



### Selection Guide for Universal Joints

**Step 1:** Find the appropriate correction value for your particular application using the Correction Factor table on the right. The table is based on "intermittent" application—more than 1 start/stop per hr., with sufficient time for cooling before starting. If your application is continuous—sustained operation with less than 1 stop/start per hr. for up to 8 hr. per day—multiply the value in the table by 2.

**Step 2:** Multiply your specific torque requirements by the correction value found in Step 1. (Be sure to use in.-lb.)

**Step 3:** Refer to the "Static Breaking Torque" column in the Universal Joints table to select a joint (solid type or bored type) with the same or greater torque than the in.-lb. number you calculated in Step 2.

Outside Dia.	SOLID TYPE						
	Lovejoy	Curtis	Boston	Manufacturer's Model	Browning	Alves	Apex
1/2"	D-2	C-642	J-50	UJ-4S	S-500	300-8	
3/8"	D-3	C-643	J-62	UJ-5S	S-625	300-10	
3/4"	D-4	C-644	J-75	UJ-6S	S-750	300-12	
7/8"	D-5	C-645	J-87	UJ-7S	S-875	300-14	
1"	D-6	C-646	J-100	UJ-8S	S-1000	300-16	
1 1/8"	D-7	C-647	—	UJ-9S	S-1125	—	
1 1/4"	D-8	C-648	J-125	UJ-10S	S-1250	300-20	
1 1/2"	D-10	C-650	J-150	UJ-12S	S-1500	300-24	
1 3/4"	D-11	C-651	J-175	UJ-14S	S-1750	300-28	
2"	D-12	C-652	J-200	UJ-16S	S-2000	300-32	
2 1/2"	D-13	C-653	J-250	UJ-20S	S-2500	400-40	
3"	D-14	C-654	J-300	UJ-24S	S-3000	400-48	

Operating RPM	Angle of Operation in Degrees							
	0°	3°	5°	7°	10°	15°	20°	25°
1800	9	20	34	45	—	—	—	—
1500	8	16	28	39	—	—	—	—
1200	7	13	22	32	40	—	—	—
900	6	11	16	23	34	—	—	—
600	5	8	11	15	22	34	40	—
300	4	5	7	8	11	16	22	28
100	3	4	4	5	6	8	9	11



D Type



Needle Bearing Type



### Universal Joints

Special tapered shape of yokes provides exceptional strength, while allowing full free movement of joint. Standard industrial-type universal joints have pin-and-block design as well as boot-retaining grooves. For applications with angles up to 25° and speeds up to 1750 rpm (6000 rpm for needle-bearing units). Stainless Steel is grade 303.

Outside Dia.	Overall Length	Static Breaking Torque	Keyway	Max. Bore *	Std. Bore	BORED TYPE			SOLID TYPE			
						Mfr. Model	Item No.	Max. Bore *	Std. Bore	Mfr. Model	Item No.	
<b>Steel, D Type with Keyway and Setscrew</b>												
1 in	3 3/8 in	1,560 in-lb	1/8 x 1/16 in	3/4 in	1/2 in	D-6Bkw/ss	1CYP6	—	—	—	—	—
1 1/8 in	3 1/2 in	2,880 in-lb	3/16 x 3/32 in	7/8 in	3/4 in	D-7Bkw/ss	1CYP7	—	—	—	—	—
1 1/4 in	3 3/4 in	5,220 in-lb	3/16 x 3/32 in	1 in	3/4 in	D-8B 5/8BE kw/ss	1CYP8	—	—	—	—	—
1 1/4 in	3 3/4 in	5,220 in-lb	3/16 x 3/32 in	1 in	3/4 in	D-8B 3/4 kw/ss	1CYP9	—	—	—	—	—
1 1/2 in	4 1/4 in	7,920 in-lb	3/16 x 3/32 in	1 1/8 in	3/4 in	D-10B 5/8BE kw/ss	1CYR1	—	—	—	—	—
1 1/2 in	4 1/4 in	7,920 in-lb	3/16 x 3/32 in	1 1/8 in	3/4 in	D-10B 3/4BE kw/ss	1CYR2	—	—	—	—	—
1 1/2 in	4 1/4 in	7,920 in-lb	3/16 x 3/32 in	1 1/8 in	3/4 in	D-10B 3/4BE kw/ss	1CYR3	—	—	—	—	—
<b>Steel, D Type, No Keyway or Setscrew</b>												
1/2 in	2 in	378 in-lb	—	3/8 in	1/4 in	D-2B	1L742	3/8 in	Solid	D-2	1L730	
3/8 in	2 1/4 in	540 in-lb	—	1/2 in	3/8 in	D-3B	1L743	1/2 in	Solid	D-3	1L731	
3/4 in	2 1/2 in	768 in-lb	—	3/4 in	3/8 in	D-4B	1A929	3/4 in	Solid	D-4	1L732	
7/8 in	3 in	1,176 in-lb	—	1 1/8 in	7/8 in	D-5B	1L744	1 1/8 in	Solid	D-5	1L733	
1 in	3 3/8 in	1,560 in-lb	—	3/4 in	1/2 in	D-6B	1A930	3/4 in	Solid	D-6	1L734	
1 1/8 in	3 1/2 in	2,880 in-lb	—	7/8 in	3/8 in	D-7B	1L745	7/8 in	Solid	D-7	1L735	
1 1/4 in	3 3/4 in	5,220 in-lb	—	1 in	3/8 in	D-8B	1A931	1 in	Solid	D-8	1L736	
1 1/2 in	4 1/4 in	7,920 in-lb	—	1 1/8 in	3/4 in	D-10B	1A932	1 1/8 in	Solid	D-10	1L737	
1 3/4 in	5 in	10,680 in-lb	—	1 1/2 in	7/8 in	D-11B	1L746	1 1/2 in	Solid	D-11	1L738	
2 in	5 7/8 in	15,600 in-lb	—	1 1/2 in	1 in	D-12B	1A933	1 1/2 in	Solid	D-12	1L739	
<b>Steel, Needle Bearing Type, No Keyway or Setscrew</b>												
1 in	3 3/8 in	1,150 in-lb	—	3/4 in	1/2 in	NB-6B	1CYR4	—	—	—	—	—
1 1/4 in	3 3/4 in	2,500 in-lb	—	1 in	3/8 in	NB-8B	1CYR5	—	—	—	—	—
1 1/2 in	4 1/4 in	4,400 in-lb	—	1 1/8 in	3/4 in	NB-10B	1CYR6	—	—	—	—	—
2 in	5 7/8 in	10,500 in-lb	—	1 1/2 in	1 in	NB-12B	1CYR7	—	—	—	—	—
<b>Stainless Steel, D Type, No Keyway or Setscrew</b>												
3/4 in	2 1/8 in	512 in-lb	—	3/8 in	3/8 in	D-4BSS	1CYT4	3/8 in	Solid	D-4SS	1CYR8	
1 in	3 3/8 in	1,040 in-lb	—	3/4 in	1/2 in	D-6BSS	1CYT5	3/4 in	Solid	D-6SS	1CYR9	
1 1/4 in	3 3/4 in	3,480 in-lb	—	1 in	3/8 in	D-8BSS	1CYT6	1 in	Solid	D-8SS	1CYT1	
1 1/2 in	4 1/4 in	5,280 in-lb	—	1 1/8 in	3/4 in	D-10BSS	1CYT7	1 1/8 in	Solid	D-10SS	1CYT2	
2 in	5 7/8 in	10,400 in-lb	—	1 1/2 in	1 in	D-12BSS	1CYT8	1 1/2 in	Solid	D-12SS	1CYT3	

\* Units may be re-bored to maximum diameter shown.

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