

Metraflex has identified pain points in a typical pump system and has developed products that will combat high pressure drops and heavily-maintenanced systems. A powerful, yet cost-effective, combination of out-performing pump specialties, improved strainer technology and silent valves works together to measurably improve system performance.



Butterfly Valves are available in either wafer style or lug style. The lug style can be used for dead end service. Widely used for shut off and balancing of systems because of their compact size and reliability.

- Applicable for all water systems •
- Made in standard sizes: 2" through 12" •
- Constructed of cast iron body with DINC disk and EPDM seat •
- Sizes 8" and larger are equipped with gear operator •



The **LPD-Mag Y-Strainer** provides the same significant energy savings as the original LPD, but is upgraded with a Neodymium magnet. The magnet's purpose is to defeat the build up of iron oxides that can cause damage to boilers, heat exchangers and seal failures.

- Available in standard sizes 2" through 12" •
- Remove metallic and non metallic particles •
- 8000 Gauss Magnet helps to remove oxide buildup •



The Metraflex **#900 Series Globe Style Check Valve** features a center guided single disc and stainless to stainless seating with special stainless steel spring control to insure positive, noiseless opening and closing.

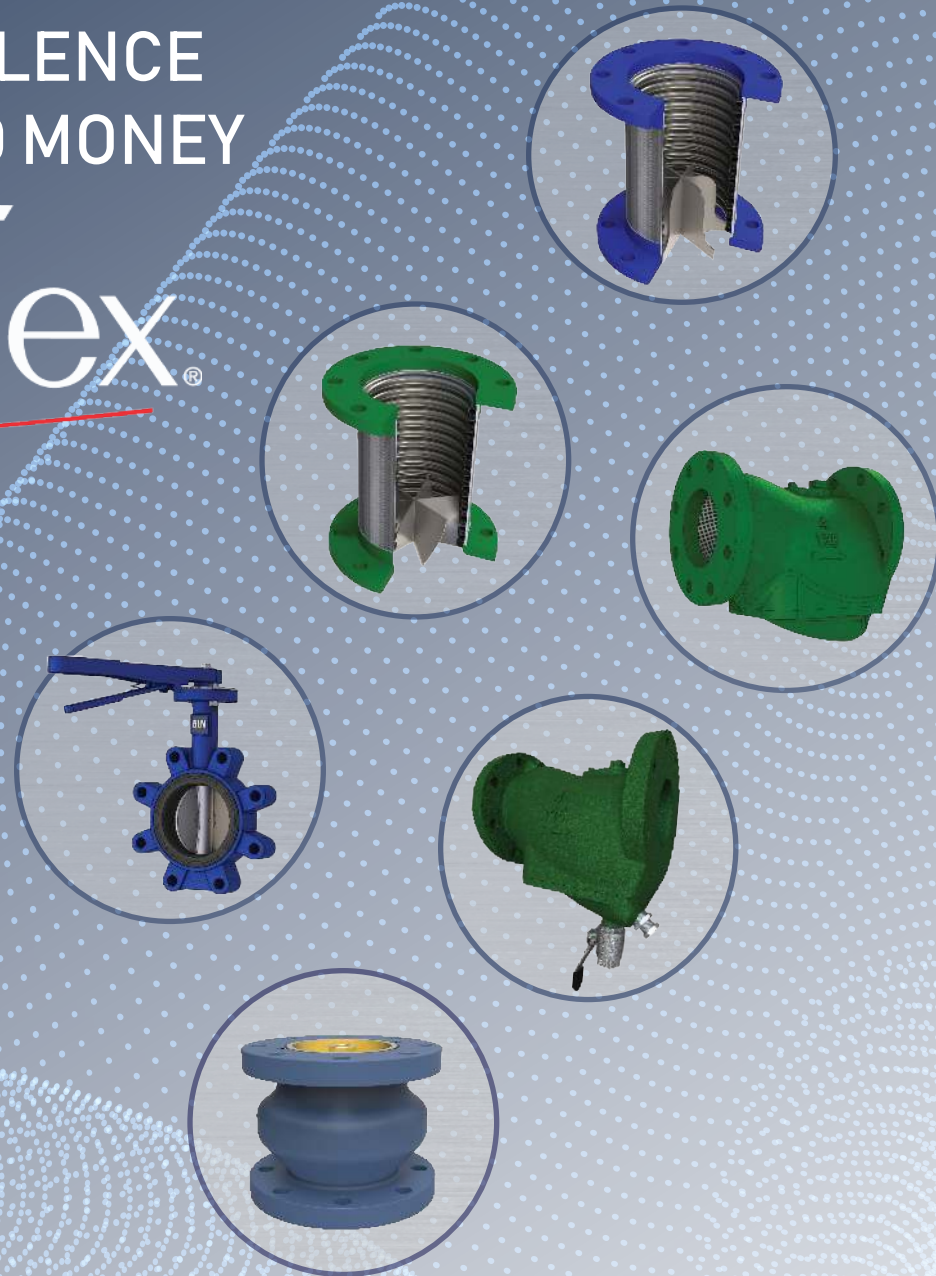
- Applicable to all water systems •
- Made in fourteen standard sizes: 2-½" through 30" •
- Designed for low pressure loss with maximum efficiency •
- Activated at ¼ to ½ psi •



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www.Metraflex.com/agent-locator

THE HIGH PERFORMANCE PUMP PACKAGE

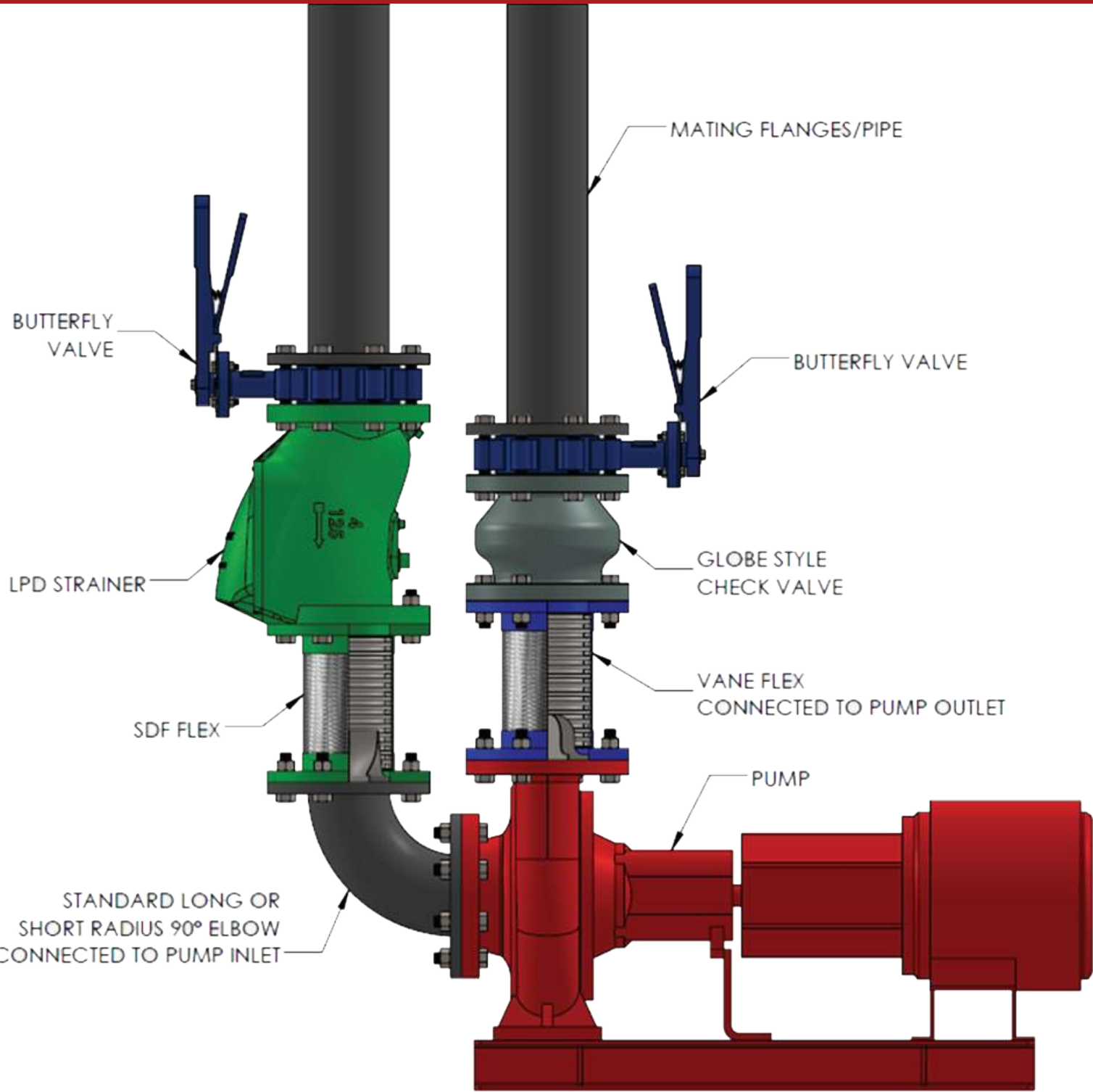
ELIMINATE TURBULENCE
SAVE ENERGY AND MONEY



THE NEW STANDARD

USE LESS ENERGY • REQUIRE LESS MAINTENANCE • SPEND LESS MONEY

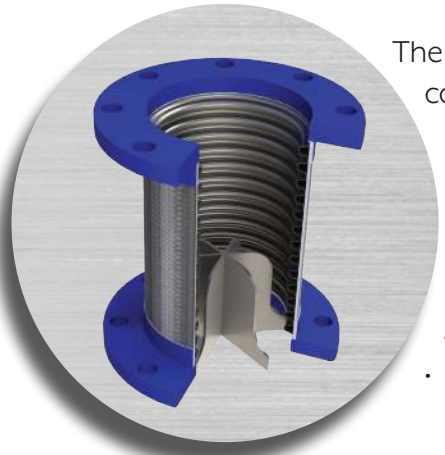
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The **Suction Diffuser Flex** consists of a specially designed set of stationary vanes placed upstream of an elbow. The Suction Diffuser Flex imparts to the fluid a gyroscopic motion, which counteracts the elbow induced motion, enabling the fluid to negotiate the turn uniformly and exit with a flat velocity profile.

SDF Size	C _v
4"	461
6"	1224
8"	2275

- Available in standard sizes 2 ½ through 14"
- Reduced pump vibration and wear, maximizing pump operating life
- Increased pump efficiency and flow rate



The **Vane Flex** maintains the full range of movement of a standard flexible connector by combining hydrodynamic-shaped vanes with a flexible pump connector, yet, at the same time and in the same space as a standard connector, provides better flow-straightening than a length of pipe equivalent to 5-to-10 diameters.

- Available in standard sizes 2 ½ through 14"
- Tested and proven to reduce in flow turbulence
- Provides same stress relief and vibration in same face-to-face



The **LPD Y-Strainer™** is the product of a complete remodel of the traditional 100-year-old strainer. Metraflex has removed the bridge wall/body casting structure that has traditionally diverted flow into the screen as it enters the strainer. The result is significantly lower pressure drops resulting in energy savings so significant the LPD Y-strainer can pay for itself in months.

- Available in standard sizes 2" through 12"
- Leaner interior with fewer obstructions
- Accommodates larger screens allowing smoother flow

LPD Size	C _v
2"	120
2 ½"	165
3"	236
4"	460
5"	641
6"	952
8"	1580
10"	2424
12"	3576

ENERGY-SAVING PUMP CONNECTORS

We have learned that many of the suction guides / diffusers (name depends on pump manufacturer) sold do not reduce turbulence as well as commonly thought. There is also a new entry in the market that has a better velocity profile of fluid and pressure drop as compared to other suction diffusers. However, this is achieved by using 3/16" perforations in the diffuser screen making it even less effective as a strainer, if it can even be considered a strainer.

The typical suction diffuser "diffuses" the flow with what is commonly called an "Orifice Cylinder" or "Diffuser Screen", followed by flow straightening vanes which recondition this diffused flow to the pump. The problem is that the diffuser screen is much smaller in capacity than even a traditional Y strainer screen, so it clogs up rather quickly, increasing pressure drop and lowering NPSH (net positive suction head). Usually the screen on the suction diffuser is neglected until it causes noticeable flow problems.

For a better hook up, we recommend using a Suction Diffuser Flex along with an LPD Y strainer. This will provide the best velocity profile along with the most energy efficient Y Strainer. This will offer better pump performance and protection.

For the pump discharge, we recommend a Vane Flex. The flow straightening vanes will greatly reduce the turbulence coming off the pump discharge, helping protect the check valve. This will also eliminate the need for the 10 pipe diameter long spool required by the valve manufacturer from the pump and the valve.

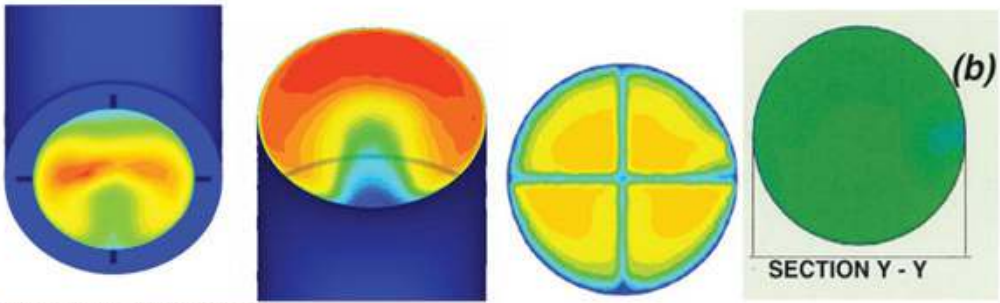
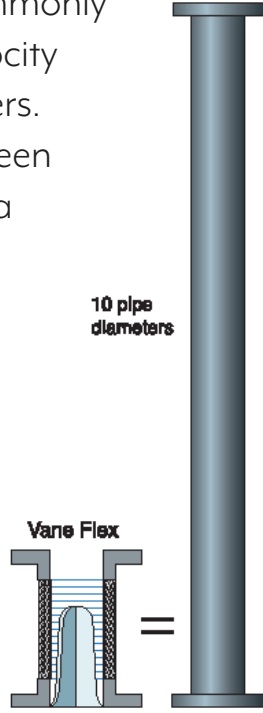


Figure 21 Velocity Profile Comparison

Traditional Suction Diffuser LR 90 Deg. Elbow Suction Diffuser Plus Suction Diffuser Flex



For videos and technical data visit www.Metraflex.com