

Dewatering Pump

Type DUMPER

DUMPER pump line is the answer to dewatering problems. It's reduced diameter and side discharge option, make this pump line suitable for both contracting and industrial use. The stainless steel version allows further more extreme applications such as mining and others. Overall, the robust construction together with high quality materials, make this product a strong and reliable partner for the most demanding user.

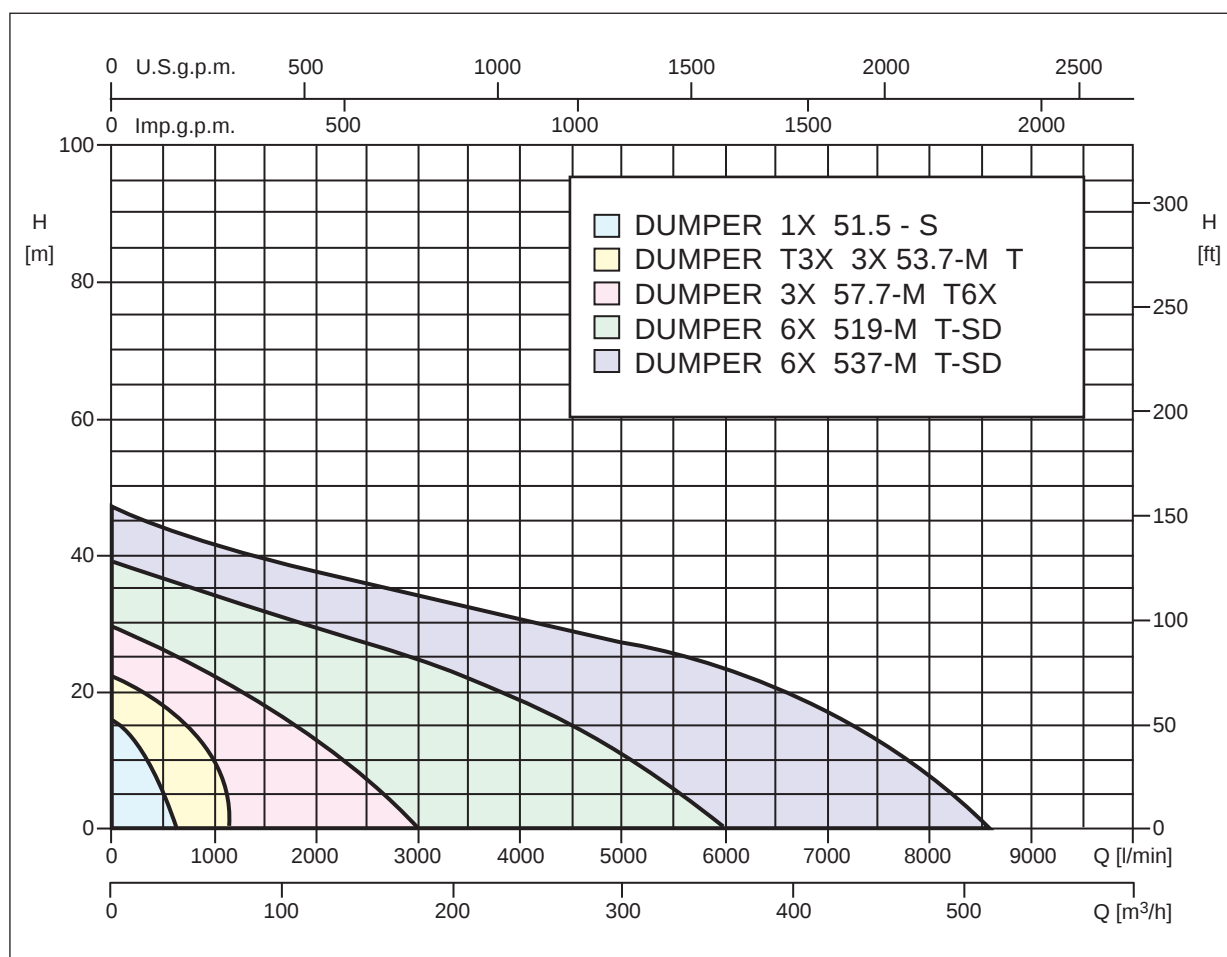
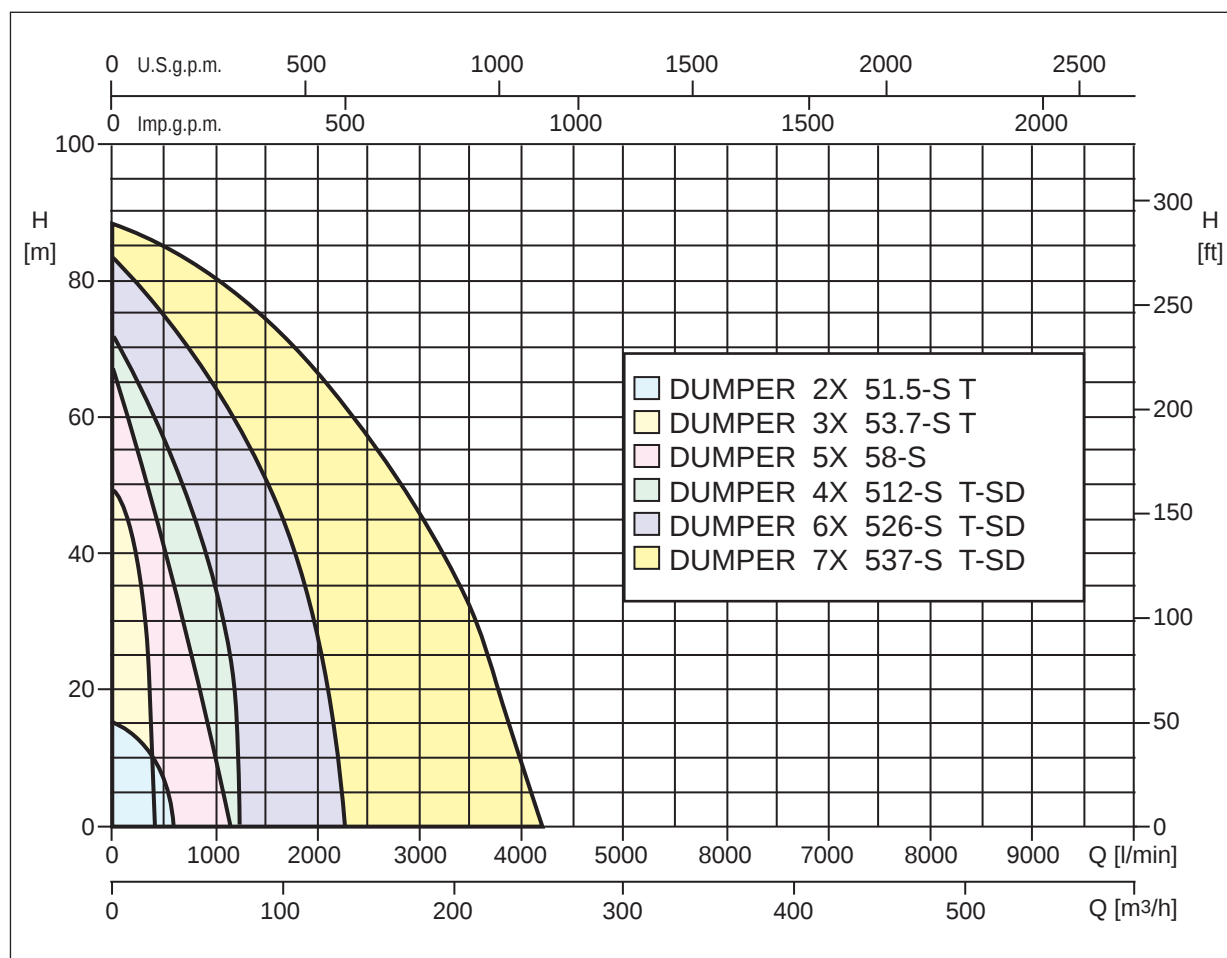
FEATURES

- Flexible metal cable protection of around 1m length
- Water isolating blocking system
- Elastic oil chamber for seal for heat dissipation on dry running
- Double, independent tandem-mechanical seal
- Sand protection for mechanical seal
- Epoxy coating for parts made of aluminium / steel

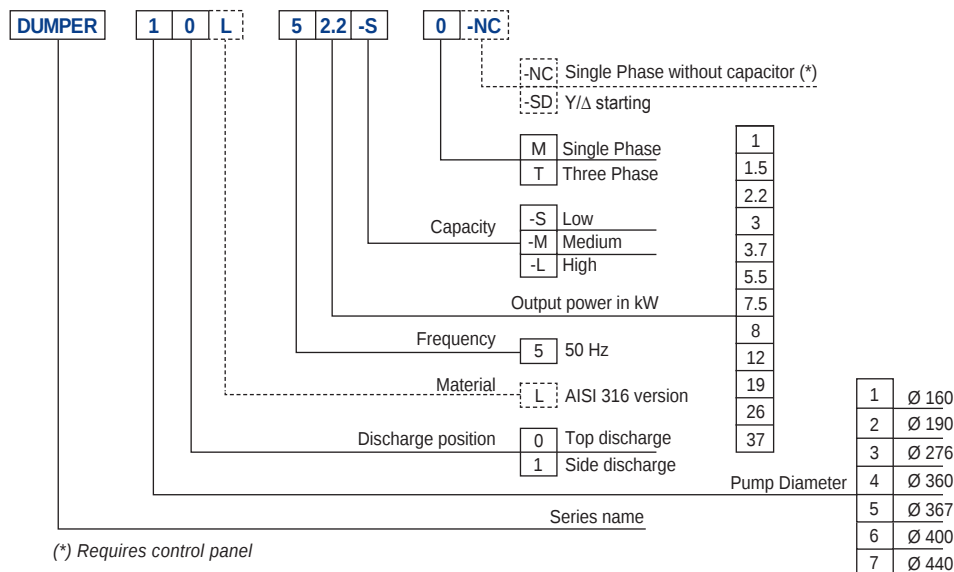


Quality • Value • Performance

PERFORMANCE CHART



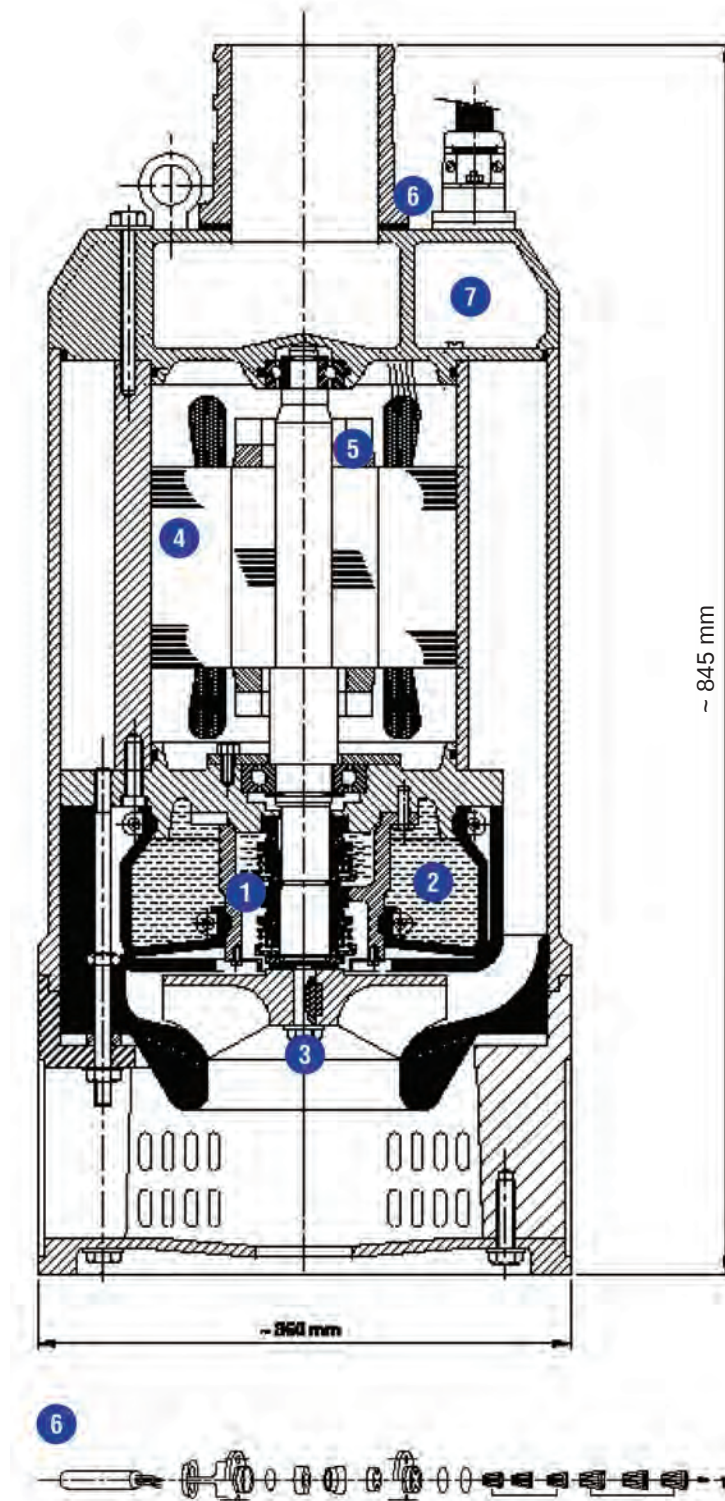
PUMP IDENTIFICATION CODE



SPECIFICATIONS

PUMP	Liquid Handled	Type of liquid		Water with mud contents		
		Max Temp. [°C]		40°		
		Max solids size [mm]		25x6 DUMPER 3X 53.7(L,M) 30x9.5 DUMPER 3X 5(5.5, 7.5)-M 25.5x5 DUMPER 4X 512-M 25.5x10 DUMPER 6X 5(19,26,37)-M Ø 6 DUMPER 1X, 2X, 3X 5(3.7,5.5,7.5)-S, 5X Ø 10 DUMPER 4X 512-S, DUMPER 6X 5(19, 26)-S Ø 13 DUMPER 7X		
	Submergence	Max [m]		15		
		Min [m]		0.127		
	Construction	Impeller		Open		
		Shaft seal type		Double mechanical seal wholly enclosed in a pressure compensated oil chamber		
	Connection	Suction		Strainer		
		Discharge	Hose (standard) [mm]	75 DUMPER 2X 5(2.2,3)-S, 3X-S, DUMPER 5X 100 DUMPER 3X-(L,M), 4X 512-S, 6X 519-S 150 DUMPER 4X 512-M, 6X 519-M, 6X 526-S, 7X 200 DUMPER 6X 526-M, 6X 537-M		
			Threaded (Optional) [inch]	2 DUMPER 1X, 2X 51.5 3 DUMPER 3X-S, 2X 5(2.2,3)-S, 5X 4 DUMPER 3X-(L,M), 4X 512-S, 6X 519-S 6 DUMPER 4X 512-M, 6X 519-M, 6X 526-S, 7X 8 DUMPER 6X 526-M, DUMPER 6X 537-M		
	Materials	Casing		Aluminium (up to 8 kW) Steel (from 12 kW and higher)		
		Impeller		Nitride hardened AISI 410		
		Suction Cover		AISI 304		
		Shaft		AISI 431		
		Fasteners		AISI 304		
	Mechanical seal		Tungsten Carbide/ Tungsten Carbide /NBR (Motor side) Tungsten Carbide/ Tungsten Carbide /NBR (Impeller Side)			
	Application standard of test				ISO 9906 Annex A	
MOTOR	Type		Induction, continuous rated, motor with squirrel cage rotor			
			Single Phase		Three Phase	
	No. of Poles		2			
	Rotation speed [min ⁻¹]		2800			
	Insulation Class		H			
	Protection degree		IP 68			
	Power Rating		[kW]	1 ÷ 2.2		1 ÷ 37
			[HP]	1.3 ÷ 3		1.3 ÷ 50
	Frequency [Hz]		50			
	Voltage [V]		230 ±6%		400 ±6%	
	Starting	up to 8 kW		DOL		DOL
		12 kW and above		/		Y/Δ DOL (optional)
	Over load protection		DUMPER 1X 51-S M		Built-in motor protector with automatic reset	
			DUMPER 5X 58-S T		Built in thermal probe and contactor with automatic reset	
			The other		Built in thermal probe - Protection must be provided by the user	
	Cable	Material		H07RN-F		
		Lenght [m]		20		
Stainless steel sheath (pump side) [m]		1 (except Dumper 10)				
Bearings	up to 7.5 kW		Two single row, deep groove ball bearing			
	8 kW and above		Single row, deep groove (upper bearing) Double angular contact (lower bearings)			

MATERIAL AND TECHNICAL FEATURES



- ① Double mechanical seal on all pump line.
- ② Compensating oil bag for mechanical seals.
- ③ On site adjustable efficiency compensating device.
- ④ Zinc anodes to protect casing from salty aggressive water.
- ⑤ Heavy duty H class insulation motors, ready for the hardest working conditions.
- ⑥ Double gromet water isolation for electric cable. Metal sleeve of around 1m lenght (standard starting from 2.2 kW).
- ⑦ Built in automatic ON/OFF thermal overload copy to be connected to the control panel's contactor.

PUMP RANGE

	AXIAL version	AXIAL AISI 316 version	RADIAL version
✓ available ⊘ not available			
Pump diameter index (*)	Discharge position and Material Index		
	0	0L	1
1X	✓	✓	⊘
2X	✓	✓	⊘
3X	✓	✓	✓
4X	✓	✓	✓
5X	⊘	⊘	✓
6X	✓	✓	✓
7X	✓	✓	⊘

MATERIAL TABLE

	AXIAL version	AXIAL AISI 316 version	RADIAL version
Outer casing	ALUM./STEEL	AISI 316	ALUM./STEEL
Stator casing	ALUM.	AISI 316	ALUM.
Strainer volume	AISI 304	AISI 316	AISI 304
Wearing plate	NBR coated	AISI 316	NBR coated
Diffuser	NBR coated	AISI 316*	NBR coated
Impeller	AISI 410 hardened	AISI 410 hardened	AISI 410 hardened
Shaft	AISI 431	AISI 431	AISI 431
Tandem mech. seal	TUNGST./ TUNGST.	SiC/SiC	TUNGST./ TUNGST.
O-ring	NBR	FPM	NBR
Hardware	AISI 304	AISI 316	AISI 304
Cable type	H07RN-F	H07RN-F	H07RN-F
Oil	FOOD GRADE	FOOD GRADE	FOOD GRADE
Ball bearings	RADIAL/ANGULAR	RADIAL/ANGULAR	RADIAL/ANGULAR

(*) Not available in all models

PERFORMANCE TABLE

Model (*)		P ₂		Q = Flow rate													
Single Phase	Three phase	[kW]	[HP]	l/min 0	50	100	150	200	250	300	350	400	450	480	550	600	650
				m ³ /h 0	3	6	9	12	15	18	21	24	27	28.8	33	36	39
H = Head [m]																	
DUMPER 10 51-S M-(NC)	DUMPER 1X 51-S T	1	1.3	16	14.8	13.6	12.5	11.3	10.2	8.5	6.7	4.5	2	0	-	-	-
-	DUMPER 1X 51.5-S T	1.5	2	16	15.5	15.1	14.4	13.7	12.7	11.9	10.6	9.2	7.7	6.5	4.3	2.2	0

Model (*)		P ₂		Q = Flow rate													
Single Phase	Three phase	[kW]	[HP]	l/min 0	200	300	400	500	600	700	800	900	1000	1100	1200	1270	1400
				m ³ /h 0	12	18	24	30	36	42	48	54	60	66	72	76.2	84
H = Head [m]																	
DUMPER 2X 51.5-S M-NC	DUMPER 2X 51.5-S T	1.5	2	15.3	13.5	11.9	9.8	6.7	0	-	-	-	-	-	-	-	-
DUMPER 2X 52.2-S M-NC	DUMPER 2X 52.2-S T	2.2	3	19	16.3	15.3	14.1	12.8	11.6	10.1	8.6	7.1	5.4	3.7	1.9	0	-
-	DUMPER 2X 53-S T	3	4	20.0	17.6	16.4	15.3	14	12.7	11.3	10	8.7	7.4	5.8	4.2	2.8	0

Model (*)		P ₂		Q = Flow rate													
Single Phase	Three phase	[kW]	[HP]	l/min 0	100	200	300	420	600	800	1050	1120	1150	1600	2130	2600	3000
				m ³ /h 0	6	12	18	25.2	36	48	63	67.2	69	96	127.8	156	180
H = Head [m]																	
-	DUMPER 3X 53.7-S T	3.7	5	51	45.5	42	32.9	0	-	-	-	-	-	-	-	-	-
-	DUMPER 3X 53.7-M T	3.7	5	22	21.5	20.7	20	18.8	16.8	14.1	8.8	4.7	0	-	-	-	-
-	DUMPER 3X 53.7-L T	3.7	5	15	14.6	14.3	14	13.6	13	12.2	11.2	10.8	10.7	8.2	0	-	-
-	DUMPER 3X 55.5-S T	5.5	7.5	47.5	46.0	43.5	41	37.1	33.5	21.8	6.5	0	-	-	-	-	-
-	DUMPER 3X 55.5-M T	5.5	7.5	28	27.1	26.2	25.3	24.1	22.7	20.6	18.2	17.5	17.2	12.4	5.9	0	-
-	DUMPER 3X 57.5-S T	7.5	10	49.0	48.5	47	46	43.5	37.9	29.4	18.2	-	-	-	-	-	-
-	DUMPER 3X 57.5-M T	7.5	10	29.5	29.1	28.2	27.7	26.8	25.3	23.8	22.1	21.2	20.9	16.8	11.5	5.7	0

Model (*)		P ₂		Q = Flow rate													
Single Phase	Three phase	[kW]	[HP]	l/min 0	200	400	600	800	1000	1250	1600	2000	2500	3000	3500	4000	4450
				m ³ /h 0	12	24	36	48	60	75	96	120	150	180	210	240	267
H = Head [m]																	
-	DUMPER 4X 512-ST-SD	12	16	72.5	66.0	60.0	53.5	45.0	35.9	0	-	-	-	-	-	-	-
-	DUMPER 4X 512-M T-SD	12	16	33.1	31.4	30.6	29.4	28	27.1	25.4	23.1	20.9	16.9	13.7	9.7	5	0

Model (*)		P ₂		Q = Flow rate													
Single Phase	Three phase	[kW]	[HP]	l/min 0	100	200	300	400	500	600	700	800	900	1000	1100	1150	1200
				m ³ /h 0	6	12	18	24	30	36	42	48	54	60	66	69	72
H = Head [m]																	
-	DUMPER 5X 58-ST	8	10.7	68	62.5	57.5	52.5	46.5	41.0	35.5	30	23.2	16.4	9.6	2.3	0	-

Model (*)		P ₂		Q = Flow rate													
Single Phase	Three phase	[kW]	[HP]	l/min 0	500	1000	1500	2170	2280	3000	3750	4500	5250	6000	7100	8000	8600
				m ³ /h 0	30	60	90	130.2	136.8	180	225	270	315	360	426	480	516
H = Head [m]																	
-	DUMPER 6X 519-ST-SD	19	25	78.5	73	63.5	45.0	0	-	-	-	-	-	-	-	-	-
-	DUMPER 6X 519-M T-SD	19	25	39	36.9	34.4	31.7	28.5	28	24.6	20	15.1	8.3	0	-	-	-
-	DUMPER 6X 526-ST-SD	26	35	83.5	75	63.5	51.0	12.5	0	-	-	-	-	-	-	-	-
-	DUMPER 6X 526-M T-SD	26	35	45	43	41	38.8	35.9	35	31.8	28.8	24.7	18.8	11.1	0	-	-
-	DUMPER 6X 537-M T-SD	37	50	47	44	41.5	39.3	37	36.3	34	31.5	29	26.3	23.3	16.3	7.3	0

Model (*)		P ₂		Q = Flow rate													
Single Phase	Three phase	[kW]	[HP]	l/min 0	400	800	1200	1500	1800	2100	2400	2700	3000	3300	3600	3900	4200
				m ³ /h 0	24	48	72	90	108	126	144	162	180	198	216	234	252
H = Head [m]																	
-	DUMPER 6X 537-ST-SD	37	50	88	84.5	82.5	78	74	69	64.5	58	52	47	36.3	27.9	13.7	0

(*) Replace letter "X" in pump name with:
 "0" for pump with "top discharge";
 "0L" for pump with "top discharge" in AISI 316;
 "1" for pump with "side discharge".

* Dimensional details are provided for reference only.

* All specifications are subject to change without prior notice.



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