



MPB Industries Ltd

*Designers and Manufacturers of Scientific and
Process Control Instrumentation*

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**VARIABLE AREA
FLOWMETERS
DUAL TUBE VERSIONS
ALSO AVAILABLE**

**SINGLE & DUAL TUBE
VETERINARY
FLOWMETERS**

**METAL TUBE
FLOWMETERS**

**ISO 5358
ANAESTHESIA
FLOWMETERS**

**CALIBRATION
CYLINDERS**

**HYGIENIC
FLOWMETERS**

**LEVEL GAUGES
WITH CHECK
VALVES**

**HIGH PRESSURE
FLOWMETERS**

**WIDE RANGE OF
FLOW SWITCHES
AND ALARMS**



HUMIDIFIERS

MEDICAL GASES

**PANEL MOUNTING
KITS AVAILABLE**

**240V LATCHING
ALARMS**

4-20 mA OUTPUTS

**BESPOKE
DESIGNS TO
CUSTOMER
SPECIFICATION &
REQUIREMENTS**

ISO 9001:2015

**SPECIALIST
CALIBRATION
TRACEABLE TO
UKAS**

**EXCELLENT
RANGE OF
COMPETITIVELY
PRICED PLASTIC
FLOWMETERS**

SPECIALISTS IN FLOWMETERING & PROCESS CONTROL INSTRUMENTATION

MPB Industries Ltd produces variable area flowmeters, flow alarms, flow transmitters, flow indicators, flow switches and level switches. Other products manufactured by MPB include calibration cylinders, sight glasses and specialist medical gas flowmeters. All products are manufactured in the UK to ISO 9001:2015 and calibration is traceable to national standards (UKAS).

MPB also offers an excellent contract service for design, assembly, test and calibration of original, or OEM instrument manufacture. This service includes state of the art manufacturing facilities and construction, testing and finishing to customer specification.

Formed in 1986, MPB supplies process control instrumentation throughout the world and has found successful applications in power generation, gas and oil production, human and veterinary medical anaesthesia, aviation, pharmaceutical, water treatment, pollution control, scientific analysis, educational and many other areas.

Due to the constant development and improvement of products, information may be altered or withdrawn without notice.



For full technical bulletins, please contact our Sales Office
Tel: +44 (0)1622 872401



FLOWMETERS



Series 1200 Variable Area Flowmeter

Widely used standard flowmeter supplied in three lengths, ideal for many industrial, process control, calibration and analytical applications.

Alarmed versions are also available.



Series 630 and 1000 Variable Area Flowmeters

Highly versatile, broad specification, small flowmeter with, or without, integral flow control valve, stainless steel connections, etc. Widely specified general use flowmeter.

Alarm version available.

Flow rates available down to 20cc/min Air @ 1013 mbar abs 20°C.

Series 1700 Variable Area Flowmeter

A robust in-line mounted meter with a wide variety of flow ranges.

MPB provide specifications for corrosion resistant applications.



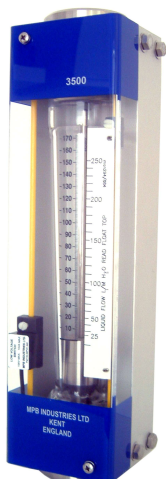
Series 1750 Variable Area Flowmeter with optional latching alarm

Robust and widely used flowmeter which handle flows up to 125 L/min H₂O and 1750 L/min Air @ 1013 mbar abs 20°C and can be fitted with an economical latching alarm device. They can be supplied with stainless steel or PVC connections.



Series 3000 Variable Area Flowmeter with optional latching alarm

This instrument offers a wide range of flows, both liquid and gas. For low flows these utilise 'free floats'. Standard flows as low as 250cc/min Air and up to 125 L/min H₂O available.



Series 3500 Variable Area Flowmeter

High accuracy, quality, flowmeter. Flow rates up to 250 L/min H₂O. Can be supplied with latching alarm facility. Connections PVC, or stainless steel.



Series 1300 Variable Area Flowmeter

This flowmeter has been designed as the ideal choice for applications where a simple device is required to indicate flow.

It will give an instantaneous flow rate of virtually any process gas or liquid and can be front of panel mounted, or inline.

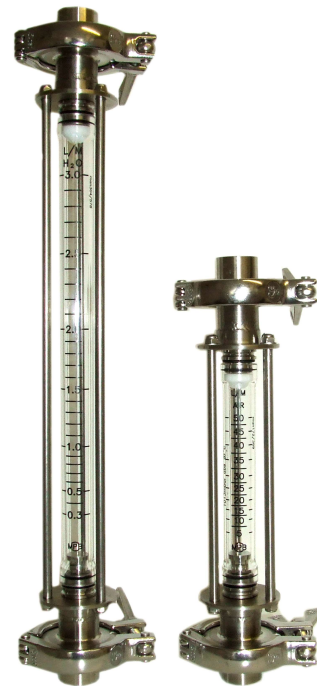
For full technical specification on any product, please contact MPB Sales Office on +44 (0)1622 872401



**Series 1241S
Dual Tube Cascade Flowmeter**
Where a wide turndown ratio is required, this instrument can cascade two flow tubes to give accurate readings with a 100:1 turndown.



**Series 1240S
Dual Tube Flowmeter**
A series of dual tube flowmeter assemblies covering a wide range of gases and liquids. Employed where space is of a premium, or a really neat "double tube" application is required.



**Series 1200HS
Hygienic Flowmeter**
The 1200HS Hygienic Flowmeter has a useful range of flow rates and is fitted with tri clamp process connections as standard.



Series F100 Flowmeter
The F100 Flowmeter is a panel mounted flowmeter displaying a high degree of standard accuracy. Supplied with 1/8" NPTF rear facing connections.



**Series 640S & 1040S
Dual Tube Flowmeters**
The 640S is the smallest version dual tube arrangement we offer, ideal where mounting space is of a premium.
The 1040S is the larger version which offers a better scale resolution and is also available with an alarm if required.



Series 7200 Clearview Flowmeter
Designed to offer an economical solution for liquid flow measurements up to 1000 L/min/60 M³/hr.
Available in five sizes with a useful range of standard flows and threaded, or socket weld connections
Generally available ex-stock.

For full technical specification on any product, please contact MPB Sales Office on +44 (0)1622 872401

FLOW ALARMS



Series FA10 Ultra Low Flow Alarm

Designed to give a visual indication of flow and also a switched output at pre-determined flows as low as 25cc/min H₂O (1.5 L/hr).



Series FA20 Flow Alarm

An in-line flow alarm offering high corrosion resistance and visible flow indication, ideal for applications where chlorinated solutions are employed.

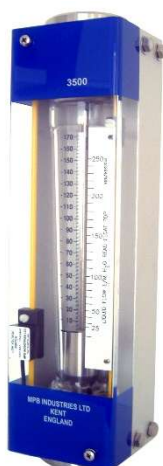
Series FA50 Flow Alarm

An in-line, or panel mounted, flow alarm with an adjustable latching alarm device exhibiting excellent corrosion resistance. Widely used in the water and analyser industries.



Series FA60 Flow Alarm

A robust panel mounted pre-set flow alarm.



Series FA350 Flow Alarm

Covers flow rates up to 250 L/min H₂O and has a fully adjustable latching alarm.



Series 630VA & 1000VA Flowmeters with Alarms

Can also be supplied without valve, as flow failure.



Series 1200A Flowmeter with Alarm

Can be supplied with Inductive Ring Sensor, or an arrangement with a flow failure, or with factory set points for hi and lo flow.

Series TX600 Metal Tube Flowmeter with Latching Alarms

This unit is fitted with a 4-20 mA transmitter and two fully adjustable high/low alarms.



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SIGHT GLASSES

Series SL102V, SL105SV and SL107V

Sight Level Indicators

Offer the facility for manufacture to suit customer specification, both in dimensions and materials of construction.

The SL102V has an aluminium chassis and offers process centres up to 2.5 metres.

The SL105SV is manufactured from stainless steel with borosilicate, or polycarbonate sight tube up to maximum length of 1 metre. Ball check valves and tube isolation valves supplied as standard.

The SL107V has a stainless steel chassis and offers process centres up to 2.5 metres.

These can be supplied with screwed, or flanged connections.

Suitable for irregular shaped tanks.



**Series
SL105SV**

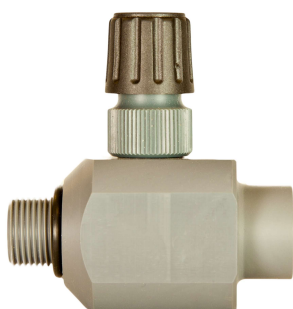


**Series
SL107SV**

**Series
SL102SV**

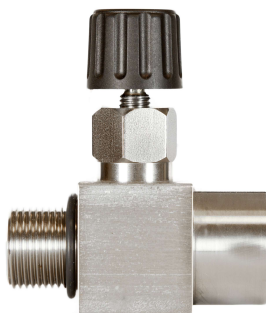
FLOW CONTROL VALVES

A range of flow control valves initially designed to suit MPB flowmeters but have found a wide use in general industrial applications.



**Series CV100
Flow Control Valve**

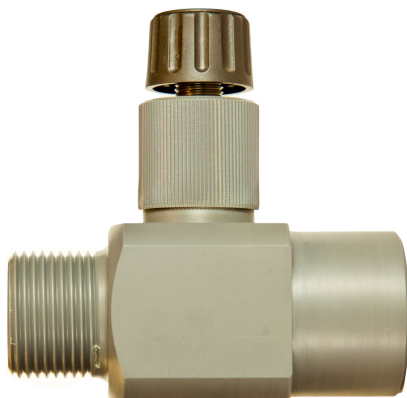
Ideal for use with all MPB flowmeters having $\frac{3}{8}$ " BSPPM and $\frac{1}{4}$ " BSPPF connections, manufactured in PVC, or stainless steel.



**Series CV200
Flow Control Valve**

Ideal for use with all MPB flowmeters having $\frac{1}{2}$ " BSPP male and female connections, manufactured in PVC, or stainless steel.

A T-bar option is available with the stainless steel version.



**Series CV300
Flow Control Valve**

Ideal for use with all MPB flowmeters having 1" BSPP male and female connections, manufactured in PVC, or stainless steel.

A T-bar option is available with the stainless steel version.



**Series 1750
Flowmeter fitted with CV200
Flow Control Valve**

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MEDICAL GASES



VETERINARY GAS FLOWMETERS

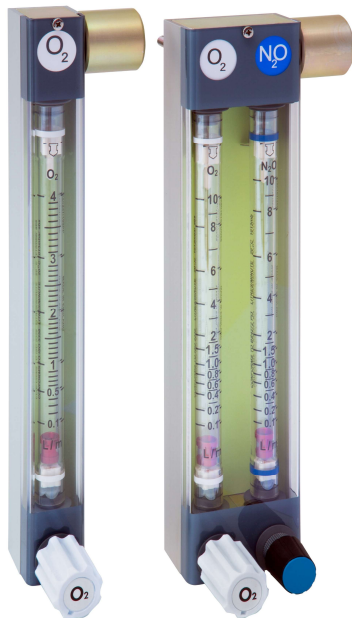
Series 1200BV-ANS/230

This flowmeter is designed to house a standard 230mm long anaesthetic tube and can be supplied with any standard range anaesthesia flowmeter.



MPB produces an extensive range of human anaesthetic flowmeters suitable for most anaesthesia systems. These can be supplied from stock to ISO 5358 / BS 4272 specifications. All tubes manufactured by MPB have matching tube and float serial numbers and are electrically conductive to the above specification.

MPB also provide bespoke anaesthesia flow tubes covering length of tube, colour banding, font styles, customer part numbers, etc. MPB will be pleased to supply company logos to all products depending upon quantity.



Series 1600

Single and Dual Tube Veterinary Gas Flowmeters

A range of veterinary anaesthetic flowmeters with independent flow control valves, photoluminescent backing and earthing tags suitable for trolley or wall mounting.

All flow tubes conform to ISO 5358/BS 4272.

Wide range of flow tubes available.

1/4" BSPP process connections, or ISO 23mm taper.



Series 1650

Veterinary Gas Flowmeter

The MPB Series 1650 Veterinary Gas Flowmeter consists of a polycarbonate safety cover, integral flow control valve and is suitable for trolley, or wall mounting.

For full technical specification on any product, please contact MPB Sales Office on +44 (0)1622 872401

HUMIDIFIERS



Series 225 Humidifier, Male Thread

These are designed for use where a portable humidifier is required on the outlet of an oxygen therapy flowmeter.



Series 225 Humidifier, Female Thread

These are designed for use where a portable humidifier is required on the outlet of an oxygen therapy flowmeter.

METAL TUBE FLOWMETERS & FLOW TRANSMITTERS



Series TX600 Transmitting Flowmeter

Flow transmitter 4-20mA output suitable for high pressure and corrosive applications. 1", 2" and 3" versions available in 316 stainless steel and with screwed or flanged connections.



Series F6000 Metal Tube Flowmeters

A useful range of metal tube meters which can be supplied with flanged, or screwed connections. 1", 2" and 3" versions available.



Series TX50 Transmitting Flowmeter

A small in-line or panel mounted flow transmitter developed from our highly successful FA50 Flow Alarm giving a 4-20 mA output signal.



Series TX200 and F200 Metal Tube VA Flowmeter

This has been designed to measure flow volumes of aggressive chemicals at higher-than-average pressures. Can be supplied with a 4-20 mA Transmitter and adjustable High and Low alarm contacts.



Series TX175/TX300 Transmitting Flowmeter

The TX175 is a 4-20 mA signal transmitting flowmeter handling flows up to 125 L/min H₂O. The TX300 is a similar instrument, with an overall length of 400mm giving a larger scale resolution.

For full technical specification on any product, please contact MPB Sales Office on +44 (0)1622 872401

CALIBRATION CYLINDERS

Series CP100, CP110, CP1200 and CP130 Calibration Cylinders

MPB produces a range of precision calibration cylinders that have been designed to meet the requirements for high accuracy, competitive cost and robust construction. Traceable calibration certificates can be supplied, along with full material certification. Construction materials include carbon steel, stainless steel, duplex, super duplex, titanium, polypropylene and rigid PVC. These can also be constructed to customers' own requirements and can be supplied with screwed or flanged connections.

These calibration cylinders can be supplied with safety covers manufactured from stainless steel and polycarbonate.

These instruments cover ranges from 2cc up to 50 litres.



CP100



CP110



CP1200



The above photo is courtesy of Geveke WTB.
This was for an FPSO project.

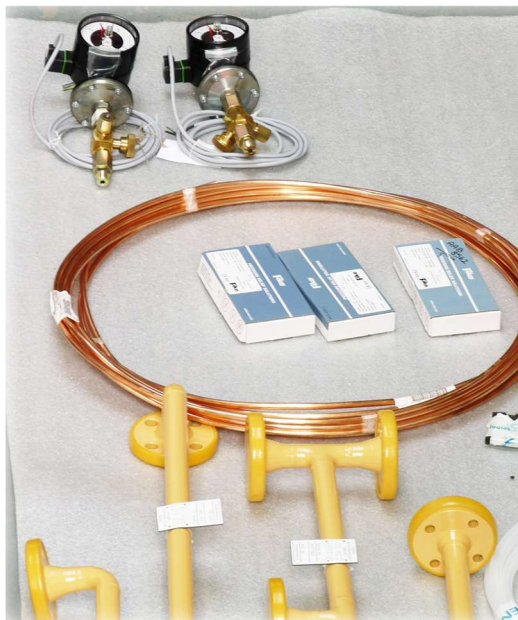


CP130

For full technical specification on any product, please contact MPB Sales Office on +44 (0)1622 872401

SERVICE TO THE PROCESS CONTROL INDUSTRY

MPB Industries Ltd offers a contract service to the process control industry, including bespoke design facility, construction, calibration and testing of customers products. This includes a design service for pipework construction where a wide selection of materials may be included. MPB has coded welding facilities and can offer parts completely finished to customers' final specification.



FIND OUT MORE ABOUT OUR PARENT COMPANY



SDI designs and manufactures scientific products for use in applications including life sciences, healthcare, astronomy, consumer manufacturing and art conservation markets.

www.thesdigroup.net

AND SOME OF OUR SISTER COMPANIES



Bespoke chemical control systems

www.astles.co.uk



The UK's largest independent manufacturer of electrochemical sensors

www.sentek.co.uk



Experts in pressure, vacuum and gas flow solutions

www.chell.co.uk



Synoptics designs and manufactures scientific instruments based on digital imaging, for the life science research, microbiology and healthcare markets

www.synoptics.co.uk



Gallenkamp's principal activity is the manufacture of Life Sciences Equipment products

www.gallenkamp-labs.com

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INFORMATION SHEET

Have you checked the following before you placed your order?

WHICH TYPE OF FLOW INSTRUMENT DO YOU REQUIRE?				WHAT PROCESS MEDIUM IS BEING METERED? (eg, Air, Nitrogen, Water, etc, etc)							
FLOWMETER	(✓)		QUANTITY								
FLOW ALARM	(✓)		QUANTITY		WHAT IS MAXIMUM FLOW RATE? (Please state in the following units)						
FLOW SWITCH	(✓)		QUANTITY		CC/MIN	L/MIN	L/HR	M ³ /HR	OTHER		
FLOW TRANSMITTER	(✓)		QUANTITY								
FOR GAS APPLICATIONS, PLEASE STATE OPERATING DENSITY, STATE IN kg/m³, OR S.G.						kg/m³		S.G.			
OPERATING PRESSURE - ACTUAL PRESSURE WITHIN FLOWMETER AT FLOWING CONDITIONS					mbar abs		bar g		bar abs		
PLEASE STATE IN mbar abs (ie atmospheric pressure 1013 mbar abs @ 20°C), or bar g or bar abs											
FOR LIQUID APPLICATIONS, PLEASE STATE DENSITY AS SPECIFIC GRAVITY:				S.G.	PLEASE STATE VISCOSITY IN cPs:				cPs:		
FOR GAS AND LIQUID APPLICATIONS PLEASE STATE OPERATING TEMPERATURE:								°C	°F		
ACCURACY REQUIRED:											
PREDICTED CALIBRATION:		(✓)	STD ± 5% FSD			STANDARD MPB TOLERANCE					
SERIES CALIBRATION:		(✓)	STD ± 2% FSD			CALIBRATION TO ORDER					
FLOWMETER CONSTRUCTION											
IS VALVE REQUIRED?		(✓)	YES		NO		MPB WILL SELECT VALVE FROM FLOW RATE DATA				
PROCESS CONNECTIONS REQUIRED						STRAIGHT THROUGH		(✓)		REAR FACING	(✓)
THREAD SIZE (see Technical Bulletin):-											
END CONNECTION MATERIAL:	(✓)	STAINLESS STEEL		RIGID PVC		Ni PLATED BRASS		NYLON 6 (FA60 only)		ANODISED ALUMINIUM	
SEALS:	(✓)	VITON > 100°C			NITRILE > 60°C						
IS AN ALARM SENSOR REQUIRED?			(✓)	YES		NO					
ADJUSTABLE LATCHING:		(✓)		FLOW FAILURE :			(✓)				
SWITCH RATING:		(✓)	100V MAX 1 AMP MAX, 10VA MAX RESISTIVE LOAD				240V, 5 AMP MAX			INTRINSICALLY SAFE	

If you are unsure of any of these items, or require assistance, please contact
MPB Sales Office on +44 (0)1622 872401

USEFUL CONVERSIONS

FLOW CONVERSIONS		
FROM	TO	MULTIPLY BY
LPM	M ³ /hr	0.06
SCFM	M ³ /hr	1.7
IGPM	L/hr	273
USGPM	L/hr	227
IGPH	L/min	0.076
USGPH	L/min	0.06
SCFH	L/min	0.472
LPH	cc/min	16.67
PPD	kg/hr	0.0189

PRESSURE		
FROM	TO	MULTIPLY BY
psi	millibar	68.95
psi	Atm	0.068
Psi	Inches H ₂ O	27.68
kPa	millibar	10
Inches H ₂ O	millibar	2.49

VOLUME AND MASS		
FROM	TO	MULTIPLY BY
US galls	Litres	3.79
Imp galls	Litres	4.55
SCF	Litres	28.32
Pound	kg	0.454
Imp Pint	Litres	0.568

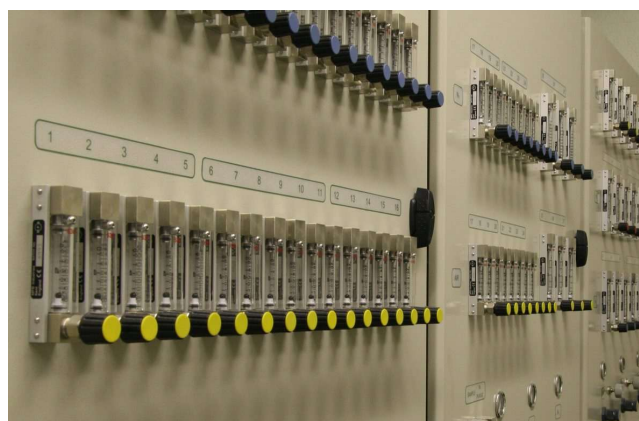
STANDARD GAS CONVERSIONS		
GAS	RELATIVE DENSITY	CONVERSION FACTOR*
Acetylene	0.90	0.95
Argon	1.38	1.18
Butane	2.00	1.42
Carbon Dioxide	1.52	1.23
Helium	0.14	0.37
Hydrogen	0.07	0.26
Methane	0.55	0.74
Nitrogen	0.97	0.98
Oxygen	1.105	1.05
Propane	1.52	1.23

Conversion factors given @ Standard Temperature and Pressure (STP) = 20°C/1013 mbar abs

***To convert air flows for a given flowrate to a gas listed below divide by the conversion factor, i.e. for a flow of air at STP listed as 0.2 to 2 L/min the equivalent Argon flow would be:-**

$$\frac{0.2}{1.18} \text{ to } \frac{2}{1.18} = 0.17 - 1.7 \text{ L/min Argon}$$

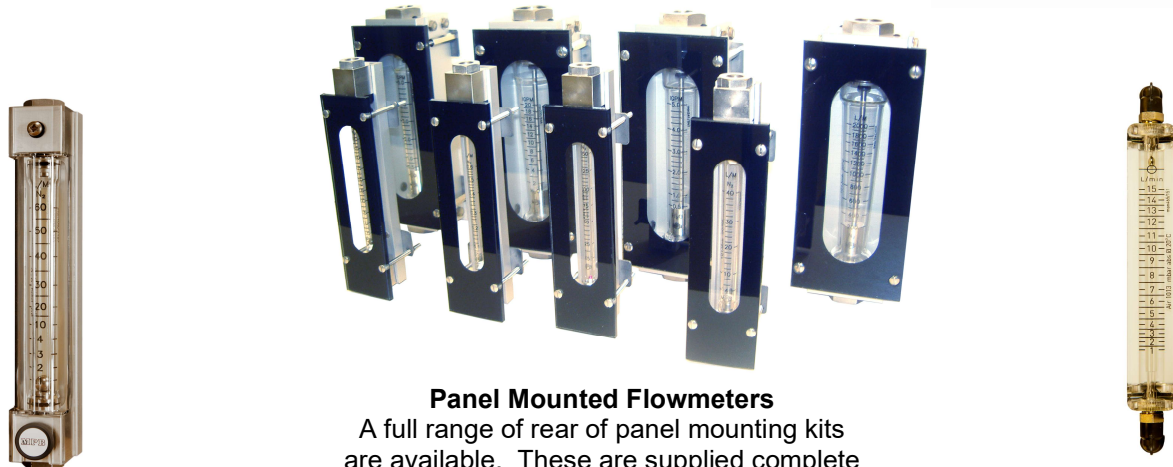
Please contact our Sales Office for gases not given above, for gases at temperature or pressure variation to STP, or alternative liquid flows.



For full technical specification on any product, please contact MPB Sales Office on +44 (0)1622 872401

Over 60% of MPB's business is derived from instrumentation specifically designed to customers' own specifications. This includes special flowmeters, alarms and switches, which MPB manufacture competitively in volume quantities.

DO YOU HAVE A REQUIREMENT?



Panel Mounted Flowmeters

A full range of rear of panel mounting kits are available. These are supplied complete with bezel and all mounting accessories.



Chlorine Gas Flowmeter Tubes Suitable for Water Treatment

A large number of flow rates and tube sizes are available.

Can be manufactured to suit customer specification.



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