

KV Vertical In-Line Pumps

Taco Vertical In-Line Pumps meet the latest standards for hydraulic performance and dimensional characteristics.



WATER CIRCULATION, FLOW CONTROL, AIR ELIMINATION, FLOW MEASUREMENT/BALANCING, ELECTRONIC CONTROLS



Quiet, dependable power. Proven performance.

Taco's extensive line of Vertical In-Line Pumps are designed for optimum performance and ease of installation. Doing your job once means doing it right...with pumps made by the world leader in hydronic technology for heating and cooling. Each pump we sell is backed by Taco's reputation for quality and dependability, and engineered for years of trouble-free service.

Space Saving Design Taco Vertical In-Line Pumps require no isolation pads. Their simplified in-the-line design saves you time and money.

Back Pull-Out Design Should a service call or maintenance ever be required, our pumps pull out from the back. There's no need to disconnect the pump from the piping system to work on it.

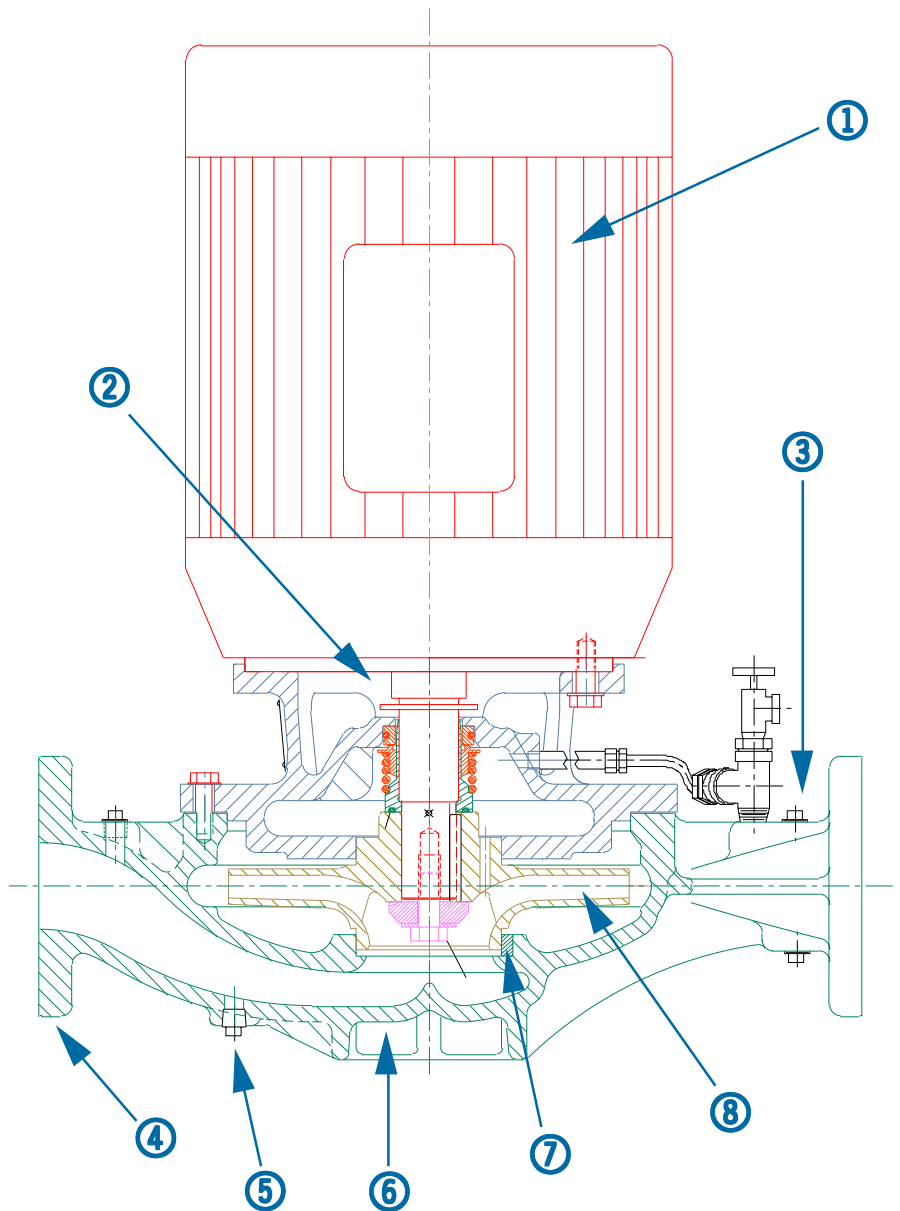
Close Coupled Design Each Vertical In-Line pump features Taco's close coupled design for improved alignment and increased seal life. The bottom line? Fewer service calls.

Lower Installed Cost Because of the way we've engineered our pumps, they require less time to install, and require no special tools or hardware.

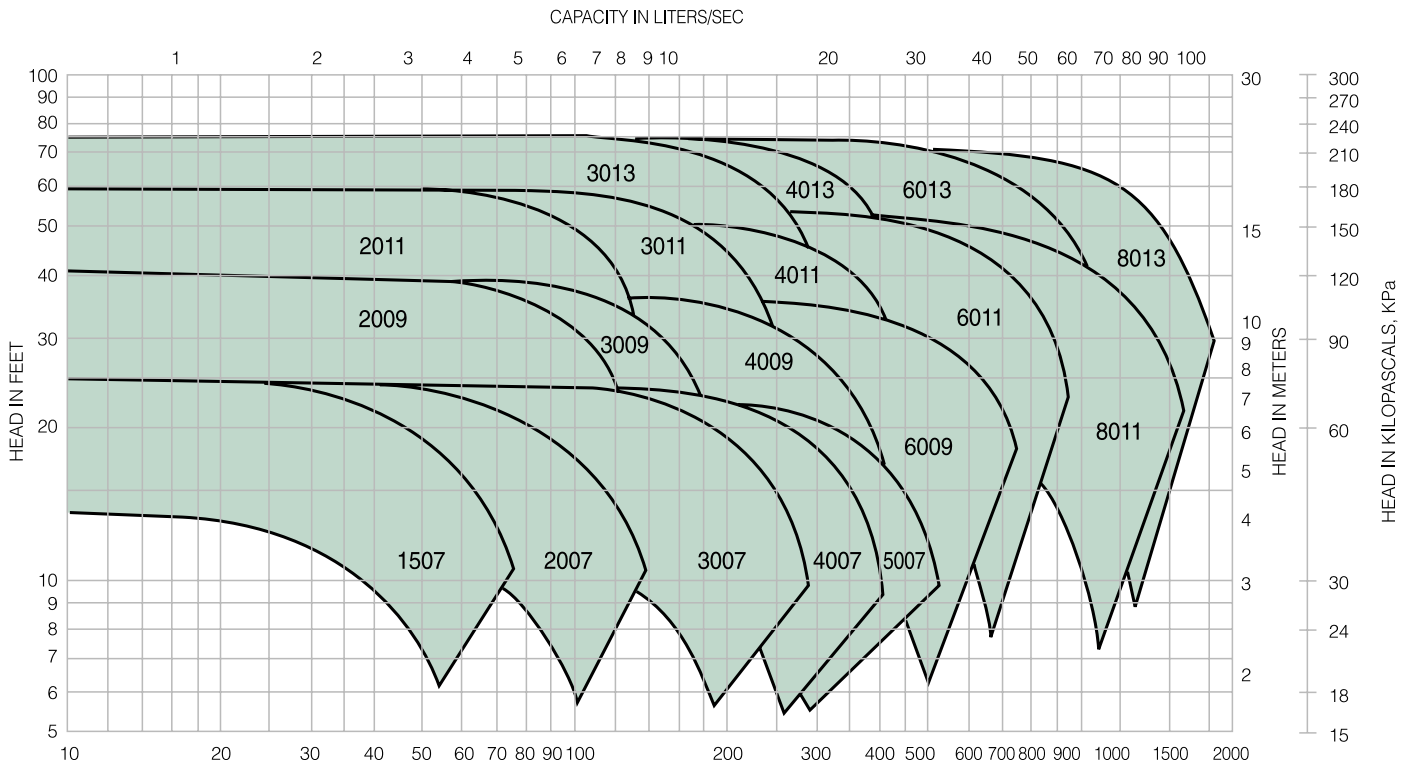
Replaceable Casing, Wear Ring, and Pump Support Bracket are all value added options.

We've got you covered With flows ranging up to 2500 GPM and heads up to 300' TDH, Taco can do the job.

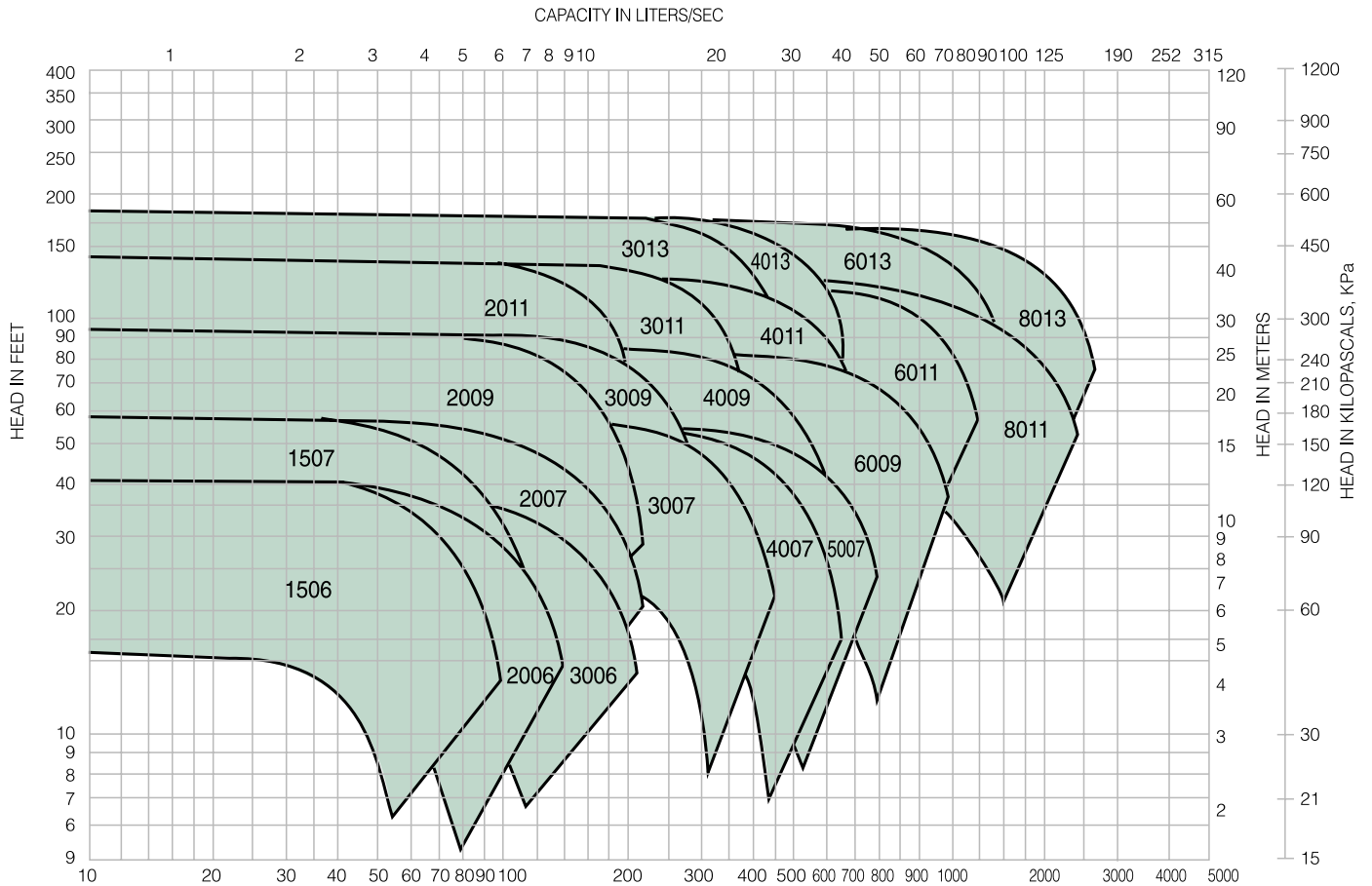
- ① Standard NEMA JM Motor.
- ② Standard seal design allows for flexibility of seal options.
- ③ Pressure tapping on suction and discharge for easy verification of pump performance.



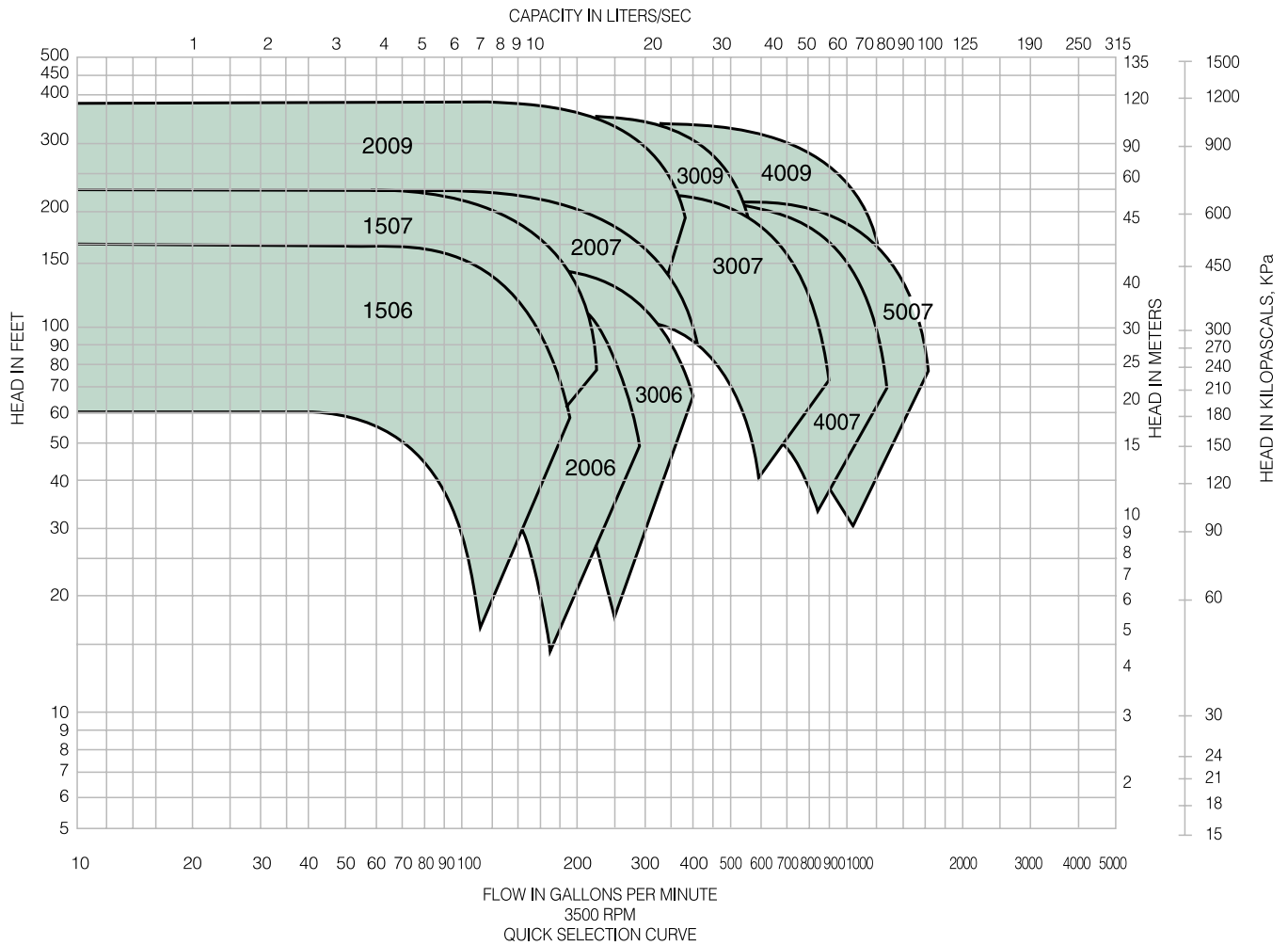
- ④ 250# flanges available
- ⑤ Casing drain
- ⑥ Machined mounting surface with tapped holes
- ⑦ Low cost replaceable optional wear ring available
- ⑧ High efficiency impellers standard on all models



FLOW IN GALLONS PER MINUTE
1160 RPM
QUICK SELECTION CURVE



FLOW IN GALLONS PER MINUTE
1760 RPM
QUICK SELECTION CURVE



Vertical In-Line Pump Materials of Construction

Item	Standard*			All Iron		
	Standard*	Bronze Fitted	Optional	Standard	All Iron	Optional
Casing	Cast Iron ASTM A48 CLASS 30			Cast Iron ASTM A48 CLASS 30A		
Impeller	Red Brass ASTM B584-836 Silicon Bronze ASTM B584-875			Cast Iron ASTM A48 CLASS 30A		
Wear Ring	None	Bronze ASTM B584-932 SAE660		None		N/A
Shaft	Carbon Steel AISI 1045	Stainless Steel AISI 416		Carbon Steel AISI 1045	Stainless Steel AISI 416	
Shaft Sleeve	Bronze SAE 660	Stainless Steel AISI 303		Stainless Steel AISI 303		
Mechanical Seal: Stationary Seat	Ceramic	Ni-Resist Tungsten Carbide		Ceramic	Ni-Resist Tungsten Carbide	
Rotating Face	Carbon			Carbon		
Elastomer	Ethylene Propylene	Viton		Ethylene Propylene	Viton	
Spring	Stainless Steel			Stainless Steel		
Seal Flush Line	Copper	Stainless Steel		Stainless Steel		

* Standard Pump Construction

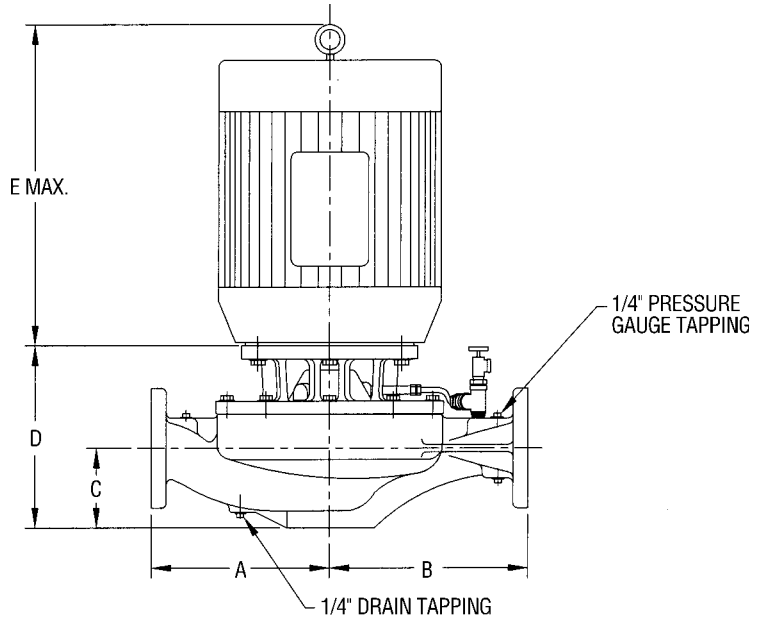
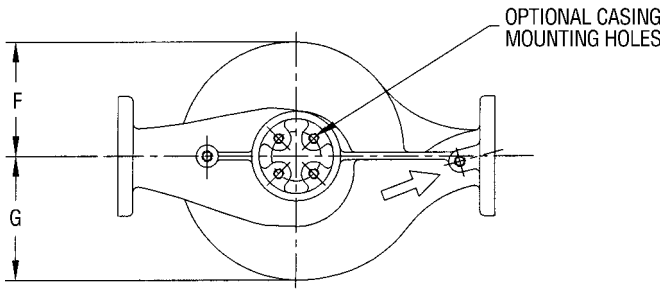
Vertical In-Line Pump Dimensions

MODEL NO. "KV"	MOTOR FRAME SIZE	PRESSURE CLASS 125 LBS.		PRESSURE CLASS 250 LBS.		C	D	F	G	E MAX.	J DIA
		A	B	A	B						
1 1/2 x 1 1/2 x 6 (KV1506)	143	7.50 (191 MM)	7.50 (191 MM)	7.75 (197 MM)	7.75 (197 MM)	4.49 (114 MM)	8.65 (220 MM)	4.13 (105 MM)	4.63 (118 MM)	12.06 (306 MM)	6.62
	145									13.43 (341 MM)	(168 MM)
	182									13.94 (354 MM)	7.88
	184									15.58 (396 MM)	(200 MM)
2 X 2 X 6 (KV2006)	143	7.50 (191 MM)	8.00 (203 MM)	7.75 (197 MM)	8.25 (210 MM)	3.91 (99 MM)	8.11 (206 MM)	4.41 (112 MM)	5.14 (131 MM)	12.06 (306 MM)	6.62
	145									13.43 (341 MM)	(168 MM)
	182									13.94 (354 MM)	7.88
	184									15.58 (396 MM)	(200 MM)
	213									16.68 (424 MM)	9.56 (234 MM)
3 X 3 X 6 (KV3006)	143	8.50 (216 MM)	10.00 (254 MM)	8.87 (225 MM)	10.37 (263 MM)	4.97 (126 MM)	9.13 (232 MM)	4.67 (119 MM)	5.56 (141 MM)	12.06 (306 MM)	6.62
	145									13.43 (341 MM)	(168 MM)
	182									13.94 (354 MM)	7.88
	184									15.58 (396 MM)	(200 MM)
	213									16.68 (424 MM)	9.56
1 1/2 X 1 1/2 x 7 (KV1507)	143	8.00 (203 MM)	8.00 (203 MM)	8.31 (211 MM)	8.31 (211 MM)	4.13 (105 MM)	8.42 (214 MM)	4.88 (124 MM)	5.16 (131 MM)	12.06 (306 MM)	6.62
	145									13.43 (341 MM)	(168 MM)
	182									13.94 (354 MM)	7.88
	184									15.58 (396 MM)	(200 MM)
	213									16.68 (424 MM)	9.56
2 X 2 X 7 (KV2007)	143	8.50 (216 MM)	8.50 (216 MM)	8.76 (223 MM)	8.76 (223 MM)	3.94 (100 MM)	8.27 (210 MM)	4.88 (124 MM)	5.45 (138 MM)	12.06 (306 MM)	6.62
	145									13.43 (341 MM)	(168 MM)
	182									13.94 (354 MM)	7.88
	184									15.58 (396 MM)	(200 MM)
	213									16.68 (424 MM)	9.56
	215									17.83 (453 MM)	(234 MM)
3 X 3 X 7 (KV3007)	143	10.00 (254 MM)	10.00 (254 MM)	10.37 (263 MM)	10.37 (263 MM)	6.30 (160 MM)	10.53 (267 MM)	5.29 (134 MM)	6.31 (160 MM)	12.06 (306 MM)	6.62 (168 MM)
	145									13.43 (341 MM)	7.88
	182									13.94 (354 MM)	(200 MM)
	184									15.58 (396 MM)	9.56
	213									16.68 (424 MM)	(234 MM)
	215									17.83 (453 MM)	12.94
	254									19.91 (506 MM)	(329 MM)
4 X 4 X 7 (KV4007)	143	11.00 (279 MM)	11.00 (279 MM)	11.32 (288 MM)	11.32 (288 MM)	6.59 (167 MM)	11.21 (285 MM)	5.64 (143 MM)	6.80 (173 MM)	13.43 (341 MM)	6.62 (168 MM)
	145									13.94 (354 MM)	7.88
	182									15.58 (396 MM)	(200 MM)
	184									16.68 (424 MM)	9.56
	213									18.18 (462 MM)	(234 MM)
	215									17.83 (453 MM)	12.94
	254									19.91 (506 MM)	(329 MM)
5 X 5 X 7 (KV5007)	143	13.00 (330 MM)	11.00 (279 MM)	13.44 (341 MM)	11.44 (291 MM)	6.63 (168 MM)	11.58 (294 MM)	6.42 (163 MM)	7.91 (201 MM)	13.43 (341 MM)	6.62 (168 MM)
	145									13.94 (354 MM)	7.88
	182									15.58 (396 MM)	(200 MM)
	184									16.68 (424 MM)	9.56
	213									18.18 (462 MM)	(234 MM)
	215									17.83 (453 MM)	12.94
	254									19.91 (506 MM)	(329 MM)
	284									23.39 (594 MM)	15.29
286	25.28 (642 MM)	(388 MM)									
324	25.28 (642 MM)	17.85 (453 MM)									
326	25.28 (642 MM)	(453 MM)									

Vertical In-Line Pump Dimensions, continued

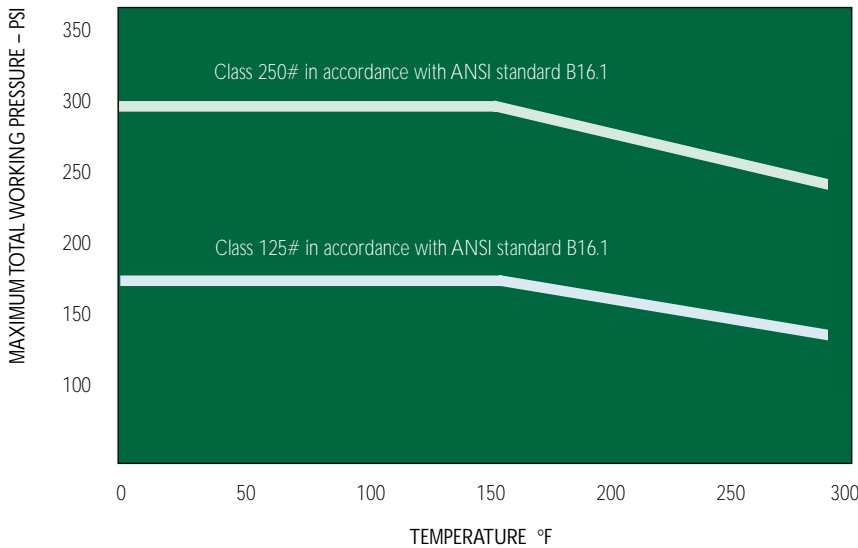
MODEL NO. "KV"	MOTOR FRAME SIZE	PRESSURE CLASS 125 LBS.		PRESSURE CLASS 250 LBS.			D	F	G	E MAX.	J DIA	
		A	B	A	B	C						
2 X 2 X 9 (KV2009)	145	9.00 (229 MM)	10.00 (254 MM)	9.25 (235 MM)	10.25 (260 MM)	3.94 (100 MM)	8.29 (211 MM)	5.72 (145 MM)	6.22 (158 MM)	13.43 (341 MM)	6.62 (168 MM)	
	182									13.94 (354 MM)	7.88	
	184									15.58 (396 MM)	(200 MM)	
	213									16.68 (424 MM)	9.56	
	215									18.18 (462 MM)	(234 MM)	
	254									17.83 (453 MM)	12.94	
	256									19.91 (506 MM)	(329 MM)	
	284									23.39 (594 MM)	15.29	
286	23.39 (594 MM)	(388 MM)										
3 X 3 X 9 (KV3009)	145	10.00 (254 MM)	11.00 (279 MM)	10.37 (263 MM)	11.37 (289 MM)	5.19 (132 MM)	9.47 (241 MM)	5.94 (151 MM)	6.53 (166 MM)	13.43 (341 MM)	6.62 (168 MM)	
	182									13.94 (354 MM)	7.88	
	184									15.58 (396 MM)	(200 MM)	
	213									16.68 (424 MM)	9.56	
	215									18.18 (462 MM)	(234 MM)	
	254									17.83 (453 MM)	12.94	
	256									19.91 (506 MM)	(329 MM)	
	284									23.39 (594 MM)	15.29	
286	23.39 (594 MM)	(388 MM)										
324	25.28 (642 MM)	17.85 (453 MM)										
4 X 4 X 9 (KV4009)	145	11.00 (279 MM)	13.00 (330 MM)	11.32 (288 MM)	13.32 (338 MM)	6.19 (157 MM)	10.58 (269 MM)	6.28 (160 MM)	7.25 (184 MM)	13.43 (341 MM)	6.62 (168 MM)	
	182									13.94 (354 MM)	7.88	
	184									15.58 (396 MM)	(200 MM)	
	213									16.68 (424 MM)	9.56	
	215									18.18 (462 MM)	(234 MM)	
	254									17.83 (453 MM)	12.94	
	256									19.91 (506 MM)	(329 MM)	
	284									23.39 (594 MM)	15.29	
286	23.39 (594 MM)	(388 MM)										
324	25.28 (642 MM)	17.85										
326	25.28 (642 MM)	(453 MM)										
6 X 6 X 9 (KV6009)	184	13.50 (343 MM)	15.50 (394 MM)	13.82 (351 MM)	15.82 (402 MM)	6.60 (168 MM)	11.44 (291 MM)	7.62 (194 MM)	9.31 (236 MM)	15.58 (396 MM)	7.88 (200 MM)	
	213						11.62 (295 MM)			16.68 (424 MM)	9.56	
	215						12.25 (311 MM)			18.18 (462 MM)	(234 MM)	
	254									17.83 (453 MM)	12.94	
	256									19.91 (506 MM)	(329 MM)	
284		23.39 (594 MM)	15.29 (388 MM)									
2 X 2 X 11 (KV2011)	145	10.50 (267 MM)	10.85 (276 MM)	10.75 (273 MM)	11.10 (282 MM)	3.94 (100 MM)	8.23 (209 MM)	7.06 (179 MM)	7.12 (181 MM)	13.43 (341 MM)	6.62 (168 MM)	
	182									13.94 (354 MM)	7.88	
	184									15.58 (396 MM)	(200 MM)	
	213									8.41 (214 MM)	16.68 (424 MM)	9.56
	215										18.18 (462 MM)	(234 MM)
3 X 3 X 11 (KV3011)	145	11.50 (292 MM)	13.00 (330 MM)	11.88 (302 MM)	13.38 (340 MM)	6.00 (152 MM)	10.32 (262 MM)	7.10 (180 MM)	7.89 (200 MM)	13.43 (341 MM)	6.62 (168 MM)	
	182									13.94 (354 MM)	7.88	
	184									15.58 (396 MM)	(200 MM)	
	213									10.50 (267 MM)	16.68 (424 MM)	9.56
	215										18.18 (462 MM)	(234 MM)
254		11.27 (286 MM)	17.83 (453 MM)	12.94 (329 MM)								
4 X 4 X 11 (KV4011)	184	13.50 (343 MM)	15.00 (381 MM)	13.81 (351 MM)	15.31 (389 MM)	6.29 (160 MM)	10.89 (277 MM)	7.74 (197 MM)	8.82 (224 MM)	15.58 (396 MM)	7.88 (200 MM)	
	213						11.06 (281 MM)			16.68 (424 MM)	9.56	
	215						11.76 (299 MM)			18.18 (462 MM)	(234 MM)	
	254									17.83 (453 MM)	12.94	
	256									19.91 (506 MM)	(329 MM)	

Vertical In-Line Pump Dimensions, continued



MODEL NO. "KV"	MOTOR FRAME SIZE	PRESSURE CLASS 125 LBS.		PRESSURE CLASS 250 LBS.		C	D	F	G	E MAX.	J DIA	
		A	B	A	B							
6 X 6 X 11 (KV6011)	213	16.00 (406 MM)	17.50 (445 MM)	16.32 (415 MM)	17.82 (453 MM)	7.82 (199 MM)	12.86 (327 MM)	8.61 (219 MM)	10.25 (260 MM)	16.68 (424 MM)	9.56 (234 MM)	
	215											18.18 (462 MM)
	254											17.83 (453 MM)
	256											19.91 (506 MM)
	284											23.39 (594 MM)
	286											23.39 (594 MM)
324	25.28 (642 MM)	17.85 (453 MM)										
8 X 8 X 11 (KV8011)	254	20.00 (508 MM)	19.50 (495 MM)	20.50 (521 MM)	20.00 (508 MM)	9.25 (235 MM)	15.44 (392 MM)	9.57 (243 MM)	12.75 (324 MM)	17.83 (453 MM)	12.94	
	256									19.91 (506 MM)	(329 MM)	
	284									23.39 (594 MM)	15.29	
	286									23.39 (594 MM)	(388 MM)	
	324									25.28 (642 MM)	17.85	
	326									25.28 (642 MM)	(453 MM)	
3 X 3 X 13 (KV3013)	184	13.63 (346 MM)	14.13 (359 MM)	14.00 (356 MM)	14.50 (368 MM)	5.93 (151 MM)	10.55 (268 MM)	8.31 (211 MM)	8.77 (223 MM)	15.58 (396 MM)	7.88 (200 MM)	
	213						10.73 (273 MM)			16.68 (424 MM)	9.56	
	215						11.36 (289 MM)			18.18 (462 MM)	(234 MM)	
	254						17.83 (453 MM)			12.94		
	256						19.91 (506 MM)			(329 MM)		
	284						23.39 (594 MM)			15.29 (388 MM)		
4 X 4 X 13 (KV4013)	184	15.50 (394 MM)	15.50 (394 MM)	15.81 (402 MM)	15.81 (402 MM)	6.23 (158 MM)	10.89 (277 MM)	8.53 (217 MM)	9.52 (242 MM)	15.58 (396 MM)	7.88 (200 MM)	
	213						11.07 (281 MM)			16.68 (424 MM)	9.56	
	215						11.70 (297 MM)			18.18 (462 MM)	(234 MM)	
	254						17.83 (453 MM)			12.94		
	256						19.91 (506 MM)			(329 MM)		
	284						23.39 (594 MM)			15.29		
286	23.39 (594 MM)	(388 MM)										
6 X 6 X 13 (KV6013)	215	17.00 (432 MM)	17.00 (432 MM)	17.32 (440 MM)	17.32 (440 MM)	8.17 (208 MM)	13.35 (339 MM)	9.30 (236 MM)	11.48 (292 MM)	18.18 (462 MM)	9.56 (234 MM)	
	254						17.83 (453 MM)			12.94		
	256						19.91 (506 MM)			(329 MM)		
	284						23.39 (594 MM)			15.29		
	286						23.39 (594 MM)			(388 MM)		
	324						25.28 (642 MM)			17.85		
326	25.28 (642 MM)	(453 MM)										
364	27.21 (691 MM)	19.25 (489 MM)										
8 X 8 X 13 (KV8013)	256	20.00 (508 MM)	21.00 (533 MM)	20.50 (521 MM)	21.50 (546 MM)	9.25 (235 MM)	15.29 (388 MM)	10.44 (265 MM)	13.40 (340 MM)	19.91 (506 MM)	12.94 (329 MM)	
	284									23.39 (594 MM)	15.29	
	286									23.39 (594 MM)	(388 MM)	
	324									25.28 (642 MM)	17.85	
	326									25.28 (642 MM)	(453 MM)	
	364									27.21 (691 MM)	19.25 (489 MM)	

Pressure-Temperature Ratings



OPERATING SPECIFICATIONS			
	Standard		Optional
Flange	Class 125	Class 250	
Pressure	175PSIG*	300PSIG*	CF
Temperature	250°F*	250°F*	CF***

* Per chart at left

ADDITIONAL OPTIONS	
Filters	Cuno 5 Micron
Separators	Kynar Cyclone Separator

Typical Specification

Furnish and install centrifugal in-line single stage pump(s) with capacities and characteristics as shown on the plans. Pumps shall be Taco Model KV or approved equal.

Pump volute or casings shall be constructed of class 30 cast iron. The pump casing shall have equal suction and discharge ports. The pump casing shall be drilled and tapped for gauge ports at both the suction and discharge flanges and for drain port at the bottom of the casing. Optional bronze wear rings can be fitted to the casing. The pump shall be capable of being serviced without disturbing system piping.

The impeller shall be bronze and hydraulically balanced by the back impeller hub and balancing holes. The

impeller shall be dynamically balanced and shall be fitted to the shaft with a key.

The pump cover shall be machined to provide a balance chamber from the close tolerance between the back impeller hub and the cover. The cover shall be designed to provide maximum flexibility of mechanical shaft seals and flush glands.

The pump seal shall be EPT Ceramic rated to 250 degrees F. ***. Optional seat materials and elastomers are available. The pump shall have a factory installed vent/flush line to insure removal of trapped air and mechanical seal cooling. The vent/flush line shall run from the seal chamber to the pump discharge. Extended seal life can be accomplished with an optional filter or

sediment separator, which can be incorporated in the vent/flush line.

The pump shall be coupled to a NEMA rated JM motor design for continuous operation and readily removable for servicing. The pump shall incorporate a dry shaft design to prevent the circulating fluid from contacting the shaft. The shaft shall be covered with a replaceable bronze (stainless steel) shaft sleeve.

*** For operating temperatures above 250 degrees F, a cooled flush is required and is recommended for temperatures above 225 degrees F. for optimum seal life. On closed systems, insert a small heat exchanger in the flush line to cool the seal flushing fluid.

WATER CIRCULATION, FLOW CONTROL, AIR ELIMINATION, FLOW MEASUREMENT/BALANCING, ELECTRONIC CONTROLS



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