## TECHNICAL DATA Toy

#### · CONCEPT:

The Toyo DP100 to DP150 submersible pumps with agitator has been specially designed to handle very heavy and abrasive slurries.

These centrifugal pumps with closed impeller, feature a unique agitator design. This agitator lifts sediments into suspension, creating a slurry mixture. This enables the continuous pumping of media with a high concentration of solids.

Robust construction, careful selection of materials and unique contour components, coupled with a low speed high torque motor, have produced a pump with excellent abrasion resistance as well as a sufficient weight and an important torque. These characteristics ensure long service life and economical operation.

The impeller, the wear plates and the agitator are manufactured in cast chrome iron (24 to 28% Cr).

A strong short shaft, supported by a series of carefully selected bearings and an assembly of special lip seals operating in an oil bath ensure tightness in the hardest of conditions.

The DP100 to DP150 pumps are available with lip seals and mechanical seal (option).

Servicing and maintaining the pumps to keep them in good working order is easy. On DP100 to DP150 pumps you have two wear plates, one of which is adjustable allowing simple adjustments to maintain long lasting high performance.

The electric class B motor is cooled by the liquid in which the pump is submerged.

The DP100 to DP150 can be equipped with thermal protection and moister sensor. These pumps are also available in different metallurgies and notably in stainless steel for acid slurries pumping. These pumps can be provided with detachable bend and base.

#### • OPERATING CONDITIONS:

- with solid content of up to 60% by weight
- particle sizes up to 120 mm
- liquid temperatures up to 60°C
- pH levels between 4 and 14

Special versions are available for liquid temperatures up to 80°C. Maximal standard operating depth is 30 m and 120 m for high depth vesions.



### • ELECTRIC POWER REQUIREMENTS\*:

Pump type	Power kVA	Amp. 400 V
DD 400D/DI	450	450
DP 100B/BL	150	150
DP 100B/6	150	150
DP 120B/6	180	160
DP 150/L/B	220	215

<sup>\*</sup>These figures are given as an indication.

#### • ELECTRIC CABLE:

The standard cable type to be used for connecting the pump is HO7RN-F and its specifications should correspond to the following:

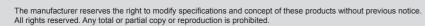
Pump type	Section	Outer diam. mm	Max. length m / 400V		
DP 100B/BL	4 x 50 mm <sup>2</sup>	43	130		
DP 100B/6	4 x 50 mm <sup>2</sup>	43	130		
DP 120B/6	4 x 95 mm <sup>2</sup>	58	260		
DP 150/L/B	4 x 95 mm <sup>2</sup>	58	170		

#### CONTROL PANEL:

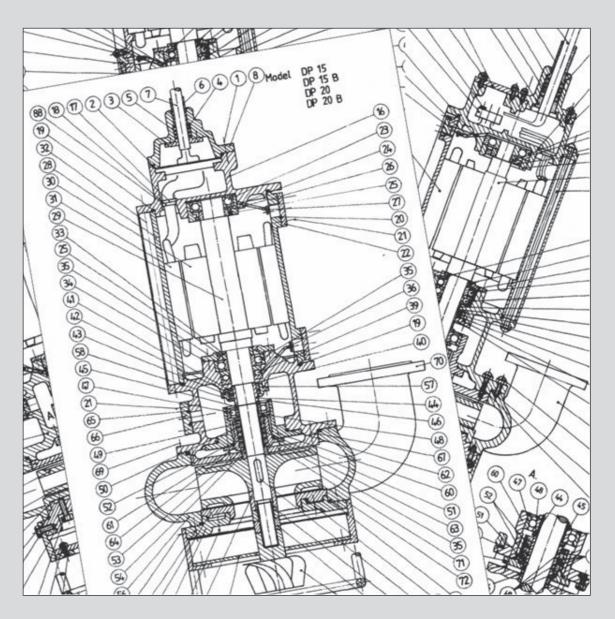
We recommend the use of a Toyo statoric starter to start DP100 to 150 pumps.

### **TOYO PUMPS EUROPE**

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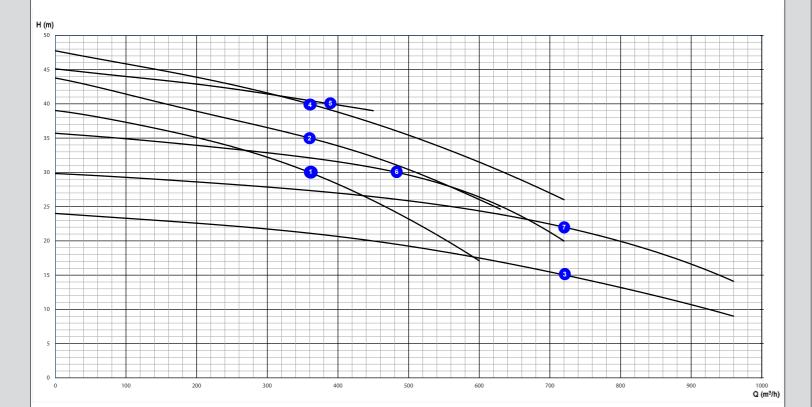




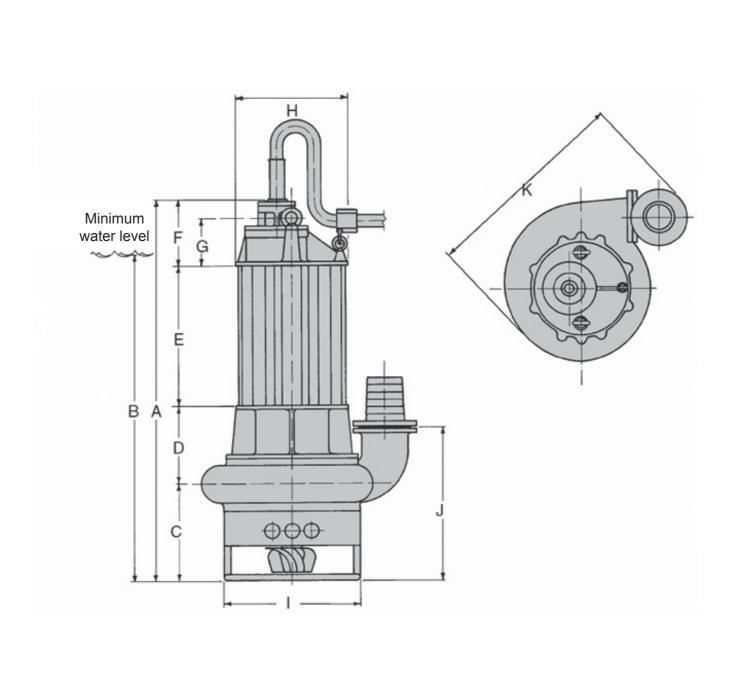
**Heavy slurry pumps** 

TECHNICAL SPECIFICATIONS
DP 100 TO 150 PUMPS

# Performance curves



Nr	Type	(in	itlet ch) nm)	Capacity (m³/h)	Manom. head (m)	Particle size (mm)	Power (kW)	Poles (P)	Revolu- tion (1/min) 50Hz	Current (A) 400V	Electr. cable	Weight (kg)
1	DP 100B	8	200	360	30	60	75	8	740	150	4x50mm <sup>2</sup>	2200
2	DP 100B/6	8	200	360	35	60	75	6	985	148	4x50mm²	1650
3	DP 100BL	10	250	720	15	100	75	8	740	150	4x50mm²	2700
4	DP 120B/6	8	200	360	40	60	90	6	985	160	4x95mm <sup>2</sup>	1700
5	DP 150	8	200	390	40	120	110	10	590	215	4x95mm <sup>2</sup>	3500
6	DP 150L	8	200	480	30	120	110	10	590	215	4x95mm²	3500
7	DP 150B	10	250	720	22	120	110	10	590	215	4x95mm²	3500



DIMEN (mm)	SIONS	A	В	С	D	E	F	G	н	- 1	J	K
1	DP 100B	1875	1650	445	415	680	335	160	600	760	695	1570
2	DP 100B/6	1905	1500	413	393	650	450	-	530	690	713	1255
3	DP 100BL	2058	1850	540.5	502.5	680	335	160	600	820	840.5	1645
4	DP 120B/6	1955	1500	413	393	700	450	-	530	690	713	1255
5	DP 150	2734	2300	640	634	920	540	-	640	1010	940	1610
6	DP 150L	2734	2300	640	634	920	540	-	640	1010	940	1610
7	DP 150B	2794	2400	670	664	920	540	-	640	1010	970	1695