

APPLICATIONS:

For discharge of liquid or gas from vessels, separators, treaters, knockouts and other similar liquid accumulators.

For back pressure or pressure reducing applications with pressure pilots.

FEATURES:

- Compact design
- Soft seat with metal to metal backup
- Valve travel indicator
- Field reversible topworks
- Teflon packed stuffing box
- Bubble tight shut-off
- Piston balanced seat assembly

CERTIFICATIONS:

- Canadian Registration Number (CRN):
- 0C10903.24567890NTY (2" HPCV PB)
- 0C15019.24567890NTY (3"-10" HPCV PB)

TOPWORKS:

Unless otherwise specified, all HPCV's will be furnished with ductile topworks.

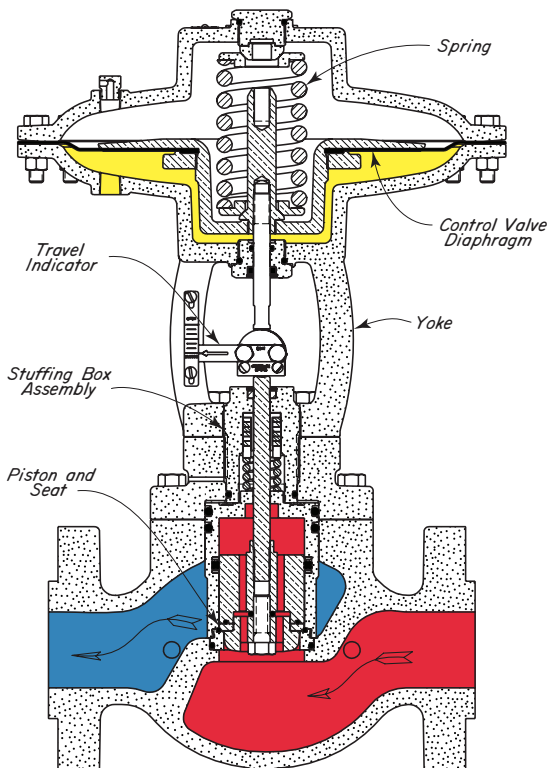
Effective diaphragm area:

- 2" HPCV PB - 65 square inches
- 3" HPCV PB - 100 square inches
- 4" HPCV PB - 100 square inches
- 6" HPCV PB - 120 square inches
- 8" HPCV PB - 120 square inches
- 10" HPCV PB - 120 square inches

ACTUATOR WORKING PRESSURE:

- 15-30 psig normal (see spring ranges)
- 45 psig maximum

-  Control Valve Diaphragm Assembly
-  Control Valve Diaphragm Pressure
-  Upstream Pressure
-  Downstream Pressure



SPRINGS:

HPCV springs are available for diaphragm pressures of 15, 20, and 30 psig in the 2" valve and 30 psig in the 3" and 4" valve. Unless otherwise specified, all PISTON BALANCED HPCV's will be furnished with 30 lb. springs.

Top Adjusting Screw may be adjusted to vary the spring tension slightly; this affects pressure required to actuate valve.

STEM TRAVEL:

- 2" HPCV PB - 3/4" nominal
- 3" HPCV PB - 1 3/8" nominal
- 4" HPCV PB - 1 3/4" nominal
- 6" HPCV PB - 2 1/2" nominal
- 8" HPCV PB - 2 1/2" nominal
- 10" HPCV PB - 2 1/2" nominal

WORKING PRESSURE:

- 2" HPCV PB - 1500, 4000 psig
- 3" HPCV PB - 1500 psig
- 4" HPCV PB - 1500 psig
- 6" HPCV PB - 1500 psig
- 8" HPCV PB - 1500 psig
- 10" HPCV PB - 1500 psig

STANDARD TRIM SPECIFICATIONS:

- 316 stainless steel cage
- D-2 tool steel valve plug assembly
- D-2 tool steel seat
- Polyurethane seal with Metal-to-Metal back-up
- (Other material available on request)

Cf & Cv VALUES				
Line Size	Flow Characteristic	Trim Size	Cf	Cv
2"	Equal Percentage	1 1/2"	0.75	28.6
		2"	0.76	57.0
3"	Equal Percentage	2"	0.75	52.6
		3"	0.76	107.0
4"	Equal Percentage	3"	0.75	115.0
		4 3/8"	0.75	222.0
6"	Equal Percentage	4 3/8"	0.75	222.0
		6 3/4"	0.75	431.0
8"	Reduced EP	6"	0.75	453.0
	Refined EP	8 1/2"	0.75	630.0
	Modified EP ¹	8 1/2"	0.75	810.0
10"	Reduced EP	6"	0.75	655.0
	Refined EP	8 1/2"	0.75	884.0
	Modified EP ¹	8 1/2"	0.75	1091.0

¹ Standard Trim Configuration

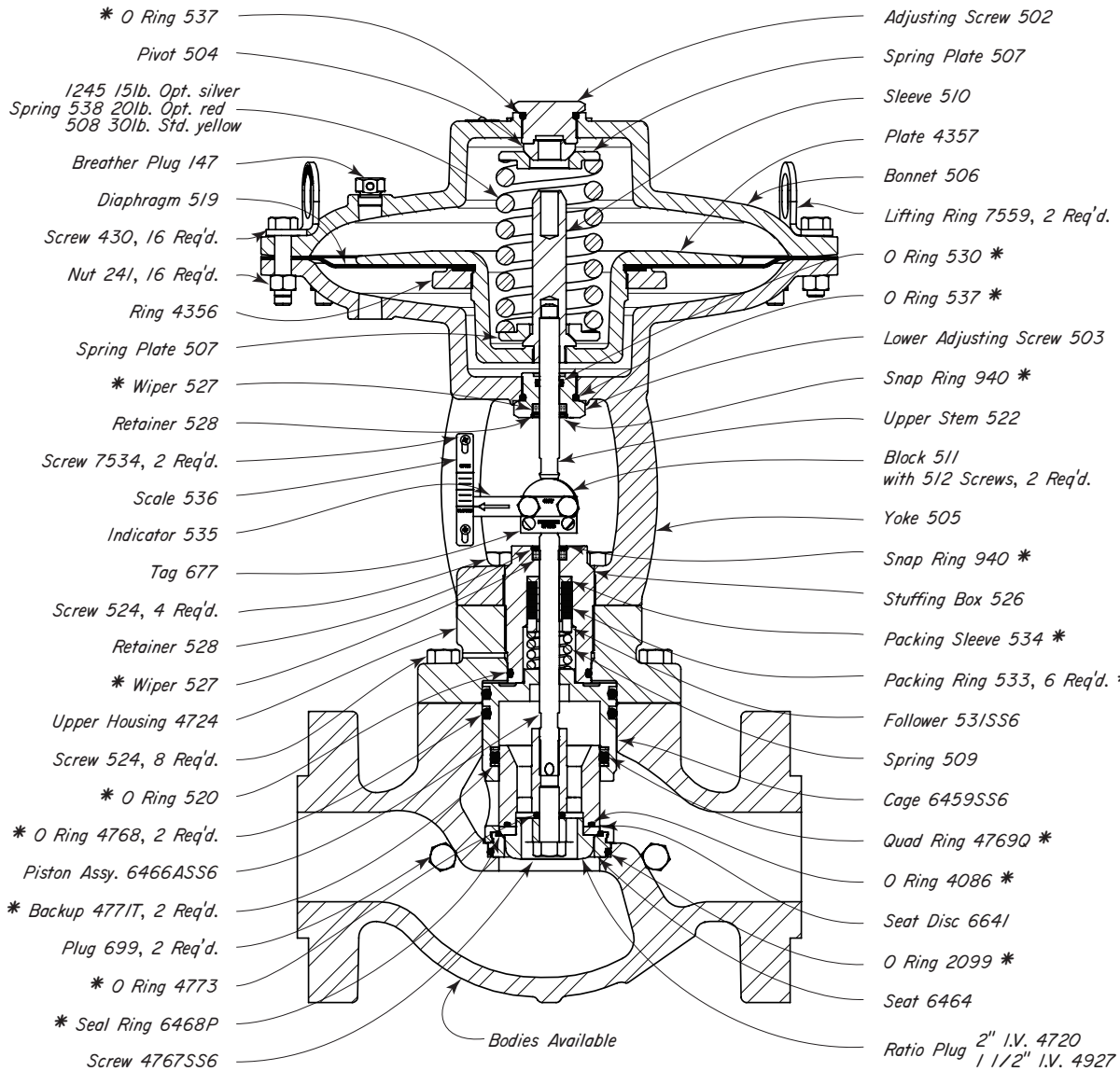


Kimray is an ISO 9001- certified manufacturer.

HIGH PRESSURE CONTROL VALVES

KIMRAY INC.®

PISTON BALANCED 2" STEEL BODY DUCTILE TOPWORKS



BODY TYPE	SCREWED ‡			FLANGED		
	SIZE	BODY	W.P.	SIZE	BODY	ANSI CLASS
THRU	2"	4813	1500 psig	2"	4712	600 RF
	2"	4764	4000 psig	2"	4713	600 RTJ
				2"	4714	1500 RF
				2"	4715	1500 RTJ
				3"	4871	600 RF
				3"	4872	600 RTJ

‡ 2" NPT ANSI THREADS

THRU VALVES AVAILABLE:

CAT. NO.	SIZE TYPE	VALVE	MAX W.P.	KIT
EFG	2" SCRD.	2150 SMT PB 2 IV	1500	RUR
EFH	2" SCRD.	2400 SMT PB 2 IV	4000	RUR
EFI	2" FLGD.	2150 FMT PB 600 RF- 2 IV	1480	RUR
EFJ	2" FLGD.	2150 FMT PB 600 RTJ- 2 IV	1480	RUR
EFK	2" FLGD.	2150 FMT PB 1500 RF- 2 IV	3705	RUR
EFL	2" FLGD.	2150 FMT PB 1500 RTJ- 2 IV	3705	RUR
EFM	3" FLGD.	3150 FMT PB 600 RF- 2 IV	1480	RUR
EFO	3" FLGD.	3150 FMT PB 600 RTJ- 2 IV	1480	RUR

*For working pressure vs. working temperature see ASME B16.34;
For flanges & flanged fittings see ASME B16.5.

NOTES:

All standard HPCV's have a Cat. No. Seats, stems, cages, stuffing boxes and valve bodies are available in 316 stainless steel. Inner valves can be made from a wide selection of materials. Specify when ordering.

Dimensions refer to E1:100.3

For BOTTOM WORKS only refer to Bulletin No. E105357

For TOP WORKS only refer to Bulletin No. E106025

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

Kimray is an ISO 9001- certified manufacturer.

VALVE LINE SIZE	INNER VALVE SIZE	MATERIAL	ELASTOMERS	SEAT	RATIO PLUG	CATALOG CODE
2"	2"	D-2 STEEL	BUNA-N	6464	4720	EFB
		D-2 STEEL	AFLAS	6464	4720	EFBAF
		D-2 STEEL	VITON	6464	4720	EFBV
		S6	BUNA-N	6464SS6	4720SS6	EFBSS6
		S6	AFLAS	6464SS6	4720SS6	EFBS6AF
		S6	VITON	6464SS6	4720SS6	EFBS6V
		17-4PH	BUNA-N	6464PH	4720PH	EFBPH
		S6	HSN	6464SS6	4720SS6	EFBS6HSN
		ZIRCONIA	BUNA-N	6464	4720	EFBZR
	2" QUICK OPENING	D-2 STEEL / S6	BUNA-N	6464	6672SS6	EFBQOV
		D-2 STEEL / ZIRCONIA	BUNA-N	6464	6641ZR	EFBQOZR
	1 1/2"	D-2 STEEL	BUNA-N	6464	4927	EFR
		S6	BUNA-N	6464SS6	4927SS6	EFRSS6
		S6	AFLAS	6464SS6	4927SS6	EFRS6AF
		S6	HSN	6464SS6	4927SS6	EFRS6HSN
		ZIRCONIA	BUNA-N	6464	4927	EFRZR
3"	3"	D-2 STEEL	BUNA-N	6465	4985	EFC
		S6	BUNA-N	6465SS6	4985SS6	EFCSS6
		S6	VITON	6465SS6	4985SS6	EFCSS6V
		17-4PH	BUNA-N	6465PH	4985PH	EFCPH
		S6	AFLAS	6465SS6	4985SS6	EFCSS6AF
		S6	HSN	6465SS6	4985SS6	EFCSS6HSN
		D-2 STEEL	VITON	6465	4985	EFCV
		ZIRCONIA	BUNA-N	6465	4985	EFCZR
	3" QUICK OPENING	17-4PH / D2	BUNA-N	6465PH	7094	EFCQOPH
		D-2 STEEL	BUNA-N	6465	5123	EHZ
	2"	D-2 STEEL	VITON	6465	5123	EHZV
		S6	BUNA-N	6465SS6	5123SS6	EHZS6
		S6	HSN	6465SS6	5123SS6	EHZS6HSN
		S6	VITON	6465SS6	5123SS6	EHZS6V
		S6	VITON	6465SS6	5123SS6	EHZS6V
4"	4"	D-2 STEEL	BUNA-N	5583	5139	EFF
		D-2 STEEL	VITON	5583	5139	EFFV
		S6	BUNA-N	5583SS6	5139SS6	EFFSS6
		S6	VITON	5583SS6	5139SS6	EFFS6V
		S6	HSN	5583SS6	5139SS6	EFFS6HSN
		ZIRCONIA	BUNA-N	5583	5139	EFFZR
	3"	D-2 STEEL	BUNA-N	5583	5255	EVK
		D-2 STEEL	VITON	5583	5255	EVKV
		S6	BUNA-N	5583SS6	5255SS6	EVKS6
		S6	VITON	5583SS6	5255SS6	EVKS6V
6"	6"	D-2 STEEL	BUNA-N	5375SS6	5313	EFQ
		S6	BUNA-N	5375SS6	5313	EFQS6
		S6	AFLAS	5375SS6	5313SS6	EFQS6AF
	4"	S6 / D-2 STEEL	BUNA-N	5375SS6	6425	MGE
		S6 / D-2 STEEL	AFLAS	5375SS6	6425	MGEAF
		S6 / D-2 STEEL	HSN	5375SS6	6425	MGEHSN
		S6 / D-2 STEEL	VITON	5375SS6	6425	MGEV
		S6		5375SS6	6425SS6	MGES6
		S6	AFLAS	5375SS6	6425SS6	MGES6AF
		S6		5375SS6	6425SS6	MGES6AF
8" & 10"	8"	S6 / D-2 STEEL	BUNA-N	6570S6	6609	EIC
		S6	BUNA-N	6570S6	6609SS6	EICS6
		S6	HSN	6570S6	6609SS6	EICS6HSN
	6"	S6 / D-2 STEEL	BUNA-N	6570S6	6647	MGI
		S6	BUNA-N	6570S6	6647SS6	MGIS6
		S6	HSN	6570S6	6647SS6	HGIS6HSN

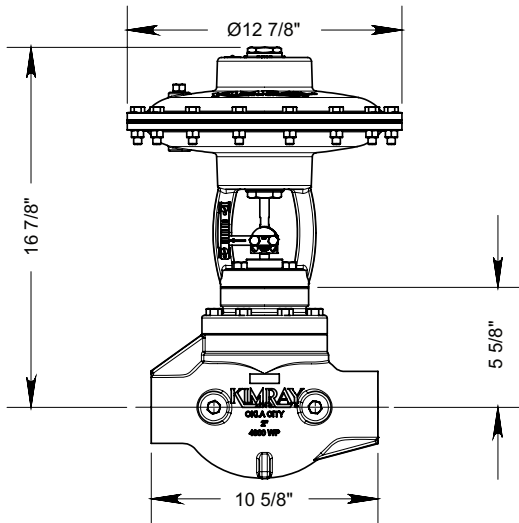
Kimray is an ISO 9001- certified manufacturer.

HIGH PRESSURE CONTROL VALVES

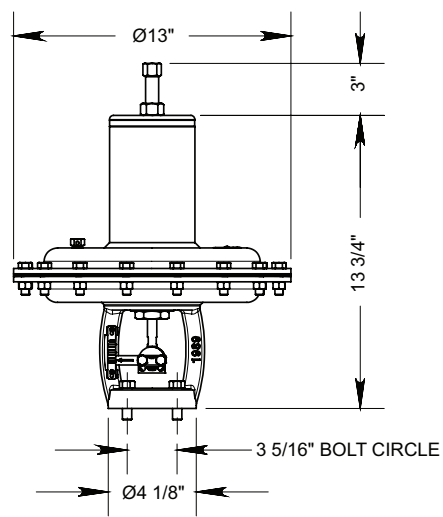
2" HPCV DIMENSIONS

KIMRAY INC.®

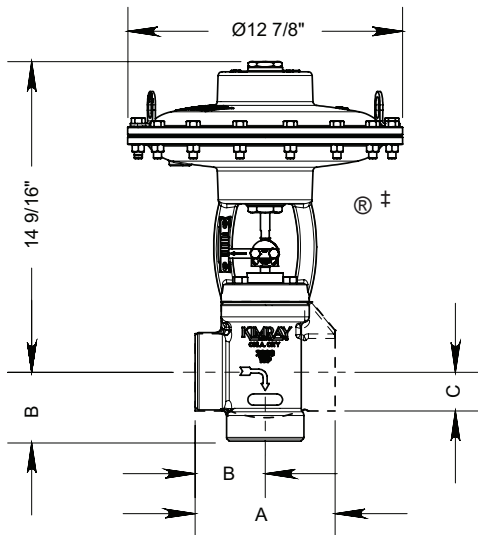
2" HPCV PB



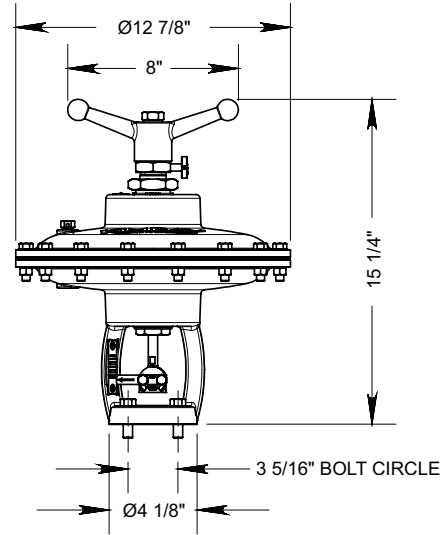
2" -65 TOPWORKS



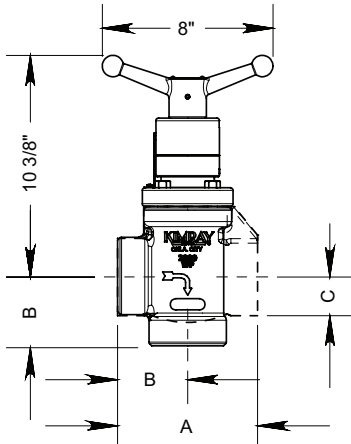
2" HPCV



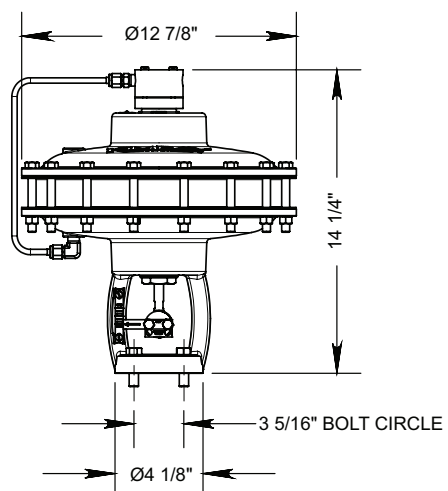
2" MVP TOPWORKS



2" SMVA/T TOPWORKS

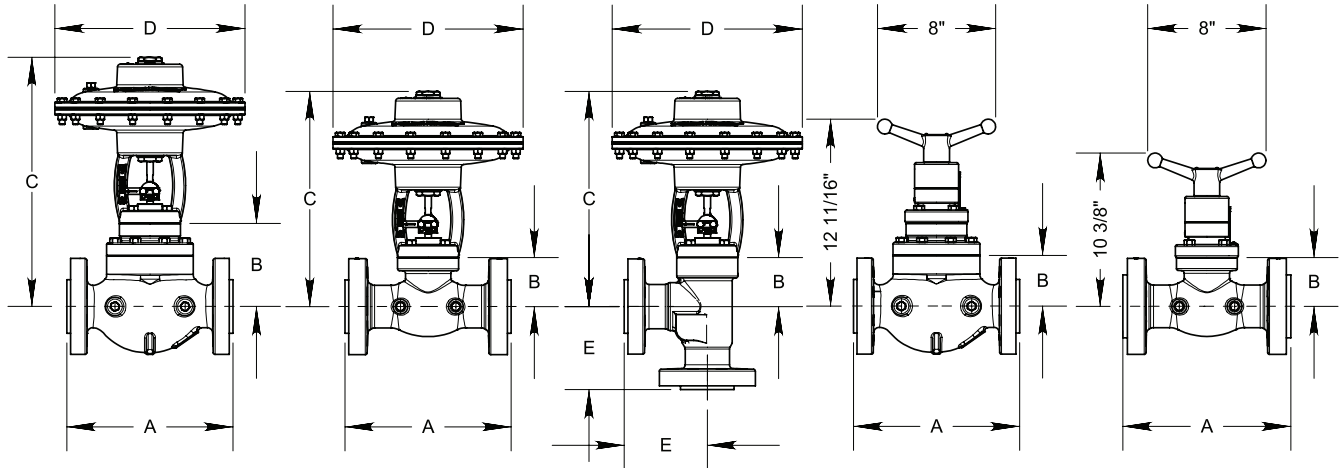


2" PVP TOPWORKS



MODEL NO.	A	B	C
2200	6 9/16"	3 9/32"	1 13/16"
2400	6 9/16"	3 9/32"	2 1/16"

All dimensions are in inches
Flanged body dimensions available on request.



	SIZE	BODY STYLE	A	B	C	D	E
STANDARD	1"	150RF	7 1/4"	1 15/16"	10 1/2"	9 1/8"	
		150RTJ	7 5/8"	1 15/16"	10 1/2"	9 1/8"	
		300RF	7 3/4"	1 15/16"	10 1/2"	9 1/8"	
		300RTJ	8 1/8"	1 15/16"	10 1/2"	9 1/8"	
		600RF	8 1/4"	1 15/16"	10 1/2"	9 1/8"	
		600RTJ	8 1/4"	1 15/16"	10 1/2"	9 1/8"	
		1500RF	10 3/4"	1 15/16"	10 1/2"	9 1/8"	
		1500RTJ	10 3/4"	1 15/16"	10 1/2"	9 1/8"	
	2"	150RF	10"	3 3/16"	14 1/2"	12 7/8"	5"
		150RTJ	10 3/8"	3 3/16"	14 1/2"	12 7/8"	5"
		300RF	10 1/2"	3 3/16"	14 1/2"	12 7/8"	5 1/2"
		300RTJ	11"	3 3/16"	14 1/2"	12 7/8"	5 1/4"
		600RF	11 1/4"	3 3/16"	14 1/2"	12 7/8"	5 5/8"
		600RTJ	11 3/8"	3 3/16"	14 1/2"	12 7/8"	5 5/8"
		1500RF	13 3/8"	3 3/16"	14 1/2"	12 7/8"	7 13/32"
		1500RTJ	13 1/2"	3 3/16"	14 1/2"	12 7/8"	7 13/32"
		2500RTJ	16 3/8"	3 3/16"	14 1/2"	12 7/8"	
		2 1/16 API 5,000	14 3/4"	3 3/16"	14 1/2"	12 7/8"	
PISTON BALANCED	2"	150RF	10"	5 5/8"	17"	12 7/8"	
		300RF	10 1/2"	5 5/8"	17"	12 7/8"	
		600RF	11 1/4"	5 5/8"	17"	12 7/8"	
		1500RF	13 3/8"	5 5/8"	17"	12 7/8"	
		1500RTJ	13 1/2"	5 5/8"	17"	12 7/8"	
	3"	150RF	11 3/4"	7 1/4"	27"	15 3/4"	
		300RF	12 1/2"	7 1/4"	27"	15 3/4"	
		600RF	13 1/4"	7 1/4"	27"	15 3/4"	
		600RTJ	13 3/8"	7 1/4"	27"	15 3/4"	
	4"	150RF	13 7/8"	11"	30"	15 3/4"	
		300RF	14 1/2"	11"	30"	15 3/4"	
		600RF	15 1/2"	11"	30"	15 3/4"	
	6"	150RF	17 3/4"	11 3/16"	34 1/2"	20 7/16"	
		300RF	18 5/8"	11 3/16"	34 1/2"	20 7/16"	
		600RF	20 1/16"	11 3/16"	34 1/2"	20 7/16"	
	8"	150RF	21 3/8"	11 5/16"	34 1/2"	20 1/2"	
		300RF	22 3/8"	11 5/16"	34 1/2"	20 1/2"	
		600RF	24"	11 5/16"	34 1/2"	20 1/2"	
	10"	150RF	26 1/2"	11 5/16"	34 1/2"	20 1/2"	
		300RF	27 7/8"	11 5/16"	34 1/2"	20 1/2"	
		600RF	29 9/16"	11 5/16"	34 1/2"	20 1/2"	