

# TECHNICAL DATA



**CONCEPT :**

The Toyo DP15 to DP75 submersible pumps with agitator has been specially designed to handle extra heavy and abrasive slurries.

These centrifugal pumps, with closed impeller, feature a unique agitator design. The agitator lifts sediments into suspension and creates a homogeneous 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.

DP15 to DP75 are also available with double mechanical seals.

Servicing and maintaining the pumps to keep them in good working order is easy. On the pumps DP15 to DP75, you have two wear plates, one of which is adjustable allowing simple adjustments to maintain long lasting high performance.

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

DP15 to DP75 can be equipped with thermal protection and moisture 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 60 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\* :**

Model	Power kVA	Amp. 400 V
DP 15/B	30	24
DP 20/B	40	32
DP 30/B	50	46
DP 40B	65	58
DP 50/B/BL/H	80	69
DP 60B	100	90
DP 75	120	116
DP 75B	120	116

\*These figures are given as an indication.

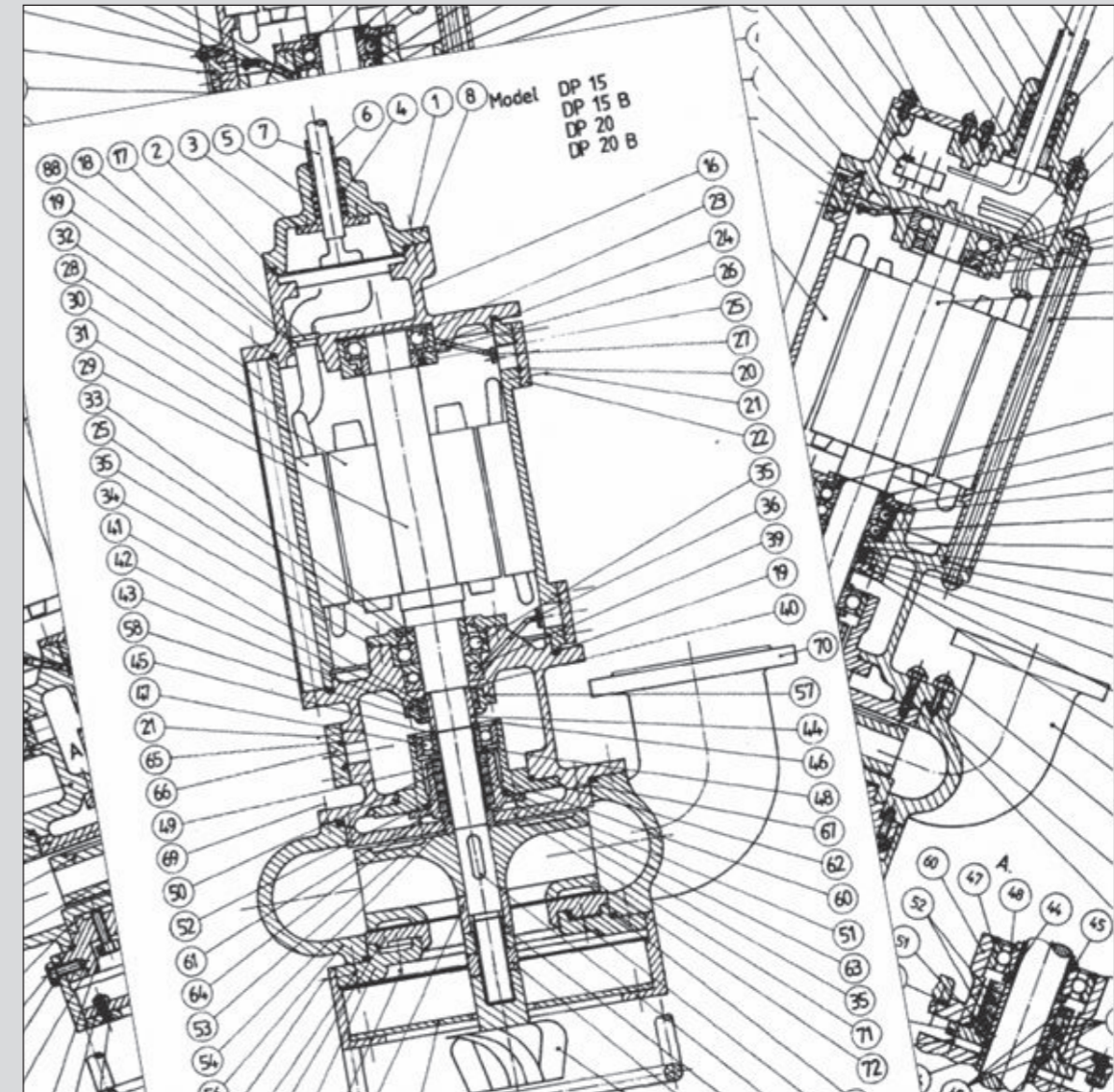
**ELECTRIC CABLE :**

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

Model	Section	Outer diam. mm	Max. length m / 400V
DP 15/B	4 x 10 mm <sup>2</sup>	23	170
DP 20/B	4 x 10 mm <sup>2</sup>	23	120
DP 30/B	4 x 16 mm <sup>2</sup>	27	140
DP 40B	4 x 35 mm <sup>2</sup>	37	260
DP 50/B/BL/H	4 x 35 mm <sup>2</sup>	37	200
DP 60B	4 x 35 mm <sup>2</sup>	37	170
DP 75	4 x 50 mm <sup>2</sup>	43	180
DP 75B	4 x 50 mm <sup>2</sup>	43	180

**CONTROL PANEL :**

We recommend the use of a Toyo statoric starter to start DP15- DP75 pumps.



**TOYO PUMPS EUROPE**

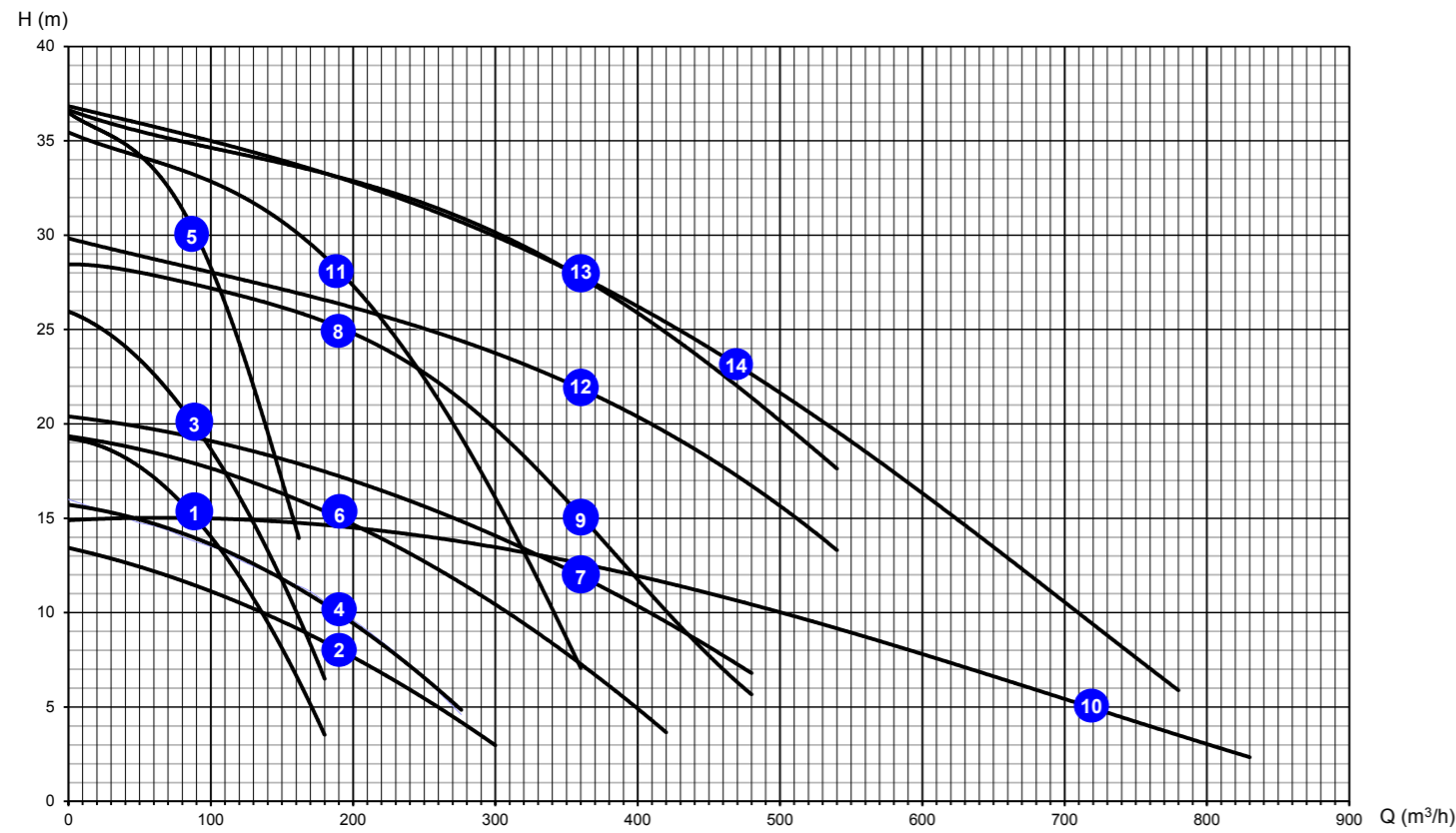
Parc Industriel Sud - Zone II  
 Rue de l'Industrie 41 - BE - 1400 Nivelles - Belgium  
 Tel. : +32(0)67 64 55 35/37 - Fax : +32(0)67 64 55 31  
 E-mail : sales@toyopumpseurope.com  
 Website : www.toyopumpseurope.com



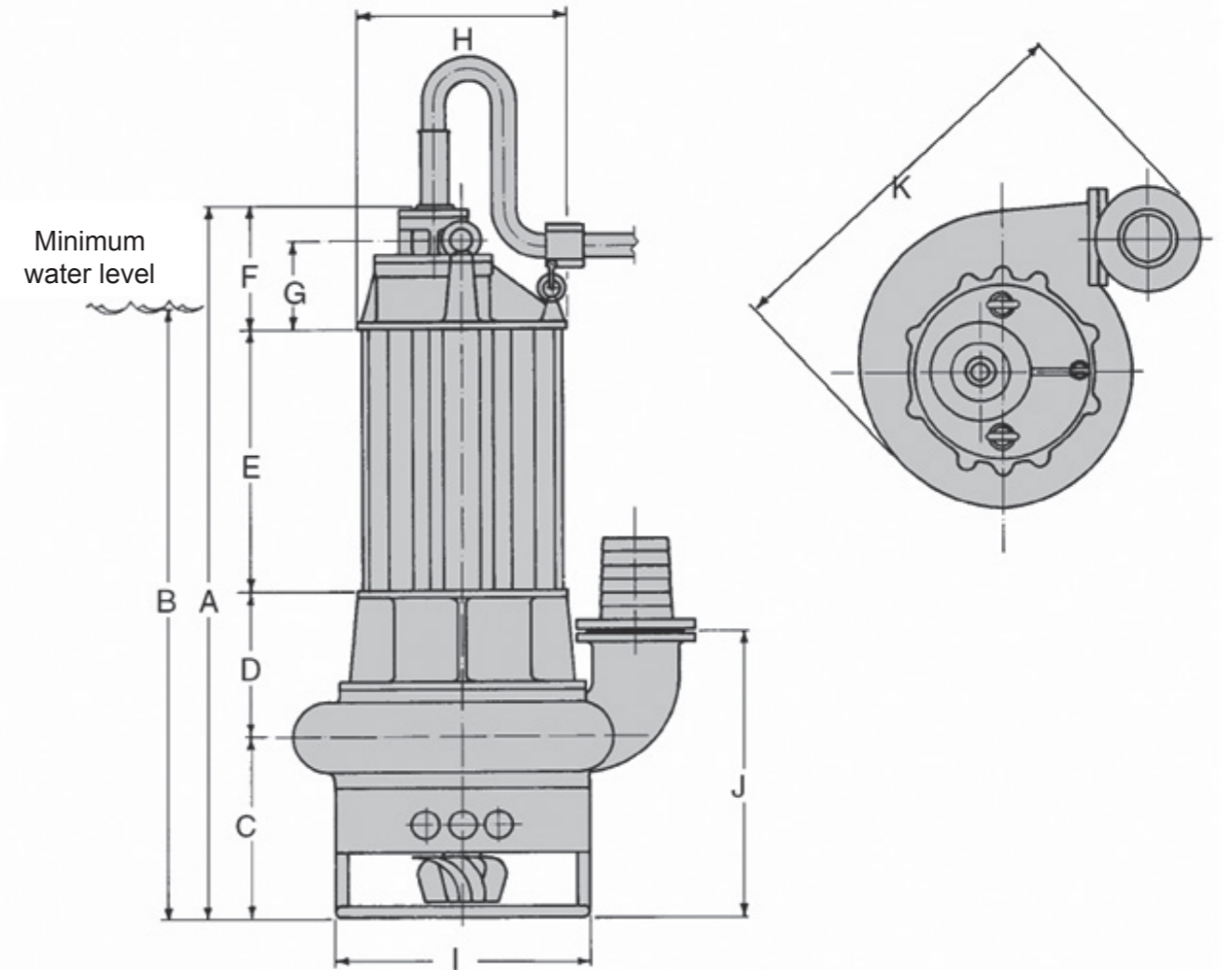
**Heavy slurry pumps**

**TECHNICAL SPECIFICATIONS  
 DP15 TO DP75 PUMPS**

Performance curves



Nr	Type	Outlet (inch) (mm)	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 15	4 100	90	15	35	11	6	960	24	4x10mm <sup>2</sup>	490
2	DP 15B	6 150	192	8	60	11	6	960	24	4x10mm <sup>2</sup>	530
3	DP 20	4 100	90	20	35	15	6	970	32	4x10mm <sup>2</sup>	550
4	DP 20B	6 150	192	10	60	15	6	970	32	4x10mm <sup>2</sup>	540
5	DP 30	4 100	90	30	35	22	6	975	46	4x16mm <sup>2</sup>	750
6	DP 30B	6 150	192	15	60	22	6	975	46	4x16mm <sup>2</sup>	730
7	DP 40B	8 200	360	12	40	30	6	970	58	4x35mm <sup>2</sup>	750
8	DP 50	6 150	192	25	60	37	6	980	75	4x35mm <sup>2</sup>	950
9	DP 50B	8 200	360	15	60	37	6	980	75	4x35mm <sup>2</sup>	970
10	DP 50BL	10 250	720	5	100	37	6	980	75	4x35mm <sup>2</sup>	1150
11	DP 50H	6 150	192	28	40	37	6	980	75	4x35mm <sup>2</sup>	1050
12	DP 60B	8 200	360	22	60	45	6	975	90	4x35mm <sup>2</sup>	1000
13	DP 75	8 200	360	28	60	55	6	975	116	4x50mm <sup>2</sup>	1185
14	DP 75B	8 200	470	22	60	55	6	975	116	4x50mm <sup>2</sup>	1200



DIMENSIONS (mm)		A	B	C	D	E	F	G	H	I	J	K
1	DP 15	1275	1100	350	260	425	240	155	380	445	500	750
2	DP 15B	1275	1100	330	280	425	240	155	380	445	560	841
3	DP 20	1310	1100	345	265	460	240	155	380	515	495	825
4	DP 20B	1310	1100	330	280	460	240	155	380	445	560	841
5	DP 30	1390	1200	365	280	480	265	195	415	635	515	910
6	DP 30B	1390	1200	350	295	480	265	195	415	510	580	955
7	DP 40B	1390	1200	350	295	480	265	195	415	510	600	1010
8	DP 50	1575	1350	405	325	570	275	195	460	560	635	1020
9	DP 50B	1575	1350	405	325	570	275	195	460	560	655	1065
10	DP 50BL	1650	1450	462.5	342.5	570	275	195	460	560	762.5	1350
11	DP 50H	1575	1350	420	315	570	275	195	460	660	650	1094
12	DP 60B	1665	1400	405	325	610	325	245	460	560	655	1065
13	DP 75	1710	1450	412.5	332.5	640	325	245	460	660	712.5	1185
14	DP 75B	1705	1450	408	332	640	325	245	460	660	708	1195