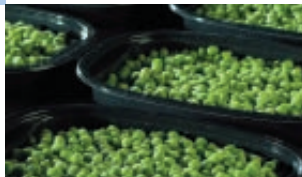


Ramsey GP-Series Checkweighers

For general-purpose dynamic weighing applications where line-space is critical

Ramsey GP-Series checkweighers provide the highest levels of weighing accuracy across a broad range of applications. The professional-grade design is compact and efficient so that integration, operation, and sanitation are optimized. Suitable for food, pharmaceutical and consumer packaged goods applications, the GP-Series offers outstanding flexibility at a reasonable cost.



There are three models of GP Series checkweighers, each offering unique benefits in terms of accuracy, functionality and capability. From light weight high-accuracy applications, to medium duty or heavy duty applications, there is a solution available in the GP Series of checkweighers. For increased functionality, an optional DSP IP Plus metal detector may be seamlessly integrated with the GP-200/275 models to provide a complete weight control / contaminant inspection station.

The Ramsey GP Series of checkweighers from Thermo is the result of over 50 years of experience in the field of dynamic weighing. Logical designs driven by customer requirements are the cornerstone of our product development process.

Features & Benefits

- Small footprint / adjustable height for easy integration into a production line
- No-maintenance, high torque brushless DC motors
- Hygienic design to facilitate sanitation
- Your choice of basic or premium controller
- Wide variety of data interface options
- Global support and expertise from Thermo Electron Corporation

Logical Mechanical Design Enables Flexibility

Ramsey GP-Pharma

Suitable for small packages / high accuracy applications in dry environments at rates up to 350 packages per minute.

The Ramsey GP-Pharma checkweigher has been specifically designed to address high accuracy requirements in a cost effective design. The Ramsey GP-Pharma is perfect for pharmaceutical and food production environments where high accuracy is needed, but where the cost of a pharmaceutical-grade checkweigher is not justified.

High accuracy at lower cost is achieved by integrating low-friction aluminum conveyors, dynamically-balanced weigh-table rollers, and precision 40-watt DC motors. The Ramsey GP-Pharma is accurate to ± 0.2 g, (typical), at package weights up to 500 g (17.5 oz), at line speeds to 350 packages per minute. Like the other GP models in the series, when configured with the AC9000 controller and required options, the GP-Pharma can be FDA 21 CFR Part 11 compliant.



Ramsey GP-200

Suitable for medium size packages in dry or wet environments at rates up to 280 packages per minute.

The Ramsey GP-200 is the ultimate general purpose checkweigher. Featuring 100% stainless steel construction and rated to IP66, (NEMA 4X), this checkweigher has been designed to perform in a variety of environments. Able to handle package rates up to 280 per minute, and package weights up to 2.5 kg (5.5 lb), the Ramsey GP-200 is the best solution for general applications.

The Ramsey GP-200 matches the output of most packaging machines enabling seamless integration into production lines. Routine maintenance is facilitated through thoughtful innovations such as brushless DC motors with integrated motor controls, and quick-release belts, rollers and conveyors. The functional design and attention to sanitary details will delight engineering, maintenance, and sanitation personnel. For increased functionality, an optional Goring Kerr DSP IP Plus metal detector may be seamlessly integrated with the Ramsey GP-200 checkweigher to provide a complete weight control / contaminant inspection station.



Ramsey GP-275

Suitable for large packages in dry or wet environments at rates up to 200 packages per minute.

The Ramsey GP-275 handles large or bulky packages with ease, offering a good performance balance in the quest for accuracy and weighing capacity. Powerful 180-watt brushless motors and stainless steel conveyors with upgraded 34 mm (1.3 in) diameter rollers enable the Ramsey GP-275 to handle oversize products with weights of up to 2.5 kg (5.5 lb). In rigorous applications, the Ramsey GP-275 offers uncompromising durability and reliability. For increased functionality, an optional Goring Kerr DSP IP Plus metal detector may be seamlessly integrated with the Ramsey GP-275 checkweigher to provide a complete weight control / contaminant inspection station.



Checkweigher Control Choices to Meet Your Requirements

The selection of an appropriate checkweigher mechanics is largely dictated by your product and environment. The choice of controls is more a function of your operations and data requirements; two controllers are available for any GP model—the basic Ramsey AC4000i, or the sophisticated Ramsey AC9000-Plus.

Ramsey AC9000-Plus Controller

Suitable for applications requiring color graphic display of data in all environments.

The Ramsey AC9000-plus is our full-featured controller. It offers a broad array of capabilities accessed through an interactive menu structure presented on a vivid color VGA display. The 32-bit micro-processor and integrated PC micro-controller provide the power to support high rate and high accuracy weighing functions, and also drive the graphical statistic displays, diagnostics, network communications, and servo feedback.

When the Ramsey 9000-Plus controller is integrated with the Ramsey GP-Series checkweigher mechanics, you have an exceptional dynamic weighing solution. This combination meets the stringent requirements of Europe's OIML-R51 weights and measures standards, according to Holland's NMI, France's SDM, and Italy's UCM, among others.

Ramsey AC4000i Controller

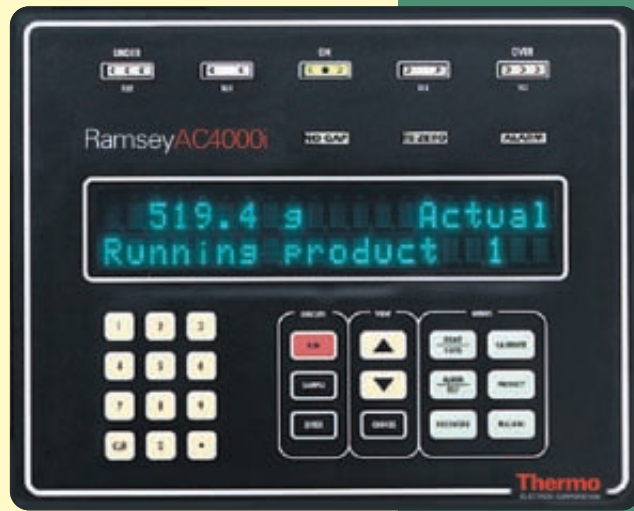
Suitable for basic applications in all environments.

The Ramsey AC4000i is our basic controller, designed to meet the production and monitoring requirements of most checkweigher applications in a cost effective and efficient manner.

Some of the standard features of the Ramsey AC4000i include 15 product setup memory, basic production statistics and three/five weight zone operation. Options available to increase the capability of the controller include reject verification, servo feedback and Ethernet communications. With thousands of units installed, the Ramsey AC4000i is a perfect compliment to the Ramsey GP-Series checkweighers, and time-tested solution for general purpose checkweighing applications.



Ramsey AC9000-plus Controller



Ramsey AC4000i Controller



Ramsey GP-200 or Ramsey GP-275 / Goring Kerr DSP IP Plus Combination Unit

The Ramsey GP-200/275-IP combination models can offer the complete integration of dynamic checkweighing and metal detection into one compact system, which utilizes minimum floor space, and provides overall equipment cost savings. The system uses the Goring Kerr DSP IP Plus, our most compact, high-sensitivity metal detector featuring the patented AuditCheck performance verification system.

For Further Information

For complete product details or to discuss your application, please give us a call at one of the numbers listed on the back page of this literature. With global sales and service support, Thermo is ready to address your checkweighing requirements!

Ramsey GP-Series Checkweighers

Specification	
General Specifications	
Operating Temperature	-10°C to +50°C (14°F to 122°F)
Relative Humidity	20% to 90% non-condensing
Electrical	115/230 VAC, 50/60 Hz, 1 phase 15 amps 380/415 VAC, 50/60 Hz, 3 phase 5 amps
Air Requirement	5.5 bar (80 psi)
Line Height	630 mm (24.8 in) to 1150 mm (45.3 in)
Interface Options	RS232/422/485, Allen Bradley Remote I/O, Ethernet TCP/IP, Allen Bradley DF-1, Modbus RTU, Modbus TCP

	GP-Pharma	GP-200	GP-275
Maximum Package Weight	500 g (17.5 oz)	2.5 kg (5.5 lb)	2.5 kg (5.5 lb)
Maximum Line Speed	350 ppm	280 ppm	210 ppm
Typical Accuracy ¹	±0.2 g	±0.3 g	±0.5 g
Checkweigher Length	910 mm (36 in)	760 mm (30 in)	1,210 mm (48 in)
Washdown Rating	IP-55, NEMA 5	IP-66, NEMA 4x	IP-66, NEMA 4x
Conveyor Belt	Polyester, urethane coated (green)	Polyester, urethane coated (green), optional FDA white	Polyester, urethane coated (green), optional FDA white
Motors	40 W DC (weigh-table) 90 W brushless DC (In/Out-feeds)	90 W brushless DC	180 W brushless DC
Conveyor Bed	Aluminum	Stainless Steel	Stainless Steel
Roller Construction	Aluminum	Aluminum Optional stainless steel	Aluminum Optional stainless steel
Weigh-Table Lengths	200 mm (8 in) 250 mm (10 in)	250 mm (10 in) 300 mm (12 in) 400 mm (16 in)	400 mm (16 in) 500 mm (20 in) 600 mm (24 in)
Weigh-Table Belt Widths	80 mm (3.1 in) 140 mm (5.5 in)	200 mm (8 in)	275 mm (11 in)
In-Feed/Out-Feed Lengths	350 mm (14 in) 500 mm (20 in)	250 mm (10 in) 300 mm (12 in) 400 mm (16 in) 600 mm (24 in)	400 mm (16 in) 500 mm (20 in) 600 mm (24 in)
In-Feed/Out-Feed Belt Widths	150 mm (6 in)	200 mm (8 in)	275 mm (11 in)
Freestanding Out-Feed ¹ Lengths ²	500 mm (20 in)	400 mm (16 in) 600 mm (24 in) 800 mm (32 in)	400 mm (16 in) 500 mm (20 in) 600 mm (24 in) 1,000 mm (39 in)
In-Feed/Out-Feed Roller Diameter	24 mm (0.95 in)	24 mm (0.95 in)	34 mm (1.3 in)
Weigh-Table Roller Diameter	16 mm (0.6 in)	24 mm (0.95 in)	34 mm (1.3 in)
Checkweigher / Metal Detector Combination Unit			
Maximum Metal Detector Aperture Size	N/A	250 mm (10 in) x 250 mm (10 in)	325 mm (13 in) x 250 mm (10 in)
Combo In-Feed Belt Width	N/A	100 mm (4 in) 150 mm (6 in) 200 mm (8 in)	275 mm (11 in)
Combo integral in-feed lengths:	N/A	650 mm (26 in) ³ 750 mm (30 in)	750 mm (30 in)

¹Actual accuracy for any application is dependant on package length, weight, speed and stability.

²Freestanding outfeed required for pusher rejects and/or to ensure the total cantilevered length of conveyors is no greater than 1,250 mm with combo configuration or 1,350 mm without combo.

³750 mm (30 in) combo in-feed required for apertures larger than 200 mm (8 in).

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