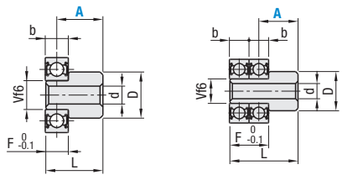
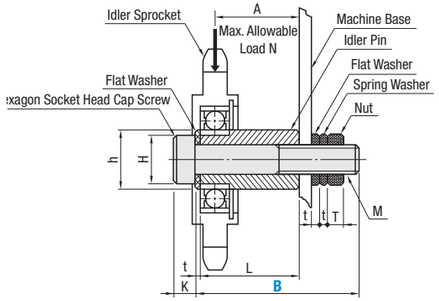
Idler Pins

IDP
IDPS (Stainless Steel or Equivalent)



Type **S**

Type **W**



Part Name	Type			
	IDP			IDPS
	Material		Surface Treatment	Material
Idler Pins	1045 Carbon Steel or Equivalent		Black Oxide	Stainless Steel or Equivalent
Hex Socket Head Cap Screw	4137 Alloy Steel or Equivalent			
Nut, Plain Washer	1018 Carbon Steel or Equivalent			
Spring Washer	SWRH57 High Carbon Wire Steel (JIS)			

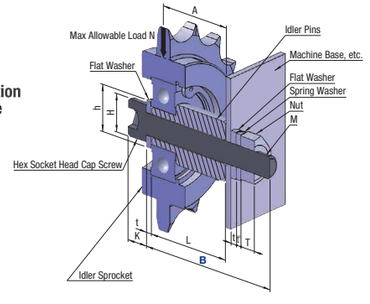
Part Number			A	B	Applicable	Pin Body Size					Size of Screw / Washer							Max. Allowable Load N (kgf)	Available Types	
Type	Bearing No.	Type	Selection	Selection 5 mm Increment	Bearings	L	F	V_{f6}	D	d	M	K	H	T	t	t'	h		IDP	IDPS
IDP IDPS Stainless Steel or Equivalent	6000	S	12	30–40	6000ZZ (b=8)	A+3.8	7.8	10	16	6.2	M6	6	10	5.0	1.6	1.5	12.5	323 (33)	•	•
			14, 16	35–45																
			18, 20	40–50																
		W	12, 14	40–50		A+11.8	15.8											274 (28)	•	—
			16, 18	45–55																
			20	50–60																
	6001	S	14	35–45	6001ZZ (b=8)	A+3.8	7.8	12	16	8.2	M8	8	13	6.5	1.6	2.0	17.0	548 (56)	•	•
			16, 18, 20	40–50																
			22	45–55																
		W	14, 16	45–55		A+11.8	15.8											441 (45)	•	—
			18, 20, 22	50–60																
	6201	S	14	35–45	6201ZZ (b=10)	A+4.8	9.8	12	16	8.2	M8	8	13	6.5	1.6	2.0	17.0	548 (56)	•	•
			16, 18	40–50																
			20, 22	45–55																
		W	14	45–55		A+14.8	19.8											441 (45)	•	—
			16, 18	50–60																
			20, 22	55–65																
	6202	S	16, 18, 20	45–55	6202ZZ (b=11)	A+5.3	10.8	15	20	10.5	M10	10	16	8.0	2.0	2.5	21.0	999 (102)	•	•
			22, 24	50–60																
		W	16, 18	55–65		A+16.3	21.8											803 (82)	•	—
			20, 22	60–70																
			24	65–75																
	6203	S	16, 18	45–55	6203ZZ (b=12)	A+5.8	11.8	17	25	10.5	M10	10	16	8.0	2.0	2.5	21.0	1244 (127)	•	•
			20, 22, 24	50–60																
		W	16	55–65		A+17.8	23.8											990 (101)	•	—
			18, 20, 22	60–70																
			24	65–75																
	6204	S	20, 22	55–65	6204ZZ (b=14)	A+6.8	13.8	20	25	14.5	M14	14	21	11.0	2.5	3.5	28.0	1989 (203)	•	•
			24, 26	60–70																
			28, 30	65–75																
		W	20, 22	70–80		A+20.8	27.8											1617 (165)	•	—
			24, 26, 28	75–85																
			30	80–90																

- Ensure that load applied to the idler does not exceed max allowable load.
- This idler pin is not designed for applications that have impact load or reversing operation.
- For Cantilever Shaft under large load, refer to **P.914-937.**

Part Number Example

Part Number	-	A	-	d
IDP6000S	-	16	-	35

Application Example



Idler Sprockets with Hub

35B, 40B, 50B, 60B Series

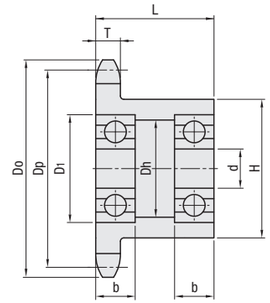
Feature: The Idlers which bearings are built-in on both sides of general purpose sprockets.

Idler Sprockets with Hub – 35B, 40B, 50B, 60B Series

Type	Material		Surface Treatment
	Main Body	Bearing	
DRCBW	1045 Carbon Steel or Equivalent (Induction Hardened Teeth Tip)	Steel	Black Oxide
DRCSBW	304 Stainless Steel or Equivalent	Stainless Steel or Equivalent	—

For Cantilever Shaft, refer to **P.914–937**.
For non-drive shaft side tension adjustments, please see Tensioner Unit on **P.1253–1255**.

*Bearing Accuracy JIS B1514 Class 0
Bearings are press-fit.



Part Number		No. of Teeth	d	Dp	Do	Dh	Hub		T	Bearing Dimension			Available Types	
Type	No.						H	L		No.	D_1	b	DRCBW	DRCSBW
DRCBW 1045 Carbon Steel or Equivalent Induction Hardened Teeth Tip DRCSBW 304 Stainless Steel or Equivalent	35	10	10	30.82	34	13	*24.5	20	4.3	6700ZZ	15	4	•	•
		12	12	36.80	41	18	*30.5			6801ZZ	21	5	•	•
		13	12	39.80	44	18	*32			6801ZZ	21	5	•	•
		14	12	42.81	47	21	32			6901ZZ	24	6	•	•
		15	12	45.81	51	24	35			6001ZZ	28	8	•	•
		16	12	48.82	54	24	37			6001ZZ	28	8	•	•
		18	15	54.85	60	28	44			6002ZZ	32	9	•	•
		20	15	60.89	66	28	50			6002ZZ	32	9	•	•
		21	15	63.91	69	28	53			6002ZZ	32	9	•	•
		25	20	76	81	34	53	22		6904ZZ	37	9	•	•
		32	20	97.18	102	34	53			6904ZZ	37	9	•	•
	40	10	12	41.10	46	18	*32	22	7.2	6801ZZ	21	5	•	•
		11	12	45.08	51	21	*36			6901ZZ	24	6	•	•
		12	12	49.07	55	24	*40			6001ZZ	28	8	•	•
		13	12	53.07	59	24	37			6001ZZ	28	8	•	•
		14	12	57.07	63	24	42			6001ZZ	28	8	•	•
		15	15	61.08	67	28	46			6002ZZ	32	9	•	•
		16	15	65.1	71	28	50			6002ZZ	32	9	•	•
		17	20	69.12	76	34	54			6904ZZ	37	9	•	•
		18	20	73.14	80	34	57			6904ZZ	37	9	•	•
		19	20	77.16	84	34	62			6904ZZ	37	9	•	•
		20	25	81.18	88	36	67	25		6905ZZ	42	9	•	•
		24	25	97.3	104	36	63			6905ZZ	42	9	•	•
		25	25	101.33	108	36	63			6905ZZ	42	9	•	•
		26	25	105.36	112	36	63			6905ZZ	42	9	•	•
	50	12	15	61.34	69	29	*50	25	8.7	6202ZZ	35	11	•	•
		14	15	71.34	79	29	52			6202ZZ	35	11	•	•
		15	20	76.35	84	34	57			6904ZZ	37	9	•	•
		17	20	86.39	94	34	67			6904ZZ	37	9	•	•
		18	25	91.42	100	41	72	28		6005ZZ	47	12	•	•
		20	25	101.48	110	41	73			6005ZZ	47	12	•	•
		24	30	121.62	130	48	73			6006ZZ	55	13	•	•
		28	35	141.79	150	49	73			6907ZZ	55	10	•	•
	60	12	15	73.6	83	29	51	32	11.7	6202ZZ	35	11	•	—
		14	20	85.61	95	40	62			6204ZZ	47	14	•	—
		15	20	91.62	101	40	68			6204ZZ	47	14	•	—
		17	25	103.67	113	45	73			6205ZZ	52	15	•	—
		19	30	115.74	126	55	83	40		6206ZZ	62	16	•	—
		20	30	121.78	132	55	83			6206ZZ	62	16	•	—
		22	30	133.86	144	55	83			6206ZZ	62	16	•	—
		25	35	151.99	162	60	83			6207ZZ	72	17	•	—
		30	35	182.25	193	60	83			6207ZZ	72	17	•	—

- Sprockets marked with * have grooves on hub O.D.

Part Number Example

Part Number	-	No. of Teeth
DRCBW50	-	20
DRCSBW40	-	25

Application Example