



Keystone Submersible Slurry Pump Data Sheet

Model: HDS 100H / HCR / Motor Frame 320T

HDS 100H Pump Data	
Discharge Size	4" (100mm)
Flange Rating	150# F.F. /ANSI B16.5
Impeller Dia.	15.75" (400mm)
Min. Impeller Trim Dia.	11.81" (300mm)
Impeller Free Passage	2" (50mm)
Max Pressure	225 PSI (1551KPA)
Min. Casing Thickness	0.95" (24mm)
Casing Wear Allowance	0.5" (12mm)

HDS 100H Wet End Materials of Construction			
Part	ASTM Material	Part	ASTM Material
Impeller	A532 CL III Type A	Shaft Adapter	17-4PH A564 Gr.630
Casing	A532 CL III Type A	Shaft Extension	17-4PH A564 Gr.630
Suction Cover	A532 CL III Type A	Fasteners	316 SS
Agitator	A532 CL III Type A	Gaskets	Durlon® 8500 (Eq.)
Stand	A536 Gr. 80-55-06	O-Ring	Buna

Electric Motor Information														
Flange mounted • 15 Minutes Operation in Air • 10 Stops & Starts/hr • (2) Moisture Sensing Probes • (2) Normally Closed Thermostats														
Horsepower	30 HP (22 KW)		40 HP (30 KW)		50 HP (37 KW)		60 HP (45 KW)		50 HP (37 KW)		60 HP (45 KW)		75 HP (56 KW)	
RPM	1165		1165		1165		1165		1760		1760		1760	
Voltage ¹	460V or 575V		460V or 575V		460V or 575V		460V or 575V		460V or 575V		460V or 575V		460V or 575V	
Freq. (HZ) ²	60		60		60		60		60		60		60	
Motor Frame	320T		320T		320T		320T		320T		320T		320T	
Enclosure Type	TENV		TENV		TENV		TENV		TENV		TENV		TENV	
Insulation Class ³	F 155 °C (310°F)		F 155 °C (310°F)		F 155 °C (310°F)		F 155 °C (310°F)		F 155 °C (310°F)		F 155 °C (310°F)		F 155 °C (310°F)	
Max Continuous Temp. in Liquid ⁴	40 °C (104°F)		40 °C (104°F)		40 °C (104°F)		40 °C (104°F)		40 °C (104°F)		40 °C (104°F)		40 °C (104°F)	
Service Factor	1.15		1.15		1.15		1.15		1.15		1.15		1.15	
Permitted Use	Class I, Div. 1, Group C&D		Class I, Div. 1, Group C&D		Class I, Div. 1, Group C&D		Class I, Div. 1, Group C&D		Class I, Div. 1, Group C&D		Class I, Div. 1, Group C&D		Class I, Div. 1, Group C&D	
Certification ^{5,6}	FM (USA, CDN)		FM (USA, CDN)		FM (USA, CDN)		FM (USA, CDN)		FM (USA, CDN)		FM (USA, CDN)		FM (USA, CDN)	
Start	D.O.L.		D.O.L.		D.O.L.		D.O.L.		D.O.L.		D.O.L.		D.O.L.	
Mechanical Seal 65 ft Depth	Run Dry Slurry Seal		Run Dry Slurry Seal		Run Dry Slurry Seal		Run Dry Slurry Seal		Run Dry Slurry Seal		Run Dry Slurry Seal		Run Dry Slurry Seal	
Bearings Radial Bearing Thrust Bearing	Ball Brg. Ang. Ct. Brg. Greased for Life		Ball Brg. Ang. Ct. Brg. Greased for Life		Ball Brg. Ang. Ct. Brg. Greased for Life		Ball Brg. Ang. Ct. Brg. Greased for Life		Ball Brg. Ang. Ct. Brg. Greased for Life		Ball Brg. Ang. Ct. Brg. Greased for Life		Ball Brg. Ang. Ct. Brg. Greased for Life	
Lubrication	Ball Brg. Ang. Ct. Brg. Greased for Life		Ball Brg. Ang. Ct. Brg. Greased for Life		Ball Brg. Ang. Ct. Brg. Greased for Life		Ball Brg. Ang. Ct. Brg. Greased for Life		Ball Brg. Ang. Ct. Brg. Greased for Life		Ball Brg. Ang. Ct. Brg. Greased for Life		Ball Brg. Ang. Ct. Brg. Greased for Life	
Power & Control Cable Length ⁷	25 ft (7.6m)		25 ft (7.6m)		25 ft (7.6m)		25 ft (7.6m)		25 ft (7.6m)		25 ft (7.6m)		25 ft (7.6m)	
Voltage	460V	575V	460V	575V	460V	575V	460V	575V	460V	575V	460V	575V	460V	575V
FL. Amps 4/4	40	32	53	42	64	51	79	63	61	49	73	59	89	71
LCK. Amps	216	173	285	228	350	280	435	348	340	272	430	344	420	336
Efficiency 4/4	87.5	87.5	88	88	88.5	88.5	88.5	88.5	90	90	90.5	90.5	91	91
3/4	87	87	88	88	88.5	88.5	88.5	88.5	90	90	90.5	90.5	91	91
2/4	85	85	86.5	86.5	87	87	87	87	88.5	88.5	89	89	90	90
Power Factor 4/4	80	80	81	81	82.5	82.5	80	80	85.5	85.5	85	85	87	87
3/4	75	75	76.5	76.5	78.5	78.5	75	75	82.5	82.5	81.5	81.5	84	84
2/4	64.5	64.5	66	66	69.5	69.5	64.5	64.5	74	74	72.5	72.5	77	77
Torque BD	210	210	200	200	200	200	210	210	210	210	220	220	210	210
% LR	190	190	170	170	170	170	190	190	200	200	210	210	200	200

Motor Options	<ol style="list-style-type: none"> 1 380V, 400V & 475V Motors Available 2 50 Hz Frequency Available 3 H 180°C (356°F) Insulation Class Available 4 High Ambient Option Available • Cooling Water Jacket Available 5 cFM_{USA} meets CSA electrical standards 6 CSA-M421 Ground Conductor Monitoring Compliant Systems Available 7 Up to 100 ft (30.5m) of Power & Control Cable Available
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