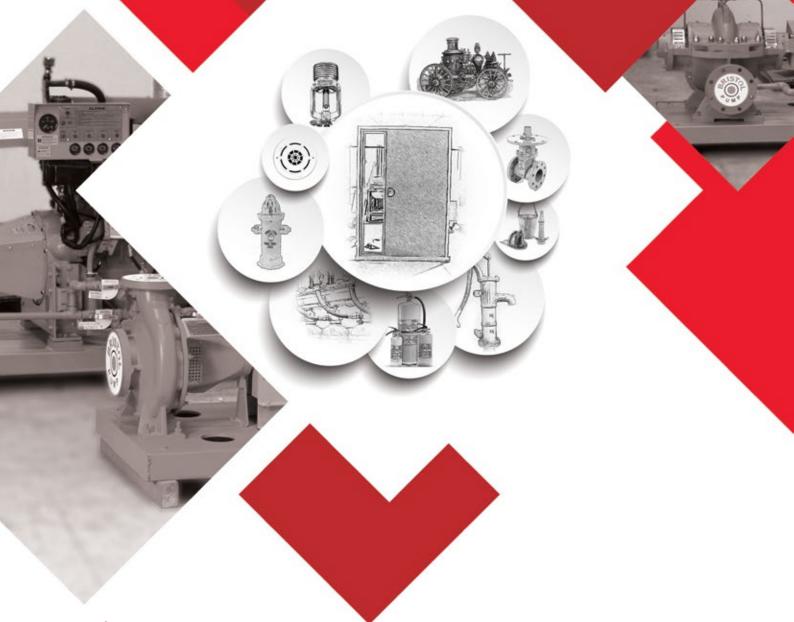
BRISTOL FIRE ENGINEERING

Fire Pumps



Bristol: A History & Future.

In 1971, seven emirates joined forces to create the United Arab Emirates, with the goal of becoming a growing leader on an international scale. The UAE's focus has always been the safety of its land and people, BRISTOL was established in support of that same vision.

BRISTOL FIRE ENGINEERING, part of the Concorde – Corodex Group, is the leading fire-fighting and fire protection manufacturer in the Middle East and has been unsurpassed in innovative fire-fighting solutions for more than 44 years.

We have been steadfast in our developments and have grown to become pioneers in the industry for unmatched quality and dependability, longstanding commitment and unwavering dedication.

Our headquarters and manufacturing facility started in the UAE's Emirate of Dubai, producing world-class fire-fighting systems and equipment in cooperation with international know-how and technology with a grand vision to expand globally.

We strive to continue to adopt the highest international and national standards in line with the UAE's goal to become the safest country in the world.

BRISTOL was one of the first fire-fighting companies in the Middle East to receive an ISO 9001 certification, placing great emphasis on achieving local and international approvals on product certifications such as Kite Mark, LPBC, UL listing, and FM approval. Moreover, Bristol is certified to ISO 14001 and OHSAS 18001.

We focus on innovation by means of continual research and development of advanced fire-fighting solutions, ensuring we not only meet, but exceed the demands of our rapidly changing market.

For decades, we have been proudly supplying various government entities and sectors such as the oil and gas, commercial, and industrial sectors across the globe with world-class equipment and services.

BRISTOL has been serving Middle Eastern, African, Asian, and European markets for more than four decades with a vision to expand further.

Paving the road towards safety for more than four decades, and counting: BRISTOL.

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Fire Pumps - End Suction



Bristol End Suction Pumps are designed according to NFPA 20 for Fire Fighting applications. This pump is designed with latest technology and has premium components for fast maintenance and absolute efficiency.

Performance Range

- Capacity : From 50 GPM up to 1000 GPM
- Head : From 40 MTR up to 160 MTR

Features

- Available in electric motor driven or engine driven configuration
- Dynamic balanced impellers
- Available in clockwise or counter-clockwise rotation to simplify pump room layout
- UL Certificate No. : Ex16459

Material Construction

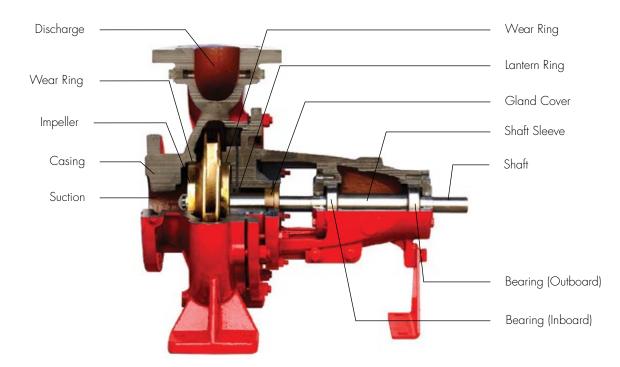
- Shaft : Stainless Steel
- Casing : Ductile Iron
- Impeller : Bronze
- Shaft Seal : Packing Gland-Immersion Graphite



General Information for Centrifugal Fire Pumps, End Suction

Model	Rated Capacity (GPM)	Size (In)	Rated Net Pressure Range (psi)	Approx Speed (RPM)	Model	Rated Capacity (GPM)	Size (In)	Rated Net Pressure Range (psi)	Approx Speed (RPM)
IS32 – 200	50	2 x 1 1⁄4	62-95	2950	IS65 – 320H	300	3 x 2½	97-181	2800
IS32 - 200	50	2 x 1 1⁄4	55-85	2800	IS65 – 320H	300	3 x 2½	98-152	2600
IS32 – 260	50	2 x 1 1⁄4	113 - 130	2950	IS65 – 320H	300	3 x 2½	82-128	2400
IS32 - 260	100	2 x 1 1⁄4	103 - 125	2950	IS80 - 260	400	4 × 3	105-139	2950
IS50 – 320H	50	2½ x 2	103-167	2600	IS80 - 260	500	4 × 3	101-137	2950
IS50 – 320H	50	2½ x 2	88-142	2400	IS80 – 320H	300	4 × 3	159-203	2950
IS50 – 320H	100	2½ × 2	178-298	3500	IS80 – 320H	300	4 × 3	143-183	2800
IS50 – 320H	100	2½ x 2	132-210	2950	IS80 - 320H	400	4 × 3	158-203	2950
IS50 – 320H	100	2½ x 2	119-189	2800	IS80 – 320H	400	4 × 3	142-183	2800
IS50 – 320H	100	2½ x 2	102-166	2600	IS100 - 320H	400	5 x 4	123-158	2950
IS50 - 320H	100	2½ × 2	87-141	2400	IS100 - 320H	400	5 x 4	110-142	2800
IS50 - 320H	150	2½ x 2	177-296	3500	IS100 - 320H	400	5 x 4	98-172	2600
IS50 – 320H	150	2½ x 2	132-209	2950	IS100 - 320H	400	5 × 4	83-147	2400
IS50 - 320H	150	2½ × 2	118-188	2800	IS80 - 320H	450	4 x 3	157-203	2950
IS50 - 320H	150	2½ x 2	99-165	2600	IS80 – 320H	450	4 × 3	140-182	2800
IS50 – 320H	150	2½ x 2	84-140	2400	IS100 - 320H	450	5 x 4	122-158	2950
IS50 – 320H	200	2½ × 2	173-296	3500	IS100 - 320H	450	5 × 4	110-142	2800
IS50 – 320H	200	2½ × 2	127-209	2950	IS100 - 320H	450	5 x 4	98-172	2600
IS50 – 320H	200	2½ x 2	113-188	2800	IS100 - 320H	450	5 × 4	83-147	2400
IS65 – 320H	200	3 x 2½	159-290	3500	IS80 – 320H	500	4 × 3	155-202	2950
IS65 – 320H	200	3 x 2½	108-201	2950	IS80 – 320H	500	4 × 3	136-182	2800
IS65 – 320H	200	3 x 2½	97-181	2800	IS100 - 320H	500	5 × 4	122-158	2950
IS65 – 320H	200	3 x 2½	104-158	2600	IS100 - 320H	500	5 × 4	110-142	2800
IS65 – 320H	200	3 x 2½	88-133	2400	IS100 - 320H	500	5 x 4	97-172	2600
IS65 - 320H	250	3 x 2½	157-290	3500	IS100 - 320H	500	5 × 4	82-147	2400
IS65 – 320H	250	3 x 2½	107-201	2950	IS100 - 320H	750	5 × 4	119-147	2950
IS65 – 320H	250	3 x 2½	97-181	2800	IS100 – 320H	750	5 x 4	104-131	2800
IS65 – 320H	250	3 x 2½	102-155	2600	IS100 - 320H	750	5 x 4	89-166	2600
IS65 – 320H	250	3 x 2½	85-131	2400	IS100 - 260	750	5 × 4	113-139	2950
IS65 – 320H	300	3 x 2½	155-289	3500	IS100 - 260	1000	5 x 4	104-131	2950
IS65 – 320H	300	3 x 2½	107-201	2950					

Characteristics



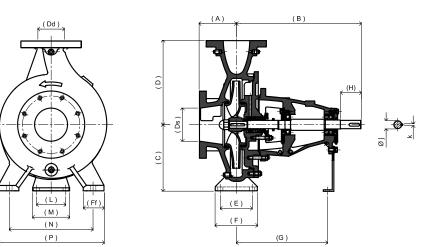
Description

- Discharge
- Wear Ring
- Bearing (Ind. & Out.)
- Packing Gland
- Shaft
- Gland Cover
- Lantern Ring
- Impeller
- Suction
- Casing

- : Vertical Discharge on the center line
- : Bronze Is standard for the certified ANSI pumps Radially split casing with flanged connections
- : Deep Grooved Ball Bearing
- : Immersion Graphite Rope
- : Stainless Steel Sleeve shaft as standard for extended seal life
- : Bronze to house a gland seal
- : Bronze to keep packing lubricated
- : Bronze Enclosed impeller design ensures maximum efficiency
- : Horizontal End Suction ANSI 150# or 300# flange drilling is available based on material selection
- : Ductile Iron 65-45-12 Heavy-duty power frame

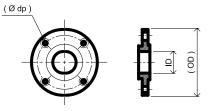


Dimensions



Pump - Table of Dimension in (mm)

MODEL	А	В	С	D	E	F	Ff	G	Н	L	м	Ν	Р	Øi	К
IS32 - 200	80	360	160	183.5	70	100	50	267	49	110	140	190	240	22.225	4.7x4.7x32
IS32 - 260	100	360	180	228	95	125	65	267	49	110	140	250	320	22.225	4.7x4.7x32
IS50 - 320H	125	470	225	285.6	95	125	65	342	79.4	110	140	280	345	28.575	6.35x6.35x44.5
IS65 - 320H	125	470	225	284	120	160	80	342	79.4	110	140	315	400	28.575	6.35x6.35x44.5
IS80 - 260	125	470	200	280	120	140	80	342	79.4	110	140	315	400	28.575	6.35x6.35x44.5
IS80 - 320H	125	470	250	317	120	160	80	342	79.4	110	140	315	400	28.575	6.35x6.35x44.5
IS100 - 260	140	470	225	280	120	160	80	342	79.4	110	140	315	400	28.575	6.35x6.35x44.5
IS100 - 320H	142	470	250	316	120	160	80	342	79.4	110	140	315	400	28.575	6.35x6.35x44.5



Flange - Table of Dimension in (mm)

		Suction		Discharge					
Model	ØID	ØOD	Ø dp	ØID	ØOD	Ø dp			
IS32 – 200	50.8	152	4 holes Ø19 On PCD 120	32	117	4 holes Ø16 On PCD 90			
IS32 – 260	50.8	152	4 holes Ø19 On PCD 120	32	117	4 holes Ø16 On PCD 90			
IS50 – 320H	63.5	178	4 holes Ø19 On PCD 133	50.8	152	4 holes Ø19 On PCD 120			
IS65 – 320H	76	190	4 holes Ø19 On PCD 152	63.5	178	4 holes Ø19 On PCD 140			
IS80 – 260	101.6	228.6	8 holes Ø19 On PCD 190	76.2	190.5	4 holes Ø19 On PCD 152			
IS80 - 320H	101.6	228.6	8 holes Ø19 On PCD 190	76.2	190.5	4 holes Ø19 On PCD 152			
IS100 - 260	127	254	8 holes Ø19 On PCD 190	101.6	228.6	8 holes Ø19 On PCD 190			
IS100 - 320H	127	228.6	8 holes Ø19 On PCD 216	101.6	228.6	8 holes Ø19 On PCD 190			

Fire Pumps - Horizontal Split Case



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 quit operation - Easy service bearing and packing gland can be changed
- Easy service bearing and packing glana converting the top casing half
- UL Certificate No. EX16089



Performance Range

Capacity : From 300 GPM up to 1500 GPM
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Head

: From 50 MTR up to 150 MTR

Material Construction

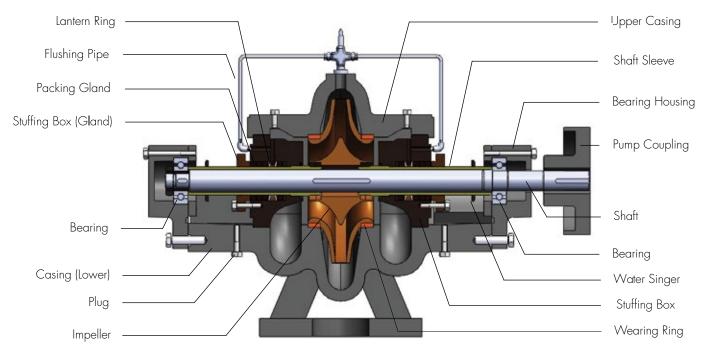
Shaft	: Stainless Steel
Casing	: Ductile Iron
Impeller	: Bronze
Shaft Seal	: Packing Gland D - Immersion Graphite Rope

General Information for Centrifugal Fire Pumps, Split

Rated Capacity (GPM)	Size (In)	Rated Net Pressure Range (psi)	Approx Speed (RPM)
300	5 × 3	117 – 159	2950
400	5 × 3	115 – 157	2950
450	5 x 3	114 - 155	2950
500	5 x 3	112 - 154	2950
500	6 × 4	129 - 222	2950
750	6 x 4	125 - 223	2950
1000	6 × 4	117 - 218	2950
1000	8 × 5	155 – 194	2950
1250	8 × 5	147 - 191	2950
1500	8 × 5	138 - 184	2950
	300 400 450 500 500 750 1000 1250	300 5 × 3 400 5 × 3 450 5 × 3 500 5 × 3 500 6 × 4 750 6 × 4 1000 6 × 4 1000 8 × 5 1250 8 × 5	300 5×3 $117 - 159$ 400 5×3 $115 - 157$ 450 5×3 $114 - 155$ 500 5×3 $112 - 154$ 500 6×4 $129 - 222$ 750 6×4 $125 - 223$ 1000 6×4 $117 - 218$ 1000 8×5 $155 - 194$ 1250 8×5 $147 - 191$



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.

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

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

Bearking - (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).

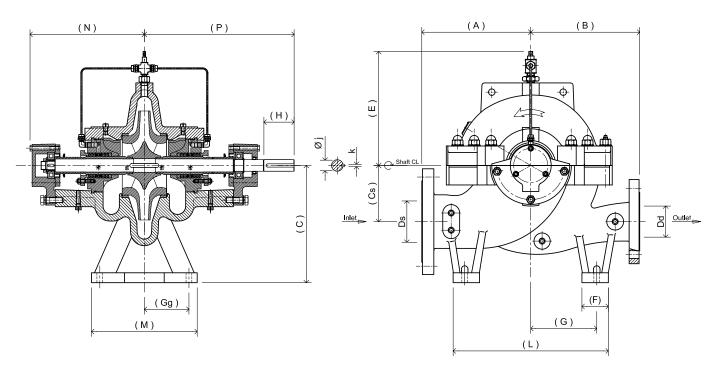
Bearing Housing - (Cast Iron).

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

Water Singer - (Oil Resistant Rubber).

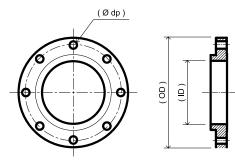
Pump Coupling (ASTM No.35).

Dimensions



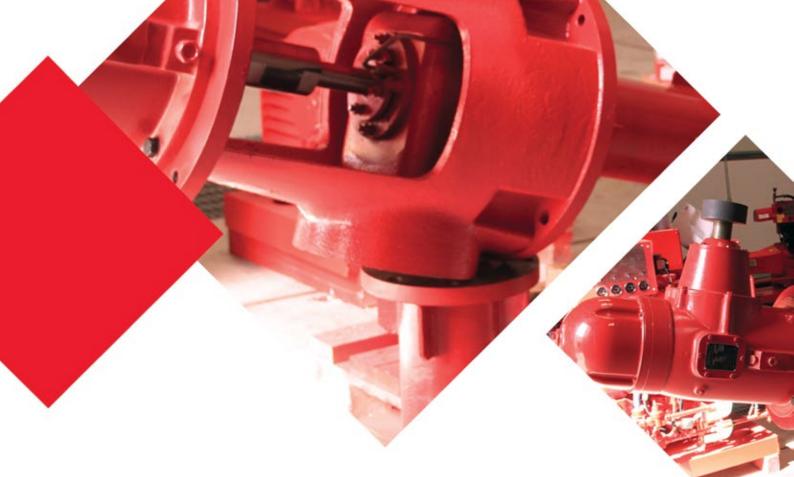
Split Case - Table of Dimension in (mm)

Model	А	В	С	Cs	E	F	G	н	L	м	N	Р	Øj	К
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
BSP-200-290	370	370	400	200	310	80	225	110	530	390	366	517.5	45	14x14x108



Flange - Table of Dimension in (mm)

		Suction		Discharge				
Model	ØID	ØOD	Ø dp	ØID	ØOD	Ø dp		
BSP-125-270	143.8	279	8 holes Ø22 on PCD 235	90.7	210	8 holes Ø22 on PCD 168		
BSP-150-310	170.7	318	12 holes Ø26 on PCD 270	116.1	254	8 holes Ø22 on PCD 200		
BSP-200-290	221.5	381	12 holes Ø26 on PCD 330	143.8	279	8 holes Ø22 on PCD 235		



Fire Pumps - Vertical Turbine



Bristol Vertical Turbine centrifugal pump is developed and fabricated by our company, according to NFPA20. This pump is used for any underground water source where the water level is below the pump suction, it's Impeller remains submerged with the water tank at all times.

Where the fire protection water source is located below ground or deck level, the best technical pumping solution is the vertical suspended multi stage turbine pump. With this type of unit the impellers are fully immersed in the water maintaining prime at all times. The pumps are driven by vertical electric motors or by diesel engines through a right angle gearbox.

Features

- Performance and hydrostatic tests
- In compliance with NFPA 20, FM approved
- Materials of construction: cast iron, bronze fitted
- Sealing arrangement: packing with flushing
- Modular construction: assures complete flexibility in selecting a pump
- Pre-engineered standard components
- Space-saver design: requires minimum floor space
- Static suction lift: permissible by NFPA 20 where water source is located below ground
- Open line shaft: water-lubricated bowl and line-shaft bearings
- Stuffing Box (Gland) (Bronze) to press the packing gland into the seal area through bolts
- Bolted bowl: bowls and suction bell are bolted together, allowing easier disassembly
- Dynamic balanced impellers: secured to the shaft with steel locking collets
- Discharge gauge connection

Performance Range

- Capacity : From 500 GPM up to 5000 GPM
- Head : From 50 MTR up to 200 MTR

Material Construction

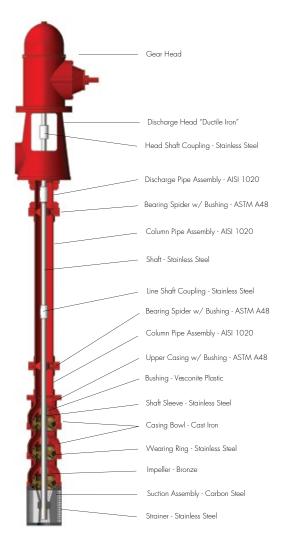
Shaft	: Stainless Steel
Casing	: Ductile Iron
Impeller	: Bronze



Cross Sectional

Typical Services

- Cooling Water Seawater and River Water Intake
- Industrial Process Pump
- Utility Circulating WaterCondenser Circulating Water Pumps
- Fire Service
- Reclaimed Water



Performance Parameters of Table

No.	Туре	Capacity (m3 /h) (GPM)	Speed	Pressure (Kpa (psi))
1	BVP 350	115 (500)	1490	310 - 1605 (45 - 233)
2	BVP 350	170 (750)	1490	285 - 1480 (41 - 215)
3	BVP 350	170 (750)	1790	450 - 1560 (65 - 226)
4	BVP 350	227 (1000)	1790	405 - 1427 (59 - 208)
5	BVP 450	285 (1250)	1490	295 - 1545 (43 - 224)
6	BVP 400	285 (1250)	1490	365 - 1510 (53 - 219)
7	BVP 450	340 (1500)	1490	285 - 1505 (41 - 215)
8	BVP 400	340 (1500)	1490	330 - 1570 (48 - 228)
9	BVP 450	340 (1500)	1790	425 - 1700 (62 - 248)
10	BVP 400	340 (1500)	1790	530 - 1590 (77 - 231)
11	BVP 450	454 (2000)	1490	275 - 1415 (40 - 205)
12	BVP 450	454 (2000)	1790	405 - 1620 (59 - 236)
13	BVP 500	568 (2500)	1490	750 - 1500 (109 - 218)
14	BVP 650	680 (3000)	1490	635 - 1270 (92 - 184)
15	BVP 650	795 (3500)	1490	605 - 1210 (88 - 176)
16	BVP 650	908 (4000)	1490	600 - 1200 (87 - 174)
17	BVP 650	1022 (4500)	1490	580 - 1740 (84 - 252)
18	BVP 650	1135 (5000)	1490	560 - 1680 (81 - 243)



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