

- > **Port size: G2**
- > **Robust design**
- > **Reliable operation for more than 20 years if maintenance program is being followed**

- > **Options are designed to tailor or customize D291 to application needs, hence increasing overall efficiency**



### Technical features

Ideal for variable inlet pressure and environmental temperature the D291 maintains stable downstream pressure control. The heavy duty construction makes the D291 perfect for arduous conditions and harsh environments. Suitable for medium and high pressure. It's manually adjustable, differential version, balanced design optional back pressure regulator

#### Applications:

- Gas distribution/mixing
- Pressure test rigs
- Marine industries
- Off shore / aggressive environments
- Oxygen use approved
- Compressor regulation
- Air, O<sub>2</sub>, CH<sub>4</sub> compressor

#### Medium:

Any gases, air, N<sub>2</sub>, O<sub>2</sub>, Ar, H<sub>4</sub>, H<sub>2</sub>, C<sub>2</sub>H<sub>2</sub>, CO<sub>2</sub>, N<sub>2</sub>O or some liquids

#### Maximum inlet pressure:

15 barg (217 psig) \*  
 100 barg (1450 psig) \*

#### Outlet pressure range:

0,3 ... 5 barg (4.3 ... 72 psig)  
 0,5 ... 100 barg (7.2 ... 1450 psig)

#### Flow rate indication:

Flow rate indication is given for an equivalent flow with air, in sonic conditions (P<sub>1</sub> > 2P<sub>2</sub>), which is 195 Nm<sup>3</sup>/h per Bar of absolute pressure downstream (internal Ø 20 mm and ports 2").

#### Leakage:

Helium leak tested:  
 Internal leak tight: >10<sup>-3</sup> mbar.l/sec  
 External leak tight: >10<sup>-4</sup> mbar.l/sec  
 Helium leak tested to 10<sup>-8</sup> atm.cm<sup>3</sup>/sec<sup>-1</sup> (on request)

#### Weight:

13 kg

#### Ambient/Media temperature:

-20 ... +50°C (-4 ... +122°F)

#### Materials:

Body: Brass or stainless steel  
 Valve insert: NBR, EPR or FPM  
 Seat: Brass or stainless steel

**Option selector**

**D291\*\*\*\*\*N\*\*\*\*\***

Main material	Substitute
Brass	L
Stainless steel	I
Maa. inlet pressure	Substitute
15 barg	C
100 barg	G
Outlet pressure range	Substitute
0,3 ... 5 barg	17
0,5 ... 100 barg	43
Valve material	Substitute
NBR	R
EPR	E
FPM	V
Seat material	Substitute
Brass	L
Stainless steel	I

Main options	Substitute
Standard version 20 mm	<b>2000</b>
Standard version 25 mm	<b>2001</b>
Dome with only G" 1/4 piloting port	<b>2009</b>
Hydraulic version 20 mm	<b>2023</b>
With electronic proportionnal control pilot D466 0-40 bar 4-20 mA	<b>2158</b>
Equipped with ISO DN25 PN40 swivelling flange and G 1/4" piloting port	<b>2030</b>
Equiped with manual piloting D420 directly flanged on the dome	<b>2036</b>

More options are available upon specific request

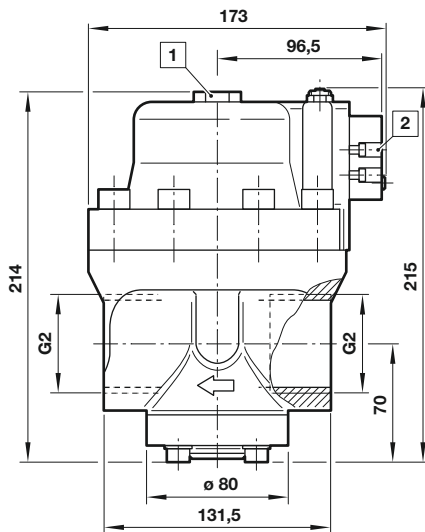
**Option selector service kits**

**★D291\*\*\*\*\***

Service kit	Substitute
Complete repair and maintenance kit with valve assembly	<b>K</b>
'O'rings only	<b>J</b>

Manufacture code	Substitute
Norgren internal use	
Elastomer	Substitute
NBR	<b>R</b>
EPR	<b>E</b>
FPM	<b>V</b>

**Dimensions**

 Dimensions in mm  
 Projection/First angle


- 1 Dome filling port
- 2 Needle valve piloting block (internal loading)

**Warning**

Do not use these products where pressures and temperatures can exceed those listed under »**Technical features/data**«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI Precision Engineering, IMF sas.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.