



REDLINE | HORIZONTAL SPLIT CASE FIRE PUMPS

Where higher flows are required, *RedLine* offers Horizontal Split Case Fire Pumpset (Model RLD) with options to be electric motor or diesel engine driven. They feature capacities up to 20 000 USGPM (75 500 lit/min) covering a wide range of pressures.

With its split case design, the pump is serviceable in-line without disturbing the piping, simplifying inspection and disassembly. The impeller is a hydraulically-balanced, double-suction, 'staggered vane' design, which ensures quiet operation, minimum vibration, low pulsation, low NPSH-required and optimum flow. With this 'balanced' construction, the thrust load is reduced, hence prolonging the life of the bearings.



REDLINE | VERTICAL MULTISTAGE PUMPS

MonoFlo *Linear* Series (Model LN) is a range of Vertical Multistage pumps, suitable for application in Hosereel System, and as a Jockey Pump.

All wetted parts of *Linear* are produced in high quality polished pressed stainless steel, which offers excellent corrosion resistance and increased durability.



Linear comprises an extensive range of models with various number of stages to meet flowrates and pressure heads up to 1250 litres/min and 29 bars respectively.

REDLINE | CONTROLLER | 300 & 500 SERIES

The MonoFlo 300 and 500 Series Controllers are designed for electric (motor) and diesel (engine) driven fire pump services. They are available for both automatic and manual operation. These controllers meet or exceed the operational and functional requirements of the National Fire Protection Association Standard, NFPA 20.



The 300 Series electric controller offers various methods of starting. These include Direct-on-line, Star-Delta, Auto-trans and Soft-start.

The 500 Series is used to start the diesel engine pump automatically during low water pressure condition, manually. It is supplied with 12V or 24V DC dual charger.

General

A properly designed, installed and maintained automatic fire protection systems help save lives and properties. As a chain is as strong as its weakest link, the fire pumps has to be as reliable a component as the other equipment in the fire protection system to ensure the credibility in protecting lives and properties. Hence, compromising in the design of **MONOFLO 'RedLine'** fire-fighting pumps and pumpsets is not an option.

RedLine, meeting AS2941 guidelines, is specific in its design for requirements in fire protection systems, particularly in the Fire Sprinkler Systems and the Hydrant & Wet Riser System.



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RedLine Fire Pump |
End Suction PumpType - Model RLS

Features

MEETING HYDRAULIC REQUIREMENTS IN THE CLASSIFICATION OF OCCUPANCIES-HAZARD GROUPS, FOR A SPRINKLER SYSTEM | The comprehensive range of End Suction Pumps, Model RLS, performs in accordance to AS2941. It is designed to meet a range of flowrates required in the various hazard group classification - the *Ordinary Hazard Class* for fire sprinkler systems, from OH Group 1, 2 & 3, to OH Group Special Class and Extra High Hazard.

END SUCTION 'BACK PULLOUT' PUMPS | Manufactured in high grade cast iron, this DIN24255 end suction pump is of centreline discharge design for automatic self venting. The impellers, which are dynamically balanced, are of enclosed type. Replaceable wear rings are fitted as standard. The pump shaft is fitted with a protecting sleeve, and is supported by an angular thrust type bearing on the hydraulic end and a single row deep groove ball bearing on the coupling end.

The pump features a "back pullout" design which allows the whole hydraulic assembly to be removed from the pump casing for maintenance and service without disturbing the pipework. The mounting feet is integrally casted to the casing.

PACKAGED SYSTEMS | *Redline* can be supplied in a factory-assembled package fire unit comprising the pump, its driver and a controller, mounted on a common frame as an integral system. The package shall also include pressure gauges.

Controllers are factory pre-wired to the pump driver. Diesel engine driven units also include starting batteries, fuel tank and fuel lines factory-piped to and from the engine.



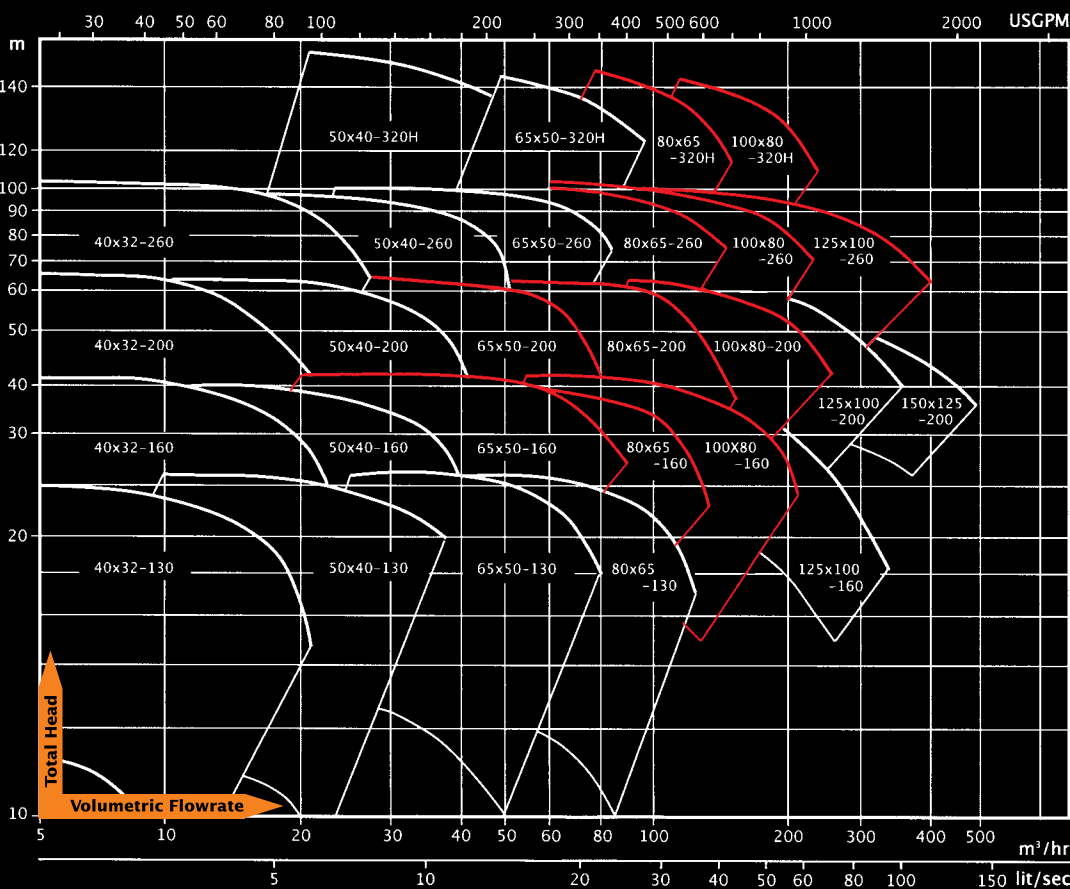
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Performance Range

Performance tested to ISO 9906 Class II | Test water temperature of 20°C

RLS
50 Hz | 2850 rpm | 2-pole



Approved RLS Fire Pumps | Hazard Class Classification

Hazard Group	Pump model	Nominal flow rating [lit.min]	Driver (motor) rating [kW]
OHG I - 15m	RLS 65x50-160	900	5.5
OHG I - 30m	RLS 65x50-160	1150	11.0
OHG I - 45m	RLS 65x50-200	1340	15.0
OHG I - 60m	RLS 80x65-260	1500	30.0
OHG I - 75m	RLS 80x65-260	1650	37.0
OHG II - 15m	RLS 80x65-160	1700	11.0
OHG II - 30m	RLS 80x65-200	2050	18.5
OHG II - 45m	RLS 80x65-200	2350	30.0
OHG II - 60m	RLS 100x80-260	2650	45.0
OHG II - 75m	RLS 100x80-260	2900	55.0
OHG III - 15m	RLS 80x65-160	2250	15.0
OHG III - 30m	RLS 100x80-200	2700	30.0
OHG III - 45m	RLS 100x80-260	3100	45.0
OHG III - 60m	RLS 125x100-260	3400	75.0
OHG III - 75m	RLS 125x100-260	3700	90.0
OHG III Special - 15m	RLS 100x80-160	2650	22.0
OHG III Special - 30m	RLS 100x80-200	3050	37.0
OHG III Special - 45m	RLS 125x100-260	3400	55.0
OHG III Special - 60m	RLS 125x100-260	3750	75.0
OHG III Special - 75m	RLS 125x100-260	4050	90.0

Technical Data

Pump | Operating limits

Liquid handled	Clean water
Working pressure	Maximum working pressure up to 12 bar . For the 'high-head' models, maximum pressure up to 16 bar .
Flowrate	Maximum capacity up to 8 400 litres/min or 500 m3/hr .
Discharge head	Maximum discharge pressure up to 15 bar or 150 metres
Operating temperature	The ambient temperature shall not exceed 40°C . Maximum temperature of medium pumped up to 60°C .
Operating speed	Nominal operating speed is 2 900 rpm at 50Hz

Pump | Material of construction

Parts	Material	
	Standard	Option
Casing & back cover	Cast iron GG25 AS1830/T260 BS1452Gr260	Cast stainless steel AS2074/H6B BS1504Gr316
Impeller	Bronze [Gunmetal] AS 1565/C836B BS1400 LG2	Cast stainless steel AS2074/H6B BS1504Gr316
Shaft	Stainless steel 420 AS 1444/420 BS 970Gr.420 S37	Stainless steel 316 AS 1444/316 BS 970Gr.316 S16
Shaft sleeve	Stainless steel 420 AS 1444/420 BS 970Gr.420 S37	Stainless steel 316 AS 1444/316 BS 970Gr.316 S16
Wear ring	Bronze [Gunmetal] AS 1565/C836B BS1400 LG2	
Shaft seal	Gland packing	Mechanical seal Carbon/Silicon Carbide/Nitrile o-ring

Model Designation | For RLS fire pumpset

RLSE 65x50-160

Impeller nominal size | 160

| **Pump DISCHARGE size** | DN

Pump SUCTION size | DN 65

Driver type

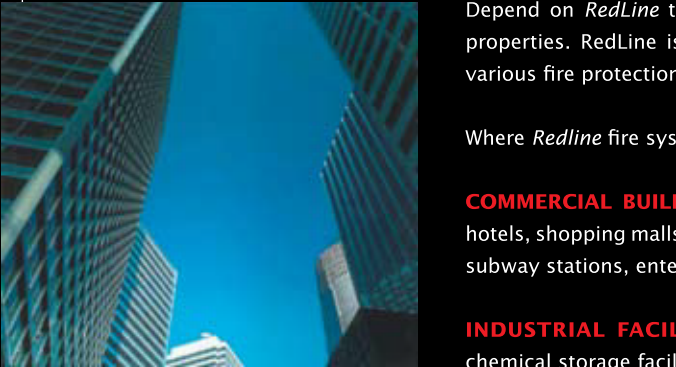
E | Electric motor
D | Diesel engine

	Pump type
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S | End Suction Centrifugal
D | Horizontal Split Case Pump

| 'RedLine' Series model prefix

Applications



to protect and minimise loss of lives and
is installed to play critical integral role in
in systems in buildings and facilities.

tems are installed,

INGS | Office buildings, condominiums,
s, schools & institutions, hospitals, prisons,
entertainment and sports complexes.

ILITIES | Warehouses, mills, shipyards,
ilities and factories.

“Depend on RedLine...
Don't Compromise.”

TYPICAL FIRE PROTECTION SYSTEMS

FIRE SPRINKLER SYSTEMS | It is hydraulically designed in accordance with the relevant hazard class to provide an appropriate density of discharge over an assumed area of protection. When the system is activated, and adequate water supply and pressure is required, *Redline* is typically installed to meet this hydraulic demand.

Fire Sprinkler Systems are classified on the basis of the hazard classes of occupancies. Monoflo's AS2941-compliance RLS End Suction Pump meets these requirements - the Ordinary Hazard Class for fire sprinkler systems, from OH Group 1, 2 & 3, to OH Group Special Class.

HYDRANT & WET RISER SYSTEMS | Redline offers high-head models, capable of lifting water to higher floor levels in a typical Hydrant or Wet Riser Systems in buildings, serving landing valves, canvas hoses and hosereels.

DELUGE SYSTEMS |



monoflo PUMPS
...engineering flow in our life