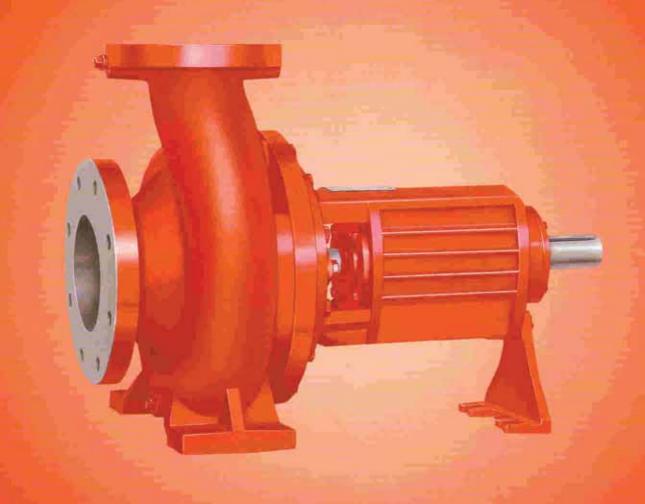
# Acme Pumps

Type ESF Fire Pump







# Description

ACME type ESF Centrifugal Fire Pumps are of single stage end-suction design and constructed to ISO 2858 standard. This ensures dimensional interchangeability with other pumps of the same standard. More importantly, Acme ESF centrifugal pumps are designed to ensure long continuous service life at an efficient cost.

Approved and Listed Acme Fire Pumps are specifically designed and tested to meet the full requirements of Singapore PSB Product Listing Scheme under Class 1A and based on the Australian Standard 2941 for Fixed fire protection installations - Pumpset systems.

The approval authority verifies full compliance with their very detailed 'Testing Standards' and carries out extensive performance and hydrostatic tests on the pumps. It is only upon the successful completion of these tests and a manufacturing QA audit, will the prestigious PSB Test labels and Certificate of Conformity be awarded.

Acme Pumps is the first pump manufacturer in Singapore to perform all the required tests in one of the most advanced computerized pump test facilities in Asia which is located in Singapore.

Fire Protection Systems: Wide ranging pump sizes are developed to provide full coverage for ordinary hazard class (pre-calculated), extra high hazard to fully hydraulically calculated, automatic sprinkler systems, wet riser, hydrant, hose reel, water spray and fire water transfer services.

Acme Fire Pumps are designed for all types of installations. These include: commercial premises, high rise buildings, warehouses, hotels, airports, manufacturing units, chemical and petrochemical complexes.

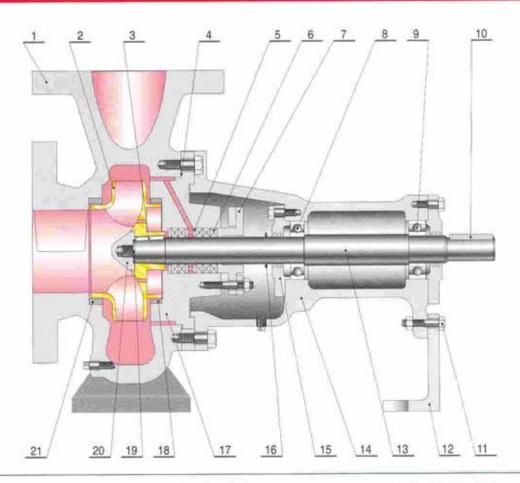
**Performance:** The standard range of Acme fire pumps for both electric motor and diesel engine driven packages are designed to meet the PSB Class 1A rules with:

- Flows up to 420m3/hr (7,000 l/min )
- Pressures up to 160m (1,570 kPa)
- Extended pressures up to 232m (2,275 kPa) available on individual approval

Providing Excellent Value that Meets Customers' Needs: Once built, Acme fire pump packages are tested as a complete working assembly in accordance with AS 2941 standard. Comprehensive tests on pump performance, hydrostatic, mechanical integrity and overall package operation reinforce the reputation for reliability that Acme Pumps is credited for.

A complete service support and regular planned maintenance of your plant, combined with the use of genuine guaranteed Acme Pumps spare parts will ensure the long life of your fire pump sets and avoid costly breakdowns and overhauls.

# Construction



- 1 Pump casing
- 2 Impeller
- 3 Impeller key
- 4 Casing Joint
- 5 Lantern ring
- 6 Gland packing
- Gland

- Line bearing
- 9 Thrust bearing
- 10 Coupling Key
- Thrust bearing cover 11
- 12 Bearing bracket foot
- 13 Shaft
- Bearing bracket

- Bearing cover
- 16 Liquid thrower
- 17 Stuffing box cover
- Back wear ring(optional)
- Impeller nut lockwasher 19
- Impeller nut 20
- 21 Front Wear Ring (optional)

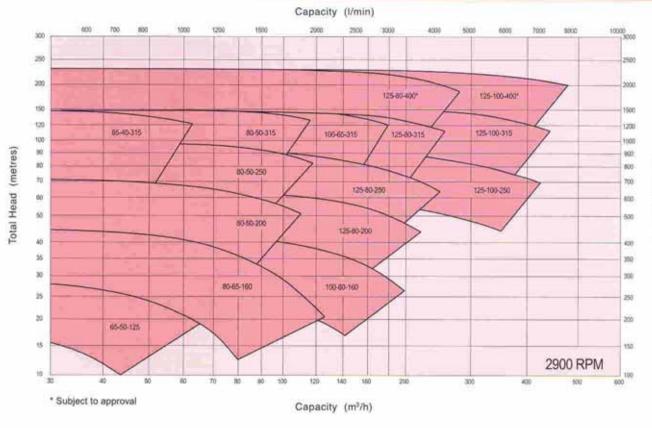
### Materials of Construction

Part	Materials						
Casing	Cast Iron ASTM A48-Class 30						
Impeller	Bronze ASTM B584 C83600						
Shaft	Stainless Steel 416 ASTM A582 S41600						
Shaft Sealing	Soft Packed with Lantern Ring and Gland follower						

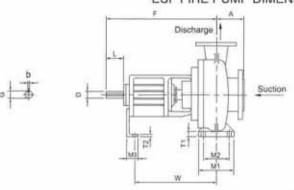
<sup>\*</sup> Other materials available for Liquid Ends are: Ductile Iron, 316SS & Duplex SS

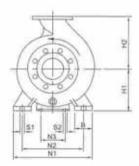
### **Main Features**

- Robust and solid construction designed for 16 bar working pressure with optional material suitable for operating at high working pressure conditions.
- · Back-pull-out construction allows rotating assembly to be withdrawn without disturbing the suction and delivery connections.
- Heavy-duty, stiff solid shaft design with grease lubricated seal-for-life bearings requiring no maintenance.
- · Hydraulically and Dynamically balanced impeller, taper mounted and keyed to pump shaft for positive locking with stainless steel dome impeller nut.



## ESF FIRE PUMP DIMENSIONS(mm)





Pump Size	Diameter		Pump Dimensions			Mounting Dimensions												Shaft				Weigh	
	Suc.	Dis.	A	F	H1	H2	В	MT	WS	M3	N1	N2	N3	TI	T2	W	051	ØS2	ØD	L	b	G	(kg)
65-50-125	65	50	80	385	112	140	50	100	70	54	210	160	110	14	6	285	14.5	14.5	24	50	8	27.3	53
80-65-160	80	65	100	385	160	180	50	100	70	54	265	212	110	16	6	285	145	14.5	24	50	8	27.3	69
100-80-160	100	80	100	500	160	205	65	125	95	54	280	212	110	20	6	370	14.5	14.5	32	80	10	35.3	95
80-50-200	80	50	100	385	160	200	50	100	70	54	265	212	110	18	6	285	14.5	145	24	50	8	27.3	71
125-80-200	125	80	125	500	180	250	65	125	95	54	345	280	110	20	6	370	14.5	14.5	32	80	10	35.3	114
80-50-250	80	50	125	500	180	245	65	125	95	-54	320	250	110	20	6	370	14.5	14.5	32	80	10	35.3	106
125-80-250	125	80	125	500	225	280	80	160	120	.54	400	315	110	22	6	370	18.5	14.5	32	80	10	35.3	132
125-100-250	125	100	140	530	225	280	80	160	120	-54	400	315	110	22	6	370	18.5	14.5	42	110	12	45.3	179
65-40-315	65	40	125	500	200	250	65	125	95	54	345	300	110	20	6	370	14.5	14.5	32	80	10	35.3	132
80-50-315	80	50	125	500	225	280	65	125	95	. 54	345	280	110	20	6	370	14.5	14.5	32	80	10	35.3	138
100-65-315	100	65	125	530	225	280	80	160	120	54	400	315	110	25	6	370	18.5	14.5	42	110	12	45.3	186
125-80-315	125	80	125	530	250	315	80	160	120	54	400	315	110	25	6	370	18.5	14.5	42	110	12	45.3	191
125-100-315	125	100	140	530	250	345	80	160	120	54	400	315	110	25	6	370	18.5	14.5	42	110	12	45.3	194
125-80-400	125	80	125	530	260	355	80	160	120	54	435	355	110	25	6	370	15.5	14.5	42	110	12	453	243
125-100-400	125	100	140	530	280	375	100	200	150	54	500	400	110	25	6	370	24	14.5	42	110	12	45.3	259

We reserve the right to amend design without notice

