

# Seal Gas Booster

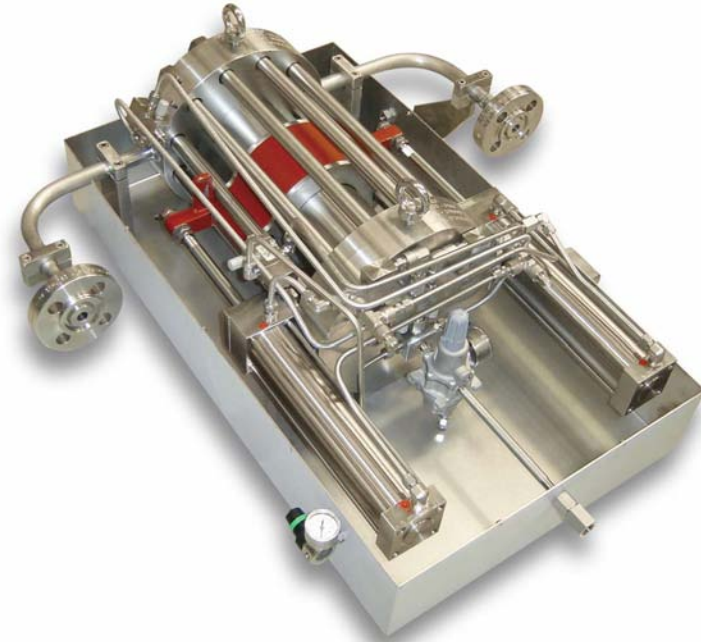
## DESCRIPTION

The magnetic booster is used to ensure seal gas flow to centrifugal compressor dry seals during compressor start-up or when compressor is in pressurized shutdown.

The booster is realized as a seal-less reciprocating compressor driven by two pneumatic actuators. The pneumatic actuators move a Taurus shape permanent high efficiency magnet. The piston of the reciprocating compressor is dragged by the external magnetic field, without any mechanical link. In this way the booster has a completely sealed construction, without the need of any seal system. It will be activated by means of a 2-way solenoid valve installed on pneumatic actuators air inlet. Booster assembly shall be suitable for horizontal or vertical mounting. Vertical mounting, anyhow, will be realized maintaining horizontal movement of the booster piston.

## DESIGN CONDITION

ITV SERIES		SGB 20	
RATINGS	MP VERSION	HP VERSION	
Design pressure	200 Bar-g	350 Bar-g	
Process fluid	Natural gas or others		
Mounting	Wall mounting (vertical with horizontal movement) or Horizontal		
Weight	Approx. Kg 220		
Design Temperature	80°C		
Design Flow	7,2 Am <sup>3</sup> /h @ 60 cycles per minute		
Boosting Delta P	1 bar		
Displacement	2.000 cm <sup>3</sup>		
Instruments air	min 4 - Norm 6 - max 9		
Maintenance Intervals	4.000 hours for checking - 8.000 hours for replacement		
Pneumatic motor air consumption	40 Sm <sup>3</sup> /h at 6 Bar-g air supply		
	28 Sm <sup>3</sup> /h at 4 Bar-g air supply		
Purge air consumption	3.5 Sm <sup>3</sup> /h		



## STANDARD CONNECTIONS

DESCRIPTION	TYPE
Booster Inlet / Outlet	Flanged type: 3/4" ANSI 2500 RJ
	3/4" ANSI 1500 RJ
	Threaded type: 3/4" NPT-F
Pneumatic motor instrument air inlet	1/2" NPT-F (on solenoid valve)
Purge instrument air inlet	1/2" NPT-F (on pressure reducer)
Solenoid valve electrical connection	1/2" NPT-F

## STANDARD MATERIALS

	MP VERSION	HP VERSION
	200 Bar-g	350 Bar-g
Cylinder	AISI 316	NITRONIC 50 BOHLER L334
Heads	AISI 316L	
O Rings	Viton FR58/90 Explosion-proof	
Studs and Nuts	AISI 316L	
Connection flanges	AISI 316L	AISI 316L
NACE MR0175 compliance	YES	NO

## DIMENSIONS

