

- Eliminate leaks
- Filter foreign gases



Digital form at:
www.cgs-company.de/downloads/MDZ_E_D_PGU.pdf

Why re-purge? Causes for leaks due to dissolved gases:

In metals, gases are not just absorbed at the surface level. To a greater or lesser extent, they are also dissolved deep within the metal structure.

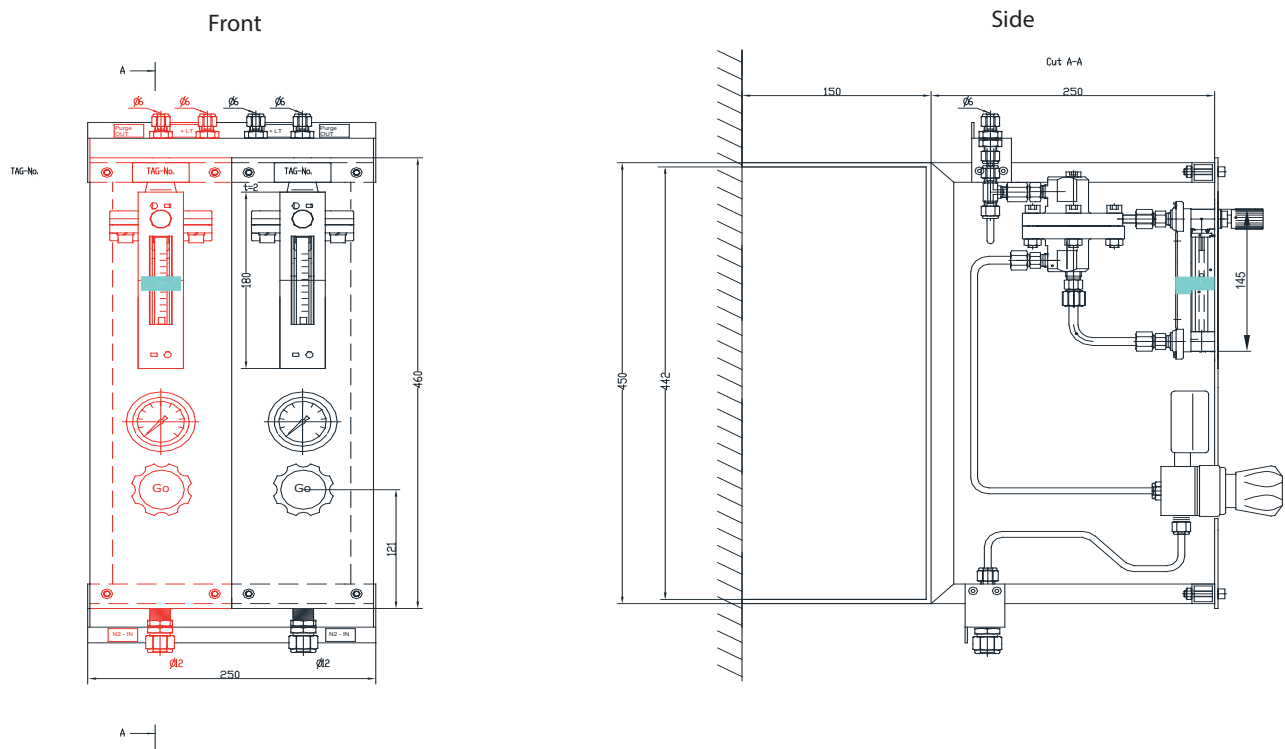
At a certain temperature and gas pressure, and depending on the type of metal and the types of gas in contact with this metal, this will result in a gas proportion within the metal that is in a state of equilibrium with the respective gas atmosphere.

Foreign gases may enter a system in two different ways: they either flow into the apparatus by way of individual leaks (pores), or they permeate gas-carrying systems (permeation).

Technical data

- Ambient temperature: -10°C to +50°C
- Type of protection (with flow meter only): IP 65
- Material housing: VA / flow meter: glass
- Material TAG-No. plate: VA stainless steel
- Flow: 0 - 100 NI/h
- Pressure range max. IN: 0 - 10 bar / 0 - 145 PSI
- Pressure range max. OUT: 0 - 4 bar / 0 - 58 PSI
- Type of gas: N₂ (Inert gases)
- Medium temperature: -5°C to 100°C
- Inlet fittings: 12 mm, 1/2"
- Outlet fittings: 6 mm, 1/4"
- Measurements Purge gas unit (W x H x D): 250 x 540 x 480 mm
- Weight: 21,9 kg (2-line)

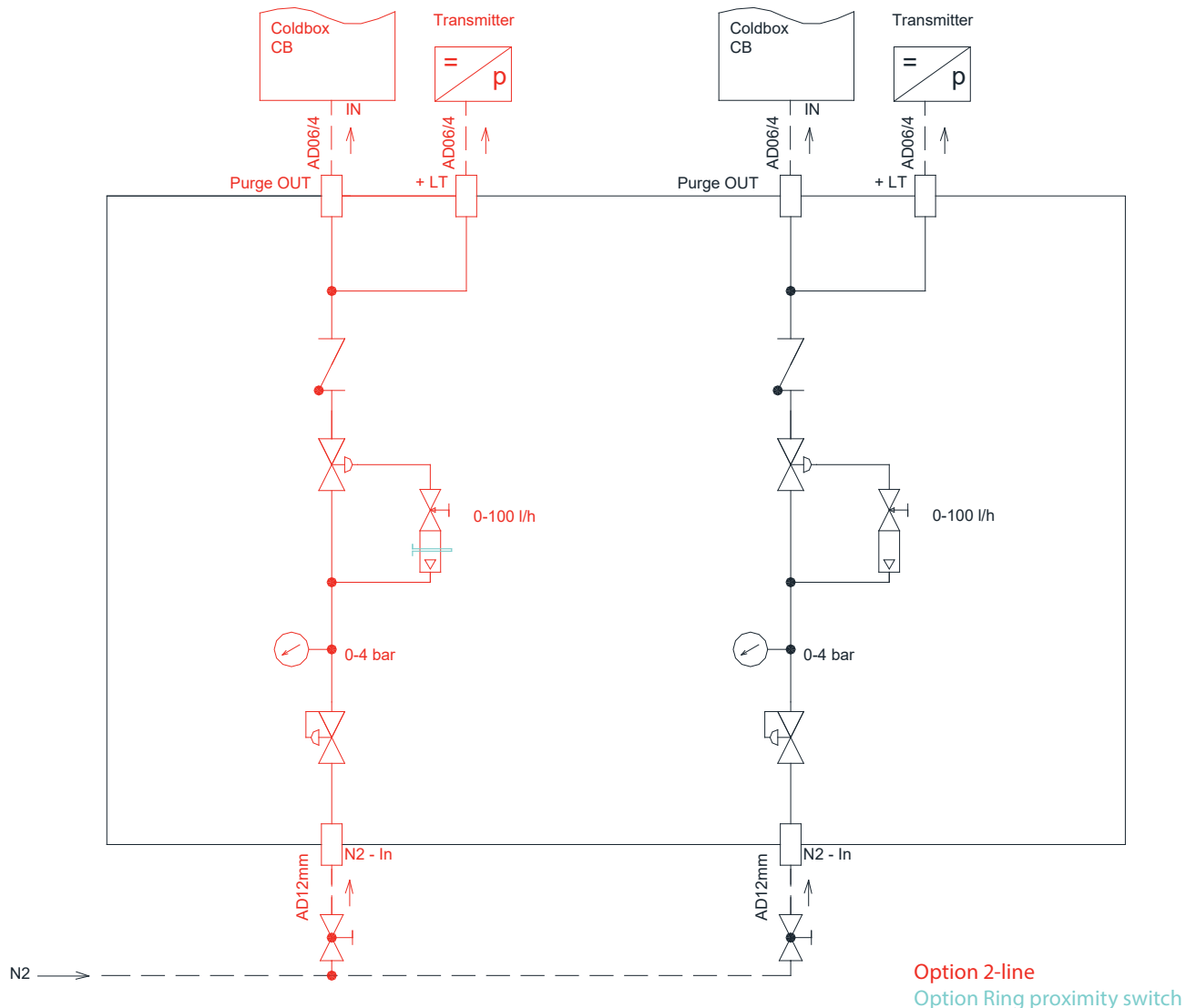
Drawing



Option 2-line

Option Ring proximity switch

Gas flow scheme



Application of the Purge gas unit

Inert gas is introduced to dilute or purge any escaping process gases during the air separation process in cold boxes or in tubes and apparatus cases. For this, CGS purge gas units are used, depending on the application, so as to keep the defined, inflowing inert gas at a constant using the appropriate counter pressure.

In order to keep the flow rate of the inflowing inert gas at a constant when experiencing pressure fluctuations, the purge gas unit is equipped with mechanical differential pressure regulators (back pressure regulators) including the appropriate pressure and flow-rate gauges.

The robust, mechanical design allows the units to be installed on-site and directly on the apparatus cases themselves or on the section which is to be purged. As an option, an electronic flow rate monitor (ring proximity switch) can be integrated into the flow meter, and/or a pressure transmitter into the purge gas unit, to remotely monitor proper functioning of the purge gas unit.



PURGE GAS UNIT

Type PGU

Order numbers

Article

- 1-line metrical PGU-10
- 1-line metrical with flow PGU-10-R
- 1-line imperial PGU-11
- 1-line imperial with flow PGU-11-R
- 2-line metrical PGU-20
- 2-line metrical with flow PGU-20-R
- 2-line imperial PGU-21
- 2-line imperial with flow PGU-21-R

Order number

1019550
1033904
1033905
1033906
1019551
1033907
1033908
1033909

Spare parts

Article

- Ring proximity switch
- Flow meter DK800
- Bourdon-tube gauge
- Pressure regulator

Order number

1014583
1021842
1014618
1020151

Note