IMC (TOP ENTRY)



RED OX

More Expertise. Less Emissions.

VRG Controls has partnered with Oxford Flow to provide revolutionary new regulation technology to meet the needs of today's gas pipelines and natural gas utilities. The Red Ox Regulators brand is the exclusive distributor in the USA of Oxford Flow based natural gas applications. Oxford Flow and Red Ox have "grabbed the bull by the horns" to provide innovative gas regulation solutions that ensure superior performance while exceeding the environmentally friendly demands of the industry.

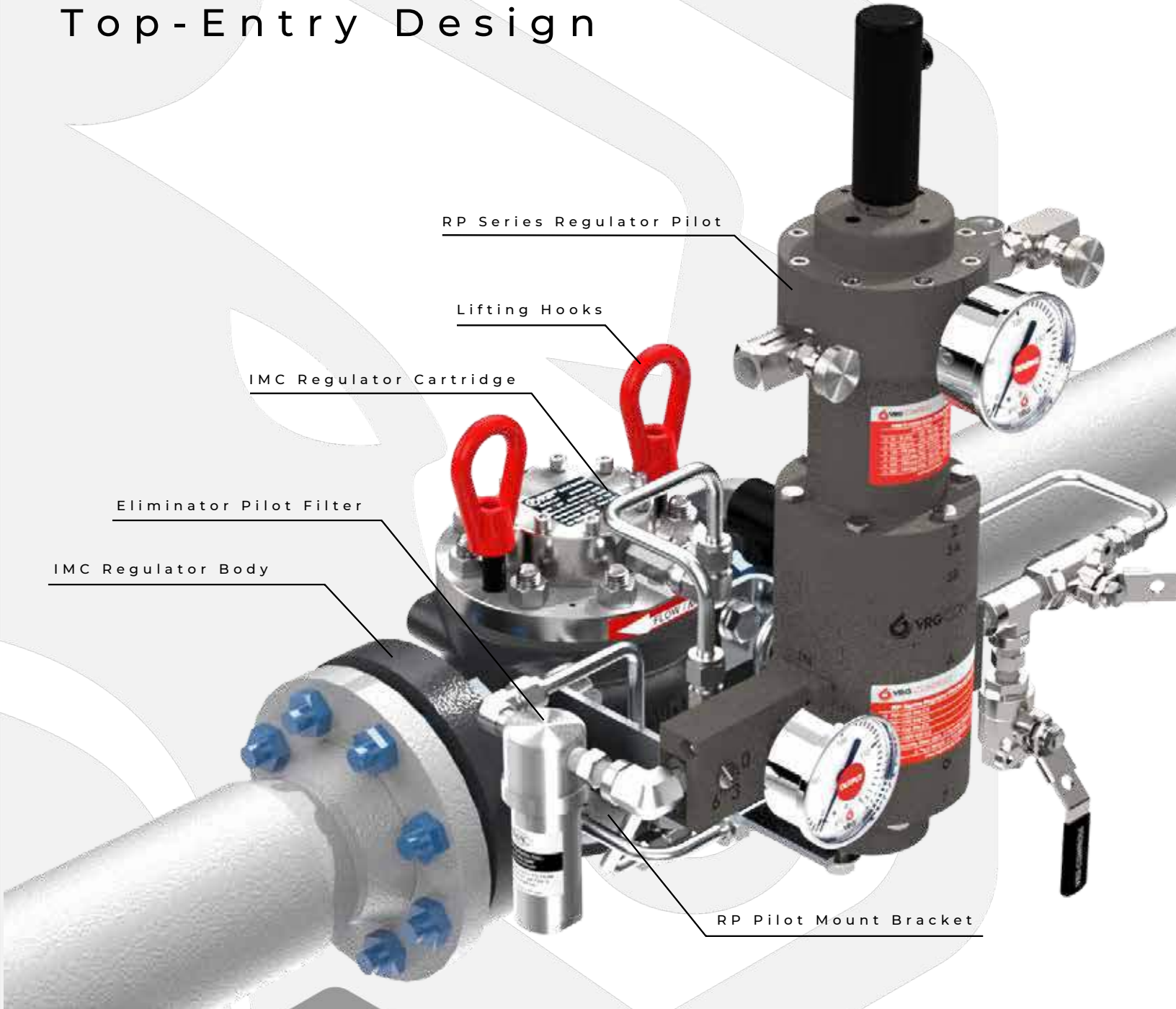
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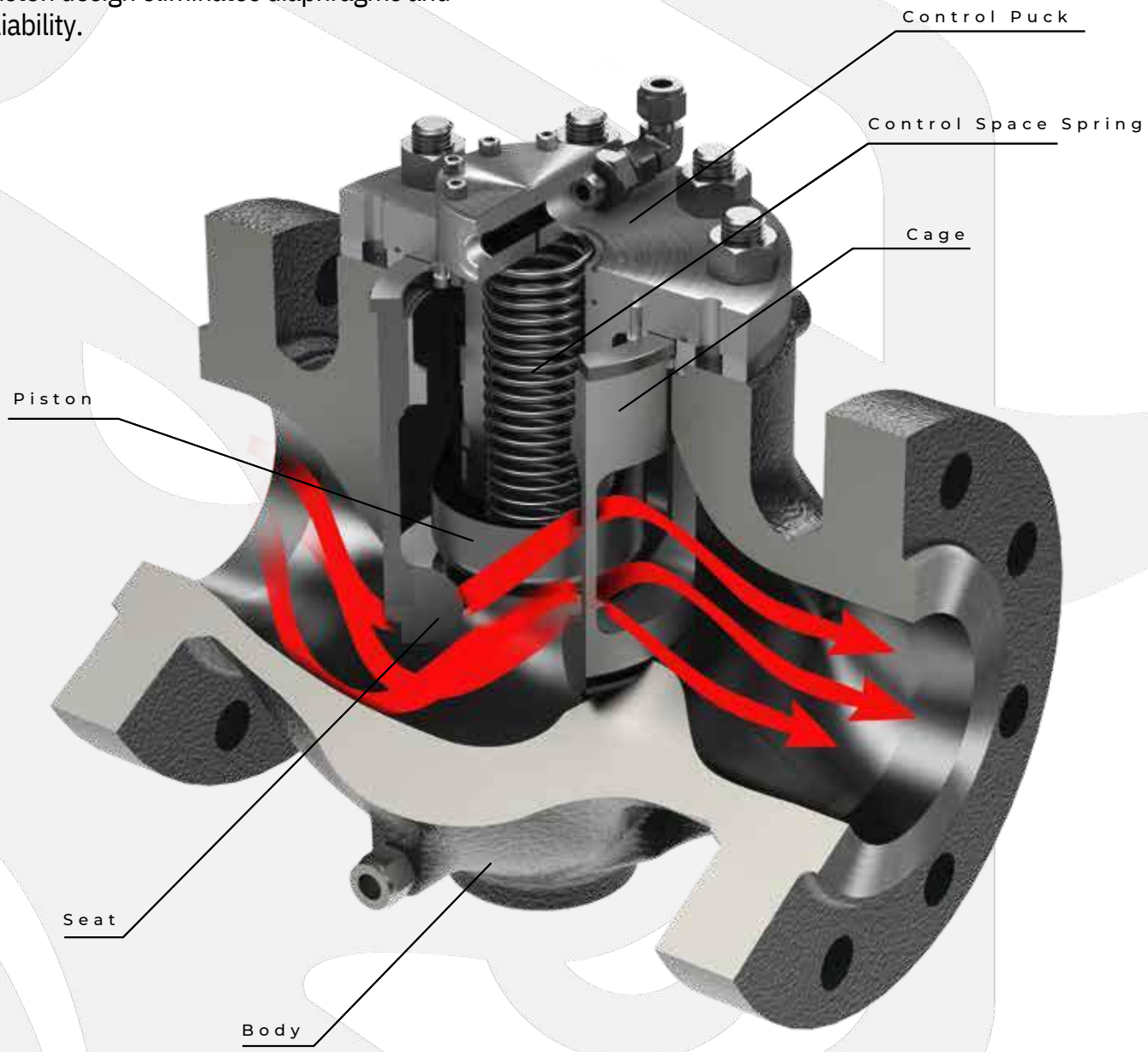
High Performance Gas Control in Convenient Top-Entry Design



IMC Series Top Entry Flanged Regulator

Single Moving Part. No Diaphragm.

The Red Ox IMC incorporates a unique top-entry cartridge con guration that ensures easy maintenance. The patented piston design eliminates diaphragms and ensures reliability.



IMC Series Top Entry Flanged Regulator



Top Entry Convenience

The Red Ox IMC features a top-entry design commonly requested by operators to accommodate e cient maintenance protocol. The simple design of IMC regulator can be rebuilt rapidly without the need to remove the RP Regulator Pilot. E ciency saves time! E ciency saves money!

Table 1.0 - IMC Series – Key Specifications

Size	NPS 2, 3, 4, 6, 8 (DN50 to DN200)
Pressure Classes	150, 300, 600 ANSI*
Connections	RFFE Per ASME B16.5
Temperature Range	-20 to 180°F (-29 to 82°C)
Flow Profile	Linear
Leakage	ANSI FCI 70-2: Class VI
Lock UpClass	Bubble Tight
Accuracy Class	±1.0% or better
Instrument Ports	0.250 Female NPT/ 0.375 BSPP (Loading)
Body Ports	0.250 Female NPT (QTY 2 Upstream / QTY 2 Downstream)
Face-Face Dimensions	Per ANSI / ISA-75.08.01-2016

NOTES:
1 - * Refer to Table 3.0 for nominal size and ANSI Class rang combinaons.

Table 2.0 - IMC Series - Standard Materials of Construction:

Component	Material
Body	WCC Carbon Steel
Cap	316L SS
Trim	316L SS
Fittngs	316L SS
Seat	Viton (FKM)* / Buna-N (NBR)
Static Seals	Viton (FKM)* / Buna-N (NBR)
Piston Seal	Viton (FKM) / Buna-N (NBR)*

NOTES:
1 - * Indicates Standard Issue Material for Stocked Product
2 - Alternate Materials Available Upon Request

Table 3.0 - IMC Series / 600 ANSI RFFE – Key Dimensions:

Note: Weightdoesnotincludecontrolinstrumentationorotheraccessories.

Nominal Size	Rating	Face-Face Dims	Weight
in (mm)	*(--)*	*in (mm)*	*Lbs (kg)*
2 (50)	150 CL FLG	10.00 (254)	54 (24.5)
2 (50)	300 CL FLG	10.50 (266)	59 (26.6)
2 (50)	600 CL FLG	11.30 (286)	62 (28.2)
3 (80)	150 CL FLG	11.70 (298)	97 (44.1)
3 (80)	300 CL FLG	12.50 (318)	106 (48.2)
3 (80)	600 CL FLG	13.30 (337)	112 (50.9)
4 (100)	150 CL FLG	13.90 (352)	173 (78.5)
4 (100)	300 CL FLG	14.50 (368)	191 (86.4)
4 (100)	600 CL FLG	15.50 (394)	214 (96.4)
6 (150)	150 CL FLG	N/A	N/A
6 (150)	300 CL FLG	18.62 (473)	393 (178)
6 (150)	600 CL FLG	20.00 (508)	448 (203)
8 (200)	150 CL FLG	N/A 22.38 (568)	N/A 500 (227)
8 (200)	300 CL FLG	24.00 (610)	650 (295)
8 (200)	600 CL FLG		

Table 4.0 - IMC Series – Capacities & Sizing Data:

IMC SIZE *in (mm)*	KV	KG	CV	CG
2 (50)	43.4	1521	50.2	1446
3 (80)	94.2	3217	108.9	3058
4 (100)	148.8	5284	172.0	5023
6 (150)	307.2	10744	355.0	10213
8 (200)	473.5	16653	547.2	15830

COMPATIBLE CONTROL DEVICES



VRG RP-SN-CS

Regulator Pilots: VRG Controls RP-SN-CS Regulator Pilots are the perfect complement to Red Ox Regulators for the most demanding pressure control applications. The CS Closed Spring sensing chamber protects the Control Spring from aggressive environments and ensures optimum pressure control accuracy in installations like power plants, industrial gas feeds and pipeline applications. Available Setpoint Ranges: 3.0 1500 psig (21 10,342 kPA)



VRG RP-SN-OS

Regulator Pilots: VRG Controls RP-SN-OS Regulator Pilots are well suited for use with Red Ox Regulators for high performance pressure control applications. The OS Open Spring design provides high performance in a moderate cost platform and ensures very good pressure control accuracy in installations like gas utility and pipeline applications. Available Setpoint Ranges: 9.0 700 psig (62 4826 kPA) power supply. The unit can lock last loading pressure upon loss of signal or power supply.



Oxford Flow PRX2 Pilots

Reducing Pilots: Oxford Flow s PRX2 are well suited for use with Red Ox Regulators for cost-effective pressure control applications. The PRX2 design features 100% 316 Stainless Steel Construction in a moderate cost platform and ensures good pressure control accuracy in installations like gas utility applications. Available Setpoint Ranges: 0.15-1000 psig (1-7000 kPa)



RCV Research Control Valves

The Model RCV research Control Valve is a pneumatically operated control valve that is used in conjunction with Red Ox Regulators to provide control of a variety of processes. The RCV is typically used for flow control, remote electronic control, or droopless pressure control. The RCV is available in fail open or fail closed configurations.



ERCV Electronic Research Control Valves

The Model ERCV research Control Valve is a electrically operated control valve that is used in conjunction with Red Ox Regulators to provide control of a variety of processes. The RCV is typically used for electronic flow or pressure control. The RCV is typically controlled via 4-20 mA command signal with 12 VDC or 115 VAC power supply. The unit can lock last loading pressure upon loss of signal or power supply.

COMPATIBLE ACCESSORIES



ESC Electronic Setpoint ControL

The module provides remote setpoint adjustment capability when paired with VRG Controls RP Series Regulator Pilots. ESC modules may be powered with 120 or 24 VDC Power. 4-20 mA analog or 24 VDC discrete command signal will raise / lower pressure setpoint. In event of loss of command signal or power, the ESC will render the RP pilot to lock at last pressure setpoint, thereby maintaining control of the process. The ESC features an easy pushbutton programming and 4-20 mA feedback of ESC motor position.



Eliminator Pilot Filters

The Eliminator Pilot Filter provides 20 µ filtration of pilot inlet gas to ensure reliable operation of your Red Ox control devices. The Eliminator features 316 Stainless Steel construction in a compact design with 0.250 FNPT inlet, outlet and drain connections. The standard sintered polyethylene filter element can easily be changed inline.



FD Filter Dryer Assemblies

The FD Series of Filter assemblies provide high capacity, long-life 10 µ filtration. The FD Series features a heavy duty, high pressure carbon steel construction with 0.250 FNPT inlet, outlet and drain connections. Various filter/dryer media filters are available to remove entrained moisture, gas odorant and trace sulfur.



Supply Gas Heaters

Supply Gas Heaters provide a robust amount of self-contained heat to ensure reliable operation of Control Devices without the need for constant electrical power. Supply Gas Heaters are pre-piped in a compact, durable stainless steel enclosure that includes an explosion proof catalytic heater, heat exchanger core, and low pressure supply gas heaters. Startup voltages available in 12 VDC or 120 VAC.

NAJ Noise Attenuating Jackets

NAJ Series Noise Attenuating Jackets provide excellent acoustic noise reduction when paired with Red Ox Regulators. Noise attenuation can typically be reduced between 12-25 dBA when applied to aggressive regulation applications. The NAJ offers a cost-effective solution during design stage or retrofit to existing problem facilities. NAJ Jackets are equipped with easy removal and reinstallation without special tools or material.

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