

Eagle Signal Veeder Root

Quick Reference Guide

Product Catalog







Eagle Signal Veeder Root

Quick Reference Guide





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Series	CT4	HP5E	HQ9E	B866	BRE	B856	B506
Product Type	_	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers
Name	Percentage Timer	CYCL-FLEX® Reset Timer	Percentage Timer	1/16 DIN SOLID STATE ANALOG DIAL TIMER	Reset Timer	1/16 DIN MULTI-FUNCTION LCD DISPLAY TIMER	1/16 DIN Multi-Function LED Display Timer
Dimension	3.50" x 3.50" x 4.05" Depth	97 mm x 108 mm	97 mm x 108 mm	48 mm x 48 mm	2.5" x 4.25"	48 mm x 48 mm	48 mm x 48 mm
Display Type	Dial for time set. LEDs for Progress Indication	Dial for time set. LEDs for Progress Indication	Dial for percent setting. LEDs for Progress Indication	Dial for time set	Dial for time set	Dual line LCD	Dual line LED
# of Digits	NA	NA	NA	NA	NA	4	4
Power Supply	120 VAC~(+10, -15%) 50/60 Hz/ 240 VAC~ (+10, -15%) 50/60 Hz	120/240 VAC, 50/60 Hz	120/240 VAC, 50/60 Hz	24 - 240 VAC or 24 VDC	120 or 240 VAC	24 - 240 VAC or 24 VDC	90 - 240 VAC or 24 V AC/DC
Time Ranges	11 Ranges: 15 Sec - 120 Min	16 Ranges: 5 Sec - 16 Hrs	Available in 10 Ranges: 15 Sec - 20 Hrs	1, 10 Seconds; 1, 10 Minutes; 1, 10 Hours	11 ranges cover .05 seconds to 10 hours	Hrs; Min; Sec; Hrs:Min; Min:Sec	Selectable for Hrs, Min, Sec; Selecable Decimal PT.
Operation Modes	Percent ON adjustable within total cycle	Stand. and Rev. Start, Instant and delayed Contacts	Percent ON adjustable within total cycle	On-Delay, Off-Delay, Interval, Repeat Cycle	Standard, reverse and momentaty Start	On-Delay, Off-Delay, Interval, Repeat Cycle	On Delay, Off Delay, Interval, Repeat, Delay/Interval
Control Inputs	Start/Stop	Start/Stop, Reset	Start/Stop	Start/Stop - Reset	Start/Stop - Reset	Start/Stop - Reset	Start/Stop - Reset
Repeat Accuracy	Setting: ±1% of Total Time Cycle Repeat: ± 1% of Total Time Cycle	N/A	Setting: ±1%	Setting: ±5% Repeat: ± 0.5%	Setting: 3% of full scale Repeat: ± 1/4% of full scale	Repeat: ±0.03%	Repeat: ±0.01%
Control Outputs	9 Amp/120 VAC, 5 Amp/240 VAC	DPDT - 5 to 10 Amps	SPDT - 5 to 10 Amps	DPDT - 5 Amps	To 10 Amps	DPDT - 5 Amps	5 Amp Relay & NPN Transistor
Front Panel Rating	IP51 for Panel Surface Only	N/A	N/A	IP54	N/A	NEMA 4/IP65	NEMA 4/IP65



PRODUCT CATALOG







12.34

Series	C628	A103	C342	7999	SX210	CX200	CX300
Product Type	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers
Name	Elapsed Timer	Preset Timer	Timer Totalizer	MITE Elapsed Timer	Microprocessor Digital Timer	Microprocessor Timer/ Counter	Microprocessor Timer/Counter
Dimension	48 mm x 96 mm	36 mm x 72 mm	24 mm x 48 mm	24 mm x 48 mm	68 mm x 68 mm	97 mm x 108 mm	97 mm x 108 mm
Display Type	LED, Programmable Red or Green color	Backlit LCD (Backlight requires external 12 VDC)	7.0 mm high LCD or 7.6 mm LED	LCD	.3 inch high LED display	LCD	LCD5 inch high digits
# of Digits	5 (0.71" high)	7 (0.47" high)	LCD: 8, LED: 6	7 (0.3" high)	4.5	4.5	4.5
Power Supply	90-240 VAC, 20-50 VAC/ DC 50/60 Hz, 4 Watts	3 Volt replaceable lithium battery	Internal lithium battery or 12-24 VDC external	Internal lithium battery	A6 - 120 VAC, 50/60 Hz B6 - 240 VAC, 50/60 Hz	A6 - 120 VAC, 50/60 Hz B6 - 240 VAC, 50/60 Hz K6 - 208 VAC, 50/60 Hz	A6 - 120 VAC, 50/60 Hz B6 - 240 VAC, 50/60 Hz Z6 - 24 VAC, 50/60 Hz
Time Ranges	Sec., Min., Hrs., Min. & Sec., or Hrs. & Min.	Seconds, Minutes to 0.1, hours to 0.1, Hrs:Mins:Secs	Hrs:Mins:Secs or Hours to .01	Sec, Min-Sec, Hr-Min, or Hrs-1/100 (by model #)	8 "Hrs; Min; Sec; Hrs:Min; Min:Sec"	5 time ranges from 19.999 sec. to 199 hrs.: 59 min., Count 500 Minimum, Count 5000 minumum	5 time ranges from 19.999 sec. to 199 hrs.: 59 min.
Operation Modes	Single alarm at timed interval	On Delay, Interval	Hour Meter	Elapsed Time	On Delay, On Delay with Time Totalizer, Interval, Interval with Time Totalizer, Pulse-99.99 Seconds, Pulse-Same Range, Pulse Repeat-99.99 Seconds, Pulse Repeat - Same Range	On Delay, Interval,	Microprocessor Timer/ Counter
Control Inputs	Start/Stop - Reset	Start, Reset - Sinking, Contact closure	Start/Reset - Reset	Contact Closure or Open Collector	Standard Start, Reverse Start, Reset through Start input.	Standard Start, Reverse Start, Reset through Start input.	Standard Start, Reverse Start, Reset through Start input.
Repeat Accuracy	Repeat: ±0.1%	0.20%	N/A	±20 ppm @ 20°C	±0.001% of setting or 35 ms	±0.001% of setting or 35 ms	±0.001% of setting or 35 ms
Control Outputs	2 Amp Relay & NPN Transistor	0.1 Amp SSR (A103-008)	Optional on LED display models	N/A	5 amp (resistive)	10 amp (resistive)	10 amp (resistive)
Front Panel Rating	NEMA 4X/IP65	NEMA 4X	IP65	NEMA 4 / IP65	NEMA 4	NEMA 4	NEMA 4

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Series	CX400	CX100	A103	HP5	MODEL 191	HQ9
Product Type	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers	Time Indicators and Preset Timers
Name	Dual Setpoint Timer/Counter	Repeat Cycle Timer	Elapsed Time Indicator	-	Reset Timer	-
Dimension	97 mm x 108 mm	97 mm x 108 mm	36 mm x 72 mm	97 mm x 108 mm	93 mm x 93 mm	_
Display Type	LCD5 inch high digits	LCD5 inch high digits	supertwist LCD display	Highly visible, calibrated dials	push-button located in the center of the time set pointer knob on the panel mounted dia	-
# of Digits	4.5	4.5	8	NA	NA	-
Power Supply	A6 - 120 VAC, 50/60 Hz	A6 - 120 VAC, 50/60 Hz B6 - 240 VAC, 50/60 Hz	Single or Dual 3 Volt replacea- ble lithium battery	120 V (+10, -15%), 60 Hz 240 V (+10, -15%), 60 Hz	120 V (+10%, -15%) 50/60 Hz 240 V (+10%, -15%) 50/60 Hz	-
Time Ranges	5 time ranges from 19.999 sec. to 199 hrs.: 59 min.	5 time ranges from 19.999 sec. to 199 hrs.: 59 min.	Seconds, minutes to 1/10, hours to 1/10, hours: minutes: secondshours, or hours: minutes: seconds	16 standard time ranges from 5 seconds to 60 hours	12 standard time ranges from 8 seconds to 16 hours	_
Operation Modes	Dual Setpoint Timer/Counter	Repeat Cycle Timer	Elapsed Time Indicator	synchronous motor driven reset timer	push-button start, motor driven timer with cycle progress pointer, double make-double break snap action switch	-
Control Inputs	Standard Start, Reverse Start, Reset through Start input.	Standard Start, Reverse Start, Reset through Start input.	NPN, Contact Closure; A	Standard Start, Reverse Start, Reset through Start input.	Standard Start, Reverse Start, Reset through Start input.	-
Repeat Accuracy	±0.001% of setting or 35 ms	±0.001% of setting or 35 ms	NA	NA	1.5% of full scale	-
Control Outputs	10 amp (resistive)	10 amp (resistive)	Single Pole Double Throw 120/240 VAC, 30 V DC contacts ; 5 amps	10 amps, resistive, 120 VAC 5 amps, resistive, 240 VAC	10 A 120/240 V	-
Front Panel Rating	NEMA 4	NEMA 4	NEMA 4X/IP65	UL rated 94V-0)	NEMA 4	-





Series	Max Count Advanced	C342	C628	A103	A103
Product Type	Preset Counter	Totalizing Counter	Totalizing Counter	Totalizing Counter	Preset Counters
Name	-	_	Totalizer	Totalizer	Preset Counter
Dimensions	48 mm x 96 mm	24 mm x 48 mm	48 mm x 96 mm	36 mm x 72 mm	36 mm x 72 mm
Display Type	LED 0.4" High	LCD or LED	LED, Programmable Red or Green color	Supertwist LCD	Backlit LCD (Backlight requires external 12 VDC)
# of Digits	8	LCD: 8 (7.0 mm high) LED: 6 (7.6 mm high)	5 (0.71" high)	8	7
Power Supply	85-265 VAC, 50-60 Hz, 20 VA 12 VDC @ 0.5 A. Optional	Internal lithium battery or external DC	90-240 VAC, 20-50 VAC/ DC 50/60 Hz, 4 Watts	3 V replaceable lithium battery	3 V replaceable lithium battery
Reset Method	Front Panel (Selectable Enable), Remote	Front Panel (Selectable Enable), Remote	Front Panel (Selectable), Remote	Front Panel (Selectable), Remote	Front Panel (Selectable), Remote
Calibrator	Multiplier 0.0001 to 9.9999 Calibrates Main Counter and Totalizer	Optional	Multiplier 0.0001 to 9.9999	Multiplier 0.0001 to 9.9999	None
Max Count Speed	DC to 40 k Hz (40 k Hz external input frequency with x1 logic) (20 k Hz external input frequency with x2 logic) (10 k Hz external input frequency with x4 logic)	7.5 k Hz	10 k Hz	10 k Hz	10 k Hz
Count Modes	Unidirectional Add/Subtract, Quadrature	Unidirectional, Quadrature	Bidirectional	Bidirectional	Unidirectional
Input Type	3 Solid State, 100 mA sink max., 24 VDC max. Optional: 3 SPDT Relays, rated 10 Amp 30 V DC/270 VAC Resistive	Sinking, Sourcing, Contact closure	Sinking, Sourcing, Contact closure	NPN or Contact Closure	Sinking, Sourcing, contact closure
Sensor Power Supply	85-265 VAC, 50-60 Hz, 20 VA 12 VDC @ 0.5 A. Optional	None	9 - 15 VDC	None	9 - 15 VDC (Option module required)
Front Panel Rating	NEMA 4	IP65	NEMA 4X	NEMA 4X	NEMA 4X

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Series	7437/7438	7441	7999	7790/7791	799984-322
Product Type	Totalizing Counter	Totalizing Counter	Totalizing Counter	Totalizing Counter	Totalizing Counter
Name	Non-Reset Totalizer	Electric Preset Counter	MicroMITE	Non-Reset Totalizer	MicroMITE Series
Dimensions	Panel mount: 50 mm x 37.3 mm	48 mm x 96 mm	24 mm x 48 mm	Panel Mount: 36.5 mm x 29.4 mm	24 mm x 31 mm
Display Type	White Numbers on Black Counting Wheels	White Numbers on Black Counting Wheels	LCD	White Numbers on Black Counting Wheels	LCD Display
# of Digits	Reset: 5 Nonreset: 5, 6, 7	5	8 (0.315" high)	5 or 6	4
Power Supply	5 watts on AC, 1.5 watts on DC	115 VAC, 50/60 Hz; 24 VDC	Internal lithium battery	24, 48, 115 VAC; 6, 12, 24 VDC	Replaceable 1.5 v button cell type 386 or SR43 (provided)
Reset Method	Push Button	Manual pushbutton; Electric reset	Front Panel (Selectable Enable), Remote	Push-bar	To zero on insertion of battery. Remote reset can be accommodated
Calibrator	None	None	None	None	None
Max Count Speed	600 cpm	1500 cpm on DC, 1200 cpm on AC	10 k Hz 2.5 k Hz w/ quad. Adaptor	600 cpm (800 cpm available as special option)	12 Hz
Count Modes	Unidirectional	Unidirectional	Unidirectional Add/Subtract, Quadrature	Unidirectional	NA
Input Type	See Models; Allowable variation is ± 10 % or 10 volts, whichever is limiting; nonreset counter with 115 VAC coil has allowable variation of 95 to 125 VAC	Standard voltages are 115 VAC, 50/60 Hz; 24 VDC allowable voltage variation is ± 10% or 10 voltas, whichever is less	Sinking, Sourcing, Contact closure	24,48,115 VAC; 6, 12, 24 VDC ; ± 10% or 10 volts, whichever is limiting	Contact Clousre
Sensor Power Supply	None	None	None	None	None
Front Panel Rating	NA	NA	NEMA 4	NA	IP40/DIN40050



Series	799988-402/412	C628	C628	MAX COUNT JR 2
Product Type	Totalizing Counter	Preset Counters	Preset Counters	Preset Counters
Name	-	Preset & Batch Counter	Position Indicator	Predeterming Electronic Counter
Dimensions	47 mm x 21 mm	48 mm x 96 mm	48 mm x 96 mm	50 mm x 96 mm
Display Type	LCD Display	AWESOME 0.71" high digit LED display	AWESOME 0.71" high digit LED display	LED
# of Digits	8	5.5	5.5	5 (0.56" high)
Power Supply	2.6 - 3.4 VDC	90-264 VAC, 50/60 Hz, or 20-50 VAC/VDC; 4 Watt	90-264 VAC, 50/60 Hz, or 20-50 VAC/ VDC; 4 Watt	115, 230 VAC (switch selectable) or 10-26 VDC
Reset Method	Contact Closure	Front Panel (Selectable Enable), Remote	NA	Front Panel (Selectable), Remote
Calibrator	None	Multiplier 0.0001 to 9.9999 Calibrates Main Counter and Totalizer	Multiplier 0.0001 to 9.9999 Calibrates Main Counter and Totalizer	Multiplier 0.0001 to 9.9999
Max Count Speed	5k Hz	Sinking/Sourcing or Contact Closure Frequency: 10 k Hz max. (5 k Hz in quadrature mode)	Sinking (5 k Hz in quadrature mode)	5 k Hz
Count Modes	Bidirectional	Add/Subtract, Quad	Add/Subtract, Quad	Add/Subtract, Quad
Input Type	Contact Clousre/ Open Collector ; Negative Edge Triggered	Sinking, Sourcing, contact closure	Sinking	Sinking, Sourcing, contact closure, Magnetic
Sensor Power Supply	None	9-15 Unregulated VDC (125 mA max)	9-15 Unregulated VDC (125 mA max)	NPN transistors
Front Panel Rating	NA	NEMA 4X/IEC IP65	NEMA 4X/IEC IP65	NEMA 4









Series	1127-1132	1490	7623
Product Type	Product Type Totalizing Counter		Totalizing Counter
Name	Large Figure Totalizer	Vary Tally®	Hand Tally
Drive Ratios	Direct Drive (1127) 10:1, Revolution Drive (1128) 1:1 , Ratchet Drive (1129) 1:1, Direct Drive w/ Non- Reset (1130) 10:1, Revolution Drive (1131) 1:1, Ratchet Drive (1132) 1:1	Push Button 1:1	Push Button 1:1
Count Speed	Reset modeal (Direct and Reolution Drives) 1000 cpm continuous, 1500 cpm intermittent. Nonreset (Direct and Revolution Drives) 1500 cpm continuous, 2000 cpm intermittent. Ratchet drive 250 cpm continuous and intermittent	NA	NA
Torque (ozin.)	Direct: 2.5 oz-in. Revolution: 1.5 oz-in	NA	NA
# of Figures (Digits)	5 (standard). Special Options Available	4	4
Size of Figures (Digits)	0.750" x 0.605"	4.3 mm x 3.6 mm	4.8 mm x 2.5 mm
Lubrication	Not required	Not required	Not required
Construction	End caps: Glass-filled nylon Case: Steel Shafts: Chrome plated steel Pinions: Nylon Wheels: Aluminum and stee	Frame: Zinc diecast Working Parts: Hardened steel Wheels: Zinc diecast Button: Acetal resin	Case: Polycarbonate Knob & Wheels: Acetal resin Internal Working Parts: Hardened steel and acetal resin Finger Ring and Pushbutton: Hardened steel, black finish
Net Weight	4 lbs.	3 oz	Hand Tally: 1.2 oz. (34.02 g) Mounting Base: 1.2 oz. (34.02 g)



Series	7458-7461
Product Type	Totalizing Counter
Name	Small Square Case Totalizer
Drive Ratios	Direct Drive (7458 Series) adds ten counts for each drive shaft revolution; Subtracts for opposite rotation Revolution Drive (7459 Series) adds one count for each drive shaft revolution; Subtracts for opposite rotation Ratchet Drive (7460 Series) with stops, adds one count for each drive actuation through arc of 40° minimum; Maximum travel limited to arc of 45°; Integral return spring Rotary Ratchet Drive (7461 Series) adds one count for each drive shaft actuation through arc of 40° minimum; May be used as direct drive adding ten counts for each drive shaft revolution;
Count Speed	Direct Drive (7258 Series): 500 rpm Ratchet Drive (7460 Series)(harmonic motion): 1000 cpm Rotary Ratchet Drive (7461 Series) (harmonic motion): 1000 cpm
Torque (ozin.)	Direct Drive: 0.25Revolution Drive: 0.5Ratchet Drive: 6.Rotary Ratchet Drive: 1.0
# of Figures (Digits)	5
Size of Figures (Digits)	4.3 mm x 2.2 mm
Lubrication	Not required
Construction	Case, pinions, wheels: Acetal resin Drive shaft, washer: Stainless stee
Net Weight	0.49 oz.







Series	7272/7287	1259-1262			
Product Type	Totalizing Counter	Totalizing Counter			
Name	Small Reset Totalizer	Resettable Totalizer			
Drive Ratios	Ratchet Drive (7272 Series) adds one count for shaft actuation through minimum arc of 40°; travel limited to 45°; internal lever return spring ; Revolution Drive (7287 Series) adds one count for shaft revolution in either direction; will not subtract	Ratchet Drive (1259 Series) adds one count for each drive shaft actuation through 36° to 60° arc; max travel limited; internal return spring Rotary Ratchet (1260 Series) adds one count for each drive shaft actuation through 40° to 66° arc; no stops; will not subtract; Direct Drive (1261 Series) adds 10 counts for each drive shaft revolution; will not subtract past zero on right-hand when run in opposite rotation; Revolution Drive (1262 Series) add one count for each drive shaft revolution; will not subtract past zero on right-hand when run in opposite rotation			
Count Speed	Ratchet Drive (7272 Series): Harmonic – 1000 cpm; Impact – at least 30 ms to advance lever 45° Revolution Drive (7287 Series): 1000 rpm	Ratchet Drive (1259 Series): 1000 cpmRotary Ratchet (1260 Series): 1500 cpmDirect Drive (1261 Series): 5000 cpmRevolution Drive (1262 Series): 2000 cpm			
Torque (ozin.)	Maximum Static: 3 oz-in. (2.12 N.m), ratchet 8 oz-in (5.65 N.m)	1259: max torque 2 oz-in. , 1260: max torque 2 oz-in., 1261: max torque 1 oz-in., 1262: max torque 0.5 oz-in			
# of Figures (Digits)	5	6			
Size of Figures (Digits)	4.8 mm x 2.5 mm	4.78 mm x 3.96 mm			
Lubrication	Not required	Not required			
Construction	Case: Glass filled nylon Drive Shaft: Stainless steel Wheels, reset knob, pawls, yoke, end caps, working parts: Acetal resin	Case: Zamak Wheels, Pinions: Acetal resin Shafts: Chrome plated steel Gears: Brass			
Net Weight	2.4 oz.	9 oz.			



Series	7268	1133, 1134	7428, 7430
Product Type	Totalizing Counter	Totalizing Counter	Totalizing Counter
Name	High Speed Totalizer	High Speed Totalizer	Medium Sized Totalizer
Drive Ratios	Direct Drive 10:1	Direct Drive (1133 Series) adds ten counts for each drive shaft revolution in specified rotation, number 3 or 4 rotation only; Revolution Drive (1134 Series) adds one count for each drive shaft revolution; subtracts for opposite rotation; ball bearings subtracts for opposite rotation; pre lubricated porous bronze sleeve bearings	Direct Drive (7428 Series) adds ten counts for each drive shaft revolution in specified rotation, subtracts for opposite rotations if reset knob is not obstructed. Revolution Drive (7430 Series) adds one count for each drive shaft revolution in specified rotation; subtracts for opposite rotations if reset knob is not obstructed.
Count Speed	1500 rpm continuous, 2500 rpm intermittent	Direct Drive (1133 Series): 1000 rpm continuous, 1500 rpm intermittent Revolution Drive (1134 Series): 2000 rpm continuous, 3000 rpm intermittent 2000 rpm continuous, 3000 rpm intermittent	Direct Drive (7428 Series): 200 rpm of drive shaft RevolutionDrive (7430 Series): 750 rpm of drive shaft
Torque (ozin.)	Maximum static: 0.3 oz-in (0.21 N.cm)	Maximum static: 1.0 oz-in. (0.71 N.cm)	NA
# of Figures (Digits)	5 standard; 3 to 7 available, non-stock	5	5
Size of Figures (Digits)	4.7 mm x 3.6 mm	0.188" high x 0.099" wide	6.86 mm x 4.70 mm
Lubrication	Not required	Not required	Not required
Construction	Case: Brass Shaft: Stainless steel Pinions: Acetal resin Right Wheel: Nylon, all others acetal resin	Case: Brass Shaft: Chrome plated steel Wheels: Aluminum shell, steel parts Gears, Pinions: Chrome plated steel End Caps: Zamak	End Caps: Zamak Case: C.A.B. plastic Internal Parts: Acetal resin and A.B.S. plastic and sintered metal Drive Shafts: Plated steel
Net Weight	7 oz.	7 oz.	6 oz.



Series	Series 7434		1667, 1669	1953	
Product Type	Totalizing Counter	Totalizing Counter	Totalizing Counter	Totalizing Counter	
Name	Worm Drive	Pneumatic Counter	Visicounter®	Visicounter®	
Drive Ratios	Geared Drive, adds one count for a specified number of drive shaft revolutions; models subtract for opposite rotation; with 0.375:1 ratio, rightwheel is marked 0 to 7/8 by 1/8ths and reads yards and eighths whenused with 1-foot circumference measuring wheels	NA	Ratchet Drive (1667 Series) adds one count for each drive shaft actuation, arc of 26° to 45° for rotations 1 and 3, arc of 42° to 67° for rotations 2 and 4, maximum travel limited internal lever return spring; Geared Drive (1669 Series) adds one count for specified number of drive shaft revolutions in specific rotation, will not subtract past zero on right hand wheel, standard gear ratio is 1:1 or 3:1	Geared drive, adds one count for a specified number of drive shaft revolutions in specified rotation; will subtract for opposite rotation if reset knob is not obstructed	
Count Speed	Continuous 3000 rpm or 3000 cpm, whichever is limiting	250 to 1000 cpm	Ratchet: 500 cpm Geared: 1500 rpm or 5000 cpm whichever is limiting	1500 rpm or 5000 cpm	
Torque (ozin.)	Max static 2 oz-in	NA	"Ratchet Drive (1667 Series): 4 lb-in. (45 N.cm) Geared Drive (1669 Series): 1 oz-in (0.7 N.cm)"	Maximum static 1.5 oz-in (1.06 N.cm) with 3:1 ratio	
# of Figures (Digits)	5	6	6	6	
Size of Figures (Digits)	6.9 mm x 4.7 mm	4.78 mm	8.8 mm x 6.4 mm	8.76 by 6.35 mm Not required	
Lubrication	Not required	Not required	Not required		
Construction	End caps and worm base: Zamak Case: C.A.B. plastic Internal Parts: Acetal resin, A.B.S. plastic or sintered metal Worm Drive Shaft: Stainless steel	Case: Zamak Wheels and Pinions: Acetal resin Connection Fitting: Brass	Case: Zamak Base: Steel Wheels, Pinions: Acetal resin Shaft: Plated steel	Case and Worm Base: Zamak Baseplate: Steel Wheel & Pinions: Acetal resin Right Angle Drive Shafts: Stainless steel Bearings: Porous bronze, oil impregnated Worm Gear: Brass Worm: Stainless steel	
Net Weight	1 lb.	1 lb.	1 lb. 4 oz.	3 lbs.	

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	Series	S628	S628	S628	S628	Series	A103	C342
	Product Type	Process Indicators	Process Indicators	Process Indicators	Process Indicators	Product Type	Rate Indicators and Controllers	Rate Indicators and Controllers
	Name	DC Process	Temperature Indicator	DC Volts/Amps Meter	AC Volts/Amps Meter	Name	Tachometer, Rate Meter & Totalizer or Rate Meter	Tachometer
•	Dimensions	48 mm x 96 mm	48 mm x 96 mm	48 mm x 96 mm	48 mm x 96 mm	Dimensions	36 mm x 72 mm	24 mm x 48 mm
	Display Type	LED, Programmable Red or Green color	LED, Programmable Red or Green color	LED, Programmable Red or Green color	LED, Programmable Red or Green color	Display Type	Backlit LCD (Backlight requires 12 VDC power	7.0 mm high LCD or 7.2 mm LED
	# of Digits	5 (0.71" high)	5 (0.71" high)	5 (0.71" high)	5 (0.71" high)	# of Digits	4 (plus dummy zero on prog. rate versions)"	6, LSD fixed at zero
	Power Supply	90-240 VAC, 20-50 VAC/DC 50/60 Hz, 4 Watts	90-240 VAC, 20-50 VAC/DC 50/60 Hz, 4 Watts	90-240 VAC, 20-50 VAC/DC 50/60 Hz, 4 Watts	90-240 VAC, 20-50 VAC/ DC 50/60 Hz, 4 Watts	Power Supply	3 Volt replaceable lithium battery	Internal lithium battery or 12-24 VDC external
	Input Ranges	mA to 50 mA, DCV to ±10 Volts and ±100 mV	B, J, K, N, S, and T thermocouples, 14 bits	From 0-100 mV to 0-600 VDC, 0-1 mA to 0-2 amps	From 0-100 mV to 0-600 VDC, 0-1 mA to 0-2 amps	Alarm Outputs	No	No
	Input Scaling	Front panel coordinate input scaling	Front panel coordinate input scaling	Front panel coordinate input scaling	Front panel coordinate input scaling	Calibrator	Multiplier 0.001 to 9.999	No
	Accuracy	±0.01% of span	±0.01% of span	±0.01% of span	±0.1% of span (20 Hz to 5k Hz)	Max Frequency	10 k Hz	7.5 k Hz
	Outputs	NPN: 100 mA; Relay: SPDT, 2A; Linear Current & Voltage	NPN: 100 mA; Relay: SPDT, 2A; Linear Current & Voltage	NPN: 100 mA; Relay: SPDT, 2A; Linear urrent & Voltage	NPN: 100 mA; Relay: SPDT, 2A; Linear Current & Voltage"	Input Type	Sinking, Sourcing, Magnetic	Sinking, Sourcing,
	Serial Communication	RS-485; Serial asynchronous	RS-485; Serial asynchronous	RS-485; Serial asynchronous	RS-485; Serial asynchronous	Rate Calculation Method	Time Interval (1/Tau)	6 Second gate
	Front Panel Rating	NEMA 4X/IEC IP65	NEMA 4X/IEC IP65	NEMA 4X/IEC IP65	NEMA 4X/IEC IP65	Sensor Power Supply	9 - 15 VDC (Option module required)NEMA 4X	No
						Front Panel Rating	NEMA 4X	IP65
00.0	a				[00	Serial Communication	No	No





Series	C628	MT JR 1/2	SLIM TACH D	7990
Product Type	Rate Indicators and Controllers	Rate Indicators and Controllers	Rate Indicators and Controllers	Rate Indicators and Controllers
Name	Rate Meter	_	_	FLEX Series
Dimensions	48 mm x 96 mm	50 mm x 98 mm	50 mm x 96 mm	36 mm x 72 mm
Display Type	LED, Programmable Red or Green color	LED	LED	LCD
# of Digits	5 (0.71" high)	5 (0.56" high)	5 (0.56" high)	8 (0.35" high)
Power Supply	90-240 VAC, 20-50 VAC/DC 50/60 Hz, 4 Watts	115, 230 VAC (switch selectable) or 10-26 VDC	115, 230 VAC (switch selectable) or 10-26 VDC	Internal lithium battery
Alarm Outputs	2 NPN transistor, 1 SPDT 2A relay (2nd relay optional)	2 - NPN transistor	No	Front Panel (Selectable Enable), Remote
Calibrator	Multiplier 0.0001 to 9.9999	Multiplier 0.0001 to 9.9999	1 or 60 PPR input (selectable by model #)	Multiplier 0.001 to 9999
Max Frequency	10 k Hz	10 k Hz	10 k Hz	10 k Hz
Input Type	Sinking, Sourcing, Magnetic	Sinking, Sourcing, Magnetic	Sinking, Magnetic	Sinking, Contact closure
Rate Calculation Method	Time Interval (1/Tau)	Time Interval (1/Tau)	Time Interval (1/Tau)	No
Sensor Power Supply	9 - 15 VDC	12 VDC	12 VDC	No
Front Panel Rating	NEMA 4X	NEMA 4	NEMA 4	NEMA 4
Serial Communication	Optional RS-485	No	No	No



Eagle Signal R VEEDER-ROOT

About:

Eagle Signal and Veeder Root are known worldwide for robust and reliable industrial timers and counters. Eagle Signal is the most trusted manufacturer of electronic and electromechanical products, including preset, elapsed time indicators (also known as time totalizers or hourmeters), reset timers, repeat cycle timers, sequencers and related accessories for rugged and run reliable production or time monitoring of industrial manufacturing. When OEM's need innovative, high-quality counters, they turn to Veeder-Root. We offer the broadest range of electronic counters, mechanical counters and electromechanical counters to meet an array of industrial and commercial counting applications.

Due to thousands of possible "standard configurations," all timers and counters are built to order in our state-of-the-art manufacturing facility in North Carolina.



www.veeder-rootcounters.com www.eagle-signal.com

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