



PUMPMASTER®

AUSTRALIA
A NORMA Group brand

BOREHOLE PUMPS

4" PUMP ENDS, MOTORS & ACCESSORIES **ST SERIES**



Making Australia's Water Go Further

www.pumpmaster.com.au



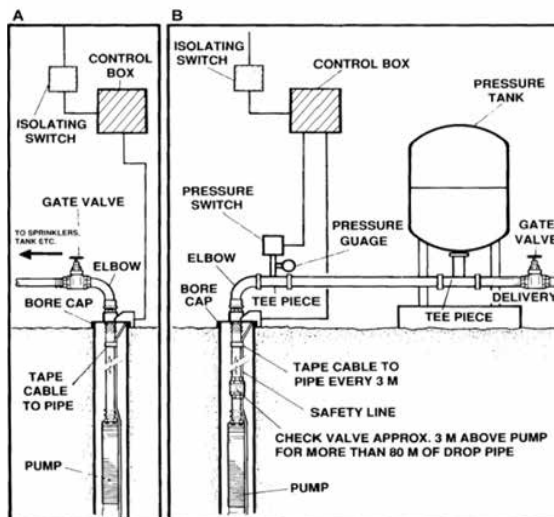
ST SERIES - 4" SUBMERSIBLE BORE PUMPS

The 'Subbiemate' ST Series are robust, high quality, corrosion-resistant 4" Submersible Bore Pumps, ideal for the residential home owner or commercial farmer wishing to transfer water from underground aquifers or very deep wells. With an extensive range of up to 63 models, Pumpmaster Bore Pumps deliver flows of up to 400l/min and heads up to 322m for motors 0.37kW to 7.5kW.

FEATURES

- Floating impeller design.
- Hexagonal shaft assembly with press fit coupling.
- In-built high-flow check valve.
- NEMA flange.
- Replaceable parts.
- Sand and grit handling - 50g/m 3hr.
- Corrosion-resistant materials.

TYPICAL SUBMERSIBLE INSTALLATION

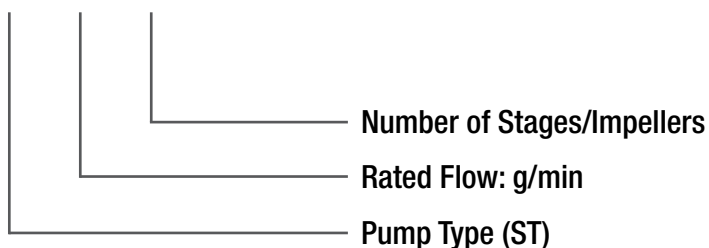


A - Pump connected for manual operation.

B - Pump installed as an automatic pressure system incorporating pressure tank and pressure switch.

PUMP END IDENTIFICATION CODE EXPLANATION

ST - 05 - 10



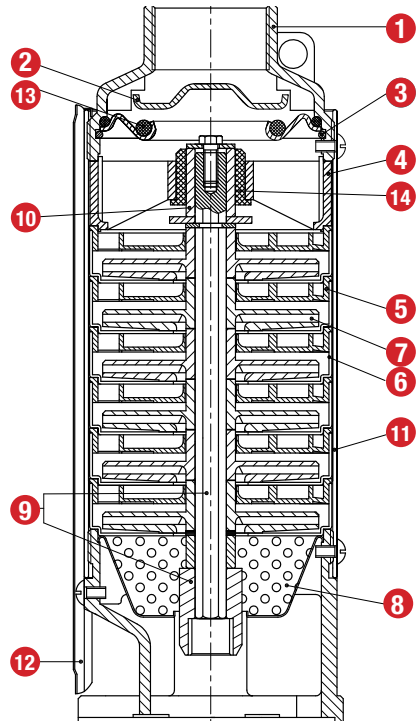
APPLICATIONS

- Domestic / residential.
- Agriculture.
- Pressure boosting.
- Water transfer.
- Irrigation.

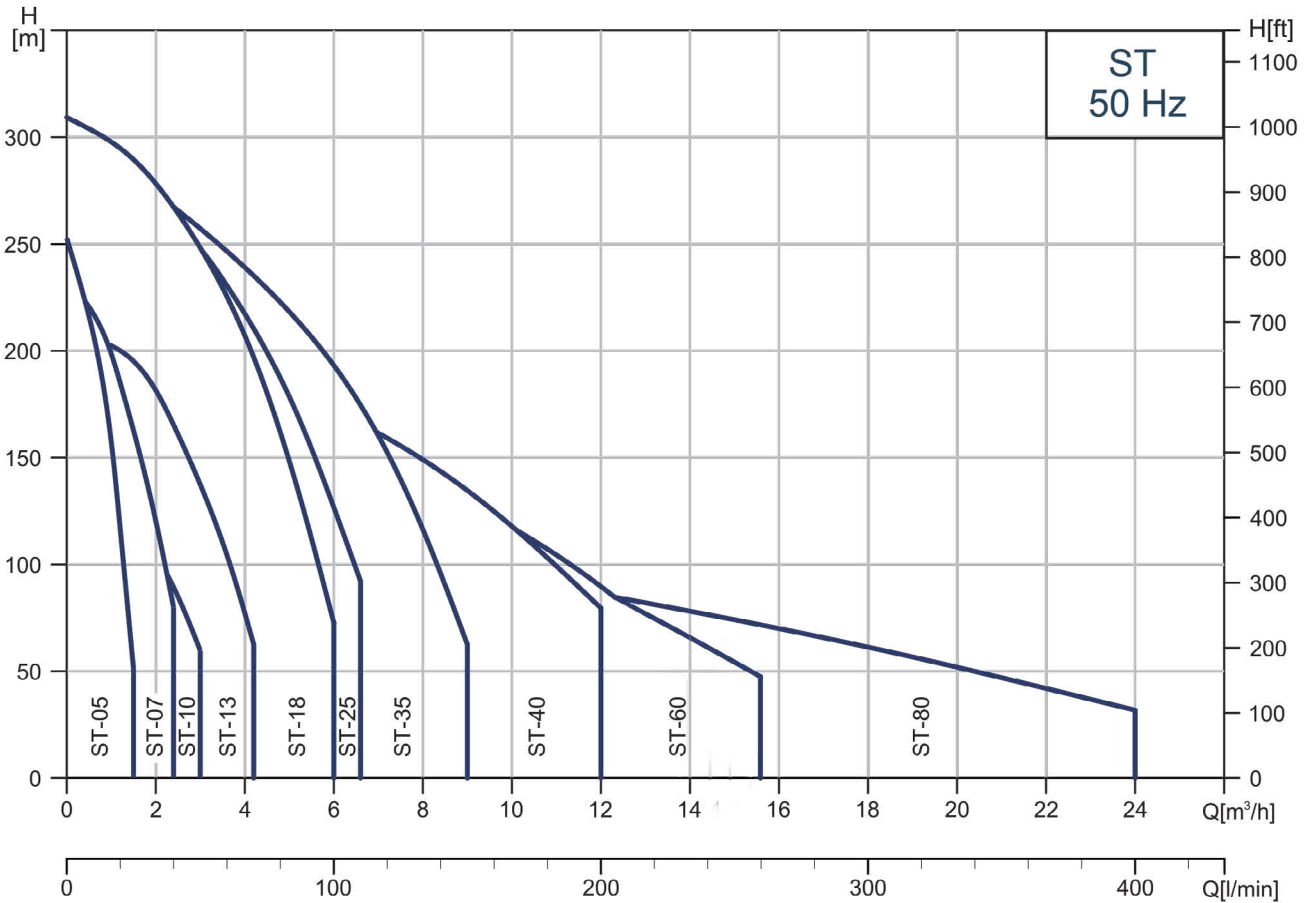


SUBBIEMATE MATERIALS

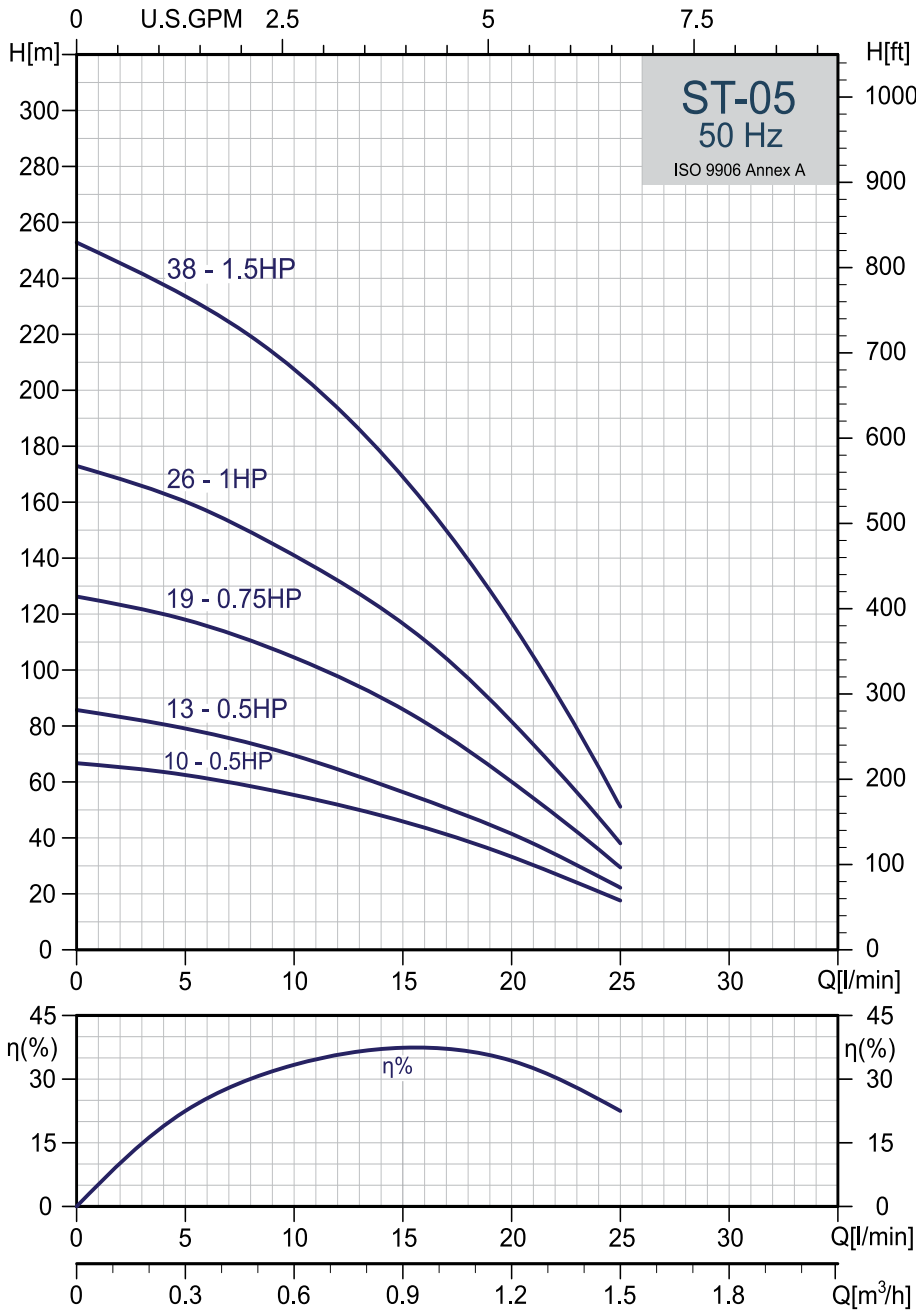
	PART NAME	MATERIAL
1	Discharge head	AISI 304 SS
2	Check valve cone	AISI 304 SS
3	Check valve retaining ring	AISI 304 SS
4	Bearing spider	Glass-filled Polycarbonate
5	Diffuser	Glass-filled Polycarbonate
6	Bowl	AISI 304 SS
7	Impeller	Noryl
8	Strainer	AISI 304 SS
9	Pump shaft coupling	AISI 304 SS
10	Shaft sleeve	AISI 304 SS or Noryl
11	Pump casing	AISI 304 SS
12	Cable guard	AISI 304 SS
13	O-ring	NBR
14	Bearing	Polyacetal



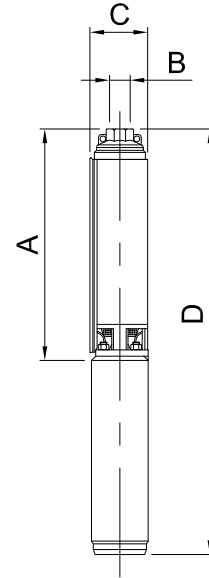
SUBBIEMATE PERFORMANCE



ST-05 (Nominal 15Lpm)



DIMENSIONS



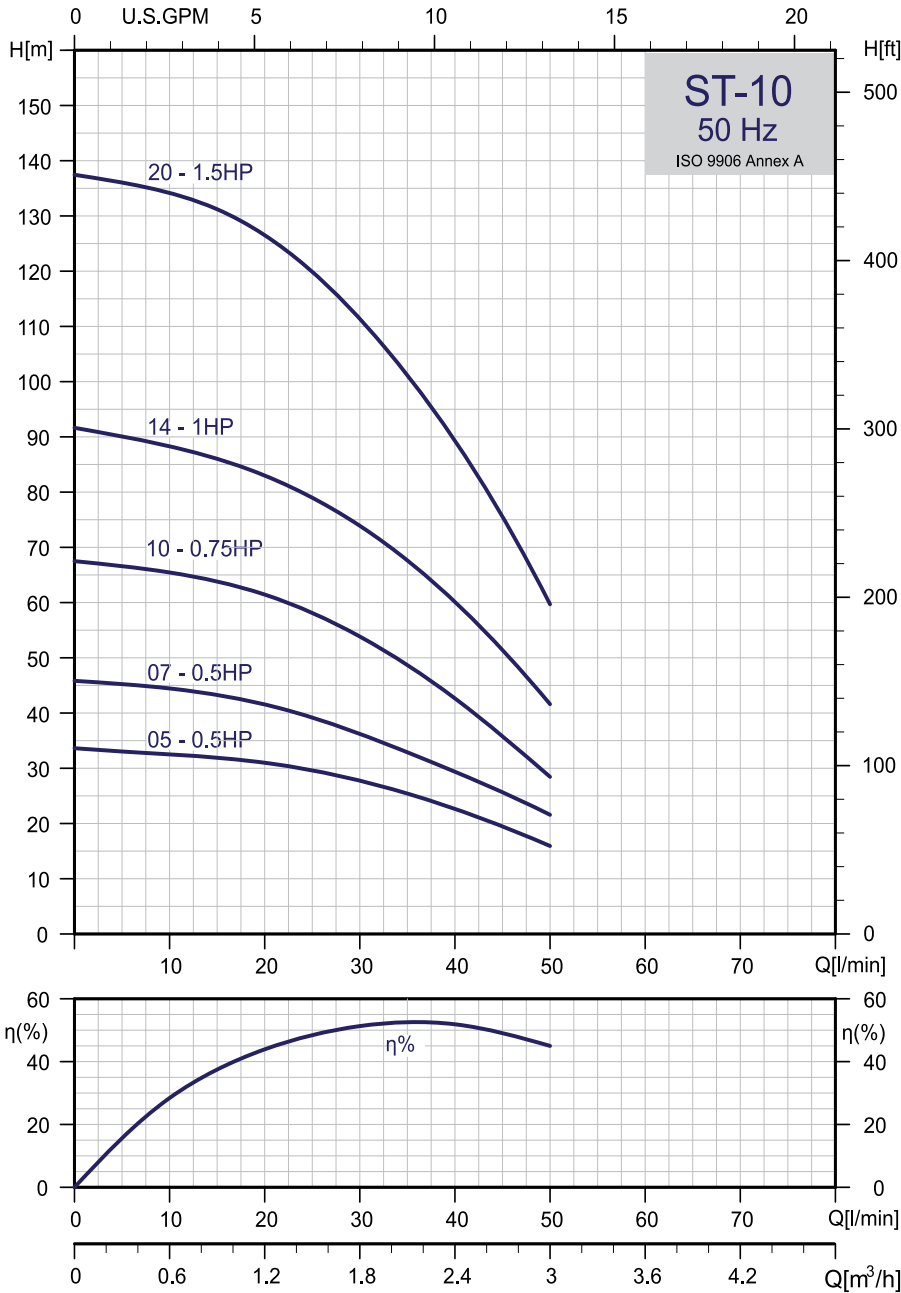
SINGLE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 0510	324		98	670
ST - 0513	377	RP /	98	723
ST - 0519	481	NPT	98	846
ST - 0526	642	1 1/4"	98	1022
ST - 0538	864		98	1307

THREE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 0510	324		98	654
ST - 0513	377	RP /	98	707
ST - 0519	481	NPT	98	827
ST - 0526	642	1 1/4"	98	1007
ST - 0538	864		98	1282

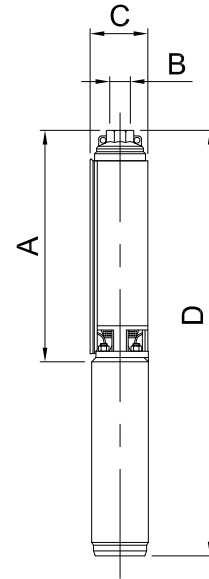
SELECTION CHART

PUMP TYPE	STAGES	MOTOR		Q = DELIVERY							PUMP	PUMP & MOTOR	
				Net Weight (kg)									
		kW	HP	l/min 0	5	10	15	20	25	30	Single Phase	Three Phase	
				m³/h 0	0.3	0.6	0.9	1.2	1.5	1.8			
H = TOTAL HEAD IN METRES													
ST - 0510	10	0.37	0.5	67	63	55	46	33	18	3.3	10.6	10.0	
ST - 0513	13	0.37	0.5	86	78	70	56	42	23	3.7	11.0	10.4	
ST - 0519	19	0.55	0.75	126	118	105	86	60	30	4.7	12.9	12.1	
ST - 0526	26	0.75	1	173	160	141	117	81	39	5.8	14.6	14.0	
ST - 0538	38	1.1	1.5	253	234	208	169	117	52	9.2	19.2	18.1	

ST-10 (Nominal 30Lpm)



DIMENSIONS



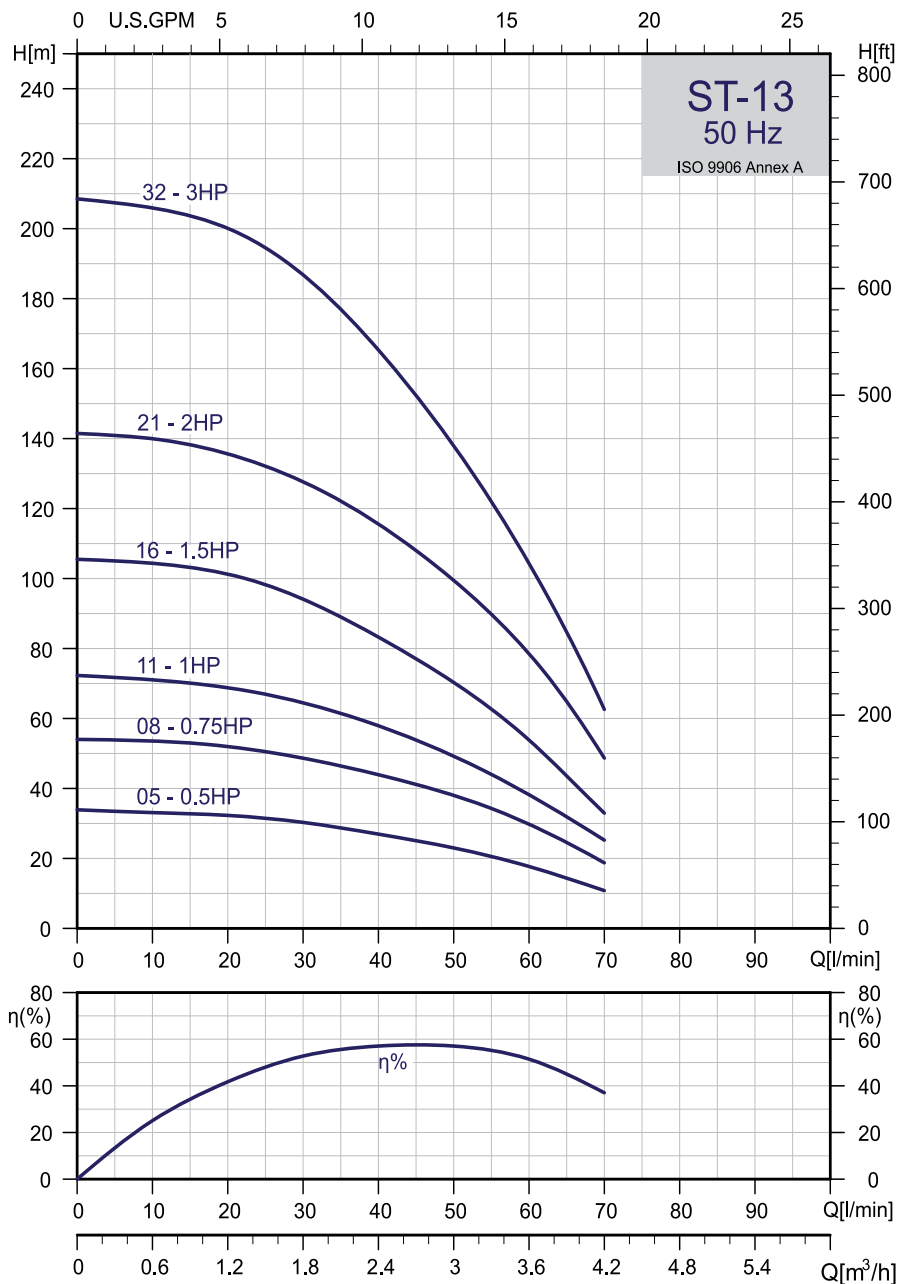
SINGLE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 1005	236	RP / NPT 1 1/4"	98	582
ST - 1007	271		98	617
ST - 1010	324		98	689
ST - 1014	394		98	774
ST - 1020	499		98	904

THREE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 1005	236	RP / NPT 1 1/4"	98	566
ST - 1007	271		98	601
ST - 1010	324		98	670
ST - 1014	394		98	759
ST - 1020	499		98	879

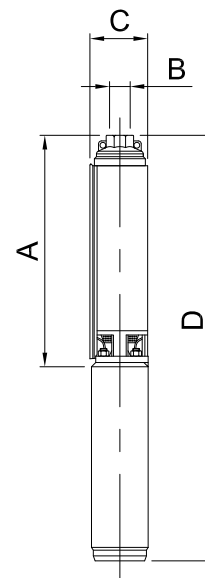
SELECTION CHART

PUMP TYPE	STAGES	MOTOR		Q = DELIVERY													PUMP	PUMP & MOTOR	
		kW	HP	l/min	10	15	20	25	30	35	40	45	50	60	Net Weight (kg)				
				m ³ /h	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.6	Single Phase	Three Phase			
		H = TOTAL HEAD IN METRES																	
ST - 1005	5	0.37	0.5	34		32	31	29	27	25	23	19	16		2.5	9.8	9.2		
ST - 1007	7	0.37	0.5	46		43	42	39	36	33	29	26	22		2.8	10.1	9.5		
ST - 1010	10	0.55	0.75	67		64	61	58	54	49	43	36	28		3.3	11.5	10.7		
ST - 1014	14	0.75	1.0	92		86	83	79	74	67	60	52	42		3.9	12.7	12.1		
ST - 1020	20	1.1	1.5	139		131	127	120	111	101	90	75	60		4.9	14.9	13.8		

ST-13 (Nominal 50Lpm)



DIMENSIONS



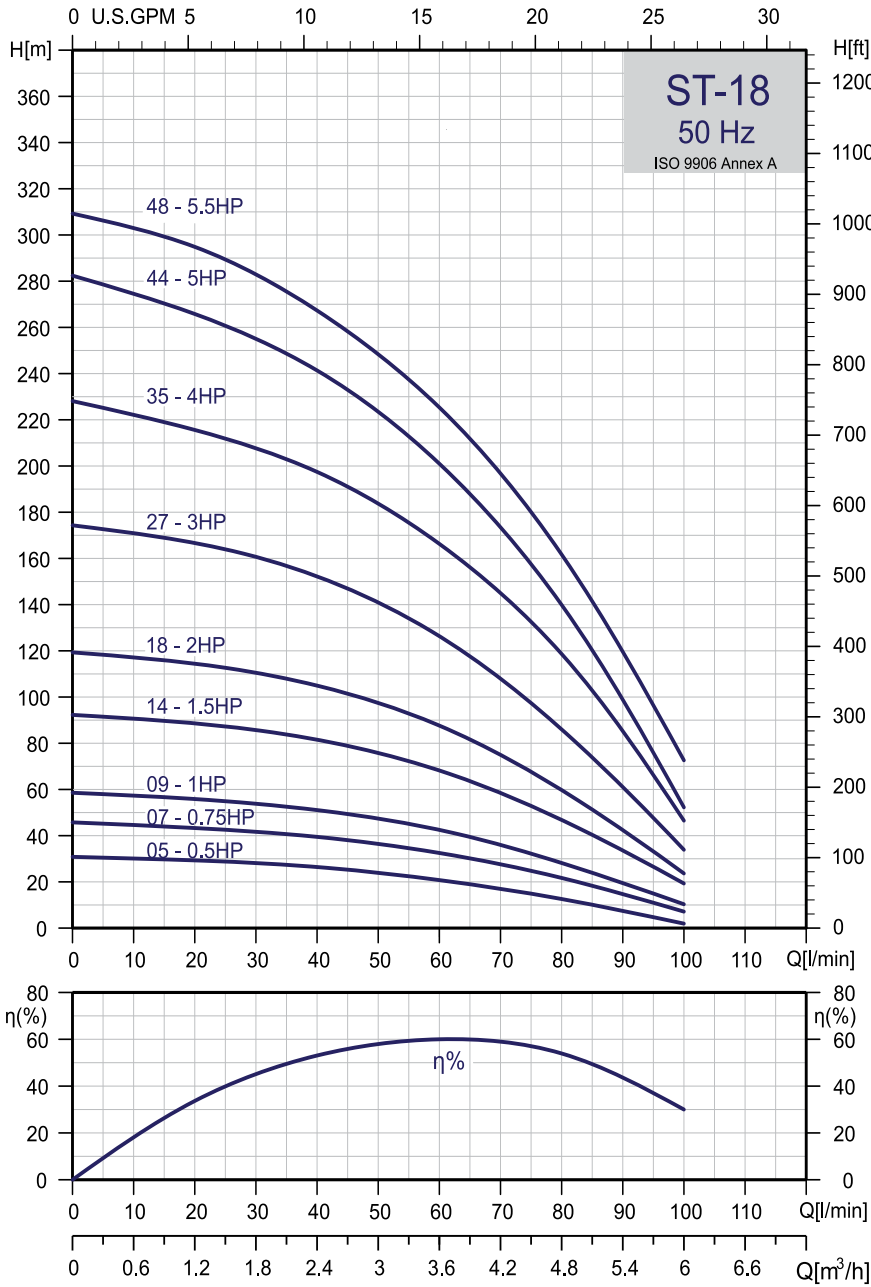
SINGLE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 1305	236	RP / NPT 1 1/4"	98	582
ST - 1308	289		98	654
ST - 1311	342		98	722
ST - 1316	430		98	835
ST - 1321	519		98	959
ST - 1332	787		98	1282

THREE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 1305	236	RP / NPT 1 1/4"	98	566
ST - 1308	289		98	635
ST - 1311	342		98	707
ST - 1316	430		98	810
ST - 1321	519		98	924
ST - 1332	787		98	1227

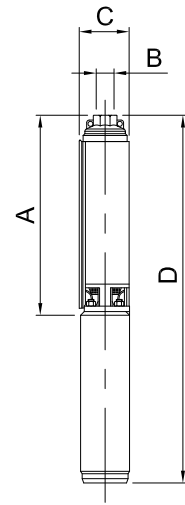
SELECTION CHART

PUMP TYPE	STAGES	MOTOR		Q = DELIVERY														PUMP	PUMP & MOTOR	
		kW	HP	l/min	15	20	25	30	35	40	45	50	60	70	80	Net Weight (kg)				
				m³/h	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.6	4.2	4.8	Single Phase	Three Phase			
		H = TOTAL HEAD IN METRES																		
ST - 1305	5	0.37	0.5	34		32	31	30	29	27	25	23	18	11		2.5	9.8	9.2		
ST - 1308	8	0.55	0.75	54		51	50	49	46	43	41	38	30	19		2.9	11.1	10.3		
ST - 1311	11	0.75	1.0	72		68	66	64	61	58	54	49	38	26		3.4	12.2	11.6		
ST - 1316	16	1.1	1.5	106		101	98	95	89	83	77	70	54	33		4.2	14.2	13.1		
ST - 1321	21	1.5	2.0	142		135	132	127	122	115	108	100	79	49		5.0	16.5	15.0		
ST - 1332	32	2.2	3.0	208		200	194	187	177	165	152	138	104	62		8.1	22.1	19.7		

ST-18 (Nominal 70Lpm)



DIMENSIONS



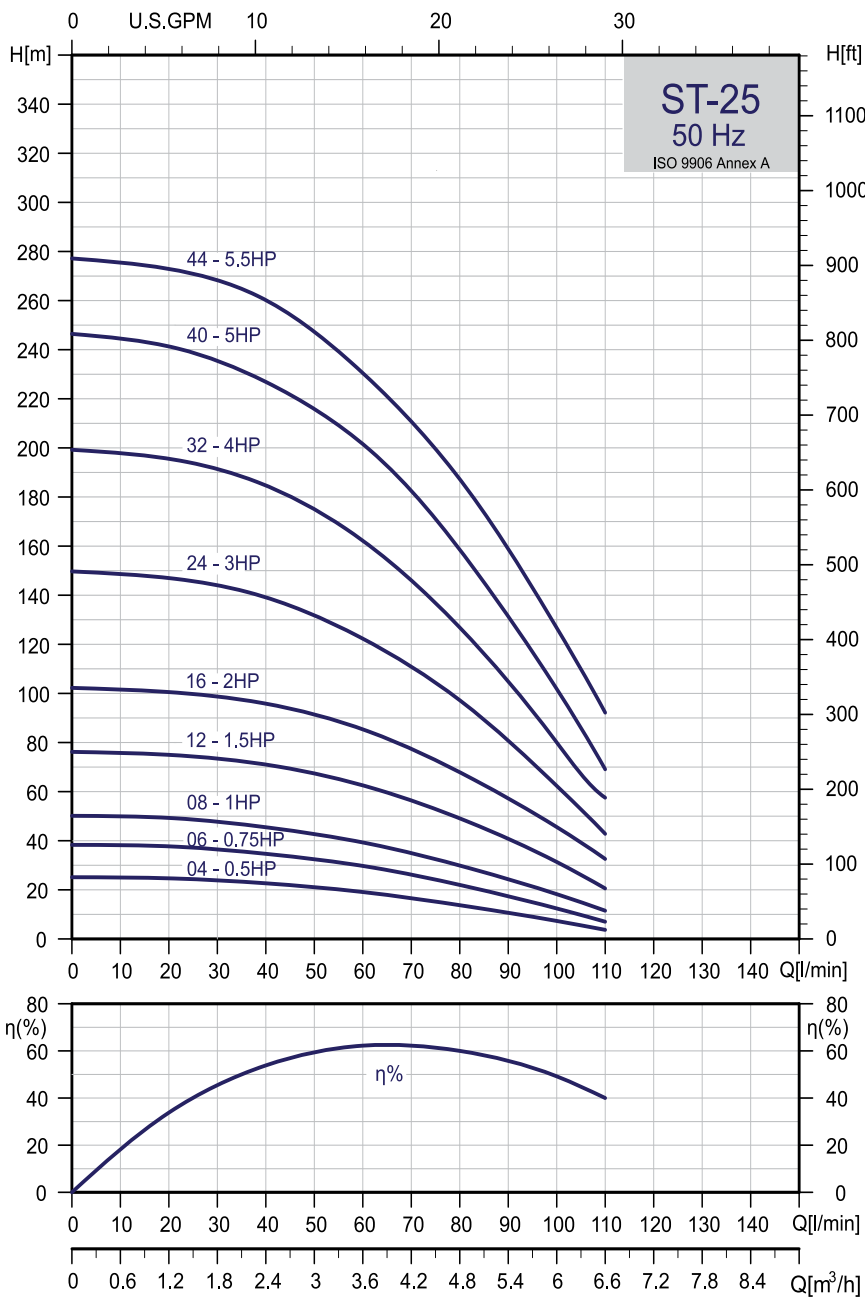
SINGLE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 1805	257	RP / NPT 1 1/4"	98	603
ST - 1807	301		98	666
ST - 1809	344		98	724
ST - 1814	452		98	857
ST - 1818	538		98	978
ST - 1827	805		98	1300
ST - 1835	972		98	1579
ST - 1844	1166		98	1849
ST - 1848	1291		98	1974

THREE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 1805	257	RP / NPT 1 1/4"	98	587
ST - 1807	301		98	647
ST - 1809	344		98	709
ST - 1814	452		98	832
ST - 1818	538		98	943
ST - 1827	805		98	1245
ST - 1835	972		98	1488
ST - 1844	1166		98	1773
ST - 1848	1291		98	1898

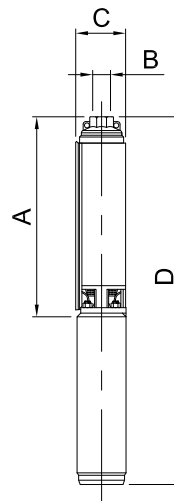
SELECTION CHART

PUMP TYPE	STAGES	MOTOR		Q = DELIVERY														PUMP	PUMP & MOTOR		
		KW	HP	l/min	20	25	30	35	40	45	50	60	70	80	90	100	120		Net Weight (kg)	Single Phase	Three Phase
				0	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.6	4.2	4.8	5.4	6.0	7.2				
		m³/h	0	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.6	4.2	4.8	5.4	6.0	7.2					
				H = TOTAL HEAD IN METRES																	
ST - 1805	5	0.37	0.5	33	29	28	27	26	25	24	21	18	13	8	3		2.7	10.0	9.4		
ST - 1807	7	0.55	0.75	46	43	42	41	39	38	36	33	28	22	15	7		3.0	11.2	10.4		
ST - 1809	9	0.75	1.0	59	55	54	52	51	49	47	43	37	28	20	10		3.3	12.1	11.5		
ST - 1814	14	1.1	1.5	93	87	86	83	81	79	76	68	58	47	33	20		4.1	14.1	13.0		
ST - 1818	18	1.5	2.0	120	113	111	108	105	102	98	88	75	60	42	25		4.7	16.2	14.7		
ST - 1827	27	2.2	3.0	175	164	161	157	152	147	141	127	109	87	61	35		7.2	21.2	18.8		
ST - 1835	35	3.0	4.0	228	212	208	203	197	191	184	166	145	119	85	46		8.9	28.3	24.1		
ST - 1844	44	3.7	5.0	282	261	255	249	241	233	223	201	173	140	99	52		10.3	33.0	29.8		
ST - 1848	48	4.0	5.5	309	289	283	276	267	258	248	225	197	162	120	73		10.9	33.7	30.4		

ST-25 (Nominal 85Lpm)



DIMENSIONS



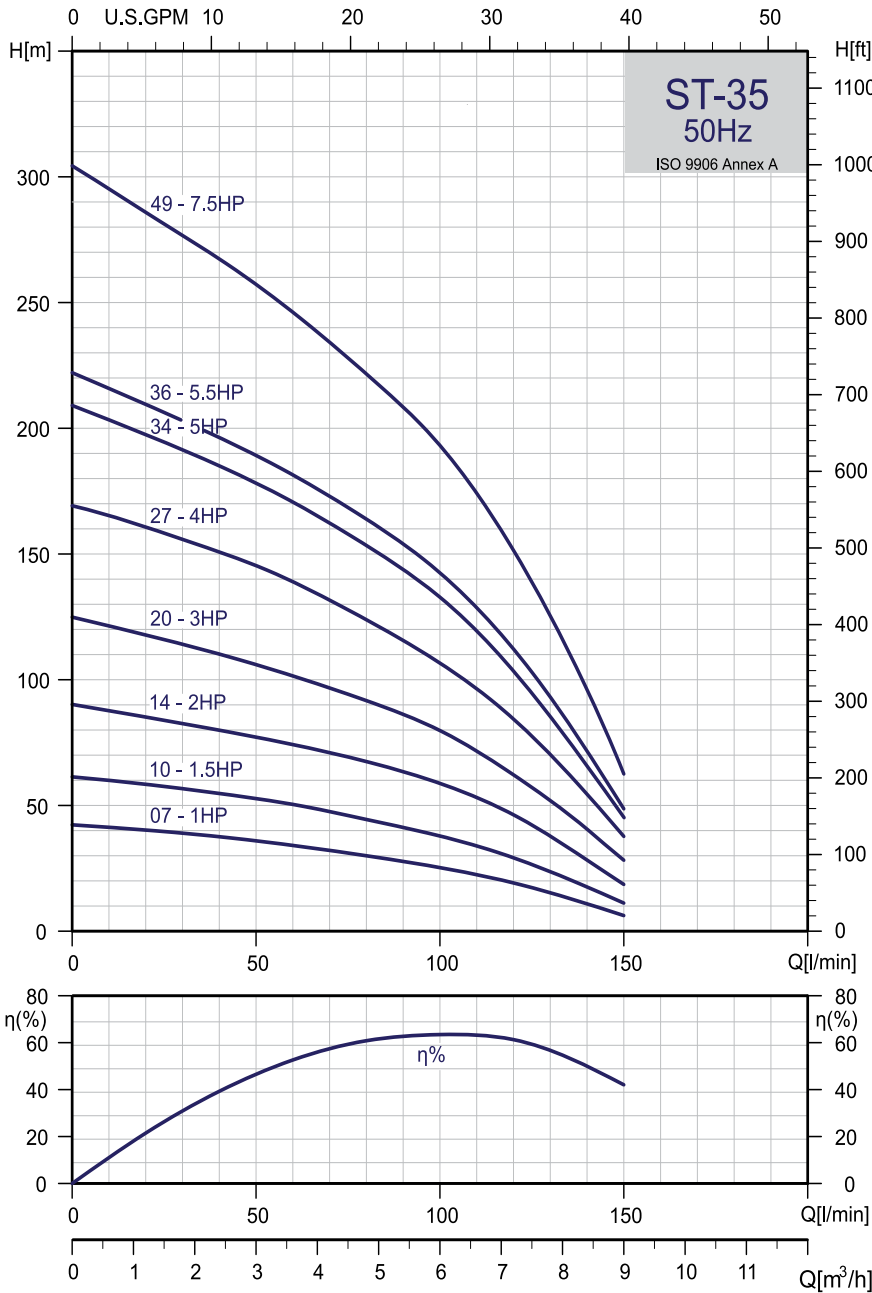
SINGLE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 2504	247	RP / NPT 1 1/2"	98	593
ST - 2506	296		98	661
ST - 2508	345		98	725
ST - 2512	433		98	838
ST - 2516	542		98	982
ST - 2524	815		98	1310
ST - 2532	1003		98	1610
ST - 2540	1198		98	1881
ST - 2544	1334		98	2071

THREE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 2504	247	RP / NPT 1 1/2"	98	577
ST - 2506	296		98	642
ST - 2508	345		98	710
ST - 2512	433		98	813
ST - 2516	542		98	947
ST - 2524	815		98	1255
ST - 2532	1003		98	1519
ST - 2540	1198		98	1805
ST - 2544	1334		98	1941

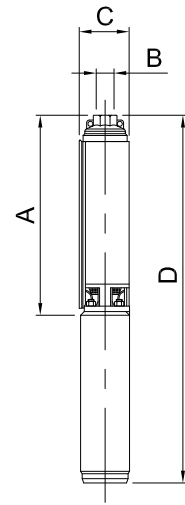
SELECTION CHART

PUMP TYPE	STAGES	MOTOR		Q = DELIVERY														PUMP	PUMP & MOTOR	
		kW	HP	m³/h															Net Weight (kg)	
				0	30	35	40	45	50	60	70	80	90	100	120	Single Phase	Three Phase			
		0	1.8	2.1	2.4	2.7	3.0	3.6	4.2	4.8	5.4	6.0	7.2							
				H = TOTAL HEAD IN METRES																
ST - 2504	4	0.37	0.5	26		23	22	22	21	19	17	14	11	7		2.4	9.7	9.1		
ST - 2506	6	0.55	0.75	38		36	35	33	32	30	26	22	18	12		2.9	11.1	10.3		
ST - 2508	8	0.75	1.0	51		47	46	44	43	39	35	30	24	18		3.3	12.1	11.5		
ST - 2512	12	1.1	1.5	77		72	71	69	68	63	57	49	41	31		4.1	14.1	13		
ST - 2516	16	1.5	2.0	102		98	96	94	92	86	77	68	57	46		5.0	16.5	15		
ST - 2524	24	2.2	3.0	151		142	139	136	132	122	111	97	80	62		7.6	21.6	19.2		
ST - 2532	32	3.0	4.0	203		188	185	180	175	162	146	127	105	80		9.7	29.1	24.9		
ST - 2540	40	3.7	5.0	253		232	227	222	216	202	182	159	131	102		11.4	34.1	30.9		
ST - 2544	44	4.0	5.5	278		265	260	254	247	230	210	187	159	127		12.2	35.0	31.7		

ST-35 (Nominal 110Lpm)



DIMENSIONS



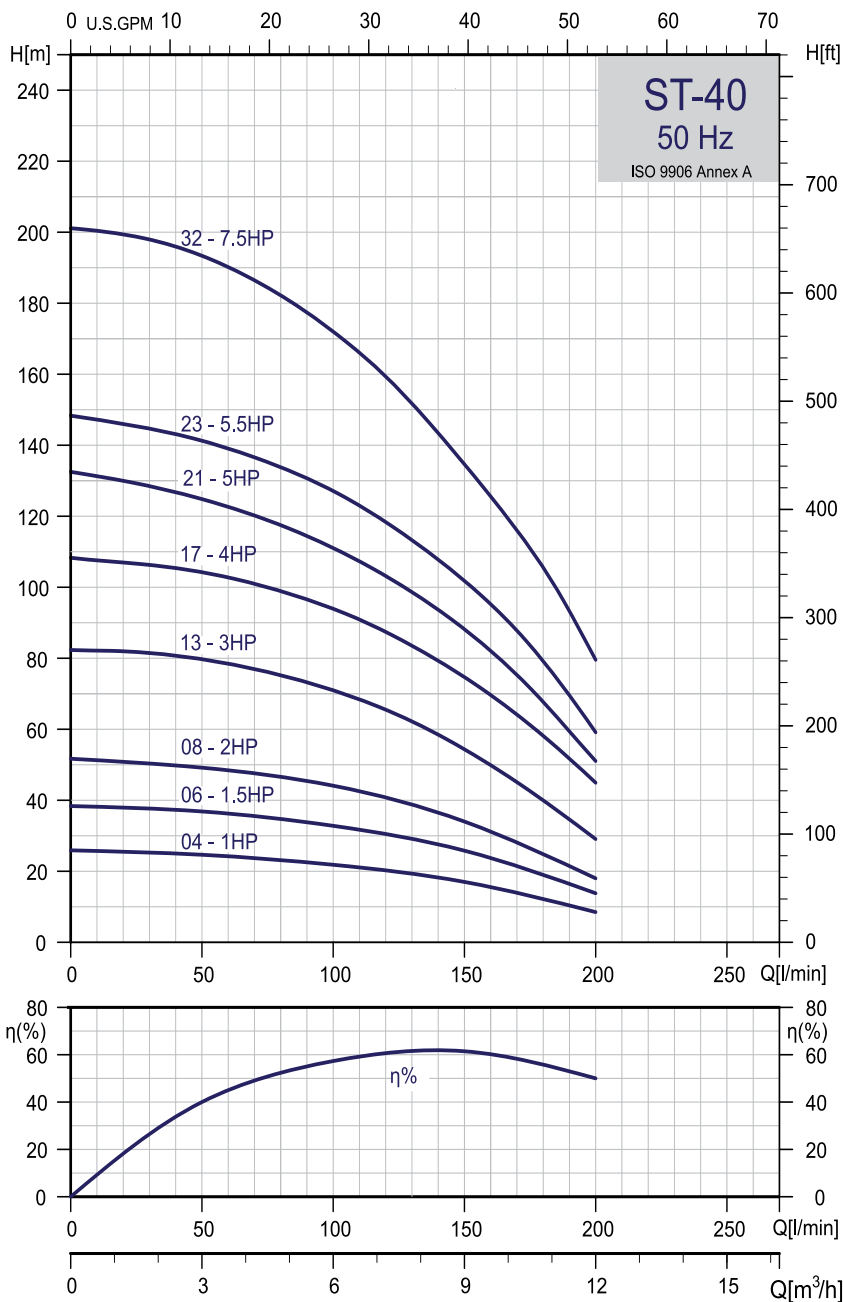
SINGLE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 3507	390	RP / NPT 2"	98	770
ST - 3510	483		98	888
ST - 3514	607		98	1012
ST - 3520	831		98	1326
ST - 3527	1086		98	1693
ST - 3534	1295		98	1978
ST - 3536	1356		98	2039
ST - 3549	1840		98	N/A

THREE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 3507	390	RP / NPT 2"	98	755
ST - 3510	483		98	863
ST - 3514	607		98	1012
ST - 3520	831		98	1271
ST - 3527	1086		98	1602
ST - 3534	1295		98	1902
ST - 3536	1356		98	1963
ST - 3549	1840		98	2523

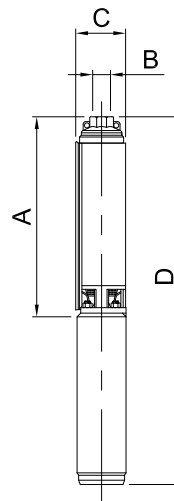
SELECTION CHART

PUMP TYPE	STAGES	MOTOR		Q = DELIVERY											PUMP	PUMP & MOTOR	
		kW	HP	l/min 0	45	50	60	70	80	90	100	120	140	160		Net Weight (kg)	
				m ³ /h 0	2.7	3.0	3.6	4.2	4.8	5.4	6.0	7.2	8.4	9.6		Single Phase	Three Phase
				H = TOTAL HEAD IN METRES													
ST - 3507	7	0.75	1.0	42		36	34	32	30	28	25	19	11		3.7	12.5	11.9
ST - 3510	10	1.1	1.5	62		53	51	48	45	41	38	29	18		4.6	14.6	13.5
ST - 3514	14	1.5	2.0	90		77	74	71	68	63	59	46	28		5.7	17.2	15.7
ST - 3520	20	2.2	3.0	125		107	102	97	92	86	80	62	40		7.5	21.5	19.1
ST - 3527	27	3.0	4.0	169		145	139	131	123	115	107	84	55		10.6	30.0	25.8
ST - 3534	34	3.7	5.0	208		178	170	162	153	143	132	103	66		12.6	35.3	32.1
ST - 3536	36	4	5.5	221		190	181	173	164	154	143	112	72		13.2	36.0	32.7
ST - 3549	49	5.5	7.5	302		257	246	234	222	209	193	151	96		16.9	N/A	40.0

ST-40 (Nominal 150Lpm)



DIMENSIONS



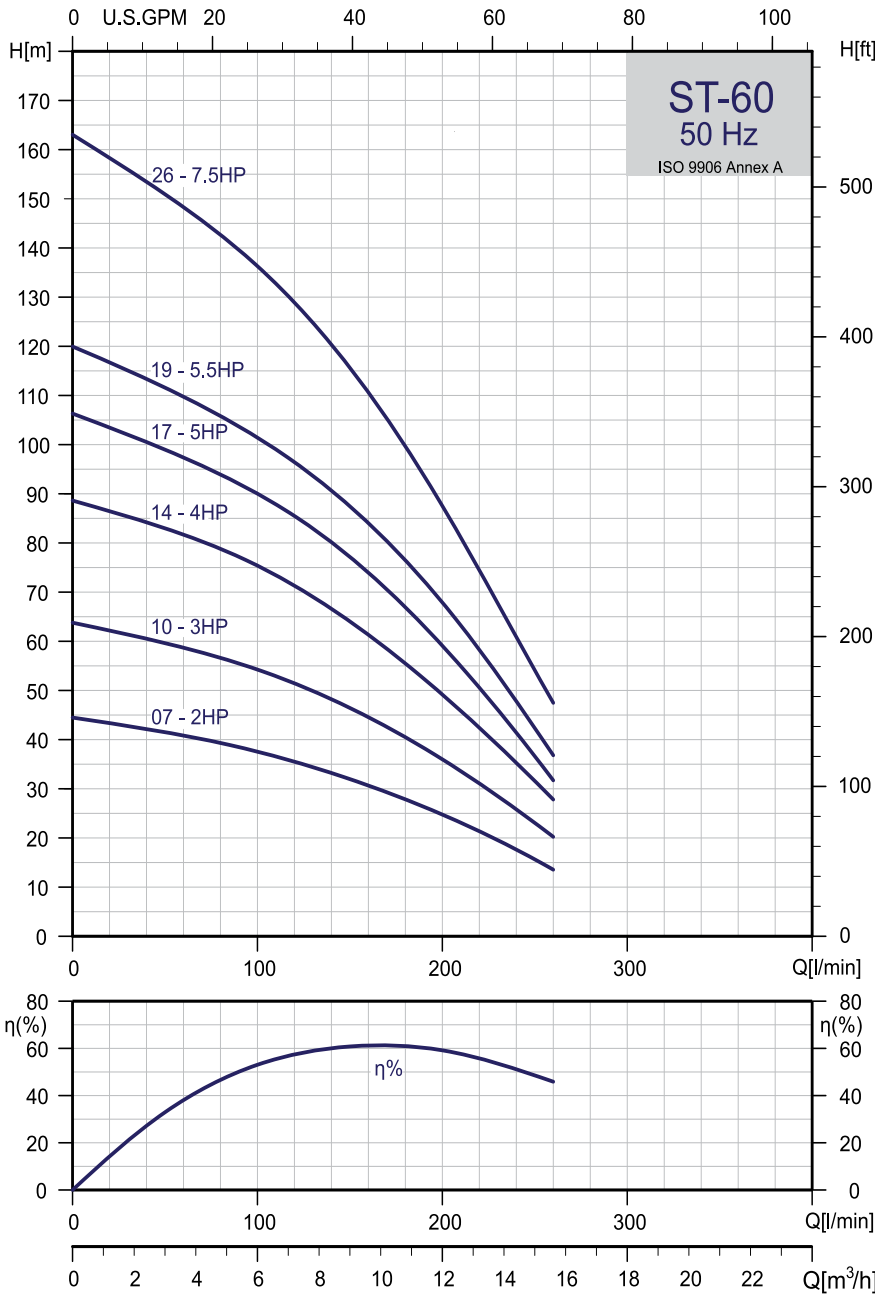
SINGLE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 4004	294	RP / NPT 2"	98	674
ST - 4006	356		98	761
ST - 4008	418		98	858
ST - 4013	573		98	1068
ST - 4017	697		98	1304
ST - 4021	859		98	1542
ST - 4023	959		98	1642
ST - 4032	1276		98	N/A

THREE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 4004	294	RP / NPT 2"	98	659
ST - 4006	356		98	736
ST - 4008	418		98	823
ST - 4013	573		98	1013
ST - 4017	697		98	1213
ST - 4021	859		98	1466
ST - 4023	959		98	1566
ST - 4032	1276		98	1595

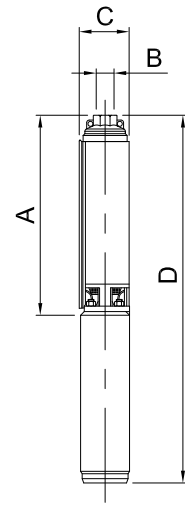
SELECTION CHART

PUMP TYPE	STAGES	MOTOR		Q = DELIVERY													PUMP & MOTOR		
		KW	HP	I/min	70	80	90	100	120	140	160	180	200	220	PUMP	Net Weight (kg)			
				m3/h	4.2	4.8	5.4	6.0	7.2	8.4	9.6	10.8	12	13.2		Single Phase	Three Phase		
		H = TOTAL HEAD IN METRES																	
ST - 4004	4	0.75	1.0	26		23	22	21	20	18	16	12	9		2.8	11.6	11		
ST - 4006	6	1.1	1.5	38		35	34	33	31	28	24	19	14		3.4	13.4	12.3		
ST - 4008	8	1.5	2.0	52		47	45	44	41	37	31	25	18		4.0	15.5	14.0		
ST - 4013	13	2.2	3.0	82		75	73	71	66	59	50	40	30		5.5	19.5	17.1		
ST - 4017	17	3.0	4.0	108		98	96	94	87	79	70	58	46		6.6	26.0	21.8		
ST - 4021	21	3.7	5.0	132		117	114	111	103	93	82	68	52		7.8	30.5	27.3		
ST - 4023	23	4.0	5.5	148		134	131	127	118	108	95	79	60		9.4	32.2	28.9		
ST - 4032	32	5.5	7.5	202		182	178	172	160	143	125	105	80		12.0	N/A	35.1		

ST-60 (Nominal 180Lpm)



DIMENSIONS



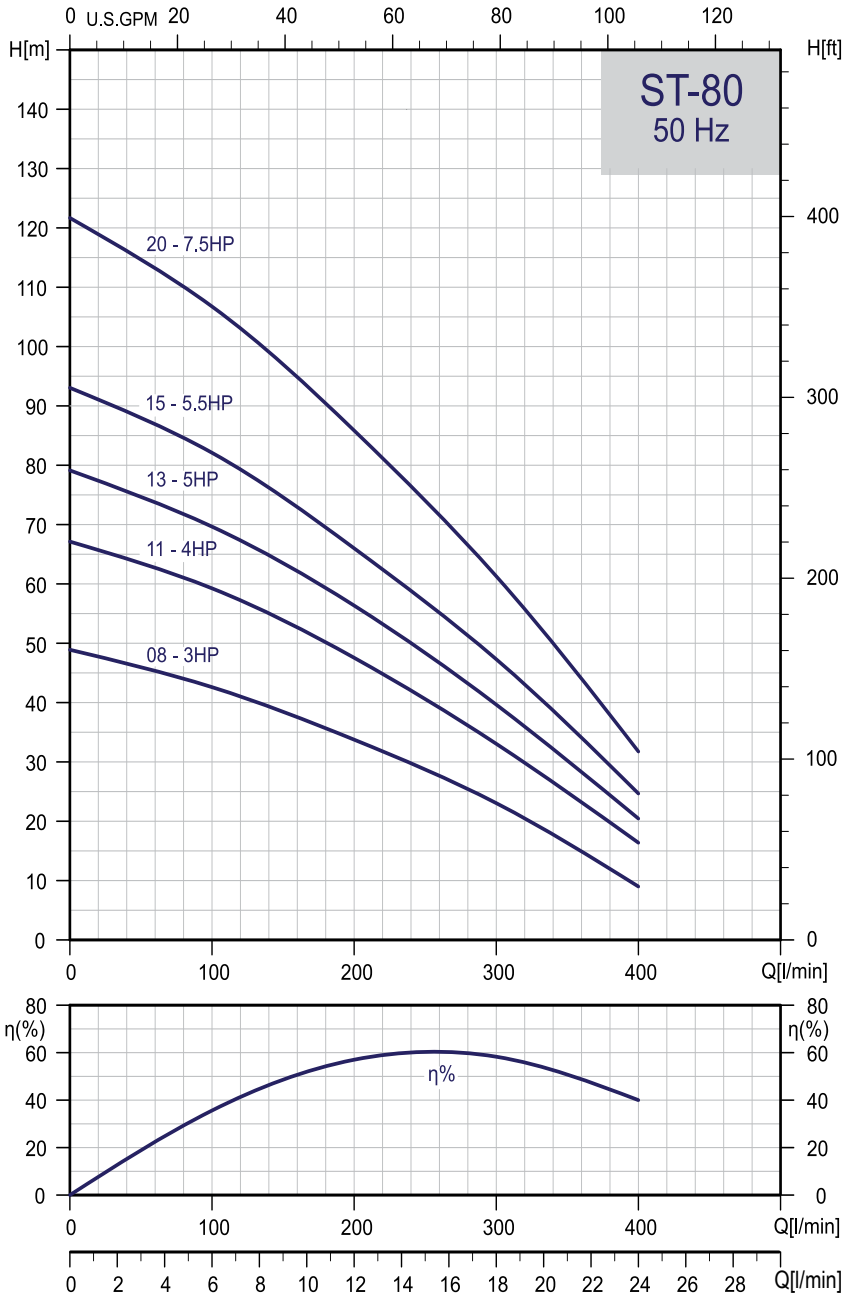
SINGLE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 6007	534	RP / NPT 2"	98	974
ST - 6010	690		98	1185
ST - 6014	989		98	1596
ST - 6017	1092		98	1775
ST - 6019	1233		98	1916
ST - 6026	1597		98	N/A

THREE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 6007	534	RP / NPT 2"	98	939
ST - 6010	690		98	1130
ST - 6014	989		98	1505
ST - 6017	1092		98	1699
ST - 6019	1233		98	1840
ST - 6026	1597		98	2280

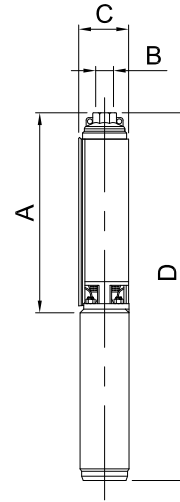
SELECTION CHART

PUMP TYPE	STAGES	MOTOR		Q = DELIVERY												PUMP	PUMP & MOTOR	
		kW	HP	l/min 0	90	100	120	140	160	180	200	220	240	260	280		Net Weight (kg)	
				m³/h 0	5.4	6.0	7.2	8.4	9.6	10.8	12	13.2	14.4	15.6	16.8		Single Phase	Three Phase
				H = TOTAL HEAD IN METRES														
ST - 6007	7	1.5	2.0	45		37	36	33	31	28	25	22	18	14		5.3	16.8	15.3
ST - 6010	10	2.2	3.0	64		54	52	48	44	41	36	32	26	20		6.7	20.7	18.3
ST - 6014	14	3.0	4.0	89		76	72	67	62	56	49	43	35	28		8.6	28.0	23.8
ST - 6017	17	3.7	5.0	107		90	86	80	74	67	59	51	42	32		10.1	32.8	29.6
ST - 6019	19	4.0	5.5	120		102	97	91	89	76	68	58	48	37		12.0	34.8	31.5
ST - 6026	26	5.5	7.5	163		136	129	120	111	100	87	75	61	48		15.3	N/A	38.4

ST-80 (Nominal 250Lpm)



DIMENSIONS



SINGLE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 8008	676		98	1171
ST - 8011	880	RP /	98	1487
ST - 8013	1013	NPT	98	1696
ST - 8015	1149	2"	98	1832
ST - 8020	1489		98	N/A

THREE PHASE MOTOR				
PUMP TYPE	DIMENSIONS (mm)			
	A	B	C	D
ST - 8008	676		98	1116
ST - 8011	880	RP /	98	1396
ST - 8013	1013	NPT	98	1620
ST - 8015	1149	2"	98	1756
ST - 8020	1489		98	2172

SELECTION CHART

PUMP TYPE	STAGES	MOTOR		Q = DELIVERY																	PUMP	PUMP & MOTOR	
		kW	HP	l/min	0	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400		450	Net Weight (kg)
				m ³ /h	0	7.2	8.4	9.6	10.8	12	13.2	14.4	15.6	16.8	18	19.2	20.4	21.6	22.8	24	27	Single Phase	Three Phase
		H = TOTAL HEAD IN METRES																					
ST - 8008	8	2.2	3.0	49		39	38	36	34	32	30	28	25	23	20	18	15	12	9		6.3	20.3	17.9
ST - 8011	11	3.0	4.0	67		55	53	50	48	45	42	39	36	33	30	27	23	20	16		8.1	27.3	23.3
ST - 8013	13	3.7	5.0	79		65	62	59	56	53	50	47	43	40	36	32	28	24	20		9.3	32.0	28.8
ST - 8015	15	4.0	5.5	93		76	73	70	66	62	59	55	51	47	43	39	34	29	25		10.5	33.3	30.0
ST - 8020	20	5.5	7.5	122		99	95	90	86	81	76	72	67	61	56	50	44	38	32		13.5	N/A	36.6



4" SUBMERSIBLE BORE MOTORS

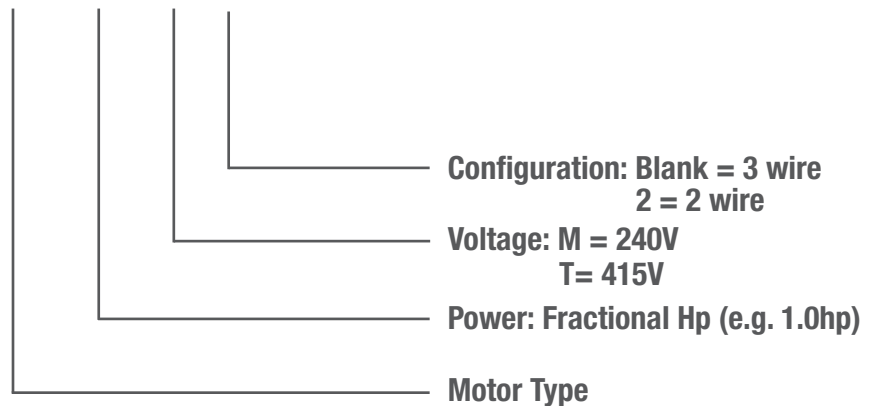
The **'MotorMate'** are a robust, high quality 4" non-toxic oil-filled motor with wide operating parameters. Available in 240V or 415V and 2wire or 3wire configurations, these motors have 4" Nema standard coupling dimensions which make it easy to assemble to all 4" borehole pumps regardless of manufacture or brand.

FEATURES

- Immersion depth: up to 200m.
- Removable motor leads.
- High start torque - 240V.
- High-grade stainless steel construction.
- Axial thrust from 2000N to 5000N.
- Up to 40 starts per hour.
- Corrosion-resistant materials.
- Cable materials CE approved (potable water applications).

MOTOR IDENTIFICATION CODE EXPLANATION

SR4 - 100 - M - 2



GENERAL SPECIFICATIONS

Mounting flange	4" NEMA standard
Degree of protection	IP 68
Insulation class	F
Single phase motors	0.37 kW up to 4.0 kW
Three phase motors	0.75 kW up to 7.5 kW
Standard voltages	1 - 230V (50Hz)
	3 - 400V (50Hz)
Cable length	1.7m 0.37 kW up to 1.5 kW
	2.5m 2.2 kW up to 7.5 kW

OPERATING PARAMETERS

Max. voltage variation	+ 10% / - 10%
Max. starts / hr	40
Max. water temperature	35 degrees C
Flow rate	0.2m/sec
Axial thrust	2000N from 0.37 kW up to 1.5 kW
	3000N 2.2 kW
	5000N from 3 kW up to 7.5 kW
Max. immersion depth	200m

TWO-WIRE MOTORS, 50Hz - PSC

MODEL NO.	P2		VOLTAGE	RUN	START	EFFICIENCY	PF	RPM	THRUST LOAD	CAPACITOR	CABLE	
	kW	HP	V	A	A		COS		N	uF	mm2	m
SR4-050M2	0.37	0.5	230	3.7	12	0.53	0.95	2840	2000	16	1.5	1.7
SR4-075M2	0.55	0.75	230	5	15	0.62	0.90	2840	2000	20	1.5	1.7
SR4-100M2	0.75	1	230	6.2	20	0.64	0.90	2840	2000	25	1.5	1.7
SR4-150M2	1.1	1.5	230	8.1	32	0.68	0.90	2850	2000	35	1.5	1.7
SR4-200M2	1.5	2	230	10.4	38	0.73	0.90	2850	2000	40	1.5	1.7

THREE-WIRE MOTORS, 50Hz - PSC

MODEL NO.	P2		VOLTAGE	RUN	START	EFFICIENCY	PF	RPM	THRUST LOAD	CAPACITOR	CABLE	
	kW	HP	V	A	A		COS		N	uF	mm2	m
SR4-100M	0.75	1	230	6.2	20	0.64	0.95	2840	2000	25	1.5	1.7
SR4-150M	1.1	1.5	230	8.1	32	0.68	0.90	2850	2000	35	1.5	1.7
SR4-200M	1.5	2	230	10.4	38	0.73	0.90	2850	2000	40	1.5	1.7
SR4-300M	2.2	3	230	15	46	0.72	0.88	2820	2000	55	1.5	2.5
SR4-550M	4.0	5.5	230	-	-	-	-	-	2000	-	-	-

THREE-PHASE MOTORS, 50Hz - DOL

MODEL NO.	P2		VOLTAGE	RUN	START	EFFICIENCY	PF	RPM	THRUST LOAD	CABLE	
	kW	HP	V	A	A		COS		N	mm2	m
SR4-100T	0.75	1	400	2.3	8.9	0.66	0.78	2830	2000	1.5	1.7
SR4-150T	1.1	1.5	400	3.1	12	0.70	0.84	2840	2000	1.5	1.7
SR4-200T	1.5	2	400	4	14	0.72	0.84	2840	2000	1.5	1.7
SR4-300T	2.2	3	400	5.6	22	0.71	0.83	2840	3000	1.5	2.5
SR4-400T	3	4	400	7.4	43	0.73	0.80	2850	5000	1.5	2.5
SR4-550T	4	5.5	400	9.8	49	0.75	0.80	2855	5000	1.5	2.5
SR4-750T	5.5	7.5	400	13.7	65	0.75	0.80	2850	5000	1.5	2.5
SR4-1000T	7.5	10	400	18.7	87	0.75	0.80	2850	5000	1.5	2.5

CONTROL BOXES - 3 WIRE, 50Hz - PSC



MODEL NO.	kW	HP	SPECIFICATION - ALL IN METAL BOX
2BC03	0.75	1.0	Single capacitor - Power light - o/load
2BC04	1.1	1.5	Single capacitor - Power light - o/load
1BC04	1.1	1.5	Dual capacitors - Power light - o/load
1BC06	1.5	2.0	Dual capacitors - Power light - o/load
1BC07	2.2	3.0	Dual capacitors - Power light - o/load
1BC09	4.0	5.5	Dual capacitors - Power light - o/load

MOTOR CABLE SIZES

SINGLE-PHASE MAXIMUM LENGTH OF COPPER CABLE (metres)

MOTOR RATING			METRIC CABLE SIZE - 70C INSULATION - COPPER WIRE - SQUARE MILLIMETRES										
Volts	kW	HP	1.5	2.5	4	6	10	16	25	35	50	70	95
220 Volt 50Hz.	.25	1/3	190	320	510	770	1260	1970	2960	3990	5340	6970	8750
	.37	1/2	120	210	330	500	820	1290	1950	2640	3560	4680	5910
	.55	3/4	80	140	230	350	580	900	1360	1830	2450	3210	4020
	.75	1.0	60	110	180	270	440	690	1050	1430	1930	2550	3230
	1.1	1.5	40	70	120	190	310	490	750	1020	1390	1860	2380
	1.5	2.0	30	60	100	150	250	400	620	850	1180	1590	2070
	2.2	3.0	20	40	60	100	170	270	410	560	770	1030	1320
	3.7	5.0	0	0	40	60	110	170	260	370	520	710	930

1 Metre = 3.3 feet.

MOTOR RESISTANCE CHART

4" SUBMERSIBLE MOTORS

FREQUENCY	PHASE	VOLTAGE	CODE	HP	kW	RESISTANCE	
						MAIN	AUX
50HZ	1	230V	SR4 - 050	0.5	0.37	8.28	16.53
			SR4 - 075	0.75	0.55	5.47	12.59
			SR4 - 100	1	0.75	4.41	9.55
			SR4 - 150	1.5	1.1	3.58	7.47
			SR4 - 200	2	1.5	2.23	5.94
			SR4 - 300M	3	2.2	1.53	4.16
			SR4 - 500M	5.5	4	0.91	2.03
	3	415V	SR4 - 100T	1	0.75	27.33	
			SR4 - 150T	1.5	1.1	16.4	
			SR4 - 200T	2	1.5	12.85	
			SR4 - 300T	3	2.2	8.53	
			SR4 - 400T	4	3	6.31	
			SR4 - 500T	5.5	4	3.97	
			SR4 - 750T	7.5	5.5	2.83	
		SR4 - 1000T	10	7.5	2.13		



PILOT - PUMP PROTECTION

PILOT is an electronic device for the control and protection of any single phase or three phase motor, and provides protection against:

- Overcurrent, phase loss and an excessive number of starts

The backlit LCD displays the running current and PILOT stops the pump if the maximum value set by the user is exceeded. The maximum number of pump starts is also user selectable and PILOT will stop the pump operation if this value is exceeded.

- Dry running

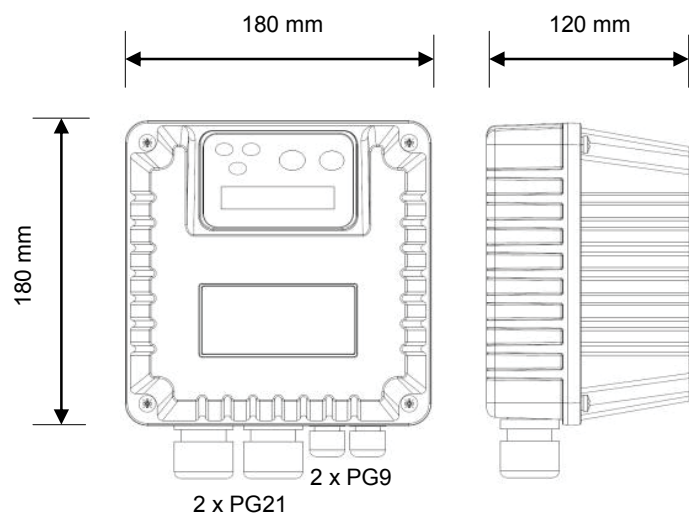
PILOT provides a display of the power factor value (P.F. or $\cos\phi$) and allows the user to set a minimum threshold value (%) for normal operation. PILOT will stop the pump below this value to protect against dry running.

GENERAL SPECIFICATIONS

MODEL NO.	VOLTAGE [+/- 10%] 50/60 Hz	MAXIMUM CURRENT	WEIGHT [kg]
PILOT 118	1 x 230 VAC	18 A	2
PILOT 325	3 x 400 VAC	25 A	2.4

FEATURES

- Max. environment temp.: 40C.
- Max. altitude: 2000m.
- IP55 (NEMA 4) Protection.
- Allows up to 5 auto restart attempts after an alarm.
- Number of starts, running hours & alarms stored in memory.
- Constructed entirely of aluminium - extremely solid & easily cooled.





AVIATOR - PILOT BOOSTER BOARD

The **AVIATOR** electronic board increases the starting torque of the motor in a simple and economic way to ensure the starting of the motor in any situation.

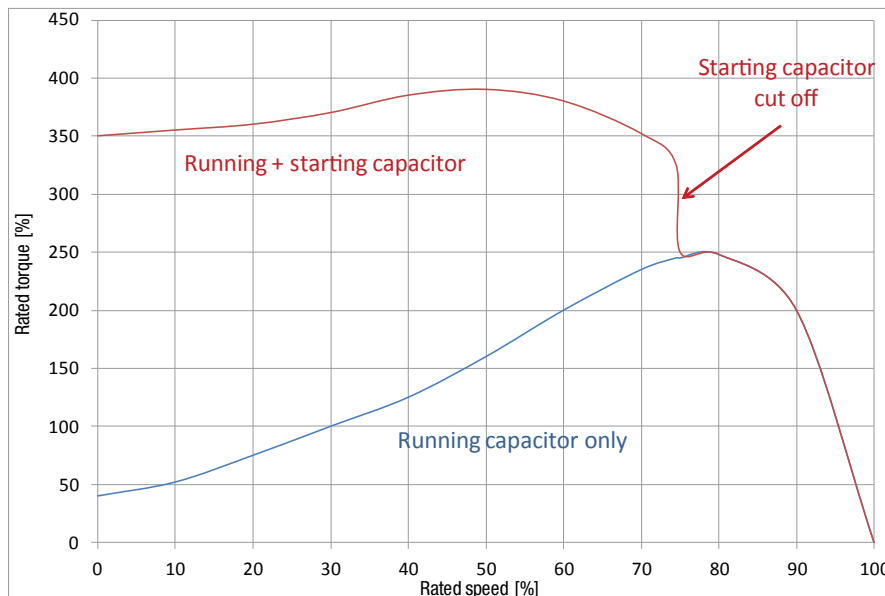
AVIATOR, available as an accessory for the PILOT 118, is equipped with specific contacts allowing it to be fitted directly onto the power board of the PILOT 118. The starting capacitor provided by the AVIATOR board is connected in parallel to the running capacitor but only in the starting phase; when the motor is running the AVIATOR will disconnect the starting capacitor. AVIATOR in conjunction with the PILOT 118 can operate any single phase motor from any major manufacturer, all that is required is to select the right value of starting capacitor for the size of motor.

GENERAL SPECIFICATIONS

MODEL NO.	TYPICAL MOTOR POWER	STARTING CAPACITOR
	kW	uF
AVIATOR 2	0.75 - 1.1	108 - 130
AVIATOR 3	1.5 - 2.2	189 - 227



PERFORMANCE





BORE CAPS

- Heavy duty 8mm steel plate.
- Powder coated.

PART NUMBER	ITEM NUMBER	DESCRIPTION
CABCAPTH	08387000019	32mm Bore Cap - threaded (200 x 8mm)
CABCAPTH40	08387000020	40mm Bore Cap - threaded (200 x 8mm)
CABCAPTH50	08387000021	50mm Bore Cap - threaded (200 x 8mm)
CABCAPTH3225	08387000091	32 x 25mm Bore Cap to suit injector pump



STAINLESS STEEL SAFETY CABLE

- AISI 304 grade stainless steel.
- 7 ply - very flexible.
- Sold per roll.

PART NUMBER	ITEM NUMBER	DESCRIPTION
SS-04.0-305	08387000009	Stainless Steel Cable 4.0mm x 305m, AISI 304, 7x7 ply
CACABCLAMP4	08387000014	4mm Stainless Steel Cable Clamps, AISI 316, 4 bolt



SUBMERSIBLE CABLE

- AS/NZS 3191 & AS/NZS 5000.1 approvals.
- Sold per metre.

PART NUMBER	ITEM NUMBER	DESCRIPTION
GFGRO4AA003	08387000024	1.5mm, 2 core + earth
GFGRO5AA004	08387000025	2.5mm, 3 core + earth
GFGRO6AA004	08387000026	4mm, 3 core + earth
FTAAX01AA02	08387000300	6mm, 3 core + earth

*Additional sizes available upon request.



HEAT SHRINK / SPLICE KITS

- Includes: 4 x 4mm cable crimps, emery paper & cleaning cloth.

PART NUMBER	ITEM NUMBER	DESCRIPTION
179-816-1	08387000022	300mm heat shrink / splice - 5 piece kit
179-816-2	08387000023	400mm heat shrink / splice - 5 piece kit





PRESSURE SWITCH KITS

- Max. pressure 2500 kpa.
- Cable glands supplied.

PART NUMBER	ITEM NUMBER	DESCRIPTION
180-109-1	08387000087	20/40psi Pressure Switch STD - SQ-D
180-110-1	08387000088	30/50psi Pressure Switch STD - SQ-D
181-109-1-PW-10A	08387000244	20/40psi pre-wired Pressure Switch, 10A 3 pin plug lead
181-110-1-PW-10A	08387000245	30/50psi pre-wired Pressure Switch, 10A 3 pin plug lead
181-111-1	08387000033	20/40psi loss of prime Pressure Switch
181-112-1	08387000034	30/50psi loss of prime Pressure Switch



PRESSURE VESSELS

- 10 BAR (150PSI) pressure rating.
- Highly rust resistant.

PART NUMBER	ITEM NUMBER	MOUNT	CAPACITY	WEIGHT
SPT-003	0838 3900 000	Pump	3L	1.2KG
SPT-008	0838 3900 001	Pump	8L	2.5KG
SPT-018	0838 3900 002	Pump	18L	4.2KG
SPT-024	0838 3900 004	Pump	24L	4.7KG
SPT-058	0838 3900 005	Base	58L	11.5KG
SPT-080	0838 3900 006	Base	80L	13KG



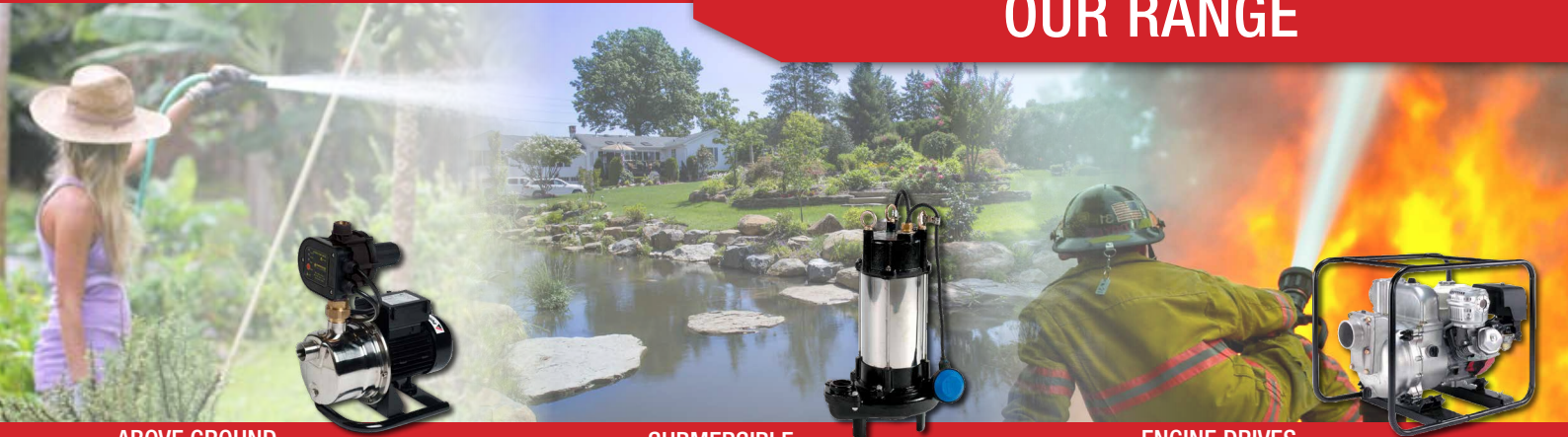
PRESSURE GAUGES

- Stainless steel.
- Oil-filled.

PART NUMBER	ITEM NUMBER	DESCRIPTION
Y0000-206-3	0838 7000 232	0 > 100kpa, 50mm x 1/4" bottom entry
CAGAG-LG-100	0838 7000 050	-100 > 0kpa, 75mm x 1/4" bottom entry
CAGAG-LG-100/+150	0838 7000 051	-100 > 150kpa, 63mm x 1/4" bottom entry
CAGAG-LQ100	0838 7000 052	0 > 100kpa, 63mm x 1/4" bottom entry
CAGAG-LQ600	0838 7000 053	0 > 600kpa, 63mm x 1/4" bottom entry
CAGAG-LQ800	0838 7000 054	0 > 800kpa, 63mm x 1/4" bottom entry
CAGAG-LQ1000	0838 7000 055	0 > 1000kpa, 63mm x 1/4" bottom entry
CAGAG-LQ2500	0838 7000 056	0 > 2500kpa, 63mm x 1/4" bottom entry
CAGAG-LQ6000	0838 7000 057	0 > 6000kpa, 63mm x 1/4" bottom entry
CAGAG-LQ25000	0838 7000 058	0 > 25000kpa, 63mm x 1/4" bottom entry



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