

密着長早見表

(密着長の求め方)
 端面研削あり：密着長 = 線形d × ((L-線形d)/ピッチP)+1
 端面研削あり：密着長 = 線形d × ((L-線形d)/ピッチP)+2

※ご注意
 線形d、自由長Lにそれぞれ公差があり、ピッチは参考値のため、
 密着長におきましては参考値となります。

計算例 FWR28-80-Aの場合
 線形 d = 2.3
 L = 80
 ピッチ = 8.2
 2.3 × ((80-2.3) ÷ 8.2 + 1) = 24.1mm

寸法		公差 (mm)
外径 (D)	φ5~14	±0.3
	φ15~32	±0.4
	φ34~48	±0.5
	φ50~60	±0.6
長さ (L)	~50	±1
	51~100	±2
	101~250	±4
	251~300	±4.5
	301~350	5
351~400	±5.5	

【！】密着長は参考値です。ロットによって多少のばらつきがあります。
 また、密着長までたわませて使用すると、ばねが変形したり、
 少ない使用回数で破損したりする可能性があります。
 必ず許容たわみ量F (mm) 以下でご使用ください。

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 Ver 1.0.1

		L																												
TYPE	材質	外径	荷重タイプ	最大荷重	線形d	ピッチp	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250
FWR FUR	SWP-A/SUS304-WPB	5	A	2.8	0.4	1.8	5.2	7.4	9.6	11.8	14.0																			
FWR FUR	SWP-A/SUS304-WPB	5	B	3.7	0.4	2.3	4.2	5.9	7.7	9.4	11.2																			
FWR FUR	SWP-A/SUS304-WPB	6	A	2.9	0.45	2	5.3	7.5	9.8	12.0	14.3	16.5	18.8																	
FWR FUR	SWP-A/SUS304-WPB	6	B	3.8	0.45	2.6	4.3	6.0	7.7	9.5	11.2	12.9	14.7																	
FWR FUR	SWP-A/SUS304-WPB	7	A	3.1	0.5	2.2	5.4	7.7	10.0	12.3	14.5	16.8	19.1	21.3																
FWR FUR	SWP-A/SUS304-WPB	7	B	4.0	0.5	2.9	4.4	6.1	7.8	9.5	11.3	13.0	14.7	16.4																
FWR FUR	SWP-A/SUS304-WPB	8	A	5.2	0.6	2.7	5.5	7.7	10.0	12.2	14.4	16.6	18.8	21.1	23.3															
FWR FUR	SWP-A/SUS304-WPB	8	B	6.8	0.6	3.5	4.5	6.2	8.0	9.7	11.4	13.1	14.8	16.5	18.2															
FWR FUR	SWP-A/SUS304-WPB	9	A	8.1	0.7	2.9	6.1	8.5	10.9	13.3	15.7	18.1	20.5	23.0	25.4	27.1														
FWR FUR	SWP-A/SUS304-WPB	9	B	10.0	0.7	3.5	5.3	7.3	9.3	11.3	13.3	15.3	17.3	19.3	21.3	22.6														
FWR FUR	SWP-A/SUS304-WPB	10	A	10.6	0.8	3.4	6.1	8.5	10.8	13.2	15.5	17.9	20.2	22.6	24.9	26.5	28.8													
FWR FUR	SWP-A/SUS304-WPB	10	B	13.7	0.8	4.4	5.1	6.9	8.7	10.5	12.4	14.2	16.0	17.8	19.6	20.7	22.5													
FWR FUR	SWP-A/SUS304-WPB	11	A	9.0	0.8	3.5	8.3	10.6	12.8	15.1	17.4	19.7	22.0	24.3	26.6	28.8	31.1													
FWR FUR	SWP-A/SUS304-WPB	11	B	12.6	0.8	4.9	6.4	8.0	9.6	11.3	12.9	14.5	16.2	17.8	19.4	21.1	22.7													
FWR FUR	SWP-A/SUS304-WPB	12	A	11.0	0.9	3.8	8.7	11.1	13.4	15.8	18.2	20.5	22.9	25.3	27.6	30.0	32.4	34.7												
FWR FUR	SWP-A/SUS304-WPB	12	B	14.2	0.9	4.9	7.1	9.0	10.8	12.7	14.5	16.3	18.2	20.0	21.8	23.7	25.5	27.3												
FWR FUR	SWP-A/SUS304-WPB	13	A	10.5	0.9	4.2	8.0	10.2	12.3	14.5	16.6	18.8	20.9	23.0	25.2	27.3	29.5	31.6	33.8											
FWR FUR	SWP-A/SUS304-WPB	13	B	13.4	0.9	5.5	6.6	8.2	9.8	11.5	13.1	14.7	16.4	18.0	19.7	21.3	22.9	24.6	26.2											
FWR FUR	SWP-A/SUS304-WPB	14	A	11.6	1	4.2	7.9	10.3	12.7	15.0	17.4	19.8	22.2	24.6	27.0	29.3	31.7	34.1	36.5	38.9										
FWR FUR	SWP-A/SUS304-WPB	14	B	15.1	1	5.5	6.3	8.1	9.9	11.7	13.5	15.4	17.2	19.0	20.8	22.6	24.5	26.3	28.1	29.9										
FWR FUR	SWP-A/SUS304-WPB	15	A	11.4	1	5	6.8	8.8	10.8	12.8	14.8	16.8	18.8	20.8	22.8	24.8	26.8	28.8	30.8	32.8	34.8									
FWR FUR	SWP-A/SUS304-WPB	15	B	14.9	1	6.5	5.5	7.0	8.5	10.1	11.6	13.2	14.7	16.2	17.8	19.3	20.8	22.4	23.9	25.5	27.0									
FWR FUR	SWP-A/SUS304-WPB	16	A	19.4	1.2	5	8.1	10.5	12.9	15.3	17.7	20.1	22.5	24.9	27.3	29.7	32.1	34.5	36.9	39.3	41.7	44.1								
FWR FUR	SWP-A/SUS304-WPB	16	B	25.1	1.2	6.5	6.5	8.4	10.2	12.1	13.9	15.7	17.6	19.4	21.3	23.1	25.0	26.8	28.7	30.5	32.4	34.2								
FWR FUR	SWP-A/SUS304-WPB	17	A	19.6	1.2	5.9	9.1	11.1	13.2	15.2	17.2	19.3	21.3	23.3	25.4	27.4	29.4	31.5	33.5	35.5	37.6	39.6								
FWR FUR	SWP-A/SUS304-WPB	17	B	25.3	1.2	7.7	7.2	8.8	10.4	11.9	13.5	15.0	16.6	18.2	19.7	21.3	22.8	24.4	25.9	27.5	29.1	30.6								
FWR FUR	SWP-A/SUS304-WPB	18	A	29.9	1.4	5.9	10.6	12.9	15.3	17.7	20.1	22.4	24.8	27.2	29.5	31.9	34.3	36.7	39.0	41.4	43.8	46.2	48.5							
FWR FUR	SWP-A/SUS304-WPB	18	B	38.9	1.4	7.7	8.4	10.2	12.1	13.9	15.7	17.5	19.3	21.1	23.0	24.8	26.6	28.4	30.2	32.1	33.9	35.7	37.5							
FWR FUR	SWP-A/SUS304-WPB	20	A	42.7	1.6	6.7	10.8	13.2	15.5	17.9	20.3	22.7	25.1	27.5	29.9	32.3	34.7	37.0	39.4	41.8	44.2	46.6	49.0							
FWR FUR	SWP-A/SUS304-WPB	20	B	55.2	1.6	8.7	8.7	10.5	12.3	14.2	16.0	17.9	19.7	21.5	23.4	25.2	27.1	28.9	30.7	32.6	34.4	36.2	38.1							
FWR FUR	SWP-A/SUS304-WPB	23	A	51.9	1.8	7.8	12.9	15.2	17.5	19.8	22.2	24.5	26.8	29.1	31.4	33.7	36.0	38.3	40.6	42.9	45.2	47.5								
FWR FUR	SWP-A/SUS304-WPB	23	B	67.4	1.8	10.1	10.4	12.2	14.0	15.7	17.5	19.3	21.1	22.9	24.6	26.4	28.2	30.0	31.8	33.6	35.3	37.1								
FWR FUR	SWP-A/SUS304-WPB	25	A	64.5	2	7.8	14.3	16.9	19.4	22.0	24.6	27.1	29.7	32.3	34.8	37.4	39.9	42.5	45.1	47.6	50.2	52.8	55.3	57.9	60.5	63.0	65.6			
FWR FUR	SWP-A/SUS304-WPB	25	B	82.4	2	10.2	11.4	13.4	15.4	17.3	19.3	21.2	23.2	25.1	27.1	29.1	31.0	33.0	34.9	36.9	38.9	40.8	42.8	44.7	46.7	48.7	50.6			
FWR FUR	SWP-A/SUS304-WPB	27	A	86.0	2.3	7.5	23.1	26.1	29.2	32.3	35.3	38.4	41.5	44.5	47.6	50.7	53.7	56.8	59.9	62.9	66.0	69.1	72.1	75.2	78.3					
FWR FUR	SWP-A/SUS304-WPB	27	B	110.9	2.3	9.6	18.5	20.9	23.3	25.7	28.1	30.5	32.9	35.3	37.7	40.1	42.5	44.9	47.3	49.7	52.1	54.5	56.9	59.2	61.6					
FWF FUF	SWP-A/SUS304-WPB	5	A	5.2	0.5	1.5	7.5	10.8	14.2	17.5	20.8																			
FWF FUF	SWP-A/SUS304-WPB	5	B	6.7	0.5	1.9	6.1	8.8	11.4	14.0	16.7																			
FWF FUF	SWP-A/SUS304-WPB	6	A	7.3	0.6	1.7	8.0	11.6	15.1	18.6	22.2	25.7	29.2																	
FWF FUF	SWP-A/SUS304-WPB	6	B	9.6	0.6	2.3	6.3	8.9	11.5	14.1	16.7	19.3	21.9																	
FWF FUF	SWP-A/SUS304-WPB	7	A	10.1	0.7	2	8.2	11.7	15.2	18.7	22.2	25.7	29.2	32.7																
FWF FUF	SWP-A/SUS304-WPB	7	B	13.1	0.7	2.7	6.4	9.0	11.6	14.2	16.8	19.4	22.0	24.6																
FWF FUF	SWP-A/SUS304-WPB	8	A	12.2	0.8	2.2	8.6	12.2	15.9	19.5	23.1	26.8	30.4	34.0	37.7															
FWF FUF	SWP-A/SUS304-WPB	8	B	15.9	0.8	2.9	6.9	9.7	12.4	15.2	17.9	20.7	23.4	26.2	29.0															
FWF FUF	SWP-A/SUS304-WPB	9	A	17.4	0.9	2.5	8.7	12.3	15.9	19.5	23.1	26.7	30.3	33.9	37.5	40.2														
FWF FUF	SWP-A/SUS304-WPB	9	B	20.6	0.9	2.9	7.7	10.8	13.9	17.0	20.1	23.2	26.3	29.5	32.6	34.8														
FWF FUF	SWP-A/SUS304-WPB	10	A	19.2	1	2.8	7.8	11.4	14.9	18.5	22.1	25.6	29.2	32.8	36.4	39.9	43.5													
FWF FUF	SWP-A/SUS304-WPB	10	B	24.9	1	3.6	6.3	9.1	11.8	14.6	17.4	20.2	22.9	25.7	28.5	31.3	34.1													
FWF FUF	SWP-A/SUS304-WPB	11	A	17.2	1	3.3	9.8	12.8	15.8	18.9	21.9	24.9	28.0	31.0	34.0	37.1	40.1													
FWF FUF	SWP-A/SUS304-WPB	11	B	22.9	1	4.3	7.7	10.1	12.4	14.7	17.0	19.4	21.7	24.0	26.3	28.7	31.0													
FWF FUF	SWP-A/SUS304-WPB	12	A	27.6	1.2	3.3	11.7	15.3	18.9	22.6	26.2	29.9	33.5	37.1	40.8	44.4	48.0	51.7												
FWF FUF	SWP-A/SUS304-WPB	12	B	35.8	1.2	4.3	9.2	12.0	14.8	17.6	20.4	23.2	26.0	28.8	31.6	34.4	37.1	39.9												
FWF FUF	SWP-A/SUS304-WPB	13	A	26.5	1.2	3.9	10.1																							

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TYPE	材質	外径	荷重タイプ	最大荷重	線形d	ピッチp	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400									
FWR	SWP-A/SUS304-WPB	28	A	83.9	2.3	8.2	21.3	24.1	26.9	29.7	32.5	35.3	38.1	40.9	43.7	46.5	49.3	52.1	54.9	57.8	60.6	63.4	66.2	69.0	71.8																								
FWR	SWP-A/SUS304-WPB	28	B	107.8	2.3	10.6	17.0	19.2	21.3	23.5	25.7	27.8	30.0	32.2	34.3	36.5	38.7	40.9	43.0	45.2	47.4	49.5	51.7	53.9	56.0																								
FWR	SWP-A/SUS304-WPB	30	A	118.9	2.6	8.6	23.0	26.0	29.0	32.0	35.1	38.1	41.1	44.1	47.2	50.2	53.2	56.2	59.3	62.3	65.3	68.3	71.3	74.4	77.4	80.4	83.4	86.5	89.5	92.5																			
FWR	SWP-A/SUS304-WPB	30	B	143.1	2.6	10.3	19.6	22.1	24.7	27.2	29.7	32.2	34.8	37.3	39.8	42.3	44.9	47.4	49.9	52.4	55.0	57.5	60.0	62.5	65.1	67.6	70.1	72.6	75.1	77.7																			
FWR	SWP-A/SUS304-WPB	32	A	101.5	2.6	9.1	21.9	24.7	27.6	30.4	33.3	36.1	39.0	41.9	44.7	47.6	50.4	53.3	56.1	59.0	61.9	64.7	67.6	70.4	73.3	76.1	79.0	81.9	84.7	87.6																			
FWR	SWP-A/SUS304-WPB	32	B	134.7	2.6	12.1	17.2	19.4	21.5	23.7	25.9	28.0	30.2	32.4	34.5	36.7	38.9	41.0	43.2	45.4	47.5	49.7	51.9	54.0	56.2	58.4	60.5	62.7	64.9	67.0																			
FWR	SWP-A/SUS304-WPB	34	A	89.5	2.6	9.7	20.7	23.3	26.0	28.7	31.4	34.1	36.7	39.4	42.1	44.8	47.5	50.2	52.8	55.5	58.2	60.9	63.6	66.2	68.9	71.6	74.3	77.0	79.6	82.3																			
FWR	SWP-A/SUS304-WPB	34	B	126.7	2.6	13.8	15.3	17.2	19.1	21.0	22.8	24.7	26.6	28.5	30.4	32.3	34.1	36.0	37.9	39.8	41.7	43.6	45.4	47.3	49.2	51.1	53.0	54.9	56.7	58.6																			
FWR	SWP-A/SUS304-WPB	36	A	79	2.6	10.3	19.6	22.1	24.7	27.2	29.7	32.2	34.8	37.3	39.8	42.3	44.9	47.4	49.9	52.4	55.0	57.5	60.0	62.5	65.1	67.6	70.1	72.6	75.1	77.7																			
FWR	SWP-A/SUS304-WPB	36	B	120.3	2.6	15.7	13.8	15.4	17.1	18.7	20.4	22.0	23.7	25.4	27.0	28.7	30.3	32.0	33.6	35.3	36.9	38.6	40.3	41.9	43.6	45.2	46.9	48.5	50.2	51.9																			
FWR	SWP-A/SUS304-WPB	38	A	102.1	2.9	9.9	22.6	25.5	28.4	31.3	34.3	37.2	40.1	43.1	46.0	48.9	51.8	54.8	57.7	60.6	63.6	66.5	69.4	72.4	75.3	78.2	81.1	84.1	87.0	89.9																			
FWR	SWP-A/SUS304-WPB	38	B	149.8	2.9	14.6	16.2	18.2	20.2	22.2	24.2	26.2	28.1	30.1	32.1	34.1	36.1	38.1	40.1	42.1	44.0	46.0	48.0	50.0	52.0	54.0	56.0	57.9	59.9	61.9																			
FWR	SWP-A/SUS304-WPB	40	A	93.6	2.9	10.8	20.9	23.6	26.3	29.0	31.7	34.3	37.0	39.7	42.4	45.1	47.8	50.5	53.1	55.8	58.5	61.2	63.9	66.6	69.3	71.9	74.6	77.3	80.0	82.7	85.4	88.0	90.7	93.4	96.1														
FWR	SWP-A/SUS304-WPB	40	B	142.7	2.9	16.4	14.8	16.5	18.3	20.1	21.8	23.6	25.4	27.1	28.9	30.7	32.4	34.2	36.0	37.8	39.5	41.3	43.1	44.8	46.6	48.4	50.1	51.9	53.7	55.4	57.2	59.0	60.7	62.5	64.3														
FWR	SWP-A/SUS304-WPB	42	A	85.5	2.9	11.5	19.8	22.3	24.9	27.4	29.9	32.4	35.0	37.5	40.0	42.5	45.0	47.6	50.1	52.6	55.1	57.6	60.2	62.7	65.2	67.7	70.3	72.8	75.3	77.8	80.3	82.9	85.4	87.9	90.4														
FWR	SWP-A/SUS304-WPB	42	B	135.5	2.9	18.2	13.6	15.2	16.8	18.4	20.0	21.6	23.2	24.7	26.3	27.9	29.5	31.1	32.7	34.3	35.9	37.5	39.1	40.7	42.3	43.9	45.5	47.1	48.6	50.2	51.8	53.4	55.0	56.6	58.2														
FWR	SWP-A/SUS304-WPB	44	A	80.7	2.9	12.6	18.3	20.6	22.9	25.2	27.6	29.9	32.2	34.5	36.8	39.1	41.4	43.7	46.0	48.3	50.6	52.9	55.2	57.5	59.8	62.1	64.4	66.7	69.0	71.3	73.6	75.9	78.2	80.5	82.8														
FWR	SWP-A/SUS304-WPB	44	B	131.2	2.9	20.5	12.4	13.8	15.2	16.6	18.1	19.5	20.9	22.3	23.7	25.1	26.5	28.0	29.4	30.8	32.2	33.6	35.0	36.4	37.9	39.3	40.7	42.1	43.5	44.9	46.3	47.8	49.2	50.6	52.0														
FWR	SWP-A/SUS304-WPB	46	A	110.2	3.2	13	19.6	22.1	24.6	27.0	29.5	32.0	34.4	36.9	39.3	41.8	44.3	46.7	49.2	51.6	54.1	56.6	59.0	61.5	64.0	66.4	68.9	71.3	73.8	76.3	78.7	81.2	83.6	86.1	88.6														
FWR	SWP-A/SUS304-WPB	46	B	162.1	3.2	19.2	14.3	16.0	17.7	19.3	21.0	22.7	24.3	26.0	27.7	29.3	31.0	32.7	34.3	36.0	37.7	39.3	41.0	42.7	44.3	46.0	47.7	49.3	51.0	52.7	54.3	56.0	57.7	59.3	61.0	62.7	64.3	66.0	67.7	69.3	71.0	72.7	74.3	76.0	77.7	79.3	81.0	82.7	
FWR	SWP-A/SUS304-WPB	48	A	102.3	3.2	13.9	18.6	20.9	23.2	25.5	27.8	30.1	32.4	34.7	37.0	39.3	41.6	43.9	46.2	48.5	50.8	53.1	55.4	57.7	60.0	62.3	64.6	66.9	69.2	71.5	73.8	76.1	78.4	80.7	83.0														
FWR	SWP-A/SUS304-WPB	48	B	155	3.2	21	13.4	14.4	16.0	18.0	19.5	21.0	22.5	24.0	25.6	27.1	28.6	30.1	31.7	33.2	34.7	36.2	37.8	39.3	40.8	42.3	43.9	45.4	46.9	48.4	50.0	51.5	53.0	54.5	56.0														
FWR	SWP-A/SUS304-WPB	50	A	95.8	3.2	14.8	17.6	19.8	22.1	24.1	26.3	28.5	30.6	32.8	34.9	37.1	39.3	41.4	43.6	45.8	47.9	50.1	52.2	54.4	56.6	58.7	60.9	63.0	65.2	67.4	69.5	71.7	73.9	76.0	78.2	80.3	82.5	84.7	86.8	89.0									
FWR	SWP-A/SUS304-WPB	50	B	150.6	3.2	23.3	12.4	13.7	15.1	16.5	17.9	19.2	20.6	22.0	23.4	24.7	26.1	27.5	28.9	30.2	31.6	33.0	34.3	35.7	37.1	38.5	39.8	41.2	42.6	44.0	45.3	46.7	48.1	49.5	50.8	52.2	53.6	54.9	56.3	57.7	59.0	60.4	61.8	63.2	64.6	66.0	67.4	68.8	
FWR	SWP-A/SUS304-WPB	52	A	86.5	3.2	15.2	17.3	19.4	21.5	23.6	25.7	27.8	29.9	32.0	34.1	36.2	38.3	40.4	42.5	44.6	46.7	48.8	50.9	53.1	55.2	57.3	59.4	61.5	63.6	65.7	67.8	69.9	72.0	74.1	76.2	78.3	80.4	82.5	84.6	86.7									
FWR	SWP-A/SUS304-WPB	52	B	143	3.2	25.1	11.7	13.0	14.3	15.5	16.8	18.1	19.4	20.6	21.9	23.2	24.5	25.7	27.0	28.3	29.6	30.8	32.1	33.4	34.7	35.9	37.2	38.5	39.8	41.0	42.3	43.6	44.9	46.1	47.4	48.7	50.0	51.2	52.5	53.8									
FWR	SWP-A/SUS304-WPB	54	A	109.1	3.5	14.7	19.3	21.7	24.1	26.5	28.9	31.2	33.6	36.0	38.4	40.8	43.1	45.5	47.9	50.3	52.7	55.0	57.4	59.8	62.2	64.6	67.0	69.3	71.7	74.1	76.5	78.9	81.2	83.6	86.0	88.4	90.8	93.1	95.5	97.9									
FWR	SWP-A/SUS304-WPB	54	B	177.9	3.5	24	13.2	14.7	16.1	17.6	19.0	20.5	21.9	23.4	24.9	26.3	27.8	29.2	30.7	32.2	33.6	35.1	36.5	38.0	39.4	40.9	42.4	43.8	45.3	46.7	48.2	49.7	51.1	52.6	54.0	55.5	56.9	58.4	59.9	61.3									
FWR	SWP-A/SUS304-WPB	56	A	97.1	3.5	14.7	19.3	21.7	24.1	26.5	28.9	31.2	33.6	36.0	38.4	40.																																	