

# Toyo

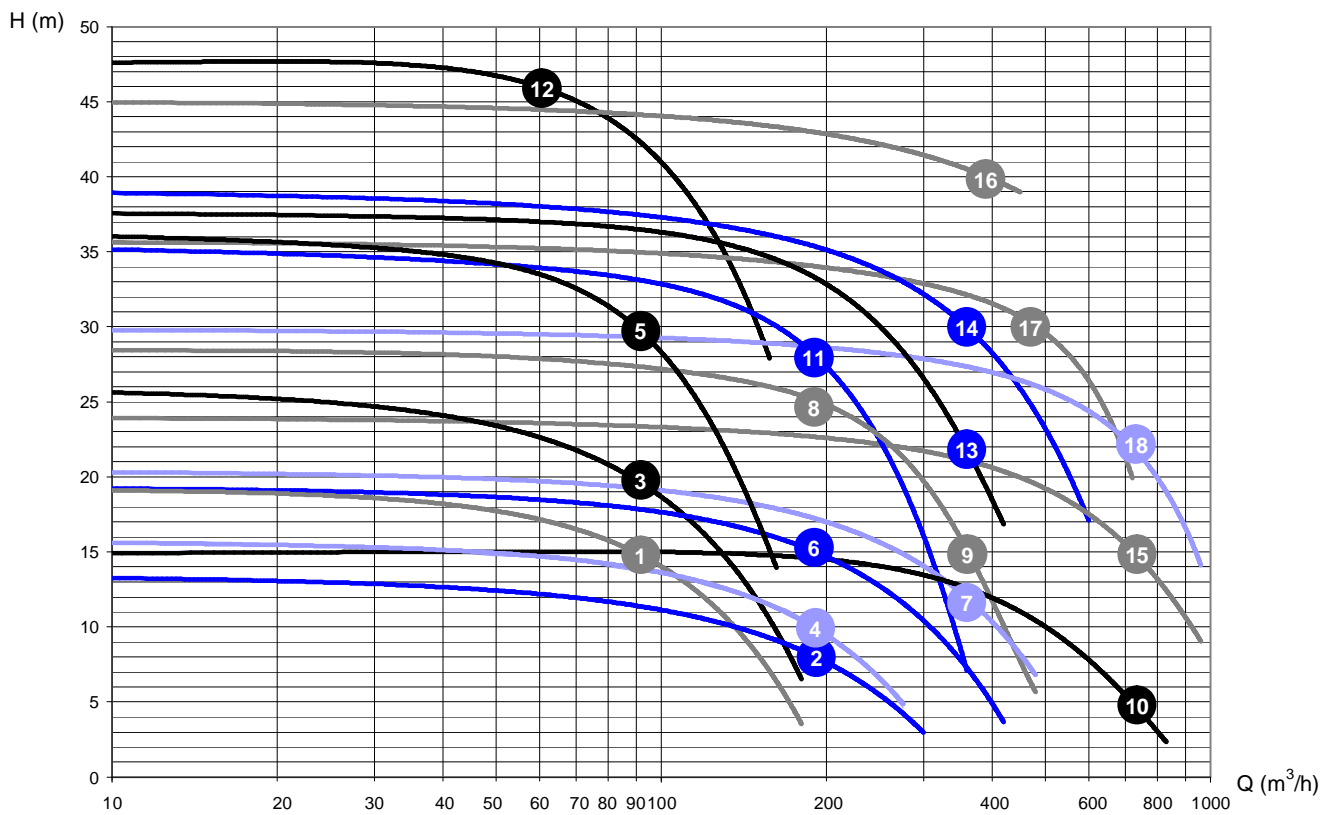
**Wear resistant pumps with agitator**

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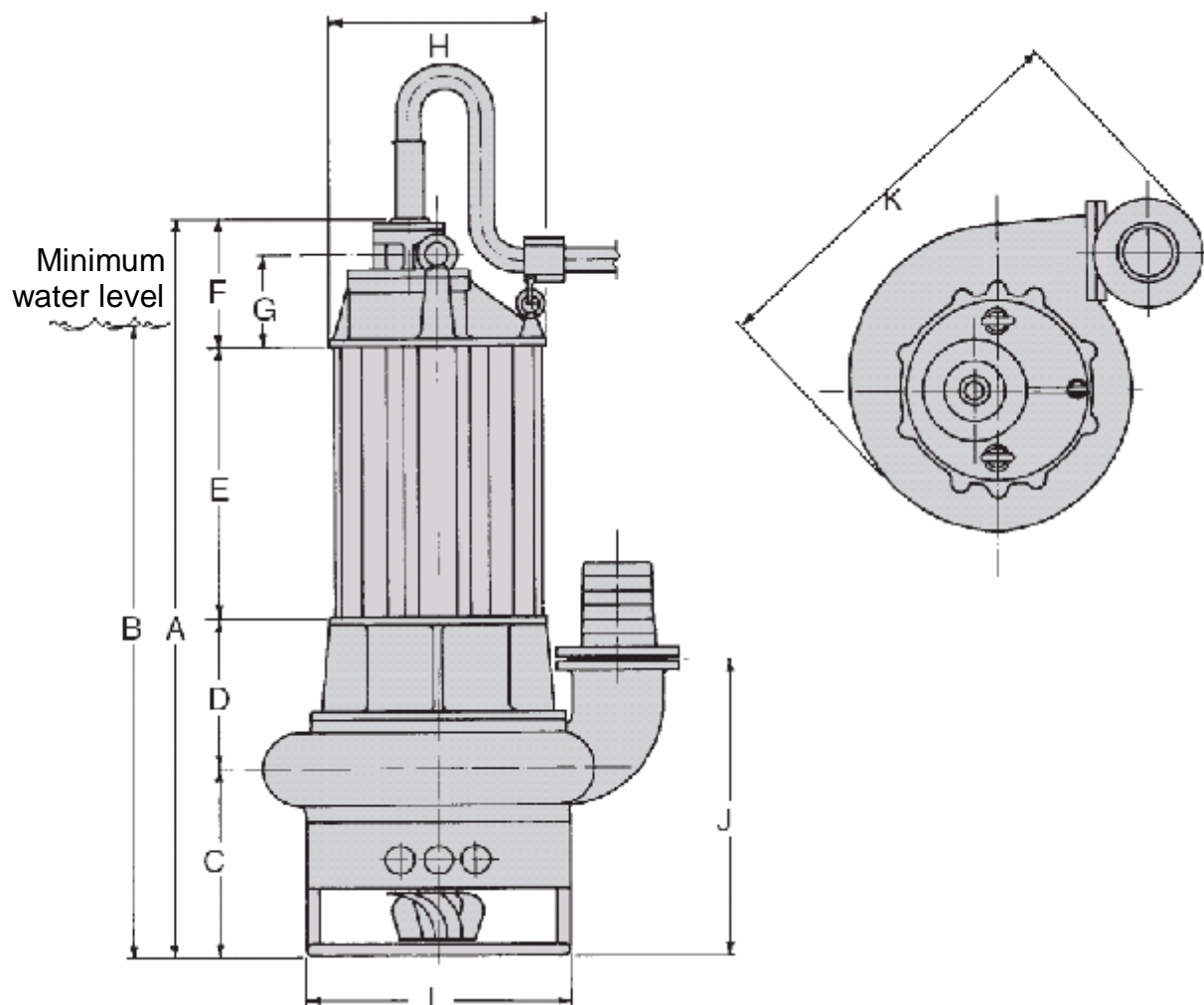
**TECHNICAL SPECIFICATIONS  
DP 15~150HP PUMPS**

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## Performance curves



Nr	Type	Outlet (inch)(mm)		Capacity (m³/h)	Manom. head (m)	Particle size (mm)	Power (kW)	Revolution (1/min) 50Hz	Current (A) 400 V	Electr. cable	Weight (kg)
1	DP 15	4	100	90	15	35	11	960	24	4X10mm <sup>2</sup>	490
2	DP 15B	6	150	192	8	60	11	960	24	4X10mm <sup>2</sup>	530
3	DP 20	4	100	90	20	35	15	970	32	4X10mm <sup>2</sup>	550
4	DP 20B	6	150	192	10	60	15	970	32	4X10mm <sup>2</sup>	540
5	DP 30	4	100	90	30	35	22	975	46	4X16mm <sup>2</sup>	750
6	DP 30B	6	150	192	15	60	22	975	46	4X16mm <sup>2</sup>	730
7	DP 40B	8	200	360	12	40	30	970	58	4X35mm <sup>2</sup>	750
8	DP 50	6	150	192	25	60	37	980	75	4X35mm <sup>2</sup>	950
9	DP 50B	8	200	360	15	60	37	980	75	4X35mm <sup>2</sup>	970
10	DP 50BL	10	250	720	5	100	37	980	75	4X35mm <sup>2</sup>	1150
11	DP 50H	6	150	192	28	40	37	980	75	4X35mm <sup>2</sup>	1050
12	DP S50S	4	100	60	46	15	37	1475	69	4x35mm <sup>2</sup>	730
13	DP 75B	8	200	360	22	40	55	975	116	4X50mm <sup>2</sup>	1120
14	DP 100B	8	200	360	30	60	75	740	150	4X50mm <sup>2</sup>	2200
15	DP 100BL	10	250	720	15	100	75	740	150	4X50mm <sup>2</sup>	2700
16	DP 150	8	200	390	40	120	110	590	215	4X95mm <sup>2</sup>	3500
17	DP 150L	8	200	480	30	120	110	590	215	4X95mm <sup>2</sup>	3500
18	DP 150B	10	250	720	22	120	110	590	215	4X95mm <sup>2</sup>	3500



DIMENSIONS		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	1580	1350	420	315	570	275	195	460	660	650	1094
12	DP S50S	1420	1200	345	280	530	265	195	415	515	498	825
13	DP 75B	1670	1450	420	315	640	295	195	460	660	670	1145
14	DP 100B	1875	1650	445	415	680	335	160	600	760	695	1570
15	DP 100BL	2058	1850	540.5	502.5	680	335	160	600	820	840.5	1645
16	DP 150	2734	2300	640	634	920	540	-	640	1010	940	1610
17	DP 150L	2734	2300	640	634	920	540	-	640	1010	940	1610
18	DP 150B	2794	2400	670	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 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 DP15~150HP pumps are also available with double mechanical seals.

Servicing and maintaining the pumps to keep them in good working order is easy. On the DP15~150HP pumps 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.

The DP15~150HP 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 :**

DP15~150HP pumps can handle slurries with solid content of up to 60 % by weight, particle sizes up to 120 mm and liquid temperatures up to 60°C with pH levels between 4 and 9,5. Special versions are available for liquid temperatures up to 80°C. Maximal standard operating depth is 30 m and 120 m in special versions.



• **Electric power requirements\* :**

Pump type	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	75
DP S50S	80	69
DP 75B	120	116
DP 100B/BL	150	150
DP 150/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 :

Pump type	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 S50S	4 x 35 mm <sup>2</sup>	37	250
DP 75B	4 x 50 mm <sup>2</sup>	43	180
DP 100B/BL	4 x 50 mm <sup>2</sup>	43	130
DP 150/L/B	4 x 95 mm <sup>2</sup>	58	170

• **Starter :**

A reactor starter must be used to start DP15~150HP pumps.

## TOYO PUMPS EUROPE

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