



# FIRE FIGHTING PUMPS

Split Case



**20** YEARS  
OF EXCELLENCE

[www.lifeco-uk.com](http://www.lifeco-uk.com)

# WE AIM TO MAKE THE WORLD A SAFER PLACE



## THE CORNER STONE TO BUILDING THE FUTURE

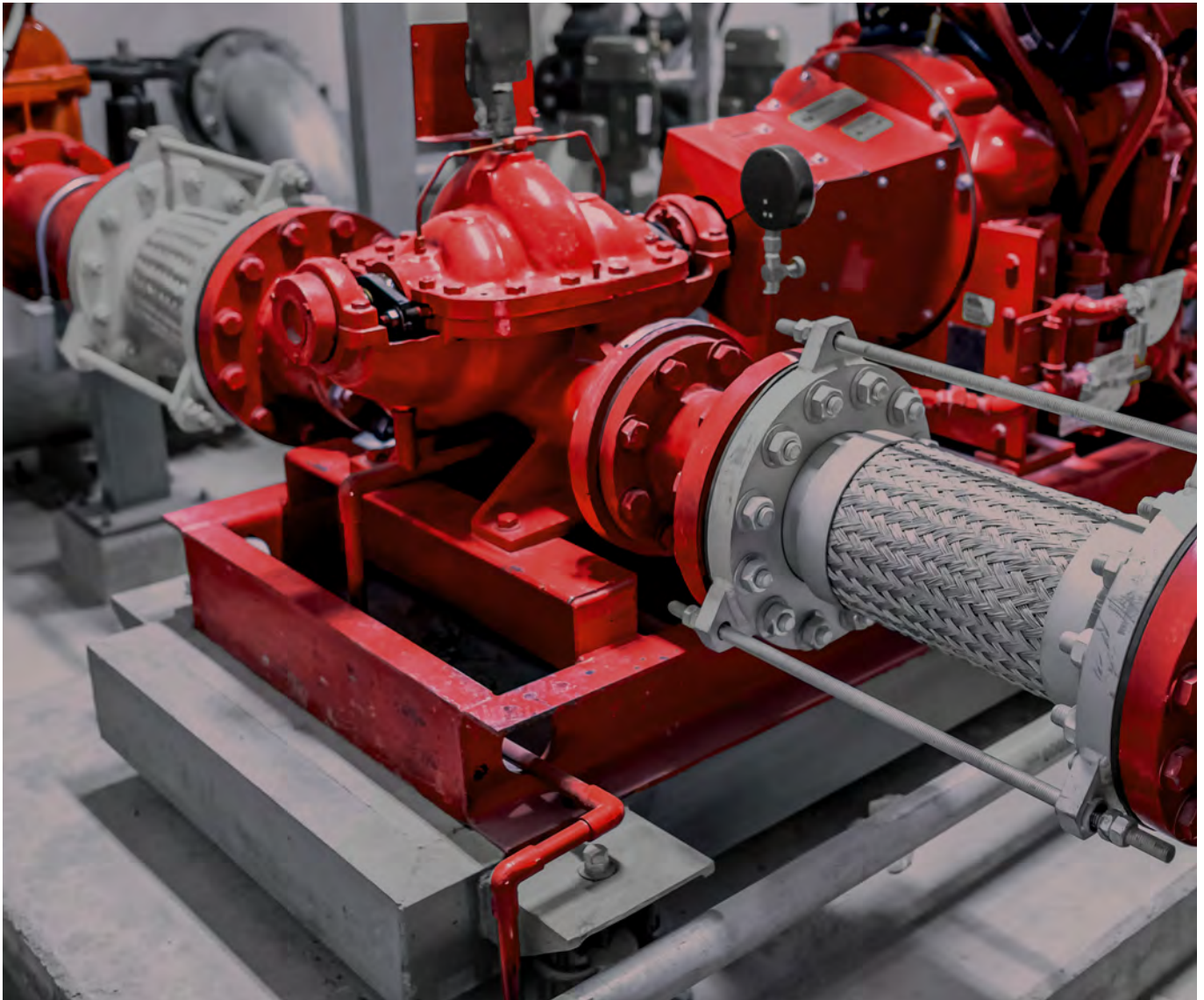
Lichfield Fire & Safety Equipment Co. Ltd. (LIFECO), LIFECO has been a global leader in supplying products covering the full range for fire detection, prevention, extinguishing and suppression system. LIFECO, with its world headquarters located in United Kingdom and is well poised to serve a variety of International markets in addition to fulfilling the local market demand.

LIFECO serves Civil Defence, Industrial and Commercial markets with its wide range of quality and innovative products. LIFECO is represented globally with its well knit National and International infrastructure of distributors. The Company's strengths are underpinned by a highly skilled workforce, and a diverse range of quality products and services that aims to provide a 'one stop shop' to satisfy all of our Customers Fire and Life Safety requirements.





# Fire Fighting Pumps



LIFECO pumps undergoes required inspection, tests and production control during the assembly process and records are logged for the same, before being delivered to our customers. Each pump produced, undergoes performance testings as follows:

## a) OPERATION TEST

Performance curves are plotted showing the Efficiency, Brake-Horsepower (kW), and Total Head developed at shutoff, at rated capacity, at 150 percent of rated capacity, and at selected intermediate capacities between shutoff and maximum capacities exceeding 150% of rated capacity.

## b) HYDROSTATIC TEST

Each pump is tested hydrostatically for not less than 5 minutes. The test pressure is to be up to 2 times the maximum working pressure of the pump, but in no case less than 250 psi (1724 kPa) to ensure no rupture or leakage through the castings at the test pressure.

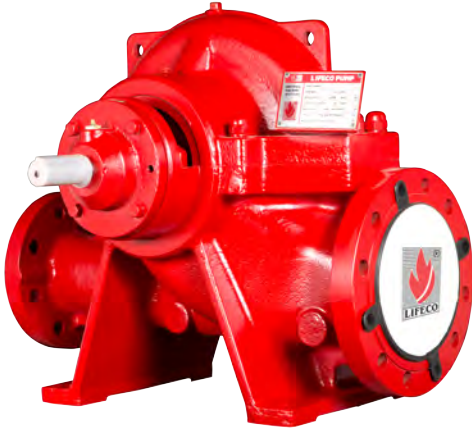
## c) IMPELLER BALANCING

The impellers of each pump are dynamically balanced to the G6.3 balance quality grade in accordance with the requirements for pump impellers in the Standard for Mechanical Vibration – Balance Quality



# Splitcase Fire Pump

50/60 HZ



CAPACITY : 150 GPM to 3500 GPM  
 PRESSURES : 88 TO 335 PSI  
 MAX WORKING PRESSURE : 220 TO 405 PSI  
 SPEED : 1480, 1500, 1760, 1800, 2900, 3000, 3500  
 AND 3600 RPM

- Volute Type Thru-Bore Casing
- Frame-Mounted Design
- Small Footprint Ideal for Retrofit
- Dynamically Balanced
- Double Suction Impeller
- Heavy Duty With Heavy Wall Thickness
- 100% Hydrostatic & performance Tested

Wide Range of Flows and Pressures Available in ELECTRIC MOTOR and DIESEL ENGINE Driven Configuration Suitable for Commercial, Industrial and Buildings Applications.

## Notes

1. All Pumps are Hydrostatically Tested to minimum of 150 % of its Maximum Working Pressure and can with stand Double the Max. Working Pressure.
2. All Pumps have Clock-Wise Rotation when viewed from the Driver Side.
3. All Pumps are horizontal single stage Pumps.
4. "The rated speed marked on the pump can vary within +/- 4% of the listed/ approved rated speed example : 3000 RPM pump can be driven with 2900 RPM Drivers."

\*\* Compliant to NFPA 20 Design & Installation Requirements.

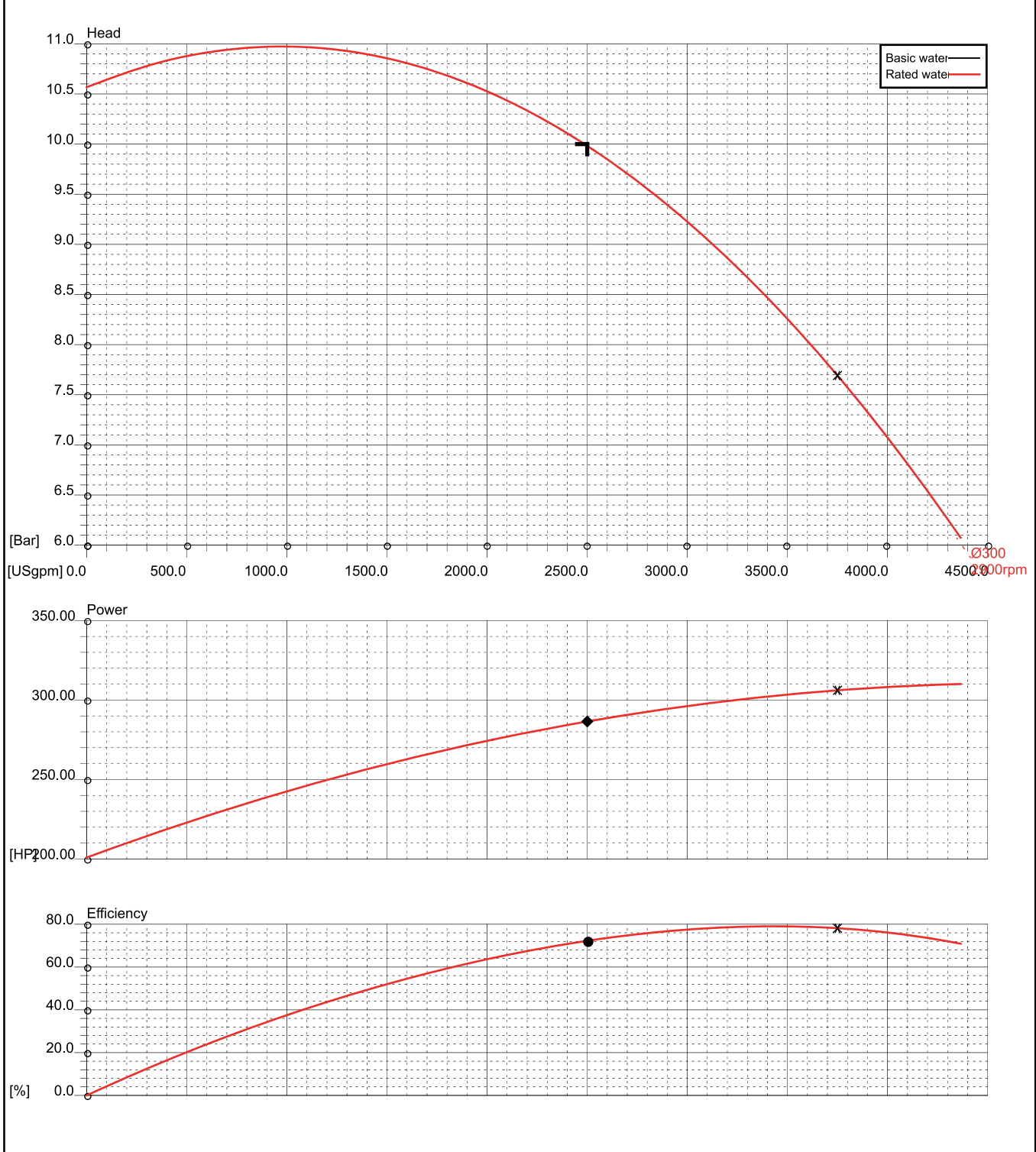
Model Dsg.	Rated Capacity (GPM)	Size (in.)	Rated Net Pressure Range (PSI)	Approx Speed (RPM)	Max Working Pressure (PSI)
GMS 150- 25SH	150 GPM	6x4	114-208	3500	300
			121-220	3600	
GMS 150- 40SM		6x4	206-289	2900	385
			221-310	3000	
GMS 150- SN 3 1SH		6x4	226-316	3500	405
			239-334	3600	
GMS 150- 28SM		5X3	101-156	2900	239
			108-167	3000	
GMS 150- 35SM		5x3	125-224	2900	318
			133-240	3000	
GMS 200- 25SH	200 GPM	6x4	114-207	3500	300
			121-219	3600	
GMS 200- 40SM		6x4	206-289	2900	385
			220-309	3000	
GMS 200- SN 3 1SH		6x4	226-317	3500	405
			239-335	3600	
GMS 200- 28SM		5X3	101-156	2900	239
			108-167	3000	
GMS 200- 35SM		5X3	124-224	2900	318
			133-240	3000	
GMS 250- 25SH	250 GPM	6x4	114-207	3500	300
			121-219	3600	
GMS 250- 40SM		6x4	206-288	2900	385
			220 - 308	3000	
GMS 250- SN 3 1SH		6x4	226 - 317	3500	405
			239 - 335	3600	
GMS 250- 28SM		5x3	191-198	2900	239
			108 - 167	3000	
GMS 250- 35SM		5X3	123.223	2900	318
			132-239	3000	
GMS 300- 35SM	300 GPM	5X3	122-222	2900	319
			131-237	3000	
GMS 300- 25SH		6x4	114-206	3500	300
			121-219	3600	
GMS 300- 40SM		6x4	206-286	2900	385
			220-307	3000	
GMS 300- SN 3 1SH		6x4	226-316	3500	405
			239 - 334	3600	
GMS 300- 28SM		5X3	100 - 156	2900	239
			107-167	3000	
GMS 400- 35SM	400 GPM	5X3	120-219	2900	319
			129-234	3000	
GMS 400- 28SM		5X3	98-155	2900	239
			105166	3000	
GMS 400- 25SH		6x4	114-206	3500	300
			120-218	3600	
GMS 400- 40SM		6x4	206-285	2900	385
			221-305	3000	
GMS 400- SN 3 1SH		6x4	225-314	3500	405
			238-332	3600	
GMS 450- 37SM - 2G	450 GPM	6x4	220-293	2900	410
			236-315	3000	
GMS 450- 28SM		5X3	96155	2900	239
			104-166	3000	
GMS 450- 25SH		6x4	113206	3500	300
			120-218	3600	
GMS 450- 40SM		6x4	205-284	2900	385
			220-304	3000	
GMS 450- SN 3 1SH		6x4	224 - 313	3500	405
			237 - 331	3600	

Model Dsg.	Rated Capacity (GPM)	Size (in.)	Rated Net Pressure Range (PSI)	Approx Speed (RPM)	Max Working Pressure (PSI)
GMS 500- 37SM - 2G	500 GPM	6x4	216-296 233-314	2900 3000	410
GMS 500- 37SM		5x3	134 - 233	2900	290
		6x4	137 - 203	2900	
GMS 500- 28SM		5X3	94-154	2900	239
			102-165	3000	
GMS 500- 25SH		6x4	113205 120-217	3500 3600	300
			119-198	2900	
GMS 500- 32SM		6x4	128212	3000	290
			204-284	2900	
GMS 500- 40SM		6x4	219-304	3000	385
GMS 500- SN 3 1SH	6x4	224 - 312	3500	405	
		237 - 330	3600		
GMS 750- 37SM - 2G	750 GPM	6x4	202-276	2900	410
			218-298	3000	
GMS 750- 3 1SM		6X4	131-201	2900	220
			106-199	3500	
GMS 750- 25SH		6x4	113211	3600	300
			111-194	2900	
GMS 750- 32SM		6x4	120208	3000	290
			148182	2900	
GMS 750- 29SM		8x5	159-196	3000	268
			199 - 281	2900	
GMS 75040SM		6x4	214 - 301	3000	385
			218 - 309	3500	
GMS 750- SN 3 1SH		6x4	231- 327	3600	405
			148 - 266	3500	
GMS 750- 12SH		8x5	157 - 281	3600	362
		190-290	3500		
GMS 750- EL3 1SH	6x4	201-306	3600	377	
			180-290	2900	
GMS 1000- 36SM - 2G	1000 GPM	8x5	194-310	3000	405
			134-195	2900	
GMS 1000- 3 18M		654	143181	2900	220
			154194	3000	
GMS 1000- 29SM		8x5	96172	2900	268
			106185	3000	
GMS 1000- 30SM		8x5	191-272	2900	275
			206-292	3000	
GMS 1000- 40SM		6x4	146 - 264	3500	385
			155 - 280	3600	
GMS 1000- 12SH		8x5	152-205	3500	362
			160-217	3600	
GMS 1000- 15SH		8x5	163-278	2900	300
			175-298	3000	
GMS 1000- 36SM		8x5	187-289	3500	375
			199-306	3600	
GMS 1000- EL3 1SH		6x4	171-281	2900	377
			184-302	3000	
GMS 1250- 36SM - 2G	1250 GPM	8x5	184-302	3000	405
			95-156	2900	
GMS 1250- 29SM - 2G		8x6	102-167	3000	250
			137-177	2900	
GMS 1250- 29SM		8X5	148191	3000	268
			94170	2900	
GMS 125030SM		8X5	101-182	3000	275
			207-264	3500	
GMS 1250- 12SH		8X5	219-279	3600	362
			150-205	3500	
GMS 1250- 15SH		8x6	159-217	3600	300
			155-278	2900	
GMS 1250- 36SM		8X5	168-298	3000	375
			178 - 287	3500	
GMS 1250- EL3 1SH		6x4	190 - 304	3600	377
GMS 1500- 29SM - 2G	1500 GPM	8x6	100-155	2900	250
			105-167	3000	
GMS 1500- 6 1SL5- 2G		12x10	99-164	1480	260
			101-168	1500	
GMS 1500- 6 1SL6- 2G		12x10	142-168	1760	260
			149-176	1800	
GMS 1500- 30SM		8X5	88-167	2900	239
			95.179	3000	
GMS 1500- 15SH		8x6	149 - 207	3500	300
			158 - 218	3600	
GMS 1500- 36SM		8x5	153 - 275	2900	375
			164-295	3000	
GMS 2000- 15SH	2000 GPM	8x6	145-203	3500	300
			154 - 215	3600	
GMS 2000- 29SM - 2G		8x6	95-152	2900	250
			103-163	3000	
GMS 2000- 6 1SL5- 2G		12x10	94-162	1480	260
			97-166	1500	
GMS 2000- 6 1SL6- 2G		12x10	136-165	1760	260
			142-173	1800	
GMS 2500- 29SM - 2G		8x6	89-145	2900	250
			95-156	3000	
GMS 2500- 6 1SL5- 2G		12x10	89-158	1480	260
			92-162	1500	
GMS 2500- 6 1SL6- 2G	12x10	132-163	1760	260	
		139-170	1800		
GMS 3000- 6 1SL5- 2G	12x10	104-153	1480	260	
			108-157	1500	
GMS 3000- 6 1SL6- 2G	12x10	125-156	1760	260	
			131-164	1800	
GMS 3500- 6 1SL5- 2G	12x10	103-144	1485	260	
			106-148	1500	
GMS 3500- 6 1SL6- 2G	12x10	119-148	1760	260	
			125-156	1800	

# Sample Fire Pump Performance Curves

Split Case Fire Pump  
 PUMP MODEL: GMS 2500-29SM-2G

General data					
Impeller type <b>Closed</b>	Selected Ø <b>300 [mm]</b>	Max. diameter <b>300 [mm]</b>	Min. diameter <b>240 [mm]</b>	Speed <b>2900 [rpm]</b>	Stages number <b>1</b>
Operating data					
Duty flow <b>2500.0 [USgpm]</b>	Dutymanometrichead <b>10.0 [Bar]</b>	Efficiency <b>72.2 [%]</b>	Power on shaft <b>286.50 [HP]</b>	NS <b>49</b>	
Density <b>1.000 [kg/dm³]</b>	Kinematic viscosity <b>1.0 [cSt]</b>	Viscosity coeff. Cq <b>1.00</b>	Viscosity coeff. Ch <b>1.00</b>	Viscosity coeff. Cη <b>1.00</b>	Fluid <b>Water</b>



\*\*LIFECO reserves the right, at its discretion, to change, modify, add or remove details/content at any time without prior notice.



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