WHEN EVERY SECOND COUNTS, COUNT ON US™

RHINO® PUMPS

High-performance fire-fighting pumps & systems, engineered for precision, reliability & life-saving performance.

www.rhinopumps.in

ENGINEERED TO EXTINGUISH™

INTRODUCTION

When lives and property are at stake, there's no room for compromise. Rhino Pumps, a division of Ratna Udyog, brings over 21 years of precision engineering expertise to deliver world-class fire-fighting pump solutions. Designed, developed, and tested in-house, our products meet stringent CE and ISO standards, ensuring unmatched durability and performance in the most critical situations.

Every Rhino Pump product is built for toughness, accuracy, and dependability. Our range covers a variety of fire-fighting applications, backed by rigorous in-house testing. Rhino Pumps is a Division of Ratna Udyog, established to provide innovative and dependable fire-fighting pump systems to meet the demand of domestic and global markets. With our roots in precision manufacturing since 2004, we combine advanced technology with rigorous quality standards to ensure our products perform when they are needed most.

Inhouse Facilities - Integrated Foundry & Machining Capabilities

FOUNDRY

Dedicated Foundry Advantage

We are one of the few manufacturers with a dedicated shell core foundry, giving us complete control over the casting process. Every casting made in-house is with strict metallurgical integrity,ensuring:

- High strength and durability.
- Consistent performance under demanding conditions.
- Long service life of critical components.

MACHINE SHOP

State-of-the-Art Machine Shop

Our advanced machine shop blends technology with craftsmanship, offering complete machining solutions:

- 4th & 5th axis CNC machines for complex, high precision parts.
- CNC probing systems for automated, accurate inspection
- Specialized processes:
  - Leak testing
  - Ultrasonic washing
  - Lapping & honing
  - Broaching

This end-to-end setup ensures precision-engineered components built for safety and performance.

CMM

Uncompromising Quality Assurance

We deploy world-class testing systems to guarantee dimensional accuracy and reliability:

- CMM machines for precise measurements.
- Air gauges, height masters & contour testers
- Surface finish & roundness testers
- Millipore setup for strict cleanliness standards

SPECTRO / SIMULATION

Metallurgical & Material Integrity

Each casting undergoes rigorous validation, including:

- Tensile & hardness testing
- Spectrometer analysis for chemical consistency
- Microstructure evaluation under high-resolution microscopes
- Sand property testing for uniform casting quality

Quality Certification


TÜVINDIA

Certificate

ISO 9001:2015

Ratna Udyog
D-40, M.I.D.C., Shiroli,
Kolhapur - 416 122, Maharashtra,
India

Manufacture of Grey Iron, Ductile Iron Casting & Machined Components.

TÜVNORDGROUP

ISO 9001:2015


TÜV

Statement of Confirmation

CE Certification


TÜVNORD

Certificate

IATF 16949

IATF 16949:2016

Manufacture of Grey Iron, Ductile Iron Casting & Machined Components

RATNA UDYOG
D-40, M.I.D.C., Shiroli
416122, Kolhapur, Maharashtra
India

USI: 3769MN

IATF 16949:2016

RHINO PUMPS

RHINO NOZZLE GUNS

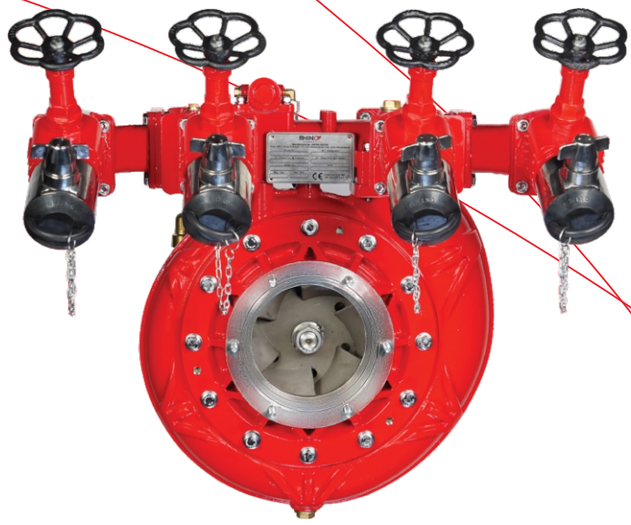
FEATURES

- **Compact & light weight**
- **Trigger locking features**
- **Selectable flow adjustments**

TECHNICAL SPECIFICATIONS

Model	**HP-15**
Body & Handles	**Aluminium alloy, hard anodization**
Head Rings & Coupling	**Aluminium alloy, hard anodization**
Screws & Axle	**Stainless Steel**
Flow Rate	**75 LPM To 150 LPM @ 40 bar**
Test Pressure	**60 bar**
Flow Rate Adjustment	**By rotating flow rate adjustment ring 3 positions: 50, 75 and 150 lpm Position ''FLUSH'' on the right stop**
Stream pattern Adjustment	**By rotating stream pattern adjustment ring. 3 positions: Straight stream, attack stream (30°) or full fog diffusion spray (130°) Full cone diffusion**
Inlet Connection	**¾" BSP Male Threaded.**
Weight	**2.46 Kg.**

RHINO PUMPS



VEHICLE MOUNTED FIRE PUMPS

Normal Pressure Series

Priming

- Mechanical Reciprocating Priming (MRP)
- Intelligent Reciprocating Priming (IRP)
- Stand alone Reciprocating Priming (SRP)

Construction Material

- Aluminium Alloy
- Gun Metal
- Stainless Steel
- Combination Of Above

Basic Data	RV NP 1020	RV NP 1030	RV NP 1040	RV NP 1060
Typical Dimensions in mm (L X W X H)	740 X 460 X 645	740 X 460 X 645	740 X 725 X 680	740 X 725 X 680
Priming System	YES	YES	YES	YES
Mounting Bolt / Holes X Nos.	M16 X 4	M16 X 4	M16 X 4	M16 X 4
No. of LP Discharge Outlet Manifold	4	6	6	6
No. of HP Discharge Outlet Manifold	NA	NA	NA	NA
Oil Capacity	1 Liter	1 Liter	1 Liter	1 Liter
Technical Details				
Pump Stage	1	1	1	1
Stage 1	Low Pressure	Low Pressure	Low Pressure	Low Pressure
Stage 2	NA	NA	NA	NA
Rated Performance (Low Pressure)	2000 lpm @ 10 bar	3000 lpm @ 10 bar	4000 lpm @ 10 bar	6000 lpm @ 10 bar
Rated Performance (High Pressure)	NA	NA	NA	NA
Required Power (Kw/HP) (Low Pressure)	52 kw / 70 hp	80 kw / 107 hp	97 kw / 130 hp	150 kw / 201 hp
Required Power (Kw/HP) (High Pressure)	NA	Na	NA	NA
Rated RPM (Low Pressure)	3000	3250	3000	3250
Rated RPM (High Pressure)	NA	NA	NA	NA
Limit Pressure (Low Pressure)	17 bar	17 bar	17 bar	17 bar
Limit Pressure (High Pressure)	NA	NA	NA	NA
Suction Inlet	100mm	150mm	150mm	200mm
Priming Performance Range	0 to 8 meters	0 to 8 meters	0 to 8 meters	0 to 8 meters
Recommended Priming Speed	2400 rpm	2400 rpm	2400 rpm	2400 rpm
Maximum Recommended Speed	3600 rpm	3600 rpm	3600 rpm	3600 rpm
Thermal Relief Valve Activation	50°C to 60°C	50°C to 60°C	50°C to 60°C	50°C to 60°C
Minimum Idle Speed	900 to 1000 rpm	900 to 1000 rpm	900 to 1000 rpm	900 to 1000 rpm

RHINO PUMPS

VEHICLE MOUNTED FIRE PUMPS

Multi Pressure Series

Priming

- Mechanical Reciprocating Priming (MRP)
- Intelligent Reciprocating Priming (IRP)
- Stand alone Reciprocating Priming (SRP)

Construction Material

- Aluminium Alloy
- Gun Metal
- Stainless Steel
- Combination Of Above

Basic Data	RV MP 1020	RV MP 1030	RV MP 1040	RV MP 1060
Typical Dimensions in mm (L X W X H)	782 X 460 X 705	782 X 460 X 705	782 X 725 X 740	782 X 725 X 740
Priming System	YES	YES	YES	YES
Mounting Bolt / Holes X Nos.	M16 X 4	M16 X 4	M16 X 4	M16 X 4
No. of LP Discharge Outlet Manifold	6	6	6	6
No. of HP Discharge Outlet Manifold	2	2	2	2
Oil Capacity	1 Liter	1 Liter	1 Liter	1 Liter

Technical Details				
Pump Stage	2	2	2	2
Stage 1	Low Pressure	Low Pressure	Low Pressure	Low Pressure
Stage 2	High Pressure	High Pressure	High Pressure	High Pressure
Rated Performance (Low Pressure)	2000 lpm @ 10 bar	3000 lpm @ 10 bar	4000 lpm @ 10 bar	6000 lpm @ 10 bar
Rated Performance (High Pressure)	250 lpm @ 40 bar	250 lpm @ 40 bar	250 lpm @ 40 bar	250 lpm @ 40 bar
Required Power (Kw/HP) (Low Pressure)	67 kw / 90 hp	100 kw / 134 hp	125 kw / 168 hp	170 kw / 228 hp
Required Power (Kw/HP) (High Pressure)	90 kw / 121 hp	90 kw / 121 hp	90 kw / 121 hp	90 kw / 121 hp
Rated RPM (Low Pressure)	3000	3250	3000	3250
Rated RPM (High Pressure)	3250	3250	3250	3250
Limit Pressure (Low Pressure)	17 bar	17 bar	17 bar	17 bar
Limit Pressure (High Pressure)	54.5 bar	54.5 bar	54.5 bar	54.5 bar
Suction Inlet	100mm	150mm	150mm	200mm
Priming Performance Range	0 to 8 meters	0 to 8 meters	0 to 8 meters	0 to 8 meters
Recommended Priming Speed	2400 rpm	2400 rpm	2400 rpm	2400 rpm
Maximum Recommended Speed	3600 rpm	3600 rpm	3600 rpm	3600 rpm
Thermal Relief Valve Activation	50°C to 60°C	50°C to 60°C	50°C to 60°C	50°C to 60°C
Minimum Idle Speed	900 to 1000 rpm	900 to 1000 rpm	900 to 1000 rpm	900 to 1000 rpm

RHINO
PUMPS

RHINO TRAILER MOUNTED FIRE FIGHTING PUMP

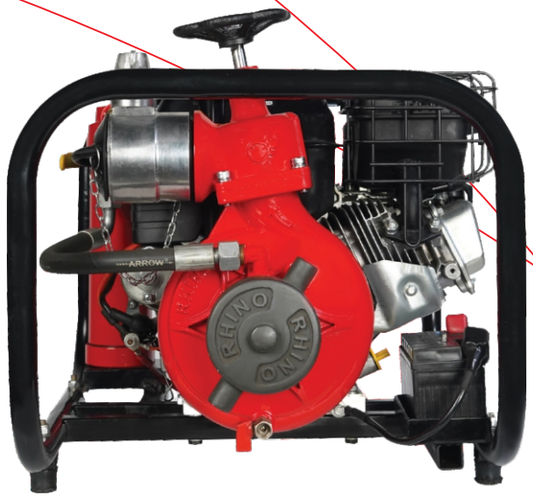
1800 LPM to 6000 LPM

Technical Specifications for Trailer Mounted Fire Pump

Sr. No.	Description	Pump Models			
		RTFP-2000-D	RTFP-3000-D	RTFP-4000-D	RTFP-6000-D
Pump Specifications					
1	Pump Capacity	2000 LPM @ 10 Bar	3000 LPM @ 10 Bar	4000 LPM @ 10 Bar	6000 LPM @ 10 Bar
2	Priming System	Automatic E-Primatic Priming System. Operated with Electromagnetic Clutch & Control Panel			
3	Pump MOC	Aluminium / Gunmetal / Stainless Steel Combination as per requirment			
4	Pump Suction	100mm X 1 Nos. BSRT	140mm X 1 Nos. BSRT	140mm X 1 Nos. BSRT	140mm X 2 Nos BSRT
5	Pump Discharge	2 Nos X 63mm SDT Valves	4 Nos X 63mm SDT Valves	4 Nos X 63mm SDT Valves	6 Nos X 63mm SDT Valves
6	RPM Step Up Gear Box	Applicabe as per required ratio			
7	Mechanical Seal	Self Adjusting Mechanical Carbon Seal Dry run 2 Minutes			
8	Maximum Suction Lift	Up to 8 meters @ sea level			
Pump MOC					
1	Pump Volute Casing	Aluminium / Gunmetal / Stainless Steel			
2	Pump Shaft	Stainless Steel 304			
3	Delivery Valves & Outlet Manifold	Stainless Steel CF8			
4	Impeller	Stainless Steel CF8			
5	Impeller Waring Rings	Polymer Based			
6	Suction Inlet	Stainless Steel 304 / CF8			
Pump Priming					
1	Type	Positive Displacement Twin Piston Reciprocating Priming System. Operated by 12 or 24V Electromagnetic Clutch			
2	Control	Auto / Manual Priming Controller with Sensor attachment.			
3	Working	Arrangement made to actuate the primer in manual and auto modes. When operating in manual mode,primer shall be engaged through control panel, only when it is needed. When operating in auto mode , primer must be actuated through control panel and must automatically re-engage when pressure is lost			
4	Disengagment	In both operating modes the primer shall disengage automatically at a pump discharge pressure of not more than 0.8 bar.			
Engine Specifications					
1	Engine Make	Ashok Leyland Make or Equivalent			
2	Engine Power	88 HP	130 HP	170HP	220HP
3	Engine Type	12 / 24 Volts Water Cooled			
4	Starter	Battery Operated Electric Starter			
5	Fuel Tank	Up to 70 Liters	Up to 90 Liters	Up to 150 Liters	Up to 170 Liters
6	Transmission	Flexible Holset Coupling from engine to pump			
Trailer Specifications					
1	Fabrication Work	All skid, Canopy & fuel tank made with M. S. Powder Coated / Painted RED, Black & Gray color			
2	Suspensions	Leaf Springs with Shock Absorbers			
3	Wheels	2 Nos. Cross-Country type 6 X 16 – 6/8 Ply	2 Nos. Cross-Country type 6 X 16 – 6/8 Ply	4 Nos. Cross-Country type 6 X 16 – 6/8 Ply	4 Nos. Cross-Country type 6 X 16 – 6/8 Ply
4	Towing	Towing Eye – ID 75mm Fix Mounted	Towing Eye – ID 75mm Fix Mounted	Towing Eye – ID 75mm& adjustable above ground level	Towing Eye – ID 75mm& adjustable above ground level
5	Tool box	Fabricated tool box for carrying small tools & accessories. Special arrangement for suction hose mounting along with all equipment			
6	Parking Jack	3 or 4 Jacks for Height Adjustment and Stability			
7	Lifting Provision	4 Lifting Eyes			
8	Manual Handling	2 Nos. foldable manual handling bars provided			
Control Panel					
1	Instruments & Gauges	Pressure Gauge, Hours Meter, Compound Gauge, Ampere Meter, Throttle Control, Ignition Switch, Low Lube Oil Pressure Indicator, Engine ON/OFF, Battery Charging Fail Indicator, Engine Cooling Water Temp Gauge, Panel Light, Fuel Tank Level Gauge, Search Light, Emergency Stop, Engine RPM.			
Accessories					
	Type	As per requirment of customer			

RHINO PUMPS

RHINO PORTABLE FIRE PUMPS P-RPFP-275



FEATURES

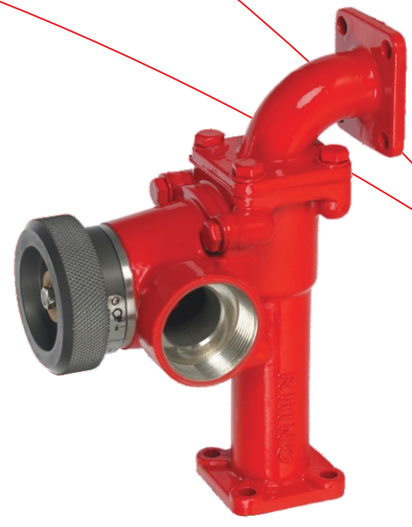
- Compact Design
- High capacity hand priming, capable of suction from 7.5 meters
- Electric & Recoil rope start
- Fuel tank for continues 90 minutes pump running
- Engine frame as per customer choice

TECHNICAL SPECIFICATIONS

Model Name	P-RPFP-275
Rated Performance	275 lpm @ 4.2 bar
Engine	6.5 Hp Briggs & Stratton Make Petrol Engine
Engine Power	6.5 Hp @ 3600 RPM
Suction Inlet	75mm
Delivery Outlet	1 X 63mm Screw Down Type Valve
Priming	Hand Primer Lifting Up to 7.5 meters
Maximum Outlet Pressure	5.5 bar
Pump MOC	Light Aluminium Alloy with Hard Anodizing
Engine Frame Moc	Stainless Steel & Mild Steel with Coating

RHINO PUMPS

RTP-
Around The Pump Foam Proportioning System



FEATURES

- RTP is mounted directly on the suction tube and volute of the pump in a compact and self contained manner thereby eliminating any excessive piping/plumbing work to accommodate a foam inductor. The assembly is easier to operate and accurate proportions of foam is induced in the pump suction.
- RTP is suitable for all commercially available Natural and Synthetic Foam Compounds. The assembly is made up from Stainless Steel and a stainless steel venture. An infinitely variable control knob provided to control the induction rate with calibrated markings from 0-180 l/min. This is a purely manual system, which allows the operator full control of the water / foam mix ratio. This system is operated satisfactorily at a main pump pressure from 5 to 15 bars. System is with minimum number of moving parts thereby making it highly reliable.

TECHNICAL SPECIFICATIONS

Foam System Type	**Around the pump type**
Model	**RTP 180**
Capacity	**180 LPM**
Pressure Rating	**Up to 21 Bar**
MOC	**Stainless Steel**
Calibration Knob	**Rotary Type Up to 180 LPM (Percentage Making as per Requirement)**

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SCAN TO CONTACT

www.rhinopumps.in info@rhinopumps.in marketing@rhinopumps.in

+91 8956213482 D-40, Shiroli MIDC, Kolhapur, Maharashtra, INDIA - 416122.

BESPOKE design