beacon CENTRIFUGAL PUMPS

BEACON PUMPS (INDIA) LIMITED

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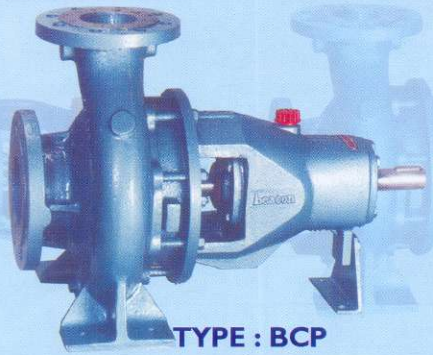
HORIZONTAL BACK PULL OUT

For Low, Medium and High Pressure

32/130.....**150/400**

To DIN 24255

TECHNICAL DATA		
Capacity	:	Upto - 550 M^3/Hr
Total Head	:	Upto - 140 M
Speed	:	Upto - 2900 rpm
Temperature	:	Upto - 100^0C
Casing Pressure	:	Upto - 16 BAR



TYPE : BCP

APPLICATION

BCP types are particularly noted for handling clean or slightly turbid, non-aggresive liquids. They are suitable for pumping condensate, including water upto 100^0C, irrigation, general water supply in agriculture, trade and industries with favourable NPSH conditions.

CONSTRUCTION FEATURES

Horizontal single stage volute casing pumps, dimension corresponds to DIN 24255 with end suction, top centreline discharge. Back pull-out design, enables to remove the rotor assembly without disturbing the pipe lines. The support feet are integrally cast with volute casing.

The BCP range comprises of 32 pump types with 3 shaft sizes which cover the entire range with maximum interchangeability.

For pumps belonging to a particular shaft size, shaft, shaft sleeve, impeller nut and bearings are interchangeable. Impeller is hydraulically balanced by back vanes, in the case of larger impeller diameter by renewable wear ring and relief holes.

SHAFT

Made of accurately ground high tensile steel supported with Conventional Oil lubricated two Deep Groove Ball Bearings. Grease lubrication will be an option.

FLANGES

Flange dimension as per DIN 2532/2533, ANSI/BS will be an option.

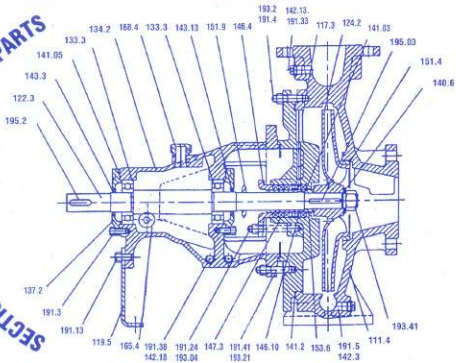
DIRECTION OF ROTATION

Clockwise from drive end.

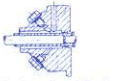
Material Execution Chart

PART NUMBER	PART NAME	M_1	M_2	M_3	M_4	M_5	M_6
111.4	VOLUTE CASING	C.I.					
117.3	STUFFING BOX	C.I.					
146.4	GLAND	C.I.					
151.4	WEAR RING	C.I.				BRONZE	
124.2	IMPELLER	C.I.		BRONZE			
122.3	PUMP SHAFT	En8	410	En8	410	En8	410
153.6	SHAFT SLEEVE	410				BRONZE	
146.10	LANTERN RING	En8					
147.3	GLAND PACKING	TIGA					
	FASTENERS	En8 / MS					

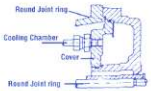
SECTIONAL DRAWING WITH LIST OF PARTS



ALTERNATIVE TYPES OF SHAFT SEALS



012 Stuffing box for external Sealing Drilled inlet and outlet



013 Cooled without flushing

014 with Mechanical seal

CODE No.	PART NAME	MATERIAL	QTY
134.2	BEARING BED	IS 210 FG 200	1
133.3	BEARING (S.R.DEEP GROOVE)	STEEL	2
137.2	BEARING CAP (INNER & OUTER)	IS 210 FG 200	2
191.3	HEX SCREW (FOR 137.2)	BS 970 EN 8	4+4
191.13	HEX SCREW (SUPPORT FOOT)	BS 970 EN 8	1
195-2	KEY (COUPLING)	BS 970 EN8	1
195-03	KEY (IMPELLER) *	BS 970 EN8	1
151.9	DEFLECTOR *	PLASTIC	1
141.03	FLAT GASKET (WASHER) *	TEFLON	1
168.4	VENT	PLASTIC	1
191.38	SCREW PLUG (OIL DRAIN) *	BS 970 EN8	1
165.4	OIL LEVEL SIGHT GLASS	STEEL	1
142.18	WASHER (OIL DRAIN)	CAF - 9	1
141.05	GASKET (BRG. CAP INN. & OUTER)	CAF - 9	2
163.6	GREASE NIPPLE	STEEL	2
143.3	OIL SEAL *	SYNTHETIC RUBBER	1
143.13	OIL SEAL *	SYNTHETIC RUBBER	1
140.6	WASHER (IMPELLER NUT) *	IS 226 C15	1
191.5	SCREW PLUG (CASING DRAIN)	BS 970 EN8	1
142.3	WASHER (FOR 191.5)	CAF-9	1
111.4	VOLUTE CASING	IS 210-FG 200	1

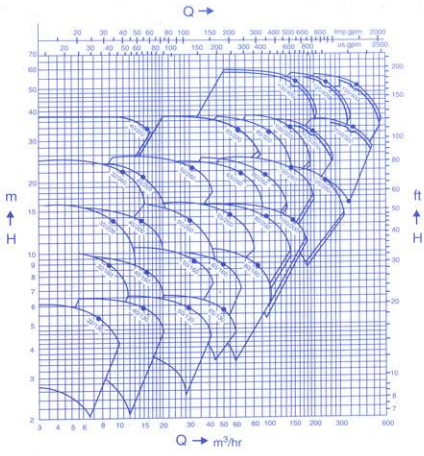
CODE No.	PART NAME	MATERIAL	QTY
151.4	WEAR RING (CASING)		1
191.41	STUD (BED./C.COVER)	BS 970 EN 8	8
193.21	HEX NUT (BRG.BED/C.COVER)	BS 970 EN 8	8
191.33	SCREW PLUG (CIR.LINE.CONN)	BS 970 En8	1
142.13	WASHER (FOR 191.33)	CAF - 9	1
141.2	GASKET (CASING)	CAF - 9	1
117.3	CASING COVER	IS 210 FG 200	1
122.3	PUMP SHAFT		1
124.2	IMPELLER		1
193.41	HEX NUT (IMPELLER)	BS 970 EN 8	1
119.5	SUPPORT FOOT	IS 226 C15	1
191.4	STUD (VOLUTE CASING)	BS 970 En8	8
193.2	HEX NUT (VOLUTE CASING)	BS 970 EN 8	8
	FOR GLAND PACKING ONLY		
147.3	GLAND PACKING	TIGA	4
146.10	LANTERN RING	BS 970 EN 8	1
146.4	GLAND	IS 210 FG 200	1
153.6	SHAFT SLEEVE		1
191.24	STUD (GLAND)	BS 970 EN 8	2
193.04	HEX NUT (GLAND)	BS 970 EN 8	2

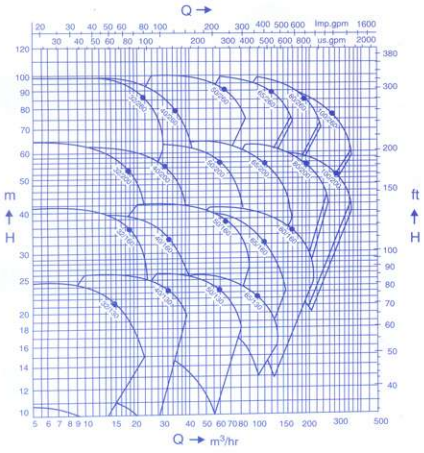
NOTE : * MARKED ITEMS REQUIRE SPARES FOR TWO YEARS NORMAL OPERATION

Range Chart

1450 RPM

SHAFT SIZE		
15	18	22
Optimum point		





2900 RPM

SHAFT SIZE	
15	18
Optimum point	

Note : Pump Sizes 40/320, 50/320, 65/320, 80/320 and 100/320 cannot be offered in 2900 rpm from BCP construction. The same can be offered from BCP-H construction, meant for High Speed application.

PERMISSIBLE SPEEDS

MAXIMUM SPEED	3600 rpm	2900 rpm	1800 rpm	1450 rpm
PUMP TYPE	BCP 32/130-65/130 BCP 32/160-65/160 BCP 32/200-80/200	BCP 80/160 BCP 100/200 BCP 32/260 - 100/260	BCP 125/260 BCP 40/320 - 150/320 BCP 80/400 - 150/400	BCP 200/400

S. No.	Pump Models	Size Suction x Delivery (M.M)	Speed of Operation (R.P.M.)
1.	BCP 32/130	50 X 32	2900
2.	BCP 32/160	50 X 32	2900
3.	BCP 32/200	50 X 32	2900
4.	BCP 32/260	50 X 32	2900
5.	BCP 40/130	65 X 40	2900
6.	BCP 40/160	65 X 40	2900
7.	BCP 40/200	65 X 40	2900
8.	BCP 40/260	65 X 40	2900
9.	BCP 40/320	65 X 40	1450
10.	BCP 50/130	65 X 50	2900
11.	BCP 50/160	65 X 50	2900
12.	BCP 50/200	65 X 50	2900
13.	BCP 50/260	65 X 50	2900
14.	BCP 50/320	65 X 50	1450
15.	BCP 65/130	80 X 65	2900
16.	BCP 65/160	80 X 65	2900
17.	BCP 65/200	80 X 65	2900
18.	BCP 65/260	80 X 65	2900
19.	BCP 65/320	80 X 65	1450
20.	BCP 80/160	100 X 80	2900
21.	BCP 80/200	100 X 80	2900
22.	BCP 80/260	100 X 80	2900
23	BCP 80/320	100 X 80	1450
24.	BCP 100/200	125 X 100	2900
25.	BCP 100/260	125 X 100	2900
26.	BCP 100/320	125 X 100	1450
27.	BCP 100/400	125 X 100	1450
28.	BCP 125/260	150 X 125	1450
29.	BCP 125/320	150 X 125	1450
30.	BCP 125/400	150 X 125	1450
31.	BCP 150/320	200 X 150	1450
32.	BCP 150/400	200 X 150	1450

DEALER ADDRESS