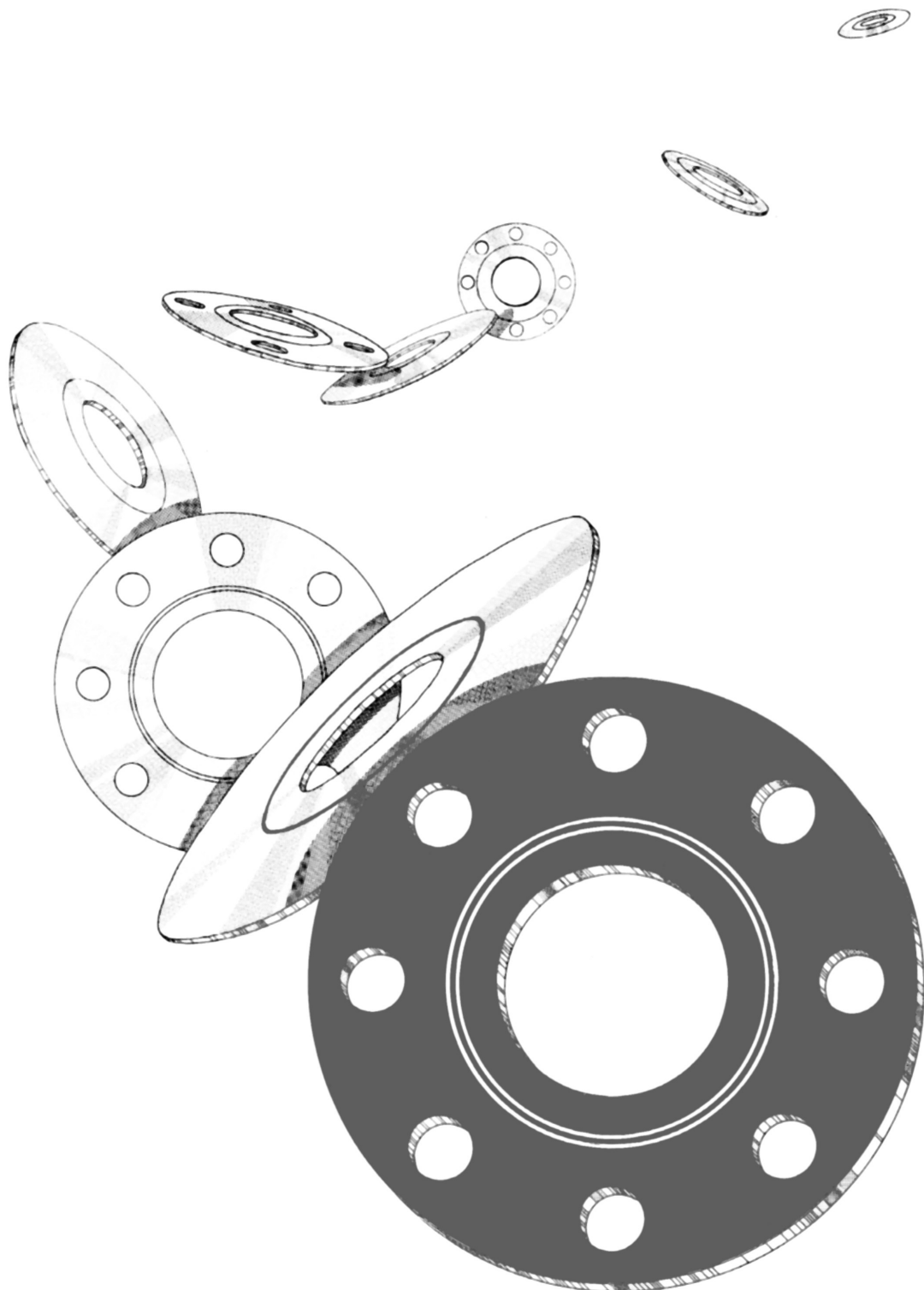


GASKET SEAL



COBALCH Gasket Seals are based on the advantageous principle of O-ring seals, without their characteristic disadvantages. Unlike O-rings, there is no need to provide grooves in the flanges with close tolerances or to align the flanges exactly when assembling them.

COBALCH Gasket Seals are principally made of first-class insulating material. Later on, they may be converted into insulating flanges by incorporating insulating sleeves and washers around the bolts.

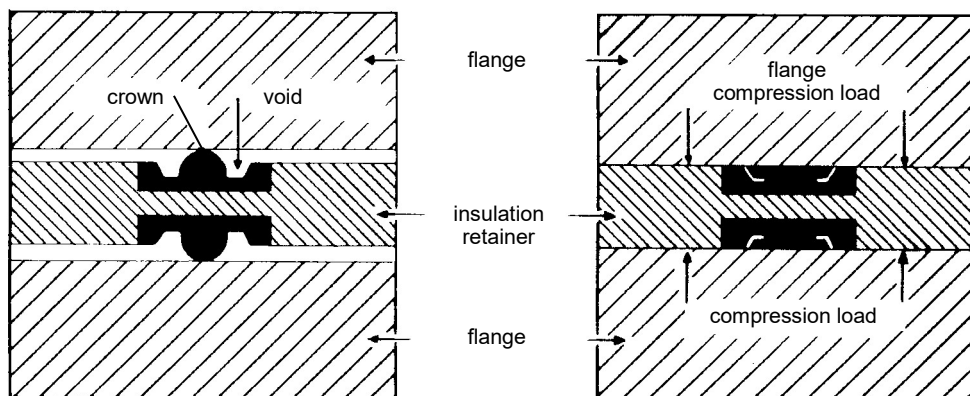
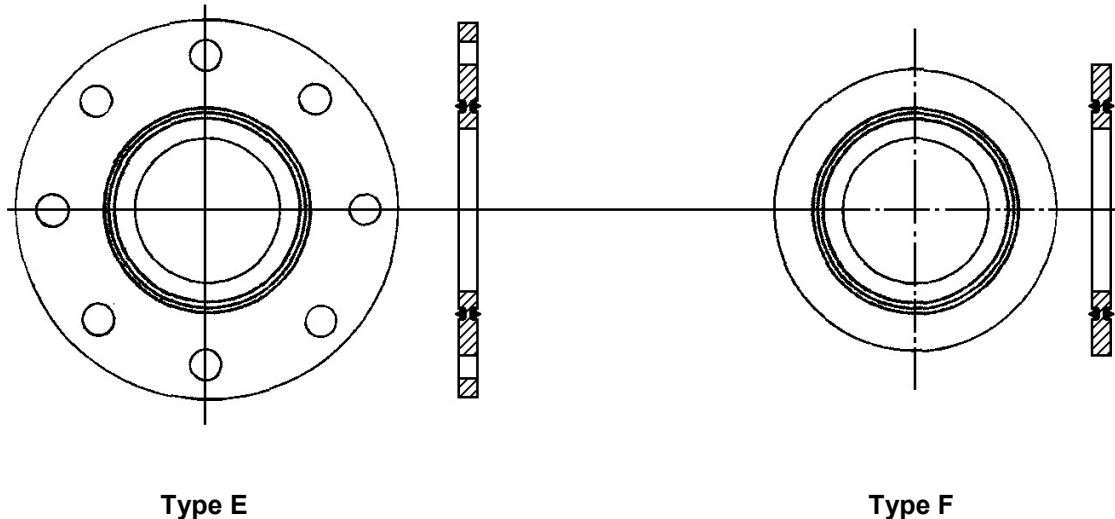
The deformation of the sealing element being predetermined under pressure by the construction of the ring. The synthetic rubber of the element recovers its original form if the flanges "breathe" under pressure in the pipes. That is the crown of the sealing ring remains in uniform contact with the inner flange surfaces, thus ensuring perfect sealing, even in case of pulsating pressure.

The materials for the retainer and the sealing are carefully selected so as to allow their utilization in a wide range of liquids and gases under various operating conditions.

Standard versions can be used up to a maximum operating temperature of +107°C.

High temperature versions even tolerate temperatures up to +180°C.

COBALCH Gasket Seals can also be used under lower vacuum conditions.

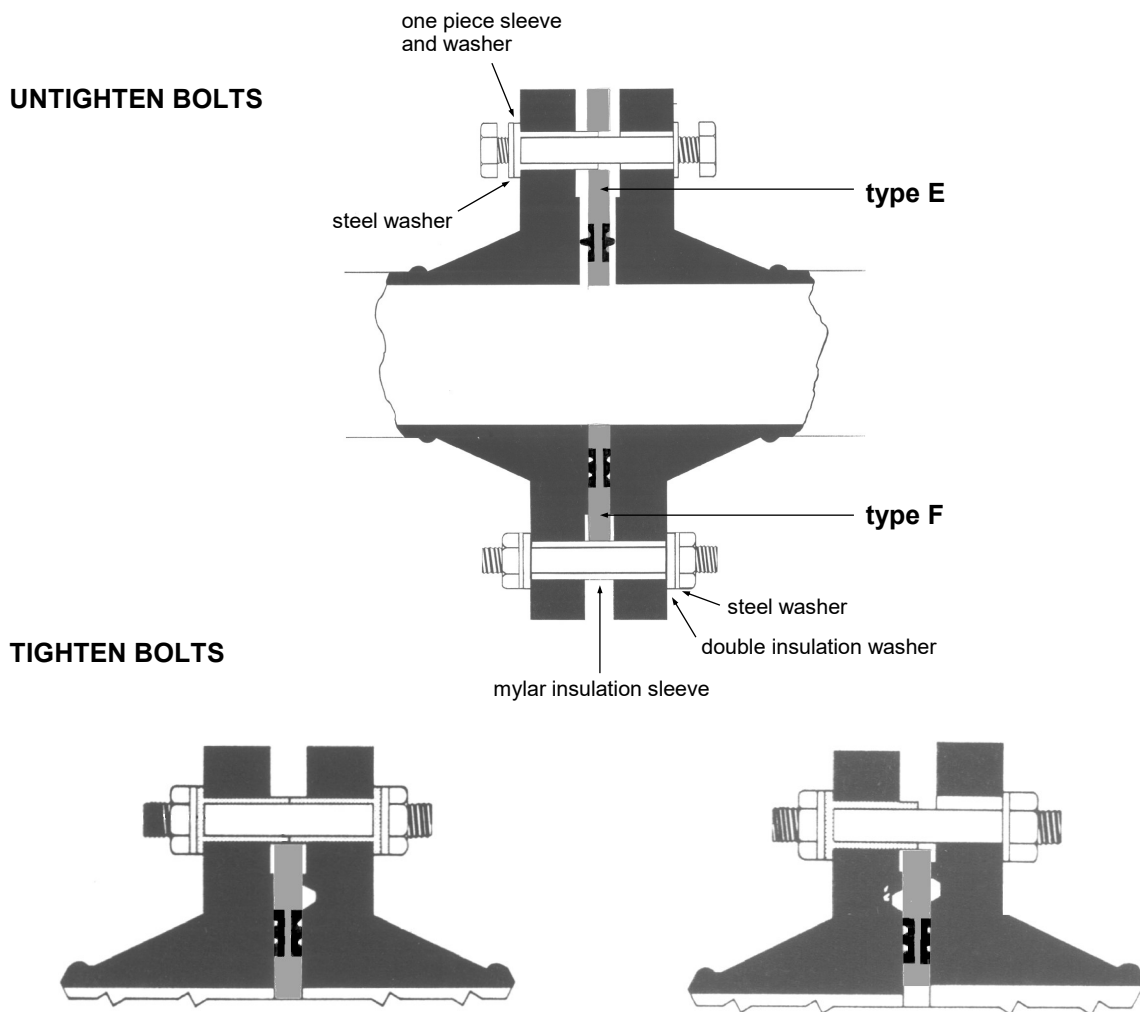


COBALCH Gasket Seals are the answer to engineers' long problems, how to avoid leaks in flanged piping systems.

COBALCH Gasket Seals are sealings which already become effective when the pipes are assembled the first time. The gasket has an almost unlimited durability and may be removed and reinstalled several times.

COBALCH Gasket Seals for pipe diameters from 1/2" up to 42" are available and can also be supplied with insulating material for the bolts.

The retainer of **COBALCH Gasket Seals** consists of phenolic, and on each side a synthetic rubber sealing element is molded in a groove. The retainer locks the sealing element in position, thus confining it on all sides when the crowns are deformed by the bolt load and the voids on either side of the crowns are filled completely. They also allow the material to expand at different temperatures.



COBALCH Gasket Seals are very suitable for the insulation of flanges. By additional use of insulating sleeves and washers **Gasket Seals** are converted into a electrical insulated flange.

COBALCH Gasket Seals permit to design piping systems with much freedom, while integrating the cathodic protection. By using **COBALCH Gasket Seals**, efficient functioning of any flange coupling will be achieved.

No shutdown will be necessary when converting a normal **Gasket Seal** into a flange insulation. The bolts are removed successively, provided with insulating sleeves and washers, then reinstalled and the flange coupling is unchanged.

COBALCH Gasket Seals can be used on the following flanges:

- Welding neck flanges	DIN norm	ANSI norm	1/2" to 42"
- Lap joint flanges		ANSI norm	1/2" to 42"
- Socket weld flanges	DIN norm	ANSI norm	1/2" to 42"
- Slip-on flanges	DIN norm	ANSI norm	1/2" to 42"
- Threaded flanges	DIN norm	ANSI norm	1/2" to 42"
- Flat face flanges	DIN norm	ANSI norm	1/2" to 42"
- Raised face flanges	DIN norm	ANSI norm	1/2" to 42"
- RTJ flanges up to 600		ANSI norm	2 1/2" to 42"
- RTJ flanges 900 to 1500		ANSI norm	2" to 24"
- RTJ flanges 2500		ANSI norm	1" to 12"

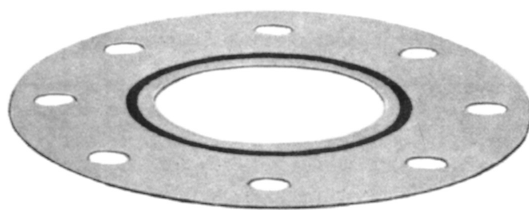
Special types of retainer and sealing, if required, can be made of other materials for special applications (for corrosive liquids, gasses, vacuum). As these special versions are non-standard, please order in good time.

General use: Crude oil, gasoline. LPG (low pressure gas), water (alkaline and salt), gasses and various chemicals.

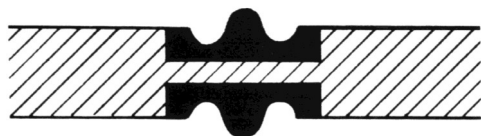
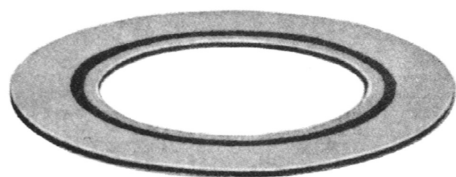
Standard materials: Retainer: Phenolic - Seal element: Nitrile - Max. operating temp. + 180°F (82°C).

High temperature materials: Retainer: Hi-temp. phenolic - Seal element: Fluorocarbon - max. operating temp. 350°F (175°C).

TECHNICAL SPECIFICATIONS



RETAINER	
Standard type	Phenol
<u>Dielectric strength</u> V/mm material	500 V/mm
Compression strength	1687 kp/cm
Waterabsorbering	1,6%
Temperature	-50° to +107° C



SEALING ELEMENT	
Standard type	Nitril (Buna N)
Temperature	-50° to +107° C
Hightemperature type	Viton (Flourcarbon)
Temperature	-30° to +180° C