



SAFE LINK for GAS Application

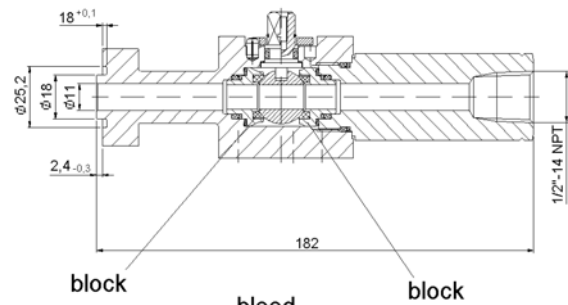
1 General

For natural gas applications very often “double block and bleed” configurations are required. This makes the hook-up complex, sensitive to leaks and expensive. INTERTEC offers a solution with **one** ball valve that has the double-block and optionally the bleed function.

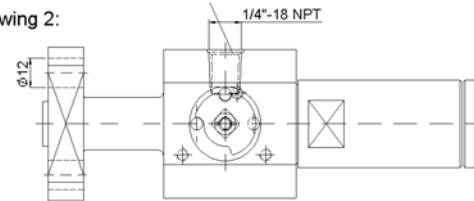
Principle: Traditionally a ball valve has two seats, one on each side of the valve. In closed position the seat on the opposite side of the pressure entrance keeps the valve tight due to the pressure on the ball.

The double-block design (see drawing 1) has two spring loaded seats which are tight on both sides in any direction at any time independent of the direction the valve is pressurized. For the pressure relief of the ball chamber a ¼ NPT bleeding valve can be mounted as an option (see drawing 2 and example 1)

Drawing 1:



Drawing 2:



Ansicht ohne Druckablassventil gezeichnet

2 Applications

INTERTEC provides standard basic applications, but each SAFE LINK can be customized and adapted to the end user's specifications. There are SAFE LINK hook-ups for flow and pressure, for remote or direct mounting, with or without protection box and heater.

Example1:

SAFE LINK type O2/0/N/ D KH90/KR40,

DP-flow application for remote mounting, with two double block and bleed ball valves. The hook-up is protected in an INTERTEC DIABOX 87 aSS and heated with an INTERTEC Ex-proof heater KH90. The temperature inside of the enclosure is controlled with the INTERTEC thermostat KR40 Ex. All SAFE LINKs can be delivered pre-assembled, bagged and tagged, ready to install at plant site.

- Design pressure: 413 bar – ANSI class 2500,
- Materials: 1.4571/ SS316Ti.
- ¼ NPT pressure relief (bleed) valve



Example2:

SAFE LINK type G/1/T/ 1"/2500#RTJ MH4 for Pressure Transmitter mounted directly in the INTERTEC MINIBOX and heated with the MINITHERM conduction heater. Multi-port valve with process connection according to end user's request (welded, flanged, screwed ends,...).The instrument connection can be among others an oval flange according IEC 61518 or G1/2" (pipe thread).

SAFE LINKs can be delivered without or with all brands and styles of transmitters.

Instrument connection: G1/2"

¼ NPT for vent valve

ANSI flange: 1"/2500# RTJ





SAFE LINK for GAS Application

3 Technical data: valve

Valve style 1	Quarter turn, spring loaded seat ball valve with optional pressure relief at the ball chamber.
Valve style 2	Same as style 1 but Multi-port design
Body Material	1.4571/316Ti – Other materials available on request
Ball Material	1.4571/316Ti – Other materials available on request
Seat Material	PVDF, PTFE – Other materials available on request
Stem seal	Viton o-ring
Pressure Class	413 Bar, ANSI 2500
Valve Size	½” – DN15 – Full Bore
Handle	Oval handle – 316SS – indicates valve position – lockable on request
Option	Fully welded

4 Options

* **Protection boxes:** INTERTEC is one of the leading manufacturers of instrument protection boxes in GRP. Many designs are available for both direct mounting and for remote mounted applications. All enclosures can be supplied with extra insulation (aSS). Other accessories like windows, drains, vents or pipe stands are available. Please consult the

INTERTEC general catalogue or web page for more detailed information.

* **Heaters:** INTERTEC has a wide range of electrical explosion-proof convection and conduction heaters as well as steam, glycol and hot water heaters. The electrical heaters type MINITHERM have a self limiting characteristic. The conduction heaters are designed for mounting direct to the transmitter or the manifold block. For all heaters, appropriate controllers or thermostats are available.

* **Pre-assembly:** Any hook-up can be delivered completely pre-assembled, even including the transmitter. The assembled SAFE LINKs are tested, pressurized and certified according end users specifications. This prefab character of the system reduces the on-site installation time and installation costs up to 60%.

* **Certifications:** material tracing 3.1B acc. to EN 10204; NACE MG01 75;

* **Software:** The INTERTEC ISL software is specially designed as an engineering tool for planning the instrumentation of complete plants, revamps and standard applications. The software provides the specification including 3D-drawings of instrument hook-ups and is very useful for the creation of plant and/or customized standards. The easy data import and export allows the use of this expert tool as a supplement to other CAE-systems.

