

Application

The 2424 pellet receiver provides a high capacity sequencing system designed to handle pellets as well as regrind and granular materials. Recommended uses are for silo-to-daybin transfer, in-plant transfer or railcar unloading applications up to 6,800 kg/hr [15,000 lb/h].

The 2424 receiver is available in two versions for either general keep full conveying or loss-in-weight (LIW) feeder refill applications, with a selection of various discharge valve types (gravity or butterfly), depending on the application and material to be fed.

Receivers for keep-full applications are fitted with a gravity gate discharge valve. When material level in the storage hopper drops below the level indicator, the receiver is signaled to begin drawing material. The fill sequence continues until the material level in the hopper is above the level indicator.

Receivers designed for loss-in-weight feeder refill applications are fitted with a level sensor and require a butterfly valve. The receiver draws material until it is full and waits for a signal from the feeder below to open the discharge valve and dispense the material. This cycle is then repeated.

Design

The 2424 receiver is available in either carbon steel (painted) or stainless steel construction. Each receiver has a stainless steel check valve to allow multiple receivers to draw material from a common conveying line. The 2424 pellet receiver features a perforated screen filter section.

Central system units for the 2424 receivers utilize a common vacuum blower package, and are primarily used on multiple-destination applications where larger conveying rates or long distances are required.

Mechanical Features

- Rugged modular design
- Quick-connect clamps for easy cleaning and filter maintenance
- Full support discharge flange for mounting

Controls

The receiver is available with controls suitable for use with either a solid state microprocessor controller (MPC) or a programmable logic controller (PLC). Both control systems utilize 24 VDC low voltage and are available with installation kits making installation easy and more economical. The receiver controls include color coded quick connectors and provide communication to the central controller.

For single receiver applications, we offer the LSR Controller. In loss-in-weight feeder refill applications, the LSR Controller seamlessly interfaces with Coperion K-Tron Feeder controls.

Conveying Rates

Based on a distance of 15 m [50 ft] and bulk density of 0.5 kg/dm³ [31 lb/ft³]. Rates vary with material characteristics, conveying distance and plant layout.

Pellet Receiver

- Up to 6,800 kg/h [15,000 lb/h]



*2424 pellet receiver
in painted carbon steel
with gravity discharge gate*

Technical Data

Standard Mechanical Specifications

- Available in carbon steel with painted primer interior and painted RAL 7035 gray exterior or 1.4301 (AISI 304) stainless steel construction
- Holding capacity: keep full version 134 dm³ [4.74 ft³]
LIW refill version 106 dm³ [3.74 ft³]
- 559 mm [22 in] diameter housing
- Up to 102 mm [4 in] tangential inlet with stainless steel check valve assembly
- Stainless steel band clamps
- Integral fill valve with backside vent, dual acting air cylinder with solenoid control 24 VDC
- Discharge gate valve
 - Keep full version: One-piece stainless steel 254 mm [10 in] gravity gate discharge with white Neoprene seal
 - LIW feeder refill version: Butterfly gate valve; with single coil solenoid (energize to open valve)

Standard Filtration Specifications

- Perforated filter element for pellets

Standard Electrical Specifications

- Signal voltage 24 VDC

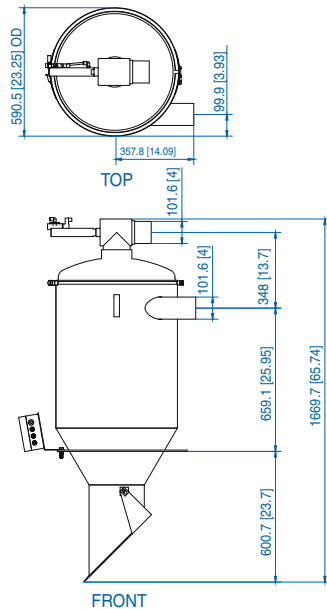
Weights

- Keep full version 65 kg [144 lb]
LIW refill version 114 kg [250]

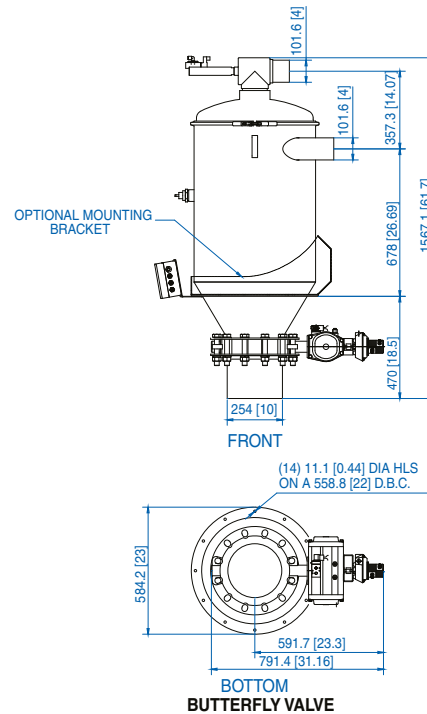
Operating Temperature

- -10 to 50°C [14 to 122°F]

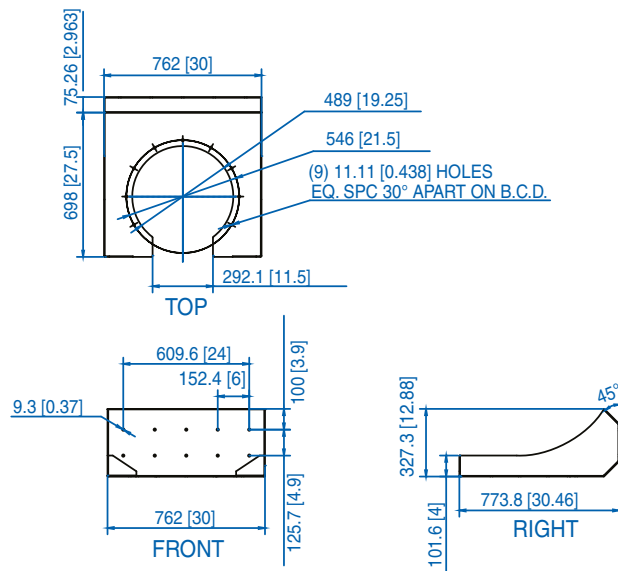
Dimensions of 2424 Pellet Receiver mm [in]
for general keep full conveying



for loss-in-weight feeder refill



Dimensions Optional Mounting Bracket mm [in]



Options

Mechanical

- Mounting bracket for LIW feeder refill versions
- Flange for discharge gate valve (volume capacity 130 dm³ [4.6 ft³]) other volumes available upon request
- Weatherhood for outdoor use
- Custom material combinations
- Reduced inlet tube size to meet smaller capacity applications
- Vibrator as discharge aid
- Aeration pads as discharge aid
- Enclosure for solenoids

Electrical

- Mounting bracket for terminal box or controller
- Level probes (capacitive or tuning fork type)
- Limit switches on butterfly or slide gate valve
- LSR controller
- Central Microprocessor or PLC control
- Stainless steel options on solenoids, gauges as required
- Solenoid boxes supplied loose in mild or stainless steel finish
- Terminal box mounted in mild or stainless steel finish
- CSA or UL certified solenoids

Caution: Measurements are for general reference only. Please consult dimensional drawing for exact measurements.