

Family Overview

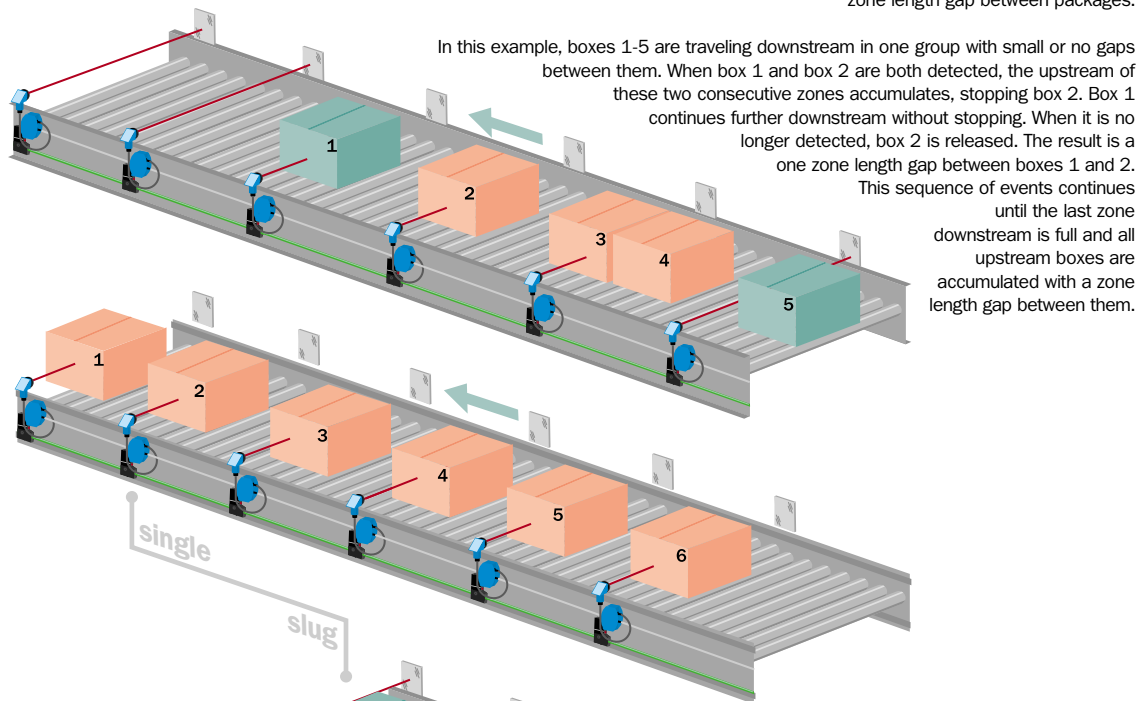
ZoneControl™

The complete ZPA solution.

SICK

Single accumulation.

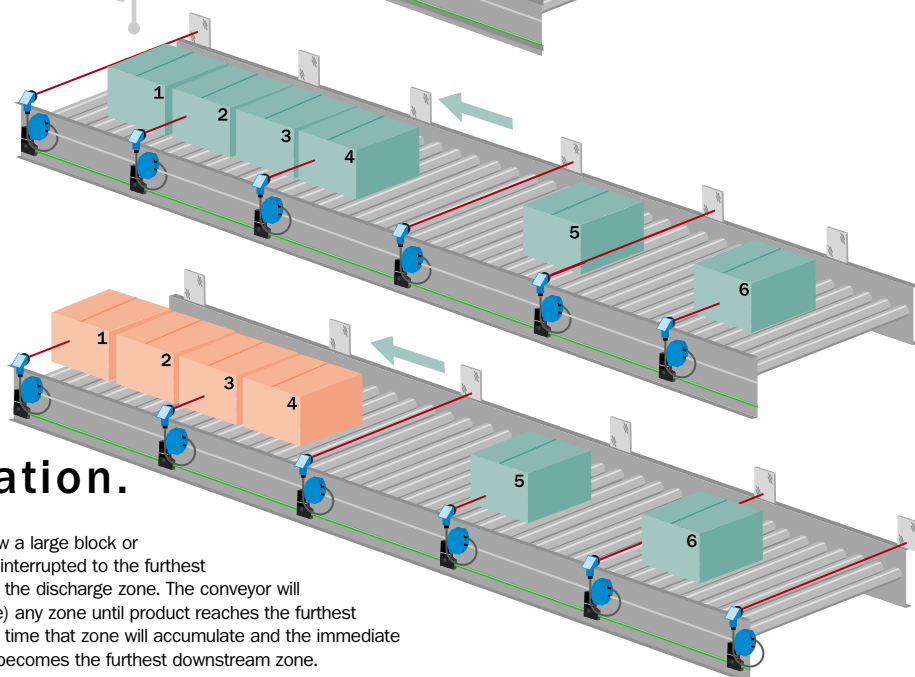
Single accumulation **will not** allow a large block or slug of product to travel downstream without inflicting a gap between packages. Single accumulation will accumulate (deactivate) the upstream zone of any two consecutive zones that are detecting product, or in other words, any zone will accumulate when it is detecting product AND the downstream zone is detecting product. The result is a zone length gap between packages.



Slug accumulation.

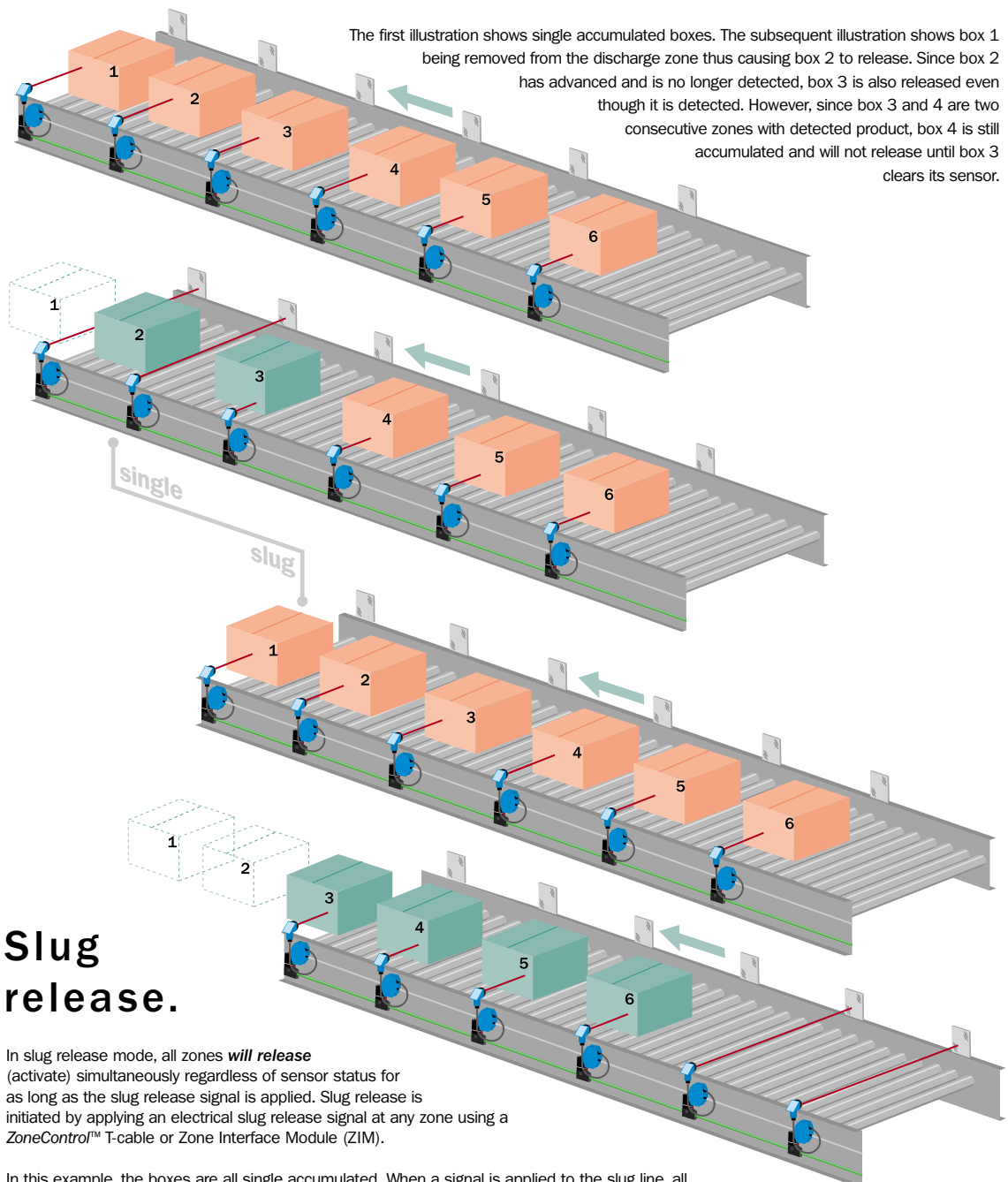
Slug accumulation **will** allow a large block or slug of product to travel uninterrupted to the furthest downstream zone, typically the discharge zone. The conveyor will not accumulate (deactivate) any zone until product reaches the furthest downstream zone at which time that zone will accumulate and the immediate upstream zone effectively becomes the furthest downstream zone.

In the first illustration, boxes 1-4 are traveling downstream in one group with small or no gaps between them. Even though two consecutive zones are detecting boxes 2 and 4, the conveyor does not accumulate (deactivate) because box 1 is not yet detected by the furthest downstream zone, in this case the discharge zone. In the second illustration, box 1 is detected by the furthest downstream zone; that zone accumulates and the immediate upstream zone becomes the furthest downstream zone, which in this case, accumulates instantly causing the third zone from the left to become the furthest downstream zone. Box 5 is detected, but not by the furthest downstream zone, so it continues to move downstream.



Single release.

In single release mode, a given zone **will not release** (activate) until the sensing device in the downstream zone has been cleared of packages. Single release can be initiated by applying an electrical single release signal at the discharge zone or physically removing packages in the discharge zone.



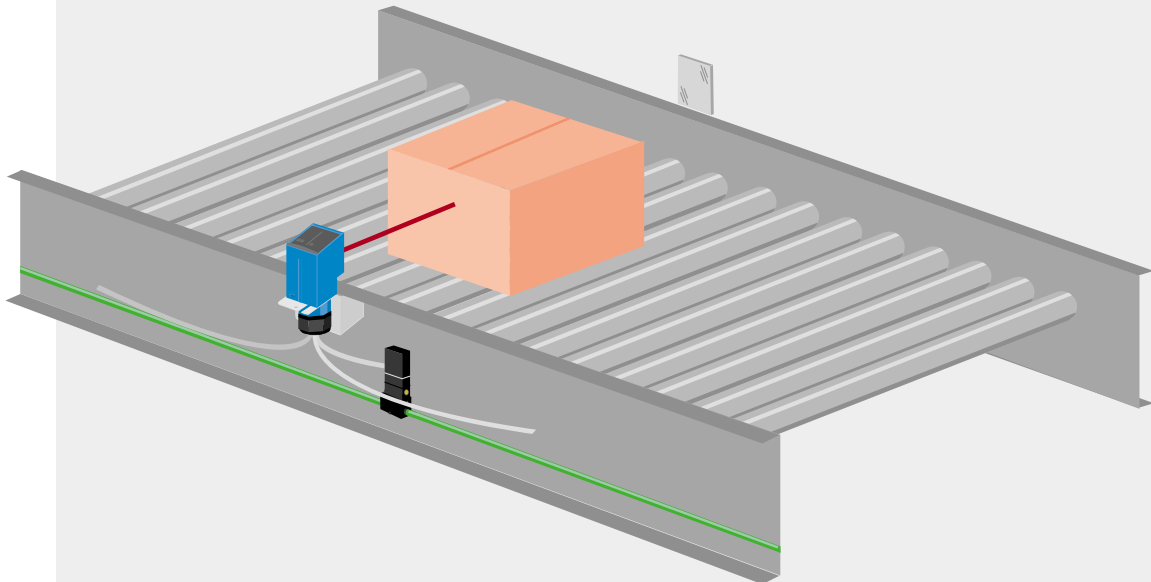
Slug release.

In slug release mode, all zones **will release** (activate) simultaneously regardless of sensor status for as long as the slug release signal is applied. Slug release is initiated by applying an electrical slug release signal at any zone using a *ZoneControl™* T-cable or Zone Interface Module (ZIM).

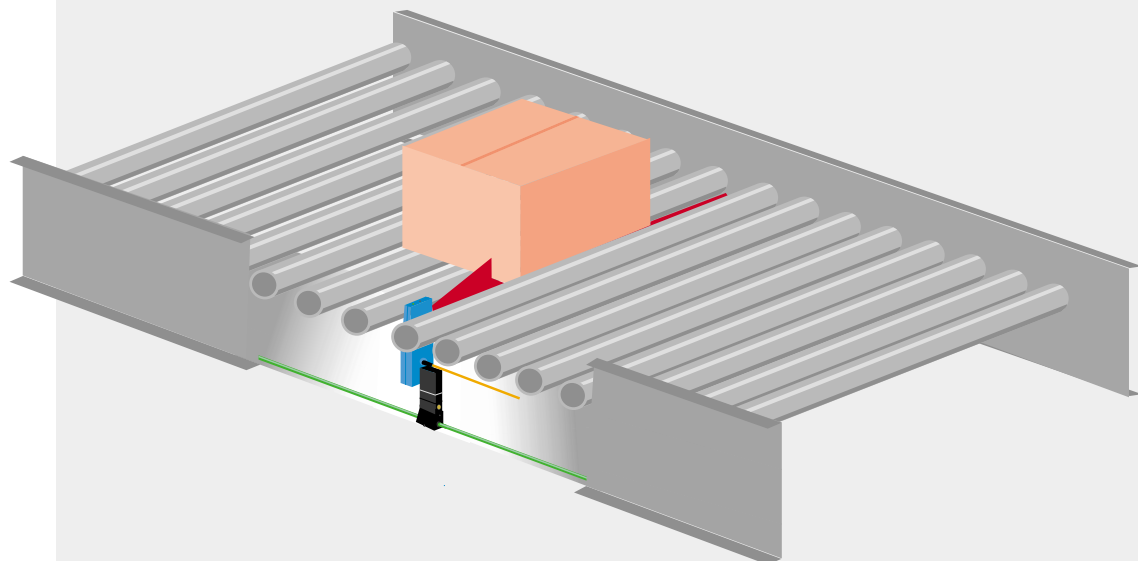
In this example, the boxes are all single accumulated. When a signal is applied to the slug line, all zones will release simultaneously and travel downstream uninhibited despite detection.

Over-/Under-the-Conveyor

Over-the-Conveyor



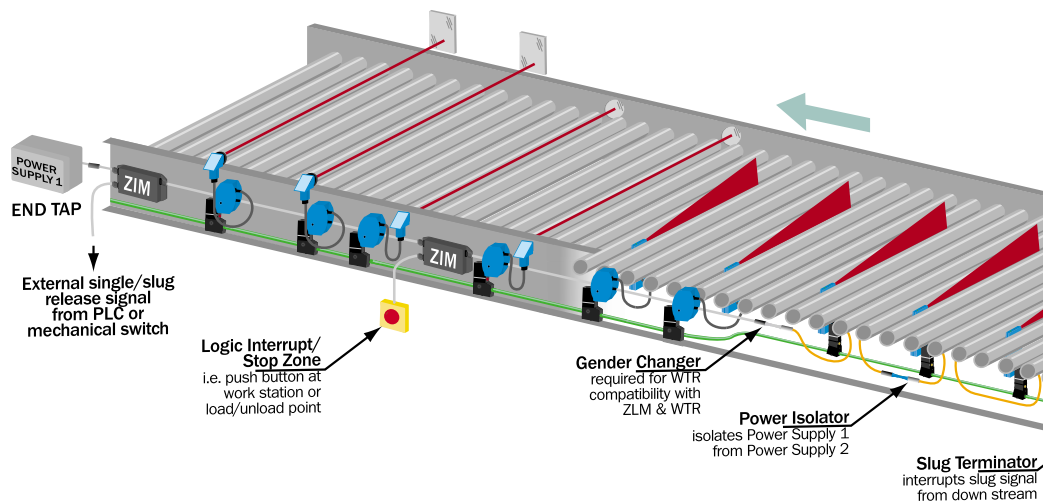
Under-the-Conveyor







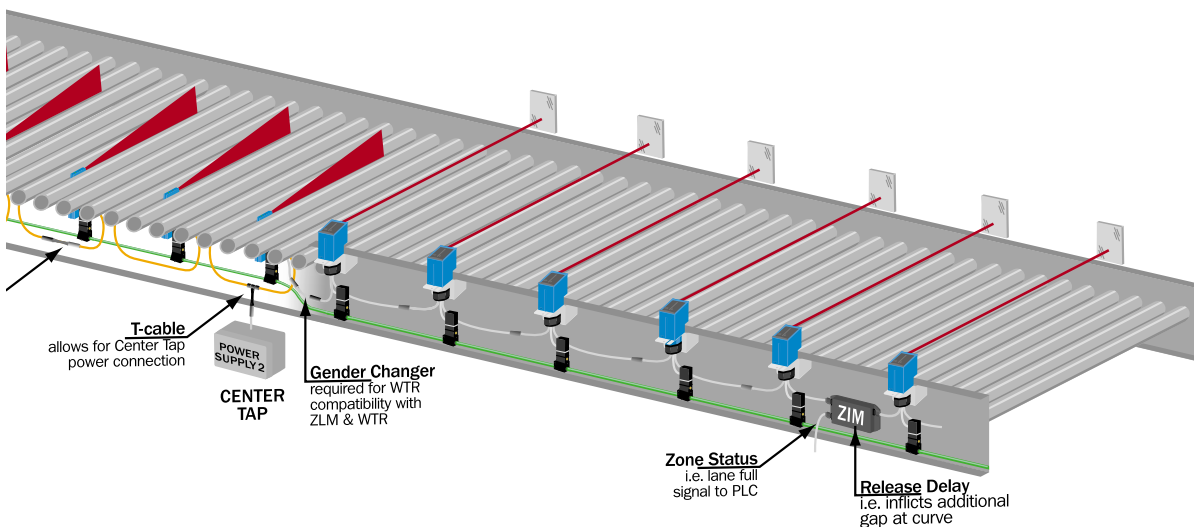
General Specifications



	ZLM 1 Pneumatic Output	WTR 1 Pneumatic Output	WTR 2 Electric Output
Mounting	Side-Frame-Mount	Under-the-Conveyor	Under-the-Conveyor
Supply voltage	DC	DC	DC
Integrated optical sensor	No	Yes	Yes
Sensing mode	-	Proximity with Adjustable Background Suppression	Proximity with Adjustable Background Suppression
Sensing range	-	3.9...35.4 in (100...900 mm)	3.9...35.4 in (100...900 mm)
Interconnect type	Industrial grade M12	Industrial grade M12	Industrial grade M12
Switching frequency/response time	200 Hz/2.5 ms	250 Hz/2.0 ms	250 Hz/2.0 ms
Integrated logic	Yes	Yes	Yes
Accumulation modes	Single and slug	Single and slug	Single and slug
Release modes	Single and slug	Single and slug	Single and slug
Zone length	3 ft and 6 ft	3 ft and 6 ft	3 ft and 6 ft
Modules per 100 W power source	60	60	60
Integrated valve	Yes	Yes	No
Valve airflow	40 NI/min; 1.4SCFM	40 NI/min; 1.4SCFM	-
Air line connection	3/8" supply and 1/4" output Quick Connect	3/8" supply and 1/4" output Quick Connect	-
Operating pressure	0...4.5 bar	0...4.5 bar	-
Cable output to motor control or valve	No	No	Yes
Output connection type	-	-	Flying leads
Enclosure rating	IP 40, NEMA 2	IP 54, NEMA 3	IP 54, NEMA 3

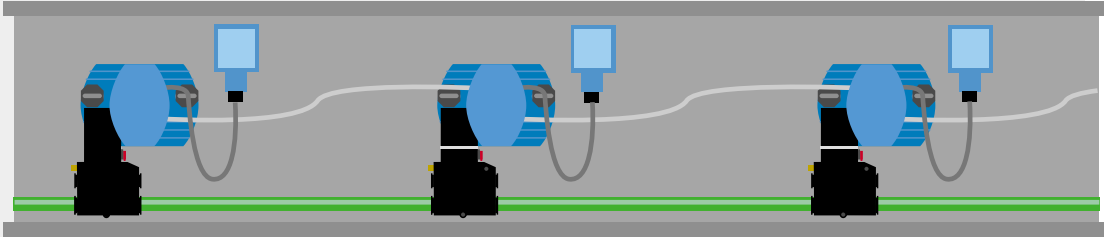


 WLR 2100-D Electric Output	 WLR 2100-M Electric Output	 WTR 2 Sensor	 ELF Sensor
Over-the-Conveyor	Over-the-Conveyor	Under-the-Conveyor	Side-Frame-Mount Over-the-Conveyor
DC	AC	DC	DC
Yes	Yes	Yes	Yes
Retro reflective	Retro reflective	Proximity with Adjustable Background Suppression	Retro-reflective
0...29.5 ft (0...9 m)	0...29.5 ft (0...9 m)	3.9...35.4 in (100...900 mm)	0.2...13.1 ft (0.07...4.0 m)
Industrial grade M12	Industrial grade M12	Industrial grade M12	Industrial grade M12 and M8
500 Hz/1.0 ms	250 Hz/2.0 ms	500 Hz/1.0 ms	200 Hz/2.5 ms
Yes	Yes	No	No
Single and slug	Adjustable	-	-
Single and slug	Single, slug and adjustable	-	-
3 ft and 6 ft	3 ft and 6 ft	-	-
60	40	-	-
No	No	No	No
-	-	-	-
-	-	-	-
-	-	-	-
Yes	Yes	No	No
9.4 mm DIN or 2-wire spade	9.4 mm DIN	-	-
IP 67, NEMA 6	IP 67, NEMA 6	IP 54, NEMA 3	IP 54, NEMA 3

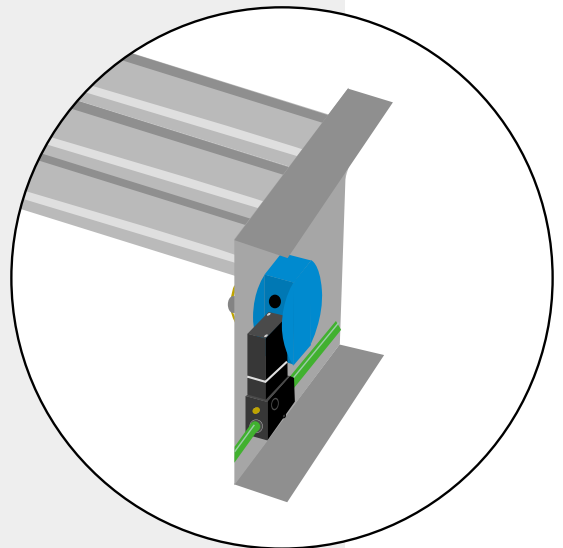
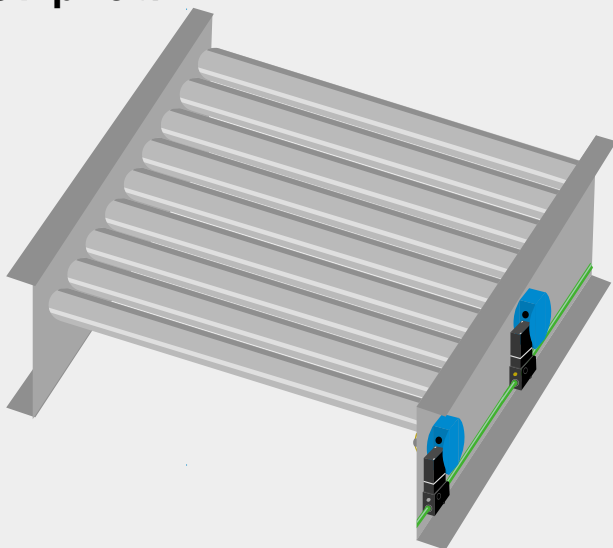


Side-Frame-Mount

Bolt-on



Clip-on



For more information on *ZoneControl*™...

Copy, fill in and fax back.

Company	<input type="text"/>
Name	<input type="text"/>
Position/ Department	<input type="text"/>
Address	<input type="text"/>
City/State/ Zip code	<input type="text"/>
Phone/Fax	<input type="text"/>
Industry/Field of application	<input type="text"/>

Yes, I would like to know more about:

Please have a sales executive call me to discuss my application needs.

More product information available for download at www.sickusa.com



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