

# Toyo

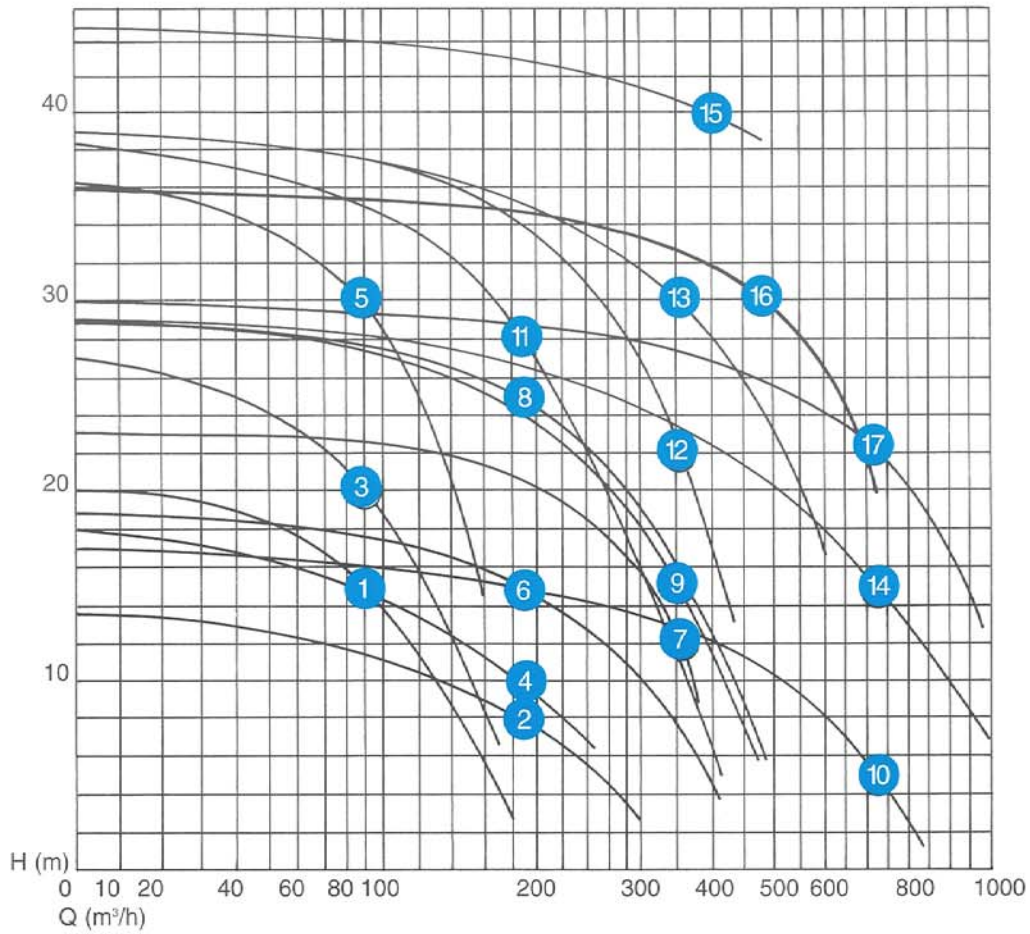
**Wear resistant pumps with agitator**

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**TECHNICAL SPECIFICATIONS  
DP PUMPS**

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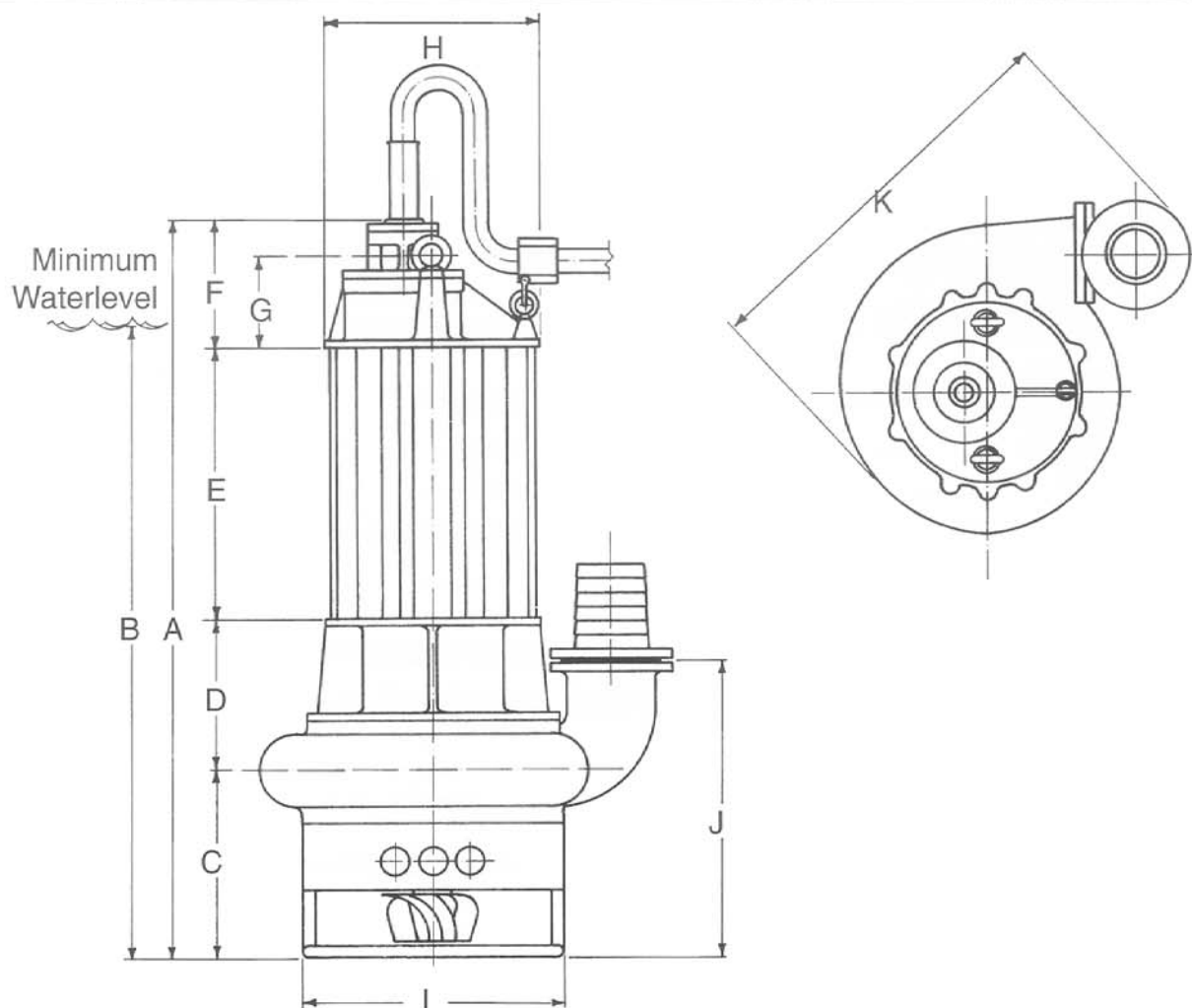
## Performance curves



Nr	Type	Outlet (inch) (mm)	Capacity (m <sup>3</sup> /h)	Manom. head (m)	Particle Size (mm)	Power (kW)	Revolution (1/min) 50 Hz	Current (A) 400 V	Electr. Cable	Weight (kg)
1	DP 15-4	4 100	90	15	35	11	960	24	4x10 mm <sup>2</sup>	470
2	DP 15 B-4	6 150	190	8	60	11	960	24	4x10 mm <sup>2</sup>	510
3	DP 20-4	4 100	90	20	35	15	970	32	4x10 mm <sup>2</sup>	550
4	DP 20 B-4	6 150	190	10	60	15	970	32	4x10 mm <sup>2</sup>	540
5	DP 30-4	4 100	90	30	35	22	975	46	4x16 mm <sup>2</sup>	750
6	DP 30 B-4	6 150	190	15	60	22	975	46	4x16 mm <sup>2</sup>	730
7	DP 40 B-4	8 200	360	12	40	30	970	58	4x35 mm <sup>2</sup>	750
8	DP 50-4	6 150	190	25	60	37	980	75	4x35 mm <sup>2</sup>	950
9	DP 50 B-4	8 200	360	15	60	37	980	75	4x35 mm <sup>2</sup>	970
10	DP 50 BL-4	10 250	720	5	100	37	980	75	4x35 mm <sup>2</sup>	1150
11	DP 50 H-4	6 150	190	28	40	37	980	75	4x35 mm <sup>2</sup>	1050
12	DP 75 B-4	8 200	360	22	40	55	975	116	4x50 mm <sup>2</sup>	1120
13	DP 100 B	8 200	360	30	60	75	740	150	4x50 mm <sup>2</sup>	2300
14	DP 100 BL	10 250	720	15	100	75	740	150	4x50 mm <sup>2</sup>	2700
15	DP 150	8 200	390	40	120	110	590	215	4x95 mm <sup>2</sup>	3500
16	DP 150 L	8 200	480	30	120	110	590	215	4x95 mm <sup>2</sup>	3500
17	DP 150 B	10 250	720	22	120	110	590	215	4x95 mm <sup>2</sup>	3500

# DIMENSIONS

**Toyo**



DIMENSIONS		A	B	C	D	E	F	G	H	I	J	K
1	<b>DP 15-4</b>	1295	1100	350	260	445	240	155	350	445	500	750
2	<b>DP 15 B-4</b>	1295	1100	330	280	445	240	155	350	445	560	840
3	<b>DP 20-4</b>	1310	1100	345	265	460	240	155	380	515	495	825
4	<b>DP 20 B-4</b>	1310	1100	330	280	460	240	155	380	445	560	840
5	<b>DP 30-4</b>	1390	1200	365	280	480	265	195	415	635	515	910
6	<b>DP 30 B-4</b>	1390	1200	350	295	480	265	195	415	510	580	955
7	<b>DP 40 B-4</b>	1390	1200	350	295	480	265	195	415	510	600	1010
8	<b>DP 50-4</b>	1575	1350	405	325	570	275	195	460	560	635	1020
9	<b>DP 50 B-4</b>	1575	1350	405	325	570	275	195	460	560	655	1065
10	<b>DP 50 BL-4</b>	1650	1450	462,5	342,5	570	275	195	460	560	762,5	1350
11	<b>DP 50 H-4</b>	1580	1350	420	315	570	275	195	460	660	650	1095
12	<b>DP 75 B-4</b>	1670	1450	420	315	640	295	195	460	660	670	1145
13	<b>DP 100 B</b>	1875	1650	445	415	680	335	160	600	760	695	1570
14	<b>DP 100 BL</b>	2058	1850	540,5	502,5	680	335	160	600	820	840,5	1645
15	<b>DP 150</b>	2734	2300	640	634	920	540	-	640	1010	940	1610
16	<b>DP 150 L</b>	2734	2300	640	634	920	540	-	640	1010	940	1610
17	<b>DP 150 B</b>	2734	2400	640	664	920	540	-	640	1010	970	1695

• **Concept :**

The TOYO DP range of submersible pumps with agitator has been specially designed to handle 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 capable of handling the toughest of applications. 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 lip seals, ensure tightness in the hardest of conditions.

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

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

The DP pumps are available in different metallurgies, with thermal protection and moisture detector as well as in special versions for high temperatures or depths.

• **Operating conditions :**

DP pumps can handle slurries with solid contents of up to 60 % by weight, particle sizes up to 120 mm and liquid temperatures up to 40°C with pH levels between 4 and 9,5.

Special versions are available for liquid temperatures up to 80°C.

Standard operating depth is 40 m and maximum 120 m in special versions.

• **Electric power requirements \*:**

Pumptype	Power kVA	Amp. 400V
DP15/B-4	30	24
DP20/B-4	40	32
DP30/B-4	50	46
DP40B-4	65	58
DP50/B/BL/H-4	80	75
DP75B-4	120	116
DP100B/BL	150	150
DP150/L/B	220	215

\* 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 :

Pumptype	Section	Outer diam. mm	Max. lenght câble/m/400V
DP15/B-4	4 x 10 mm <sup>2</sup>	23	120
DP20/B-4	4 x 10 mm <sup>2</sup>	23	120
DP30/B-4	4 x 16 mm <sup>2</sup>	27	130
DP40B-4	4 x 35 mm <sup>2</sup>	37	170
DP50/B/BL/H-4	4 x 35 mm <sup>2</sup>	37	170
DP75B-4	4 x 35 mm <sup>2</sup>	37	130
DP100B/BL	4 x 50 mm <sup>2</sup>	43	130
DP150/L/B	4 x 95 mm <sup>2</sup>	58	170

• **Starter :**

A reactor starter must be used to start DP pumps.

## TOYO PUMPS EUROPE

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