10 10 10	12 12 12 12 12	153 158 163 168 173	140.6 145.6 150.6 155.6 160.6	4 4 4 4	4 4 4 4 4	SKY-140 SKY-145 SKY-150 SKY-155 SKY-160	SKY-140F SKY-145F SKY-150F SKY-155F SKY-160F	SKY-145N	•	•	TCS-155×140 TCS-160×145 TCS-165×150 TCS-170×155 TCS-175×160	
165 170 175 180 185	180 185 190 200 205	9 9 9 12 12	10 10 10 13 13	12 12 12 15.5 15.5	178 183 188 198 203	165.6 170.6 175.6 180.8 185.8	4 4 4 5 5	4 4 4 5 5	SKY-165 SKY-0170001N906 SKY-175 SKY-180 SKY-0185001N906	SKY-165F SKY-175F SKY-180F		•	•	TCS-180×165 TBC-0170001T111 TCS-190×175 TCS-200×180 TBC-0185001T111	
190 195 200 204 210	210 215 220 224 230	12 12 12 12 12	13 13 13 13 13	15.5 15.5 15.5 15.5 15.5	208 213 218 222 228	190.8 195.8 200.8 204.8 210.8	5 5 5 5 5	5 5 5 5 5	SKY-0190003N906 SKY-0195001N906 SKY-200 SKY-204 SKY-0210002N906	SKY-200F SKY-204F				TBC-0190004T111 TBC-0195006T111 TCS-220×200 TCS-224×204 TBC-0210004T111	
215 220 224	235 240 244	12 12 12	13 13 13	15.5 15.5 15.5	233 238 242	215.8 220.8 224.8	5 5 5	5 5 5	SKY-0215001N906 SKY-0220001N906 SKY-224	SKY-224F				TBC-0215003T111 TBC-0220003T111 TCS-244×224	

\*Orders and inquiries are accepted on part numbers.

\*Products with the part numbers in blue back ground are stock items.

\*Packings with the part numbers in light Italic require the confirmation of the existence of the tooling prior to ordering. These items are subject to the abolishment without notice. Reclamation of an abolished product requires to newly produce the tooling at your expense.

\*Packings are adequately packaged for the optimum storage. Refer to "Cautions" in page 2 for the handling and the storage.

\*The heat resistant material for the products larger than the SKY-300F is RF907.

\*Inquiries for HNBR materials:

\*Please specify material code RP903 or RP902 in addition to the standard part number.

RP902 is the material applicable to both high and low temperature operating conditions.

\*All HNBR products are manufactured on made-to-order base.

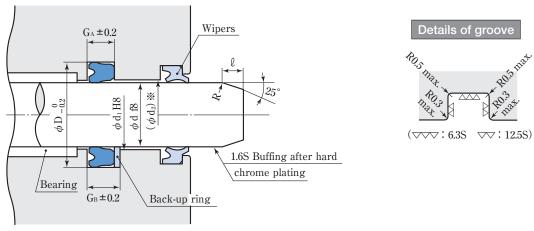
\*Indicates manufacturable items. For those items without \*\*© indication, please inquire of us.

\*Engraved marks may be variant because some dimensions/items are manufactured by using toolings for different materials.

\*Polloted products: SDR-Winers. SCR-Winers. SW-Wear rings. S-LEEVE and PG-Rings

Related products: SDR-Wipers, SCK-Wipers, SCB-Wipers, SW-Wear rings, S-LEEVE and PG-Rings

### Dimension table



Note: 
 Ocnsider adopting divided grooves if one piece groove is technically adverse.
 For applications without back-up rings, refer to the limiting curve of extrusion of seals (page 15) for the size ( $\phi d_2$ ).
 For information on preferred values of surface finish (roughness), see page 14.

## Dimension table of SKY-Packings

(Unit:mm)

	F	ackir	ng &	Groo	ve din	nensions	6		Part No.					
										SKY-Packin				Combination
d	D	Н	GA	Gв	Dı	d <sub>1</sub> (Reference)	L	l	Standard material (RN906)	High temperature- resistant material (RF905) (RF907)	Low temperature- resistant material (RN903)	HNE (RP902) (F		back-up ring (PT111)
230 235 237 240 245	250 255 257 260 265	12 12 12 12 12	13 13 13 13 13	15.5 15.5 15.5 15.5 15.5	248 253 255 258 263	230.8 235.8 237.8 240.8 245.8	5 5 5 5 5	5 5 5 5 5	SKY-230 SKY-0235001N906 SKY-0237001N906 SKY-0240003N906 SKY-0245001N906	SKY-230F SKY-0240001F905				TCS-250 × 230 TBC-0235001T111 TC-Part No. of packings TBC-0240001T111 TBC-0245004T111
250 260 280 290 295	270 280 300 310 315	12 14 14 14 14	13 15 15 15 15	15.5 18 18 18 18	268 278 298 308 313	250.8 260.8 280.8 290.8 295.8	5 5 5 5 5	5 5 5 5 5	SKY-250 SKY-260 SKY-280 SKY-0290001N906 SKY-295	SKY-250F SKY-260F SKY-280F SKY-295F				TCS-270×250 TCS-280×260 TCS-300×280 TBC-0290001T111 TCS-315×295
300 310 315 335 355	320 330 335 355 375	12 14 14 14 14	13 15 15 15 15	16 18 18 18 18	318 328 333 353 373	300.8 311 316 336 356	5 5 5 5 5	5 5 5 5 5	SKY-0300003N906 SKY-0310001N906 SKY-315 SKY-335 SKY-355					TBC-0300003T111 TBC-0310002T111 TCS-335×315 TCS-355×335 TCS-375×355
380 400 430 450 480	400 420 450 470 500	14 14 14 14 14	15 15 15 15 15	18 18 18 18 18	398 418 448 468 498	381 401 431 451 481	5 5 5 5 5	5 5 5 5 5 5	SKY-380 SKY-400 SKY-430 SKY-450 SKY-480	SKY-380F				TCS-400×380 TCS-420×400 TCS-450×430 TCS-470×450 TCS-500×480
500 540 550 610 630	525 560 570 630 655	17 14 13 14 17	18 15 14 15 18	21 18 17 18 21	522 558 568 628 652	501 541 551 611 631	5 5 5 5 5	5 5 5 5 5 5	SKY-0500001N906 SKY-0540001N906 SKY-0550001N906 SKY-0610001N906 SKY-0630001N906					TBC-0500002T111 TBC-0540001T111 TBC-0550001T111 TBC-0610001T111 TBC-0630001T111
660 770	690 800	18 18	19 19	22 22	687 797	661 771	5 5	5 5	SKY-0660001N906 SKY-0770001N906					TC-Part No. of packings TC-Part No. of packings

- \*Corders and inquiries are accepted on part numbers.

  \*Products with the part numbers in blue back ground are stock items.

  \*Products with the part numbers in blue back ground are stock items.

  \*Packings with the part numbers in light Italic require the confirmation of the existence of the tooling prior to ordering. These items are subject to the abolishment without notice. Reclamation of an abolished product requires to newly produce the tooling at your expense.

  \*Packings are adequately packaged for the optimum storage. Refer to "Cautions" in page 2 for the handling and the storage.

  \*The heat resistant material for the products larger than the SKY-300F is RF907.

  \*Inquiries for HNBR materials:

  \*Please specify material code RP903 or RP902 in addition to the standard part number.

  RP903 is applicable to high temperature operation and to water polyglycol operating fluid.

  RP902 is the material applicable to both high and low temperature operating conditions.

  \*All HNBR products are manufactured on made-to-order base.

  \*Indicates manufacturable items. For those items without \*●\* indication, please inquire of us.

  \*Engraved marks may be variant because some dimensions/items are manufactured by using toolings for different materials.