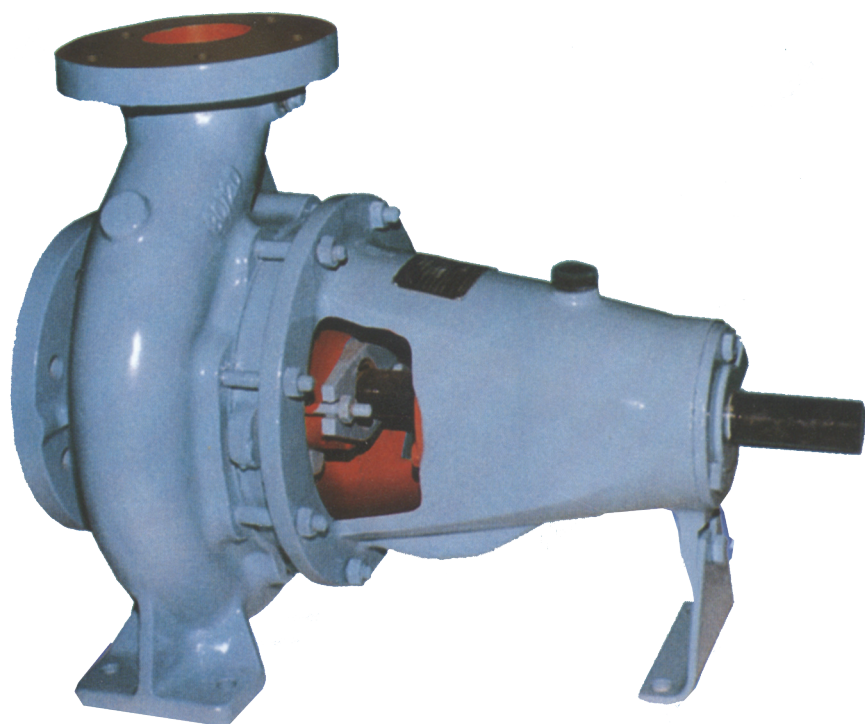


END SUCTION PUMPS
TYPE : DB



END SUCTION PUMPS - TYPE DB

Description

Range :

Delivery size : upto 150mm
Capacity : up to 550 m³/hr
Head : up to 100 meters

Applications :

Suitable for Circulation of Water in Industries, Air-Conditioning Plant, Power Station, Mine Water, Lift Irrigation Sprinkler systems, fire Fighting, Booster service, pumping brine, oils etc. for liquids having temperature in the range of - 10°C to 100°C.

Constructional Features :

These are single stage, single suction, horizontal shaft type. They are made in accordance with DIN 24255. Models are available to operate at 1450 rpm and 2900 rpm at 50 Hz and 1750 rpm and 3500 rpm at 60 Hz.

Casing :

End suction, volute type with top centreline discharge. Suction and discharge nozzles as well as the supporting feet are cast integral with the casing.

Impeller :

Enclosed type dynamically balanced Hydraulic balance is achieved either by back vanes for smaller impellers and by balancing hole with back wear rings for large impellers.

Shaft :

Three driving units cover complete range. The high tensile steel shaft accurately machined and ground is supported by antifriction bearings. The shaft is protected by shaft sleeve from wear in stuffing box area.

Stuffing Box :

The stuffing box can be sealed by gland packing or by mechanical seal.

Bearings :

Deep groove ball bearings are provided Standard lubrication is grease. Oil lubrication against requirement.

Direction of Rotation :

Clockwise viewed from driving end.

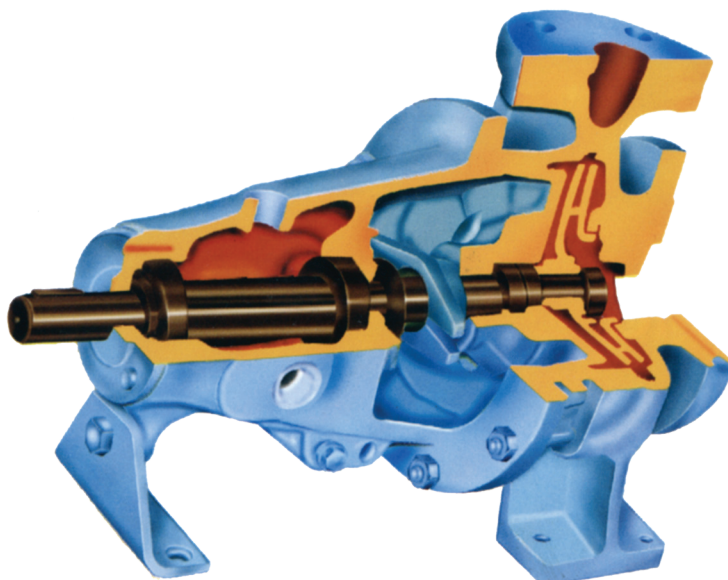
Drive :

Suitable for coupling with electric motors, engines directly or through belt drives.

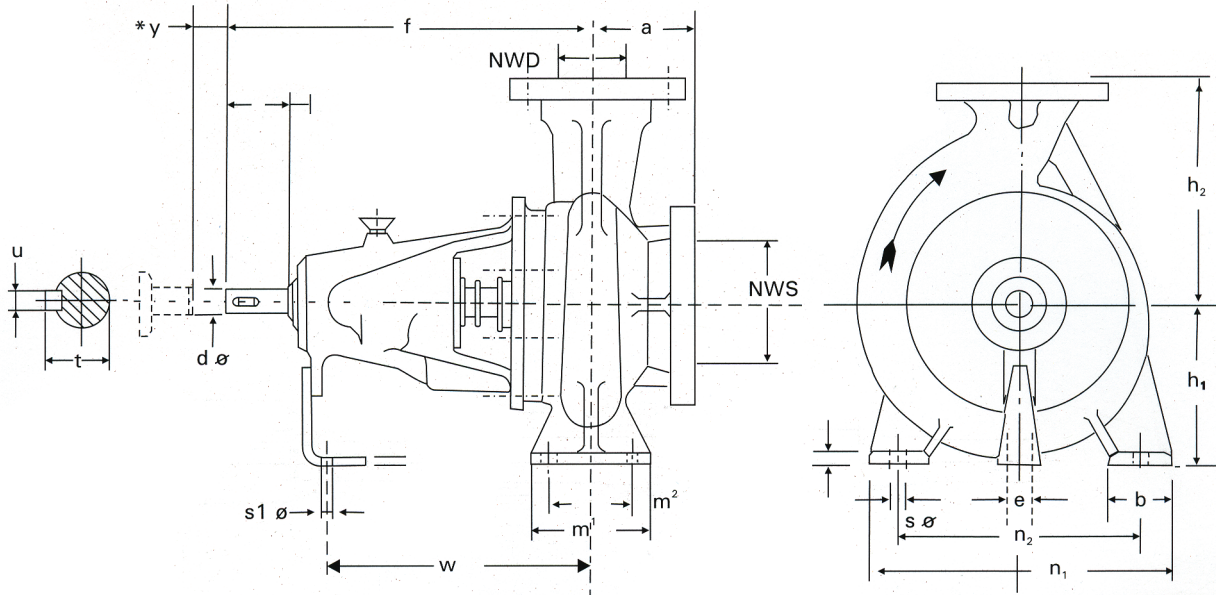
Flanges :

- Standar : Drilling as per BS EN 1092-2 (DIN 2533 ND 16)
- Optional : Drilling as per IS/BS/ASA/DIN available with suitable pressure rating.

CUT-SECTIONAL VIEW



GENERAL DIMENSIONS / MOUNTING DETAILS DB PUMP



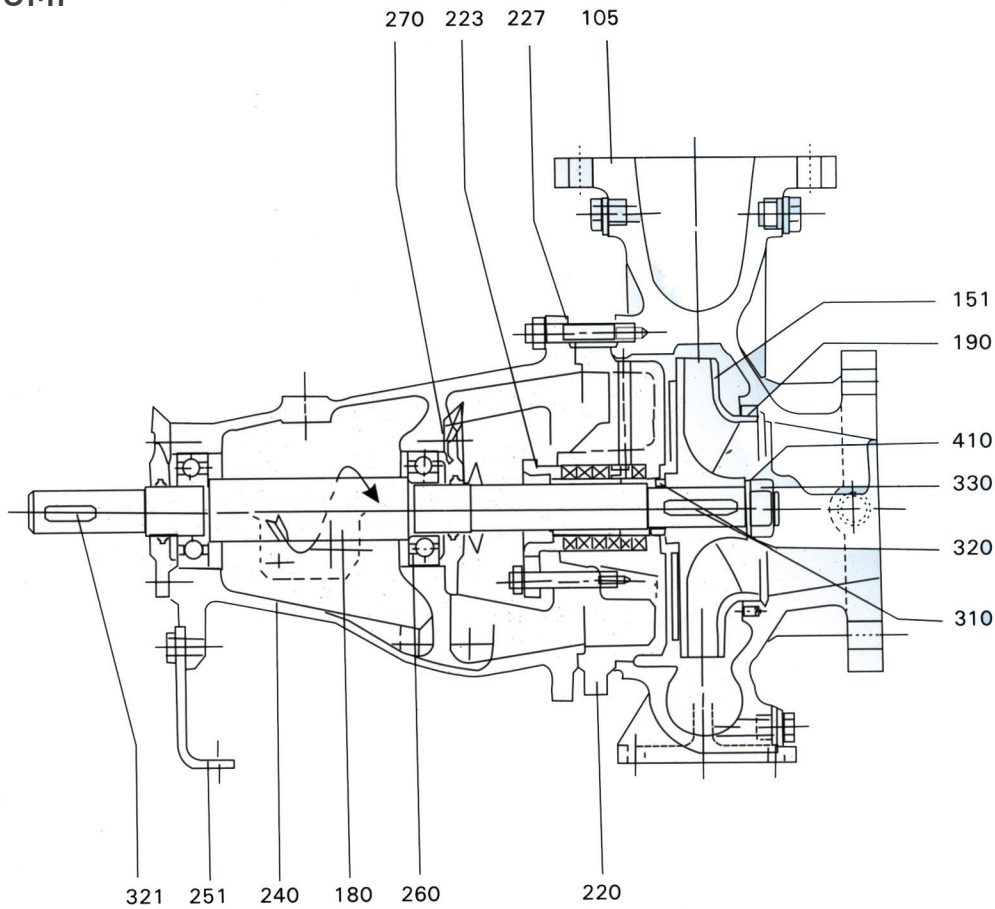
Typical Drawing

PUMP MODLE	UNIT NO.	SUC.	DEL	PUMP MOUN														SHAFT END				Y	WT. KG
				a	f	h1	h2	b	c	m1	m2	n1	n2	sØ	e1	s1Ø	w	dØ	l	t	u		
32/13	25	50	32	80	360	112	140	50	14	100	70	190	140	14	100	14	267	24	50	27	8	100	28
32/16	25	50	32	80	360	132	160	50	14	100	70	240	190	14	100	14	267	24	50	27	8	100	34
32/20	25	50	32	80	360	160	180	50	14	100	70	240	190	14	110	14	267	24	50	27	8	100	41
32/26	25	50	32	100	360	180	225	65	14	125	95	320	250	14	110	14	267	24	50	27	8	100	59
40/13	25	65	40	80	360	112	140	50	14	100	70	210	160	14	100	14	267	24	50	27	8	100	29
40/16	25	65	40	80	360	132	160	50	14	100	70	240	190	14	100	14	267	24	50	27	8	100	36
40/20	25	65	40	100	360	160	180	50	14	100	70	265	212	14	110	14	267	24	50	27	8	100	44
40/26	25	65	40	100	360	180	225	65	14	125	95	320	250	14	110	14	267	24	50	27	8	100	61
50/13	25	65	50	100	360	132	160	50	14	100	70	240	190	14	100	14	267	24	50	27	8	100	32
50/16	25	65	50	100	360	160	180	50	14	100	70	265	212	14	110	14	267	24	50	27	8	100	38
50/20	25	65	50	100	360	160	200	50	14	100	70	265	212	14	110	14	267	24	50	27	8	100	46
50/26	25	65	50	100	360	180	225	65	14	125	95	320	250	14	110	14	267	24	50	27	8	100	63
50/32k	35	65	50	125	470	225	290	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	83
65/13	25	80	65	100	360	160	180	65	14	125	95	280	212	14	110	14	267	24	50	27	8	100	39
65/16	25	80	65	100	360	160	200	65	14	125	95	280	212	14	110	14	267	24	50	27	8	100	43
65/20	25	80	65	100	360	180	225	65	14	125	95	320	250	14	110	14	267	24	50	27	8	100	52
65/26	35	80	65	100	360	200	250	80	16	160	120	360	280	18	110	14	342	24	80	35	10	140	81
65/32	35	80	65	125	470	225	280	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	100
80/16	25	100	80	125	360	180	225	65	14	125	95	320	250	14	110	14	267	24	50	27	8	100	53
80/20	35	100	80	125	470	180	250	65	14	125	95	345	280	14	110	14	342	32	80	35	10	140	70
80/26	35	100	80	125	470	200	280	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	91
80/32	35	100	80	125	470	250	315	80	18	160	120	400	315	18	110	14	342	32	80	35	10	140	107
100/20	35	125	100	125	470	200	280	80	16	160	120	360	280	18	110	14	342	32	80	35	10	140	85
100/26	35	125	100	140	470	225	280	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	103
100/32	35	125	100	140	470	250	315	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	116
100/40	45	125	100	140	530	280	355	100	18	200	150	500	400	23	100	14	370	42	110	45	12	140	177
125/26	35	150	125	140	470	250	355	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	110
125/32	45	150	125	140	530	280	355	100	18	200	150	500	400	23	110	14	370	42	110	45	12	140	151
125/40	45	150	125	140	530	315	400	100	18	200	150	500	400	23	110	14	370	42	110	45	12	140	188
150/32	45	200	150	160	530	280	400	100	18	200	150	550	450	23	110	14	370	42	110	45	12	140	170
150/40	45	200	150	160	530	315	450	100	18	200	150	550	450	23	110	14	370	42	110	45	12	140	205

y-Backpullout distance required between motor shaft end and pump shaft



CROSS SECTIONAL VIEW DB PUMP

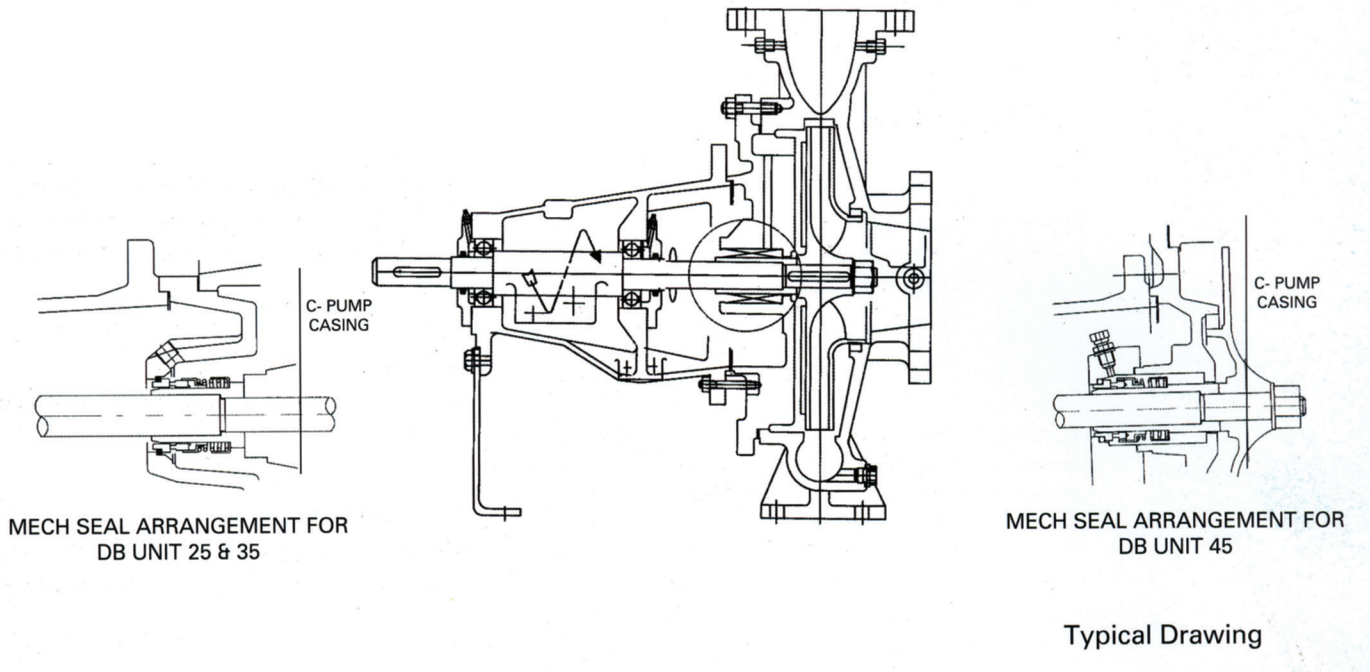


INTERCHANGEABILITY OF COMPONENTS

PART	NAME OF PART	TOTAL NO. OF PARTS	PUMP MODEL																																	
			32/13	40/13	50/13	65/13	32/16	40/16	50/16	65/16	80/16	32/20	40/20	50/20	65/20	32/26	40/26	50/26	80/20	100/20	65/26	80/26	100/26	125/26	52/32K	65/32	80/32	100/32	125/32	150/32	100/40	125/40	150/40			
			UNIT 25															UNIT 35					UNIT 45													
105	PUMP CASING	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	32	24	25	26	27	28	29	30			
151	IMPELLER	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	32	24	25	26	27	28	29	30			
180	SHAFT	3											1											2	2		3									
190	CASING RING	9	1	2	3	4	1	2	3	4	5	2	2	3	4	2	3	4	5	6	4	5	6	7	5	15	8	6	7	9	6	7	9			
220	CASING COVER	10	1	1	1	1	2	2	2	2	2	3	3	3	3	4	4	4	5	5	6	6	7	7	8	8	8	8	9	9	10	10	10			
223	GLAND	3											1											2	2		3									
227	LANTER RING	3											1											2	2		3									
240	BEARING HOUSING	4	1	1	1	1	2	2	2	2	2	1	1	1	1	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4		
251	SUPPORT FOOT	8	1	1	2	3	2	2	3	3	4	3	3	3	4	4	4	4	3	4	4	4	5	6	5	5	6	6	7	7	7	8	8			
260	BEARING	3											1											2	3		3									
270	BEARING COVER	3											1											2	2		3									
310	SHAFT SLEEVE	3											1											2	2		3									
320	IMPELLER KEY	3											1											2	2		3									
321	COUPLING KEY	3											1											2	2		3									
330	IMPELLER NUT	3											1											2	2		3									
410	LOCK WASHER	3											1											2	2		3									



DB PUMP MECHANICAL SEAL ARRANGEMENT



MATERIAL OF CONSTRUCTION

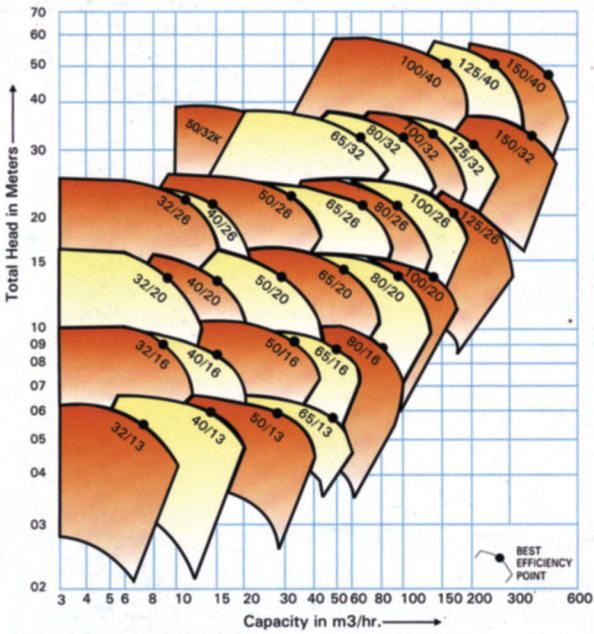
Pump Casing	C.I.	C.I.	C.I.	C.I.	C.I.
Casing Cover	C.I.	C.I.	C.I.	C.I.	C.I.
Impeller	C.I.	Bronze	Ph. Br.	Bronze	Ph. Br.
Wear Ring	C.I.	C.I.	Bronze	Bronze	Br.
Shaft	C.S./St.St.	C.S./St.St.	C.S./St.St.	C.S./St.St.	St.St.
Shaft Sleeve	St.St.	Br./St.St.	St.St.	Bronze/St.St.	Bronze
Lantern Ring	C.I.	C.I.	C.I.	C.I./Bronze	C.I.
Gland	C.I.	C.I.	C.I.	C.I./Bronze	C.I.

Other Material of construction can be available on request.

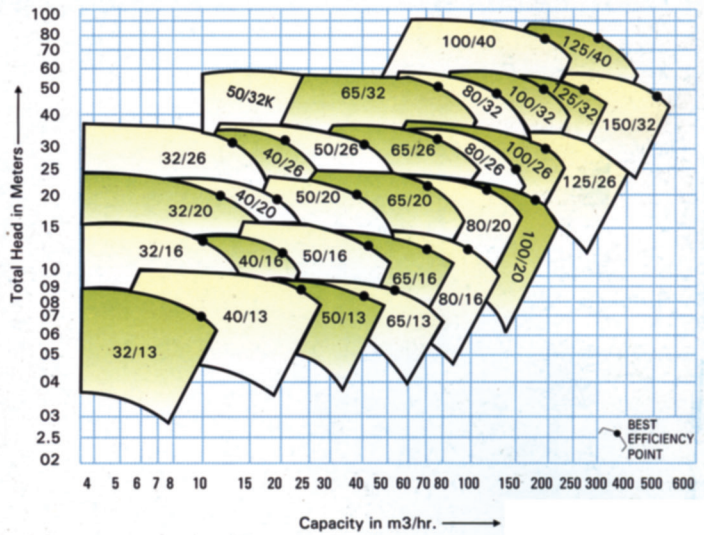
MATERIAL STANDARDS

Material	IS	Equivalent International Standards	
		BS	ASTM
Cast Iron (C.I.)	IS 210 Gr. FG 260	BSEN 1561 GJL 250	ASTM - A 48 CL 35
Carbon Steel (C.S.)	IS 1570 Gr. 45 C 8	BS 970 080 M 46	ASTM - A 107 Gr. 1040
AISI 410 (St.St.)	-	BS 970 410 S 21	ASTM - A 276A Type 410
Bronze	IS 318 Gr. LTB 2	BSEN 1982 - CC 491 K	ASTM-B62, B145 Alloy 4A
Phosphor Bronzer (Ph. Br.)	IS 28 Gr. 1	BS 1400 PB 4	

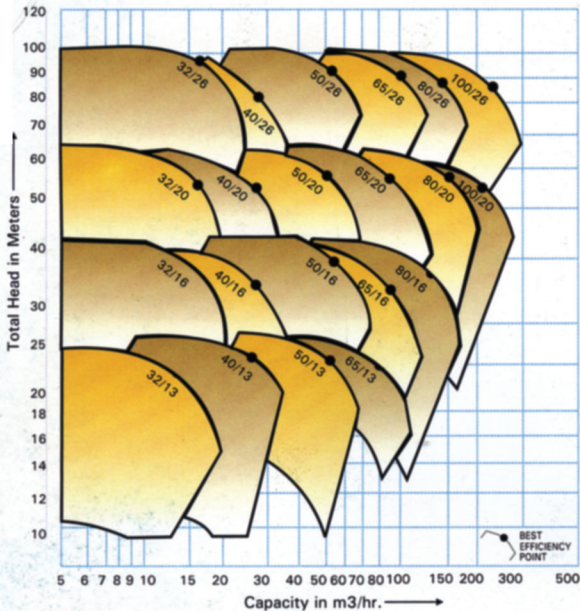
Family Curves of DB Pump at 1450 rpm-50Hz



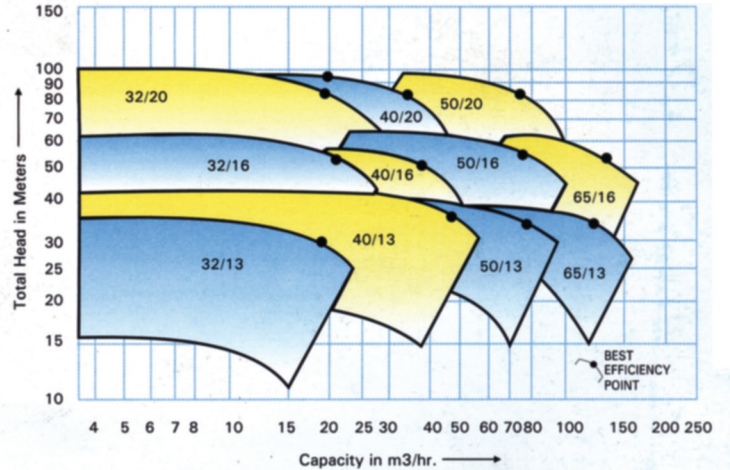
Family Curves of DB Pump at 1750 rpm-60Hz



Family Curves of DB Pump at 2900 rpm-50Hz



Family Curves of DB Pump at 3500 rpm-60Hz



As we are constantly endeavouring to improve the performance of our products/equipment, we reserve the right to make alterations from time to time and as such our product equipment may differ from that detailed in this publication. For latest information you may get in touch with our Regional Sales Offices.

