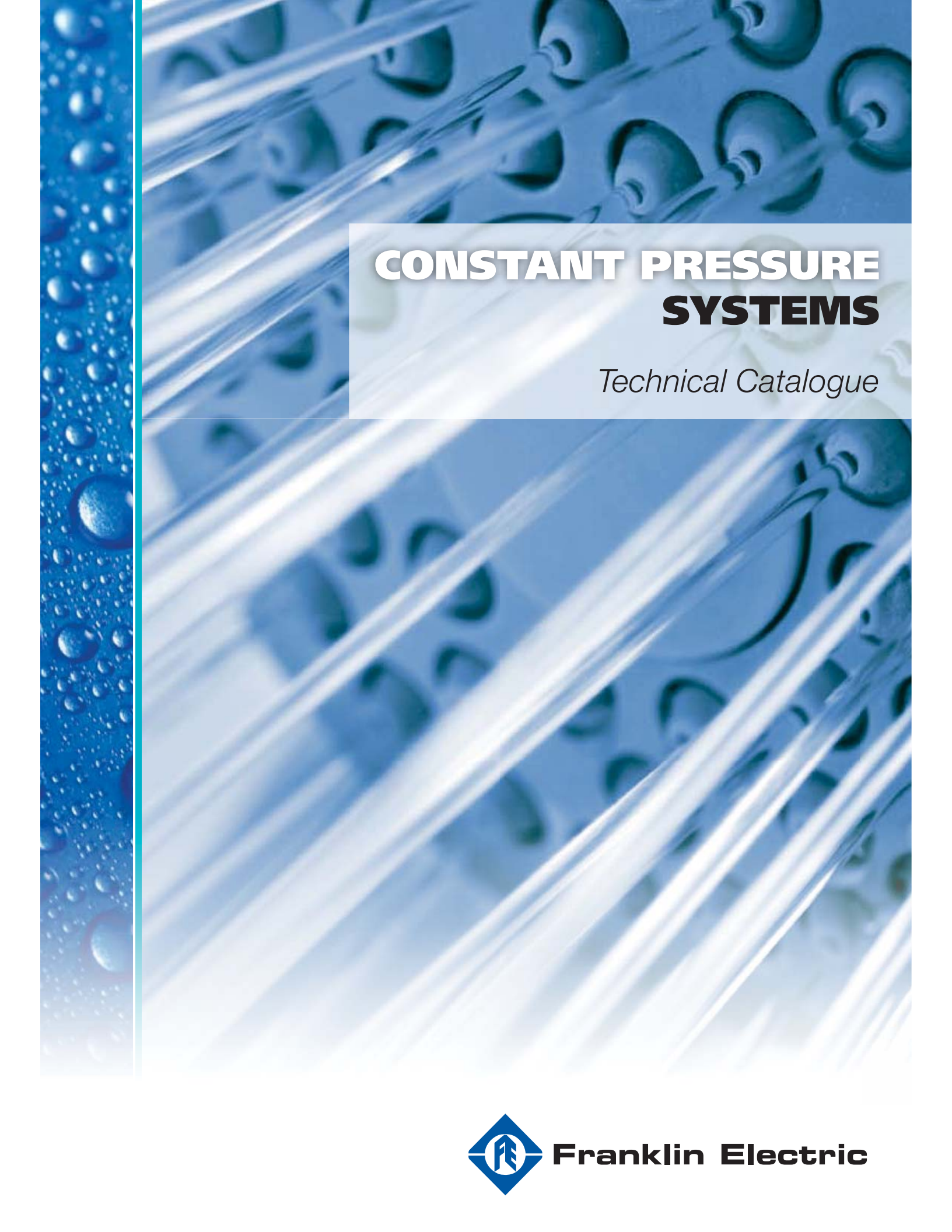




CONSTANT PRESSURE SYSTEMS

Technical Catalogue



Franklin Electric

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SubDrive Inline 1100

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SubDrive QuickPAK

CONSTANT PRESSURE SYSTEM



SubDrive QuickPAK Constant Pressure System

SubDrive is Franklin Electric's variable frequency drive constant pressure system. SubDrive QuickPAK is comprised of a pump, motor, drive and sensor; all in one quick and easy-to-install package. SubDrive controller provides constant pressure by continually monitoring and adjusting the pump speed to meet water demand.

Features and Benefits:

- Single-phase input power with three-phase motor performance
- Variable speed = Variable Horsepower = Energy Savings
- Soft-start feature eliminates water hammer
- Smart Reset® technology increases borewell life by preventing water overdraw
- Excellent radio frequency interference shielding
- Wide range of pressure settings
- Noise-free

Applications:

- High-end residential homes
- Multi-family dwellings
- Hair and beauty salons
- Guest houses
- Farm houses, row houses and villas
- Golf courses
- Nursing homes



Standard Specifications:

- Range: 1.1 – 3.7 kW (1.5 – 5 hp)
- Input Supply: 220 V, 1 Phase AC, 50 Hz
- Total Head: Up to 320 m
- Capacity: 560 lpm
- Liquid: Clear water

Built-in Protection:

The SubDrive controller guards from:

- Surge protection
- Underload
- Undervoltage
- Locked pump
- Open circuit
- Short circuit
- Overheated controller

Model Designation:

XX SD QP - X.XHP - XX

SubDrive Enclosure Rating

Motor kW(hp): 1.1(1.5), 1.5(2), 2.2(3), 3.7(5)

QuickPAK

SubDrive

Pump Flow lpm(gpm): 25(7), 35(10), 57(15), 75(20), 95(25), 135(35), 225(60), 340(90)

SUBDRIVE QUICKPAK INCLUDES

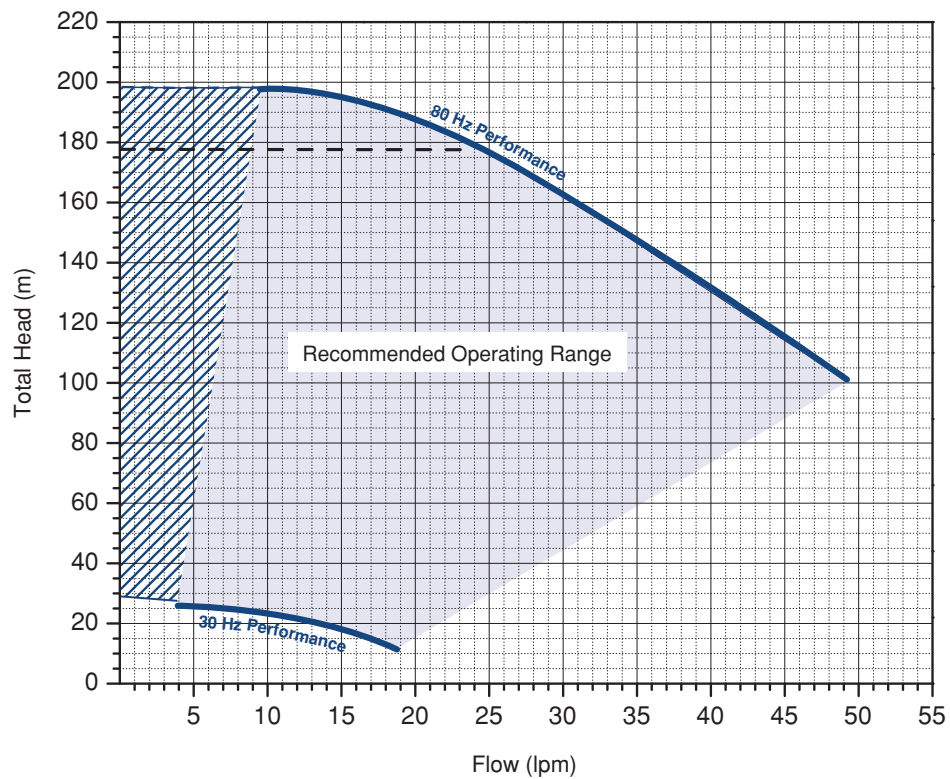
QUICKPAK			SUBDRIVE		PUMP						MOTOR	
Order No.	Model Number	LPM	SD	Part No.	KW	Outlet Size (mm)	LPM	Design	Hydraulics	Part No.	KW	Part No.
93800760	7SDQP-1.5HP-N4	25	SD75-N4	5870203384	0.55	32	25	SS	Noryl	92470812	1.1	23451492S
93800772	7SDQP-2.0HP-N4	25	SD100-N4	5870204104	0.75	32	25	SS	Tri-Seal	93870710	1.5	23431592S
93800710	7SDQP-3.0HP-N4	25	SD150-N4	5870204154	1.1	32	25	SS	Noryl	92470820	2.2	23431626
93801002	10SDQP-1.5HP-N4	35	SD75-N4	5870203384	0.55	32	35	SS	Tri-Seal	93871007	1.1	23451492S
93801062	10SDQP-2.0HP-N4	35	SD100-N4	5870204104	0.75	32	35	SS	Tri-Seal	93871010	1.5	23431592S
93801004	10SDQP-3.0HP-N4	35	SD150-N4	5870204154	1.5	32	35	SS	Tri-Seal	93871020	2.2	23431626
93801502	15SDQP-1.5HP-N4	57	SD75-N4	5870203384	0.55	32	57	SS	Tri-Seal	93871507	1.1	23451492S
93801511	15SDQP-2.0HP-N4	57	SD100-N4	5870204104	0.75	32	57	SS	Tri-Seal	93871510	1.5	23431592S
93801504	15SDQP-3.0HP-N4	57	SD150-N4	5870204154	1.1	32	57	SS	Tri-Seal	93871515	2.2	23431626
93802002	20SDQP-1.5HP-N4	75	SD75-N4	5870203384	0.75	32	75	SS	Tri-Seal	93872010	1.1	23451492S
93802036	20SDQP-2.0HP-N4	75	SD100-N4	5870204104	0.75	32	75	SS	Tri-Seal	93872010	1.5	23431592S
93802004	20SDQP-3.0HP-N4	75	SD150-N4	5870204154	1.5	32	75	SS	Tri-Seal	93872020	2.2	23431626
93802502	25SDQP-1.5HP-N4	95	SD75-N4	5870203384	0.75	32	95	SS	Tri-Seal	93872510	1.1	23451492S
93802530	25SDQP-2.0HP-N4	95	SD100-N4	5870204104	0.75	32	95	SS	Tri-Seal	93872510	1.5	23431592S
93802504	25SDQP-3.0HP-N4	95	SD150-N4	5870204154	1.1	32	95	SS	Tri-Seal	93872515	2.2	23431626
93803514(a)	35SDQP-1.5HP-N4	135	SD75-N4	5870203384	0.75	50	135	SS	Noryl	93873510	1.1	23451492S
93803520(a)	35SDQP-2.0HP-N4	135	SD100-N4	5870204104	0.75	50	135	SS	Noryl	93873510	1.5	23431592S
93803528(a)	35SDQP-3.0HP-N4	135	SD150-N4	5870204154	1.1	50	135	SS	Noryl	93873515	2.2	23431626
93806016(a)	60SDQP-3.0HP-N4	225	SD150-N4	5870204154	1.5	50	225	SS	Noryl	93876020	2.2	23431626
93809010(a)	90SDQP-3.0HP-N4	340	SD150-N4	5870204154	1.5	50	340	SS	Noryl	93879020	2.2	23431626
NA(b)	90SDQP-5.0HP-N4	340	SD300-N4	5870206300	2.2	50	340	SS	Noryl	93619007(a)	3.7	23431786

Notes: (a) High capacity pumps, 135 lpm + higher, in a QuickPAK are not supplied with an internal check valve.

(b) 90SDQP-5.0HP-N4 only sold as separate components, not as kit.

7SDQP1.5HP

Performance Curve



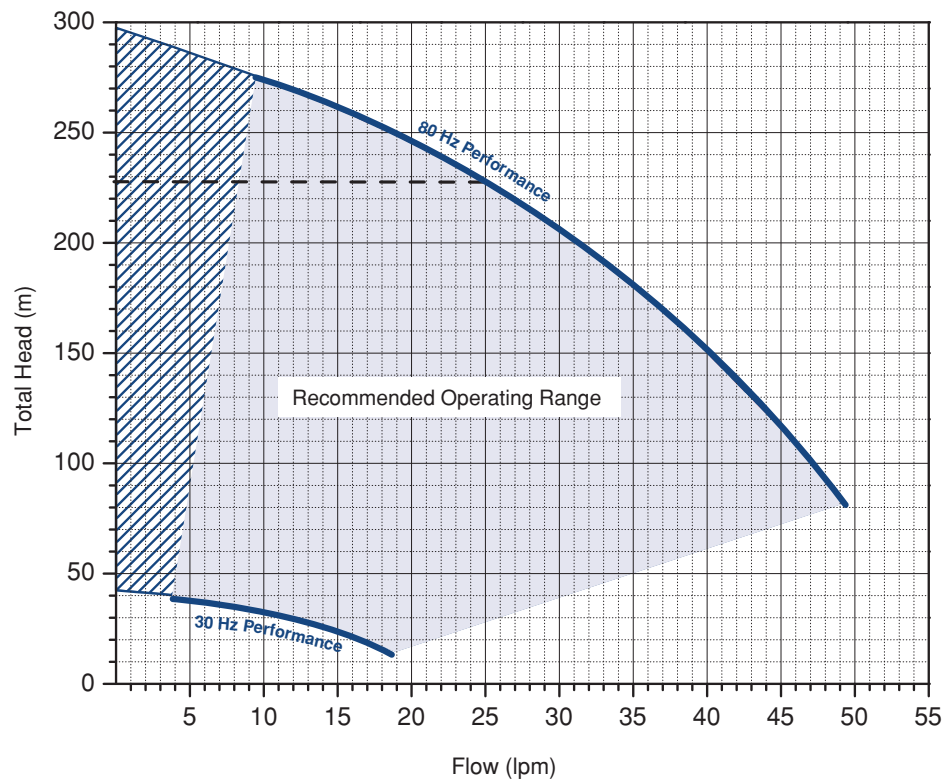
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres										
		35.0	40.0	45.0	50.0	60.0	80.0	100.0	120.0	140.0	160.0	180.0
1.1	0 (0)								43	37	30	24
	0.5 (5)							48	42	35	29	22
	1 (10)							46	40	34	27	19
	2 (20)							43	37	30	24	
	3 (30)						46	40	34	27	19	
	4 (40)						43	37	30	24		
	5 (50)					46	40	34	27	19		
	6 (60)			48	46	43	37	30	24			
	7 (70)	48	46	45	43	40	34	27	19			
Shut-off kg/cm ²		16	16	15	15	14	12	10	8	6	4	2

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

7SDQP2HP

Performance Curve



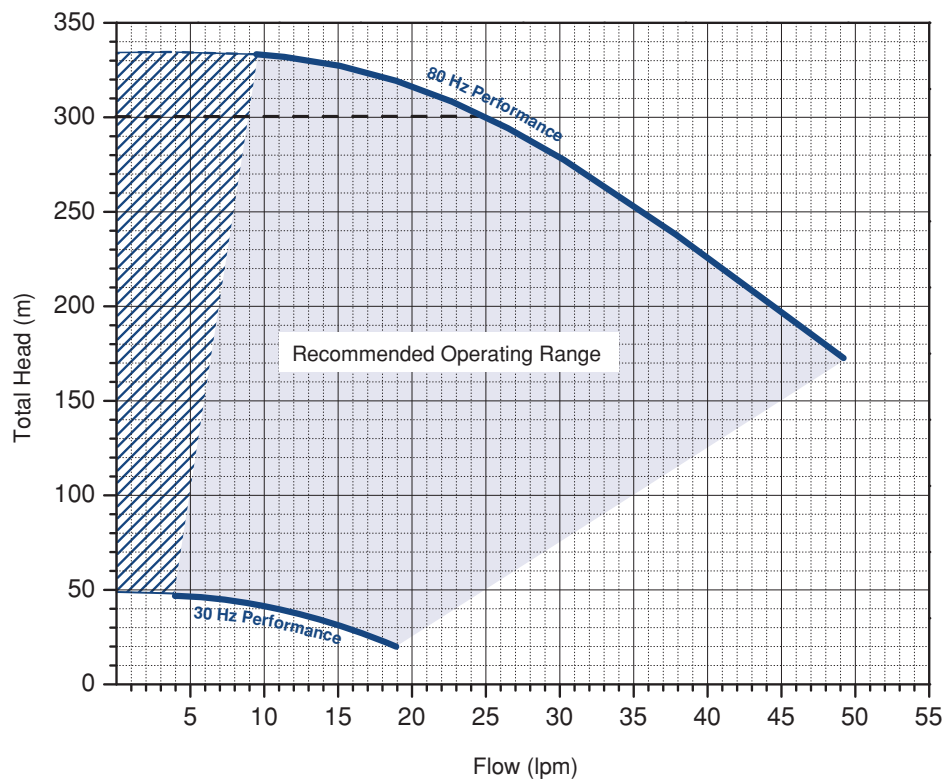
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres															
		25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0	120.0	140.0	160.0	180.0	200.0	220.0	240.0
1.5	0 (0)									47	44	42	39	35	31	27	22
	0.5 (5)								49	46	44	41	38	34	30	26	20
	1 (10)								48	46	43	40	37	33	29	24	18
	2 (20)								47	44	42	39	35	31	27	22	15
	3 (30)							48	46	43	40	37	33	29	24	18	11
	4 (40)					49	48	47	44	42	39	35	31	27	21	15	
	5 (50)			49	48	48	47	46	43	40	37	33	29	24	18	11	
	6 (60)	49	48	48	47	46	46	44	42	39	35	31	27	21	15		
	7 (70)	48	47	46	46	45	44	43	40	37	33	29	24	18	11		
Shut-off kg/cm ²		27	27	26	26	25	25	24	22	20	18	16	14	12	10	8	6

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

7SDQP3HP

Performance Curve



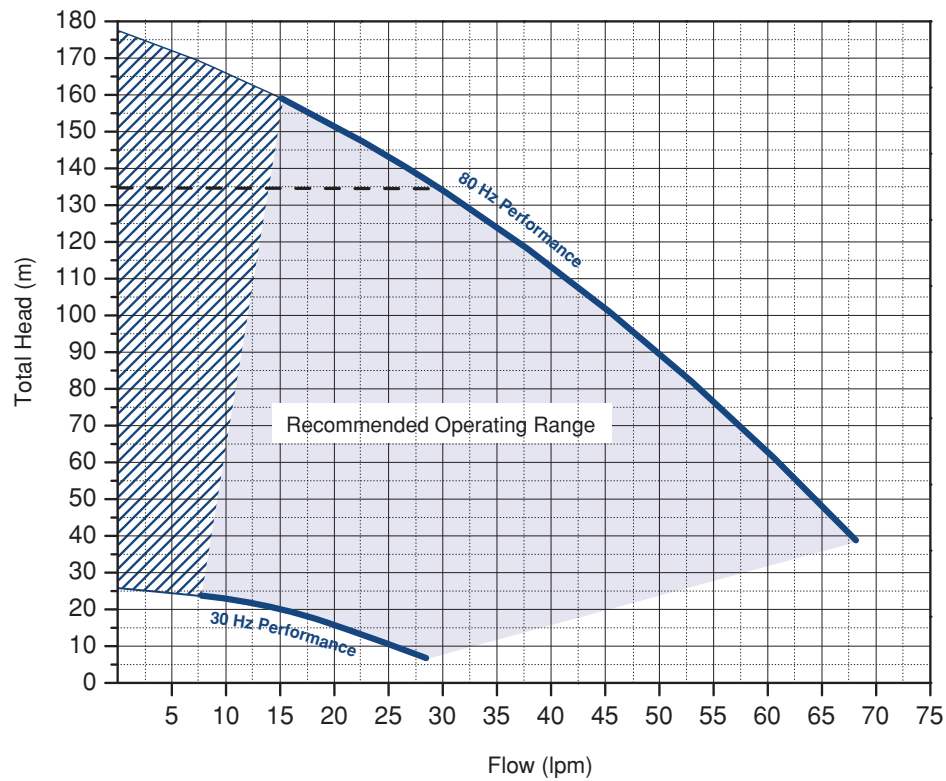
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres											
		120.0	140.0	160.0	180.0	200.0	220.0	240.0	260.0	280.0	300.0	320.0	
2.2	0 (0)				48	44	41	38	34	30	25	18	Shut-off 334 m
	0.5 (5)				47	44	40	37	33	29	24	16	
	1 (10)				46	43	39	36	32	28	22	13	
	2 (20)			48	44	41	38	34	30	25	18		
	3 (30)			46	43	39	36	32	28	22	13		
	4 (40)		48	44	41	38	34	30	25	18			
	5 (50)		46	43	39	36	32	28	22	13			
	6 (60)	48	44	41	38	34	30	25	18				
	7 (70)	46	43	39	36	32	28	22	13				
Shut-off kg/cm ²		21	19	17	15	13	11	9	7	5	3	1	

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

10SDQP1.5HP

Performance Curve



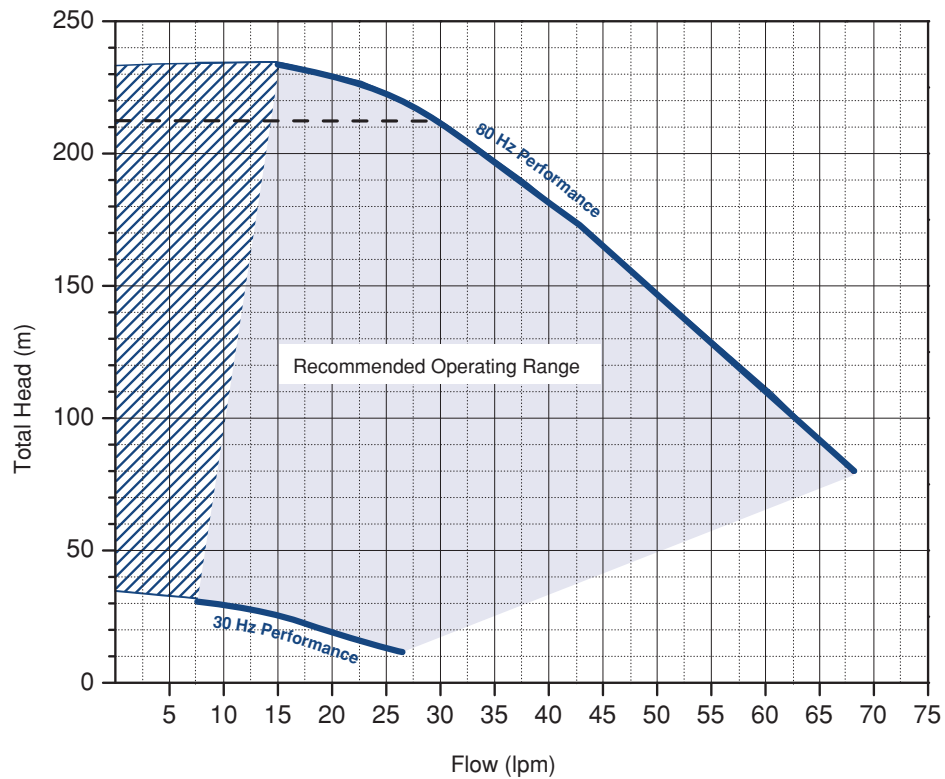
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres														
		5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0	120.0	140.0
1.1	0 (0)								68	66	64	61	54	46	37	27
	0.5 (5)							68	66	64	63	59	52	44	35	24
	1 (10)						68	66	64	63	61	57	50	41	32	21
	2 (20)				68	66	64	63	61	59	57	54	46	37	27	
	3 (30)		68	66	64	63	61	59	57	56	54	50	41	32	21	
	4 (40)	66	64	63	61	59	57	56	54	52	50	46	37	27		
	5 (50)	63	61	59	57	56	54	52	50	48	46	41	32	21		
	6 (60)	59	57	56	54	52	50	48	46	44	41	37	27			
	7 (70)	56	54	52	50	48	46	44	41	39	37	32	21			
Shut-off kg/cm ²		17	17	16	16	15	15	14	14	13	13	12	10	8	6	4

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

10SDQP2HP

Performance Curve



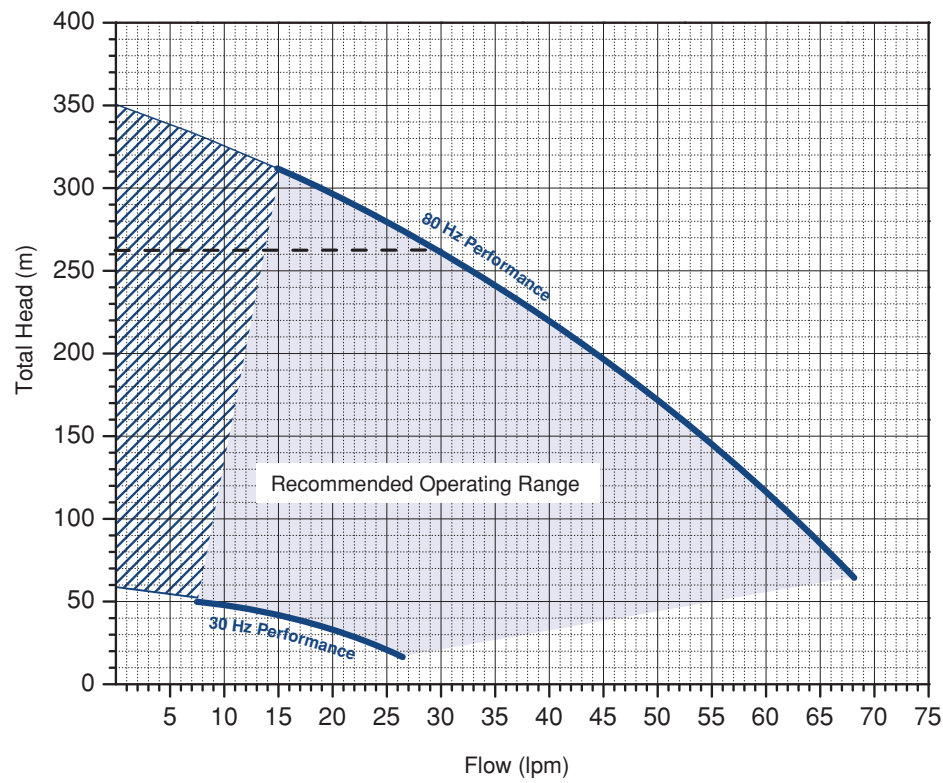
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres														
		20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0	120.0	140.0	160.0	180.0	200.0
1.5	0 (0)									68	63	58	52	46	40	35
	0.5 (5)									66	61	57	51	45	39	33
	1 (10)									65	60	55	49	43	38	31
	2 (20)								68	63	58	52	46	40	35	26
	3 (30)							68	65	60	55	49	43	38	31	19
	4 (40)					68	66	65	63	58	52	46	40	35	26	
	5 (50)			68	66	65	64	63	60	55	49	43	38	31	19	
	6 (60)	68	66	65	64	63	61	60	58	52	46	40	35	26		
	7 (70)	65	64	63	61	60	59	58	55	49	43	38	31	19		
Shut-off kg/cm ²		21	21	20	20	19	19	18	17	15	13	11	9	7	5	3

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

10SDQP3HP

Performance Curve



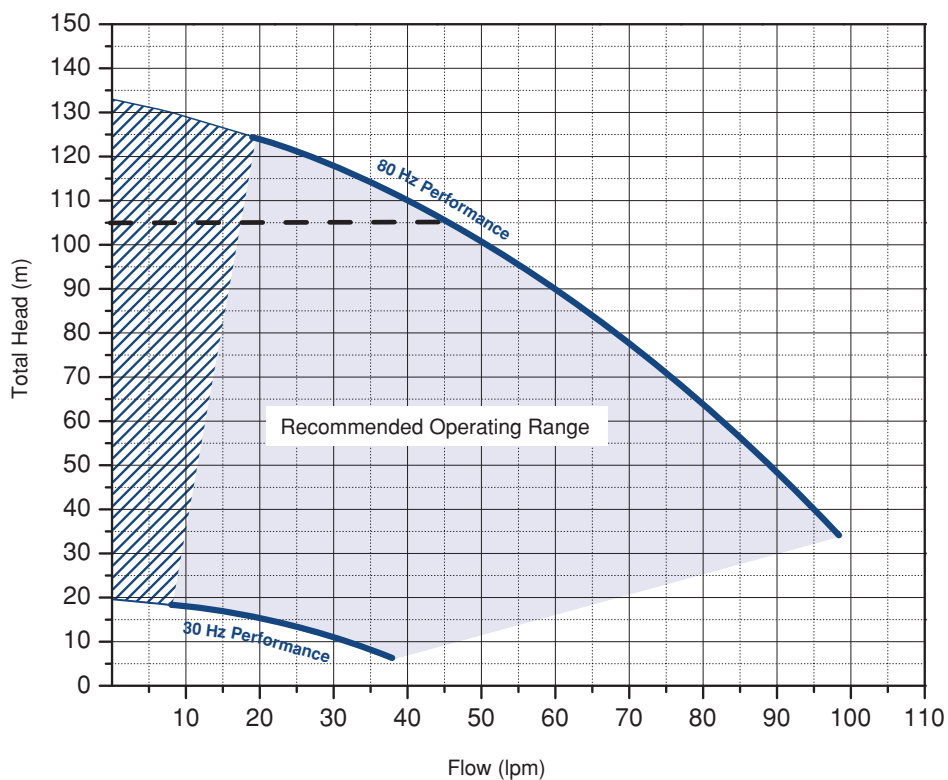
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres																		
		25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0	120.0	140.0	160.0	180.0	200.0	220.0	240.0	260.0	280.0	
2.2	0 (0)							66	63	60	56	52	49	44	40	35	30	25	Shut-off 350 m	
	0.5 (5)							65	62	59	55	51	48	43	39	34	29	23		
	1 (10)						68	64	61	58	54	51	47	42	38	33	28	22		
	2 (20)					68	66	63	60	56	52	49	44	40	35	30	25	19		
	3 (30)				68	67	66	64	61	58	54	51	47	42	38	33	28	22		16
	4 (40)		68	67	66	65	64	63	60	56	52	49	44	40	35	30	25	19		
	5 (50)	67	66	65	64	64	63	61	58	54	51	47	42	38	33	28	22	16		
	6 (60)	65	64	64	63	62	61	60	56	52	49	44	40	35	30	25	19			
	7 (70)	64	63	62	61	60	60	58	54	51	47	42	38	33	28	22	16			
Shut-off kg/cm ²		33	32	32	31	31	30	29	27	25	23	21	19	17	15	13	11	9	7	

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

15SDQP1.5HP

Performance Curve



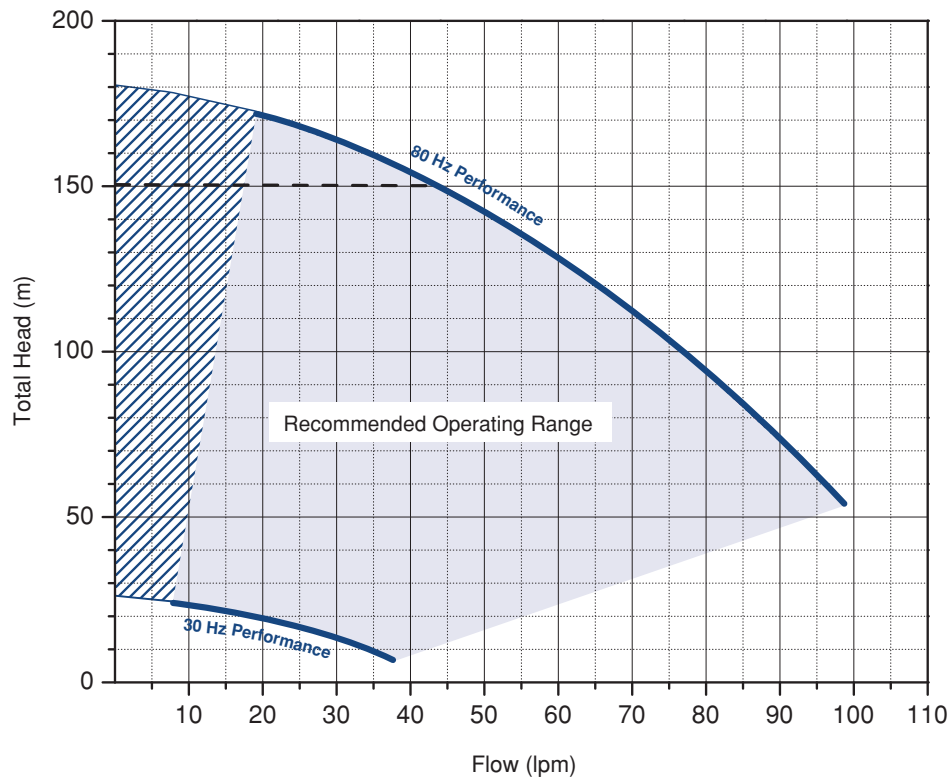
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres												
		5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0
1.1	0 (0)							98	95	92	89	82	67	50
	0.5 (5)						98	95	92	89	85	79	63	45
	1 (10)					98	95	92	89	85	82	75	59	39
	2 (20)			98	95	92	89	85	82	79	75	67	50	26
	3 (30)	98	95	92	89	85	82	79	75	71	67	59	39	
	4 (40)	92	89	85	82	79	75	71	67	63	59	50	26	
	5 (50)	85	82	79	75	71	67	63	59	55	50	39		
	6 (60)	79	75	71	67	63	59	55	50	45	39	26		
	7 (70)	71	67	63	59	55	50	45	39	33	26			
Shut-off kg/cm ²		13	12	12	11	11	10	10	9	9	8	7	5	3

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

15SDQP2HP

Performance Curve



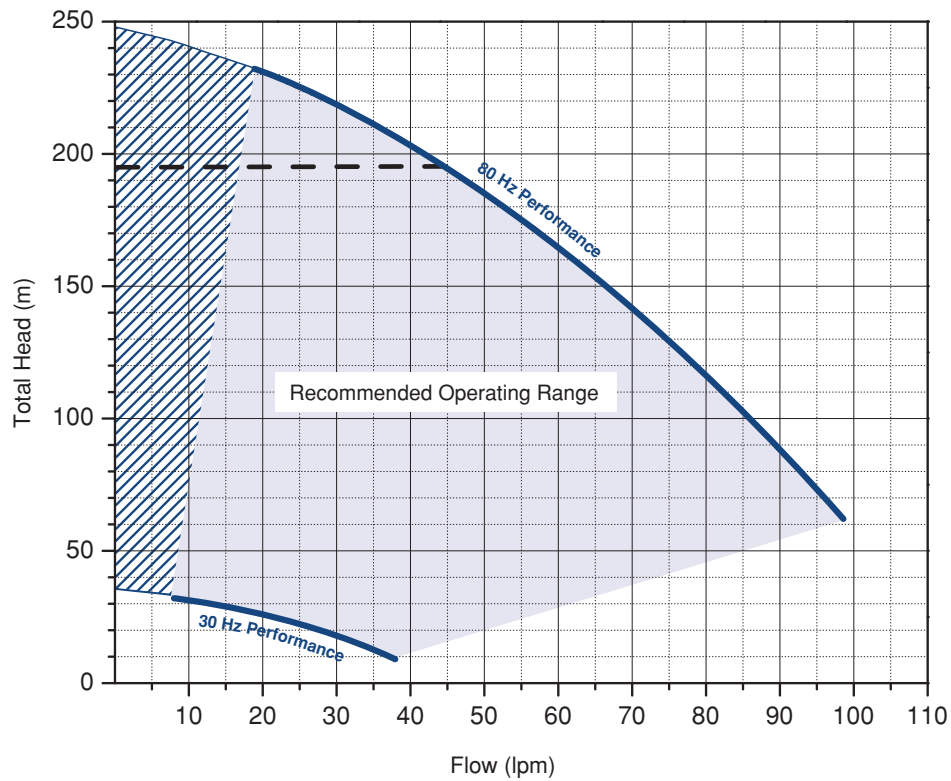
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres														
		10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0	120.0	140.0	
1.5	0 (0)										96	87	77	65	52	Shut-off 180 m
	0.5 (5)									98	94	85	74	62	48	
	1 (10)							98	96	91	82	71	59	44		
	2 (20)					98	96	94	91	87	77	65	52	35		
	3 (30)				98	96	94	91	89	87	82	71	59	44	23	
	4 (40)		98	96	94	91	89	87	84	82	77	65	52	35		
	5 (50)	96	94	91	89	87	84	82	79	77	71	59	44	23		
	6 (60)	91	89	87	84	82	79	77	74	71	65	52	35			
	7 (70)	87	84	82	79	77	74	71	68	65	59	44	23			
Shut-off kg/cm ²		17	17	16	16	15	15	14	14	13	12	10	8	6	4	

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

15SDQP3HP

Performance Curve



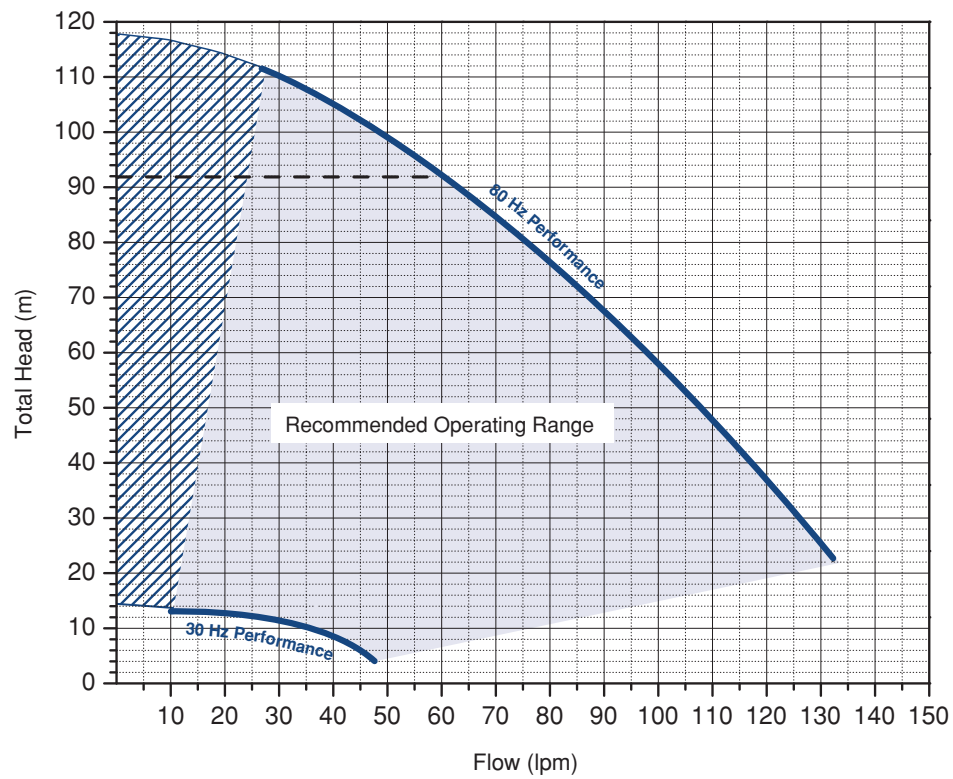
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres															
		15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0	120.0	140.0	160.0	180.0	200.0
2.2	0 (0)										93	86	79	71	62	53	42
	0.5 (5)									97	91	84	77	69	60	51	39
	1 (10)									96	89	82	75	67	58	48	36
	2 (20)							97	96	93	86	79	71	62	53	42	29
	3 (30)					97	96	94	93	89	82	75	67	58	48	36	21
	4 (40)			97	96	94	93	91	89	86	79	71	62	53	42	29	
	5 (50)	97	96	94	93	91	89	88	86	82	75	67	58	48	36	21	
	6 (60)	94	93	91	89	88	86	84	82	79	71	62	53	42	29		
	7 (70)	91	89	88	86	84	82	81	79	75	67	58	48	36	21		
Shut-off kg/cm ²		23	23	22	22	21	21	20	20	19	17	15	13	11	9	7	5

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

20SDQP1.5HP

Performance Curve



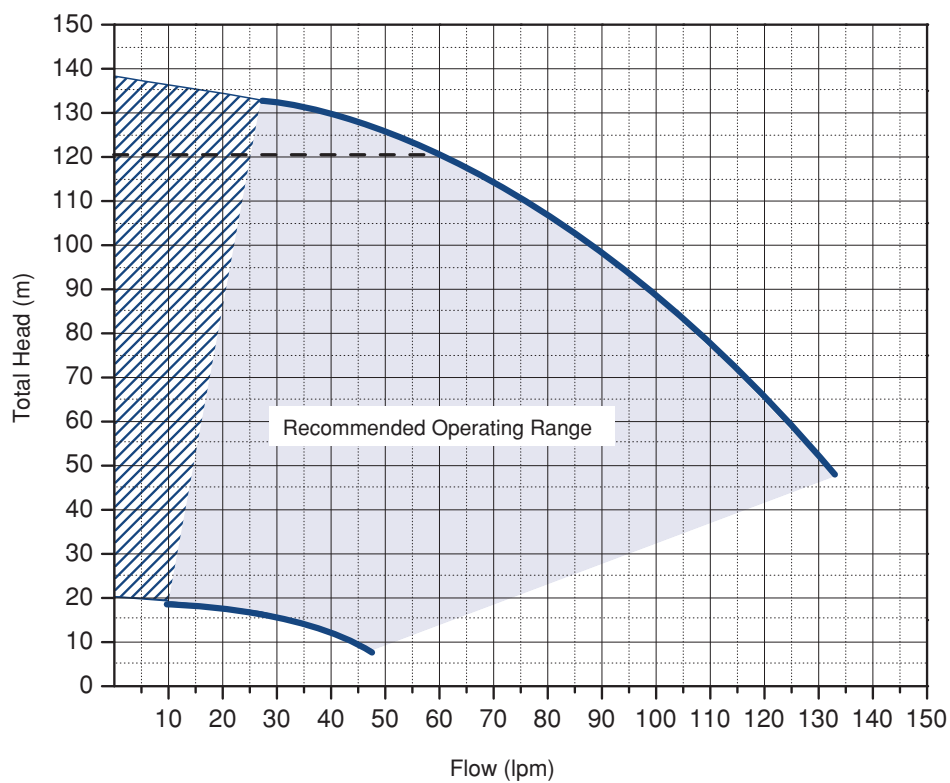
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres													
		5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0	
1.1	0 (0)					130	125	121	116	112	107	97	75	49	Shut-off 117 m
	0.5 (5)				130	125	121	116	112	107	102	92	70	41	
	1 (10)			130	125	121	116	112	107	102	97	87	63	31	
	2 (20)	130	125	121	116	112	107	102	97	92	87	75	49		
	3 (30)	121	116	112	107	102	97	92	87	81	75	63	31		
	4 (40)	112	107	102	97	92	87	81	75	70	63	49			
	5 (50)	102	97	92	87	81	75	70	63	57	49	31			
	6 (60)	92	87	81	75	70	63	57	49	41	31				
	7 (70)	81	75	69	63	57	49	41	31						
Shut-off kg/cm ²		11	11	10	10	9	9	8	8	7	7	6	4	2	

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

20SDQP2HP

Performance Curve



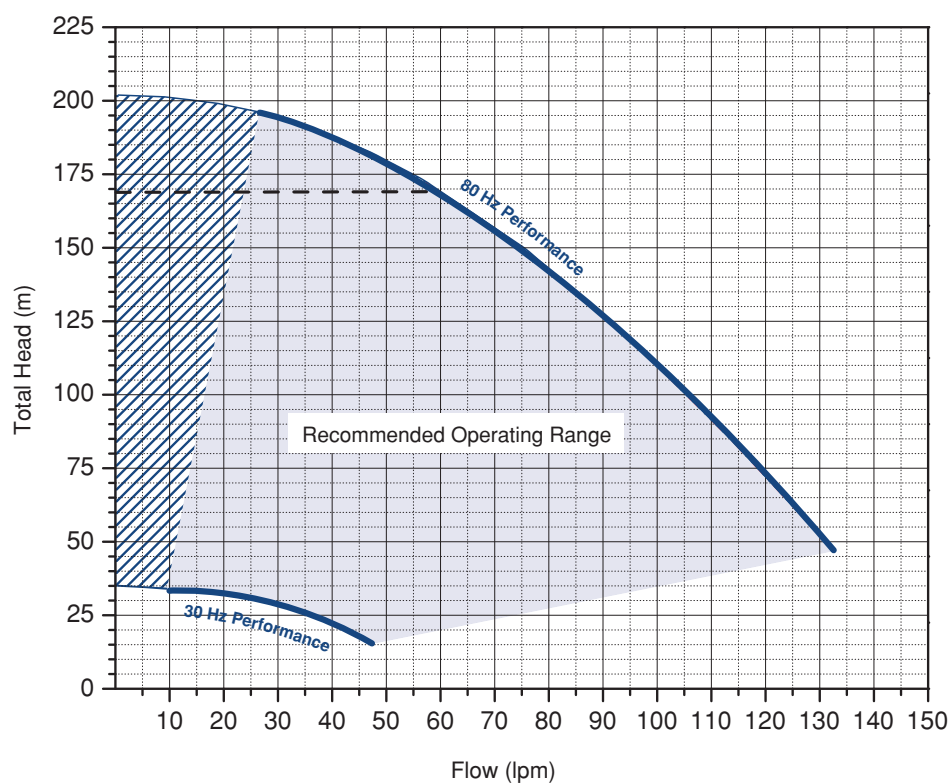
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres												
		10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0	120.0
1.5	0 (0)									130	123	107	87	62
	0.5 (5)								130	126	119	103	82	52
	1 (10)							130	126	123	116	98	76	37
	2 (20)					130	126	123	119	116	107	87	62	
	3 (30)			130	126	123	119	116	112	107	98	76	37	
	4 (40)	130	126	123	119	116	112	107	103	98	87	62		
	5 (50)	123	119	116	112	107	103	97	92	87	76	37		
	6 (60)	116	112	107	102	97	92	87	82	76	62			
	7 (70)	107	102	97	92	87	82	76	70	62	37			
Shut-off kg/cm ²		13	12	12	11	11	10	10	9	9	8	6	4	2

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

20SDQP3HP

Performance Curve



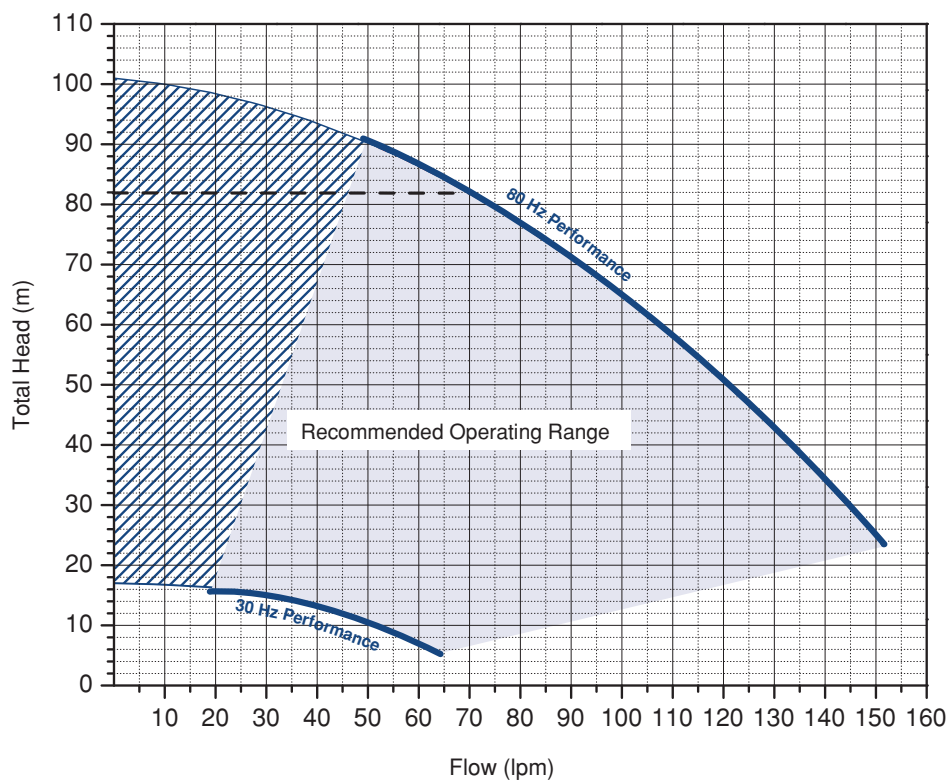
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres														
		15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0	120.0	140.0	160.0	180.0
2.2	0 (0)								130	124	116	107	94	81	68	51
	0.5 (5)							130	127	122	114	104	90	77	65	44
	1 (10)						130	127	124	120	112	100	87	74	61	36
	2 (20)				130	127	124	122	120	116	107	94	81	68	51	
	3 (30)		130	127	124	122	120	118	116	112	100	87	74	61	36	
	4 (40)	127	124	122	120	118	116	114	112	107	94	80	68	51		
	5 (50)	122	120	118	116	114	112	109	107	100	87	74	61	36		
	6 (60)	118	116	114	112	109	107	104	100	94	80	68	51			
	7 (70)	114	112	109	107	103	100	97	94	87	74	61	36			
Shut-off kg/cm ²		19	18	18	17	17	16	16	15	14	12	10	8	6	4	2

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

25SDQP1.5HP

Performance Curve



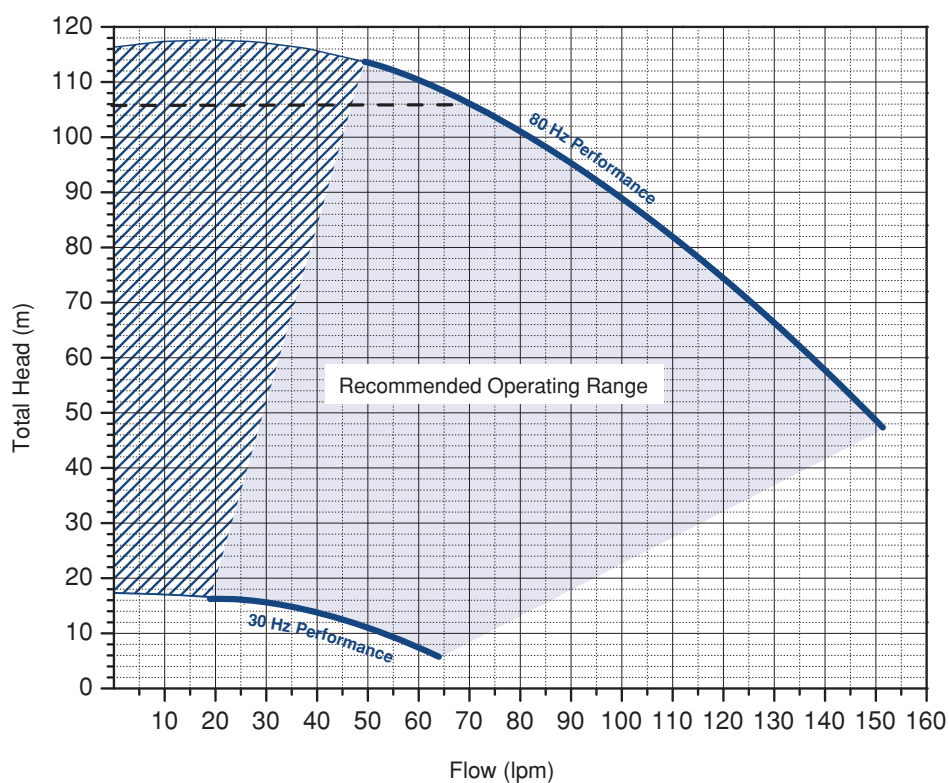
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres										
		10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0
1.1	0 (0)				150	144	139	133	127	121	107	74
	0.5 (5)			150	144	139	133	127	121	114	100	63
	1 (10)		150	144	139	133	127	121	114	107	92	51
	2 (20)	144	139	133	127	121	114	107	100	92	74	
	3 (30)	133	127	121	114	107	100	92	83	74	50	
	4 (40)	121	114	107	100	92	83	74	63	50		
	5 (50)	107	100	92	83	74	63	50				
	6 (60)	92	83	74	63	50						
	7 (70)	73	63	50								
Shut-off kg/cm ²		9	9	8	8	7	7	6	6	5	4	2

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

25SDQP2HP

Performance Curve



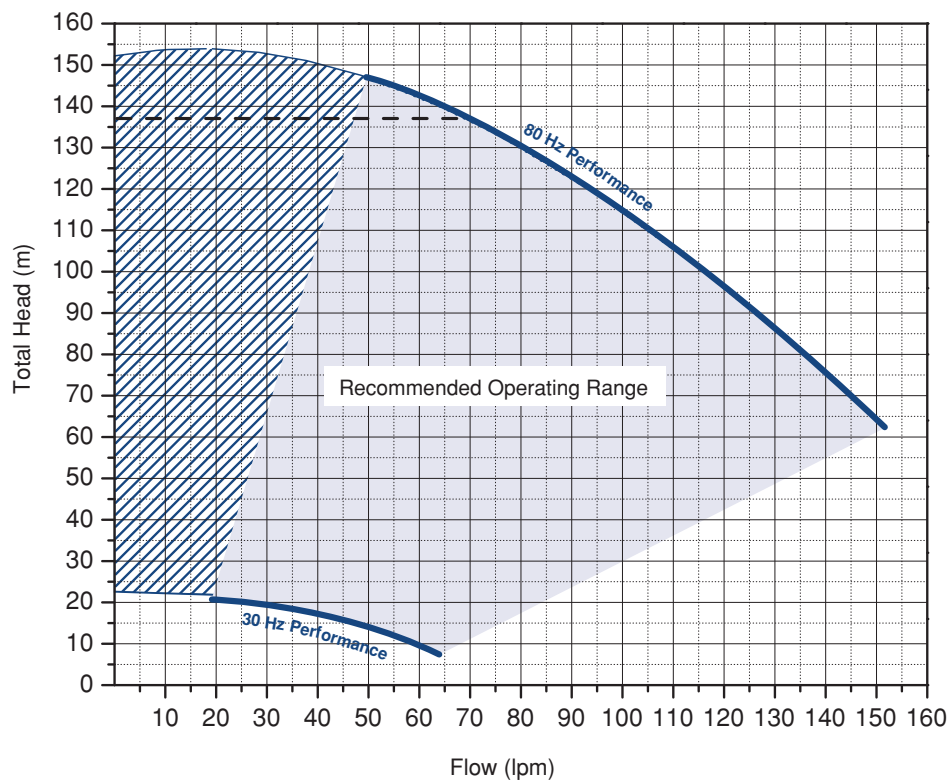
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres												
		10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0	
1.5	0 (0)									147	137	113	82	Shut-off 116 m
	0.5 (5)								147	142	131	106	72	
	1 (10)							147	142	136	125	98	60	
	2 (20)					147	142	136	131	125	112	82		
	3 (30)			147	142	136	131	125	119	112	98	60		
	4 (40)	147	142	136	131	125	119	112	106	98	82			
	5 (50)	136	131	125	119	112	106	98	91	82	60			
	6 (60)	125	119	112	105	98	91	82	72	60				
	7 (70)	112	105	98	91	82	72	60						
Shut-off kg/cm ²		11	10	10	9	9	8	8	7	7	6	4	2	

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

25SDQP3HP

Performance Curve



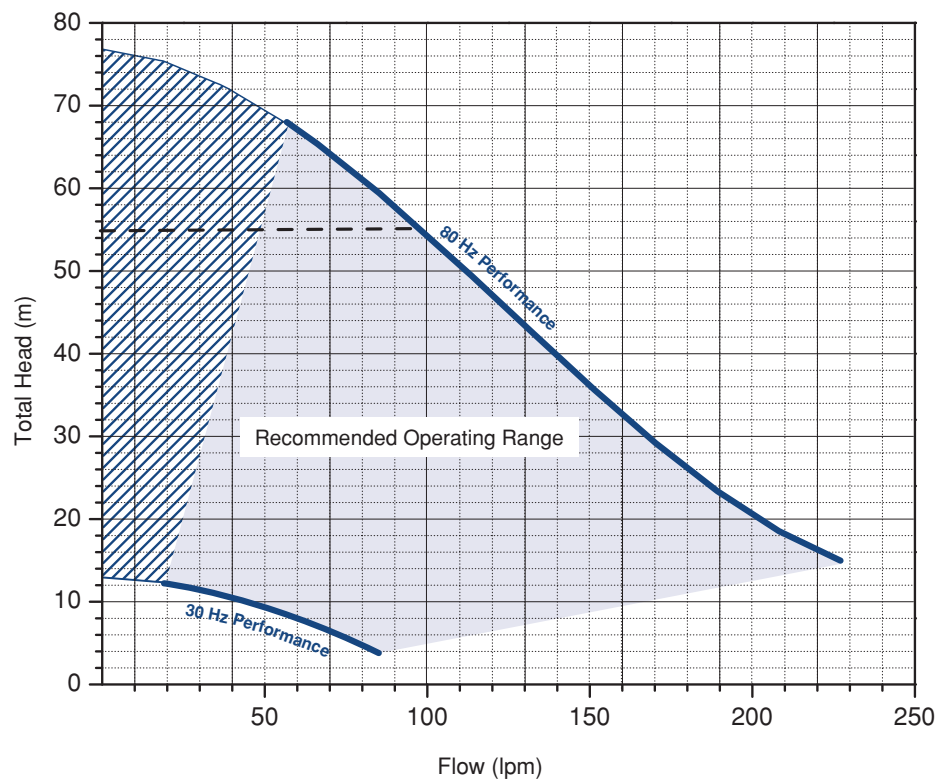
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres													
		10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0	120.0	140.0
2.2	0 (0)											136	116	94	64
	0.5 (5)										149	131	111	87	54
	1 (10)										145	126	105	80	
	2 (20)								149	145	136	116	94	64	
	3 (30)						149	145	140	136	126	105	80		
	4 (40)				149	145	140	136	131	126	116	93	64		
	5 (50)		149	145	140	136	131	126	121	116	105	80			
	6 (60)	145	140	136	131	126	121	116	111	105	93	64			
	7 (70)	136	131	126	121	116	111	105	99	93	80				
Shut-off kg/cm ²		14	14	13	13	12	12	11	11	10	9	7	5	3	1

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

35SDQP1.5HP

Performance Curve



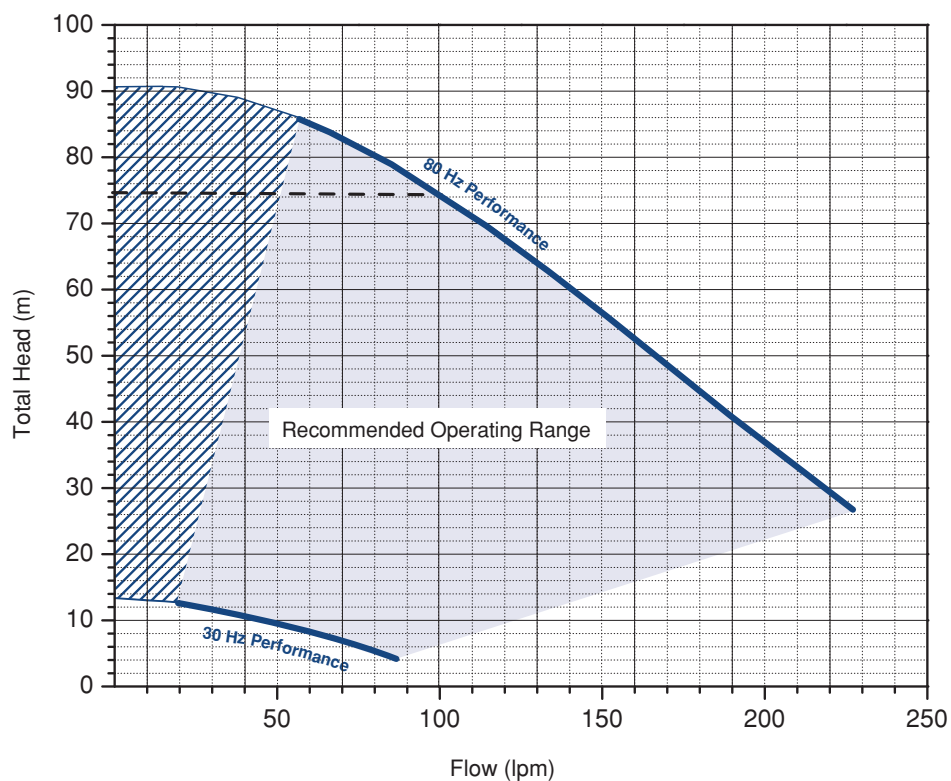
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres											
		5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	
1.1	0 (0)			227	202	183	168	153	139	126	112	83	Shut-off 77 m
	0.5 (5)		227	202	183	168	153	139	126	112	98	68	
	1 (10)	227	202	183	168	153	139	126	112	98	83		
	2 (20)	183	168	153	139	126	112	98	83	67			
	3 (30)	153	139	126	112	98	83	67					
	4 (40)	125	112	98	83	67							
	5 (50)	98	83	67									
	6 (60)	67											
Shut-off kg/cm ²		7	7	6	6	5	5	4	4	3	3	2	

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

35SDQP2HP

Performance Curve



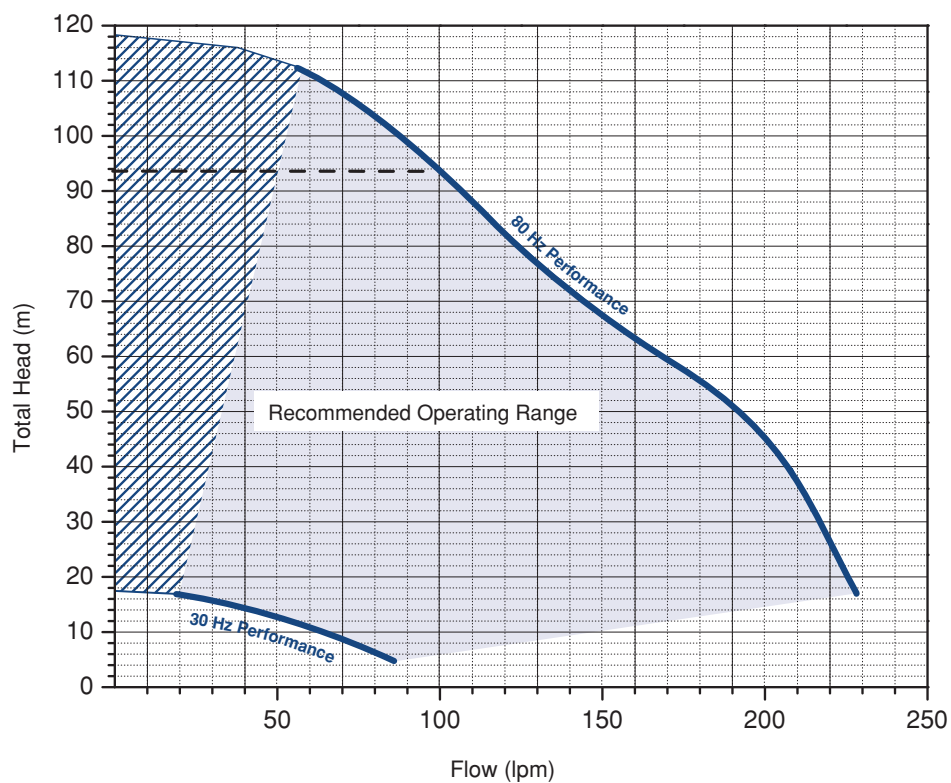
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres												
		5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	
1.5	0 (0)						218	204	192	179	167	141	81	Shut-off 90 m
	0.5 (5)					217	204	192	179	167	154	127	60	
	1 (10)				217	204	192	179	167	154	141	113		
	2 (20)		217	204	192	179	167	154	141	127	113	81		
	3 (30)	204	192	179	167	154	141	127	113	98	81			
	4 (40)	179	167	154	141	127	113	98	81	60				
	5 (50)	154	141	127	113	98	81	60						
	6 (60)	127	113	98	81	60								
	7 (70)	98	81	60										
Shut-off kg/cm ²		9	8	8	7	7	6	6	5	5	4	3	1	

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

35SDQP3HP

Performance Curve



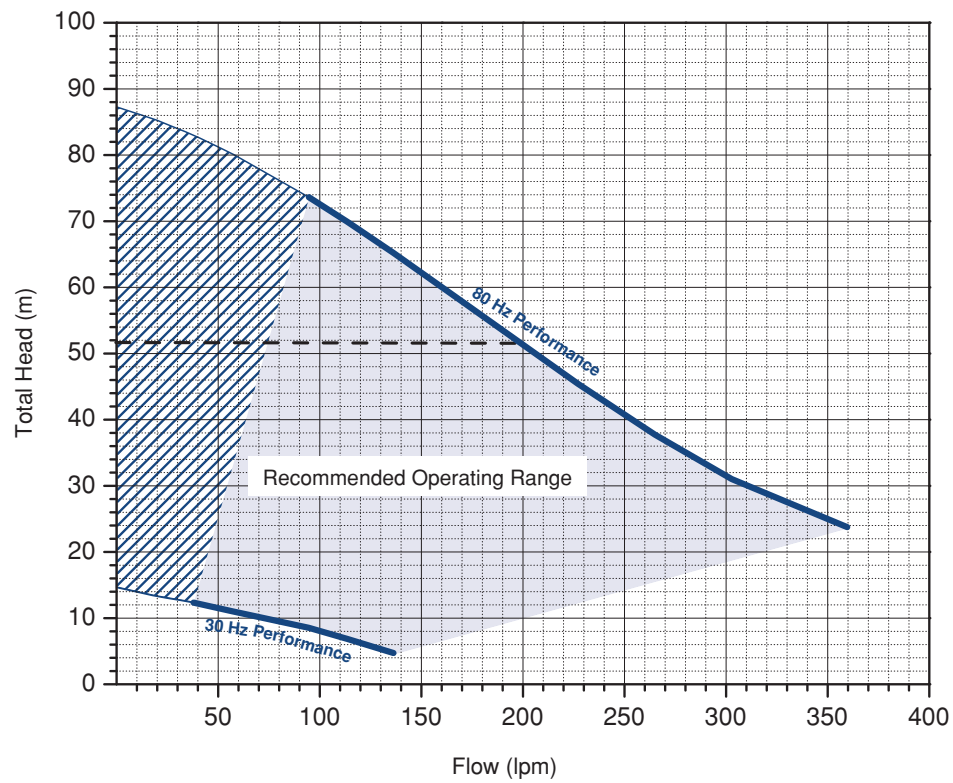
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres											
		10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0	80.0	100.0
2.2	0 (0)			225	223	219	214	208	200	190	169	124	87
	0.5 (5)		225	223	219	214	208	200	190	180	157	114	77
	1 (10)	225	223	219	214	208	200	190	180	168	145	105	64
	2 (20)	219	214	208	200	190	180	168	157	145	124	87	
	3 (30)	208	200	190	180	168	157	145	134	124	105	63	
	4 (40)	190	180	168	157	145	134	124	114	105	87		
	5 (50)	168	157	145	134	124	114	105	96	87	63		
	6 (60)	145	134	124	114	105	96	87	77	63			
	7 (70)	124	114	105	96	87	77	63					
Shut-off kg/cm ²		11	10	10	9	9	8	8	7	7	6	4	2

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

60SDQP3HP

Performance Curve



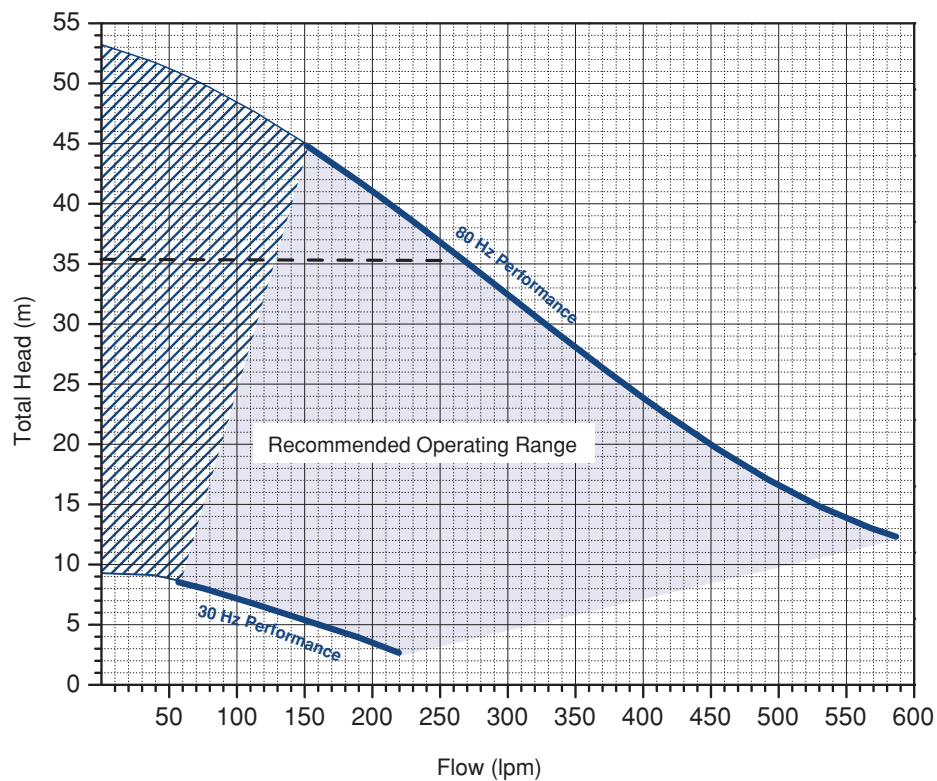
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres										
		5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0
2.2	0 (0)					348	310	279	253	229	206	160
	0.5 (5)				348	309	279	253	229	206	183	137
	1 (10)			348	309	279	253	229	206	183	160	113
	2 (20)	348	309	279	253	229	206	183	160	137	113	
	3 (30)	279	253	229	206	183	160	137	113			
	4 (40)	229	206	183	160	137	113					
	5 (50)	183	160	137	113							
	6 (60)	137	113									
Shut-off kg/cm ²		8	8	7	7	6	6	5	5	4	4	3

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

90SDQP3HP

Performance Curve



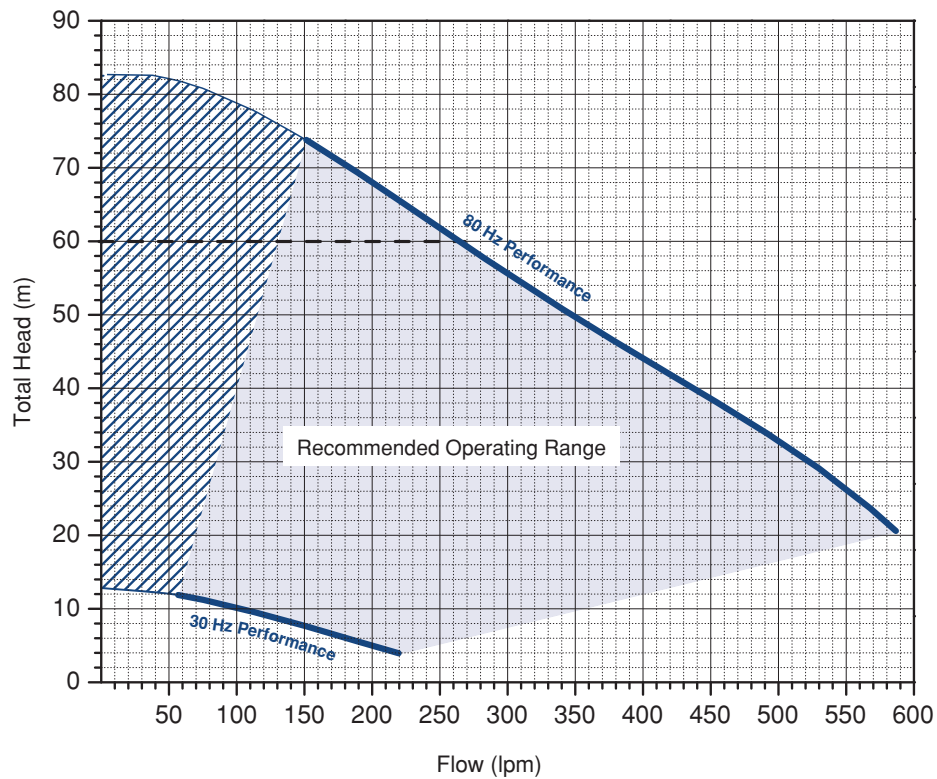
Performance Table

kW	kg/cm ² (meters)	Depth to Pumping Water Level, or Lift, in Metres								
		5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	
2.2	0 (0)			527	449	386	328	270	212	Shut-off 53 m
	0.5 (5)		527	449	386	328	270	212		
	1 (10)	527	448	386	328	270	212			
	2 (20)	386	327	270	212					
	3 (30)	270	212							
	4 (40)									
	5 (50)									
Shut-off kg/cm ²		5	4	4	3	3	2	2	1	

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

90SDQP5HP

Performance Curve



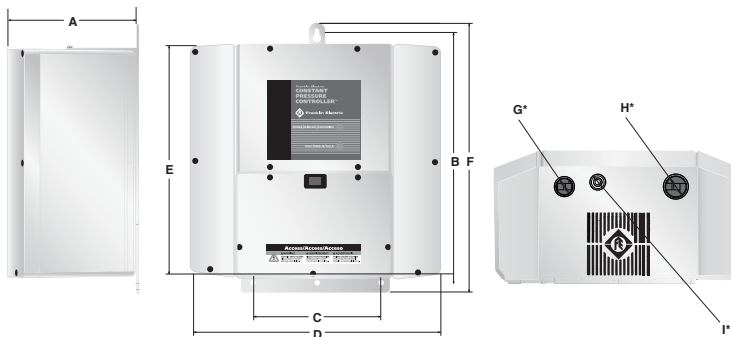
Performance Table

kW	kg/cm ² (metres)	Depth to Pumping Water Level, or Lift, in Metres										
		5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	60.0
3.7	0 (0)					558	522	482	438	392	347	262
	0.5 (5)				558	522	482	438	392	347	303	224
	1 (10)			558	522	482	438	392	346	303	262	186
	2 (20)	558	522	482	438	392	346	303	262	224	186	
	3 (30)	481	438	392	346	303	262	224	185			
	4 (40)	392	346	303	262	224	185					
	5 (50)	302	262	224	185							
	6 (60)	224	185									
Shut-off kg/cm ²		7	7	6	6	5	5	4	4	3	3	2

Notes: Table values in litres/minute (lpm)
Table values based on maximum speed

Mounting Dimensions

SubDrive SD75/100/150 NEMA 4 Enclosure

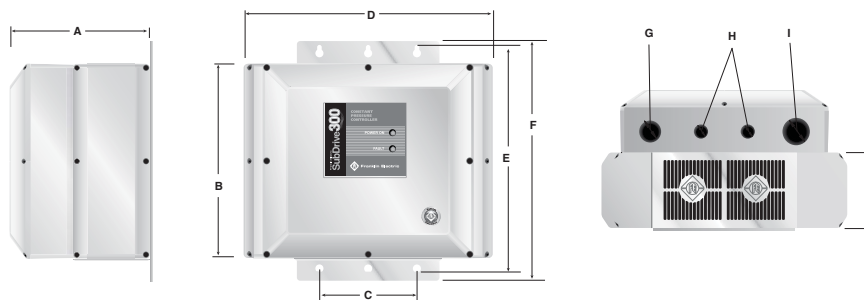


Dimensions in mm (approximate)

NEMA 4	A	B	C	D	E	F	G*	H*	I*
Dimension	184	320	178	345	318	376	22/28	28/35	Closed/12/22
Conduit Sizes	-	-	-	-	-	-	13/19	19/26	13

* Use knock-outs as required

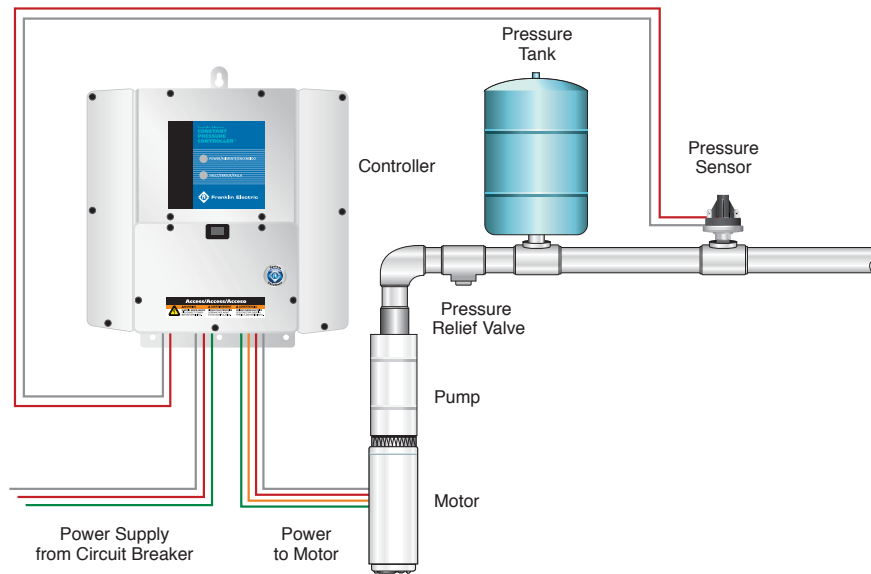
SubDrive SD300-N4 NEMA 4 Enclosure



Dimensions in mm (approximate)

NEMA 4	A	B	C	D	E	F	G	H	I	J
Dimension	222	305	152	390	355	375	35	23	4	12
Conduit Sizes	-	-	-	-	-	-	25	13	32	

Typical Installation



Maximum Motor Cable Length (in Metres)								
Controller Model	Franklin Motor Model	kW	60 °C Insulation - mm ² copper wire size					
			2.5	4	6	10	16	25
SubDrive75	234514XXXX	1.1	128	204	320	510	-	-
SubDrive100	234315XXXX	1.5	98	155	245	390	613	-
SubDrive150	234316XXXX	2.2	73	119	189	300	470	-
SubDrive300	234317XXXX	3.7	-	70	113	180	280	435

Generator Sizing for SubDrive		
Controller Model	Recommended minimum generator sizes	kW
SubDrive75	3500 Watts	3.5
SubDrive100	5700 Watts	6
SubDrive150	7000 Watts	7
SubDrive300	11000 Watts	11



FROM *trickle*
to GUSH



SUBDRIVE INLINE 1100 CONSTANT PRESSURE SYSTEM

SubDrive Inline 1100

SubDrive Inline 1100 Constant Pressure System

Features:

- Unique uni-module system
 - Single pump and motor design with integrated drive
- Small and compact
 - Fits into small areas, even in shafts
- Stainless steel construction
 - Made for years of operation
- Simple and easy installation
 - Step-by-step illustrated instructions
- Quiet and cool operation
 - No fan – Radiant cooling
- NEMA 4 electronics enclosure
- Multi-mounting
 - Horizontal, vertical & even upside down
- Built-in electronic protections
 - Surge protection
 - Voltage underload
 - Locked pump
 - Open circuit
 - Short circuit
 - Overheated controller



Applications:

- Independent floor houses
- Penthouses
- Luxury duplex flats and condominiums
- Health clubs
- Hair and beauty salons
- Automated car washes



Technical Information:

Flow range: Up to 135 lpm

Product power rating: 0.9 kW (1.2 hp)

Minimum incoming flow and cisterns: Flooded suction without water vortexing

Minimum incoming pressure: 0.2 – 0.5 kg/cm²

Maximum incremental pressure boost: 4.2 kg/cm²

Input voltage: 220 V AC

Input frequency: 50 Hz

Current (maximum): 12 amps (rms)

Pressure setting from factory: 3.5 kg/cm²

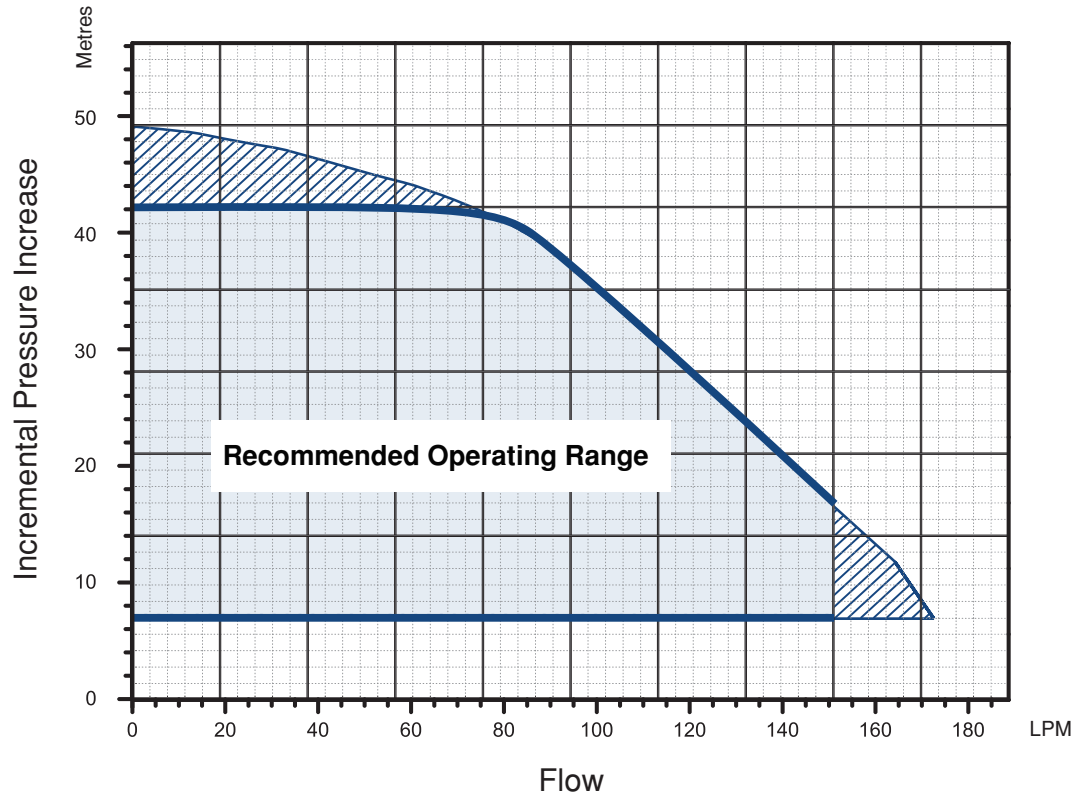
Pressure adjustment range: 1.7 – 5.6 kg/cm²

Relative humidity: 0 – 100% condensing

Shipping weight: 22.7 kg

SubDrive Inline 1100

Performance Curve



NOTE: Running outside of 'Recommended Operating Range' for short periods of time is permissible.

Ordering Information

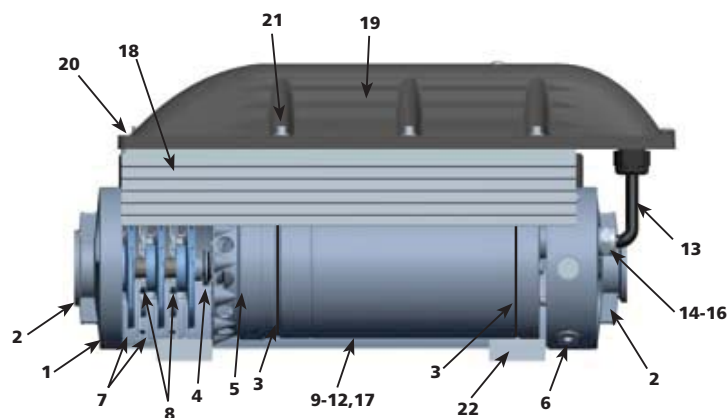
Model Description	Order No.	Input Voltage	Input Phase
25SDIL1100N4 ¹	90401102	220/230	Single
Drive Assembly ²	305707901	220/230	Single
Pump Motor Assembly ²	305707911	220/230	Single
Mounting Feet ²	305707903	N/A	N/A
Pressure Switch ²	305707906	N/A	N/A
Fastener Kit ²	305707904	N/A	N/A
Pressure Switch Cable ²	305707905	N/A	N/A

¹ Includes pump, motor, drive, pressure switch, pressure sensor and all cables.

² Spare part model information.

SubDrive Inline 1100

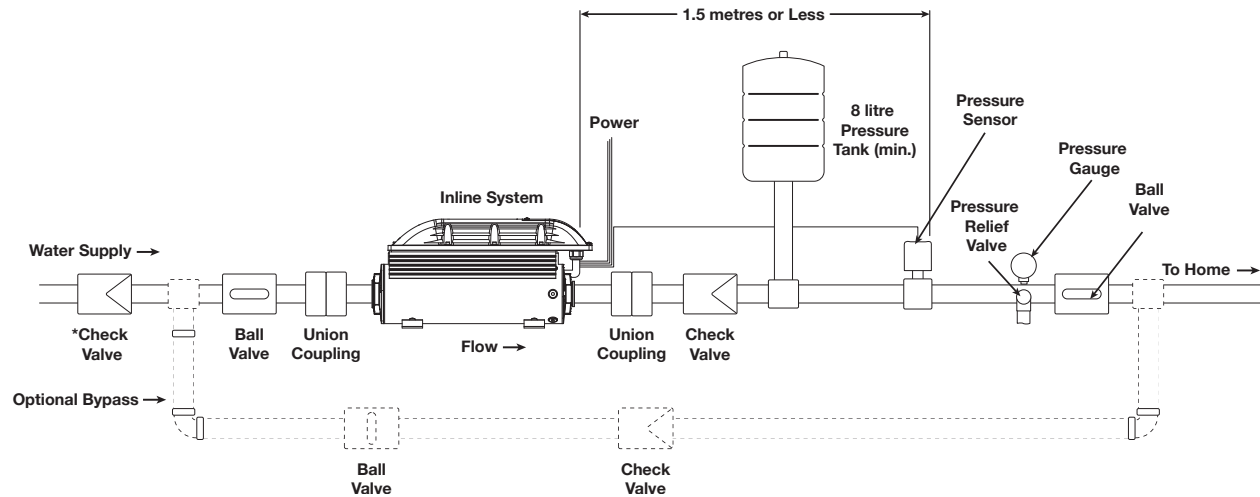
Material Specifications



Item	Description	Comment
1	Outer Shell	300 Series SS — 1.5 mm thick
2	Suction/Discharge	304 SS Casting. 32 mm BSPP thread. Integrated ears able to hold other types of flanges if required
3	O-Rings	NBR-Nitrile Buna Rubber — Temp. rated to 40 °C
4	Pump Mechanical Seal	Carbide/Ceramic/Buna Rubber Seals
5	Internal Motor Seal	Silicon/Carbide/Buna Rubber Seals
6	Outer Shell Screws and Inserts	316 SS
7	Pump Hydraulics	i.e. Impellers, Diffusers, Bowls — 316 SS
8	Floating Seal Rings	Teflon
9	Motor	Dry Design
10	Motor Bearings	Ball Bearing Type — 6202 double sealed on discharge end, 6303 — suction side — double sealed All pre-greased and rated to 40 °C
11	Motor Shaft	304 SS
12	Motor Insulation	Class - F - IP68 rated
13	Motor Lead	14 Ga SJOOW
14	Motor Cable Gland	CuZn — Nickel plated brass
15	Motor Lead Washers	304 SS
16	Motor Lead Rubber Seal	Nitrile
17	Oil Chamber (Motor)	Filled with medical grade white oil — Marcol 82
18	Heat Sink	Die cast aluminum
19	Drive Enclosure Material	Polycarbonate (Flame Retardant, UL 94 V-0)
20	Drive Gaskets	Close Cell Foam Nitrile Rubber
21	Drive Fasteners	304 SS
22	Mounting Base	300 Series SS
N/A	Shaft Coupling	304 SS (Not Shown)

SubDrive Inline 1100

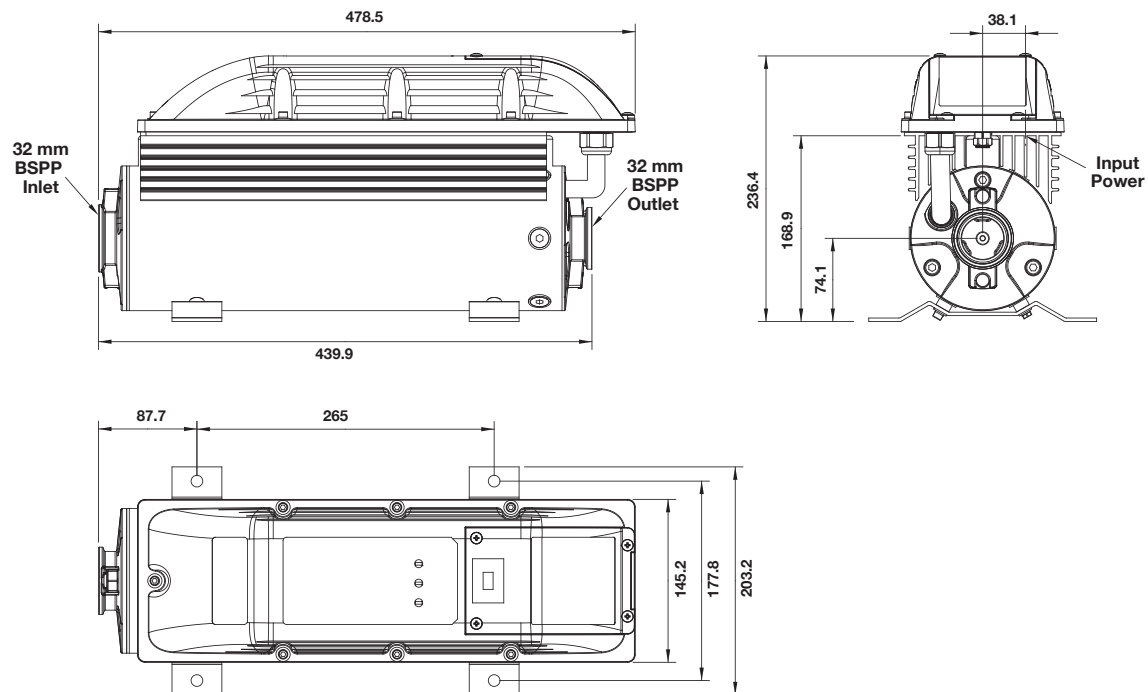
Typical Installation



*NOTICE: If system plumbing does not have a backflow prevention device, a check valve is required on the incoming water supply line.

NOTE: These optional components are shown in a typical installation diagram. They should be used at the installer's discretion as required for particular applications.

Dimensions (in approximate mm)



Notes

Notes

Notes

**Virtual Interaction at
www.constantpressure.com**



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