



2820 SERIES

Spring Loaded Regulator, 1/2"
(DN15)



YOUR CREATIVE ENGINEERING PARTNER

2820 SERIES

Spring Loaded Regulator, 1/2"

The 2820 Series is a High Pressure Spring Loaded Pressure Regulator which provides accurate pressure control for medium flow applications. The 2820 Series regulator is suitable for gas applications up to 465 barg and liquid applications up to 690 barg. For gas applications, an internal filter provides protection against low levels of contamination. An F Series filter can be fitted upstream for additional protection. RS or RVA Series Relief Valves can be matched to the 2820 Series regulator to protect downstream systems. All regulators and associated products can be supplied fitted with pipe couplings or flanges as appropriate for the application.

HIGHLIGHTS

- > Accurate pressure setting
- > Low operating torque
- > Stable in high pressure drop / low flow situations
- > Sensitive pressure control
- > NACE compliant variants
- > Self-venting

IDEAL USES

- > Pressure test applications
- > Medium flow pressure reduction system
- > Breathing air systems

+70°C



Maximum Inlet
for Gas Applications
465
barg
(6,750 psig)

Maximum
Inlet for Liquid
Applications
690
barg
(10,000 psig)

Cv
0.6

FEATURES, SPECIFICATIONS & PRODUCT SPECIFICATION DATA

1. Thrust Bearing

> Non rising stem piston arrangement and large control knob combine to offer a low operating torque

2. Closed Spring Chamber

> To avoid atmospheric corrosion and contamination ingress

3. Main Spring

> Low rate main spring for accuracy

4. Piston Sensing Elements

> For outlet pressures above 58 barg

5. Self – Venting (Captured vent)

6. Diaphragm Sensing Element

> For low pressure applications for greater sensitivity and accuracy

7. Unbalanced Valve Stem

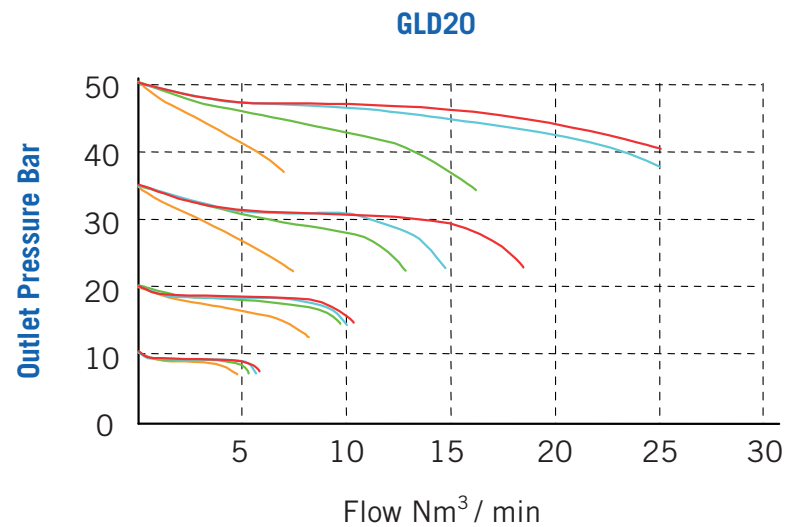
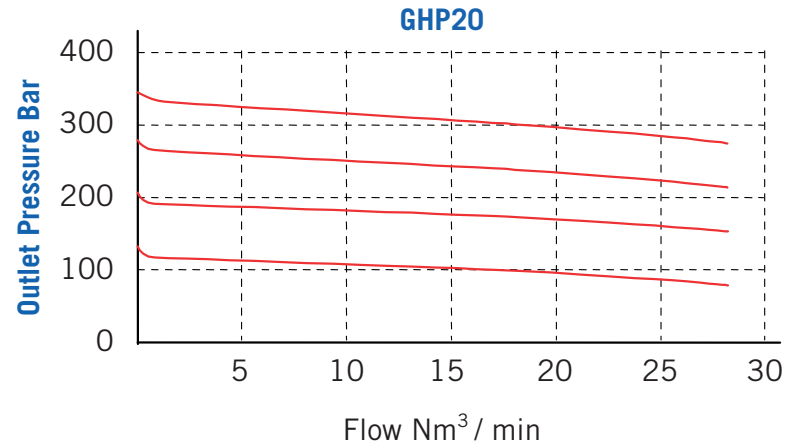
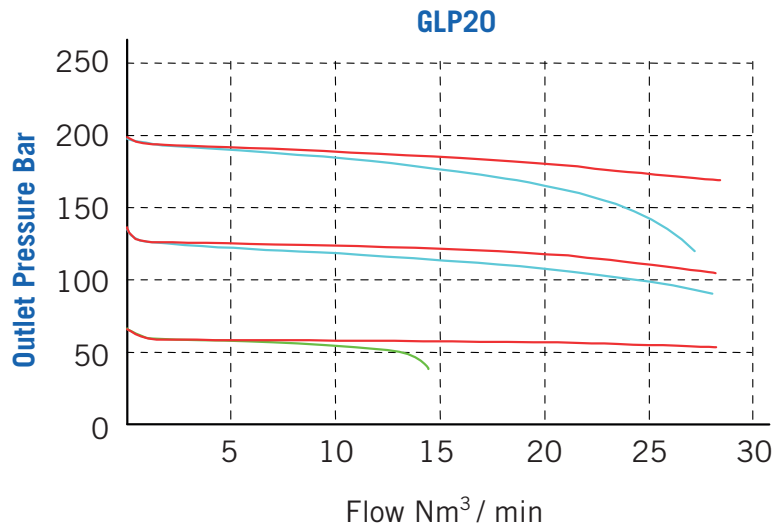
> For positive gas shut off



	GLD20	GLP20	GHP20
Function	Pressure Control		
Media	Gases and Hydraulic Fluid		
Inlet Rating Gas	465 barg (6,750 psig)		
Inlet Rating Liquid	690 barg (10,00 psig)		
Outlet Ranges	10 – 117 barg (150 – 250 psig) 16 – 27 barg (230 – 400 psig) 25 – 58 barg (370 – 850 psig)	48 – 103 barg (670 – 1,500 psig) 96 – 241 barg (1400 – 3,500 psig)	220 – 414 barg (3200 – 6,000 psig)
Supply Pressure Dependency	1.25%	7%	12%
Seat (mm)	6mm (1/4")		
Cv	0.6		
Leakage (seat)	Bubble Tight		
Temperature Range	-20°C to +70°C (-4 to + 158°F)		
Process Ports	1/2"		
Instrument Ports	1/2" (same type as process ports)		
Spill Port	ISO G3/8"		
Port Types	ISO G Aluminium (AL) NPT Stainless Steel (SS)		
Materials (body), Materials (other)	SS & AL, Nitrile / Peek (AL), Viton / Peek (SS)		
Weight	AL 2kg (4.5lbs) SS 4.5kg (10lbs)		

FLOW CHARACTERISTICS

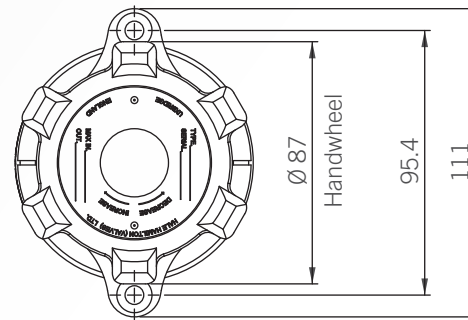
The regulator is set to a desired outlet pressure at zero flow using the control knob. Flow is induced by opening a metering valve downstream and the change in outlet pressure is measured without adjusting the knob. This is repeated for various inlet pressures.



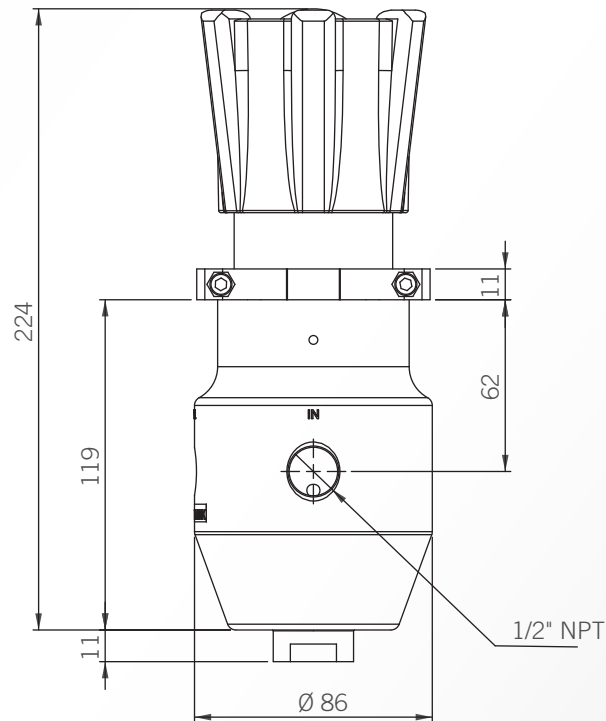
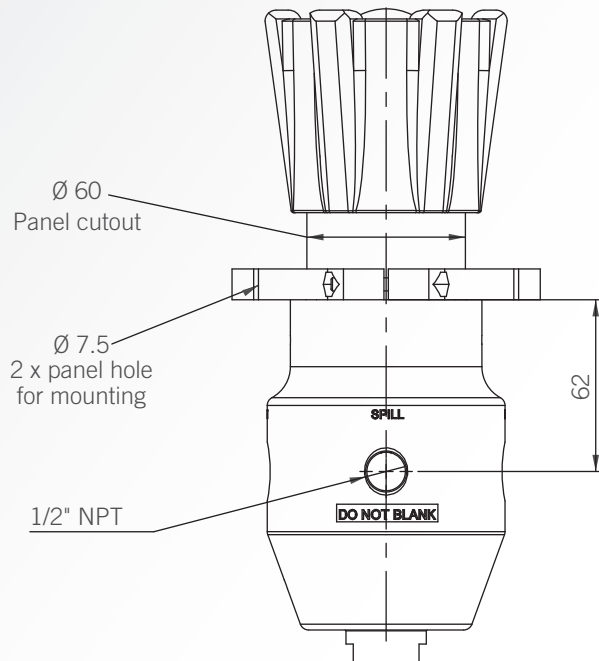
INLET PRESSURE KEY

- 400 bar
- 275 bar
- 140 bar
- 70 bar

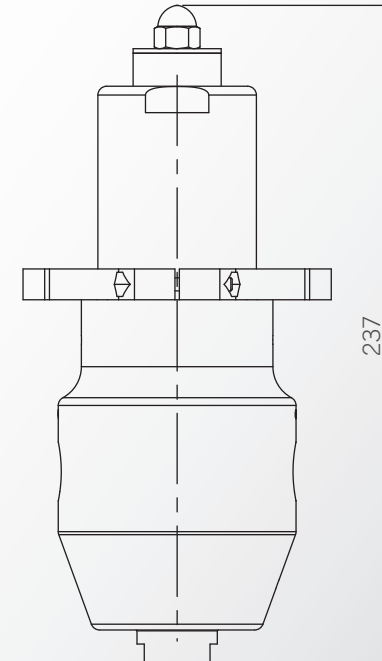
PRODUCT DIMENSIONS (IN MM)



HANDWHEEL



LOCKED VERSION



PRODUCT ORDERING CODES - GLD20, GLP20, GHP20

ORDERING CODE	TYPE	OUTLET RANGE	MEDIUM	MATERIAL	CONTROL OPTION	PORT
NB28151-1	GLD20 MK1	10.3 – 17.2 barg (150 – 250 psig)	Gas	Aluminium	Handwheel	2
NB28151-3	GLD20 MK1	25.5 – 58.6 barg (370 – 850 psig)	Gas	Aluminium	Handwheel	2
NB28151-4	GLD20 MK1	10.3 – 17.2 barg (150 – 250 psig)	Gas	Aluminium	Locked Outlet	2
NB28151-6	GLD20 MK1	25.5 – 58.6 barg (370 – 850 psig)	Gas	Aluminium	Locked Outlet	2
NB28152-1	GLD20 MK 2	25.5 – 58.6 barg (370 – 850 psig)	Gas	Aluminium	Handwheel	4
NB28152-2	GLD20 MK 2	10.3 – 17.2 barg (150 – 250 psig)	Gas	Aluminium	Handwheel	4
NB28152-3	GLD20 MK2	25.5 – 58.6 barg (370 – 850 psig)	Gas	Aluminium	Handwheel	4
NB28157-1	GLD20 MK7	10.3 – 17.2 barg (150 – 250 psig)	Gas	Stainless Steel	Handwheel	4
NB28157-2	GLD20 MK7	15.9 - 27.6 barg (230 – 400 psig)	Gas	Stainless Steel	Handwheel	4
NB28157-3	GLD20 MK7	25.5 – 58.6 barg (370 – 850 psig)	Gas	Stainless Steel	Handwheel	4
NB28158-1	GLD20 MK8	10.3 – 17.2 barg (150 – 250 psig)	Gas	Stainless Steel	Handwheel	4
NB28158-10	GLD20 MK8/HYD	10.3 – 17.2 barg (150 – 250 psig)	Liquid	Stainless Steel	Handwheel	4
NB28158-11	GLD20 MK8/HYD	15.9 – 27.6 barg (230 – 400 psig)	Liquid	Stainless Steel	Handwheel	4
NB28158-12	GLD20 MK8/HYD	25.5 – 58.6 barg (370 – 850 psig)	Liquid	Stainless Steel	Handwheel	4
NB28158-6	GLD20 MK8	25.5 – 58.6 barg (370 – 850 psig)	Gas	Stainless Steel	Locked Outlet	4
NB28201-1	GLP20 MK1	48.3 – 103.4 barg (700 – 1,500 psig)	Gas	Aluminium	Handwheel	2
NB28202-1	GLP20 MK2	48.3 – 103.4 barg (700 – 1,500 psig)	Gas	Aluminium	Handwheel	4
NB28202-2	GLP20 MK2	96.5 – 241.4 barg (1,400 – 3,500 psig)	Gas	Aluminium	Handwheel	4
NB28202-5	GLP20 MK2	48.3 – 103.4 barg (700 – 1,500 psig)	Gas	Aluminium	Limit Stop	4
NB28202-6	GLP20 MK2	96.5 – 241.4 barg (1,400 – 3,500 psig)	Gas	Aluminium	Limit Stop	4
NB28207-10	GLP20 MK7	96.5 – 241.4 barg (1,400 – 3,500 psig)	Gas	Stainless Steel	Limit Stop	2
NB28207-2	GLP20 MK7	96.5 – 241.4 barg (1,400 – 3,500 psig)	Gas	Stainless Steel	Handwheel	2
NB28207-7	GLP20 MK7	48.3 – 103.4 barg (700 – 1,500 psig)	Liquid	Stainless Steel	Handwheel	2
NB28207-8	GLP20 MK7	96.5 – 241.4 barg (1,400 – 3,500 psig)	Liquid	Stainless Steel	Handwheel	2
NB28208-1	GLP20 MK8	48.3 – 103.4 barg (700 – 1,500 psig)	Gas	Stainless Steel	Handwheel	4
NB28208-2	GLP20 MK8	96.5 – 241.4 barg (1,400 – 3,500 psig)	Gas	Stainless Steel	Handwheel	4
NB28208-3	GLP20 MK8	48.3 – 103.4 barg (700 – 1,500 psig)	Gas	Stainless Steel	Locked Outlet	4
NB28208-4	GLP20 MK8	96.5 – 241.4 barg (1,400 – 3,500 psig)	Gas	Stainless Steel	Locked Outlet	4
NB28208-7	GLP20 MK8/HYD	48.3 – 103.4 barg (700 – 1,500 psig)	Liquid	Stainless Steel	Handwheel	4
NB28208-8	GLP20 MK8/HYD	96.5 – 241.4 barg (1,400 – 3,500 psig)	Liquid	Stainless Steel	Handwheel	4
NB28252-1	GHP20 MK2	220 – 414 barg (3,200 – 6,000 psig)	Gas	Aluminium	Handwheel	2
NB28258-1	GHP20 MK8	220.7 – 413.8 barg (3,200 – 6,000 psig)	Gas	Stainless Steel	Handwheel	4
NB28258-2	GHP20 MK8	220.7 – 413.8 barg (3,200 – 6,000 psig)	Gas	Stainless Steel	Locked Outlet	4
NB28258-4	GHP20 MK8/HYD	220.7 – 413.8 barg (3,200 – 6,000 psig)	Liquid	Stainless Steel	Handwheel	4
NB28258-5	GHP20 MK8/HYD	220.7 – 413.8 barg (3,200 – 6,000 psig)	Liquid	Stainless Steel	Locked Outlet	4

PRODUCT ORDERING INFORMATION

When placing an enquiry please advise the following:

- > Inlet Pressure
- > Outlet Pressure
- > Flow Rate
- > Fluid Temperature
- > Media
- > Certification and QA Requirements
- > Locked Outlet
- > Limit Stop on Outlet