## **Model - GRT15S-420**

# **Description**

The GRT15S springloaded pressure regulator reduces the supply pressure on the inletside to a controlled pressure on the outletside.

# **Specifications**

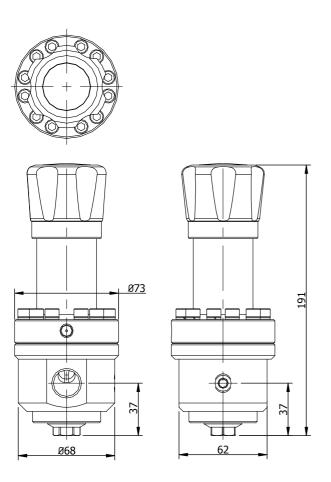
Inlet pressure 280 or 420 bar Adjustable 0-420 bar Connections 1/2" NPT or BSPP

Seatdiameter 7 mm

Cv / Kv Cv 1.0 / Kv 0.85

## **Fluids**

This pressure regulator is suitable for gases and liquids.





# **Materials**

The regulator is made out of barstock stainless steel material.

Body ss 316L Springhousing ss 316L Valve ss 316L

Seat NBR, FKM or EPDM

Valve spring ss 316 Setspring ss 302

O-rings / diaphragm NBR, FKM or EPDM

Other materials available on request.

All metal parts are marked with a traceable batch number. Material certificates are available on request.

# **Temperature**

The general temperature range of the regulator is -50 / 200 °C, but could be limited due to the used sealing materials.

KEL-F seat	-15 / 60 °C
PEEK seat	-50 / 200 °C
NBR seals	-35 / 130 °C
FKM seals	-20 / 200 °C
EPDM seals	-50 / 120 °C

## **Model - GRT15S-420**

## **Technical details**

- all regulators tested before delivery
- leak-tight seat design
- all parts cleaned and degreased
- PED classification SEP
- ATEX classification EXII 3GD

Although this regulator has a leak-tight seat, the regulator should not be used as a shutt-off valve.

Spare parts kits are available for the regulator.

# **Dependency**

A character of the regulator is "dependency". The set-pressure will change, when you have a changing inletpressure.

## **Options**

Dutch Regulators supplies the regulators to your needs. When you have the need for special features or options, Dutch Regulators is the right address.

## **Standard options**

- gauge ports
- locking cap

# **Special options**

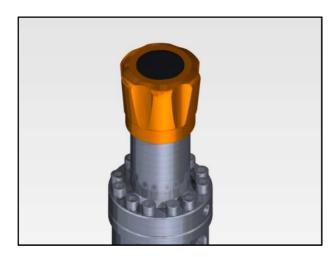
- other seal materials on request
- other body materials on request
- material according to NACE MR0175

#### Flow

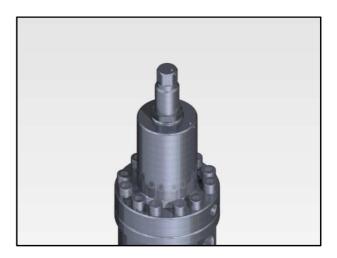
The regulator has good flow performance over the complete range of inlet and outlet pressures. Always ask Dutch Regulators for advice, if this regulator is the best choice for your application.

# **Adjusting the regulator**

The regulator comes standard with a knob. The threadpiece below the knob is designed for frequent adjustment.



Regulators that have a fixed setpoint, can be equipped with a locking cap.





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## **Section view**

The section view of the regulator gives an idea of the internals of the regulator.

- diaphragm sensing up to 20 bar
- piston sensing above 50 bar outletpressure

# **Gaugeports**

The regulator has standard one 1/4" NPT gaugeport to measure the controlled setpressure.

Option G1 and G2 are optional 1/4" NPT gaugeports, see for the position the pictures below.

On request it is possible to have other gaugeports.



#### **Standard**

Outlet gaugeport



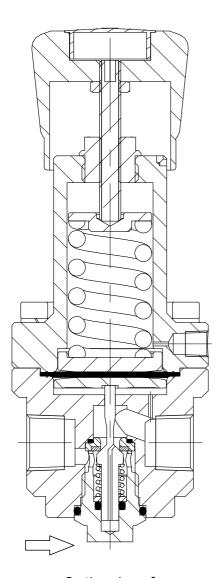
## **Option G1**

Extra Outlet gaugeport

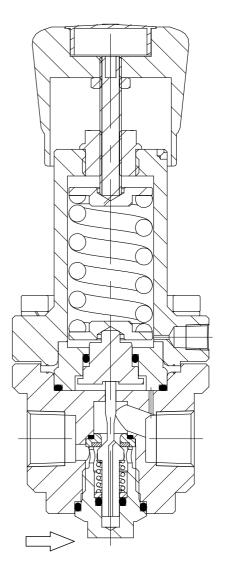


## **Option G2**

Extra Inlet gaugeport and Outlet gaugeport



Section view of: GRT15S-420N20-SSKN



Section view of: GRT15S-420N100-SSKN



**Model - GRT15S-420** 

# **Mounting holes**

The bottom of the regulator has two mounting holes M5 with 8 mm thread and a C-C distance of 35 mm.



# **Design pressures**

The regulator has a design pressure of 280 or 420 bar, where the design pressure applies for the inlet and outletside.

Depending on temperature or special wishes, the design pressure on the regulator could be different.

# **Typenumber explanation**

Example: GRT15S - 280N20 - SSKN

model	design pressure	connections	adjustable	material	seat	seals	options
GRT15S	<b>280</b> : 280 bar	<b>N</b> : 1/2" NPT	<b>3</b> : 0-3 bar	<b>SS</b> SS 316L	<b>K</b> kel-f	<b>N</b> nitrile	<b>G1</b> one extra
	<b>420</b> : 420 bar	<b>B</b> : 1/2" BSPP	8 : 0-8 bar		PCTFE	NBR	gaugeport
			<b>20</b> : 0-20 bar		P PEEK	<b>V</b> viton	<b>G2</b> two extra
			<b>50</b> : 0-50 bar			FKM	gaugeports
			<b>100</b> : 0-100 bar			<b>E</b> EPDM	L locking cap
			<b>280</b> : 0-280 bar				
			<b>420</b> : 0-420 bar				xxx codes for
							special option

All regulators are marked with a unique ID number, the exact configuration of the regulator is stored in this ID number. Always mention the ID number in case you need spare parts.

