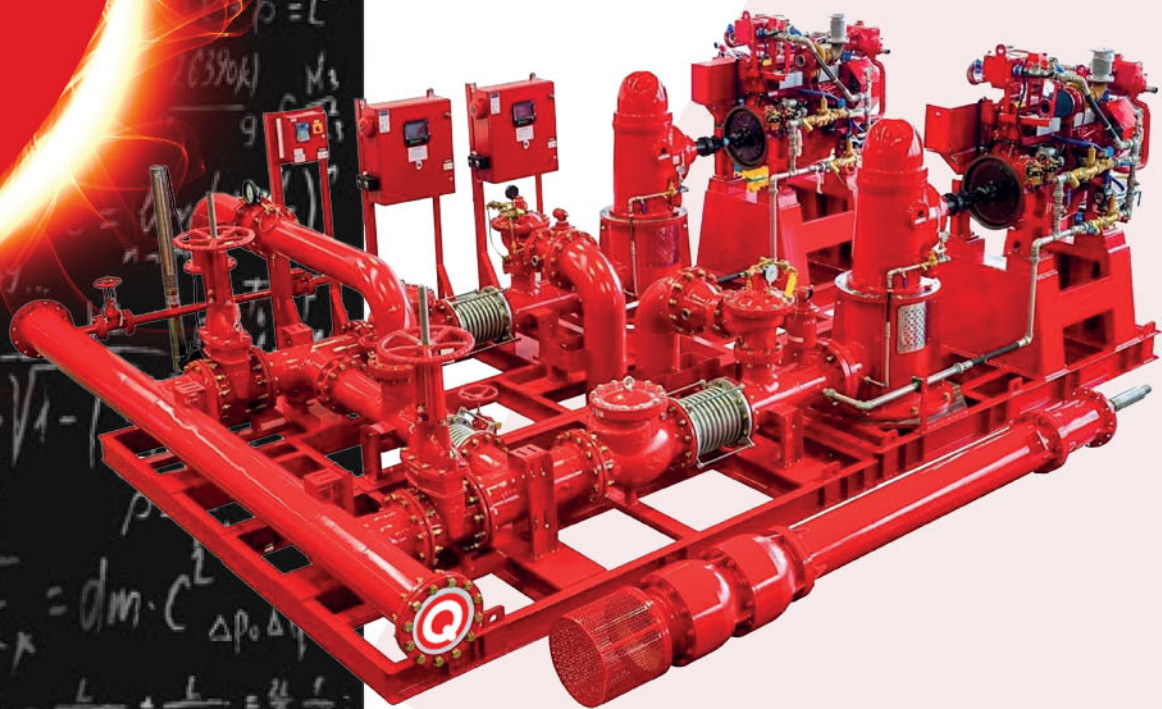




Quantum Pump Systems Ltd

FIRE PUMP RANGE





WE PUMP
ENGINEERING
SOLUTIONS!

Since 1990, Quantum Pump Systems Ltd has provided Engineering, Manufacturing and Rotating Equipment services around the world, primarily covering diverse sectors such as Oil & Gas, Utilities and Construction.

Our company has built a strong reputation for the supply of top-quality rotating and generation equipment, packaged complete with all the ancillary systems engineered to meet individual customer requirements. All built in parts, components, and sub-assemblies with proven quality in similar applications are integrated into our packaged units.

Our highly trained and experienced engineers are readily available to support our customers with after sales service, technical service demands, installation, commissioning, and onsite training works.

Quantum Pump Systems Ltd has a global presence with facilities in the United Kingdom, Malaysia, United Arab Emirates, Turkey and Australia. Our vision is to extend our support worldwide and supply high quality products and related services to our esteemed customers.

We keep stock of a wide range of fast-moving goods and essential spare parts to aid urgent requirements.

Quantum also specializes in Reverse Engineering. Our fully equipped Reserve Engineering division at multiple Quantum facilities focus on re-engineering custom modifications or obsolete original parts requirements, bring it back to working order, testing, and certifying it back to its original standards.



At Quantum we hold quality in the highest regard and therefore the majority of our pumps for the fire protection industry are Underwriter Laboratory (UL) listed, thus meaning we are in conformance with the latest standards. and regularly inspected by UL's team of inspectors on a quarterly basis to ensure our products continue to meet their highest standards.

UL's team of inspectors not only inspect our components on a quarterly basis but also witness test each of the components at each of our global facilities to ensure they are not just inspected and acceptable but also performing to meet the flows and pressures within their certificates.

Each of Quantums UL listed fire pumps are certified for a range of flows, pressures and speeds and provided acceptable, results are shown within each of the certificates issued.

Fig. 1.1 shows our sample UL certificate. Our complete range is available online on the UL Product IQ section of UL website www.ul.com.

Quantum Pump Systems Ltd provide a large range of UL listed fire pumps including horizontal split case, end suction and vertical turbine fire pumps

End Suction fire pumps are perfect solutions for those buildings with limited space given their small foot space, suitable for either motor driven or diesel engine driven and for up to flows of 750 usgpm they are a suitable option.

Horizontal split case fire pumps are an obvious choice for your everyday requirements covering flows from 300 Usgpm up to 8000 Usgpm.

For when your water tank is beneath the fire pump sets, Quantum Pump Systems Ltd have a large range of vertical turbine fire pumps which allow you to move water from your underground tank without risk, covering a flow range from 100 Usgpm up to 6000 Usgpm.

0/23/2020 QXJY.EX28319 - Centrifugal Fire Pumps, Split Case | UL Product IQ

UL Product IQ™

QXJY.EX28319 - Centrifugal Fire Pumps, Split Case

Centrifugal Fire Pumps, Split Case

See General Information for Centrifugal Fire Pumps, Split Case

QUANTUM PUMP SYSTEMS LTD - UK
 TREGONNIGIE INDUSTRIAL ESTATE, FALMOUTH, UK, TR11 4SN
 FALMOUTH, TR11 4SN UNITED KINGDOM
 Fire pumps, single stage

DX28319

Rated Capacity (gpm)	Size (in.)	Model Dwg	Rated Net Pressure Range (psi)	Approx Speed (rpm)	Max Working Pressure (psi)
300	5x3	QHSC1-125/80-250	83-136	2950	280
300	5x3	QHSC1-125/80-250	120-196	3550	280
300	5x4	QHSC1-125/100-300	123-195	2980	400
300	5x4	QHSC1-125/100-300	176-279	3550	400
400	5x3	QHSC1-125/80-250	82-135	2950	280
400	5x3	QHSC1-125/80-250	120-196	3550	280
400	5x4	QHSC1-125/100-300	120-189	2980	400
400	5x4	QHSC1-125/100-300	173-274	3550	400
450	5x3	QHSC1-125/80-250	80-134	2950	280
450	5x3	QHSC1-125/80-250	119-196	3550	280
450	5x4	QHSC1-125/100-300	119-187	2980	400
450	5x4	QHSC1-125/100-300	172-272	3550	400
500	5x3	QHSC1-125/80-250	79-133	2950	280
500	5x3	QHSC1-125/80-350G	172-257	2980	261
500	5x3	QHSC1-125/80-250	118-195	3550	280
500	5x4	QHSC1-125/100-300	117-184	2980	400
500	5x4	QHSC1-125/100-300	170-269	3550	400
500	6x5	QHSC1-150/125-250	117-162	2980	310
500	6x5	QHSC1-150/125-310	137-207	2980	370
500	6x5	QHSC1-150/125-400	208-283	2980	370
500	6x5	QHSC1-150/125-250	137-230	3550	310

<https://ulinspector.com/enq/ul/qxjy/ex28319>

Fig. 1.1 – UL Certificate Sample

Quantum's single stage and two stage horizontal split case fire pumps are UL listed and in full compliance to the latest NFPA 20 standards, with a maximum flow of 8000 USgpm you can be assured we will likely have a pump to cover your project requirements.

The split case design is advantageous for a lot of our customers because of its ability to handle large flows and pressure given the impeller/s can be supported by the bearings on both sides.

Another advantage is the fact it is easy to maintain given the suction and discharge flanges are located on the lower half of the casing allowing the top half of the pump casing to be removed with ease to access the pump internals for maintenance purposes.

Our UL listed horizontal split case flow range extends from 300 USgpm to 8000 USgpm and a pressure range from 79 psi up to 361 psi.

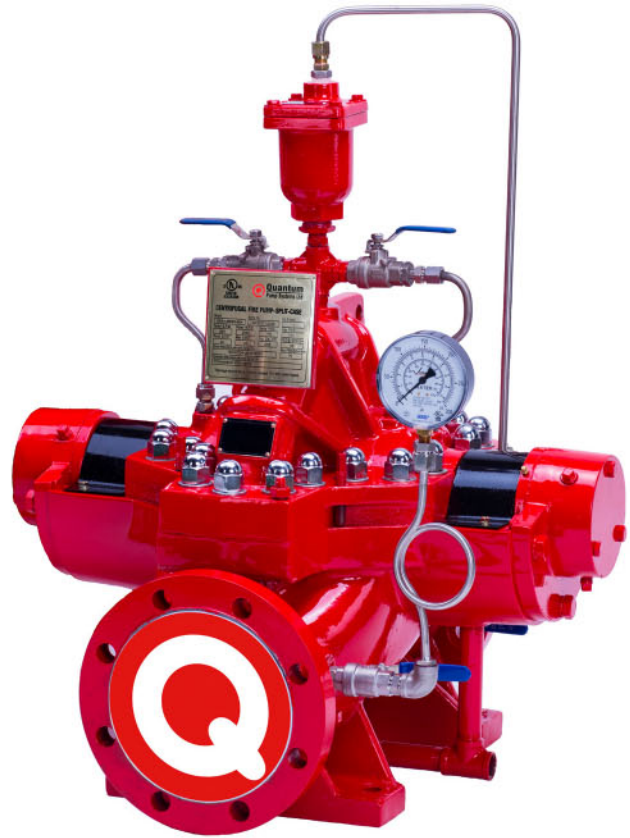
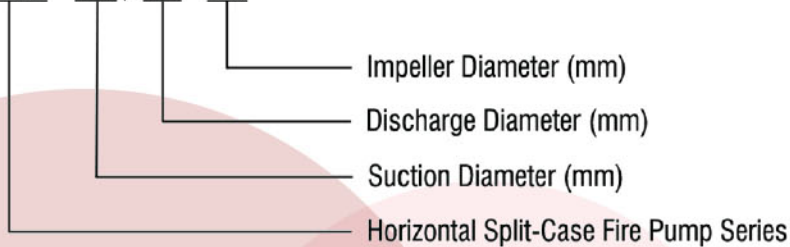


Fig.2.1 – Quantum Split-Case Pump

UL Listed Model Breakdown

QHSC1 - 200 / 150 - 400



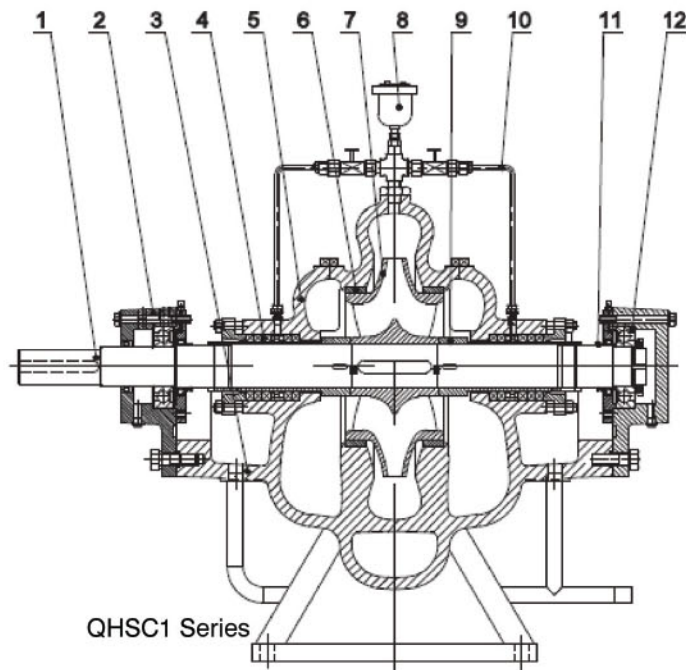


Fig.2.2 – Bare-Shaft Cross Section

MOC - Split-Case Pumps		
S.No	Name	Material
1	Shaft	Stainless Steel / Duplex Stainless Steel / Alloy Steel
2	Bearing Housing	Cast Iron
3	Casing	Ductile Cast Iron / Duplex Stainless Steel
4	Packing Seal Assembly	Stainless Steel / Bronze
5	Upper Casing	Ductile Cast Iron / Duplex Stainless Steel
6	Casing Seal Ring	Bronze
7	Impeller	Stainless Steel / Duplex Stainless Steel
8	Air Release Valve	Cast Iron / Stainless Steel
9	Shaft Sleeve	Stainless Steel / Duplex Stainless Steel
10	Flushing Pipe	Stainless Steel / Duplex Stainless Steel
11	Water-Proof Ring	NBR
12	Bearing	SKF

SPLIT-CASE PUMP SERIES

GENERAL RANGE

Quantum Pump Systems Ltd range of horizontal split case fire pumps certified by Underwriter Laboratories (UL), are certified to be coupled to a horizontal UL listed electric fire pump motor.

The electric motor set is usually installed and used as the duty fire pump in the system to start in case of fire, after the jockey pump (pressure maintenance pump).

The electric fire pump set will continue to run until the system pressure drops to the same pressure drop point configured into the controller, when this is reached, the diesel fire pump set starts.

The electric fire pump motors are designed to NEMA or IEC standards and UL listed for fire pump motors housed in either ODP or TEFC enclosures at 2 pole or 4 pole speed.

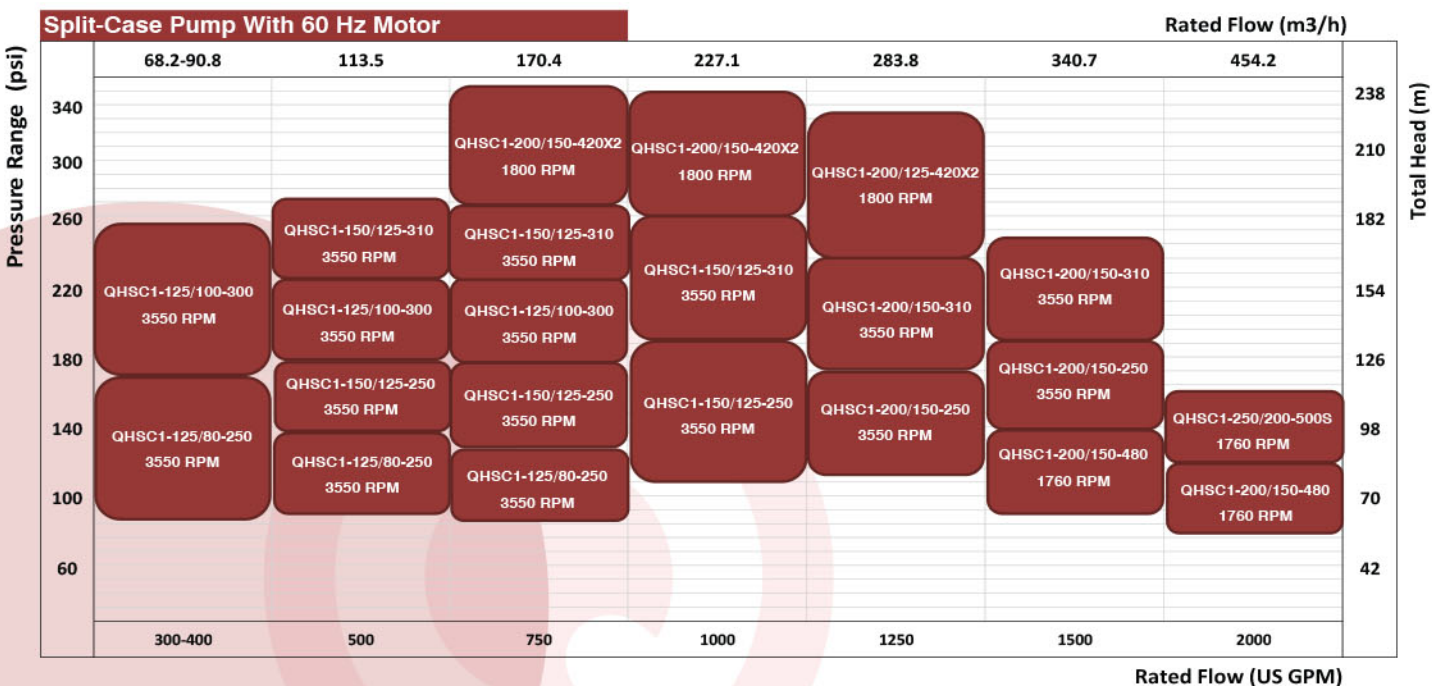
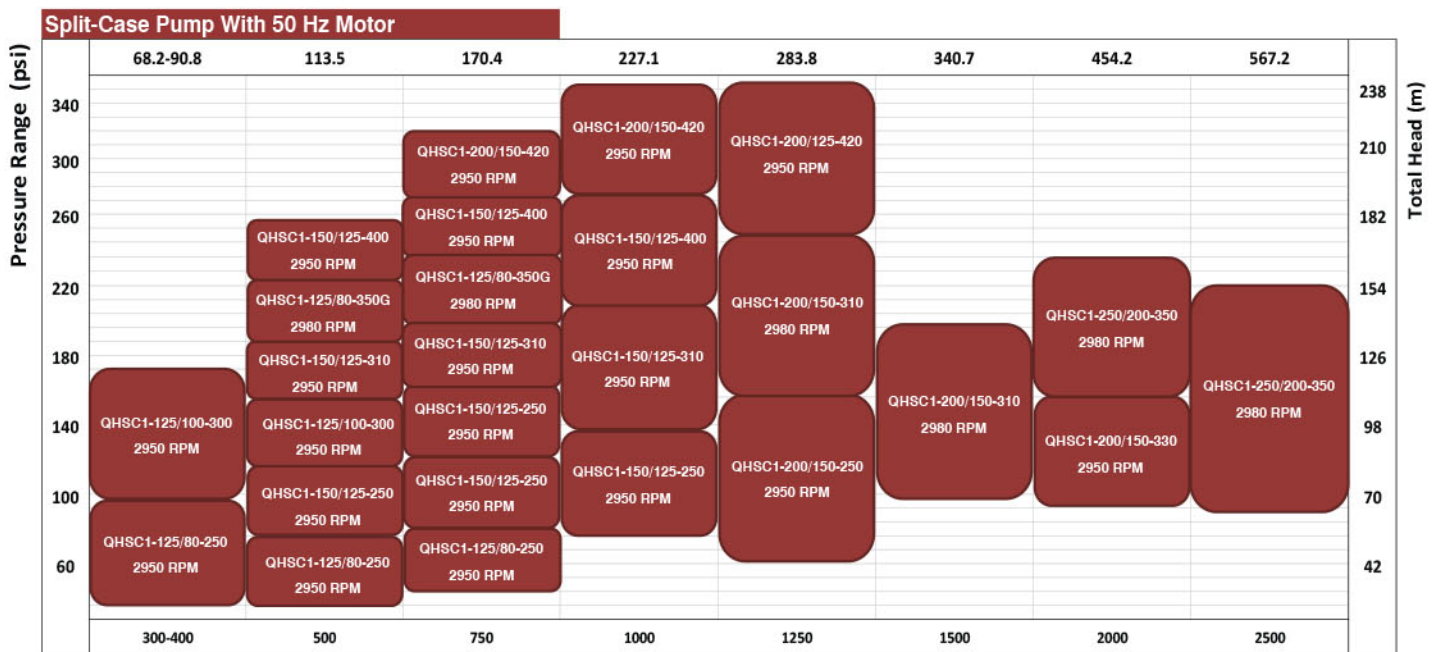
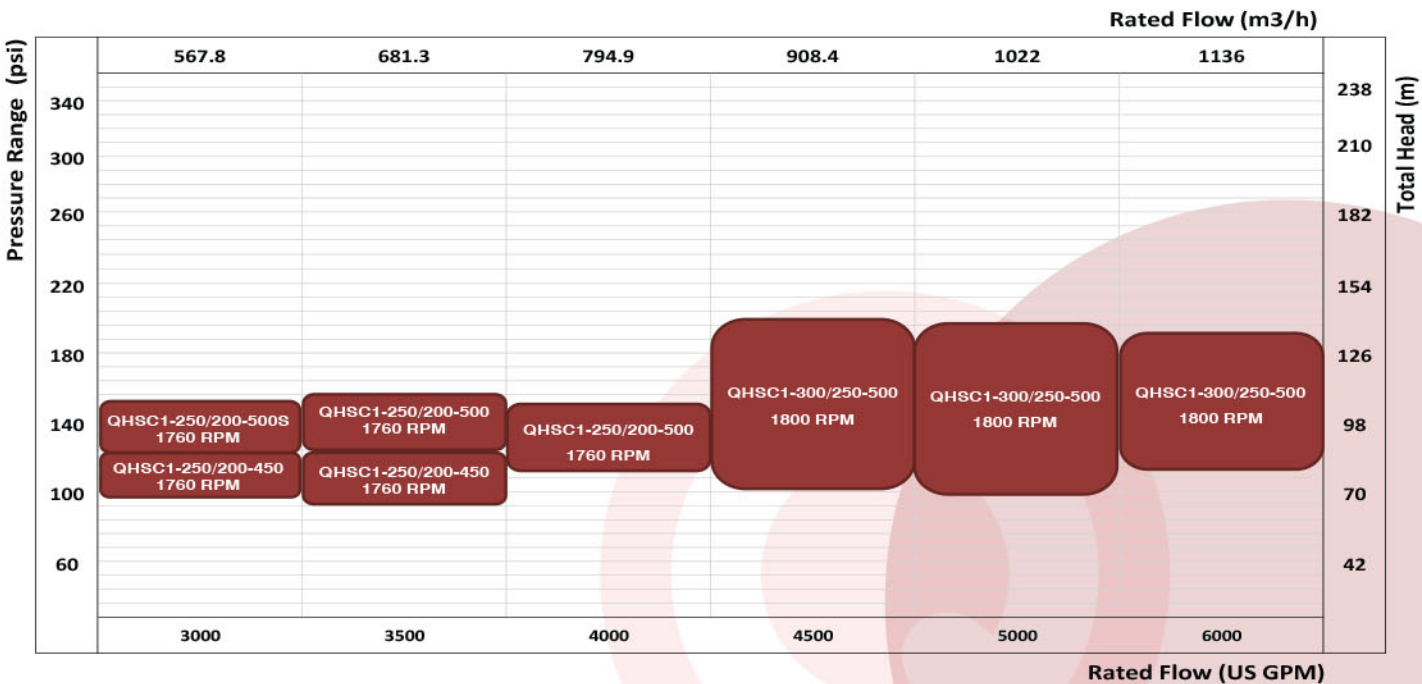
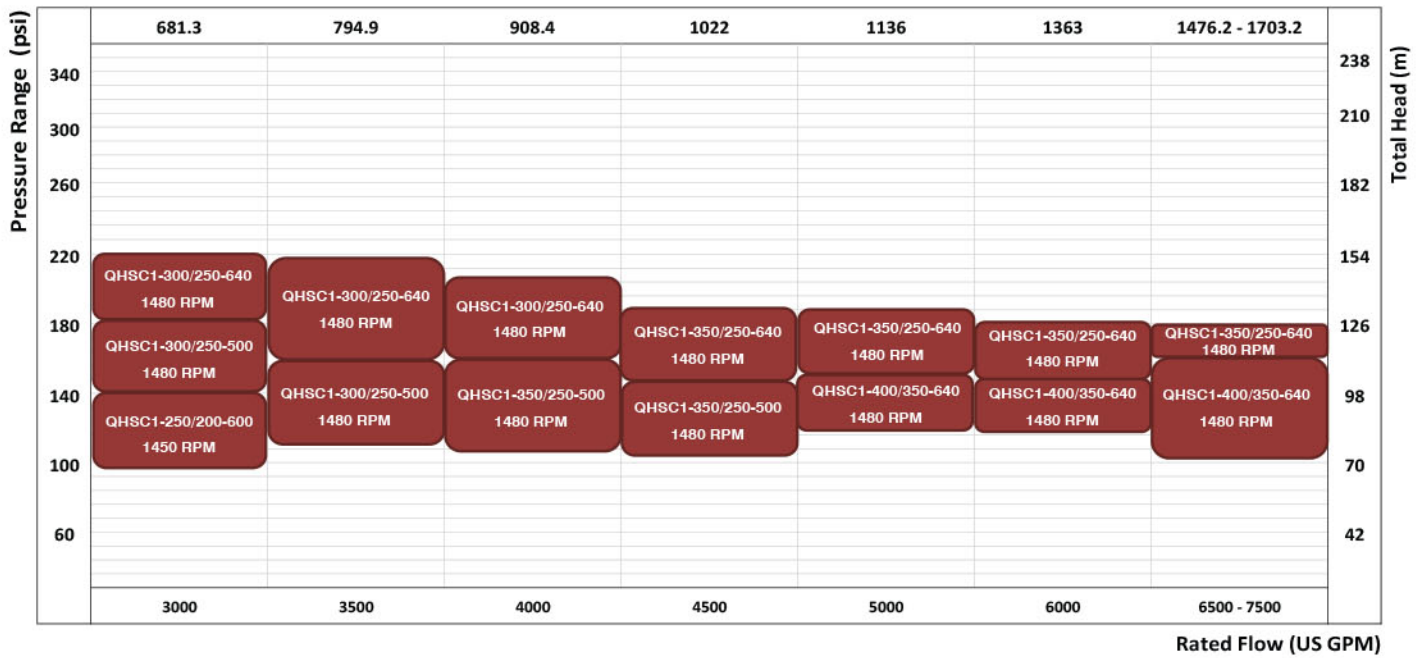




Fig. 2.3 – Split-Case Pump with Motor



SPLIT-CASE PUMP SERIES

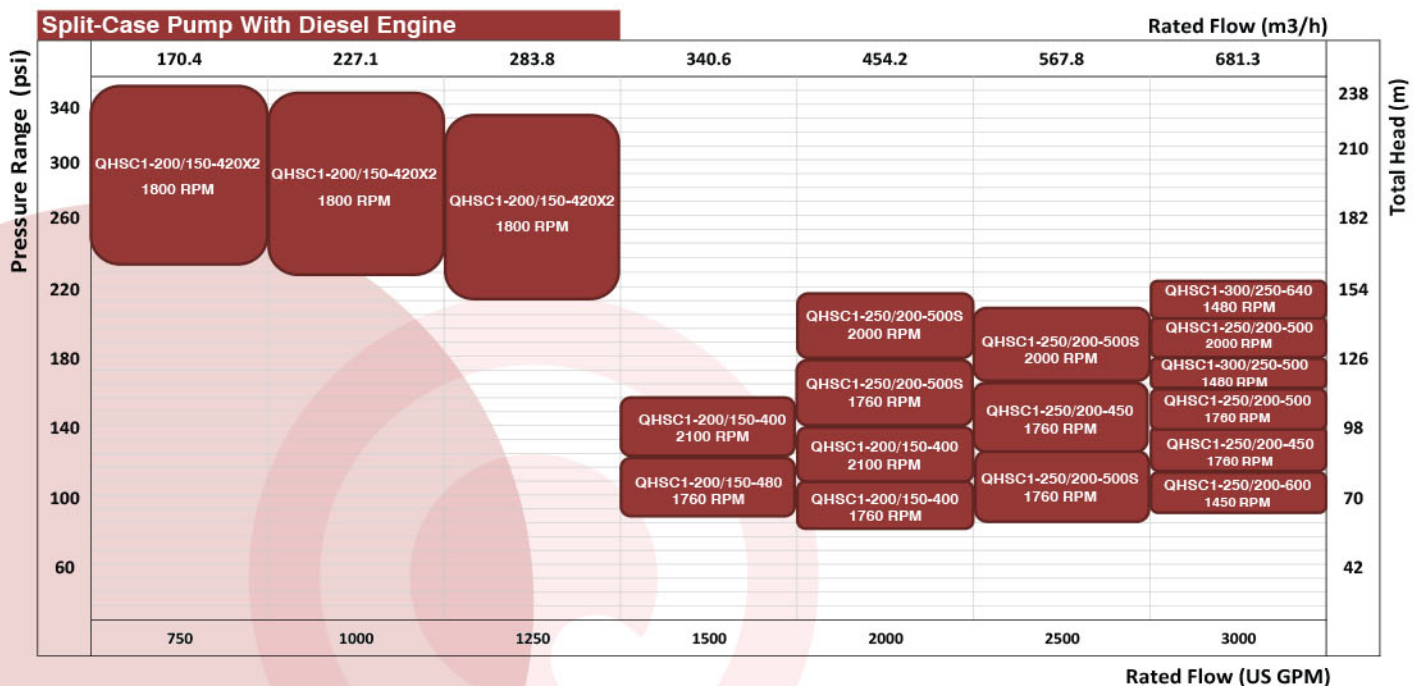
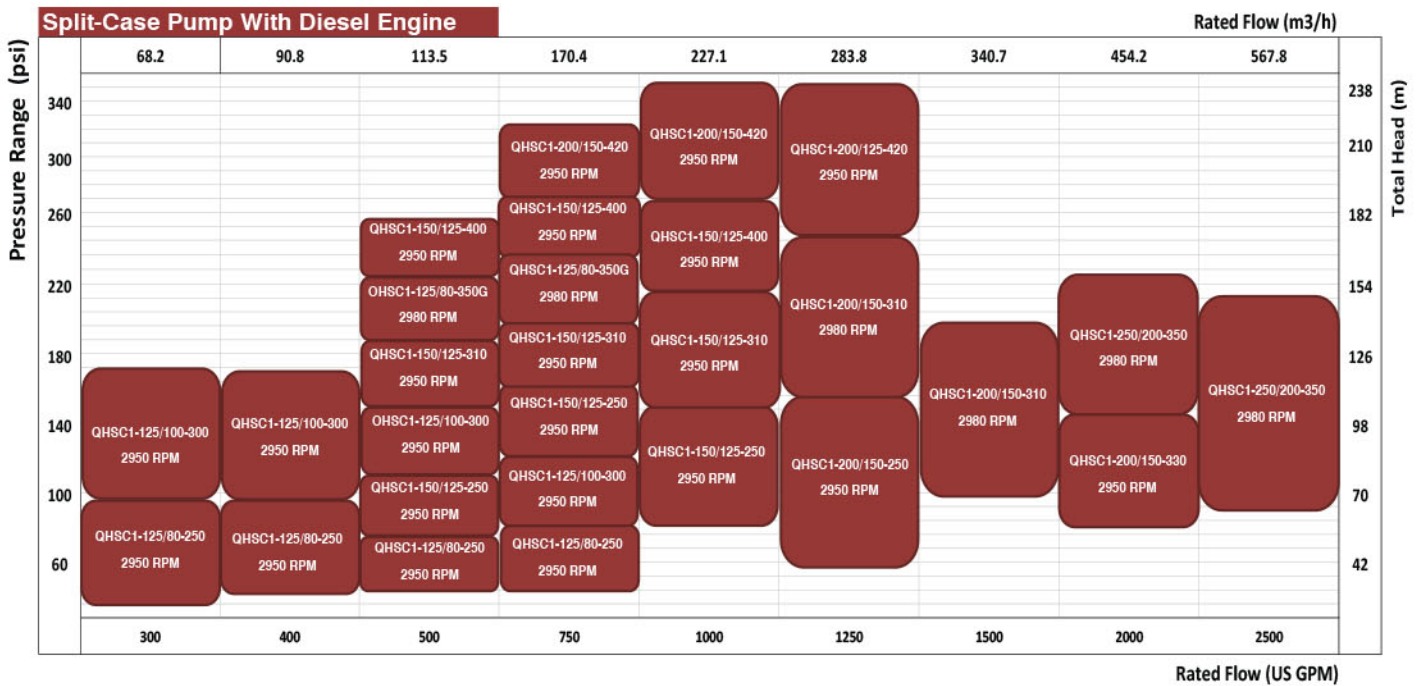
GENERAL RANGE

Quantum Pump Systems Ltd range of horizontal split case fire pumps certified by Underwriter Laboratories (UL), are suitable and approved to be coupled to a horizontal FM and/or UL approved diesel engine.

The diesel fire pump set is usually installed and used as the standby fire pump in the

system to start once the electric fire pump set pressure drop point has been exceeded.

The diesel fire pump set is designed to run until destruction given this is the last line of defense on most occasions.



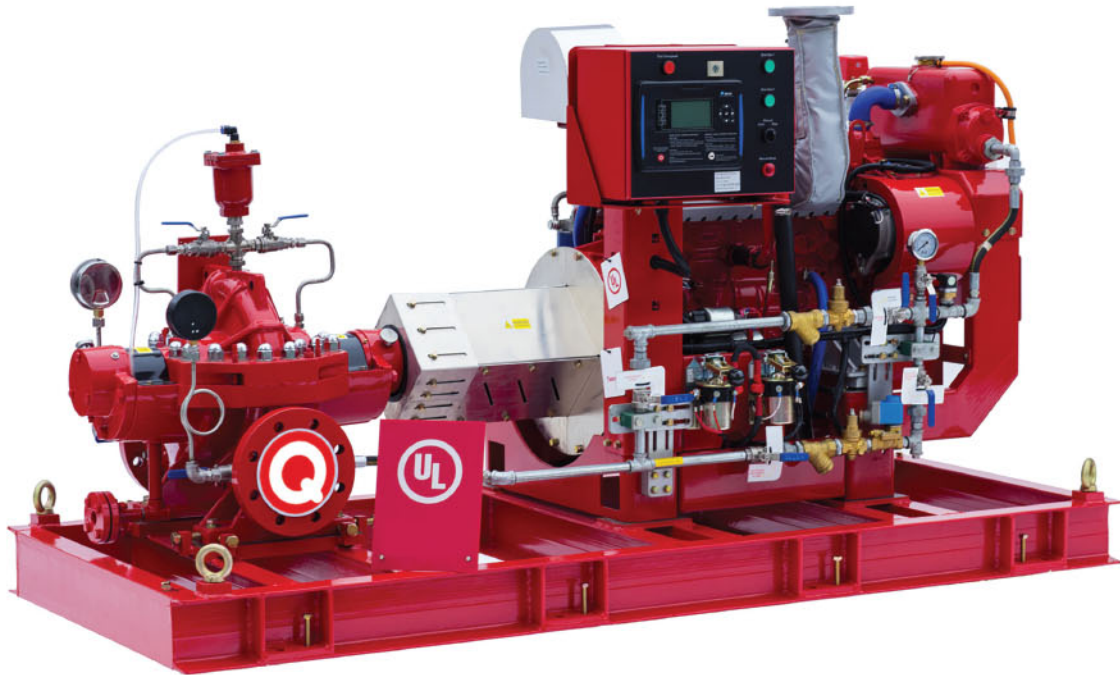
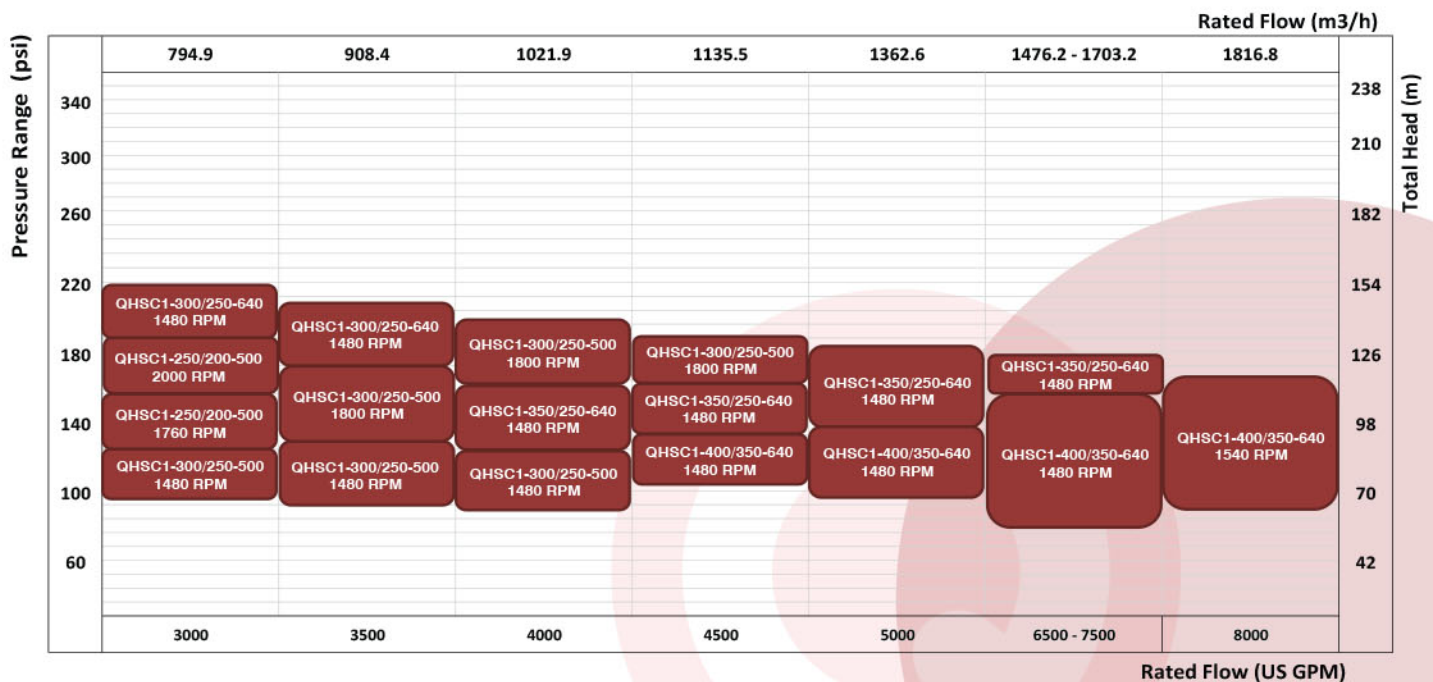


Fig. 2.4 – Split-Case (Single Stage) Pump with Diesel Engine



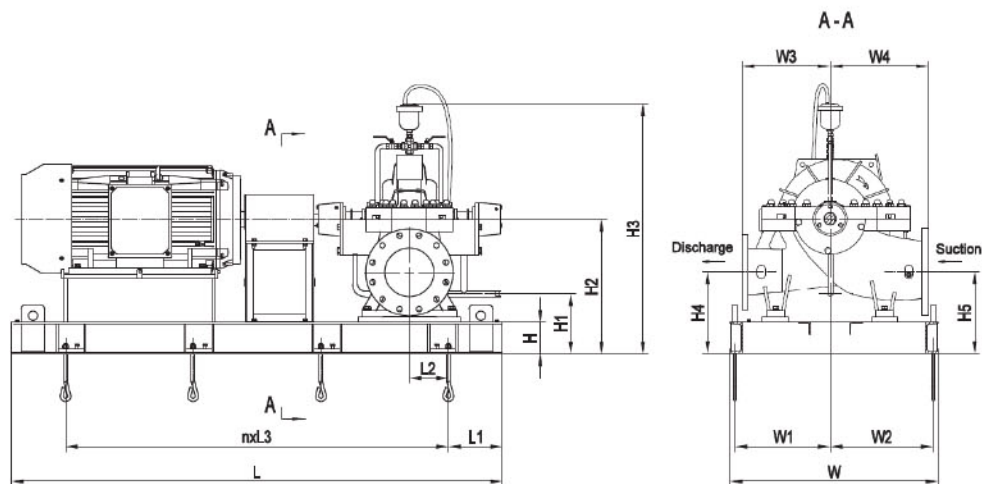


Fig. 2.5 – Split-Case (Single Stage) Pump with Motor

Split-Case Pump With Motor (NEMA/IEC)																							
Pump Model	Speed (RPM)	Power (HP)	Motor Type	Dimensions (mm)																Anchor Bolt	Weight (Kg)		
				L	L1	L2	n	L3	W	W1	W2	W3	W4	H	H1	H2	H3	H4	H5				
QHSC1-125/80-250	2980	25	ODP	1600	150	230	2	650	700	285	365	250	330	120	180	455	875	295	295	6-M16x300	600		
			TEFC	1600	150	230	2	650	700	285	365	250	330	120	180	455	875	295	295	6-M16x300	600		
		30	ODP	1600	150	230	2	650	700	285	365	250	330	120	180	455	875	295	295	6-M16x300	600		
			TEFC	1600	150	230	2	650	700	285	365	250	330	120	180	455	875	295	295	6-M16x300	600		
		40	ODP	1600	150	230	2	650	700	285	365	250	330	120	180	455	875	295	295	6-M16x300	600		
			TEFC	1600	150	230	2	650	700	285	365	250	330	120	180	455	875	295	295	6-M16x300	700		
	50	ODP	1600	150	230	2	650	700	285	365	250	330	120	180	455	875	295	295	6-M16x300	700			
		TEFC	1600	150	230	2	650	700	285	365	250	330	120	180	455	875	295	295	6-M16x300	700			
	60	ODP	1600	150	230	2	650	700	285	365	250	330	120	180	455	875	295	295	6-M16x300	700			
		TEFC	1700	150	230	2	700	800	335	415	250	300	140	200	475	895	315	315	6-M16x300	900			
	3550	50	ODP	1600	150	230	2	650	700	285	365	250	330	120	180	455	875	295	295	6-M16x300	700		
			TEFC	1600	150	230	2	650	700	285	365	250	330	120	180	455	875	295	295	6-M16x300	700		
75		ODP	1600	150	230	2	650	800	335	415	250	300	140	200	475	895	315	315	6-M16x300	900			
		TEFC	1700	150	230	2	700	800	335	415	250	300	140	200	475	895	315	315	6-M16x300	900			
100		ODP	1600	150	230	2	650	800	335	415	250	300	140	200	475	895	315	315	6-M16x300	900			
		TEFC	1800	150	230	2	750	800	335	415	250	300	140	200	475	895	315	315	6-M16x300	950			
QHSC1-125/100-300	2980	75	ODP	1700	150	230	2	700	800	395	355	330	290	140	190	475	925	305	305	6-M16x300	900		
			TEFC	1700	150	230	2	700	900	445	405	330	290	140	190	475	925	305	305	6-M16x300	900		
		100	ODP	1700	150	230	2	700	800	395	355	330	290	140	190	475	925	305	305	6-M16x300	900		
			TEFC	1800	150	230	2	750	900	445	405	330	290	140	190	475	925	305	305	6-M16x300	1000		
	3550	125	ODP	1800	150	230	2	750	900	445	105	330	290	140	190	475	925	305	305	6-M16x300	1000		
			TEFC	1900	150	230	2	800	950	470	430	330	290	140	190	475	925	305	305	6-M16x300	1300		
		150	ODP	1800	150	230	2	750	900	445	405	330	290	140	190	475	925	305	305	6-M16x300	1000		
			TEFC	1900	150	230	2	800	950	470	430	330	290	140	190	475	925	305	305	6-M16x300	1300		
		200	ODP	1900	150	230	2	800	950	470	430	330	290	140	190	475	925	305	305	6-M16x300	1300		
			TEFC	2100	150	230	3	600	950	470	430	330	290	140	190	475	925	305	305	8-M16x300	1550		
		QHSC1-125/80-350G	2980	150	ODP	1900	150	230	2	800	950	450	450	330	330	140	200	475	948	335	335	6-M16x300	1100
					TEFC	1900	150	230	2	800	950	450	450	330	330	140	200	475	948	335	335	6-M16x300	1050
200	ODP		2000	175	205	3	550	950	450	450	330	330	140	200	475	948	335	335	8-M16x300	1250			
	TEFC		2100	150	230	3	600	950	450	450	330	330	140	200	475	948	335	335	8-M16x300	1400			
250	ODP		2000	175	205	3	550	950	450	450	330	330	140	200	475	948	335	335	8-M16x300	1250			
	TEFC		2100	150	230	3	600	950	450	450	330	330	140	200	475	948	335	335	8-M16x300	1400			
QHSC1-150/125-250	2980	75	ODP	1700	150	230	2	700	800	350	400	300	350	140	245	565	1013	365	365	6-M16x300	1000		
			TEFC	1700	150	230	2	700	800	350	400	300	350	140	245	565	1013	365	365	6-M16x300	960		
		100	ODP	1700	150	230	2	700	800	350	400	300	350	140	245	565	1013	365	365	6-M16x300	1000		
			TEFC	1800	150	230	2	750	800	350	400	300	350	140	245	565	1013	365	365	6-M16x300	1050		
		125	ODP	1800	150	230	2	750	800	350	400	300	350	140	245	565	1013	365	365	6-M16x300	1050		
			TEFC	1900	150	230	2	800	900	400	450	300	350	140	245	565	1013	365	365	6-M16x300	1350		
	3550	125	ODP	1800	150	230	2	750	800	350	400	300	350	140	245	565	1013	365	365	6-M16x300	1050		
			TEFC	1900	150	230	2	800	900	400	450	300	350	140	245	565	1013	365	365	6-M16x300	1350		
		150	ODP	1800	150	230	2	750	800	350	400	300	350	140	245	565	1013	365	365	6-M16x300	1050		
			TEFC	1900	150	230	2	800	900	400	450	300	350	140	245	565	1013	365	365	6-M16x300	1350		
		200	ODP	1900	150	230	2	800	900	400	450	300	350	140	245	565	1013	365	365	6-M16x300	1350		
			TEFC	2000	100	230	3	600	900	400	450	300	350	140	245	565	1013	365	365	8-M16x300	1650		
250	ODP	2000	100	280	3	600	900	400	450	300	350	140	245	565	1013	365	365	8-M16x300	1500				
	TEFC	2000	100	230	3	600	900	400	450	300	350	140	245	565	1013	365	365	8-M16x300	1650				

Note: All weights and measurements are approximate only and subject to change without notice. This information should not be used for civil works.

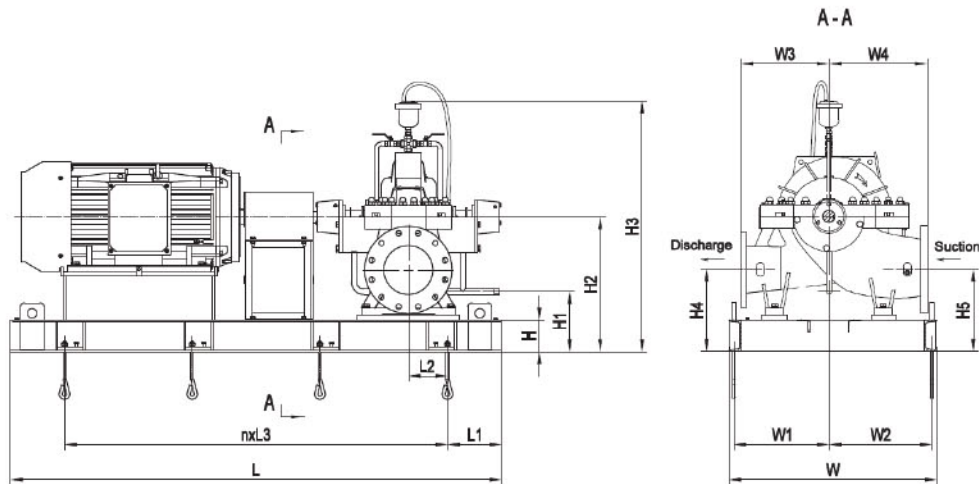


Fig. 2.6 – Split-Case (Single Stage) Pump with Motor

Split-Case Pump With Motor (NEMA/IEC)																					
Pump Model	Speed (RPM)	Power (HP)	Motor Type	Dimensions (mm)																Anchor Bolt	Weight (Kg)
				L	L1	L2	n	L3	W	W1	W2	W3	W4	H	H1	H2	H3	H4	H5		
QHSC1-150/125-250S	3550	75	ODP	1700	150	230	2	700	800	350	400	300	350	140	245	565	1013	365	365	6-M16x300	1000
			TEFC	1700	150	230	2	700	800	350	400	300	350	140	245	565	1013	365	365	6-M16x300	960
		100	ODP	1700	150	230	2	700	800	350	400	300	350	140	245	565	1013	365	365	6-M16x300	1000
			TEFC	1800	150	230	2	750	800	350	400	300	350	140	245	565	1013	365	365	6-M16x300	1050
QHSC1-150/125-310	2980	125	ODP	1700	150	230	2	700	800	350	400	350	400	140	225	565	1033	345	345	6-M16x300	1100
			TEFC	1900	150	230	2	800	900	400	450	350	400	140	225	565	1013	365	365	6-M16x300	1450
		150	ODP	1700	150	230	2	700	800	350	400	350	400	140	225	565	1033	345	345	6-M16x300	1100
			TEFC	1900	150	230	2	800	900	400	450	350	400	140	225	565	1013	365	365	6-M16x300	1450
	3550	200	ODP	1900	150	230	2	800	900	400	450	350	400	140	225	565	1033	345	345	6-M16x300	1400
			TEFC	2100	150	230	3	600	900	400	450	350	400	140	225	565	1013	365	365	8-M16x300	1700
		250	ODP	2000	100	280	3	600	900	400	450	350	400	140	225	565	1033	345	345	8-M16x300	1600
			TEFC	2100	150	230	3	600	900	400	450	350	400	140	225	565	1013	365	365	8-M16x300	1700
QHSC1-150/125-400	2980	150	ODP	1900	150	260	2	800	950	375	525	350	500	140	235	620	1123	335	335	6-M16x300	1230
			TEFC	2000	100	310	3	600	1000	400	550	350	500	140	235	620	1123	335	335	8-M16x300	1550
		200	ODP	2000	100	310	3	600	1000	400	550	350	500	140	235	620	1123	335	335	8-M16x300	1550
			TEFC	2200	275	135	3	550	1000	400	550	350	500	160	275	640	1143	355	355	8-M16x300	1900
QHSC1-200/150-250	2950	75	ODP	1700	150	260	2	700	800	325	425	300	400	140	215	565	1033	365	365	6-M16x300	1050
			TEFC	1700	150	260	2	700	900	375	475	300	400	140	215	565	1033	365	365	6-M16x300	1000
		100	ODP	1700	150	260	2	700	800	325	425	300	400	140	215	565	1033	365	365	6-M16x300	1050
			TEFC	1800	150	260	2	750	900	375	475	300	400	140	215	565	1033	365	365	6-M16x300	1100
QHSC1-200/150-250	3550	125	ODP	1800	150	260	2	750	900	375	475	300	400	140	215	565	1033	365	365	6-M16x300	1080
			TEFC	1900	150	260	2	800	950	400	500	300	400	140	215	565	1033	365	365	6-M16x300	1400
		150	ODP	1900	150	260	2	800	900	375	475	300	400	140	215	565	1033	365	365	6-M16x300	1400
			TEFC	1900	150	260	2	800	950	400	500	300	400	140	215	565	1033	365	365	6-M16x300	1400
QHSC1-200/150-250	100	100	ODP	1700	150	260	2	700	800	325	425	300	400	140	215	565	1033	365	365	6-M16x300	1050
			TEFC	1800	150	260	2	750	900	375	475	300	400	140	215	565	1033	365	365	6-M16x300	1100
		125	ODP	1800	150	260	2	750	900	375	475	300	400	140	215	565	1033	365	365	6-M16x300	1600
			TEFC	1900	150	260	2	800	950	400	500	300	400	140	215	565	1033	365	365	6-M16x300	1400
	150	150	ODP	1800	150	260	2	750	900	375	475	300	400	140	215	565	1033	365	365	6-M16x300	1600
			TEFC	1900	150	260	2	800	950	400	500	300	400	140	215	565	1033	365	365	6-M16x300	1400
		200	ODP	1900	150	260	2	800	900	375	475	300	400	140	215	565	1033	365	365	6-M16x300	1400
			TEFC	2200	125	285	3	650	950	400	500	300	400	140	215	565	1033	365	365	6-M16x300	1650
250	250	ODP	2000	100	310	3	600	950	400	500	300	400	140	215	565	1033	365	365	8-M16x300	1700	
		TEFC	2200	125	285	3	650	950	400	500	300	400	140	215	565	1033	365	365	8-M16x300	1650	
	300	ODP	2000	100	310	3	600	950	400	500	300	400	140	215	565	1033	365	365	8-M16x300	1700	
		TEFC	2200	125	285	3	650	950	400	500	300	400	140	215	565	1033	365	365	8-M16x300	1650	

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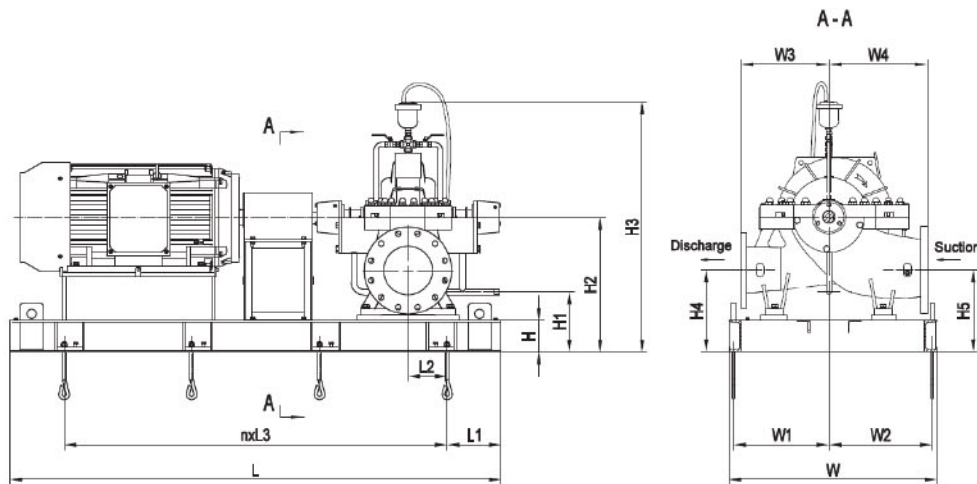


Fig. 2.7 – Split-Case (Single Stage) Pump with Motor

Split-Case Pump With Motor (NEMA/IEC)																					
Pump Model	Speed (RPM)	Power (HP)	Motor Type	Dimensions (mm)																Anchor Bolt	Weight (Kg)
				L	L1	L2	n	L3	W	W1	W2	W3	W4	H	H1	H2	H3	H4	H5		
QHSC1-200/150-310	2980	125	ODP	1800	150	260	2	750	900	390	460	350	425	140	215	565	1055	355	370	6-M16x300	1200
			TEFC	2000	100	310	3	600	950	415	485	350	425	140	215	565	1055	355	370	8-M16x300	1500
		150	ODP	1800	150	260	2	750	900	390	460	350	425	140	215	565	1055	355	370	6-M16x300	1200
			TEFC	2000	100	310	3	600	950	415	485	350	425	140	215	565	1055	355	370	8-M16x300	1500
		200	ODP	2000	100	310	3	600	950	415	485	350	425	140	215	565	1055	355	370	8-M16x300	1500
			TEFC	2200	125	285	3	650	950	415	485	350	425	140	215	565	1055	355	370	8-M16x300	1750
	3550	250	ODP	2100	150	260	3	600	950	415	485	350	425	140	215	565	1055	355	370	8-M16x300	1650
			TEFC	2200	125	285	3	650	950	415	485	350	425	140	215	565	1055	355	370	8-M16x300	1750
		200	ODP	2000	100	310	3	600	950	415	485	350	425	140	215	565	1055	355	370	8-M16x300	1500
			TEFC	2200	125	285	3	650	950	415	485	350	425	140	215	565	1055	355	370	8-M16x300	1750
		250	ODP	2100	150	260	3	600	950	415	485	350	425	140	215	565	1055	355	370	8-M16x300	1650
			TEFC	2200	125	285	3	650	950	415	485	350	425	140	215	565	1055	355	370	8-M16x300	1750
QHSC1-200/150-330	2950	200	ODP	2000	100	310	3	600	950	410	480	350	415	140	195	620	1103	390	390	8-M16x300	1600
			TEFC	2200	125	285	3	650	950	410	480	350	415	140	195	620	1103	390	390	8-M16x300	1900
		250	ODP	2100	150	260	3	600	950	410	480	350	415	140	195	620	1103	390	390	8-M16x300	1750
	TEFC		2200	125	285	3	650	950	410	480	350	415	140	195	620	1103	390	390	8-M16x300	1900	
	300	ODP	2100	150	260	3	600	950	410	480	350	415	140	195	620	1103	390	390	8-M16x300	1750	
		TEFC	2200	125	285	3	650	950	410	480	350	415	140	195	620	1103	390	390	8-M16x300	1900	
TEFC		2200	125	285	3	650	950	410	480	350	415	140	195	620	1103	390	390	8-M16x300	1900		
QHSC1-200/150-420	2980	200	ODP	2000	100	310	3	600	950	425	475	400	450	140	195	620	1158	340	370	8-M16x300	1600
			TEFC	2200	125	285	3	650	950	425	475	400	450	140	195	620	1158	340	370	8-M16x300	1900
		250	ODP	2100	150	260	3	600	950	425	475	400	450	140	195	620	1158	340	370	8-M16x300	1750
	TEFC		2200	125	285	3	650	950	425	475	400	450	140	195	620	1158	340	370	8-M16x300	1900	
	300	ODP	2100	150	260	3	600	950	425	475	400	450	140	195	620	1158	340	370	8-M16x300	1750	
		TEFC	2200	125	285	3	650	950	425	475	400	450	140	195	620	1158	340	370	8-M16x300	1900	
TEFC		2200	125	285	3	650	950	425	475	400	450	140	195	620	1158	340	370	8-M16x300	1900		
QHSC1-250/200-350	2980	250	ODP	2400	300	200	3	600	1100	500	550	450	500	160	245	685	1275	415	415	8-M20x400	2050
			TEFC	2400	300	200	3	600	1100	500	550	450	500	160	245	685	1275	415	415	8-M20x400	2150
		300	ODP	2400	300	200	3	600	1100	500	550	450	500	160	245	685	1275	415	415	8-M20x400	2050
			TEFC	2400	300	200	3	600	1100	500	550	450	500	160	245	685	1275	415	415	8-M20x400	2150
		350	ODP	2400	300	200	3	600	1100	500	550	450	500	160	245	685	1275	415	415	8-M20x400	2050
			TEFC	2700	300	200	3	700	1250	575	625	450	500	160	245	685	1275	415	415	8-M20x400	2300
	450	ODP	2400	300	200	3	600	1100	500	550	450	500	160	245	685	1275	415	415	8-M20x400	2050	
		TEFC	2700	300	200	3	700	1250	575	625	450	500	160	245	685	1275	415	415	8-M20x400	2300	
		TEFC	2700	300	200	3	700	1250	575	625	450	500	160	245	685	1275	415	415	8-M20x400	2300	
QHSC1-200/150-480	1760	200	ODP	2100	150	290	3	600	1000	425	525	420	500	140	225	635	1266	385	385	8-M16x300	1750
			TEFC	2400	150	290	3	700	1000	425	525	420	500	160	245	655	1286	405	405	8-M20x400	2000
		250	ODP	2300	175	265	3	650	1000	425	525	420	500	160	245	655	1286	405	405	8-M20x400	2050
	TEFC		2400	150	290	3	700	1000	425	525	420	500	160	245	655	1286	405	405	8-M20x400	2000	
	300	ODP	2300	175	265	3	650	1000	425	525	420	500	160	245	655	1286	405	405	8-M20x400	2050	
		TEFC	2400	150	290	3	700	1000	425	525	420	500	160	245	655	1286	405	405	8-M20x400	2000	

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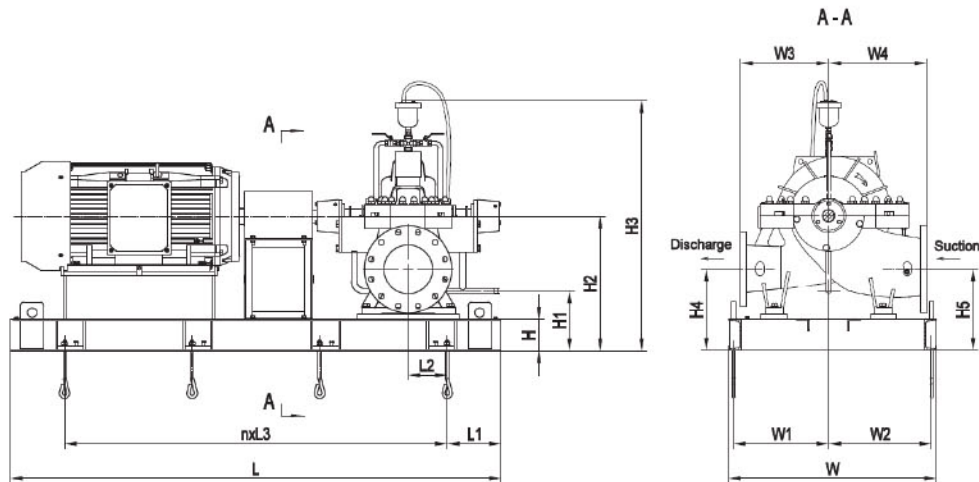


Fig. 2.8 – Split-Case (Single Stage) Pump with Motor

Split-Case Pump With Motor (NEMA/IEC)																							
Pump Model	Speed (RPM)	Power (HP)	Motor Type	Dimensions (mm)																Anchor Bolt	Weight (Kg)		
				L	L1	L2	n	L3	W	W1	W2	W3	W4	H	H1	H2	H3	H4	H5				
QHSC1-250/200-450	1760	250	ODP	2300	175	265	3	650	1100	475	575	400	520	160	245	705	1300	425	425	8-M20x400	2100		
			TEFC	2400	150	290	3	700	1100	475	575	400	520	160	245	705	1300	425	425	8-M20x400	2250		
		300	ODP	2300	175	265	3	650	1100	475	575	400	520	160	245	705	1300	425	425	8-M20x400	2100		
			TEFC	2400	150	290	3	700	1100	475	575	400	520	160	245	705	1300	425	425	8-M20x400	2250		
		350	ODP	2300	175	265	3	650	1100	475	575	400	520	160	245	705	1300	425	425	8-M20x400	2100		
			TEFC	2700	300	140	3	700	1200	475	675	400	520	160	245	705	1300	425	425	8-M20x400	2520		
QHSC1-250/200-500S	1760	200	ODP	2400	300	220	3	600	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2100		
			TEFC	2700	300	220	3	700	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2350		
		250	ODP	2500	275	245	3	650	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2250		
			TEFC	2700	300	220	3	700	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2350		
		300	ODP	2500	275	245	3	650	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2250		
			TEFC	2700	300	220	3	700	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2350		
		350	ODP	2500	275	245	3	650	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2250		
			TEFC	3000	300	220	3	800	1300	575	675	450	550	160	255	735	1315	425	425	8-M20x400	2600		
		400	TEFC	3000	300	220	3	800	1300	575	675	450	550	160	255	735	1315	425	425	8-M20x400	2600		
			TEFC	3000	300	220	3	800	1300	575	675	450	550	160	255	735	1315	425	425	8-M20x400	2600		
		QHSC1-250/200-500	1760	200	ODP	2400	300	220	3	600	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2100
					TEFC	2700	300	220	3	700	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2350
250	ODP			2500	275	245	3	650	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2250		
	TEFC			2700	300	220	3	700	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2350		
300	ODP			2500	275	245	3	650	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2250		
	TEFC			2700	300	220	3	700	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2350		
350	ODP			2500	275	245	3	650	1100	475	575	450	550	160	255	735	1315	425	425	8-M20x400	2250		
	TEFC			3000	300	220	3	800	1300	575	675	450	550	160	255	735	1315	425	425	8-M20x400	2600		
400	TEFC			3000	300	220	3	800	1300	575	675	450	550	160	255	735	1315	425	425	8-M20x400	2600		
	TEFC			3000	300	220	3	800	1300	575	675	450	550	160	255	735	1315	425	425	8-M20x400	2600		
QHSC1-200/150-450X2	1800			250	ODP	2700	300	555	3	700	1100	525	252	500	500	160	230	685	1468	385	405	8-M20x400	2700
					TEFC	2800	275	580	3	750	1100	520	250	500	500	180	250	705	1488	405	425	8-M20x400	2850
		300	ODP	2700	300	555	3	700	1100	525	252	500	500	160	230	685	1468	385	405	8-M20x400	2700		
			TEFC	2800	275	580	3	750	1100	520	250	500	500	180	250	705	1488	405	425	8-M20x400	2850		
		350	ODP	2700	300	555	3	700	1100	525	252	500	500	160	230	685	1468	385	405	8-M20x400	2700		
			TEFC	3100	300	555	4	625	1300	620	250	500	500	180	250	705	1488	405	425	10-M20x400	3050		
		400	TEFC	3100	300	555	4	625	1300	620	250	500	500	180	250	705	1488	405	425	10-M20x400	3050		
			TEFC	3100	300	555	4	625	1300	620	250	500	500	180	250	705	1488	405	425	10-M20x400	3050		
		QHSC1-250/200-600	1450	300	ODP	2500	200	330	3	700	1200	525	625	500	600	160	265	775	1420	425	425	8-M20x400	2360
					TEFC	2700	300	230	3	700	1200	525	625	500	600	160	265	775	1420	425	425	8-M20x400	2490
				350	ODP	2500	200	330	3	700	1200	525	625	500	600	160	265	775	1420	425	425	8-M20x400	2360
					TEFC	3100	300	230	4	625	1300	525	725	500	600	160	265	775	1420	425	425	10-M20x400	2700
400	TEFC			3100	300	230	4	625	1300	525	725	500	600	160	265	775	1420	425	425	10-M20x400	2700		
	TEFC			3100	300	230	4	625	1300	525	725	500	600	160	265	775	1420	425	425	10-M20x400	2700		
QHSC1-300/250-500	1480	350	ODP	2700	300	330	3	700	1300	575	675	550	650	160	265	860	1507	430	430	8-M20x400	2650		
			TEFC	3100	300	330	4	625	1300	575	675	550	650	160	265	860	1507	430	430	10-M20x400	2750		
		400	TEFC	3100	300	330	4	625	1300	575	675	550	650	160	265	860	1507	430	430	10-M20x400	2750		
			TEFC	3100	300	330	4	625	1300	575	675	550	650	160	265	860	1507	430	430	10-M20x400	2750		
		1800	400	TEFC	3100	300	330	4	625	1300	575	675	550	650	160	265	860	1507	430	430	10-M20x400	2750	
			450	TEFC	3100	300	330	4	625	1300	575	675	550	650	160	265	860	1507	430	430	10-M20x400	2750	

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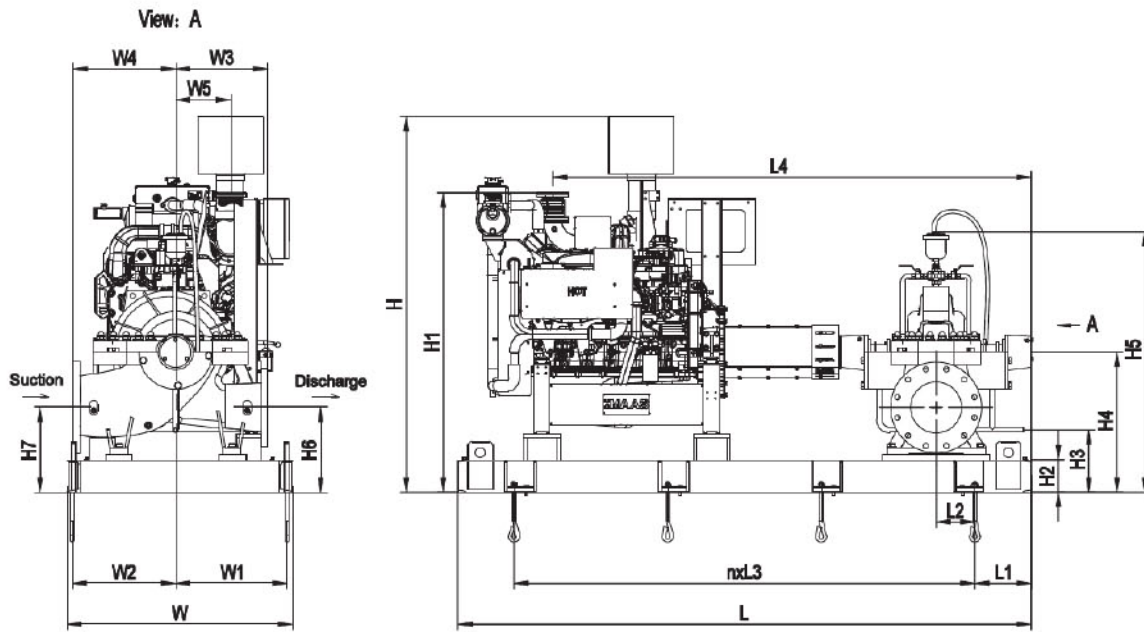


Fig. 2.9 – Split-Case (Single Stage) Pump with Diesel Engine

Split-Case Pump With Diesel Engine (DE MAAS)																									
Pump Model	Speed (RPM)	Power (kW)	Diesel Engine Model	Dimensions (mm)																	Anchor Bolt	Starting System (V)	Weight (Kg)		
				L	L1	L2	n	L3	L4	W	W1	W2	W3	W4	W5	H	H1	H2	H3	H4				H5	H6
QHSC1-125/80-250	2950	60	IF05AH-F	2200	140	240	3	640	1764	1100	590	460	250	330	205	1696	1286	140	285	560	1050	400	400	8-M16x300	930
		97	IF05ATH-F	2200	140	240	3	640	1764	1100	590	460	250	330	234	1696	1286	140	285	560	1050	400	400	8-M16x300	930
QHSC1-125/80-350G	2980	132	IF05ATH-F	2200	125	225	3	650	1771	1000	535	415	330	330	234	1600	1286	140	285	560	1050	420	420	8-M16x300	1110
		144	IF05BTH-F	2200	125	255	3	650	1771	1000	535	415	330	330	234	1600	1286	140	285	560	1050	420	420	8-M16x300	1110
		179	IF07ATH-F	2500	125	255	3	750	2055	1000	535	415	330	330	265	1620	1341	140	285	560	1050	420	420	8-M16x300	1380
		202	IF07BTH-F	2500	125	255	3	750	2055	1000	535	415	330	330	265	1620	1341	140	285	560	1050	420	420	8-M16x300	1380
QHSC1-125/100-300	2980	60	IF05AH-F	2150	175	195	3	600	1758	1030	560	420	290	330	205	1600	1286	140	285	560	1170	390	390	8-M16x300	1050
		97	IF05ATH-F	2150	175	195	3	600	1758	1030	560	420	290	330	234	1600	1286	140	285	560	1170	390	390	8-M16x300	1050
		132	IF05ATH-F	2200	200	170	3	600	1808	1030	560	420	290	330	234	1600	1286	140	285	560	1170	390	390	8-M16x300	1050
QHSC1-150/125-250	2980	60	IF05AH-F	2150	175	195	3	600	1768	1030	560	420	300	350	205	1600	1286	140	240	560	1180	360	360	8-M16x300	1100
		97	IF05ATH-F	2150	175	195	3	600	1768	1030	560	420	300	350	234	1600	1286	140	240	560	1180	360	360	8-M16x300	1100
		132	IF05ATH-F	2200	200	170	3	600	1818	1030	560	420	300	350	234	1600	1286	140	240	560	1180	360	360	8-M16x300	1100
QHSC1-150/125-310	2980	97	IF05ATH-F	2150	175	195	3	600	1768	1030	560	420	350	400	234	1600	1286	140	220	560	1200	340	340	8-M16x300	1150
		132	IF05ATH-F	2200	200	170	3	600	1818	1030	560	420	350	400	234	1600	1286	140	220	560	1200	340	340	8-M16x300	1150
		179	IF07ATH-F	2440	200	170	3	700	2052	1030	560	420	350	400	265	1560	1341	140	220	560	1200	340	340	8-M16x300	1200
QHSC1-150/125-400	2980	132	IF05ATH-F	2300	175	225	3	650	1920	1120	565	505	350	500	234	1600	1286	140	235	620	1300	335	335	8-M16x300	1400
		144	IF05BTH-F	2300	175	225	3	650	1920	1120	565	505	350	500	234	1600	1286	140	235	620	1300	335	335	8-M16x300	1400
		179	IF07ATH-F	2550	150	250	3	750	2153	1120	565	505	350	500	265	1620	1401	140	235	620	1300	335	335	8-M16x300	1700
		202	IF07BTH-F	2550	150	250	3	750	2153	1120	565	505	350	500	265	1620	1401	140	235	620	1300	335	335	8-M16x300	1700
		224	IF07CTH-F	2550	150	250	3	750	2153	1120	565	505	350	500	265	1620	1401	140	235	620	1300	335	335	8-M16x300	1700
QHSC1-200/150-250	2950	97	IF05ATH-F	2150	175	195	3	600	1768	1030	560	420	300	400	234	1600	1286	140	220	560	1200	340	340	8-M16x300	1100
		132	IF05ATH-F	2200	200	170	3	600	1818	1030	560	420	300	400	234	1600	1286	140	220	560	1200	340	340	8-M16x300	1100
		179	IF07ATH-F	2440	200	170	3	700	2052	1030	560	420	300	400	265	1560	1341	140	220	560	1200	340	340	8-M16x300	1150
QHSC1-200/150-310	2980	132	IF05ATH-F	2300	175	225	3	650	1920	1030	555	425	350	425	234	1600	1286	140	210	560	1200	350	365	8-M16x300	1250
		144	IF05BTH-F	2300	175	225	3	650	1920	1030	555	425	350	425	234	1600	1286	140	210	560	1200	350	365	8-M16x300	1250
		179	IF07ATH-F	2550	150	250	3	750	2153	1030	555	425	350	425	265	1560	1341	140	210	560	1200	350	365	8-M16x300	1550
		202	IF07BTH-F	2550	150	250	3	750	2153	1030	555	425	350	425	265	1560	1341	140	210	560	1200	350	365	8-M16x300	1550
		224	IF07CTH-F	2550	150	250	3	750	2153	1030	555	425	350	425	265	1560	1341	140	210	560	1200	370	365	8-M16x300	1550
QHSC1-200/150-330	2950	132	IF05ATH-F	2300	175	225	3	650	1920	1030	555	425	350	415	234	1600	1286	140	210	560	1200	370	400	8-M16x300	1250
		144	IF05BTH-F	2300	175	225	3	650	1920	1030	555	425	350	415	234	1600	1286	140	210	560	1200	350	400	8-M16x300	1250
		179	IF07ATH-F	2550	150	250	3	750	2153	1100	575	475	350	415	265	1620	1401	140	195	620	1335	360	420	8-M16x300	1750
		202	IF07BTH-F	2550	150	250	3	750	2153	1100	575	475	350	415	265	1620	1401	140	195	620	1335	360	420	8-M16x300	1750
QHSC1-200/150-420	2980	202	IF07BTH-F	2800	245	265	3	770	2380	1150	570	530	450	500	265	1838	1465	160	245	685	1335	415	415	8-M20x400	1870
		224	IF07CTH-F	2800	245	265	3	770	2380	1150	570	530	450	500	265	1838	1465	160	245	685	1335	415	415	8-M20x400	1870
		187	IF07BTH-F	2550	150	250	3	750	2153	1100	575	475	370	450	265	1620	1401	140	225	620	1250	370	370	8-M16x300	1780
QHSC1-200/150-400	2100	261	DF12TH-F	2800	200	200	3	800	2094	1100	525	525	370	450	265	1905	1608	160	245	640	1270	390	390	8-M20x400	2240
		373	DF15TH-F	3000	300	100	3	800	1225	1400	675	675	370	450	528	1823	1593	160	355	750	1380	500	500	8-M20x400	2420

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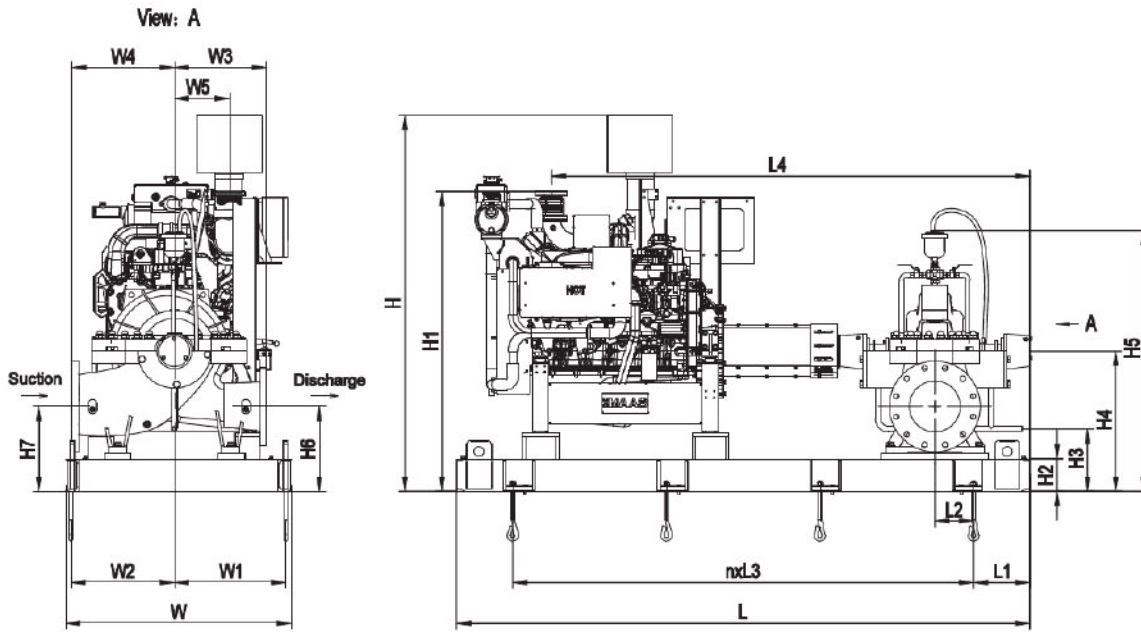


Fig. 2.10 – Split-Case (Single Stage) Pump with Diesel Engine

Split-Case Pump With Diesel Engine (DE MAAS)																									
Pump Model	Speed (RPM)	Power (kW)	Diesel Engine Model	Dimensions (mm)																	Anchor Bolt	Starting System (V)	Weight (Kg)		
				L	L1	L2	n	L3	L4	W	W1	W2	W3	W4	W5	H	H1	H2	H3	H4				H5	H6
QHSC1-200/150-480	1760	165	IF078TIH-F	2700	150	320	3	800	2274	1150	575	525	420	500	364	1789	1416	140	225	635	1225	385	385	8-M16x300	1800
		252	DF12TIH-F	2900	190	280	3	840	2206	1150	575	525	420	500	221	1920	1623	140	225	635	1225	385	385	8-M16x300	2260
		366	DF15TIH-F	3100	300	170	4	625	1436	1450	750	750	420	500	528	1822	1593	160	340	750	1340	500	500	10-M20x400	2450
QHSC1-250/200-450	1760	252	DF12TIH-F	3000	300	240	3	800	2275	1200	590	560	400	520	221	1990	1694	160	245	705	1321	425	425	8-M20x400	2400
		366	DF15TIH-F	3200	300	240	4	650	1505	1400	690	660	400	520	528	1822	1952	160	245	705	1321	425	425	10-M20x400	2510
	2000	371	DF15TIH-F	3200	300	240	4	650	1505	1400	690	660	400	520	528	1822	1952	160	245	705	1321	425	425	10-M20x400	2510
		456	DF18TIH-F	3300	350	145	4	650	1477	1400	690	660	400	520	539	2022	1672	160	245	705	1321	425	425	10-M20x400	2760
QHSC1-250/200-500S	1760	165	IF078TIH-F	2900	280	270	3	780	2456	1200	575	575	450	550	265	1889	1516	160	255	735	1350	425	425	8-M20x400	2090
		252	DF12TIH-F	3100	290	260	3	840	2388	1200	575	575	450	550	221	2020	1723	160	255	735	1350	425	425	8-M20x400	2450
		366	DF15TIH-F	3250	285	265	4	670	1610	1400	675	675	450	550	528	1826	1593	160	270	750	1365	440	440	10-M20x400	2580
	2000	258	DF12TIH-F	3100	290	260	3	840	2388	1200	575	575	450	550	221	2020	1723	160	255	735	1350	425	425	8-M20x400	2450
		371	DF15TIH-F	3250	285	265	4	670	1610	1400	675	675	450	550	528	1826	1593	160	270	750	1365	440	440	8-M20x400	2580
		456	DF18TIH-F	3500	300	250	4	725	1719	1400	675	675	450	550	540	2023	1673	160	270	750	1365	440	440	10-M20x400	2820
QHSC1-250/200-500	1480	305	DF15TIH-F	3250	285	265	4	670	1610	1400	675	675	450	550	528	1826	1593	160	270	750	1365	440	440	10-M20x400	3230
		364	DF18TIH-F	3500	300	250	4	725	1719	1400	675	675	450	550	540	2023	1673	160	270	750	1365	440	440	10-M20x400	2580
		486	DF22TIH-F	3700	300	250	4	775	1719	1400	675	675	450	550	540	2023	1673	160	270	750	1365	440	440	10-M20x400	2820
		252	DF12TIH-F	3100	290	260	3	840	2388	1200	575	575	450	550	221	2020	1723	160	255	735	1350	425	425	8-M20x400	3230
	1760	366	DF15TIH-F	3250	285	265	4	670	1610	1400	675	675	450	550	528	1826	1593	160	270	750	1365	440	440	10-M20x400	2450
		436	DF18TIH-F	3500	300	250	4	725	1719	1400	675	675	450	550	540	2023	1673	160	270	750	1365	440	440	10-M20x400	2580
		371	DF15TIH-F	3250	285	265	4	670	1610	1400	675	675	450	550	528	1826	1593	160	270	750	1365	440	440	10-M20x400	2820
		456	DF18TIH-F	3500	300	250	4	725	1719	1400	675	675	450	550	540	2023	1673	160	270	750	1365	440	440	10-M20x400	2820
		563	DF22TIH-F	3700	300	250	4	775	1719	1400	675	675	450	550	540	2023	1673	160	270	750	1365	440	440	10-M20x400	3230
		2000	305	DF15TIH-F	3250	285	265	4	670	1610	1400	675	675	450	550	528	1826	1593	160	270	750	1365	440	440	10-M20x400
364	DF18TIH-F		3500	300	250	4	725	1719	1400	675	675	450	550	540	2023	1673	160	270	750	1365	440	440	10-M20x400	2820	
486	DF22TIH-F		3700	300	250	4	775	1719	1400	675	675	450	550	540	2023	1673	160	270	750	1365	440	440	10-M20x400	3230	
371	DF15TIH-F		3250	285	265	4	670	1610	1400	675	675	450	550	528	1826	1593	160	270	750	1365	440	440	10-M20x400	2580	
456	DF18TIH-F		3500	300	250	4	725	1719	1400	675	675	450	550	540	2023	1673	160	270	750	1365	440	440	10-M20x400	2820	
QHSC1-250/200-600	1450	228	DF12TIH-F	3100	280	290	4	635	2427	1200	535	615	500	600	221	2060	1763	160	245	775	1492	425	425	10-M20x400	2550
		305	DF15TIH-F	3400	280	280	4	710	1727	1400	670	670	500	600	528	1866	1635	180	265	795	1512	445	445	10-M20x400	2900
		364	DF18TIH-F	3600	280	300	4	760	1763	1400	670	670	500	600	540	2067	1718	180	265	795	1512	445	445	10-M20x400	3100
		486	DF22TIH-F	3700	300	260	4	775	1743	1450	695	695	570	600	540	2087	1738	200	285	815	1532	465	465	10-M24x500	3500
QHSC1-300/250-640	1480	486	DF22TIH-F	3850	275	368	5	660	2483	1450	655	735	550	680	540	2172	1823	200	310	900	1770	510	510	12-M24x500	4070
		562	DF224TIH-F	3850	275	368	5	660	1870	1450	655	735	550	680	553	2233	1822	200	310	900	1770	510	510	12-M24x500	4150
QHSC1-300/250-500	1480	305	DF15TIH-F	3500	260	348	4	745	1819	1400	650	690	550	650	528	1951	1720	180	290	880	1594	510	510	10-M20x400	2840
		364	DF18TIH-F	3700	260	390	4	795	1877	1400	650	690	550	650	540	2152	1803	180	290	880	1594	510	510	10-M20x400	3080
		486	DF22TIH-F	3850	275	368	5	660	1870	1450	655	735	550	650	540	2173	1823	200	310	990	1614	530	530	12-M24x500	3590
	1800	562	DF224TIH-F	3850	275	368	5	660	1870	1450	655	735	550	650	553	2233	1822	200	310	990	1614	530	530	12-M24x500	3660
		366	DF15TIH-F	3500	260	348	4	745	1819	1400	650	690	550	650	528	1951	1720	180	290	880	1594	510	510	10-M20x400	2840
		436	DF18TIH-F	3700	260	390	4	795	1877	1400	650	690	550	650	540	2152	1803	180	290	880	1594	510	510	10-M20x400	3080
QHSC1-350/250-640	1480	573	DF22TIH-F	3850	275	368	5	660	1870	1450	655	735	550	650	540	2172	1823	200	310	900	1614	530	530	12-M24x500	3590
		652	DF224TIH-F	3850	275	368	5	660	1870	1450	655	735	550	650	553	2233	1822	200	310	900	1614	530	530	12-M24x500	3660
QHSC1-400/350-640	1480	486	DF22TIH-F	4000	275	432	5	690	2020	1500	655	785	600	750	540	2212	1863	200	330	940	1696	540	540	12-M24x500	4480
		562	DF224TIH-F	4000	275	432	5	690	2020	1500	655	785	600	750	553	2273	1862	200	330	940	1696	540	540	12-M24x500	4550
QHSC1-400/350-640	1480	486	DF22TIH-F	4000	300	400	4	850	2017	1550	745	745	650	730	540	2268	1918	180	310	995	1920	545	545	10-M20x400	4530
		562	DF224TIH-F	4000	275	435	5	690	2022	1450	655	735	650	730	553	2336	1927	200	330	1015	1960	565	565	12-M24x500	4600

Note: All weights and measurements are approximate only and subject to change without notice. This information should not be used for civil works.

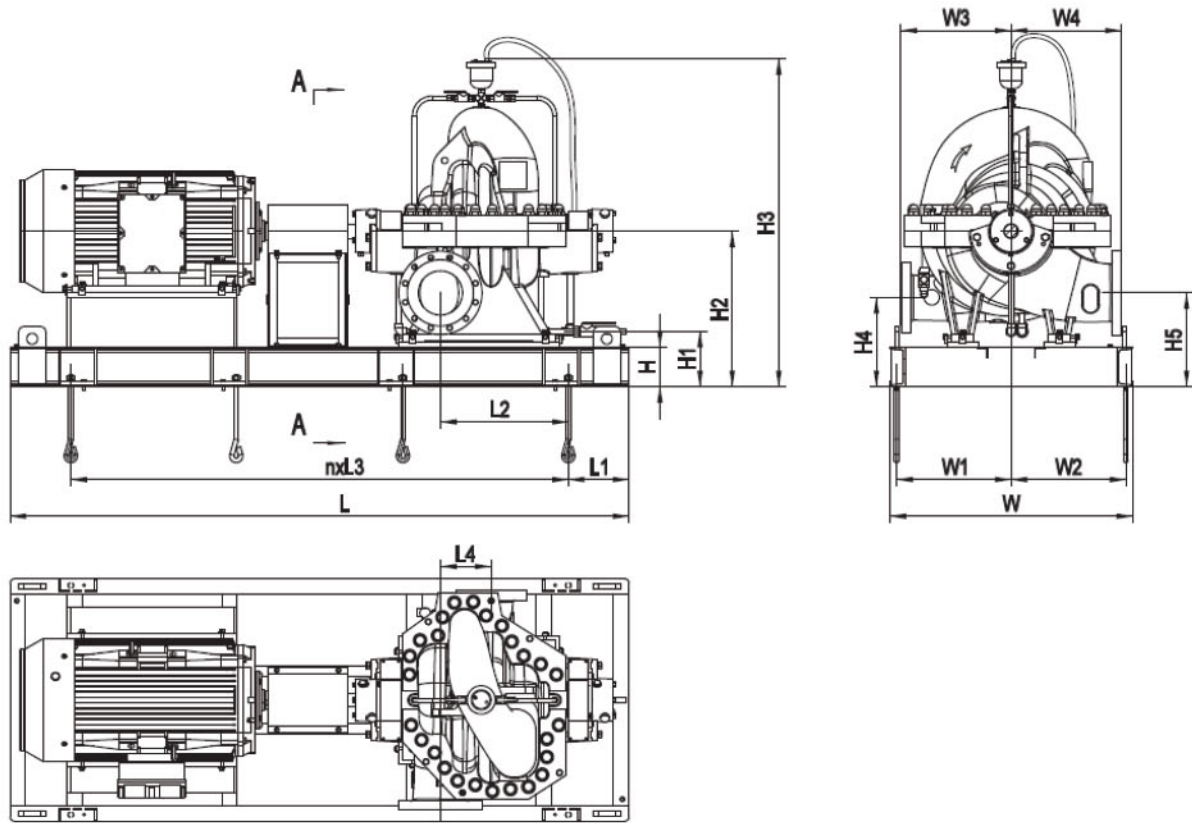


Fig. 2.11 – Split-Case (Double Stage) Pump with Motor

Split-Case Pump With Motor (NEMA/IEC)																						
Pump Model	Speed (RPM)	Power (HP)	Motor Type	Dimensions (mm)																	Anchor Bolt	Weight (Kg)
				L	L1	L2	n	L3	L4	W	W1	W2	W3	W4	H	H1	H2	H3	H4	H5		
QHSC1-200/150-450X2	1800	250	ODP	2700	300	555	3	700	230	1100	525	252	500	500	160	230	685	1468	385	405	8-M20x400	2700
			TEFC	2800	275	580	3	750	230	1100	520	520	500	500	180	250	705	1488	405	425	8-M20x400	2850
		300	ODP	2700	300	555	3	700	230	1100	525	252	500	500	160	230	685	1468	385	405	8-M20x400	2700
			TEFC	2800	275	580	3	750	230	1100	520	520	500	500	180	250	705	1488	405	425	8-M20x400	2850
		350	ODP	2700	300	555	3	700	230	1100	525	252	500	500	160	230	685	1468	385	405	8-M20x400	2700
			TEFC	3100	300	555	4	625	230	1300	620	620	500	500	180	250	705	1488	405	425	10-M20x400	3050
		400	ODP	2700	300	555	3	700	230	1100	525	252	500	500	160	230	685	1468	385	405	8-M20x400	2700
			TEFC	3100	300	555	4	625	230	1300	620	620	500	500	180	250	705	1488	405	425	10-M20x400	3050

Note: All weights and measurements are approximate only and subject to change without notice. This information should not be used for civil works.

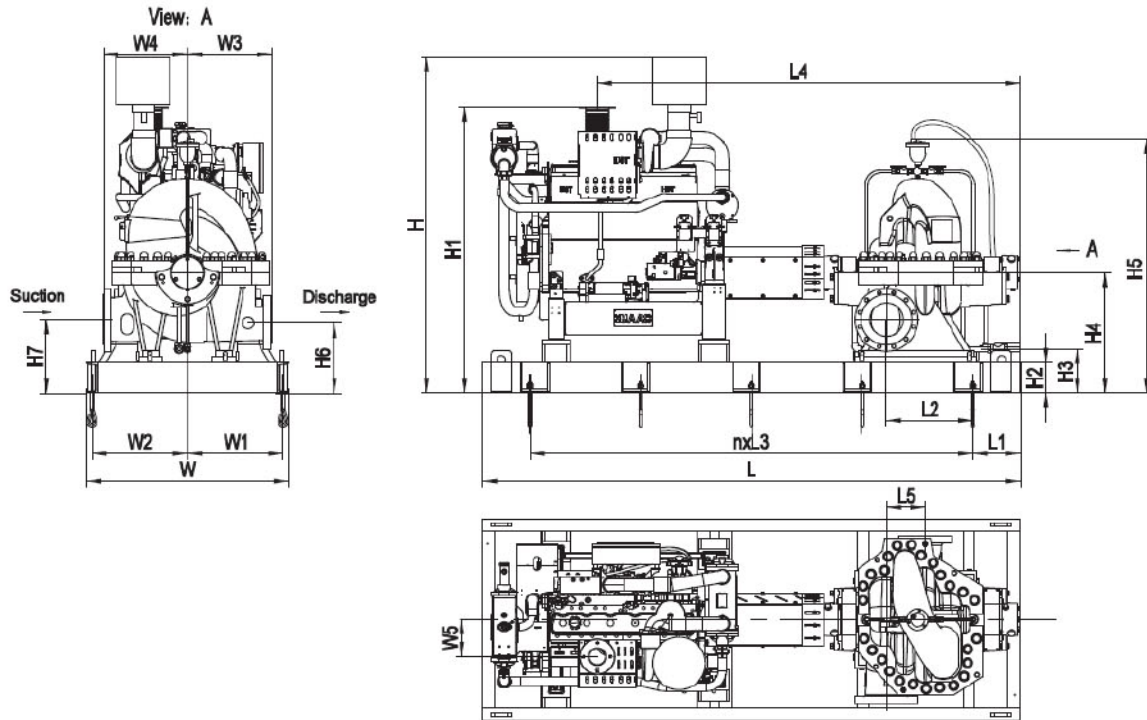


Fig. 2.12 – Split-Case (Double Stage) Pump with Diesel Engine

Split-Case Pump With Diesel Engine																										
Pump Model	Speed (RPM)	Power (HP)	Diesel Engine Model	Dimensions																	Anchor Bolt	Starting System (V)	Weight (Kg)			
				L	L1	L2	n	L3	L4	L5	W	W1	W2	W3	W4	W5	H	H1	H2	H3				H4	H5	H6
QHSC1-200/150-450X2	1800	338	DF12TIH-F	3200	280	515	4	660	2518	230	1200	570	500	500	350	2000	1700	180	260	716	1550	416	436	10-M20x400	3500	
		490	DF15TIH-F	3400	280	515	4	710	1735	230	1500	800	640	500	220	1840	1610	180	315	770	1600	470	490	10-M20x400	3700	
		584	DF18TIH-F	3700	280	515	4	785	1905	230	1500	800	640	500	290/110	2045	1895	180	315	770	1600	470	490	10-M20x400	3950	

Note: All weights and measurements are approximate only and subject to change without notice. This information should not be used for civil works.

Quantum's end suction fire pumps are UL listed and in full compliance to the latest NFPA 20 standards, with a maximum flow of 750 USgpm you can be assured we will likely have a pump to cover your project requirement.

The end suction design is advantageous for a lot of our customers because of its ability to be installed into pump rooms with restricted space and pump rooms where the system pipework is located in the ceiling of the pump room as the discharge is designed to vertically discharge from the top of the pump.

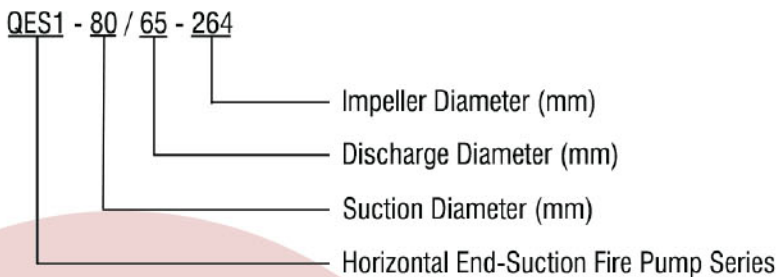
Another advantage is the fact it is easy to maintain given the pump is effectively installed on a slide rail, the back pull out design, allows you to uncouple the pump and slide the pump away from the electric motor and perform any service work required with relative ease.

Our UL listed end suction flow range extends from 50 USgpm to 750 USgpm and a pressure range from 69 psi up to 152 psi.



Fig.3.1 – Quantum End-Suction Pump

UL Listed Model Breakdown



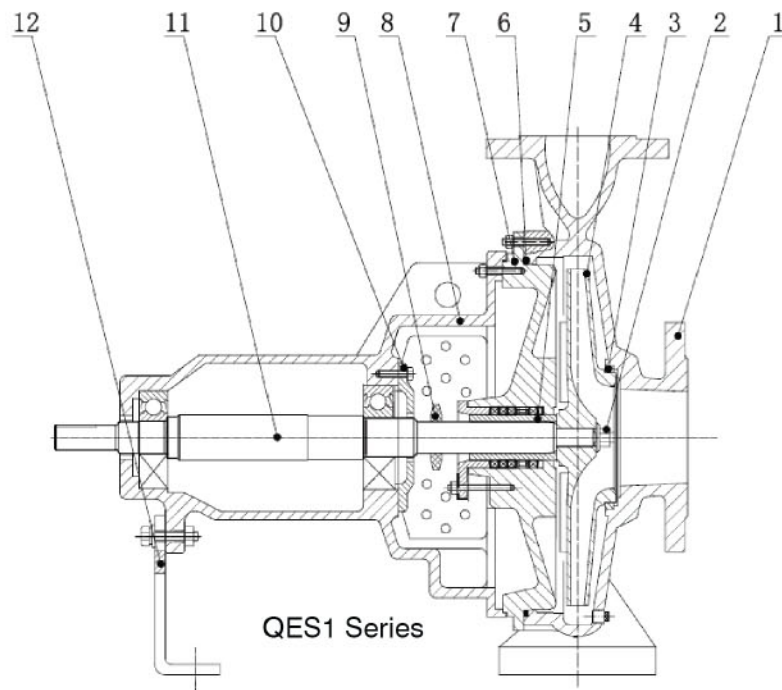


Fig.3.2 – Bare-Shaft Cross Section

MOC - End-Suction Pumps		
S.No	Name	Material
1	Casing	Ductile Cast Iron
2	Impeller Nut	Stainless Steel
3	Casing Wear Ring	Brass
4	Impeller	SS 304
5	Packing Sleeve	Stainless Steel
6	O-Ring	NBR
7	Casing Cover	Ductile Cast Iron
8	Bearing Housing	Cast Iron
9	Water-Proof Ring	NBR
10	Bearing Cover	Cast Iron
11	Shaft	Stainless Steel
12	Bearing Bracket	Carbon Steel

Quantum Pump Systems Ltd range of end suction fire pumps certified by Underwriter Laboratories (UL), are suitable and approved to be coupled to a horizontal FM and/or UL approved diesel engine.

The diesel fire pump set is usually installed and used as the standby fire pump in the system to start once the electric fire pump set pressure drop point has been exceeded.

The diesel fire pump set is designed to run until destruction given this is the last line of defense on most occasions.



Fig. 3.3 – End-Suction Pump with Diesel Engine

End-Suction Pump Range with Diesel Engine & 50Hz Motor								Rated Flow (m ³ /h)	
Pressure Range (psi)	23	45.4	57	68	91	102	114	170	Total Head (m)
	175								
150									106
125	QES1-65/40-264 2980 RPM	QES1-65/50-264 2980 RPM	QES1-80/65-264 2980 RPM	QES1-80/65-264 2980 RPM	QES1-80/65-264 2980 RPM	QES1-80/65-264 2980 RPM	QES1-100/80-264 2980 RPM	QES1-100/80-264 2980 RPM	88
100	QES1-65/40-225 2980 RPM	QES1- 65/50-225 2980 RPM	QES1-80/65-225 2980 RPM	QES1-80/65-225 2980 RPM	QES1-80/65-225 2980 RPM	QES1-80/65-225 2980 RPM	QES1-80/65-225 2980 RPM	QES1-100/80-225 2980 RPM	70
75			QES1- 65/50-225 2980 RPM						53
50									35
	100	200	250	300	400	450	500	750	
	Rated Flow (US GPM)								

Quantum Pump Systems Ltd range of end suction fire pumps certified by Underwriter Laboratories (UL), are suitable and approved to be coupled to a horizontal UL listed electric fire pump motor.

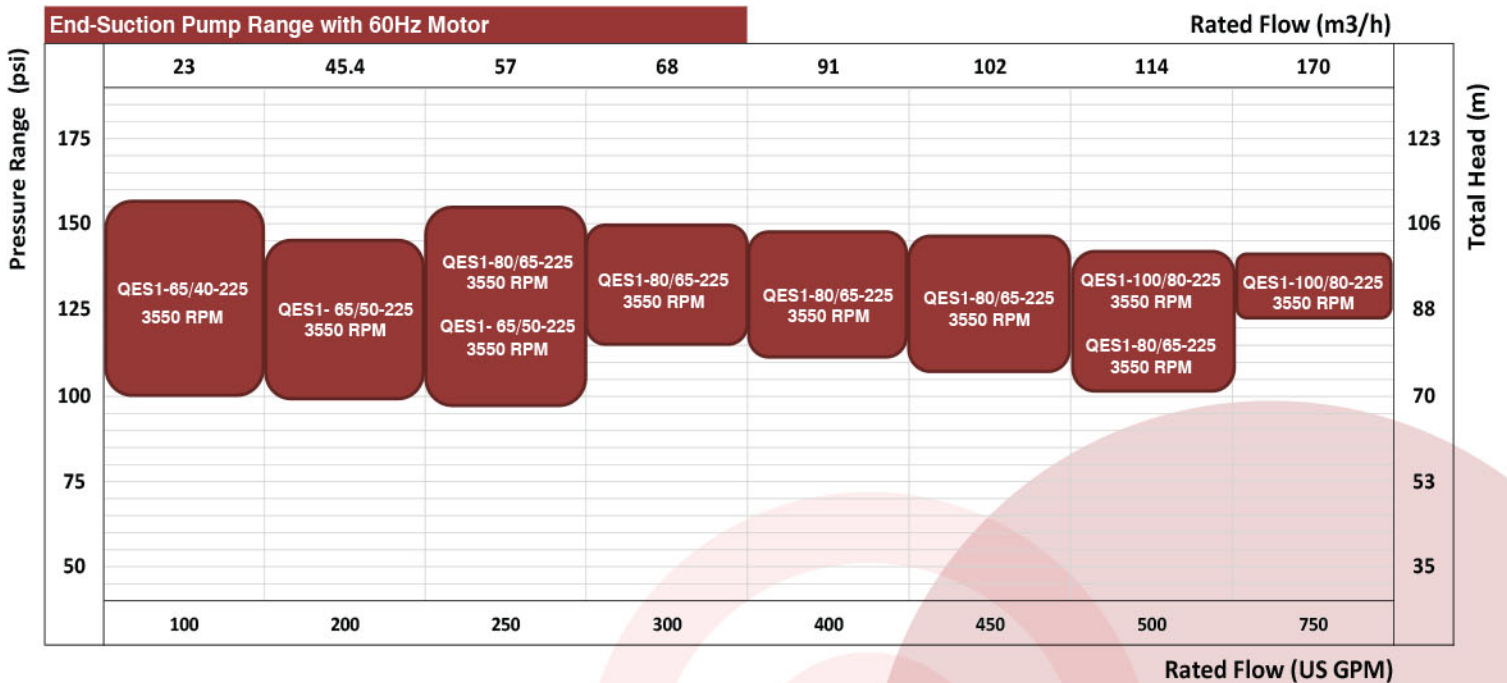
The electric motor set is usually installed and used as the duty fire pump in the system to start in case of fire, after the jockey pump (pressure maintenance pump).

The electric fire pump set will continue to run until the system pressure drops to the same pressure drop point configured into the controller, when this is reached, the diesel fire pump set starts.

The electric fire pump motors are designed to NEMA or IEC standards and UL listed housed in either ODP or TEFC enclosures at 2 pole or 4 pole speed.



Fig. 3.4 – End-Suction Pump with Motor



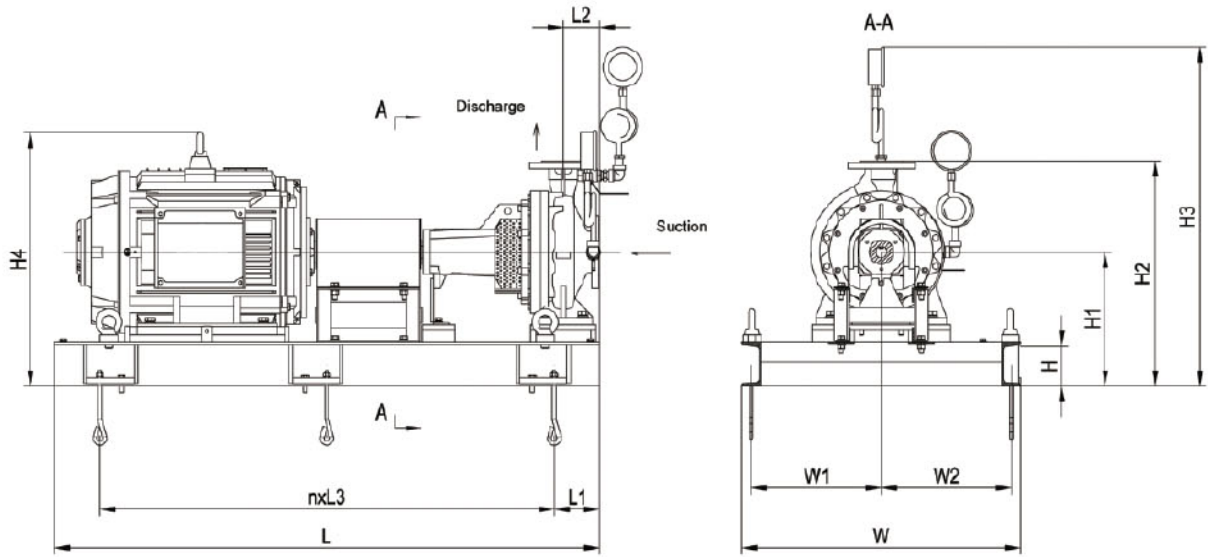


Fig. 3.5 – End-Suction Pump with Motor

End-Suction With Motor (NEMA/IEC)																	
Pump Model	Speed	Power	Motor Type	Dimensions (mm)												Anchor Bolt	Weight (Kg)
	(RPM)	(HP)		L	L1	L2	n	nxL3	W	W1	W2	H	H1	H2	H3		
QES1-65/40-225	2980	15	ODP	1200	150	100	2	450	550	215	285	120	295	475	795	6-M16x300	398
			TEFC	1200	150	100	2	450	550	215	285	120	295	475	795	6-M16x300	398
	3550	20	ODP	1200	150	100	2	450	550	215	285	120	295	475	795	6-M16x300	398
			TEFC	1200	150	100	2	450	550	215	285	120	295	475	795	6-M16x300	398
		25	ODP	1200	150	100	2	450	550	215	285	120	313	493	810	6-M16x300	546
			TEFC	1200	150	100	2	450	550	215	285	120	313	493	810	6-M16x300	546
30	ODP	1200	150	100	2	450	550	215	285	120	313	493	810	6-M16x300	546		
	TEFC	1300	150	100	2	500	550	215	285	120	313	493	810	6-M16x300	561		
QES1-65/40-264	2980	25	ODP	1200	150	100	2	450	550	215	285	120	315	540	855	6-M16x300	569
			TEFC	1200	150	100	2	450	550	215	285	120	315	540	855	6-M16x300	569
		30	ODP	1200	150	100	2	450	550	215	285	120	315	540	855	6-M16x300	569
			TEFC	1300	150	100	2	500	550	215	285	120	315	540	855	6-M16x300	584
	40	ODP	1200	150	100	2	450	550	215	285	120	315	540	855	6-M16x300	569	
		TEFC	1300	150	100	2	500	650	250	350	120	343	568	880	6-M16x300	733	
QES1-65/50-225	2980	20	ODP	1200	150	100	2	450	550	215	285	120	295	475	795	6-M16x300	398
			TEFC	1200	150	100	2	450	550	215	285	120	295	475	795	6-M16x300	398
		25	ODP	1200	150	100	2	450	550	215	285	120	313	493	810	6-M16x300	546
			TEFC	1200	150	100	2	450	550	215	285	120	313	493	810	6-M16x300	546
		30	ODP	1200	150	100	2	450	550	215	285	120	313	493	810	6-M16x300	546
			TEFC	1300	150	100	2	500	550	215	285	120	313	493	810	6-M16x300	561
	3550	40	ODP	1200	150	100	2	450	550	215	285	120	313	493	810	6-M16x300	546
			TEFC	1300	150	100	2	500	650	250	350	120	343	543	860	6-M16x300	713
		40	ODP	1200	150	100	2	450	550	215	285	120	313	493	810	6-M16x300	546
			TEFC	1300	150	100	2	500	650	250	350	120	343	543	860	6-M16x300	713
		50	ODP	1300	150	100	2	500	650	250	350	120	343	543	860	6-M16x300	724
			TEFC	1300	150	100	2	500	650	250	350	120	343	543	860	6-M16x300	724
60	ODP	1300	150	100	2	500	650	250	350	120	343	543	860	6-M16x300	724		
	TEFC	1300	150	100	2	500	750	300	400	120	369	570	890	6-M16x300	980		
QES1-65/50-264	2980	40	ODP	1200	150	100	2	450	550	215	285	120	315	540	855	6-M16x300	721
			TEFC	1300	150	100	2	500	650	250	350	120	343	568	880	6-M16x300	733
		50	ODP	1300	150	100	2	500	650	250	350	120	343	568	907	6-M16x300	743
			TEFC	1300	150	100	2	500	650	250	350	120	343	568	907	6-M16x300	743

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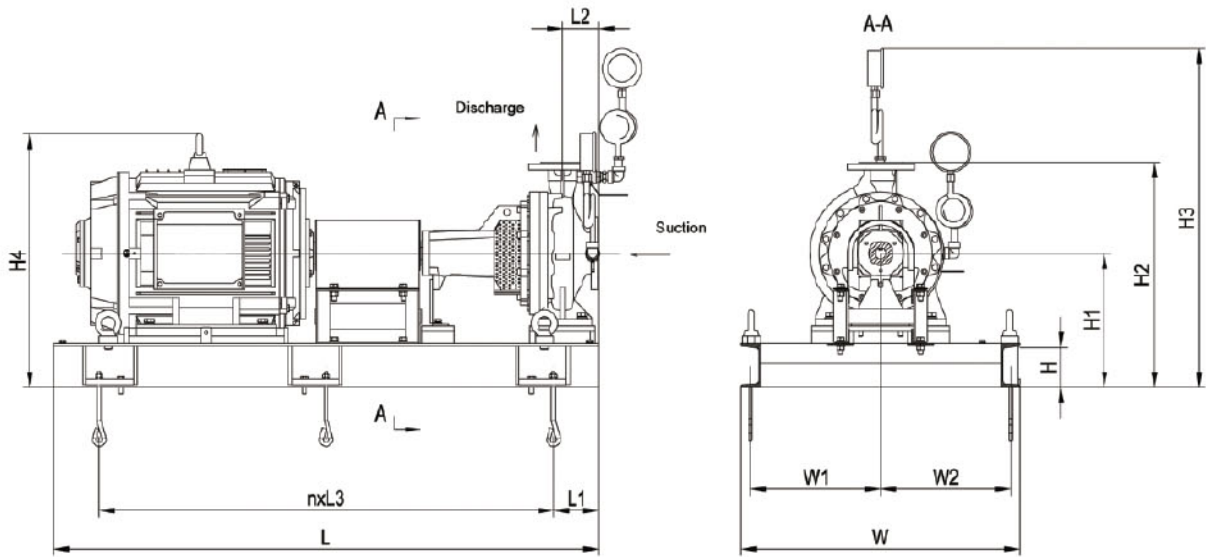


Fig. 3.6 – End-Suction Pump with Motor

End-Suction With Motor (NEMA/IEC)																	
Pump Model	Speed (RPM)	Power (HP)	Motor Type	Dimensions (mm)											Anchor Bolt	Weight (Kg)	
				L	L1	L2	n	n x L3	W	W1	W2	H	H1	H2			H3
QES1-80/65-225	2980	40	ODP	1200	150	100	2	450	550	215	285	120	315	540	855	6-M16x300	569
			TEFC	1300	150	100	2	500	650	250	350	120	343	568	880	6-M16x300	747
		50	ODP	1300	150	100	2	500	650	250	350	120	343	568	887	6-M16x300	758
			TEFC	1300	150	100	2	500	650	250	350	120	343	568	887	6-M16x300	758
	3550	60	ODP	1300	150	100	2	500	650	250	350	120	343	568	887	6-M16x300	758
			TEFC	1300	150	100	2	500	750	300	400	120	369	594	913	6-M16x300	1005
		75	ODP	1300	150	100	2	500	650	250	350	120	343	568	887	6-M16x300	758
			TEFC	1300	150	100	2	500	750	300	400	120	369	594	913	6-M16x300	1070
			ODP	1400	150	100	2	550	750	300	400	120	369	594	913	6-M16x300	1075
			TEFC	1400	150	100	2	550	750	300	400	120	369	594	913	6-M16x300	1075
100	ODP	1300	150	100	2	500	750	300	400	120	369	594	913	6-M16x300	1070		
	TEFC	1500	150	100	2	600	750	300	400	120	394	619	938	6-M16x300	1280		
QES1-80/65-264	2980	60	ODP	1400	150	100	2	550	650	250	350	120	343	593	907	6-M16x300	1005
			TEFC	1500	150	100	2	600	750	300	400	120	369	619	933	6-M16x300	1015
		75	ODP	1400	150	100	2	550	650	250	350	120	369	619	933	6-M16x300	1085
			TEFC	1500	150	100	2	600	750	300	400	120	369	619	933	6-M16x300	1085
		100	ODP	1400	150	100	2	550	650	250	350	120	369	619	933	6-M16x300	1085
			TEFC	1600	150	100	2	650	750	300	400	120	394	644	958	6-M16x300	1275
QES1-100/80-225	2980	75	ODP	1600	150	125	2	650	750	300	400	120	369	619	938	6-M16x300	1075
			TEFC	1600	150	125	2	650	750	300	400	120	369	619	938	6-M16x300	1075
		100	ODP	1600	150	125	2	650	750	300	400	120	369	619	938	6-M16x300	1260
			TEFC	1800	150	125	2	750	750	300	400	120	394	644	963	6-M16x300	1260
	3550	125	ODP	1600	150	125	2	650	750	300	400	120	394	644	963	6-M16x300	1770
			TEFC	1800	150	125	2	750	850	350	450	120	419	669	988	6-M16x300	1790
		150	ODP	1600	150	125	2	650	750	300	400	120	394	644	963	6-M16x300	1880
			TEFC	1800	150	125	2	750	850	350	450	120	419	669	988	6-M16x300	1890
QES1-100/80-264	2980	100	ODP	1600	150	125	2	650	750	300	400	120	369	649	963	6-M16x300	1283
			TEFC	1800	150	125	2	750	750	300	400	120	394	674	988	6-M16x300	1295
		125	ODP	1600	150	125	2	650	750	300	400	120	394	674	988	6-M16x300	1782
			TEFC	1800	150	125	2	750	850	350	450	120	419	699	1008	6-M16x300	1815

Note: All weights and measurements are approximate only and subject to change without notice. This information should not be used for civil works.

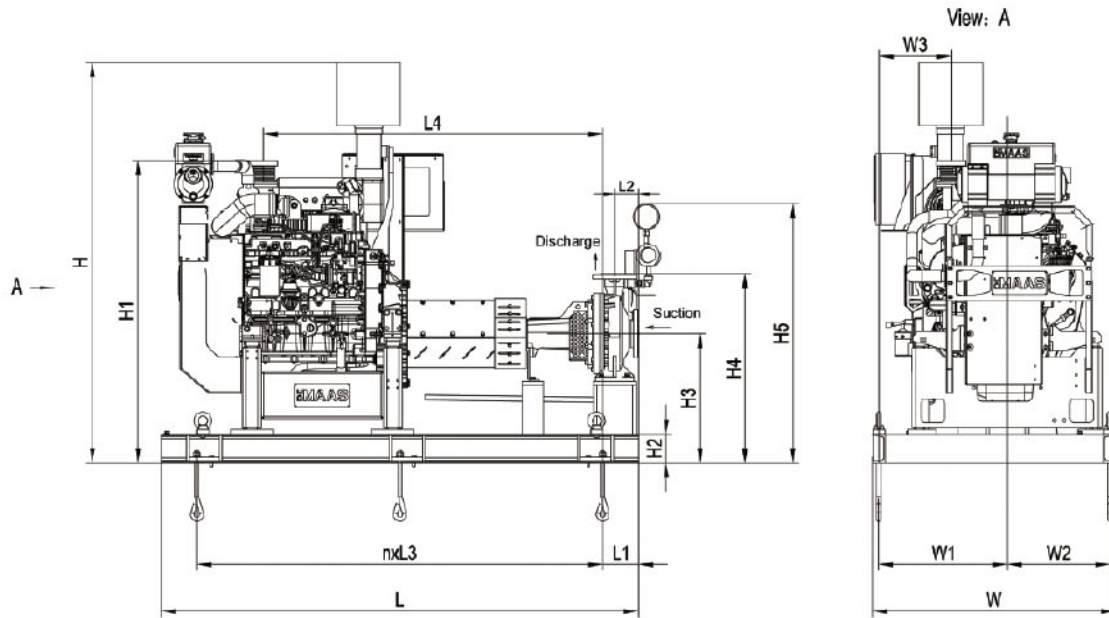


Fig. 3.7 – End-Suction Pump with Diesel Engine

End-Suction Pump With Diesel Engine (DE MAAS)																						
Pump Model	Speed	Power	Diesel Engine Model	Dimensions (mm)															Anchor Bolt	Starting System (V)	Weight (Kg)	
	(RPM)	(HP)		L	L1	L2	n	L3	L4	W	W1	W2	W3	H	H1	H2	H3	H4				H5
QES1-65/40-225	2980	80	IF05AH-F	1900	150	100	2	800	1080	1020	540	430	306	1530	1133	120	540	720	1020	6-M16x300	24	690
QES1-65/40-264	2980	80	IF05AH-F	1900	150	100	2	800	1080	1020	540	430	306	1530	1133	120	540	765	1060	6-M16x300		710
QES1-65/50-225	2980	80	IF05AH-F	1900	150	100	2	800	1080	1020	540	430	306	1530	1133	120	540	740	1040	6-M16x300		685
QES1-65/50-264	2980	80	IF05AH-F	1900	150	100	2	800	1080	1020	540	430	306	1530	1133	120	540	765	1085	6-M16x300		705
QES1-80/65-225	2980	80	IF05AH-F	1900	150	100	2	800	1085	1020	540	430	306	1530	1133	120	540	765	1065	6-M16x300		690

Note: All weights and measurements are approximate only and subject to change without notice. This information should not be used for civil works.

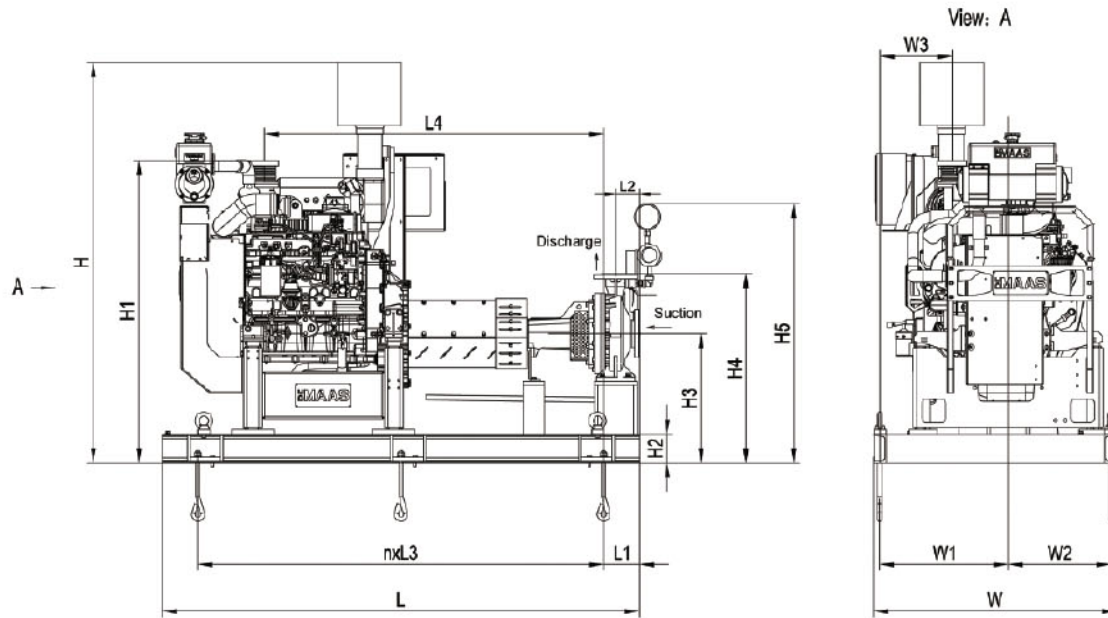


Fig. 3.8 – End-Suction Pump with Diesel Engine

End-Suction Pump With Diesel Engine (DE MAAS)																						
Pump Model	Speed (RPM)	Power (HP)	Diesel Engine Model	Dimensions (mm)																Anchor Bolt	Starting System (V)	Weight (Kg)
				L	L1	L2	n	L3	L4	W	W1	W2	W3	H	H1	H2	H3	H4	H5			
QES1-80/65-264	2980	80	IF05AH-F	2000	150	100	2	850	1210	1020	540	430	306	1530	1133	120	540	790	1085	6-M16x300	24	730
		130	IF05ATH-F	2000	150	100	2	850	1430	1020	540	430	306	1530	1266	120	540	790	1085			6-M16x300
QES1-100/80-225	2980	80	IF05AH-F	2000	150	125	2	850	1230	1020	540	430	306	1530	1133	120	540	790	1090	6-M16x300	24	720
		130	IF05ATH-F	2000	150	125	2	850	1450	1020	540	430	306	1530	1266	120	540	790	1090			6-M16x300
QES1-100/80-264	2980	80	IF05AH-F	2000	150	125	2	850	1230	1020	540	430	306	1530	1133	120	540	820	1115	6-M16x300	24	740
		130	IF05ATH-F	2000	150	125	2	850	1450	1020	540	430	306	1530	1266	120	540	820	1115			6-M16x300

Note: All weights and measurements are approximate only and subject to change without notice. This information should not be used for civil works.

Single and multistage UL listed vertical turbine pumps manufactured by Quantum Pump Systems Ltd are uniquely designed to move water in most cases from an underground tank.

Alternatively, our vertical turbine pumps are also UL listed in special materials, at certain flows and pressures, such as super duplex stainless steel for the project requirements where you need to pump medium such as sea water from the sea to the system.

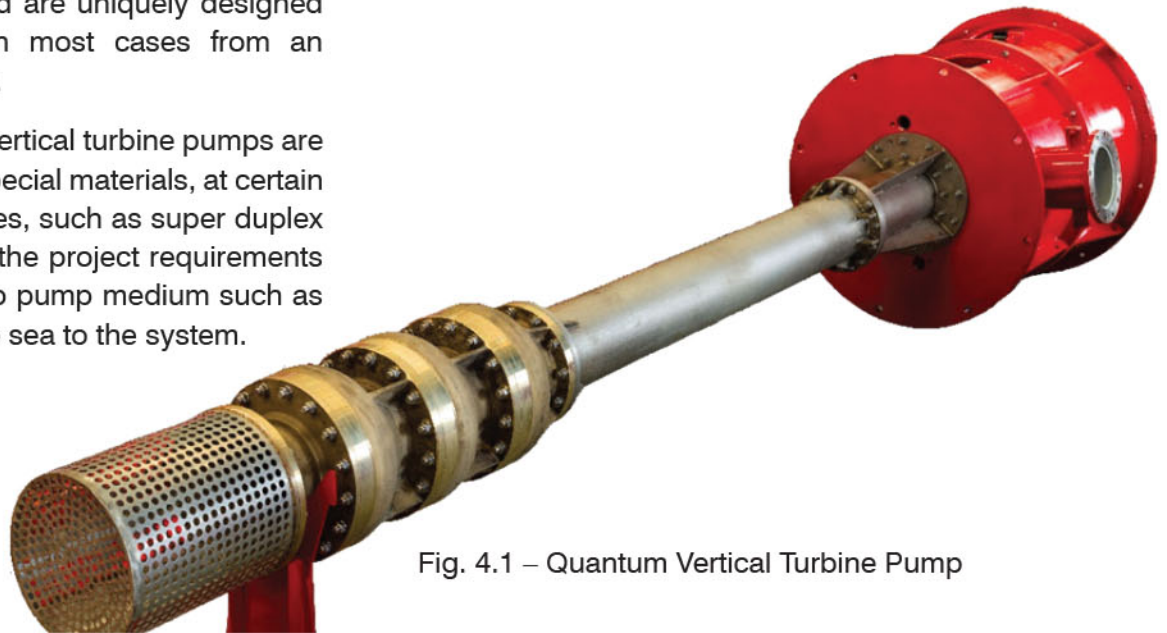
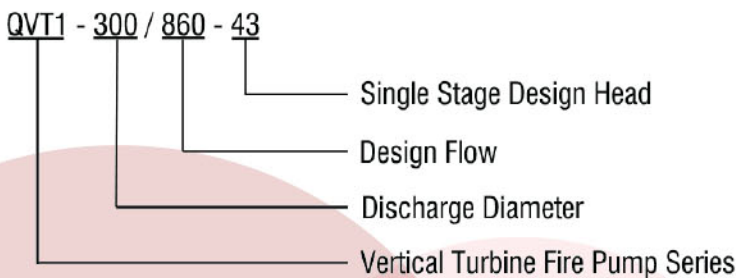


Fig. 4.1 – Quantum Vertical Turbine Pump

As per NFPA 20 rules, installing an end suction fire pump or horizontal split case fire pump on suction lift contravenes the requirements therefore the only suitable solution in order to maintain the UL listing is installing a vertical turbine fire pump on suction lift.

The vertical turbine fire pumps are designed based on the TPL at project site, provided this information is given calculations can be made by our design team to determine the correct column pipe length and number of stages required.

UL Listed Model Breakdown



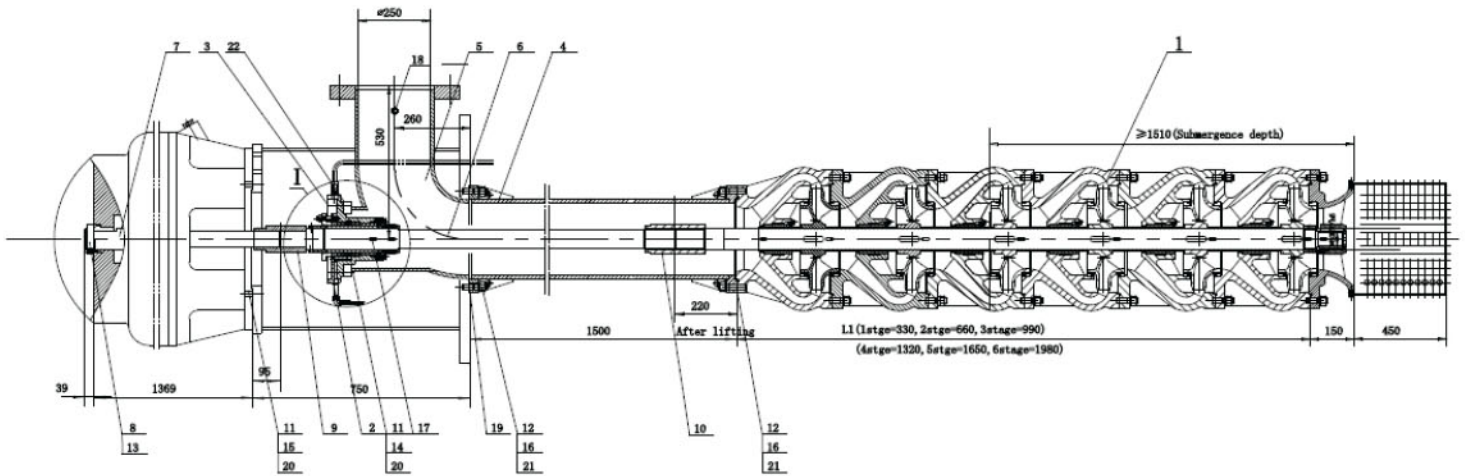


Fig. 4.2 – Vertical Turbine Pump Cross Sectional Drawing

Part List - Vertical Turbine Pumps

S.No	Name	Qty
1	Bowl Assembly	1
2	Seal Pipe Line	1
3	Packing Seal Assembly	1
4	Column	1
5	Discharge Head	1
6	Line Shaft	1
7	Motor Drive Shaft	1
8	Adjusting Nut	1
9	Screw Couplings	1
10	Screw Couplings	1
11	Spring Washer	12
12	Spring Washer	24
13	Screw	1
14	Studs $\varnothing 175 \times 260 \times 0.26$ mm	8
15	Studs	4
16	Studs	24
17	Key B	2
18	Plug R1/2	2
19	O Ring	1
20	Nut	12
21	Nut	24
22	Pad	1

MOC - Vertical Turbine Pumps

S.No	Name	Material
I	Discharge Head / Casing / Bowl	Carbon Steel / Cast Iron / Ductile Iron/ Ni. Cl./Cast Steel / Stainless Steel / Duplex SS / Super Duplex SS / Mild Steel
II	Column Pipe	Carbon Steel / Cast Iron / Ductile Iron/ Ni. Cl./Cast Steel / Stainless Steel / Duplex SS / Super Duplex SS
III	Guide Bearing	Teflon
IV	Shaft	SS416 / SS420
V	Seal	Gland Packing
VI	Impeller	Stainless Steel SS304 / CF8M / Duplex SS / Super Duplex SS / Cast Iron / Bronze / Cast Steel
VII	Suction Bell	Ductile Cast Iron
VIII	Diffuser	Ductile Cast Iron

Quantum Pump Systems Ltd range of vertical turbine fire pumps certified by Underwriter Laboratories (UL), are suitable and approved to be coupled to a UL listed vertically mounted hollow shaft motor or an FM and/or UL listed diesel engine via an FM approved right angle gear drive.

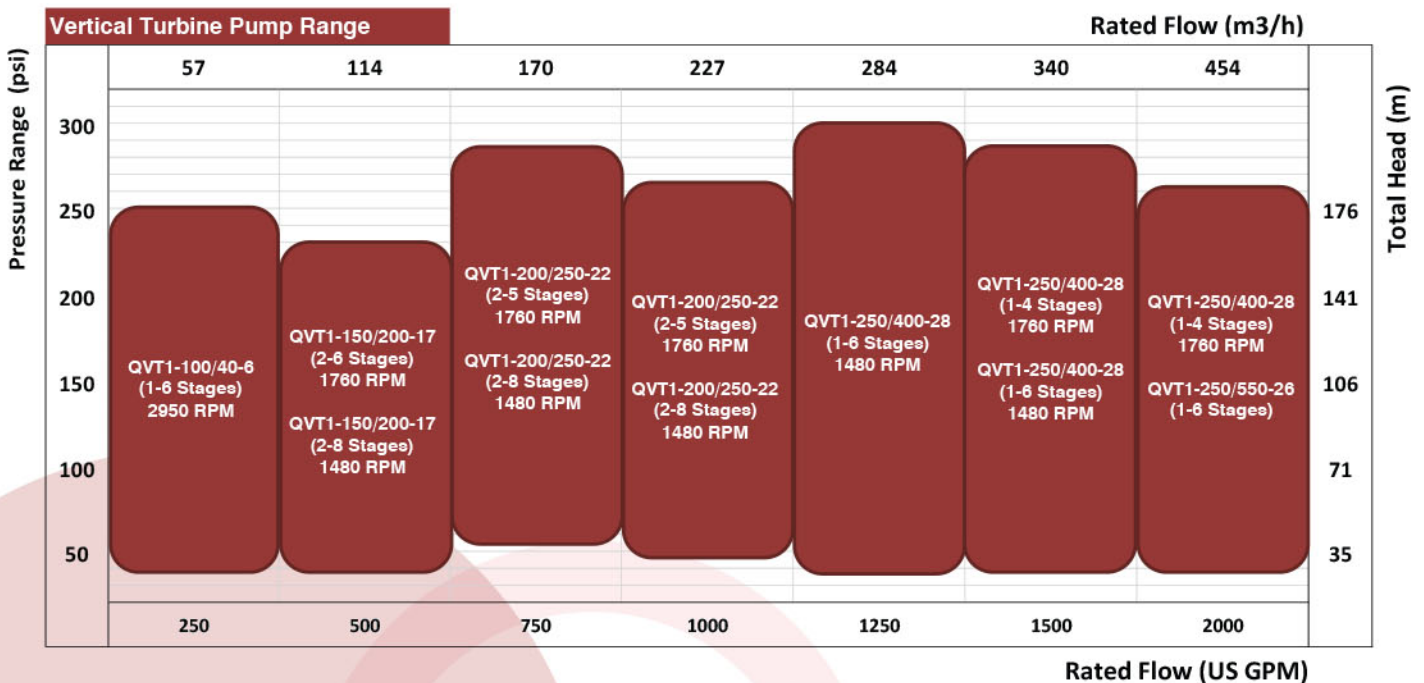
The electric motor set is usually installed and used as the duty fire pump in the system to start in case of fire, after the jockey pump (pressure maintenance pump).

The electric fire pump set will continue to run until the system pressure drops to the same pressure drop point configured into

the controller, when this is reached, the diesel fire pump set starts.

The electric fire pump motors are UL listed, vertically mounted hollow shaft motors available in WP1, ODP or TEFC design, running at 2 pole or 4 pole.

The diesel engines offered are FM and/or UL listed for fire service and installed with right angle gear drives, FM approved as per global standards, working together they are assembled to the fire pump and act as standby components in the system and only to run should the pressure drop reach the level inputted into the controller.



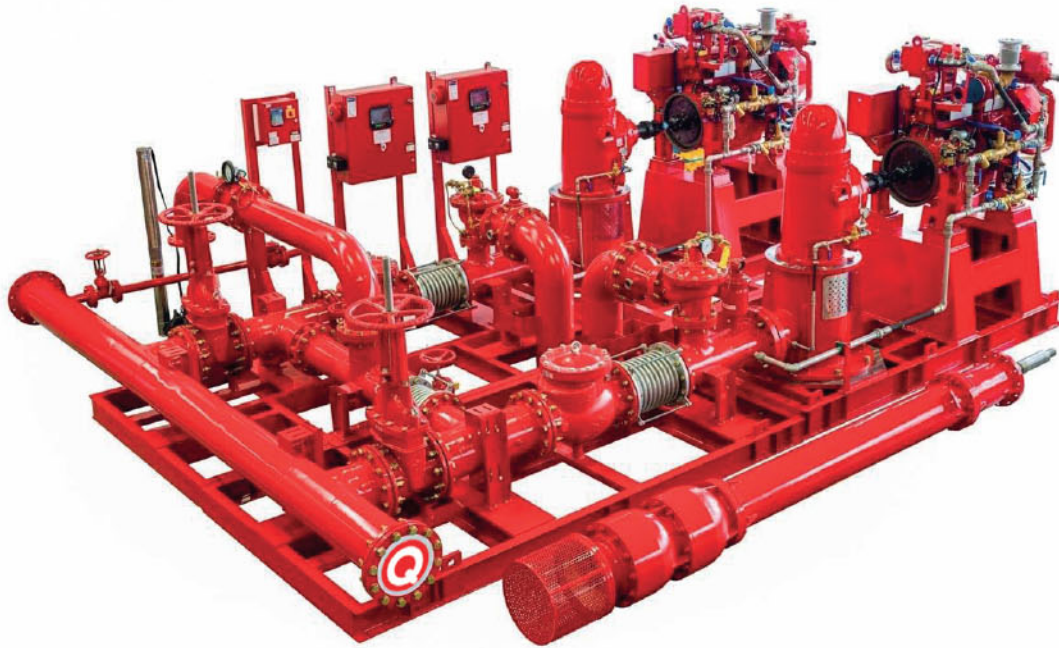


Fig. 4.3 – Vertical Turbine Pump with Engines

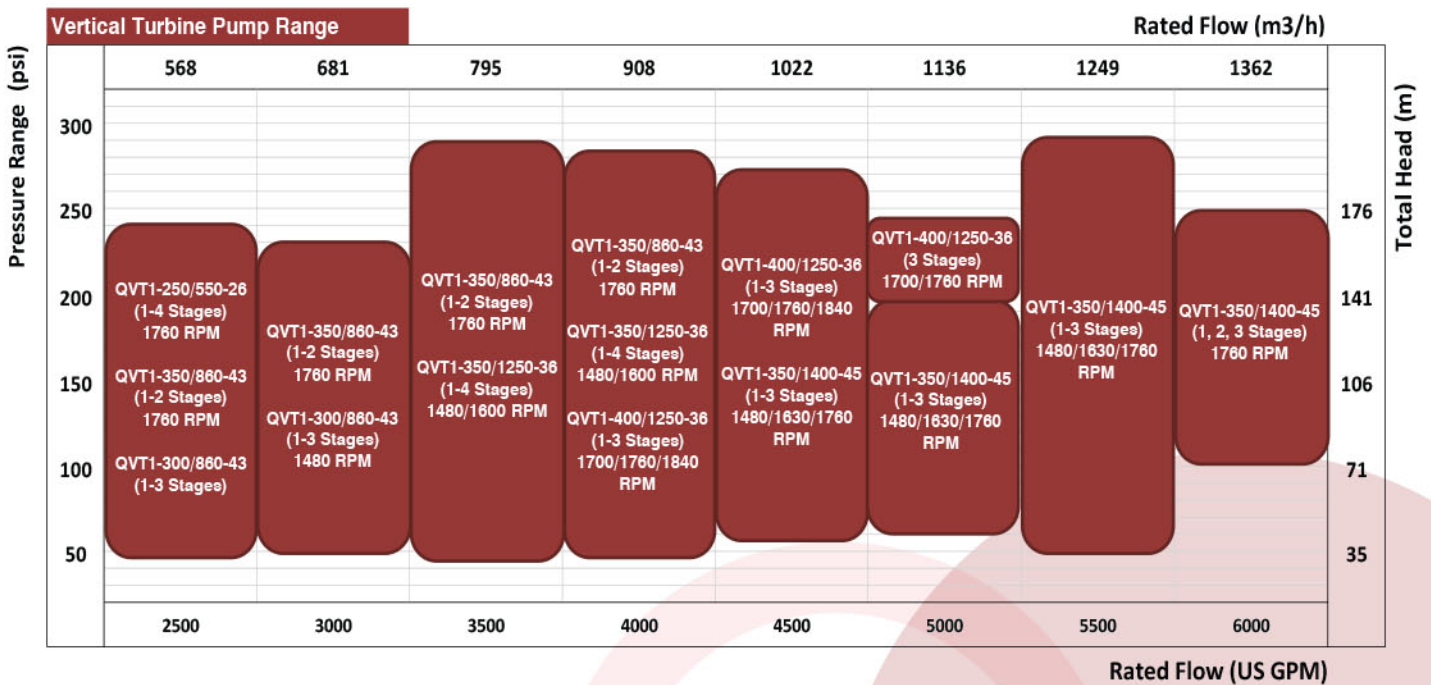




Fig. 5.1 – Pump Package

In addition to our individually mounted fire pump sets, Quantum also can manufacture fire pump packaged sets. This allows the customer to have a main and standby fire pump with a jockey pump and accessories designed, installed and tested in Quantum's factory on one common baseplate.

The advantages to this design of fire pump set is the fact at site you can easily place the fire pump skid in your required location and simply connect the suction and discharge flanges to the pipework at site and turn on, this brings a lot of ease to a lot of our customers and saves them labour hours designing a dedicated pump room.

The packaged sets can also be assembled with all necessary accessories which you would find in a typical fire pump room including the control panels, flowmeter, fuel tank, interconnecting pipework, headers and valves.

Purchasing a packaged set ultimately gives the customer piece of mind as it reduces risk knowing that the complete set has been assembled by the manufacturer. We can assemble these sets to meet the same minimum and max flow and pressure ranges as the end suction, split case and vertical turbine range given in the previous pages.

We use trusted vertical multistage pump brands as jockey pump in Quantum Fire Sets that are designed and installed to allow the fire main and standby fire pumps to remain non-operational, saving the critical equipment for in-case of emergency, and allow the jockey pump to maintain the system pressure for any small leaks in the system.

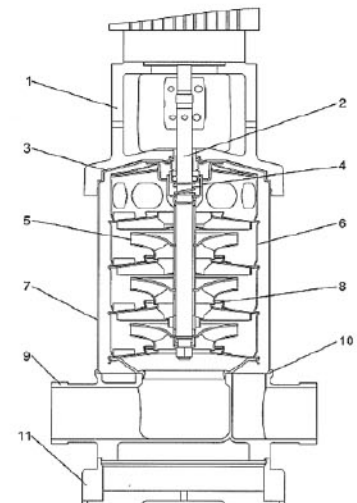
OPERATING PARAMETERS

- Maximum Flow: Up to 350 USgpm
- Max Pressure: Up to 450 psi
- Standard Liquid Temperature: 0 to +70°C (Options available up to 120°C for special cases)
- Medium: Thin, clean, non-aggressive liquids which do not contain solid particles

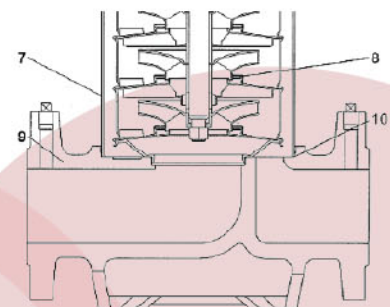
MOC - Vertical Multistage Pumps (Jockey Pump)		
S.No	Name	Material
1	Motor Base	Cast Iron
2	Shaft	Stainless Steel SS304 / SS316
3	Pump Top Casing	Cast Iron
4	Mechanical Seal	Silicon Carbide/Carbon/EPDM
5	Impeller	Stainless Steel SS304
6	Diffuser	Stainless Steel SS304
7	Outer Cyliner	Stainless Steel SS304
8	Sleeve	Stainless Steel SS304
9	Pump Inlet / Outlet Header	Cast Iron / Stainless Steel SS304
10	Elastomer	EPDM
11	Pump Base	Cast Iron



Fig. 6.1 – Jockey Pump



Pipe Threads Inlet/Outlet Type



Flange Inlet/Outlet Type

Fig. 6.2 – Jockey Pump Cross Section



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