

Fire Pumps - Horizontal Split Case



DESCRIPTION

Bristol Split Case Pump is a single stage, non-self-priming, centrifugal volute pump with radial suction and discharge port. This pump has a horizontal pump shaft with the impeller placed in the middle of the shaft and with self contained combination bearing housing and seal chamber on both sides of the impeller. Without disturbing the motor or pipe-work, the split case construction enables the pump casing to be dismantled in the horizontal plane along the drive shaft. Removal and dismantling of the internal pump parts e.g. bearings, wear rings, impeller and shaft seal can then take place.

FEATURES

- In line Pump
- Double Suction
- Low NPSH
- Low axial load on the shaft
- Double Volute
- Improved efficiency (Overall higher efficiency)
- Low radial load on the shaft
- Low axial and radial loads extends wear ring, seal and bearing life, minimize

vibration and provides quiet operation

- Easy service bearing and packing gland can be changed without removing the top casing half

- UL File No. EX16089

PERFORMANCE RANGE

- Capacity : From 300 GPM up to 3000 GPM

- Head : From 50 MTR up to 205 MTR

MATERIALS OF CONSTRUCTION

- Shaft : AISI 4340/AISI 4140

- Casing : Ductile Iron

- Impeller: Bronze

- Shaft Seal : Packing Gland Immersion Graphite Rope

More Details

HSC SELECTION CHART

Model	Rated Capacity (GPM)	Size (In)	UL Listed Pressure (psi)	FM Approved Pressure (PSI)	Approx Speed (RPM)
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Model	Rated Capacity (GPM)	Size (In)	UL Listed Pressure (psi)	FM Approved Pressure (PSI)	Approx Speed (RPM)
BSP-125-270	300	5x3	117-159		2950
BSP-125-270	400	5x3	115 – 157		2950
BSP-150-310	400	6x4		138 – 226	2950
BSP-125-270	450	5x3	114 - 155		2950
BSP-125-270	500	5x3	112 - 154		2950
BSP200-290	500	8x5	165 - 228		3550
BSP-150-310	500	6x4	129 - 222	137 – 225	2950
BSP150-370	500	6x4	261 - 293		2950
BSP150-370	500	6x4	235 - 264		2800
BSP150-370	500	6x4	202 - 226		2600
BSP 6X4X10HF	500	6x4	91-126		2950
BSP 6X4X10HF	500	6x4	130-178		3500
BSP200-290	750	8x5	161 - 229		3550
BSP-150-310	750	6x4	125 - 223	132-225	2950
BSP150-370	750	6x4	254 - 285		2950
BSP150-370	750	6x4	228 - 256		2800
BSP150-370	750	6x4	195 - 219		2600
BSP200-365	750	8x5	214 - 262		2950

Model	Rated Capacity (GPM)	Size (In)	UL Listed Pressure (psi)	FM Approved Pressure (PSI)	Approx Speed (RPM)
BSP200-365	750	8x5	193 - 236		2800
BSP200-365	750	8x5	165 - 203		2600
BSP 6X4X10HF	750	6x4	85-121		2950
BSP 6X4X10HF	750	6x4	123-174		3500
BSP200-290	1000	8x5	155 - 222		3550
BSP-150-310	1000	6x4	117 - 218	128-222	2950
BSP-200-290	1000	8x5	155 – 194	140-172	2950
BSP150-370	1000	6x4	245 - 277		2950
BSP150-370	1000	6x4	219 - 248		2800
BSP150-370	1000	6x4	186 - 212		2600
BSP200-365	1000	8x5	210 - 259		2950
BSP200-365	1000	8x5	188 - 233		2800
BSP200-365	1000	8x5	161 - 199		2600
BSP 6X4X10HF	1000	6x4	76-112		2950
BSP 6X4X10HF	1000	6x4	114-166		3500
BSP 10X8X21HF	1000	10x8	87-149		1500
BSP 10X8X21HF	1000	10x8	113-203		1750
BSP 10X8X29MF	1000	10x8	174-222		1750

Model	Rated Capacity (GPM)	Size (In)	UL Listed Pressure (psi)	FM Approved Pressure (PSI)	Approx Speed (RPM)
BSP200-290	1250	8x5	148 - 217		3550
BSP-200-290	1250	8x5	147 – 191	136-169	2950
BSP200-365	1250	8x5	205 - 254		2950
BSP200-365	1250	8x5	183 - 227		2800
BSP200-365	1250	8x5	156 - 194		2600
BSP 10X8X21HF	1250	10x8	86-149		1500
BSP 10X8X21HF	1250	10x8	111-202		1750
BSP 10X8X29MF	1250	10x8	171-218		1750
BSP-200-290	1500	8x5	138 - 184	132-165	2950
BSP200-365	1500	8x5	198 - 248		2950
BSP200-365	1500	8x5	177 - 221		2950
BSP200-365	1500	8x5	150 - 188		2950
BSP 10X8X21HF	1500	10x8	84-148		1500
BSP 10X8X21HF	1500	10x8	110-202		1750
BSP 10X8X29MF	1500	10x8	167-214		1750
BSP 10X8X21HF	2000	10x8	78-144		1500
BSP 10X8X21HF	2000	10x8	105-200		1750
BSP 10X8X29MF	2000	10x8	122-209		1450

Model	Rated Capacity (GPM)	Size (In)	UL Listed Pressure (psi)	FM Approved Pressure (PSI)	Approx Speed (RPM)
BSP 10X8X29MF	2000	10x8	160-207		1750
BSP 10X8X29MF	2500	10x8	114-198		1450
BSP 10X8X29MF	2500	10x8	151-196		1750
BSP 10X8X29MF	3000	10x8	136-188		1450
BSP 10X8X29MF	3000	10x8	140-185		1750

CHARACTERISTICS

Description

Casing - (Ductile Iron) - Upper and Lower half bolted and dowelled to provide perfect alignment. Upper half casing can be removed for inspection, without disturbing bearings or alignment.

Shaft Sleeve - (Stainless Steel) - Protect the shaft against corrosion and wear, extends through gland for maximum shaft protection.

Impeller - (Bronze) - Enclosed, double suction, Cast in one-piece and balance to minimize the thrust and to ensure longer bearing life. Locked in position by shaft sleeve.

Sealing Housing - (Ductile Iron) - Designed to accept packing with lantern ring. Internally drilled liquid passage in upper-half casing provides lubrication to the packing area.

Shaft - (Steel) - Large - diameter, precision-machined, high strength steel shaft for maximum strength with minimum shaft deflection.

Bearing - (SKF) - High speed capability and low friction bearing.

Wear Ring - (Bronze) - A sacrificial component installed to inhibit fluid from re-circulating back to suction from the discharge.

Lantern Ring - (Stainless Steel) - A perforated hollow ring that receives relatively cool, clean liquid. Distribute uniformly around the shaft to provide lubrication and cooling.

Packing Gland - (Immersion Graphite) - flexibility allows the shaft to run freely as well as leak proof.

Stuffing Box (Gland) - (Bronze) - to press the packing gland into the seal area through bolts.

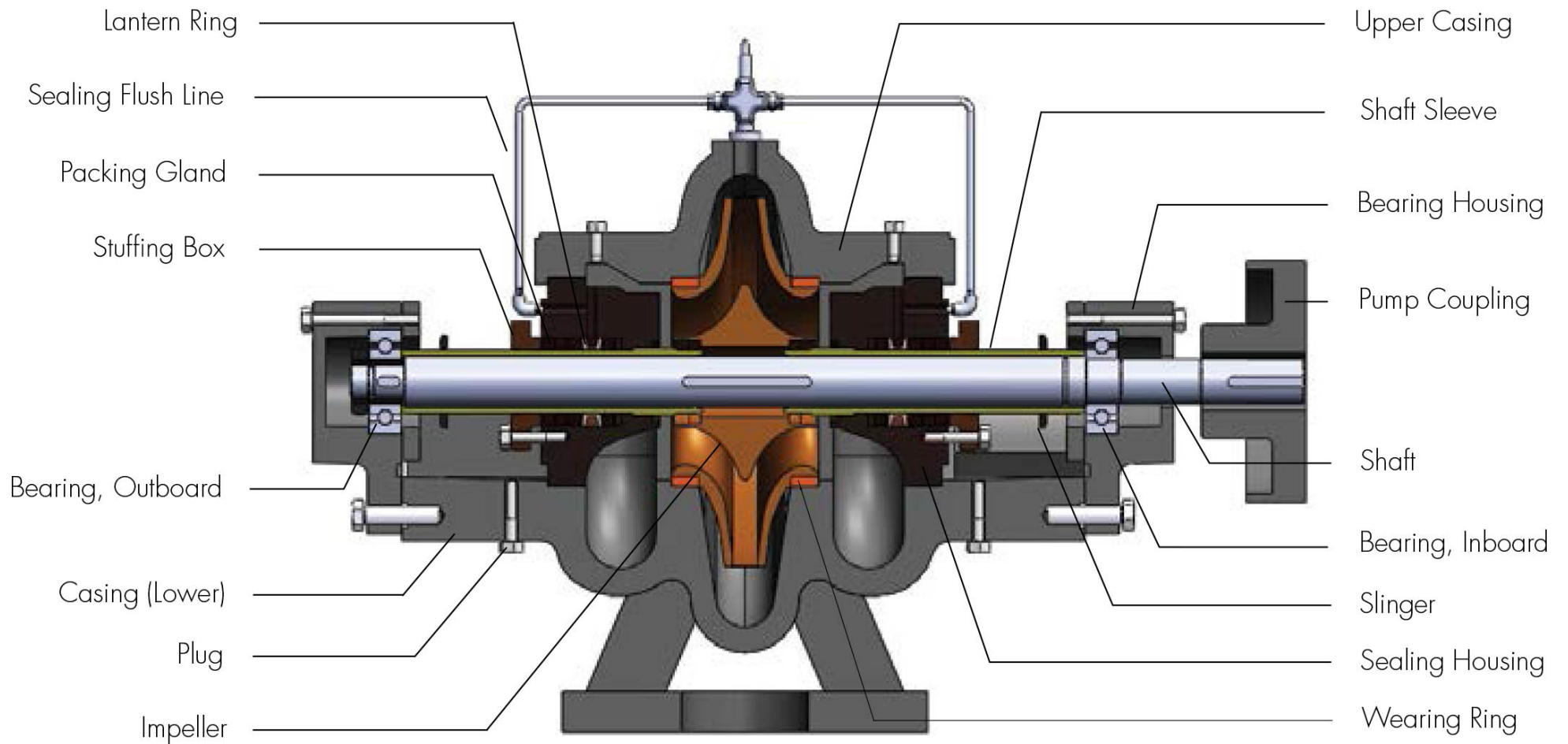
Plug - (Stainless Steel).

Bearing Housing - (Cast Iron).

Sealing Flush Line - (Stainless Steel) - Line from discharge of the pump and recirculated through the pressure regulating valve into the gland.

Water Slinger - (Oil Resistant Rubber).

Pump Coupling (ASTM No.35).



SPLIT CASE - DIMENSION TABLE (MM)

MODEL	A	B	C	Cs	E	F	G	H	L	M	N	P	Ø j	K
BSP-125-270	300	300	315	140	270	70	140	82	410	320	336	443	35	10x10x78
BSP-150-310	330	330	355	170	345	80	200	91.5	470	320	345	345	35	10x10x85

MODEL	A	B	C	Cs	E	F	G	H	L	M	N	P	Ø j	K
BSP-150-370	370	370	355	170	345	70	200	80	470	320	344	443	35	10x10x78
BSP-200-290	370	370	400	200	310	80	225	110	530	390	366	517	45	14x14x108
BSP-200-365	370	370	400	200	350	80	225	110	530	390	366	517	45	14x14x108
BSP 6X4X10HF	330	330	355	170	270	70	200	110	470	320	300	410	40	10x10x85
BSP 10X8X21HF	600	500	560	300	472	70	350	185	770	480	475	610	70	18x18x149
BSP 10X8X29MF	682	609	600	300	555	100	440	140	980	600	520	710	70	18x18x138

FLANGE - DIMENSION TABLE (MM)

Model	Suction					Discharge				
	ID	(Pump Casing Range) OD	No. of Holes	Bolt Hole DI A	BCD	ID	(Pump Casing Range) OD	No. of Holes	Bolt Hole DI A	BCD
BSP 125-270	125	280	8	22	235	80	210	8	22	168
BSP 150-310	150	320	8	22	270	100	255	8	22	200
BSP 150-370	150	320	8	22	270	100	255	8	22	200
BSP 200-290	200	380	12	26	330	125	280	8	22	235
BSP 200-365	200	380	12	26	330	125	280	8	22	235
BSP 6X4X10HF	150	320	12	22	270	100	250	8	22	200

Model	Suction					Discharge				
	ID	(Pump Casing Range) OD	No. of Holes	Bolt Hole DI A	BCD	ID	(Pump Casing Range) OD	No. of Holes	Bolt Hole DI A	BCD
BSP 10X8X21HF	250	445	16	28	387	200	380	12	25	330
BSP 10X8X29MF	250	445	16	28	387	200	380	12	25	330