

## Comparison Sheet – 8500lb HDD Swivels

Three swivels made for horizontal directional drilling, from three different manufacturers.

Let the numbers tell the story, and get *more* for your money.



	DCD Design 00503-204	Exhibit C	Exhibit D	Comparison
Capacity	8500lb SWL Permanent stamp	8500lb Load Limit Permanent stamp	9000lb Working Load Permanent stamp	Equivalent
Dimensions  Diameter  Length  Clevis width  Weight	2.00" 8.75" 0.75" 5.5lb	1.63" 7.22" 0.63" 2.75lb	1.70" 8.58" 0.75" 3.5lb	20% larger → DCD 20% longer → DCD 20% larger → DCD 2x heavier → DCD
Bearings	3x Angular Contact BB	4x Deep Groove BB	1x Needle Thrust Bearing	Axial load bearings → DCD
Bearing Life @SWL L10 = (C/P)^3	600,000 rev (~330 hours)	60,000 rev (~33 hours; Poor.)	13,000rev (~7 hours; Unsuitable!)	10x longer life → DCD 10x more reliable → DCD
Lubrication	Lithium-complex extreme pressure grease.	Bearings are lubricated.	Bearings are lubricated.	More grease → DCD  Better grease → DCD
Machined Finish	125 microinch or better throughout.	Poor finish promotes wear and corrosion.	Good finish	Better <b>finish</b> → DCD
Clevis Pins	0.69" Diameter (0.37sq.in area) Hardened shoulder pins to resist bending.	0.52" Diameter (0.21sq.in area) Straight pins with reduced wear surface.	0.63" Diameter (0.31sq.in area) Straight pins	25% larger → DCD
Vibration Proof	Thread-lock compound on redundant locking pins.	No thread-lock to resist vibration.	Setscrew to lock cap.	Secure assembly → DCD
Paint	Pro-grade urethane-alkyd spray	Soft enamel paint	Yellow Zinc plating	Better coating → DCD
List Price	\$ 450 USD	\$ 400 USD	\$ 375 USD	Save 15% → The other guys  OR
				Get <i>more</i> for your money. → DCD