

HELYON

5 Chemin du Jubin 69570 DARDILLY
Tél. +33 (0)4 72 52 16 70 - Fax +33 (0)4 72 52 16 71
www.helyon.com / E-mail : contact@helyon.com

TRI CLAMP PRESSURE REGULATORS - 3TCR2

Stainless steel AISI 316L pressure regulators with clamp connections, suitable for compressed air, gas and liquid



FEATURES

Pressure regulator for inlet pressure up to 25 bar (362 psi)

Clamp connections DIN 32676 welded to the body:

1/2";
3/4";
1";
1"1/2.

Outlet pressure is controlled by a piston.

Electropolished body.

Ra 0,4 μm (16 μin) roughness on inside wetted surfaces.

Available the ATEX version.

Brand  II2GDclICX.

For use in potentially explosive atmospheres zones: 1, 21, 2, 22 (not applicable in mines and zone 0).

The product complies with the directive 97/23/CE PED.

SPECIFICATIONS

1/2" and 3/4" pressure regulator weight ~1,56 Kg (~3,4 lb)

1" and 1"1/2 pressure regulator weight ~10,2 Kg (~22,5 lb)

Operating temperature: -40°C ÷ +175°C (-40 °F ÷ +347 °F) – Suitable for steam service

Main valve leakage classification: VI (bubble tight)

Flow coefficient: Kv= 1,2 Nm³/h Cv = 1,4 US gal/min for 1/2" and 3/4" version

Flow coefficient: Kv= 11 Nm³/h Cv = 12,8 US gal/min for 1" and 1"1/2 version

Degree of protection: IP25

All metallic parts are machined from the solid bar. No threaded connections exposed to the fluid

MATERIALS

Body and bonnet: stainless steel AISI 316L

Internal parts: stainless steel AISI 316L

Main valve spring: stainless steel AISI 302 (not in contact with the fluid)

Adjusting spring: C85 nickel-plated NiP/Fe 15 µm (not in contact with the fluid)

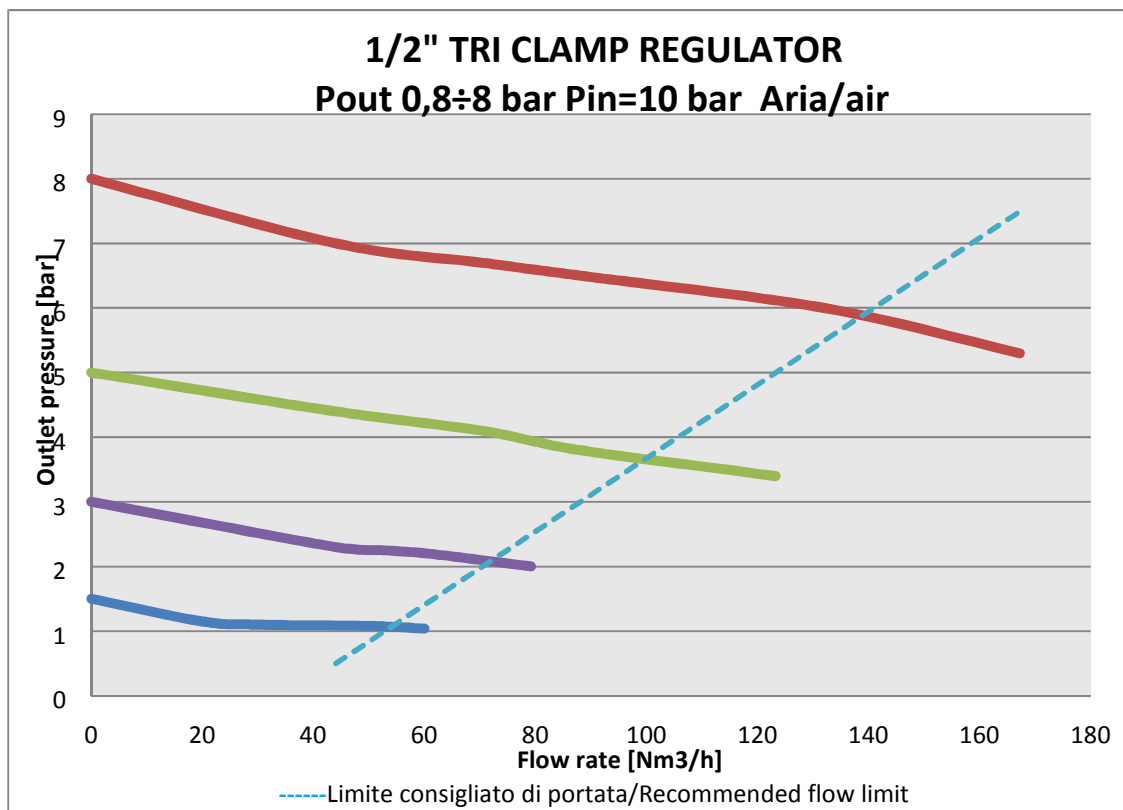
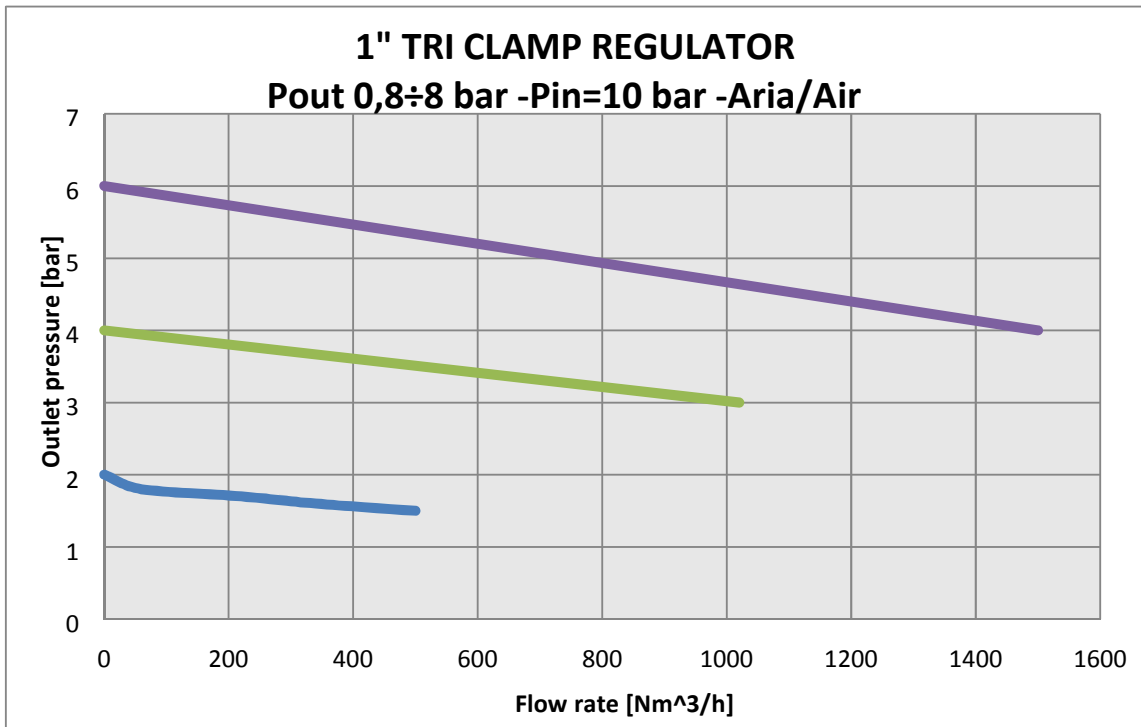
Piston: stainless steel AISI 316L

Gaskets: EPDM or EPDM in accordance to FDA (other compounds available on request)

SPARE PARTS

Complete kit: complete main valve, o-rings

flow charts



available model types

Tri-Clamp Pressure regulators

Pressure regulators with tri-clamp connections, made of stainless steel for compressed air and technical, non corrosive gases and liquids

Metallic parts machined from solid bar – No gauge

| TYPE | Pin Bar | Pout Bar | Inlet CLAMP | Outlet CLAMP | GAUGE Connection | MEDIUM |
|-------|---------|-----------|-------------|--------------|---------------------|-------------------------------------|
| | | | | | | Tri-Clamp Pressure regulator |
| 3TCR2 | 25 | 0,2 – 1,5 | ½" | ½" | No gauge connection | * |
| | | | ¾" | ¾" | | |
| | | | 1" | 1" | On request | |
| | | | 1"1/2 | 1"1/2 | | |
| 3TCR2 | 25 | 0,3 – 3 | ½" | ½" | No gauge connection | * |
| | | | ¾" | ¾" | | |
| | | | 1" | 1" | On request | |
| | | | 1"1/2 | 1"1/2 | | |
| 3TCR2 | 25 | 0,8 – 8 | ½" | ½" | No gauge connection | * |
| | | | ¾" | ¾" | | |
| | | | 1" | 1" | On request | |
| | | | 1"1/2 | 1"1/2 | | |

* Air – N2 – He – Ar – H2 – CO2 – N2O – Liquid

SPECIAL VERSIONS

Pre-set outlet pressure

Fixed outlet pressure, screw with cap nut

Connection for bonnet piping

Not standard branding

Degreased for O2

Relieving version

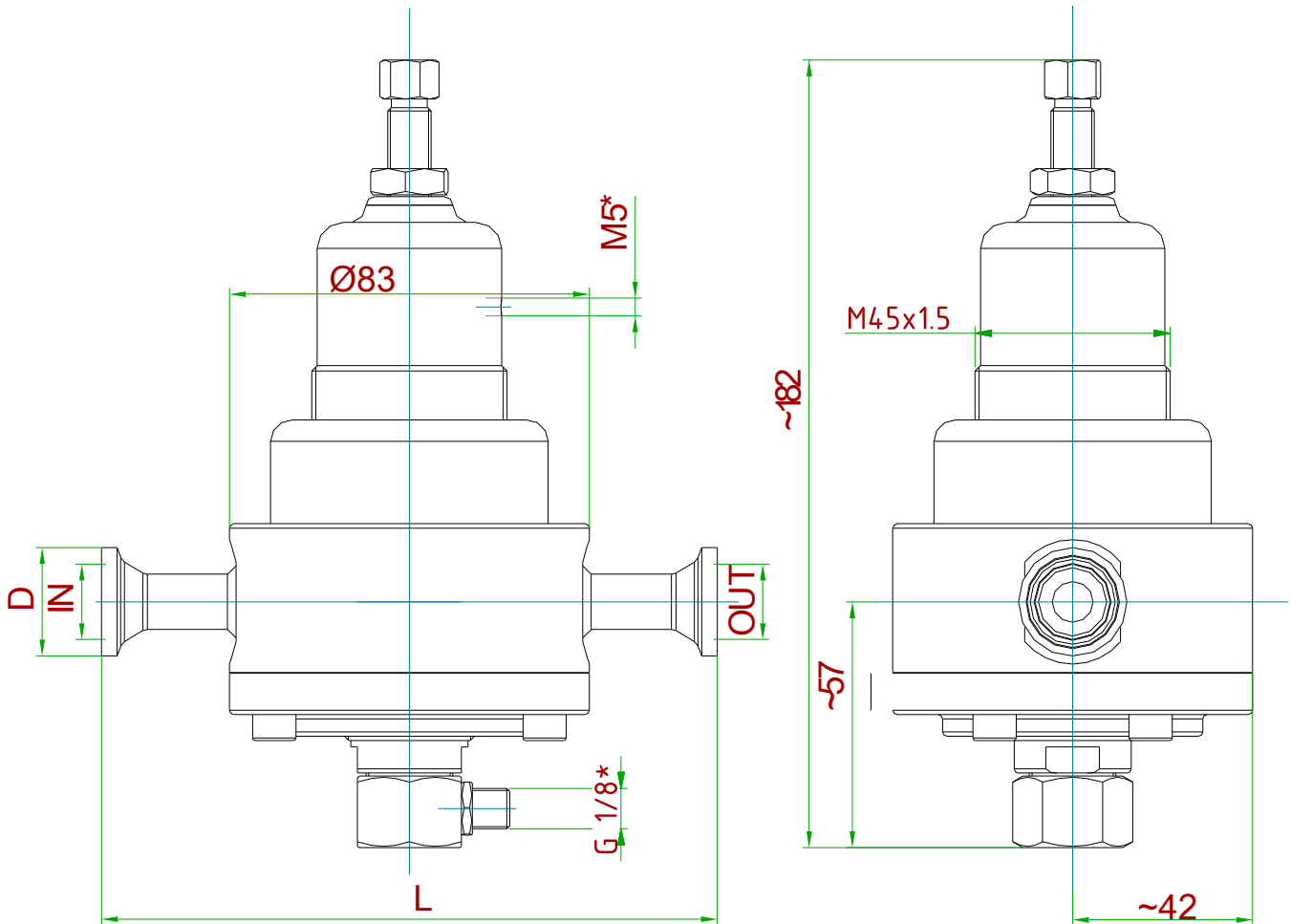
ATEX version

Special temperature range

O-ring in accordance to FDA

technical drawings (all dimensions in mm)

PRESSURE REGULATOR CLAMP CONNECTIONS 1/2" - 3/4"

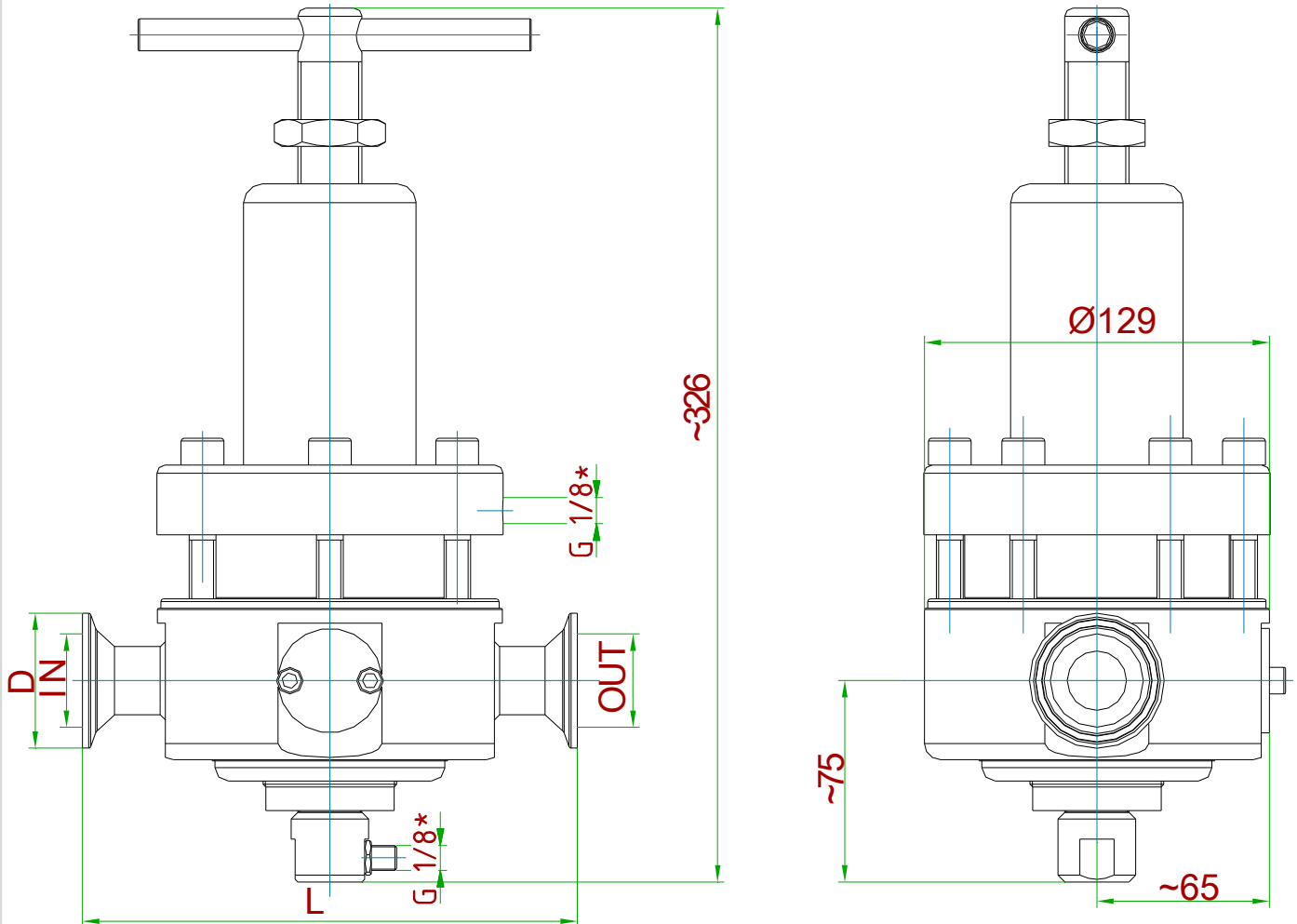


*For pipe connection when required, random orientation

| IN/OUT | L | D |
|--------|---------|-----|
| 1/2" | 142±3 | ø25 |
| 3/4" | 139,4±3 | ø25 |

technical drawings (all dimensions in mm)

PRESSURE REGULATOR CLAMP CONNECTIONS 1" - 1"1/2



| IN/OUT | L | D |
|--------|---------|-------|
| 1" | ~180 ±3 | ø50.5 |
| 1"1/2 | ~182 ±3 | ø50.5 |

*For pipe connection when required, random orientation