

ECM High-Efficiency Circulator

The Taco 00e[®] VR series are ECM high-efficiency, wet-rotor, self-sensing commercial circulators ideal for HVAC and potable water applications. The wide range of models with Low, Medium, or High head options provide differential head pressures up to 65 ft. and flow ranges up to 320 GPM. BMS communication with Modbus, BACnet, 0-10Vdc, and PWM come standard while high-efficiency ECM technology reduces power consumption up to 85%. The stainless steel models are NSF 61 & 372 domestic and commercial hot rated.



- Intuitive user interface with real-time feedback
- Constant speed, constant pressure, proportional pressure, and activeADAPT[®]; self-adjusting proportional pressure
- BMS communication; Modbus, BACnet, 0-10Vdc, PWM
- Parallel pump control; cascading, auto-rotate & main/ standby
- Standard #125 ANSI flanges (Companion flange kit sold separately)



Stainless Steel Models





Efficiency & Simplicity

A solution for every application

The Taco 00e VR series is built to exacting specifications meeting the widest range of HVAC and NSF 61 & 372 domestic and commercial hot water applications. They are suitable for use with fluids at temperatures from 14 to 230°F (-10 to 110°C) and feature 175psi working pressure. All models incorporate a stainless steel rotating assembly, stainless steel rotor can, and the option of a stainless steel volute.

Smart protection and flexible voltages

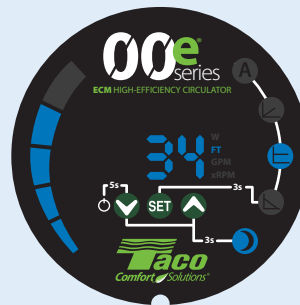
Non-overloading ECM high-efficiency offers smart protection with integrated soft-start technology. Single phase voltage range 110-240 volts up to 800 watts, single phase 200-240 volts above 800 watts.

Parallel pumping

Intuitive lead-lag 24 hour alternation, main-standby for redundancy and cascading mode for additional capacity.



Proportional Pressure



Constant Pressure

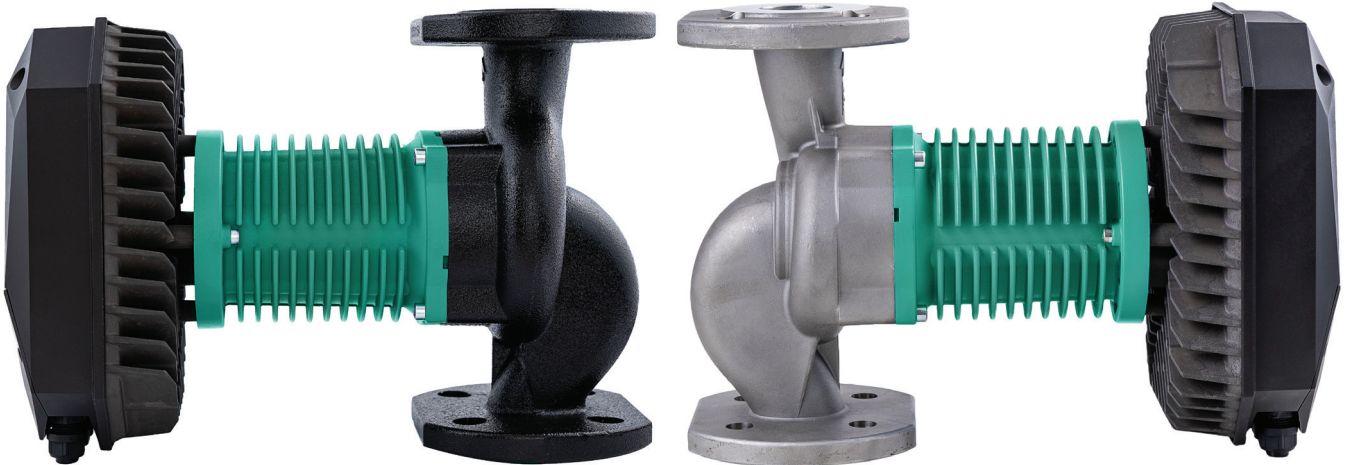


Constant Speed

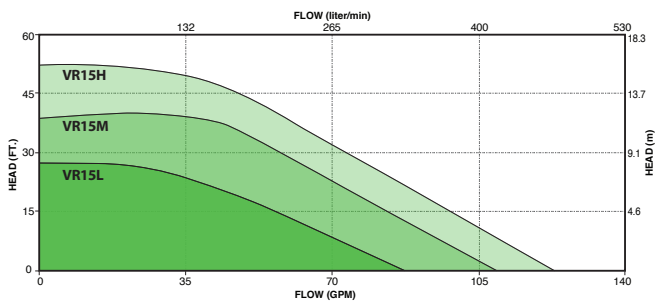
Built-in Protections:

- Dry run protection
- Overcurrent protection
- Line surge protection
- Current limit protection
- Thermal monitoring
- Heat sink status
- Over temperature protection
- Over & under voltage protection

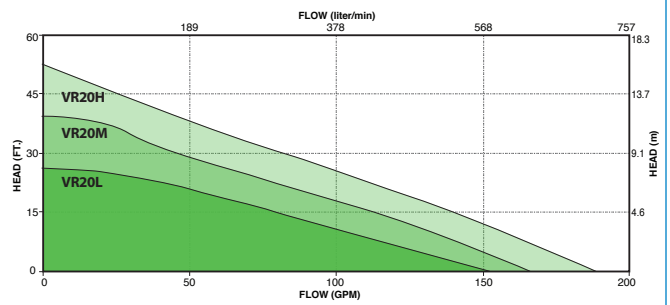
Pumping Iron. Pumping Steel.



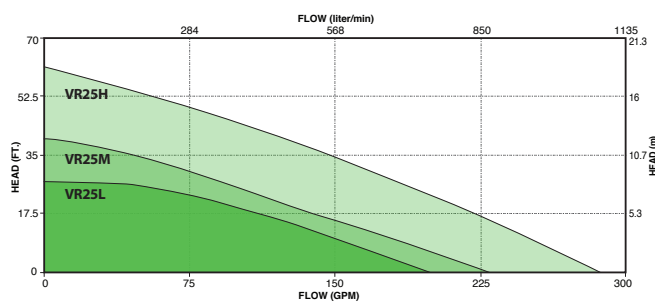
VR15 Performance Curves



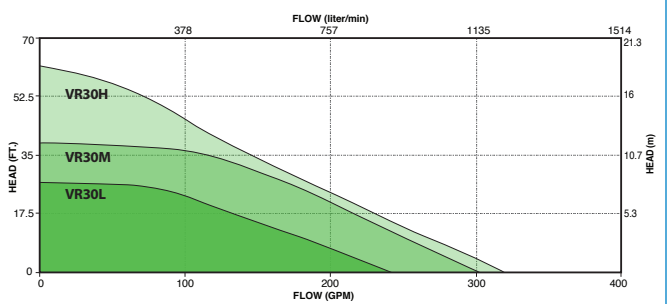
VR20 Performance Curves



VR25 Performance Curves



VR30 Performance Curves



The award winning Taco Tags use wireless NFC technology to provide you with all relevant information for a specific product right on your phone. Detailed specifications, technical documents, instruction manuals, how-to videos and more are all quickly and easily accessible. This digital library contains the most up-to-date information for that specific piece of equipment.

By utilizing the power of Taco Tags, Taco is ensuring you have the resources you need to make fast, informed decisions in the field, increasing your productivity while saving you time.



00e® VR Series — ECM High-Efficiency Circulators

For complete information refer to the Submittal Data Sheet numbers listed below.

Pump Specifications

Max. Operating Pressure:
175 PSI (12 bar)
Water Temperature Range:
36° - 230°F (2° - 110°C)
Ambient Temperature Range:
32° - 104°F (0° - 40°C)
Ambient Humidity:
Less than 95%, for indoor use only

Materials of Construction

Casing (HVAC)..... Cast iron
Casing (DHW)..... 304 Stainless Steel
Impeller..... PES GF-30
Shaft..... ANSI 420
Bearing..... Carbon Sleeve Type

Minimum Inlet Pressure

Temp.	VR15-20	VR25-30
112°F (50°C)	7.3 PSIA / 0.5 Bar	4.36 PSIA / 0.3 Bar
176°F (80°C)	11.6 PSIA / 0.8 Bar	14.5 PSIA / 1.0 Bar
230°F (110°C)	20.3 PSIA / 1.4 Bar	20.3 PSIA / 1.4 Bar



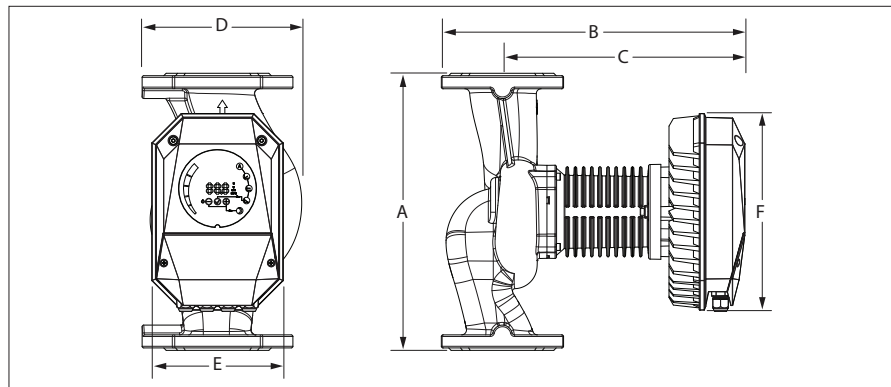
Stainless Steel Models

Operating Modes

activeADAPT®
Proportional Pressure
Constant Pressure
Constant Speed
Night Setback
BACnet
ModBus
0-10Vdc
PWM
Twin Pump Mode

Electrical Specifications

24 Volt Supply Outlet	Max current up to 100mA, Output Voltage +/- 20% of 24 Volts, Output Ripple under 1 Volt
Relay Output (s)	230 Vac, 3A, AC1 Potential Free Changeover Contact
Analog Inputs	Max Input Voltage 32Vdc, 2 Inputs, 1 output
Ethernet	RJ-45 Connector, Http server and FTP Client server



Dimensions & Weights

Model Number	ER	CEI	Flange Size*	A		B		C		D		E		F		CI Weight		SS Weight	
				in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	Kg	lbs.	Kg
VR15L	140	0.46	1-1/2"	9.8	250	15	380	11.7	297	7	179	5.9	150	9.5	241	26	12	28	13
VR15M	133	0.47				15	380	11.7	297	7	179	5.9	150	9.5	241	26	12	28	13
VR15H	131	0.48				15.4	390	12.1	307	7	179	5.9	150	9.5	241	29	13	30	14
VR20L	141	0.42	2"	11	280	14.6	371	11.3	287	8.3	210	6.5	165	9.5	241	30	14	31	15
VR20M	135	0.45				14.6	371	11.3	287	8.3	210	6.5	165	9.5	241	31	15	32	15
VR20H	130	0.47				15	380	11.7	297	8.3	210	6.5	165	9.5	241	33	15	34	16
VR25L	134	0.47	2-1/2"	13.4	340	15.8	402	12.1	307	8.4	214	7.3	185	9.5	241	39	18	41	19
VR25M	129	0.49				16.2	412	12.5	317	8.4	214	7.3	185	9.5	241	41	19	43	20
VR25H	125	0.50				17.1	434	14.1	359	8.4	214	7.3	185	10	255	52	24	56	25
VR30L	127	0.51	3"	14.2	360	16.7	425	12.1	307	10.7	273	7.9	200	9.5	241	55	25	59	27
VR30M	118	0.57				18.2	462	14.5	369	10.7	273	7.9	200	10	255	66	30	72	33
VR30H	128	0.27				18.2	462	14.5	369	10.7	273	7.9	200	10	255	66	30	72	33

*Flange Type (4 Bolt #125 ANSI)

Model Numbers are followed by: "-F" for Cast Iron or "-SF" for Stainless Steel

00e Series — VR Circulator Submittal Data Sheets:

Model	Submittal	Model	Submittal
VR15L	301-257	VR20L	301-260
VR15M	301-258	VR20M	301-261
VR15H	301-259	VR20H	301-262



A Taco Family Company

00e Series — VR Circulator Submittal Data Sheets:

Model	Submittal	Model	Submittal
VR25L	301-263	VR30L	301-266
VR25M	301-264	VR30M	301-267
VR25H	301-265	VR30H	301-268

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