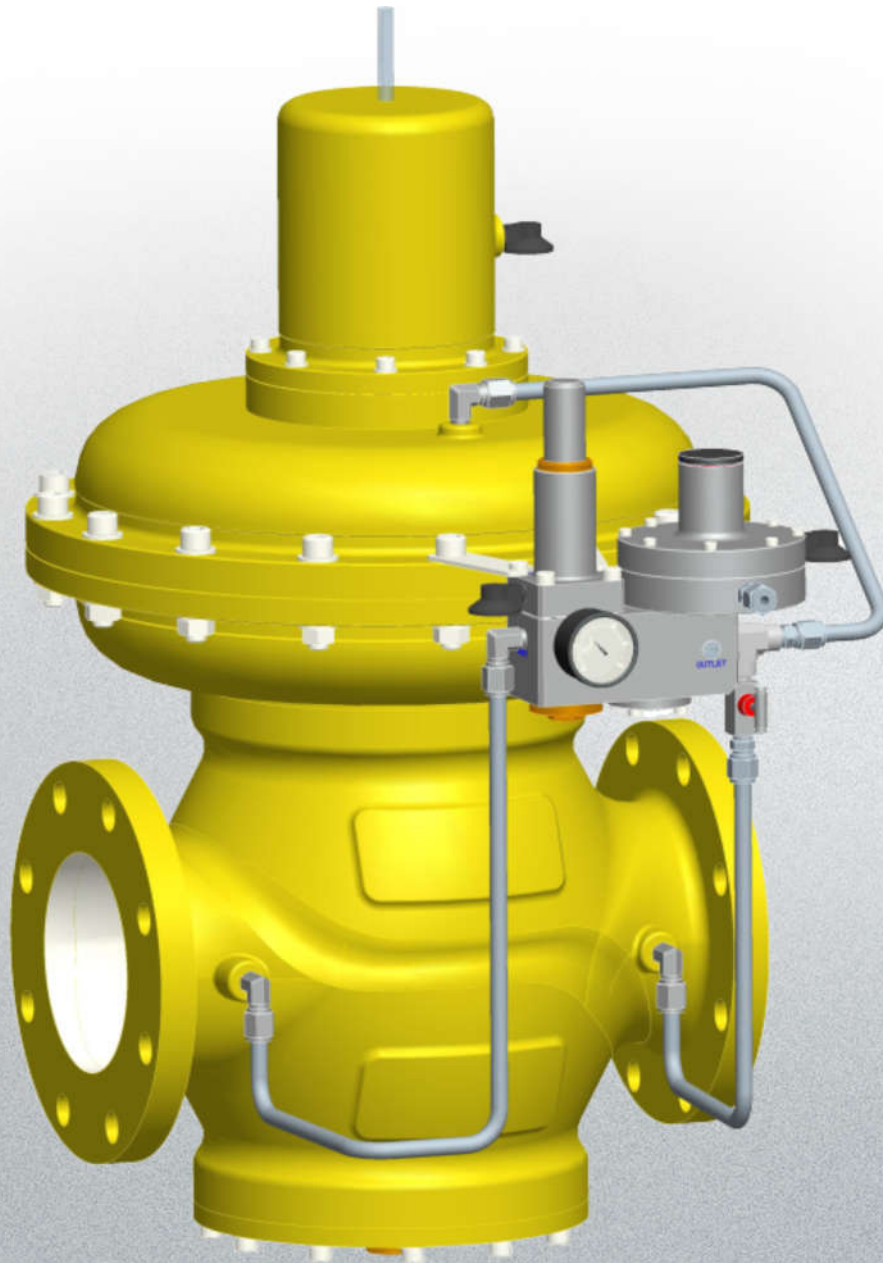# GOVERNOR 254 P
Series
Pressure Regulator Valve

GASCAT

INTRODUCTION

The GOVERNOR 254 P was developed by GASCAT for applications with low inlet pressure (up to 10 bar) in combination with low outlet pressures (10 to 1100 mbar), high sensetive and fast response

Many application on natural gas networks distribution, LGP and all non corrosive gaseous.

FEATURES

• Quick response

• Installation at any angle

• Wide operational pressure range

WORKING PRINCIPLE

The GOVERNOR 254 P working principle is based on the forces in equilibrium. The pressure to be controlled (outlet pressure) is transmitted by an sensing line installed downstream and acts under the diaphragm, where the under force will be in equilibrium with the piloting pressure force that acts over diaphragm.
Starting the gas consumption the pressure downstream will decrease as soon as in the sensing line and under the diaphragm. The piloting pressure force will move downward the obturator assembly allowing the gas passage through the valve body. In case of gas consumption stopping the valve will close.

Inlet Pressure
Outlet Pressure
Feeding Pressure
Loading Pressure
Atmostheric Pressure
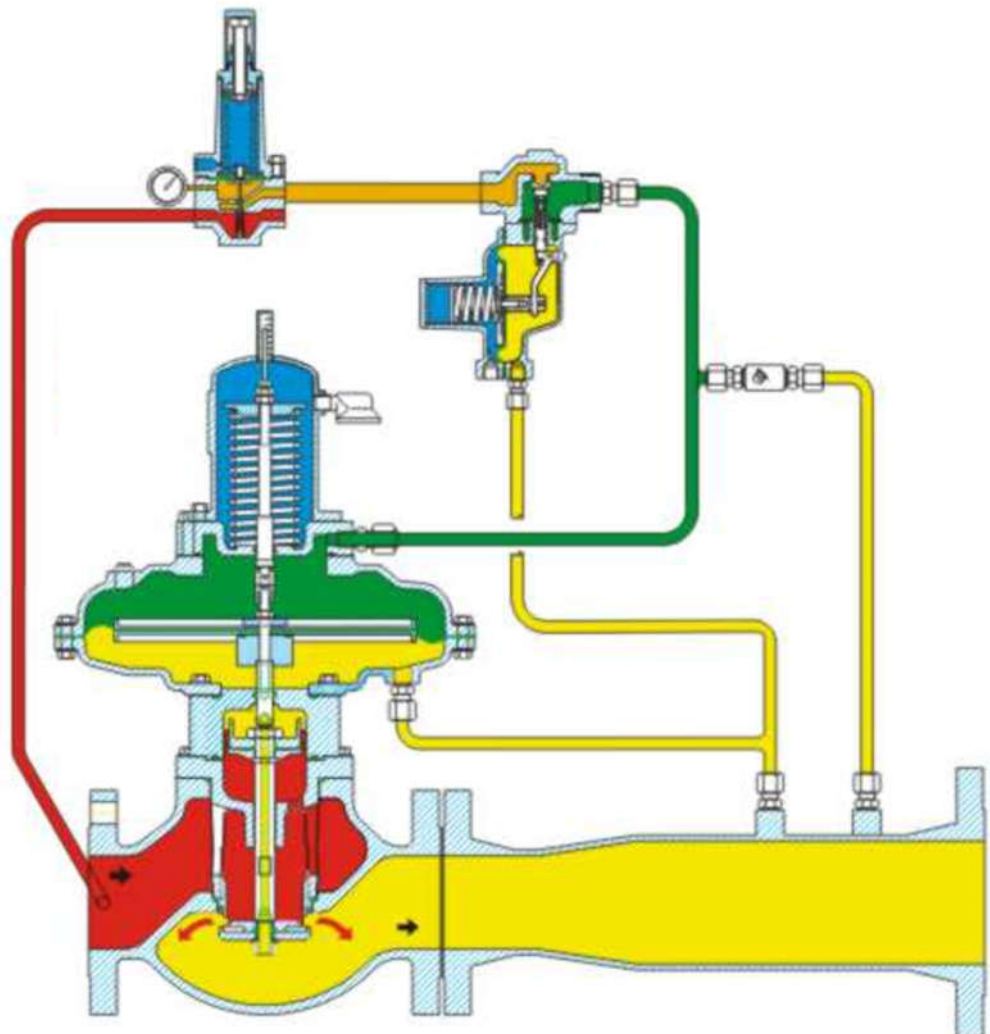
TECHNICAL CHARACTERISTICS

COMPONENT	MATERIAL
Body	Aluminium / Ductile Iron GGG40 (Optional)
Bottom Cover	Aluminium
Top Cover	Aluminium
Internals	Aluminium
Elastomers	BUNA-N (STD) FKM (Optional)

Note: For other material option, consult our Sales Department.

OPERATION LIMITS	
Maximum Inlet Pressure	10 bar
Outlet Pressure Range	10 mbar ~ 1100 mbar
Temperature Range	-20°C ~ +60°C (*)
AC - Acuraccy Class	Up to 10%
SG - Lock Up	Up to 5%

Note: GASCAT should be consulted for temperatures different than mentioned above.

CONNECTION	ND	CLASS
Flange ANSI B16.5	3", 4", 6" & 8"	125# RF / FF, 150#RF / FF PN16RF / FF

SPRING RANGE	SPRING COLOR	PILOT
10 - 25 mbar	Yellow	
20 - 130 mbar	Blue	
90 - 250 mbar	White and Gray	G51 or G80
230 - 400 mbar	Silver	
350 - 1100 mbar	Gray	

SIZING

The sizing of GOVERNOR P is based in the short equations from standard DIN EN 334 and floe behavior according to differential pressure.

Where:

Q = Flow in Nm³/h;

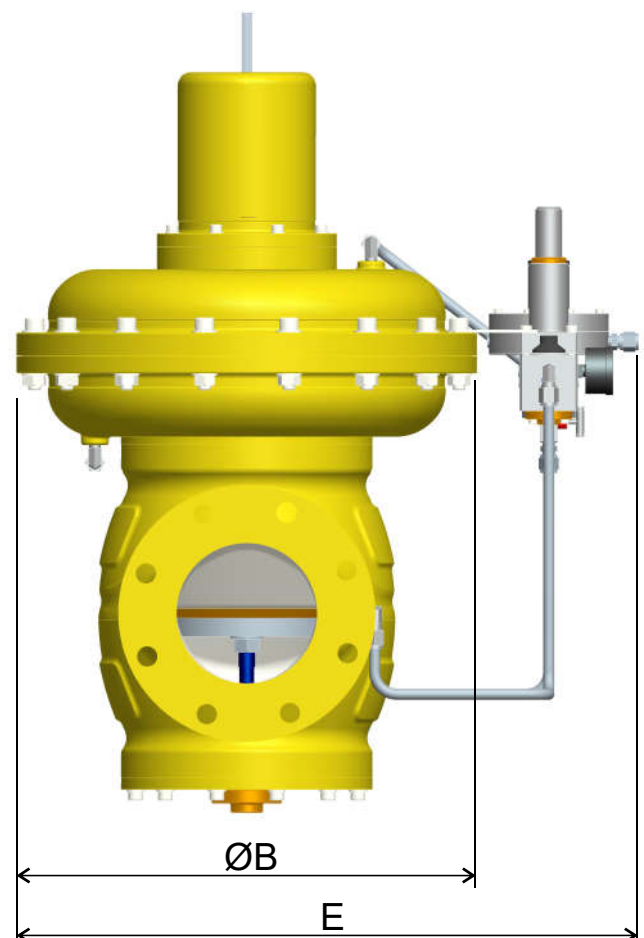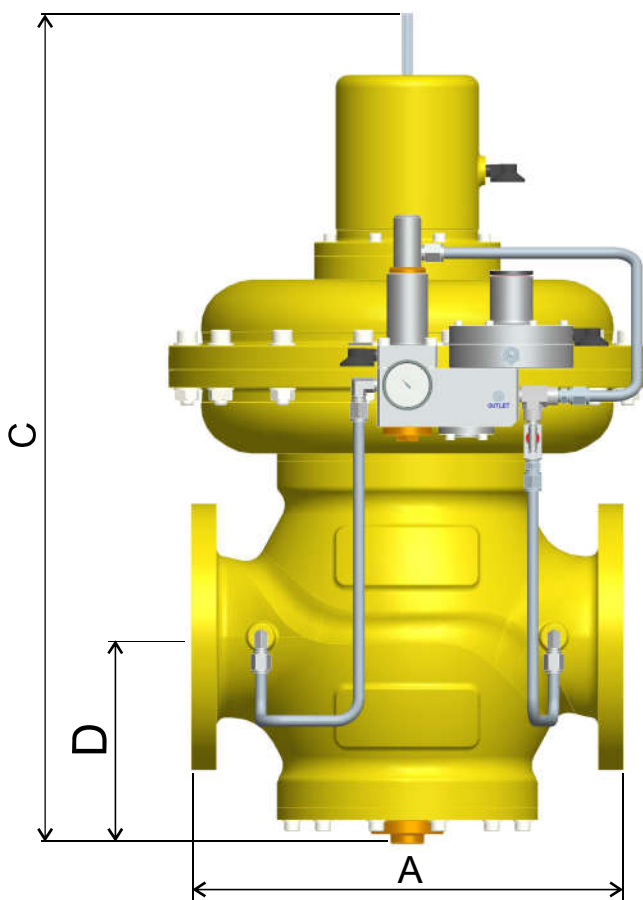P1 = Inlet pressure in bar absolute;

P2 = Outlet pressure in bar absolute;

KG = Regulator flowe coefficient;

SUB-CRITICAL FLOW	CRITICAL FLOW
$P_2 / P_1 \geq 0.53$	$P_2 / P_1 < 0.53$
$Q = KG \times \sqrt{P_2 \times (P_1 - P_2)}$	$Q = (KG \times P_1) / 2$

ND	KG
3"	3800
4"	6850
6"	15080
8"	28250

DIMENSIONS AND WEIGHTS

DIMENSIONS (mm)						WEIGHTS (kg)
ND	A	ØB	C	D	E	
3"	298	381	640	154	398	15
4"	352	451	754	180	465	64
6"	451	500	870	217	675	115
8"	543	662	1388	280	754	210

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