

NC Series Selection table

Item Name	Allowable conditional variable	Allowable rotating speed (min ⁻¹)	Allowable operating angle(°)	Allowable torque(N.m)	Static breaking torque(N.m)	Static tensile load(N)	GD ² (kg.cm ²)	Weight (g)
NC-06-00	28000	1800	30	5.3	16	5300	0.015	15
NC-08-00	42000	1500	30	11.6	35	7840	0.044	30
NC-10-00	70000	1300	30	27.4	83	13000	0.13	55
NC-12-00	106000	1100	30	46	140	23000	0.35	110
NC-14-00	133000	1000	30	66	200	26000	0.67	155
NC-16-00	175000	900	30	102	310	39000	1.5	260
NC-18-00	203000	800	30	132	400	44000	2.3	345
NC-20-00	239000	700	30	175	530	52000	3.6	465
NC-22-00	302000	650	30	251	760	68000	5.9	630
NC-25-00	356000	600	30	330	1000	81000	9.7	790
NC-30-00	465000	550	30	495	1500	100000	20	1160

Angle	5°and Under	10°	15°	20°	25°	30°
Angle coefficient	1.00	1.05	1.18	1.43	1.82	2.50

Selection example (NC-**-05A is not applicable)

When NC series is to be used under a rotating speed of 300min⁻¹, an operating angle 25°, and a transmission torque of 19 N.m, the calculation conditional variable 142500 is obtained from the following formula.

$$\text{Rotating speed} \times \text{angle} \times \text{torque} = \text{Conditional variable}$$

$$300 \times 25 \times 19 = 142500$$

Secondly, check the allowable rotating speed of NC-16 according to the following formula.

$$\text{Rotating speed} \times \text{angle coefficient} < \text{Allowable rotating speed}$$

Do the above calculations and compare the allowable conditions to each of the items for NC-16.

1. Conditional variable $\text{142500} < \text{Allowable conditional variable } \text{175000}$
2. Rotating speed $300\text{min}^{-1} \times 1.82 < \text{Allowable rotating speed } 900\text{min}^{-1}$
3. Angle $25^\circ < \text{Allowable operating angle } 30^\circ$
4. Torque $19\text{N.m} < \text{Allowable torque } 102\text{N.m}$

The universal joint meeting the requirements of the above service conditions, with good lubricating conditions, is the NC-16.

NC Popular top type

JIS B1454 C type

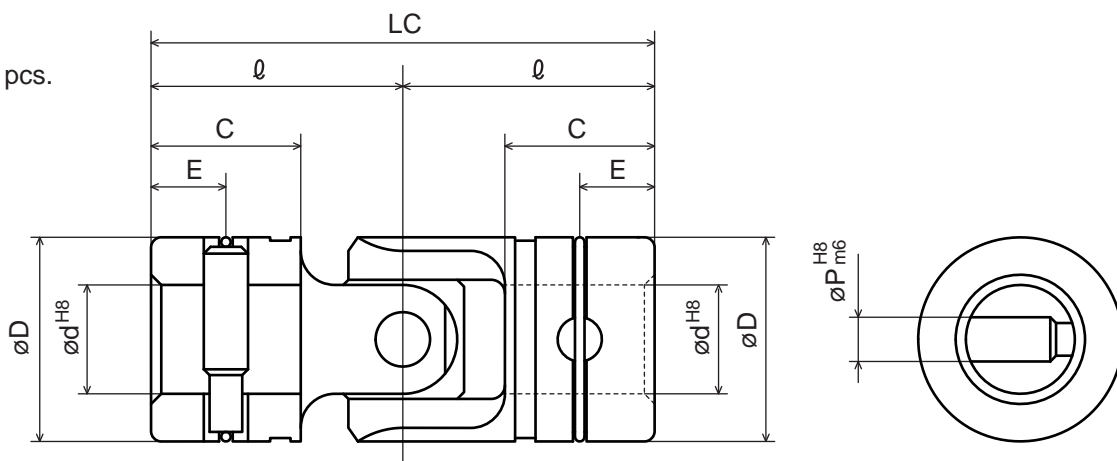
NC-**-00A

(6 to 30mm diam.)

Accessories

Heavy duty set pin 2 pcs.

Ring spring 2 pcs.

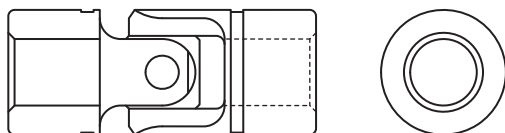


Accessories Heavy duty set pin 1 pc. Ring spring 2 pcs.

NC-**-05A

(6 to 30mm diam.)

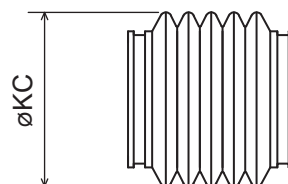
Non-hardening of the drive yoke body allows additional processing.



GBC**-00

(8 to 30mm diam.)

When rubber cover attachment is intended for use, denote NC-**-**C beforehand.



Dimension Name	d	D	LC	l	C	E	LD	A	P	KC	KD
N*-06-**-A	6	12	31	15.5	9	4.5	49.5	18.5	3	—	—
N*-08-**-A	8	15	36	18	10	5	58	22	3.5	25	26
N*-10-**-A	10	20	42	21	12	6	67.5	25.5	4.5	32	32
N*-12-**-A	12	23	52	26	15	7.5	83	31	5	35	36
N*-14-**-A	14	26	59	29.5	17	8.5	94.5	35.5	5.8	40	40
N*-16-**-A	16	30	74	37	22	11	117.5	43.5	6.5	46	46
N*-18-**-A	18	33	81	40.5	23.5	11.75	129	48	7	52	52
N*-20-**-A	20	36	87	43.5	25	12.5	139	52	8	58	58
N*-22-**-A	22	40	94	47	27	13.5	150	56	9	62	62
N*-25-**-A	25	44	105	52.5	30	15	168	63	10	68	68
N*-30-**-A	30	51	122	61	35	17.5	195	73	11.5	82	82

ND Series Selection table

Item Name	Allowable conditional variable	Allowable rotating speed (min ⁻¹)	Allowable operating angle(°)	Allowable torque(N.m)	Static breaking torque(N.m)	Static tensile load(N)	GD ² (kg.cm ²)	Weight (g)
ND-06-00	28000	1800	one side 30	3.96	12	5300	0.029	30
ND-08-00	42000	1500	one side 30	8.58	26	7840	0.069	50
ND-10-00	70000	1300	one side 30	20.1	61	13000	0.21	95
ND-12-00	106000	1100	one side 30	33	100	23000	0.55	180
ND-14-00	133000	1000	one side 30	46	140	26000	1.0	250
ND-16-00	175000	900	one side 30	76	230	39000	2.3	410
ND-18-00	203000	800	one side 30	96	290	44000	3.7	550
ND-20-00	239000	700	one side 30	129	390	52000	5.7	690
ND-22-00	302000	650	one side 30	185	560	68000	9.1	940
ND-25-00	356000	600	one side 30	248	750	81000	15	1240
ND-30-00	465000	550	one side 30	363	1100	100000	31	1775

Angle	5°and Under	10°	15°	20°	25°	30°
Angle coefficient	1.00	1.05	1.18	1.43	1.82	2.50

Selection example (NC-**-05A is not applicable)

When ND series is to be used under a rotating speed of 800min⁻¹, an operating angle 20°, and a transmission torque of 10 N.m, the calculation conditional variable 160000 is obtained from the following formula.

$$\text{Rotating speed} \times \text{angle} \times \text{torque} = \text{Conditional variable}$$

$$800 \times 20 \times 10 = 160000$$

Secondly, check the allowable rotating speed of ND-16 according to the following formula.

$$\text{Rotating speed} \times \text{angle coefficient} < \text{Allowable rotating speed}$$

Do the above calculations and compare the allowable conditions to each of the items for ND-16.

$$1. \text{Conditional variable} \quad 160000 < \text{Allowable conditional variable} \quad 175000$$

$$2. \text{Rotating speed} \quad 800\text{min}^{-1} \times 1.43 < \text{Allowable rotating speed} \quad 900\text{min}^{-1}$$

$$3. \text{Angle} \quad 20^\circ < \text{Allowable operating angle} \quad 30^\circ$$

$$4. \text{Torque} \quad 10\text{N.m} < \text{Allowable torque} \quad 76\text{N.m}$$

As the service rotating speed exceeds the allowable rotating speed under the intended conditions, change the service condition or select another type.

ND Popular top type

JIS B1454 CC type

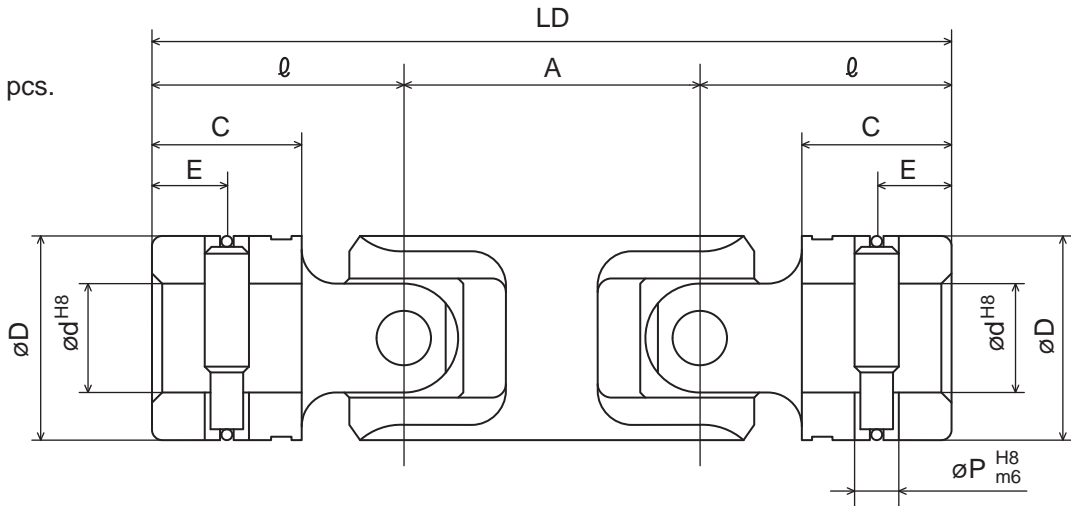
ND-**-00A

(6 to 30mm diam.)

Accessories

Heavy duty set pin 2 pcs.

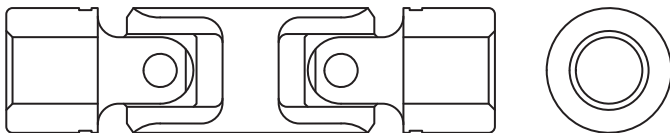
Ring spring 2 pcs.



ND-**-05A

(6 to 30mm diam.)

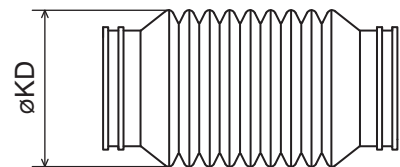
Non-hardening of the drive yoke body allows additional processing.



GBD**-00

(8 to 30mm diam.)

When rubber cover attachment is intended for use, denote NC-**-**C beforehand.



NP TYPE With intermediate spline shaft

Intermediate spline shaft attachment type is available.

Refer to SP-**-00A on page 12.

