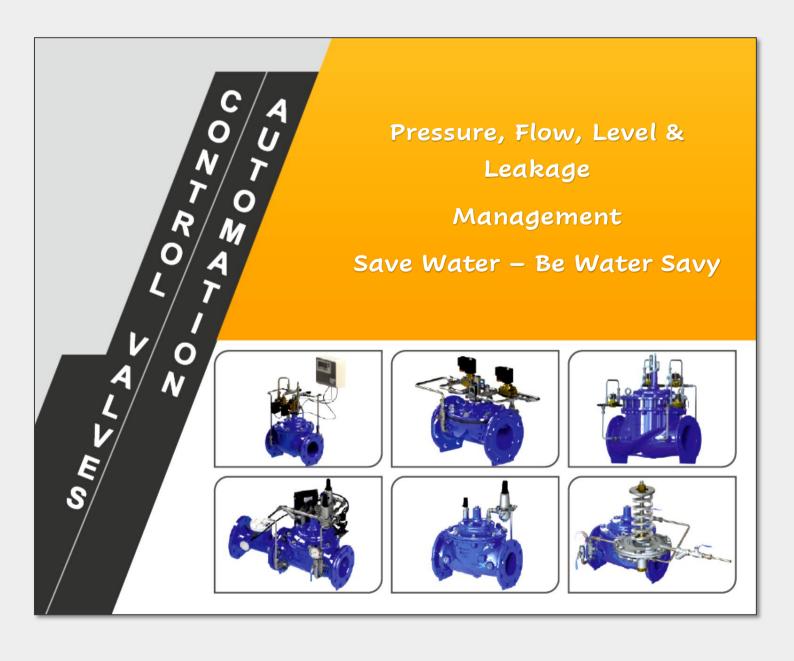
Alpine Flowtech











Alpine Flowtech Global Company Profile

Hydraulically Operated Control Valves

Alpine Flowtech, an Indian Company is the sole selling agent and sales representatives of M/s. Alpine Flow Control Co., Ltd. (AFC), A Global Company manufacturing world class Control Valves and having Factories in Malaysia, PRC as well as Offices Cum Assembly lines in Indonesia, Vietnam, Taiwan.

Alpine Flowtech is the 1st Company from India to have a CWPRS, Pune Certification for the Flow Control Valve (FCV) and PLC integration.

Alpine Flow Control was originated in the year 2009 when the shareholder company Jupiter Technologies Co. Ltd., Anguilla (a British overseas territory in the Caribbean) sponsored formation with a registered as well as paid up capital of 1.5 Million USD through its legal representative Mr. Liang Nai Lieh. The formed company was wholly owned by foreign corporation. The major focus of the company is in the Water Valves Design and Manufacturing. Proven and supported by on-going quality and reliability test, AFC has built its own inhouse reliability test laboratory to ensure that our products not only meet the international quality and reliability test specification, but also comply to various international valves standards and specifications. Our production is mainly for export business (95%), and we follow the international standard EN & AWWA. Our overseas market has expanded to America, Italy, Spain, India, UK, Malaysia, Vietnam, Mexico, Russia, Brazil, Philippine, Indonesia, Korea, UAE etc. We have the prestigious EN 1074-5: 2000, Certificate of Conformity, Type Test for the Hydraulically Operated Control Valves issued by TUV.

The Management staff have over 30 years' experience in the water valve design and manufacturing, combined with the high-tech electronics manufacturing experience of multi-national listed companies. This unique combination of traditional and high-tech industry management experience and skills have given us an advantage over the traditional valve manufacturer. More than 40% of our staff are technical staff with knowledge and experience in valve and mechanical design/manufacturing.

Our Mission:

- Be the market leader in Valve & Flow Control Applications
- Technology through Innovation. Continuous upgradation and R&D
- Quality product and service through Quality people
- Business growth through Cohesive partnership
- Best in class Design and Service support through network reps. across globe.





PICTURE GALLERY OF WORKS











































Alpine Flow Control Co., Ltd. (AFC)

Corporate & Technical Profile

Particulars	Description
Brand Name if any	ALPINE, AFC
Factory & Office	☐ MALAYSIA - FACTORY & OFFICE
Global Presence	☐ CHINA - FACTORY & OFFICE
	☐ INDIA – ASSEMBLY, INSPECTION, WAREHOUSE &
	OFFICE
	□ TAIWAN – ASSEMBLY, WAREHOUSE & OFFICE
	□ INDONESIA – ASSEMBLY, WAREHOUSE & OFFICE
	□ VIETNAM – ASSEMBLY, WAREHOUSE & OFFICE
Countries Served	US-America, Italy, Spain, UK, Mexico, Russia, Brazil,
	Philippine, Korea, UAE.
Year of Establishment	2009
Year of commencement of	2009
production.	

Manufacturing, Design, R&D, Govt. Certifications.

Type Test Certification	Type test of Control Valves as per EN 1074-5-2000 by TUV.
Quality Management	GB/T19001-2016 / ISO:9001-2015
Certifications	ISO 14001:2004
Test certificate from certified	CWPRS Pune, India Three Certificates for Flow Control Valves
Govt. Organization.	
R & D Facilities if any	In-House Electronics Lab R&D for Control Valves
	Hydro dynamic testing equipments.
	Collaboration for Smart Valves Software with HEDA
Type of Valves	Hydraulically Operated Diaphragm Type Pilot/Solenoid/SCADA Operated
	Control Valves. Sewage Air & vacuum Breaker Valves.
Class, Diameter	Hydraulically operated, Diaphragm type Control Valves DN 50-900
	Rating- PN 10/16/25
	Sewage Air & vacuum Valves – 50 mm to 200 mm





Quality Control, Inspection & Testing.

	, , , , ,
Availability of Equipment	2 sets of all gauge and each set goes for calibration every half year.
	Pressure Gauge – Calibrate per half year
	Calliper – Calibrate per year
	Torque wrench – Calibrate per year
	Coating thickness gauge – Calibrate per year
	Non-porosity test equipment– Calibrate per year
	Thermometer Calibrate per year
	All the calibration is done in CNAS certificate lab.
QC record/document	Calibrated equipment certificate.
maintenance	IQC
	IPQC
	FQC
	ogc
Details of testing facility	Hydro test machines which can meet BS/AWWA pressure test. Impact test
available	equipment for coating. Coating thickness gauge. Non-porosity test machine.
Approved by reputed	TUV – EN1074-5 certificate
Organization	
List of tests carried out for	We follow BS and AWWA standards.
RAW Material & Product	Hydraulic Control Valve: EN1074-5
	Seat test (Low pressure): 0.5 bar
	Seat test (High pressure): 1.1*pressure rating
	Shell test (High pressure): 1.5*pressure rating
Detail in house testing facility	Hydro test machine PD004 – test valves from DN50-DN200
	Hydro test machine PD005 – test valves from DN250-DN600
	Hydro test machine PD022 – test valves from DN600-DN1200
	Hydro test machine PD024 – test valves from DN100-DN300
	BS –up to PN25. AWWA – up to 200 PSI

Assembly, Service, Sales & Marketing in India.

- 1) Alpine Flowtech, Thane, Maharashtra.
- 2) Verve Incorporation, Hyderabad, Telangana.
- 1) Unit No. 1, B-Wing, Swaraj Complex, Opp. Bewakoof Textile Factory Outlet, Rajlaxmi Compound, Kasheli, Kalher, Bhiwandi, Dist. Thane, Maharashtra. 421302
- 2) Villa No. 27, Splendid Aparna, Palm Meadows, Pochampally, Kompalle, Rangareddy, Telangana. 500014





PROBLEMS FACED BY	SMART SOLUTIONS BY ALPINE/AFC
UTILITIES	CONTROL VALVES
Unequal Water	☐ Pressure & Flow Management Solutions.
Distribution	☐ Reservoir Management.
	☐ Branch/Taping/Feeder Control.
	☐ Customer Service Connections Management.
	☐ Pressure and Level Management.
(NRW). Physical Loss of	☐ Dynamic and Static Network Management.
Water Engineer's	☐ Time based pressure Management.
Perspective (Non-	☐ Overflow Prevention
Socio/political)	☐ Rate of flow control
	☐ Air Management
	☐ Capacity Building & Training
	Adding the No. of Service Connections by reducing the NRW.
Damages to the Critical	☐ Surge Protection,
Equipments,	☐ Anticipation,
Infrastructure.	☐ Pump Control, Pressure Reduction,
	☐ Anti-Cavitation.





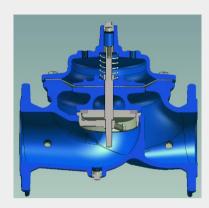
ADVANTAGES OF USING ALPINE/AFC CONTROL VALVES







Alpine/AFC Control Valves Design Advantage



- ❖ Double guided Shaft/Stem for balanced stroke & control in AISI SS 304/optional in SS 316
- ❖ Body seat and retainer in AISI SS 304/optional in SS 316
- ❖ High Performance Long Service Life Diaphragm in reinforced nylon fabric EPDM/NBR-food grade & WRAS approved.
- ❖ Body, Bonnet, Disc Holder, Diaphragm, Upper plate in DI Grade GJS/SGI 500/7/GGG 50
- Resilient seat and O rings in EPDM/NBR
- Spring AISI SS 304/optional in SS 316
- ❖ High performance 24vDC/230-240 vAC solenoids in SS/Brass/Bronze.
- ❖ Hex Bolt, Washer, Nut in A2 AISI SS:304, corrosion resistant.
- Tubings, Plugs and connecting fittings in rigid AISI SS 304
- Extra tapping plugs for SCADA modifications and adding other features/pressure gauge.
- Strainer, Needle Valves for speed control, Ball Valves for isolation in AISI SS 304.
- ❖ Fusion bonded epoxy coating with a minimum 250-micron coating food grade WRAS approved.
- PN 10, 16, 25 pressure rating and flange drilling options.
- ❖ Optional Accessories: Air Vent Valve, Emergency Valve opening barrel with ball valve, Limit switch, Pump Control Panel with necessary sequence and relays and timers.

PRODUCTS GALLERY



Pressure Reducing Valve



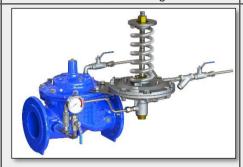
Relief + Sustaining



Flow Limiting



Dual Solenoid for SCADA



Altitude Valve – Tank Level



Surge Anticipating Valve



Ball Float Valve



Pressure Management Valve (PLC)



PRV With Actuator



Solenoid On-Off Valve



Burst Control Valve



Pump Control Valve (Panel)



Flow Limiting With Solenoid



5 In One Valve



Flow Limiting + Altitude

PRODUCTS GALLERY



PRV + Altitude



PRV + Flow Limiting



PRV + Flow Limiting + Solenoid



Multi Time Setting PRV



Surge Relief + Solenoid



Stemless Direct Seat PRV



Stemless Direct Seat Relief Valve



Stemless Direct Seat Flow Limiting Valve



Stemless Direct Seat Altitude Valve



Stemless Direct Seat Solenoid On-Off Valve



Valve On-Off Programmer

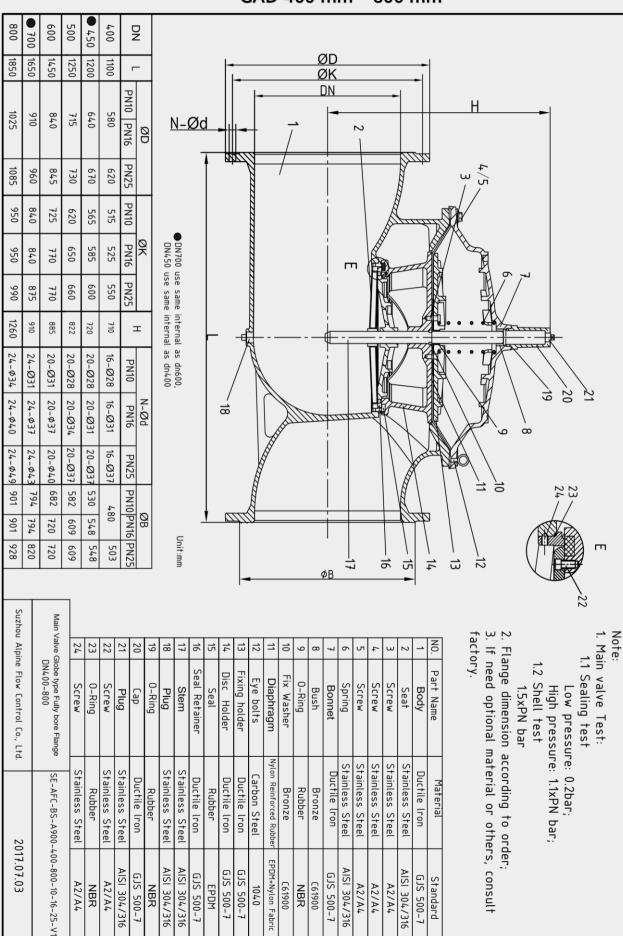


Latching Solenoid For Main Valve On-Off by 9 vDC Battery





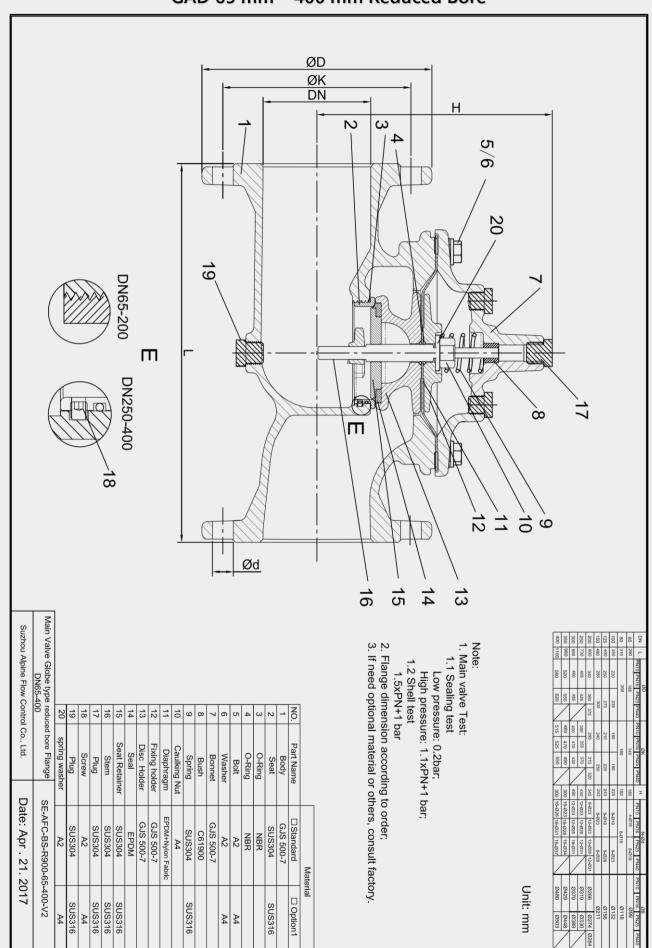
GAD 400 mm - 800 mm







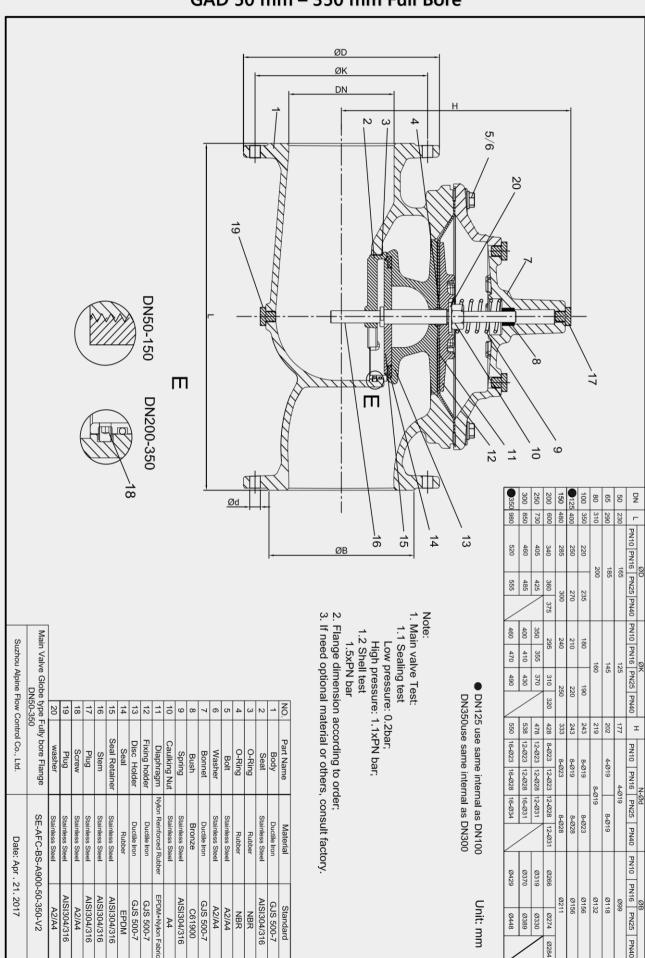
GAD 65 mm - 400 mm Reduced Bore







GAD 50 mm - 350 mm Full Bore







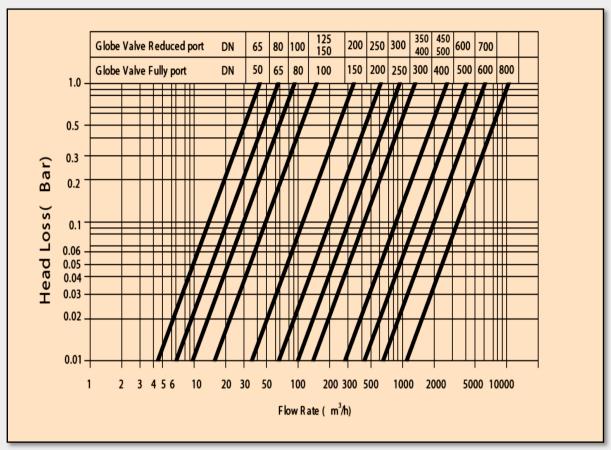
MATERIALS OF CONSTRUCTION, OPTIONALS & TECHNICAL DATA

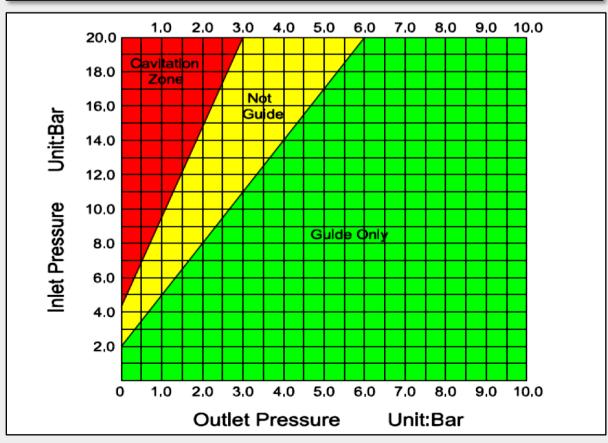
Sr. No.	Description		Grade, Details	
1	Body, Bonnet, Disc Holder, Diaphragm U _l	oper Plate	DI Grade GJS/SGI 500/7/GGG 50	
2	Double guided Shaft/Stem	AISI SS 304/optional in SS 316 for balanced stroke & control		
3	Body Seat and Retainer		AISI SS 304/optional in SS 316	
4	High Performance Diaphragm	Reinforced nylon fabric EPDM/NBR-food grade. WRAS approved.		
5	Resilient Seat and O rings		EPDM/NBR. WRAS approved	
6	Spring		AISI SS 304/optional in SS 316	
7	Bushing in Brass		CZ 122	
8	Hex Bolt, Washer, Nut		A2 AISI SS:304, corrosion resistant	
9	Tubings, Plugs and connecting fittings		Rigid AISI SS 304	
10	Extra tapping plugs for SCADA modificated adding other features/pressure gauge	tions and	AISI SS 304	
11	Strainer, Needle Valves for speed cor Valves for isolation	ntrol, Ball	AISI SS 304	
12	Various Pilots		AISI SS 304	
13	Fusion Bonded Epoxy Coating with a 250-Micron Coating.	Minimum	RAL Blue/Similar. WRAS approved.	
14	Pressure Rating and Flange Drilling Option	ons	PN 10, 16, 25	
15	with ball valve, Latching solenoid ar	nd battery sure Transr	n Indicator, Emergency Valve opening barrel r-operated timer, Pressure Gauges, Surge mitter, Pressure Switch, On-Off 9vDC battery	
16	Direct Membrane sealing Valve option a Rural Water Supply Projects.	lso availabl	e upto 150 mm for optimizing the cost of	
The valve ca	an be serviced in line as the valve is	Globe de	esign for superior linear characteristics.	
Straight Bo	dy.	Best suit	ed for controlling operations	
Tight shut o	off due to internal weight of the disc	Sizes ava	ilable 50 mm to 800 mm	
Temperatu	re rating – 10 Deg.C to 80 Deg.C		andard BS EN 1074-5, ISO 5208, BS EN BS EN 558-1, BS EN 1092-2	





HEAD LOSS & CAVITATION DATA CONTROL VALVES









Selected Installations



















CWPRS CERTIFICATION 450 MM DIA.







GOVERNMENT OF INDIA

Ministry of Jal Shakti Department of Water Resources, River Development & Ganga Rejuvenation

Central Water & Power Research Station Khadakwasla, Punc- 411024



HYDRAULIC MACHINERY AND CAVITATION DIVISION

TEST CERTIFICATE FOR DIAPHRAGM TYPE CONTROL VALVE
E No: CWPRS/HMC/19-20/G- 037 TEST DATE: 14.08.2019
erred by M/s Allied Electro Mechanicals Pvt. Ltd., Pune CERTIFICATE No: CWPRS/HMC/19-20/G- 037 Calibration referred by M/s Suzhou Alpine Flow Control Co. Ltd. PRC, through M/s Alpine Flowtech, Thane Calibrated for Project Wardha WSS (SCADA Automation of ESR), Wardha Municipal Council; PMC: Maharashtra Jeevan Pradhikaran

ALPINE Brand Double Solenoid Hydraulically Operated

Diaphragm Type Automatic Flow Control Valve (AFCV)

Instruments installed in Testing rig 3 Type of Valve 4 a)PLC Drive Concord AFCV RTU & Kokhan Automation ABB b) Flow transmitter (Make-Adept,Pune; Ultrasonic)
c) Pressure Sensor (Make - Electronet, Pune)

d) Level Transmitter (Make - Baumer)

Reference standard

Gravimetric method with an uncertainty ± 0.3% Line Size & Valve Size 450 mm NB Fluid media Clear cold water 0 - 900 m³/hr Flow Range calibrated

				OBSERVA	TION TAB	LE		
		REGUI	LAR TEST	READING	GS AT VAR	HOUS SET	POINTS	
Sr. No.	Pressure P ₁ (bar)	Reference flow rate Q.(m³/hr)	FCV Set Point	Outlet Pressure P ₂ (bar)	$\frac{\Delta P}{(P_1 - P_2)}$	Response time (in Secs)	$K_V = \frac{Q\sqrt{G}}{\sqrt{\Delta P}}$	C _V = K, x 1.156
1		898.900	100%		0.2470		1808.685	2090.84
2	g 8 g F	679.282	75%	Differential Pressure transducer installed	0.3810	220	1100.494	1272.171
3	Sifferentia Pressure transducer installed	430.339	50%	28.29	0.3780	206	699.9464	809.1381
4	Differentia Pressure transducer installed	235.552	25%	Nifferentia Pressure transducer installed	0.4840	200	338.5822	391.401
5		0	0%		0.5638	465	0	0
		RAND	OM TEST	READING	SATVAR	IOUS SET I	POINTS	
1		283.642	Random	-	. 0.4350	68	430.0569	497.1458
2		543.432	Random	-	0.3800	59	881.5631	1019.087
3		809.931	Random		0.1980	80	1820,185	2104.133

REMARKS

- PLC command, Input Signal from flow transmitter and flow control valve response were in proper synchronization mode. Valve operation is linear during the variation of flow at various set points with different valve openings. At 100% set point (Full Opened Position) 0.2470 bar pressure drop was observed in the circuit.

 2. A level indicator and Pressure Transmitter are also synchronized to observe the flow control response during the test and
- the operations were found to be satisfactory.

 Kr = Flow Coefficient (General use in Europe), Cr = Valve Coefficient (General use in USA), G = Specific Gravity of Water = 1

WITNESSED BY ri Zalke, EE, MJP, Nagpur ri Bandewar, Wardha Municipal Council
ri Prabal Dubey, Er., Alpine Flowtech ri Prasad Gadkari, Allied Electro Mechanicals, Pune ri Govind Hamdapurkar, Concord Technologies
h

Bird (K U Farande) Asst Research Officer



aller (Dr K Kumar) Scientist 'C'

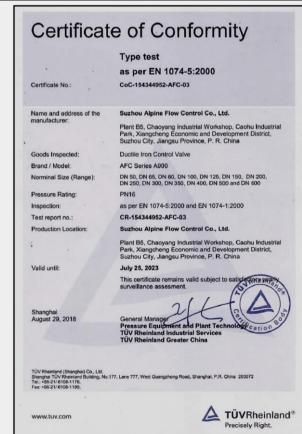




CERTIFICATIONS









Alpine Flowtech



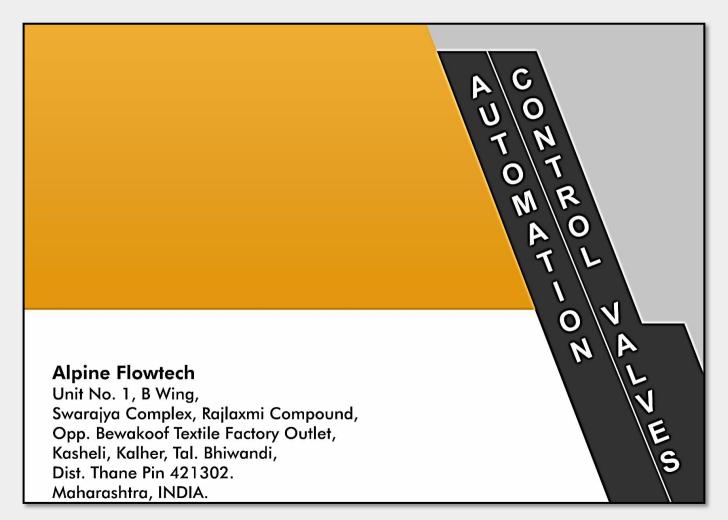


Pressure, Flow, Level & Leakage

Management

Save Water - Be Water Savy

China - Malaysia - Indonesia - Vietnam - Taiwan



<u>alpineflowtech@gmail.com</u> www.alpineflowtech.com