

envirosep DBS

# **DOMESTIC WATER BOOSTER SYSTEMS**

Envirosep has led the way in packaged systems by offering designs and manufacturing integrated solutions for fluid handling, heat transfer and energy recovery for over 20 years. We strive to provide the most cost effective and energy efficient pre-engineered packaged pumping systems to our customers.

Domestic water booster pump packages, *envirosep DBS*, are preengineered, manufactured and ready to install systems designed to address the pressure needs of commercial potable water systems. Each system is engineered to boost supplied water pressure to a predetermined PSI (depending on a required output). Capable of handling a wide range of water flow rates and pressures while being custom-tailored to your specific site needs, *envirosep DBS* is an ideal choice for either new or retrofit installations.



#### **FEATURES & BENEFITS**

- The envirosep DBS is factory manufactured, tested and certified by IAPMO R&T as a product that meets the NSF/ANSI 61 and the NSF/ANSI 372 standards and is also UL-listed ensuring quality and NEC code compliance
- Complete packaged pre-engineered systems offering versatility and saving time and money
- Space saving footprint-effectively designed with a compact footprint to minimize space
- Custom designs available
- The envirosep DBS is cost effective offering fixed costs and on-time delivery coordinated with site (factory controlled environment means no weather delays)
- Instantaneous variable speed performance means consistent operation
- Speeds up installation and start-up which provides significant savings to contractors, engineers and facility owners

## STANDARD DESIGN INCLUDES:

- Multi-stage, vertical in-line pumps
- Stainless steel headers
- Butterfly isolation valves
- Check valves
- Variable frequency drives (VFD)
- Discharge pressure transmitter
- Automatic Pump staging/alternation
- Touch-screen operator interface
- Package meets NSF/ANSI 61 & 372 standards

#### **DESIGN OPTIONS INCLUDE:**

- Bladder hydro-pneumatic expansion tanks connected to unit (6-40 gallons)
- Remote tanks for large water storage capacity
- Close-coupled, end suction pumps
- Discharge pressure regulating valves (PRV)
- System inlet pressure switch
- Victaulic connections
- High pressure pumps and components available (up to 300 PSI)



## **TECHNICAL DATA**

SYSTEM CONDITIONS	RANGE
system pressure (psi)	10 to 100
system flow rate (gpm)	30 to 1,800
system type	duplex, triplex
motor power (hp)	1 to 50
liquid temperature (°F)	0 to 240
operating pressure (psi)	10 to 150

ACCESSORY COMPONENT OPTIONS	RANGE
hydro-pneumatic expansion tank (gal)	6 to 40
remote expansion tank (gal)	60 to 211
discharge PRV (in.)	1 to 8
victaulic connections (in.)	1 to 8



**FIGURE 1.** Space saving custom duplex and triplex *envirosep DBS*, domestic water booster systems, with close coupled end-suction pumps and hydro-pneumatic tank.

## **SYSTEM DATA**

#### **DUPLEX SYSTEMS**

PIPE SIZE	FLOW	MOTOR POWER (HP)				
(IN.)	(GPM)	30 PSI	40 PSI	50 PSI	60 PSI	100 PSI
1.5	50	1	1.5	2	2	3
2	60	1.5	3	3	3	5
3	90	1.5	3	3	3	5
3	130	3	3	3	5	7.5
3	160	5	5	7.5	7.5	10
4	220	5	7.5	7.5	7.5	15
4	280	5	7.5	7.5	10	15
4	400	7.5	10	10	15	20
5	560	10	15	20	20	25
6	800	15	20	20	20	40
8	1200	25	30	40	40	50

Duplex systems are 2 X 50%

#### TRIPLEX SYSTEMS

PIPE SIZE	FLOW	MOTOR POWER (HP)				
(IN.)	(GPM)	30 PSI	40 PSI	50 PSI	60 PSI	100 PSI
2	75	1	1.5	2	2	3
3	90	1.5	3	3	3	5
3	135	1.5	3	3	3	5
3	195	3	3	3	5	7.5
4	240	5	5	7.5	7.5	10
4	330	5	7.5	7.5	7.5	15
5	420	5	7.5	7.5	10	15
6	600	7.5	10	10	15	20
6	840	10	15	20	20	25
8	1200	15	20	20	20	40
8	1800	25	30	40	40	50

Triplex systems are 3 X 33%

