



Keystone Submersible Slurry Pump Data Sheet

Model: HDS 50M / HCR / Motor Frame 250T

HDS 50M Pump Data	
Discharge Size	2" (50mm)
Flange Rating	150# F.F. /ANSI B16.5
Impeller Dia.	13.38 (340mm)
Min. Impeller Trim Dia.	10.7" (272mm)
Max Particle Size	0.79" (20mm)
Max Pressure	225 PSI (1551KPA)
Min. Casing Thickness	0.71" (18mm)
Casing Wear Allowance	0.35" (9mm)

HDS 50M 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	15 HP (11.2 KW)		20 HP (14.9 KW)		25 HP (18.6 KW)		20 HP (14.9 KW)		25 HP (18.6 KW)		30 HP (22.4 KW)		40 HP (29.8 KW)	
RPM	1160		1160		1160		1750		1745		1745		1750	
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	250		250		250		250		250		250		250	
Enclosure Type	TENV		TENV		TENV		TENV		TENV		TENV		TENV	
Insulation Class ³	F (155 °C)		F (155 °C)		F (155 °C)		F (155 °C)		F (155 °C)		F (155 °C)		F (155 °C)	
Max Continuous Temp. in Liquid ⁴	40 °C		40 °C		40 °C		40 °C		40 °C		40 °C		40 °C	
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	20.9	16.7	26.7	21.4	34.1	27.3	24	19.2	30	24	36	28.8	48	38.4
LCK Amps	112	90	140	112	185	148	139	111	165	132	193	154	286	229
Efficiency 4/4	85	85	86.5	86.5	87	87	86.5	86.5	87	87	87.5	87.5	88.5	88.5
3/4	84.5	84.5	86	86	86.5	86.5	87	87	87.5	87.5	88	88	89	89
2/4	82.5	82.5	84	84	84.5	84.5	85.5	85.5	86.5	86.5	87.5	87.5	88	88
Power Factor 4/4	79	79	81	81	79	79	88.5	88.5	89	89	89.5	89.5	89	89
3/4	73	73	75.5	75.5	73	73	86	86	87	87	87.5	87.5	86.5	86.5
2/4	61.5	61.5	64.5	64.5	62	62	78.5	78.5	81	81	82	82	80	80
Torque BD	210	210	210	210	220	220	210	210	205	205	292	292	215	215
% LR	190	190	180	180	200	200	235	235	220	220	199	199	250	250

Motor Options	
1	380V, 400V & 475V Motors Available
2	50 Hz Frequency Available
3	H (180°C) 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