

PRESSURE REGULATORS

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INC.[®]

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PRESSURE REGULATORS

TABLE OF CONTENTS

GAS BACK PRESSURE:	06:10.1 - 06:10.10
APPLICATIONS: Self-contained, Pilot-operated regulator used on vent lines for separators, heat treaters, compressor stations, gas gathering systems.	
OPERATING PRESSURE RANGES: 10 psig to 300 psig	
GAS LOW PRESSURE BACK PRESSURE:	06:10.9 - 06:10.11
APPLICATIONS: Self-contained, pilot-operated regulator used to control 5 to 20 psig back pressure on vent lines for separators, heat treaters, compressor stations, gas gathering systems.	
OPERATING PRESSURE RANGES: 5 psig to 20 psig	
GAS BACK PRESSURE NON VENTING:	06:20.1 - 06:20.5
APPLICATIONS: Self-contained, pilot-operated regulator used on vent lines for separators, heat treaters, compressor stations, gas gathering systems where it is desired that no gas be vented.	
OPERATING PRESSURE RANGES: 10 psig to 300 psig	
GAS BACK PRESSURE TO VACUUM:	06:30.1 - 06:30.3
APPLICATIONS: Self-contained, pilot-operated regulator used on positive pressure control of systems flowing into downstream vacuum gathering line.	
OPERATING PRESSURE RANGES: 10 psig to 300 psig	
GAS LOW PRESSURE BACK PRESSURE TO VACUUM:	06:30.5 - 06:30.9
APPLICATIONS: Self-contained, pilot-operated regulator used to maintain ounces of positive pressure on systems flowing into a downstream vacuum, such as vapor recovery systems.	
OPERATING PRESSURE RANGES: 1 psig to 20 psig	
BACK PRESSURE W/ OUTSIDE SUPPLY:	06:40.1 - 06:40.5
APPLICATIONS: Self-contained, pilot-operated regulator used in liquid packed systems where an auxiliary source of supply gas pressure is available.	
OPERATING PRESSURE RANGES: 10 psig to 300 psig	
GAS PRESSURE REDUCING:	06:50.1 - 06:50.7
APPLICATIONS: Self-contained, pilot-operated regulator used for regulation of inlet pressure to gas compressors. Control of supply or distribution system pressure.	
OPERATING PRESSURE RANGES: 10 psig to 300 psig	
GAS LOW PRESSURE PRESSURE REDUCING:	06:50.9 - 06:50.13
APPLICATIONS: Self-contained, Low pressure pilot-operated regulator used for maintaining vapor pressure on storage tanks, controlling compressor by-pass for gas recirculation and maintaining low pressure head on flash separators.	
OPERATING PRESSURE RANGES: 5 psig to 20 psig	
GAS PRESSURE REDUCING NON VENTING:	06:60.1 - 06:60.5
APPLICATIONS: Self-contained, pilot-operated regulator used to regulate down stream pressures on vent lines for separators, heat treaters, compressor stations, gas gathering systems where it is desired that no gas be vented.	
OPERATING PRESSURE RANGES: 10 psig to 300 psig	
GAS PRESSURE REDUCING W/ OUTSIDE SUPPLY:	06:60.7 - 06:60.11
APPLICATIONS: Self-contained, pilot-operated regulator used for regulation of inlet pressure to gas compressors. Control of supply or distribution system pressure.	
Where an auxiliary source of supply gas pressure is available.	
OPERATING PRESSURE RANGES: 10 psig to 300 psig	
GAS PRESSURE REDUCING BALANCED:	06:70.1 - 06:70.5
APPLICATIONS: Self-contained, pilot-operated regulator used for regulation of inlet pressure to gas compressors and control of supply or distribution system pressures where the pressure to the regulator varies significantly and regulated pressure must remain constant.	
OPERATING PRESSURE RANGES: 10 psig to 300 psig	
GAS PRESSURE REDUCING BALANCED NO VENT:	06:70.7 - 06:70.9
APPLICATIONS: Self-contained, pilot-operated regulator used for regulation of inlet pressure to gas compressors and control of supply or distribution system pressures where the pressure to the regulator varies significantly and regulated pressure must remain constant and where it is desired that no gas be vented.	
OPERATING PRESSURE RANGES: 10 psig to 300 psig	
GAS PRESSURE DIFFERENTIAL:	06:80.1 - 06:80.5
APPLICATIONS: Self-contained, pilot-operated regulator used for maintaining a constant pressure drop across meter systems.	
OPERATING PRESSURE RANGES: 10 psig to 300 psig	
GAS LOW PRESSURE PRESSURE REDUCING TO VACUUM:	06:90.1 - 06:90.5
APPLICATIONS: Self-contained, pilot-operated regulator used for gas compressor suction regulation.	
OPERATING PRESSURE RANGES: 1 psig to 20 psig	
GAS LOW PRESSURE BACK PRESSURE TO ATMOSPHERE W/OUTSIDE SUPPLY:	06:90.7 - 06:90.13
APPLICATIONS: Self-contained, pilot-operated regulator designed to regulate ounces (0.5 oz to 2.5 psig) back pressure on a tank and vent to atmosphere when pressure exceeds set point.	
OPERATING PRESSURE RANGES: 1 psig to 20 psig	
SPRING LOADED BACK PRESSURE FULL PORT:	06:100.1 - 06:100.5
APPLICATIONS: Self-contained, spring-operated regulator used for liquid or gas systems where a 0 to 85 psig adjustable back pressure is desired.	
OPERATING PRESSURE RANGES: 0 psig to 85 psig	
SPRING LOADED BACK PRESSURE REDUCED PORT:	06:100.7 - 06:100.11
APPLICATIONS: Self-contained, spring-operated regulator used for liquid or gas systems where a 0 to 85 psig adjustable back pressure is desired.	
OPERATING PRESSURE RANGES: 0 psig to 125 psig	
PNEUMATICALLY ADJUSTED PRESSURE:	06:110.1 - 06:110.3
APPLICATIONS: Regulate down stream pressure to match pneumatic signal	
OPERATING PRESSURE RANGES: 10 psig to 300 psig	
FLOW COEFFICIENT	06:I
VALVE DIMENSIONS	06:II
SEALS	06:III
MATERIAL SPECIFICATIONS	06:IV

PRESSURE REGULATORS

CODE BUILDER
HIGH PRESSURE R SERIES

KIMRAY
INC.®

Series:

R = Pressure Regulator

Model: _____

Line Size:

- 1 = 1 NPS
- 2 = 2 NPS**
- 3 = 3 NPS
- 4 = 4 NPS
- 6 = 6 NPS

End Connection:

SA = FNPT

AR = 150RF Flange

GV = Grooved (2 NPS only)

Shell Material:

D = Ductile Iron

W = Steel (WCB)

Inner Valve Size:

F = Full Port

R = Reduced Port

Control Range:

1 = 10 - 300 psig Spring

Service Type:

S = Standard

C = Corrosive

K = Corrosive with Coated Shell Components

R	BP	2	SA	D	F	1	S	
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Options: Additional cost and lead times will apply

If multiple options required input in sequential order

Leave blank if no options required

1 = NACE Certification (Corrosive Option Only)

2 = Hydrostatic Test Certification

3 = MTR (Shell Components)

A = AFLAS Elastomers

H = HSN Elastomers

V = FKM Elastomers

X = Export (Hydrostatic test, MTR & 3.1)

Not all selections available on all products listed.
See the following product pages for available options

06:10.1 - 06:10.7, 06:20.1 - 06:20.5,

06:30.1 - 06:30.3, 06:40.1 - 06:40.5,

06:50.1 - 06:50.7, 06:60.1 - 06:60.5,

06:70.1 - 06:70.5, 06:80.1 - 06:80.5,

Series:
R = Pressure Regulator
Model:
LB = Low Pressure Back Pressure
VB = Low Pressure Back Pressure to Vacuum
AB = Low Pressure Back Pressure to Atmosphere
LR = Low Pressure Pressure Reducing
VR = Low Pressure Pressure Reducing to Vacuum
Line Size:

- 1 = 1 NPS (VR & AB only)**
- 2 = 2 NPS**
- 3 = 3 NPS**
- 4 = 4 NPS**
- 6 = 6 NPS**

End Connection:
SA = FNPT
AR = 150RF Flange (not available in 1 NPS)
GV = Grooved (2 NPS only)
Shell Material:
D = Ductile Iron
W = Steel (WCB) (VB, AB & LR only)
Inner Valve Size:
F = Full Port
R = Reduced Port
2 = 0-20 psig Spring
3 = 0-5 psig Spring
4 = 0-2.5 psig Spring
Control Range:
Service Type:
S = Standard
C = Corrosive
K = Corrosive with Coated Shell Components

R	B P	2	SA	D	F	2	S	
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Options: Additional cost and lead times will apply

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2 = Hydrostatic Test Certification
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X = Export (Hydrostatic test, MTR & 3.1)

Not all selections available on all products listed.

See the following product pages for available options

06:10.9 - 06:10.11, 06:30.5 - 06:30.9,

06:50.9 - 06:50.13, 06:90.1 - 06:90.13

PRESSURE REGULATORS

CODE BUILDER
SPRING LOADED R SERIES

KIMRAY
INC.®

Series:

R = Pressure Regulator

Model:

SB = Spring Loaded BP

Line Size:

2 = 2 NPS

3 = 3 NPS

End Connection:

SA = FNPT

AR = 150RF Flange

GV = Grooved (2 NPS only)

Shell Material:

D = Ductile Iron

W = Steel (WCB)

Inner Valve Size:

F = Full Port

R = Reduced Port

Control Range:

		Full Port	Reduced Port
Spring Loaded	A =	0-10 psig	0-10 psig
2"	B =	10-20 psig	10-20 psig
	C =	15-30 psig	20-40 psig
	D =	25-50 psig	40-65 psig
	E =	30-65 psig	65-90 psig
	F =	40-85 psig	80-125 psig
3"	G =	10-75 psig	N/A

Service Type:

S = Standard

C = Corrosive

K = Corrosive with Coated Shell Components

R	SB	2	SA	D	F	A	S	
----------	-----------	----------	-----------	----------	----------	----------	----------	--

Options: Additional cost and lead times will apply

If multiple options required input in sequential order

Leave blank if no options required

- 1 = NACE Certification (Corrosive Option Only)
- 2 = Hydrostatic Test Certification
- 3 = MTR (Shell Components)
- A = AFLAS Elastomers
- H = HSN Elastomers
- V = FKM Elastomers
- X = Export (Hydrostatic test, MTR & 3.1)

Not all selections available on all products listed.
See product pages 06:100.1 - 06:100.11 for available options

APPLICATION:

Self-contained, pilot-operated regulator used on vent lines for separators, heat treaters, compressor stations, gas gathering systems.

FEATURES:

- Tight shut-off - Class VI
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

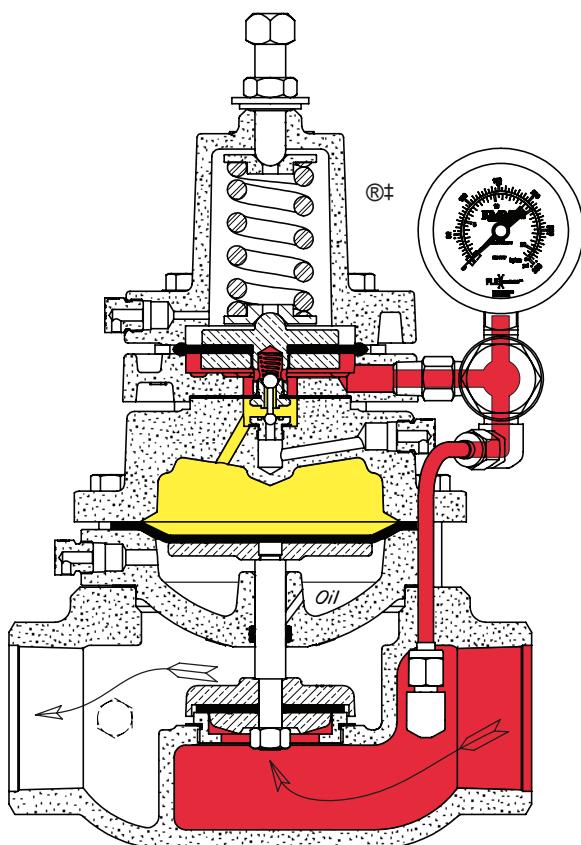
CERTIFICATIONS:

Canadian Registration Number (CRN):
0C16234.24567890NTY (Ductile)
0C15604.24567890NTY (Steel)

Kimray is an ISO 9001-certified manufacturer.

CLASSIFICATIONS:

Non-Bleed / Intermittent Vent



- [Grey Hatched Pattern] Pilot Assembly
- [Red Hatched Pattern] Motor Valve Stem Assembly
- [Red Line] Upstream Pressure
- [Yellow Area] Motor Valve Diaphragm Pressure



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RBP1SADF1S	AKB	1"	NPT	10-300	300	13.2	0.74
	RBP2SADF1S	AAR	2"	NPT	10-300	300	47.0	0.84
	RBP2ARDF1S	AAS		150RF	10-250	250		
	RBP3SADF1S	AAT	3"	NPT	10-300	300	117	0.75
	RBP3ARDF1S	AAU		150RF	10-250	250		
	RBP4SADF1S	AAW	4"	NPT	10-300	300	210	0.75
	RBP4ARDF1S	AAX		150RF	10-250	250		
	RBP4ARDF1S	AY	6"	150RF	10-250	250	480	0.75
Steel	RBP1SAWF1S	AKC	1"	150RF	10-285	285	47.0	0.84
	RBP2ARWF1S	AGB	2"	150RF	10-285	285	117	0.75
	RBP3ARWF1S	AGC	3"	150RF	10-285	285	210	0.75
	RBP4ARWF1S	AGD	4"	150RF	10-285	285	480	0.75
	RBP6ARWF1S	AGE	6"	150RF	10-285	285	480	0.75

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

‡ For KimCoat option remove last "S" & replace with "K"

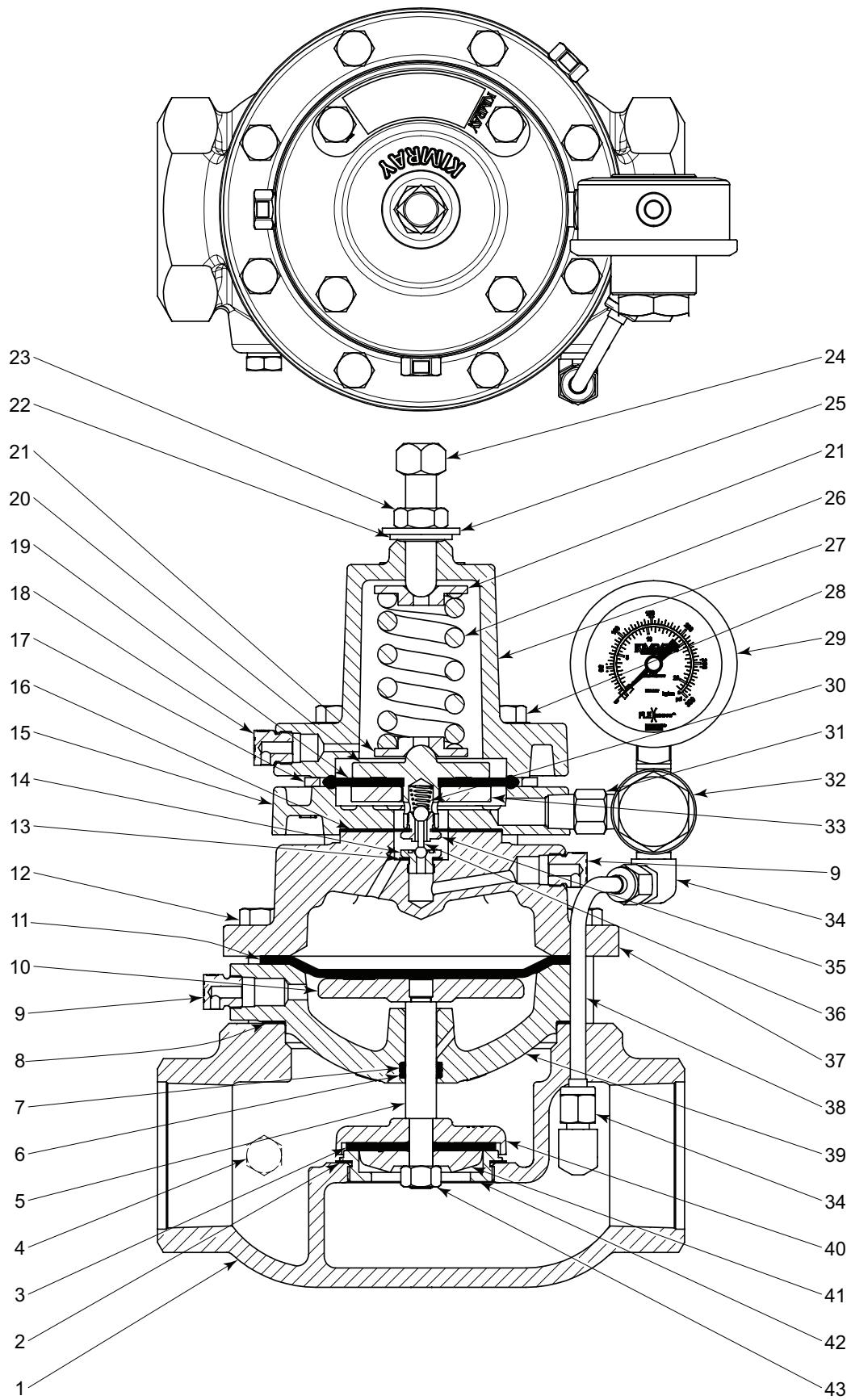
† For code builder see page 06:00.2

‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

DUCTILE GAS BACK PRESSURE
MODEL BP PARTS DRAWING

KIMRAY
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PRESSURE REGULATORS

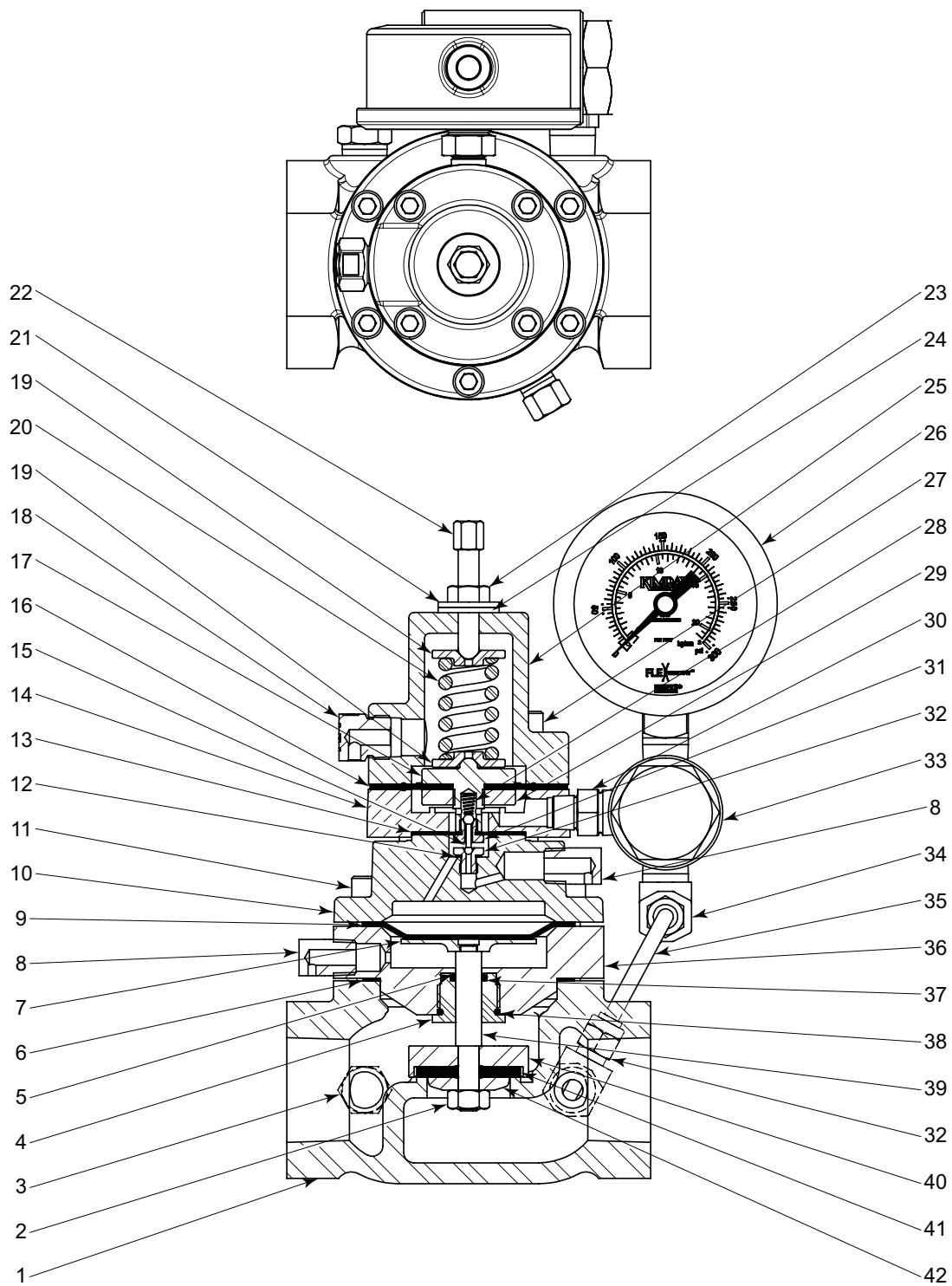
DUCTILE GAS BACK PRESSURE MODEL BP PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER										
			STANDARD					CORROSIVE					
			1 INCH	2 INCH	3 INCH	4 INCH	6 INCH	1 INCH	2 INCH	3 INCH	4 INCH	6 INCH	
1	1	Body											
		NPT Thru	2033	1709	1634	2001	----	2033 ‡	1709 ‡	1634 ‡	2001 ‡	----	
		150RF Thru	----	1913	1914	2002	2466	----	1913 ‡	1914 ‡	2002 ‡	2466 ‡	
		Grooved Thru	----	2964	----	----	----	----	2964 ‡	----	----	----	
2	1	NPT Angle	----	4999	----	----	----	----	4999 ‡	----	----	----	
		Gasket	*	----	276	277	196	279	276	277	196	279	
3	1	Seat	*	163HSN	164HSN	165HSN	166HSN	167HSN	163HSN	164HSN	165HSN	166HSN	167HSN
4	2	Plug				699						699SS6	
5	1	Valve Stem		137	138	139	140	141	137SS6	138SS6	139SS6	140SS6	141SS6
6	2	Back Up	*	148T	149T	150T	151T	152T	148T	149T	150T	151T	152T
7	1	O-Ring	*	153	154	155	156	157	153	154	155	156	157
8	1	Gasket	*	195	196	197	198	199	195	196	197	198	199
9	1	Vent Plug		1357			147		1357SS6			147SS6	
10	1	Diaphragm Plate		132SS6	133	134	135	136	132SS6	133	134	135	136
11	1	Diaphragm	*	127	1706	1640	2015	2140	127	1706	1640	2015	2140
12	(QTY)	Bolt		4318 (6)	965 (8)	907(10)	907 (12)	2142 (16)	4318 (6)	965 (8)	907(10)	907 (12)	2142 (16)
13	1	Gasket	*	3018			118		3018			118	
14	1	Pilot Seat	*	3016			113		3016SS6			113SS6	
15	1	Pilot Housing		3013			1701		3013SS6			1701 ‡	
16	1	Diaphragm	*	3014			110		3014			110	
17	1	Spacer Ring	*	----			7437		----			7437	
18	1	Vent Plug				147						147SS6	
19	1	Diaphragm	*	3011P			5259P		3011P			5259P	
20	1	Diaphragm Plate		3009			105		3009SS6			105SS6	
21	2	Spring Guide		4484SS6			2612		4484SS6			2612SS6	
22	1	Thread Seal		4542			4488		4542			4488	
23	1	Nut		1676			2377		1676SS6			2377SS6	
24	1	Adjusting Screw		6976			5163		6976SS6			5163SS6	
25	1	Washer		4543			4491		4543			4491	
26	1	Spring		4323			2611		4323			2611	
27	1	Bonnet		4525			2610		4525			2610 ‡	
28	4	Bolt		6972			907		6972			907	
29	1	Pressure Gauge				7707						7707	
30	1	Spring	*	3008			108		3008			108HAC	
31	1	Nipple		6890			648		6890SS6			648SS6	
32	1	1/4 F30 Filter				YAS						YASSS6	
33	1	Diaph. Nut		3010			107		3010SS6			107SS6	
34	2	Elbow				875						875SS6	
35	1	Pilot Seat	*	3015			565		3015SS6			565SS6	
36	1	Pilot Plug	*	3017			112		3017			112	
37	1	Upper Housing		3019	1719	1636	2003	2177	3019SS6	1719 ‡	1636 ‡	2003 ‡	2177 ‡
38	1	Tubing		263S6	123SS6	124SS6	125SS6	126SS6	4416S6	123SS6	124SS6	125SS6	126SS6
39	1	Lower Housing		142	1704	1632	145	146	142 ‡	1704 ‡	1632 ‡	145 ‡	146 ‡
40	1	Seat Disc		158	159	160	161	162	158SS6	2493SS6	2494SS6	2495SS6	2961SS6
41	1	Standard Ratio Plug		176SS6	177SS6	178	179	180	176SS6	177SS6	3076SS6	3078SS6	3079SS6
		Reduced Ratio Plug		4932	4933	1228SS6	177SS6	178	4932SS6	4933SS6	1228SS6	177SS6	3076SS6
42	1	Removable Seat		----	272K	273K	274K	275K	----	2496SS6K	2497SS6K	2498SS6K	3075SS6K
43	1	Nut	*	172	173		906	175	172SS6	173SS6		174SS6	175SS6
	2	Lifting Ring (not shown)		----	----		7559	----	----	----		7559	----
‡ Coated Parts available with "K" service type													
Repair Kits			RRU	RDG	RDH	RDI	RDJ						
* These parts are recommended spare parts and are stocked as repair kits.													

PRESSURE REGULATORS

1 INCH STEEL GAS BACK PRESSURE
MODEL BP PARTS DRAWING

KIMRAY
INC. ®



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

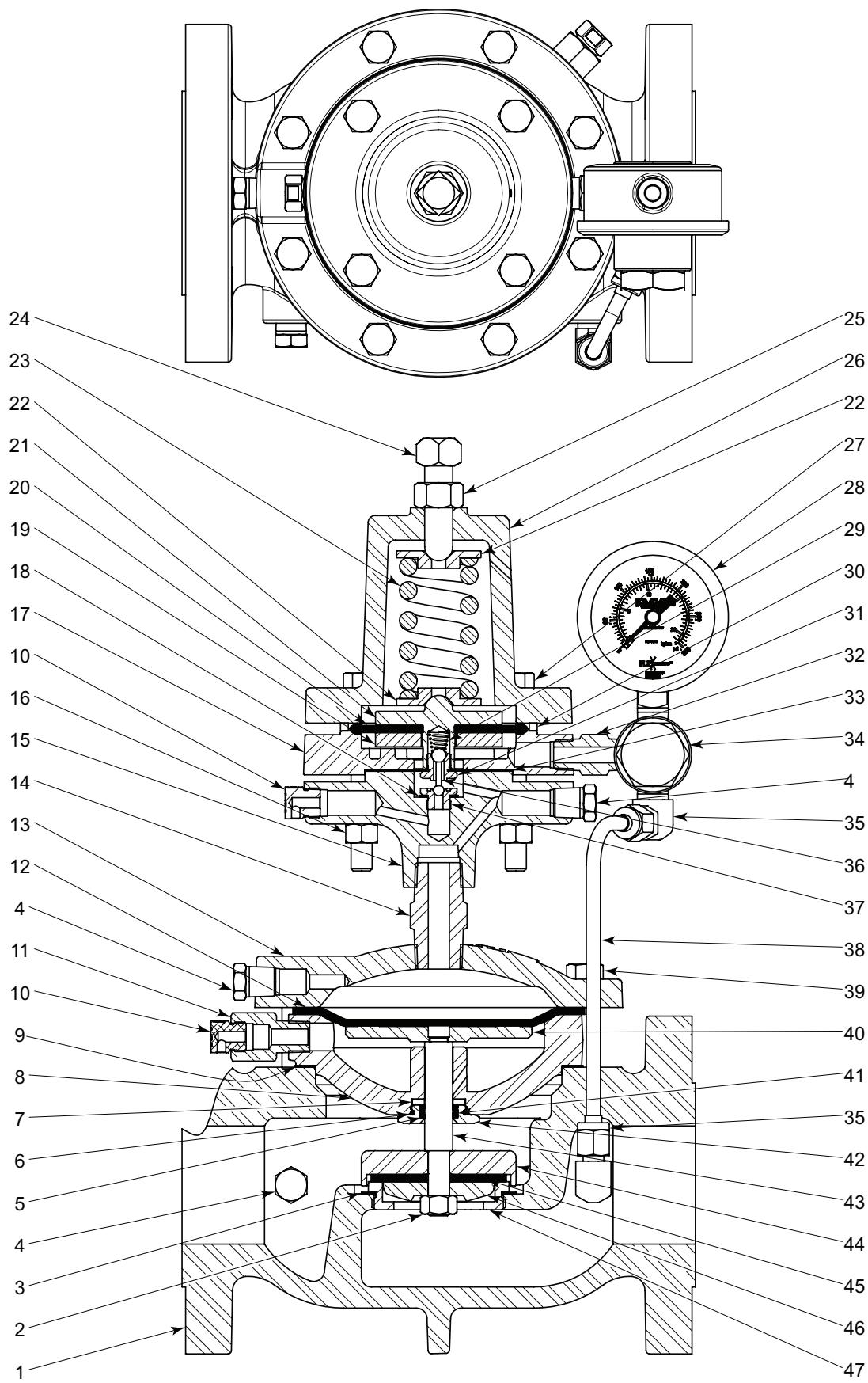
1 INCH STEEL GAS BACK PRESSURE MODEL BP PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER	
			STANDARD	CORROSIVE
1	1	Full Port Body		
		NPT Thru	4942	4942 ‡
		150RF Thru	7354	7354 ‡
		Reduced Port Body		
		NPT Thru	4603	4603 ‡
		150RF Thru	5292	5292 ‡
		Removable Seat (not shown)	1349	1349SS6
2	1	Nut *	172	172SS6
3	1	Plug	699	699SS6
4	1	Bushing	4632A	4632A
5	1	Seal	4551C	4551C
6	1	Gasket *	195	195
7	1	Diaphragm Plate	132SS6	132SS6
8	2	Vent Plug	1357	1357SS6
9	1	Diaphragm *	127	127
10	1	Upper Housing	3019	3019SS6
11	6	Bolt	4318	4318
12	1	Gasket *	3018	3018
13	1	Diaphragm *	3014	3014
14	1	Pilot Housing	3013	3013SS6
15	1	Pilot Plug *	3017	3017
16	1	Diaphragm *	3011P	3011P
17	1	Diaphragm Plate	3009	3009SS6
18	1	Vent Plug	147	147SS6
19	2	Spring Guide	4484SS6	4484SS6
20	1	Spring *	4323	4323
21	1	Washer *	4543	4543
22	1	Adjusting Screw	6976	6976S6
23	1	Nut	1676	1676SS6
24	1	Thread Seal *	4542	4542
25	1	Bonnet	4525	4525 ‡
26	1	Pressure Gauge	7707	7707
27	4	Bolt	6972	6972
28	1	Spring *	3008	3008
29	1	Diaph. Nut	3010	3010SS6
30	1	Nipple	6890	6890S6
31	1	Pilot Seat *	3016	3016SS6
32	1	Pilot Seat *	3015	3015SS6
33	1	1/4 F30 Filter	YAS	YASSS6
34	2	Elbow	875	875SS6
35	1	Tubing	263S6	263S6
36	1	Lower Housing	4551BSS6	4551BSS6 ‡
37	1	O-Ring *	153V	153V
38	1	O-Ring *	4552	4552
39	1	Valve Stem	137	137SS6
40	1	Seat Disc	158	158SS6
41	1	Seat	163HSN	163HSN
42	1	Standard Ratio Plug	176SS6	176SS6
		Reduced Ratio Plug	4932	4932SS6
‡ Coated Parts available with "K" service type				
Repair Kits		RRT-TB		RRT-TB
* These parts are recommended spare parts and are stocked as repair kits.				

PRESSURE REGULATORS

STEEL GAS BACK PRESSURE
MODEL BP PARTS DRAWING

KIMRAY
INC.



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PRESSURE REGULATORS

STEEL GAS BACK PRESSURE
MODEL BP PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER			
			STANDARD			
			2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body	2468	2469	2470	2959
2	1	Nut *	173	906	175	
3	1	Gasket *	276	277	196	279
4	3	Plug		699		
5	2	Back Up *	149T	150T	151T	152T
6	1	O-Ring *	5225	5226	5227	4086
7	1	Spacer	4557DS6	4561DS6	4566DS6	4571DS6
8	1	Lower Housing	2481	2482	2483	2957
9	1	Gasket *	196	197	198	199
10	2	Vent Plug		147		
11	1	Adapter		7244		----
12	1	Diaphragm *	1706	1640	2015	2140
13	1	Bonnet	2487	2488	2489	2956
14	1	Nipple		2516		
15	1	Base		4995		
16	4	Nut		241		
17	1	Pilot Housing		2514		
18	1	Gasket		118		
19	1	Diaphragm Nut		107		
20	1	Diaphragm *		5259P		
21	1	Diaphragm Plate		105		
22	2	Spring Guide		2612		
23	1	Spring		2611		
24	1	Adjusting Screw		2613		
25	1	Nut		2377		
26	1	Bonnet		2671		
27	4	Bolt		1232		
28	1	Pressure Gauge		7707		
29	1	Spring *		108		
30	1	Spacer Ring		7437		
31	1	Pilot Seat *		565		
32	1	Nipple		648		
33	1	Diaphragm *		110		
34	1	1/4 F30 Filter		YAS		
35	2	Elbow		875		
36	1	Pilot Plug		112		
37	1	Pilot Seat		113		
38	1	Tubing	2505SS6	2552SS6	2529SS6	5061SS6
39	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)
40	1	Diaphragm Plate	2490	2491	2492	2958
41	1	O-Ring *	154	807	156	157
42	1	Retainer	4557ES6	4561ES6	4566ES6	4571ES6
43	1	Valve Stem	138	139	140	141
44	1	Seat Disc	2493SS6	2494SS6	2495SS6	2961SS6
45	1	Seat *	164HSN	165HSN	166HSN	167HSN
46	1	Ratio Plug	177SS6	178	179	3079SS6
47	1	Removable Seat	2496SS6K	2497SS6K	2498SS6K	3075SS6K
	2	Lifting Ring (not shown)		7559		----
Repair Kits			RAE	RAF	RAG	RAH
* These parts are recommended spare parts and are stocked as repair kits.						

‡ Coated Parts available with "K" service type

RAE RAF RAG RAH

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, pilot-operated regulator used to control 5 to 20 psig back pressure on vent lines for separators, heat treaters, compressor stations, gas gathering systems.

FEATURES:

- Tight shut-off - Class VI
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

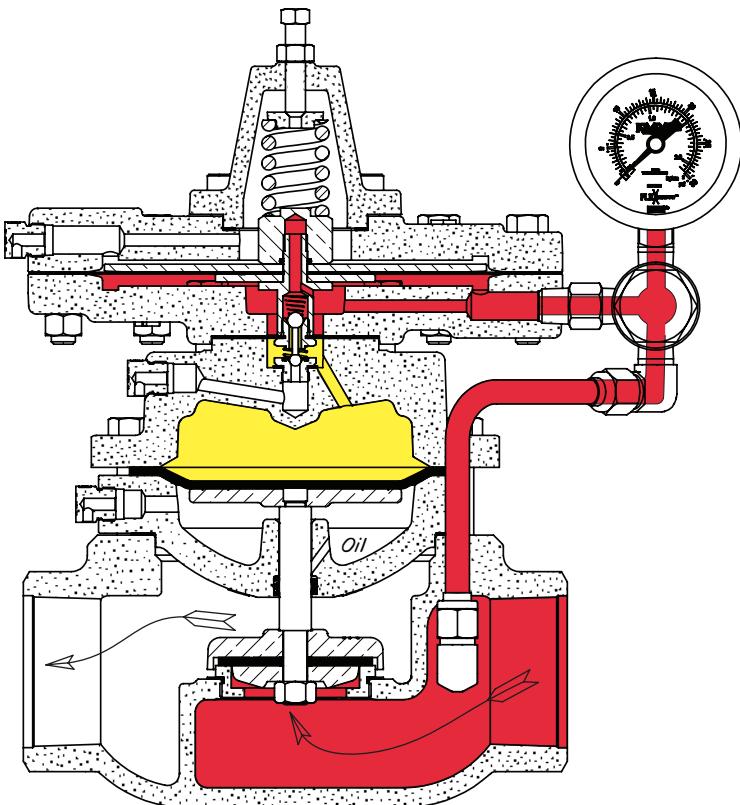
- Pilot Assembly
- Motor Valve Stem Assembly
- Upstream Pressure
- Diaphragm Pressure

CERTIFICATIONS:

Canadian Registration Number (CRN):
0C16234.24567890NTY (Ductile)
Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

Non-Bleed / Intermittent Vent



Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
RLB2SADF2S	ASE	2"	NPT	5-20	300	47.0	0.84
			150RF	5-20	250		
RLB3SADF2S	ASH	3"	NPT	5-20	300	117	0.75
			150RF	5-20	250		
RLB4SADF2S	ASJ	4"	NPT	5-20	300	210	0.75
			150RF	5-20	250		
RLB4ARDF2S	ASK	6"	150RF	5-20	250	480	0.75

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

‡ For KimCoat option remove last "S" & replace with "K"

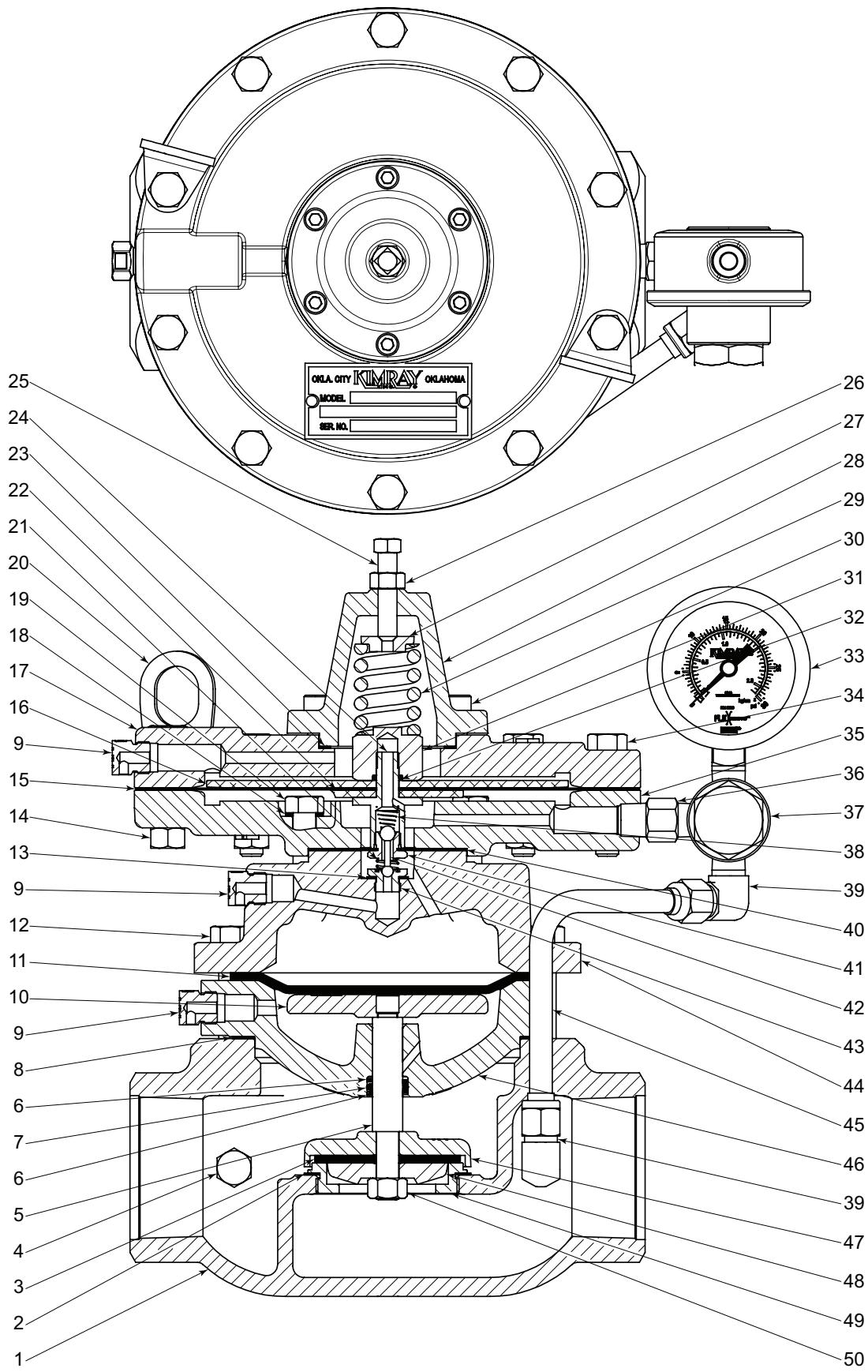
† For code builder see page 06:00.3

‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

GAS LOW PRESSURE BACK PRESSURE
MODEL LB PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

GAS LOW PRESSURE BACK PRESSURE MODEL LB PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER								
			STANDARD				CORROSIVE				
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH	
1	1	Body									
		NPT Thru	1709	1634	2001	----	1709 ‡	1634 ‡	2001 ‡	----	
		150RF Thru	1913	1914	2002	2466	1913 ‡	1914 ‡	2002 ‡	2466 ‡	
		Grooved Thru	2964	----	----	----	2964 ‡	----	----	----	
2	1	Gasket *	276	277	196	279	276	277	196	279	
3	1	Seat *	164HSN	165HSN	166HSN	167HSN	164HSN	165HSN	166HSN	167HSN	
4	1	Plug		699				699SS6			
5	1	Valve Stem	138	139	140	141	138SS6	139SS6	140SS6	141SS6	
6	2	Back Up *	149T	150T	151T	152T	149T	150T	151T	152T	
7	1	O-Ring *	154	155	156	157	154	155	156	157	
8	1	Gasket *	196	197	198	199	196	197	198	199	
9	3	Vent Plug		147				147SS6			
10	1	Diaphragm Plate	133	134	135	136	133	134	135	136	
11	1	Diaphragm *	1706	1640	2015	2140	1706	1640	2015	2140	
12	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)	965SS6 (8)	907SS6(10)	907SS6 (12)	2142SS6 (16)	
13	1	Gasket *		118				118			
14	10	Nut		241				241SS6			
15	1	Diaphragm *		1212				1212			
16	1	Upper Diaphragm Plate		1208				1208SS6			
17	1	Upper Pilot Housing		1206				1206 ‡			
18	4	Gasket *		242				242			
19	4	Screw		1672				1672SS6			
20	2	Lifting Ring	7559		----		7559		----		
21	1	Spring		566				566HAC			
22	1	Lower Diaphragm Plate		1340				1340SS6			
23	1	Gasket		1216				1216			
24	1	Stem		1339				1339S6			
25	1	Adjusting Screw		897				897			
26	1	Nut		922				922SS6			
27	1	Spring Guide		7148S6				7148S6			
28	1	Bonnet		1336				1336 ‡			
29	1	Spring		4379				4379			
30	6	Screw		7531				7531			
31	1	Nut		1337				1337S6			
32	1	O-Ring *		265				265			
33	1	Pressure Gauge		7705				7705			
34	10	Screw		236				236SS6			
35	1	Lower Pilot Housing		1356				1356 ‡			
36	1	Nipple		648				648SS6			
37	1	1/4 F30 Filter		YAS				YASSS6			
38	1	Spring *		1360				1360			
39	2	Elbow		877				877SS6			
40	1	Diaphragm *		110				110			
41	1	Pilot Seat *		565				565SS6			
42	1	Pilot Plug *		112				112			
43	1	Pilot Seat *		113				113SS6			
44	1	Upper Housing	1719	1636	2003	2177	1719 ‡	1636 ‡	2003 ‡	2177 ‡	
45	1	Tubing	4127	4129S6		74SS	4127SS6	4129S6		74SS6	
46	1	Lower Housing	1704	1632	145	146	1704 ‡	1632 ‡	145 ‡	146 ‡	
47	1	Seat Disc	159	160	161	162	2493SS6	2494SS6	2495SS6	2961SS6	
48	1	Standard Ratio Plug	177SS6	178	179	180	177SS6	3076SS6	3078SS6	3079SS6	
		Reduced Ratio Plug	4933	1228SS6	177SS6	178	4933SS6	1228SS6	177SS6	3076SS6	
49	1	Removable Seat	272K	273K	274K	275K	2496SS6K	2497SS6K	2498SS6K	3075SS6K	
50	1	Nut *	173		906	175	173SS6		174SS6	175SS6	
Repair Kits			RUID	RUJD	RUKD	RUPD	‡ Coated Parts available with "K" service type				
			* These parts are recommended spare parts and are stocked as repair kits.							RUID	RUJD

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, pilot-operated regulator used on vent lines for separators, heat treaters, compressor stations, gas gathering systems where it is desired that no gas be vented

- Inside Buildings
- In populated areas
- Emissions regulated areas
- Sour or poisonous gas systems

- | | |
|--|---------------------------|
| | Pilot Assembly |
| | Motor Valve Stem Assembly |
| | Upstream Pressure |
| | Downstream Pressure |
| | Diaphragm Pressure |

FEATURES:

- Tight shut-off - Class VI
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

CERTIFICATIONS:

- Canadian Registration Number (CRN):
- 0C16234.24567890NTY (Ductile)
- 0C15604.24567890NTY (Steel)

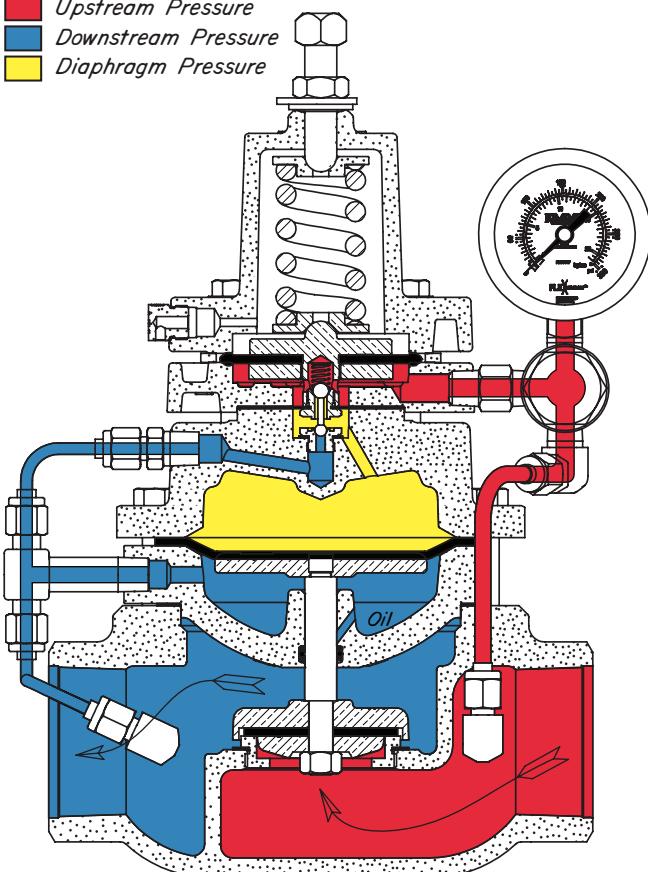
Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

- Non-Bleed / Intermittent Vent

MIN. DIFFERENTIAL:

10 psig



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RBN1SADF1S	ALDD	1"	NPT	10-300	300	13.2	0.74
	RBN2SADF1S	ALED	2"	NPT	10-300	300	47.0	0.84
	RBN2ARDF1S	ALFD		150RF	10-250	250		
	RBN3SADF1S	ALHD	3"	NPT	10-300	300	117	0.75
	RBN3ARDF1S	ALID		150RF	10-250	250		
	RBN4SADF1S	ALJD	4"	NPT	10-300	300	210	0.75
	RBN4ARDF1S	ALKD		150RF	10-250	250		
	RBN4ARDF1S	ALLD	6"	150RF	10-250	250	480	0.75
Steel	RBN2ARWF1S	AGF	2"	150RF	10-285	285	117	0.75
	RBN3ARWF1S	AGV	3"	150RF	10-285	285	210	0.75
	RBN4ARWF1S	AGP	4"	150RF	10-285	285	480	0.75
	RBN6ARWF1S	AGU	6"	150RF	10-285	285	480	0.75

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

‡ For KimCoat option remove last "S" & replace with "K"

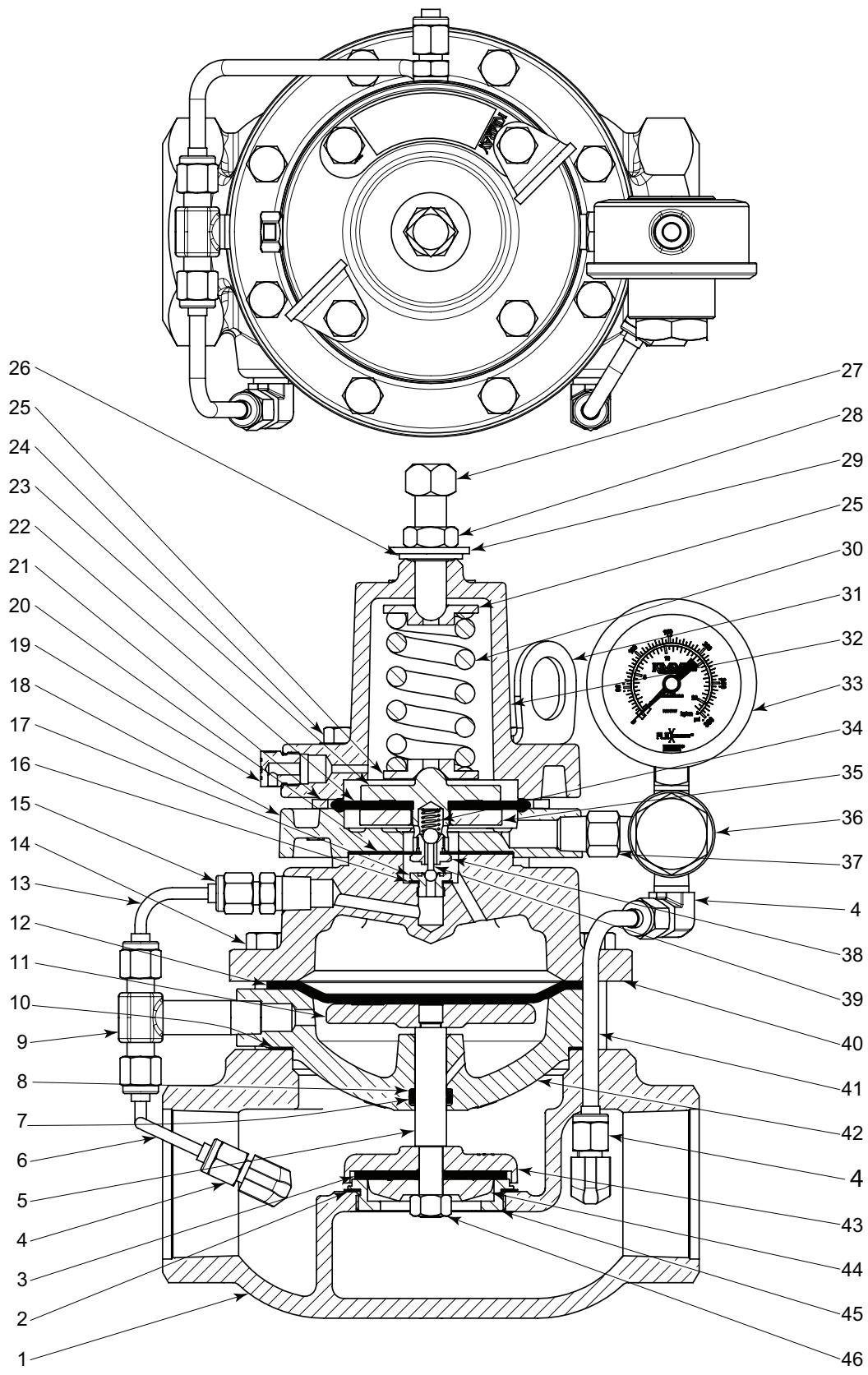
† For code builder see page 06:00.2

‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

DUCTILE GAS BACK PRESSURE NON VENTING
MODEL BN PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

DUCTILE GAS BACK PRESSURE NON VENTING
MODEL BN PARTS LIST

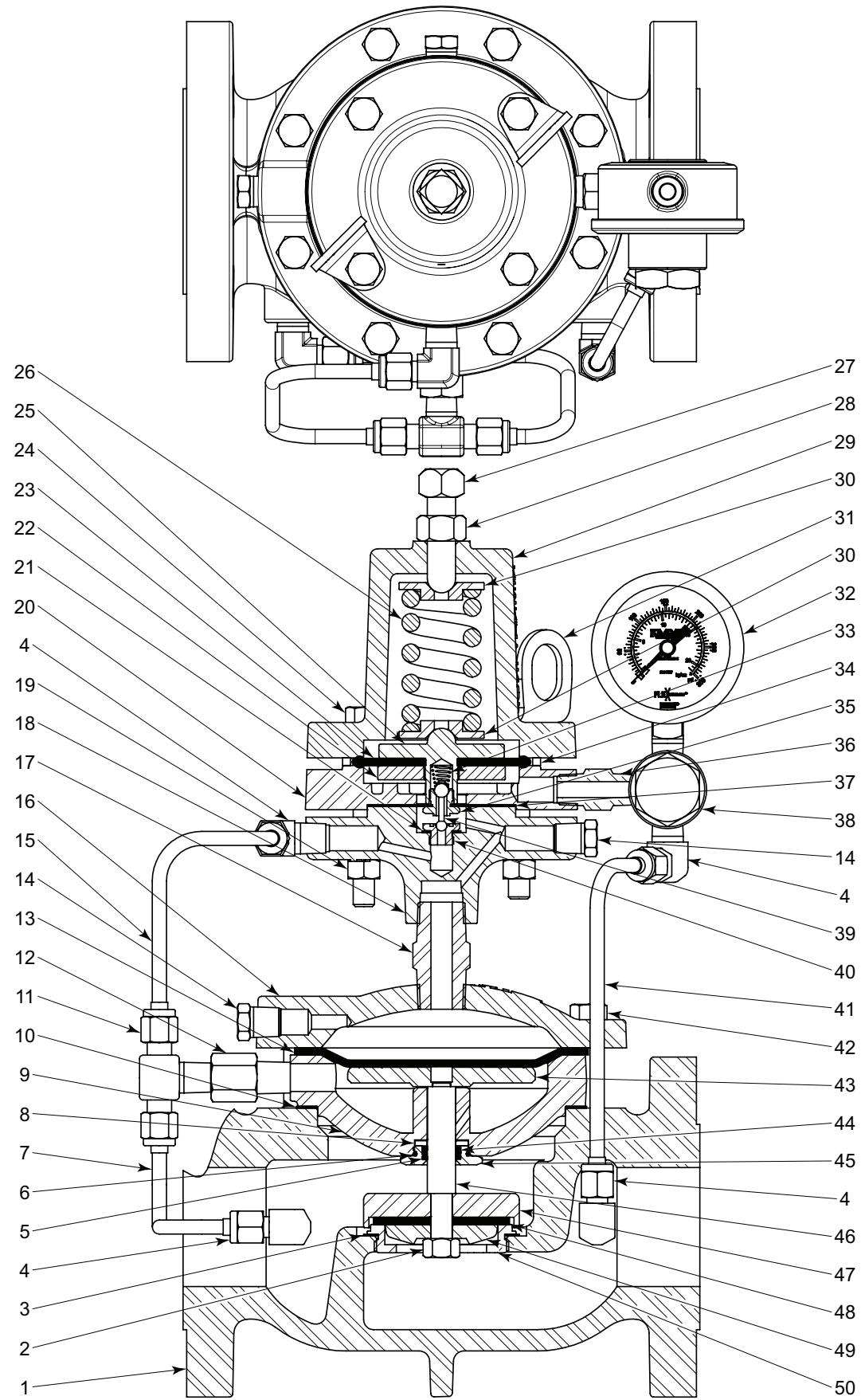
ITEM	QTY.	DESCRIPTION	PART NUMBER						CORROSIVE			
			STANDARD					CORROSIVE				
			1 INCH	2 INCH	3 INCH	4 INCH	6 INCH	1 INCH	2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body										
		NPT Thru	2033	1709	1634	2001	----	2033 ‡	1709 ‡	1634 ‡	2001 ‡	----
		150RF Thru	----	1913	1914	2002	2466	----	1913 ‡	1914 ‡	2002 ‡	2466 ‡
		Grooved Thru	----	2964	----	----	----	2964	----	----	----	
2	1	Gasket *	----	276	277	196	279	276	277	196	279	
3	1	Seat *	163HSN	164HSN	165HSN	166HSN	167HSN	163HSN	164HSN	165HSN	166HSN	167HSN
4	3	Ell			875							
5	1	Valve Stem	137	138	139	140	141	137SS6	138SS6	139SS6	140SS6	141SS6
6	1	Tubing	7562S6	4050SS6	1383SS6	1379SS6	1385SS6	7562S6	4050SS6	1383SS6	1379SS6	1385SS6
7	1	O-Ring *	153	154	155	156	157	153	154	155	156	157
8	2	Back Up *	148T	149T	150T	151T	152T	148T	149T	150T	151T	152T
9	1	Tee	7713	5087			5087	5087SS6			5087SS6	
							1481				1481SS6	
							648				648SS6	
10	1	Gasket *	195	196	197	198	199	195	196	197	198	199
11	1	Diaphragm Plate	132SS6	133	134	135	136	132SS6	133	134	135	136
12	1	Diaphragm *	127	1706	1640	2015	2140	127	1706	1640	2015	2140
13	1	Tubing	4416S6	4050SS6	1378SS6	1379SS6	5061SS6	4416S6	4050SS6	1378SS6	1379SS6	5061SS6
14	(QTY)	Bolt	4318 (6)	965 (8)	907(10)	907 (12)	2142 (16)	4318 (6)	965 (8)	907(10)	907 (12)	2142 (16)
15	1	Connector	1604		874			1604SS6			874SS6	
16	1	Gasket *	3018		118			3018			118	
17	1	Pilot Seat *	3016		113			3016SS6			113SS6	
18	1	Pilot Housing	3013		1701			3013SS6			1701 ‡	
19	1	Vent Plug *		147							147SS6	
20	1	Diaphragm *	3014		110			3014			110	
21	1	Spacer Ring *	----		7437			----			7437	
22	1	Diaphragm	3011P		5259P			3011P			5259P	
23	1	Diaphragm Plate	3009		105			3009SS6			105SS6	
24	4	Bolt	6972		907			6972			907	
25	2	Spring Guide	4484SS6		2612			4484SS6			2612SS6	
26	1	Thread Seal	4542		4488			4542			4488S6	
27	1	Adjusting Screw	6976		5163			6976SS6			5163SS6	
28	1	Nut	1676		2377			1676SS6			2377SS6	
29	1	Washer	4543		4491			4543			4491	
30	1	Spring	4323		2611			4323			2611	
31	2	Lifting Ring	----	7559	----			----	7559	----		
32	1	Bonnet	4525		2610			4525			2610 ‡	
33	1	Pressure Gauge		7707					7707			
34	1	Spring *	3008		585			3008			585	
35	1	Diaph. Nut	3010		107			3010SS6			107SS6	
36	1	1/4 F30 Filter		YAS							YASSS6	
37	1	Nipple	6890		648			6890S6			648SS6	
38	1	Pilot Seat *	3015		565			3015SS6			565SS6	
39	1	Pilot Plug *	3017		112			3017			112	
40	1	Upper Housing	3019	1719	1636	2003	2177	3019SS6	1719 ‡	1636 ‡	2003 ‡	2177 ‡
41	1	Tubing	263SS6	123SS6	124SS6	125SS6	126SS6	263SS6	123SS6	124SS6	125SS6	126SS6
42	1	Lower Housing	142	1704	1632	145	146	142 ‡	1704 ‡	1632 ‡	145 ‡	146 ‡
43	1	Seat Disc	158	159	160	161	162	158SS6	2493SS6	2494SS6	2495SS6	2961SS6
44	1	Standard Ratio Plug	176SS6	177SS6	178	179	180	176SS6	177SS6	3076SS6	3078SS6	3079SS6
		Reduced Ratio Plug	4932	4933	1228SS6	177SS6	178	4932SS6	4933SS6	1228SS6	177SS6	3076SS6
45	1	Removable Seat	----	272K	273K	274K	275K	----	2496SS6K	2497SS6K	2498SS6K	3075SS6K
46	1	Nut *	172	173	906	906	175	172SS6	173SS6	174SS6	175SS6	
Repair Kits			RRU	RDGNV	RDHNV	RDINV	RDJNV	RRU	RDGNV	RDHNV	RDINV	RDJNV
* These parts are recommended spare parts and are stocked as repair kits.												

‡ Coated Parts available with "K" service type

PRESSURE REGULATORS

STEEL GAS BACK PRESSURE NON VENTING
MODEL BN PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

STEEL GAS BACK PRESSURE NON VENTING MODEL BN PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER							
			STANDARD				CORROSIVE			
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body	2468	2469	2470	2959				
2	1	Nut *	173		906		175			
3	1	Gasket *	276	277	196	279				
4	4	Ell			875					
5	2	Back Up *	149T	150T	151T	152T				
6	1	O-Ring *	5225	5226	5227	4086				
7	1	Tubing	2505SS6	4251S6	4418S6	4251S6				
8	1	Spacer	4557DS6	4561DS6	4566DS6	4571DS6				
9	1	Lower Housing	2481	2482	2483	2957				
10	1	Gasket *	196	197	198	199				
	1	Tee		5087		2000				
11	1	Nipple		----		648				
	2	Connector		----		874				
12	1	Adapter		7244		----				
13	1	Diaphragm *	1706	1640	2015	2140				
14	2	Plug		699						
15	1	Tubing	2512SS6	4011SS6	4666S6	4011SS6				
16	1	Bonnet	2487	2488	2489	2956				
17	1	Nipple		2516						
18	1	Base		4995						
19	4	Nut		241						
20	1	Pilot Housing		2514						
21	1	Gasket *		118						
22	1	Diaphragm Nut		107						
23	1	Diaphragm *		5259P						
24	4	Bolt		1232						
25	1	Diaphragm Plate		105						
26	1	Spring		2611						
27	1	Adjusting Screw		2613						
28	1	Nut		2377						
29	1	Bonnet		2671						
30	2	Spring Guide		2612						
31	2	Lifting Ring		7559		----				
32	1	Pressure Gauge		7707						
33	1	Spring *		585						
34	1	Spacer Ring *		7437						
35	1	Pilot Seat *		565						
36	1	Nipple		648						
37	1	Diaphragm *		110						
38	1	1/4 F30 Filter		YAS						
39	1	Pilot Plug		112						
40	1	Pilot Seat		113						
41	1	Tubing	2505SS6	2552SS6	2529SS6	5061SS6				
42	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)				
43	1	Diaphragm Plate	2490	2491	2492	2958				
44	1	O-Ring *	154	807	156	157				
45	1	Retainer	4557ES6	4561ES6	4566ES6	4571ES6				
46	1	Valve Stem	138	139	140	141				
47	1	Seat Disc	2493SS6	2494SS6	2495SS6	2961SS6				
48	1	Seat *	164HSN	165HSN	166HSN	167HSN				
49	1	Ratio Plug	177SS6	178	179	3079SS6				
50	1	Removable Seat	2496SS6K	2497SS6K	2498SS6K	3075SS6K				

‡ Coated Parts available with "K" service type

Repair Kits

RAENV RAFNV RAGNV RAHNV RAENV RAFNV RAGNV RAHNV

* These parts are recommended spare parts and are stocked as repair kits.

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, pilot-operated regulator used on positive pressure control of systems flowing into downstream vacuum gathering line.

FEATURES:

- Tight shut-off - Class VI
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

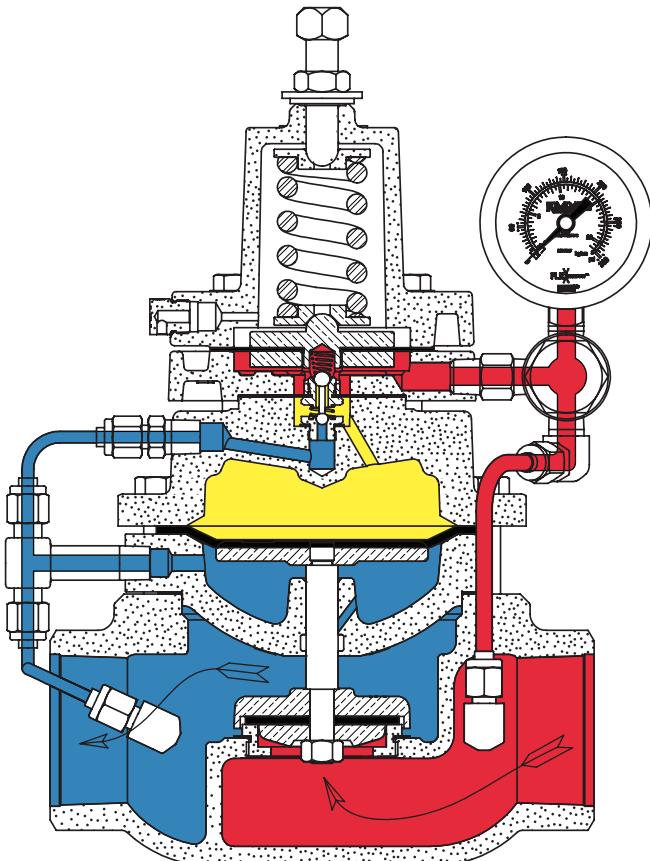
CERTIFICATIONS:

Canadian Registration Number (CRN):
 0C16234.24567890NTY (Ductile)
 Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

Non-Bleed / Intermittent Vent

- | | |
|--|---------------------------|
| | Pilot Assembly |
| | Motor Valve Stem Assembly |
| | Upstream Pressure |
| | Downstream Pressure |
| | Diaphragm Pressure |



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RBV1SADF1S	AMSD	1"	NPT	10-300	300	13.2	0.74
	RBV2SADF1S	ADUD	2"	NPT	10-300	300	47.0	0.84
	RBV2ARDF1S	ADWD		150RF	10-250	250		
	RBV3SADF1S	ADYD	3"	NPT	10-300	300	117	0.75
	RBV3ARDF1S	AEAD		150RF	10-250	250		
	RBV4SADF1S	AEBD	4"	NPT	10-300	300	210	0.75
	RBV4ARDF1S	AECD		150RF	10-250	250		
	RBV4ARDF1S	AEDD	6"	150RF	10-250	250	480	0.75

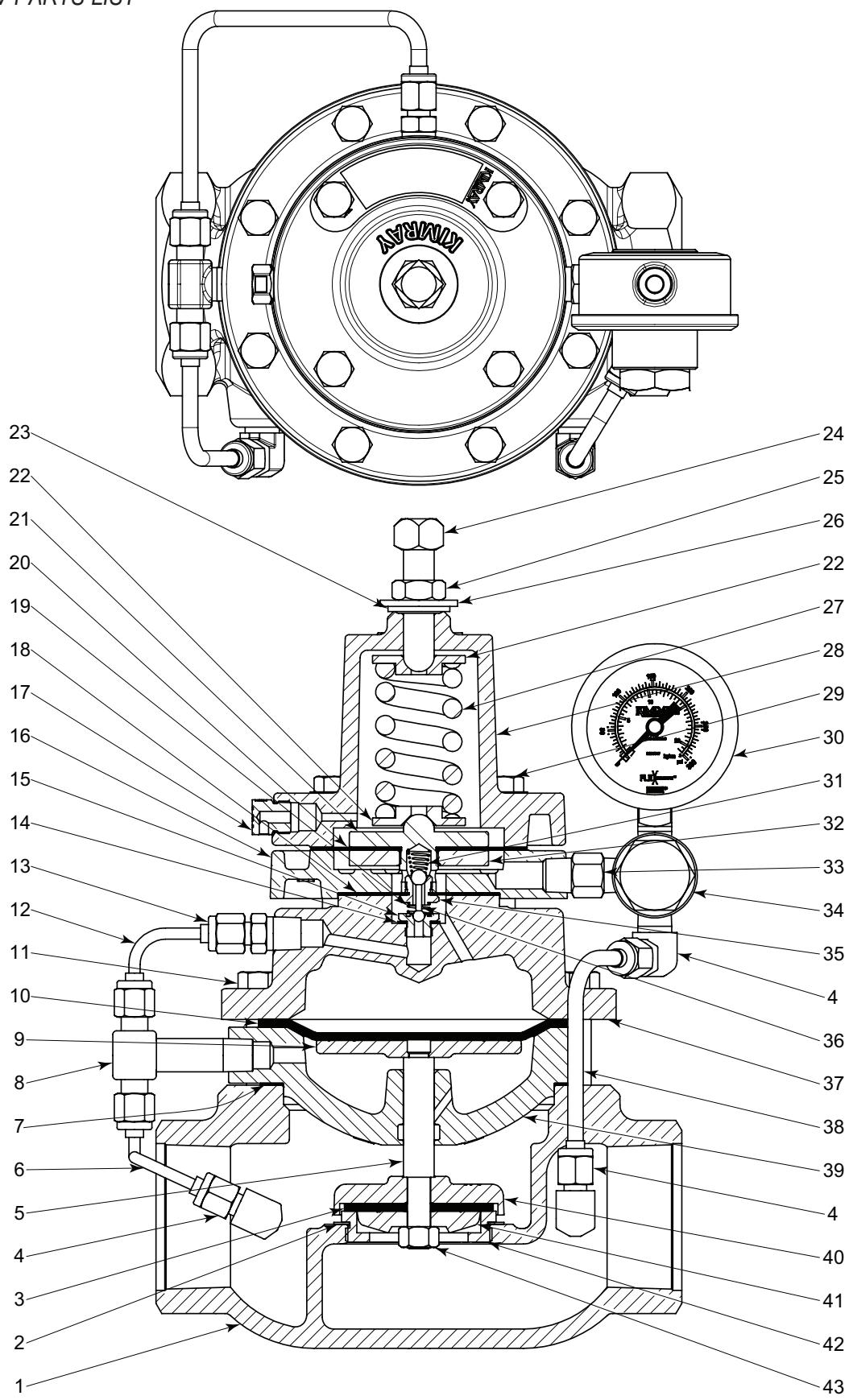
NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV
 † For Corrosive service remove last "S" & replace with "C"
 † For KimCoat option remove last "S" & replace with "K"
 † For code builder see page 06:00.2
 ‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

GAS BACK PRESSURE TO VACUUM
MODEL BV PARTS LIST

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

GAS BACK PRESSURE TO VACUUM
MODEL BV PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER									
			STANDARD					CORROSIVE				
			1 INCH	2 INCH	3 INCH	4 INCH	6 INCH	1 INCH	2 INCH	3 INCH		
1	1	Body										
		NPT Thru	2033	1709	1634	2001	----	2033 ‡	1709 ‡	1634 ‡		
		150RF Thru	----	1913	1914	2002	2466	----	1913 ‡	1914 ‡		
		Grooved Thru	----	2964	----	----	----	2964 ‡	----	----		
2	1	Gasket *	----	276	277	196	279	----	276	277	196	279
3	1	Seat *	163HSN	164HSN	165HSN	166HSN	167HSN	163HSN	164HSN	165HSN	166HSN	167HSN
4	3	Ell			875							875SS6
5	1	Valve Stem	137	138	139	140	141	137SS6	138SS6	139SS6	140SS6	141SS6
6	1	Tubing	1378SS6	4050SS6	1383SS6	1385SS6		1378SS6	4050SS6	1383SS6	1385SS6	
7	1	Gasket *	195	196	197	198	199	195	196	197	198	199
8	1	Tee	7713	5087			5087	5087SS6			5087SS6	
				5087			1481	1481SS6			1481SS6	
				648				648SS6			648SS6	
9	1	Diaphragm Plate	132SS6	133	134	135	136	132SS6	133	134	135	136
10	1	Diaphragm *	127	1706	1640	2015	2140	127	1706	1640	2015	2140
11	(QTY)	Bolt	4318 (6)	965 (8)	907(10)	907 (12)	2142 (16)	4318 (6)	965 (8)	907(10)	907 (12)	2142 (16)
12	1	Tubing	2505SS6	4050SS6	1378SS6	1379SS6	5061SS6	2505226	4050SS6	1378SS6	1379SS6	5061SS6
13	1	Connector	1604		874			1604SS6				874SS6
14	1	Gasket *	3018		118			3018				118
15	1	Pilot Seat *	3016		113			3016SS6				113SS6
16	1	Pilot Housing	3013		1701			3013SS6				1701 ‡
17	1	Vent Plug *			147							147SS6
18	1	Diaphragm *	3014		110			3014				110
19	1	Spring *	----		566			----				566HAC
20	1	Diaphragm	3011P		688			3011P				688
21	1	Diaphragm Plate	3009		687SS6			3009SS6				687SS6
22	2	Spring Guide	4484SS6		2612			4484SS6				2612SS6
23	1	Thread Seal	4542		4488			4542				4488S6
24	1	Adjusting Screw	6976		5163			6976SS6				5163SS6
25	1	Nut	1676		2377			1676SS6				2377SS6
26	1	Washer	4543		4491			4543				4491
27	1	Spring	4323		2611			4323				2611
28	1	Bonnet	4525		2610			4525 ‡				2610 ‡
29	4	Bolt	6972		907			6972				907SS6
30	1	Pressure Gauge			7707							7707
31	1	Spring *	3008		108			3008				108HAC
32	1	Diaph. Nut	3010		107			3010SS6				107SS6
33	1	Nipple	6890		648			6890S6				648SS6
34	1	1/4 F30 Filter			YAS							YASSS6
35	1	Pilot Seat *	3015		565			3015SS6				565SS6
36	1	Pilot Plug *	3017		112			3017				112
37	1	Upper Housing	3019	1719	1636	2003	2177	3019SS6	1719 ‡	1636 ‡	2003 ‡	2177 ‡
38	1	Tubing	4416S6	123SS6	124SS6	125SS6	126SS6	4416S6	123SS6	124SS6	125SS6	126SS6
39	1	Lower Housing	142	1704	1632	145	146	142 ‡	1704 ‡	1632 ‡	145 ‡	146 ‡
40	1	Seat Disc	158	159	160	161	162	158SS6	2493SS6	2494SS6	2495SS6	2961SS6
41	1	Standard Ratio Plug	176SS6	177SS6	178	179	180	176SS6	177SS6	3076SS6	3078SS6	3079SS6
		Reduced Ratio Plug	4932	4933	1228SS6	177SS6	178	4932SS6	4933SS6	1228SS6	177SS6	3076SS6
42	1	Removable Seat	----	272K	273K	274K	275K	----	2496SS6K	2497SS6K	2498SS6K	3075SS6K
43	1	Nut *	172	173	906	175		172SS6	173SS6	174SS6	175SS6	
	2	Lifting Ring (not shown)	----	----	7559	----		----	----	7559	----	
Repair Kits			RBB	RBC	RBD	RBE	RBF	RBB	RBC	RBD	RBE	RBF
* These parts are recommended spare parts and are stocked as repair kits.												

‡ Coated Parts available with "K" service type

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, pilot-operated regulator used To maintain ounces of positive pressure on systems flowing into a downstream vacuum, such as vapor recovery systems.

FEATURES:

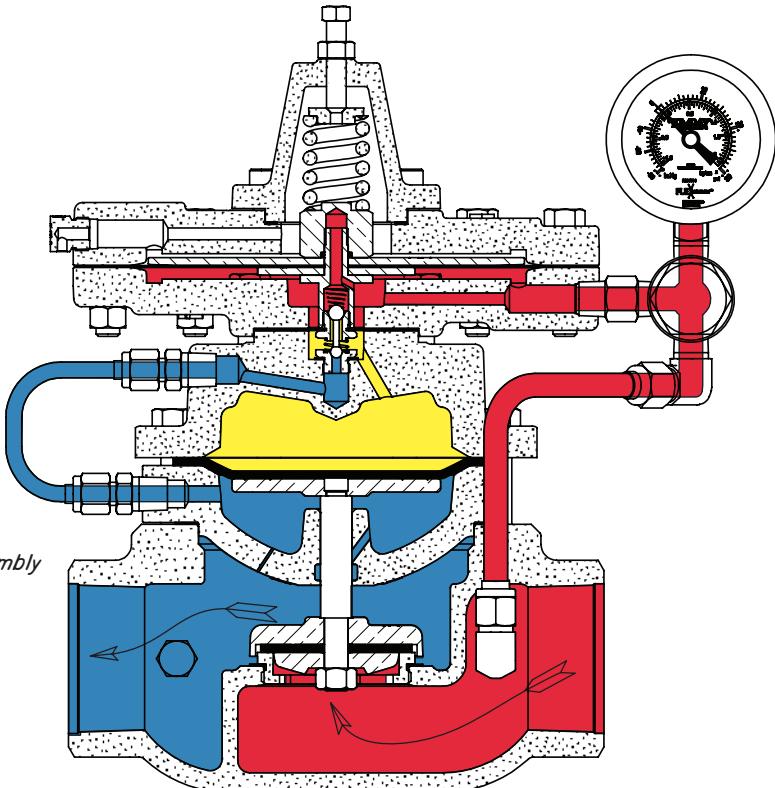
- Tight shut-off - Class VI
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint
- Minimum upstream pressure required

CERTIFICATIONS:

Canadian Registration Number (CRN):
 0C16234.24567890NTY (Ductile)
 Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

Non-Bleed / Intermittent Vent



- | | |
|--------------|---------------------------|
| [Grey Box] | Pilot Assembly |
| [Red Box] | Motor Valve Stem Assembly |
| [Blue Box] | Upstream Pressure |
| [Yellow Box] | Downstream Pressure |
| [Yellow Box] | Diaphragm Pressure |



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RVB2SADF2S	AFED20	2"	NPT	1-20	300	47.0	0.84
	RVB2ARDF2S	AFFD20		150RF	1-20	250		
	RVB3SADF2S	AFHD20	3"	NPT	1-20	300	117	0.75
	RVB3ARDF2S	AFID20		150RF	1-20	250		
	RVB4SADF2S	AFJD20	4"	NPT	1-20	300	210	0.75
	RVB4ARDF2S	AFKD20		150RF	1-20	250		
	RVB4ARDF2S	AFLD20	6"	150RF	1-20	250	480	0.75
Steel	RVB2ARWF2S	AHA20	2"	150RF	10-285	285	117	0.75
	RVB3ARWF2S	AHB20	3"	150RF	10-285	285	210	0.75
	RVB4ARWF2S	AHC20	4"	150RF	10-285	285	480	0.75
	RVB6ARWF2S	AHD20	6"	150RF	10-285	285	480	0.75

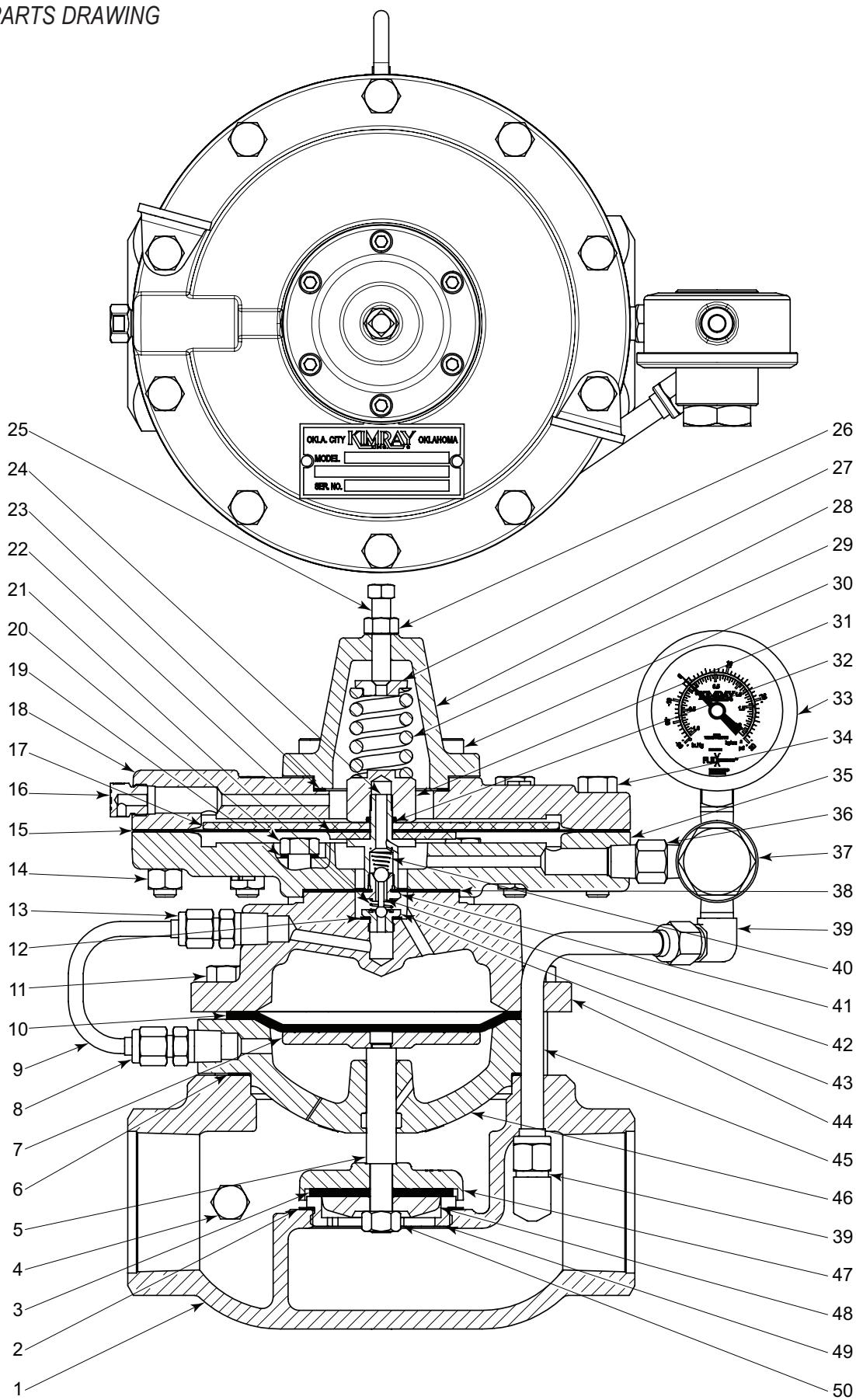
NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV
 † For Corrosive service remove last "S" & replace with "C"
 † For KimCoat option remove last "S" & replace with "K"
 † For code builder see page 06:00.3
 ‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

GAS LOW PRESSURE BACK PRESSURE TO VACUUM
MODEL VB PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

GAS LOW PRESSURE BACK PRESSURE TO VACUUM
MODEL VB PARTS LIST

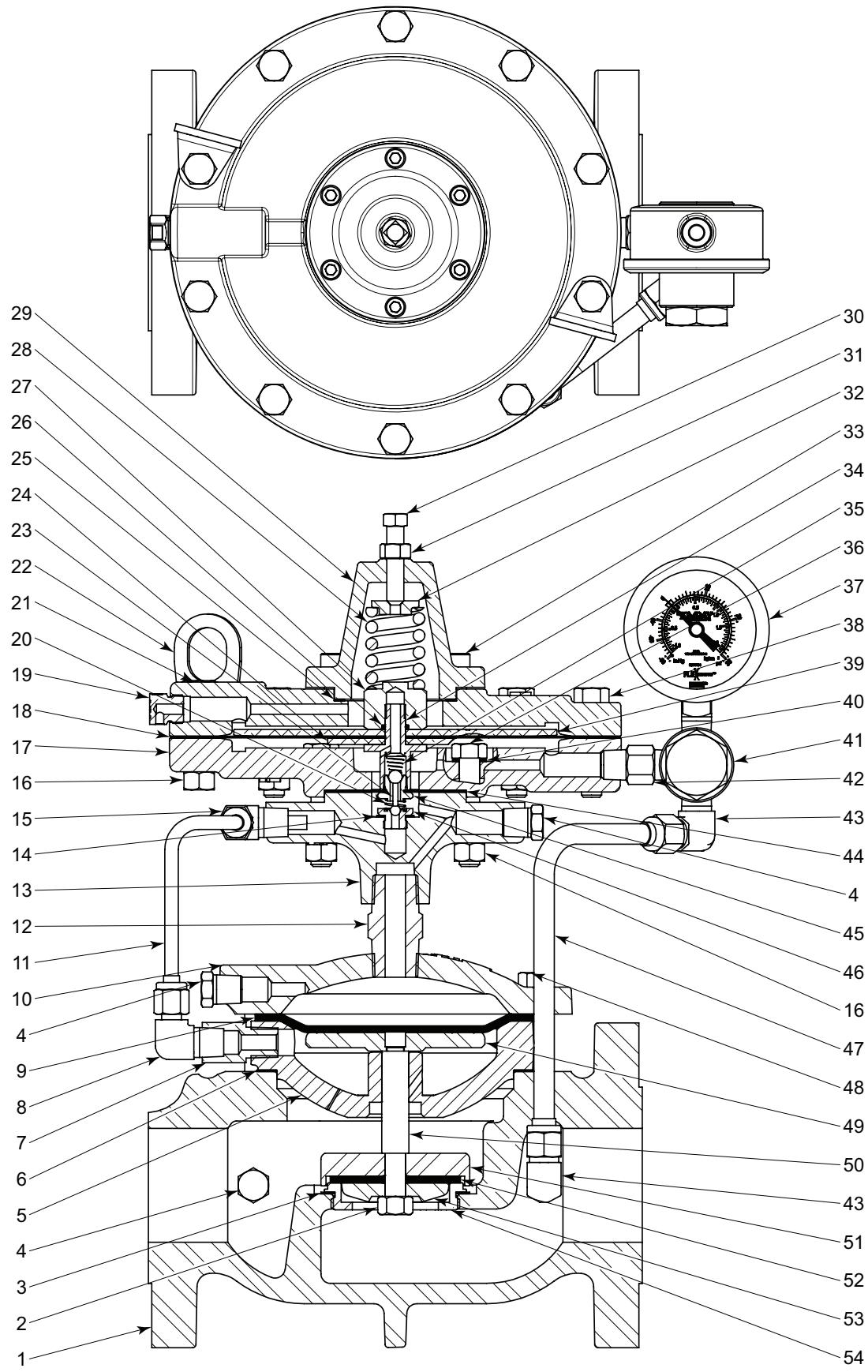
ITEM	QTY.	DESCRIPTION	PART NUMBER										
			STANDARD				CORROSIVE						
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH			
1	1	Body											
		NPT Thru	1709	1634	2001	----	1709 ‡	1634 ‡	2001 ‡	----			
		150RF Thru	1913	1914	2002	2466	1913 ‡	1914 ‡	2002 ‡	2466 ‡			
		Grooved Thru	2964	----	----	----	2964 ‡	----	----	----			
2	1	Gasket	*	276	277	196	279	276	277	196	279		
3	1	Seat	*	164HSN	165HSN	166HSN	167HSN	164HSN	165HSN	166HSN	167HSN		
4	2	Plug		699				699SS6					
5	1	Valve Stem		138	139	140	141	138SS6	139SS6	140SS6	141SS6		
6	1	Gasket	*	196	197	198	199	196	197	198	199		
7	1	Diaphragm Plate		133	134	135	136	133	134	135	136		
8	1	Connector		875				875SS6					
9	1	Tubing		4008SS6	213SS6	2505SS6	215SS6	1826SS6	213SS6	2505SS6	215SS6		
10	1	Diaphragm	*	1706	1640	2015	2140	1706	1640	2015	2140		
11	(QTY)	Bolt		965 (8)	907(10)	907 (12)	2142 (12)	965SS6 (8)	907SS6(10)	907SS6 (12)	2142SS6 (12)		
12	1	Gasket	*	118				118					
13	1	Connector		874				874SS6					
14	10	Nut		241				241					
15	1	Diaphragm	*	1212				1212					
16	1	Vent Plug		147				147SS6					
17	1	Upper Diaphragm Plate		1208				1208SS6					
18	1	Upper Pilot Housing		1206				1206 ‡					
19	4	Gasket	*	242				242					
20	4	Screw		1672				1672SS6					
21	1	Spring		566				566HAC					
22	1	Lower Diaphragm Plate		1340				1340SS6					
23	1	Gasket	*	1216				1216					
24	1	Stem		1339				1339S6					
25	1	Adjusting Screw		897				897					
26	1	Nut		922				922SS6					
27	1	Spring Guide		7148S6 (Std. 20 lbs.) 636SS6 (Optional 2.5 & 5 lbs.)				7148S6 (Std. 20 lbs.) 636SS6 (Optional 2.5 & 5 lbs.)					
28	1	Bonnet		1336				1336 ‡					
29	1	Spring		4379 (Std 20 lbs.) 1527 (Opt 2.5 lbs.) 3061 (Opt 5 lbs.)				4379 (Std 20 lbs.) 1527 (Opt 2.5 lbs.) 3061 (Opt 5 lbs.)					
30	6	Screw		7531				7531					
31	1	Nut		1337				1337S6					
32	1	O-Ring	*	265				265					
33	1	Pressure Gauge		7704				7704					
34	10	Screw		236				236SS6					
35	1	Lower Pilot Housing		1356				1356 ‡					
36	1	Nipple		648				648SS6					
37	1	1/4 F30 Filter		YAS				YASSS6					
38	1	Diaphragm	*	110				110					
39	2	Elbow / Conn.		877				877SS6					
40	1	Spring	*	1360				1360					
41	1	Pilot Seat	*	565				565SS6					
42	1	Pilot Plug	*	112				112					
43	1	Pilot Seat	*	113				113SS6					
44	1	Upper Housing		1719	1636	2003	2177	1719 ‡	1636 ‡	2003 ‡	2177 ‡		
45	1	Tubing		4127				4127SS6					
46	1	Lower Housing		1373	1632	1375	146	1373 ‡	1632 ‡	1375 ‡	146 ‡		
47	1	Seat Disc		159	160	161	162	2493SS6	2494SS6	2495SS6	2961SS6		
	1	Standard Ratio Plug		177SS6	178	179	180	177SS6	3076SS6	3078SS6	3079SS6		
48	1	Reduced Ratio Plug		4933	1228SS6	177SS6	178	4933SS6	1228SS6	177SS6	3076SS6		
49	1	Removable Seat		272K	273K	274K	275K	2496SS6K	2497SS6K	2498SS6K	3075SS6K		
50	1	Nut	*	173	906		175	173SS6	174SS6		175SS6		
	2	Lifting Ring (not shown)		7559				7559					
Repair Kits			RBGD	RBHD	RBID	RBKD	* These parts are recommended spare parts and are stocked as repair kits.						

‡ Coated Parts available with "K" service type

PRESSURE REGULATORS

STEEL GAS LOW PRESSURE BACK PRESSURE TO VACUUM
MODEL VB PARTS DRAWING

KIMRAY
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All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

STEEL GAS LOW PRESSURE BACK PRESSURE TO VACUUM MODEL VB PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER								
			STANDARD				CORROSIVE				
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH	
1	1	Body	2468	2469	2470	2959	2468 ‡	2469 ‡	2470 ‡	2959 ‡	
2	1	Nut	173		906	175	173SS6		174SS6	175SS6	
3	1	Gasket *	276	277	196	279	276	277	196	279	
4	3	Plug			699				699SS6		
5	1	Lower Housing	4211	4212	4213	4214	4211 ‡	4212 ‡	4213 ‡	4214 ‡	
6	1	Gasket *	196	197	198	199	196	197	198	199	
7	1	Adapter			7244				7244S6		
8	1	Elbow			875				875SS6		
9	1	Diaphragm *	1706	1640	2015	2140	1706	1640	2015	2140	
10	1	Bonnet	2487	2488	2489	2956	2487 ‡	2488 ‡	2489 ‡	2956 ‡	
11	1	Tubing	4050SS6		2505SS6	4312SS6	4050SS6		2505SS6	4312SS6	
12	1	Nipple			2516				2516SS6		
13	1	Base			4995				4995 ‡		
14	1	Gasket *			118				118		
15	1	Elbow / Connector		875		874	875	875SS6	874SS6	875SS6	
16	14	Nut			241				241		
17	1	Lower Pilot Housing			1356				1356 ‡		
18	1	Diaphragm *			1212				1212		
19	1	Vent Plug			147				147SS6		
20	1	Spring *			566				566HAC		
21	2	Lifting Ring (not shown)		7559		----		7559		----	
22	1	Upper Pilot Housing			1206				1206 ‡		
23	1	Pilot Plug *			112				112		
24	1	Lower Diaphragm Plate			1340				1340SS6		
25	1	Gasket *			1216				1216		
26	1	O-Ring *			265				265		
27	1	Nut			1337				1337S6		
28	1	Spring	4379 (Std 20 lbs.)	1527 (Opt 2.5 lbs.)	3061 (Opt 5 lbs.)			4379 (Std 20 lbs.)	1527 (Opt 2.5 lbs.)	3061 (Opt 5 lbs.)	
29	1	Bonnet			1336				1336 ‡		
30	1	Adjusting Screw			897				897		
31	1	Nut			922				922		
32	1	Spring Guide	7148S6 (Std. 20 lbs.)	636SS6 (Optional 2.5 & 5 lbs.)				7148S6 (Std. 20 lbs.)	636SS6 (Optional 2.5 & 5 lbs.)		
33	6	Screw			7531				7531		
34	1	Stem			1339				1339S6		
35	1	Spring *			1360				1360HAC		
36	4	Screw			191				191		
37	1	Pressure Gauge			7704				7704		
38	10	Screw			236				236		
39	1	Upper Diaphragm Plate			1208				1208SS6		
40	4	Gasket *			242				242		
41	1	Nipple			648				648SS6		
42	1	1/4 F30 Filter			YAS				YASSS6		
43	2	Elbow		877		875		877SS6		875SS6	
44	1	Diaphragm *			110				110		
45	1	Pilot Seat *			565				565SS6		
46	1	Pilot Seat *			113				113SS6		
47	1	Tubing	4127		4129S6	2529SS6		4127SS6	4129S6	2529SS6	
48	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)		965 (8)	907(10)	907 (12)	2142 (16)
49	1	Diaphragm Plate	2490	2491	2492	2958		2490SS6	2491SS6	2492SS6	2958SS6
50	1	Valve Stem	138	139	140	141		138SS6	139SS6	140SS6	141SS6
51	1	Seat Disc	2493SS6	2494SS6	2495SS6	2961SS6		2493SS6	2494SS6	2495SS6	2961SS6
52	1	Seat *	164HSN	165V	166V	167HSN		164HSN	165V	166V	167HSN
53	1	Standard Ratio Plug	177SS6	178	179	3079SS6		177SS6	3076SS6	3078SS6	3079SS6
		Reduced Ratio Plug	4933	1228SS6	177SS6	3076SS6		4933SS6	1228SS6	177SS6	3076SS6
54	1	Removable Seat	2496SS6K	2497SS6K	2498SS6K	3075SS6K		2496SS6K	2497SS6K	2498SS6K	3075SS6K
Repair Kits			RSV	RSW	RBI	RBK		RSV	RSW	RBI	RBK
			* These parts are recommended spare parts and are stocked as repair kits.								

‡ Coated Parts available with "K" service type

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, pilot-operated regulator ideal for use in liquid packed systems where an auxiliary source of supply air or dry gas pressure available. When compressed air can be used as the outside source of supply, it is a great way to mitigate emissions concerns related to vented gas.

FEATURES:

- Tight shut-off
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

CERTIFICATIONS:

Canadian Registration Number (CRN):
 0C16234.24567890NTY (Ductile)
 0C15604.24567890NTY (Steel)

Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

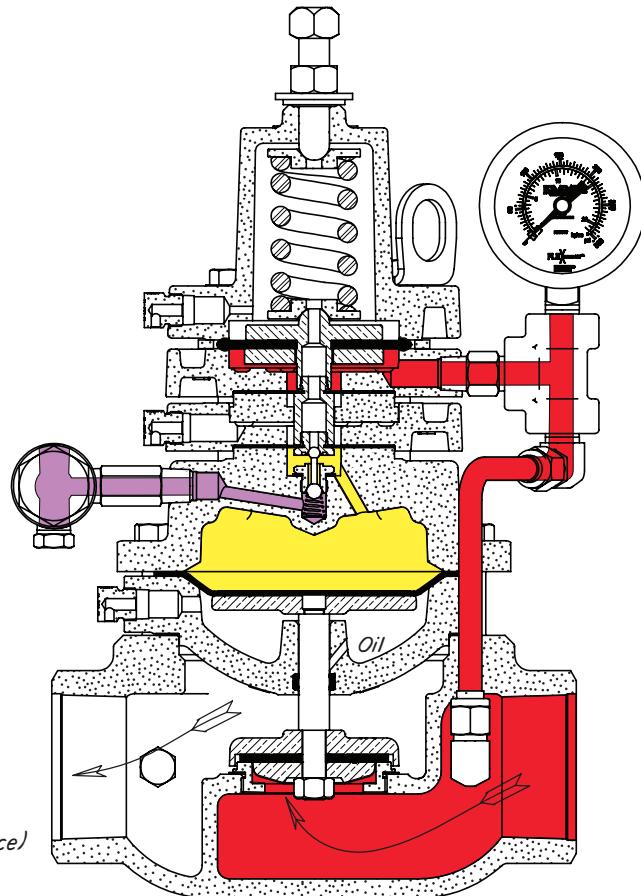
Non-Bleed / Intermittent Vent

SUPPLY PRESSURE:

Equal to or not less than 60% of controlled pressure upstream



- Pilot Assembly
- Motor Valve Stem Assembly
- Upstream Pressure
- Diaphragm Pressure
- Supply Pressure (outside source)



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Steel	RFB2SADF1S	AEM	2"	NPT	10-300	300	47.0	0.84
	RFB2ARDF1S	AEN		150RF	10-250	250		
	RFB3SADF1S	AEP	3"	NPT	10-300	300	117	0.75
	RFB3ARDF1S	AER		150RF	10-250	250		
	RFB4SADF1S	AES	4"	NPT	10-300	300	210	0.75
	RFB4ARDF1S	AET		150RF	10-250	250		
	RFB6ARDF1S	AEU	6"	150RF	10-250	250	480	0.75
	RFB2ARWF1S	AGW	2"	150RF	10-285	285	117	0.75
	RFB3ARWF1S	AGX	3"	150RF	10-285	285	210	0.75
	RFB4ARWF1S	AGY	4"	150RF	10-285	285	480	0.75
	RFB6ARWF1S	AGZ	6"	150RF	10-285	285	480	0.75

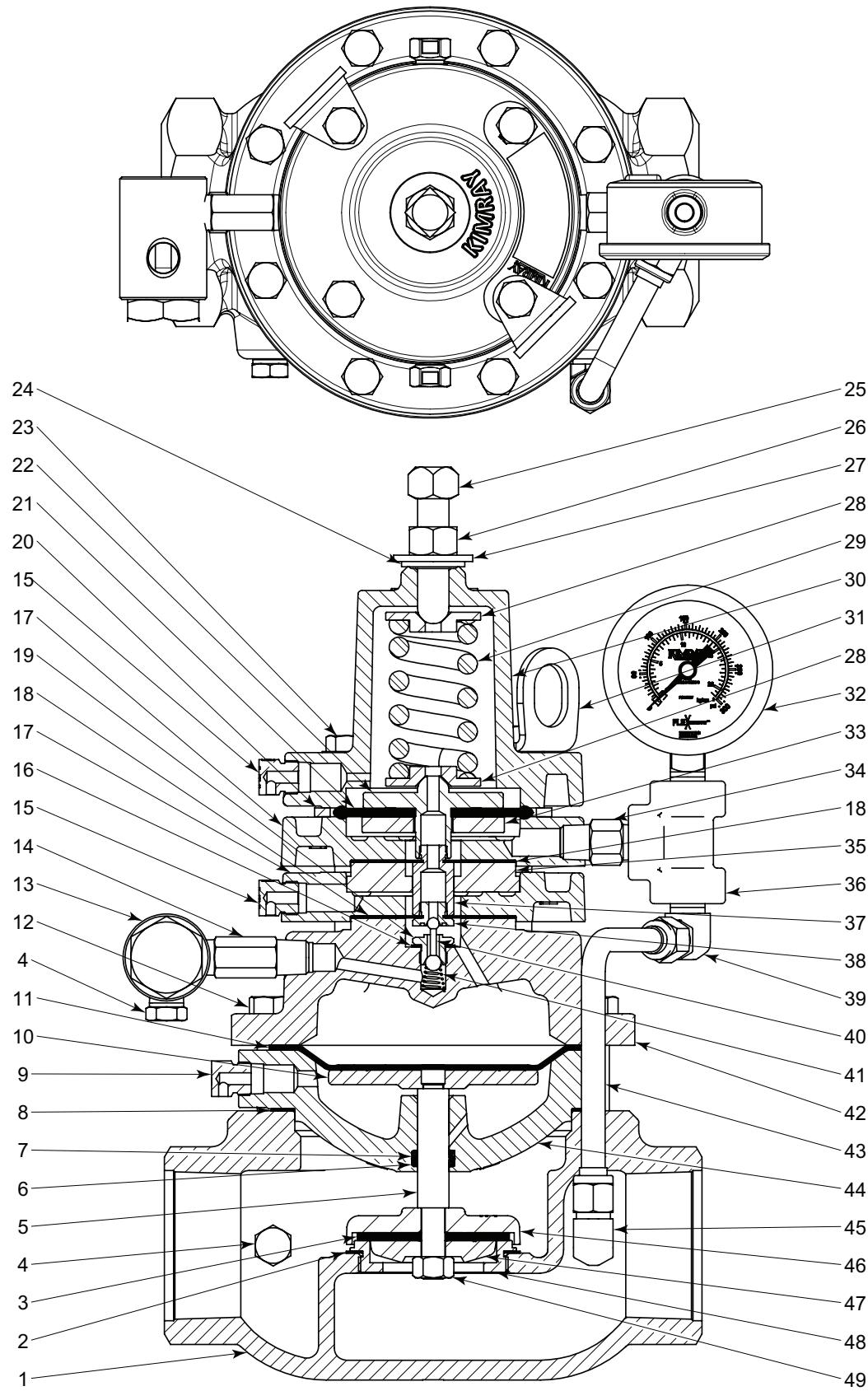
NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV
 † For Corrosive service remove last "S" & replace with "C"
 † For KimCoat option remove last "S" & replace with "K"
 † For code builder see page 06:00.2
 ‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

DUCTILE BACK PRESSURE W/ OUTSIDE SUPPLY
MODEL FB PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

DUCTILE BACK PRESSURE W/ OUTSIDE SUPPLY MODEL FB PARTS LIST

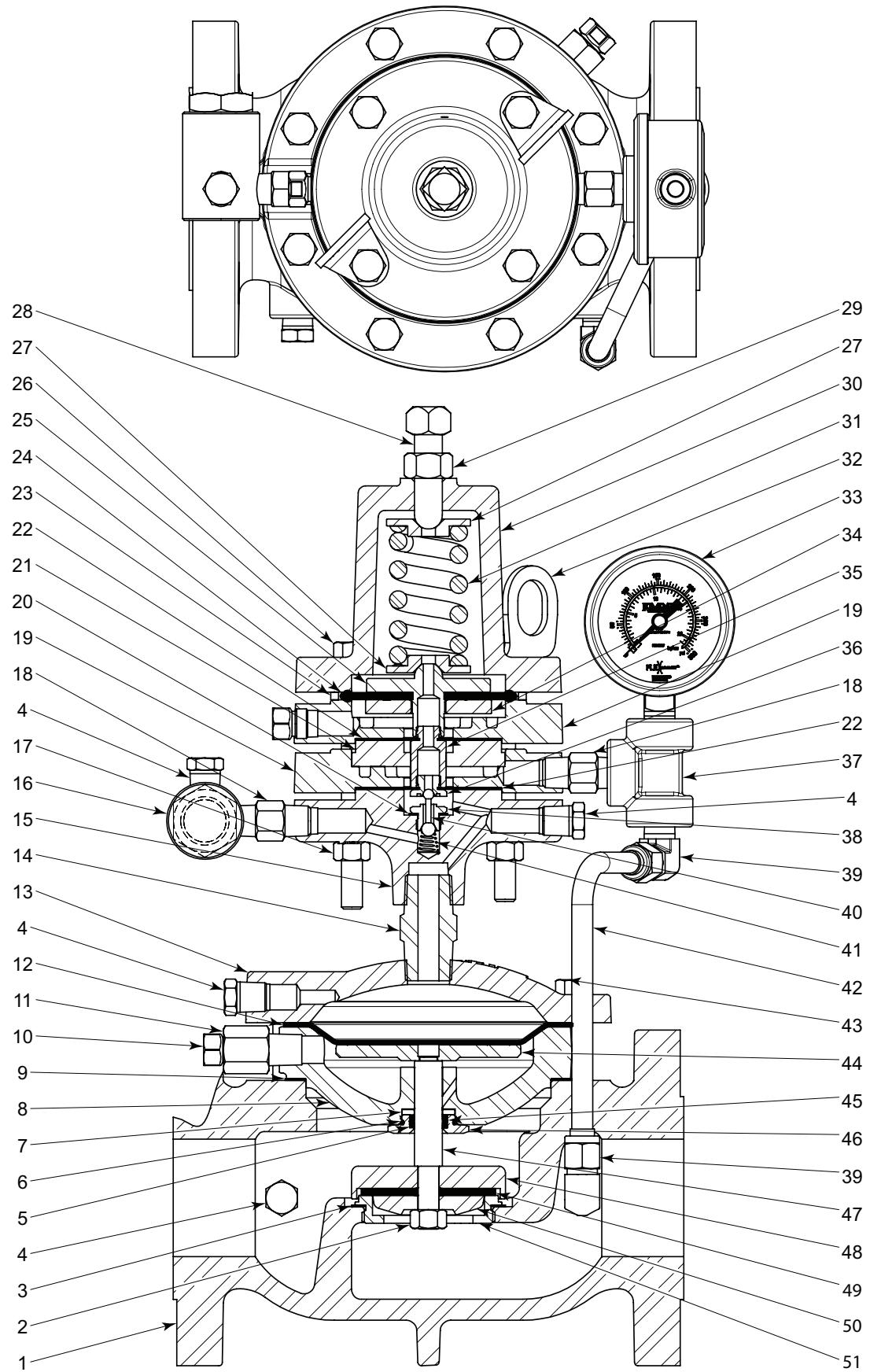
ITEM	QTY.	DESCRIPTION	PART NUMBER								
			STANDARD				CORROSIVE				
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH	
1	1	Body									
		Screwed Thru	1709	1634	2001	----	1709 ‡	1634 ‡	2001 ‡	----	
		Flanged Thru	1913	1914	2002	2466	1913 ‡	1914 ‡	2002 ‡	2466 ‡	
		Grooved Thru	2964	----	----	----	2964 ‡	----	----	----	
2	1	Gasket	*	276	277	196	279	276	277	196	279
3	1	Seat	*	164HSN	165HSN	166HSN	167HSN	164HSN	165HSN	166HSN	167HSN
4	2	Plug			699						
5	1	Valve Stem		138	139	140	141	138SS6	139SS6	140SS6	141SS6
6	2	Back Up	*	149T	150T	151T	152T	149T	150T	151T	152T
7	1	O-Ring	*	154	155	156	157	154	155	156	157
8	1	Gasket	*	196	197	198	199	196	197	198	199
9	1	Vent Plug			147						
10	1	Diaphragm Plate		133	134	135	136	133	134	135	136
11	1	Diaphragm	*	1706	1640	2015	2140	1706	1640	2015	2140
12	(QTY)	Bolt		965 (8)	907(10)	907 (12)	2142 (16)	965 (8)	907(10)	907 (12)	2142 (16)
13	1	1/4 F30 Filter			YAS						
14	1	Nipple		262		2600		262SS6		2600SS6	
15	2	Vent Plug			147			147SS6			
16	1	Gasket	*		118			118			
17	2	Pilot Housing			1701			1701 ‡			
18	2	Diaphragm	*		110			110			
19	1	Pilot Seat	*		565			565SS6			
20	1	Spacer Ring			7437			7437			
21	1	Diaphragm	*		5259P			5259P			
22	1	Diaphragm Plate			116			116SS6			
23	4	Bolt			7671			7671			
24	1	Thread Seal			4488			4488			
25	1	Adjusting Screw			5163			5163SS6			
26	1	Nut			2377			2377SS6			
27	1	Washer			4491			4491S6			
28	2	Spring Guide			2612			2612SS6			
29	1	Spring			2611			2611			
30	1	Bonnet			2610			2610 ‡			
31	2	Lifting Ring			7559		----	7559		----	
32	1	Pressure Gauge			7707			7707			
33	1	Diaphragm Nut			107			107SS6			
34	1	Nipple			648			648SS6			
35	1	Spacer Ring			2021			2021			
36	1	Tee			2000			2000SS6			
37	1	Seat Extension			4297			4297			
38	1	Pilot Seat	*		113			113SS6			
39	1	Elbow / Connector	*	877	876	877		877SS6	876SS6	877SS6	
40	1	Pilot Plug	*		112			112SS6			
41	1	Spring			108			108HAC			
42	1	Upper Housing		1719	1636	2003	2177	1719 ‡	1636 ‡	2003 ‡	2177 ‡
43	1	Tubing		72SS6	72SS6	73SS6	74SS6	4416S6	72SS6	73SS6	74SS6
44	1	Lower Housing		1704	1632	145	146	1704 ‡	1632 ‡	145 ‡	146 ‡
45	1	Elbow			877			877SS6			
46	1	Seat Disc		159	160	161	162	2493SS6	2494SS6	2495SS6	2961SS6
47	1	Standard Ratio Plug		177SS6	178	179	180	177SS6	3076SS6	3078SS6	3079SS6
		Reduced Ratio Plug		4933	1228SS6	177SS6	178	1933SS6	1228SS6	177SS6	3076SS6
48	1	Removable Seat		272K	273K	274K	275K	2496SS6K	2497SS6K	2498SS6K	3075SS6K
49	1	Nut	*	173		906	175	173SS6		174SS6	175SS6
‡ Coated Parts available with "K" service type											
Repair Kits			RRM	RRN	RRO	RRP	RRM	RRN	RRO	RRP	
* These parts are recommended spare parts and are stocked as repair kits.											

All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.

PRESSURE REGULATORS

STEEL BACK PRESSURE W/ OUTSIDE SUPPLY
MODEL FB PARTS DRAWING

KIMRAY
INC.



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PRESSURE REGULATORS

STEEL BACK PRESSURE W/ OUTSIDE SUPPLY
MODEL FB PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER			
			STANDARD			
			2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body	2468	2469	2470	2959
2	1	Nut *	173		906	175
3	1	Gasket *	276	277	196	279
4	4	Plug			699	
5	2	Back Up *	149T	150T	151T	152T
6	1	O-Ring *	5225	5226	5227	4086
7	1	Spacer	4557DS6	4561DS6	4566DS6	4571DS6
8	1	Lower Housing	2481	2482	2483	2957
9	1	Gasket *	196	197	198	199
10	1	Vent Plug			147	
11	1	Adapter			7244	
12	1	Diaphragm *	1706	1640	2015	2140
13	1	Bonnet	2487	2488	2489	2956
14	1	Nipple			2516	
15	1	Base			4995	
16	1	1/4 F30 Filter			YAS	
17	4	Nut			241	
18	2	Nipple			648	
19	2	Pilot Housing			2514	
20	1	Gasket *			118	
21	1	Spacer			2021	
22	2	Diaphragm *			110	
23	1	Spacer Ring *			7437	
24	1	Diaphragm *			5259P	
25	1	Diaphragm Nut			107	
26	4	Bolt			4298	
27	2	Spring Guide			2612	
28	1	Adjusting Screw			2613	
29	1	Diaphragm Plate			116	
30	1	Bonnet			2671	
31	1	Spring			2611	
32	2	Lifting Ring		7559		----
33	1	Pressure Gauge			7707	
34	1	Nut			2377	
35	1	Seat Extension			4297	
36	1	Pilot Seat *			113	
37	1	Tee			2000	
38	1	Pilot Seat *			565	
39	2	Elbow			877	
40	1	Pilot Plug *			112	
41	1	Spring			108	
42	1	Tubing	2558	2559	2560	4309
43	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)
44	1	Diaphragm Plate	2490	2491	2492	2958
45	1	O-Ring *	154	807	156	157
46	1	Retainer	4557ES6	4561ES6	4566ES6	4571ES6
47	1	Valve Stem	138	139	140	141
48	1	Seat Disc	2493SS6	2494SS6	2495SS6	2961SS6
49	1	Seat *	164HSN	165HSN	166HSN	167HSN
50	1	Ratio Plug	177SS6	178	179	3079SS6
51	1	Removable Seat	2496SS6K	2497SS6K	2498SS6K	3075SS6K
Repair Kits			RAE	RAF	RAG	RAH
* These parts are recommended spare parts and are stocked as repair kits.						

All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, pilot-operated regulator used in liquid packed systems where an auxiliary source of supply gas pressure is available. 60% set point supply.

FEATURES:

- Tight shut-off
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

CERTIFICATIONS:

Canadian Registration Number (CRN):
0C16234.24567890NTY (Ductile)
0C15604.24567890NTY (Steel)

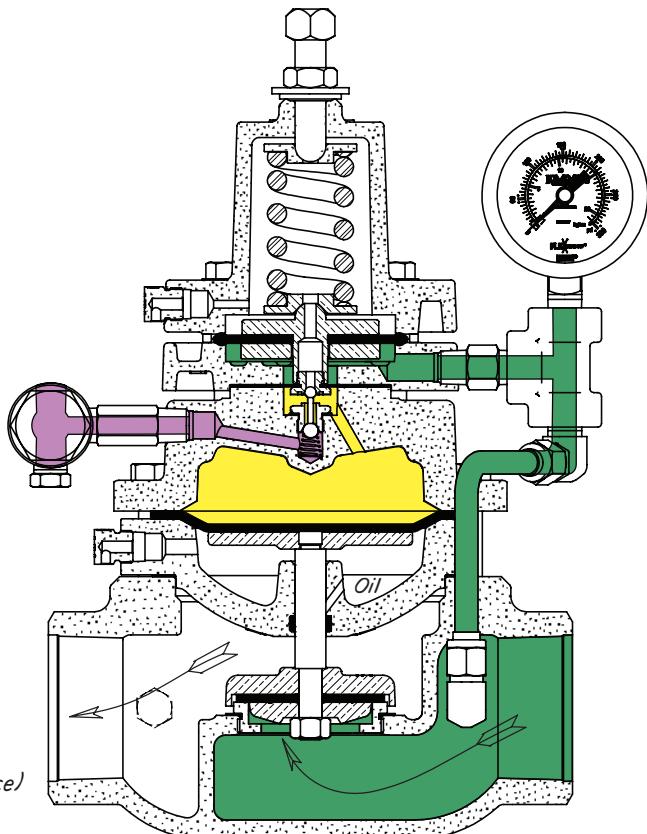
Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

Non-Bleed / Intermittent Vent

SUPPLY PRESSURE:

Equal to or not less than 60% of controlled pressure upstream



Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
RFB1SADF1S	ACG	1"	NPT	10-300	300	13.2	0.74

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

† For KimCoat option remove last "S" & replace with "K"

† For code builder see page 06:00.2

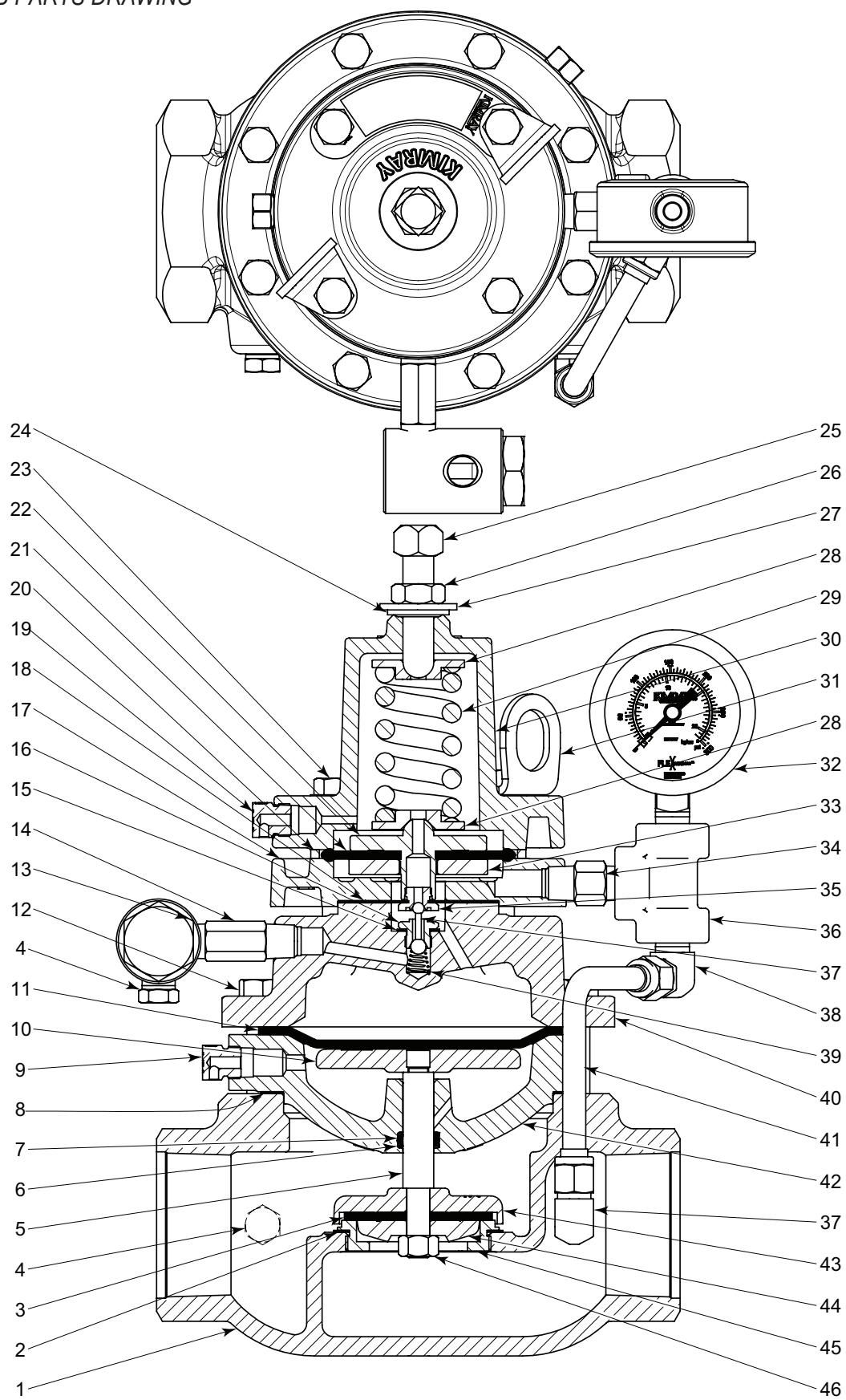
‡ Max W.P. values based on -20°F to 100°F.

All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.

PRESSURE REGULATORS

DUCTILE LIQUID BACK PRESSURE
MODEL FB PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

DUCTILE LIQUID BACK PRESSURE MODEL FB PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER	
			STANDARD	CORROSIVE
1	1	Body		
		Screwed Thru	2033	2033
2	1	Gasket *	----	----
3	1	Seat *	163HSN	163HSN
4	2	Plug	699	699SS6
5	1	Valve Stem	137	137SS6
6	2	Back Up *	148T	148T
7	1	O-Ring *	153	153
8	1	Gasket *	195	195
9	1	Vent Plug	1357	1357SS6
10	1	Diaphragm Plate	132SS6	132SS6
11	1	Diaphragm *	127	127
12	(QTY)	Bolt	4318 (6)	4318 (6)
13	1	1/4 F30 Filter	YAS	YASSS6
14	1	Nipple	6890	6890S6
15	1	Gasket *	3018	3018
16	1	Pilot Seat *	3015	3015SS6
17	1	Pilot Housing	3013	3013SS6
18	1	Diaphragm *	3014	3014
19	1	Vent Plug	147	147SS6
20	1	Spacer Ring	----	----
21	1	Diaphragm *	3011P	3011P
22	1	Diaphragm Plate	4014	4014SS6
23	4	Bolt	6972	6972
24	1	Thread Seal	4542	4542
25	1	Adjusting Screw	6976	6976S6
26	1	Nut	1676	1676SS6
27	1	Washer	4543	4543
28	2	Spring Guide	4484SS6	4484SS6
29	1	Spring	4323	4323
30	1	Bonnet	4525	4525
31	2	Lifting Ring	----	----
32	1	Pressure Gauge	7707	7707
33	1	Diaphragm Nut	3010	3010SS6
34	1	Nipple	6890	6890S6
35	1	Pilot Seat *	3016	3016SS6
36	1	Tee	219	219SS6
37	1	Pilot Plug *	3017	3017
38	1	Spring *	3008	3008
39	1	Upper Housing	3019	3019
40	1	Tubing	4416S6	4416S6
41	1	Lower Housing	142	142
42	2	Elbow	875	875SS6
43	1	Seat Disc	158	158SS6
44	1	Standard Ratio Plug	176SS6	176SS6
		Reduced Ratio Plug	4932	4932
45	1	Removable Seat	----	----
46	1	Nut *	172	172SS6
* These parts are recommended spare parts and are stocked as repair kits.				
Repair Kits		RRU	RRU	

All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Regulation of inlet pressure to gas compressors. Control of supply or distribution system pressure

FEATURES:

- Tight shut-off
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes downstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

CERTIFICATIONS:

Canadian Registration Number (CRN):
 0C16234.24567890NTY (Ductile)
 0C15604.24567890NTY (Steel)

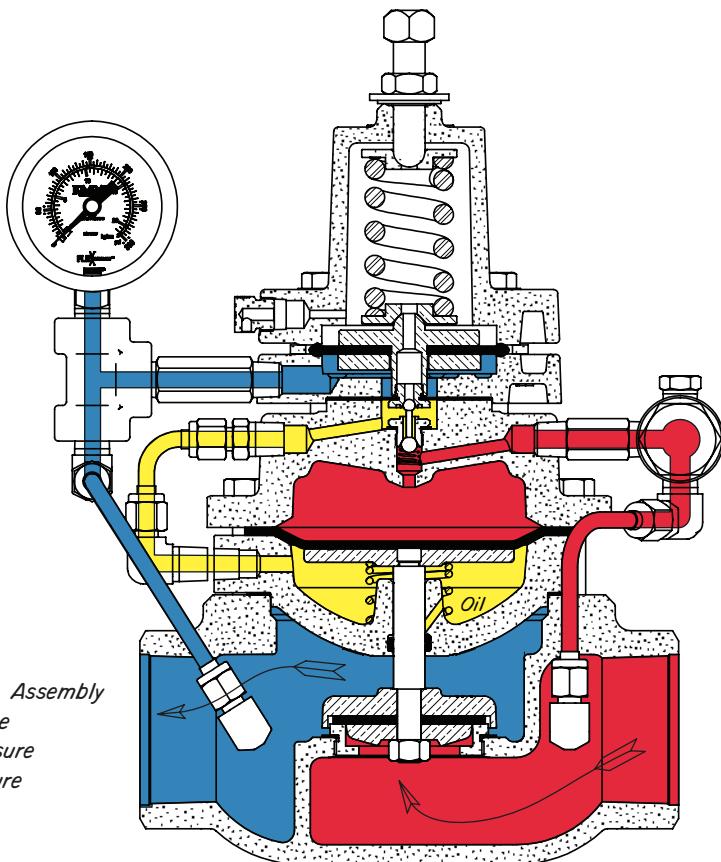
Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

Non-Bleed / Intermittent Vent

SET POINT DRIFT RATIO:

8:1



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RPR1SADF1S	AKF	1"	NPT	10-300	300	13.2	0.74
	RPR2SADF1S	ABU	2"	NPT	10-300	300	47.0	0.84
	RPR2ARDF1S	ABW		150RF	10-250	250		
	RPR3SADF1S	ABX	3"	NPT	10-300	300	117	0.75
	RPR3ARDF1S	ABY		150RF	10-250	250		
	RPR4SADF1S	ACA	4"	NPT	10-300	300	210	0.75
	RPR4ARDF1S	ACB		150RF	10-250	250		
	RPR4ARDF1S	ACC	6"	150RF	10-250	250	480	0.75
Steel	RPR1SAWF1S	AKG	1"	NPT	10-300	300	13.2	0.74
	RPR2ARWF1S	AGG	2"	150RF	10-285	285	117	0.75
	RPR3ARWF1S	AGH	3"	150RF	10-285	285	210	0.75
	RPR4ARWF1S	AGI	4"	150RF	10-285	285	480	0.75
	RPR6ARWF1S	AGJ	6"	150RF	10-285	285	480	0.75

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

‡ For KimCoat option remove last "S" & replace with "K"

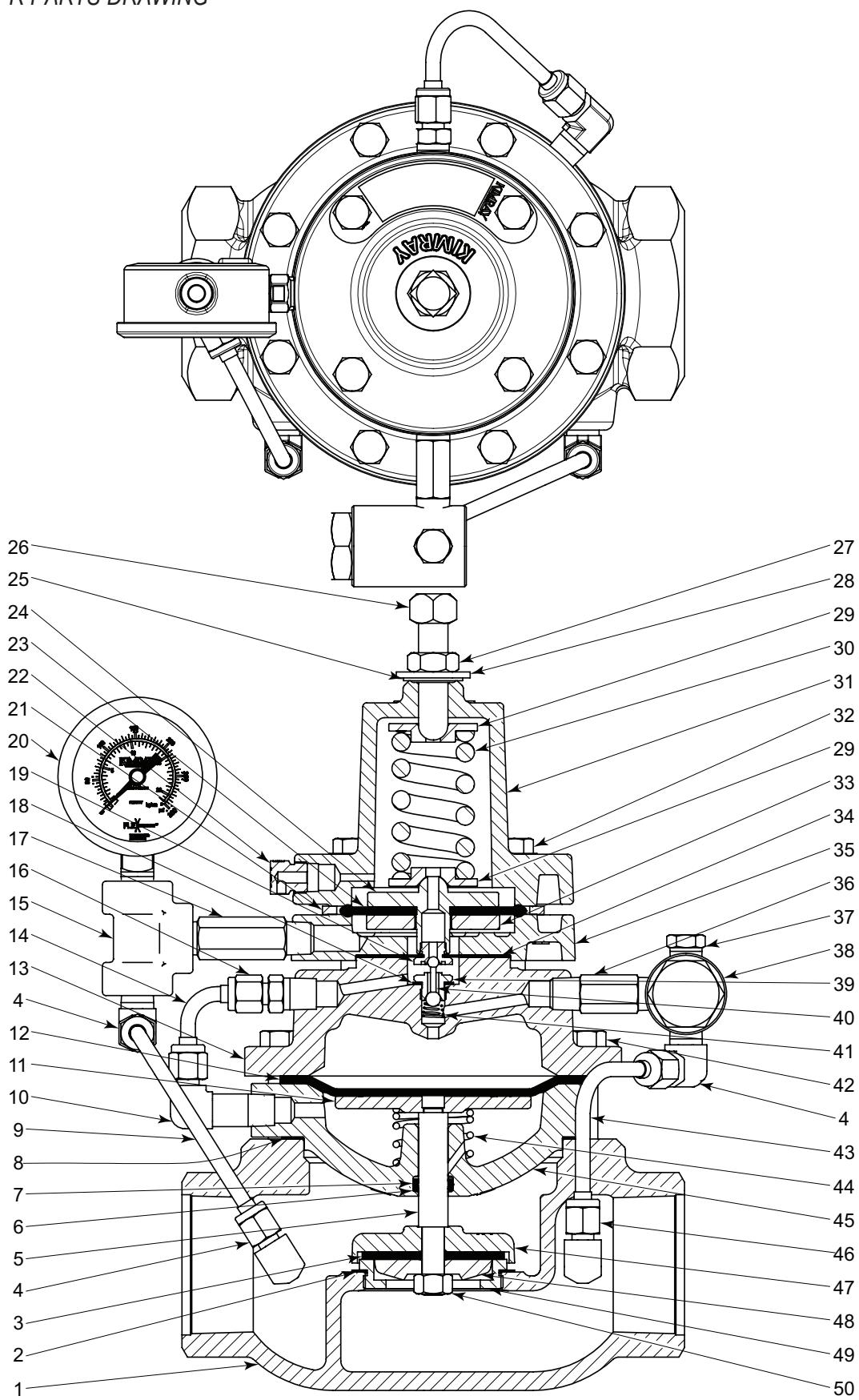
† For code builder see page 06:00.2

‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

DUCTILE GAS PRESSURE REDUCING
MODEL PR PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

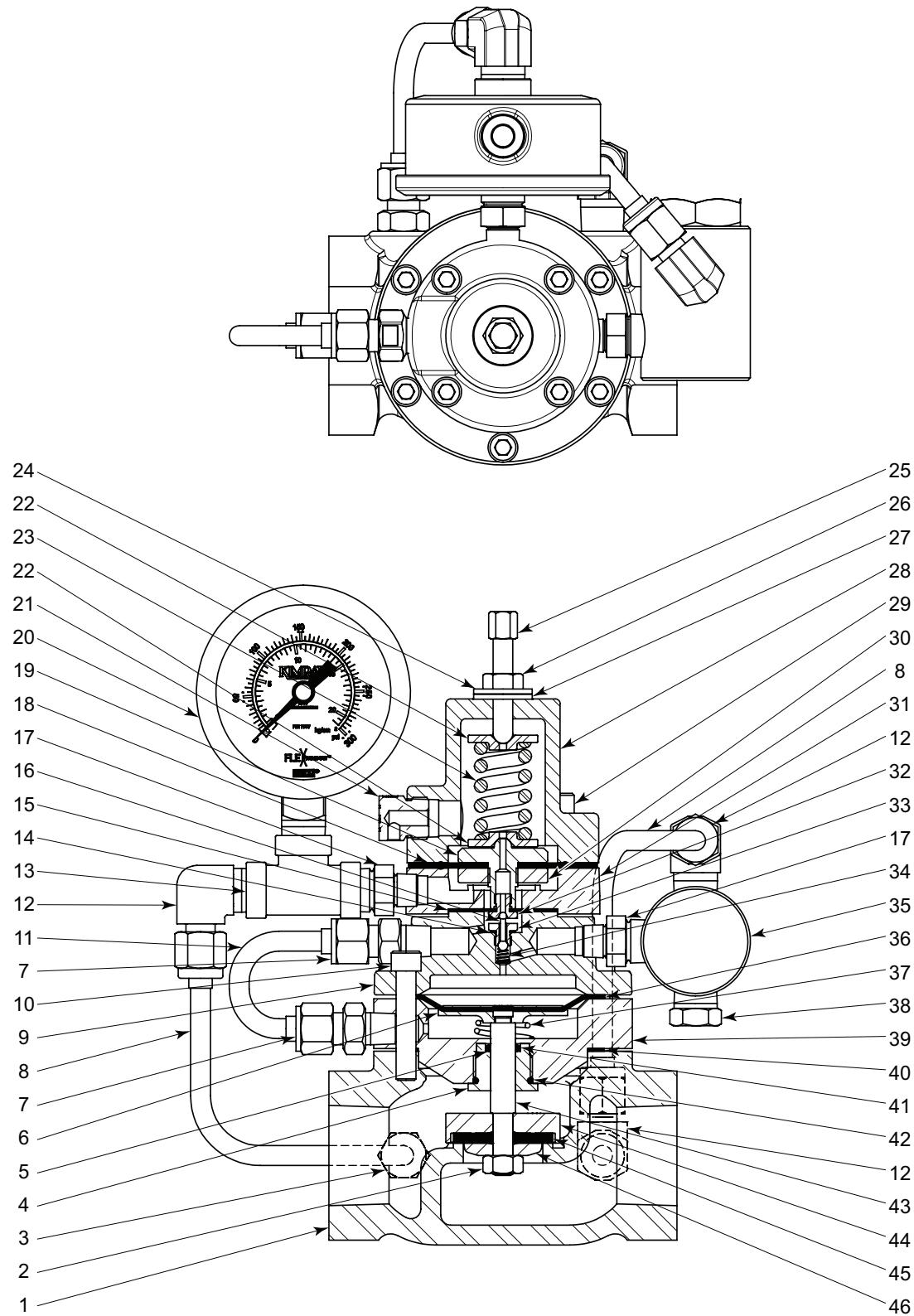
DUCTILE GAS PRESSURE REDUCING MODEL PR PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER								
			STANDARD					CORROSIVE			
			1 INCH	2 INCH	3 INCH	4 INCH	6 INCH	1 INCH	2 INCH	3 INCH	
1	1	Body									
		NPT Thru	2033	1709	1634	2001	----	2033 ‡	1709 ‡	1634 ‡	2001 ‡
		150RF Thru	----	1913	1914	2002	2466	----	1913 ‡	1914 ‡	2002 ‡
2	1	Gasket *	----	276	277	196	279	2964 ‡	----	----	----
		Seat *	163HSN	164HSN	165HSN	166HSN	167HSN	163HSN	164HSN	165HSN	166HSN
		Elbow			875					875SS6	
5	1	Valve Stem	137	138	139	140	141	137SS6	138SS6	139SS6	140SS6
6	2	Back Up *	148T	149T	150T	151T	152T	148T	149T	150T	151T
7	1	O-Ring *	153	154	155	156	157	153	154	155	156
8	1	Gasket *	195	196	197	198	199	195	196	197	198
9	1	Tubing	123SS6	216SS6	217SS6	4251S6	218SS6	123SS6	216SS6	217SS6	4251S6
10	1	Elbow	1605		875		1481	1605SS6		875SS6	1481SS6
	1	Connector	----	----	----	----	874	----	----	----	874SS6
	1	Nipple	----	----	----	----	262	----	----	----	262SS6
11	1	Diaphragm Plate	132SS6	133	134	135	136	132SS6	133	134	135
12	1	Diaphragm *	127	1706	1640	2015	2140	127	1706	1640	2015
13	1	Upper Housing	4015	1703	1639	2004	2178	4015SS6	1703 ‡	1639 ‡	2004 ‡
14	1	Tubing	1378SS6	4008SS6	213SS6	4011SS6	2529SS6	1378SS6	4008SS6	213SS6	4011SS6
15	1	Tee	219		2000			219SS6		2000SS6	
16	1	Connector	1604		874			1604SS6		874SS6	
17	1	Nipple	6890		648			6890S6		648SS6	
18	1	Gasket *	3018		118			3018		118	
19	1	Pilot Seat *	3016		113			3016SS6		113SS6	
20	1	Pressure Gauge			7707					7707	
21	1	Spacer Ring *	----		7437			----		7437	
22	1	Vent Plug			147					147SS6	
23	1	Diaphragm *	3011P		5259P			3011P		5259P	
24	1	Diaphragm Plate	4014		116			4014SS6		116SS6	
25	1	Thread Seal *	4542		4488			4542		4488	
26	1	Adjusting Screw	6976		5163			6976S6		5163SS6	
27	1	Nut	1676		2377			1676SS6		2377SS6	
28	1	Washer *	4543		4491			4543		4491S6	
29	2	Spring Guide	4484SS6		2612			4484SS6		2612SS6	
30	1	Spring	4323		2611			4323		2611	
31	1	Bonnet	4525		2610			4525 ‡		2610 ‡	
32	4	Bolt	6972		907			6972		907	
33	1	Diaph. Nut	3010		107			3010SS6		107SS6	
34	1	Diaphragm *	3014		110			3014		110	
35	1	Pilot Housing	3013		1701			3013SS6		1701 ‡	
36	1	Nipple	6890	262	2600		648	6890S6	262SS6	2600SS6	648SS6
37	1	Plug			699					699SS6	
38	1	1/4 F30 Filter			YAS					YASSS6	
39	1	Pilot Seat *	3015		565			3015SS6		565SS6	
40	1	Pilot Plug *	3017		112			3017		112	
41	1	Spring *	3008		108			3008		108HAC	
42	(QTY)	Bolt	4318 (6)	965 (8)	907(10)	907 (12)	2142 (16)	4318 (6)	965 (8)	907(10)	907 (12)
43	1	Tubing	123S6	1638SS6	1826SS6	1383SS6	2247SS6	123S6	1638SS6	1826SS6	1383SS6
44	1	Spring	1358	1388	7132	1529	1575	1358	1388	7132	1529
45	1	Lower Housing	142	1704	1632	145	146	142 ‡	1704 ‡	1632 ‡	145 ‡
46	1	Elbow	874	875	874		1481	874SS6	875SS6	874SS6	1481SS6
47	1	Seat Disc	158	159	160	161	162	158SS6	2493SS6	2494SS6	2495SS6
48	1	Standard Ratio Plug	176SS6	177SS6	178	179	180	176SS6	177SS6	3076SS6	3078SS6
		Reduced Ratio Plug	4932	4933	1228SS6	177SS6	178	4932SS6	4933SS6	1228SS6	177SS6
49	1	Removable Seat	----	272K	273K	274K	275K	----	2496SS6K	2497SS6K	2498SS6K
50	1	Nut *	172	173	906		175	172SS6	173SS6	174SS6	175SS6
51	2	Lifting Ring (not shown)	----	----	7559			----	7559	7559	----
Repair Kits			RRU	RDG	RDH	RDI	RDJ	RRU	RDG	RDH	RDI
* These parts are recommended spare parts and are stocked as repair kits.											
‡ Coated Parts available with "K" service type											

PRESSURE REGULATORS

1 INCH STEEL GAS PRESSURE REDUCING
MODEL PR PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

1 INCH STEEL GAS PRESSURE REDUCING MODEL PR PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER	
			STANDARD	CORROSIVE
1	1	Body		
		NPT Thru	4942	4942 ‡
		150RF Thru	5292	5292
2	1	Nut *	172	172SS6
3	2	Nipple	6890	6890S6
4	1	Bushing *	4632A	4632A
5	1	Seal *	4551C	4551C
6	1	Diaphragm Plate	132SS6	132SS6
7	3	Connector	1604	1604SS6
8	2	Tubing	123SS6	123SS6
9	1	Upper Housing	4015	4015SS6
10	6	Bolt	4318	4318
11	1	Tubing	4008SS6	4008SS6
12	3	Elbow	875	875SS6
13	1	Tee	219	219SS6
14	1	Gasket *	3018	3018
15	1	Diaphragm *	3014	3014
16	1	Pilot Plug *	3017	3017
17	2	Nipple	6890	6890S6
18	1	Diaphragm *	3011P	3011P
19	1	Diaphragm Plate	4014	4014SS6
20	1	Pressure Gauge	7707	7707
21	1	Breather Plug	147	147SS6
22	2	Spring Guide	4484SS6	4484SS6
23	1	Spring	4323	4323
24	1	Washer *	4543	4543
25	1	Adjusting Screw	6976	6976S6
26	1	Nut	1676	1676SS6
27	1	Thread Seal *	4542	4542
28	1	Bonnet	4525	4525 ‡
29	4	Bolt	6972	6972
30	1	Diaph. Nut	3010	3010SS6
31	1	Pilot Housing	3013	3013SS6
32	1	Pilot Seat *	3016	3016SS6
33	1	Pilot Seat *	3015	3015SS6
34	1	Spring *	3008	3008
35	1	1/4 F30 Filter	YAS	YASSS6
36	1	Diaphragm *	127	127
37	1	Spring	1358S	1358S
38	1	Plug	699	699SS6
39	1	Lower Housing	4632	4632 ‡
40	1	Gasket *	195	195
41	1	O-Ring *	153V	153V
42	1	O-Ring *	4552	4552
43	1	Valve Stem	137	137SS6
44	1	Seat Disc	158	158SS6
45	1	Seat *	163HSN	163HSN
46	1	Standard Ratio Plug	176SS6	176SS6
		Reduced Ratio Plug	4932	4932SS6

‡ Coated Parts available with "K" service type

Repair Kits

RRUTB

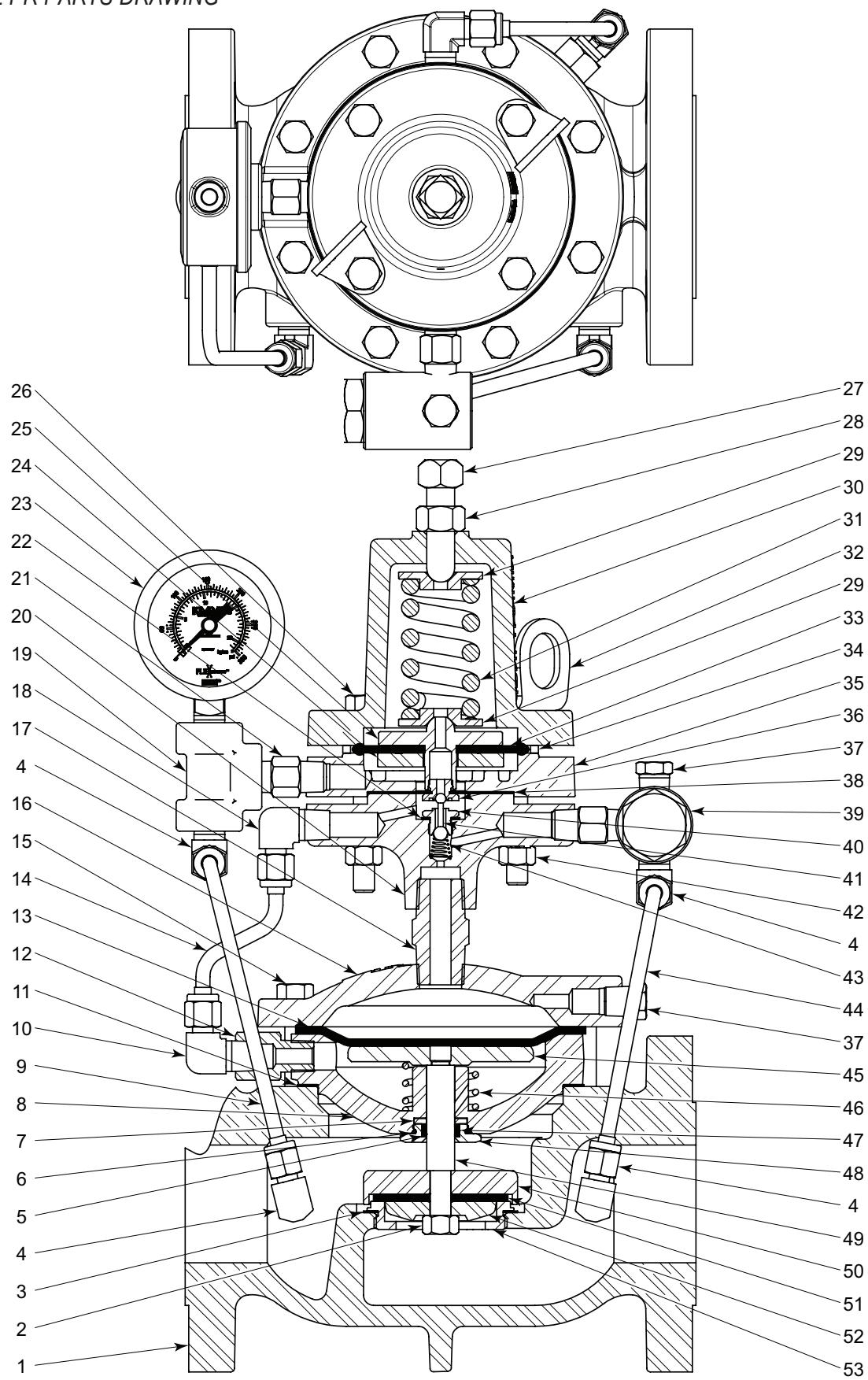
RRUTB

* These parts are recommended spare parts and are stocked as repair kits.

PRESSURE REGULATORS

STEEL GAS PRESSURE REDUCING
MODEL PR PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

STEEL GAS PRESSURE REDUCING MODEL PR PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER							
			STANDARD				CORROSIVE			
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body	2468	2469	2470	2959	2468 ‡	2469 ‡	2470 ‡	2959 ‡
2	1	Nut *	173		906	175	173SS6		174SS6	175SS6
3	1	Gasket *	276	277	196	279	276	277	196	279
4	4	Ell			875				875SS6	
5	2	Back Up *	149T	150T	151T	152T	149T	150T	151T	152T
6	1	O-Ring *	5225	5226	5227	4086	5225	5226	5227	4086
7	1	Spacer	4557DS6	4561DS6	4566DS6	4571DS6	4557DS6	4561DS6	4566DS6	4571DS6
8	1	Lower Housing	2481	2482	2483	2957	2481 ‡	2482 ‡	2483 ‡	2957 ‡
9	1	Tubing	2505SS6	2552S6	2529SS6	4306S6	2505SS6	2552S6	2529SS6	4306S6
10	1	Ell / Connector			875			875SS6		874SS6
11	1	Gasket *	196	197	198	199	196	197	198	199
		Adapter			7244			7244S6		----
12	1	Nipple			----			----		648SS6
		Elbow			----			----		1481226
13	1	Diaphragm *	1706	1640	2015	2140	1706	1640	2015	2140
14	1	Tubing	2511SS6		4011SS6	2529S6	2511SS6		4011SS6	2529S6
15	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)	965 (8)	907(10)	907 (12)	2142 (16)
16	1	Bonnet	2487	2488	2489	2956	2487 ‡	2488 ‡	2489 ‡	2956 ‡
17	1	Nipple			2516			2516SS6		
18	1	Ell / Connector		875		874	875SS6		874SS6	
19	1	Tee			2000			2000SS6		
20	1	Base			2515			2515 ‡		
21	2	Nipple			648			648SS6		
22	1	Gasket *			118			118		
23	1	Pressure Gauge			7707			7707		
24	1	Diaphragm Nut			107			107SS6		
25	1	Diaphragm Plate			116			116SS6		
26	4	Bolt			1232			1232		
27	1	Adjusting Screw			2613			2613SS6		
28	1	Nut			2377			2377SS6		
29	2	Spring Guide			2612			2612SS6		
30	1	Bonnet			2671			2671 ‡		
31	1	Spring			2611			2611		
32	2	Lifting Ring		7559		----	7559		----	
33	1	Diaphragm *			5259P			5259P		
34	1	Spacer Ring *			7437			7437		
35	1	Pilot Housing			2514			2514 ‡		
36	1	Pilot Seat *			113			113SS6		
37	1	Plug			699			699SS6		
38	1	Diaphragm *			110			110		
39	1	1/4 F30 Filter			YAS			YASSS6		
40	1	Pilot Seat *			565			565SS6		
41	1	Pilot Plug *			112			112		
42	4	Nut			241			241SS6		
43	1	Spring *			108			108HAC		
44	1	Tubing	2505SS6	4011SS6	2529SS6	5061SS6	2505SS6	4011SS6	2529SS6	5061SS6
45	1	Diaphragm Plate	2490	2491	2492	2958	2490SS6	2491SS6	2492SS6	2958SS6
46	1	Spring	1388	7132	1529	1575	1388	7132	1529	1575
47	1	O-Ring *	154	807	156	157	154	807	156	157
48	1	Retainer	4557ES6	4561ES6	4566ES6	4571ES6	4557ES6	4561ES6	4566ES6	4571ES6
49	1	Valve Stem	138	139	140	141	138SS6	139SS6	140SS6	141SS6
50	1	Seat Disc	2493SS6	2494SS6	2495SS6	2961SS6	2493SS6	2494SS6	2495SS6	2961SS6
51	1	Seat *	164HSN	165HSN	166HSN	167HSN	164HSN	165HSN	166HSN	167HSN
52	1	Ratio Plug	177SS6	178	179	3079SS6	177SS6	3076SS6	3078SS6	3079SS6
53	1	Removable Seat	2496SS6K	2497SS6K	2498SS6K	3075SS6K	2496SS6K	2497SS6K	2498SS6K	3075SS6K

‡ Coated Parts available with "K" service type

Repair Kits

RAE

RAF

RAG

RAH

RAE

RAF

RAG

RAH

* These parts are recommended spare parts and are stocked as repair kits.

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, low pressure pilot-operated regulator used for maintaining vapor pressure on storage tanks, controlling compressor by-pass for gas recirculation and maintaining low pressure head on flash separators.

FEATURES:

- Tight shut-off
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

CERTIFICATIONS:

Canadian Registration Number (CRN):
0C16234.24567890NTY (Ductile)
Kimray is an ISO 9001- certified manufacturer.

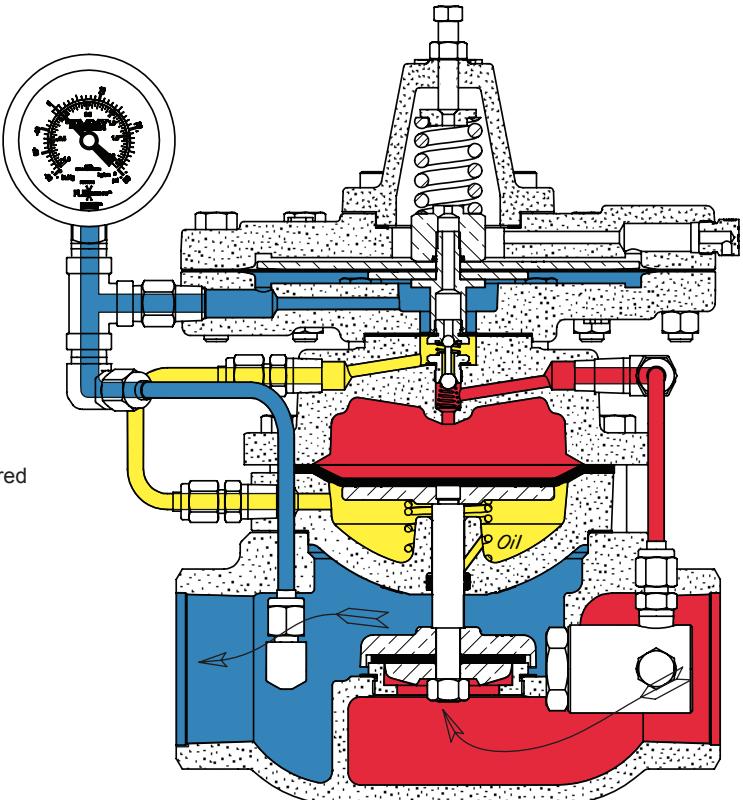
CLASSIFICATIONS:

Non-Bleed / Intermittent Vent

UPSTREAM PRESSURE RANGE:

- 1 Inch valves:
 Full port 10 psig min. or outside supply source is required
 Reduced port 5 psig min. or outside supply source is required
- 2 thru 6 inch valves:
 5 psig min. or outside supply source is required

- Pilot Assembly
- Motor Valve Stem Assembly
- Upstream Pressure
- Downstream Pressure
- Diaphragm Pressure



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RLR2SADF2S	AOSD20	2"	NPT	1-20	300	47.0	0.84
	RLR2ARDF2S	AOTD20		150RF	1-20	250		
	RLR3SADF2S	AOVD20	3"	NPT	1-20	300	117	0.75
	RLR3ARDF2S	AOWD20		150RF	1-20	250		
	RLR4SADF2S	AOYD20	4"	NPT	1-20	300	210	0.75
	RLR4ARDF2S	AOZD20		150RF	1-20	250		
	RLR4ARDF2S	APCD20	6"	150RF	1-20	250	480	0.75
Steel	RLR2ARWF2S	AIA20	2"	150RF	10-285	285	117	0.75
	RLR3ARWF2S	AFC20	3"	150RF	10-285	285	210	0.75
	RLR4ARWF2S	AFD20	4"	150RF	10-285	285	480	0.75
	RLR6ARWF2S	AHH20	6"	150RF	10-285	285	480	0.75

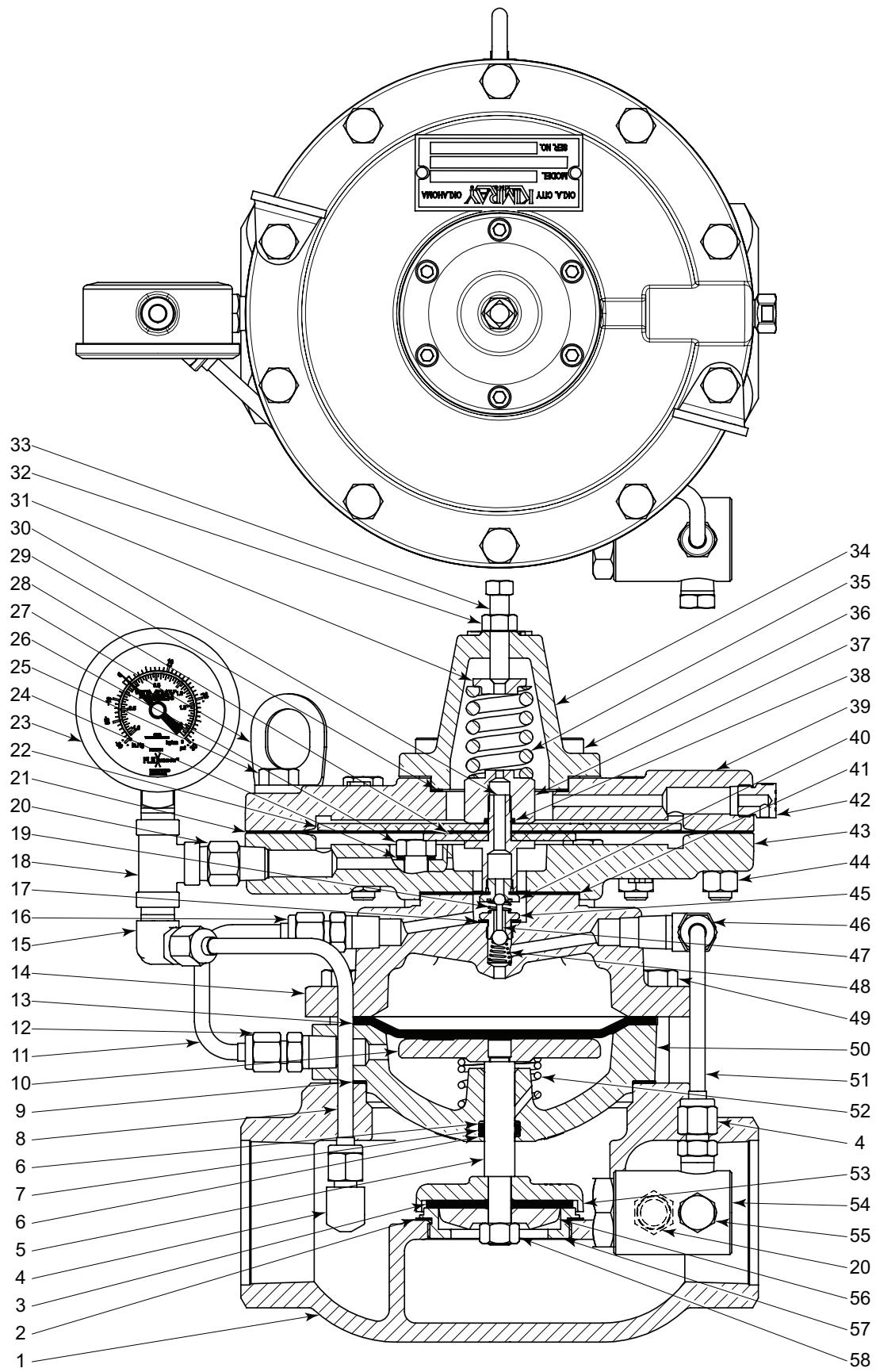
NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV
 † For Corrosive service remove last "S" & replace with "C"
 † For KimCoat option remove last "S" & replace with "K"
 † For code builder see page 06:00.3
 ‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

GAS LOW PRESSURE PRESSURE REDUCING
MODEL LR PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

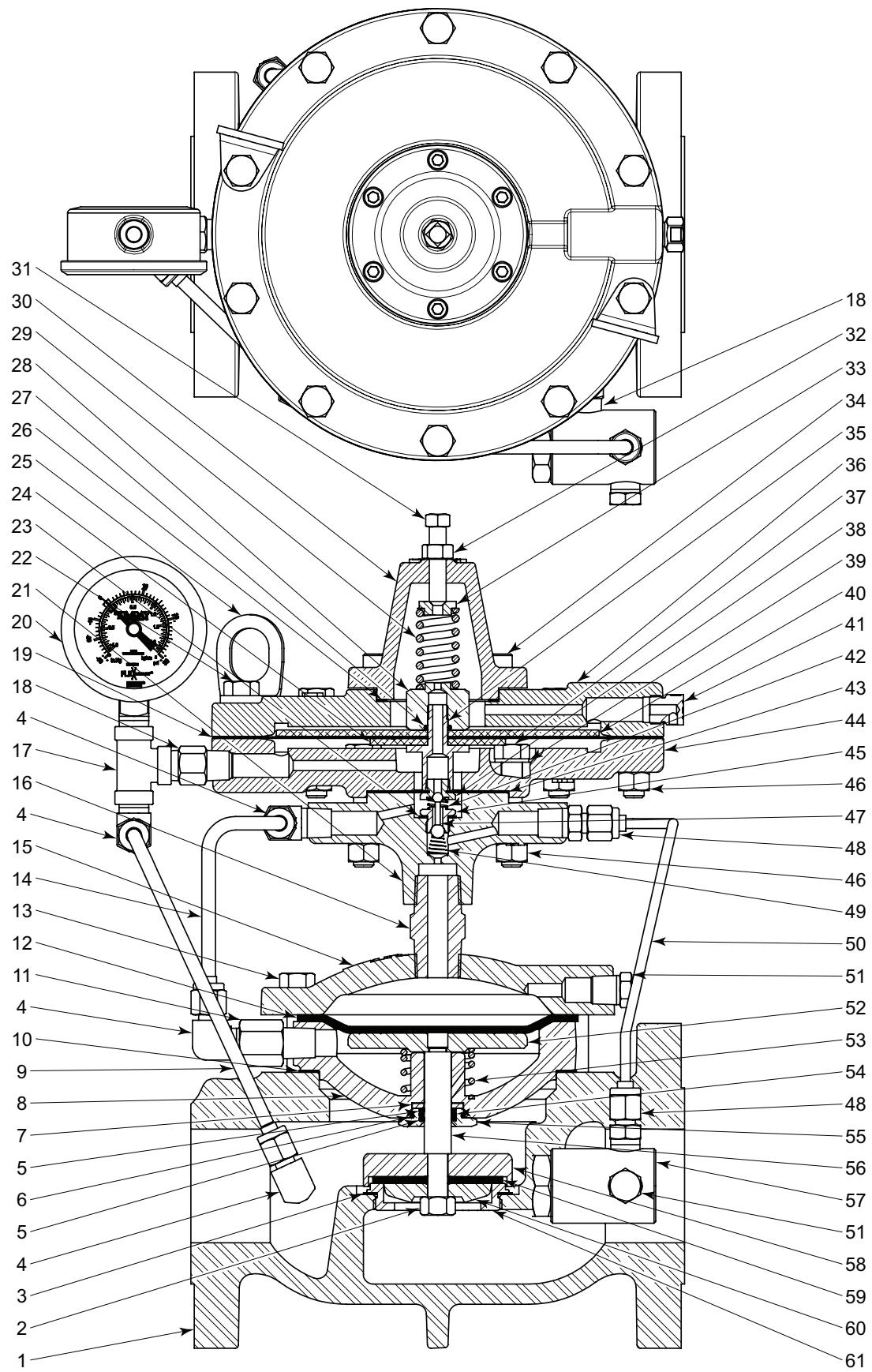
GAS LOW PRESSURE PRESSURE REDUCING MODEL LR PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER								
			STANDARD				CORROSIVE				
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH	
1	1	Body									
		NPT Thru	1709	1634	2001	----	1709 ±	1634 ±	2001 ±	----	
		150RF Thru	1913	1914	2002	2466	1913 ±	1914 ±	2002 ±	2466 ±	
		Grooved Thru	2964	----	----	----	2964 ±	----	----	----	
2	1	Gasket	*	276	277	196	279	276	277	196	279
3	1	Seat	*	164HSN	165HSN	166HSN	167HSN	164HSN	165HSN	166HSN	167HSN
4	2	Elbow				875					875SS6
5	1	Valve Stem		138	139	140	141	138SS6	139SS6	140SS6	141SS6
6	2	Back Up	*	149T	150T	151T	152T	149T	150T	151T	152T
7	1	O-Ring	*	154	155	156	157	154	155	156	157
8	1	Tubing		1378SS6	2529SS6	4251S6	218SS6	1378SS6	2529SS6	4251S6	218SS6
9	1	Gasket	*	196	197	198	199	196	197	198	199
10	1	Diaphragm Plate		133	134	135	136	133	134	135	136
11	1	Tubing		4008SS6	213SS6	4251S6	2529SS6	4008SS6	213SS6	4251S6	2529SS6
12	1	Elbow / Conn.			875		874				875SS6
	1	Nipple & Ell			----		648 & 1481				648SS6 & 1481SS6
13	1	Diaphragm	*	1706	1640	2015	2140	1706	1640	2015	2140
14	1	Upper Housing		1703	1639	2004	2178	1703 ±	1639 ±	2004 ±	2178 ±
15	1	Elbow / Conn.		875		874	875	875SS6	874SS6	875SS6	874SS6
16	1	Elbow / Conn.			874						118
17	1	Gasket	*		118						219SS6
18	1	Tee			219						566HAC
19	1	Spring			566						648SS6
20	2	Nipple	*	648		2600	648	1212			2600SS
21	1	Diaphragm	*		1212						648SS6
22	1	Upper Diaphragm Plate			1208						1208SS6
23	1	Pressure Gauge			7704						7704
24	4	Gasket	*		242						242
25	10	Screw			236						236
26	4	Screw			1672						1672SS6
27	2	Lifting Ring			7559		7559				7559
28	1	Lower Diaphragm Plate			1340						1340SS6
29	1	Gasket	*		1216						1216
30	1	Stem			2913						2913S6
31	1	Spring Guide			7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)						7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)
32	1	Nut			922						922
33	1	Adjusting Screw			897						897
34	1	Bonnet			1336						1336 ±
35	1	Spring			4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)						4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)
36	6	Screw			7531						7531
37	1	Nut			2912						2912S6
38	1	O-Ring	*		265						265
39	1	Upper Pilot Housing			1206						1206 ±
40	1	Pilot Seat	*		113						113SS6
41	1	Diaphragm	*		110						110
42	2	Vent Plug			147						147SS6
43	1	Lower Pilot Housing			1356						1356 ±
44	10	Nut			241						241
45	1	Pilot Seat	*		565						565SS6
46	1	Elbow / Conn.			874		874				875SS6
47	1	Pilot Plug	*		112						112
48	1	Spring	*		108						108HAC
49	(QTY)	Bolt		965 (8)	907(10)	907 (12)	2142 (16)	965 (8)	907(10)	907 (12)	2142 (16)
50	1	Lower Housing		1704	1632	145	146	1704 ±	1632 ±	145 ±	146 ±
51	1	Tubing		1826SS6	206S6	126SS6	1385SS6	1826SS6	206SS6	126SS6	1385SS6
52	1	Spring		1388	7132	1529	1575	1388	7132	1529	1575
53	1	Seat Disc		159	160	161	162	2493SS6	2494SS6	2495SS6	2961SS6
54	1	1/4 F30 Filter			YAS						YASSS6
55	1	Plug			699						699SS6
56	1	Standard Ratio Plug		177SS6	178	179	180	177SS6	3076SS6	3078SS6	3079SS6
		Reduced Ratio Plug		4933	1228SS6	177SS6	178	4933SS6	1228SS6	177SS6	3076SS6
57	1	Removable Seat		272K	273K	274K	275K	2496SS6K	2497SS6K	2498SS6K	3075SS6K
58	1	Nut	*	173	906		175	173SS6	174SS6		175SS6
Repair Kits			RUAD	RUBD	RUCD	RUDD	‡ Coated Parts available with "K" service type				
			* These parts are recommended spare parts and are stocked as repair kits.								

PRESSURE REGULATORS

STEEL GAS LOW PRESSURE PRESSURE REDUCING
MODEL LR PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

STEEL GAS LOW PRESSURE PRESSURE REDUCING MODEL LR PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER				PART NUMBER			
			STANDARD				CORROSIVE			
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body	2468	2469	2470	2959	2468 ‡	2469 ‡	2470 ‡	2959 ‡
2	1	Nut	*	173	906	175	173SS6	174SS6	175SS6	
3	1	Gasket	*	276	277	196	276	277	196	279
4	4	Elbow			875					875SS6
5	2	Back Up	*	149T	150T	151T	149T	150T	151T	152T
6	1	O-Ring	*	5225	5226	5227	5225	5226	5227	4086
7	1	Spacer	4557DS6	4561DS6	4566DS6	4571DS6	4557DS6	4561DS6	4566DS6	4571DS6
8	1	Lower Housing	2481	2482	2483	2957	2481 ‡	2482 ‡	2483 ‡	2957 ‡
9	1	Tubing	2552SS6	213SS6	4251S6	5061SS6	2552SS6	213SS6	4251S6	5061SS6
10	1	Gasket	*	196	197	198	196	197	198	199
		Adapter		7244				7244S6		---
11	1	Elbow			---					1481SS6
		Nipple			---					2600SS6
12	1	Diaphragm	*	1706	1640	2015	1706	1640	2015	2140
13	(QTY)	Bolt		965 (8)	907(10)	907 (12)	965 (8)	907(10)	907 (12)	2142 (16)
14	1	Tubing	4008SS6	213SS6	4050SS6	5060SS6	4008SS6	213SS6	4050SS6	5060SS6
15	1	Bonnet		2487	2488	2489	2487 ‡	2488 ‡	2489 ‡	2956 ‡
16	1	Nipple			2516			2516SS6		
17	1	Tee		219		2000	219	219SS6	2000SS6	219SS6
18	2	Nipple			648			648SS6		
19	1	Diaphragm	*		1212			1212		
20	1	Pressure Gauge			7704			7704		
21	1	Base			2515			2515 ‡		
22	10	Screw			236			236		
23	1	Gasket	*		118			118		
24	1	Lower Diaphragm Plate			1340			1340SS6		
25	2	Lifting Ring		7559			7559			----
26	1	Gasket	*		1216			1216		
27	1	O-Ring	*		265			265		
28	1	Nut			2912			2912S6		
29	1	Spring		4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)			4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)			
30	1	Bonnet			1336			1336 ‡		
31	1	Adjusting Screw			897			897		
32	1	Nut			922			922		
33	1	Spring Guide		7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)			7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)			
34	6	Screw			7531			7531		
35	1	Stem			2913			2913SS6		
36	1	Upper Pilot Housing			1206			1206 ‡		
37	4	Screw			191			191		
38	1	Pilot Seat	*		113			113SS6		
39	4	Gasket	*		242			242		
40	1	Upper Diaphragm Plate			1208			1208SS6		
41	1	Vent Plug			147			147SS6		
42	1	Spring	*		566			566HAC		
43	1	Diaphragm	*		110			110		
44	1	Lower Pilot Housing			1356			1356 ‡		
45	1	Pilot Seat	*		565			565SS6		
46	14	Nut			241			241		
47	1	Pilot Plug	*		112			112		
48	2	Elbow / Conn.			874			874SS6		
49	1	Spring	*		1360			1360HAC		
50	1	Tubing	2552SS6	213SS6	4251S6	2529SS6	4251SS6	213SS6	4251S6	2529SS6
51	1	Plug			699			699SS6		
52	1	Diaphragm Plate		2490	2491	2492	2490	2491	2492	2958SS6
53	1	Spring		1388	1528	1529	1388	1528	1529	1575
54	1	O-Ring	*	154	807	156	154	807	156	157
55	1	Retainer	4557ES6	4561ES6	4566ES6	4571ES6	4557ES6	4561ES6	4566ES6	4571ES6
56	1	Valve Stem		138	139	140	138SS6	139SS6	140SS6	141SS6
57	1	1/4 F30 Filter			YAS					YASSS6
58	1	Seat Disc	2493SS6	2494SS6	2495SS6	2961SS6	2493SS6	2494SS6	2495SS6	2961SS6
59	1	Seat	*	164HSN	165HSN	166HSN	164HSN	165HSN	166HSN	167HSN
60	1	Standard Ratio Plug	177SS6	178	179	3079SS6	177SS6	3076SS6	3078SS6	3079SS6
		Reduced Ratio Plug	4933	1228SS6	177SS6	178	4933SS6	1228SS6	177SS6	3076SS6
61	1	Removable Seat	2496SS6K	2497SS6K	2498SS6K	3075SS6K	2496SS6K	2497SS6K	2498SS6K	3075SS6K
Repair Kits			RUAD	RUBD	RUCD	RUDD	‡ Coated Parts available with "K" service type			
* These parts are recommended spare parts and are stocked as repair kits.							RUAD	RUBD	RUCD	RUDD

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, pilot-operated regulator used to regulate down stream pressures on vent lines for separators, heat treaters, compressor stations, gas gathering systems where it is desired that no gas be vented

- Inside Buildings
- In populated areas
- Emissions regulated areas
- Sour or poisonous gas systems

FEATURES:

Tight shut-off
Single soft seat
Removable valve seat
Minimum maintenance
All internal parts can be removed with valve in line
Single-point adjustment of setpoint
Utilizes upstream pressure as actuation pressure
Efficient 3-way plug accurately maintains setpoint

CERTIFICATIONS:

Canadian Registration Number (CRN):
OC16234.24567890NTY (Ductile)
OC15604.24567890NTY (Steel)

Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

Non-Bleed / Intermittent Vent

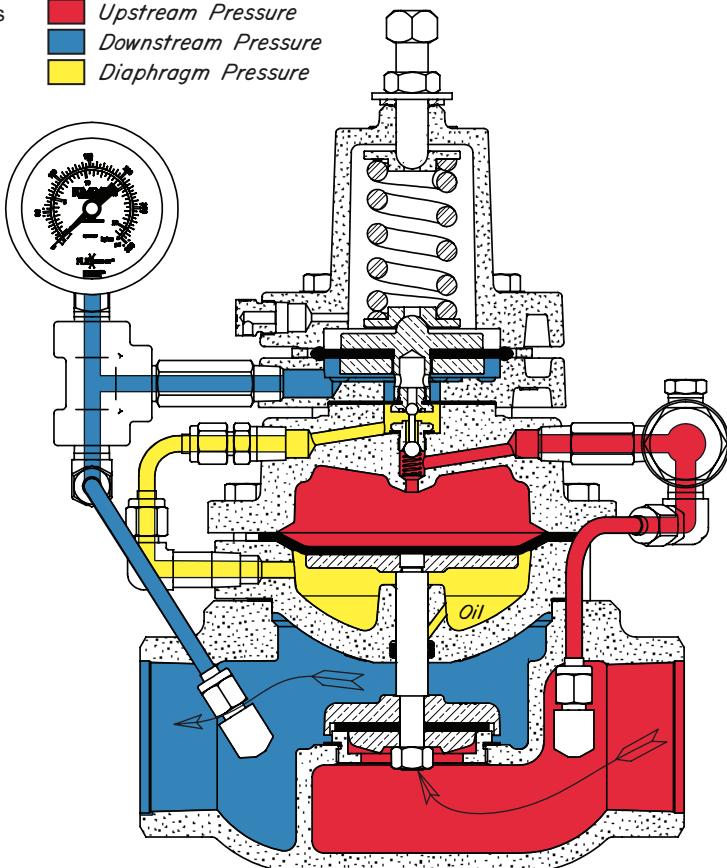
SET POINT DRIFT RATIO:

8:1

MIN. DIFFERENTIAL:

10 psig

- | | |
|--|---------------------------|
| | Pilot Assembly |
| | Motor Valve Stem Assembly |
| | Upstream Pressure |
| | Downstream Pressure |
| | Diaphragm Pressure |



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RRN1SADF1S	AKLD	1"	NPT	10-300	300	13.2	0.74
	RRN2SADF1S	AKMD	2"	NPT	10-300	300	47.0	0.84
	RRN2ARDF1S	AKND		150RF	10-250	250		
	RRN3SADF1S	AKPD	3"	NPT	10-300	300	117	0.75
	RRN3ARDF1S	AKQD		150RF	10-250	250		
	RRN4SADF1S	AKRD	4"	NPT	10-300	300	210	0.75
	RRN4ARDF1S	AKSD		150RF	10-250	250		
	RRN4ARDF1S	AKTD	6"	150RF	10-250	250	480	0.75
Steel	RRN2ARWF1S	AEV	2"	150RF	10-285	285	117	0.75
	RRN3ARWF1S	AEW	3"	150RF	10-285	285	210	0.75
	RRN4ARWF1S	AEX	4"	150RF	10-285	285	480	0.75
	RRN6ARWF1S	AEY	6"	150RF	10-285	285	480	0.75

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

‡ For KimCoat option remove last "S" & replace with "K"

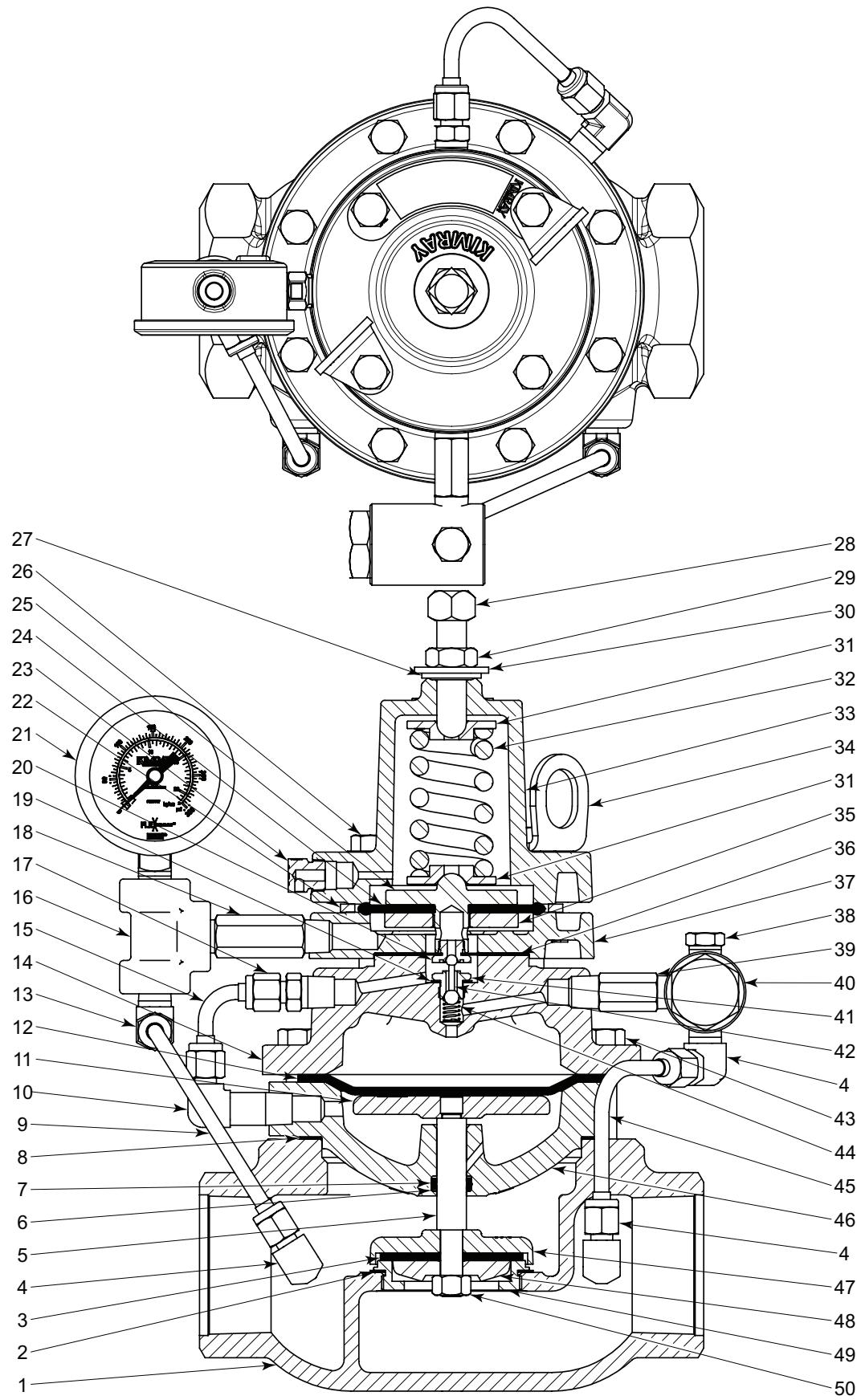
† For code builder see page 06:00.2

‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

GAS PRESSURE REDUCING NON - VENTING
MODEL RN PARTS DRAWING

KIMRAY
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PRESSURE REGULATORS

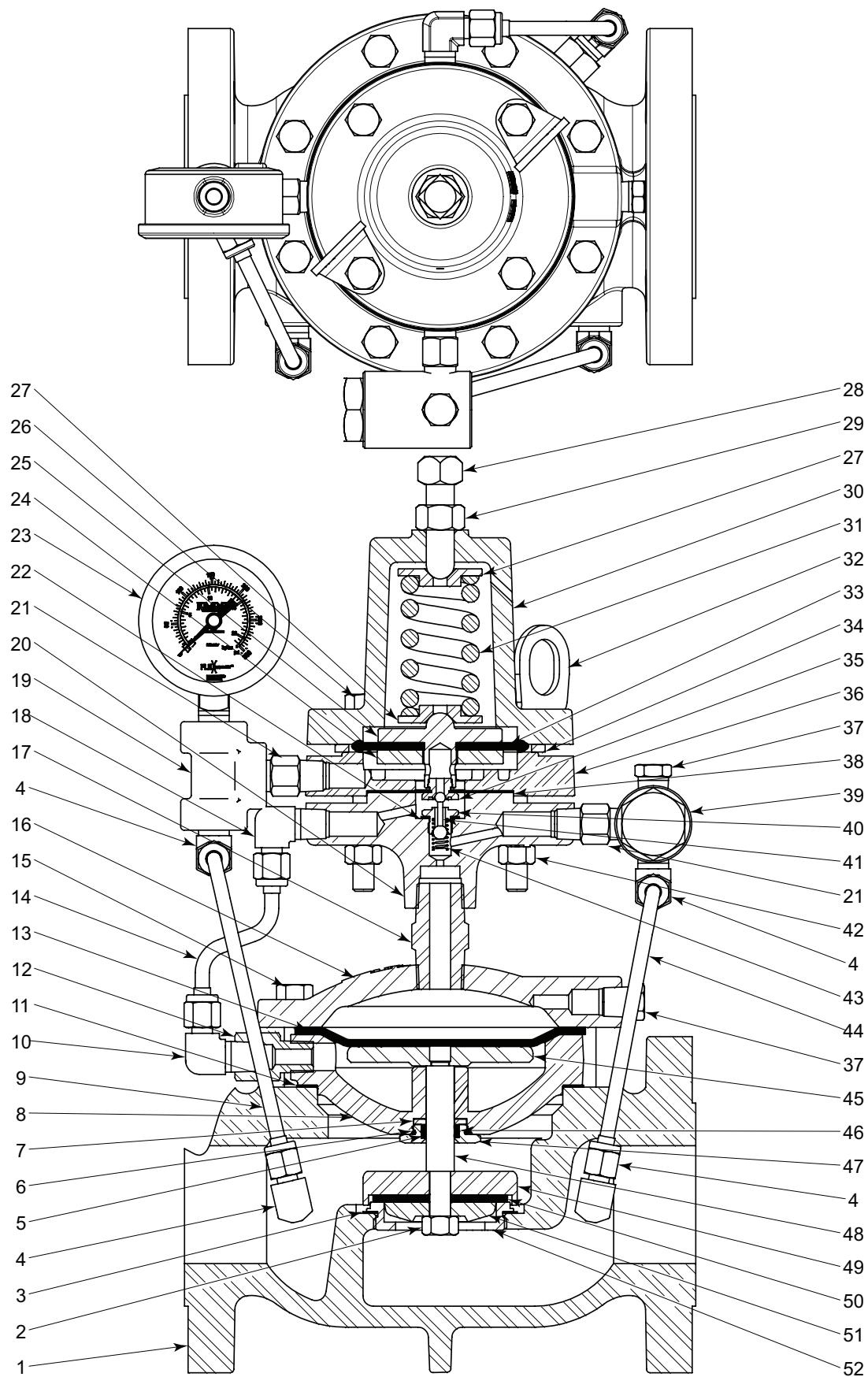
GAS PRESSURE REDUCING NON - VENTING
MODEL RN PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER							
			STANDARD					CORROSIVE		
			1 INCH	2 INCH	3 INCH	4 INCH	6 INCH	1 INCH	2 INCH	3 INCH
1	1	Body								
		NPT Thru	2033	1709	1634	2001	----	2033 ‡	1709 ‡	1634 ‡
		150RF Thru	----	1913	1914	2002	2466	----	1913 ‡	1914 ‡
		Grooved Thru	----	2964	----	----	----	2964 ‡	----	----
2	1	Gasket *	----	276	277	196	279	----	276	277
3	1	Seat	* 163HSN	164HSN	165HSN	166HSN	167HSN	163HSN	164HSN	165HSN
4	3	Elbow			875					875SS6
5	1	Valve Stem	137	138	139	140	141	137SS6	138SS6	139SS6
6	2	Back Up *	148T	149T	150T	151T	152T	148T	149T	150T
7	1	O-Ring *	153	154	155	156	157	153	154	155
8	1	Gasket *	195	196	197	198	199	195	196	197
9	1	Tubing	123SS6	216SS6	217SS6	4251S6	218SS6	123SS6	216SS6	217SS6
		Elbow	1605		875		1481	1605SS6	875SS6	1481SS6
10	1	Connector		---			874		---	874SS6
		Nipple		---			648		---	648SS6
11	1	Diaphragm Plate	132SS6	133	134	135	136	132SS6	133	134
12	1	Diaphragm *	127	1706	1640	2015	2140	127	1706	1640
13	1	Elbow / Connector	874	875		874		874SS6	875SS6	874SS6
14	1	Upper Housing	4015	1703	1639	2004	2178	4015SS6	1703 ‡	1639 ‡
15	1	Tubing	1378SS6	4008SS6	213SS6	4011SS6	2529SS6	1378SS6	4008SS6	213SS6
16	1	Tee	219		2000			219SS6		2000SS6
17	1	Connector	1604		874			1604SS6		874SS6
18	1	Nipple	6890		648			6890S6		648SS6
19	1	Gasket *	3018		118			3018		118
20	1	Pilot Seat *	3016		113			3016SS6		113SS6
21	1	Pressure Gauge			7707					7707
22	1	Spacer Ring *	----		7437			----		7437
23	1	Vent Plug			147					147SS6
24	1	Diaphragm *	3011P		5259P			3011P		5259P
25	1	Diaphragm Plate	3009		105			3009SS6		105SS6
26	4	Bolt	6972		907			6972		907
27	1	Thread Seal *	4542		4488			4542		4488
28	1	Adjusting Screw	6976		5163			6976S6		5163SS6
29	1	Nut	1676		2377			1676SS6		2377SS6
30	1	Washer *	4543		4491			4543		4491
31	2	Spring Guide	4484SS6		2612			4484SS6		2612SS6
32	1	Spring	4323		2611			4323		2611
33	1	Bonnet	4525		2610			4525		2610 ‡
34	2	Lifting Ring	----		7559			----		7559
35	1	Diaph. Nut	3010		107			3010SS6		107SS6
36	1	Diaphragm *	3014		110			3014		110
37	1	Pilot Housing	3013		1701			3013SS6		1701 ‡
38	1	Plug			699					699SS6
39	1	Nipple	6890	262	2600		648	6890S6	262SS6	2600SS6
40	1	1/4 F30 Filter			YAS					YASSS6
41	1	Pilot Seat *	3015		565			3015SS6		565SS6
42	1	Pilot Plug *	3017		112			3017		112
43	(QTY)	Bolt	4318 (6)	965 (8)	907(10)	907 (12)	2142 (16)	4318 (6)	965 (8)	907(10) 907 (12) 2142 (16)
44	1	Spring *	3008		585			3008		585
45	1	Tubing	123SS6	1638SS6	1826SS6	1383SS6	2247SS6	4123SS6	1638SS6	1826SS6
46	1	Lower Housing	142	1704	1632	145	146	142 ‡	1704 ‡	1632 ‡
47	1	Seat Disc	158	159	160	161	162	158SS6	2493SS6	2494SS6
48	1	Standard Ratio Plug	176SS6	177SS6	178	179	180	176SS6	177SS6	3076SS6
		Reduced Ratio Plug	4932	4933	1228SS6	177SS6	178	4932SS6	4933SS6	1228SS6
49	1	Removable Seat	----	272K	273K	274K	275K	----	2496SS6K	2497SS6K
50	1	Nut *	172	173		906	175	172SS6	173SS6	174SS6
		Repair Kits	RRU	RDGNV	RDHNV	RDINV	RDJNV			
			* These parts are recommended spare parts and are stocked as repair kits.							
			‡ Coated Parts available with "K" service type							

PRESSURE REGULATORS

STEEL GAS PRESSURE REDUCING NON - VENTING
MODEL RN PARTS DRAWING

KIMRAY
INC.



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PRESSURE REGULATORS

STEEL GAS PRESSURE REDUCING NON - VENTING MODEL RN PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER				PART NUMBER			
			STANDARD				CORROSIVE			
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body	2468	2469	2470	2959	2468 ‡	2469 ‡	2470 ‡	2959 ‡
2	1	Nut *	173		906	175	173SS6		174SS6	175SS6
3	1	Gasket *	276	277	196	279	276	277	196	279
4	4	Ell			875				875SS6	
5	2	Back Up *	149T	150T	151T	152T	149T	150T	151T	152T
6	1	O-Ring *	5225	5226	5227	4086	5225	5226	5227	4086
7	1	Spacer	4557DS6	4561DS6	4566DS6	4571DS6	4557DS6	4561DS6	4566DS6	4571DS6
8	1	Lower Housing	2481	2482	2483	2957	2481 ‡	2482 ‡	2483 ‡	2957 ‡
9	1	Tubing	2505SS6	2552S6	2529S6	4306S6	2505SS6	2552S6	2529S6	4306S6
10	1	Elbow / Connector		875		874		875SS6		874SS6
11	1	Gasket *	196	197	198	199	196	197	198	199
12	1	Adapter		7244		----		7244S6		----
		Nipple		----		648		----		648SS6
		Elbow		----		1481		----		1481SS6
13	1	Diaphragm *	1706	1640	2015	2140	1706	1640	2015	2140
14	1	Tubing	2511SS6		4011SS6	2529S6	2511SS6		4011SS6	2529S6
15	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)	965 (8)	907(10)	907 (12)	2142 (16)
16	1	Bonnet	2487	2488	2489	2956	2487 ‡	2488 ‡	2489 ‡	2956 ‡
17	1	Nipple		2516				2516SS6		
18	1	Elbow / Connector		875		874		875SS6		874SS6
19	1	Tee			2000			2000SS6		
20	1	Base			2515			2515 ‡		
21	2	Nipple			648			648SS6		
22	1	Gasket *			118			118		
23	1	Pressure Gauge			7707			7707		
24	1	Diaphragm Nut			107			107SS6		
25	1	Diaphragm Plate			105			105SS6		
26	4	Bolt			1232			1232		
27	2	Spring Guide			2612			2612SS6		
28	1	Adjusting Screw			2613			2613SS6		
29	1	Nut			2377			2377SS6		
30	1	Bonnet			2671			2671 ‡		
31	1	Spring			2611			2611		
32	2	Lifting Ring		7559		----		7559		----
33	1	Diaphragm *			5259P			5259P		
34	1	Spacer Ring *			7437			7437		
35	1	Pilot Seat *			113			113SS6		
36	1	Pilot Housing			2514			2514 ‡		
37	2	Plug			699			699SS6		
38	1	Diaphragm *			110			110		
39	1	1/4 F30 Filter			YAS			YASSS6		
40	1	Pilot Seat *			565			565SS6		
41	1	Pilot Plug *			112			112		
42	4	Nut			241			241		
43	1	Spring *			585			585		
44	1	Tubing	2505SS6	4011SS6	2529S6	5061SS6	2505SS6	4011SS6	2529S6	5061SS6
45	1	Diaphragm Plate	2490	2491	2492	2958	2490SS6	2491SS6	2492SS6	2958SS6
46	1	O-Ring *	154	807	156	157	154	807	156	157
47	1	Retainer	4557ES6	4561ES6	4566ES6	4571ES6	4557ES6	4561ES6	4566ES6	4571ES6
48	1	Valve Stem	138	139	140	141	138SS6	139SS6	140SS6	141SS6
49	1	Seat Disc	2493SS6	2494SS6	2495SS6	2961SS6	2493SS6	2494SS6	2495SS6	2961SS6
50	1	Seat *	164HSN	165HSN	166HSN	167HSN	164HSN	165HSN	166HSN	167HSN
51	1	Ratio Plug	177SS6	178	179	3079SS6	177SS6	3076SS6	3078SS6	3079SS6
52	1	Removable Seat	2496SS6K	2497SS6K	2498SS6K	3075SS6K	2496SS6K	2497SS6K	2498SS6K	3075SS6K

‡ Coated Parts available with "K" service type

Repair Kits

RAENV RAFNV RAGNV RAHNV

* These parts are recommended spare parts and are stocked as repair kits.

NOTES:



Kimray is an ISO 9001- certified manufacturer.

GAS PRESSURE REDUCING W/ OUTSIDE SUPPLY
 MODEL FR

APPLICATION:

Regulation of inlet pressure to gas compressors. Control of supply or distribution system pressure. Ideal for use in liquid packed systems where an auxiliary source of supply air or dry gas pressure available. When compressed air can be used as the outside source of supply, it is a great way to mitigate emissions concerns related to vented gas.

And other systems where it is desired that no gas be vented

- Inside Buildings
- In populated areas
- Emissions regulated areas
- Sour or poisonous gas systems

FEATURES:

- Tight shut-off
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes downstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

CERTIFICATIONS:

Canadian Registration Number (CRN):
 0C16234.24567890NTY (Ductile)
 0C15604.24567890NTY (Steel)

Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

Non-Bleed / Intermittent Vent

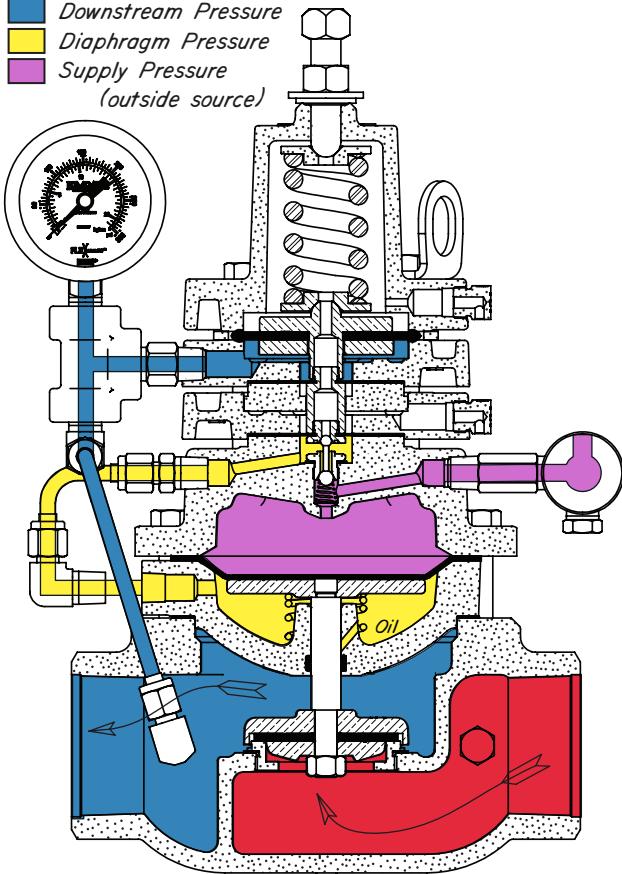
SET POINT DRIFT RATIO:

8:1

SUPPLY PRESSURE:

Equal to or not less than 60% of upstream pressure

	Pilot Assembly
	Motor Valve Stem Assembly
	Upstream Pressure
	Downstream Pressure
	Diaphragm Pressure
	Supply Pressure (outside source)



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RFR2SADF1S	AWB	2"	NPT	10-300	300	47.0	0.84
	RFR2ARDF1S	AWD		150RF	10-250	250		
	RFR3SADF1S	AWE	3"	NPT	10-300	300	117	0.75
	RFR3ARDF1S	AWF		150RF	10-250	250		
	RFR4SADF1S	AWG	4"	NPT	10-300	300	210	0.75
	RFR4ARDF1S	AWH		150RF	10-250	250		
Steel	RFR6ARDF1S	AWI	6"	150RF	10-250	250	480	0.75
	RFR1SAWF1S	AWJ	1"	NPT	10-300	300	13.2	0.74
	RFR2ARWF1S	awl	2"	150RF	10-285	285	117	0.75
	RFR3ARWF1S	AWM	3"	150RF	10-285	285	210	0.75
	RFR4ARWF1S	AWN	4"	150RF	10-285	285	480	0.75
	RFR6ARWF1S	AWO	6"	150RF	10-285	285	480	0.75

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

‡ For KimCoat option remove last "S" & replace with "K"

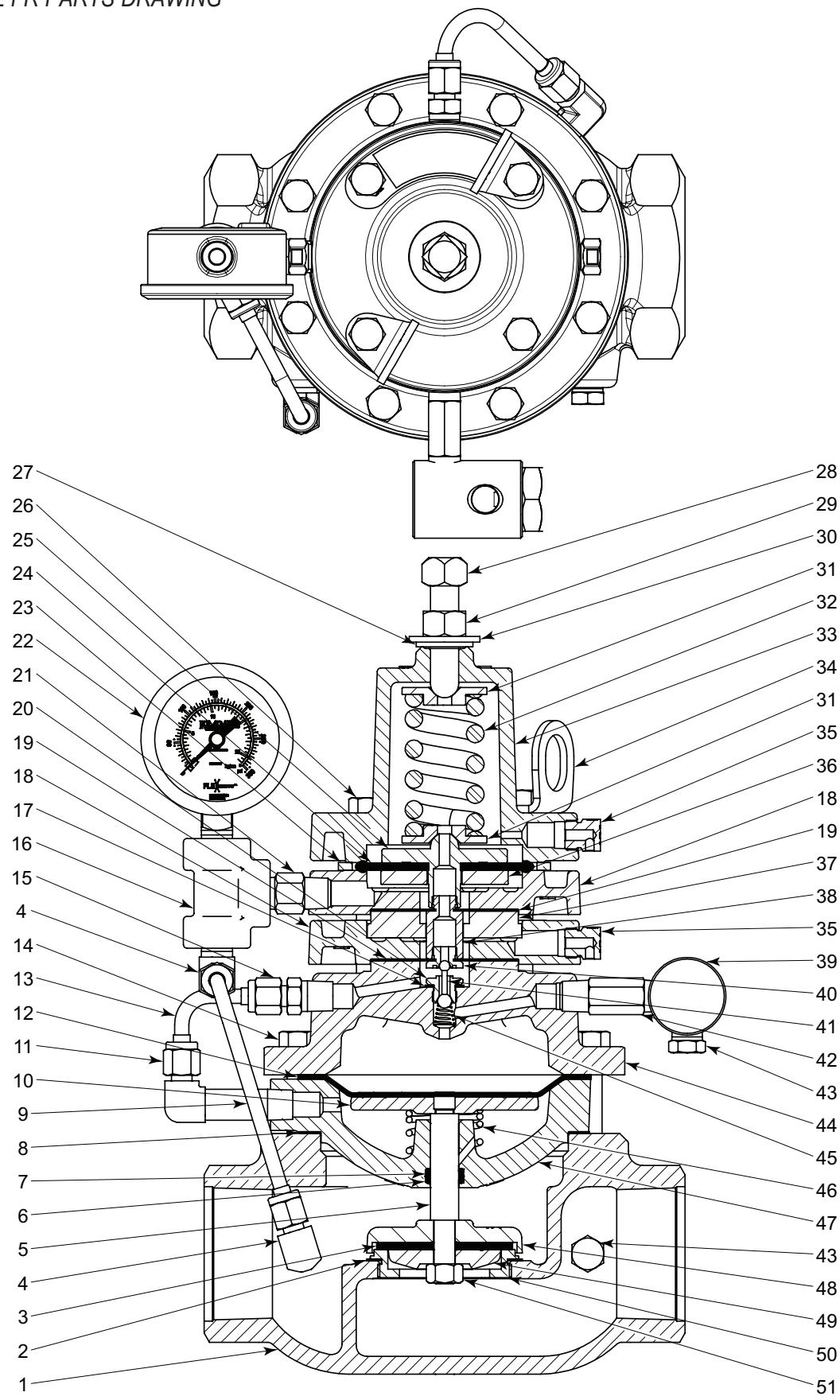
† For code builder see page 06:00.2

‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

DUCTILE GAS PRESSURE REDUCING W/ OUTSIDE SUPPLY
MODEL FR PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

DUCTILE GAS PRESSURE REDUCING W/ OUTSIDE SUPPLY MODEL FR PARTS LIST

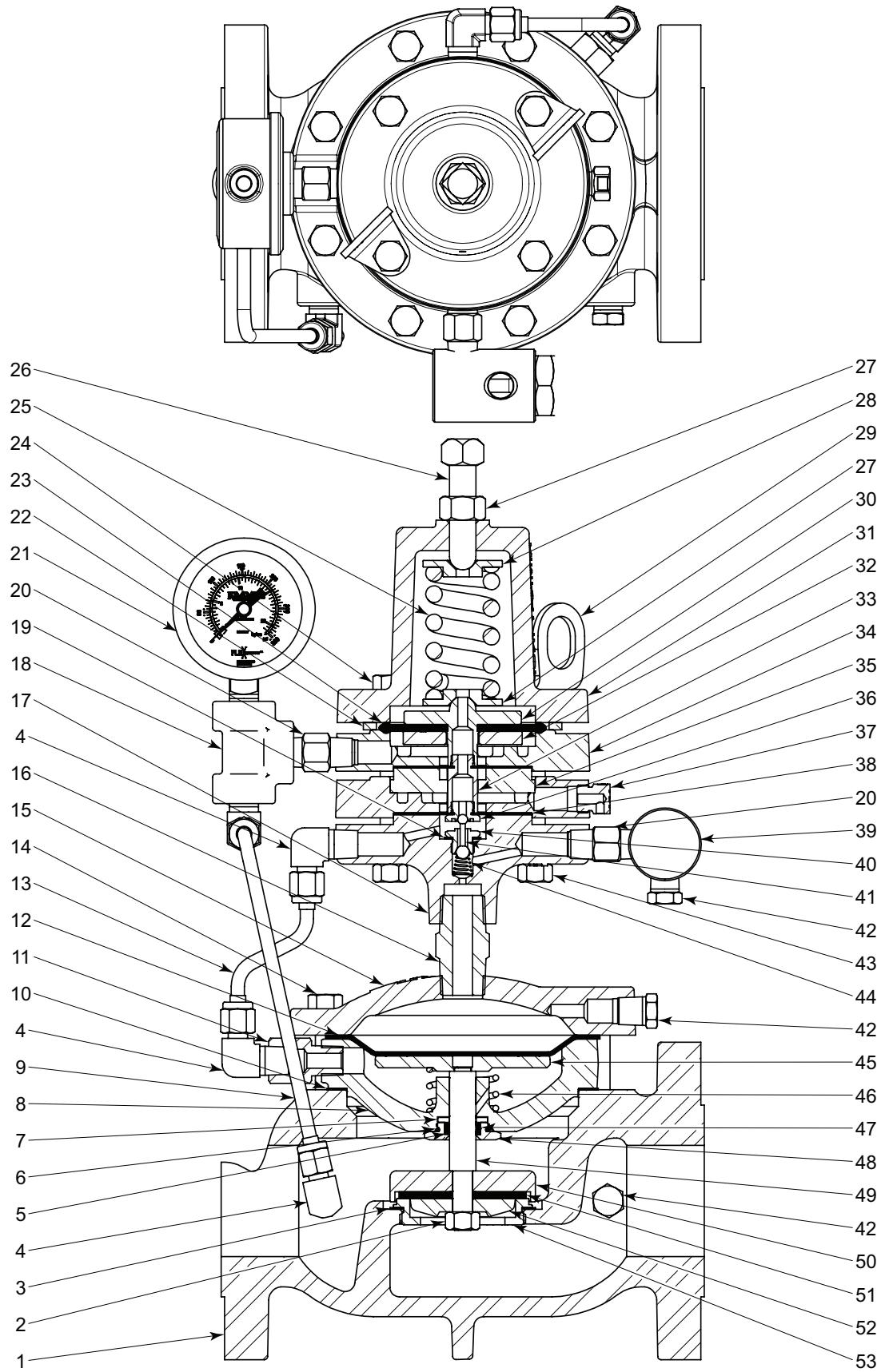
ITEM	QTY.	DESCRIPTION	PART NUMBER							
			STANDARD				CORROSIVE			
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body								
		NPT Thru	1709	1634	2001	----	1709 ‡	1634 ‡	2001 ‡	----
		150RF Thru	1913	1914	2002	2466	1913 ‡	1914 ‡	2002 ‡	2466 ‡
2	1	Gasket *	276	277	196	279	2964 ‡	----	----	----
		Seat *	164HSN	165HSN	166HSN	167HSN	276	277	196	279
		Elbow		875			164HSN	165HSN	166HSN	167HSN
5	1	Valve Stem	138	139	140	141				
6	2	Back Up *	149T	150T	151T	152T	138SS6	139SS6	140SS6	141SS6
7	1	O-Ring *	154	155	156	157	149T	150T	151T	152T
8	1	Gasket *	196	197	198	199	154	155	156	157
9	1	Tubing	2512SS6	4251S6	2529SS6	4306SS6	196	197	198	199
10	1	Diaphragm Plate	133	134	135	136	216SS6	217SS6	4251S6	4306SS6
11	1	Elbow		875			133	134	135	136
		Connector	----	----	----			875SS6		1481SS6
		Nipple	----	----	----	1481SS6	----	----	874SS6	----
12	1	Diaphragm *	1706	1640	2015	2140	----	----	----	262SS6
13	1	Tubing	4008SS6	213SS6	4011SS6	2529SS6	1706	1640	2015	2140
14	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)	4008SS6	213SS6	4011SS6	2529SS6
15	1	Connector		874			965 (8)	907(10)	907 (12)	2142 (16)
16	1	Tee		2000						
17	1	Gasket *		118						
18	1	Pilot Housing		1701						
19	1	Diaphragm *		110						
20	1	Pilot Seat *		565						
21	1	Nipple		648						
22	1	Pressure Gauge		7707						
23	1	Spacer Ring		7437						
24	1	Diaphragm *		5259P						
25	1	Diaphragm Plate		116						
26	4	Bolt		7671						
27	1	Thread Seal *		4488						
28	1	Adjusting Screw		5163						
29	1	Nut		2377						
30	1	Washer *		4491						
31	2	Spring Guide		2612						
32	1	Spring		2611						
33	1	Bonnet		2610						
34	2	Lifting Ring	----	7559	----		----	7559	----	
35	1	Vent Plug		147				147SS6		
36	1	Diaph. Nut		107				107SS6		
37	1	Spacer Ring		2021				2021		
38	1	Seat Extension		4297				4297		
39	1	1/4 F30 Filter						YASSS6		
40	1	Pilot Seat *		113				113SS6		
41	1	Pilot Plug *		112				112		
42	1	Nipple	262	2600	648		262SS6	2600SS6	648SS6	
43	1	Plug		699				699SS6		
44	1	Spring *		108				108HAC		
45	1	Upper Housing	1703	1639	2004	2178	1703 ‡	1639 ‡	2004 ‡	2178 ‡
46	1	Spring	1388	7132	1529	1575	1388	7132	1529	1575
47	1	Lower Housing	1704	1632	145	146	1704 ‡	1632 ‡	145 ‡	146 ‡
48	1	Seat Disc	159	160	161	162	2493SS6	2494SS6	2495SS6	2961SS6
49	1	Standard Ratio Plug	177SS6	178	179	180	177SS6	3076SS6	3078SS6	3079SS6
		Reduced Ratio Plug	4933	1228SS6	177SS6	178	4933SS6	1228SS6	177SS6	3076SS6
50	1	Removable Seat	272K	273K	274K	275K	2496SS6K	2497SS6K	2498SS6K	3075SS6K
51	1	Nut *	173	906	175		173SS6	174SS6	175SS6	
1	Tubing	1638SS6	1826SS6	1383SS6	2247SS6		1638SS6	1826SS6	1383SS6	2247SS6
1	Elbow	875	874	1481			875	874	1481	
Repair Kits			RRM	RRN	RRO	RRP	RRN	RRO	RRP	RDJ
* These parts are recommended spare parts and are stocked as repair kits.										

‡ Coated Parts available with "K" service type

PRESSURE REGULATORS

STEEL GAS PRESSURE REDUCING W/ OUTSIDE SUPPLY
MODEL FR PARTS DRAWING

KIMRAY
INC.®



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.

‡ Configuration of Back Pressure Control Valve is a trademark of Kimray, Inc.

www.kimray.com



PRESSURE REGULATORS

STEEL GAS PRESSURE REDUCING W/ OUTSIDE SUPPLY MODEL FR PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER							
			STANDARD				CORROSIVE			
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body	2468	2469	2470	2959	2468 ‡	2469 ‡	2470 ‡	2959 ‡
2	1	Nut *	173		906	175	173SS6		174SS6	175SS6
3	1	Gasket *	276	277	196	279	276	277	196	279
4	4	Ell			875					875SS6
5	2	Back Up *	149T	150T	151T	152T	149T	150T	151T	152T
6	1	O-Ring *	5225	5226	5227	4086	5225	5226	5227	4086
7	1	Spacer	4557DS6	4561DS6	4566DS6	4571DS6	4557DS6	4561DS6	4566DS6	4571DS6
8	1	Lower Housing	2481	2482	2483	2957	2481 ‡	2482 ‡	2483 ‡	2957 ‡
9	1	Tubing	2505SS6	2552S6	2529SS6	4306S6	2505SS6	2552S6	2529SS6	4306S6
10	1	Gasket *	196	197	198	199	196	197	198	199
		Adapter		7244		----		7244S6		----
11	1	Nipple		----		648		----		648SS6
		Elbow		----		1481		----		1481226
12	1	Diaphragm *	1706	1640	2015	2140	1706	1640	2015	2140
13	1	Tubing	2511SS6		4011SS6	2529S6	2511SS6		4011SS6	2529S6
14	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)	965 (8)	907(10)	907 (12)	2142 (16)
15	1	Bonnet	2487	2488	2489	2956	2487 ‡	2488 ‡	2489 ‡	2956 ‡
16	1	Nipple		2516				2516SS6		
17	1	Base		2515				2515 ‡		
18	1	Tee		2000				2000SS6		
19	1	Gasket *		118				118		
20	2	Nipple		648				648SS6		
21	1	Pressure Gauge		7707				7707		
22	1	Spacer Ring *		7437				7437		
23	1	Diaphragm *		5259P				5259P		
24	4	Bolt		1232				1232		
25	1	Spring		2611				2611		
26	1	Adjusting Screw		2613				2613SS6		
27	1	Nut		2377				2377SS6		
28	2	Spring Guide		2612				2612SS6		
29	2	Lifting Ring		7559		----		7559		----
30	1	Diaphragm Plate		116				116SS6		
31	1	Bonnet		2671				2671 ‡		
32	1	Diaphragm Nut		107				107SS6		
33	1	Seat Extension		4297				4297		
34	1	Pilot Housing		2514				2514 ‡		
35	1	Spacer Ring		2021				2021		
36	1	Pilot Seat *		113				113SS6		
37	1	Breather Plug		147				147SS6		
38	1	Diaphragm *		110				110		
39	1	1/4 F30 Filter		YAS				YASSS6		
40	1	Pilot Seat *		565				565SS6		
41	1	Pilot Plug *		112				112		
42		Plug		699				699SS6		
43	4	Nut		241				241SS6		
44	1	Spring *		108				108HAC		
45	1	Diaphragm Plate	2490	2491	2492	2958	2490SS6	2491SS6	2492SS6	2958SS6
46	1	Spring	1388	7132	1529	1575	1388	7132	1529	1575
47	1	O-Ring *	154	807	156	157	154	807	156	157
48	1	Retainer	4557ES6	4561ES6	4566ES6	4571ES6	4557ES6	4561ES6	4566ES6	4571ES6
49	1	Valve Stem	138	139	140	141	138SS6	139SS6	140SS6	141SS6
50	1	Seat Disc	2493SS6	2494SS6	2495SS6	2961SS6	2493SS6	2494SS6	2495SS6	2961SS6
51	1	Seat *	164HSN	165HSN	166HSN	167HSN	164HSN	165HSN	166HSN	167HSN
52	1	Ratio Plug	177SS6	178	179	3079SS6	177SS6	3076SS6	3078SS6	3079SS6
53	1	Removable Seat	2496SS6K	2497SS6K	2498SS6K	3075SS6K	2496SS6K	2497SS6K	2498SS6K	3075SS6K

‡ Coated Parts available with "K" service type

Repair Kits	RAE	RAF	RAG	RAH	RAE	RAF	RAG	RAH
	* These parts are recommended spare parts and are stocked as repair kits.							

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, pilot-operated regulator used for regulation of inlet pressure to gas compressors and control of supply or distribution system pressures where the pressure to the regulator varies significantly and regulated pressure must remain constant.

FEATURES:

- Tight shut-off
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

CERTIFICATIONS:

Canadian Registration Number (CRN):
 0C16234.24567890NTY (Ductile)
 0C15604.24567890NTY (Steel)

Kimray is an ISO 9001- certified manufacturer.

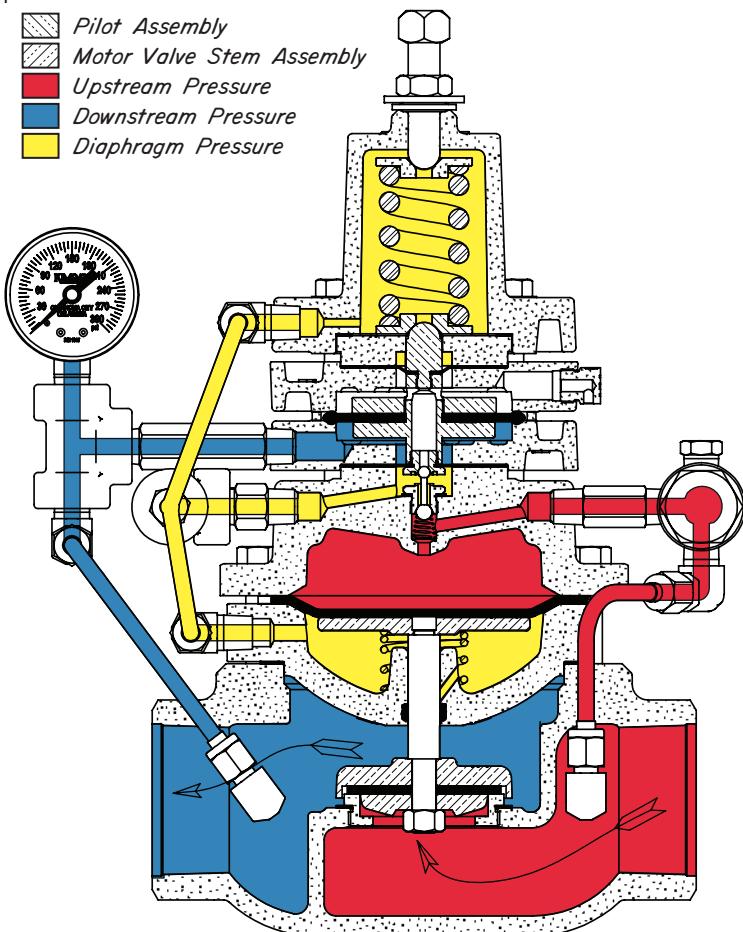
CLASSIFICATIONS:

Non-Bleed / Intermittent Vent

SET POINT DRIFT RATIO:

100:1

	<i>Pilot Assembly</i>
	<i>Motor Valve Stem Assembly</i>
	<i>Upstream Pressure</i>
	<i>Downstream Pressure</i>
	<i>Diaphragm Pressure</i>



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RRB1SADF1S	AKJ	1"	NPT	10-300	300	13.2	0.74
	RRB2SADF1S	AJI	2"	NPT	10-300	300	47.0	0.84
	RRB2ARDF1S	AJJ		150RF	10-250	250		
	RRB3SADF1S	AJK	3"	NPT	10-300	300	117	0.75
	RRB3ARDF1S	AJL		150RF	10-250	250		
	RRB4SADF1S	AJM	4"	NPT	10-300	300	210	0.75
	RRB4ARDF1S	AJN		150RF	10-250	250		
	RRB4ARDF1S	AJP	6"	150RF	10-250	250	480	0.75
Steel	RRB2ARWF1S	AJR	2"	150RF	10-285	285	117	0.75
	RRB3ARWF1S	AJS	3"	150RF	10-285	285	210	0.75
	RRB4ARWF1S	AJT	4"	150RF	10-285	285	480	0.75
	RRB6ARWF1S	AJU	6"	150RF	10-285	285	480	0.75

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

‡ For KimCoat option remove last "S" & replace with "K"

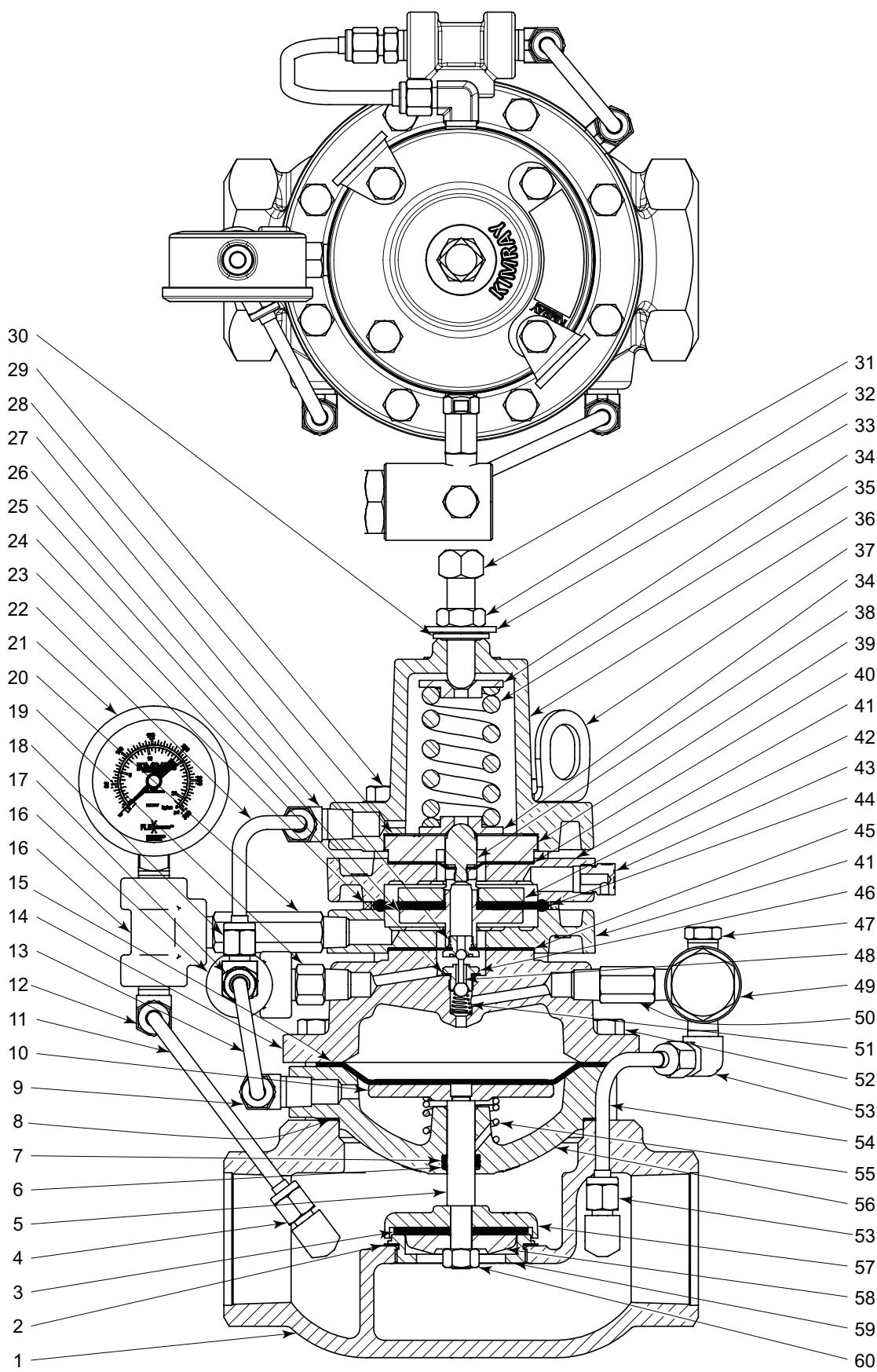
† For code builder see page 06:00.2

‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

GAS PRESSURE REDUCING BALANCED
MODEL RB PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

GAS PRESSURE REDUCING BALANCED MODEL RB PARTS LIST

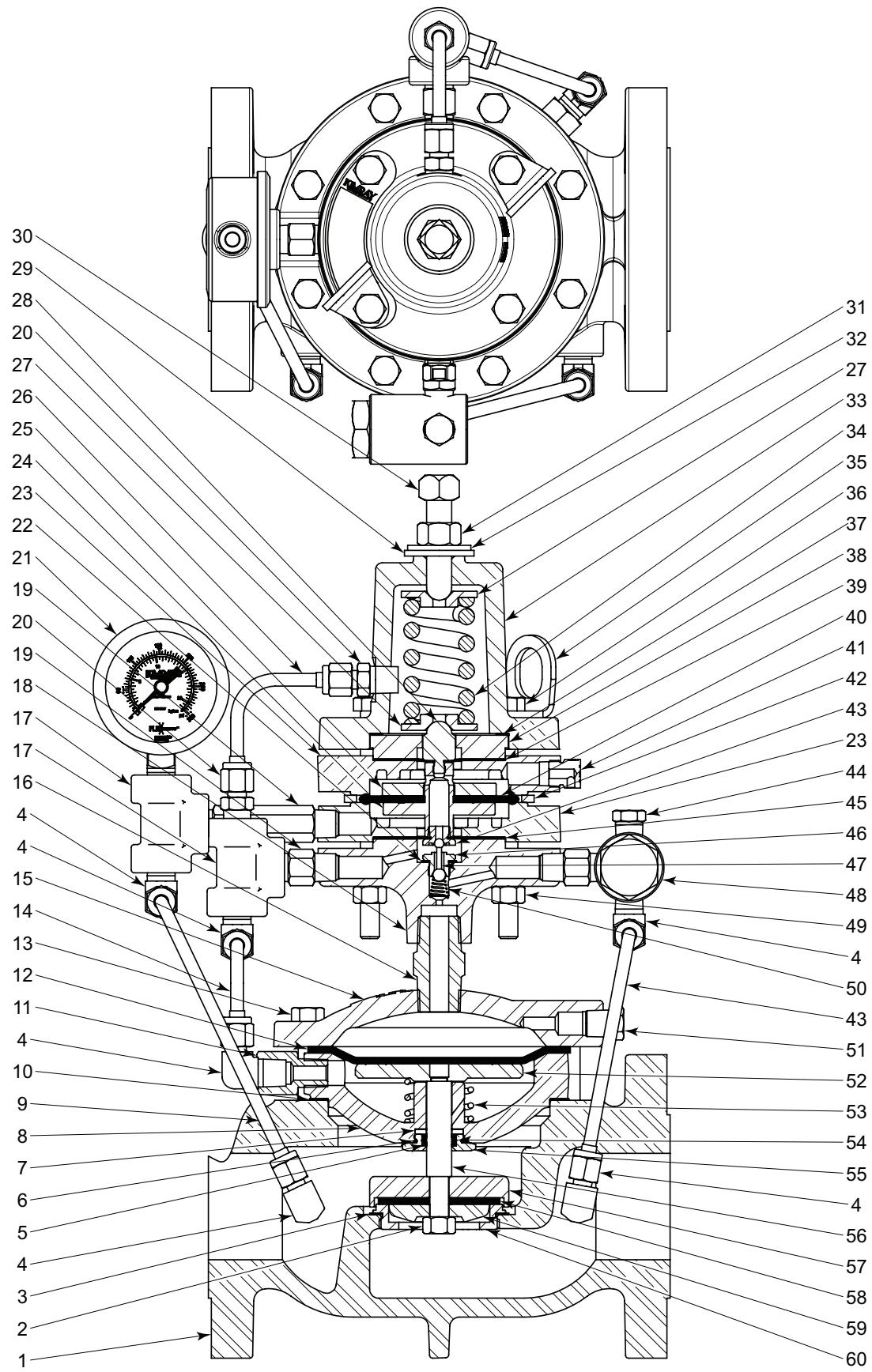
ITEM	QTY.	DESCRIPTION	PART NUMBER					
			STANDARD					CORROSIVE
			1 INCH	2 INCH	3 INCH	4 INCH	6 INCH	
1	1	Body						
		NPT Thru	2033	1709	1634	2001	---	2033 ‡
		150RF Thru	----	1913	1914	2002	2466	1709 ‡
		Grooved Thru	----	2964	---	---	---	1913 ‡
2	1	Gasket *	---	276	277	196	279	2964 ‡
3	1	Seat *	163HSN	164HSN	165HSN	166HSN	167HSN	163HSN
4	1	Elbow / Connector	874		875			164HSN
5	1	Valve Stem	137	138	139	140	141	165HSN
6	2	Back Up *	148T	149T	150T	151T	152T	166HSN
7	1	O-Ring *	153	154	155	156	157	167HSN
8	1	Gasket *	195	196	197	198	199	
		Elbow	1605		875			
9	1	Connector		---				1481SS6
		Nipple		---				874SS6
10	1	Diaphragm Plate	132SS6	133	134	135	136	262SS6
11	1	Tubing	123SS6	216SS6	217SS6	4251S6	218SS6	132SS6
12	1	Elbow		875	874	875		123SS6
13	1	Tubing	4416SS6	2511SS6		4011SS6		217SS6
14	1	Upper Housing	4015	1703	1639	2004	2178	4251S6
15	1	Diaphragm *	127	1706	1640	2015	2140	218SS6
16	2	Tee	219		2000			4011SS6
17	1	Elbow / Connector	875		874	875	874	2000SS6
18	1	Elbow / Connector	874		875		874	875SS6
19	1	Nipple	6890	648	2600			874SS6
20	1	Nipple	6890		648			648SS6
21	1	Pressure Gauge			7707			7707
22	1	Tubing	4416SS6	2511SS6		4011SS6	4262SS6	4011SS6
23	1	Spacer Ring *	---		7437			4262SS6
24	1	Gasket *	3018		118			7437
25	1	Diaphragm Plate	4495		6525			118
26	1	Elbow / Connector		875		874	875	6525SS6
27	1	Pilot Seat *	3016		113			875SS6
28	1	Gasket *	4554		276			874SS6
29	4	Bolt	4553	7671		1613		875SS6
30	1	Thread Seal *	4542		4488			875SS6
31	1	Adjusting Screw	6976		5163			648SS6
32	1	Nut	1676		2377			
33	1	Washer	4543		4491			
34	2	Spring Guide	4484SS6		2612			
35	1	Spring	4323		2611			
36	1	Bonnet	4525		2610			
37	2	Lifting Ring	---		7559			
38	1	Pivot Screw	4493		6524			
39	1	Spacer	4494S6		2021			
40	1	Diaphragm *	3014		6520			
41	2	Pilot Housing	3013		1701			
42	1	Diaph. Nut	3010		107			
43	1	Vent Plug	1357		147			
44	1	Diaphragm *	3011P		5259P			
45	1	Diaphragm *	3014		110			
46	1	Pilot Seat	3015		565			
47	1	Plug			699			
48	1	Pilot Plug *	3017		112			
49	1	1/4 F30 Filter			YAS			
50	1	Nipple	6890	262	2600		648	
51	1	Spring *	3008		108			
52	(QTY)	Bolt	4318 (6)	965 (8)	907(10)	907 (12)	2142 (16)	
53	2	Elbow			875			
54	1	Tubing	123SS6	1638SS6	1826SS6	1383SS6	2247SS6	
55	1	Spring	1358	1388	7132	1529	1575	
56	1	Lower Housing	142	1704	1632	145	146	
57	1	Seat Disc	158	159	160	161	162	
58	1	Standard Ratio Plug	176SS6	177SS6	178	179	180	
		Reduced Ratio Plug	4932	4933	1228SS6	177SS6	178	
59	1	Removable Seat	---	272K	273K	274K	275K	
60	1	Nut *	172	173		906	175	
Repair Kits			RYA	RRM	RRN	RRO	RRP	
* These parts are recommended spare parts and are stocked as repair kits.								

‡ Coated Parts available with "K" service type

PRESSURE REGULATORS

STEEL GAS PRESSURE REDUCING BALANCED
MODEL RB PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

STEEL GAS PRESSURE REDUCING BALANCED
MODEL RB PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER							
			STANDARD				CORROSIVE			
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body	2468	2469	2470	2959	2468 ‡	2469 ‡	2470 ‡	2959 ‡
2	1	Nut	173		906	175	173SS6	174SS6	175SS6	
3	1	Gasket *	276	277	196	279	276	277	196	279
4	6	Ell		875 (see note below)			875SS6 (see note below)			
5	2	Back Up *	149T	150T	151T	152T	149T	150T	151T	152T
6	1	O-Ring *	5225	5226	5227	4086	5225	5226	5227	4086
7	1	Spacer	4557DS6	4561DS6	4566DS6	4571DS6	4557DS6	4561DS6	4566DS6	4571DS6
8	1	Lower Housing	2481	2482	2483	2957	2481 ‡	2482 ‡	2483 ‡	2957 ‡
9	1	Tubing	2529SS6	2552SS6	2507SS6	4306SS6	2529SS6	2552SS6	2507SS6	4306SS6
10	1	Gasket *	196	197	198	199	196	197	198	199
11	1	Adapter		7244			7244S6			
12	1	Diaphragm *	1706	1640	2015	2140	1706	1640	2015	2140
13	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)	965 (8)	907(10)	907 (12)	2142 (16)
14	1	Tubing	4416S6	263S6	4418S6	4251S6	4416S6	263S6	4418S6	4251S6
15	1	Bonnet	2487	2488	2489	2956	2487 ‡	2488 ‡	2489 ‡	2956 ‡
16	1	Nipple		2516			2516SS6			
17	2	Tee		2000			2000SS6			
18	1	Base		2515			2515 ‡			
19	3	Nipple		648			648SS6			
20	2	Connector		874			874SS6			
21	1	Pressure Gauge		7707			7707			
22	1	Gasket *		118			118			
23	2	Pilot Housing		2514			2514 ‡			
24	1	Diaphragm Plate		6525			6525SS6			
25	1	Diaphragm Nut		107			107SS6			
26	1	Tubing	4414S6	4050SS6	4666S6	4305S6	4414S6	4050SS6	4666S6	4305S6
27	2	Spring Guide		2612			2612SS6			
28	1	Pivot Screw		6524			6524SS6			
29	1	Packing Seal *		4488			4488			
30	1	Adjusting Screw		5163			5163SS6			
31	1	Nut		2377			2377SS6			
32	1	Washer *		4491			4491S6			
33	1	Bonnet		2672			2672 ‡			
34	1	Spring		2611			2611			
35	2	Lifting Ring		7559			7559			
36	4	Bolt		4298			4298			
37	1	Gasket		276			276			
38	1	Spacer		2021			2021			
39	1	Diaphragm *		6520			6520			
40	1	Diaphragm *		5259P			5259P			
41	1	Breather Plug		147			147SS6			
42	1	Spacer Ring		7437			7437			
43	1	Pilot Seat *		113			113SS6			
44	2	Plug		699			699SS6			
45	1	Diaphragm *		110			110			
46	1	Pilot Seat *		565			565SS6			
47	1	Pilot Plug *		112			112			
48	1	1/4 F30 Filter		YAS			YASSS6			
49	4	Nut		241			241			
50	1	Spring *		108			108HAC			
51	1	Tubing	2505SS6	4011SS6	2510SS6	5061SS6	2505SS6	4011SS6	2510SS6	5061SS6
52	1	Diaphragm Plate	2490	2491	2492	2958	2490SS6	2491SS6	2492SS6	2958SS6
53	1	Spring	1388	7132	1529	1575	1388	7132	1529	1575
54	1	O-Ring *	154	807	156	157	154	807	156	157
55	1	Retainer	4557ES6	4561ES6	4566ES6	4571ES6	4557ES6	4561ES6	4566ES6	4571ES6
56	1	Valve Stem	138	139	140	141	138SS6	139SS6	140SS6	141SS6
57	1	Seat Disc	2493SS6	2494SS6	2495SS6	2961SS6	2493SS6	2494SS6	2495SS6	2961SS6
58	1	Seat *	164HSN	165HSN	166HSN	167HSN	164HSN	165HSN	166HSN	167HSN
59	1	Ratio Plug	177SS6	178	179	3079SS6	177SS6	3076SS6	3078SS6	3079SS6
60	1	Removable Seat	2496SS6K	2497SS6K	2498SS6K	3075SS6K	2496SS6K	2497SS6K	2498SS6K	3075SS6K

‡ Coated Parts available with "K" service type

Repair Kits

RRQ

RRR

RRS

RRX

RRQ

RRR

RRS

RRX

* These parts are recommended spare parts and are stocked as repair kits.

NOTE: 6 inch Lower Housing uses (1) 874, (1) 1481, & (1) 648 instead of 875

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, pilot-operated regulator used for regulation of inlet pressure to gas compressors and control of supply or distribution system pressures where the pressure to the regulator varies significantly and regulated pressure must remain constant.

FEATURES:

- Tight shut-off
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

CERTIFICATIONS:

Canadian Registration Number (CRN):
0C16234.24567890NTY (Ductile)
0C15604.24567890NTY (Steel)

Kimray is an ISO 9001- certified manufacturer.

SET POINT DRIFT RATIO:

100:1

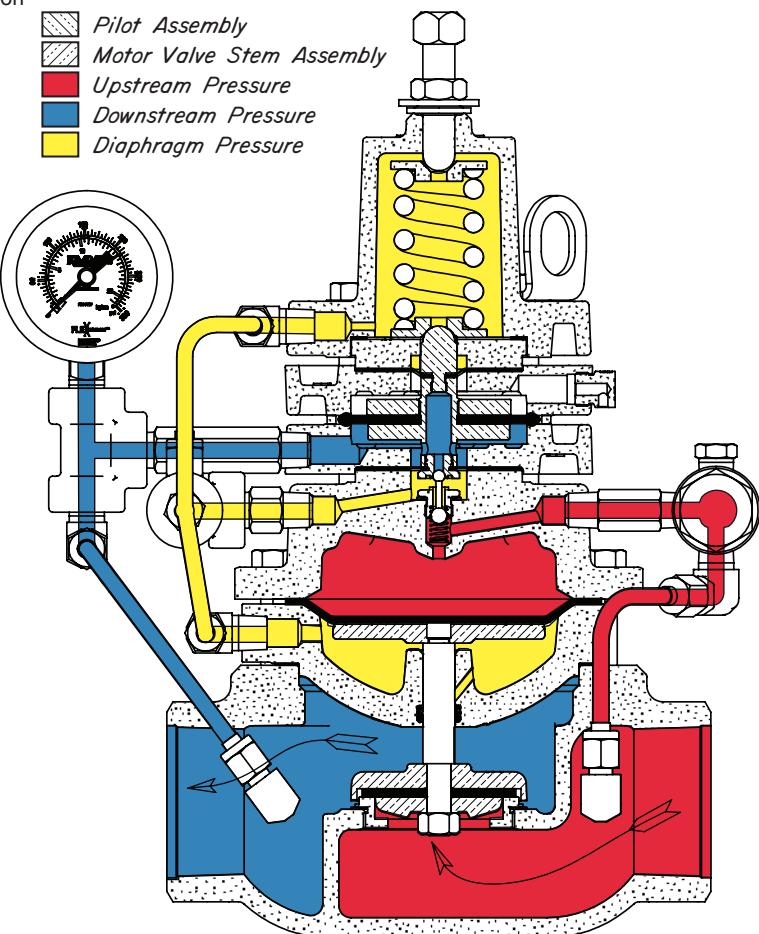
CLASSIFICATIONS:

Non-Venting

MIN. DIFFERENTIAL:

10 psig

	<i>Pilot Assembly</i>
	<i>Motor Valve Stem Assembly</i>
	<i>Upstream Pressure</i>
	<i>Downstream Pressure</i>
	<i>Diaphragm Pressure</i>



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RPN1SADF1S	AVD	1"	NPT	10-300	300	13.2	0.74
	RPN2SADF1S	AVE	2"	NPT	10-300	300	47.0	0.84
	RPN2ARDF1S	AVF		150RF	10-250	250		
	RPN3SADF1S	AVH	3"	NPT	10-300	300	117	0.75
	RPN3ARDF1S	AVI		150RF	10-250	250		
	RPN4SADF1S	AVK	4"	NPT	10-300	300	210	0.75
	RPN4ARDF1S	AVL		150RF	10-250	250		
Steel	RPN6ARDF1S	AVN	6"	150RF	10-250	250	480	0.75
	RPN2ARWF1S	AVG	2"	150RF	10-285	285	117	0.75
	RPN3ARWF1S	AVJ	3"	150RF	10-285	285	210	0.75
	RPN4ARWF1S	AVM	4"	150RF	10-285	285	480	0.75
	RPN6ARWF1S	AVO	6"	150RF	10-285	285	480	0.75

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

‡ For KimCoat option remove last "S" & replace with "K"

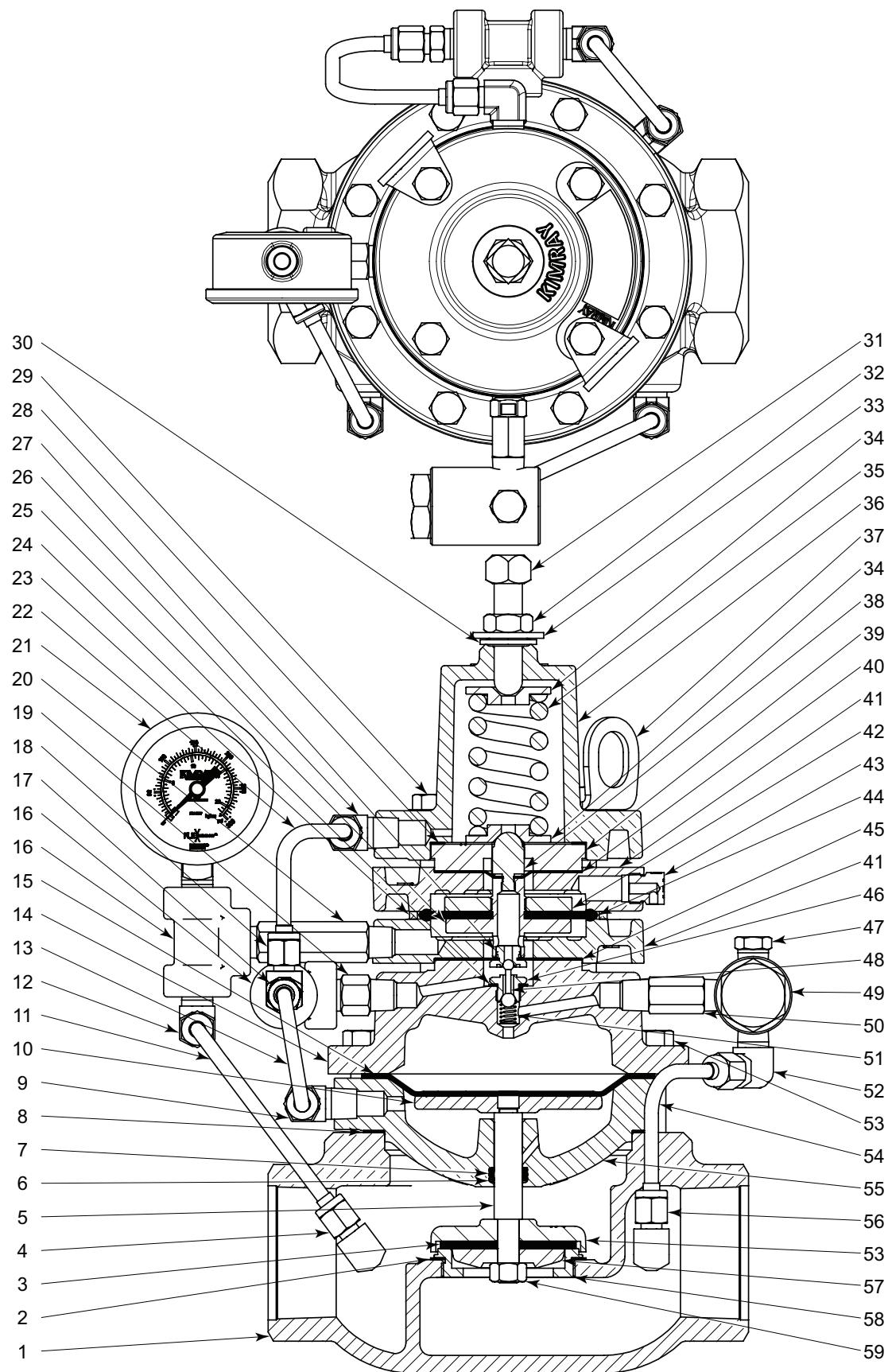
† For code builder see page 06:00.2

‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

GAS PRESSURE REDUCING BALANCED NON - VENTING
MODEL PN PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

GAS PRESSURE REDUCING BALANCED NON - VENTING
MODEL PN PARTS LIST

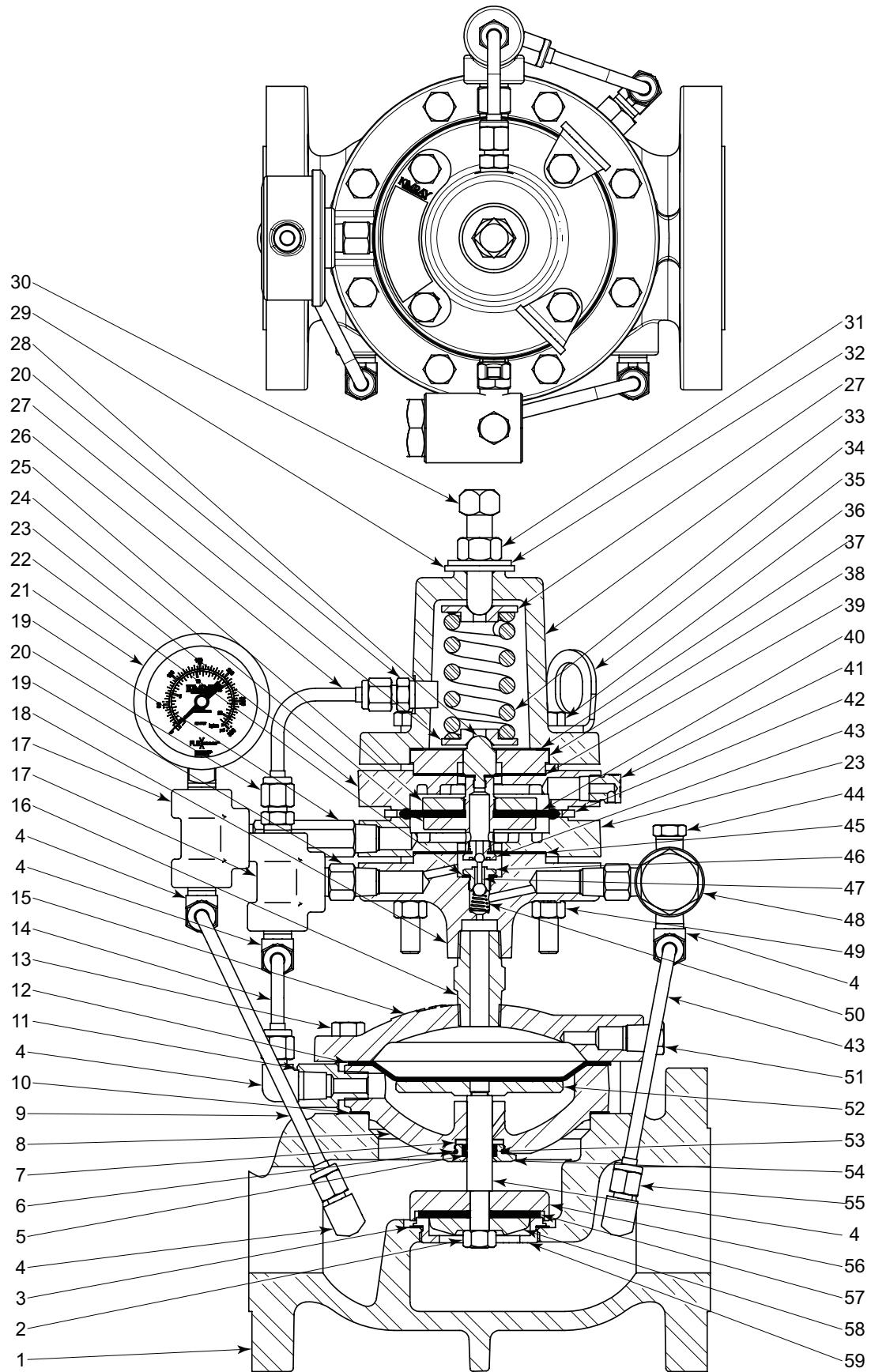
ITEM	QTY.	DESCRIPTION	PART NUMBER					
			STANDARD					CORROSIVE
			1 INCH	2 INCH	3 INCH	4 INCH	6 INCH	
1	1	Body						
		NPT Thru	2033	1709	1634	2001	---	
		150RF Thru	----	1913	1914	2002	2466	
		Grooved Thru	----	2964	---	---	---	
2	1	Gasket *	---	276	277	196	279	
3	1	Seat *	163HSN	164HSN	165HSN	166HSN	167HSN	
4	1	Elbow / Connector	874		875			
5	1	Valve Stem	137	138	139	140	141	
6	2	Back Up *	148T	149T	150T	151T	152T	
7	1	O-Ring *	153	154	155	156	157	
8	1	Gasket *	195	196	197	198	199	
		Elbow	1605		875		1481	
9	1	Connector		---			874	
		Nipple		---			262	
10	1	Diaphragm Plate	132SS6	133	134	135	136	
11	1	Tubing	123SS6	216SS6	217SS6	4251S6	218SS6	
12	1	Elbow		875	874	875		
13	1	Tubing	4416SS6	2511SS6		4011SS6	2247SS6	
14	1	Upper Housing	4015	1703	1639	2004	2178	
15	1	Diaphragm *	127	1706	1640	2015	2140	
16	2	Tee	219		2000			
17	1	Elbow / Connector	875		874	875	874	
18	1	Elbow / Connector	874		875		874	
19	1	Nipple	6890	648	2600		648	
20	1	Nipple	6890		648			
21	1	Pressure Gauge			7707			
22	1	Tubing	4416SS6	2511SS6		4011SS6	4262SS6	
23	1	Spacer Ring *	---		7437			
24	1	Gasket *	3018		118			
25	1	Diaphragm Plate	7873		7872			
26	1	Elbow / Connector		875		874	875	
27	1	Pilot Seat *	3016		113			
28	1	Gasket *	4554		276			
29	4	Bolt	4553	7671		1613		
30	1	Thread Seal *	4542		4488			
31	1	Adjusting Screw	6976		5163			
32	1	Nut	1676		2377			
33	1	Washer	4543		4491			
34	2	Spring Guide	4484SS6		2612			
35	1	Spring	4323		2611			
36	1	Bonnet	4525		2610			
37	2	Lifting Ring	---		7559		---	
38	1	Pivot Screw	4493		6524			
39	1	Spacer	4494S6		2021			
40	1	Diaphragm *	3014		6520			
41	2	Pilot Housing	3013		1701			
42	1	Diaph. Nut	3010		107			
43	1	Vent Plug	1357		147			
44	1	Diaphragm *	3011P		5259P			
45	1	Diaphragm *	3014		110			
46	1	Pilot Seat	3015		565			
47	1	Plug			699			
48	1	Pilot Plug *	3017		112			
49	1	1/4 F30 Filter			YAS			
50	1	Nipple	6890	262	2600		648	
51	1	Spring *	3008		585			
52	(QTY)	Bolt	4318 (6)	965 (8)	907(10)	907 (12)	2142 (16)	
53	2	Elbow			875			
54	1	Tubing	123SS6	1638SS6	1826SS6	1383SS6	2247SS6	
55	1	Lower Housing	142	1704	1632	145	146	
56	1	Seat Disc	158	159	160	161	162	
57	1	Standard Ratio Plug	176SS6	177SS6	178	179	180	
58	1	Reduced Ratio Plug	4932	4933	1228SS6	177SS6	178	
59	1	Removable Seat	---	272K	273K	274K	275K	
		*						
		Repair Kits	RYA	RQH	RQI	RQJ	RQK	
			* These parts are recommended spare parts and are stocked as repair kits.					

‡ Coated Parts available with "K" service type

PRESSURE REGULATORS

STEEL GAS PRESSURE REDUCING BALANCED NON - VENTING
MODEL PN PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

STEEL GAS PRESSURE REDUCING BALANCED NON - VENTING
MODEL PN PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER				PART NUMBER					
			STANDARD				CORROSIVE					
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH		
1	1	Body	2468	2469	2470	2959	2468 ‡	2469 ‡	2470 ‡	2959 ‡		
2	1	Nut	173	906		175	173SS6	174SS6	175SS6			
3	1	Gasket *	276	277	196	279	276	277	196	279		
4	6	Ell	875 (see note below)				875SS6 (see note below)					
5	2	Back Up *	149T	150T	151T	152T	149T	150T	151T	152T		
6	1	O-Ring *	5225	5226	5227	4086	5225	5226	5227	4086		
7	1	Spacer	4557DS6	4561DS6	4566DS6	4571DS6	4557DS6	4561DS6	4566DS6	4571DS6		
8	1	Lower Housing	2481	2482	2483	2957	2481 ‡	2482 ‡	2483 ‡	2957 ‡		
9	1	Tubing	2529SS6	2552SS6	2507SS6	4306SS6	2529SS6	2552SS6	2507SS6	4306SS6		
10	1	Gasket *	196	197	198	199	196	197	198	199		
11	1	Adapter	7244				7244S6					
12	1	Diaphragm *	1706	1640	2015	2140	1706	1640	2015	2140		
13	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)	965 (8)	907(10)	907 (12)	2142 (16)		
14	1	Tubing	4416S6	263S6	4418S6	4251S6	4416S6	263S6	4418S6	4251S6		
15	1	Bonnet	2487	2488	2489	2956	2487 ‡	2488 ‡	2489 ‡	2956 ‡		
16	1	Nipple	2516				2516SS6					
17	2	Tee	2000				2000SS6					
18	1	Base	2515				2515 ‡					
19	3	Nipple	648				648SS6					
20	2	Connector	874				874SS6					
21	1	Pressure Gauge	7707				7707					
22	1	Gasket *	118				118					
23	2	Pilot Housing	2514				2514 ‡					
24	1	Diaphragm Plate	7872S6				7872S6					
25	1	Diaphragm Nut	107				107SS6					
26	1	Tubing	4414S6	4050SS6	4666S6	4305S6	4414S6	4050SS6	4666S6	4305S6		
27	2	Spring Guide	2612				2612SS6					
28	1	Pivot Screw	6524				6524SS6					
29	1	Packing Seal *	4488				4488					
30	1	Adjusting Screw	5163		2613		5163SS6					
31	1	Nut	2377				2377SS6					
32	1	Washer *	4491				4491S6					
33	1	Bonnet	2672				2672 ‡					
34	1	Spring	2611				2611					
35	2	Lifting Ring	7559		----		7559					
36	4	Bolt	4298				4298					
37	1	Gasket	276				276					
38	1	Spacer	2021				2021					
39	1	Diaphragm *	6520				6520					
40	1	Diaphragm *	5259P				5259P					
41	1	Breather Plug	147				147SS6					
42	1	Spacer Ring	7437				7437					
43	1	Pilot Seat *	113				113SS6					
44	2	Plug	699				699SS6					
45	1	Diaphragm *	110				110					
46	1	Pilot Seat *	565				565SS6					
47	1	Pilot Plug *	112				112					
48	1	1/4 F30 Filter	YAS				YASSS6					
49	4	Nut	241				241					
50	1	Spring *	585				585HAC					
51	1	Tubing	2505SS6	4011SS6	2510SS6	5061SS6	2505SS6	4011SS6	2510SS6	5061SS6		
52	1	Diaphragm Plate	2490	2491	2492	2958	2490SS6	2491SS6	2492SS6	2958SS6		
53	1	O-Ring	154	807	156	157	154	807	156	157		
54	1	Retainer *	4557ES6	4561ES6	4566ES6	4571ES6	4557ES6	4561ES6	4566ES6	4571ES6		
55	1	Valve Stem	138	139	140	141	138SS6	139SS6	140SS6	141SS6		
56	1	Seat Disc	2493SS6	2494SS6	2495SS6	2961SS6	2493SS6	2494SS6	2495SS6	2961SS6		
57	1	Seat	164HSN	165HSN	166HSN	167HSN	164HSN	165HSN	166HSN	167HSN		
58	1	Ratio Plug *	177SS6	178	179	3079SS6	177SS6	3076SS6	3078SS6	3079SS6		
59	1	Removable Seat	2496SS6K	2497SS6K	2498SS6K	3075SS6K	2496SS6K	2497SS6K	2498SS6K	3075SS6K		

‡ Coated Parts available with "K" service type

Repair Kits

RRQ RRR RRS RRX RRQ RRR RRS RRX

* These parts are recommended spare parts and are stocked as repair kits.

NOTE: 6 inch Lower Housing uses (1) 874, (1) 1481, & (1) 648 instead of 875

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, pilot-operated regulator used for maintaining a constant pressure drop across meter systems.

FEATURES:

- Tight shut-off
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

CERTIFICATIONS:

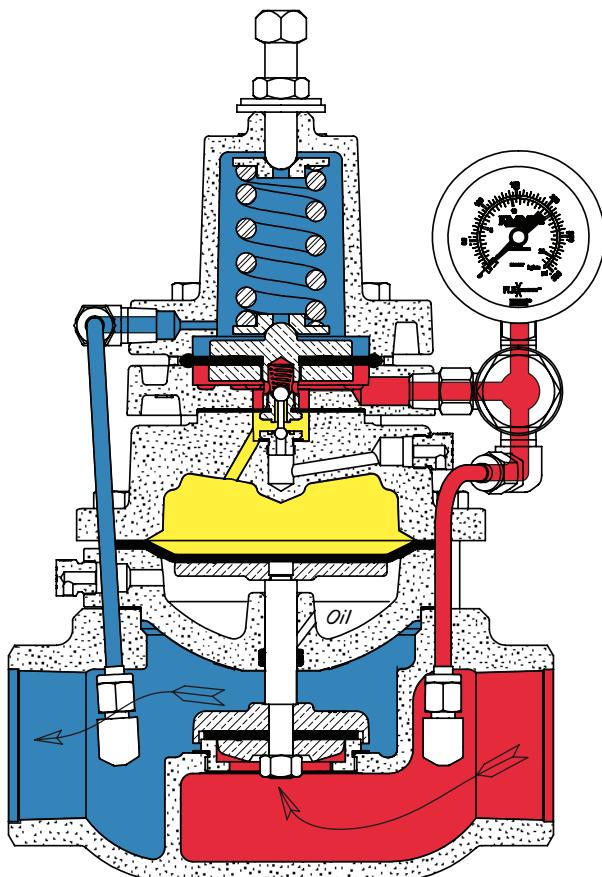
Canadian Registration Number (CRN):
 0C16234.24567890NTY (Ductile)
 0C15604.24567890NTY (Steel)

Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

Non-Bleed / Intermittent Vent

- | | |
|--|----------------------------------|
| | <i>Pilot Assembly</i> |
| | <i>Motor Valve Stem Assembly</i> |
| | <i>Upstream Pressure</i> |
| | <i>Downstream Pressure</i> |
| | <i>Diaphragm Pressure</i> |



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RDP1SADF1S	ADQ	1"	NPT	10-300	300	13.2	0.74
	RDP2SADF1S	ACU	2"	NPT	10-300	300	47.0	0.84
	RDP2ARDF1S	ACW		150RF	10-250	250		
	RDP3SADF1S	ACX	3"	NPT	10-300	300	117	0.75
	RDP3ARDF1S	ACY		150RF	10-250	250		
	RDP4SADF1S	ADA	4"	NPT	10-300	300	210	0.75
	RDP4ARDF1S	ADB		150RF	10-250	250		
	RDP4ARDF1S	ADC	6"	150RF	10-250	250	480	0.75
Steel	RDP2ARWF1S	AGL	2"	150RF	10-285	285	117	0.75
	RDP3ARWF1S	AGM	3"	150RF	10-285	285	210	0.75
	RDP4ARWF1S	AGN	4"	150RF	10-285	285	480	0.75
	RDP6ARWF1S	AGO	6"	150RF	10-285	285	480	0.75

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

‡ For KimCoat option remove last "S" & replace with "K"

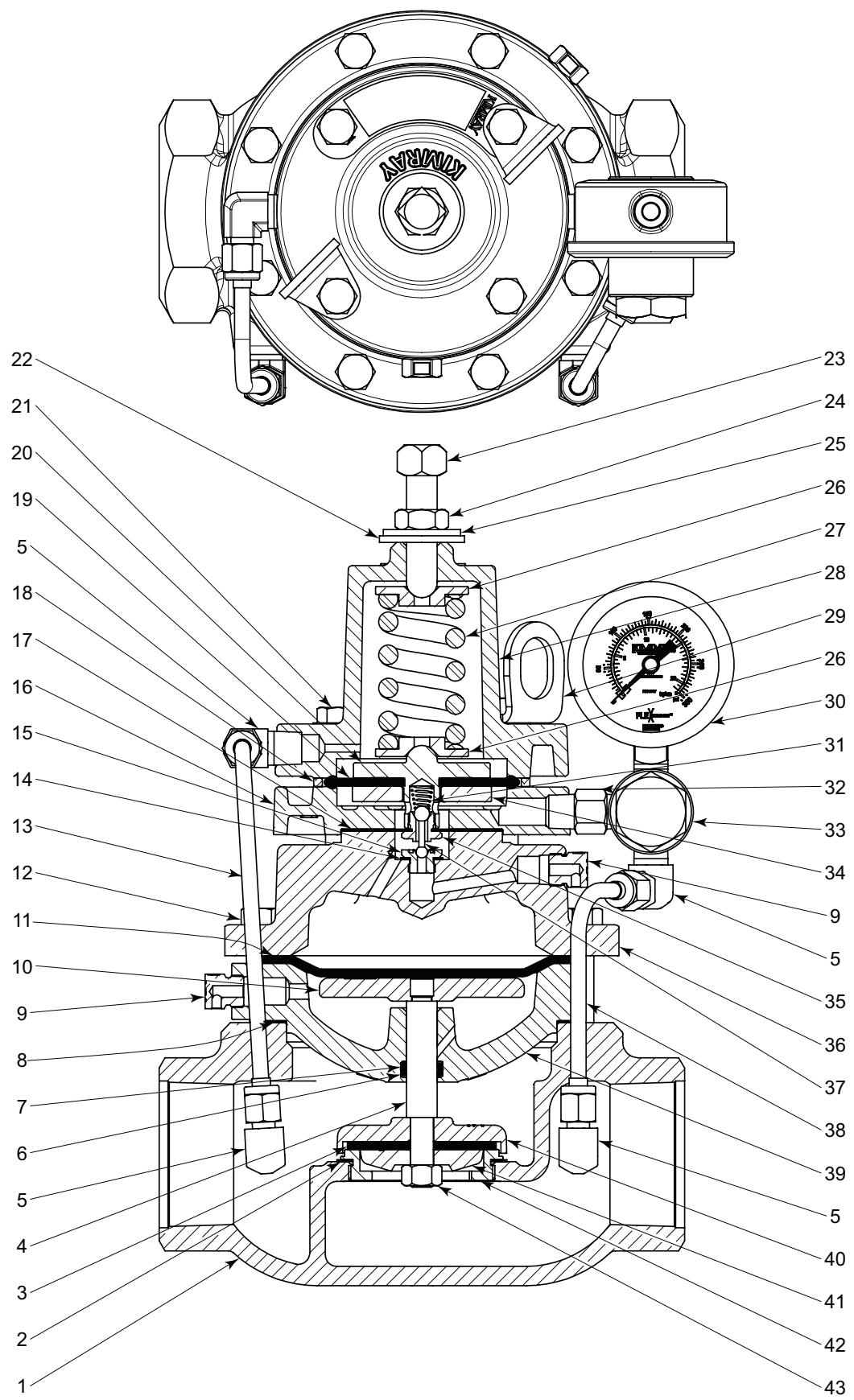
† For code builder see page 06:00.2

‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

GAS PRESSURE DIFFERENTIAL
MODEL DP PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

GAS PRESSURE DIFFERENTIAL
MODEL DP PARTS LIST

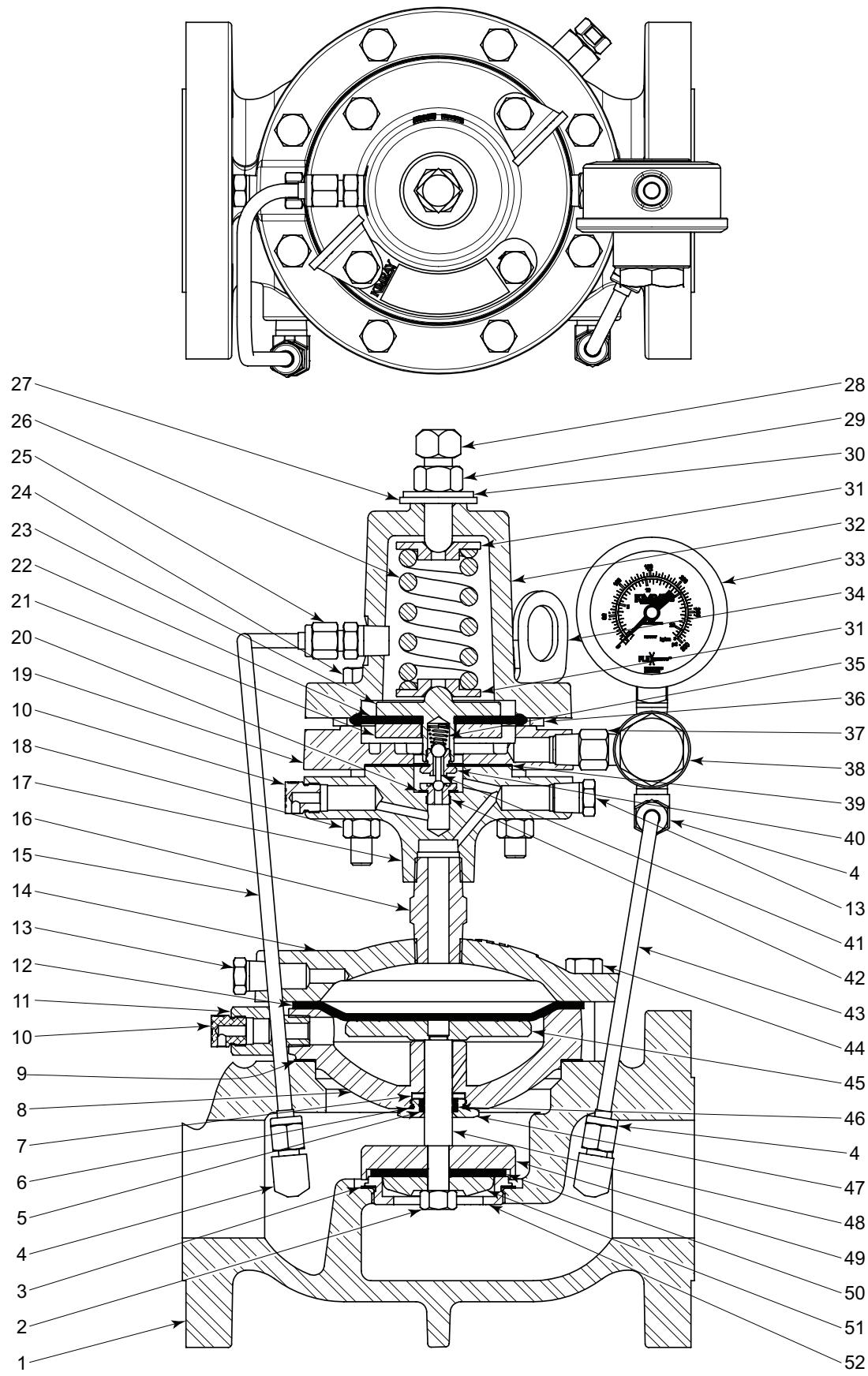
ITEM	QTY.	DESCRIPTION	PART NUMBER									
			STANDARD					CORROSIVE				
			1 INCH	2 INCH	3 INCH	4 INCH	6 INCH	1 INCH	2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body										
		NPT Thru	2033	1709	1634	2001	----	2033	1709 ‡	1634 ‡	2001 ‡	----
		150RF Thru	----	1913	1914	2002	2466	----	1913 ‡	1914 ‡	2002 ‡	2466 ‡
		Grooved Angle	----	2964	----	----	----	2964 ‡	----	----	----	----
2	1	Gasket *	----	276	277	196	279	----	276	277	196	279
3	1	Seat *	163HSN	164HSN	165HSN	166HSN	167HSN	163HSN	164HSN	165HSN	166HSN	167HSN
4	1	Valve Stem	137	138	139	140	141	137SS6	138SS6	139SS6	140SS6	141SS6
5	4	Elbow	875	875					875SS6			
6	2	Back Up *	148T	149T	150T	151T	152T	148T	149T	150T	151T	152T
7	1	O-Ring *	153	154	155	156	157	153	154	155	156	157
8	1	Gasket *	195	196	197	198	199	195	196	197	198	199
9	2	Vent Plug	1357	147					1357SS6			
10	1	Diaphragm Plate	132SS6	133	134	135	136	132SS6	133	134	135	136
11	1	Diaphragm *	127	1706	1640	2015	2140	127	1706	1640	2015	2140
12	(QTY)	Bolt	4318 (6)	965 (8)	907(10)	907 (12)	2142 (16)	4318 (6)	965 (8)	907(10)	907 (12)	2142 (16)
13	1	Tubing	123SS6	2603SS6	4251S6	4853SS6	4312SS6	123SS6	2603SS6	4251S6	4853SS6	4312SS6
14	1	Gasket *	3018	118					3018	118		
15	1	Pilot Seat *	3016	113					3016SS6	113SS6		
16	1	Pilot Housing	3013	1701					3013SS6	1701 ‡		
17	1	Diaphragm *	3014	110					3014	110		
18	1	Spacer Ring	----	7437					----	7437		
19	1	Diaphragm *	3011P	5259P					3011P	5259P		
20	1	Diaphragm Plate	3009	105					3009SS6	105SS6		
21	4	Bolt	6972	907					6972	907		
22	1	Thread Seal *	4542	4488					4542	4488SS6		
23	1	Adjusting Screw	6976	5163					6976S6	5163SS6		
24	1	Nut	1676	2377					1676	2377SS6		
25	1	Washer *	4543	4491					4543	4491S6		
26	2	Spring Guide	4484SS6	2612					4484SS6	2612SS6		
27	1	Spring	4323	2611					4323	2611		
28	1	Bonnet	4525	2610					4525	2610 ‡		
29	2	Lifting Ring	----	----	7559	----	----	----	----	7559	----	----
30	1	Pressure Gauge	7707	7707					7707	7707		
31	1	Spring *	3008	108					3008	108HAC		
32	1	Nipple	6890	648					6890S6	648SS6		
33	1	1/4 F30 Filter	YAS					YASSS6				
34	1	Diaph. Nut	3010	107					3010SS6	107SS6		
35	1	Pilot Seat *	3015	565					3015SS6	565SS6		
36	1	Upper Housing	3019	1719	1636	2003	2177	3019	1719 ‡	1636 ‡	2003 ‡	2177 ‡
37	1	Pilot Plug *	3017	112					3017	112		
38	1	Tubing	4416S6	123SS6	124SS6	125SS6	126SS6	4416S6	123SS6	124SS6	125SS6	126SS6
39	1	Lower Housing	142	1704	1632	145	146	142	1704 ‡	1632 ‡	145 ‡	146 ‡
40	1	Seat Disc	158	159	160	161	162	158SS6	2493SS6	2494SS6	2495SS6	2961SS6
41	1	Standard Ratio Plug	176SS6	177SS6	178	179	180	176SS6	177SS6	3076SS6	3078SS6	3079SS6
		Reduced Ratio Plug	4932	4933	1228SS6	177SS6	178	4932SS6	4933SS6	1228SS6	177SS6	3076SS6
42	1	Removable Seat	----	272K	273K	274K	275K	----	2496SS6K	2497SS6K	2498SS6K	3075SS6K
43	1	Nut *	172	173	906			172SS6	173SS6	174SS6		
Repair Kits			----	RPK	RPL	RPM	RPN	----	RPK	RPL	RPM	RPN

* These parts are recommended spare parts and are stocked as repair kits.

PRESSURE REGULATORS

STEEL GAS PRESSURE DIFFERENTIAL
MODEL DP PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

STEEL GAS PRESSURE DIFFERENTIAL
MODEL DP PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER				PART NUMBER			
			STANDARD				CORROSIVE			
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body	2468	2469	2470	2959	2468 ‡	2469 ‡	2470 ‡	2959 ‡
2	1	Nut *	173		906	175	173SS6		174SS6	175SS6
3	1	Gasket *	276	277	196	279	276	277	196	279
4	3	Elbow			875				875SS6	
5	2	Back Up *	149T	150T	151T	152T	149T	150T	151T	152T
6	1	O-Ring *	5225	5226	5227	4086	5225	5226	5227	4086
7	1	Spacer	4557DS6	4561DS6	4566DS6	4571DS6	4557DS6	4561DS6	4566DS6	4571DS6
8	1	Lower Housing	2481	2482	2483	2957	2481 ‡	2482 ‡	2483 ‡	2957 ‡
9	1	Gasket *	196	197	198	199	196	197	198	199
10	2	Vent Plug			147				147SS6	
11	1	Adapter			7244				7244S6	
12	1	Diaphragm *	1706	1640	2015	2140	1706	1640	2015	2140
13	2	Plug			699				699SS6	
14	1	Bonnet	2487	2488	2489	2956	2487 ‡	2488 ‡	2489 ‡	2956 ‡
15	1	Tubing	2529SS6	4068S6	5061SS6	4312SS6	2529SS6	4068S6	5061SS6	4312SS6
16	1	Nipple			2516				2516SS6	
17	1	Base			4995				4995 ‡	
18	4	Nut			241				241	
19	1	Pilot Housing			2514				2514 ‡	
20	1	Gasket *			118				118	
21	1	Diaphragm Nut			107				107SS6	
22	1	Diaphragm *			5259P				5259P	
23	1	Diaphragm Plate			105				105SS6	
24	2	Spring Guide			2612				2612SS6	
25	1	Connector			874				874SS6	
26	1	Spring			2611				2611	
27	1	Packing Seal *			4488				448	
28	1	Adjusting Screw			2613				2613	
29	1	Nut			2377				2377	
30	1	Washer *			4491				4491	
31	1	Bonnet			2672				2672 ‡	
32	1	Pressure Gauge			7707				7707	
33	4	Bolt			1232				1232	
34	2	Lifting Ring			7559		----		7559	----
35	1	Spring *			108				108HAC	
36	1	Spacer Ring *			7437				7437	
37	1	Nipple			648				648SS6	
38	1	1/4 F30 Filter			YAS				YASSS6	
39	1	Diaphragm *			110				110	
40	1	Pilot Seat *			565				565SS6	
41	1	Pilot Plug *			112				112	
42	1	Pilot Seat *			113				113SS6	
43	1	Tubing	2505SS6	2552SS6	2529SS6	5061SS6	2505SS6	2552SS6	2529SS6	5061SS6
44	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)	965 (8)	907(10)	907 (12)	2142 (12)
45	1	Diaphragm Plate	2490	2491	2492	2958	2490SS6	2491SS6	2492SS6	2958SS6
46	1	O-Ring *	154	807	156	157	154	807	156	157
47	1	Retainer	4557ES6	4561ES6	4566ES6	4571ES6	4557ES6	4561ES6	4566ES6	4571ES6
48	1	Valve Stem	138	139	140	141	138SS6	139SS6	140SS6	141SS6
49	1	Seat Disc	2493SS6	2494SS6	2495SS6	2961SS6	2493SS6	2494SS6	2495SS6	2961SS6
50	1	Seat *	164HSN	165HSN	166HSN	167HSN	164HSN	165HSN	166HSN	167HSN
51	1	Ratio Plug	177SS6	178	179	3079SS6	177SS6	3076SS6	3078SS6	3079SS6
52	1	Removable Seat	2496SS6K	2497SS6K	2498SS6K	3075SS6K	2496SS6K	2497SS6K	2498SS6K	3075SS6K

† Coated Parts available with "K" service type

Repair Kits	RAE	RAF	RAG	RAH	RAE	RAF	RAG	RAH
	* These parts are recommended spare parts and are stocked as repair kits.							

NOTES:



Kimray is an ISO 9001- certified manufacturer.

GAS OUNCES PRESSURE REDUCING TO VACUUM MODEL VR

APPLICATION:

Self-contained, pilot-operated regulator used for gas compressor suction regulation. Vapor pressure recovering systems and vacuum distribution systems, and compressor by-pass lines.

FEATURES:

- Tight shut-off
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

-  Pilot Assembly
-  Motor Valve Stem Assembly
-  Upstream Pressure
-  Downstream Pressure
-  Diaphragm Pressure

CERTIFICATIONS:

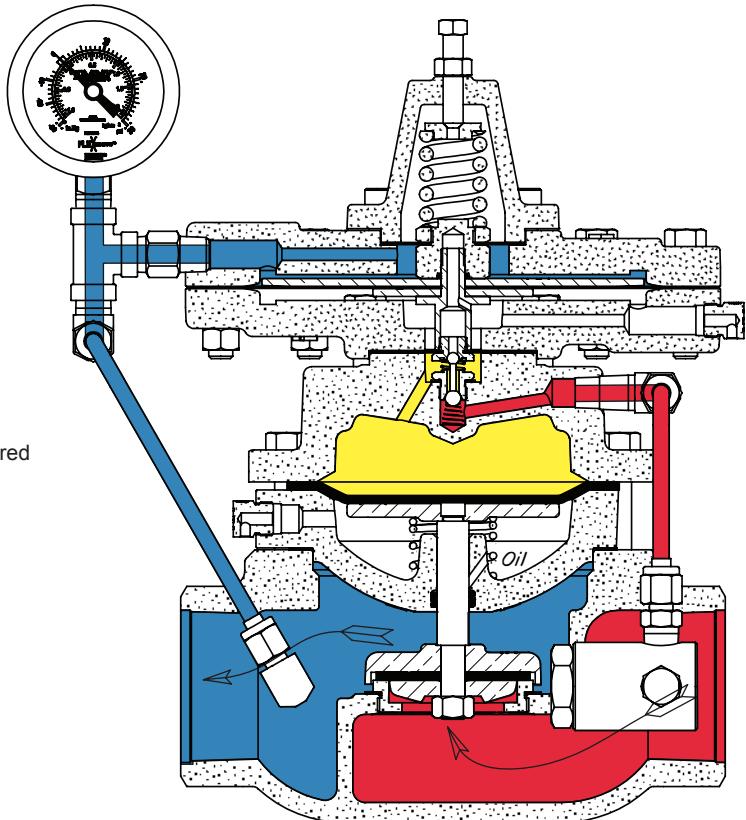
Canadian Registration Number (CRN):
OC16234.24567890NTY (Ductile)
Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

Non-Bleed / Intermittent Vent

UPSTREAM PRESSURE RANGE:

- 1 Inch valves:
 - Full port 10 psig min. or outside supply source is required
 - Reduced port 5 psig min. or outside supply source is required
- 2 thru 6 inch valves:
 - 5 psig min. or outside supply source is required



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RVR1SADF2S	APED20	1"	NPT	10-300	300	13.2	0.74
	RVR2SADF2S	APHD20	2"	NPT	0-20	300	47.0	0.84
	RVR2ARDF2S	APID20		150RF	0-20	250		
	RVR3SADF2S	APKD20	3"	NPT	0-20	300	117.0	0.75
	RVR3ARDF2S	APLD20		150RF	0-20	250		
	RVR4SADF2S	APND20	4"	NPT	0-20	300	210.0	0.75
	RVR4ARDF2S	APOD20		150RF	0-20	250		
	RVR4ARDF2S	APRD20	6"	150RF	0-20	250	480.0	0.75

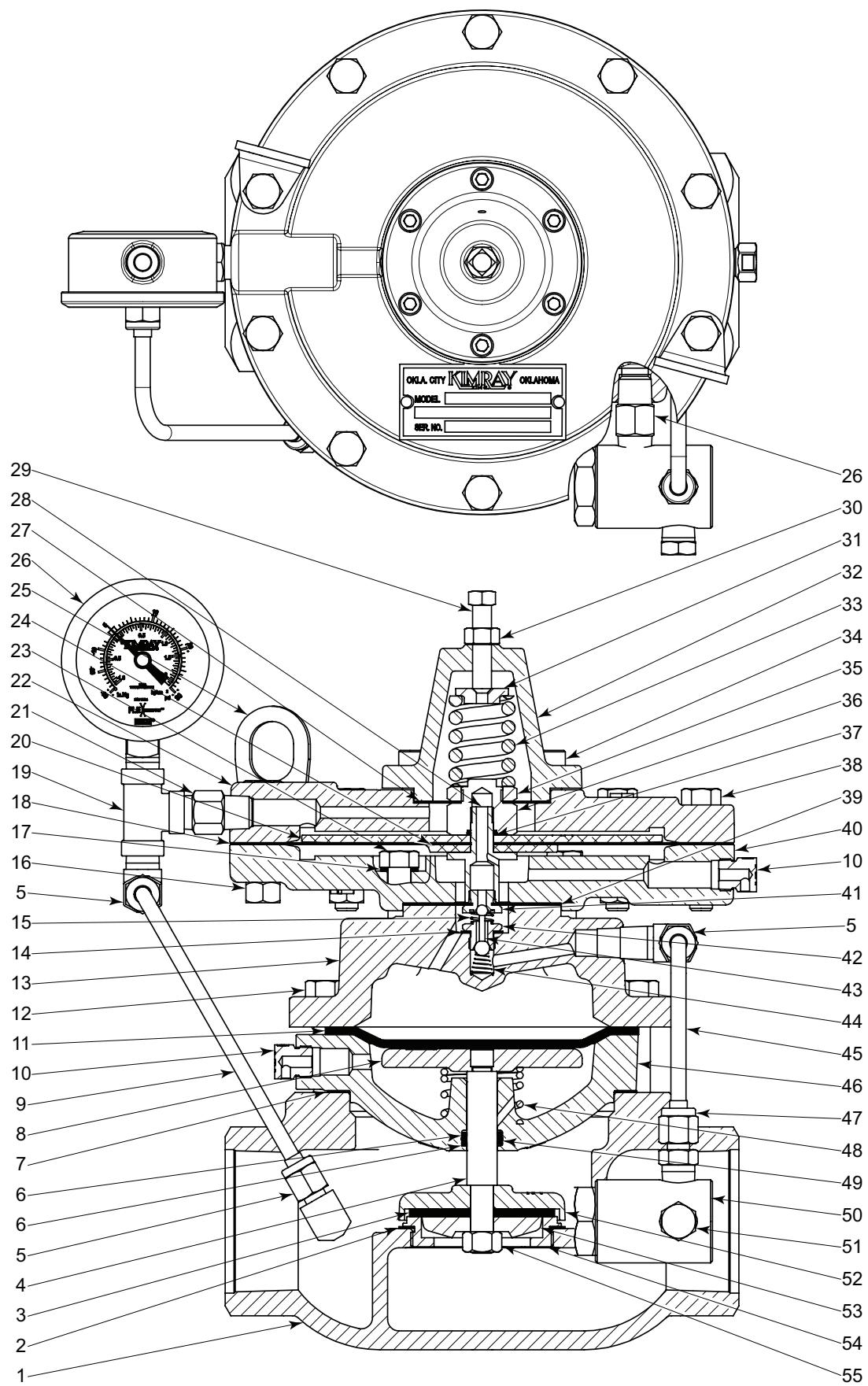
NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV
 † For Corrosive service remove last "S" & replace with "C"
 † For KimCoat option remove last "S" & replace with "K"
 † For code builder see page 06:00.3
 ‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

GAS OUNCES PRESSURE REDUCING TO VACUUM
MODEL VR PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

GAS OUNCES PRESSURE REDUCING TO VACUUM
MODEL VR PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER					
			STANDARD				CORROSIVE	
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH
		Body						
1	1	NPT Thru	1709	1634	2001	----	1709 ‡	1634 ‡
		150RF Thru	1913	1914	2002	2466	1913 ‡	1914 ‡
		Grooved Thru	2964	----	----	----	2964 ‡	----
2	1	Gasket *	276	277	196	279	276	277
3	1	Seat *	164HSN	165HSN	166HSN	167HSN	164HSN	165HSN
4	1	Valve Stem	138	139	140	141	138SS6	139SS6
5	3	Elbow			875			875SS6
6	2	Back Up *	149T	150T	151T	152T	149T	150T
7	1	Gasket *	196	197	198	199	196	197
8	1	Diaphragm Plate	133	134	135	136	133	134
9	1	Tubing	2505SS6	213SS6	2505SS6	5061SS6	2505SS6	213SS6
10	2	Vent Plug			147			147SS6
11	1	Diaphragm *	1706	1640	2015	2140	1706	1640
12	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)	965 (8)	907(10)
13	1	Upper Housing	1719	1636	2003	2177	1719 ‡	1636 ‡
14	1	Gasket *			118			118
15	1	Spring *			566			566HAC
16	10	Nut			241			241
17	4	Gasket *			242			242
18	1	Diaphragm *			1212			1212
19	1	Tee			219			219SS6
20	1	Upper Diaphragm Plate			1208			1208SS6
21	2	Nipple			648			648SS6
22	1	Upper Pilot Housing			1206			1206 ‡
23	4	Screw			1672			1672SS6
24	1	Lower Diaphragm Plate			1340			1340SS6
25	2	Lifting Ring		7559		----	7559	----
26	1	Pressure Gauge			7704			7704
27	1	Diaphragm *			5027			5027
28	1	Stem			1339			1339S6
29	1	Adjusting Screw			897			897
30	1	Nut			922			922SS6
31	1	Spring Guide			7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)			7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)
32	1	Bonnet			5043			5043 ‡
33	1	Spring			4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)			4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)
34	6	Screw			7531			7531
35	1	Diaphragm Nut			5026			5026SS6
36	1	Diaphragm Stem			5028			5028SS6
37	1	O-Ring *			265			265
38	10	Screw			236			236
39	1	Diaphragm *			110			110
40	1	Lower Pilot Housing			1356			1356 ‡
41	1	Pilot Seat *			113			113SS6
42	1	Pilot Seat *			565			565SS6
43	1	Pilot Plug *			112			112
44	1	Spring *			1360			1360
45	1	Tubing	214SS6	217SS6	2552SS6	5061SS6	214SS6	217SS6
46	1	Lower Housing	1704	1632	145	146	1704 ‡	1632 ‡
47	1	Connector			874			874SS6
48	1	Spring	1388	1528	1529	1575	1388	1528
49	1	O-Ring *	154	155	156	157	154	155
50	1	1/4 F30 Filter			YAS			YASSS6
51	1	Plug			699			699SS6
52	1	Seat Disc	159	160	161	162	2493SS6	2494SS6
53	1	Standard Ratio Plug	177SS6	178	179	180	177SS6	3076SS6
		Reduced Ratio Plug	4933	1228SS6	177SS6	178	4933SS6	1228SS6
54	1	Removable Seat	272K	273K	274K	275K	2496SS6K	2497SS6K
55	1	Nut *	173		906	175	173SS6	174SS6
Repair Kits			RUED	RUFD	RUGD	RUHD	* These parts are recommended spare parts and are stocked as repair kits.	

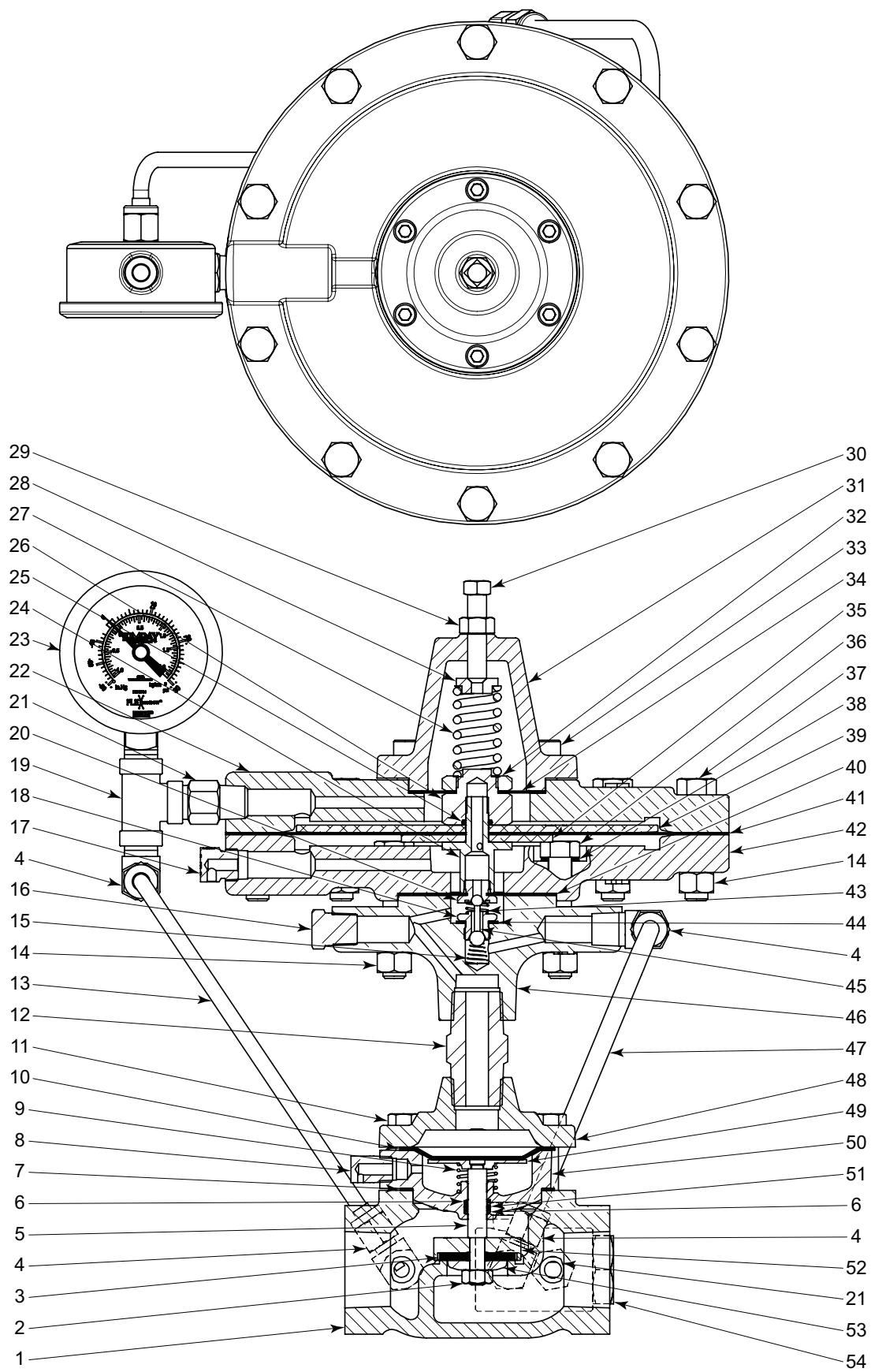
‡ Coated Parts available with "K" service type

RUED RUFD RUGD RUHD

PRESSURE REGULATORS

1 INCH GAS OUNCES PRESSURE REDUCING TO VACUUM
MODEL VR PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

1 INCH GAS OUNCES PRESSURE REDUCING TO VACUUM MODEL VR PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER	
			STANDARD	CORROSIVE
1	1	Body	2033	2033 ‡
2	1	Nut	* 172	172SS6
3	1	Seat	* 163	163HSN
4	4	Elbow	875	875SS6
5	1	Valve Stem	137X	138SS6X
6	2	Back Up	* 148T	148T
7	1	Gasket	* 195	195
8	1	Vent Plug	1357	1357SS6
9	1	Spring	7323	7323
10	1	Diaphragm	* 127	127
11	6	Bolt	2007	2007
12	1	Nipple	2516	2516SS6
13	1	Tubing	4251S6	4251S6
14	14	Nut	241	241
15	1	Spring	* 1360	1360HAC
16	1	Plug	699	699SS6
17	1	Vent Plug	147	147SS6
18	1	Pilot Seat	* 565	565SS6
19	1	Tee	219	219SS6
20	1	Pilot Seat	* 113	113SS6
21	2	Nipple	648	648SS6
22	1	Upper Pilot Housing	1206	1206 ‡
23	1	Pressure Gauge	7704	7704
25	1	O-Ring	* 265	265
24	1	Stem	1339	1339S6
26	1	Diaphragm Stem	5028	5028S6
27	1	Spring	4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)	4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)
28	1	Spring Guide	7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)	7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)
29	1	Nut	922	922
30	1	Adjusting Screw	897	897
31	1	Bonnet	4477	4477 ‡
32	1	Diaphragm Nut	5026	5026S6
33	6	Screw	7531	7531
34	1	Diaphragm	* 5027	5027
35	1	Lower Diaphragm Plate	1340	1340SS6
36	4	Screw	191	191
37	10	Screw	236	236
38	4	Gasket	* 242	242
39	1	Upper Diaphragm Plate	1208	1208SS6
40	1	Diaphragm	* 110	110
41	1	Diaphragm	* 1212	1212
42	1	Lower Pilot Housing	1356	1356 ‡
43	1	Spring	* 566	566HAC
44	1	Gasket	* 118	118
45	1	Pilot Plug	* 112	112
46	1	Base	4995	4995 ‡
47	1	Tubing	217SS6	217SS6
48	1	Bonnet	1336	1336 ‡
49	1	Diaphragm Plate	132SS6	132SS6
50	1	Lower Housing	142	142 ‡
51	1	O-Ring	* 153	153
52	1	Seat Disc	158	158SS6
53	1	Ratio Plug	176SS6	176SS6
54	1	1/4 F30 Filter	YAS	YASSS6

‡ Coated Parts available with "K" service type

Repair Kits RULD RULD

* These parts are recommended spare parts and are stocked as repair kits.

NOTES:



Kimray is an ISO 9001- certified manufacturer.

GAS OUNCES BACK PRESSURE TO ATMOSPHERE W/OUTSIDE SUPPLY
 MODEL AB

APPLICATION:

Self-contained, pilot-operated regulator designed to regulate ounces (0.5 oz to 2.5 psig) back pressure on a tank and vent to atmosphere when pressure exceeds set point.

FEATURES:

- Tight shut-off
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Single-point adjustment of setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

-  Pilot Assembly
-  Motor Valve Stem Assembly
-  Upstream Pressure
-  Downstream Pressure
-  Diaphragm Pressure
-  Supply Pressure (outside source)

CERTIFICATIONS:

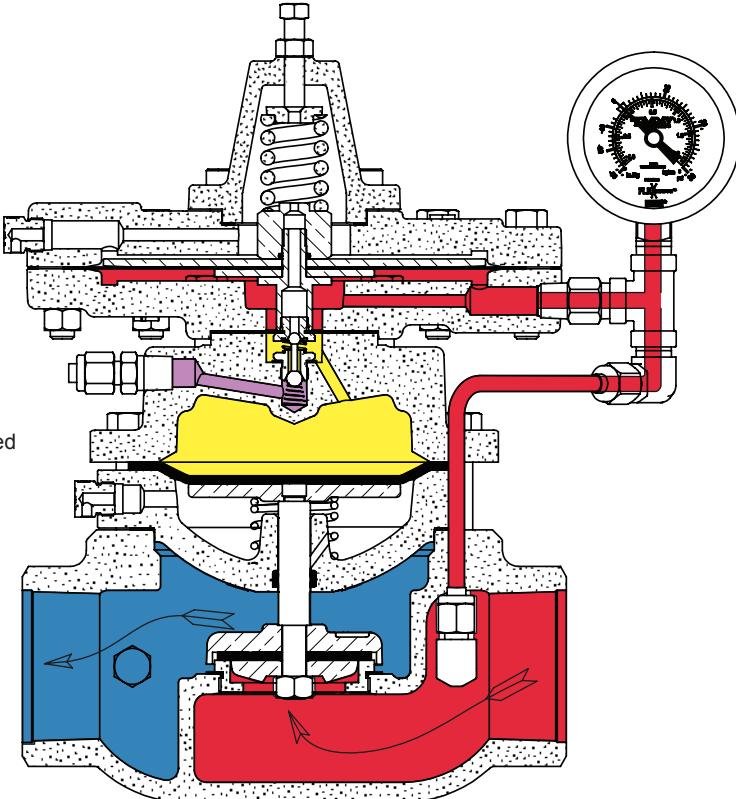
Canadian Registration Number (CRN):
 0C16234.24567890NTY (Ductile)
 Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

Non-Bleed / Intermittent Vent

UPSTREAM PRESSURE RANGE:

- 1 Inch valves:
 Full port 10 psig min. or outside supply source is required
 Reduced port 5 psig min. or outside supply source is required
- 2 thru 6 inch valves:
 5 psig min. or outside supply source is required



	Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
Ductile	RAB1SADF2S	ABGD20	1"	NPT	10-300	300	13.2	0.74
	RAB2SADF2S	AAID20	2"	NPT	0-20	300	47.0	0.84
	RAB2ARDF2S	AAJD20		150RF	0-20	250		
	RAB3SADF2S	AALD20	3"	NPT	0-20	300	117	0.75
	RAB3ARDF2S	AAMD20		150RF	0-20	250		
	RAB4SADF2S	AAND20	4"	NPT	0-20	300	210	0.75
	RAB4ARDF2S	AAOD20		150RF	0-20	250		
	RAB4ARDF2S	AAPD20	6"	150RF	0-20	250	480	0.75
Steel	RAB2ARWF2S	AVA20	2"	150RF	10-285	285	117	0.75
	RAB3ARWF2S	AFB20	3"	150RF	10-285	285	210	0.75
	RAB4ARWF2S	AVC20	4"	150RF	10-285	285	480	0.75
	RAB6ARWF2S	AJV20	6"	150RF	10-285	285	480	0.75

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

‡ For KimCoat option remove last "S" & replace with "K"

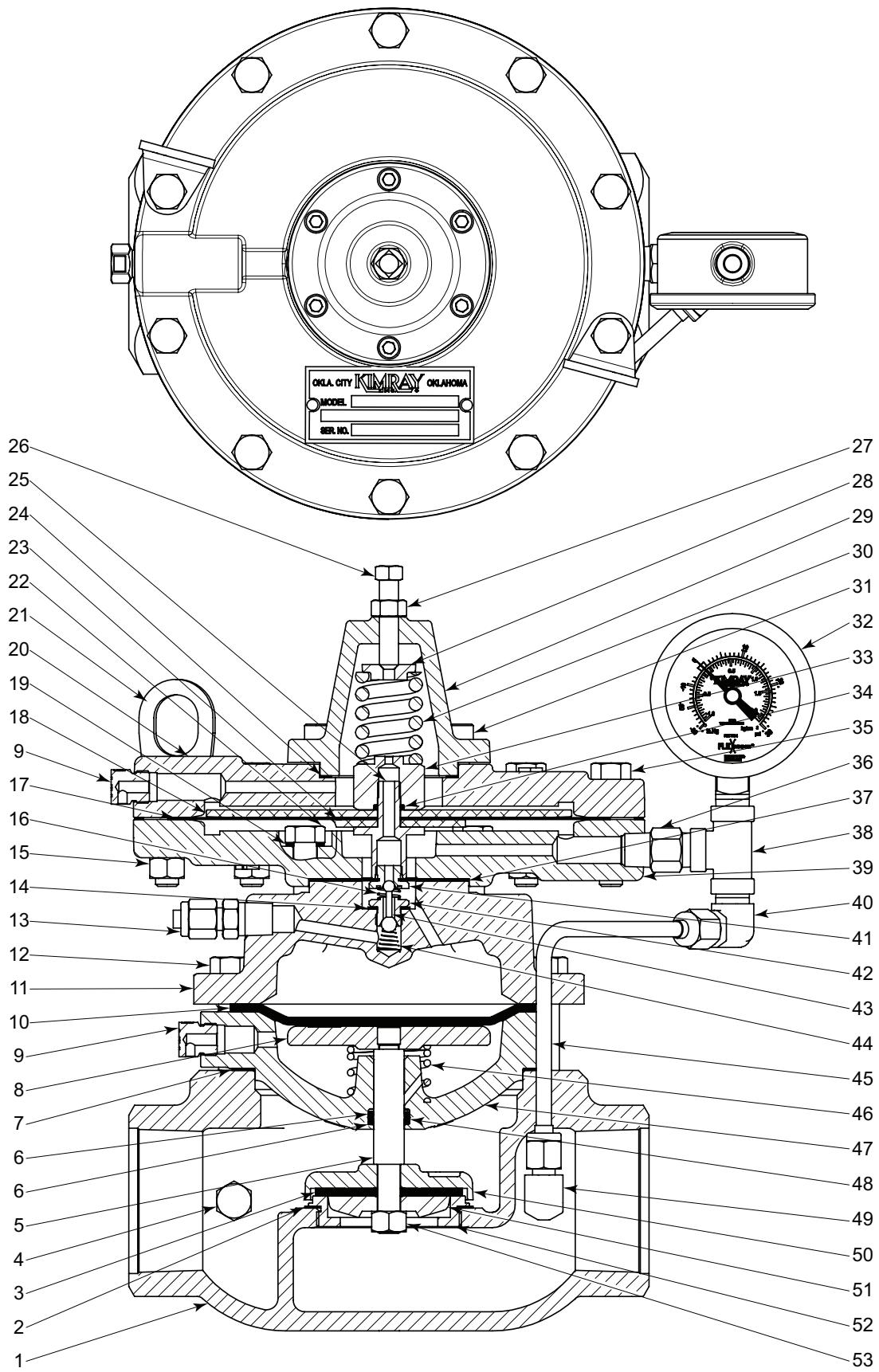
† For code builder see page 06:00.3

‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

GAS OUNCES BACK PRESSURE TO ATMOSPHERE W/OUTSIDE SUPPLY
MODEL AB PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

GAS OUNCES BACK PRESSURE TO ATMOSPHERE W/OUTSIDE SUPPLY
MODEL AB PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER			
			STANDARD			
			2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body				
		NPT Thru	1709	1634	2001	----
		150RF Thru	1913	1914	2002	2466
		Grooved Thru	2964	----	----	----
2	1	Gasket *	276	277	196	279
3	1	Seat *	164HSN	165HSN	166HSN	167HSN
4	1	Plug		699		
5	1	Valve Stem	138	139	140	141
6	2	Back Up *	149T	150T	151T	152T
7	1	Gasket *	196	197	198	199
8	1	Diaphragm Plate	133	134	135	136
9	2	Vent Plug		147		
10	1	Diaphragm *	1706	1640	2015	2140
11	1	Upper Housing	1719	1636	2003	2177
12	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)
13	1	Connector		874		
14	1	Gasket *		118		
15	10	Nut		241		
16	1	Spring *		566		
17	1	Diaphragm *		1212		
18	1	Upper Diaphragm Plate		1208		
19	4	Gasket *		242		
20	1	Upper Pilot Housing		1206		
21	2	Lifting Ring	----	7559	----	
22	4	Screw		1672		
23	1	Lower Diaphragm Plate		1340		
24	1	Gasket *		1216		
25	1	Stem		2913		
26	1	Adjusting Screw		897		
27	1	Nut		922		
28	1	Spring Guide		7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)		
29	1	Bonnet		1336		
30	1	Spring	4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)			
31	6	Screw		7531		
32	1	Pressure Gauge		7704		
33	1	Diaphragm Nut		2912		
34	1	O-Ring		265		
35	10	Screw		236		
36	1	Nipple		648		
37	1	Diaphragm *		110		
38	1	Tee		219		
39	1	Lower Pilot Housing		1356		
40	1	Elbow / Connector	877	876	877	
41	1	Pilot Seat *		113		
42	1	Pilot Seat *		565		
43	1	Pilot Plug *		112		
44	1	Spring *		1360		
45	1	Tubing	2559SS6	74SS		
46	1	Spring	1388	1528	1529	1575
47	1	Lower Housing	1704	1632	145	146
48	1	O-Ring *	154	155	156	157
49		Elbow		877		
50	1	Seat Disc	159	160	161	162
51	1	Standard Ratio Plug	177SS6	178	179	180
		Reduced Ratio Plug	4933	1228SS6	177SS6	178
52	1	Removable Seat	272K	273K	274K	275K
53	1	Nut *	173	906	175	
Repair Kits			RUID	RUJD	RUKD	RTYD
* These parts are recommended spare parts and are stocked as repair kits.						

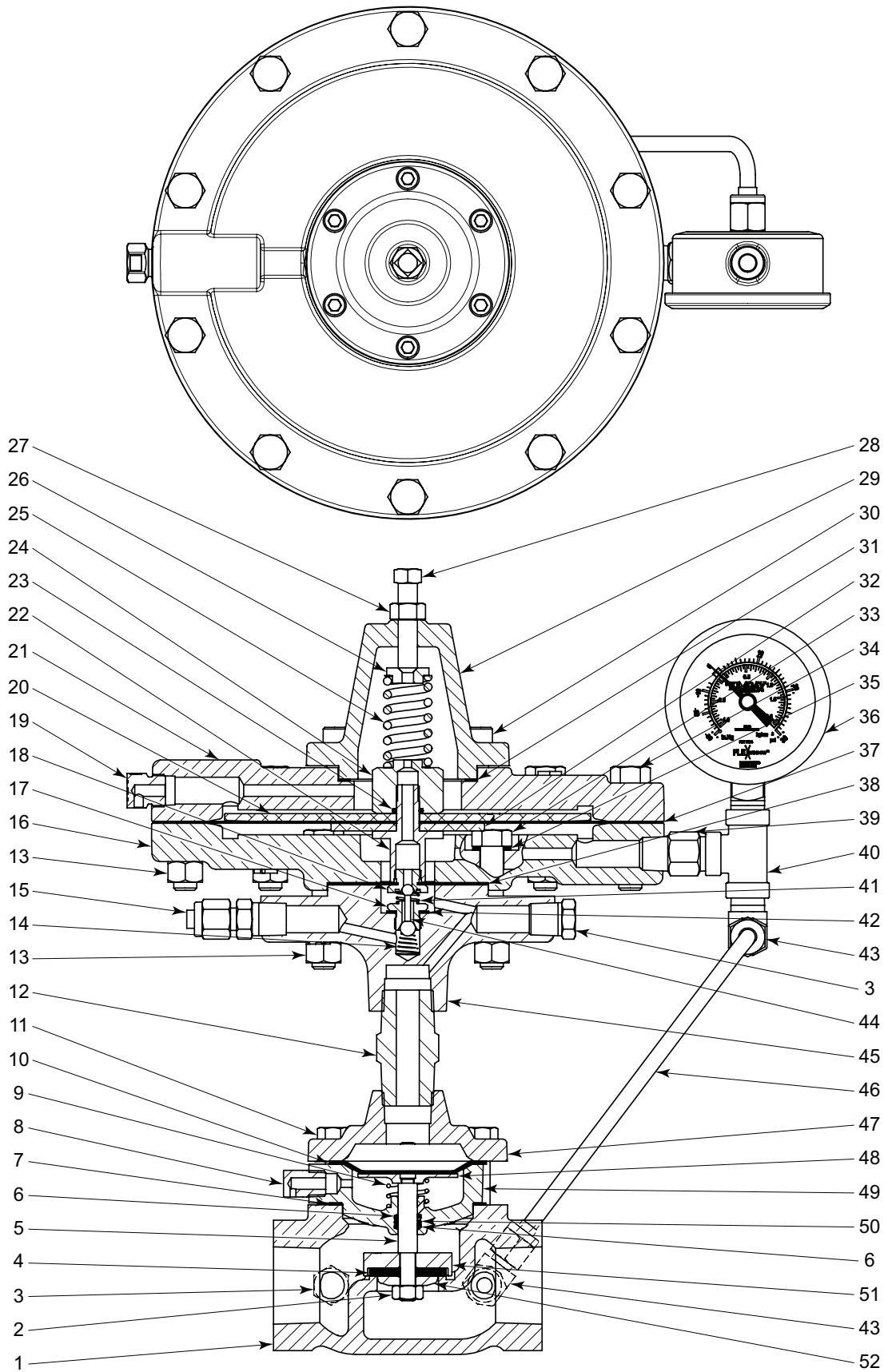
‡ Coated Parts available with "K" service type

RUID RUJD RUKD RTYD

PRESSURE REGULATORS

KIMRAY
INC.

1 INCH GAS OUNCES BACK PRESSURE TO ATMOSPHERE W/OUTSIDE SUPPLY
MODEL AB PARTS DRAWING



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

1 INCH GAS OUNCES BACK PRESSURE TO ATMOSPHERE W/OUTSIDE SUPPLY
MODEL AB PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER	
			STANDARD	CORROSIVE
1	1	Body	2033	2033 ‡
2	1	Nut *	172	172SS6
3	2	Plug	699	699SS6
4	1	Seat *	163	163HSN
5	1	Valve Stem	137X	138SS6X
6	2	Back Up *	148T	148T
7	1	Gasket *	195	195
8	1	Vent Plug	1357	1357SS6
9	1	Spring	1358	1358
10	1	Diaphragm *	127	127
11	6	Bolt	2007	2007
12	1	Nipple	2516	2516SS6
13	14	Nut	241	241
14	1	Spring *	1360	1360HAC
15	1	Connector	874	874SS6
16	1	Lower Pilot Housing	1356	1356 ‡
17	1	Pilot Seat *	565	565SS6
18	1	Pilot Seat *	113	113SS6
19	1	Vent Plug	147	147SS6
20	1	Upper Diaphragm Plate	1208	1208SS6
21	1	Upper Pilot Housing	1206	1206 ‡
22	1	Stem	2913	2913SS6
23	1	O-Ring *	265	265
24	1	Diaphragm Nut	2912	2912S6
25	1	Spring	4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)	4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)
26	1	Spring Guide	7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)	7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)
27	1	Nut	922	922
28	1	Adjusting Screw	897	897
29	1	Bonnet	1336	1336 ‡
30	6	Screw	7531	7531
31	1	Gasket *	1216	1216
32	1	Lower Diaphragm Plate	1340	1340SS6
33	4	Screw	191	191
34	10	Screw	236	236
35	4	Gasket *	242	242
36	1	Pressure Gauge	7704	7704
37	1	Diaphragm *	1212	1212
38	1	Diaphragm *	110	110
39	1	Nipple	648	648SS6
40	1	Tee	219	219SS6
41	1	Spring *	566	566HAC
42	1	Gasket *	118	118
43	2	Elbow	875	875SS6
44	1	Pilot Plug *	112	112
45	1	Base	4995	4995 ‡
46	1	Tubing	1383SS6	1383SS6
47	1	Bonnet	4477	4477 ‡
48	1	Diaphragm Plate	132SS6	132SS6
49	1	Lower Housing	142	142 ‡
50	1	O-Ring *	153	153
51	1	Seat Disc	158	158SS6
52	1	Ratio Plug	176SS6	176SS6

‡ Coated Parts available with "K" service type

Repair Kits RUAD

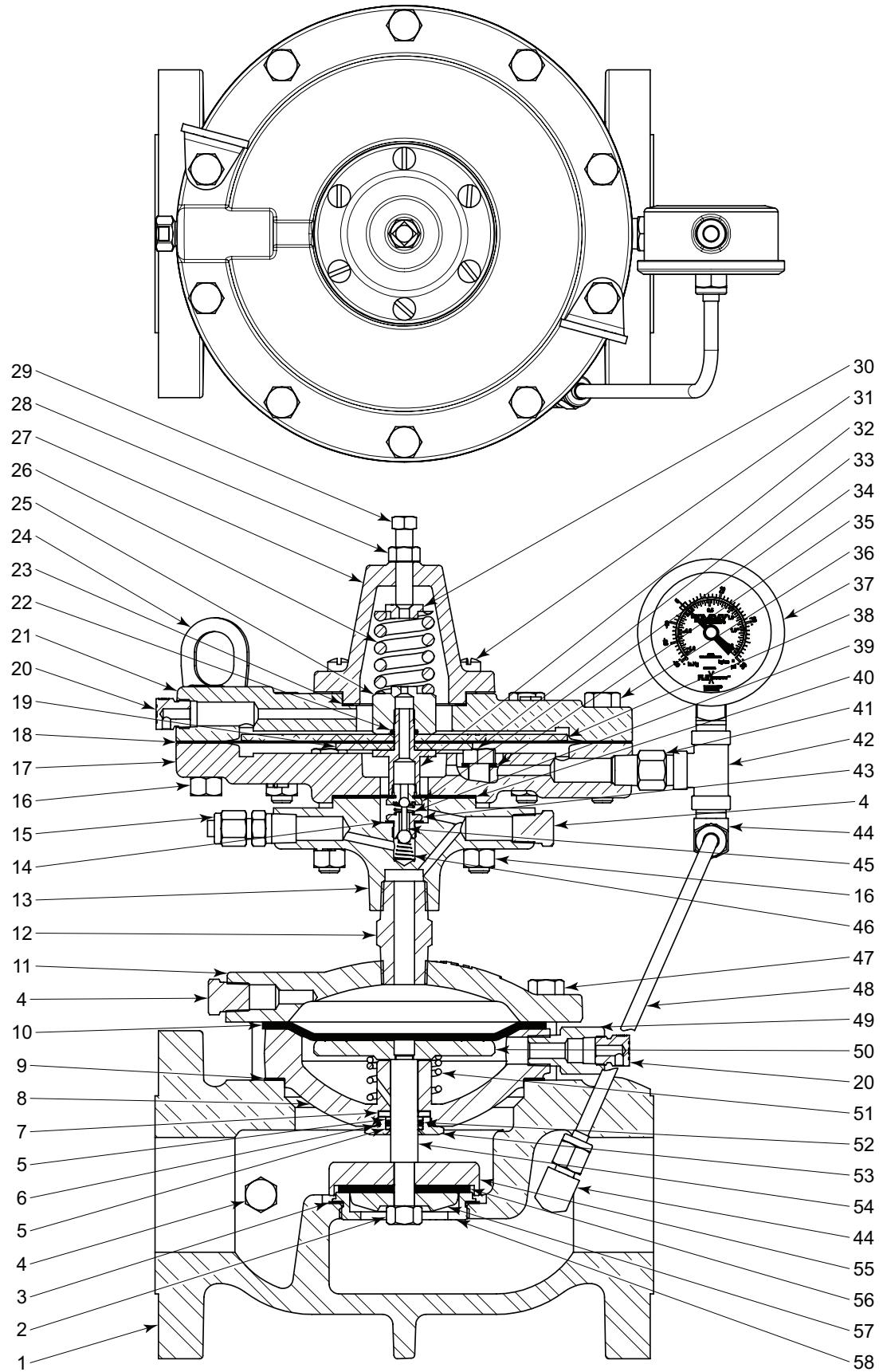
RUAD

* These parts are recommended spare parts and are stocked as repair kits.

PRESSURE REGULATORS

KIMRAY
INC.

STEEL GAS OUNCES BACK PRESSURE TO ATMOSPHERE W/OUTSIDE SUPPLY
MODEL AB PARTS DRAWING



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

STEEL GAS OUNCES BACK PRESSURE TO ATMOSPHERE W/OUTSIDE SUPPLY
MODEL AB PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER				PART NUMBER			
			STANDARD				CORROSIVE			
			2 INCH	3 INCH	4 INCH	6 INCH	2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body	2468	2469	2470	2959	2468 ‡	2469 ‡	2470 ‡	2959 ‡
2	1	Nut *	173		906	175	173SS6		174SS6	175SS6
3	1	Gasket *	276	277	196	279	276	277	196	279
4	2	Plug			699					699SS6
5	2	Back Up *	149T	150T	151T	152T	149T	150T	151T	152T
6	1	O-Ring *	5225	5226	5227	4086	5225	5226	5227	4086
7	1	Spacer	4557DS6	4561DS6	4566DS6	4571DS6	4557DS6	4561DS6	4566DS6	4571DS6
8	1	Lower Housing	2481	2482	2483	2957	2481 ‡	2482 ‡	2483 ‡	2957 ‡
9	1	Gasket *	196	197	198	199	196	197	198	199
10	1	Diaphragm *	1706	1640	2015	2140	1706	1640	2015	2140
11	1	Bonnet	2487	2488	2489	2956	2487 ‡	2488 ‡	2489 ‡	2956 ‡
12	1	Nipple			2516					2516SS6
13	1	Base			4995					4995 ‡
14	1	Gasket *			118					118
15	1	Connector / Elbow	874	876		875	874SS6	876SS6		875SS6
16	14	Nut			241					241
17	1	Lower Pilot Housing			1356					1356 ‡
18	1	Diaphragm *			1212					1212
19	1	Lower Diaphragm Plate			1340					1340SS6
20	2	Vent Plug			147					147SS6
21	1	Upper Pilot Housing			1206					1206 ‡
22	1	O-Ring *			265					265
23	1	Gasket *			1216					1216
24	2	Lifting Ring			7559					7559
25	1	Diaphragm Nut			2912					2912S6
26	1	Spring			4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)					4379 (Std.) 1527 (Opt. 2.5 lbs.) & 3061 (Opt. 5 lbs.)
27	1	Bonnet			1336					1336 ‡
28	1	Nut			922					922
29	1	Adjusting Screw			897					897
30	1	Spring Guide			7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)					7148S6 (Std.) 636SS6 (Opt. 2.5 & 5 lbs.)
31	6	Screw			7531					7531
32	1	Stem			2913					2913SS6
33	4	Screw			191					191
34	1	Pilot Seat *			113					113SS6
35	4	Gasket *			242					242
36	10	Screw			236					236
37	1	Pressure Gauge			7704					7704
38	1	Upper Diaphragm Plate			1208					1208SS6
39	1	Spring *			566					566HAC
40	1	Diaphragm *			110					110
41	1	Nipple			648					648SS6
42	1	Tee			219					219SS6
43	1	Pilot Seat *			565					565SS6
44	2	Elbow			875					875SS6
45	1	Pilot Plug *			112					112
46	1	Spring			1360					1360HAC
47	(QTY)	Bolt	965 (8)	907(10)	907 (12)	2142 (16)	965 (8)	907(10)	907 (12)	2142 (16)
48	1	Tubing			2552SS6					2552SS6
49	1	Adapter			7244					7244S6
50	1	Diaphragm Plate	2490	2491	2492	2958	2490S6	2491S6	2492S6	2958SS6
51	1	Spring	1388	7132	1529	1575	1388	7132	1529	1575
52	1	O-Ring *	154	807	156	157	154	807	156	157
53	1	Retainer	4557ES6	4561ES6	4566ES6	4571ES6	4557ES6	4561ES6	4566ES6	4571ES6
54	1	Valve Stem	138	139	140	141	138SS6	139SS6	140SS6	141SS6
55	1	Seat Disc	2493SS6	2494SS6	2495SS6	2961SS6	2493SS6	2494SS6	2495SS6	2961SS6
56	1	Seat *	164HSN	165HSN	166HSN	167HSN	164HSN	165HSN	166HSN	167HSN
57	1	Standard Ratio Plug	177SS6	178	179	3079SS6	177SS6	3076SS6	3078SS6	3079SS6
		Reduced Ratio Plug	4933	1228SS6	177SS6	178	4933SS6	1228SS6	177SS6	3076SS6
58	1	Removable Seat	2496SS6K	2497SS6K	2498SS6K	3075SS6K	2496SS6K	2497SS6K	2498SS6K	3075SS6K
Repair Kits			RTN	RTO	RTP		RTNHSN	RTOHSN	RTPHSN	
			* These parts are recommended spare parts and are stocked as repair kits.							

‡ Coated Parts available with "K" service type

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, spring-operated regulator used for liquid or gas systems where a 0 to 85 psig adjustable back pressure is desired, such as treaters, free water knockouts, pressure vessels, vent lines on separators, flow treaters, compressor stations, and gas gathering systems

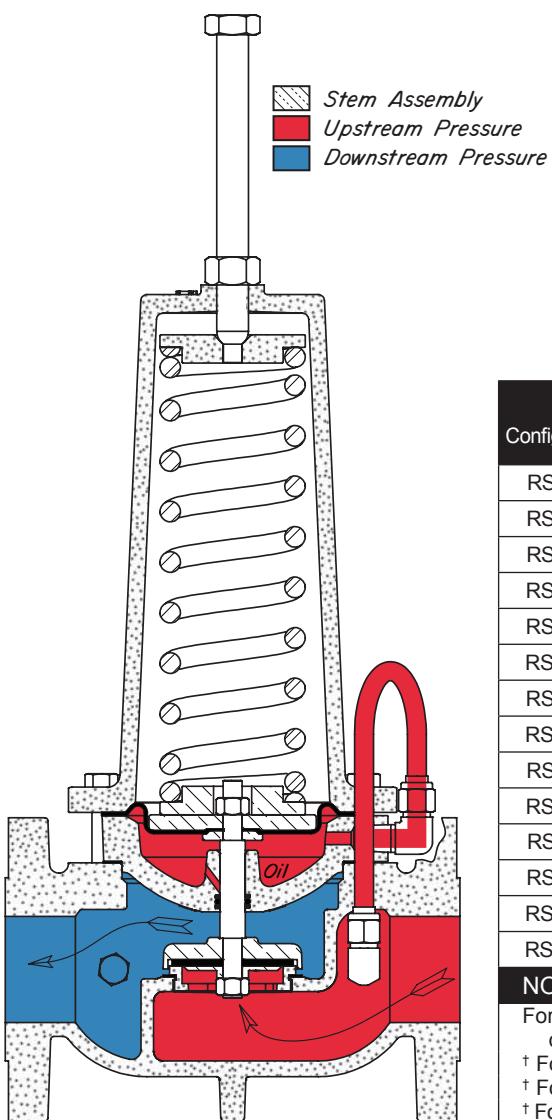
FEATURES:

- Single adjustment
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line

CERTIFICATIONS:

Canadian Registration Number (CRN):
 0C15676.24567890NTY (Ductile)
 0C15331.24567890NTY (Steel)

Kimray is an ISO 9001- certified manufacturer.



Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
RSB2SADFAS	AMU1	2"	NPT	0-10	300	47.0	0.84
RSB2ARDFAS	AMW1		150RF		250		
RSB2SADFBFS	AMU2	2"	NPT	10-20	300	47.0	0.84
RSB2ARDFBFS	AMW2		150RF		250		
RSB2SADFCFS	AMU3	2"	NPT	15-30	300	47.0	0.84
RSB2ARDFCFS	AMW3		150RF		250		
RSB2SADFDSS	AMU5	2"	NPT	25-50	300	47.0	0.84
RSB2ARDFDSS	AMW5		150RF		250		
RSB2SADFEFS	AMU6	2"	NPT	30-65	300	47.0	0.84
RSB2ARDFEFS	AMW6		150RF		250		
RSB2SADFFFS	AMU8	2"	NPT	40-85	300	47.0	0.84
RSB2ARDFFFS	AMW8		150RF		250		
RSB3SADFGS	ENU	3"	NPT	10-75	300	117	0.75
RSB3ARDFGS	ENZ		150RF		250		

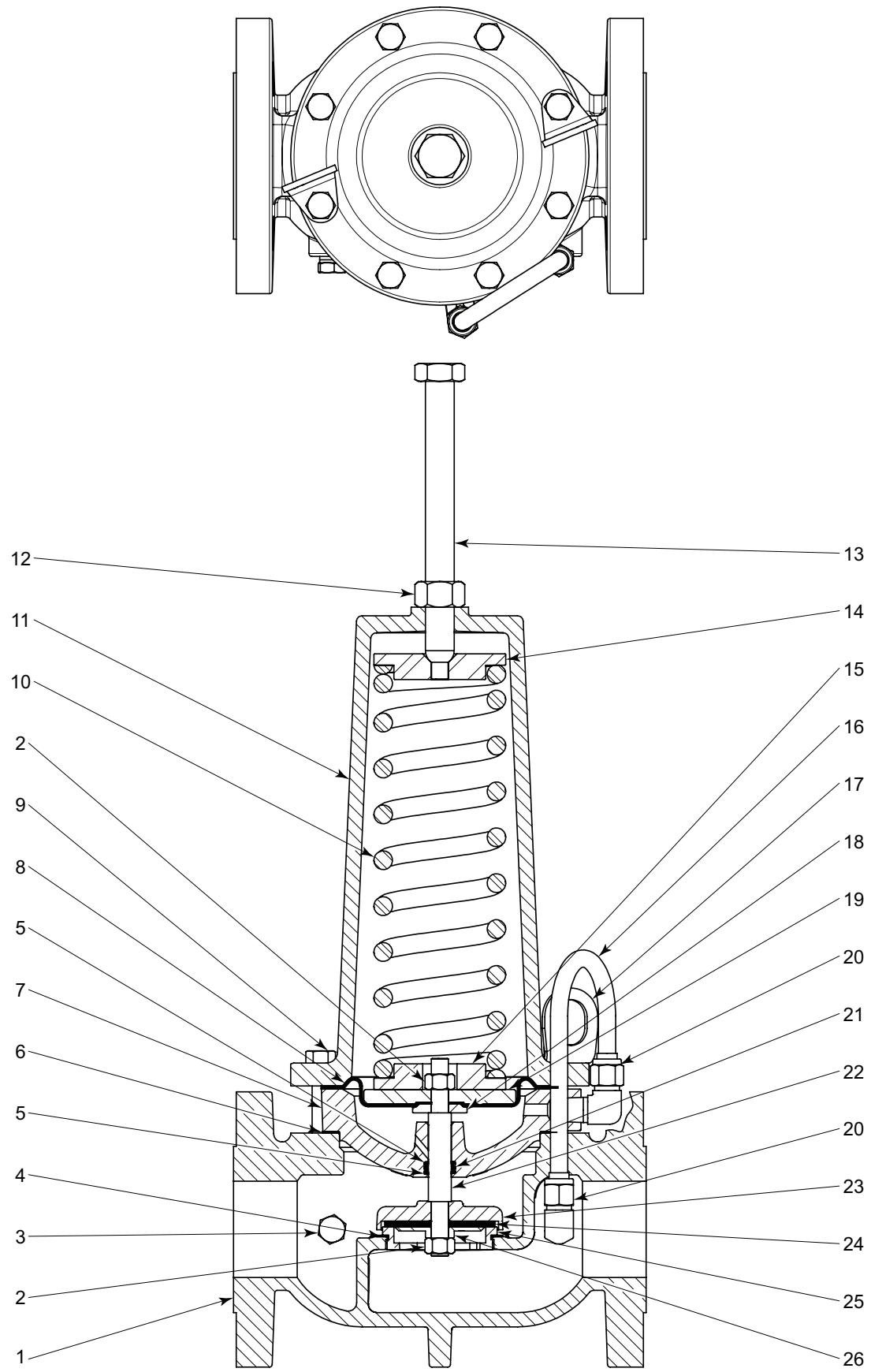
NOTES:

For standard & optional seals, metals, Cv Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV
 † For Corrosive service remove last "S" & replace with "C"
 ‡ For KimCoat option remove last "S" & replace with "K"
 † For code builder see page 06:00.4
 ‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

SPRING LOADED BACK PRESSURE FULL PORT
MODEL SB PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

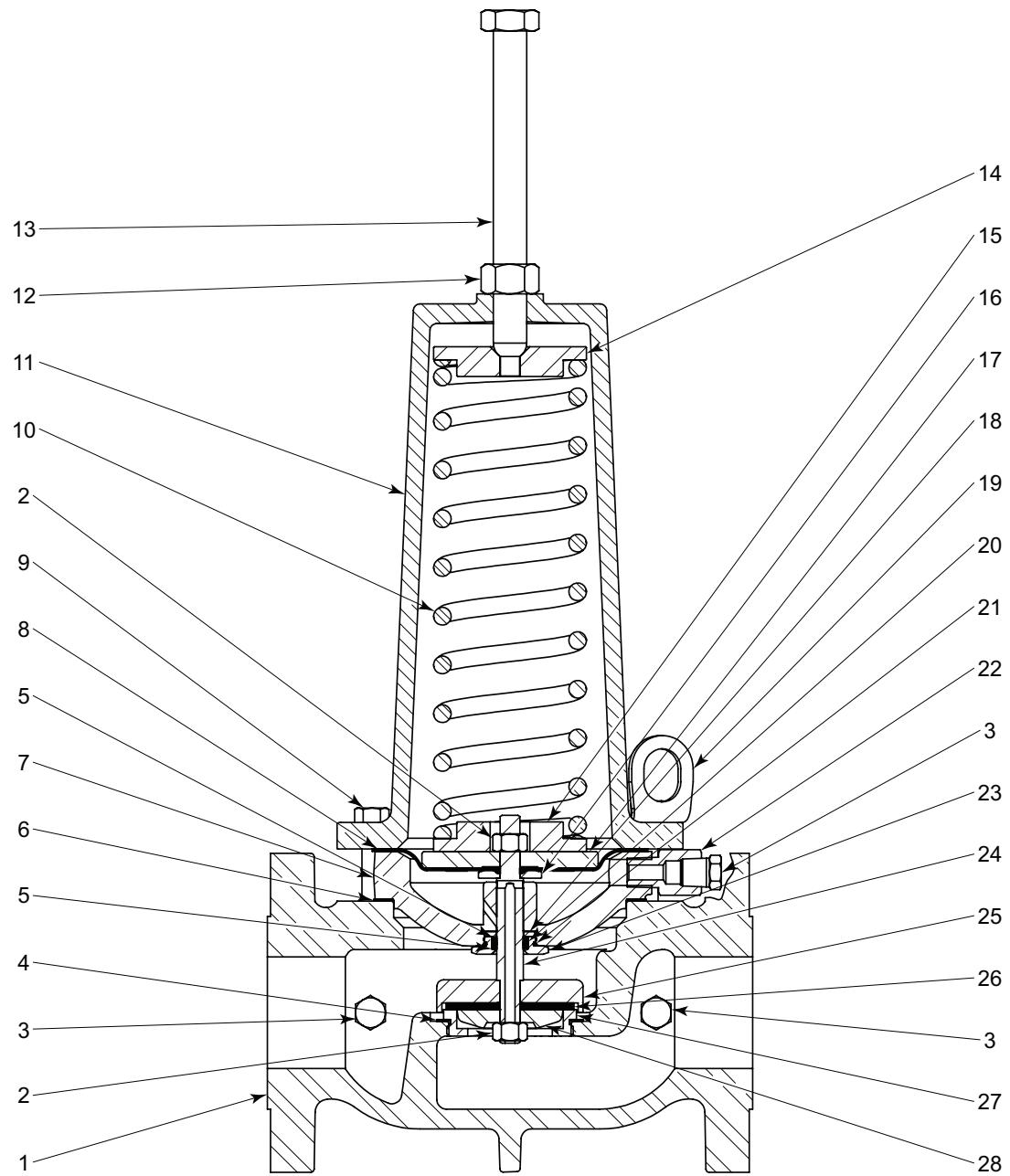
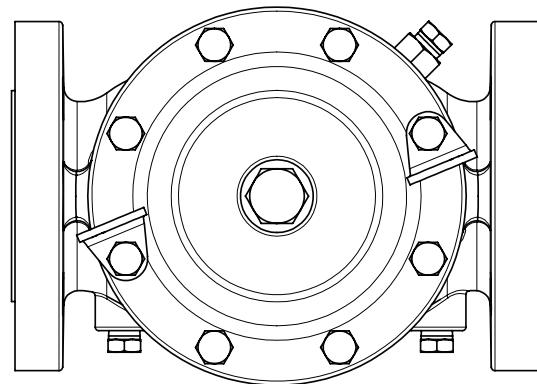
SPRING LOADED BACK PRESSURE FULL PORT MODEL SB PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER			
			STANDARD		CORROSIVE	
			2 INCH	3 INCH	2 INCH	3 INCH
1	1	Body				
		NPT Thru	1709	1634	1709 ‡	1634 ‡
		150RF Thru	1913	1914	1913 ‡	1914 ‡
		Grooved Thru	2964	----	2964 ‡	----
2	2	Nut	*	173	906	173SS6
3	(QTY)	Plug		699 (1)	699 (3)	699SS6 (1)
4	1	Gasket	*	276	277	276
5	2	Back Up	*	149T	150T	149T
6	1	Gasket	*	196	197	196
7	1	Lower Housing		1704	1632	1704 ‡
8	1	Diaphragm	*	5369	743	5369
9	(QTY)	Bolt		965 (8)	907(10)	965 (8)
10	1	Spring				
		0-10		5368	----	5368
		10-20		5370	----	5370
		15-30		5336	----	5336
		25-50		2013	----	2013
		30-65		5371	----	5371
		40-85		4006	----	4006
		10-75	Inner Spring	----	6937	----
			Outer Spring	----	6938	6937
11	1	Bonnet		2031	4581	2031 ‡
12	1	Nut		1897		1897
13	1	Adjusting Screw		6911	7546	6911
14	1	Upper Spring Guide		1888	5293	1888
15	1	Lower Spring Guide		2029	5294	2029
16	1	Tubing		2996SS	----	2996SS6
17	2	Lifting Ring		7559		7559
18	1	Lower Diaphragm Plate		323SS6	738	323SS6
19	1	Upper Diaphragm Plate		737	733	737
20	2	Elbow		877	----	877SS6
21	1	O-Ring	*	154	155	154
22	1	Valve Stem		727	6801	727SS6
23	1	Seat Disc		159	160	2493SS6
24	1	Seat	*	164HSN	165HSN	164HSN
25	1	Removable Seat		272K	273K	2496SS6K
26	1	Ratio Plug		5391	178	5391SS6
‡ Coated Parts available with "K" service type						
Repair Kits			RNU1	RTD	RNU1	RTD
* These parts are recommended spare parts and are stocked as repair kits.						

PRESSURE REGULATORS

STEEL SPRING LOADED BACK PRESSURE FULL PORT
MODEL SB PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

STEEL SPRING LOADED BACK PRESSURE FULL PORT MODEL SB PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER			
			STANDARD		CORROSIVE	
			2 INCH	3 INCH	2 INCH	3 INCH
1	1	Body	2468	2469	2468 ‡	2469 ‡
2	2	Nut	173	906	173SS6	174SS6
3	3	Plug	699		699SS6	
4	1	Gasket	*	276	277	276
5	2	Back Up	*	149T	150T	149T
6	1	Gasket	*	196	197	196
7	1	Lower Housing		2481	2482	2481 ‡
8	1	Diaphragm	*	5369	743	5369
9	(QTY)	Bolt	965 (8)	907(10)	965 (8)	907(10)
10	1	Spring				
		15-30	5336	----	5336	----
		25-50	2013	----	2013	----
		10-75	Inner Spring	6937	----	6937
			Outer Spring	6938	----	6938
11	1	Bonnet	2031	4581	2031 ‡	4581 ‡
12	1	Nut	1897		1897	
13	1	Adjusting Screw	6911	7546	6911SS6	7546
14	1	Upper Spring Guide	1888	5293	1888SS6	5293SS6
15	1	Lower Spring Guide	2029	5294	2029SS6	5294SS6
16	1	Lower Diaphragm Plate	323SS6	738	323SS6	738SS6
17	1	Upper Diaphragm Plate	737	733	737SS6	733SS6
18	1	Spacer	4557DS6	4564DS6	4557DS6	4564DS6
19	2	Lifting Ring	7559		7559	
20	1	O-Ring	*	154Q	807	154Q
21	1	O-Ring	*	5225	5226	5225
22	1	Adapter	7244		7244S6	
23	1	Retainer	4557ES6	4564ES6	4557ES6	4564ES6
24	1	Valve Stem	3070	6801	3070SS6	6801S6
25	1	Seat Disc	2493SS6	2494SS6	2493SS6	2494SS6
26	1	Seat	*	164HSN	165HSN	164HSN
27	1	Removable Seat	2496SS6K	2497SS6K	2496SS6K	2497SS6K
28	1	Ratio Plug	177SS6	178	177SS6	3076SS6
‡ Coated Parts available with "K" service type						
Repair Kits			RTC	RTD2	RTC	RTD2
* These parts are recommended spare parts and are stocked as repair kits.						

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Self-contained, spring-operated regulator used for Liquid or gas systems where a 0 to 125 psig adjustable back pressure is desired, such as treaters, free water knockouts, pressure vessels, vent lines on separators, flow treaters, compressor stations, and gas gathering systems

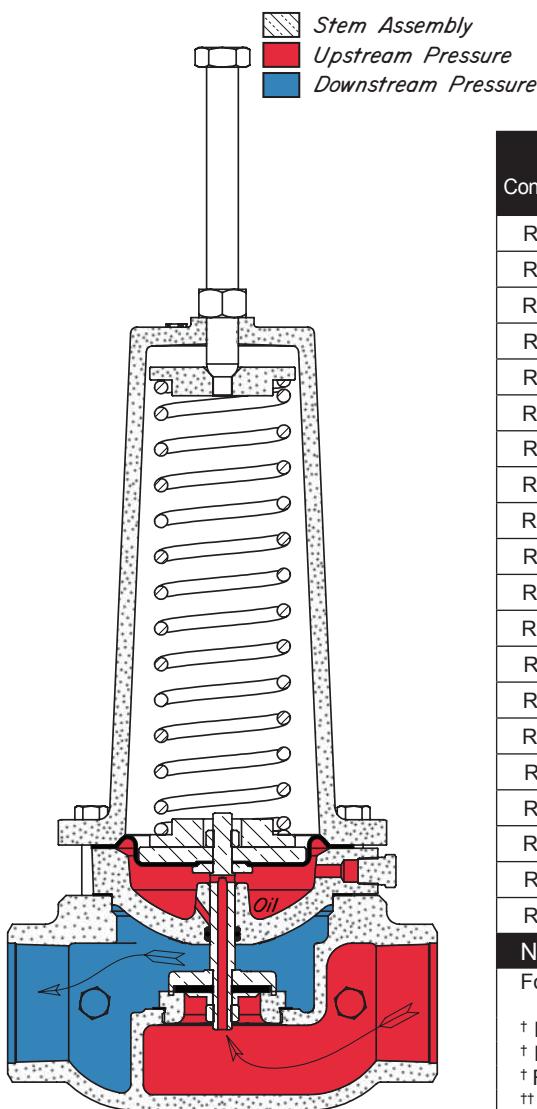
FEATURES:

- Single adjustment
- Single soft seat
- Internal sense line
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line

CERTIFICATIONS:

Canadian Registration Number (CRN):
 0C15676.24567890NTY (Ductile)
 0C15331.24567890NTY (Steel)

Kimray is an ISO 9001- certified manufacturer.



Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
RSB2SADRAS	ALU1	2"	NPT	0-10	300	21.0	0.75
RSB2ARDRAS	ALW1		150RF		250		
RSB2GVDRAS	ALV1		GRVD		300		
RSB2SADRB5	ALU2	2"	NPT	10-20	300	21.0	0.75
RSB2ARDRB5	ALW2		150RF		250		
RSB2GVDRB5	ALV2		GRVD		300		
RSB2SADRC5	ALU4	2"	NPT	20-40	300	21.0	0.75
RSB2ARDRC5	ALW4		150RF		250		
RSB2GVDRCS	ALV4		GRVD		300		
RSB2SADRDS	ALU6	2"	NPT	40-65	300	21.0	0.75
RSB2ARDRDS	ALW6		150RF		250		
RSB2GVDRDS	ALV6		GRVD		300		
RSB2SADRES	ALU9	2"	NPT	65-90	300	21.0	0.75
RSB2ARDRES	ALW9		150RF		250		
RSB2GVDRRES	ALV9		GRVD		300		
RSB2SADRFS	ALU12	2"	NPT	80-125	300	21.0	0.75
RSB2ARDRFS	ALW12		150RF		250		
RSB2GVDRFS	ALV12		GRVD		300		
RSB3SADRFS	ENU5	3"	NPT	10-75	300	34.0	0.82
RSB3ARDRFS	ENZ5		150RF		250		

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

‡ For KimCoat option remove last "S" & replace with "K"

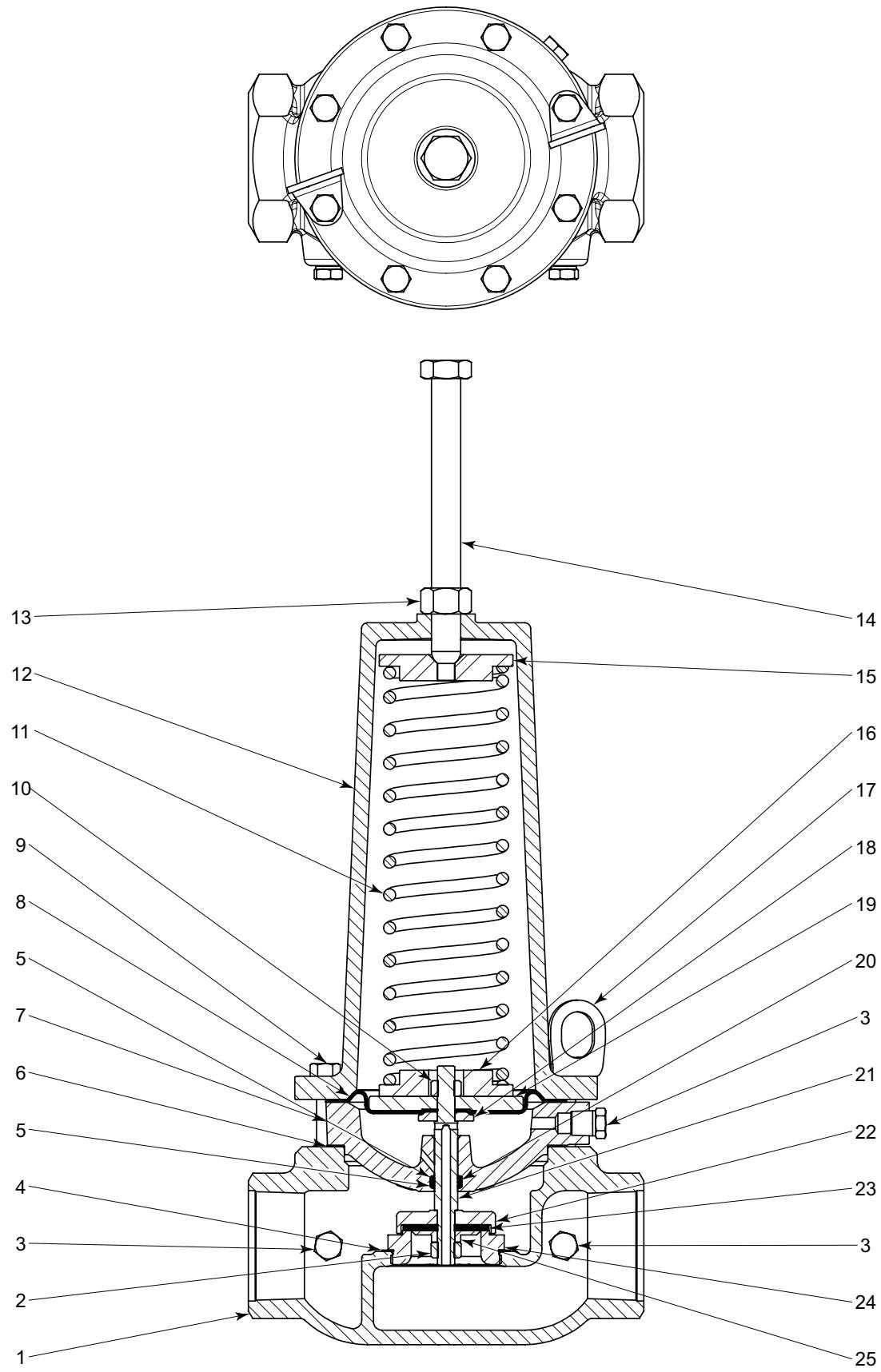
† For code builder see page 06:00.4

‡ Max W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

SPRING LOADED BACK PRESSURE REDUCED PORT
MODEL SB PARTS DRAWING

KIMRAY
INC.®



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

SPRING LOADED BACK PRESSURE REDUCED PORT MODEL SB PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER			
			STANDARD		CORROSIVE	
			2 INCH	3 INCH	2 INCH	3 INCH
1	1	Body				
		NPT Thru	1709	---	1709 ‡	---
		150RF Thru	1913	1914	1913 ‡	1914 ‡
		Grooved Thru	2964	---	2964 ‡	---
2	1	Nut	*	173	173SS6	
3	3	Plug		699	699SS6	
4	1	Gasket	*	276	276	277
5	2	Back Up	*	149T	149T	150T
6	1	Gasket	*	196	196	197
7	1	Lower Housing		1704	1704 ‡	1632 ‡
8	1	Diaphragm	*	5369	5369	743
9	(QTY)	Bolt		965 (8)	965 (8)	907 (10)
10	1	Nut		173	173SS6	174SS6
11	1	Spring			5368	----
		0-10		5368	5370	----
		10-20		5370	5336	----
		20-40		5336	2013	----
		40-65		2013	5371	----
		65-90		5371	4006 & 6763	----
		80-125		4006 & 6763	----	----
		10-75	Inner Spring	----	6937	6937
			Outer Spring	----	6938	6938
12	1	Bonnet		2031	2031 ‡	4581 ‡
13	1	Nut		1897	1897	
14	1	Adjusting Screw		6911	6911	7546
15	1	Upper Spring Guide		1888	1888	5293
16	1	Lower Spring Guide		2029	2029	5294
17	2	Lifting Ring		7559	7559	
18	1	Lower Diaphragm Plate		323SS6	323SS6	738
19	1	Upper Diaphragm Plate		737	737	733
20	1	Quad Ring	*	154Q	154Q	155
21	1	Valve Stem		3070	3070SS6	4582SS6
22	1	Seat Disc		312	312SS6	1229
23	1	Seat	*	310HSN	310HSN	1230P
24	1	Removable Seat		4005K	4005K	1219DK
25	1	Ratio Plug		1539SS6	1539SS6	

‡ Coated Parts available with "K" service type

Repair Kits

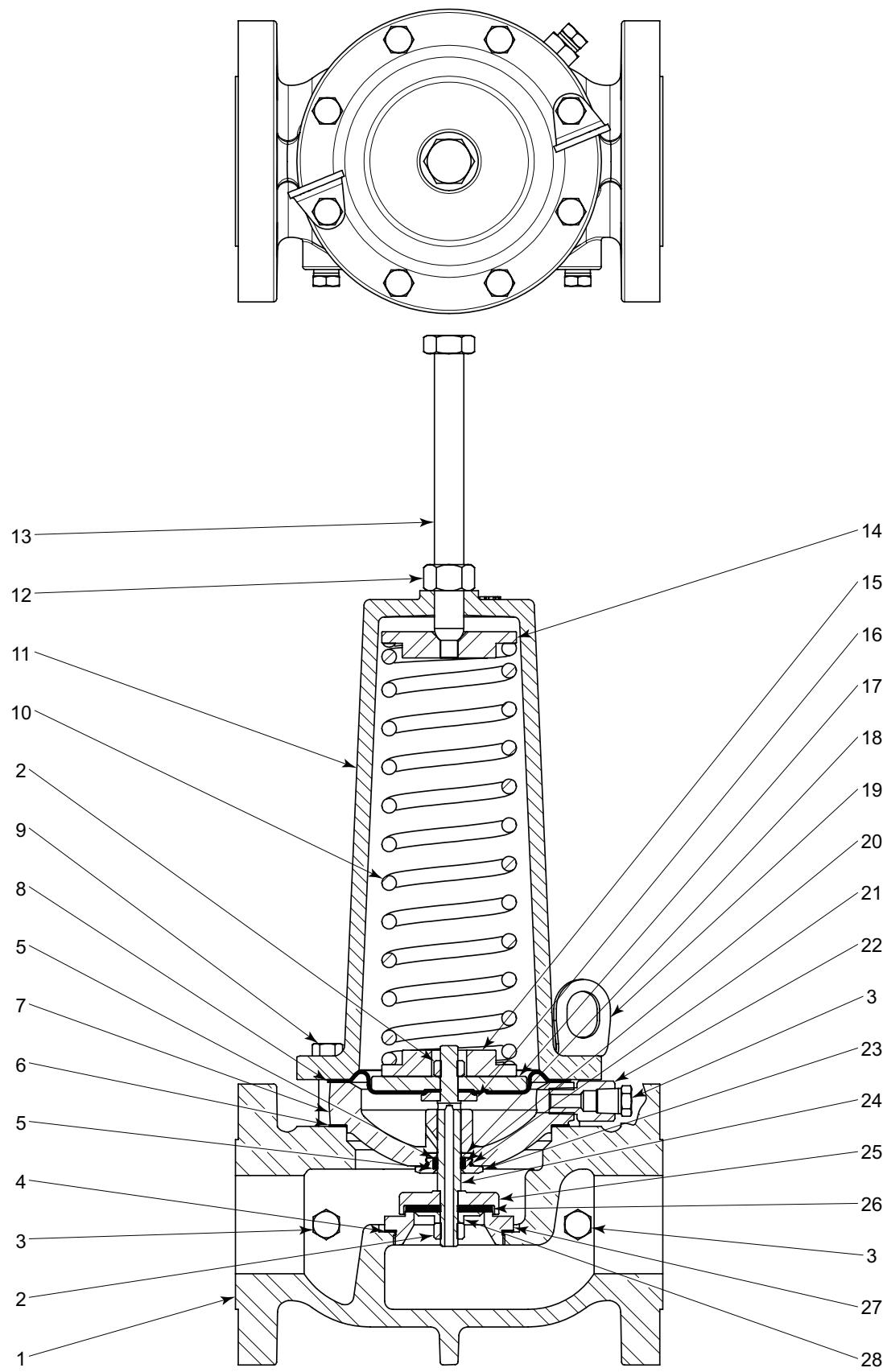
RTB1 RTD1 RTB1 RTD1

* These parts are recommended spare parts and are stocked as repair kits.

PRESSURE REGULATORS

STEEL SPRING LOADED BACK PRESSURE REDUCED PORT
MODEL SB PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

STEEL SPRING LOADED BACK PRESSURE REDUCED PORT MODEL SB PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER	
			STANDARD	CORROSIVE
1	1	Body	2468	2468S6 ‡
2	2	Nut	173	173SS6
3	3	Plug	699	699SS6
4	1	Gasket	* 276	276
5	2	Back Up	* 149T	149T
6	1	Gasket	* 196	196
7	1	Lower Housing	2481	2481SS6 ‡
8	1	Diaphragm	* 5369	5369
9	8	Bolt	965	965
10	1	Spring		
		0-10	5368	5368
		10-20	5370	5370
		20-40	5336	5336
		40-65	2013	2013
		65-90	5371	5371
		80-125	4006 & 6763	4006 & 6763
11	1	Bonnet	2031	2031 ‡
12	1	Nut	1897	1897
13	1	Adjusting Screw	6911	6911
14	1	Upper Spring Guide	1888	1888
15	1	Lower Spring Guide	2029	2029
16	1	Lower Diaphragm Plate	323SS6	323SS6
17	1	Upper Diaphragm Plate	737	737
18	1	Spacer	4557DS6	4557DS6
19	2	Lifting Ring	7559	7559
20	1	Quad Ring	* 154Q	154Q
21	1	O-Ring	* 5225	5225
22	1	Adapter	7244	7244S6
23	1	Retainer	4557ES6	4557ES6
24	1	Valve Stem	3070	3070SS6
25	1	Seat Disc	312	312SS6
26	1	Seat	* 310HSN	310HSN
27	1	Removable Seat	4060SS6K	4060SS6K
28	1	Ratio Plug	1539SS6	1539SS6
			‡ Coated Parts available with "K" service type	
Repair Kits			RTC1	RTC1
			* These parts are recommended spare parts and are stocked as repair kits.	

NOTES:



Kimray is an ISO 9001- certified manufacturer.

APPLICATION:

Used to regulate downstream pressure. Downstream pressure is regulated to match the pneumatic signal sent to the pilot. Downstream pressure remains constant through changes in upstream pressure.

FEATURES:

- Tight shut-off
- Single soft seat
- Removable valve seat
- Minimum maintenance
- All internal parts can be removed with valve in line
- Remote setpoint
- Utilizes upstream pressure as actuation pressure
- Efficient 3-way plug accurately maintains setpoint

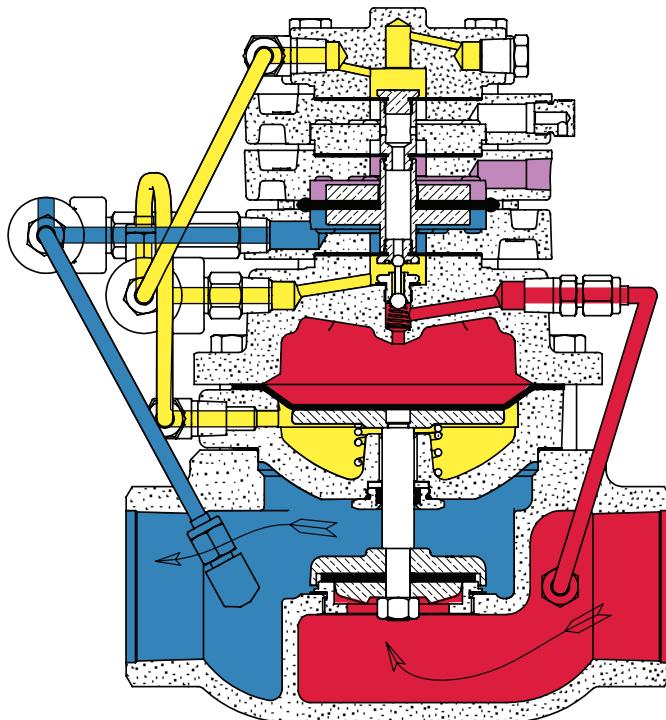
CERTIFICATIONS:

Kimray is an ISO 9001- certified manufacturer.

CLASSIFICATIONS:

Non-Bleed / Intermittent Vent

	<i>Pilot Assembly</i>
	<i>Motor Valve Stem Assembly</i>
	<i>Upstream Pressure</i>
	<i>Downstream Pressure</i>
	<i>Diaphragm Pressure</i>
	<i>Supply Pressure</i>



Standard Configuration Code †	Order Code	Line Size	Connection Type	Oper. Press. psig	Max. W.P. psig ‡	Cv	Cf
RPA2SADF1S	AJIPNU	2"	NPT	10-300	300	47.0	0.84
RPA2ARDF1S	AJJPNU		150RF	10-250	250		
RPA3SADF1S	AJKPNU	3"	NPT	10-300	300	117	0.75
RPA3ARDF1S	AJLPNU		150RF	10-250	250		
RPA4SADF1S	AJMPNU	4"	NPT	10-300	300	210	0.75
RPA4ARDF1S	AJNPNU		150RF	10-250	250		
RPA4ARDF1S	AJPPNU	6"	150RF	10-250	250	480	0.75

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 06:I - 06:IV

† For Corrosive service remove last "S" & replace with "C"

† For KimCoat option remove last "S" & replace with "K"

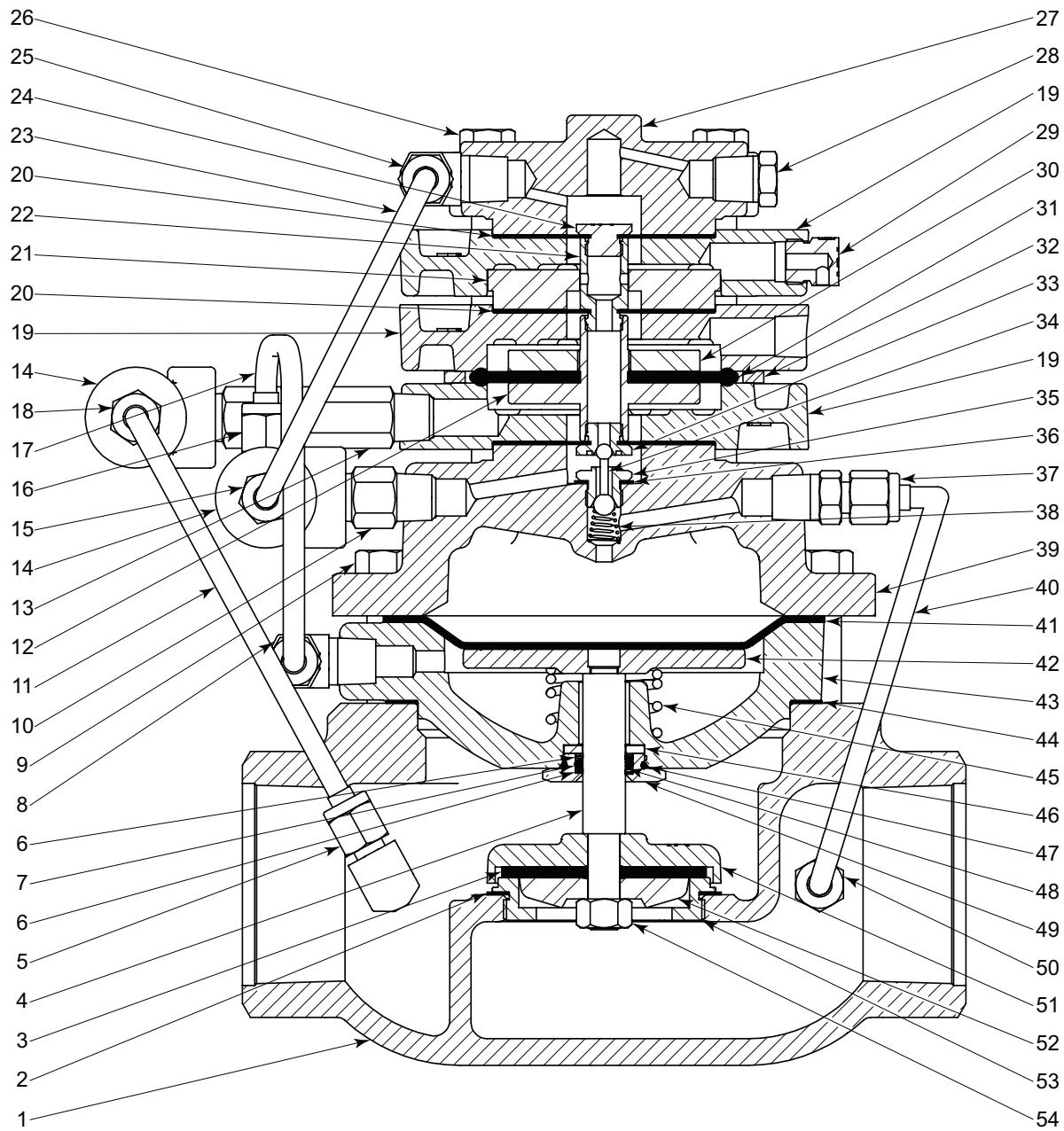
† For code builder see page 06:00.2

‡ Max. W.P. values based on -20°F to 100°F.

PRESSURE REGULATORS

PNEUMATICALLY ADJUSTED
MODEL PA PARTS DRAWING

KIMRAY
INC.



All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



PRESSURE REGULATORS

PNEUMATICALLY ADJUSTED MODEL PA PARTS LIST

ITEM	QTY.	DESCRIPTION	PART NUMBER			
			2 INCH	3 INCH	4 INCH	6 INCH
1	1	Body	1709	1634	2001	----
		NPT Thru				
		150RF Thru	1913	1914	2002	2466
2	1	Gasket	*	276	277	196
3	1	Seat	*	164HSN	165HSN	166HSN
4	1	Valve Stem		138	139	140
5	1	Elbow			875	
6	2	Back Up	*	149T	150T	151T
7	1	O-Ring	*	154	807	156
		Elbow			875	874
8	1	Connector			---	1481
		Nipple			---	262 (1)
		Bolt	965 (8)	907 (10)	907 (12)	2142 (16)
10	1	Nipple			648	
11	1	Tubing		216SS6	4011SS6	1383SS6
12	1	Diaphragm Plate			2022	
13	1	Nipple		648	2600	648
14	2	Tee			2000	
15	1	Elbow / Connector			874	
16	1	Elbow / Connector			875	874
17	1	Tubing		4008SS6	4011SS6	2505SS6
18	1	Elbow / Connector			874	875
19	3	Pilot Housing			1701	
20	3	Diaphragm	*		110	
21	1	Spacer			2021	
22	1	Seat Extension			5063	
23	1	Tubing		2603SS6	4011SS6	2247SS6
24	1	Plug			1546	
25	1	Elbow			875	
26	4	Bolt			5069	
27	1	Base			6969	
28	1	Plug			699	
29	1	Vent Plug			147	
30	1	Diaph. Nut			107	
31	1	Diaphragm	*		5259P	
32	1	Spacer Ring	*		7437	
33	1	Pilot Seat	*		113	
34	1	Pilot Plug	*		112	
35	1	Pilot Seat	*		565	
36	1	Gasket	*		118	
37	1	Elbow / Connector			874	
38	1	Spring	*		108	
39	1	Upper Housing		1703	1639	2004
40	1	Tubing		2512SS6	4011SS6	4251S6
41	1	Diaphragm	*	1706	1640	2015
42	1	Diaphragm Plate		133	134	135
43	1	Lower Housing		4557B	4561B	4566B
44	1	Gasket	*	196	197	198
45	1	Spring		1388	1528	1529
46	1	Spacer	*	4557DS6	4561DS6	4566DS6
47	1	O-Ring	*	5225	5226	5227
48	1	Channel Seal	*	4557C	4561C	4566C
49	1	Retainer	*	4557ES6	4561ES6	4566ES6
50	1	Elbow / Connector		874	874	875
51	1	Seat Disc		159	160	161
52	1	Ratio Plug		177SS6	178	179
53	1	Removable Seat		272K	273K	274K
54	1	Nut	*	173	906	906
Repair Kits			RRM-PNU	RRN-PNU	RRO-PNU	RRP-PNU
* These parts are recommended spare parts and are stocked as repair kits.						

NOTES:



Kimray is an ISO 9001- certified manufacturer.

Table 1 - Flow Coefficient(Cv) at % stem travel for Pilot-operated Regulators

1" Pressure Regulator										
Trim Size in.(mm)	Cf	Valve Opening Percentage								
		10	20	30	40	50	60	70	80	100
1/2 in (12mm) Reduced	0.75	0.4	0.7	0.9	1.3	1.8	2.5	3.2	3.9	4.5
1 in (25mm) Full Port	0.74	1.1	1.8	2.4	3.4	4.8	6.6	8.5	10.2	11.9
2" Pressure Regulator										
Trim Size in. (mm)	Cf	Valve Opening Percentage								
		10	20	30	40	50	60	70	80	100
1 1/4 in (31 mm) Reduced	0.75	1.8	2.8	3.9	5.4	7.7	10.5	13.6	16.2	19.0
2 in Removable Full Port *	0.84	4.0	6.2	8.6	12.1	17.2	23.5	30.4	36.3	42.5
2 in (50 mm) Full Port *	0.75	4.4	6.9	9.5	13.4	19.1	26.0	33.6	40.2	47.0
3" Pressure Regulator										
Trim Size in. (mm)	Cf	Valve Opening Percentage								
		10	20	30	40	50	60	70	80	100
1 5/8 in (66 mm) Reduced	0.82	2.9	4.5	6.2	8.8	12.5	17.0	22.0	26.3	30.7
3 in (76 mm) Full Port	0.75	9.9	15.6	21.5	30.2	42.9	58.6	75.7	90.4	105.7
4" Pressure Regulator										
Trim Size in. (mm)	Cf	Valve Opening Percentage								
		10	20	30	40	50	60	70	80	100
2 in (50 mm) Reduced	0.80	4.7	7.3	10.1	14.2	20.2	27.5	35.6	42.5	49.7
4 in (100 mm) Full Port	0.75	17.8	27.9	38.6	54.2	77.0	105.2	135.9	162.2	189.8
6" Pressure Regulator										
Trim Size in. (mm)	Cf	Valve Opening Percentage								
		10	20	30	40	50	60	70	80	100
3 in (76 mm) Reduced	0.80	10.2	16.0	22.0	30.9	44.0	60.1	77.7	92.7	108.4
6 in (152 mm) Full Port	0.75	40.6	63.8	88.1	123.8	176.0	240.4	310.6	370.7	433.7

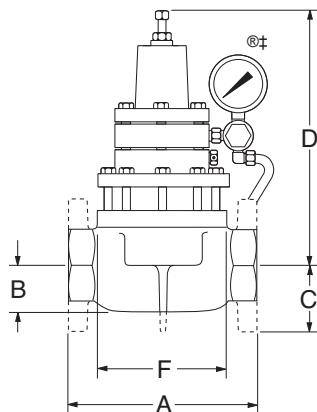
Kimray flow equations conform to ANSI/ISA - 75.01.01-2002
 Kimray inherent flow characteristics conform to ANSI/ISA 75.11.01 -1985

PRESSURE REGULATORS

KIMRAY
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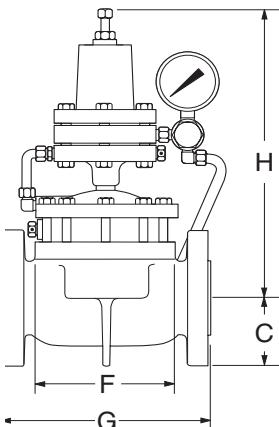
DIMENSIONS

BACK PRESSURE
UPSTREAM DIFFERENTIAL PRESSURE
PRESSURE REDUCING-BALANCED
PRESSURE REDUCING VACUUM

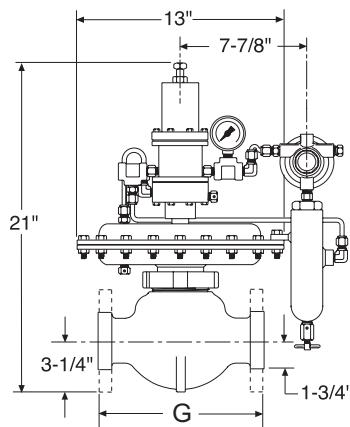


DUCTILE

PRESSURE DIFFERENTIAL
PRESSURE REDUCING
BACK PRESSURE VACUUM
LIQUID BACK PRESSURE

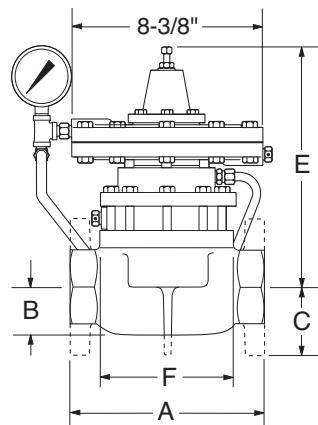


STEEL

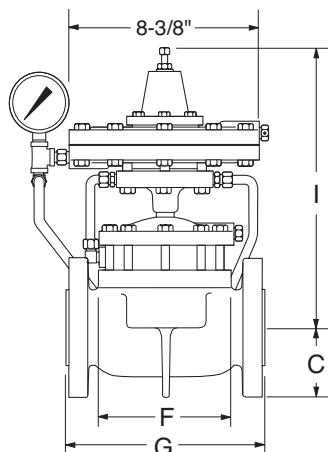


250 S/FGT-BP-S

LOW PRESSURE BACK PRESSURE
OUNCES BACK PRESSURE TO VACUUM
OUNCES PRESSURE REDUCING
OUNCES PRESSURE REDUCING VACUUM
VACUUM BACK PRESSURE TO VACUUM



DUCTILE



STEEL

LINE SIZE	BODY SIZE	A	B	C	D *	E	F	G	H *	I
1"	NPT	4 3/8"	1 1/8"		7 1/2"	11 5/8"	3 1/4"			
	FLANGED	7 1/4"	1 1/8"	2 1/8"	7 1/2"	11 5/8"	3 1/4"			
2"	NPT	8 1/2"	2 1/8"		11 1/2"	10 1/2"	6 1/2"			
	FLANGED	9"		3"	11 1/2"	10 1/2"	6 1/2"	9 1/8"	14 1/2"	14"
	GROOVED	8 3/4"	2 1/8"		11 1/2"	10 1/2"	6 1/2"			
250 S/FGT	NPT							10 1/2"		
	FLANGED							10 3/8"		
3"	NPT	12 1/16"	3 1/16"		13"	12"	8 1/2"			
	FLANGED	12 3/16"		3 3/4"	13"	12"	8 1/2"	12 3/8"	16 1/2"	15 1/2"
4"	NPT	15" 1/16"	4"		14 1/2"	13 3/16"	10 1/2"			
	FLANGED	15 1/16"		4 1/2"	14 1/2"	13 3/16"	10 1/2"	15 1/16"	18 1/2"	16 11/16"
6"	FLANGED	22"		5 1/2"	17"	17 7/8"	16"	21 15/16"	20 1/2"	18 3/8"

FLANGE DIMENSIONS ARE ANSI 125/150 STANDARD. *Add 7/8" to Pressure Reducing Balanced and Up Stream Differential Pressure Regulators for this dimension.

All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.
‡ Configuration of Back Pressure Control Valve is a trademark of Kimray, Inc.

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Table 2 - Seal Options

Part	Standard Material	Optional Material
Seat	HSN	FKM, AFLAS®
O-rings	Nitrile	HSN, FKM, AFLAS®
All Diaphragms	Nitrile	HSN, FKM, AFLAS®

Table 3 - Seal Specifications

	NITRILE	HIGHLY SATURATED NITRILE	FKM	AFLAS®
Kimray Suffix	-	HSN	V	AF
Resistance	Abrasion	G	G-E	G
	Acid	F	G-E	E
	Chemical	F	F	E
	Cold	G	G	P
	Flame	P	P	E
	Heat	G	E	E
	Oil	G-E	E	E
	Ozone	P	G	G-E
	Set	G	G	G-E
	Tear	F	F	F
	Water/Steam	F	E	P
	Weather	F	G	E
	CO2	F-G	G	G
	H2S	P	F	P
Properties	Methanol	F	E	P
	Dynamic	G	G	G
	Electrical	F	F	G-E
	Impermeability	G	G	G
	Tensile Strength	G	G-E	G
Temp. Range	-20° to +225°F	-20° to +250°F	-15° to +400°F	+15° to +450°F
	-29° to +107°C	-29° to +121°C	-26° to +204°C	-9° to +232°C
RATINGS: P-POOR, F-FAIR, G-GOOD, E-EXCELLENT				

Table 4 - Material Options

Part Description	Valve Size	Standard Material	Corrosive Material
Ratio Plug	1" & 2"	316 Powdered Metal SS-316NI-25	
	1" & 2" Reduced Trim	Alloy Steel (ASTM A108)	316SS (ASTM A479)
	3"	Powdered Metal F-008	316SS (ASTM A479)
	4" & 6"	Ductile (ASTM A395)	316SS (ASTM A479)
Seat Disc	1"	Powdered Metal F-008	316SS (ASTM A479)
	2", 3" & 4"	Ductile (ASTM A395)	316SS (ASTM A351 CF8M)
	6"	Ductile (ASTM A395)	316SS (ASTM A 240)
Stem	1" thru 6"	303SS (ASTM A582)	316SS (ASTM A479)
Body	1" thru 6"	Ductile (ASTM A395)	WCB (ASTM A216) + Kimcoat
	2" thru 6"	WCB (ASTM A216)	316SS (ASTM A351 CF8M)
Tubing	1" thru 6"	304SS (ASTM A249)	316SS (ASTM A213)
Removable Seat	2" thru 6" Ductile Body	Ductile (ASTM A395)	316SS (ASTM A351 CF8M)
	2" thru 6" Steel Body		316SS (ASTM A351 CF8M)