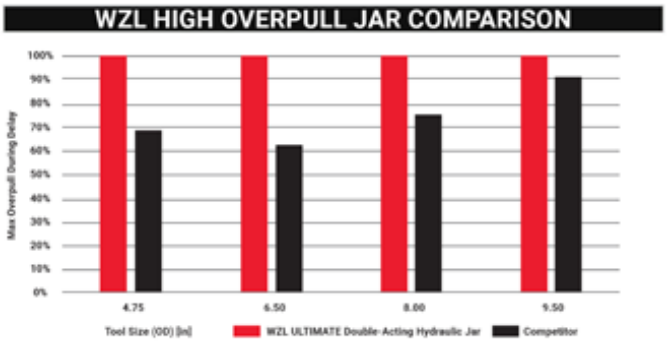
WZL HJDA

Double-Acting Hydraulic Jar

HYDRAULIC CONTROL IN BOTH DIRECTIONS

For reliable defense against stuck drillstrings in highly deviated or high-friction wells, the WZL HJDA offers sturdy and powerful hydraulic, bidirectional action.





FEATURES & BENEFITS

Twin metering valves

The WZL HJDA is a purely hydraulic bidirectional drilling jar that allows the operator to apply variable impact in both the up and down directions – unaffected by left or right hand torque.

Variable, operator-controlled impact is achieved thanks to a pair of hydraulic metering valves that feature high level flow restriction with large passage. The metering device (Visco Jet) ensures consistent delay times over a full range of operating temperatures and delay can be changed by swapping jets. These high performance valves have been used successfully in the aerospace industry, where precision and reliability is paramount.

Latch-free design

Because of the HJDA's latch-free design, the range of jar placement options increases significantly. The HJDA can be used in tension or compression, and is an excellent option when available force is not sufficient to jar down with conventional HMJ drilling jars.

Simpler, smaller and cost effective

The minimalist design of our HJDA makes it the shortest drilling jar on the market. Fewer oil seal chambers and parts keeps costs down and maintenance simple. By shortening the length of the HJDA, longer flex collars can be used to reduce bending stress across the jar.

To further increase its durability, we coat all external sealing surfaces with wear and corrosion resistant tungsten carbide.

SPECIFICATIONS – IMPERIAL

Nominal OD (in)	Type	Length (ft)	Thru bore (in)	Tensile yield (lb)	Torsional limit (ft-lb)	Pump open area (in²)	Max pull during delay (lb)	Max slack during delay (lb)	Free / total stroke (in)
3 ⅛	Standard	14.3	1.25	240,000	6,000	4.9	50,000	50,000	7.0 / 21.0
3 ⅜	Standard	14.3	1.50	234,900	9,000	5.9	50,000	50,000	7.0 / 21.0
4 ¼	Standard	16.9	2.00	300,800	15,300	8.9	70,000	70,000	8.0 / 25.0
4 ¾	Standard	17.4	2.25	370,600	22,800	11.8	85,000	85,000	8.0 / 25.0
	Ultimate	22.0	2.25	370,600	22,800	11.8	132,000	85,000	8.0 / 25.0
5	Standard	17.4	2.25	370,600	22,800	11.8	85,000	85,000	8.0 / 25.0
	Ultimate	21.5	2.25	370,600	27,300	11.8	135,000	85,000	8.0 / 25.0
5 ¼	Ultimate	21.9	2.25	534,300	30,500	14.2	185,000	115,000	8.0 / 25.0
6 ¼	Standard	17.9	2.25	938,900	55,900	19.6	160,000	160,000	8.0 / 25.0
6 ½	Standard	18.1	2.75	1,220,000	63,700	23.8	175,000	175,000	8.0 / 25.0
	Ultimate	23.1	2.75	1,220,000	63,700	23.8	275,000	175,000	8.0 / 25.0
6 ¾	Standard	17.9	2.75	1,220,000	66,600	23.8	230,000	230,000	8.0 / 25.0
	Ultimate	22.7	2.75	1,220,000	66,600	23.8	340,000	230,000	8.0 / 25.0
7	Ultimate	22.7	2.75	1,220,000	66,600	23.8	340,000	230,000	8.0 / 25.0
8	Standard	18.2	2.81	1,293,900	89,400	30.7	300,000	300,000	8.0 / 25.0
	Ultimate	23.4	2.81	1,293,900	89,400	30.7	450,000	300,000	8.0 / 25.0
8 ¼	Standard	18.2	2.81	1,293,900	89,400	30.7	300,000	300,000	8.0 / 25.0
9 ½	Standard	19.0	3.00	1,658,500	139,400	41.3	350,000	350,000	8.0 / 25.0
10	Ultimate	24.1	3.00	1,658,500	139,400	41.3	550,000	350,000	8.0 / 25.0

All HJDA drilling jars can be converted to a Hydraulic Mechanical Double-Acting (HMDA) or Hydraulic Mechanical Single-Acting (HMSA) drilling jar with minimal modifications. Contact a WZL representative for details.

Specifications are based on as-new condition and are subject to change without notice. As-new OD is typically the nominal OD plus API drill collar allowance.

EXPAND YOUR OPTIONS WITH CONVERTIBLE JARS

Keep both hydraulic and mechanical jar options on hand with a single asset and minimal inventory thanks to WZL's convertible jar system. The HJDA can be easily converted to both a Hydraulic Mechanical Double-Acting drilling jar (HMDA) or a Hydraulic Mechanical Single-Acting jar (HMSA), giving you flexibility to move these assets into any region for any application.

DELIVER THE ULTIMATE PUNCH

The WZL HJDA is available in our proprietary Ultimate configuration, which gives operators the highest overpull capacity on the market.

SPECIFICATIONS – METRIC

Nominal OD (mm)	Type	Length (m)	Thru bore (mm)	Tensile yield (daN)	Torsional limit (N·m)	Pump open area (mm²)	Max pull during delay (daN)	Max slack during delay (daN)	Free / total stroke (mm)
80	Standard	4.3	32	106,800	8,100	3,200	22,200	22,200	180 / 530
86	Standard	4.3	38	104,500	12,200	3,800	22,200	22,200	180 / 530
108	Standard	5.2	51	133,800	20,700	5,700	31,100	31,100	200 / 640
121	Standard	5.3	57	164,800	30,900	7,600	37,800	37,800	200 / 640
	Ultimate	6.7	57	164,800	30,900	7,600	58,700	37,800	200 / 640
127	Standard	5.3	57	164,800	30,900	7,600	37,800	37,800	200 / 640
	Ultimate	6.6	57	164,800	37,000	7,600	60,000	37,800	200 / 640
133	Ultimate	6.7	57	237,700	41,400	9,200	82,300	51,200	200 / 640
159	Standard	5.4	57	417,600	75,800	12,600	71,200	71,200	200 / 640
165	Standard	5.5	70	542,700	86,400	15,400	77,800	77,800	200 / 640
	Ultimate	7.0	70	542,700	86,400	15,400	122,300	77,800	200 / 640
171	Standard	5.5	70	542,700	90,300	15,400	102,300	102,300	200 / 640
	Ultimate	6.9	70	542,700	90,300	15,400	151,200	102,300	200 / 640
178	Ultimate	6.9	70	542,700	90,300	15,300	151,200	102,300	200 / 640
203	Standard	5.5	71	575,500	121,200	19,800	133,400	133,400	200 / 640
	Ultimate	7.1	71	575,500	121,200	19,800	200,200	133,400	200 / 640
210	Standard	5.5	71	575,500	121,200	19,800	133,400	133,400	200 / 640
241	Standard	5.8	76	737,700	189,000	26,600	155,700	155,700	200 / 640
	Ultimate	7.3	76.2	737,700	189,000	26,600	244,600	155,700	200 / 640

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