

CIRCUMFERENTIAL PISTON PRODUCT LINE:

Revolution® Series Stainless Steel Pumps

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SERIES DESCRIPTION

The Revolution® Series is a positive displacement pump with both rotary lobe and circumferential piston rotor options. This is the ideal solution for Food and Beverage, Personal Care, Pharmaceutical, Confectionary and a wide range of Light Chemical Applications due to its cleanability, superior performance, and ease of maintenance.

US 3-A, European CE, UKCA and ATEX compliant models and specifications are available.

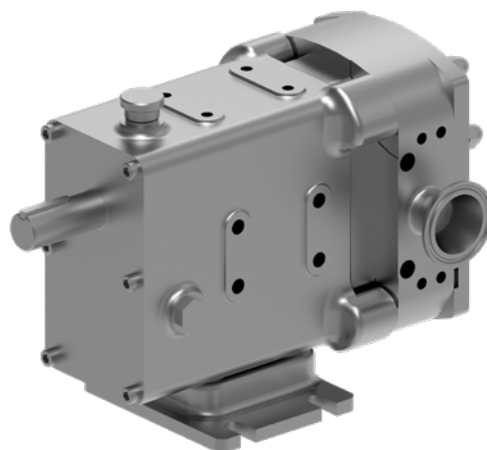
It can handle flows up to 399 GPM (91 m³/h).



RELATED PRODUCTS

Stainless Steel, TRA®20 Series: Catalog Section 1721

Stainless Steel, TRA®10 Series: Catalog Section 1722



Revolution® Series

OPERATING RANGE

SERIES	NOMINAL FLOW		MAXIMUM PRESSURE		TEMPERATURE		VISCOSITY RANGE	
	GPM	m³/h	PSI	Bar	°F	°C	SSU	cSt
Revolution®	0 - 399	0 - 91	450	31	to +300	to +150	to 910,000	to 200,000

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FEATURES & BENEFITS

- Cleanability
 - » Efficient CIP (Clean In Place) ability is standard for all Revolution pumps
 - » Self draining pump head from innovative cusps & cusp reliefs
 - » Innovative seal design with no dead zones & a dynamic leak path
 - » No dead zones on front cover
 - Ease of Maintenance
 - » Fast, front loading seal changes while pump is still in line
 - » Front access shimming for setting rotor clearance significantly reduces maintenance time
 - » Convenient preventive maintenance parts kits available
- Performance
 - » Improved volumetric efficiency in low & high viscosity applications
 - » Up to 15% better flow performance than competitors' CIP configuration
 - » Gentle handling of solids & shear sensitive products
 - » Long-life durability from heavy duty shafts, bearings & helical gears
 - » Less overhung load

STANDARD MATERIALS OF CONSTRUCTION

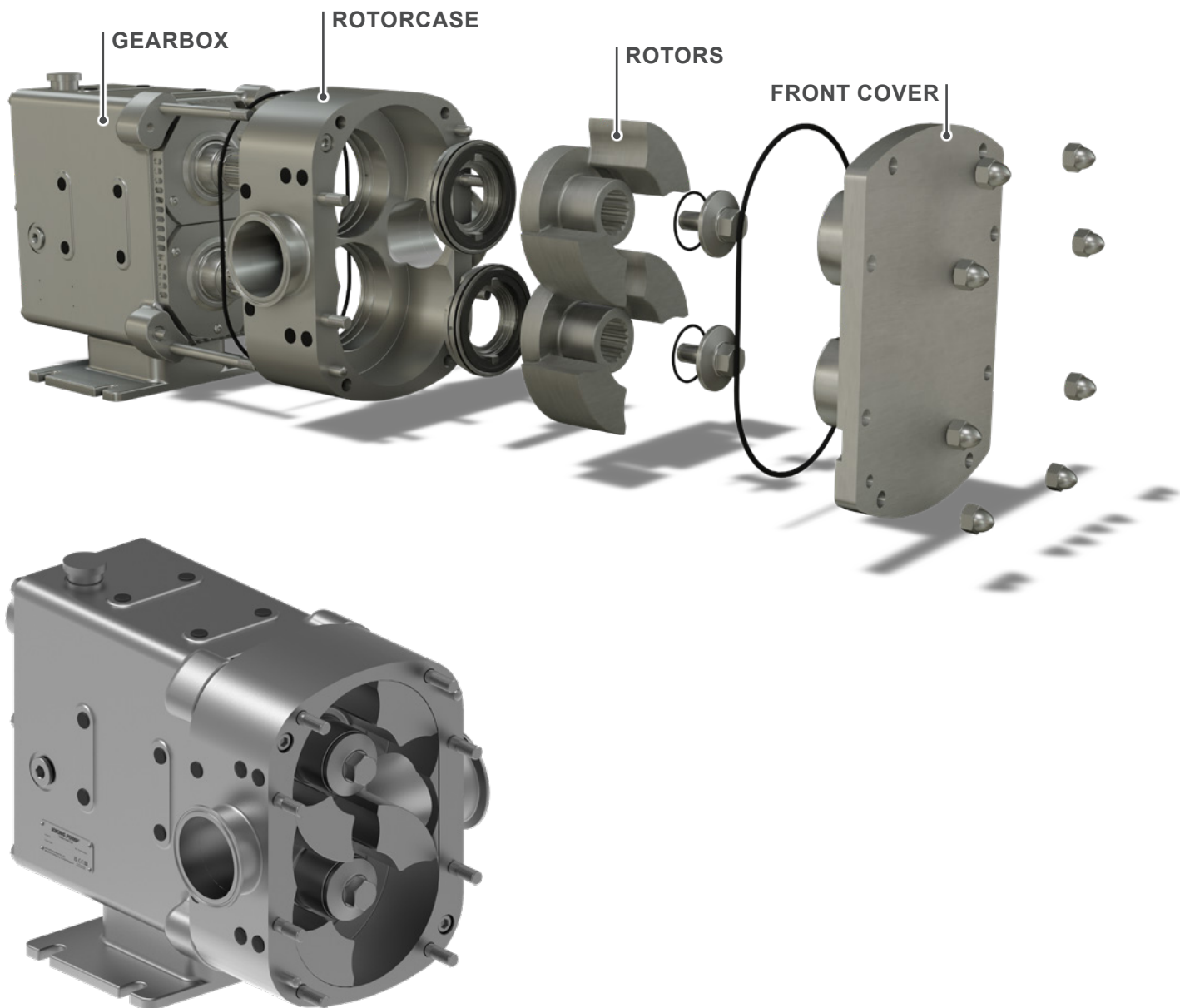
Component	Standard Material
Rotorcase	316L Stainless Steel
Front Cover	316L Stainless Steel
Rotors	316L Stainless Steel or Alloy 808
Rotor Retainers	316L Stainless Steel
Shafts	316L Stainless Steel
Setting Ring	316L Stainless Steel
Gearbox	304 Stainless Steel
Gearbox Cover	304 Stainless Steel
Foot	304 Stainless Steel

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CUTAWAY VIEW & PUMP FEATURES



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MODEL NUMBER KEY

C	P	P	R	0	3	0	0	X
Rotor Type:			Pump Range	Model Size				Pump Type:
CPP =			(Revolution®)	Size 2:	Size 3:	Size 4:	Size 5:	X = Setup for CPP
Circumferential				0150	0200	0450	1800	P = Setup for CPP
Piston Pump				0180	0300	0600	2200	
					0400	0800	2600	
							1300	

SPECIFICATIONS

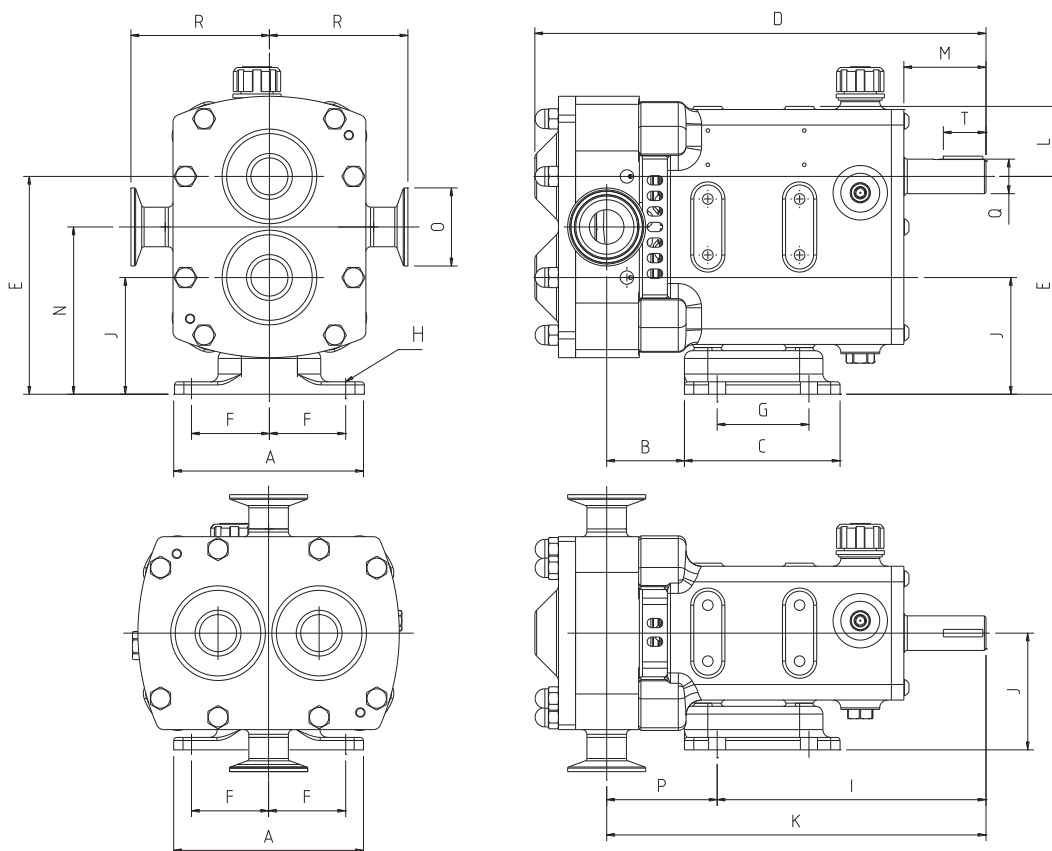
Size	Model Number	Standard Port Size	Nominal Pump Rating (100 SSU & below)			Displacement		Maximum Differential Pressure		Maximum Recommended Temperature for Standard Pump		Approx. Shipping Weight with Grease	
		Inches	GPM	m³/h	RPM	USG/rev.	l/rev.	PSIG	BAR	°F	°C	Lbs.	Kg.
Size 2	R0150X	1.5	11.6	2.6	800	0.015	0.055	305	21	300	150	48.5	22
	R0180P	1.5	23.2	5.3	800	0.029	0.11	203	14	300	150	58	26
Size 3	R0200X	1.5	34	8	800	0.04	0.16	305	21	300	150	97	44
	R0300X	1.5	48	11	800	0.06	0.23	247	17	300	150	99	45
	R0400X	2	62	14	800	0.08	0.29	203	14	300	150	101	46
Size 4	R0450X	2	67	15	600	0.11	0.42	450	31	300	150	200	91
	R0600P	2.5	92	21	600	0.15	0.58	305	21	300	150	212	96
	R0800X	2.5	122	28	600	0.2	0.77	247	17	300	150	213	97
	R1300X	3	159	36	600	0.26	1	203	14	300	150	231	105
Size 5	R1800X	3	231	53	600	0.39	1.46	450	31	300	150	484	220
	R2200X	4	313	71	600	0.52	1.98	305	21	300	150	510	231
	R2600P	4	399	91	600	0.67	2.52	203	14	300	150	519	235

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DIMENSIONS – ALL MODELS – INCHES



Size	Pump Type	Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R1	S	T
2	CPP	R0150X	4.80	1.97	3.94	11.42	5.51	1.93	2.32	0.43x0.47	6.81	2.95	9.61	1.77	2.09	4.23	1/1.5	2.80	0.87	3.50	7.01	0.187" x1"
	CPP	R0180P	4.80	2.20	3.94	11.46	5.51	1.93	2.32	0.43x0.47	6.81	2.95	9.84	1.77	2.09	4.23	1.50	3.03	0.87	3.50	7.01	0.187" x1"
3	CPP	R0200X	5.75	2.76	4.09	13.64	6.85	2.32	2.56	0.43 X 0.55	7.95	3.54	11.46	2.24	2.68	5.20	1.50	3.50	1.25	4.25	8.50	0.25" X 1.77"
	CPP	R0300X	5.75	2.89	4.09	13.64	6.85	2.32	2.56	0.43x0.55	7.95	3.54	11.59	2.24	2.68	5.20	1.50	3.64	1.25	4.25	8.50	0.25" X 1.77"
	CPP	R0400X	5.75	3.15	4.09	14.04	6.85	2.32	2.56	0.43x0.55	7.95	3.54	11.85	2.24	2.68	5.20	2.00	3.90	1.25	4.25	8.50	0.25" X 1.77"
4	CPP	R0450X	8.27	3.50	6.54	18.02	9.57	3.50	4.13	0.51 X 0.63	10.08	5.08	14.84	3.07	3.07	7.32	2.00	4.76	1.62	5.35	10.71	0.375" X 1.62"
	CPP	R0600P	8.27	3.58	6.54	18.41	9.57	3.50	4.13	0.51 X 0.63	10.08	5.08	15.16	3.07	3.07	7.32	2.50	5.08	1.62	5.35	10.71	0.375" X 1.62"
	CPP	R0800X	8.27	4.19	6.54	18.02	9.57	3.50	4.13	0.51 X 0.63	10.08	5.08	15.53	3.07	3.07	7.32	2.50	5.45	1.62	5.35	10.71	0.375" X 1.62"
	CPP	R1300X	8.27	4.45	6.54	18.61	9.57	3.50	4.13	0.51 X 0.63	10.08	5.08	15.79	3.07	3.07	7.32	3.00	5.71	1.62	5.35	10.71	0.375" X 1.62"
5	CPP	R1800X	8.50	3.03	10.08	22.28	12.36	3.74	7.24	0.51 X 0.77	14.06	6.09	18.27	4.12	2.78	9.36	3.00	4.21	2.00	6.63	13.27	0.5" X 2"
	CPP	R2200X	8.50	3.03	10.08	22.44	12.36	3.74	7.24	0.51 X 0.77	14.06	6.09	18.50	4.12	2.78	9.36	4.00	4.45	2.00	6.63	13.27	0.5" X 2"
	CPP	R2600P	8.50	3.03	10.08	23.19	12.36	3.74	7.24	0.51 X 0.77	14.06	6.09	19.53	4.12	2.78	9.36	4.00	5.47	2.00	6.63	13.27	0.5" X 2"

R1 applies to Tri-Clamp fittings only.

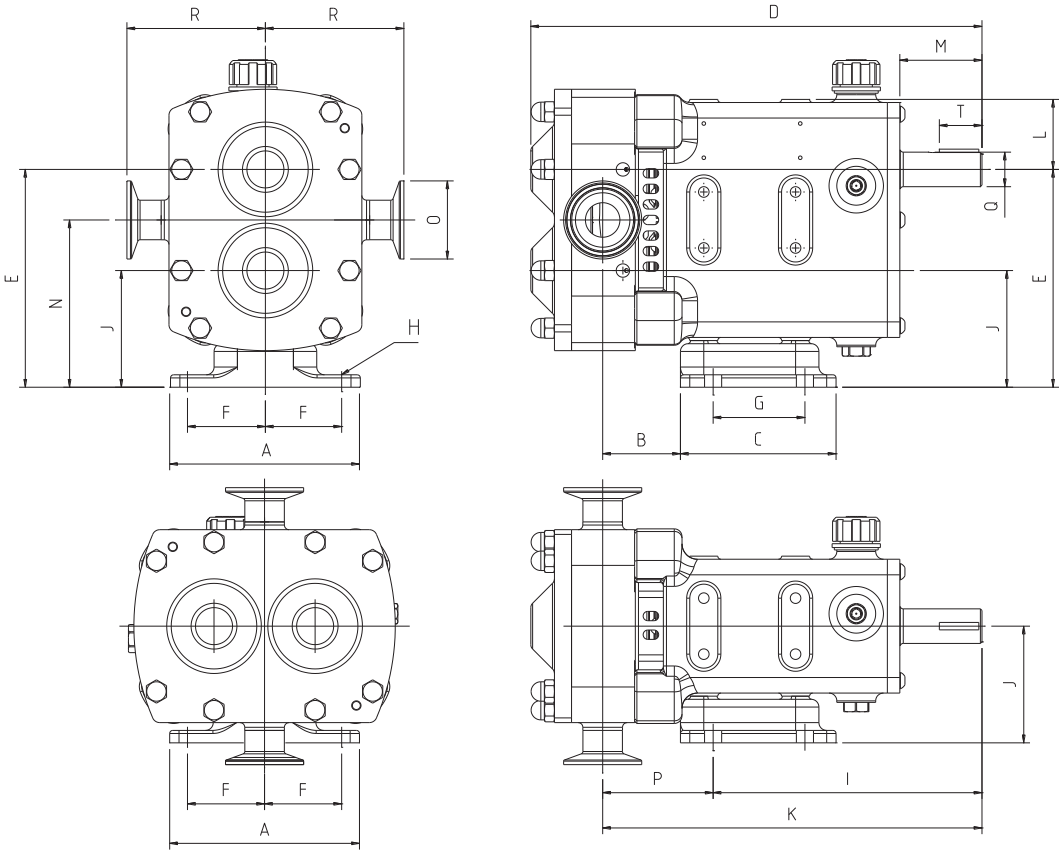
Dimensions given are for guidance only and should **not** be used for installation purposes. Certified dimensions will be supplied on request.

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DIMENSIONS – ALL MODELS – MILLIMETERS



Size	Pump Type	Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R1	S	T
2	CPP	R0150X	122	50	100	290	140	49	59	11 X 12	173	75	244	45	53	107.5	25/38	71	22.2	89	178	4.76X25.4
	CPP	R0180P	122	56	100	291	140	49	59	11 X 12	173	75	250	45	53	107.5	38	77	22.2	89	178	4.76X25.4
3	CPP	R0200X	146	70	104	346.5	174	59	65	11 X 14	202	90	291	57	68	132	38	89	31.75	108	216	6.35 X 45
	CPP	R0300X	146	73.5	104	346.5	174	59	65	11 X 14	202	90	294.5	57	68	132	38	92.5	31.75	108	216	6.35 X 45
	CPP	R0400X	146	80	104	356.5	174	59	65	11 X 14	202	90	301	57	68	132	50	99	31.75	108	216	6.35 X 45
4	CPP	R0450X	210	89	166	457.7	243	89	105	13x16	256	129	377	78	78	186	50	121	41.2	136	272	9.53x41.25
	CPP	R0600P	210	91	166	467.7	243	89	105	13x16	256	129	385	78	78	186	64	129	41.2	136	272	9.53x41.25
	CPP	R0800X	210	106.5	166	457.7	243	89	105	13x16	256	129	394.5	78	78	186	64	138.5	41.2	136	272	9.53x41.25
	CPP	R1300X	210	113	166	472.7	243	89	105	13x16	256	129	401	78	78	186	76	145	41.2	136	272	9.53x41.25
5	CPP	R1800X	216	77	256	566	314	95	184	13X19.5	357	154.75	464	104.75	70.5	237.75	76	107	50.8	168.5	337	12.7X50.8
	CPP	R2200X	216	77	256	570	314	95	184	13X19.5	357	154.75	470	104.75	70.5	237.75	101	113	50.8	168.5	337	12.7X50.8
	CPP	R2600P	216	77	256	589	314	95	184	13X19.5	357	154.75	496	104.75	70.5	237.75	101	139	50.8	168.5	337	12.7X50.8

R1 applies to Tri-Clamp fittings only.

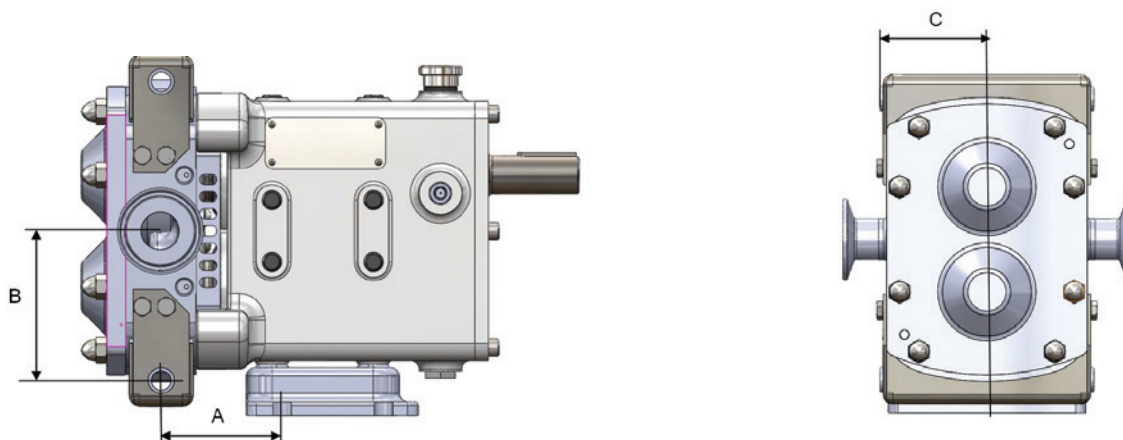
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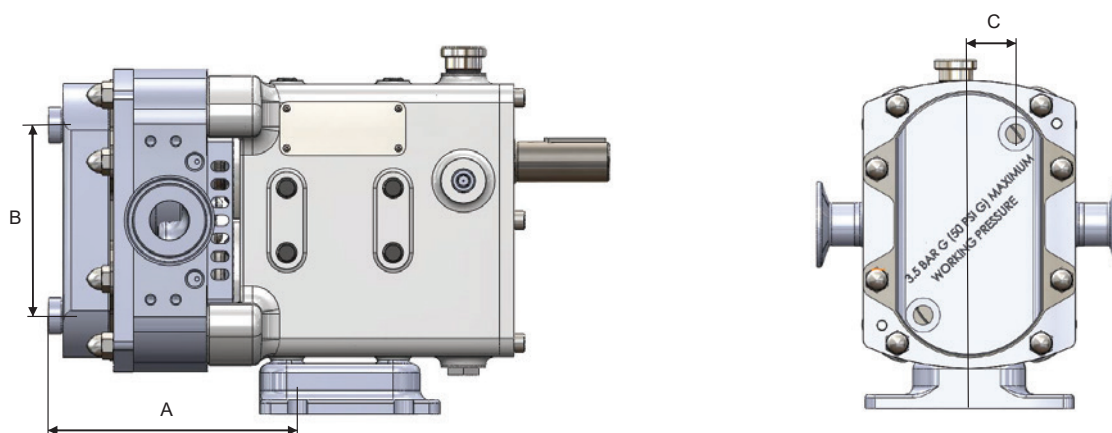
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DIMENSIONS – ROTORCASE JACKET FOR HEATING/COOLING



		Size 2		Size 3			Size 4				Size 5		
		R0150X	R0180X	R0200	R0300	R0400	R0450	R0600	R0800	R1300	R1800	R2200	R2600
A	mm	70.5	84	90.5	100.5	110.5	121	131	143	158	128.5	146.5	165.5
	Inch	2.78	3.31	3.56	3.96	4.35	4.76	5.16	5.63	6.22	5.06	5.77	6.52
B	mm	87		114			159				217		
	Inch	3.43		4.49			6.26				8.54		
C	mm	64.5		81			109				142		
	Inch	2.54		3.19			4.29				5.59		
Size		1/4" bsp		1/4" bsp			1/2" bsp				1/2" bsp		

DIMENSIONS – FRONT COVER JACKET FOR HEATING/COOLING



		Size 2		Size 3			Size 4				Size 5		
		R0150X	R0180X	R0200	R0300	R0400	R0450	R0600	R0800	R1300	R1800	R2200	R2600
A	mm	138	151.5	166.5	176.5	186.5	210	220	232	247	232	250	269
	Inch	5.43	5.96	6.56	6.95	7.34	8.27	8.66	9.13	9.72	9.13	9.84	10.59
B	mm	106		132			180				260		
	Inch	4.17		5.2			7.09				10.24		
C	mm	27		35			52				60		
	Inch	1.06		1.38			2.05				2.36		
Size		1/4" bsp		1/4" bsp			1/2" bsp				1/2" bsp		

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NPSH REQUIRED

Printed performance curves are not available.

Performance curves can be electronically generated with the Viking Pump Curve Generator on vikingpump.com.

NPSHR data is available in the Viking Pump Hygienic Pump Selector Tool.

