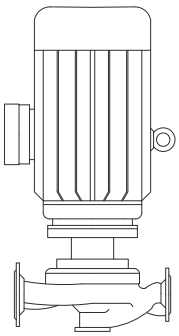
Vertical in-line fire pump

Vertical in-line fire pump from TPMC delivers reliable, high-capacity water supply for standpipes, automatic sprinkler systems, and general building fire protection. The suction and discharge connections are on the same centerline, eliminating the flow-direction change inherent in end-suction designs — reducing hydraulic losses and installation complexity. The compact vertical configuration occupies significantly less floor space than horizontal pumps, making it ideal for space-constrained mechanical rooms and retrofit projects.



- Certificate: UL Listed / FM Approved
- Standard: NFPA 20
- Configuration: Vertical, single-stage, in-line design
- Flow: 150 ~ 1500 gpm (34 ~ 341 m^3/h)
- Pressure (Head): 40 ~ 150 psi (2.8 ~ 10.3 bar)
- Speed: 2900 rpm (50 Hz) / 3500 rpm (60 Hz); 4-pole (1450/1750 rpm) available
- Liquid: Clean water, 0°C ~ 40°C
- Surface: Red FBE coating per AWWA C550



Main parts and material

Pump casing	Ductile iron, cast iron or cast steel	**Impeller / trim**	Cast iron, bronze or SS (AISI 304/316)
Shaft	SS or high-strength alloy steel shaft with SS/bronze sleeves	**Sealing**	Standard mechanical seal, or soft gland packing
Driver	High-efficiency vertical electric motor (close-coupled or split-coupled)	**Controller**	Electrical motor controller
Standard accessories	Circulation relief valve, air release valve, vibration-proof pressure switch, pressure gauges	**Optional accessories**	Pressure relief valve, gate valves, check valves, flow meter, baseplate for skid-mounted package, etc.

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Electric motor drive package

Motor	· UL Listed, NFPA 20 compliant. · TEFC (IP55, Class F) or ODP enclosures. · 3-phase, 50/60 Hz, available in low-voltage (208 V – 690 V) or medium-voltage (2.3 kV – 4.16 kV). · Suitable for across-the-line, reduced-voltage, or soft-start operation.
Controller	· UL Listed and FM Approved, NFPA 20 & UL 218 compliant. · Across-the-line, wye-delta, or soft-start. Microprocessor-based with auto/manual modes. · Phase-reversal and overload protection, display, transducer, recorder. Dry contacts for BMS/FAS.

Jockey pump & controller (Optional)

Pump	· CE certified. · Electric-motor-driven pressure-maintenance pump. · Typically sized at 1-3% of main pump capacity with set pressure 10-20 psi above main pump start pressure.
Controller	· CE certified. · Automatically starts/stops jockey pump to maintain system pressure between main pump operations. · Enclosure options (NEMA 2 / IP55) match main pump controllers.

Available sizes

US system			Metric system			Ref. No.
Capacity (gpm)	Pressure (psi)	Head (ft)	Capacity (m^3/h)	Pressure (bar)	Head (m)	
150	40 ~ 150	92 ~ 347	34	2.8 ~ 10.3	28 ~ 106	U0401
200	40 ~ 140	92 ~ 323	45	2.8 ~ 9.7	28 ~ 98	U0402
250	40 ~ 140	92 ~ 323	57	2.8 ~ 9.7	28 ~ 98	U0403
300	53 ~ 145	122 ~ 335	68	3.7 ~ 10.0	37 ~ 102	U0404
400	41 ~ 140	95 ~ 323	91	2.8 ~ 9.7	29 ~ 98	U0405
450	43 ~ 139	99 ~ 321	102	3.0 ~ 9.6	30 ~ 98	U0406
500	67 ~ 140	155 ~ 323	114	4.6 ~ 9.7	47 ~ 98	U0407
750	45 ~ 140	104 ~ 323	170	3.1 ~ 9.7	32 ~ 98	U0408
1000	45 ~ 135	104 ~ 312	227	3.1 ~ 9.3	32 ~ 95	U0409
1250	50 ~ 130	116 ~ 300	284	3.4 ~ 9.0	35 ~ 91	U0410
1500	50 ~ 120	116 ~ 277	341	3.4 ~ 8.3	35 ~ 85	U0411

Note:

1. The pressure ranges shown represent the available performance envelope at nominal speeds. Actual performance curves and drive power selection are provided upon request for selected duty point. Contact TPMC for details.
2. All ratings comply with NFPA 20 (150% capacity at not less than 65% of rated head; shut-off head not more than 140% of rated head).