

# BRISTOL: A History and 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 and 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 40 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, LPCB, 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 Firefighting 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 209 MTR

#### **Features**

- Available in electric motor driven or engine driven configuration
- Dynamically balanced impellers
- Available in clockwise or counter-clockwise rotation to simplify pump room layout
- UL Certificate No.: EX16459

#### Materials of Construction

- Shaft : Stainless Steel - Casing : Ductile Iron - Impeller : Bronze

- Shaft Seal : Packing Gland-Immersion Graphite

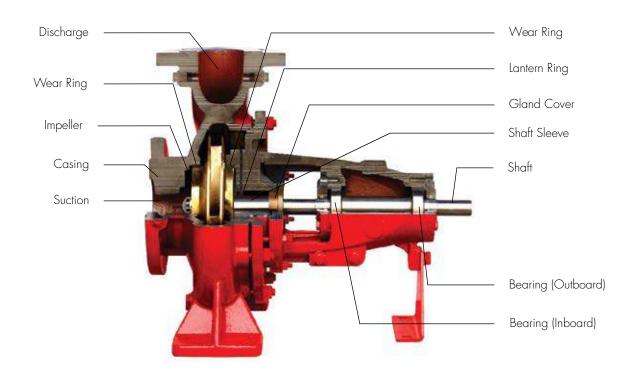


#### **End Suction Selection Chart**

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
IS32 - 200	50	2 x 1 1/4	55-85	2800
IS32 - 260	50	2 x 1 1/4	113 - 130	2950
IS32 - 260	100	2 x 1 1/4	103 - 125	2950
IS50 - 320H	50	2½ x 2	103-167	2600
IS50 - 320H	50	2½ x 2	88-142	2400
IS50 - 320H	100	2½ x 2	178-298	3500
IS50 - 320H	100	2½ x 2	132-210	2950
IS50 - 320H	100	2½ x 2	119-189	2800
IS50 - 320H	100	2½ x 2	102-166	2600
IS50 - 320H	100	2½ x 2	87-141	2400
IS50 - 320H	150	2½ x 2	177-296	3500
IS50 - 320H	150	2½ x 2	132-209	2950
IS50 - 320H	150	2½ x 2	118-188	2800
IS50 - 320H	150	2½ x 2	99-165	2600
IS50 - 320H	150	2½ x 2	84-140	2400
IS50 - 320H	200	2½ x 2	173-296	3500
IS50 - 320H	200	2½ x 2	127-209	2950
IS50 - 320H	200	2½ x 2	113-188	2800
IS65 - 320H	200	3 x 2½	159-290	3500
IS65 - 320H	200	3 x 2½	108-201	2950
IS65 - 320H	200	3 x 2½	97-181	2800
IS65 - 320H	200	3 x 2½	104-158	2600
IS65 - 320H	200	3 x 2½	88-133	2400
IS65 - 320H	250	3 x 2½	1 <i>57</i> -290	3500
IS65 - 320H	250	3 x 2½	107-201	2950
IS65 - 320H	250	3 x 2½	97-181	2800
IS65 - 320H	250	3 x 2½	102-155	2600
IS65 - 320H	250	3 x 2½	85-131	2400
IS65 - 320H	300	3 x 2½	155-289	3500
IS65 - 320H	300	3 x 2½	107-201	2950

Model	Rated Capacity (GPM)	Size (In)	Rated Net Pressure Range (psi)	Approx Speed (RPM)
IS65 - 320H	300	3 x 2½	97-181	2800
IS65 - 320H	300	3 x 2½	98-152	2600
IS65 - 320H	300	3 x 2½	82-128	2400
IS80 - 260	300	4 x 3	167-222	3550
IS80 - 260	400	4 x 3	165-222	3550
IS80 - 260	400	4 x 3	105-139	2950
IS80 - 260	500	4 x 3	101-137	2950
IS80 - 320H	300	4 x 3	159-203	2950
IS80 - 320H	300	4 x 3	143-183	2800
IS80 - 320H	400	4 x 3	158-203	2950
IS80 - 320H	400	4 x 3	142-183	2800
IS100 - 320H	400	5 x 4	123-158	2950
IS100 - 320H	400	5 x 4	110-142	2800
IS100 - 320H	400	5 x 4	98-172	2600
IS100 - 320H	400	5 x 4	83-147	2400
IS80 - 320H	450	4 x 3	157-203	2950
IS80 - 320H	450	4 x 3	140-182	2800
IS100 - 320H	450	5 x 4	122-158	2950
IS100 - 320H	450	5 x 4	110-142	2800
IS100 - 320H	450	5 x 4	98-172	2600
IS100 - 320H	450	5 x 4	83-147	2400
IS80 - 320H	500	4 x 3	155-202	2950
IS80 - 320H	500	4 x 3	136-182	2800
IS100 - 320H	500	5 x 4	122-158	2950
IS100 - 320H	500	5 x 4	110-142	2800
IS100 - 320H	500	5 x 4	97-172	2600
IS100 - 320H	500	5 x 4	82-147	2400
IS100 - 320H	750	5 x 4	119-147	2950
IS100 - 320H	750	5 x 4	104-131	2800
IS100 - 320H	750	5 x 4	89-166	2600
IS100 - 260	750	5 x 4	113-139	2950
IS100 - 260	500	5 x 4	144-212	3550
IS100 - 260	750	5 x 4	140-212	3550
IS100 - 260	500	5 x 4	132-208	3550
IS100 - 260	1000	5 × 4	104-131	2950

#### Characteristics



#### Description

- Discharge : Vertical Centerline Discharge

- Wear Ring : Bronze - Is standard for the certified ANSI pumps Radially split casing with flanged connections

- Bearing (Ind. & Out.) : Deep Grooved Ball Bearing - Packing Gland : Immersion Graphite Rope

- Shaft : Stainless Steel - Sleeve shaft as standard for extended seal life

- Gland Cover : Bronze - to house a gland seal : Bronze - to keep packing lubricated

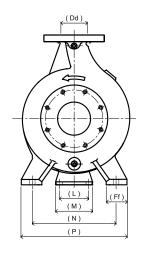
- Impeller : Bronze - Enclosed impeller design ensures maximum efficiency

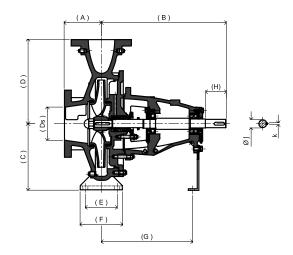
- Suction : Horizontal End Suction ANSI 150# or 300# flange drilling is available based on material selection

- Casing : Ductile Iron 65-45-12 - Heavy-duty power frame



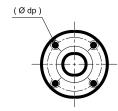
## **Dimensions**





Pump - Dimension Table (mm)

MODEL	А	В	С	D	E	F	Ff	G	Н	L	М	N	Р	Øį	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	4.7×4.7×32
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	6.35×6.35×44.5
IS80 - 260	125	470	200	280	120	140	80	342	79.4	110	140	315	400	28.575	6.35×6.35×44.5
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	6.35×6.35×44.5
IS100 - 320H	142	470	250	316	120	160	80	342	79.4	110	140	315	400	28.575	6.35×6.35×44.5





Flange - Dimension Table (mm)

W 11		Suction			Discharge	
Model	ØID	Ø OD	Ø dp	Ø ID	Ø OD	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 without removing the top casing half
- UL Certificate No. EX16089



Shaft : AISI 4140Steel

Casing : Ductile Iron

Impeller : Bronze

Shaft Seal : Packing Gland D - Immersion Graphite Rope



#### Performance Range

: From 300 GPM up to 1500 GPM Capacity

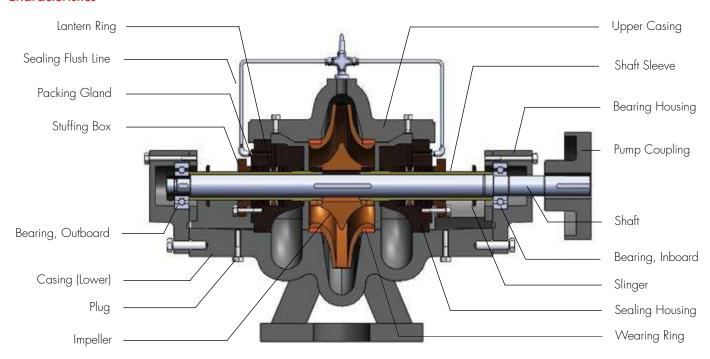
: From 50 MTR up to 205 MTR Head

### **HSC Selection Chart**

Model	Rated Capacity (GPM)	Size (In)	UL Listed Pressure (psi)	Approx Speed (RPM)
BSP-125-270	300	5x3	11 <i>7</i> -159	2950
BFE 80-280	400	5x3	134	2800
BFE 80-280	400	5×3	144	2900
BFE 80-280	400	5x3	149	2950
BFE 80-280	400	5x3	154	3000
BFE 80-280	400	5x3	175	3200
BSP-125-270	400	5x3	115-157	2950
BFE 80-280	450	5x3	144	2900
BFE 80-280	450	5x3	149	2950
BFE 80-280	450	5x3	154	3000
BFE 80-280	450	5×3	175	3200
BSP-125-270	450	5×3	114-155	2950
BFE 80-280	500	5x3	175	3200
BSP-125-270	500	5x3	112-154	2950
BSP-150-310*	500	6x4	129-222	2950
BSP200-290	500	8x5	165-228	3550
BSP150-370	500	6x4	261-293	2950
BSP150-370	500	6x4	235-264	2800
BSP150-370	500	6x4	202-226	2600
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
BSP200-365	750	8x5	193-236	2800
BSP200-365	750	8x5	165-203	2600
BSP-150-310*	750	6x4	125-223	2950
BSP200-290	500	8x5	165-228	3550
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

Model	Rated Capacity (GPM)	Size (In)	UL Listed Pressure (psi)	Approx Speed (RPM)
BSP200-365	1000	8x5	188-233	2800
BSP200-365	1000	8x5	161-199	2600
BSP200-290	1000	8x5	155-222	3550
BSP-150-310*	1000	6x4	117-218	2950
BSP-200-290*	1000	8x5	155-194	2950
BSP200-290	1250	8x5	148-217	3550
BSP-200-290*	1250	8x5	147-191	2950
BSP200-365	1250	8x5	205-254	2950
BSP200-365	1250	8x5	183-227	2800
BSP200-365	1250	8x5	156-194	2600
BSP-200-290*	1500	8x5	138-184	2950
BSP200-365	1500	8x5	198-248	2950
BSP200-365	1500	8x5	177-221	2800
BSP200-365	1500	8x5	150-188	2600

#### 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).

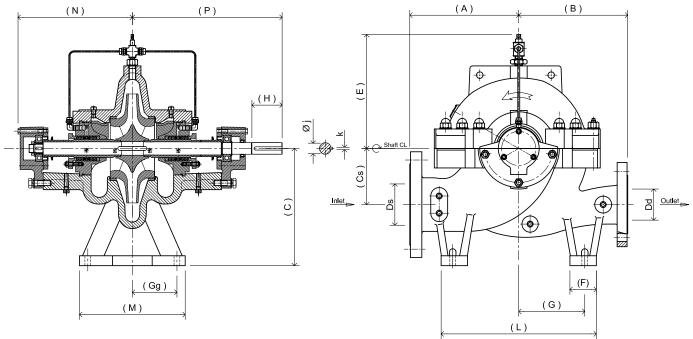
Bearing Housing - (Cast Iron).

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

Water Slinger - (Oil Resistant Rubber).

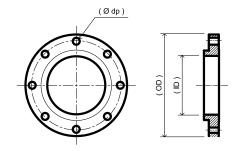
Pump Coupling (ASTM No.35).

# Dimensions



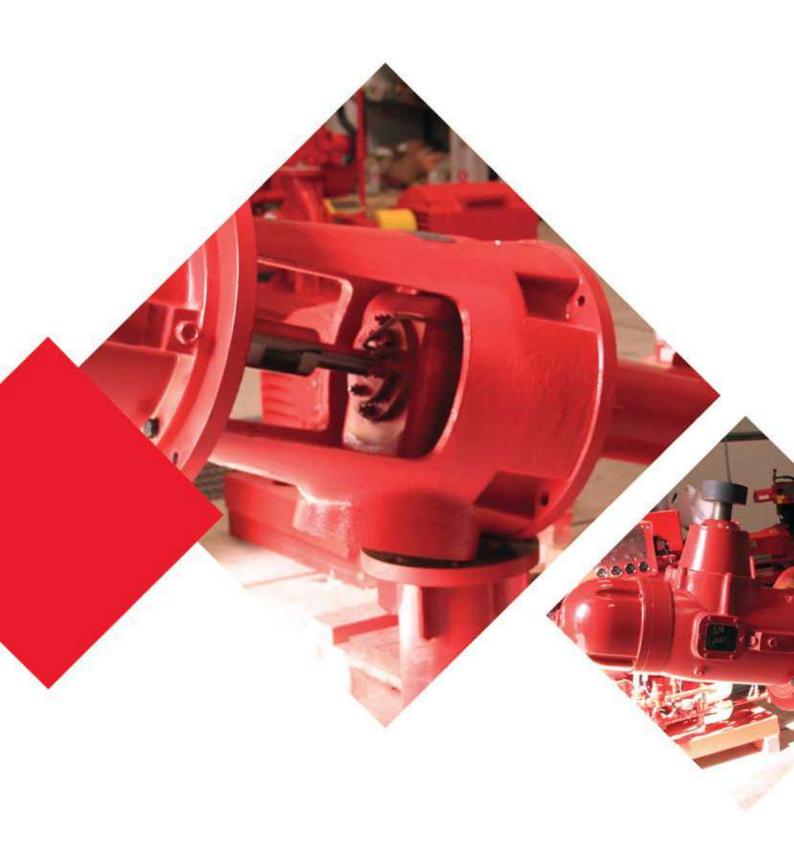
Split Case - Dimension Table (mm)

Model	А	В	С	Cs	E	F	G	Н	L	М	N	Р	Øį	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-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



Flange - Dimension Table (mm)

M 11		Suction		Discharge				
Model	ØID	Ø OD	Ø dp	Ø ID	Ø OD	Ø dp		
BSP-125-270	125	279	8 holes Ø22 on PCD 235	80	210	8 holes Ø22 on PCD 168		
BSP-150-310	150	318	12 holes Ø26 on PCD 270	100	254	8 holes Ø22 on PCD 200		
BSP-1 <i>5</i> 0-3 <i>7</i> 0	150	381	12 holes Ø22 on PCD 270	100	254	8 holes Ø22 on PCD 200		
BSP-200-290	200	381	12 holes Ø26 on PCD 330	125	279	8 holes Ø22 on PCD 235		
BSP-200-365	200	381	12 holes Ø26 on PCD 330	125	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

#### Materials of Construction

Shaft : Stainless Steel

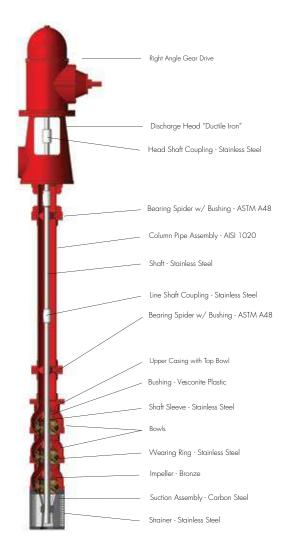
Casing : Cast Iron
Impeller : Bronze



#### **Cross Sectional**

# **Typical Services**

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



#### **VTP Selection Chart**

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)



# **Fuel Tank**



BRISTOL Aboveground are primarily designed for safe storage of flammable and combustible liquids. These tanks are designed, fabricated, tested and labeled in accordance with Underwriters Laboratories, Inc. UL-142 (Steel Aboveground Tanks for Flammable and Combustible Liquids) standard. Tanks are designed and engineered to meet the demanding needs of many industries.

We have experienced team that offers quality engineering and support to help you customize your tank to your specific application. Our tanks are produced according to the highest standards for the commercial, industrial, public and private sectors.

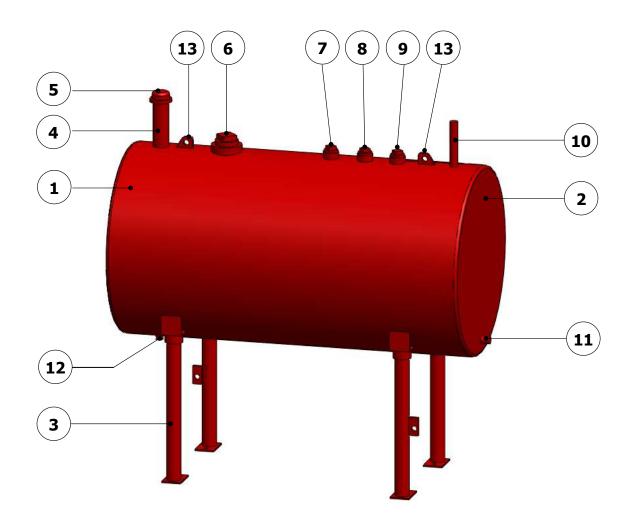
## Capacity

Model	CAP
BFE25	25 GALLON
BFE70	70 GALLON
BFE120	120 GALLON
BFE180	180 GALLON
BFE280	280 GALLON
BFE360	360 GALLON



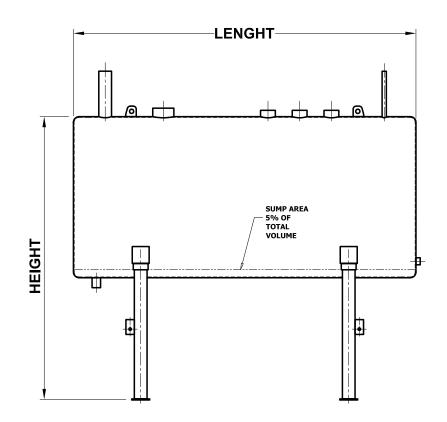
#### **Features**

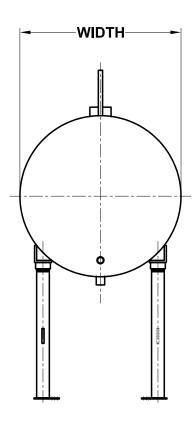
- UL-142 Label
- Standard Capacity: 25 360 gallons
- Thickness of 10mm MS Steel
- Flat flanged heads in single wall configurations
- Connections for normal and emergency venting, gauging, filling and product piping
- Lifting lugs
- Structural legs for easy installation
- Primer paint, Red spray paint finished



# Description

- 1. Tank Shell
- 2. End Cap (Dished Head)
- 3. Leg Assembly
- 4. Filler Neck
- 5. Fill Cap with Provisions for Pad-Lock with Removable Strainer (1/16" Mesh)
- 6. Emergency Vent
- 7. Normal Vent (2")
- 8. Fuel Level Indicator Gauge Connection (2")
- 9. NPT Connection for Fuel Switch
- 10. Return Connection (1")
- 11. Discharge Connection (1  $^1/_4$ ")
- 12. Drain Connection





W 11	T 10 "		^\\^/-:- <b> </b> +		
Model	Tank Capacity	Length	Width	Height	Approx Weight
BFE25	25	32.69	16	39.3	57
BFE70	70	46.99	22	44.7	87
BFE120	120	43.27	30	52.7	108
BFE180	180	63.78	30	52.7	137
BFE280	280	50.87	42	61.6	168
BFE360	360	64.76	42	93.2	195



