

## U N I V E R S A L

Concert Stages

Animated Characters

Conveyor Equipment

Clean Room Robotics

Hospital Equipment

## A P P L I C A T I O N S

*Universal joint hub modifications are available in metric, which include but may not be limited to bores, keyways, set screw holes, square holes and hex holes. Contact the Curtis sales department for more information.*



## Curtis Double Joints Afford Extra Angularity

**C**urtis double joints are available in 14 sizes, and share all of the advantages of Curtis single U-joints. Features include:

- **Extra angularity** allows standard units to operate at angles up to 70°.
- **Quick and easy TakeApart™ design** for easy and economical disassembly and reassembly, with no special tooling required.
- **Firm, positive lockup** of the entire assembly thanks to Curtis' exclusive Tell-Tale Lock Ring.
- **Built-in lubrication passages** with Curtis' exclusive internal lubrication system.
- **Lubrication covers (boots)** available in all sizes to retain lubrication and keep out contaminants, extending the life of the joint. Curtis Joints do not require grooves on hubs to retain boots.
- **Less galling and seizing** because Curtis uses dissimilar materials on all bearing surfaces.
- **Maximum wear and strength** from Curtis' induction hardened forks.
- **Easy machinability** due to Curtis' soft hubs.
- **Smooth operations and longer life** assured by close and well-controlled tolerances between mating parts and Curtis' built-in lubrication system.
- **Perfect concentricity** with hubs ground on center and centering holes provided on solid hubs to aid in machining.

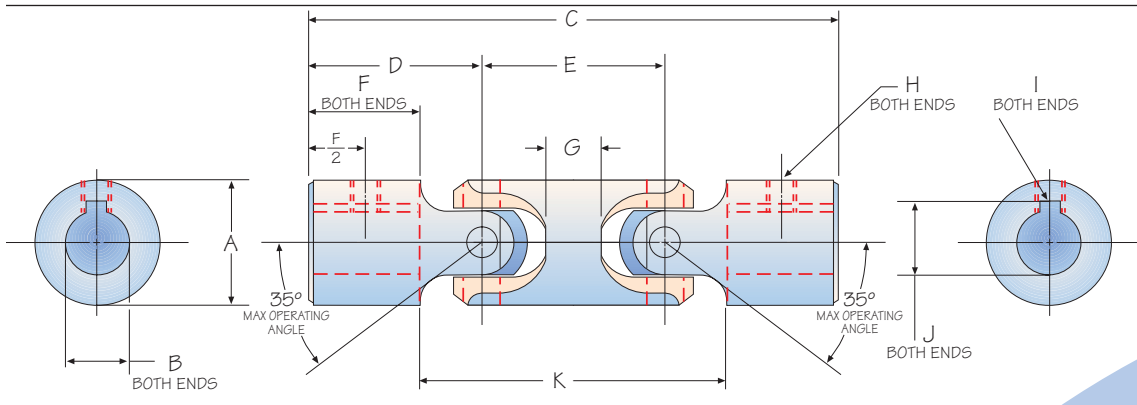
## SELECTION GUIDE - ALLOY STEEL BLOCK AND PIN TYPE STANDARD DOUBLE JOINTS

MEET MILITARY SPEC. MIL U-20625A, CLASS A

DOUBLE JOINTS			BREAKING LOADS		DIMENSIONS OF STANDARD JOINTS IN INCHES											APPROXIMATE WEIGHT IN POUNDS	
Standard Solid Hub	Standard Bored Hubs Bore 1/2 of O.D.	Standard Bored Hubs w/ Keyway & 1 Set Screw Ea. End*	Static Torque Rating	Compression or Tension Load	Outside Dia. "A"	Bore Dia. "B"	Total Length "C"	End Fork Lengths "D"	Centerline to Centerline Dim. "E"	Hub/Bore Length "F"	Center Sect. Hub Length "G"	Set Screw Size "H"	Keyway Size "I"	Far side to bottom of K/W "J"	Shaft to Shaft Distance "K"	Solid Hubs	Bored Hubs
Cat. No.	Cat. No.	Cat. No.	Inch Pounds	Pounds	+ .000 - .003	± .001	±1/32 **±3/64	± .010	± .010	±1/64	±1/64	Unified Std. Threads Class 3B	Commercial Tolerance	+ .010 - .000			
CJ641D	CJ641DB	CJ641DB1SS*	140	—	3/8"	3/16"	2-7/16"	7/8"	11/16"	11/16"	5/16"	2-56 NC	—	—	1-1/16"	.07	.06
CJ642D	CJ642DB	CJ642DB1SS*	425	1200	1/2"	1/4"	2-13/16"	1.0"	13/16"	3/4"	5/16"	4-40 NC	—	—	1-5/16"	.14	.12
CJ643D	CJ643DB	CJ643DBKW1SS	900	2000	5/8"	5/16"	3-1/4"	1-1/8"	1.0"	13/16"	3/8"	10-32 NF	3/32" x 3/64"	.352"	1-5/8"	.26	.22
CJ644D	CJ644DB	CJ644DBKW1SS	1610	3200	3/4"	3/8"	3-13/16"	1-11/32"	1-1/8"	31/32"	3/8"	10-32 NF	3/32" x 3/64"	.416"	1-7/8"	.43	.37
CJ645D	CJ645DB	CJ645DBKW1SS	1800	4600	7/8"	7/16"	4-3/8"	1-1/2"	1-3/8"	1-1/32"	7/16"	10-32 NF	3/32" x 3/64"	.480"	2-5/16"	.64	.50
CJ646D	CJ646DB	CJ646DBKW1SS	3050	5600	1.0"	1/2"	4-7/8"	1-11/16"	1-1/2"	1-3/16"	1/2"	1/4-20 NC	1/8" x 1/16"	.555"	2-1/2"	.91	.75
CJ647D	CJ647DB	CJ647DBKW1SS	3500	6000	1-1/8"	9/16"	5-1/8"	1-3/4"	1-5/8"	1-7/32"	9/16"	1/4-20 NC	1/8" x 1/16"	.618"	2-5/8"	1.22	1.04
CJ648D	CJ648DB	CJ648DBKW1SS	5500	8800	1-1/4"	5/8"	5-5/8"	1-7/8"	1-7/8"	1-1/4"	5/8"	5/16-18 NC	3/16" x 3/32"	.705"	3-1/8"	1.65	1.38
CJ650D	CJ650DB	CJ650DBKW1SS	9000	14000	1-1/2"	3/4"	6-9/16"	2-1/8"	2-5/16"	1-11/32"	3/4"	5/16-18 NC	3/16" x 3/32"	.832"	3-7/8"	2.69	2.32
CJ651D	CJ651DB	CJ651DBKW1SS	14000	18000	1-3/4"	7/8"	**7-3/4"	2-1/2"	2-3/4"	1-9/16"	7/8"	5/16-18 NC	3/16" x 3/32"	.958"	4-5/8"	4.27	3.72
CJ652D	CJ652DB	CJ652DBKW1SS	22000	25000	2.0"	1.0"	**8-5/8"	2-23/32"	3-3/16"	1-5/8"	1.0"	3/8-16 NC	1/4" x 1/8"	1.109"	5-3/8"	6.12	5.37
CJ653D	CJ653DB	CJ653DBKW1SS	32000	35000	2-1/2"	1-1/4"	**11-1/16"	3-1/2"	4-1/16"	2-3/32"	1-1/4"	3/8-16 NC	1/4" x 1/8"	1.363"	6-7/8"	12.34	10.90
CJ654D	CJ654DB	CJ654DBKW1SS	55000	—	3"	1-1/2"	**13-13/16"	4-1/2"	4-13/16"	2-27/32"	1-1/2"	1/2-13 NC	3/8" x 3/16"	1.663"	8-1/8"	22.22	19.47
CJ655D	CJ655DB	CJ655DBKW1SS	131000	—	4"	2.0"	**17"	5-5/16"	6-3/8"	3-1/8"	2.0"	1/2-13 NC	1/2" x 1/4"	2.219"	10-3/4"	47.61	42.11

All above configurations also available in 303 stainless steel.

\* Furnished with one (1) set screw each hub only (no keyway)



**note:**

Dimension "E" as shown above is the shortest length center section that Curtis manufactures. Longer than standard center sections can be made per customer needs. Contact Curtis with your requirements.

Curtis standard double universal joints will operate through angles of 70°. For applications requiring greater angles, special design can be employed, enabling the joint to operate at angles up to 90°.

ASK US ABOUT  
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SAME DAY SHIPPING!



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