

SPLINE SOCKETS

Proto[®] spline tools are designed to service spline fasteners. They can also be used instead of a conventional socket on conventional 4 point, 6 point and 12 point fasteners.

On spline fasteners:

Spline sockets on spline fasteners help deliver twice the torque of 12 pt. wrenches on double hex fasteners, helping tighten high strength bolts to high torque loads. Spline helps reduce foreign object debris (FOD) by forcing a precise fit between the fastening tool and the fastener.



On conventional fasteners:

Proto[®] spline sockets are suitable for use on 4 point, 6 point and 12 point fasteners. The contact between the splines and the flat part of the fastener is away from the corners of the fastener helping to prevent FOD caused by fastener rounding and scoring.



By moving the torque load away from the

corners, where the fastener is weakest, spline sockets also help provide more torque than hex sockets on hex fasteners.

Additionally, since the contact between the fastener and the socket is away from the corners, spline sockets can also be used to turn fasteners with damaged corners.

Proto[®] spline sockets meet military specification MIL-W-8982/1A.

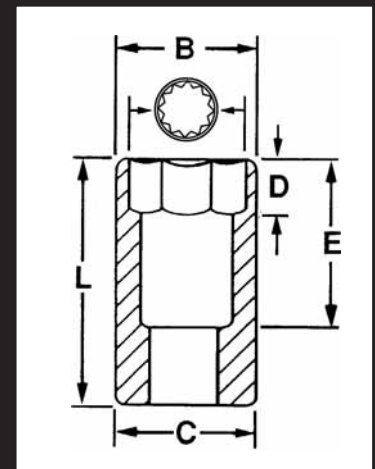
About spline fasteners:

Spline fasteners are high tensile strength fasteners with smaller heads than comparable conventional hex fasteners. They can be tightened to high torque loads, and are thus used widely on military and commercial aircraft, where space and torque are important, in heavy machinery applications where vibration is prevalent, and in automotive and industrial areas in which high performance torque needs to be achieved.



SPLINE
SOCKETS

1/4" Drive STD Depth Spline Sockets							
Part#	Description	Hex Size (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Weight (lbs.)
J4706SPL	1/4" Dr Skt 3/16 #6 12-Spln	3/16	0.31	0.43	0.18	0.57	0.02
J4707SPL	1/4" Dr Skt 7/32 #7 12-Spln	7/32	0.34	0.43	0.20	0.57	0.02
J4708SPL	1/4" Dr Skt 1/4 #8 12-Spln	1/4	0.37	0.43	0.25	0.57	0.03
J4709SPL	1/4" Dr Skt 9/32 #9 12-Spln	9/32	0.43	0.43	0.28	0.57	0.03
J4710SPL	1/4" Dr Skt 5/16 #10 12-Spln	5/16	0.46	0.46	0.31	0.57	0.04
J4712SPL	1/4" Dr Skt 3/8 #12 12-Spln	3/8	0.54	0.54	0.34	0.57	0.04
J4714SPL	1/4" Dr Skt 7/16 #14 12-Spln	7/16	0.62	0.62	0.42	0.68	0.05
1/4" Drive Deep Spline Sockets							
Part#	Description	Hex Size (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Weight (lbs.)
J4706DPL	1/4" Dr Skt Dp 3/16 #6 12-Spln	3/16	0.31	0.43	0.18	1.65	2.00
J4707DPL	1/4" Dr Skt Dp 7/32 #7 12-Spln	7/32	0.34	0.43	0.20	1.65	2.00
J4708DPL	1/4" Dr Skt Dp 1/4 #8 12-Spln	1/4	0.37	0.43	0.25	1.65	2.00
J4709DPL	1/4" Dr Skt Dp 9/32 #9 12-Spln	9/32	0.43	0.43	0.28	1.65	2.00
J4710DPL	1/4" Dr Skt Dp 5/16 #10 12-Spln	5/16	0.46	0.46	0.31	1.65	2.00
J4712DPL	1/4" Dr Skt Dp 3/8 #12 12-Spln	3/8	0.54	0.54	0.34	1.65	2.00
J4714DPL	1/4" Dr Skt Dp 7/16 #14 12-Spln	7/16	0.62	0.62	0.42	1.65	2.00
3/8" Drive STD Depth Spline Sockets							
Part#	Description	Hex Size (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Weight (lbs.)
J5212SPL	3/8" Dr Skt Spline 3/8" #12	3/8	0.54	0.66	0.34	0.69	1.17
J5214SPL	3/8" Dr Skt Spline 7/16" #14	7/16	0.63	0.69	0.42	0.75	1.23
J5216SPL	3/8" Dr Skt Spline 1/2" #16	1/2	0.72	0.72	0.44	0.75	1.23
J5218SPL	3/8" Dr Skt Spline 9/16" #18	9/16	0.82	0.82	0.45	0.75	1.23
J5220SPL	3/8" Dr Skt Spline 5/8" #20	5/8	0.89	0.89	0.53	0.88	1.36
3/8" Drive Deep Spline Sockets							
Part#	Description	Hex Size (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Weight (lbs.)
J5012DPL	3/8" Dr Skt Dp 3/8 #12 12-Spln	3/8	0.54	0.66	0.34	1.65	2.13
J5014DPL	3/8" Dr Skt Dp 7/16 #14 12-Spln	7/16	0.63	0.69	0.42	1.65	2.13
J5016DPL	3/8" Dr Skt Dp 1/2 #16 12-Spln	1/2	0.72	0.72	0.44	1.65	2.13
J5018DPL	3/8" Dr Skt Dp 9/16 #18 12-Spln	9/16	0.82	0.82	0.45	1.90	2.38
J5020DPL	3/8" Dr Skt Dp 5/8 #20 12-Spln	5/8	0.89	0.89	0.53	1.90	2.38
1/2" Drive STD Depth Spline Sockets							
Part#	Description	Hex Size (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Weight (lbs.)
J5416SPL	1/2" Dr Skt Spline 1/2" #16	1/2	0.72	0.87	0.44	0.77	1.42
J5418SPL	1/2" Dr Skt Spline 9/16" #18	9/16	0.82	0.87	0.45	0.77	1.42
J5420SPL	1/2" Dr Skt Spline 5/8" #20	5/8	0.89	0.89	0.53	1.02	1.67
J5422SPL	1/2" Dr Skt Spline 11/16" #22	11/16	0.97	0.97	0.56	1.02	1.67
J5424SPL	1/2" Dr Skt Spline 3/4" #24	3/4	1.04	1.04	0.56	1.02	1.67
J5426SPL	1/2" Dr Skt Spline 13/16" #26	13/16	1.12	1.12	0.56	1.02	1.67
J5428SPL	1/2" Dr Skt Spline 7/8" #28	7/8	1.18	1.18	0.56	1.02	1.67
J5430SPL	1/2" Dr Skt Spline 15/16" #30	15/16	1.27	1.27	0.56	1.02	1.67
1/2" Drive Deep Spline Sockets							
Part#	Description	Hex Size (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Weight (lbs.)
J5316DPL	1/2" Dr Skt Dp 1/2 #16 12-Spln	1/2	0.72	0.87	0.44	2.73	3.38
J5318DPL	1/2" Dr Skt Dp 9/16 #18 12-Spln	9/16	0.82	0.87	0.45	2.73	3.38
J5320DPL	1/2" Dr Skt Dp 5/8 #20 12-Spln	5/8	0.89	0.89	0.53	2.73	3.38
J5322DPL	1/2" Dr Skt Dp 11/16 #22 12-Spln	11/16	0.97	0.97	0.56	2.73	3.38
J5324DPL	1/2" Dr Skt Dp 3/4 #24 12-Spln	3/4	1.04	1.04	0.56	2.73	3.38
J5326DPL	1/2" Dr Skt Dp 13/16 #26 12-Spln	13/16	1.12	1.12	0.56	2.73	3.38
J5328DPL	1/2" Dr Skt Dp 7/8 #28 12-Spln	7/8	1.18	1.18	0.56	2.73	3.38
J5330DPL	1/2" Dr Skt Dp 15/16 #30 12-Spln	15/16	1.27	1.27	0.56	2.73	3.38
3/4" Drive Spline Sockets							
Part#	Description	Hex Size (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Weight (lbs.)
J5524SPL	3/4" Dr Skt 3/4 #24 12-Spln	3/4	1.05	1.37	0.63	0.62	1.74
J5526SPL	3/4" Dr Skt 13/16 #26 12-Spln	13/16	1.16	1.37	0.66	0.62	1.74
J5528SPL	3/4" Dr Skt 7/8 #28 12-Spln	7/8	1.26	1.37	0.72	0.68	1.80
J5530SPL	3/4" Dr Skt 15/16 #30 12-Spln	15/16	1.37	1.37	0.78	0.74	1.87
J5532SPL	3/4" Dr Skt 1 #32 12-Spln	1	1.46	1.46	0.81	1.03	1.93
J5534SPL	3/4" Dr Skt 1-1/16 #34 12-Spln	11/16	1.54	1.54	0.88	1.09	1.99
1" Drive Spline Sockets							
Part#	Description	Hex Size (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Weight (lbs.)
J5732SPL	1" Dr Skt 1 #32 12-Spln	1	1.46	1.88	0.81	1.26	2.43
J5734SPL	1" Dr Skt 1-1/16 #34 12-Spln	1-1/16	1.54	1.88	0.88	1.32	2.49
J5736SPL	1" Dr Skt 1-1/8 #36 12-Spln	1-1/8	1.63	2.00	0.94	1.38	2.55
J5738SPL	1" Dr Skt 1-3/16 #38 12-Spln	1-3/16	1.71	2.00	1.14	1.57	2.74
J5740SPL	1" Dr Skt 1-1/4 #40 12-Spln	1-1/4	1.79	2.00	1.14	1.57	2.74
J5742SPL	1" Dr Skt 1-5/16 #42 12-Spln	1-5/16	1.89	2.00	1.14	1.70	2.87
J5744SPL	1" Dr Skt 1-3/8 #44 12-Spln	1-3/8	1.98	2.00	1.19	1.83	2.93
J5746SPL	1" Dr Skt 1-7/16 #46 12-Spln	1-7/16	2.07	2.07	1.25	1.89	2.99
J5748SPL	1" Dr Skt 1-1/2 #48 12-Spln	1-1/2	2.15	2.15	1.31	1.95	3.05



Measurement Key