FIRE PUMPS

GENERAL PUMPS
ESPAÑA

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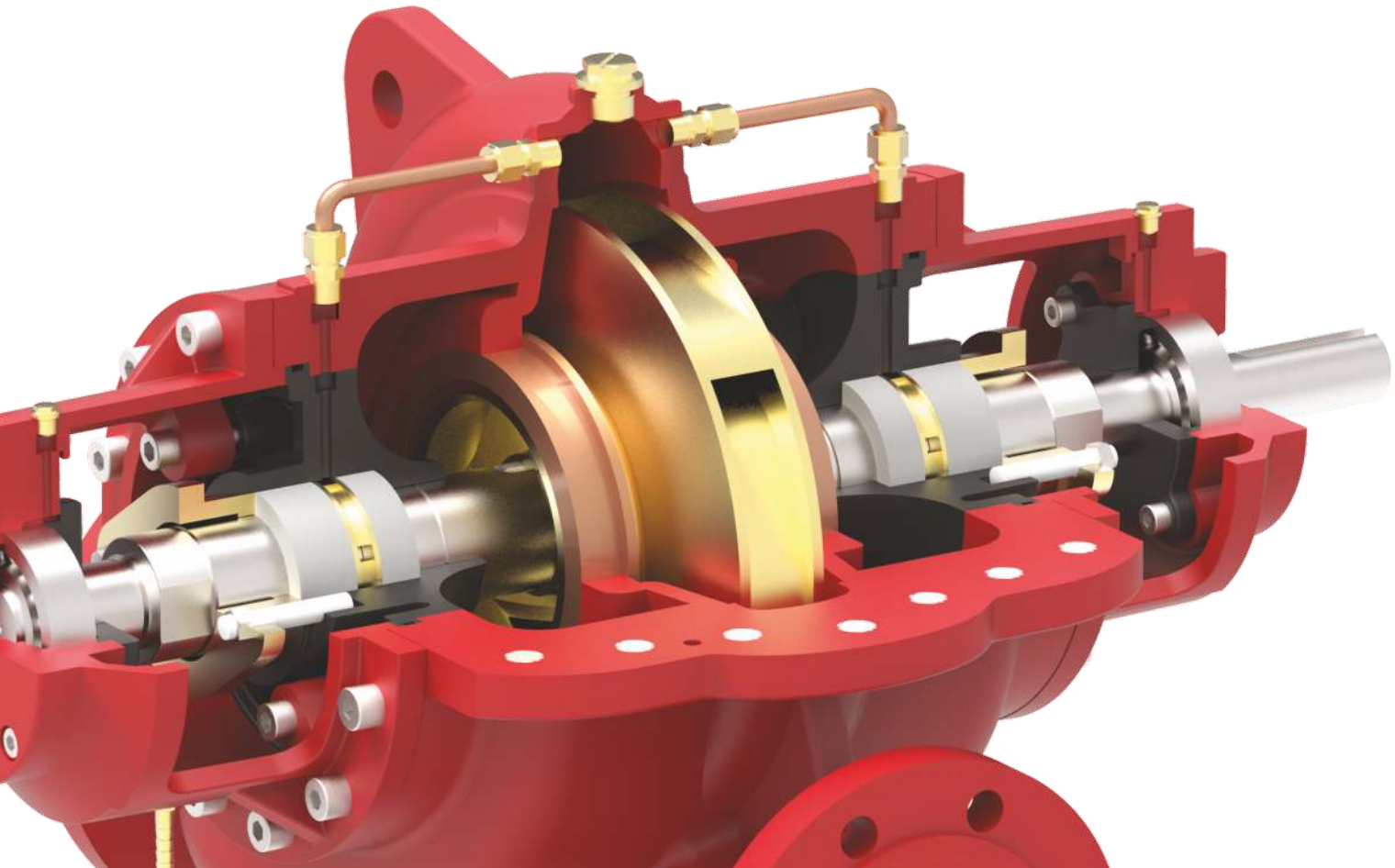


GENERAL PUMPS
ESPAÑA

General Pumps S.L.U., was established more than 25 years ago in Valencia, Spain.

We are a major manufacturer in Spain of a wide variety of water pumps for various applications. We have two factories in Spain with the total space of more than 2600 Sq. M.

Today we have one of the most comprehensive ranges of pumps for Fire, HVAC, Water Treatment and Plumbing Industry. The product line ranges from small domestic pumps to large Industrial application pumps. The pumps can be offered in various Metallurgies such as Cast Iron, Stainless Steel, Bronze, etc.

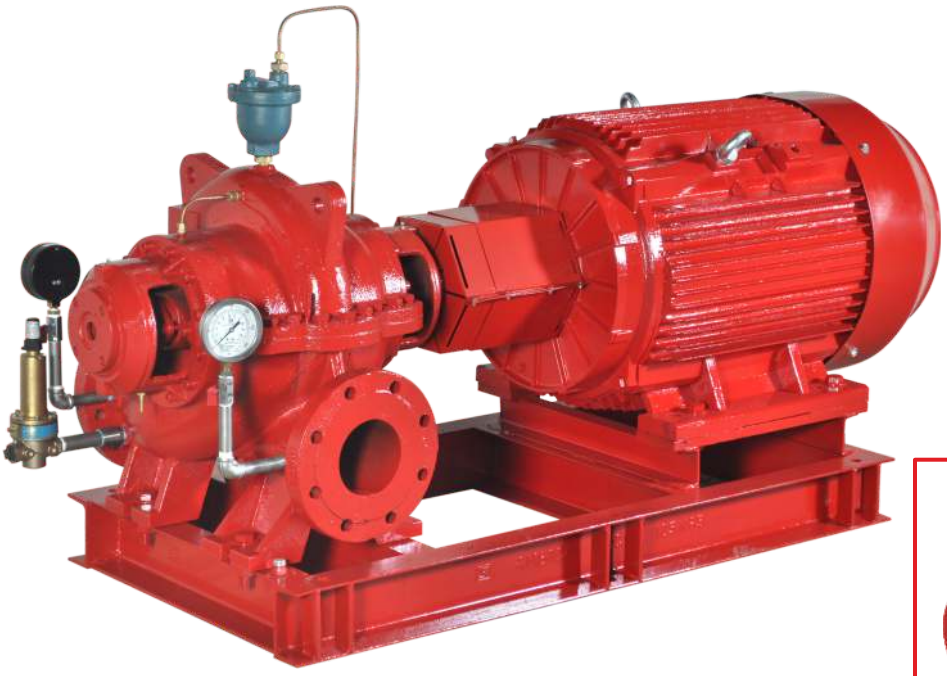
We have our product distribution channels in North and South America, Europe, Middle East and Far East. More than 75% of our sales revenue is generated through exports across the world.

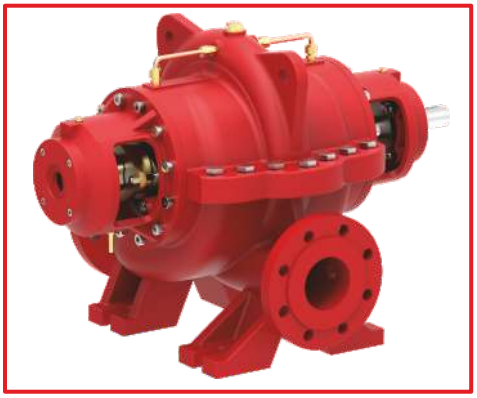
We have a comprehensive range of Fire Pumps which are UL Listed and FM Approved.

The Quality Management System at our manufacturing facility is certified to the latest International Standard of ISO 9001.

We believe in providing our customers with a complete solution for all their Fire Pumping needs. Our Engineers can assist you in making the right choice of product for your Fire Pumping Application.

Horizontal Split Case Fire Pumps





UL LISTED EX26841

FM APPROVED

Introduction

General Pumps offers FGHC series state-of-the-art fire pumps with diesel engine or electric motor driven, horizontal split case pump.

These pumps are typically used in fire-fighting applications for supplying water to fire hose reels, fire hydrants or sprinkler systems.

Pumps have a discharge range from 450 to 3000 USgpm and the head range from 4.2 to 23 bar.

These fire pumps meet or exceed the requirements of NFPA20.

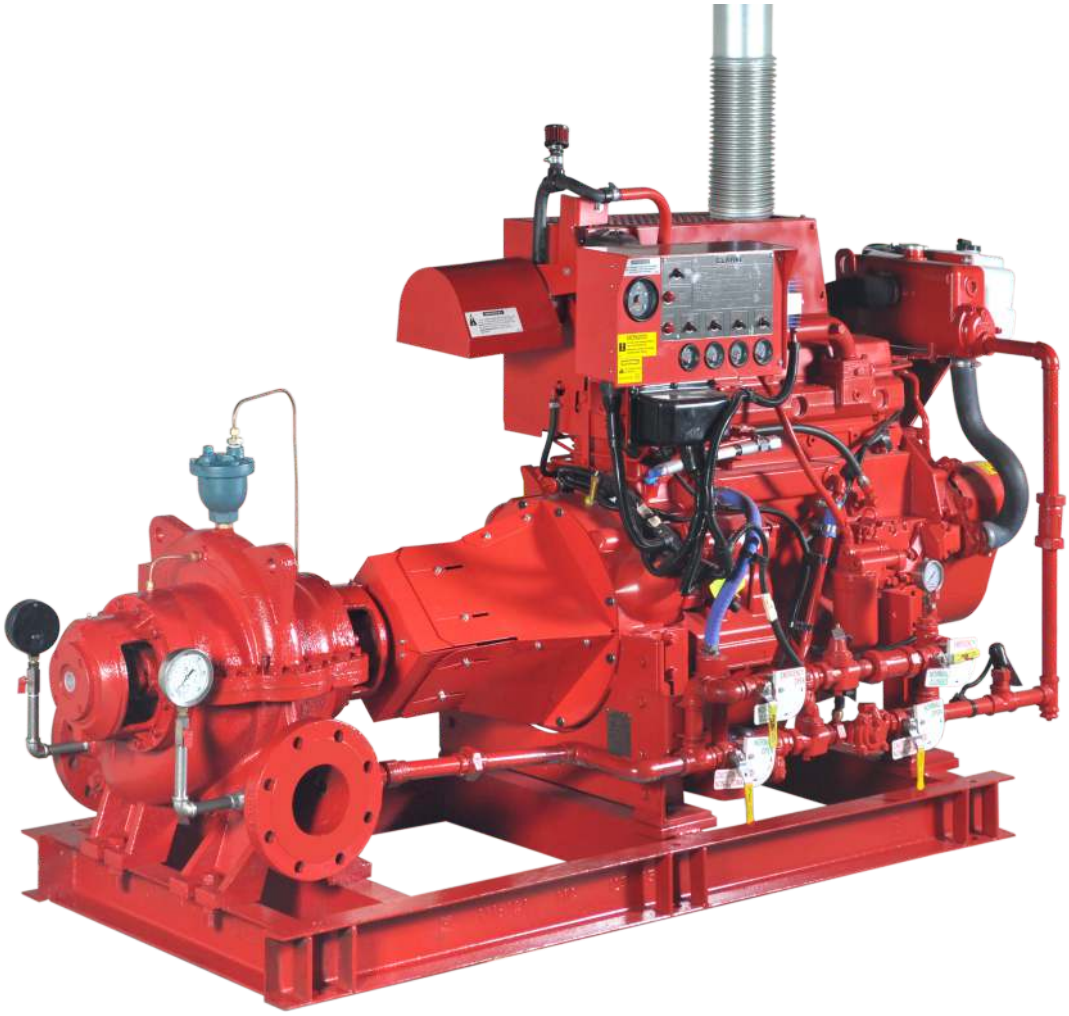
Installations of these pumps would ensure the safety of human life, buildings, and expensive equipments and plants. FGHC fire pumpset shall be used only where a positive suction is provided as specified in NFPA20.

There fire pumps typically consist of the following equipments:

- Horizontal Split Case pump.
- Electric motor or Diesel Engine
- Cooling system for Diesel Engine
- Fuel system for Diesel Engine
- Battery for Diesel Engine electric start
- Exhaust system for Diesel Engine
- Diesel Engine / Electric Motor Fire pump controller
- Suction and Discharge pressure gauges
- Air relief valve
- Casing Relief Valve for Motor Fire Pump
- Base frame

All above equipments except fuel supply tank and fire pump controller are mounted on a common base frame.

General Pumps can also supply Packaged fire pumping system with all required accessories ready for site installation.



Applications

The FGHC fire pumps are used in fire-fighting applications for supplying water to fire hose reels, fire hydrants or sprinkler systems in areas which are prone to the hazards of fire.

The typical applications are as follow:

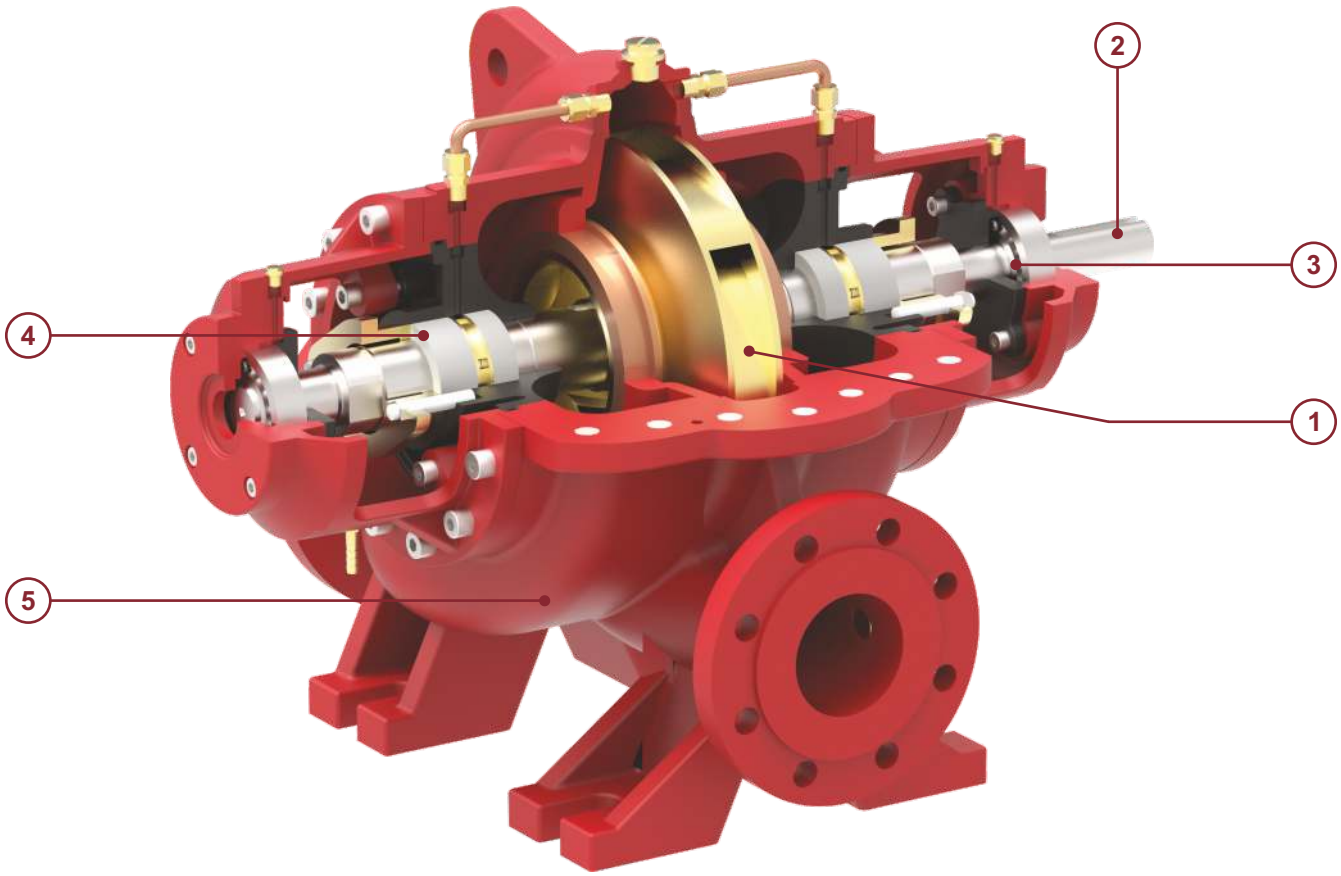
- Commercial complexes and high rise buildings
- Petrochemical industries and Gas plants
- Oil and Gas on-shore &off-shore platforms
- Oil terminals
- Airports and ports
- Jetties
- Marine applications
- Power stations and transformer stations
- Chemical industries
- Manufacturing plants
- Fire-work industries
- Warehouses/godowns.

Features & benefits

FGHC fire pumps offers all features & benefits as mentioned in our GHC standard pump series data booklet. Following are the additional features & benefits offered by these pumps :

- State-of-the-art design fire pumping system.
- UL listed/FM approved/NFPA-20 design
- Diesel engine as well as electric motor driven pump
- Rugged construction
- Liberal water passages
- Automatic air relief valve
- Efficient operation
- Lower initial cost
- Reduced installation time and cost
- Simplified piping design
- Suitable for space saving installation systems and retrofit applications
- Easy access to all working parts
- Ease of maintenance
- Single source unit responsibility.

General Pump Features



1 - Impeller & Casing

- Minimal axial thrust due to double-entry impeller.
- Impeller is dynamically balanced to grade G6.3 balance quality in accordance to ISO 1940-1.
- Impeller & Casing are designed using state of art CFD tools to ensure optimal performance.

2 - Shaft

- Heavy duty stainless steel shaft completely sealed and dry for zero corrosion.
- Short and rigid with negligible vibrations.
- Replaceable shaft protecting sleeves.
- No threads exposed to pump medium, long operating life and no corrosion.
- Adjustment-free assembly.

3 - Bearing

- Heavy duty and grease lubricated antifriction bearings for long service life.
- Open gland, enough space for service activities.

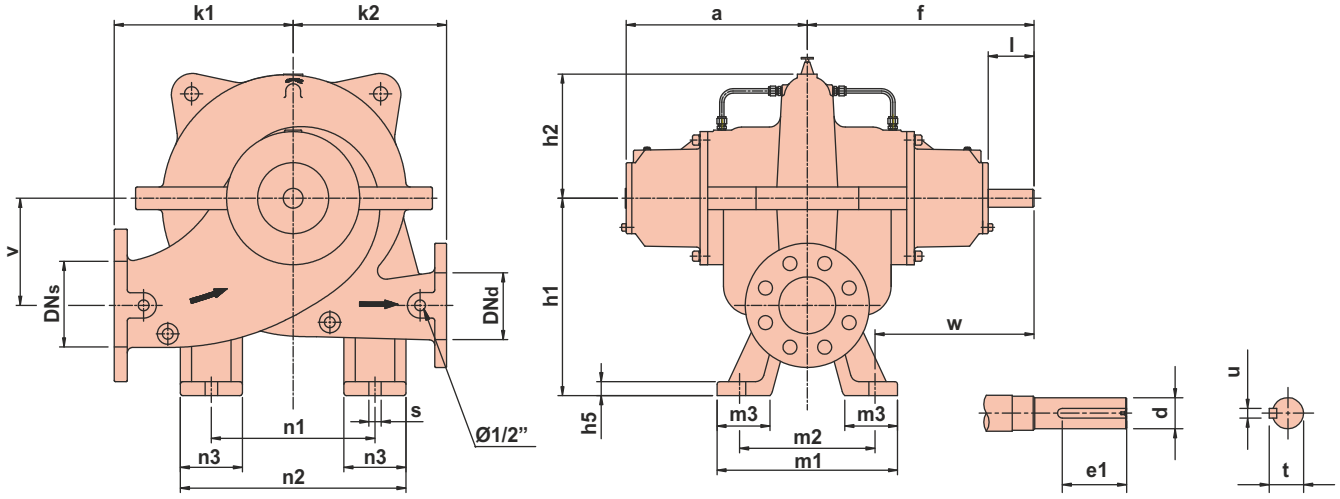
4 - Seal

- Asbestos - free, soft packed stuffing boxes.

5 - Casing

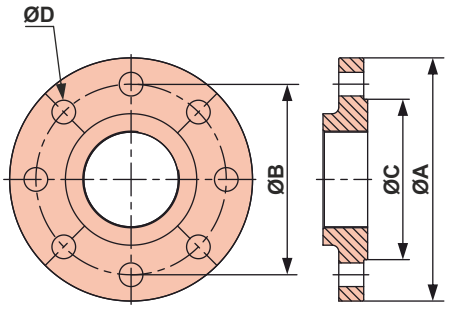
- In-line axially split design which permits removal of the complete Impeller Shaft Assembly without removing the pipes & motor.
- Short distance between bearings.
- Leak-tight due to compact joint flange with long Pre-stessed bolts.
- Counter-rotation possible with similar parts.
- Easy mounting self-aligning upper casing.
- Flange drilled as per ASME B16.42 class 300..
- Smooth surface inside & CED coated for superior corrosion protection.
- Replaceable wear ring protect the casing and the impeller running clearances.
- Heavy duty casing design for high working pressure.

Dimensions



Model	DNs	DNd	k1	k2	v	n1	n2	n3	a	f	h1	h2	h5	s	w	m1	m2	m3	d	l	e1	u	t
FGHC 125-100-250	125	100	310	250	170	250	350	100	323	402	320	199	25	22	282	320	240	95	32	81	65	10	35,3
FGHC 125-100-400	125	100	375	325	210	370	490	120	334	434	365	260	25	22	314	320	240	87	38	102	85	10	41
FGHC 150-125-315	150	125	350	300	195	300	440	140	333	434	375	244	25	22	309	350	250	99	38	102	85	10	41
FGHC 200-150-250	200	150	385	325	190	350	490	140	354	451	390	233	25	24	298	370	305	80	38	97	85	10	41
FGHC 250-200-250	250	200	450	325	280	360	495	135	402	499	525	281	28	24	299	500	400	96	38	97	85	10	41
FGHC 250-200-315	250	200	450	375	235	430	570	140	408	513	465	287	28	24	333	460	360	105	48	105.5	93	14	52
FGHC 250-200-400	250	200	485	420	230	460	604	144	409	515	465	313	28	24	365	400	300	97	55	106	94	16	59
FGHC 250-200-650	250	200	600	600	325	650	810	160	434	570	575	405	32	24	382	453	375	119	75	135	135	20	79.5
FGHC 300-250-500	300	250	600	575	275	650	835	185	495	634	550	379	30	28	424	520	420	120	85	140	130	22	89
FGHC 300-250-650	300	250	700	700	320	860	1020	160	458	597	590	415	32	24	417	460	360	120	85	140	135	22	89

Flange Dimensions

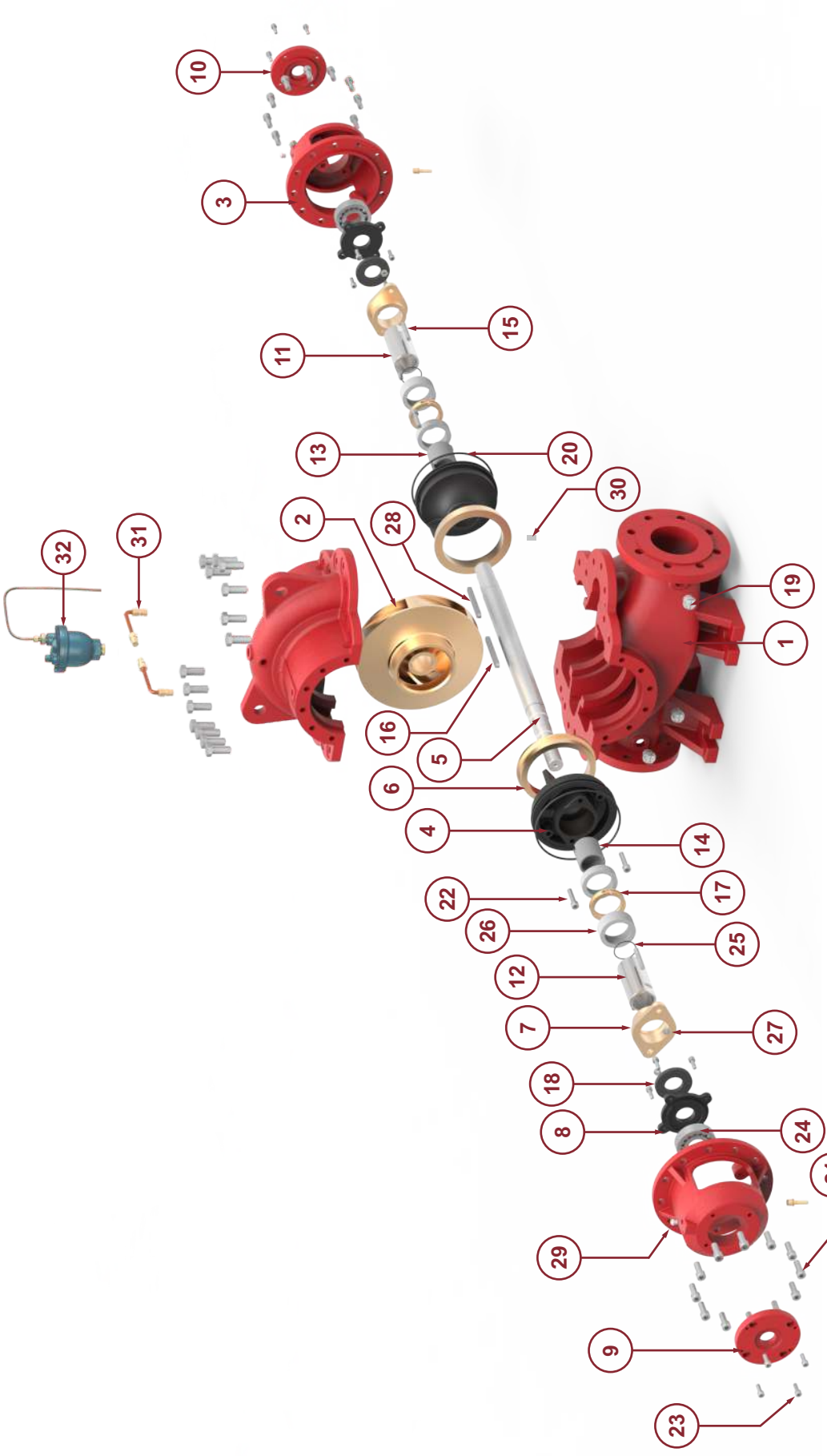


ANSI 250 Flange Dimensions

Model	Suction				Discharge			
	ØA	ØB	ØC	ØD x Nos. of holes	ØA	ØB	ØC	ØD x Nos. of holes
FGHC 125-100-250	280	235	211	Ø7/8" x 8	255	200	176	Ø7/8" x 8
FGHC 125-100-400	280	235	211	Ø7/8" x 8	255	200	176	Ø7/8" x 8
FGHC 150-125-315	320	270	246	Ø7/8" x 12	280	235	211	Ø7/8" x 8
FGHC 200-150-250	380	330	303	Ø1"X12	320	270	246	Ø7/8"X12
FGHC 250-200-250	445	387	357	Ø1-1/8"X16	380	330	303	Ø1"X12
FGHC 250-200-315	445	387	357	Ø1-1/8"X16	380	330	303	Ø1"X12
FGHC 250-200-400	445	387	357	Ø1-1/8"X16	380	330	303	Ø1"X12
FGHC 250-200-650	445	387	357	Ø1-1/8"X16	380	330	303	Ø1"X12
FGHC 300-250-500	520	451	418	Ø1-1/4"x16	445	387	350	Ø1-1/8"x16
FGHC 300-250-650	520	451	418	Ø1-1/4"x16	445	387	350	Ø1-1/8"x16

GENERAL PUMPS ESPAÑA

Exploded View



Part no.	Part name	Part no.	Part name	Part no.	Part name
1	Split casing	11	R.H. Sleeve	21	Cap screw with spring washer	31	Hose pipe
2	Impeller	12	L.H. Sleeve	22	Cap screw	32	Automatic Air Release Valve
3	Bearing housing	13	Shaft sleeve	23	Cap screw		
4	Back cover	14	Shaft sleeve	24	Ball bearing		
5	Shaft	15	Stud	25	'O' ring		
6	Wear ring	16	Key	26	Graphite packing		
7	Gland	17	Lantern ring	27	Hex nut		
8	Internal bearing cover	18	Water thrower	28	Key		
9	External bearing cover	19	Drain plug	29	Grease nipple		
10	External bearing cover(drive)	20	'O' ring	30	Dowel pin		

Approved Fire Pump Models with Rating

RATED CAPACITY- 400 US GPM									
Sr. No.	Pump Model	UL Listed Pressure		FM Approved Pressure		Rated Speed (rpm)	Suction Inlet Dia. (inch)	Discharge Outlet Dia. (inch)	Stage(s)
		(psi)	(bar)	(psi)	(bar)				
1	FGHC 125-100-400	245-336	16.8-23.16	245-335	16.89-23.09	2900	5	4	1

RATED CAPACITY- 450 US GPM									
Sr. No.	Pump Model	UL Listed Pressure		FM Approved Pressure		Rated Speed (rpm)	Suction Inlet Dia. (inch)	Discharge Outlet Dia. (inch)	Stage(s)
		(psi)	(bar)	(psi)	(bar)				
1	FGHC 125-100-250	71-131	4.89-9	75-136	5.1-9.3	2900	5	4	1
2	FGHC 125-100-400	244-335	16.8-23.0	244-333	16.82-22.95	2900	5	4	1

RATED CAPACITY- 500 US GPM									
Sr. No.	Pump Model	UL Listed Pressure		FM Approved Pressure		Rated Speed (rpm)	Suction Inlet Dia. (inch)	Discharge Outlet Dia. (inch)	Stage(s)
		(psi)	(bar)	(psi)	(bar)				
1	FGHC 125-100-250	71-131	4.89-9	74-135	5.10-9.3	2900	5	4	1
2	FGHC 125-100-400	243-334	16.75-23.0	243-332	16.75-22.89	2900	5	4	1
3	FGHC 150-125-315	131-214	9-14.75	131-214	9-14.75	2900	6	5	1

RATED CAPACITY- 750 US GPM									
Sr. No.	Pump Model	UL Listed Pressure		FM Approved Pressure		Rated Speed (rpm)	Suction Inlet Dia. (inch)	Discharge Outlet Dia. (inch)	Stage(s)
		(psi)	(bar)	(psi)	(bar)				
1	FGHC 125-100-250	65-130	4.4-8.96	66-132	4.5-9.10	2900	5	4	1
2	FGHC 125-100-400	236-323	16.27-22.27	234-321	16.13-22.13	2900	5	4	1
3	FGHC 150-125-315	129-213	8.8-14.68	129-212	8.8-14.61	2900	6	5	1

RATED CAPACITY- 1000 US GPM									
Sr. No.	Pump Model	UL Listed Pressure		FM Approved Pressure		Rated Speed (rpm)	Suction Inlet Dia. (inch)	Discharge Outlet Dia. (inch)	Stage(s)
		(psi)	(bar)	(psi)	(bar)				
1	FGHC 200-150-250	80-142	5.51-9.79	79-141	5.44-9.72	2900	8	6	1
2	FGHC 150-125-315	127-210	8.75-14.4	126-209	8.68-14.4	2900	6	5	1

RATED CAPACITY- 1250 US GPM									
Sr. No.	Pump Model	UL Listed Pressure		FM Approved Pressure		Rated Speed (rpm)	Suction Inlet Dia. (inch)	Discharge Outlet Dia. (inch)	Stage(s)
		(psi)	(bar)	(psi)	(bar)				
1	FGHC 200-150-250	78-140	5.37-9.65	77-140	5.30 -9.65	2900	8	6	1
2	FGHC 150-125-315	121-205	8.34-14.13	119-204	8.20-14	2900	6	5	1

Approved Fire Pump Models with Rating

RATED CAPACITY- 1500 US GPM									
Sr. No.	Pump Model	UL Listed Pressure		FM Approved Pressure		Rated Speed (rpm)	Suction Inlet Dia. (inch)	Discharge Outlet Dia. (inch)	Stage(s)
		(psi)	(bar)	(psi)	(bar)				
1	FGHC 200-150-250	75-139	5.17-9.58	73-137	5.03-9.44	2900	8	6	1
2	FGHC 250-200-315	113-210	7.7-14.4	113-209	7.79-14.41	2900	10	8	1
3	FGHC 250-200-400	135-206	9.30-14.2	135-203	9.30-13.99	2350	10	8	1
4	FGHC 250-200-650	184-245	12.6-16.8	185-244	12.75-16.82	1470	10	8	1

RATED CAPACITY- 2000 US GPM									
Sr. No.	Pump Model	UL Listed Pressure		FM Approved Pressure		Rated Speed (rpm)	Suction Inlet Dia. (inch)	Discharge Outlet Dia. (inch)	Stage(s)
		(psi)	(bar)	(psi)	(bar)				
1	FGHC 250-200-250	80-133	5.51-9.17	79-131	5.44-9.03	2900	10	8	1
2	FGHC 250-200-315	109-209	7.5-14.41	109-209	7.51-14.41	2900	10	8	1
3	FGHC 250-200-315	72-133	4.96-9.17	70-131	4.82-9.03	2350	10	8	1
4	FGHC 250-200-400	132-204	9.10-14.06	131-202	9.03-13.92	2350	10	8	1
5	FGHC 250-200-650	180-242	12.4-16.6	180-241	12.41-16.61	1470	10	8	1

RATED CAPACITY- 2500 US GPM									
Sr. No.	Pump Model	UL Listed Pressure		FM Approved Pressure		Rated Speed (rpm)	Suction Inlet Dia. (inch)	Discharge Outlet Dia. (inch)	Stage(s)
		(psi)	(bar)	(psi)	(bar)				
1	FGHC 250-200-400	126-200	8.68-13.78	126-199	8.68-13.72	2350	10	8	1
2	FGHC 300-250-500	93-152	6.4-10.4	93-152	6.41-10.48	1470	12	10	1
3	FGHC 300-250-650	152-224	10.4-15.4	151-223	10.41-15.37	1470	12	10	.1

RATED CAPACITY- 3000 US GPM									
Sr. No.	Pump Model	UL Listed Pressure		FM Approved Pressure		Rated Speed (rpm)	Suction Inlet Dia. (inch)	Discharge Outlet Dia. (inch)	Stage(s)
		(psi)	(bar)	(psi)	(bar)				
1	FGHC 300-250-500	90-151	6.20-10.4	89-151	6.13-10.41	1470	12	10	1

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