

The Machine Maker Engineering Spec Pack

8 category packs to help you select and justify the right connectivity components for industrial machinery manufacturing.

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 your technical field guide to selecting the right components for industrial machinery. Instead of browsing thousands of part numbers, use this pack to match your specific application requirements (like Torsion, Heat, or Chemical resistance) with the proven German-engineered solution



Find Your Category

- Refer to the pack that matches the specific function you are designing for (e.g., 'Power & Control Cables' or 'Industrial Connectors')."
- Instantly validate the dominant environmental stresses, the recommended product family, and the key technical features to back up your engineering choice.
- Use the Recommended Families list to specify the exact series on your BOM and verify Approvals for regional compliance."

Take Action:

- Use the Machine Maker Selection Guide.

PACK 1: Power & Control Cables

	Details
Main Challenges	Cable failure in dynamic chains; insulation breakdown from heat/oil.
Impact on Operation	Machine downtime due to cable snapping; signal interference causing servo faults.
Recommended Families:	<ul style="list-style-type: none">• General: ÖLFLEX® CLASSIC 100 / 110• Power Chain: ÖLFLEX® CHAIN 809 / FD 810• Robotics: ÖLFLEX® ROBOT 900 / F1• Heat: ÖLFLEX® HEAT 125 / 180
Approvals	<ul style="list-style-type: none">• CE, VDE, UL/CSA, HAR.
Key Features	<ul style="list-style-type: none">• Number-coded cores; Tinned-Copper Braid (CY) screening; Class 6 flexible conductors.
Why It Matters	<ul style="list-style-type: none">• Ensures power delivery survives millions of cycles in harsh factory environments.

Log in to our eShop to explore product details and check stock availability.

[Visit the eShop](#)

PACK 2: Data & BUS Cables

	Details
Main Challenges	Signal corruption from EMI (VFDs); protocol incompatibility; sensor cable degradation.
Impact on Operation	"Ghost" errors, data packet loss, and loss of sensor feedback.
Recommended Families:	<ul style="list-style-type: none">• Data: UNITRONIC® LiYY / LiYCY• BUS: UNITRONIC® BUS PB (Profibus) / ETHERLINE® PN (Profinet)• Sensor: UNITRONIC® SENSOR
Approvals	UL/CSA, Profibus, DeviceNet, Foundation Fieldbus, CC-Link, Interbus, AS-Interface
Key Features	Twisted Pair (TP); Fast Connect (FC) sheaths; Halogen-free options.
Why It Matters	Maintains data integrity for precise control and automation feedback loops.

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PACK 3: Ethernet Cables

	Details
Main Challenges	Packet loss in drag chains; connector failure due to vibration.
Impact on Operation	Network latency and communication timeout errors.
Recommended Families:	<ul style="list-style-type: none">• Fixed: ETHERLINE® Y / H• Flexible: ETHERLINE® FLEX• Continuous: ETHERLINE® FD P
Approvals	UL/CSA, PROFINET, EtherCAT.
Key Features	PUR jackets for cut/oil resistance; High-quality shielding; 2-pair/4-pair options.
Why It Matters	The backbone of Industry 4.0; ensures reliable high-speed communication.

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PACK 4: Industrial Connectors

	Details
Main Challenges	Water/dust ingress (IP rating); vibration loosening; slow wiring time.
Impact on Operation	Intermittent contact faults; slow machine assembly/disassembly.
Recommended Families:	<ul style="list-style-type: none">• Circular: EPIC® SIGNAL (M17/M23) / POWER (M12/LS1)• Rectangular: EPIC® H-BE Inserts
Approvals	UL, VDE
Key Features	<ul style="list-style-type: none">• Tool-free Push-In termination; Integrated EMC shielding; Modular inserts.• IP65/IP68.
Why It Matters	Enables modular machine design and rapid field commissioning.

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PACK 5: Cable Glands

	Details
Main Challenges	Leakage at entry points; cable pull-out under tension.
Impact on Operation	System failure due to moisture ingress.
Recommended Families:	<ul style="list-style-type: none">• Plastic: SKINTOP® ST-M• Metal: SKINTOP® MS-M• Hygienic: SKINTOP® INOX
Approvals	UL, ATEX, ECOLAB, EHEDG
Key Features	<ul style="list-style-type: none">• Vibration-proof strain relief; Wide clamping ranges; Chemical resistance.• IP68, IP69K
Why It Matters	Protects the integrity of the enclosure against harsh factory elements.

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PACK 6: Cable Markers

	Details
Main Challenges	Labels falling off or fading; unidentified wires causing service delays.
Impact on Operation	Increased Mean Time To Repair (MTTR) during troubleshooting.
Recommended Families:	<ul style="list-style-type: none">• On-site: FLEXIMARK® Basic• Custom: FLEXIMARK® Customised
Approvals	UL 94 V0, UL 224, MIL 81531, MIL-STD-202G, <i>Achilles JQS</i>
Key Features	<ul style="list-style-type: none">• Durable stainless steel or plastic options; Software integration.• Chemical/UV Resistant.
Why It Matters	Professionalizes the installation and speeds up future maintenance.

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PACK 7: Tools & Accessories

	Details
Main Challenges	Poor termination quality; damaged conductors during stripping.
Impact on Operation	Loose connections causing heat or signal loss.
Recommended Families:	<ul style="list-style-type: none">• Tools: KNIPEX Cutting / Stripping / Crimping• Protection: Shrink Tube / Braids
Approvals	UL/CSA, VDE
Key Features	Ergonomic handles; Precise die-cast crimping; Durable materials.
Why It Matters	Ensures consistent, high-quality terminations every time.

Log in to our eShop to explore product details and check stock availability.

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PACK 8: Industrial Control Cabinet

	Details
Main Challenges	Space constraints; unstable power; loose connections.
Impact on Operation	Total panel failure; fire risk; logic reboots.
Recommended Families:	<ul style="list-style-type: none">• Terminals: UT (Screw) / PIT (Push-In)• Power: TRIO Power Supplies / UPS• Network: FL SWITCH
Approvals	UL/CSA, EAC, DNV, CCC
Key Features	Tool-free Push-In Technology; Predictive maintenance signaling.
Why It Matters	The "Brain and Heart" of the machine; ensures stable power and logic.

Disclaimer: These products and solutions are only available in Indonesia and Malaysia.

Log in to our eShop to explore product details and check stock availability.

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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 risk review for your machine, control cabinet, or automation line.

This is more than a specification check. One of our connectivity specialists will collaborate with your engineering team to:

- Audit Dynamic Motion Zones – Identify torsion stress, bending radius failures, or vibration hotspots in robotics, cable tracks, and actuators.
- Review Control Cabinet Wiring – Optimise space usage, termination quality, EMC protection, and cable segregation inside the electrical cabinet.
- Verify Compliance & Approvals – Ensure selected cables and connectors meet CE, UL, IEC, and regional approval standards – ready to specify in RFQ/BOM.

You receive a confidential engineering report with risk severity, recommended product families, and compliant part numbers – at no cost.

[Talk to a Specialist](#)





ÖLFLEX®
Power and control cables



UNITRONIC®
Data communication systems



ETHERLINE®
Data communication systems
for Ethernet technology



HITRONIC®
Optical transmission systems



EPIC®
Industrial connectors



SKINTOP®
Cable glands



SILVYN®
Protective cable conduit systems
and cable carrier systems



FLEXIMARK®
Marking systems