

SPRING CABLE REEL (SCR)

Specialists from standard to special solution



BRIEF PROFILE: KNOW-HOW MEETS CUSTOMER REQUIREMENTS

GERMAN-MADE

As one of the leading manufacturers of motorised cable reels, spring cable reels, and slip ring bodies, Hartmann & König Stromzuführungs AG supplies its customers worldwide with technologically advanced systems for energy and data transmission for mobile consumers.

OUR PRODUCT PORTFOLIO:



MOTORISED
CABLE REELS



SPRING
CABLE REELS



SLIP RING ASSEMBLY

The high-quality "Made in Germany" cable reels are used on container bridges, deck and construction cranes, excavators or hoisting equipment of all types – and wherever mobile consumers require a reliable supply of electricity, data or other media. Our expertise is reflected in an impressive product portfolio of state-of-the-art cable reels and slip ring bodies. Innovative capability, reliability as well as the flexibility of a medium-sized company contribute to the success of Hartmann & König.

As an internationally active company and leading provider in the industry, Hartmann & König is committed to continuous development and invests in cutting-edge technologies.

With over 150 dedicated employees, we are a traditional company characterised by many years of experience and technological expertise.

At Hartmann & König, we go beyond simply manufacturing cable reels. Our team advises and supports our customers throughout their entire project. For us, every project is unique and comes with individual requirements. With our impressive experience, comprehensive expertise and the size of our company, we are able to offer a flexible response to your requirements and develop tailored solutions for energy and data transmission.

OUR VALUES AND VISION

Entrepreneurial spirit that spans three generations has shaped our corporate philosophy, which is based on honesty, respect and appreciative interaction with both customers and employees.

These values form the foundation of our healthy growth and long-standing, trusting relationships with our ever-growing customer base.

Every day, our employees dedicate endless passion to ensuring that our customers are always impressed with the outstanding performance of our products, our reliability and a level of flexibility that is unrivalled in the sector. We also continuously invest in research and development in order to keep our product portfolio in a competitive, leading position whilst constantly expanding it.

SPRING CABLE REELS FROM HARTMANN & KÖNIG

PRODUCT CHARACTERISTICS AT A GLANCE

- Standard SCR for travel distances up to 60 m
- Travel and stroke speeds up to $v = 60$ m/min.
- Max. acceleration 0.2 m/s²
- Ambient temperature from -40°C to $+60^{\circ}\text{C}$
- Left- or right-hand unwinding
- For horizontal or vertical cable unwinding
- Protection class: IP55/IP65
for industrial applications
- Corrosion protection in C3/C5



Compared to motorised cable reels, spring cable reels are particularly suitable for smaller cable cross-sections, limited installation space, shorter transmission paths and lower travel speeds and accelerations. They are therefore ideal for long-term use in industrial settings as well as for lifting and logistics tasks for all types of hoisting equipment.

UNCOMPROMISING QUALITY

Our spring cable reels stand out thanks to their robust design and durability. All series and sizes have reel bodies and slip ring assembly housing made of galvanised sheet steel to guarantee stability. The purely mechanical spiral leaf spring drive made of high-quality, texture-rolled spring band steel enables automatic winding and unwinding of reeling power and data leads, hoses or ropes. The spring drive offers high functionality and an impressive service life. The exact number of possible cycles varies depending on application and usage conditions, although our reels are designed for many years of reliable use.

In addition to our extensive FASTLINE range of standard reels with left- and right-hand unwinding, we also manufacture a large number of spring-driven special drums. These can be equipped with reinforced, spiral or cylindrical winding spoke reel bodies and external spring packages as required.

APPLICATIONS

- Power supply to jibs on cranes and mobile construction vehicles
- Lifting technology: supply of grabs and magnets
- Façade lifts
- Battery charging reels in car workshops, car parks, bus depots, etc.
- Stage technology: mobile power and mobile data for lighting gantries, loudspeakers
- Installation cable reel in emergency and rescue vehicles

PRODUCT PORTFOLIO

REEL SERIES:

FASTLINE



FASTLINE (STANDARD, READY TO SHIP QUICKLY)

Internal spring package

- Thanks to standardised mechanical and electrical module components, standard SCRs are ready to ship within 48 hours.
- For horizontal and vertical unwinding
- Left- and right-hand unwinding
- Protection class: IP55

LT SERIES



LT SERIES

Internal spring package

- Wide variety of series and slip ring assemblies
- Special 2K paint finish according to customer specifications if necessary
- Horizontal and vertical unwinding
- Left- and right-hand unwinding
- Protection class up to IP65
- Extended range of accessories for all series

LTA



SPECIAL SERIES (CAN BE CONFIGURED INDIVIDUALLY)

External spring package

- External spring package (several springs in parallel)
- Therefore also suitable for higher tensile forces
- Longer travel ranges of >60 m possible
- Reel body made of sheet metal or cylindrical or spiral-winding spoke reel bodies
- Left- and right-hand unwinding
- Protection class up to IP65
- Additional 2K special paint coating possible
- Extended range of accessories for all series

LTASP



We find the optimal technological solution for every challenge. Trust in our expertise and let us work together to exceed your individual requirements. Contact us.

SCR MATCH CODE GENERAL

LT300-P172-035P04-EN-RE-D0550-IP55-C3-UT2040-2,5QMM-1,5M

Type	Reel body	Drive	Slip ring assembly	Additional description	Accessories
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LAYOUT

1 SCREW-MOUNTED REEL BODIES
MADE OF SENDZIMIR-GALVANISED
SHEET STEEL

made of stainless steel or with additional
2K special coating if required

2 CAST FIXING
FLANGE INCLUDED

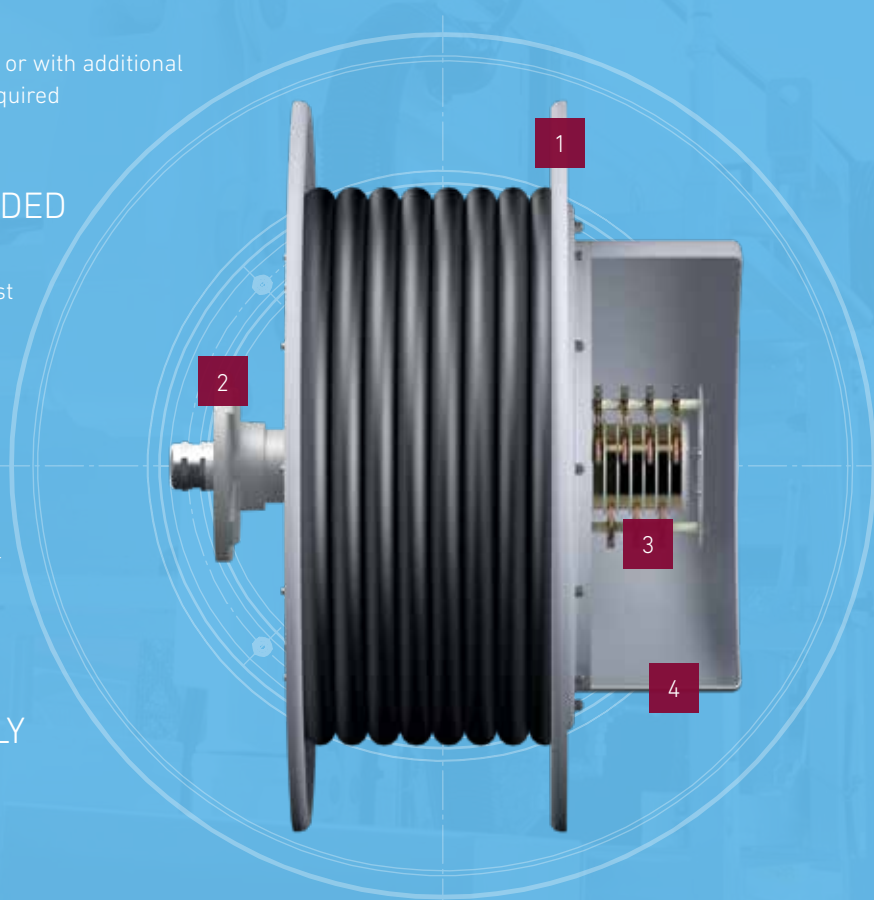
with a fixing flange as
standard for simple, fast
and safe installation

3 SLIP RING
ASSEMBLY

brass ring with copper-
graphite brushes
as standard

4 ROBUST SLIP
RING ASSEMBLY
HOUSING

made of deep-drawn,
Sendzimir-galvanised
sheet steel



TECHNICAL COMPONENTS: SLIP RING ASSEMBLY AND CABLE BASE

ARRANGEMENT EXAMPLES:



Slip rings in a slip ring assembly (type series YB/blocked) for energy transmission from 25 A to 224 A.



Compact pancake slip ring assembly 16 A with finger-type current collectors and clamping plate

Slip ring assemblies enable the uninterrupted transfer of electrical energy and signals between stationary and rotating parts. In combination with spring cable reels, they offer the ideal solution for applications that require flexible cable guiding with simultaneous rotation movement. The spring cable ensures controlled winding and unwinding, while the slip ring assembly guarantees a continuous electrical connection.

AT A GLANCE

- ✓ **Integrated in spring cable reels**
- ✓ **Reliable transfer of power and control, data, bus and video signals**
- ✓ **Slip rings for energy transmission in the range from 16 A to 224 A**
- ✓ **High wear and vibration resistance**
- ✓ **Suitable for continuous operation (100 % duty cycle)**

All reels can be equipped with multi-pole slip ring assemblies for corresponding cables. The number of wires and the cable cross-section determine the design of the slip ring assembly.

CABLES FOR DEMANDING APPLICATIONS

- Reeling cables that meet the increased mechanical requirements are used.
- The cable length is calculated from the max. unwinding length between the reel and the cable end + 2 additional safety winds to relieve the strain (remain on the wound-off reel) + standard 1 m connection length of the cable within the reel + cable length for the connection at the feed point depending on the application.
- The number of poles is the number of insulated poles, e.g. three poles + PE. The protective conductor is visible and cannot be exchanged for the phase.
- You can find the necessary cable information for individually designed spring cable reels in our questionnaire on the back pages of the brochure.

SPRING CABLE REELS STANDARD ⁽¹⁾



The reels are available with a choice of 1.5 m or 5 m of cable from the flange.
The required version must be stated when ordering.

Item no.	Horizontal unwinding	Vertical unwinding	Reel type
Winding length in metres			
4 G 1.5 mm² / Ø 11.2 mm / 0.15 kg/m			
E1075-6100	7	7	LT155-P108-025P04
E1076-6100	12	12	LT180-P131-025P04
E1076-6105	27	18	LT180-H231-025P04
E1077-6108	26	26	LT220-H251-025P04
E1079-6111	47	35	LT300-H252-025P04
5 G 1.5 mm² / Ø 11.7 mm / 0.168 kg/m			
E1075-6101	7	7	LT155-P108-025P05
E1076-6101	12	12	LT180-P131-025P05
E1076-6106	20	18	LT180-H231-025P05
E1077-6109	26	25	LT220-H251-025P05
E1079-6112	47	31	LT300-H252-025P05
7 G 1.5 mm² / Ø 13.2 mm / 0.22 kg/m			
E1075-6102	7	7	LT155-P108-025P07
E1076-6102	10	10	LT180-P131-025P07
E1077-6102	12	12	LT220-P151-025P07
E1077-6110	20	20	LT220-H251-025P07
E1078-6102	26	24	LT221-H251-025P07
E1079-6122	35	34	LT300-H272-025P07
E1079-6113	49	24	LT300-H252-025P07
12 G 1.5 mm² / Ø 16.7 mm / 0.36 kg/m			
E1076-6103	7	7	LT180-P131-025P12
E1077-6103	12	12	LT220-P151-025P12
E1077-6111	22	15	LT220-H251-025P12
E1078-6103	29	15	LT221-H251-025P12
E1079-6104	22	22	LT300-P252-025P12
E1079-6114	50	15	LT300-H252-025P12

Item no.	Horizontal unwinding	Vertical unwinding	Reel type
Winding length in metres			
18 G 1.5 mm² / Ø 18.1 mm / 0.47 kg/m			
E1077-6104	8	8	LT220-P151-025P18
E1078-6104	18	12	LT221-H251-025P18
E1079-6105	23	23	LT300-P252-025P18
E1079-6124	29	21	LT300-H272-025P18
E1081-6106	73	14	LT420-H283-035P18
24 G 1.5 mm² / Ø 20.2 mm / 0.60 kg/m			
E1079-6106	24	19	LT300-P252-035P24
E1081-6111	41	22	LT420-P253-035P24
30 G 1.5 mm² / Ø 22.5 mm / 0.74 kg/m			
E1079-6107	20	16	LT300-P252-035P30
E1081-6112	38	20	LT420-P253-035P30
4 G 2.5 mm² / Ø 12.2 mm / 0.20 kg/m			
E1075-6103	7	7	LT155-P108-025P04
E1076-6104	10	10	LT180-P131-025P04
E1076-6107	18	16	LT180-H231-025P04
E1077-6112	26	26	LT220-H251-025P04
E1079-6100	46	27	LT300-H252-025P04
5 G 2.5 mm² / Ø 13.0 mm / 0.22 kg/m			
E1075-6104	7	7	LT155-P108-025P05
E1076-6108	11	11	LT180-P131-025P05
E1076-6109	18	14	LT180-H231-025P05
E1077-6113	26	23	LT220-H251-025P05
E1079-6101	46	23	LT300-H252-025P05

* FASTLINE range: Thanks to standardised mechanical and electrical module components, standard SCRs are ready to ship within a short space of time.

SPRING CABLE REELS STANDARD (2)



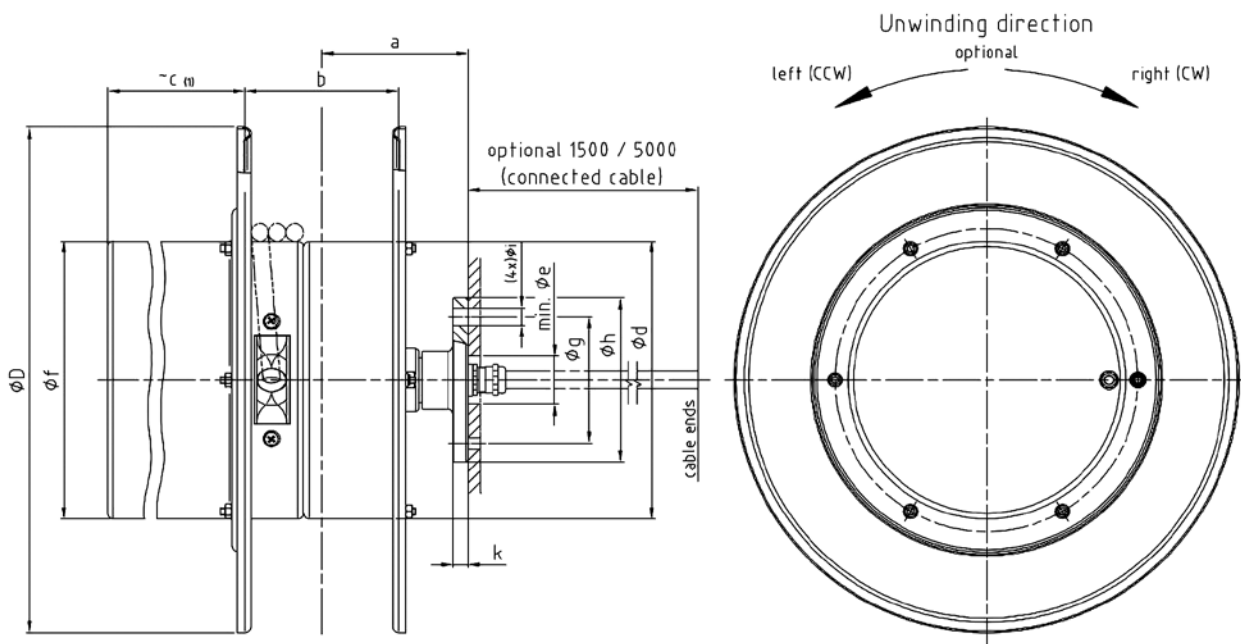
The reels are available with a choice of 1.5 m or 5 m of cable from the flange.
The required version must be stated when ordering.

Item no.	Horizontal unwinding	Vertical unwinding	Reel type
Winding length in metres			
7 G 2.5 mm² / Ø 14.7 mm / 0.31 kg/m			
E1076-6110	10	10	LT180-P131-025P07
E1077-6114	12	12	LT220-P151-025P07
E1077-6115	17	17	LT220-H251-025P07
E1078-6100	26	18	LT221-H251-025P07
E1079-6102	47	18	LT300-H252-025P07
E1079-6103	36	30	LT300-H272-025P07
12 G 2.5 mm² / Ø 20.1 mm / 0.55 kg/m			
E1077-6116	10	10	LT220-P151-025P12
E1078-6101	16	12	LT221-H251-025P12
E1079-6108	25	23	LT300-P252-025P12
18 G 2.5 mm² / Ø 20.4 mm / 0.67 kg/m			
E1077-6122	8	8	LT220-P151-025P18
E1078-6108	15	8	LT221-H251-025P18
E1079-6125	26	16	LT300-P252-035P18
24 G 2.5 mm² / Ø 22.9 mm / 0.87 kg/m			
E1079-6110	22	22	LT300-P272-035P24
4 G 4 mm² / Ø 13.5 mm / 0.28 kg/m			
E1076-6111	10	10	LT180-P131-050P04
E1077-6117	12	12	LT220-P151-050P04
E1078-6105	26	20	LT221-H251-050P04
E1079-6115	47	22	LT300-H252-050P04
E1079-6116	35	34	LT300-H272-050P04

Item no.	Horizontal unwinding	Vertical unwinding	Reel type
Winding length in metres			
4 G 6 mm² / Ø 15.2 mm / 0.37 kg/m			
E1077-6118	12	12	LT220-P151-063P04
E1077-6119	21	15	LT220-H251-063P04
E1078-6106	26	15	LT221-H251-063P04
E1079-6117	50	15	LT300-H252-063P04
E1079-6118	36	25	LT300-H272-063P04
E1081-6107	69	18	LT420-H283-063P04
4 G 10 mm² / Ø 18.6 mm / 0.60 kg/m			
E1077-6120	7	7	LT220-P151-063P04
E1077-6121	13	13	LT220-P251-063P04
E1078-6107	20	9	LT221-H251-063P04
E1079-6119	29	15	LT300-H272-063P04
E1081-6113	40	24	LT420-P253-063P04
4 G 16 mm² / Ø 21.4 mm / 0.85 kg/m			
E1079-6120	20	12	LT300-P252-125P04
E1079-6121	18	18	LT300-P272-125P04
E1079-6101	46	23	LT300-H252-025P05

* FASTLINE range: Thanks to standardised mechanical and electrical module components, standard SCRs are ready to ship within a short space of time.

REEL AND HOOD DIMENSIONS



!!! Attention!
 Needed space for removing the slip ring cover.

TABLE FOR REEL DIMENSIONS

Type	ød	øD	a	b	øe	øf	øg	øh	øi	k
LT155-	155	260	103	110	38	155	65	85	9	8
LT180-	180	295	115	130	38	180	65	85	9	8
LT220-	220	400	116	122	38	220	100	130	13.5	12
LT221-	220	450	130	150	38	220	100	130	13.5	12
LT300-	300	550	168	190	38	300	100	135	16.5	20
LT420-	420	680	200	235	60	420	135	178	18	20

TABLE FOR HOOD LENGTH C DEPENDING ON NUMBER OF POLES

Type	3+PE 25 A	3+PE 50 A	3+PE 63 A	3+PE 125 A	4+PE 25 A	6+PE 25 A	11+PE 25 A	17+PE 25 A	23+PE 35 A	29+PE 35 A
LT155-	65	-	-	-	105	105	-	-	-	-
LT180-	67	67	-	-	67	118	158	-	-	-
LT220-	82	82	82	-	82	109	209	260	-	-
LT221-	-	58	83	-	-	83	160	260	-	-
LT300-	90	90	90	130	90	90	160	260	360	460
LT420-	-	-	102	-	-	-	-	-	366	466

ACCESSORIES RANGE (1)

WA



SWIVELLING WALL MOUNTING

The swivelling wall mounting has a swivelling range of 150°. It is suitable for wall mounting in workshops or automation systems, for example.

DRB



ROTARY FIXTURE

The rotary fixture has a swivelling range of 300° and a stop. It is suitable for ceiling mounting, such as in workshops or automation systems.

UD/UDQ



DOUBLE DEFLECTION ROLLER

UD: The double deflection roller is used for spiral-winding cable reels. It is used to deflect the cable which comes from the cable reel mounted above. The UD is also used when passing the feed point.

UR/UL



DEFLECTION AND DEPOSIT ROLLERS

Deflection and deposit rollers are used when the cable cannot be unwound directly from the cable reel. The roller diameter must be at least 15 times the cable diameter.

KZS



CABLE PULLING GRIP

The cable pulling grip is aligned to the cable diameter. It ensures the strain relief of the reeling cable at the fixed point. The cable pulling grip distributes the strain relief across an area, thereby preventing any point loads.

The cable pulling grip is designed with three times the maximum tensile force of a conventional strain relief device. The cable pulling grip is only suitable for horizontal unwinding.

ACCESSORIES RANGE (2)



ROLLER YOKE

A rigid roller yoke ensures the even unwinding and winding of the reeling cable. Its two plastic rollers put very little strain on the cable. The cable can easily be unwound in the defined direction. The roller yoke can be retrofitted to the fixing flange.



RATCHET

The ratchet enables the device to be arrested and stops the cable from winding. By default, this process is carried out at a rate of one ratchet per rotation. The pawl of the ratchet turns when the spring drive unloads and the cable is wound up. The division of the ratchet can be increased to two positions per rotation if required. It is possible to assemble several ratchets to the device. The ratchet can be retrofitted to the fixing flange.



RIGID ATTACHMENT

The rigid attachment is suitable for both ceiling and floor mounting, such as in workshops.

Reels and accessories with right-hand unwinding

Reels and accessories (ratchet and roller yoke) with right-hand unwinding can be ordered with the same art. no. and are supplemented by the suffix **-RE** at the end of the art. no.

Reel type	Ratchet (art. no.)	Roller yoke (art. no.)
LT155	E2315-2000	E2350-2000
LT180	E2316-2000	E2351-2000
LT220	E2317-2000	E2352-2000
LT221	E2317-2000	E2353-2000
LT300	E2319-2000	E2354-2000
LT420	E2321-2000	E2356-2000

Cable diameter	Ratchet (art. no.)
Ø 09–12 mm	X2850-0912
Ø 12–15 mm	X2850-1215
Ø 15–20 mm	X2850-1520
Ø 20–25 mm	X2850-2025
Ø 25–30 mm	X2850-2530

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GERMAN MADE



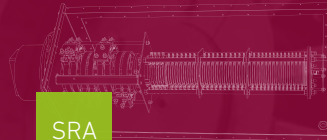
MCR

MOTORISED
CABLE REELS



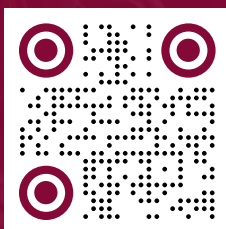
SCR

SPRING CABLE
REELS



SRA

SLIP RING
ASSEMBLIES



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