



High Pressure Inline Swivels

# HPI Swivels

for Moon Pools, MPD & DAT Systems

# High Pressure Inline Swivels



**DESIGNED & QUALIFIED TO API 16C, 17D & 6A STANDARDS**



**COMPLIANT WITH ABS & DNV CERTIFICATIONS**



**MANUFACTURED BY THE LEADER IN FLUID SWIVEL TECHNOLOGY**

DSTI's comprehensive line of High Pressure Inline (HPI) swivels for drape hoses on Moon Pools, MPD Systems and DAT Systems.

DSTI's HPI swivels maximize uptime while lowering operating costs by increasing the service life of drape hoses on vessels with dynamic positioning systems. This is done by eliminating the added stress and torsional loads hoses are subjected to while operating in rough seas.

The HPI product line consists of 15 standard designs to provide our clients with the ability to standardize their entire fleet of vessels with DSTI's moon pool hose swivels. If none of the standard HPI configurations suit your needs, contact a member of our team to discuss customized options featuring the same, field-proven sealing technology and design benefits.

## FEATURES & BENEFITS

Long Service Life Between Maintenance Intervals

Redundant Sealing System Provides Maximum Uptime

Inspection Ports Between Primary & Secondary Dynamic Seals for Early Indication of Potential Failures

Internal Locking Mechanism Improves Safety By Eliminating the Possibility of the Shaft Separating From the Housings

In-Stock Inventory for Short Lead Times

Exclusive, Low-Torque Design at Full Working Pressure

Robust, Marine Grade Plain Bearings Ensure Consistent Performance Under All Operational Loads

Preventative Maintenance & Rebuild Manual Provided

DAT SWIVELS

MPD SWIVELS

MOON POOL SWIVELS



# High Pressure Inline Swivels



DSTI is your exclusive partner for inline fluid swivels with bore sizes ranging from 2" to 8" or larger.

HOSE LOCATION	HOSE TYPE	BORE SIZE	MAWP	END CONN.	END CONNECTION TYPE & SIZE	DSTI PART NUMBER	HPI SHORT CODE
MOON POOLS	CHOKER / KILL	3-1/16"	15 ksi [103.4 MPa]	Flange	API 6A, TYPE 6BX, 3-1/16" 15K, BX154	HPI-11540-FX1504	HPI-1
				Hub	API 16A, TYPE 16BX, 3-1/16" 15K, BX154, NO. 6 CLAMP	HPI-11540-HX1504	HPI-2
	HYDRAULIC	2-1/16"	5 ksi [34.5 MPa]	Flange	API 17D, TYPE 17SS, 2-1/16" 5K, BX152	HPI-09210-FX0502	HPI-3
				Hub	API 16A, TYPE 16BX 2-1/16" 5K, BX152, NO. 1 CLAMP	HPI-09210-HX0502	HPI-4
		3-1/16"	10 ksi [68.9 MPa]	Flange	API 6A, TYPE 6BX 3-1/16" 10K, BX154	HPI-11410-FX1004	HPI-5
				Hub	API 16A, TYPE 16BX 2-9/16" 10K, BX153, NO. 4 CLAMP	HPI-11411-HX1003	HPI-6
	MUD BOOST	3-1/8"	5 ksi [34.5 MPa]	Flange	API 17D, TYPE 17SS 3-1/8" 5K, BX154	HPI-11220-FX0505	HPI-7
				Hub	API 16A, TYPE 16BX 3-1/8" 5K, BX154, NO. 4 CLAMP	HPI-11220-HX0505	HPI-8
		4-1/16"	7.5 ksi [51.7 MPa]	Flange	API 6A, TYPE 6BX 4-1/16" 10K, BX155	HPI-13320-FX1006	HPI-9
				Hub	API 16A, TYPE 16BX 4-1/16" 10K, BX155, NO. 6 CLAMP	HPI-13320-HX1006	HPI-10
MPD SYSTEMS	MPD	2"	5 ksi [34.5 MPa]	Hub	Grayloc 3GR23	HPI-0903-GR1123	HPI-11
		2-1/16"	5 ksi [34.5 MPa]	Hub	API 16A, TYPE 16BX 2-1/16" 10K, BX152, NO. 2 CLAMP	HPI-0903-HX1002	HPI-12
		6"	5 ksi [34.5 MPa]	Hub	Grayloc 6GR62	HPI-1503-GR1562	HPI-13
					API 16A, TYPE 16BX 7-1/16" 5K, BX156, NO. 8 CLAMP	HPI-1503-HX0508	HPI-14
DAT SYSTEMS	DAT	8"	5 ksi [34.5 MPa]	Flange	8" ISO 6164 GS Hydro	HPI-16210-S01	HPI-15








### DON'T SEE WHAT YOU NEED?

If none of our standard solutions meet your needs, contact a member of our team to discuss other available options.



		MOON POOLS									
		CHOKE / KILL HOSES		HYDRAULIC HOSES				MUD BOOST HOSES			
HPI SHORT CODE		HPI-1	HPI-2	HPI-3	HPI-4	HPI-5	HPI-6	HPI-7	HPI-8	HPI-9	HPI-10
PHOTOGRAPH											
DESIGN STANDARD		API 16C/6A		API 17D/6A				API 17D/6A			
MATERIAL CLASS		DD/NACE MR0175		AA				DD/NACE MR0175			
SPECIFICATION LEVEL		PSL 3		PSL 2				PSL 2			
TEMPERATURE CLASS		P+U		U				U			
FAT		API 16C		API 17D				API 17D			
NDT		PSL3		PSL2				PSL2			
MAX TENSILE LOAD AT MAWP*		26,500 lbf [117.9 kN]		7,500 lbf [33.4 kN]				10,000 lbf [44.5 kN]			
MAX BENDING LOAD AT MAWP*		16,500 ft-lbf [22.4 kNm]		7,500 ft-lbf [10.2 kNm]				7,500 ft-lbf [10.2 kNm]			
BREAKOUT TORQUE	ZERO TENSILE LOAD / 0 PSI	150 ft-lbf [203 Nm]		100 ft-lbf [136 Nm]				150 ft-lbf [203 Nm]			
	MAX TENSILE LOAD / MAWP	2,800 ft-lbf [3,796 Nm]		2,200 ft-lbf [2,983 Nm]				3,000 ft-lbf [4,067 Nm]			
INLAY		Sealing Areas Inlayed with 625 Inconel		17-4 PH throughout				Sealing Areas Inlayed with 625 Inconel			
SEALS	ELASTOMERIC	NORSOK M710		NORSOK M710				NORSOK M710			
	POLYMERIC	Certified to API 16C		Compatible with fluid				Certified to API 6A			
MAIN BODY MATERIALS		Alloy Steel PSL3 75ksi Min Yield, CRA Inlay on Sealing Areas		17-4 PH, HH1150				Alloy Steel PSL3 75ksi Min Yield, CRA Inlay on Sealing Areas			
BOLTING		ASTM A193 B7/ASTM A320 L7 with Xylan Coating									
COATING		Immersion Grade Single Coat Epoxy, White									
BEARINGS		Nickel Aluminum Bronze Plain Bearings									
FLOW		Bi-Directional									
ROTATION		Continuously in Either Direction									
DESIGN LIFE		10 Years (Hardware)									

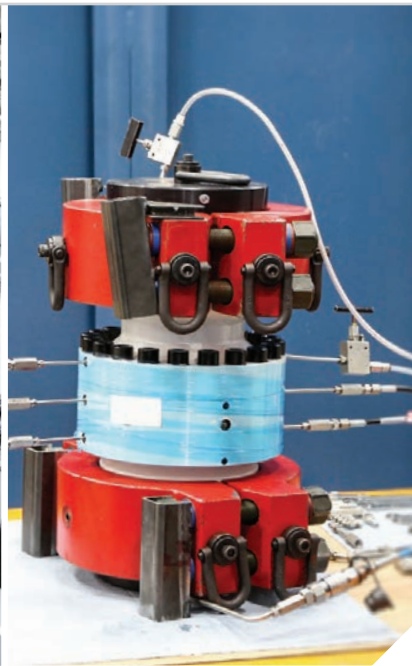
\*Loads listed are capacities for the swivel body. End connections may have higher or lower load capacity. It is the responsibility of the end user to ensure end connection load capacity and swivel body load capacity are not exceeded.

		MPD SYSTEMS				DAT SYSTEMS
		MPD HOSES				DAT HOSES
HPI SHORT CODE		HPI-11	HPI-12	HPI-13	HPI-14	HPI-15
PHOTOGRAPH						
DESIGN STANDARD		API 17D/6A		API 17D/6A		API 17D/6A
MATERIAL CLASS		DD/NACE MR0175		DD/NACE MR0175		AA
SPECIFICATION LEVEL		PSL3		PSL3		PSL2
TEMPERATURE CLASS		P+U		P+U		U
FAT		API 17D		API 17D		API 17D
NDT		PSL3		PSL3		PSL2
MAX TENSILE LOAD AT MAWP*		9,000 lbf [40.0 kN]		31,500 lbf [140.1 kN]		11,000 lbf [48.9 kN]
MAX BENDING LOAD AT MAWP*		5,250 ft-lbf [7.1 kNm]		15,750 ft-lbf [21.4 kNm]		41,500 ft-lbf [56.3 kNm]
BREAKOUT TORQUE	ZERO TENSILE LOAD / 0 PSI	100 ft-lbf [136 Nm]		300 ft-lbf [407 Nm]		500 ft-lbf [678 Nm]
	MAX TENSILE LOAD / MAWP	800 ft-lbf [1,085 Nm]		3,600 ft-lbf [4,881 Nm]		4,500 ft-lbf [6,101 Nm]
INLAY		Sealing Areas Inlayed with 625 Inconel		Sealing Areas Inlayed with 625 Inconel		17-4 PH throughout
SEALS	ELASTOMERIC	NORSOK M710		NORSOK M710		NORSOK M710
	POLYMERIC	Certified to API 6A		Certified to API 6A		Compatible with fluid
MAIN BODY MATERIALS		Alloy Steel PSL3 75ksi Min Yield, CRA Inlay on Sealing Areas		Alloy Steel PSL3 75ksi Min Yield, CRA Inlay on Sealing Areas		17-4 PH, HH1150
BOLTING		ASTM A193 B7/ASTM A320 L7 with Xylan Coating				
COATING		Immersion Grade Single Coat Epoxy, White				
BEARINGS		Nickel Aluminum Bronze Plain Bearings				
FLOW		Bi-Directional				
ROTATION		Continuously in Either Direction				
DESIGN LIFE		10 Years (Hardware)				

\*Loads listed are capacities for the swivel body. End connections may have higher or lower load capacity. It is the responsibility of the end user to ensure end connection load capacity and swivel body load capacity are not exceeded.



# About DSTI



DSTI specializes in the design and manufacturing of critical oil and gas fluid solutions worldwide.

In an industry with the highest operating costs in the world, DSTI understands the importance of maximizing equipment uptime by improving efficiencies and reducing risks for a lower total cost of ownership and greater return for our customers.

DSTI's core business focus has always remained the same; to develop fluid sealing technology and solutions for critical, highly complex applications within rotating equipment.

To do so, we've invested in state-of-the-art equipment, employ industry experts and maintain a quality management system certified to ISO 9001:2015 standards.

By controlling all aspects of the manufacturing process, from design and engineering through to testing and qualification, all under one roof, has given DSTI the reputation for delivering the highest-performing, highest-quality and most-reliable products across all industries.



## LET'S TALK ABOUT YOUR PROJECT

Contact DSTI to learn more about how we can help you achieve your next project's goals.

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