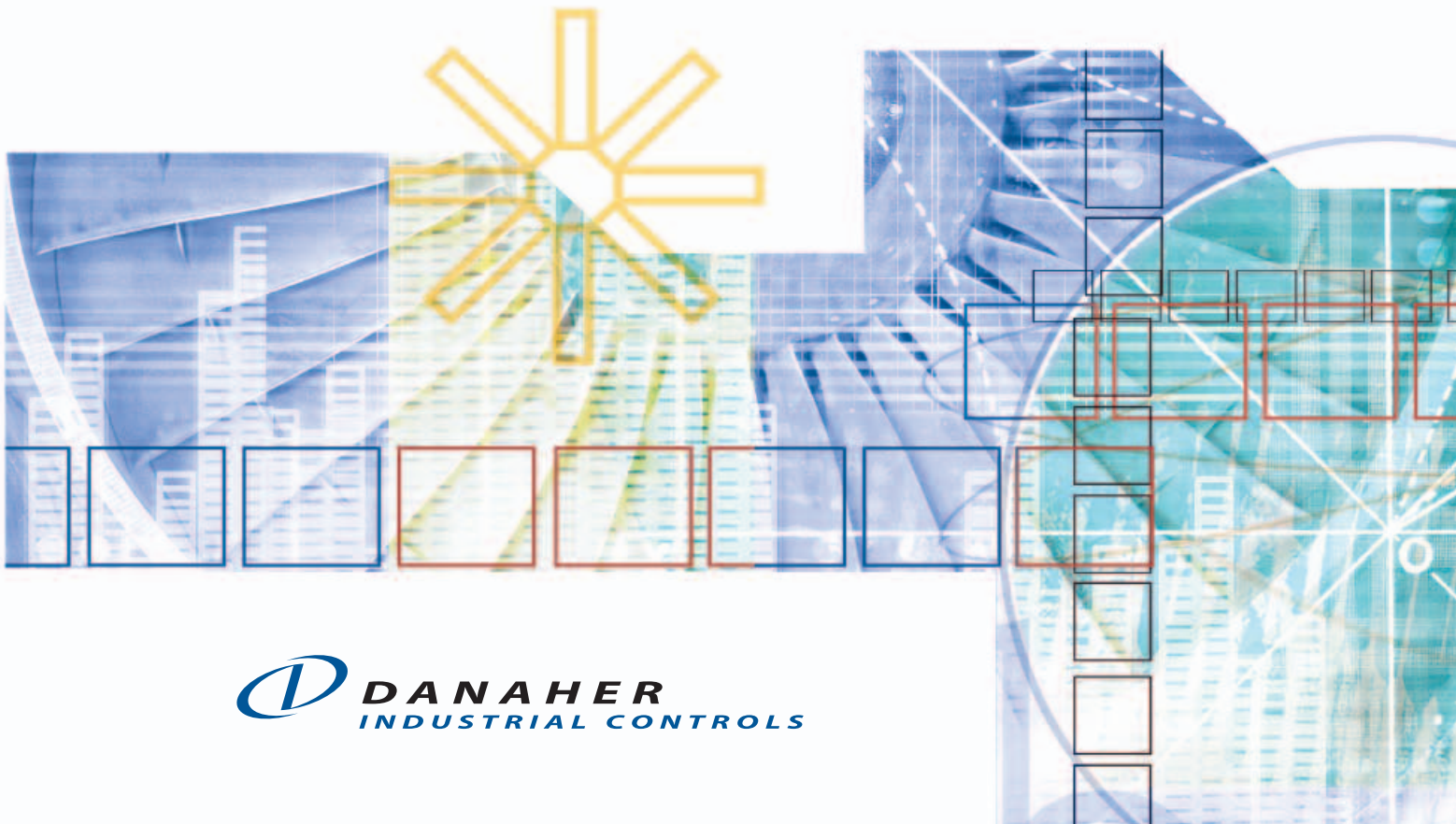


Counters, Timers, and Indicators



Controls you can
count on, time
after time.

***DYNAPAR™ brand
EAGLE SIGNAL™ brand
VEEDER-ROOT™ brand***



● Standard ○ Optional

NEW

MODEL NUMBER	Series 7999	Series A103	Series C342	Series C346	Squire	Series C628	Series B866	Series B856	Series B506	Series EHM	MAX Jr. Series	MAX Series	
TYPE	Electronic Totalizing - Basic	Electronic Predetermining - Basic	Electronic Predetermining - Basic	Electronic Predetermining - Gen Purpose Midrange	Electronic Predetermining - Gen Purpose Midrange	Electronic Predetermining - High End	Basic	Electronic Predetermining - Gen Purpose Midrange	Electronic Predetermining - High End	Electronic Hourmeter - Basic	Electronic Predetermining - High End	Electronic Predetermining - High End	
	Digital, FTP	Digital, FTP	Digital, FTP	Digital, FTP	Digital, FTP	Digital, FTP	Digital, FTP	Digital, FTP	Digital, FTP	Digital, FTP	Digital, FTP	Digital, FTP	
24mm x 48mm (1/32 DIN)	●		●										
48mm x 48mm (1/16 DIN)				●	●		●	●	●	24x26mm (square) / 53mm dia. (round)	42x90mm	136x66mm	
48mm x 96mm (1/8 DIN)						●							
36mm x 72mm		●											
FUNCTION (Based on user-selectable order configuration)													
Counter	○	○	○	●	○	○					○	○	
Timer			○	○	○	○	●	●	●				
Totalizer	○	○	○	●	○	○					○	○	
Preset/Predetermining		○	○	●	○	○	●	●	●		○	○	
Rate Indicator				●		○				●	○	○	
Elapsed Time Indicator	○		○	●									
Repeat Cycle				●			●	●	●				
DISPLAY													
Dial							●						
LED			○	○		●					●	●	
LCD	●	●	○	○	●			●	●	●			
Backlit Option		○											
# of Digits	6 Digits	Up to 8 Digits	Up to 8 Digits LCD, 6 in LED	6 Digits	6 Digits	5 Digits	N/A	Dual Line, 4 Digits	Dual Line, 4 Digits		5 Digits	Up to 6 Digits	
MAX COUNT SPEED													
2.5 kHz	○				●								
5 kHz			Std (with Quadrature option)	●									
7.5 kHz			●										
10 kHz	●	●				●					●		
40 kHz												●	
TIME RANGES													
Seconds, Minutes, Hours	○	○	○	○		○	○	○	○	Hours Only (std)			
Min & Sec		○	○	○		○	○	○	○				
Hrs & Min	○					○	○	○	○				
INPUTS													
Start/Stop								●					
Sinking (NPN) Sourcing (PNP)	●	●	●	●	●	●				Voltage Input	●	●	
Magnetic		●									●	●	
Contact Closure	●	●	●	●	●	●					●	●	
Inhibit									○			●	
Remote Reset	●	●	●	●	●	●	●	●	●		●	●	
OUTPUTS													
Max # of Presets		1		1 or 2	1 or 2	1 or 2	1	1	1 or 2		Up to 3	Up to 16	
NPN Transistor				●		●					●	●	
SSR		●										○	
DC Linear						○							
OUTPUT FUNCTION													
Alarm				●		●							
NPN Transistor				●		●					●	●	
Relay				●		●						○	
DPDT							●	●	●				
SPDT		●		●		●		●	●			○	
RS-485 Communications						○							
AGENCY APPROVALS													
UR & cUR	●			●		●	●	●	●				
CSA	●			●		●	●	●	●				
CE	●	●	●	●		●	●	●	●				
IP65							●	●	●				
Nema 4	●	4X (std)	●	●		4X (std)	●	●	●	4X (std)	●	●	
POWER SUPPLY													
Battery	Fixed	Replaceable	Fixed										
12-24 VDC				●					●		●		
20-50 VAC/DC						●	●	●		9-85 VDC			
90-264 VAC						●	●	●	●			●	
115 or 230 VAC		●		●									
Sensor Power Supply		9-15 VDC (opt)		12-24 VDC	12 VDC	9-15 VDC					12 VDC	12 VDC	
TIMING/COUNTING MODES													
Bi-directional						●					●	●	
Uni-directional (totalizing)	●	●	●								●	●	
Add/Subtract	●	○		●	●						●	●	
Quadrature	●	○	●	●	●						●	●	
Batch Counting				●	●	●					●	●	
Calibrator	○	○	○	●	○	●					●	●	
Selectable Reset						●					●	●	
ON-Delay		●					●	●	●				
OFF-Delay							●	●	●				
Interval		●					●	●	●				

See the full line catalog for the complete selection of solutions, including electronic, mechanical and electro-mechanical models.

Danaher Industrial Controls Group has combined the best of several well-respected brands in control – Veeder-Root™, Eagle Signal™ and Dynapar™. No company offers a broader selection of industrial counters, timers, indicators and panel meters.

Functionalities/Modes: Totalizing, Add/Subtract, Bidirectional

Guide: Totalizers are counters that sum the “total” number of cycles applied to their input. The totalizing function does not provide control outputs or pre-set limits, although individual products may also have these features.

Our economical Veeder-Root, Eagle Signal and Dynapar brand electronic totalizers are rugged, compact, and provide high accuracy and fast reset times. Models with LCD displays are suited for brightly lit environments; models with LED displays are suited for low-light environments.



Series A103 Totalizer

Value totalizer with basic count modes. Battery keeps unit counting even if line power is lost, and enables unit to be used in remote locations. With DC power, unit

provides backlit display, for superior LCD visibility. Part of a matching family of products, it fits a 33x68mm panel cutout.

Speed: Up to 10 kHz

Display: 8-digit 12mm LCD

Power: Internal battery, backlighting with external DC power



Series C342 Miniature Totalizer

Basic totalizer with minimal count modes in a compact 1/32 DIN (24x48mm) package. Choice of LCD or LED display for low- or bright-light conditions. Battery option

keeps unit counting even if line power is lost, and enables unit to be used in remote locations. It is part of a family of products that can be built into a system with matching components.

Speed: 7.5 kHz

Display: 8-digit 7mm LCD or 6-digit 7.6mm LED

Power: Internal battery option (LCD), external DC power (LED)

Application/Industries:

Piece Counting

Spooling

Linear and Position Measurement

Food Processing

Filling

Batching

Lumber, Paper, Textile Mills

Medical Equipment



Series C628 AWESOME Display Totalizer

Full-featured totalizer is programmable for multiple count modes, displays in engineering units, and offers high speed. A large, blazing

bright display alerts operators of alarm status by changing color from green to red. AWESOME LED dual-line display is 20 percent larger than other 1/8 DIN (48x96mm) units. Part of a family of matching products.

Speed: Up to 10 kHz

Display: 5-digit 18mm LED, secondary 1-digit 7mm LED

Power: External AC, DC



MAX®jr Count 1 Totalizer and Position Indicator

This 1/8 DIN counter has the flexibility needed for demanding applications. Scale functions enable display in engineering

units. Bi-directional operation and reference preset function make it useful as a low-cost position indicator. Includes many advanced convenience features, making it a “best value.” Fits 42x90mm panel cutout.

Speed: Up to 10 kHz

Display: 8-digit 7.6mm LED

Power: External AC, DC

Counters and Indicators

Functionalities/Modes: Totalizing, Preset/Predetermining, Batch Count, Programmable Setpoint Controls and Alarms

Guide: Preset counters are totalizers that can control an external circuit when its counted total matches a user-entered preset limit.

Our rugged and compact Veeder-Root and Dynapar brand electronic counters are the first choice for economy, accuracy and fast resetability.



Series C346 Full-Featured Preset Counter

Full-featured preset counter with multiple count modes in a tiny 1/16 DIN (48×48mm) package. Available with LED or LCD single-line display. Scale functions enable display of engineering units. Also programmable for rate. Button-per-digit setting and direct access keys keep operation simple. It is part of a family of products that can be built into a system with matching components.

Size/Mounting: Up to 5 kHz

Accuracy: 6-digit LCD or 9mm LED

Presets: 1 or 2, SPDT relay and PNP open collector outputs



Series C628 AWESOME Display Preset Counter

Full-featured preset counter available with batching or as position

indicator. For batch counting, counter can independently display background total. AWESOME LED dual-line display is 20 percent larger than other 1/8 DIN (48×96mm) units. Display communicates alarm status by changing color from green to red. It is part of a family of products that can be built into a system with matching components.

Speed: Up to 10 kHz

Display: 5-digit 18mm LED, secondary 1-digit 7mm LED

Presets: 2 relay and transistor outputs

Application/Industries:

- Filling
- Batching
- Spooling
- Flow
- Item Counting
- Length Measurement
- Positioning and Locating
- Food Processing
- Paper and Textile Mills
- Heat Treating
- Medical Equipment



Squire Compact Full-Featured Preset Counter

Dual-line backlit LCD display shows count and preset simultaneously.

Programmable scale functions enable display of engineering units. It offers multiple count modes and fits a 45×45mm panel cutout.

Speed: Up to 2.5 kHz

Display: 6-digit 7mm LCD, secondary 6-digit 4mm LCD

Presets: 2 relay and transistor outputs



MAXjr Count 2 and 3 Programmable Counters

These high value counters offer programmable add/subtract and bi-directional control. In addition to totalizing, MAXjr Count 2 offers two control presets and three preset modes. MAXjr Count 3 adds a presettable batch counter. Each fit a 1/8 DIN (42×90mm) panel cutout.

Speed: Up to 10 kHz

Display: 5-digit 14.2mm LED, 8 status annunciators

Presets: 2 transistor outputs

Power: External AC, DC

Functionalities/Modes: Speed/Rate, Draw, Multifunction

Counters and Indicators

Guide: Accurate and versatile, our industrial-duty rate indicators provide a digital display of a process, by displaying the input of a sensor representing rate or speed. Many rate indicators also function as counters. Multifunction devices can be programmed for either rate, draw (difference, ratio, % difference), or flow input.

All our Dynapar and Veeder-Root brand products are trusted for performance and value.

Application/Industries:

- Motor RPM
- Process Time
- Production Time/Rate
- Food Processing
- Ovens
- Heat Treating
- Automotive



MAX®jr Tach 1 and Tach 2 Rate Meters

Economical rate controllers offer flexibility and small package size. They display rate or speed in engineering units and have high/low alarm

setpoints. Tach 1 measures rate only; Tach 2 also can display ratio or time interval of two inputs.

Display: 5-digit 14mm LED

Outputs: Transistor

Power: AC, DC



Series C342 Miniature Tachometer

Basic tachometer fits a tiny 1/32 DIN (24x48mm) package and is available

with LED or LCD single-line display. No outputs or input scaling available. It is part of a family of matching products.

Display: 6-digit LCD or 9mm LED

Outputs: Not available

Power: Internal battery option (LCD), external DC power (LED)



Series A103 Rate Meter

Versatile rate indicator features input scaling plus programmable decimal point. Models are available that combine totalizing function. With DC power, unit provides backlit display, for

superior LCD visibility. Part of a matching family of products, it fits a 33x68mm panel cutout.

Display: 4-digit 12mm LCD

Outputs: Not available

Power: Internal battery, backlighting with external DC power



Series C346 Tachometer

Full-featured tachometer fits a tiny 1/16 DIN (48x48mm) package and is programmable with high

and low alarms. Scale functions enable display of engineering units. Also programmable for elapsed time, it is available with LED or LCD single-line display. It is part of a family of matching products.

Display: 6-digit LCD or 9mm LED

Outputs: 1 relay and 1 transistor per preset



Series C628 AWESOME Display Rate Meter

Full-featured preset counter available with batching or as position indicator and with high and low alarms. Count totalizing feature switches display

between rate and total, with an optional linear output relative to rate. AWESOME LED dual-line display is 20 percent larger than other 1/8 DIN (48x96mm) units. Display communicates alarm status by changing color from green to red.

Display: 5-digit 18mm LED, secondary 1-digit 7mm LED

Outputs: Transistor and relay



MAX® Tach 1 Rate Meter

Two-channel rate/draw controller features a programmable draw function for complex

monitoring of processes. Six outputs include high/low alarms based on rate, ratio and draw. Includes serial port for RS-485/422 communication.

Display: 5-digit 20mm LED

Outputs: 6 transistor

Power: AC, DC

Timers

Functionalities/Modes: Elapsed Time

Guide: Time indicators record and display an elapsed time, but perform no output function.

Our precise Eagle Signal and Veeder-Root electronic timers provide high visibility of timed events.



Series A103 Time Indicators

Basic indicator fits a 33x68mm panel cutout. With DC power, unit provides backlit display, for

superior LCD visibility. Battery keeps unit counting even if line power is lost, and enables unit to be used in remote locations. It is part of a family of products that can be built into a system with matching components to expand with your changing needs.

Display: 7-digit 12mm LCD

Ranges: 4 ranges: hr, min, sec, hr/min/sec

Power: Internal battery, backlighting with external DC power



Series C342 Time Totalizer

Basic time totalizer fits a tiny 1/32 DIN (24x48mm) package. Available with LED or LCD display.

Battery option keeps unit counting even if line power is lost, and enables unit to be used in remote locations. It is part of a family of products that can be built into a system with matching components to expand with your changing needs.

Display: 6-digit 7.6mm LCD or 8-digit 7mm LED

Ranges: 2 ranges: hr/hundredths, min/sec/hr

Power: Internal battery option

Application/Industries:

- Machine Run Time
- Cycle Time
- Purge Time
- Food Processing and Packaging Machinery
- Pump Controls
- Material Handling
- Plastic Working
- Service Maintenance Tracking



MITE Series 7999 Time Indicators

Basic 1/32 DIN (24x48mm) timer provides precise measurement at a low price. Battery keeps unit counting

even if line power is lost, and enables unit to be used in remote locations.

Display: 7-digit 7mm LCD

Ranges: 4 ranges: sec, min/sec, hr/min, hr/hundredths

Power: Internal battery



EHM Basic Electronic Hourmeter

Basic hourmeter offers reliable non-volatile memory and wide temperature range. Snap-fit panel mounting and

wide input-power range make it easy to install. Square (24x26mm) or round (53mm) panel cutout.

Display: 6-digit 5mm LCD display

Ranges: Hours

Power: External DC

Functionalities/Modes: Reset, Repeat Cycle, Interval, On/Off Delay, Pulse, Elapsed Time

Guide: Preset timers offer various functions that can activate or deactivate control outputs based on a preset time interval.

Our Eagle Signal and Veeder-Root brand electronic time products feature high precision, accuracy and resolution of timed events.



Series B866 Analog Multifunction Timers

The premier low-cost timing solution, the B866 provides control outputs and simple dial setpoints. Selectable for basic operations:

ON/OFF, delay, interval or repeat cycle, all in a compact 1/16 DIN (48x48mm) package.

Ranges: 16 time ranges, including 0.5 sec

Outputs: Timed and instantaneous relay



Series B856 Digital Multifunction Timers

High-accuracy digital timer features multiple operating modes in a compact 1/16 DIN (48x48mm) package. Dual line LCD indicates both process time and preset value.

Ranges: 5 ranges: hr, min, sec, hr/min, min/sec

Outputs: Timed and instantaneous relay



Series C628 AWESOME Display Elapsed Timers

For cumulative or single timing operation, the C628 offers a blazing bright display that is 20 percent larger than other 1/8 DIN (48x96mm) units. Programmable

color change based on an event: green for normal, red for alarm.

Display: 5-digit 18mm LED, secondary 1-digit 7mm LED

Ranges: 5 ranges: hr, min, sec, hr/min, min/sec

Outputs: Alarm only

Application/Industries:

Auto Control of Machine Cycles

Event Sequencing

Malfunction Detection

Process Time Regulation



Series A103 Preset Timers

The preset version of the A103 offers control outputs and a superior backlit display. Battery keeps unit

counting even if line power is lost, and enables unit to be used in remote locations. It is part of a family of products that can be built into a system with matching components.

Display: 7-digit 12mm LCD

Ranges: 4 ranges: hr, min, sec, hr/min/sec

Outputs: Transistor or relay

Power: Internal battery, backlighting with external DC power



Series B506 Digital Multifunction Timers

LED-display timers with a range of operating modes and features, including

repeat cycle, batch count, single or dual setpoints, and resolution up to 1 ms. The 1/16 DIN (48x48mm) units indicate both process time and preset value.

Ranges: 5 ranges: hr, min, sec, hr/min, min/sec

Outputs: 2 relay, 1 transistor

Worldwide Brands:

Anderson™

Dynapar™

Eagle Signal™

Harowe™

Hengstler™

Negele™

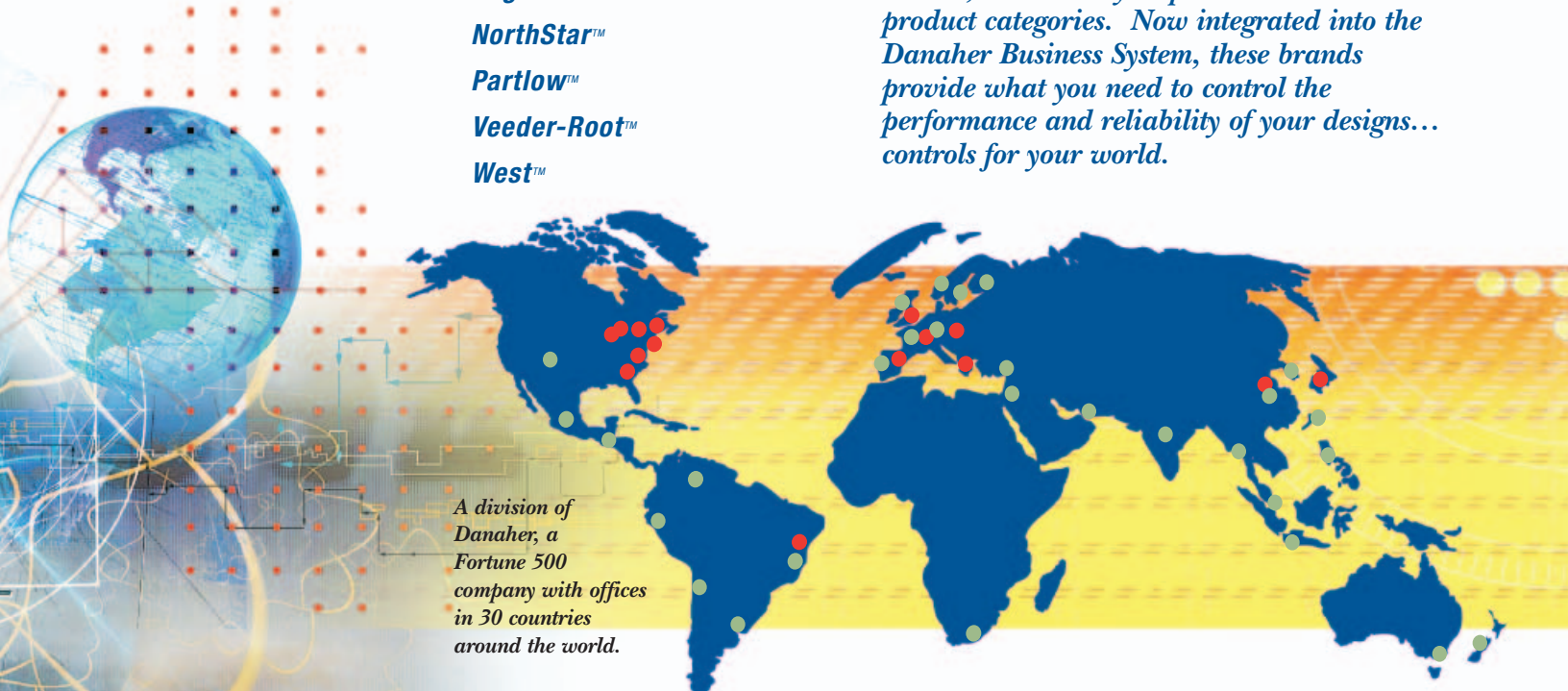
NorthStar™

Partlow™

Veeder-Root™

West™

Danaher Industrial Controls Group was formed through the merger of ten premier brands, each widely respected within their product categories. Now integrated into the Danaher Business System, these brands provide what you need to control the performance and reliability of your designs... controls for your world.



A division of Danaher, a Fortune 500 company with offices in 30 countries around the world.

More Available. With factories around the world, global sales and applications support, and an expansive network of distributors, we stay close to our customers – shortening lead times and fostering responsiveness. Three-day lead time is standard, with same-day shipments available on many products.

More Precise. With 230 combined years of experience in factory automation, we understand increasing demands for product performance. Our counters, timers and indicators give you precise control of your designs.

More Durable. Experience with more than 25,000 customers has taught us to design for durability: long life ratings and mechanical specs that others envy.

More Customizable. JIT manufacturing enables us to immediately produce any of thousands of product variations. And we're happy to work with customers to customize products to exact requirements.



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