

Fatigue Rated Ball Joints

Standard Applications

In order to satisfy today's test lab requirements, DTE has developed a cost effective ball joint solution that can be applied to the stationary end of an actuator, or the rod end. The rod end ball joints are designed to adapt to common load cells, eliminating the need for additional components.

DTE ball joints allow 360 degrees of rotational freedom and up to 23 degrees of angular displacement. They can also reduce side loads induced on the actuator due to traverse forces and bending moments.

Features:

- Compact design
- Operate without backlash
- Wide range of applications
- Low friction bearings
- Wide range of force ratings
- High load carrying capability
- Adjustable preload
- Fitted for lubrication
- 23° range of motion

Design:

The ball joints are fatigue rated, compact, and backlash free. They utilize a precision ground hardened steel ball located between two Teflon coated flanges, reducing friction and providing long life. The flange preload is adjustable to meet the requirements of specific applications.

The compliance of the ball joint is: 7.2×10^{-4} lb/in.



5.5 KIP Ball Joint

Force ratings:

- 5.5 kip (25kN)
- 11 kip (50kN)
- 22 kip (100kN)
- 35 kip (150kN)
- 55 kip (250kN)
- 75 kip (300kN)
- 110 kip (500kN)

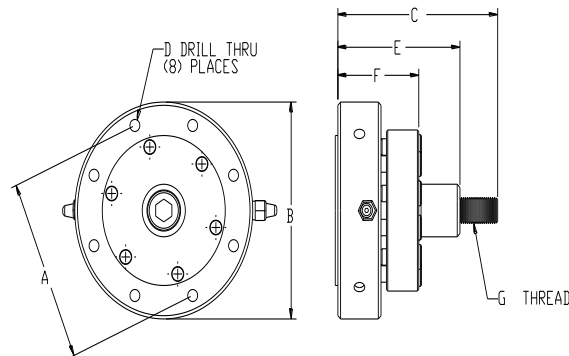
Options and Custom units:

The standard unit is designed with pilot to interface with customer fixturing. Units can be supplied to interface directly to customer supplied load cells. Adapters to standard actuator and load cell female threads are available with preload capabilities.

***Specifications:**

MODEL	SIZE	ISO	A	B	C	D	E	F	G
BJ-5.5	5.5 kip	25 kN	3.5in. (89mm)	4.13in. (104.9mm)	3.7in. (93.98mm)	0.28in. (7.11mm)	2.83in. (71.88mm)	1.88in. (47.75mm)	½-20in. (12.7-508mm)
BJ-11	11 kip	50 kN	6in. (152.4mm)	7.5in. (190.5mm)	5.25in. (133.35mm)	0.53in. (13.46mm)	4.06in. (103.12mm)	2.87in. (72.9mm)	1-14in. (25.4-355.6mm)
BJ-22	22 kip	100 kN	6in. (152.4mm)	8in. (203.2mm)	6.75in. (171.45mm)	0.53in. (13.46mm)	5in. (127mm)	3.5in. (88.9mm)	1-14in. (25.4-355.6mm)
BJ-35	35 kip	150 kN	8.25in. (209.55mm)	9.5in. (241.3mm)	7.72in. (196mm)	0.625in. (15.875mm)	6.00in. (152.4mm)	4.625in. (117.5mm)	1-14in. (25.4-355.6mm)
BJ-55	55 kip	250 kN	9in. (228.6mm)	10.38in. (263.65mm)	9.11in. (231.39mm)	0.66in. (16.76mm)	6.5in. (165.1mm)	4.63in. (117.6mm)	1 ¾-12in. (44.45-304.8mm)
BJ-75	75 kip	330 kN	10in. (254mm)	11.25in. (285.75mm)	11.2in. (284.48mm)	1.03in. (26.16mm)	8.5in. (215.9mm)	6.2in. (157.48mm)	2 ¼-12in. (57.15-304.8mm)
BJ-110	110 kip	500 kN	12in. (304.8mm)	14in. (355.6mm)	13.1in. (332.74mm)	1.03in. (26.16mm)	9in. (228.6mm)	7.3in. (185.42mm)	2 ¾-8in. (69.85-203.2mm)

**Specifications are subject to change at any time.*



Model Code

BJ-5.5-L/C-TA

