





Aluminium Manifolds

High quality and manufactured to exacting standards. One piece extrusion and anodized for corrosion protection.

- · Predrilled for easy mounting
- · Anodized for corrosion protection
- · Interlocking bodies (3/4" to 1-1/2")
- · Bespoke to your porting requirements
- · 3/4" to 2" BSPP Supply 1/4 to 1" BSPP Ports
- \cdot Available with connectors, ball valves and flow meters



Smartflow Duoflow™ Manifolds

Duoflow Manifolds are robust extruded aluminium manifolds similar to the original Smartflow one-piece design. The manifolds are divided internally and anodized for long term protection. The Duoflow design is available with standard port spacing or a shorter footprint specifically for mounting directly to an injection mould tool.

- · Shorter length for easier mounting directly to injection moulds
- · Mould-Mount to speed up mould changes
- · Economical, Proven Design for reliability
- · Optional Quick Disconnect Fittings for convenience and ease of installation



The SWAP™ Valve

Empty your mould tool of water in seconds!

- · Full port design
- · No water to dispose
- · Body 360 solid brass
- · Environmentally Friendly
- · Valves discs 303 stainless steel
- · Significantly reduce tool change times
- · Protect tools from corrosion during storage



Stainless Steel Manifolds

304SS cunstruction giving you corrosion and chemical protection.

- · Leak tested
- · Single or parallel
- · Chemical protection
- · Predrilled for easy mounting
- · Bespoke to your porting requirements
- · 3/4" to 1-1/2" BSPP Supply 1/4 to 1/2" BSPP Ports
- · Available with connectors, ball valves and flow meters



Delta-Q Modular Flow Regulator

Delta-Q Modular Flow Regulator is used in conjunction with other Smartflow® components such as threaded end caps, flowmeters, temperature and pressure gauges, Tracer Electronic Flowmeters or Dr. Eddy Turbulent Flow Indicators. The Delta-Q Regulator allows full adjustability of flow volume from unrestricted flow to complete shut off using the manual flow control knob.

- · Compact size works well in restricted-space locations
- · Rugged construction gives years of dependable service
- · 210°F (99°C) Temperature Rating allows installation into a wide range of applications
- · Common Flowmeter Configurations Stocked to provide same-day delivery in many cases
- · No Mounting Restrictions ease installation in any position without extra brackets or hardware
- · Leak-Free installation is based on proven flowmeter design



Mechanical Flow Regulators

Compact solid brass or aluminium construction with Polysulfone windows.

- · Temperature rating 115°C
- · Anodized corrosion resistance
- · Pressure rated to 100 psi (6.89 bar)
- · Optional thermometer and pressure gauge
- · Liquid-filled pressure gauge also available





Flow Regulators

Inline or manifold mounted.

- · Leak free design
- · Solid Brass Body
- · Needle valve vontrol
- · Optional Temperature gauge
- · Temperature rating to 115°C
- · Pressure rated to 150psi (10.34 bar)





Hot Water/Oil Flowmeters

Stainless steel construction to 288°C.

- · Throughput 6 gpm (us)
- · Temperature rating to 288°C
- · All stainless steel construction
- · Pressure rate to 150 psi (10.34 bar)





Tracer™ Electronic Flowmeters

 $\label{eq:decomposition} \mbox{Digital process control, local and remote signal outputs.}$

- · All model 3/8" to 2" BSP(P) supply
- · 2-418 litres per minute
- · Display of Temperature, Flow and BTU's
- · Temperature and flow alarms
- · Local display, remote alarm*, and vaiable output*
- · Temperature rating to 110°C
- · 100 psi (6.89 bar) or 150 psi (10.34 bar) 3/8"only

*see table

Model	DD	DDS
8-28VDC	×	~
Battery Powered	~	×
Brass nickel plated body (3/8" Model only)	~	~
Aluminium anodized body	~	~
Temp. Flow and BTU monitor	~	~
Temp. or Flow SDPT switch output	×	~
Temp. or Flow analogue output to pc process	×	~



FasTie™ Ejector fast connectors

Automatically lock your ejector to tooling with fast pneumatic release.

- · Flexible modular system
- · Hardened steel components
- · Super Fast mould changes
- · No mould or ejector modifications
- · Ejector force 2.5 tonnes (1") 7.5 tonnes (2")
- · Space saving connectors only 1" or 2" diameter





Dr. Eddy Diagnoses Flow Conditions

Featuring Fluid Characteristic Indication (FDI) Technology. Not just a flowmeter, but a tool to help conserve cooling water resources. In moulding applications, many mould operators try to maximize the flow of water through their cooling systems to ensure turbulent flow. Doing so increases energy costs for pumping more water than necessary through the system. This practice may also limit the amount of cooling water available for additional presses on the same cooling circuit. Using FCI Technology, Dr. Eddy displays the condition of the water as it relates to flow efficiency: laminar flow, transient flow, or turbulent flow.

- · Scales in English or Metric Units · Optional Quick-Disconnect Fittings
- · Polysulfone Sight Glass
- · Max. Operating Temperature: 210°F/99°C
- Polysulfone Sight Glass
 Max. Operating Temperature: 210°F/99°C
 Max. Pressure: 100 psi/6.9 bar
 Standard Dual-Scale Temperature Gauge
- · Brass or Reinforced Nylon Ends with 1/4" or 3/8" NPT or British Parallel Threads



Mould Temperature Regulators

Accurate Mould heating control with no power or floor space required.

- · No Power required
- · Pressure rated to 125 psi (8.6 bar)

- Very low running costs
 Inlet 1/4" Outlet 1/2"
 Unaffected by water pressure changes
 Unaffected by supply temperature changes
- · Temperature control 27°C to 49°C · Nickel plated brass and 303 stainless steel construction



Mould Safety Switches

A complete suite of ejector plate and core protection switch, potentially saving you thousands in broken tooling.

Thinswitch®

· 3/16" Thick

- · Optional Liquid Resistant model available
- · Over 10 million cycle life
- · Optional High Temp. model max. 121.1°C @ 3.5 A load
- · Temperature max. 79.4°C @ 2 A load

The Global Thinswitch®

- · Liquid resistant
- · Over 14 million cycle life
- · Only 3 or 4mm Thick
- · Temperature max. 79.4°C @ 70 mA load
- · 2 minute fitting (No milling necessary)

Smartlock® Core slide retainer & limit switch

- \cdot Over 10 million cycle life $$\cdot$$ Temperature max. 79.4°C @ 2 A load \cdot 17-27 pounds holding force $$\cdot$$ Superior flush mounted switch

- · Optional High Temperature model max. 121.1°C @ 3.5 A load

Hales Asia PTE LTD 2 Ang Mo Kio Street 64 #04-03B Econ Industrial Building Singapore 569084 Email info@hales-asia.com.sg

Phone: +65 6754 7077 Fax: +65 6754 7177