

STUART

EXVM 0300 Series Centrifugal Vertical Multistage Pumps

A range of 3m³/hour nominal flow vertical multistage pumps featuring a compact, close-coupled design and heavy duty oversized motor shaft.

Featuring AISI 304 stainless steel pump head construction, these robust and durable pumps are available in single phase and three phase options.

Capable of flow rates up to 4.5m³/h and models available providing up to 88 metres head, these pumps are suitable for use in a wide range of water boosting applications.



Features

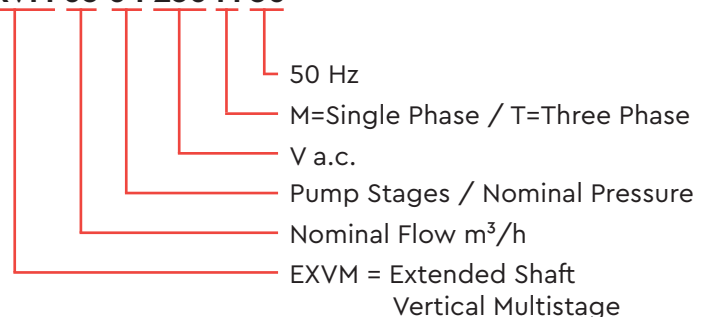
- Multistage centrifugal pump
- Flow rates up to 4.5 m³/h
- Heads up to 88 metres
- Single phase and three phase options
- Compact, close-coupled design
- AISI 304 stainless steel pump head housing, shaft, impellers and diffusers
- Extended life mechanical seal
- Continuously rated induction motor
- Easy maintenance
- WRAS Approved Product
- 1 year warranty

Applications

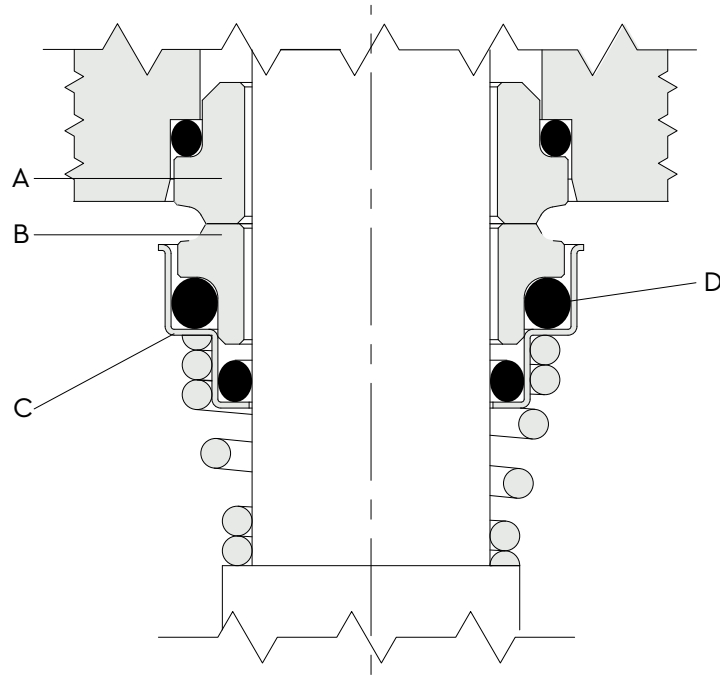
- Domestic and commercial water supply
- Industrial systems, plant and processing
- Wash down units
- Water distribution
- Irrigation and rainwater recovery
- Temperature control and air conditioning systems

Product Code

EXVM 03 04 230 M 50



Stuart EXVM 0300 Series Mechanical Seal Specifications



Seal Component Materials

Stationary Seal Face	Rotating Seal Face	Other Components	Elastomers	Temperature
A	B	C	D	
Ceramic Alumina	Carbon Graphite	Stainless Steel AISI 316	EPDM	-15°C - +110°C

Stuart EXVM 0300 Series Motor Specifications

- Asynchronous, TEFC (Totally Enclosed, Fan-Cooled)
- 2 pole
- Protection degree: IP55
- Insulation class: F
- Max. 60 starts/hour (with min. 1 minute resting time)

Single Phase Models (at 50Hz)

- Standard voltage 220–240 V \pm 5%
- Integrated thermal protection

Motor Size	P _N (kW)	Input Current	Capacitor		230V – 50Hz						
		I _N (A)	μF	V	n _N (min ⁻¹)	I _s / I _N	η%	cos φ	T _N (Nm)	T _s / T _N	T _M / T _N
71	0.33	2.50	16	450	2920	6.5	64.8	0.88	1.08	1.00	1.60
71	0.45	3.00	16	450	2890	5.4	69.7	0.92	1.50	0.72	1.60
71	0.55	3.50	16	450	2860	4.6	72.6	0.94	1.83	0.59	1.85
71	0.75	4.67	16	450	2790	3.5	72.2	0.97	2.56	0.42	1.87
71	0.90	5.45	30	450	2875	4.8	75.3	0.93	3.00	0.47	1.67
71	1.10	6.60	30	450	2820	3.9	77.0	0.96	3.70	0.38	1.86
80	1.30	7.46	30	450	2860	4.2	80.8	0.94	4.35	0.57	1.86
80	1.50	8.56	30	450	2830	3.6	79.9	0.95	5.05	0.50	1.92

Three Phase Models (at 50Hz)

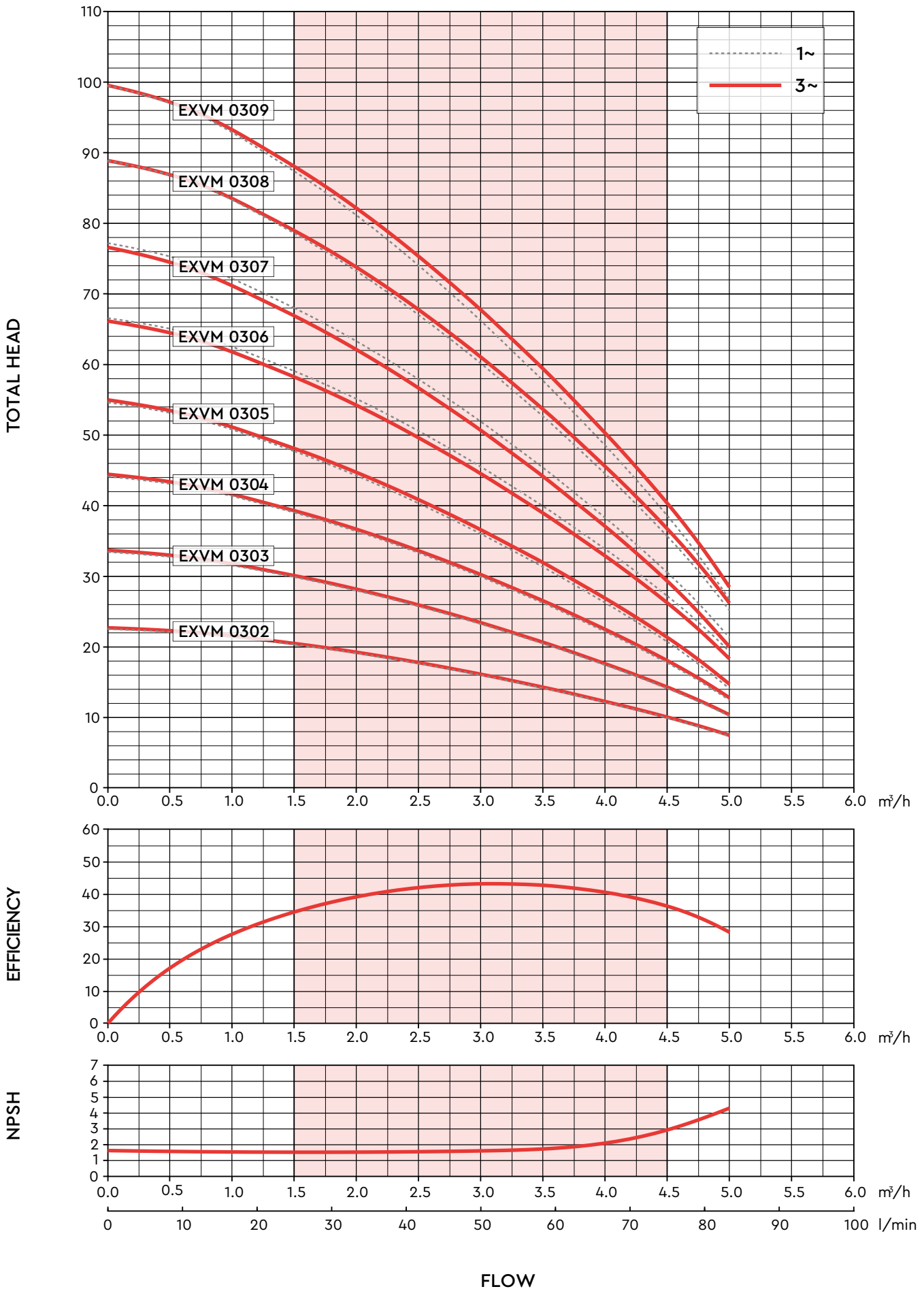
- IE3 premium efficiency motors
- IE efficiency according to IEC 60034-30-1:2014
- Electrical performance according to IEC 60034-2-1:2007
- Standard voltage 220-240 / 380-415 V \pm 5 %
- Thermal protection to be provided within the starter panel

P _N (kW)	Efficiency $\eta_N\%$						
	Δ 230 V Y 400 V			Δ 400 V Y 690 V			IE
	4/4	3/4	2/4	4/4	3/4	2/4	
0.75	80.9	81.5	79.6	-	-	-	3
1.10	82.7	84.6	84.2	-	-	-	3
1.50	84.3	85.7	85.3	-	-	-	3

Motor Size	P _N (kW)	No Poles	f _N (Hz)	400 V 50Hz				
				cos ϕ	I _S / I _N	T _N (Nm)	T _S / T _N	T _M / T _N
71	0.75	2	50	0.83	6.8	2.6	3.6	3.7
71	1.10	2	50	0.82	5.9	3.7	3.2	3.1
80	1.50	2	50	0.79	6.8	5.1	3.2	3.2

P _N (kW)	Voltage U _N				n _N (min ⁻¹)	Motor Operating Conditions		
	Δ 230 V	Y 400 V	Δ 400 V	Y 690 V		Altitude Above Sea Level (m)	T _{amb} min/max (°C)	ATEX
	I _N (A)							
0.75	2.8	1.6	-	-	2800	≤ 1000	-15 / 40	No
1.10	4.1	2.3	-	-	2840	≤ 1000	-15 / 40	
1.50	5.7	3.3	-	-	2830	≤ 1000	-15 / 40	

Stuart EXVM 0300 Series Performance



Stuart EXVM 0300 230 M 50 Technical Specifications

EXVM 0300 230 M 50	0302	0303	0304	0305	0306	0307	0308	0309
Part No	47240	47241	47242	47243	47244	47245	47246	47247

General								
Warranty	1 Year							
Approvals	CE							
Pump type	Centrifugal Multistage							

Features								
Impeller stages	2	3	4	5	6	7	8	9
Compact, close-coupled design	✓							
Heavy duty oversized motor shaft	✓							
Easy maintenance	✓							

Performance								
Flow rate - nominal (m ³ /h)	3							
Flow rate range (m ³ /h)	1.5 - 4.5							
Maximum head - closed valve (metres)	22.5	33.5	44.0	54.5	66.5	77.0	89.0	99.5
Head range (metres)	10-20.5	14-30	18-39	21-48	27-59	30.5-68	36-78.5	38.5-87.5
Working pressure - maximum (bar)	12							

Motor								
Motor type	Induction (Manual reset thermal trip)							
Power supply (Vac/Ph/Hz)	230 V a.c. / 1 / 50 Hz							
Power - input P1 (kW)	0.46	0.60	0.76	0.91	1.13	1.28	1.43	1.58
Power - motor nominal P2 (kW)	0.33	0.45	0.55	0.75	0.90	1.10	1.30	1.50
Power - motor nominal P2 (hp)	0.4	0.6	0.7	1.0	1.2	1.5	1.7	2.0
Input current - 220-240v (A)	2.5	3.0	3.7	4.3	5.4	6.0	6.9	7.5
Efficiency (%)	64.8	69.7	72.6	72.2	75.3	77.0	80.8	79.9
Insulation class	F							
Duty rating	Continuous (S1)							
Starts per hour	60							
IP rating	IP 55							

Materials								
Pump head housing	AISI 304 stainless steel							
Impellers and diffusers	AISI 304 stainless steel							
Pump shaft	AISI 304 stainless steel							
Pump seal	Ceramic Alumina/Carbon Graphite/AISI 316/EPDM							

Connections								
Connection - inlet	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"
Connection - outlet	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"

Operating Conditions								
Operating ambient temperature range (°C)	-5 to +40 °C							
Liquid temperature range (°C)	-15 to +90 °C (110 °C for industrial applications)							

Dimensions								
Height (mm)	441.5	465.5	489.5	513.5	537.5	561.5	627.5	651.5
Width (mm)	212	212	212	212	212	212	212	212
Depth (mm)	220	220	220	220	220	220	220	220
Weight (Kg)	19.4	20.1	20.7	21.4	22.5	23.1	27.2	27.8

Stuart EXVM 0300 230-400 T 50 Technical Specifications

EXVM 03XX 230-400 T 50	0302	0303	0304	0305	0306	0307	0308	0309
Part No	47217	47218	47219	47220	47221	47222	47223	47224

General								
Warranty	1 Year							
Approvals	CE							
Pump type	Centrifugal Multistage							

Features								
Impeller stages	2	3	4	5	6	7	8	9
Compact, close-coupled design	✓							
Heavy duty oversized motor shaft	✓							
Easy maintenance	✓							

Performance								
Flow rate - nominal (m ³ /h)	3							
Flow rate range (m ³ /h)	1.5 - 4.5							
Maximum head - closed valve (metres)	22.5	33.5	44.0	54.5	66	76.5	89	99.5
Head range (metres)	10-20.5	14-30	18-39	21-48	26-58	29.5-67	36-78.5	40.5-88
Working pressure - maximum (bar)	12							

Motor								
Motor type	Induction (thermal trip fitted by installer)							
Power supply (Vac/Ph/Hz)	230 - 400 V a.c. / 3 / 50 Hz							
Power - input P1 (kW)	0.41	0.57	0.72	0.87	1.02	1.17	1.39	1.55
Power - motor nominal P2 (kW)	0.75	0.75	0.75	0.75	1.10	1.10	1.50	1.50
Power - motor nominal P2 (hp)	1.0	1.0	1.0	1.0	1.5	1.5	2.0	2.0
Input current 220-240v (A)	1.9	2.1	2.4	2.7	3.3	3.6	4.8	5.1
Input current 380-415v (A)	1.1	1.2	1.4	1.6	1.9	2.1	2.8	3.0
Efficiency class	IE3	IE3	IE3	IE3	IE3	IE3	IE3	IE3
Efficiency 3 Phase 2/4 (%)	79.6	79.6	79.6	79.6	84.2	84.2	85.3	85.3
Efficiency 3 Phase 3/4 (%)	81.5	81.5	81.5	81.5	84.6	84.6	85.7	85.7
Efficiency 3 Phase 4/4 (%)	80.9	80.9	80.9	80.9	82.7	82.7	84.3	84.3
Insulation class	F							
Duty rating	Continuous (S1)							
Starts per hour	60							
IP rating	IP 55							

Materials								
Pump head housing	AISI 304 stainless steel							
Impellers and diffusers	AISI 304 stainless steel							
Pump shaft	AISI 304 stainless steel							
Pump seal	Ceramic Alumina/Carbon Graphite/AISI 316/EPDM							

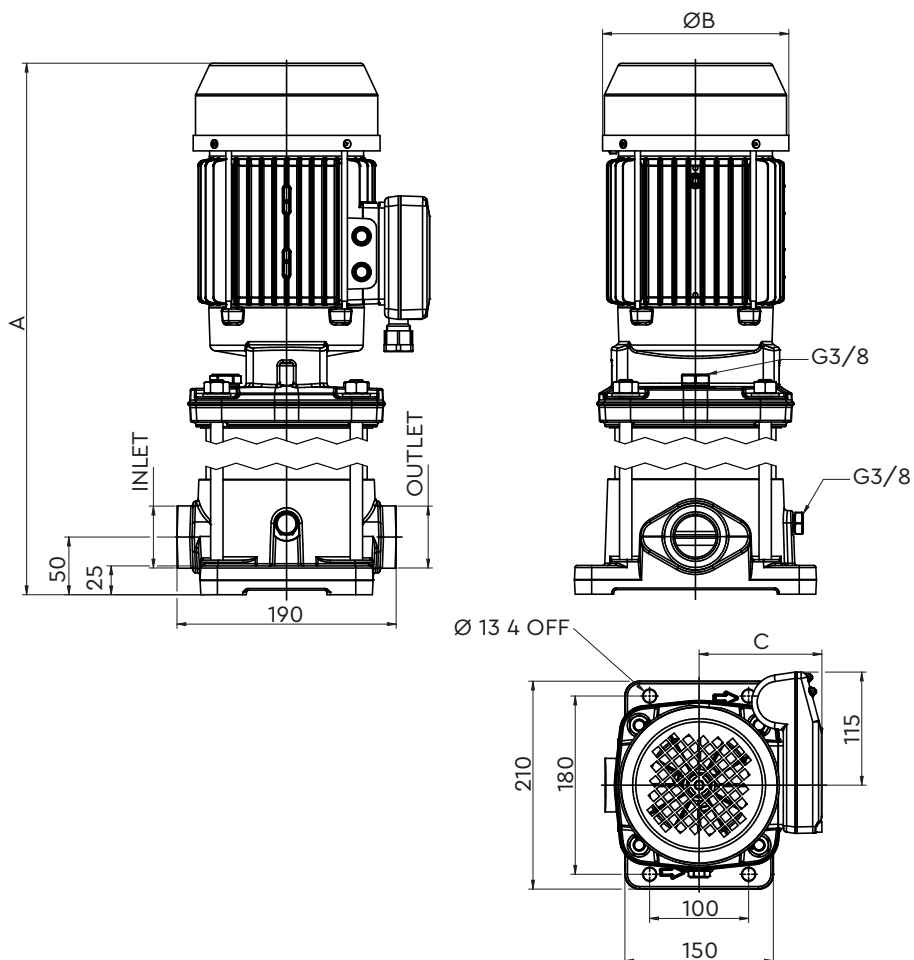
Connections								
Connection - inlet	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"
Connection - outlet	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"

Operating Conditions								
Operating ambient temperature range (°C)	-5 to +40 °C							
Liquid temperature range (°C)	-15 to +90 °C (110 °C for industrial applications)							

Dimensions								
Height (mm)	441.5	465.5	489.5	513.5	537.5	561.5	627.5	651.5
Width (mm)	212	212	212	212	212	212	212	212
Depth (mm)	220	220	220	220	220	220	220	220
Weight (Kg)	19.3	19.9	20.6	21.2	22.4	23.0	27.0	27.7

Stuart EXVM 0300 230 M 50 Dimensions

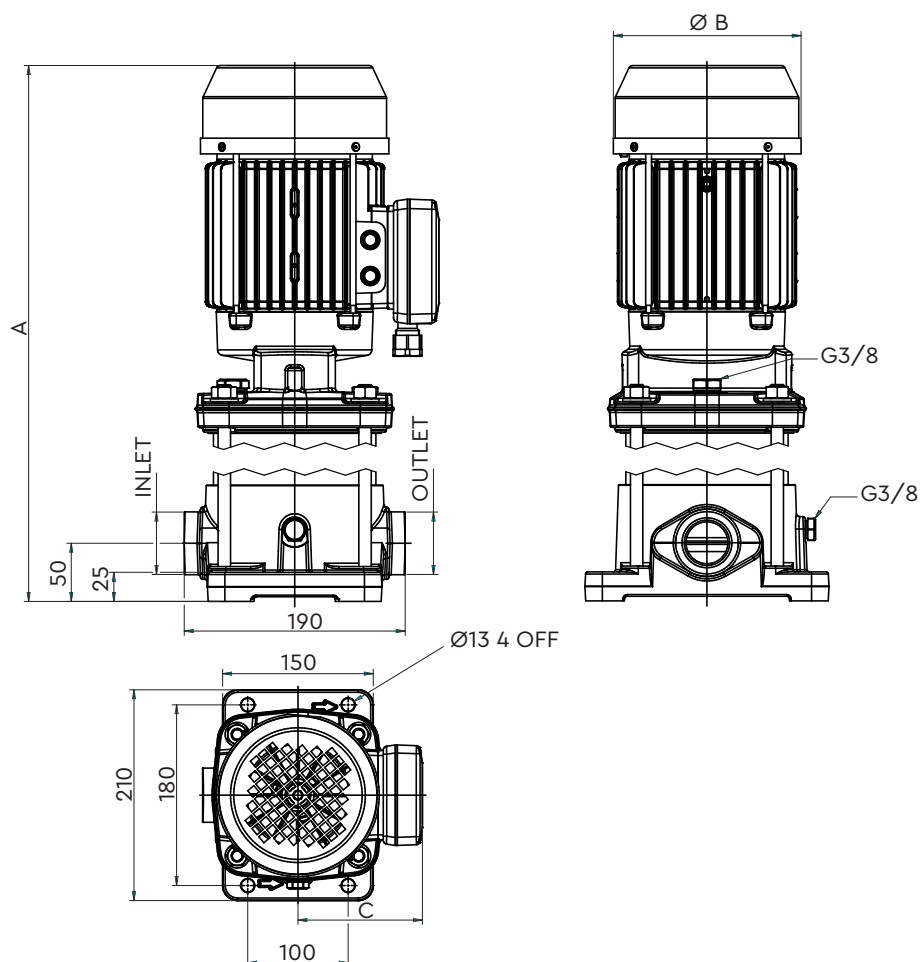
Dimensions: EXVM 0300 230 M 50



Part No	Description	Dimensions (mm)			Weight (Kg)	Inlet	Outlet
		A	Ø B	C			
47240	EXVM 0302 230 M 50	441.5	144	117	19.4	Rp 1¼"	Rp 1¼"
47241	EXVM 0303 230 M 50	465.5	144	117	20.1	Rp 1¼"	Rp 1¼"
47242	EXVM 0304 230 M 50	489.5	144	117	20.7	Rp 1¼"	Rp 1¼"
47243	EXVM 0305 230 M 50	513.5	144	117	21.4	Rp 1¼"	Rp 1¼"
47244	EXVM 0306 230 M 50	537.5	144	117	22.5	Rp 1¼"	Rp 1¼"
47245	EXVM 0307 230 M 50	561.5	144	117	23.1	Rp 1¼"	Rp 1¼"
47246	EXVM 0308 230 M 50	627.5	162	124	27.2	Rp 1¼"	Rp 1¼"
47247	EXVM 0309 230 M 50	651.5	162	124	27.8	Rp 1¼"	Rp 1¼"

Stuart EXVM 0300 230-400 T 50 Dimensions

Dimensions: EXVM 0300 230-400 T 50



Part No	Description	Dimensions (mm)			Weight (Kg)	Inlet	Outlet
		A	Ø B	C			
47217	EXVM 0302 230-400 T 50	441.5	144	117	19.3	Rp 1¼"	Rp 1¼"
47218	EXVM 0303 230-400 T 50	465.5	144	117	19.9	Rp 1¼"	Rp 1¼"
47219	EXVM 0304 230-400 T 50	489.5	144	117	20.6	Rp 1¼"	Rp 1¼"
47220	EXVM 0305 230-400 T 50	513.5	144	117	21.2	Rp 1¼"	Rp 1¼"
47221	EXVM 0306 230-400 T 50	537.5	144	117	22.4	Rp 1¼"	Rp 1¼"
47222	EXVM 0307 230-400 T 50	561.5	144	117	23.0	Rp 1¼"	Rp 1¼"
47223	EXVM 0308 230-400 T 50	627.5	162	124	27.0	Rp 1¼"	Rp 1¼"
47224	EXVM 0309 230-400 T 50	651.5	162	124	27.7	Rp 1¼"	Rp 1¼"

Stuart Turner Limited reserves the right to amend specifications without notice.

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