

Scalable  
Modular  
Solution **Integrated**  
Safe  
Cost-effective

## Technology

### Operating Control Ratio :

1/29 - 1/12,5 - 1/6

**Balanced poppet** : any effects of inlet pressure loss on outlet pressure is considerably reduced.

<sup>1</sup> in accordance with the formula (2P+1) : PE = 2P + 1 bar  
Please, consult us if this principle is not applicable

## Technical data

<b>Working pressure</b>	370 bars maxi	5360 psi maxi	
<b>Pilot pressure</b>	0-10 bars	0-145 psi	
<b>Temperature range</b>	-20°C /+70°C	-4°F / +158°F	
<b>Outlet range</b>	up to 285 bars	up to 4130 psi	
<b>Inlet port</b>	1/4" F BSPP	3/8" F BSPP	1/2" F BSPP
<b>Outlet port</b>	1/4" F BSPP	3/8" F BSPP	1/2" F BSPP
<b>Seat size</b>	1,5 mm (unbalanced)	3 mm	5,4 mm
<b>DN (Nominal Diameter)</b>	12		
<b>Pressure gauge port</b>	2x 1/4" BSPP pre-tapped		
<b>Mounting</b>	All mounting positions possible		
	Allows integration with Alcrysafe® modular systems		

## function

A dome-loaded proportional regulator enables the operator to determine an outlet pressure, within its operating limits, which is kept constant despite any variations in inlet flow rates<sup>1</sup>.

## Application

Designed for High-Pressure gas uses, the Alcrysafe® dome-loaded proportional regulator can be employed in conjunction with the whole range of gases and liquids compatible with the component materials.

However, some specific on-site installation factors can limit possible uses of the pressure regulator.



## Dome-loaded proportional regulator Size1/HP/Brass

alcrysafe®

The Alcrysafe® Pressurised Equipment range has been developed in our in-house R&D team. Technical expertise and innovation combined to provide optimal performance and security standards for your high pressure industrial gas applications.

<b>Weight</b>	5,2 kg		
<b>Brackets</b>	Two tapped M6x8 on the underside face		
	Four Ø6 drillings for angle brackets lifting (angle brackets are optional)		
<b>Body material*</b>	Brass		
<b>Seat materials*</b>	PAI Torlon	PCTFE	Peek
<b>Gasket materials*</b>	Nitrile	FKM	EPDM
<b>Cleaning</b>	Inert Gas procedure MO-PROD0103 / Oxygen procedure MO-PROD0102		
<b>Documentation</b>	2.2 Certificate of Conformity (COC) according to EN 10204		
	General operating instructions		
<b>Finishing's on demand</b>	Drilled pressure gauge port		
<b>Options</b>	Mounting brackets		
	Flanges : Welded BW or Screwed BSPP (please refer to <i>Range of connectors</i> technical data sheet n°9111)		

\* others by request

**Recommendation** : we advise one sets the upstream filtration at 25µm minimum.  
Please, refer to the "Filter" data sheet n°2221.

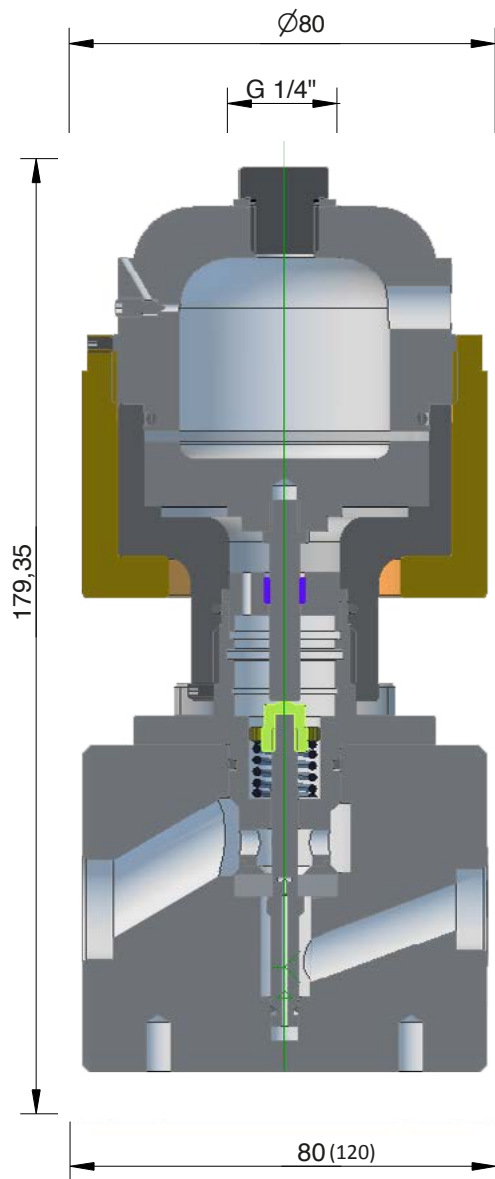
Dome-loaded  
proportional regulator  
Size1/HP/Brass

alcrysafe®

Data  
Sheet  
n°1321

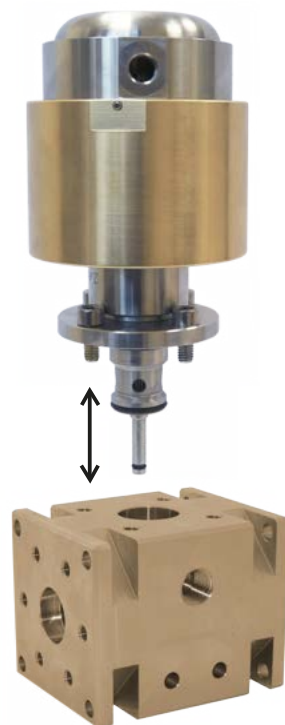
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## drawing



## f

fast&safe maintenance



### Maintenance cartridge

Safety, speed and cost-effective.  
On-site maintenance only takes a few minutes !

Designed under our **Comprehensive Safety norm** guarantees performance and comprehensive safety of the installation (refer to *Alcrysafe® range* technical notice)

### The Fast&safe maintenance cartridges offer unlimited scalability !

The regulation function, provided by the proportional regulator in this case can be easily reconfigured (dome-loaded, spring-loaded or multi-range regulator) to respond to new requirements for the installation.

## Order references

Standard configuration : Proportional regulator - AMD1HB1002  
Fast&safe cartridge - CMD1HS-002

Please refer to the table below for other Pressurised Equipment and cartridge configurations :

Gaskets	Nitrile	FKM	EPDM
<b>Seat</b>			
<b>PAI</b>	standard configuration	ref. + TV	ref. + TE
<b>PCTFE</b>	ref. + KN	ref. + KV	ref. + KE
<b>Peek</b>	ref. + PN	ref. + PV	ref. + PE

## Compatible gases\*

- Inert Gases
- Flammable Gases
- Oxidizing Gases
- Toxic Gases

\* Please, refer to one of our engineers



Size1/HP/Brass

Dome-loaded  
proportional regulator

alcrys safe®

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