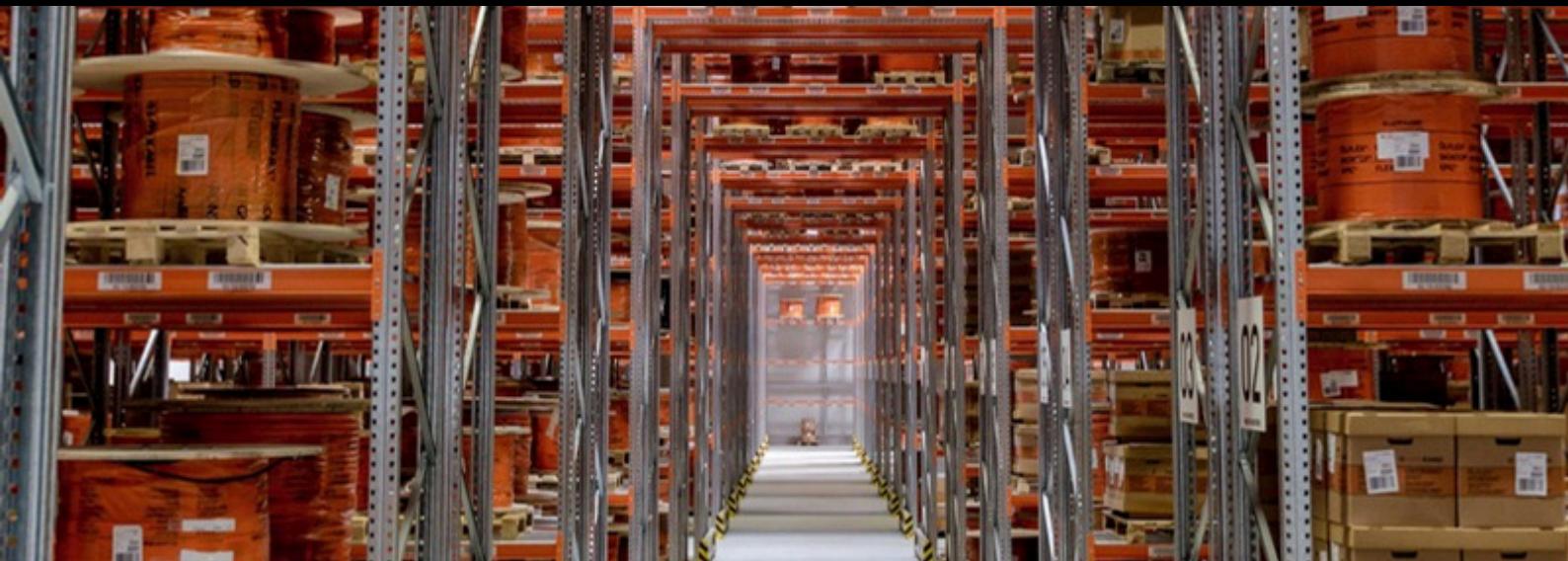


# The Engineering Spec Pack

8 application packs to help you select and justify the right cables, glands and connectors for intralogistics.

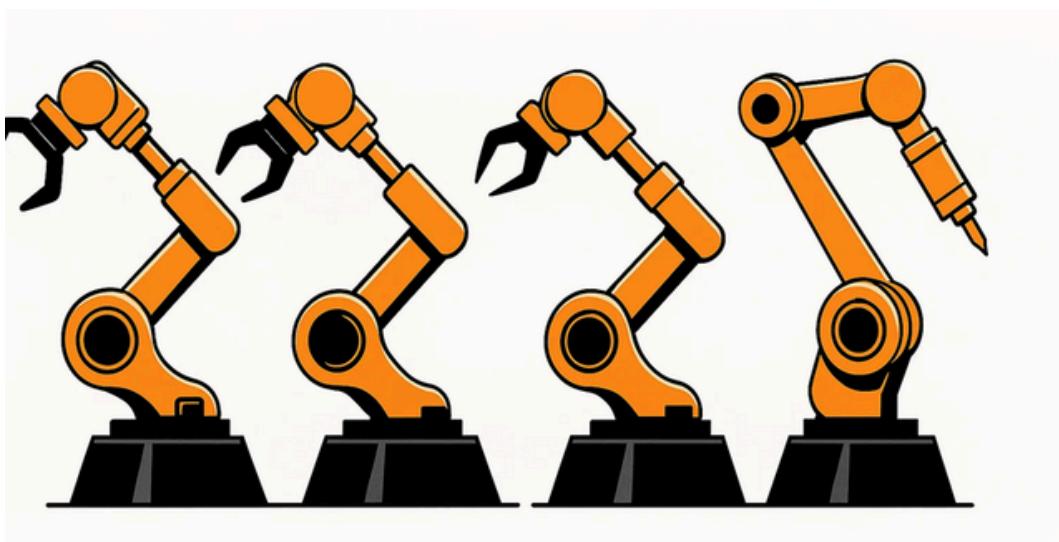
## **Disclaimer**

The products listed in this Engineering Spec Pack are provided as recommendations only and do not represent the full range of products and solutions available. For further details or specific requirements, please reach out to us directly.



# How to Use These Packs

This is our recommended approach to choose the right products (cables, glands, connectors) and stopping downtime before it starts. Each card in this pack focuses on one critical intralogistics application on your shop floor or in your warehouse.



## How they work:

- Find Your Station: Refer to the pack that matches the application you're working on (e.g., "ASRS Shuttle").
- Check the Specs: Instantly see the dominant stresses, the recommended solution, and the key features (e.g., Temp resistance  $-60\text{ }^{\circ}\text{C}$  to  $+180\text{ }^{\circ}\text{C}$ ) to back up your choice.

## Take Action:

- Use the [60-second checklist](#) to diagnose common problems.

# PACK 1: AGV/AMR Spec Sheet

	Details
<b>Main Challenges</b>	Space-constrained routing + EMI from motors (combined challenge)
<b>Impact on Operation</b>	Tight routing increases bending stress; proximity to drives causes EMI → signal loss
<b>Top Seller</b>	<ul style="list-style-type: none"><li>UNITRONIC® FD CP plus A</li><li>ÖLFLEX® SERVO FD 781 CY (power cable)</li><li>SKINTOP® MS-SC / MS-M BRUSH (EMC gland)</li></ul>
<b>Key Features</b>	<ul style="list-style-type: none"><li>≥85% braid shield for high EMI protection</li><li>Flexible design for continuous motion and tight routing</li><li>Compact outer diameter for space-limited installs</li><li>EMC-screened servo cable to block drive noise</li><li>High flex life for dynamic AGV movement</li><li>Slim profile for efficient routing</li><li>360° EMC contact for full shielding continuity</li><li>Low-resistance grounding to suppress EMI</li><li>Compact gland body for tight enclosures</li></ul>
<b>Why It Matters</b>	<ul style="list-style-type: none"><li>EMI exposure</li><li>Tight bends in compact routing; EMI from servo drives</li><li>Space-constrained cable trays</li><li>EMI leakage at termination points</li><li>Limited panel space</li></ul>

Scan the code for datasheets, sample requests, and to check local stock.

[Get Resources](#)



# PACK 2: ASRS Shuttle Spec Sheet

	Details
<b>Main Challenges</b>	Routing in confined space; inadequate strain relief; tight tray bends
<b>Impact on Operation</b>	Intermittent signal loss causes inaccurate shuttle positioning during movement
<b>Top Seller</b>	<ul style="list-style-type: none"><li>• LIFY</li><li>• SILVYN® RILL PA6</li><li>• UNITRONIC® FD CY</li></ul>
<b>Key Features</b>	<ul style="list-style-type: none"><li>• LIFY: very soft PVC insulation – flexible at low temperatures</li><li>• SILVYN® RILL PA6: protective corrugated conduit for tight routing</li><li>• UNITRONIC® FD CY: screened data cable to suppress EMI on control signals</li></ul>
<b>Why It Matters</b>	<ul style="list-style-type: none"><li>• Compact design with power and precision requires flexible, low-temp LIFY to ease tight bends;</li><li>• SILVYN® RILL PA6 adds protection and tidy routing;</li><li>• UNITRONIC® FD CY reduces induced noise to keep shuttle positioning accurate.</li></ul>

Scan the code for datasheets, sample requests, and to check local stock.

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# PACK 3: Automatic Small Parts Storage Spec Sheet

	Details
<b>Main Challenges</b>	Cable breakage in moving application
<b>Impact on Operation</b>	System downtime due to connectivity loss or jacket cracks
<b>Top Seller</b>	<ul style="list-style-type: none"><li>UNITRONIC® FD CP (TP) plus A</li><li>ETHERLINE® TORSION Cat. 5</li></ul>
<b>Key Features</b>	<ul style="list-style-type: none"><li>UNITRONIC® FD CP (TP) plus A: highly shielded data cable designed for EMI-sensitive applications</li><li>ETHERLINE® TORSION Cat. 5: industrial Ethernet cable optimised for high-speed data under motion/EMC stress</li></ul>
<b>Why It Matters</b>	<ul style="list-style-type: none"><li>UNITRONIC® FD CP (TP) plus A: highly flexible twisted-pair shielded cables with braided tinned copper (coverage 85% nominal)</li><li>ETHERLINE® TORSION Cat. 5: Cat.5 for torsion-stress applications (<math>\pm 180^\circ</math>); 2 pairs; PUR jacket with AWM approval; design 2x2xAWG22/19; for PROFINET</li></ul>

Scan the code for datasheets, sample requests, and to check local stock

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# PACK 4: Crane/Hoist Spec Sheet

	Details
<b>Main Challenges</b>	Sunlight & rain in semi-outdoor gantry; long travel
<b>Impact on Operation</b>	Weather-induced wear, cable fatigue and resulting operational delays
<b>Top Seller</b>	<ul style="list-style-type: none"><li>ÖLFLEX® CRANE F</li><li>NSHTÖU</li><li>SKINTOP® MS-M</li></ul>
<b>Key Features</b>	<ul style="list-style-type: none"><li>Bending-cycle tested for continuous motion</li><li>UV / oil / chemical-resistant construction (IEC/VDE)</li><li>IP69 sealing with SKINTOP® MS-M for robust gland integrity</li></ul>
<b>Why It Matters</b>	<ul style="list-style-type: none"><li>Flat CRANE F cables deliver reliable power/control over long travel in tough weather;</li><li>NSHTÖU handles UV and mechanical stress;</li><li>SKINTOP® MS-M maintains a tight seal to keep dust and moisture out of control panels.</li></ul>

Scan the code for datasheets, sample requests, and to check local stock

[Get Resources](#)



# PACK 5: Conveyor Systems Spec Sheet

	Details
<b>Main Challenges</b>	Cable snags near rollers
<b>Impact on Operation</b>	Cable jacket damage, short circuits, downtime
<b>Top Seller</b>	ÖLFLEX® HEAT 180 EWKF (power/control cable)
<b>Key Features</b>	<ul style="list-style-type: none"><li>• Silicone rubber sheath – highly flexible, tear/cut-resistant</li><li>• Temp resistance -60 °C to +180 °C</li><li>• Flame-retardant &amp; halogen-free</li></ul>
<b>Why It Matters</b>	Flexible silicone sheath resists tearing and maintains integrity when routed near moving rollers

Scan the code for datasheets, sample requests, and to check local stock

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# PACK 6: Robotics Spec Sheet

	Details
<b>Main Challenges</b>	High torsion & multi-axis movement (robot arms, joints)
<b>Impact on Operation</b>	Torsional and bending stress at joints; cable tugging at end-effector; robot downtime
<b>Top Seller</b>	<ul style="list-style-type: none"><li>ÖLFLEX® ROBOT F1</li><li>ÖLFLEX® ROBOT 900 DP</li></ul>
<b>Key Features</b>	<ul style="list-style-type: none"><li>Torsion rating up to <math>\pm 360^\circ/m</math>, designed for up to 10 million cycles</li></ul>
<b>Why It Matters</b>	Torsion-rated connectivity prevents conductor breakage and shield failures at robot joints, keeping vision and sensor signals clean in high-vibration motion; PUR sheath resists abrasion and oil.

Scan the code for datasheets, sample requests, and to check local stock

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# PACK 7: Sorter Spec Sheet

	<b>Details</b>
<b>Main Challenges</b>	Complex integration (sensors, RFID, cameras, drives)
<b>Impact on Operation</b>	Cable clutter, long installation time, difficult troubleshooting
<b>Top Seller</b>	<ul style="list-style-type: none"><li>• ETHERLINE® Cat.5 FRNC HYBRID</li><li>• ETHERLINE® ACCESS network switches</li><li>• Harnessing solutions</li></ul>
<b>Key Features</b>	<ul style="list-style-type: none"><li>• ETHERLINE® Cat.5 FRNC HYBRID: robust, high-quality, double-screened cable for Ethernet/power with high transmission reliability in EMI areas</li><li>• ETHERLINE® ACCESS: managed/unmanaged ranges; PROFINET Conformance Class B; compact design with high port density</li><li>• Harnessing solutions: faster plug-and-play commissioning; reduces field wiring and human error; custom sets; easy to replicate</li></ul>
<b>Why It Matters</b>	Reliable networking cuts mis-reads and sorting errors, shortens commissioning, and simplifies maintenance on complex sorter lines.

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# PACK 8: Stacker Crane Spec Sheet

	<b>Details</b>
<b>Main Challenges</b>	Sharp bends or poor cables installation
<b>Impact on Operation</b>	Cable strain, breakage under long vertical motion
<b>Top Seller</b>	<ul style="list-style-type: none"><li>ÖLFLEX® ROBUST FD C</li><li>SILVYN® cable management system</li></ul>
<b>Key Features</b>	<ul style="list-style-type: none"><li>ÖLFLEX® ROBUST FD C - Screened, halogenfree power and control cable for power chain application in harsh environmental conditions with Extended Line Performance.</li><li>SILVYN® cable management system: Protect cables in motion with safe, uninterrupted and reliable for connectivity, with trusted quality and robustness.</li></ul>
<b>Why It Matters</b>	ÖLFLEX® ROBUST FD C: Offers versatile indoor/outdoor performance with high resistance to weather, UV, and temperature extremes. SILVYN® System: Enables smooth, high-speed movement in any orientation, built for harsh environments and demanding duty cycles.

Scan the code for datasheets, sample requests, and to check local stock

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JJ-LAPP

# German Engineering, ASEAN Expertise.

We're JJ-LAPP, a partnership that brings world-class LAPP Group cable & connectivity products to Southeast Asia. With manufacturing in Indonesia and six regional stock hubs, we're not just a supplier—we're your local partner.



## We Deliver What You Need, Fast.

- **Global Standard** - Our products are designed and manufactured according to global standards to ensure quality and reliability.
- **Local expertise and support** – Our Field Service Representatives (FSRs) understand your environment.
- **Full Solutions** – From a single cable to fully assembled harnessing solutions, we simplify complexity.

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**Limited Offer**

# On-Site Engineering Consultation

Take the next step.

Book a complimentary on-site consultation during our pilot phase and get tailored advice for your own line.

This is more than just a health check. One of our connectivity specialists will partner with your team on-site to ...

- Provide a second set of expert eyes on your most critical applications.
- Identify subtle risks related to strain, torsion, and EMC interference.
- Share best practices for cable routing and management in high-cycle environments.

You get a confidential report and actionable advice, at no cost.

[Talk to a Specialist](#)





**ÖLFLEX®**  
Power and control cables



**UNITRONIC®**  
Data communication systems



**ETHERLINE®**  
Data communication systems  
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**HITRONIC®**  
Optical transmission systems



**EPIC®**  
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**SKINTOP®**  
Cable glands



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Protective cable conduit systems  
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**FLEXIMARK®**  
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