

**HEAVY**  
PUMPS

**TOYO**  
PUMPS



# DXL SERIES

**A RELIABLE DEWATERING PUMP SOLUTION  
AVAILABLE IN HIGH HEADS TO 525 FT. (160M)**



# DXL HIGH HEAD DEWATERING PUMPS

TOYO'S DXL HIGH HEAD SUBMERSIBLE SERIES IS A DEPENDABLE AND ECONOMICAL SOLUTION TO YOUR HIGH HEAD DEWATERING APPLICATIONS.

## DXL 15H - DXL 150H

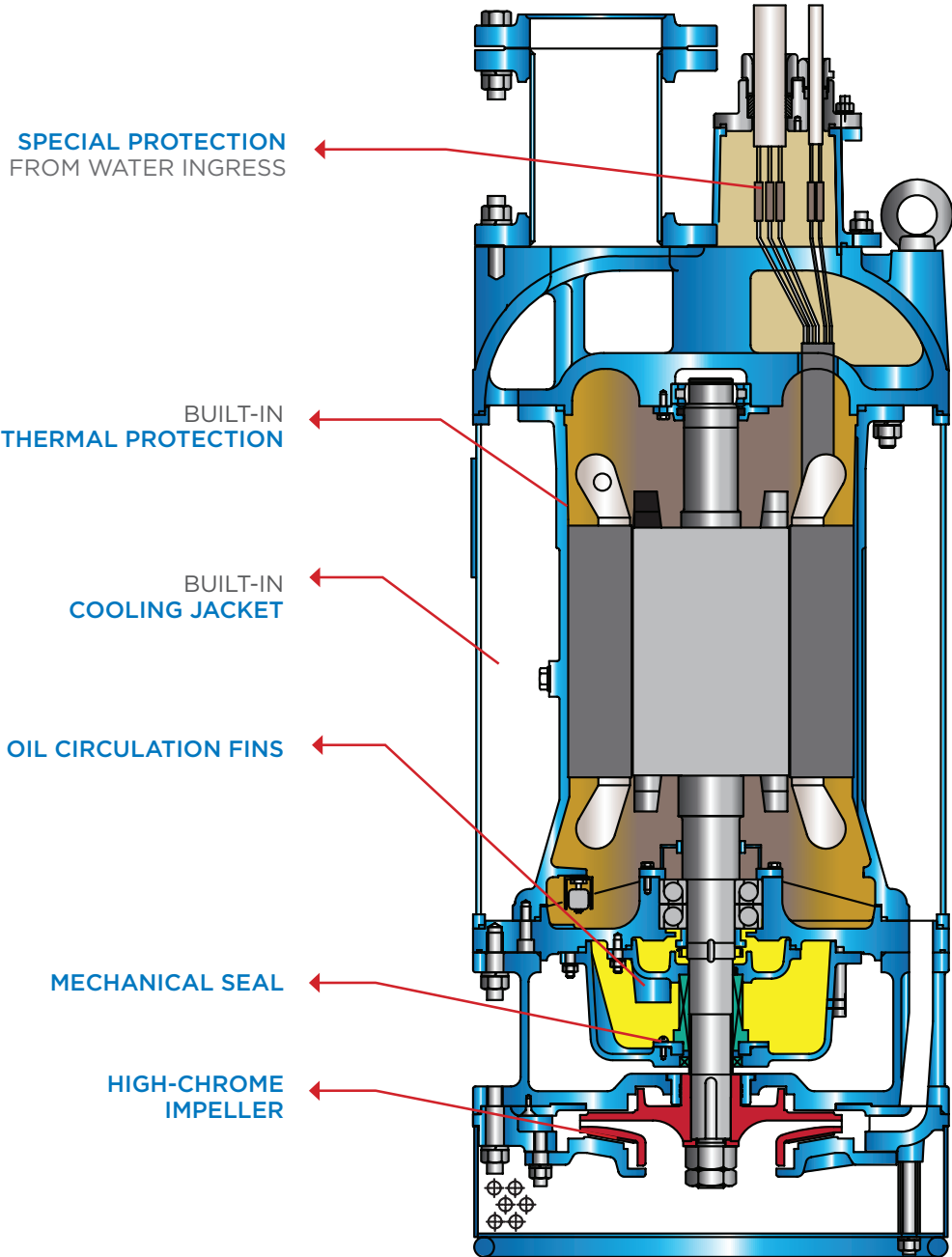
- ▶ Available from **15HP-150HP**
- ▶ Up to **525 ft (160m)** rated head
- ▶ Capacities (rated) up to **700 USgpm (159 m<sup>3</sup>/hr)**
- ▶ Up to **6" (150mm)** discharge
- ▶ Built in **Cooling Jacket**
- ▶ **High Chrome impeller**
- ▶ **Silicon Carbide Mechanical Sea**



# DXL HIGH HEAD FEATURES

The robust **High Head Dewatering Pumps** are available in powers ranging from **15 HP - 150 HP** and can pump up to 700 GPM and reach heads up to 525 feet.

**DXLs** are a **reliable dirty water pump** that are able to operate in water levels as low as 6 inches (approx).



# DXL LOW HEAD DEWATERING PUMPS

TOYO'S DXL SUBMERSIBLE SERIES IS A DEPENDABLE AND ECONOMICAL SOLUTION TO ALL YOUR DRAINAGE & DEWATERING NEEDS.

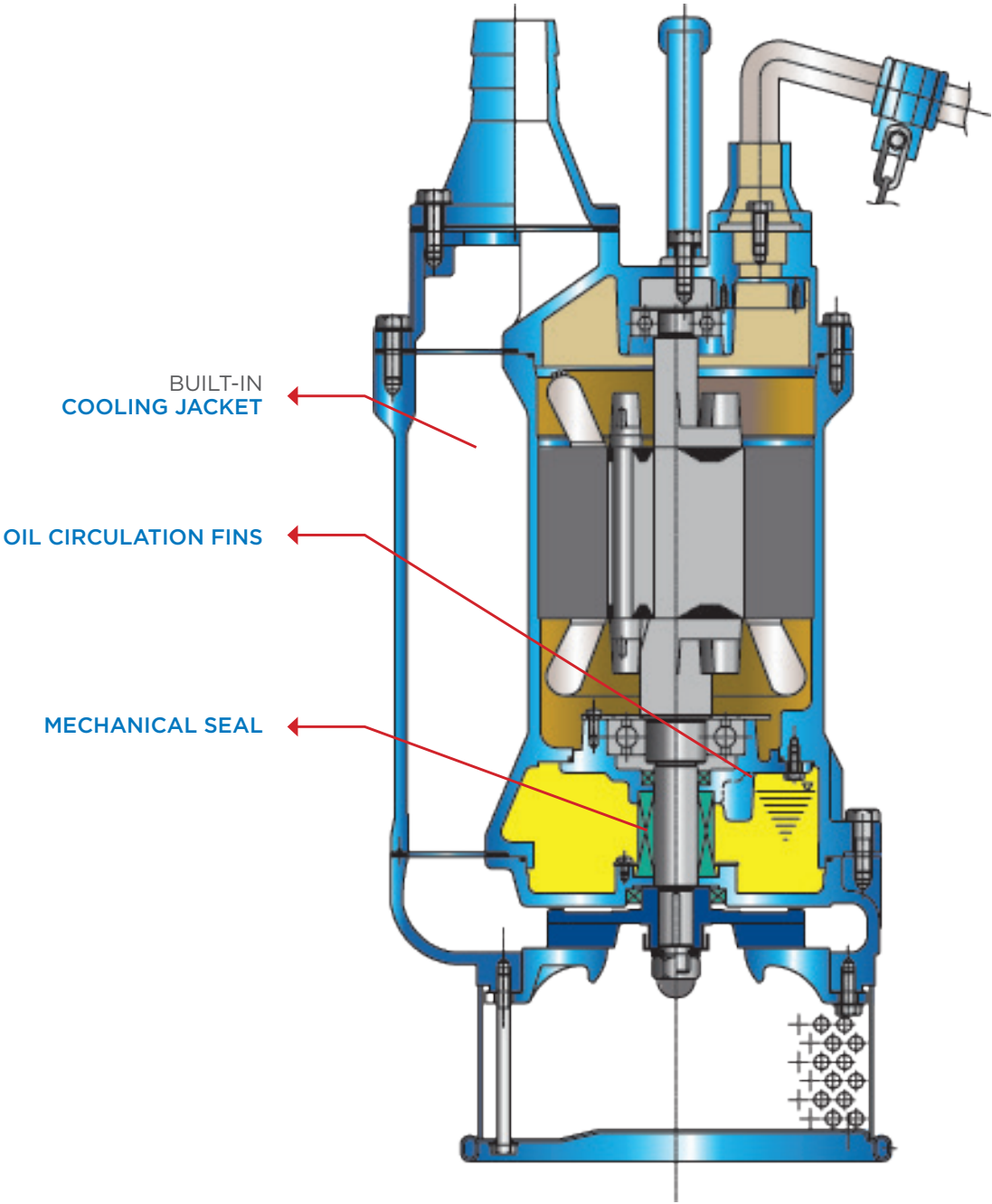
## DXL 5 - DXL 20

- ▶ Available from **5HP-20HP**
- ▶ Up to **180 ft (55m)** rated head
- ▶ Capacities up to **400 USgpm (91 m<sup>3</sup>/hr)**
- ▶ Up to **4" (100mm)** discharge
- ▶ Built in **cooling jacket**
- ▶ **Cast Iron impeller**
- ▶ **Silicon Carbide** mechanical seal



# DXL LOW HEAD FEATURES

These **low head dewatering pumps** are available in powers ranging from **5 HP - 20 HP** and can pump up to 400 GPM and reach heads up to 180 feet

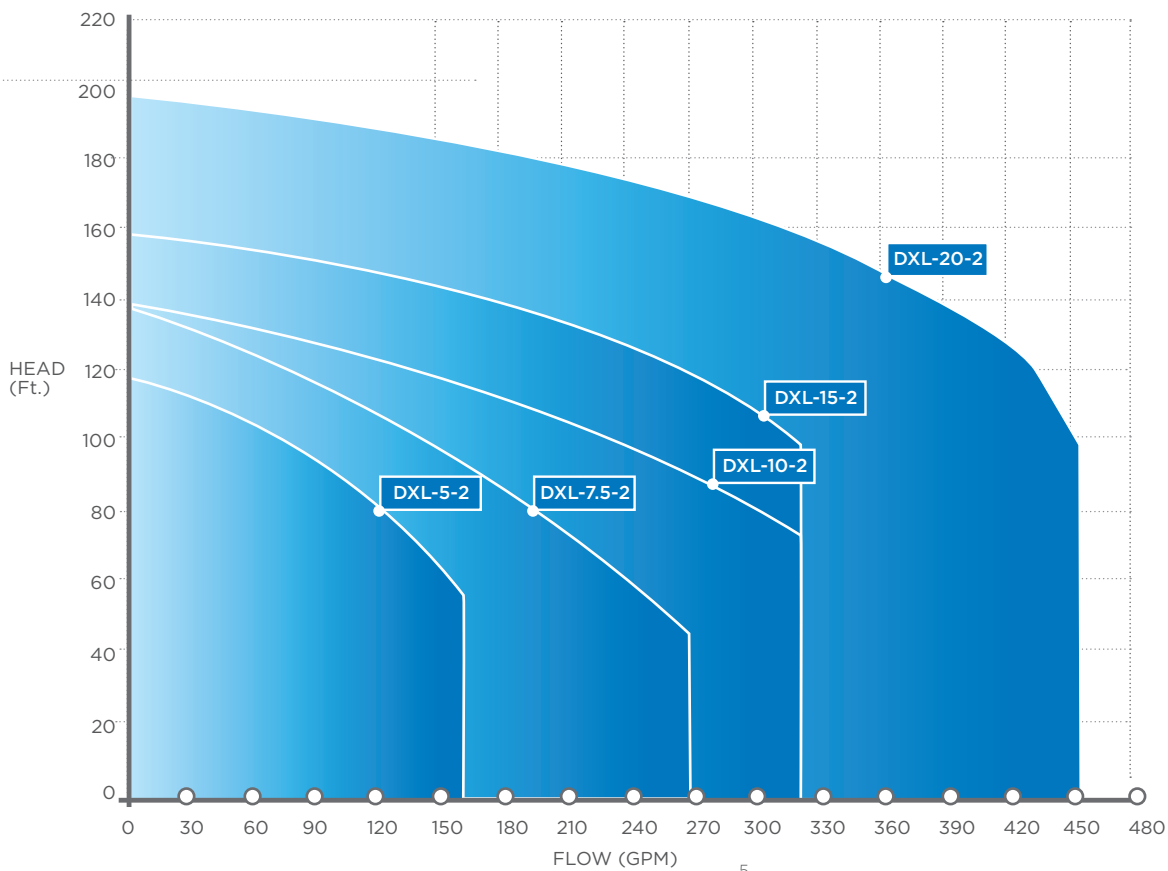




# DXL LOW HEAD SPECS

PUMP CHARACTERISTICS	DXL-5-2	DXL-7.5-2	DXL-10-2	DXL-15-2	DXL-20-2
Discharge Diameter - inch (mm)	2 (50)	3 (80)	4 (100)	4 (100)	4 (100)
Discharge Connection Type	Hose Coupling	Hose Coupling	Hose Coupling	Hose Coupling	Hose Coupling
Flow at rated point - USGPM (m3/min)	53 (0.2)	150 (0.6)	211 (0.8)	264 (1.0)	317 (1.2)
Head at rated point - ft (m)	98 (30)	82 (25)	98 (30)	115 (35)	131 (40)
Impeller Type	Semi-Open	Semi-Open	Semi-Open	Semi-Open	Semi-Open
Impeller Diameter - inch (mm)	5.9 (150)	6.6 (168)	6.7 (170)	7.1 (180)	7.7 (195)
Maximum Solid Size - inch (mm)	0.3 (8)	0.3 (8)	0.3 (8)	0.3 (8)	0.3 (8)
Weight - lb (kg)	150 (68)	187 (85)	243 (110)	363 (165)	396 (180)
Motor Size - HP (kW)	5 (3.7)	7.5 (5.5)	10 (7.5)	15 (11)	20 (15)
Speed - RPM	3450	3450	3450	3450	3450
Voltage - V (at 60Hz)	460/575	460/575	460/575	460/575	460/575
Rated Current (amps)	7.0/5.0	9.5/7.5	12.5/11.0	17.0/13.6	23.0/18.4
Starting Method	Direct-on-Line	Direct-on-Line	Direct-on-Line	Direct-on-Line	Star-Delta
Cable length - ft (m)	26 (8)	26 (8)	26 (8)	26 (8)	26 (8)
Motor Thermal Protection	No	No	No	No	No
Insulation Class	F	F	F	F	F

# DXL LOW HEAD CURVES

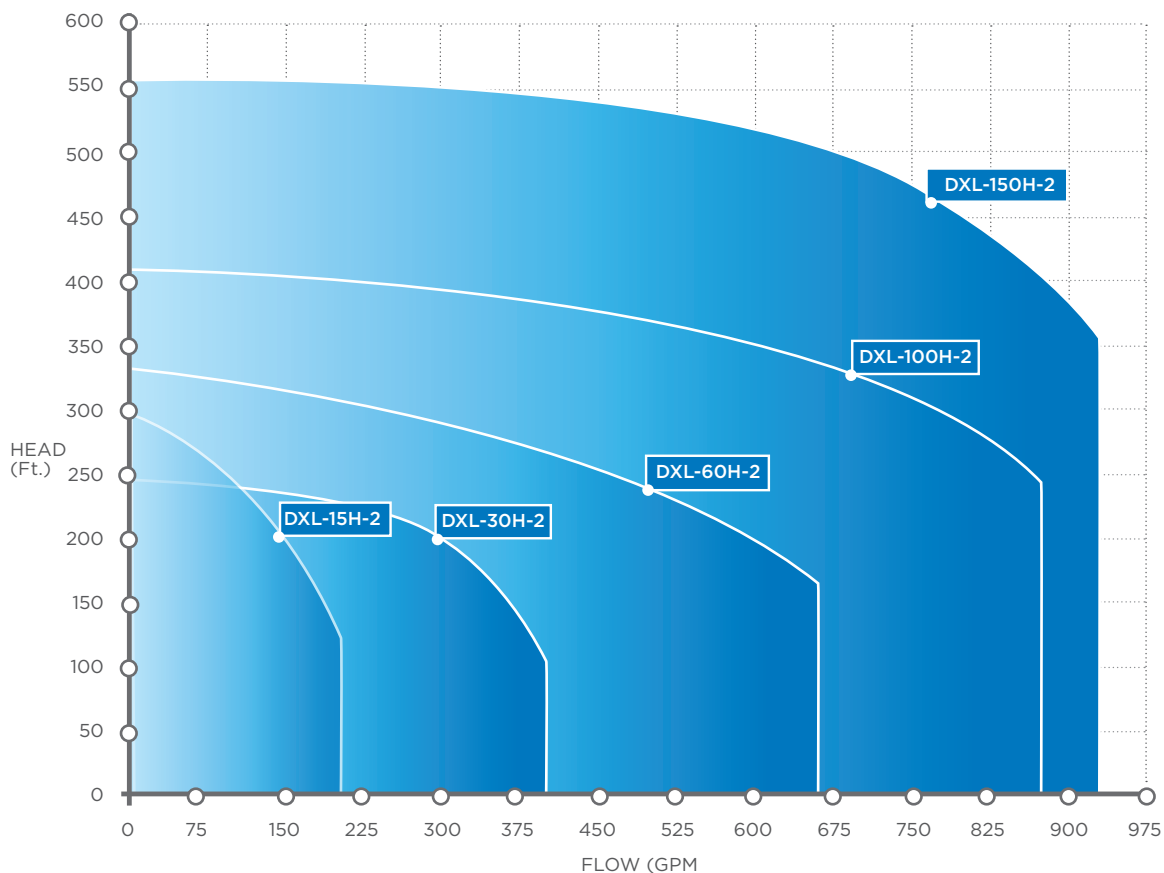


# DXL HIGH HEAD SPECS

PUMP CHARACTERISTICS	DXL-15H-2	DXL-30H-2	DXL-60H-2	DXL-100H-2	DXL-150H-2
Discharge Diameter - inch (mm)	3 (80)	4 (100)	6 (150)	6 (150)	6 (150)
Discharge Connection Type	FNPT Flange	FNPT Flange	FNPT Flange	FNPT Flange	FNPT Flange
Flow at rated point - USGPM (m <sup>3</sup> /min)	132 (0.5)	264 (1.0)	264 (1.0)	528 (2.0)	528 (2.0)
Head at rated point - ft (m)	210 (64)	197 (60)	295 (90)	361 (110)	525 (160)
Impeller Type	Semi-Open*	Closed	Closed	Closed	Closed
Impeller Diameter - inch (mm)	9.8 (250)	8.0 (202)	9.9 (251)	11.2 (285)	13.0 (330)
Maximum Solid Size - inch (mm)	0.24 (6)	0.4 (10)	0.4 (10)	0.4 (10)	0.4 (10)
Weight - lb (kg)	397 (180)	704 (320)	1650 (750)	1700 (770)	2430 (1100)
Motor Size - HP (kW)	15 (11)	30 (22)	60 (44)	100 (75)	150 (110)
Speed - RPM	3450	3450	3450	3450	3450
Voltage - V (at 60Hz)	460/575	460/575	460/575	460/575	460/575
Rated Current (amps)	18/15	37/30	74/59	124/99	178/145
Starting Method	Direct-on-Line	Direct-on-Line	Star-Delta	Star-Delta	Star-Delta
Cable length - ft (m)	50 (15)	50 (15)	50 (15)	50 (15)	50 (15)
Motor Thermal Protection	Yes	Yes	Yes	Yes	Yes
Insulation Class	E	E	E	F	F

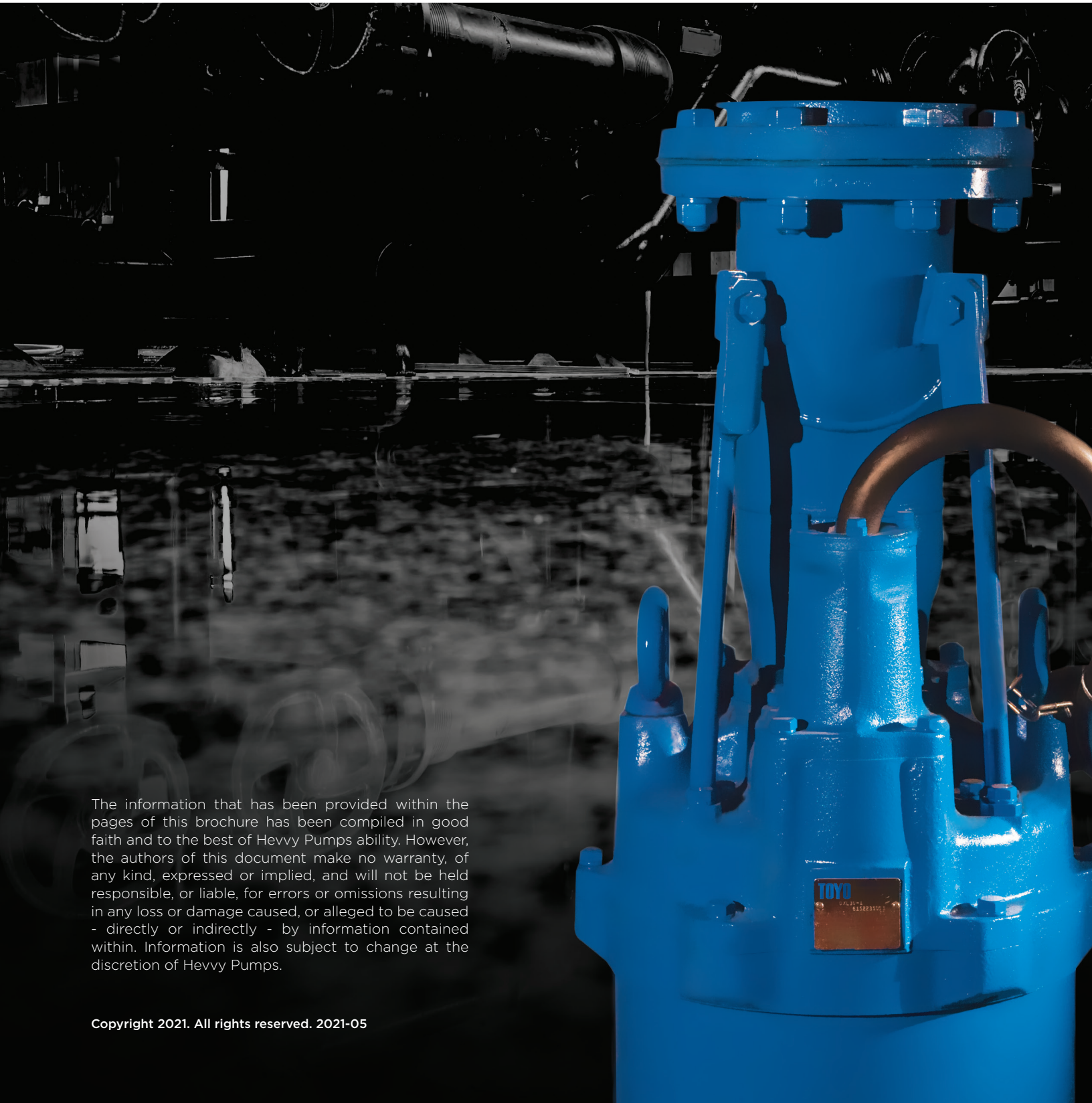
\* 2 STAGE PUMP

# DXL HIGH HEAD CURVES





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**HEAVY**  
PUMPS

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**DL SUBMERSIBLE**

**RUN-DRY CAPABLE, VERSATILE & ECONOMICAL  
SUBMERSIBLE SLURRY PUMP SOLUTIONS**

# DL QUICK FACTS

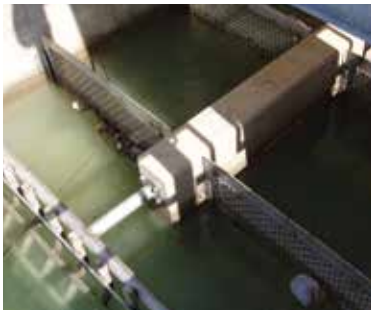
RUN DRY CAPABLE, STANDARD COOLING JACKET & HIGH CHROME WEAR PARTS

THIS **RUGGED SUBMERSIBLE SLURRY PUMP** IS THE LAST THING YOU'LL NEED TO WORRY ABOUT IN YOUR BUSY DAY

- ▶ Capacities to **3500 gpm** (800 m<sup>3</sup>/hr)
- ▶ Heads to **175 ft** (53 meters)
- ▶ Ideal for **class 1** slurries
- ▶ Sizes up to **10" (250mm)** discharge
- ▶ Agitators as standard up to **DL-30** (optional on DL-50)
- ▶ **High chrome** wear components
- ▶ **DL-4 and DL-7.5** available with chopper packages
- ▶ Run dry capability
- ▶ Built-in **thermal protection**
- ▶ Built-in **cooling jacket**
- ▶ Large internal clearances



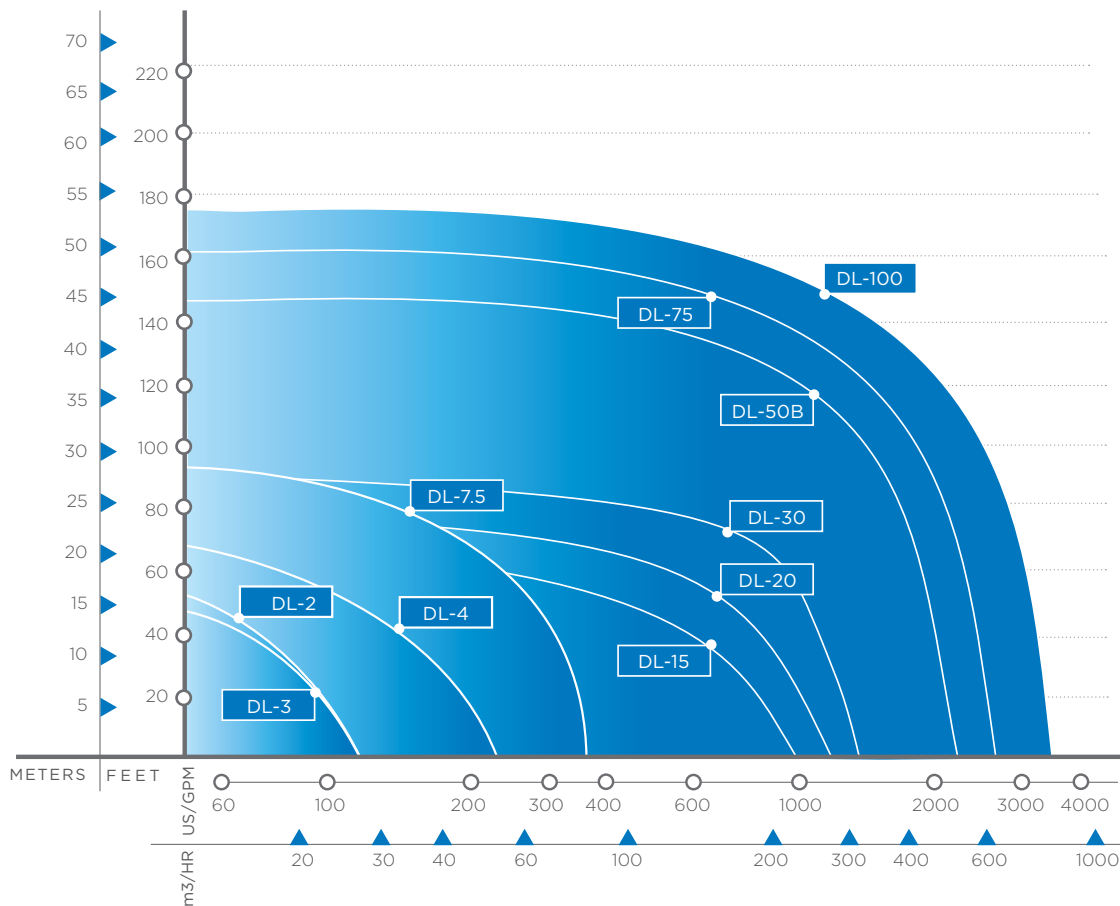
# THE ECONOMICAL DL FOR CLASS 1 SLURRIES



The **Toyo DL** series submersible pump has long been a fan favorite for its proven reliability and durability. It features a built-in cooling jacket to allow for full cooling while the pump is primed - even if the motor is fully exposed to air.

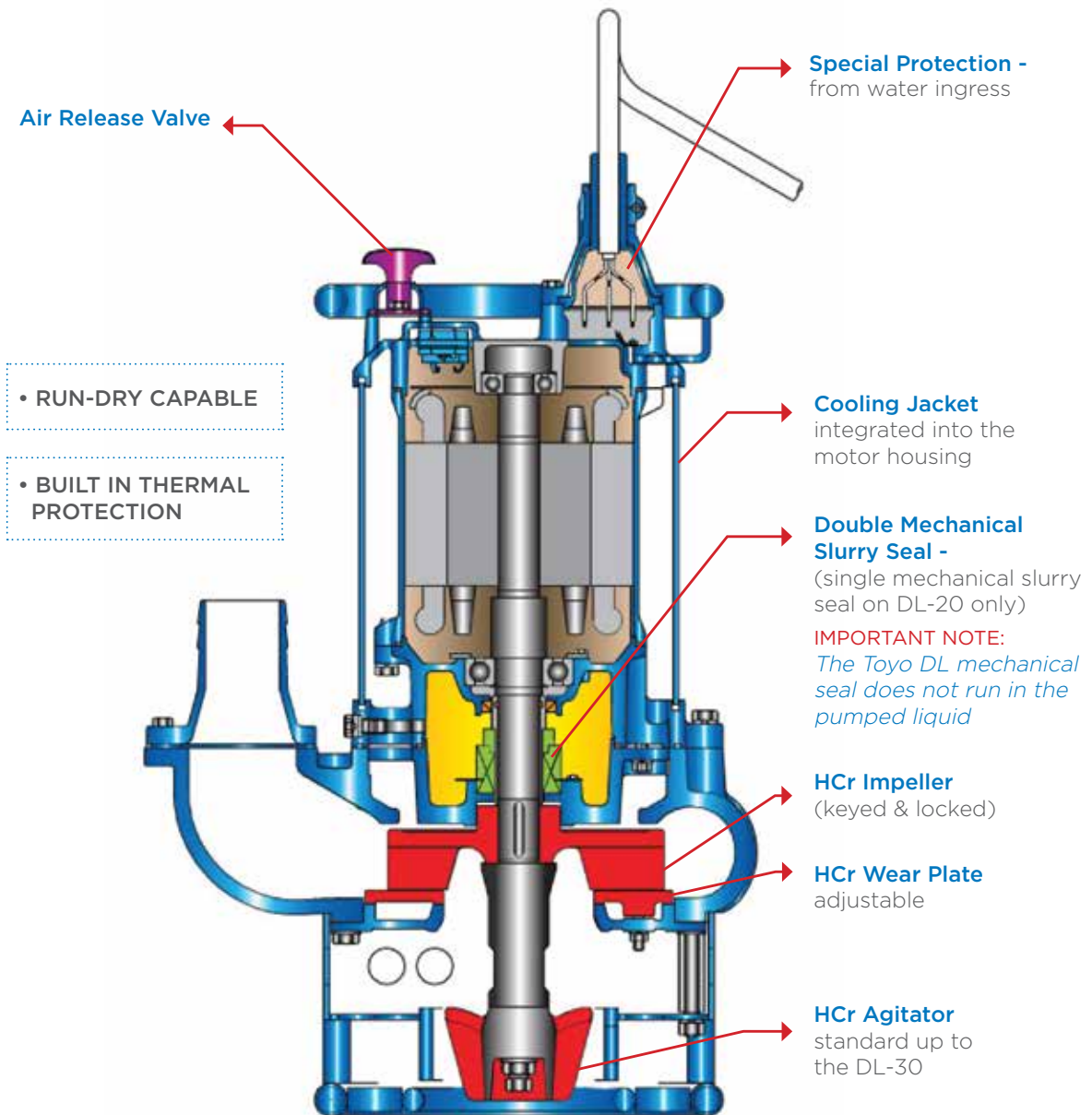
**High Chrome** wear components provide excellent wear life and the pump boasts large internal clearances for the easy passage of high concentrations of solids. This rugged submersible pump will be the last thing you need to worry about in your busy day.

## DL FAMILY CURVE





# DL MAIN FEATURES



## TOYO DL OPTIONS

### TOYO DL AGITATION OPTIONAL ON DL 50



Standard with models up to 30HP: The **Toyo agitator** reduces solids accumulating on the sump floor, significantly reducing maintenance costs resulting from digging out sumps.

### TOYO DL CHOPPER OPTION



DL-4 & DL-7.5 Only: **Heavy duty blades**, situated in front of the pump's suction, agitates, chops, cuts, shreds incoming solids such as metal banding, plastic, wood, rags and bags, prior to them entering the impeller.

MODEL NUMBER	DL-1	DL-2	DL-3	DL-4	DL-7.5	DL-15	DL-20	DL-30	DL-50B	DL-75	DL-100
Discharge diameter - inch (mm)	2 (50)	2 (50)	2 (50)	3 (80)	3 (80)	4 (100)	4 (100)	6 (150)	8 (200)	10 (250)	10 (250)
Rated Flow USgpm (m3/min)	30 (0.11)	65 (0.25)	65 (0.25)	130 (0.5)	300 (1.1)	400 (1.6)	400 (1.6)	850 (3.2)	1300 (4.9)	1525 (5.8)	2100 (7.9)
Head at rated point - ft (m)	27 (8.3)	44 (13)	40 (12)	40 (12)	40 (12)	50 (15)	69 (21)	64 (19)	102 (31)	119 (36)	112 (34)
Impeller diameter - inch (mm)	3.4 (85)	4.4 (111)	4.9 (124)	5.1 (130)	8.6 (218)	9.3 (235)	9.6(244)	11.2 (285)	12.8 (325)	13.5 (344)	14.2 (360)
Max. solid size - inch (mm)	0.4 (10)	0.3 (8)	0.4 (10)	0.4 (10)	1.2 (30)	1.2 (30)	1.2 (30)	1.2 (30)	1 (25)	1 (25)	1 (25)
Weight - lb (kg)	35 (15)	70.5 (32)	88 (39)	131 (59.5)	334 (151)	491 (222)	590 (267)	835 (378)	1874 (852)	2535 (1152)	2646 (1203)
Single/ Double Mech. Seal	Double	Double	Double	Double	Double	Double	Single	Double	Double	Double	Double
Motor Size - HP (KW)	0.75 (0.55)	2 (1.5)	2.7 (2.0)	4 (3.0)	7.5 (5.6)	15 (11)	20 (15)	30 (22)	50 (37)	75 (56)	100 (75)
Run Dry Motor	Yes										
Speed - RPM	3600	3600	3600	3600	1800	1800	1800	1800	1800	1800	1800
Starting Method	Capacitor		D.O.L	D.O.L	D.O.L	D.O.L	D.O.L	D.O.L	Star- Delta		
Insulation Class	E	B	F	F	E	B	B	F	F	E	E
Cable Length ft. (m)	32 (10)	32 (10)	50 (15)	50 (15)	50 (15)	50 (15)	82 (25)	82 (25)	50 (15)	50 (15)	50 (15)
Pump Casing	Ductile Iron	EPR	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Impeller	HCr	Ductile Iron	HCr	HCr	HCr	HCr	HCr	HCr	HCr	HCr	304SS
Suction Cover	N/A	Ductile Iron	Ductile Iron	Ductile Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Suction Wear Plate	N/A	N/A	N/A	N/A	HCr	HCr	HCr	HCr	Optional	N/A	N/A
Agitator	HCr	Ductile Iron	Ductile Iron	Ductile Iron	HCr	HCr	HCr	HCr	N/A	N/A	N/A
Aluminium Content	Yes	Yes	No	Yes	No	No	No	No	No	No	No

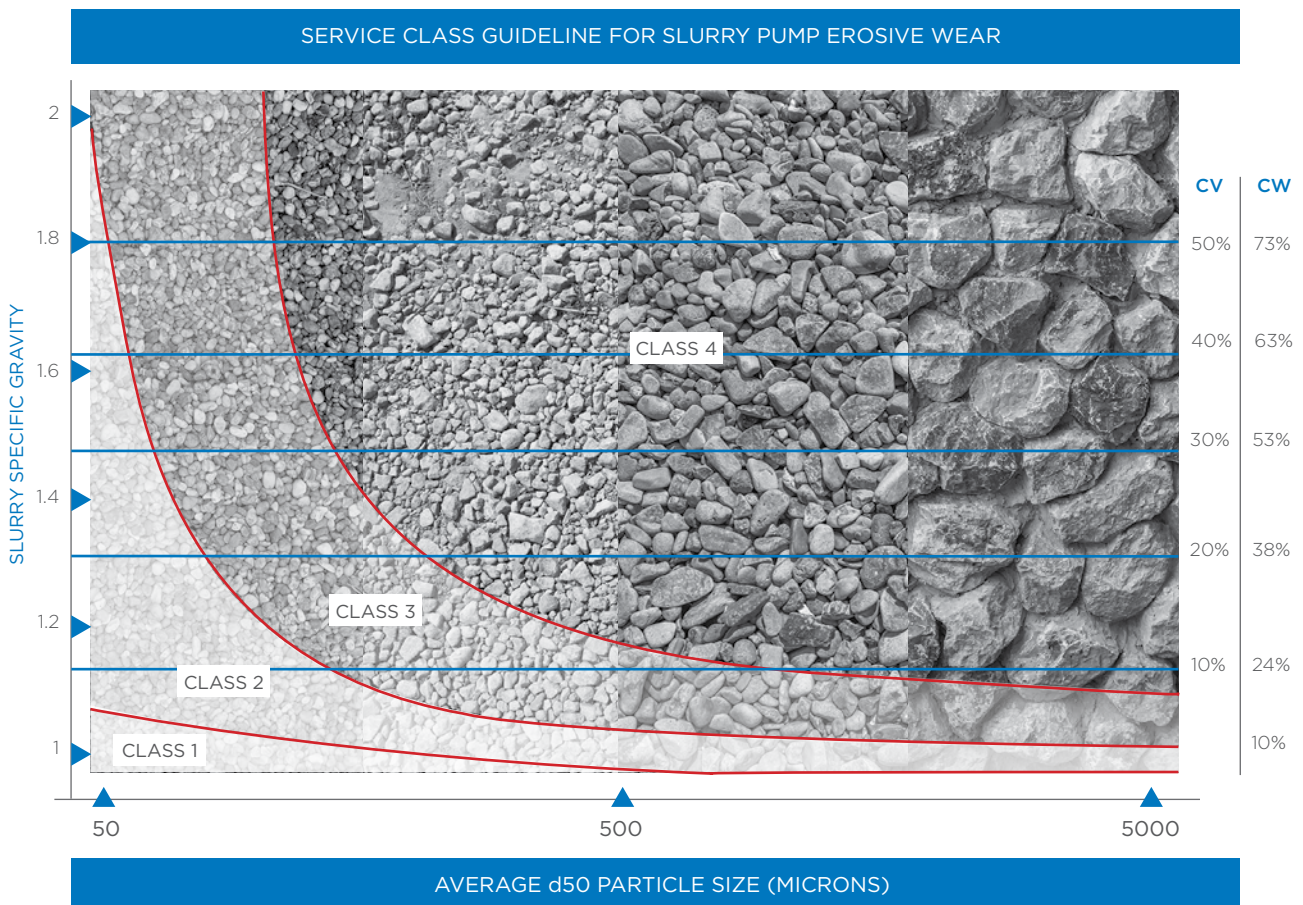
# HEVVY SLURRY

## CLASSIFICATIONS

At HEVVY PUMPS we were born out of our passion for pumping solids. The majority of pumping companies began life as a water pumping company. Therefore, if they now offer a “slurry” pump, they’ve simply adapted one of their water pumps to do a slurry pumps’ job. This is not always the ideal solution (similar to asking a pick-up truck to do a dump truck’s job).

To find the right solution for your application it is important to first understand what it is you are trying to pump. Slurries come in many shapes, sizes, weights, levels of abrasion or corrosion and consistency. For your convenience, **the industry defines slurries by classes**. We have included a very simplified chart (see below) to assist you in understanding what slurry class you might be dealing with. As always we are happy to help you choose the right solution for your application. Please give us a call if this is all as clear as well... slurry.

### SLURRY TYPES: SILT | SAND | TAILINGS



The above chart is for use as a guide only. It assumes 2.65 SS silica-based solids. Adjust rating to account for solids of different abrasivity using ASTM G75-95. The chart is based on the Hydraulic Institute’s Slurry Class guideline. For more information about the HI Slurry Classes please visit <http://pumps.org> or call HEVVY PUMPS for assistance.



# NEED SOMETHING **HEVVIER?**



## **WHAT IF** YOU NEED SOMETHING MORE

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Where the **DL Pump** is capable of handling Class 1 and some Class 2 slurries. Look to the **HS** and **HNS** if you need something more.

The Hevvy HNS Series is the world's only modular submersible slurry pump with pressurized sealing technology, run dry capability, and even capable of passing a 5" rock. It is available up to 1000 HP and can handle Class 4 slurries. The HNS is available with four wet end choices and can pump up to 10,000 GPM.



## **GIVE US** YOUR WORST

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**HEVVY PUMPS** is proud to offer a **complimentary pump audit** of your four worst pumping applications, complete with a report.

## **HEVVY's No Risk Trial Program**

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Be confident that your **HEVVY PUMP** will work with our **No Risk Trial Program**. All we need is a little information about your application and a commitment from you - when our pump meets the expectations that we both agree on - that you will keep the pump.



To find out more please contact your local Regional Manager for details or email [applications@hevvyumps.com](mailto:applications@hevvyumps.com)



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# DP LEGENDARY SUBMERSIBLE

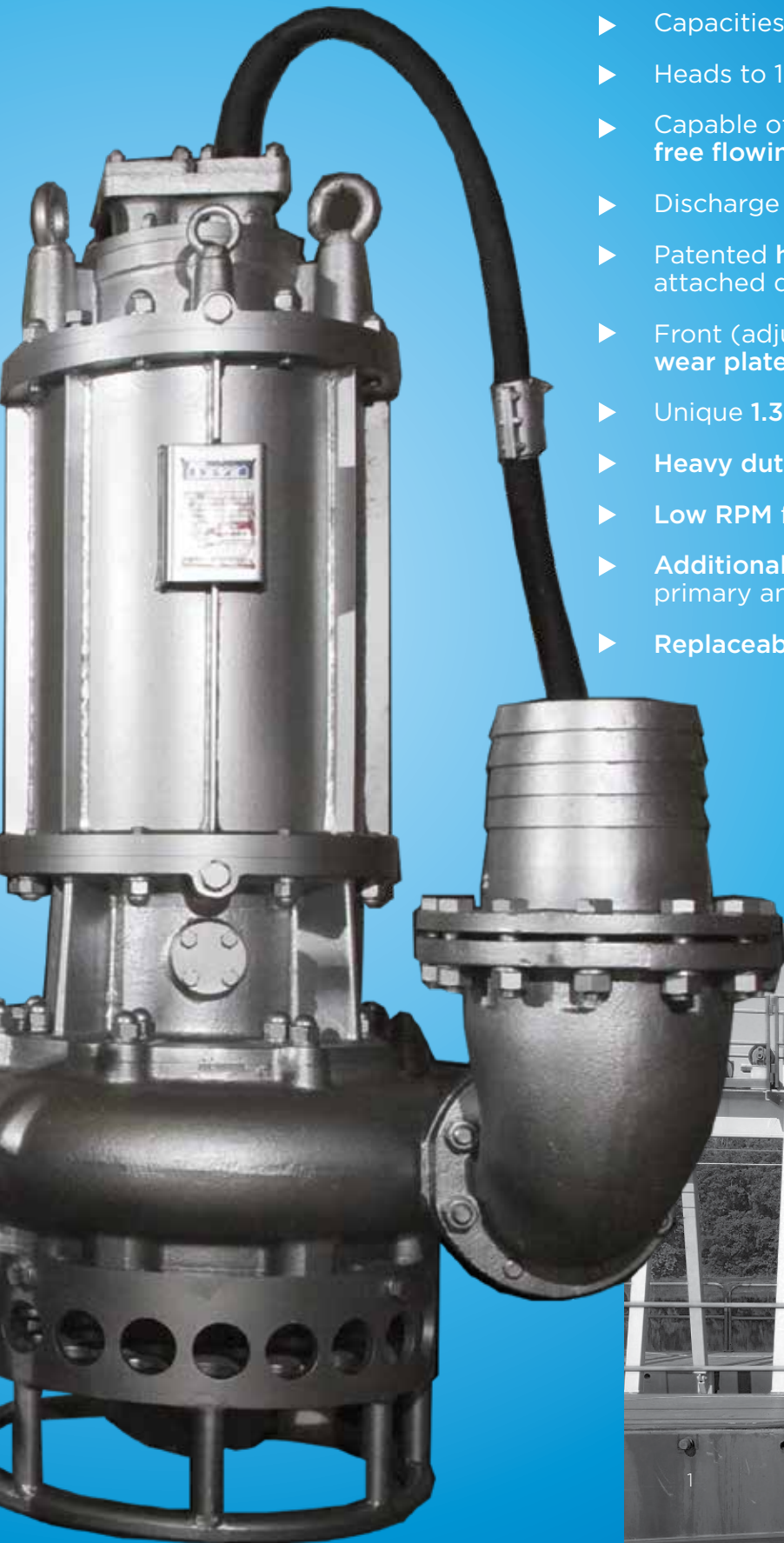
THE WORLD'S PREMIER HEAVY DUTY DREDGING SLURRY PUMP  
WITH THE AGITATOR THAT REVOLUTIONIZED AN INDUSTRY



# DP PUMP SERIES

YOUR **ELECTRICALLY DRIVEN DREDGE PUMP SOLUTION**

- ▶ Capacities to **10,000 gpm** (2,300 m<sup>3</sup>/hr)
- ▶ Heads to **168 ft** (51 meters)
- ▶ Capable of pumping **Class 3** & some **free flowing 4** slurries
- ▶ Discharge sizes up to **16" (400mm)**
- ▶ Patented **high chrome agitator** as standard – attached directly to the pump's shaft
- ▶ Front (adjustable) and Back **high chrome wear plates**
- ▶ Unique **1.35 S.F.** motor
- ▶ **Heavy duty** motor housing
- ▶ **Low RPM** for reduced wear
- ▶ **Additional bearing support** between primary and secondary seal elements
- ▶ **Replaceable elbow**



# TO PUMP SERIES

YOUR HYDRAULICALLY DRIVEN SOLUTION



The **Toyo submersible DP series** and its hydraulically driven cousin the **TO series** were specifically designed to pick up and transport abrasive materials with the least amount of water.

**The DP/TO is a pump and excavator in one.** The design incorporates the Toyo agitator, attached directly to the pump shaft, which together with the closed impeller, large open passages for the easy passage of solids and heavy duty shaft/bearing configuration results in the most rugged submersible slurry pump on the market today.

## TOYO/ HEVY CUSTOM DREDGE SOLUTIONS DESIGNED TO OPTIMIZE YOUR DP & TO

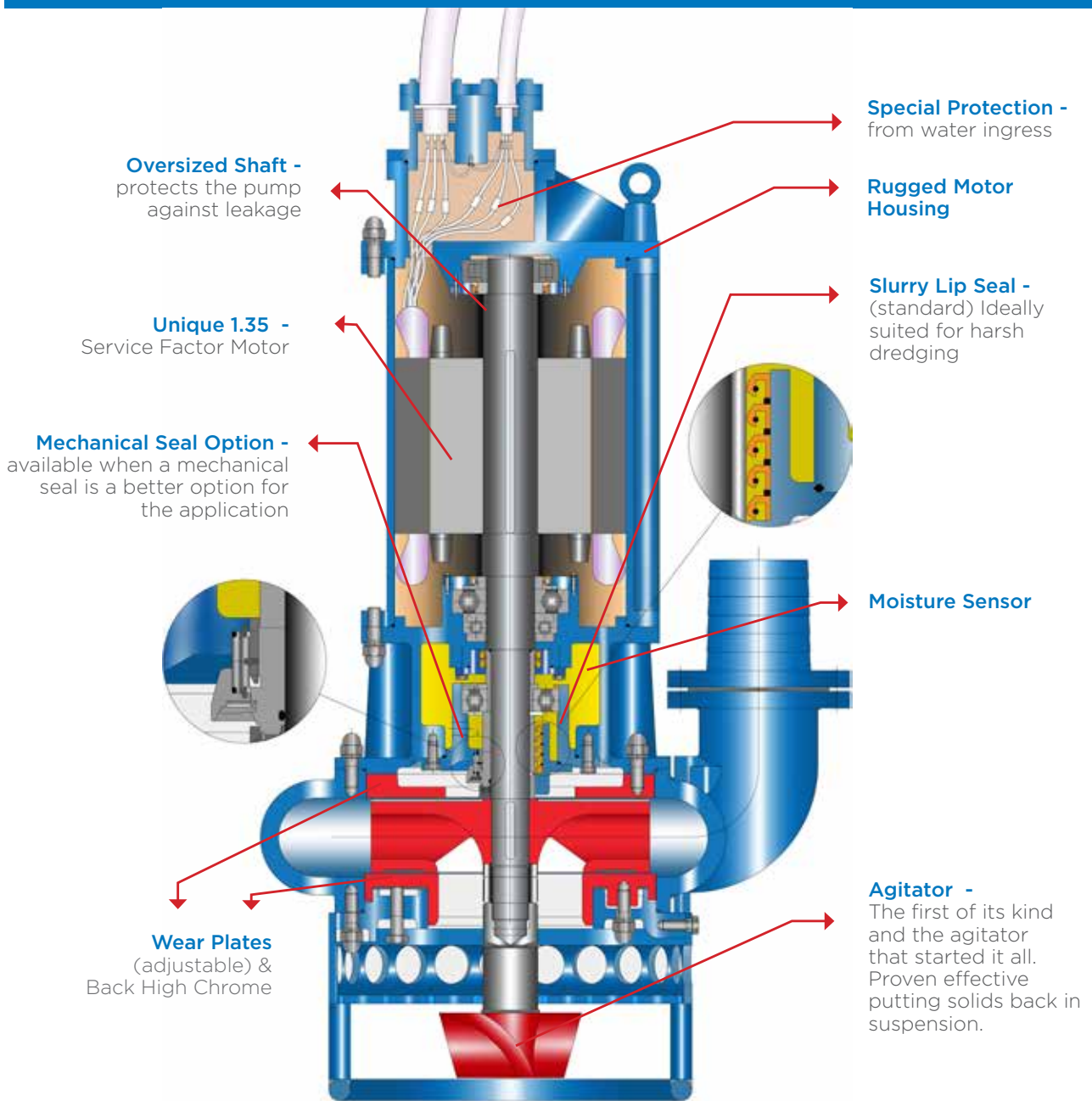


### THE TOYO/ HEVY DREDGE ADVANTAGE:

- ▶ **Optimal for precise dredging operations:** dredging close to structures/pipelines or alongside docks & piers.
- ▶ Excavate sediments with **minimal turbidity** (suspended solids in water).
- ▶ **Lower costs** - not only are Toyo/ Hevvy dredges more economical to operate than cutter head dredges but also transportation/mobilization costs are significantly reduced.



**THE DP'S HEAVY DUTY CONSTRUCTION MAKES IT THE TOUGHEST SUBMERSIBLE DREDGE PUMP ON THE MARKET TODAY**



**AGITATOR**

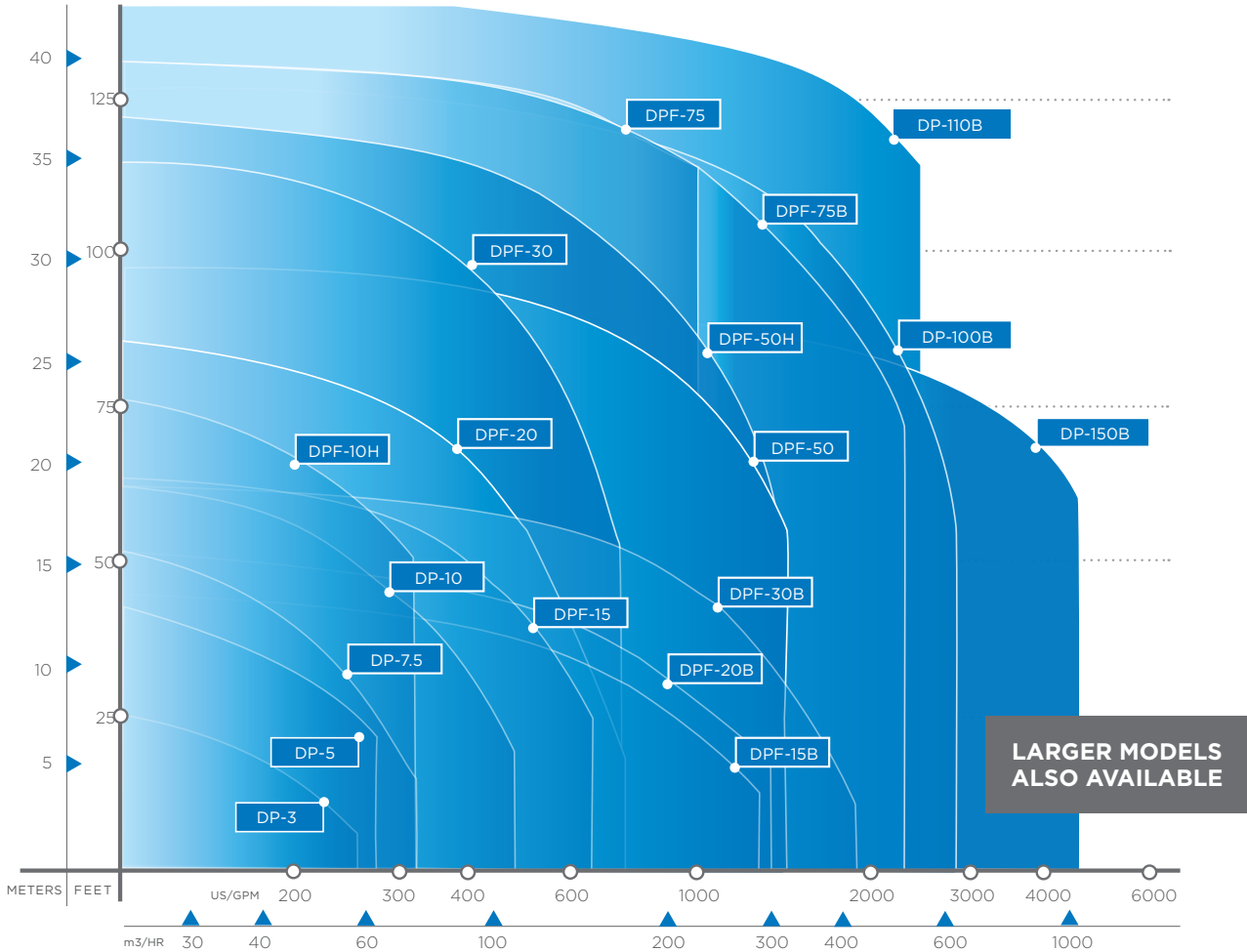


Toyo/Hevvy utilizes heavy duty submersible agitator dredge pumps in combination with our customized dredge solutions to allow for economical dredging in all water depth conditions.

The **Toyo agitator** eliminates solids accumulating on the sump floor and can significantly reduce maintenance costs resulting from digging out sumps and downtime due to solids building up and choking off the suction of conventional pumps.



# DP-3 to 150B COVERAGE CURVE



## SUPERCHARGE YOUR DREDGING OR PROCESS WITH THESE DP & TO OPTIONS

JET RING



PRESSURE COMPENSATED



**The Original Agitation team - Toyo Agitator & Jet ring** - for applications where solids are especially difficult to pump, Toyo offers the option of a special high pressure jet ring. The jet ring combined with the original Toyo agitator have proven to be a truly effective 'agitation team'.

- ▶ High Temperature package
- ▶ Pressure compensation bladder
- ▶ High Pressure Jetting ring
- ▶ Custom dredging

# DP SPECIFICATIONS

MODEL NUMBER	DP 3-2	DP 5-2	DP 7.5-2	DP 7.5B-2	DP 10-2	DP 10H-2	DPF 15	DPF 15B	DPF 20	DPF 20B
Discharge diameter- inch (mm)	3 (80)	3 (80)	3 (80)	4 (100)	4 (100)	4 (100)	4 (100)	6 (150)	4 (100)	6 (150)
Flow at rated point USgpm (m3/min)	132 (0.5)	132 (0.5)	132 (0.5)	246 (1.0)	246 (1.0)	198 (0.75)	400 (1.5)	880 (3.33)	400 (1.5)	880 (3.33)
Head at rated point - ft (m)	23 (7.0)	39 (11.9)	49 (14.9)	39 (11.9)	49 (11.9)	66 (20.1)	49 (11.9)	24 (7.3)	65 (19.8)	33 (10.0)
Impeller diameter - inch (mm)	7.26 (185)	8.23 (209)	9.13 (232)	9.13 (232)	9.53(242)	10.5(266)	12.6(320)	11.5(290)	13.9(353)	11.8(300)
Max. solid size - inch (mm)	0.8(20)	0.8(20)	1.0(25)	1.0(25)	1.0(25)	0.55(14)	1.4(35)	2.4(60)	1.4(35)	2.4(60)
Weight without cable - lb (kg)	320(145)	342(155)	430(195)	430(195)	430(195)	495(225)	1036(470)	1124(510)	1212(550)	1190(540)
Standard Motor HP	3	5	7.5	7.5	10	10	15	15	20	20
Standard seal	Double mech. seal	Double mech. seal	Double mech. seal	Double mech. seal	Double mech. seal	Double mech. seal	Toyo Lip	Toyo Lip	Toyo Lip	Toyo Lip
Number of bearings	3	3	3	3	3	3	4	4	4	4
Speed - RPM	1740	1740	1750	1750	1750	1750	1170	1170	1160	1160
Voltage - V	220/460/575									
Motor protector	Klixon						Thermostat in windings			
Starting method	D.O.L									
Motor service factor	1.35									
Electric cable length - ft (m)	65 (20)									
Insulation Class	F									
Shaft	Alloy Steel									
Pump casing STD	Ductile Iron									
Pump casing OPT	HCr									
Impeller	HCr									
Wear plate - top	Ductile Iron									
Wear plate - bottom	N/A	N/A	N/A	N/A	N/A	N/A	HCr	HCr	HCr	HCr
Suction cover	HCr	HCr	HCr	HCr	HCr	HCr	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Agitator	HCr									

MODEL NUMBER	DPF 30	DPF 30B	DPF 50	DPF 50B	DPF 75	DPF 75B	DP 100B	DP 110B	DP 150B
Discharge diameter - inch (mm)	4 (100)	6 (150)	6 (150)	8 (200)	6 (150)	8 (200)	8 (200)	8 (200)	10 (250)
Flow at rated point USgpm (m3/min)	400 (1.5)	880 (3.33)	880 (3.33)	1600 (6.0)	880 (3.33)	1600 (6.0)	1600 (6.0)	1600 (6.0)	3200(12)
Head at rated point - ft (m)	98(29.9)	49(11.9)	82(25.0)	48(14.6)	115 (35.2)	96 (29.0)	98 (30.0)	130(40.0)	72 (22)
Impeller diameter - inch (mm)	16.56 (420)	14.0 (358)	14.94 (380)	14.94 (380)	16.92 (430)	16.92 (430)	21.65 (550)	23.62 (600)	25 (636)
Max. solid size - inch (mm)	1.4.35	2.4(60)	2.4(60)	2.4(60)	2.4(60)	2.4(60)	2.4(60)	2.0(50)	4.72(120)
Weight without cable - lb (kg)	1653 (750)	1610 (730)	2100 (950)	2140 (970)	2410 (1095)	2450 (1113)	4850 (2200)	4850 (2200)	7700 (3500)
Standard Motor HP	30	30	50	50	75	75	100	110	150
Standard seal	Toyo Lip	Toyo Lip	Toyo Lip	Toyo Lip	Toyo Lip	Toyo Lip	Toyo Lip	Toyo Lip	Toyo Lip
Number of bearings	4	4	4	4	4	4	5	5	6
Speed - RPM	1185	1185	1185	1185	1185	1185	885	885	705
Voltage - V	220/460/575						460/575	460/575	460/575
Motor protector	Thermostat in windings								
Starting method	D.O.L								
Motor service factor	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.2	1.35
Electric cable length - ft (m)	65 (20)								
Insulation Class	F						B		
Shaft	Alloy steel								
Pump casing STD	Ductile Iron								
Pump casing OPT	HCr								
Impeller	HCr								
Wear plate - top	HCr								
Wear plate - bottom	HCr								
Suction cover	Cast Iron								
Agitator	HCr								





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