WATER PRESSURE BOOSTER SYSTEM SOLUTIONS

Smaart Flowmaster Product Catalogue

Complete end-to-end engineering for residential complexes, commercial buildings & industrial facilities — every component from pressure pump to last-mile fitting, by trusted global brands.



120°C	10 Bar	100/h	50+ Yrs
Temp Tolerance	Max Operating Pressure	Start/Stop Cycles	CPVC Service Life

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Product Categories

Grundfos · NIVELCO · Cimberio · Astral CPVC · Polycab

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01

Primary System Equipment

The heart of every Flowmaster pressure booster system — engineered to deliver consistent water pressure across multi-storey buildings, residential complexes and commercial facilities.

Where This System Is Deployed

Anywhere consistent water pressure is critical — from ground-floor to rooftop. A centralised Flowmaster booster replaces unreliable overhead tanks and individual pump installations, delivering precise pressure at every outlet.

- Multi-Storey Apartments
- Commercial Buildings
- Hospitals & Clinics
- Hotels & Resorts
- Industrial Facilities
- Educational Campuses

SMAART FLOWMASTER

Smaart Pump

High-efficiency pressure booster pump — SS 304 construction



Parameter	Specification
Pump Body	Electro-coated Cast Iron, Corrosion-free
Impeller	AISI 304 Stainless Steel
Chamber	AISI 304 Stainless Steel
Pump Shaft	AISI 304 Stainless Steel
Hydraulic Components	Corrosion & wear resistant SS
Inlet & Out Parts	Cast Iron
Manifold	MS CED Coated
Temperature Tolerance	20°C to 120°C
Start/Stop Cycles	Up to 100 per hour
Cut-off Control	Pre-set pressure based

★ KEY FEATURES

- Quiet, compact and highly reliable operation
- Suits various flow & pressure demands
- Built-in thermal overload protection
- High-grade motor insulation for durability
- Locally rewindable and repairable

GRUNDFOS

Twin Pump Booster Set

Dual pump configuration for redundancy



Parameter	Specification
Configuration	Dual Pump Parallel
Control Panel	Integrated with emergency stop
Operation	Lead-lag / duty-standby
Application	High-demand / 24×7 critical supply

★ HIGHLIGHTS

- Redundancy — duty/standby pumps keep supply running during maintenance or failure
- Grundfos · CE Certified · NSF Approved

PRESSURE EQUIPMENT

Pressure Tank

Diaphragm / bladder type expansion vessel



Parameter	Specification
Max Operating Pressure	Max 10 bar
Liquid Temperature	Max 90°C
Approval & Markings	CE, GOST, NSF, WRAS, ACS
Function	Reduce pump cycling, maintain pressure

02

System Instrumentation

Precise sensing and control components that automate the Flowmaster system — ensuring pumps start and stop at the right water levels, protecting equipment and optimizing energy use.

NIVELCO (NEVELCO)

Cable Suspended Float Switch

NIVOFLOAT Series — Tank level control & pump automation



Parameter	Specification
Brand	NIVELCO (Nevelco)
Switch Type	Cable Suspended Float Switch
Operation	Tilt / Float Operated Microswitch
Float Material	Injection Molded Polypropylene
Float Construction	Dual Chamber Hermetically Sealed
Contact Type	Mercury Free Microswitch
Switch Rating	10(4)A, 250V AC (NL)
Cable Material	PVC / Neoprene
Cable Diameter	9 mm
Standard Cable Length	5 m / 10 m / 20 m
Process Pressure	Up to 1 bar (NL) / 2 bar
Operating Temperature	0°C to 50°C
Weight	250 g (NL), 1.1 kg (NW)
Application	Tank Level Control / Pump Control / Overfill Protection

★ HIGHLIGHTS

- 0–50°C operating temperature
- 5–20 m cable lengths available
- 250V AC switch rating
- Dual chamber float construction
- Mercury-free microswitch type

03

Flow Control Valves

Precision-engineered valves from Cimberio — European quality brass construction for reliable isolation, control and non-return protection across the entire Flowmaster system.

CIMBERIO

Ball Valve

PN25/PN30 · ISO Standard



Parameter	Specification
Brand	Cimberio
Type	Full Port / Full Bore Ball Valve
Body Material	Forged Brass Alloy
Ball Material	Chrome Plated Brass
Stem Material	Brass Blow-Out Proof
Seat Material	PTFE Seats
End Connection	Female Threaded BSP
Operation	Quarter Turn Lever
Size Range	15 mm to 100 mm (½″ to 4″)
Pressure Rating	PN25 / PN30
Working Pressure	Up to 25 Bar
Temperature Range	-20°C to 120°C

CIMBERIO

Non-Return Valve (NRV)

PN16/PN20 · EN 12266-1



Parameter	Specification
Brand	Cimberio
Model	CIM 30 / CIM 32
Material	Forged Brass (EN 12165 – CW617N)
Type	Spring Loaded / Lift Check
Operation	Automatic (non-return)
Nominal Pressure	PN 16 / PN 20
Size Range	½" – 4" (15 NB – 100 NB)
Connection Type	BSP Threaded (Female)
Spring Material	Stainless Steel SS 316
Seat Material	PTFE / Metal Seat
Temperature Range	-10°C to +95°C
Test Pressure	Up to 25–30 bar

04 System Piping

High-performance CPVC and flexible piping designed for the full temperature and pressure demands of water booster systems — corrosion-free, long-lasting and easy to install.

ASTRAL — CPVC PIPING SYSTEM

CPVC Pipe

Chlorinated Polyvinyl Chloride — IS:15778 Certified



Parameter	Specification
Material	CPVC — Cell Class DP 110-2-3-2 (IS:15778)
Max Service Temperature	Up to 93°C (200°F)
Max Pressure (SDR 11 @ 23°C)	28.1 kg/cm² (400 psi)
Max Pressure (SDR 11 @ 82°C)	7.0 kg/cm² (100 psi)
Size Range (CTS)	½″ to 2″ — SDR 11 & SDR 13.5
Size Range (IPS)	2½″ to 12″ — SCH 40 & SCH 80
Pipe Lengths	3 metres & 5 metres
Tensile Strength	55 N/mm² @ 23°C
Flexural Strength	104 N/mm² @ 23°C
Service Life	50+ years
Standards	ASTM D2846, F441, IS:15778, IS:17546
NSF Approval	NSF/ANSI 61 — Safe for drinking water
Installation	Solvent cement jointing

★ HIGHLIGHTS

- 93°C CPVC max temperature
- 50+ years CPVC service life
- NSF/ANSI 61 — potable water safe
- SCH 40/80 pressure ratings

FLEXIBLE PIPING

Flexible Pipe

Braided PVC — Double High Tenacity Synthetic Fibre reinforcement



Parameter	Specification
Material	Flexible PVC with Double HT Synthetic Fibre
Size Range	6 mm to 50 mm ID (¼″ to 2″)
Working Pressure	8 to 20 kg/cm²
Standard Lengths	30 m / 50 m / 100 m
Temperature Range	-5°C to +65°C
Kink & Crush Resistant	Yes
Weather Resistant	Yes
Oil & Chemical Resistant	Yes (light chemicals)
Rodent Proof	Yes
Surface Finish	Bright, smooth finish
Climate Rating	Tropical climate designed

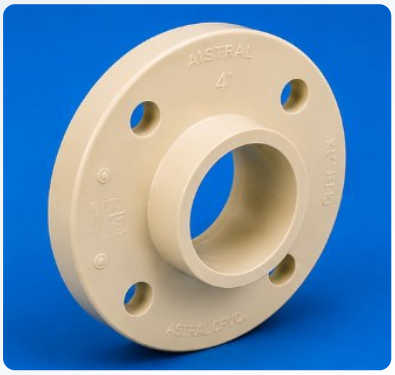
05 CPVC Pipe Fittings

Complete range of Astral CPVC fittings for every connection need in the Flowmaster system — from flanges and tees to elbows, unions and reducers. All rated for 93°C and ASTM certified.

ASTRAL

CPVC Flange

ASTM F439 · ANSI B16.5



Parameter	Specification
Brand	Astral
Standard	ASTM F439 / ASTM F441
Pressure Rating	Class 150
Max Temperature	Up to 93°C
Connection	Socket / Stub End / Threaded
Flange Type	Vanstone Flange
Bolt Drilling	ANSI B16.5
Size Range	15 mm – 300 mm (½″ – 12″)
Gasket Type	Rubber / EPDM / PTFE
Max Pressure	Approx. 10–15 kg/cm²

ASTRAL

CPVC Tee

ASTM F438 · 90° Branch



Parameter	Specification
Brand	Astral
Standard	ASTM F439 / ASTM F438
Connection Type	Socket (Solvent Cement)
Size Range	15 mm – 300 mm (½″ – 12″)
Pressure Rating	SCH 40 / SCH 80 / SDR
Max Temperature	Up to 93°C
Tee Type	Equal Tee / Reducing Tee
Branch Angle	90°
Chemical Resistance	Acids, alkalis, salts, corrosion

ASTRAL — MALE THREADED ADAPTER

CPVC MTA

BSP/NPT · Brass Insert



Parameter	Specification
Connection Type	Socket × Male Thread
Thread Type	BSP / NPT Male Thread
Size Range	15 mm – 100 mm (½″ – 4″)
Pressure Rating	SCH 40 / SCH 80 / SDR 11
Max Temperature	Up to 93°C
Insert Material	Brass (for strength)
Typical Use	Pump / valve / tank connection

ASTRAL — FEMALE THREADED ADAPTER

CPVC FTA

BSP/NPT · Brass Insert



Parameter	Specification
Connection Type	Socket × Female Thread
Thread Type	BSP / NPT Female Thread
Size Range	15 mm – 100 mm (½" – 4")
Pressure Rating	SCH 40 / SCH 80 / SDR 11
Max Temperature	Up to 93°C
Insert Material	Brass insert (high strength)
Typical Use	Valve / pump / tank nozzle connection

ASTRAL — 90° / 45°

CPVC Elbow

90° / 45° · Solvent Cement



Parameter	Specification
Standard	ASTM F439 / ASTM F438
Connection Type	Socket (Solvent Cement)
Size Range	15 mm – 300 mm
Pressure Rating	SCH 40 / SCH 80 / SDR
Max Temperature	Up to 93°C
Angle Types	90° Elbow / 45° Elbow
Chemical Resistance	Acids, alkalis, salts

ASTRAL — LONG RADIUS

CPVC Bend

Long Radius · Low Head Loss



Parameter	Specification
Standard	ASTM F439 / ASTM F441
Connection Type	Socket (Solvent Cement)
Size Range	15 mm – 300 mm
Pressure Rating	SCH 40 / SCH 80
Max Temperature	Up to 93°C
Angle Types	90° Bend / 45° Bend
Radius Type	Long Radius (1.5D to 3D)
Function	Smooth direction change, less head loss

ASTRAL — 3-PIECE

CPVC Union

3-Piece · Easy Dismantle



Parameter	Specification
Standard	ASTM F439 / ASTM F441
Connection Type	Socket × Socket / Threaded
Size Range	15 mm – 100 mm (½" – 4")
Pressure Rating	SCH 40 / SCH 80
Max Temperature	Up to 93°C
Construction	3-piece (Body + Nut + Tailpieces)
Sealing Method	O-ring / Rubber seal
Function	Easy dismantling for maintenance

ASTRAL

CPVC Reducer Coupling

ASTM F441 · Size Reduction



Parameter	Specification
Standard	ASTM F439 / ASTM F441
Connection Type	Socket × Socket (Solvent Cement)
Size Range	15 mm – 300 mm
Size Combinations	50×40 mm, 80×50 mm, 100×65 mm etc.
Pressure Rating	SCH 40 / SCH 80
Max Temperature	Up to 93°C
Function	Connect pipes of different diameters

ASTRAL

CPVC Bush (Reducing Bush)

ASTM F439 · Compact Layouts



Parameter	Specification
Standard	ASTM F439 / ASTM F441
Connection Type	Spigot (Male) × Socket (Female)
Size Range	15 mm – 100 mm (½" – 4")
Size Combinations	50×25 mm, 40×20 mm, 32×15 mm etc.
Pressure Rating	SCH 40 / SCH 80
Max Temperature	Up to 93°C
Function	Reduce pipe size within fitting

06

Installation Hardware

Every nut, bolt, clamp, seal and fastener needed for a complete, professional Flowmaster installation — corrosion-resistant materials, precision-selected for water system applications.

Product	Material / Specification	Standard / Application
Hose Nipple	Brass / GI, BSP Threaded, Size ½"–2"	Water application piping connections
Hose Clamp	SS 304, Worm Drive, Corrosion Resistant	Flexible hose securing
Nut & Bolt with 2 Washer	MS (Zinc Plated) / SS 304, Hex M8–M16	1 Plain + 1 Spring Washer
C Clamp	MS / SS, Rubber Lined, Heavy Duty	Pipe support per OD size
D Clamp	MS, Saddle Type, Painted / GI Finish	Pipe support and fixing
Teflon Tape	PTFE, 12 mm Width, High Density	Thread sealing

Product	Material / Specification	Standard / Application
Insulation Tape	PVC, Flame Retardant, 0.125 mm	Cable protection
Waterproof Tape	Self-Adhesive Butyl / PVC	Weather resistant sealing
Cable Tie	Nylon 66, UV Resistant, 100–300 mm	Cable management
Rubber Gasket	EPDM / Nitrile, 3–5 mm Thickness	Water application sealing
Screw	MS / SS, Self-Tapping / Machine Type	Corrosion resistant fixing
Rawl Plug	Nylon, 6 mm / 8 mm / 10 mm	Wall fixing anchor
Anchor Fastener	MS / SS, Wedge Type, M8–M12	Heavy duty concrete fixing
Foot Valve Mesh	SS 304, Corrosion Resistant	Suction line protection
Cement Nail	Hardened Steel	Concrete fixing
I Stand	MS Fabricated, Epoxy Coated	Pump base support

07

Electrical Components

Polycab-branded wiring and conduit system for a complete, code-compliant electrical installation — fire-retardant, durably insulated for the demands of pump motor and control applications.

POLYCAB — IS 694 / IS 1554

Power Cables



Parameter	Specification
Cable Sizes	2.5 Sq.mm × 3 Core & 4 Sq.mm × 3 Core / 1.5 Sq.mm × 3 Core
Brand	Polycab
Conductor	Annealed Copper
Insulation	PVC / FR / FRLS
Voltage Grade	1100 V
Standard	IS 694 / IS 1554
Temperature Rating	Up to 70–90°C
Application	Power supply, motor connection, panel wiring

POLYCAB

Conduit Pipe

PVC Heavy Duty — IS 9537



Parameter	Specification
Conduit Pipe	25 mm, PVC (Heavy Duty), ISI Marked
Material Type	FR / FRLS PVC
Standard	IS 9537
Colour	Grey / Black
Application	Cable protection, concealed/exposed wiring

POLYCAB

Conduit Bend

PVC Standard Radius



Parameter	Specification
Size	25 mm
Material	PVC
Radius	Standard radius bend
Standard	IS 9537
Application	Direction change in conduit runs

POLYCAB

Flexible Conduit Pipe

PVC Corrugated — IS 9537



Parameter	Specification
Size	25 mm
Type	PVC Corrugated
Material Type	FR / FRLS PVC
Standard	IS 9537
Colour	Grey / Black
Application	Flexible runs, motor terminal boxes

Smaart Flowmaster — Complete Water Pressure Booster System Solutions

KEY BRANDS

Grundfos · NIVELCO
Cimberio · Astral CPVC
Polycab

SYSTEM CATEGORIES

Equipment · Instrumentation
Valves · Piping · Fittings
Hardware · Electricals

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