

Application

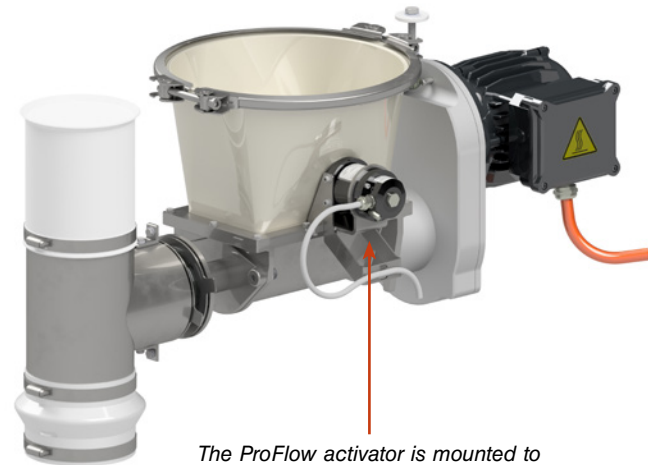
The ProRate PLUS ProFlow™ bulk solid activator aids material flow with medium free flowing materials such as powders, eliminating the need for mechanical vertical agitation. The ProFlow activator can be used with all ProRate PLUS loss-in-weight feeders.

Design

Consistent screw fill is important in screw feeders, in order to achieve optimal feeder performance and significantly improve accuracy. The ProFlow bulk solid activator consists of an electromagnetic vibratory drive mounted to the flange of the polyurethane transition between feed hopper and screw trough. It exerts a constant vibration on the transition and hopper to keep the bulk material moving and prevent ratholes or bridging while maintaining consistent screw fill. The device is self-calibrating, automatically tuning to the correct resonant frequency of the feeder. This also results in extremely low energy consumption.

The ProFlow activator is maintenance-free. It connects directly to the PCM feeder control module and requires no additional control or power supply.

In addition, a special screw with overflight is available for the ProRate PLUS-S model. The overflight acts as a screw filler even at low speed and helps to ensure that the bulk material is always in motion in the area of the screw intake, which ensures optimal screw fill.



The ProFlow activator is mounted to the flange of the PU transition hopper.

Technical Specifications

Materials of construction:	Carbon steel, stainless steel, neodymium magnet
Operating temperature range:	-20...50°C [-4...122°F]
Suitability for bulk materials:	Medium free flowing materials such as powders, consult factory for list of suitable materials
Impact on the bulk material:	The activator is outside the product contact area.
Space requirement above the feeder:	None
Influence on feeding accuracy:	Improved material flow and screw fill result in higher accuracy
Maintenance:	Maintenance free
Unit weight:	1.3 kg [2.87 lb]
Power supply (via PCM):	24 V, max. 3.6 W
Enclosure rating:	IP65
Hazardous location rating:	ATEX 3D