

PRESSURE REGULATORS

NON CORROSIVE GASES



TECHNICAL DATA

- INLET PRESSURE
200 BAR MAXIMUM
- DELIVERY PRESSURE
ADJUSTABLE 1 TO 150 BAR
- FLUID MEDIA
NON CORROSIVE GASES
- TEMPERATURE RANGE
-40°C TO +70°C
- BODY PORTS
1/4" / 1/2" NPT FEMALE
- PRESSURE GAUGES
50 MM / 65 MM DIAMETER
- WETTED AREA PARTS
ULTRASONICALLY CLEANED
CORROSION RESISTANCE

GAS SERVICE

- ACETYLENE
- C. N. G.
- HYDROGEN
- L. P. G.
- CARBON DIOXIDE
- AIR
- ARGON
- HELIUM
- NITROGEN
- OXYGEN

MATERIAL OF CONSTRUCTION

- BODY / BONNET
FORGED / BAR - BRASS
- POPPET
STAINLESS STEEL
- SEAT / SEAL
NYLATRON
- DIAPHRAGM
REINFORCED FABRIC
SYNTHETIC RUBBER
- PRESSURE ADJ. SCREW
STAINLESS STEEL

APPLICATION

- BRAZING
- CUTTING
- HEATING
- WELDING
- BEVERAGES
- BUBBLING CONTROL
- CALORIMETRY
- CHROMATOGRAPHY
- PROCESS CONTROL
- PURGING
- RESEARCH LAB.

CORRECTION FACTOR FOR GASES OTHER THAN AIR

• ACETYLENE	= 1.050
• AIR	= 1.000
• ARGON	= 0.852
• C. N. G.	= 1.340
• CARBON DIOXIDE	= 0.810
• HELIUM	= 2.690
• HYDROGEN	= 3.790
• NITROGEN	= 1.015
• OXYGEN	= 0.951
• PROPANE	= 0.810

THE PROVEN RELIABILITY OF WELDCUT PRESSURE REGULATING VALVES PROVIDE ONE COMPLETE ANSWER WHEREVER PRECISION CONTROLS ARE REQUIRED.

PRESSURE REGULATOR

SINGLE STAGE

TWO STAGE

IS : 6901 - 1988

ADJUSTABLE DELIVERY PRESSURE

- 1 BAR
- 2 BAR
- 4 BAR
- 8 BAR



300 SERIES



400 SERIES

FLOW CAPACITY : CV = 0.30 (MAX)
ESEOD = 3.25 MM

RISE RATE : 0.005 BAR PER 10 BAR INLET DECAY

ADJUSTABLE DELIVERY PRESSURE

- 10 BAR
- 15 BAR
- 20 BAR
- 25 BAR



3000 SERIES



4000 SERIES

INLET - IS : 3224 - 1979

OUTLET - IS : 6016 - 1982

HOW TO ORDER

X

XX

XXX

XXXX

XXXXX

BASIC MODEL
S - SINGLE STAGE
T - TWO STAGE

CODE	SERIES
3	300 / 3000
4	400 / 4000

CODE	GAS SERVICE
DA	ACETYLENE
BP	L.P.G.
CA	AIR
AR	ARGON
CD	CARBON D.
HE	HELIUM
HY	HYDROGEN
NG	NATURAL GAS
NI	NITROGEN
OX	OXYGEN

CODE	DELIVERY
01	1 BAR
02	2 BAR
04	4 BAR
08	8 BAR
10	10 BAR
15	15 BAR
20	20 BAR
25	25 BAR

OPTIONAL FEATURES	
CODE	DESCRIPTION
N	NEEDLE VALVE
R	NON-RETURN
K	REPAIR KIT
O	ANY OTHER

EXAMPLE

SDA - 301

SINGLE STAGE
ACETYLENE GAS SERVICE
REGULATOR
SUITABLE TO OPERATE
MAXIMUM DELIVERY PRESSURE
1 BAR.

TOX - 408

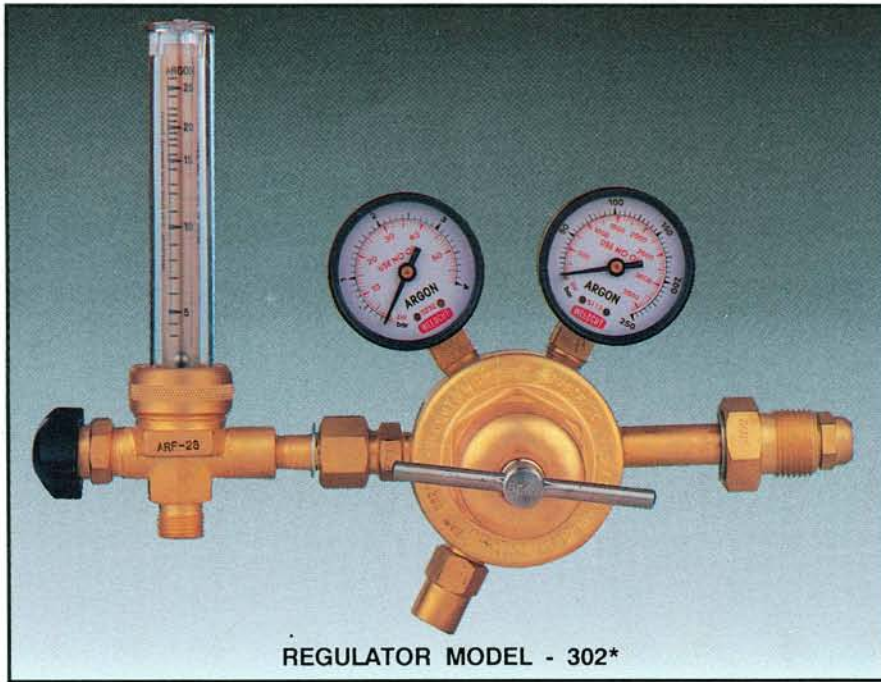
TWO STAGE
OXYGEN GAS SERVICE
REGULATOR
SUITABLE TO OPERATE
MAXIMUM DELIVERY PRESSURE
8 BAR.

PRESSURE CONVERSION CHART

BAR	KPA	PSI	KGF / CM ²
1	100	14.504	1.0197
0.01	1	0.14504	0.01019
0.06894	6.8948	1	0.07031
0.98068	98.068	14.223	1

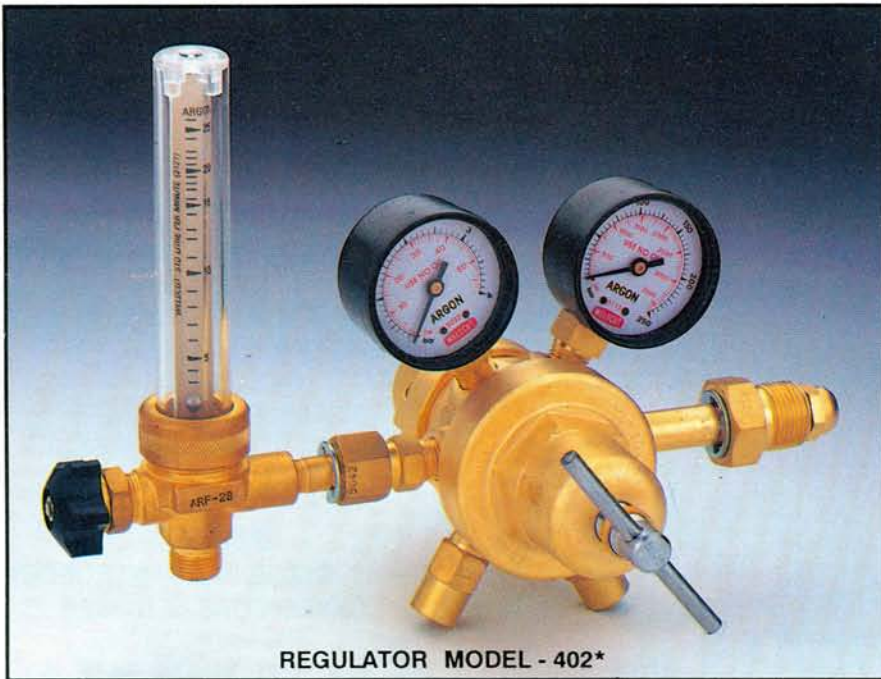
PRESSURE REGULATOR WITH FLOWMETER

SINGLE STAGE



REGULATOR MODEL - 302*

TWO STAGE



REGULATOR MODEL - 402*

HOW TO ORDER

	X	XX	XXX	XXXX
CODE	GAS SERVICE			
DA	ACETYLENE			
BP	L.P.G.			
CA	AIR			
AR	ARGON			
CD	CARBON D.			
HE	HELIUM			
HY	HYDROGEN			
NI	NITROGEN			
OX	OXYGEN			

FLOWMETER
CODE - F

CODE	REGULATOR
3	SINGLE STAGE
4	TWO STAGE

CODE	FLOW	RANGE*
45	DA	5 - 45
30	BP	3 - 30
40	CA	4 - 40
28	AR	3 - 26
28	CD	3 - 25
54	HE	10 - 110
19	HY	15 - 150
42	NI	4 - 42
38	OX	4 - 38

EXAMPLE

- ARF - 328 - SINGLE STAGE ARGON GAS REGULATOR WITH FLOWMETER FLOW RANGE 3 - 26 LPM
 ARF - 28 - ARGON GAS FLOWMETER FLOW RANGE 3 - 26 LPM

ON REQUEST

* OTHER REGULATOR MODEL
 + OTHER FLOW RANGE

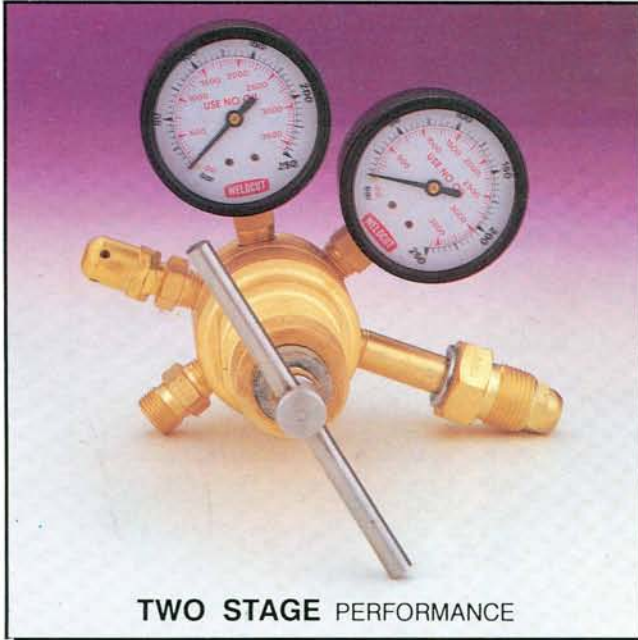
CONVERSION TABLE

UNITS OF FLOW

TO OBTAIN	GPM	L / MIN	CFM	M ³ / MIN
UNITS X FACTOR				
GPM (GALLONS PER MINUTE - USA GALS.)	1.0	3.785	0.1337	3.785 X 10 ⁻³
L / MIN. (LITRES PER MINUTE)	0.264	1.0	0.035	1.0 X 10 ⁻³
CFM (CUBIC FEET PER MINUTE)	7.481	28.32	1.0	28.32 X 10 ⁻³
M ³ / MIN. (CUBIC METRE PER MINUTE)	264.2	1000	35.31	1.0

SINGLE STAGE - BALANCE POPPET

PISTON TYPE
HIGH PRESSURE REGULATOR
 6000 SERIES



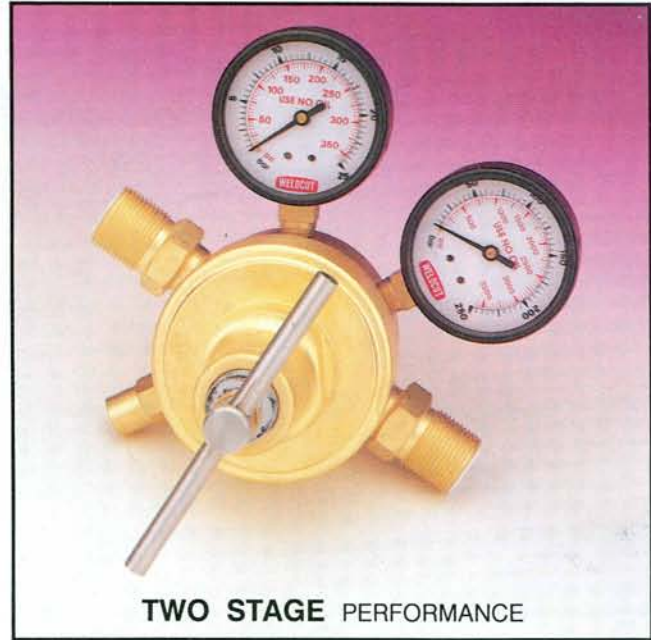
TWO STAGE PERFORMANCE

FLOW CAPACITY : CV = 0.42 (MAX)
 ESEOD = 3.8 MM
 RISE RATE : 0.015 BAR PER 10 BAR INLET DECAY

ADJUSTABLE DELIVERY PRESSURE

- 30 BAR • 100 BAR
- 50 BAR • 150 BAR

DIAPHRAGM TYPE
HIGH FLOW REGULATOR
 7000 SERIES



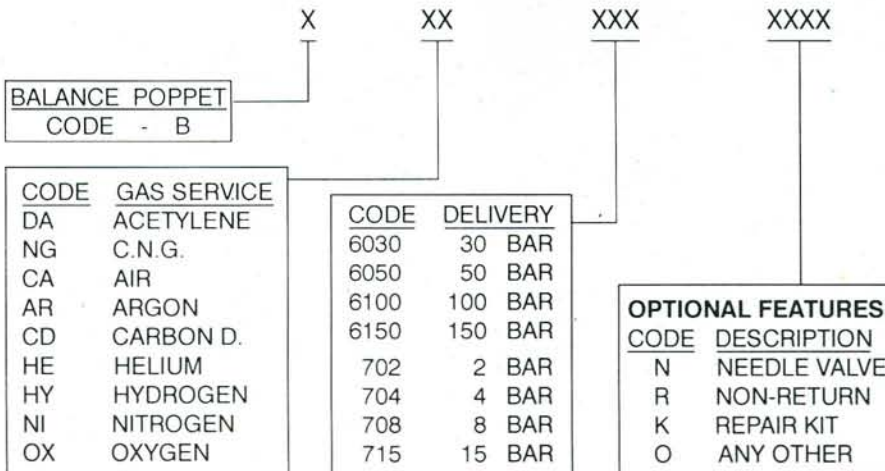
TWO STAGE PERFORMANCE

FLOW CAPACITY : CV = 1.65 (MAX)
 ESEOD = 7.5 MM
 RISE RATE : 0.03 BAR PER 10 BAR INLET DECAY

ADJUSTABLE DELIVERY PRESSURE

- 2 BAR • 8 BAR
- 4 BAR • 15 BAR

HOW TO ORDER



EXAMPLE

BNI - 6150
 SINGLE STAGE BALANCE POPPET
 NITROGEN GAS SERVICE
 REGULATOR
 SUITABLE TO OPERATE
 MAXIMUM DELIVERY PRESSURE
150 BAR

BOX - 715
 SINGLE STAGE BALANCE POPPET
 OXYGEN GAS SERVICE
 REGULATOR
 SUITABLE TO OPERATE
 MAXIMUM DELIVERY PRESSURE
15 BAR

IN VIEW OF CONTINUOUS DEVELOPMENT, WE RESERVE THE RIGHT TO MODIFY THE DESIGN AND / OR DIMENSIONS WITHOUT NOTICE.