

ÖLFLEX® CONNECT SERVO

Servo Systems made by Lapp





LAPP GROUP

ÖLFLEX® CONNECT SERVO

Servo solutions for SIEMENS® standard

With our smart servo solutions you get cables in 3 classes: Basic Line, Core Line and Extended Line. All cables are fitted with our newly designed connector. This connector is tamper proof, as it is pressed rather than screwed like conventional connectors. The 360° screen contact makes a huge improvement to EMC shielding (6db). In addition, the cable design in our Core Line enables a semi-automated production process. This ensures higher process reliability and accordingly a globally standardised quality standard.

Our powerlines at a glance:

6FX-5002	6FX-8002
<div>core line^{*1}</div> <div>semi-automated assembly  PVC</div>	<div>core line^{*2}</div> <div>semi-automated assembly  PUR</div>
<div>basic line</div> <div>PVC</div>	<div>extended line^{*3}</div> <div>PUR</div>

^{*1} ÖLFLEX® 742, PVC, for 6FX5002

^{*2} ÖLFLEX® 752, PUR, for 6FX8002

^{*3} ÖLFLEX® 796, PUR, acc. to 6FX8002

Core Line: Your smart alternative

For assemblies up to 35m, Core Line is the ideal alternative for **PUR 6FX-5002 / PVC 6FX-8002**:

- PVC 6FX-5002: Suitable for static and dynamic applications: timber processing, packaging machines, slowly moving chains
- PUR 6FX-8002: Suitable for highly dynamic applications: moving chains in tooling machines

Your benefits at a glance:

- Improved EMC shielding (6db) through new connector design (size 1, SIEMENS®)
- Improved quality through semi-automated assembly process
- Tamper proof (connector cannot be opened)
- Complete Lapp solution incl. new controller connector

More features:

- Vibration-proof
- Strain relief in line with standards
- IP67



Front: Innovative Lapp connector design acc. to SIEMENS® 5002 / 8002, size 1

Back: Extension, size 1

EMC screening

Screening

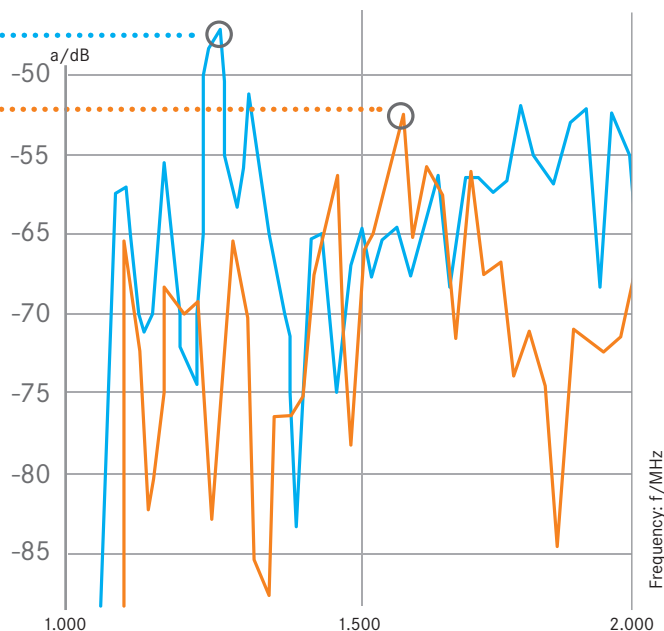
Competitor product

-47 db

-53 db

Screening

Lapp assembly*



* 6db better screening (factor 4)

Product video:
360 degree screening



Lines in comparison

6FX-5002

	core line PVC	basic line PVC
Number of cycles	5 mio. cycles	2 mio. cycles
Max. length	Up to 35m	Acc. to manufacturer info
Travelling speed	Up to 3m/s	Up to 0.5m/s
Travelling distance	Up to 10m	From 10m
Acceleration	Up to 3m/s ²	Up to 2m/s ²
Min. bending radius (1.5 – 6mm ²)	7.5 x external diameter	7.5 x external diameter

6FX-8002

	core line PUR	extended line PUR
Number of cycles	5 mio. cycles	10 mio. cycles
Max. length	Up to 35m	Up to 100m
Travelling speed	Up to 3m/s	Up to 5m/s
Travelling distance	Up to 10m	Up to 100m
Acceleration*	Up to 3m/s ²	Up to 50m/s ²
Min. bending radius (1.5 – 6mm ²)	7.5 x outer diameter	7.5 x outer diameter

*Deviation of Core Line to Extended Line due to test parameters, i.e. Core Line was not tested up to 50m/s² in high speed drag chain. This test will be undergone in due time.

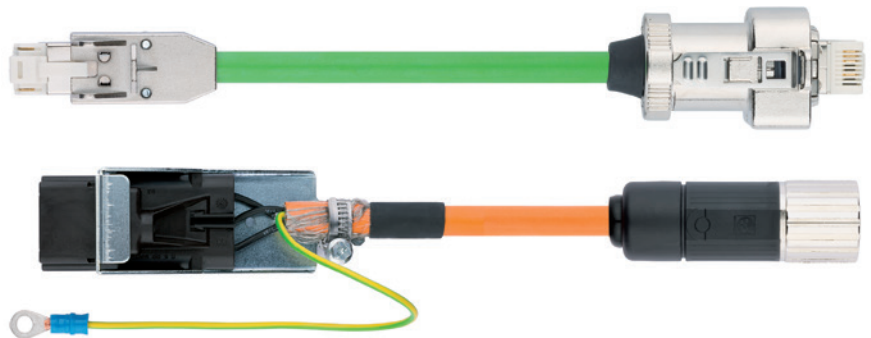
ÖLFLEX® CONNECT Basic Line according to SIEMENS® 6FX5002 (PVC)



NEW

Info

- Cables in application-oriented performance categories
- Connector with novel, safe screen connection
- Custom length available
- PVC outer sheath



Benefits

- Regional manufactured worldwide available
- Lapp quality standards

Application range

- Food production, packaging and woodworking machinery

Product features

- PVC servo cable, shielded
- Designed for average operational demands in industrial applications
- Innovative connector concept
- Basic Line for static and dynamic applications with resistant PVC outer sheath

Norm references / Approvals

- Design according to SIEMENS® standard 6FX 5002
- Flame-retardant according to IEC 60332-1-2, VW-1, FT1

Product Make-up

- Full range of types
- Brake wire with 1.5mm² wire gauge

Technical data



Minimum bending radius

Flexing: 15 x outer diameter
Power cable up to 6mm²: 7,5xD



Nominal voltage

Signal cables:
See cable datasheet
Power cable:
- Power cores:
See cable datasheet
- Control cores:
See cable datasheet

Acceleration

Power cable up to 6mm²: 2m/s²

Speed of Travel

Power cable up to 6mm²: 0.5m/s

Max. bending cycles

Power cable up to 6mm²: 2 Mio.



Temperature range

Fixed installation: -20°C to +80°C

Article number	Length (m)	SIEMENS® assembly designation	Copper index kg/1.000 pieces	Other dimensions	VPE
ÖLFLEX® SERVO Basic Line according to SIEMENS® 6FX5002 (PVC)					
5480002690	10.0	2DC10	373.7	Other lengths available	1
5480002715	10.0	2DC20	373.7	Other lengths available	1
5480002990	10.0	5CN05	888.8	Other lengths available	1
5480003015	10.0	5CN11	1333.2	Other lengths available	1
5480003240	10.0	5CQ28	888.8	Other lengths available	1
5480003365	10.0	5CS01	888.8	Other lengths available	1
5480003565	10.0	5CS31	1333.2	Other lengths available	1
5480004290	10.0	5DQ28	1686.7	Other lengths available	1
5480004415	10.0	5DS01	1686.7	Other lengths available	1
5480004515	10.0	5DS31	1959.4	Other lengths available	1

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

SIEMENS® part designations (6FX5002/5008, 6FX7002/7008, 6FX8002/8008) are registered trademarks of Siemens AG, and are listed for comparison purposes only. Other lengths and cable terminations are available upon request.

Photographs are not to scale and do not represent detailed images of the respective products.

ÖLFLEX® CONNECT Core Line for SIEMENS® 6FX5002 (PVC)



Info

- Semi-automated assembly
- Cables in application-oriented performance categories
- Connector with novel, safe screen connection
- Custom length available
- Optimized for harnessings up to 35m



Benefits

- Regional manufactured worldwide available
- Lapp quality standards

Application range

- Specifically for machine tool building
- For travel distances up to 10 m.
- For static and dynamic applications

Product features

- New PVC servo cable, shielded
- Innovative connector concept
- Core Line for light duty power chain applications

Norm references / Approvals

- Design according to SIEMENS® standard Product Make-up

Product Make-Up

- Brake wire with 1mm² wire gauge

Technical data



Nominal voltage

Power cable:
- Power cores:
1000 V (UL/CSA)
600 / 1000 V (VDE U_o/U)
- Control cores:
1000 V (UL/CSA)
600 / 1000 V (VDE U_o/U)

Distance of Travel

Power cables up to 6mm²: 10m

Acceleration

Power cable up to 6mm²: 3m/s²

Speed of Travel

Power cable up to 6mm²: 3m/s

Max. bending cycles

Power cable up to 6mm²: 5 Mio.



Temperature range

Moving: -5°C to +70°C

Article number	Length (m)	SIEMENS® assembly designation	Copper index kg/1.000 pieces	Other dimensions	PU
ÖLFLEX® SERVO Core Line for SIEMENS® 6FX5002 (PVC)					
5480008630	10.0	5CS01	818.1	other lengths up to 35m available	1
5480008210	10.0	5CQ15	1212	other lengths up to 35m available	1
5480007790	10.0	5CN31	1212	other lengths up to 35m available	1
5480007720	10.0	5CN21	818.1	other lengths up to 35m available	1
5480007650	10.0	5CN11	1212	other lengths up to 35m available	1
5480007510	10.0	5CN01	818.1	other lengths up to 35m available	1
5480007090	10.0	5CA15	1212	other lengths up to 35m available	1
5480007020	10.0	5CA05	818.1	other lengths up to 35m available	1

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ÖLFLEX® CONNECT Core Line for SIEMENS® 6FX8002 (PUR)



Info

- Semi-automated assembly
- Cables in application-oriented performance categories
- Connector with novel, safe screen connection
- Custom length available
- Optimized for harnessings up to 35m



Benefits

- Regional manufactured worldwide available
- Lapp quality standards

Application range

- Specifically for machine tool building
- For travel distances up to 10m.
- For highly dynamic applications

Product features

- New PUR servo cable, halogen-free & shielded
- Innovative connector concept
- Core Line for light duty power chain applications

Norm references / Approvals

- Design according to SIEMENS® standard

Product Make-up

- Brake wire with 1mm² wire gauge

Technical data

Nominal voltage
 Power cable:
 - Power cores:
 1000 V (UL/CSA)
 600 / 1000 V (VDE U₀/U)
 - Control cores:
 1000 V (UL/CSA)
 600 / 1000 V (VDE U₀/U)

Distance of Travel
 Power cables up to 6mm²: 10m

Acceleration
 Power cable up to 6mm²: 3m/s²

Speed of Travel
 Power cable up to 6mm²: 3m/s

Max. bending cycles
 Power cable up to 6mm²: 5 Mio

Temperature range
 Moving: -40°C to +90°C

Article number	Length (m)	SIEMENS® assembly designation	Copper index kg/1.000 pieces	Other dimensions	PU
ÖLFLEX® SERVO Core Line for SIEMENS® 6FX8002 (PUR)					
5480005390	10.0	5CS31	1302.9	other lengths up to 35m available	1
5480000665	10.0	5CN01	818.1	other lengths up to 35m available	1
5480000715	10.0	5CN11	1212	other lengths up to 35m available	1
5480000765	10.0	5CN31	1212	other lengths up to 35m available	1
5480001065	10.0	5CS01	818.1	other lengths up to 35m available	1
5480001115	10.0	5CS11	1212	other lengths up to 35m available	1
5480001215	10.0	5CS21	818.1	other lengths up to 35m available	1
5480001765	10.0	5DN11	1828.1	other lengths up to 35m available	1
5480001840	10.0	5DN41	2727	other lengths up to 35m available	1
5480002115	10.0	5DS01	1393.8	other lengths up to 35m available	1
5480002215	10.0	5DS31	1828.1	other lengths up to 35m available	1

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ÖLFLEX® CONNECT Extended Line according to SIEMENS® 6FX8002 (PUR)

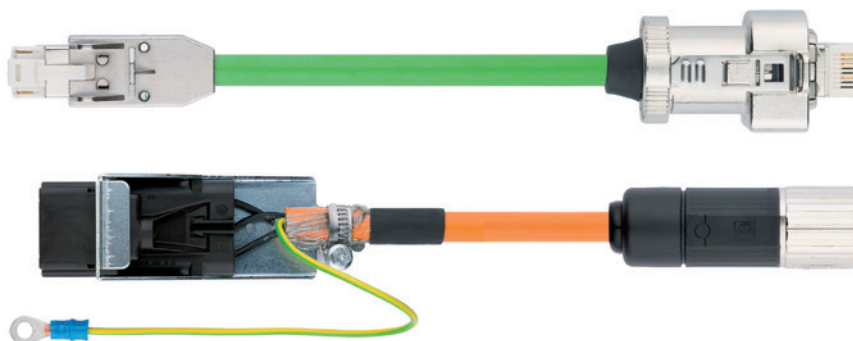


NEW



Info

- Conventional production and assembly
- Cables in application-oriented performance categories
- Connector with novel, safe screen connection
- For the most demanding mechanical requirements



Benefits

- Regional manufactured worldwide available
- Lapp quality standards

Application range

- Specifically for machine tool building
- Designed for power chain use: for travel distances up to 100m (horizontal)
- For very high dynamic motion sequences

Product features

- Proven for highest dynamic stresses and long distances
- Proven PUR servo cable, halogen-free & shielded
- Extended Line for high mechanical stress in Power chains

Norm references / Approvals

- Design according to SIEMENS® standard 6FX 8002
- Flame-retardant according to IEC 60332-1-2, VW-1, FT1

Product Make-up

- Full range of types
- Brake wire with 1.5mm² wire gauge

Technical data



Nominal voltage

Signal cables:
30 V (IEC)
30 V (UL/CSA)
Power cable:
- Power cores:
1000 V (UL/CSA)
600 / 1000 V (IEC)
- Control cores:
1000 V (UL/CSA)
600 / 1000 V (IEC)

Distance of Travel
up to 100m

Acceleration
up to 50m/s²

Speed of Travel
5m/s

Max. bending cycles
10 Mio.



Temperature range

Moving: -40°C to +90°C

Article number	Length (m)	SIEMENS® assembly designation	Copper index kg/1.000 pieces	Other dimensions	PU
Konfektionen für Signalübertragungssysteme					
5480000015	10.0	2AD00	707	Other lengths available	1
5480000065	10.0	2AH00	515.1	Other lengths available	1
5480000165	10.0	2CA31	808	Other lengths available	1
5480000290	10.0	2CH00	707	Other lengths available	1
5480000390	10.0	2DC10	424.2	Other lengths available	1
5480000415	10.0	2DC20	424.2	Other lengths available	1
5480000440	10.0	2EQ10	808	Other lengths available	1
5480004940	10.0	5CN51	2989.6	Other lengths available	1
5480005290	10.0	5CS13	4534.9	Other lengths available	1
5480005440	10.0	5CS51	2989.6	Other lengths available	1
5480005990	10.0	5DN51	3322.9	Other lengths available	1

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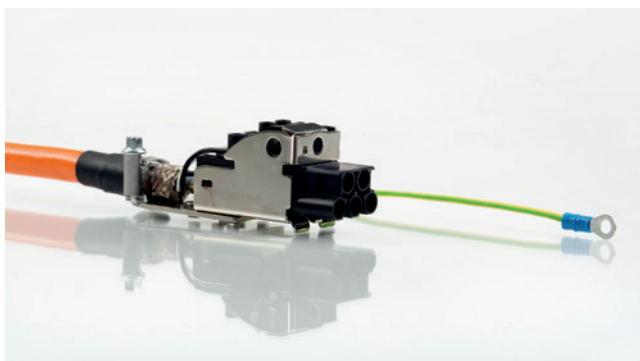
Portfolio at a glance



- Powerline for drive
- For SIEMENS® standard 5002/8002
- Size 1
- Newly designed connector
- Available as PVC/PUR



- Powerline for drive
- For SIEMENS® standard 5002/8002
- More SIEMENS® sizes available (1.5/3) as conventional assembly
- Available as PVC/PUR



- Powerline with conventional controller connector
- For SIEMENS® standard 5002/8002
- Available as PVC/PUR



Lapp controller connector acc. to SIEMENS®
S 120 C-/D types, booksize

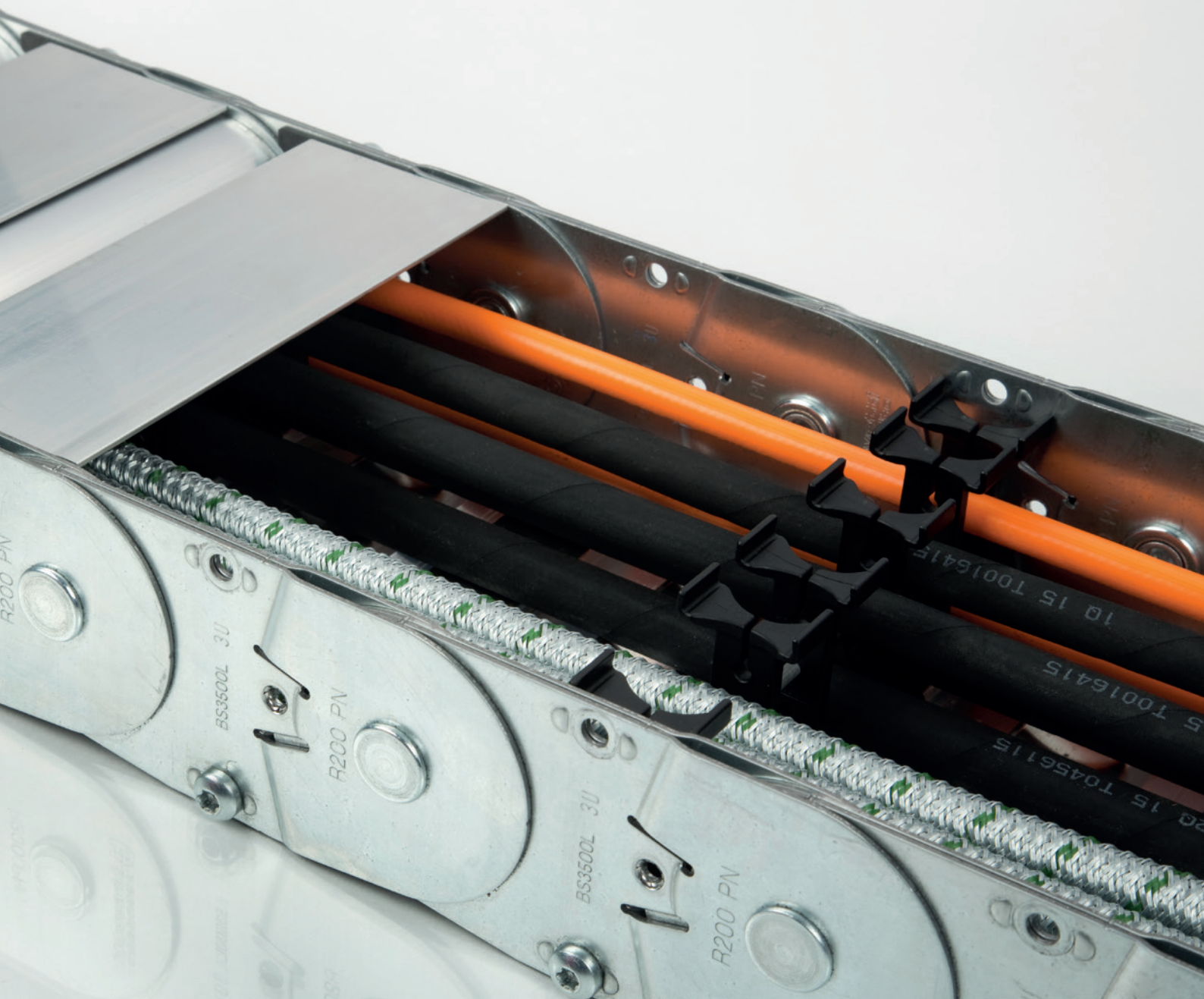
Discover our new servo configurator:
www.lappgroup.com/servoconfigurator



ÖLFLEX® CONNECT

Your Cable. Your Assembly. Your Solution. Start your designs with the connectivity experts. From cable or custom servo assemblies right up to complex drag chain applications. Lapp is with you every step of the way.

Learn more about our complete ÖLFLEX® CONNECT programme:
lappgroup.com/systems





SYSTEM
Logistics



750 kg

4

ÖLFLEX® CONNECT Delivery Programme.

Whenever and wherever you need it.

Customer service and flexibility are top priority at the Lapp Group. As a result, we are now offering more shipping options tailored to your needs.

Our three delivery options:



STANDARD

Standard delivery times for all common articles.

- For orders received before 12 p.m., dispatch within 7 working days*
- Includes SIEMENS® servo types, in all lengths



FAST LANE

Your alternative for small orders in short notice.

- For orders received before 12 p.m., dispatch within 72 hours*
- Includes SIEMENS® servo types, in all lengths
- 50 EUR express surcharge per delivery
- For orders of max. 3 servo assemblies




MRO-Stock

Selected types in stock. Subject to availability.

- For orders received before 3:30 p.m., dispatch within same working day*
- No additional costs for you
- Includes 5m, 10m, 15m and 20m lengths
- Includes the following types

Signal cables	Drive cables
6FX8002 2DC10	6FX8002 5CA01
6FX8002 2DC20	6FX8002 5DA01
6FX8002 2DC30	6FX8002 5CA31
6FX8002 2AH00	6FX8002 5DG01
6FX8002 2CA31	6FX8002 5DN01
6FX8002 2CH00	6FX8002 5DS01
6FX8002 2EQ10	6FX8002 5DS31
	6FX8002 5DS11
	6FX8002 5DS41

 In urgent cases, PVC variants can be replaced by 6FX8002 (PUR).

Learn more under lappgroup.com/servo
Customer Service and Orders: export.uil@lappgroup.com

Simply state the keyword when ordering: **STANDARD**, **FAST LANE** or **MRO**.

* Delivery times in Germany within 24h, in Europe between 24h and 72h from dispatch of order. Express or special delivery options also available upon request.



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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

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