

## 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.



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