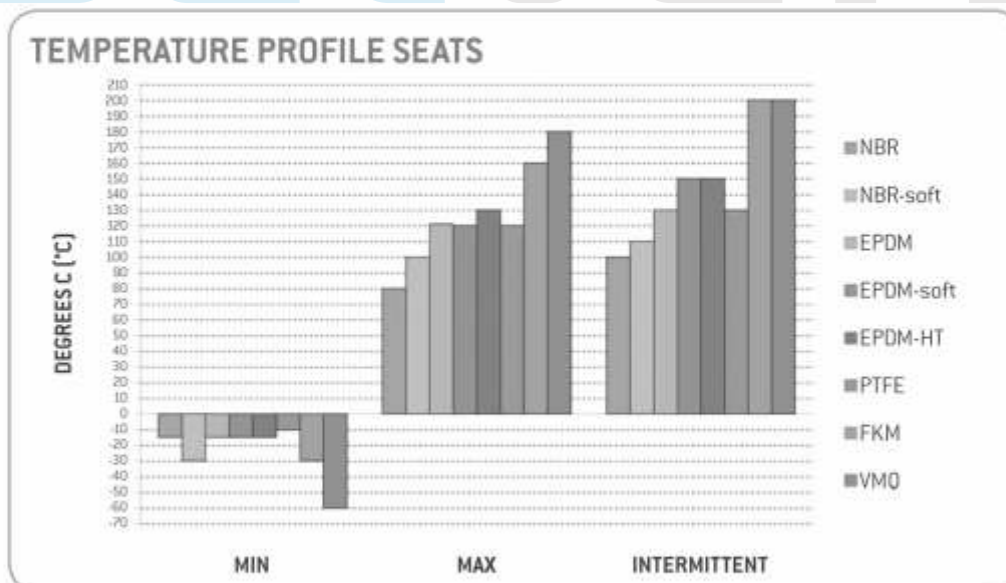


The field of application and/or chemical resistance suggested by us derives from our long experience in valve manufacturing but are purely indicative. Since many factors influence the liner - type of fluid, concentration, temperature, pressure, type of flow (turbulent, laminar), impurities, etc - the final choice of liner is up to our customers based on their specific process characteristics and applications.



- EPDM** EPDM is a terpolymer elastomer made from ethylene-propylene diene monomer. EPDM has good abrasion and tear resistance and offers excellent chemical resistance to a variety of acids and alkalines. It is susceptible to attack by oils and is not recommended for applications involving petroleum oils, strong acids or strong alkalines. It has exceptionally good weather aging and ozone resistance. It is fairly good with ketones and alcohols and has excellent temperature range from -15°C until +120°C.
- NBR** is a general purpose oil-resistant polymer known as nitrile rubber. Nitrile rubber (BUNA) is a copolymer of butadiene and acrylonitrile and has a moderate temperature range from -15°C until 80°C. Nitrile has good solvent, oil, water and hydraulic fluid resistance. It displays good abrasion resistance and tensile strength. Nitrile should not be used in highly polar solvents such as acetone and methyl ethyl ketone, nor should it be used in chlorinated hydrocarbons, ozone or nitro hydrocarbons.
- PTFE** Polytetrafluoroethylene has outstanding resistance to chemical attack by most chemicals and solvents. It is especially used in applications where high mechanical strength is required. Because of its purity, inertness and electrical isolating properties, PTFE finds most of its applications in chemical-, food-, pharmaceutical- and electro-industry. Temperature ranging from -10°C to +120°C.
- FKM** Fluorocarbon elastomers are compatible with a broad spectrum of chemicals. Because of this extensive chemical compatibility, which spans considerable concentration and temperature ranges from -30°C to +160°C, fluorocarbon elastomers have gained wide acceptance as material of construction for butterfly valves. FKM can be used in most applications involving mineral acids, salt solutions, chlorinated hydrocarbons and petroleum oils. They are particularly good in hydrocarbon service however they are not suitable for hot water and steam service.
- VMQ** Silicones are primarily based on a sequence of silicon and oxygen atoms rather than a long chain of carbon atoms. This silicon-oxygen backbone is much stronger than a carbon-based backbone, making silicones much more resistant to extreme temperature, range -60°C to 180°C. In addition to being generally inert silicones are odourless, tasteless, non-toxic and fungus resistance making them suitable for food & beverage applications. Silicones are not well suited for dynamic use due to their poor tear and tensile strength. Silicones are also gas permeable.
- TFM** TFM is manufactured with PTFE and a 1% fraction of perfluoropropyl vinyl ether (PPVE). While the properties of conventional PTFE will be conserved, the additive PPVE leads to a better allocation of the PTFE particles and thus to a higher density of the molecular structure. This leads - in comparison with conventional PTFE - to a cold flow which is considerably lower for TFM, a reduced permeation that leads to better barrier properties and a smooth surface that provokes only a slight abrasion of the liner and less particles in the medium. Temperature ranging from -20°C to +200°C



EPDM - Soft is soft seat / EPDM - HT ; EPDM that is manufactured through other production process which broadens temperature range

Belven can supply butterfly valves for a wide range of materials and applications from cast iron material for usage with water to stainless steel for usage with corrosive media. Due to the quarter-turn control, butterfly valves are easy to operate and suited for automated processes.

Upon customer's request the butterfly valves can be supplied beside manual steering with actuated OPEN/CLOSE or full position control, both supplied with the necessary accessories. Herewith we give you a brief overview of the possibilities

MANUAL



- LEVER in different materials, long or short model, adjustable, fail safe lever, ...
- GEARBOX in different materials such as cast iron or aluminium, standard/lockable/with chainwheel, with visual open/close indication

PNEUMATIC

Double acting pneumatic actuator - DA
Single acting pneumatic actuator - SA

- Suitable for high duty cycles
- Fast opening and closing times
- Few moving parts: increases operational safety
- Namur design for easy mounting of accessories, as limit switches, [NAMUR] solenoid valves and bus communication systems
- Can be combined with emergency operation [manual override - MOD]

SA : Fail-safe function can easily be realized in spring closing or spring opening configuration, standard Belven chooses for operational safety – fail close position

