

PowerFlex19

Mobile/ Flexible Conveyors

Data Sheet:

Flexible Driven Conveyors – PowerFlex

Applicable Models: PF19



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Product Description

PowerFlex is designed to be a robust, flexible and reliable conveyor solution for almost any operation requirement. Using its integrated handles and intuitive design, the conveyor can be contorted and shaped to fit into infinite environments. Its braked castors, 240v power supply and renowned latching connections, make it an incredibly user-friendly piece of equipment.

PowerFlex is used throughout almost every industry sector. Ideally suited for truck loading/ unloading, distribution centres, packaging, mobile assembly lines, shipping and receiving.

PowerFlex's diversity makes it an industry powerhouse and a must-have in today's modern warehouse environment. Simply connect multiple units together to create whatever length is required.



Technical Data

Structural Data

Expanded Unit Length	0.6m to 20m variable – Others available on request
Effective Width	450mm, 750mm, 900mm nominal – Others available on request
Roller Pitch	127mm, 102mm, 76mm, 55mm nominal – Others available on request
Module Height (TOR)	800mm to 1100mm adjustable height – Others available on request
Incline/ Decline	Max. 2° - Greater can be achieved on request
Side Plates	50mm Ribbed Aluminium Construction
Legs	38mm Fabricated steel
Castors/ Feet	200mm Brakes Castors – Foot plates available on request
Physical Connection	Roller Stop Connector/ Anchor Frame – Alternatives available on request
Compaction Ratio	0.41



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Roller/ Drive Data

Roller	Ø0mm Z/P steel tube, Precision bearings, ø12mm Z/P axles with M8 female thread
Drives	Multiple DC motors, 90W each, 20Vdc-120Vdc
Drive Method	5mm Poly-cords (85° Shore hardness) – Alternatives available on request
Torque Transmission	Roller to roller
Variable Speed	5 to 36 m/min – Controlled from the onboard speed controller
Forward/ Reverse	Both are available – Controlled from the onboard speed controller
Load Capacity	150kg / linear meter
Flow Control	Various options available on request – see Performance Options

Electrical Data

Power Supply	230v, Single Phase, 50Hz, 16A (per Master Module)
Conveyor Connections	24Vdc – 16 Pin Harting Connection
Isolation	Localised onboard LOTO Isolator (per Master Module)
Start/ Stop Control	Push button stations at both ends
Emergency Stops	Options available on request
System Integration	Options available on request

Efficiency Data

Noise	0 to 70dB(a)
Motor Rating	0.09kW
Max. Amperage	1.0A per motor - nominal
Sleep Modes	Options available on request
Efficiency Flow Control	Various options available on request – see Performance Options
Conveyor Speed	Potentiometer adjustable to precisely suit the operation.

Product Principles

The PowerFlex design architecture is seen throughout our other product lines. Shared genes mean almost all our catalogue equipment is connectable and completely interchangeable. The drive is to provide simple, reliable and user-friendly machines that delivers consistent results.

PowerFlex's unique structure and engineering gives the units their renowned 'Self Tracking' functionality. Transported goods flow down the length of conveyor and seamlessly follow the path it takes. This helps to reduce excess equipment with no need for curved or corner conveyor modules – the PowerFlex has it covered.

Needing only a 16A power feed, the PowerFlex's onboard control box and speed controller support the whole conveyor. If a situation calls for a PowerFlex that is longer than standard, 2 units can be connected and the communications pass between them – they will function as one. Adding more PowerFlexes or varying styles of BestConnect Modules, makes it possible to create larger, more complex and variable systems.

For more information and a visual demonstration, please see the below video link.

<https://youtu.be/5286Ri5mNL0>

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Performance Options



Side Guides

Preventing the transported goods from running off the edges of the modules. Various options and other product flow assist devices are available on request.



Impact Loading Table

A fabricated steel side frame is braced throughout to create an Impact Loading section to handle the increased abuse and wear normally associated with the loading point of a conveyor. Adding this item will significantly prolong the life of this area of a PowerFlex conveyor.

Optical Electronic Flow Control

Incorporates photo electronics to provide automated flow control giving the user improved ergonomics, reduced labour cost, and improved service life. With options of using diffuse scan, retro-reflective or through-beam sensors all product shapes and materials can be detected and controlled easily.

- **Zero Pressure Accumulation** – Provides a zoned flow control only allowing each package to proceed when the downstream zone is empty. The addition of 'time out' control gives excellent power saving only driving the conveyor as required.
- **Electronic Package Stop** – The conveyor stops when sensors at the end detect a package. This stops delicate packages from being driven into a fixed end and provides power saving control.
- **Indexing** – The leading edge of a package is detected and starts the conveyor which runs until the trailing edge is detected plus a pre-set time delay. The conveyor can be utilised as an end of line storage buffer.



Axle Centres

In addition to the standard axle centre of 127mm options of 102mm and 76mm are available on request to handle smaller packages. Often used in the post/ packing sector, reduced axle centres (roller pitch) can allow PowerFlex to function almost identically as a standard rigid conveyor, but with its exceptional flexible functionality.



Roller Stop Connection

Provides a simple mechanical connection between conveyor sections to allow longer lines to be built. This also acts as a drop-down stop at the end of lines. The Roller Stop Connector allows the integration of other catalogue products too. SVL's, BestConnect Modules and even Telescopic, can all be connected to a PowerFlex to create the perfect operation.