D290
Dome spring loaded regulator

- **Port size: G3**
- **Robust design**
- **Reliable operation for more than 20 years if maintenance program is being followed**
- **Options are designed to tailor or customize D290 to application needs, hence increasing overall efficiency**

Technical features

Ideal for variable inlet pressure and environmental temperature the maintains stable upstream pressure control pressure control. The heavy duty construction makes the B051 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, O2, CH4 compressor

Medium:
Any gases, air, N2, O2, Ar, H4, H2, C2H2, CO2, N2O or some liquids

Maximum inlet pressure:
15 bar (217 psi)*
100 bar (1450 psi)*

Opening pressure range:
0,3 ... 5 bar (4,3 ... 72 psi)
0,5 ... 100 bar (7,2 ... 1450 psi)

Flow rate indication:
Flow rate indication is given for an equivalent flow with air, under sonic conditions (P1>2P2), which is 500 Nm^3/h per Bar of absolute pressure downstream (internal Ø 35 mm and ports 3'').

Leakage:
Helium leak tested:
Internal leak tight:
$>10^{-3}$ mbar.l/sec
External leak tight:
$>10^{-4}$ mbar.l/sec
Helium leak tested to
10^{-8} $atm.cm^3/sec^{-1}$ (on request)

Weight:
45 kg

Ambient/Media temperature:
–20 ... +50°C (–4 ... +122°F)

Materials:
Body: Aluminium-bronze or stainless steel
Valve insert: NBR, EPR or FPM
Seat: Stainless steel

Option selector

D290★★★★N★I★★★★

Main material	Substitute
Aluminium-bronze	**B**
Stainless steel	**I**
Max. 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	**N**
EPR	**E**
FPM	**V**

Main options	Substitute
G1/8 inlet pressure port New standard version	**1700**
G1/8 inlet pressure port (35 mm seat) G3/8 back pressure port under the diaphragm	**1701**
Swivelling flanges ISO DN80 PN16 Outlet flange without back pressure port Main reducer D290BC17- -I1705	**1702**
Swivelling flanges ISO DN80 PN40 Outlet flange without back pressure port Main reducer D290BG43- -I1705 Range 0 ... 40 bar	**1703**
Inlet swivelling flange ISO DN80 PN40 Outlet swivelling flange ISO DN100 PN40 Main reducer D290BG43- -I1701 Range 0 ... 40 bar	**1704**
G1/8 inlet pressure port G3/8 back pressure port under the diaphragm Out of line 45° with the fitting axle	**1705**

Option selector service kits

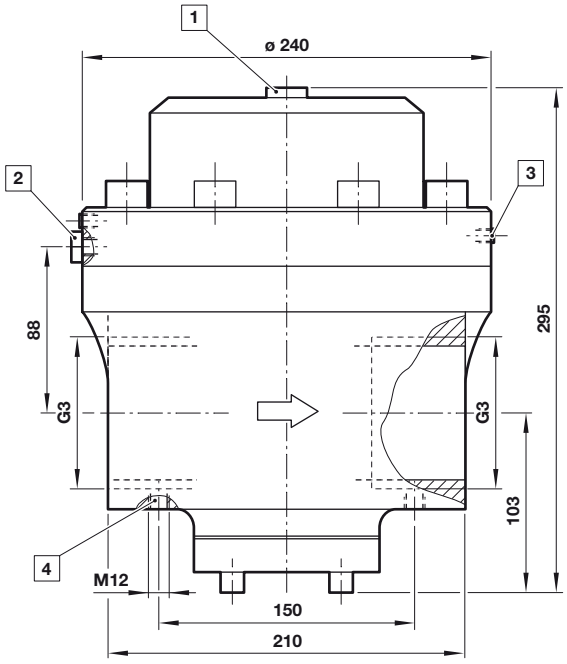
★D290★★★★★

Service kit	Substitute
Complete repair and maintenance kit with valve assembly	**K**
'O'rings only	**J**

Manufacture code	Substitute
Norgren internal use	
Elastomer	**Substitute**
NBR	**N**

Dimensions

Dimensions in mm
Projection/First angle



1 Dome filling or gauge port
2 Dome loading port
3 Dome venting port
4 Mounting threads

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 Norgren, 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.