

STUART

EXVM 0900 Centrifugal Vertical Multistage Pumps

A range of 9m³/hour nominal flow horizontal 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 14m³/h and models available providing up to 90.5 metres head, these pumps are suitable for use in a wide range of water boosting applications.



Features

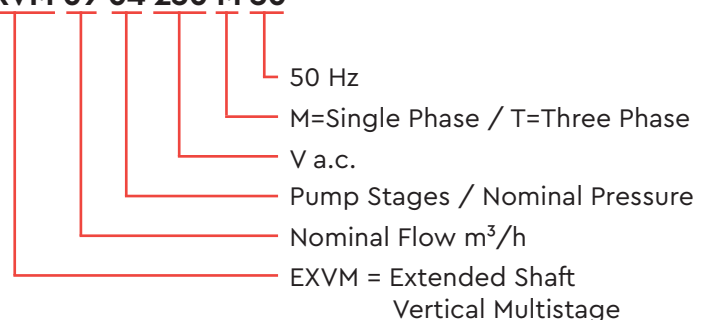
- Multistage centrifugal pump
- Flow rates up to 14 m³/h
- Heads up to 90.5 metres
- Single phase and three phase options
- Compact, close-coupled design
- AISI 304 stainless steel pump head housing, shaft, impellers and diffusers
- Extended life mechanical seal
- Continuously rated induction motor
- Easy maintenance
- WRAS Approved Product
- 1 year warranty

Applications

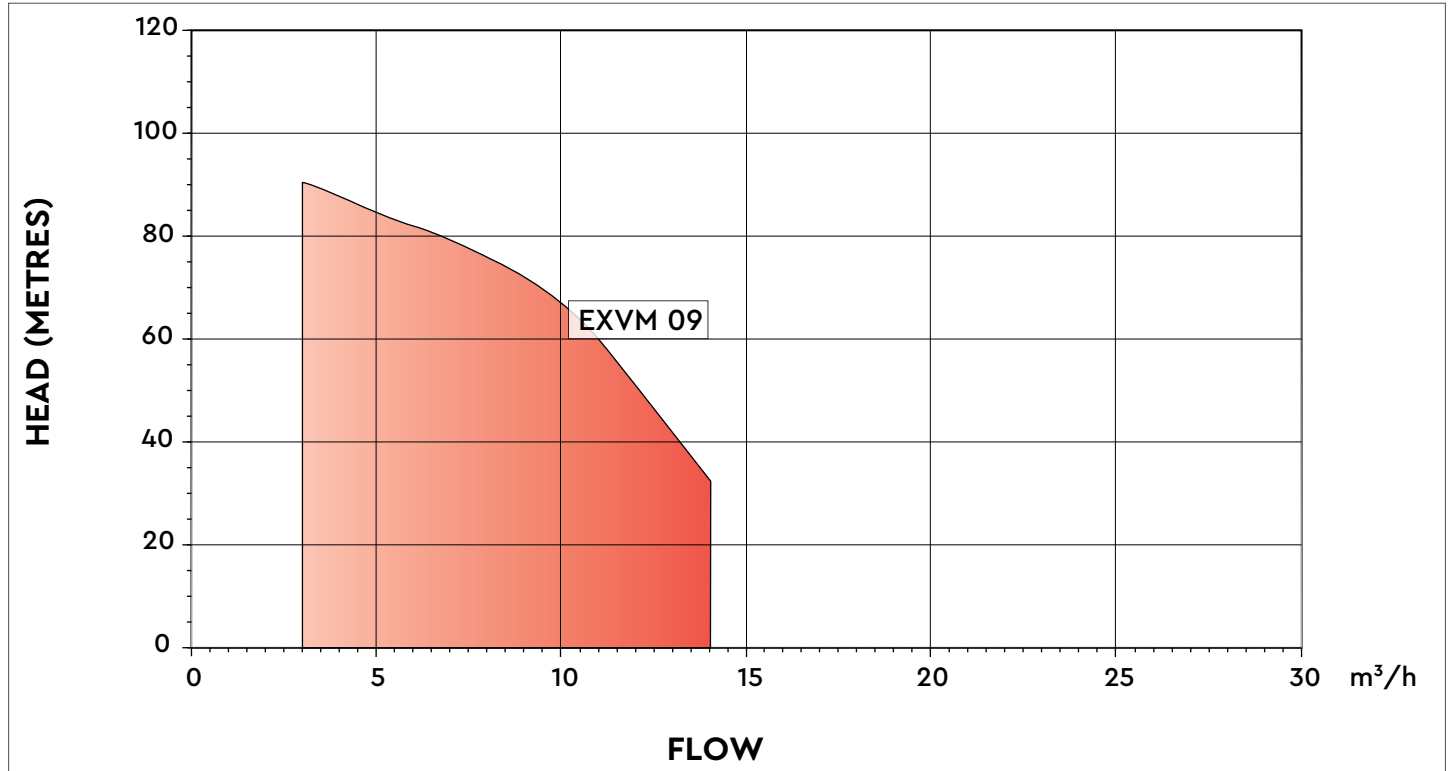
- Domestic and commercial water supply
- Industrial systems, plant and processing
- Wash down units
- Water distribution
- Irrigation and rainwater recovery
- Temperature control and air conditioning systems

Product Code

EXVM 09 04 230 M 50

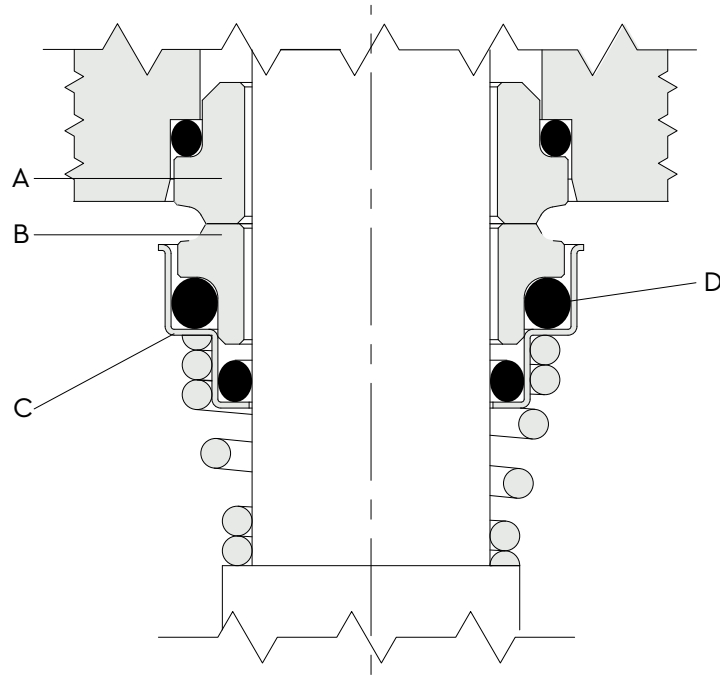


Stuart EXVM 0900 Series Performance Summary



		Q = Delivery															
l/min	0	33.3	41.7	50	58.3	66.7	75	83.3	91.7	100	116.7	133.3	150	166.7	183.3	233.3	
m³/h	0	2	2.5	3	3.5	4	4.5	5	5.5	6	7	8	9	10	11	14	
		H = Total Head (metres)															
Single Phase																	
EXVM 0902	23.4			21.9	21.6	21.3	21.0	20.6	20.3	19.9	19.1	18.3	17.1	15.7	13.8	6.6	
EXVM 0903	35.2			33.1	32.8	32.3	31.8	31.2	30.7	30.2	29.1	27.8	26.2	24.0	21.2	10.4	
EXVM 0904	47.1			44.3	43.9	43.3	42.6	41.9	41.2	40.5	39.1	37.4	35.2	32.4	28.7	14.3	
EXVM 0905	59.4			56.5	56.0	55.4	54.6	53.8	53.0	52.3	50.6	48.7	46.2	42.8	38.3	20.6	
EXVM 0906	71.0			67.3	66.6	65.9	64.9	63.8	62.9	61.9	59.8	57.4	54.2	50.1	44.6	23.2	
Three Phase																	
EXVM 0902	23.5			22.0	21.8	21.5	21.1	20.8	20.4	20.1	19.3	18.5	17.4	16.0	14.1	6.9	
EXVM 0903	35.0			32.7	32.3	31.9	31.3	30.7	30.2	29.7	28.5	27.2	25.5	23.3	20.5	9.7	
EXVM 0904	47.0			44.2	43.8	43.2	42.5	41.8	41.2	40.5	39.0	37.4	35.3	32.5	28.8	14.4	
EXVM 0905	59.6			56.7	56.2	55.6	54.8	54.0	53.3	52.5	50.8	49.0	46.5	43.2	38.7	21.0	
EXVM 0906	71.2			67.5	66.9	66.2	65.2	64.2	63.2	62.3	60.2	57.9	54.8	50.8	45.4	24.0	
EXVM 0907	83.5			79.5	78.8	78.1	76.9	75.8	74.8	73.7	71.4	68.8	65.4	60.7	54.6	29.7	
EXVM 0908	95.2			90.4	89.6	88.7	87.4	86.1	84.9	83.6	80.9	77.9	73.9	68.5	61.3	32.9	

Stuart EXVM 0900 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 0900 Series Motor Specifications

- Asynchronous, TEFC (Totally Enclosed, Fan-Cooled)
- 2 pole
- Protection degree: IP55
- Insulation class: F
- Frequency of starts:
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	0.75	4.67	16	450	2790	3.5	72.2	0.97	2.56	0.42	1.87
71	1.10	6.60	30	450	2820	3.9	77.0	0.96	3.70	0.38	1.86
80	1.50	8.56	30	450	2830	3.6	79.9	0.95	5.05	0.50	1.92
90	2.20	12.60	60	450	2870	2.2	76.7	0.99	7.30	0.51	1.99

Three Phase Models (at 50Hz)

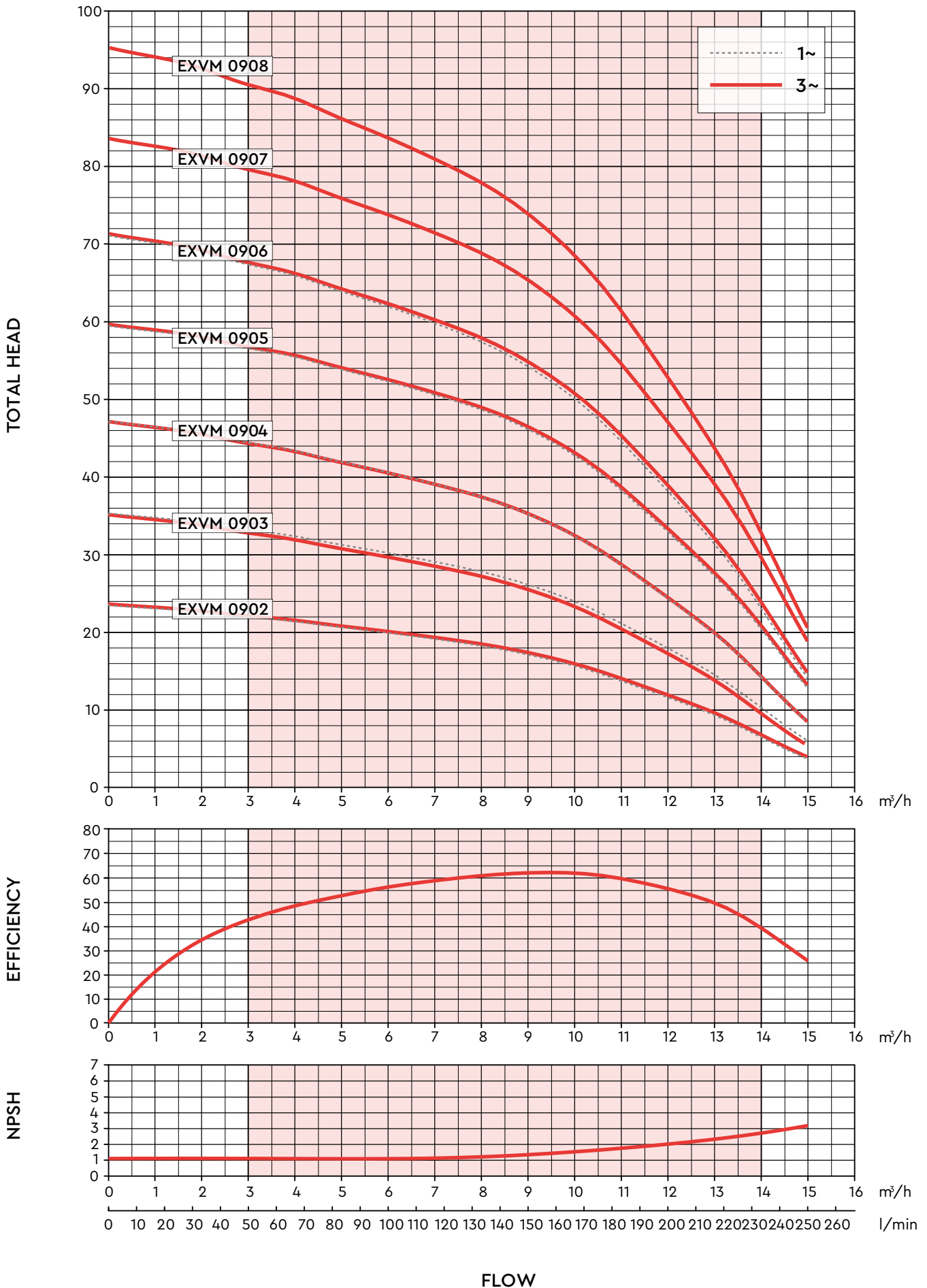
- IE3 premium efficiency motors
- IE efficiency according to IEC 60034-30-1:2014
- Electrical performance according to IEC 60034-2-1:2007
- Standard voltage 220-240 / 380-415 V \pm 5 % up to 3 kW
- Thermal protection to be provided within the starter panel

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
2.20	86.1	86.7	85.4	-	-	-	3
3.00	87.1	87.5	86.1	-	-	-	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
90	2.20	2	50	0.80	9.6	7.3	4.3	4.4
90	3.00	2	50	0.83	9.6	9.9	4.7	4.9

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	
2.20	8.0	4.6	-	-	2880	≤ 1000	-15 / 40	
3.00	10.4	6.0	-	-	2900	≤ 1000	-15 / 40	

Stuart EXVM 0900 Series Performance Summary



Stuart EXVM 0900 230 M 50 Technical Specifications

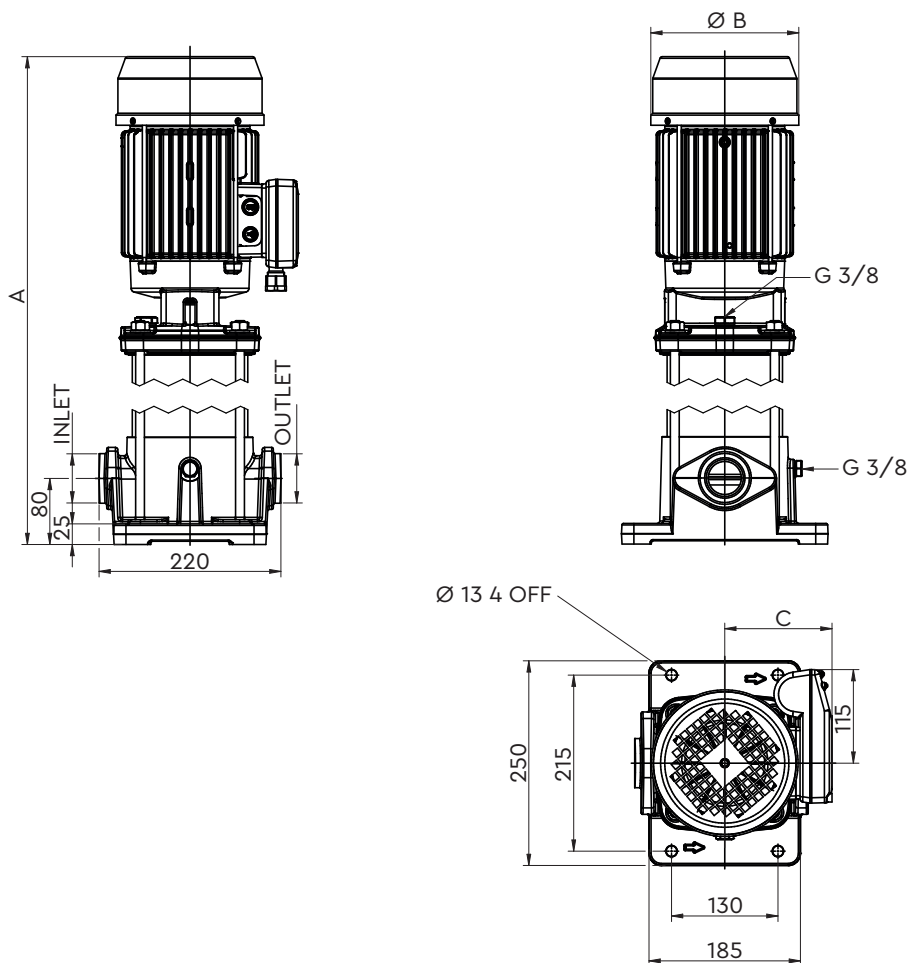
EXVM 0900 230 M 50	0902	0903	0904	0905	0906
Part No	47256	47257	47258	47259	47260
General					
Warranty	1 Year				
Approvals	WRAS Approved Product, CE				
Pump type	Centrifugal Multistage				
Features					
Impeller stages	2	3	4	5	6
Compact, close-coupled design	✓				
Heavy duty oversized motor shaft	✓				
Easy maintenance	✓				
Performance					
Flow rate – nominal (m ³ /h)	9				
Flow rate range (m ³ /h)	3.0 – 14.0				
Maximum head – closed valve (metres)	23.5	35.5	47.0	59.5	71.0
Head range (metres)	6.5–22.5	10.5–33.5	14.5–44.5	21–57	23.5–67.5
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)	0.91	1.35	1.74	2.51	2.89
Power – motor nominal P2 (kW)	0.75	1.1	1.5	2.2	2.2
Power – motor nominal P2 (hp)	1	1.5	2	3	3
Input current – 220–240v (A)	4.3	6.3	8.2	11.1	12.7
Efficiency (%)	72.2	77.0	79.9	76.7	76.7
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 1½"	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1½"
Connection – outlet	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1½"
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)	483.5	513.5	585.5	654.5	684.5
Width (mm)	227	227	234	241	241
Depth (mm)	250	250	250	250	250
Weight (Kg)	23.0	24.3	28.5	34.6	35.4

Stuart EXVM 0900 230-400 T 50 Technical Specifications

EXVM 0900 230-400 T 50	0902	0903	0904	0905	0906	0907	0908
Part No	47233	47234	47235	47236	47237	47238	47239
General							
Warranty	1 Year						
Approvals	WRAS Approved Product, CE						
Pump type	Centrifugal Multistage						
Features							
Impeller stages	2	3	4	5	6	7	8
Compact, close-coupled design	✓						
Heavy duty oversized motor shaft	✓						
Easy maintenance	✓						
Performance							
Flow rate - nominal (m ³ /h)	9						
Flow rate range (m ³ /h)	3.0 - 14.0						
Maximum head - closed valve (metres)	23.5	35.5	47.0	59.5	71.0	83.5	95.0
Head range (metres)	6.5-22.5	10.5-33.5	14.5-45.5	21-57	23.5-67.5	30-79.5	33-90.5
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)	0.87	1.24	1.70	2.20	2.61	3.08	3.49
Power - motor nominal P2 (kW)	0.75	1.10	1.50	2.20	2.20	3.00	3.00
Power - motor nominal P2 (hp)	1.0	1.5	2.0	3.0	3.0	4.0	4.0
Input current 220-240v (A)	2.7	3.8	5.5	7.1	8.2	9.5	10.4
Input current 380-415v (A)	1.6	2.2	3.2	4.1	4.7	5.50	6.0
Efficiency class	IE3	IE3	IE3	IE3	IE3	IE3	IE3
Efficiency 3 Phase 2/4 (%)	79.6	84.2	85.3	85.4	85.4	86.1	86.1
Efficiency 3 Phase 3/4 (%)	81.5	84.6	85.7	86.7	86.7	87.5	87.5
Efficiency 3 Phase 4/4 (%)	80.9	82.7	84.3	86.1	86.1	87.1	87.1
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 1½"	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1½"
Connection - outlet	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1½"
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)	483.5	513.5	585.5	654.5	684.5	752.5	782.5
Width (mm)	227	227	234	241	241	241	241
Depth (mm)	250	250	250	250	250	250	250
Weight (Kg)	22.8	24.1	28.3	34.5	35.3	39.2	40.0

Stuart EXVM 0900 230 M 50 Dimensions

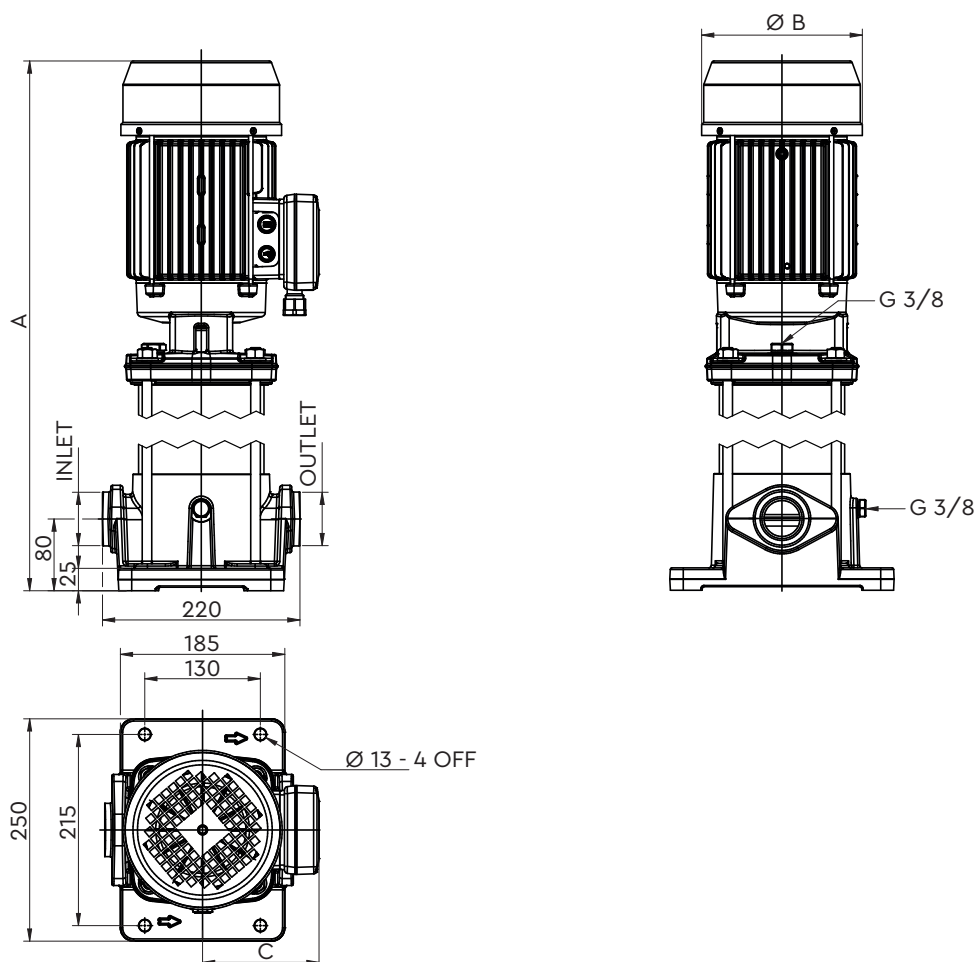
Dimensions: EXVM 0900 230 M 50



Part No	Description	Dimensions (mm)			Weight (Kg)	Inlet	Outlet
		A	Ø B	C			
47256	EXVM 0902 230 M 50	483.5	144	117	23.0	Rp 1½"	Rp 1½"
47257	EXVM 0903 230 M 50	513.5	144	117	24.3	Rp 1½"	Rp 1½"
47258	EXVM 0904 230 M 50	585.5	162	124	28.5	Rp 1½"	Rp 1½"
47259	EXVM 0905 230 M 50	654.5	179	131	34.6	Rp 1½"	Rp 1½"
47260	EXVM 0906 230 M 50	684.5	179	131	35.4	Rp 1½"	Rp 1½"

Stuart EXVM 0900 230-400 T 50 Dimensions

Dimensions: EXVM 0900 230-400 T 50



Part No	Description	Dimensions (mm)			Weight (Kg)	Inlet	Outlet
		A	Ø B	C			
47233	EXVM 0902 230-400 T 50	483.5	144	117	22.8	Rp 1½"	Rp 1½"
47234	EXVM 0903 230-400 T 50	513.5	144	117	24.1	Rp 1½"	Rp 1½"
47235	EXVM 0904 230-400 T 50	585.5	162	124	28.3	Rp 1½"	Rp 1½"
47236	EXVM 0905 230-400 T 50	654.5	179	131	34.5	Rp 1½"	Rp 1½"
47237	EXVM 0906 230-400 T 50	684.5	179	131	35.3	Rp 1½"	Rp 1½"
47238	EXVM 0907 230-400 T 50	752.5	179	131	39.2	Rp 1½"	Rp 1½"
47239	EXVM 0908 230-400 T 50	782.5	179	131	40.0	Rp 1½"	Rp 1½"

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

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