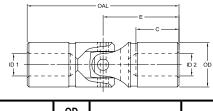


## **Universal Joints** D 303 Stainless and NB Type **Dimensional Data**

## D Type 303 Stainless

- Made from 303 stainless steel
- Ideal for applications with exposure to corrosive chemicals, corrosive atmosphere, or sanitation requirements are a factor
- Available in sizes: 4, 6, 8, 10 and 12 (Other sizes are quantity dependent)
- Available in your choice of round, hex, splined, or keyway bore
- Boot retaining grooves are standard. See page UJ-11 for selection of on-site replaceable universal joint boots
- Lubrication is required for optimal wear boots and lubricant extend universal joint life
- Contact Lovejoy Engineering if you have specific questions or requirements

### D Type 303 Stainless Dimensional Data



D-SS Type

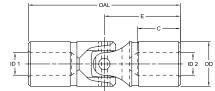
		OAL	E	С		ID1 - ID2					OD					
			Main Pin	Bore	Std	Max B	ore	Max I	Bore	Max S	quare/		Stat	tic*	Wei	ght
s	ize		Height	Depth	Bore	No Key	way	with Ke	eyway	Hex	Hole <sup>3</sup>		Breaking	Torque	Solid	Bored
Solid	Bored	in	in	in	in	in	mm	in	mm	in	mm	in	in-lb	Nm	lbs	lbs
D-4SS	D-4SSB	2.68	1.34	.88	.38	.62	15	.44	11	.38	9	.75	512	58	.30	.25
D-6SS	D-6SSB	3.38	1.68	1.00	.50	.75	19	.56	13	.50	12	1.00	1,040	117	.62	.55
D-8SS	D-8SSB	3.75	1.88	1.06	.62	1.00	25	.75	18	.62	15	1.25	3,480	393	1.11	.94
D-10SS	D-10SSB	4.25	2.12	1.18	.75	1.12	28	.88	21	.75	19	1.50	5,280	597	1.80	1.50
D-12SS	D-12SSB	5.44	2.72	1.50	1.00	1.50	38	1.19	30	.88	22	2.00	10,400	1 175	4.20	3.50

- Notes: \* indicates: This is not recommended operating torque.
  - 3 indicates: Square and hex bore measured across the flats.
  - Keyways, set screws, pin holes, or bores other than standard available at additional charge.
  - Maximum operating angle for transmission of power is 25°.
  - Applications that fall outside the limitations of these tables should be referred to Lovejoy Engineering for assistance.

## Needle Bearing (NB) Type

- Designed with high quality, pre-lubricated, and sealed needle bearings
- Ideal for applications up to 25° of angular misalignment and speeds up to 6,000 RPM
- Available in sizes: 6, 8, 10 and 12 (Other sizes are quantity dependent) with your choice of round, hex, splined, or keyway bores
- Boot retaining grooves are standard. See page UJ-11 for selection of on-site replaceable universal joint boots
- Lubrication is required for optimal wear boots and lubricant extend universal joint life

## **NB** Type



#### Needle Bearing Type Dimensional Data

		OAL	Е	С		ID1 - ID2				OD					
   s	Size		Main Pin Height	Bore Depth	Std Bore	Max B No Key		Max I with Ke			quare/ Hole³		Stat Breaking	-	Weight Solid
Solid	Bored	in	in	in	in	in	mm	in	mm	in	mm	in	in-lb	Nm	lbs
NB-6	NB-6B	3.38	1.68	1.00	.50	.75	19	.56	13	.50	12	1.00	1,150	130	.53
NB-8	NB-8B	3.75	1.88	1.06	.62	1.00	25	.75	18	.62	15	1.25	2,500	282	.91
NB-10	NB-10B	4.25	2.12	1.18	.75	1.12	28	.88	21	.75	19	1.50	4,400	497	1.50
NB-12	NB-12B	5.44	2.72	1.50	1.00	1.50	38	1.19	30	.88	22	2.00	10,500	1 186	3.40

Notes: ■ \* indicates: This is not recommended operating torque.

- 3 indicates: Square and hex bore measured across the flats.
- Maximum operating angle for transmission of power is 25°.
- For greater angular operation, use double universal joint. Join two universal joints back to back and connect with a short shaft. Attach universal joints to shaft by drilling and pinning.
- Swing Diameter is the maximum diameter over bearings, clearance must be allowed.



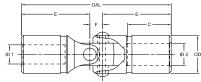


Universal Joints
LOJ and JR-4 Types, Boots
Dimensional Data

## LOJ and JR-4 Types

- Offset pin design ideal for use on hand operated, low torque drives
- Capable for operating angles up to 45° of angular misalignment
- Application examples: remote control linkages, snow blowers, packaging machinery, awning devices, etc.
- The LOJ available with round, hex, splined, or keyway bores
- The JR-4 is made of tough Zytel® material, so it will not rust and no lubrication needed
- The JR-4 withstands oils, gasoline, salts, and temperatures from -40° to 225° F
- The JR-4 is available in .38 inch bore only

# LOJ Type



LOJ - JR-4

## LOJ Type Dimensional Data

		OAL	F	E	С		ID1 - ID2		OD							
				Main Pin	Bore	Std	Max	Bore	Max B	ore		Pin	Stati	c*	We	ight
S	Size			Height	Depth	Bore	No Ke	yway	with Ke	yway		OD	Breaking	Torque	Solid	Bored
Solid	Bored	in	in	in	in	in	in	mm	in	mm	in	in	in-lb	Nm	lbs	lbs
LOJ-6	LOJ-6B	2.94	0.25	1.35	0.75	0.50	0.62	15	0.44	11	0.75	0.88	840	95	0.30	0.25
LOJ-8	LOJ-8B	3.68	0.31	1.69	0.91	0.62	0.75	19	0.56	14	1.00	1.12	1,500	169	0.65	0.55
LOJ-10	LOJ-10B	3.75	0.38	1.69	1.00	0.75	1.00	25	0.75	19	1.25	1.44	3,480	393	1.11	0.94

Notes: ■ \* indicates: This is not a recommended operating torque.

■ Maximum operating angle 45° for hand-operated applications.

### JR-4 Type Dimensional Data

	OAL	F	E	С	ID1 - ID2	OD			
			Main Pin	Bore	Std		Pin	Stati	ic*
			Height	Depth	Bore		OD	Breaking Torque	
Size	in	in	in	in	in	in	in	in-lb	Nm
JR-4	3	0.31	1.69	0.62	0.38	0.68	1.18	160	20

Notes: ■ \* indicates: This is not a recommended operating torque.

■ Maximum operating angle 45° for hand-operated applications.

#### **Universal Joint Boots**

- Protects the universal joint from dirt and contaminants, while lubrication is retained
- Lovejoy on-site replacement boots ensure proper lubrication for up to five times longer universal joint life
- Installation and replacement is fast and easy, so your machine can be back in operation in minutes
- Lovejoy universal joints D, D SS, DD, DDX, HD, and NB come pregrooved
- Use the larger type diameter Upper Type boots when possible and smaller diameter Lower Type boots when space is restricted
- Standard boots are packaged two to a bag

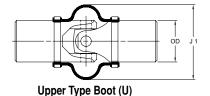
#### **Boot Dimensional Data**

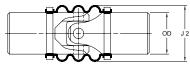
	OD	J1	J2		
		Upper	Lower		
Size	in	in	in		
D-1	0.38	0.72	0.62		
D-2	0.50	0.91	0.75		
D-3	0.62	1.09	0.94		
D-4	0.75	1.34	1.06		
D-5	0.88	1.50	1.25		
D-6	1.00	1.75	1.38		
D-7	1.12	2.03	1.50		
D-8	1.25	2.03	1.68		
D-10	1.50	2.56	1.94		
D-11	1.75	_	2.18		
D-12	2.00	_	2.59		
D-13	2.50	_	3.25		
D-14	3.00	-	4.25		
· ·		·			



**Universal Joint Boots** 

Note: ■ Boot sizes D-11 through
D-14 have 3-hump design
similar to Lower Type Boot
(L). Not shown.





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Lower Type Boot (L)