**EBRO Z 400: perfect for PE/PP piping**

*EBRO ARMATUREN**has engineered a special butterfly valve for installing in plastic pipes*

Hagen, April 2022 – In redesigning its Series Z 400, EBRO ARMATUREN has emerged as the only company within the market to offer a butterfly valve that has been specially developed for use in plastic pipes. Dimensions precisely adapted to the standardised PE/PP stub flange, and especially the adaptation of the inside diameter to that of PE/PP pipes, serve to ensure easy, error-free assembly, maximum flow and optimal hygiene.

PE/PP piping has many advantages over metal piping: it provides a high level of corrosion resistance, and hence offers a service life of up to 100 years. Not only that, it is much lighter and welding is performed without any naked flame. One of the resulting benefits is a much smaller carbon footprint than with metal pipes. The pipes meet high mechanical, physical and chemical standards. In addition, by using a very wide range of plastics it is possible to meet virtually all of the properties specified by customers. That is why plastics have become an integral part of nearly all industries and applications, e.g. the semiconductor industry, water management, the battery industry, the agricultural and food industry, and the drainage system sector.

**“Made” to fit simply isn’t good enough**

To be able to exploit all the benefits of PE/PP piping to full advantage, it is necessary to accurately match all the components used to applications in plastic piping. One weak point to date has been the use of butterfly valves, as all the valves available on the market were, irrespective of their material (metal or plastic), actually designed for metal pipes.

If conventional butterfly valves made of metal or plastic are used, the different wall thicknesses of the plastic pipes can lead to a number of problems. To be able to use them in PE/PP pipes, the latter have to be adapted. The stub flange has to be machined, in many cases in the field, on the construction site or at the point of installation, which costs time and money. The consequences are a reduction in sealing surface area, larger dead spaces and greater susceptibility to corrosion. Furthermore, the additional effort required in planning and assembly is significant. These subsequent machining processes also create problems with regard to the manufacturers' warranty.

**EBRO offers an optimal solution for plastic pipes**

The Hagen-based valve manufacturer EBRO offers a cutting-edge solution to the problem, in the form of its new Series Z 400 butterfly valves. They are perfectly matched to the dimensions of plastic pipes. The inside diameter of the valve is the same as the diameter of standardised PE/PP stub flanges, which, as a result, no longer have to be machined. Consequently, it is no longer necessary to adapt two intrinsically incompatible systems by making subsequent corrections. There is no detrimental impact on safety during installation, operation or maintenance and warranty rights remain fully intact owing to the use of the Series Z 400.

In the case of the Z 400, the sealing surfaces of stub flange and valve are precisely matched to one another so they provide an optimal flanged joint. As a result, it is also no longer necessary to bore or chamfer the stub flanges when installing the valve. This maximises the stability of the flanged joint and fittings, which in turn provides the basis for a sturdy, gas-tight, pressure surge-resistant, vacuum-proof and flow-optimised design. At the same time, the valve is easy to remove and can be recycled as a single material. The collar can also be changed in the completely maintenance-free valve. Owing to the flow-optimised valve disc and virtually dead-space-free transitions, any pressure loss is minimised while the flow rates are maximised. Valve operation is highly energy-efficient and hygienic. The EBRO Z 400 is available in all sizes from OD 50 to OD 630 without any limitations and provides standardised interfaces for all types of actuator. Consequently, the Z 400 is ideal for general industrial applications and for sectors where German air pollution regulations "TA-Luft", the German DVGW gas/water code of practice and ATEX Directive 2014/34/EU (with type testing) are applied.

**Z 400 with informative rating plate**

Seamless correlation of pipe dimension and valve in planning, assembly, service and maintenance is ensured by unambiguous data for all the relevant specifications. Whilst conventional rating plates only state the dimension of the loose flange (DN/PN), the rating plates in the entire Series Z 400 state all the relevant data such as SDR, OD, DN and PN.

The Z 400 series includes a wide range of special sealing materials, e.g. DVGW certifications are available for use in pipe networks for water or gas supply. It is available in all sizes from OD 50 to OD 630 without any limitations.

**Pictures:**

**Z414-A\_EB-SYD\_SBU\_verkabelt\_W:** The new Series Z 400, which is perfectly adapted to the dimensions of plastic pipes, provides maximum safety and cost-effectiveness compared to conventional valves made of plastic or metal.

**Z411-A\_EB-SYS\_SBU\_IO\_Link\_Typenschild:** The rating type plate of the Z 400 series states all relevant information such as SDR, da, DN and PN.

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**EBRO ARMATUREN**

Since the company was founded in 1972, EBRO ARMATUREN has been developing, producing and selling shut-off and control valves as well as automation technology for industrial applications. More than 1,000 employees at two domestic and 30+ international subsidiaries ensure that EBRO products are available in over 100 countries worldwide.

Within the global network, production takes place at the headquarters in Germany and in Italy, Sweden, China and Thailand with uniformly high manufacturing and quality standards. In 2005, the Swedish manufacturer Stafsjö Valves AB was acquired and the product range was extended by an extensive portfolio of knife gate valves.

The owner-managed family business sees itself as a reliable, future- and value-oriented partner for its more than 35,000 customers worldwide: customer satisfaction, quality and safety are reflected in the range of more than 350,000 product variants, which are manufactured with high-precision technology and distributed with fast delivery performance for customers around the globe. For EBRO, it is a matter of course that, in addition to high-quality industrial valves, the corresponding drive and automation technology is also tailored as a complete unit precisely to the specific application and its requirements. This offers the customer further synergy effects in planning support, technical advice and documentation. EBRO has established itself in the global market with innovative solutions, especially for demanding applications and sectors such as the chemical and pharmaceutical industry, food and beverage industry and seawater desalination.