



MOTOR POWERED CABLE REELS



VAHLE MOTOR POWERED CABLE REELS

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Introduction

Foreword

Our motor driven cable reels serve the industry for reliable electrification of equipment in motion; for automatic winding of flexible power- and control-cables. They fully meet international safety requirements.

Applications

include Portal-, Gantry- and Container-Cranes, Dockside-, Ship- and Construction-Cranes, Grabs and Magnets, Electric Hoists and other material-handling, -lifting, -stacking and -storing equipment.

This comprehensive line of precision designed and quality-built reels is also a proven automatic 'cable and hose care taker' in the following instances:

- VAHLE Reels on board ships or in the tropics.
- VAHLE Reels in aggressive environments (galvanizing plants, pickling lines, sewage treatment systems).
- VAHLE Reels in explosionsproof versions (slipringless).
- VAhle Reels for Control-, Signal- and Highfrequency-Transmission.
- VAHLE Reels for Air, Liquids and Gases (Hose Reels).
- VAHLE Reels for handling steel ropes in travel distance tracking systems and for grab stability on heavy cranes (Tag Line Reels).
- VAHLE Reels for Curves and for Endless Monorails with special swivel base.
- VAHLE Reels of the lift & lower type for multi level machine tools and for push-botton pendants.

Vahle welcomes your inquiry on your particular application.



Electrical Properties of Sliprings

Standard sliprings are rated for 690 Volt AC and 900 Volt DC; Control Rings in block system for 500 Volts.

Indicated collector ring ampere capacities are for 60 % nominal rating.

200 Amp and 400 Amp collector ring sizes are used for 6/10 kV high voltage applications. Reels beyond these capacities are available upon request.

Protection Code

Slipring enclosures are designed to IP 54; protected against harmful dust deposits and splash water proof per DIN 40050. Higher grade protection available upon request.

A thermostatically controlled heater is installed on high voltage reels (and can be supplied on standard reels) to prevent condensation moisture.

Drive System

The following drive systems are employed:

- Torque motor, squirrel cage type
- Torque motor, slipring type with std. or step resistor
- AC motor with magnet coupling

Further models from our wide range of heavy duty and high speed reels include:

- Torque motor, slipring type with electronic control
- Hydraulic drive with constant torque
- Hydraulic drive with variable torque for constant cable tension

Cable Payout

is normally following the technical information and drawings of this catalog.

Other requirements can be fulfilled; e. g. opposite hand rotation.

Limit Switch Assemblies

for switching off travel and hoist motors with one or two safety windings on the reel are optional.

In conjunction with torque control systems we do supply cam-type limit switches.

Accident Prevention

All moveable parts of the drive system, e. g. chaindrive are covered in accordance with the accident prevention code.

Therefore, the cable reels can be installed in work areas as well as traffic areas. Additional protective devices, such as a cover for the revolving reel body itself, are to be furnished and fitted at site.

Corrosion Protection

The random wrap reel series is galvanized. All other reels come with one primer coat and one finishing paint of epoxy-resin RAL 2002 orange-red varnish; Motor and Gearings in RAL 5009 azure-blue.

Reel Selection

Choosing the proper cable reel from the VAHLE Reel Selection Charts has been made as easy as possible.

All you have to know is:

- ▶ Cable data
 - Wire size and number of conductors
 - Diameter
 - Weight
 - Min. bending radius
- ▶ Active cable length
- ▶ Max. operating speed of your equipment

The capacities of the cable reels in this catalog are based on cables listed in the Reel Selection Charts allowing one safety winding for standard voltage or two safety windings for high voltage applications; considering an ambient temperature of -10°C up to $+40^{\circ}\text{C}$ and an acceleration factor of $0,2\text{ m/sec}^2$.

For other conditions, consult factory and use our questionnaire pages 6 & 7.

Cable Length

Reels are designed to handle a certain type and length of cable in a specific manner. Never use reels for more cable than outlined in the selection charts.

The total cable length required results from maximum payout length (active cable) plus reel installation height plus one or two safety windings plus hook-up length for connections.

Installation Information

Installation instructions and operation manuals for commissioning advice and assistance are attached to each reel shipment and found in the slipring housing.



CABLE SELECTION

**Table 1: Continuous ampacity of cables type NSH . . . and NTS . . . for stretched, open air laying.
Max. permissible operation temperature of the conductor 90° C.**

| Wire size [mm ²] | Continuous ampacity [A] at 30 ° C | f_{ED} | Multiplier for intermittent service | | | | Z [Ω / km] |
|------------------------------|-----------------------------------|----------|-------------------------------------|------|------|------|------------|
| | | | 60% | 40% | 25% | 15% | |
| 1,5 | 23 | | 1,00 | 1,00 | 1,00 | 1,00 | 8,770 |
| 2,5 | 30 | | 1,00 | 1,00 | 1,04 | 1,07 | 5,310 |
| 4 | 41 | | 1,00 | 1,03 | 1,05 | 1,19 | 3,360 |
| 6 | 53 | | 1,00 | 1,04 | 1,13 | 1,27 | 2,250 |
| 10 | 74 | | 1,03 | 1,09 | 1,21 | 1,44 | 1,370 |
| 16 | 99 | | 1,07 | 1,16 | 1,34 | 1,62 | 0,888 |
| 25 | 131 | | 1,10 | 1,23 | 1,46 | 1,79 | 0,587 |
| 35 | 162 | | 1,13 | 1,28 | 1,53 | 1,90 | 0,443 |
| 50 | 202 | | 1,16 | 1,34 | 1,62 | 2,03 | 0,344 |
| 70 | 250 | | 1,18 | 1,38 | 1,69 | 2,13 | 0,258 |
| 95 | 301 | | 1,20 | 1,42 | 1,74 | 2,21 | 0,205 |
| 120 | 352 | | 1,21 | 1,44 | 1,78 | 2,26 | 0,174 |
| 150 | 404 | | 1,22 | 1,46 | 1,81 | 2,30 | 0,154 |
| 185 | 461 | | 1,23 | 1,48 | 1,82 | 2,32 | 0,136 |
| 240 | 540 | | 1,23 | 1,49 | 1,85 | 2,36 | 0,119 |

Table 2: Multiplier for ambient temperature

| Ambient temperature [°C] | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 |
|--------------------------|------|------|------|------|------|------|------|------|------|
| Correction factor f_T | 1,05 | 1,00 | 0,95 | 0,89 | 0,84 | 0,77 | 0,71 | 0,63 | 0,55 |

Table 3: Multiplier for multi-layer service

| Number of full layers on reel | 1* | 2 | 3 | 5 |
|-------------------------------|------|------|------|------|
| Correction factor f_l | 0,80 | 0,61 | 0,49 | 0,38 |

Table 4: Multiplier for multi-conductor service, up to 10 mm² wire size

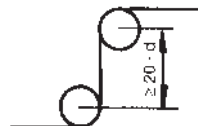
| Number of conductors in service | 5 | 7 | 10 | 14 | 19 | 24 | 40 | 61 |
|---------------------------------|------|------|------|------|------|------|------|------|
| Correction factor f_2 | 0,75 | 0,65 | 0,55 | 0,50 | 0,45 | 0,40 | 0,35 | 0,30 |

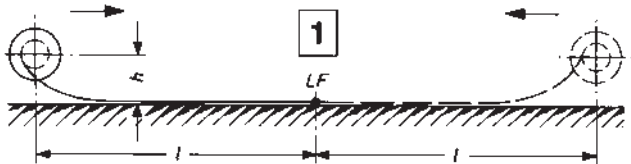
* also for spiral winding.

Table 5: Minimum bending radii, apply to cables listed in this catalog. Observe supplier's recommendations for other cables.

| Type of cable | Nominal voltage up to 0,6 / 1 kV | | | Nominal voltage above 0,6 / 1 kV | Remarks |
|--|----------------------------------|---------------|----------|----------------------------------|--|
| Flexible cables | Overall diameter of cable in mm | | | 6 x d | Consult the factory in critical cases. |
| | above 8 - 12 | above 12 - 20 | above 20 | | |
| fixed installation | 3 x d | 4 x d | 4 x d | | |
| fully flexible installation | 4 x d | 5 x d | 5 x d | | |
| for entry | 4 x d | 5 x d | 5 x d | | |
| for forced guidance with reeling operation | 5 x d | 5 x d | 6 x d | | |
| for forced guidance with rollers/sheaves | 7,5 x d | 7,5 x d | 7,5 x d | 15 x d | |

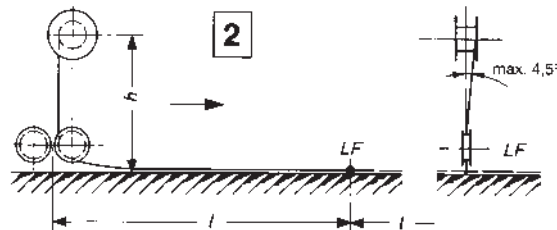
The minimum distance
with double or S-type directional changer is
20 x overall cable diameter.



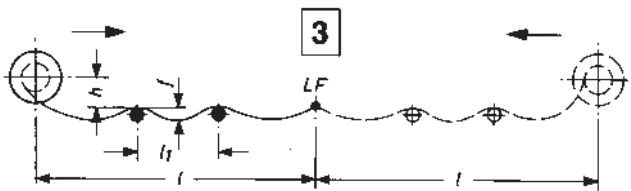


retrieve

Reel is mounted on the moving equipment, picks up cable from the floor or other surface. One- or two-way horizontal payout. The application becomes a modified retrieve lift when reel mounts too high for cable drag without guide.

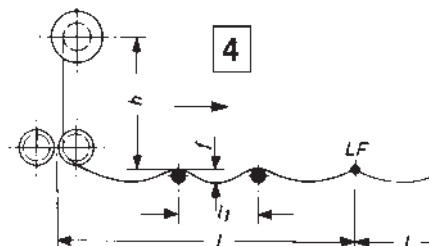


retrieve lift

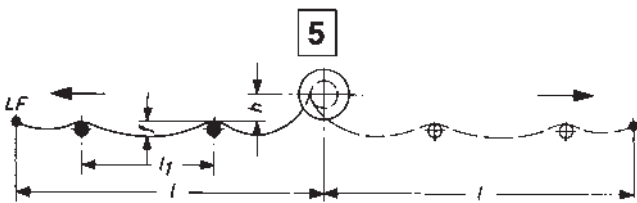


retrieve

Much the same as above, however cable recovery from round support brackets or rollers at regular intervals; l_1 for brackets max. 1 m, for rollers 1 up to 3 m.

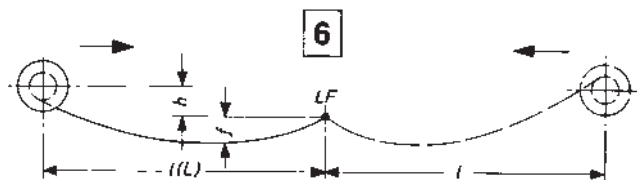


retrieve lift



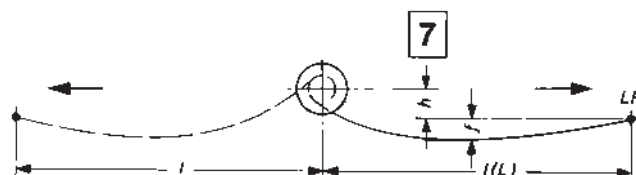
drag

In this case the reel is stationary. Cable is dragged over round supports or rollers to and from the reel, in one or two directions ($l_1 \leq 3$ m).

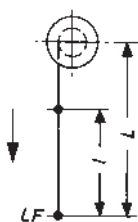


horizontal stretch with reel on moving equipment

Cable is suspended horizontally, supported only at both ends, allowing a sag (f) in relation to l or L whatever is longer.

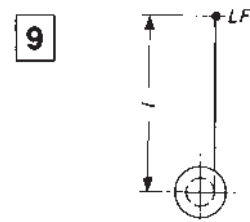


horizontal stretch with stationary reel



vertical lift

Reel is mounted overhead. Cable pays out and is retracted vertically. Total cable weight plus any extra load (pushbutton station, etc.) must be considered. The latter does not apply to case 9 where the reel is located below rather than above.



vertical retrieve

Legend to Drawings:

- l = operational (active) length of cable
- l_1 = support intervals
- L = max. length between reel and end of cable
- LF = feed point or connection to moving member
- h = height of reel above recovery surface
- f = cable sag

For applications 3 thru 7 and 9 and reels beyond the listed capacities, please contact your local VAHLE representative or the factory.

Use the reel data form on pages 6 & 7 of this catalog.

Having all the facts will ensure determining of the best reel for your specific requirement.



QUESTIONNAIRE

1. For what type of moving equipment is the reel? _____
(Dimensional drawings of equipment and application are extremely valuable)

1.1 Installation site indoor outdoor

1.2 Temperature conditions - ____°C + ____°C

1.3 Duty factor (time on) of full operating load _____ % DF

1.4 Environmental conditions _____

2. Type of application (see page 5) case

2.1 Spool type random wrap monospiral wrap

3. Mounting height from center of spool to cable pickup surface _____ m

4. Working travel of equipment in motion _____ m

5. Cable Payout one-way two-way

6. Operational length of active cable $l =$ _____ m
(Midway fee-point cuts the length of cable needed in half)

6.1 For vertical lift (see page 5, case 8) $l =$ _____ m, $L =$ _____ m

6.2 Operated from a remote point to raise and lower cable at a controlled speed? yes , no

6.2.1 Loads in addition to cable weight (pendant controls or power receptacles) _____ kg or _____ lbs

7. Chosen Cable (Number of copper conductors x wire size) _____ x _____ mm² or _____ # AWG

7.1 Weight of cable _____ kg/m or _____ lbs/ft.

7.2 Diameter of cable _____ mm or _____ in.

8. Full operating load or maximum horsepower of equipment _____ kW or _____ HP

8.1 Nom. amperage (nominal current - I_N) _____ A

8.1.1 Start. amperage (starting current - I_A) _____ A

8.2 Voltage rating / frequency _____ V _____ Hz

9. What percentage of the total installed ampacity will work simultaneously? _____ %

10. Number of phase collector rings required? _____ pcs.
(Our cable reel slipring assemblies always include one non-insulated ground)

11. How many movements of the equipment per hour? _____ times

12. Operating hours per day _____ hours

13. Speed of travel or lift _____ m/min.

14. Acceleration zero to full speed _____ sec.

15. Acceleration rate _____ m/sec².

16. Details for reel drive motor

16.1 Voltage / frequency _____ V _____ Hz

16.2 Duty cycle _____ % DF

17. Limit switch for travel or lift required? yes no

Remarks: _____



To our nearest local VAHLE-agency:

Customer: _____

Address: _____

Attention of: _____

Date: _____

| Motor data | Crane 1 | | | Crane 2 | | | Crane 3 | | |
|-----------------------------|-------------|--------------|---------------|-------------|--------------|---------------|-------------|--------------|---------------|
| | Power kW/HP | Current Amps | Duty factor % | Power kW/HP | Current Amps | Duty factor % | Power kW/HP | Current Amps | Duty factor % |
| Hoist motor | | | | | | | | | |
| Auxiliary hoist | | | | | | | | | |
| Travel motor - main-trolley | | | | | | | | | |
| Travel motor - aux.-trolley | | | | | | | | | |
| Main travel | | | | | | | | | |
| Slewing | | | | | | | | | |
| Luffing | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

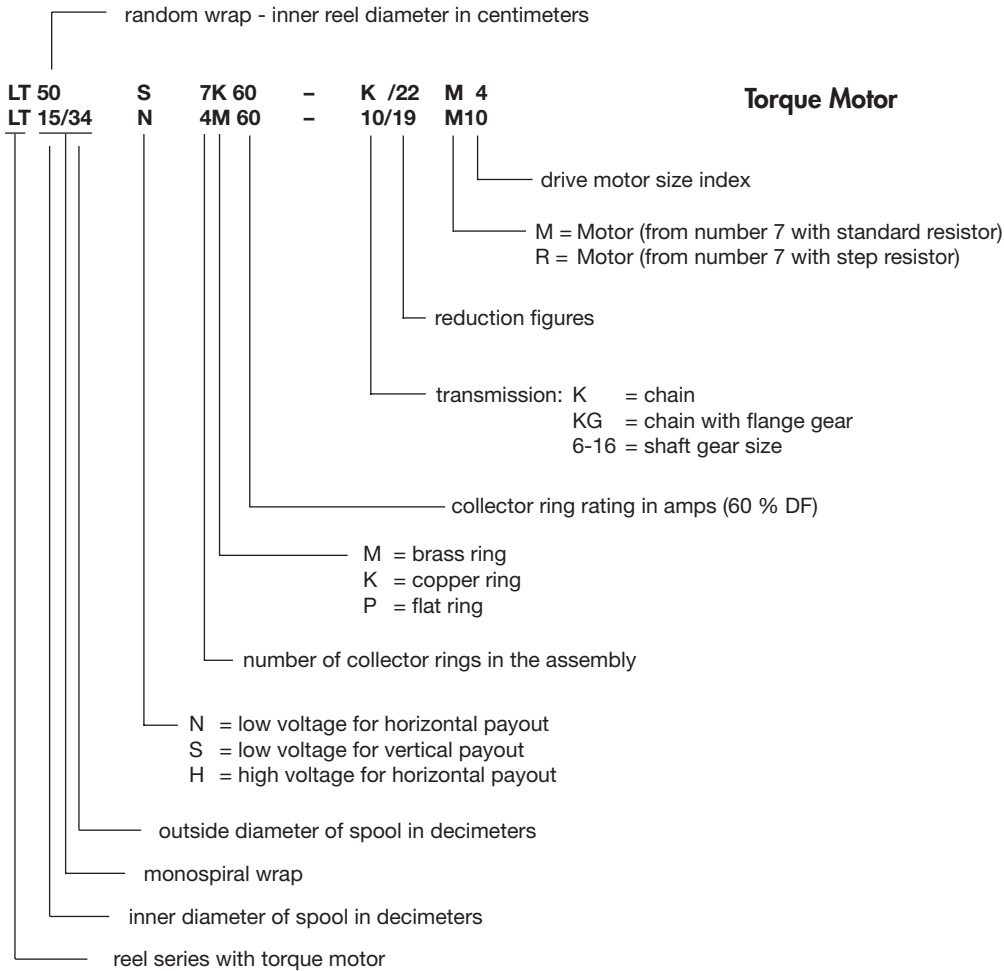
Mark with* any motor that may be in simultaneous operation.

Additional Comments: _____



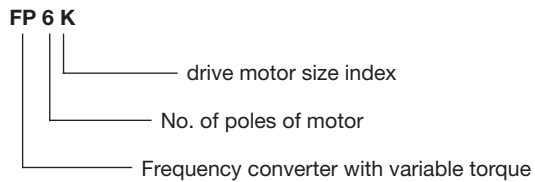
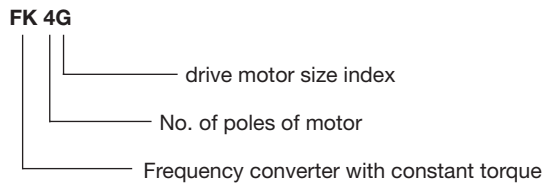
LT MODEL EXPLANATION

Reel Type Definition



Frequency converter-drive (FU)

**All models
are less cable**



Reel Selection - Example

Job function requiring a reel for:

| | |
|-------------------------------|-----------------------|
| Active cable length | : 30 m |
| No. of conductors x wire size | : 4x6 mm ² |
| Cable diameter | : 21 mm |
| Cable weight | : 0.6 kg/m |
| Operating speed | : 20 m/min |
| Application | : case 1 |
| Spool type | : monospiral |

The selection per chart on page 9:
Type : **LT 6/12 N 4M60 - 6/25 M3**
Cat.-No. : **0920002**

REEL SELECTION CHART

Monospiral wrap, shaft gear, horizontal payout

Applications

1 2



| Cable NSHTÖU-J 4 x 6 mm ² | | Ø 21 mm | | | | Weight: 0,6 kg/m | |
|---------------------------------------|--------------------|--------------------|---------------------|--------------------|---------------------|-----------------------|-----------------------|
| active length [m] | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 60 m/min. | 80 m/min. |
| 30 | LT 6/12 N 4 M 60- | 6/36 M2 0920001 | 6/25 M3 0920002 | 6/17 M4 0920003 | 8/13 M5 0920004 | - | - |
| 57 | LT 6/15 N 4 M 60- | 6/36 M3 0920005 | 6/22 M4 0920006 | 6/17 M5 0920007 | 8/12 M6 0920008 | - | - |
| 79 | LT 8/18 N 4 M 60- | 6/60 M2 0920009 | 6/29 M4 0920011 | 6/22 M5 0920012 | 8/16 M6 0920013 | - | - |
| 126 | LT 8/21 N 4 M 60- | 6/51 M3 0920014 | 6/32 M4 0920015 | 6/25 M5 0920016 | 8/19 M6 0920017 | 6/15 M9 0927001 | 6/29 FK 4D 0927002 |
| Cable NSHTÖU-J 4 x 10 mm ² | | Ø 25,5 mm | | | | Weight: 0,95 kg/m | |
| 25 | LT 6/12 N 4 M 60- | 6/45 M2 0920018 | 6/20 M4 0920019 | 6/17 M5 0920021 | 6/15 M8 0920022 | - | - |
| 48 | LT 6/15 N 4 M 60- | 6/45 M3 0920023 | 6/25 M4 0920024 | 6/17 M8 0920025 | 6/17 M8 0920026 | - | - |
| 68 | LT 8/18 N 4 M 60- | 6/51 M3 0920028 | 6/32 M4 0920029 | 6/22 M8 0920031 | 6/22 M8 0920032 | - | - |
| 104 | LT 8/21 N 4 M 60- | 6/60 M3 0920035 | 6/32 M 5 0920036 | 6/25 M8 0920037 | 6/17 M9 0920038 | 8/13 M10 0927003 | 6/36 FK 4D 0927004 |
| 133 | LT 12/25 N 4 M 60- | 8/76 M3 0920042 | 8/50 M4 0920043 | 8/32 M8 0920044 | 8/32 M8 0920045 | - | - |
| Cable NSHTÖU-J 4 x 16 mm ² | | Ø 30 mm | | | | Weight: 1,4 kg/m | |
| 19 | LT 6/12 N 4 M150- | 6/36 M3 0920048 | 6/22 M4 0920049 | 6/22 M7 0920051 | 6/15 M8 0920052 | - | - |
| 38 | LT 6/15 N 4 M150- | 6/45 M3 0920054 | 6/25 M5 0920055 | 6/20 M8 0920056 | 6/15 M9 0920057 | 8/12 M10 0927005 | 6/25 FK 4D 0927006 |
| 56 | LT 8/18 N 4 M150- | 6/60 M3 0920059 | 6/29 M5 0920061 | 6/25 M8 0920062 | 6/17 M9 0920063 | 8/13 M10 0927007 | 6/36 FK 4D 0927008 |
| 85 | LT 8/21 N 4 M150- | 6/51 M4 0920066 | 6/45 M7 0920067 | 6/32 M8 0920068 | 6/20 M9 0920069 | 8/16 M10 0927009 | 6/29 FK 4E 0927010 |
| 109 | LT 12/25 N 4 M150- | 8/57 M4 0920073 | 8/50 M5 0920074 | 8/41 M8 0920075 | 8/25 M9 0920076 | 8/19 M10 0927011 | 8/50 FK 4D 0927012 |
| 153 | LT 15/30 N 4 M150- | 8/76 M4 0920079 | 8/67 M5 0920081 | 8/50 M8 0920082 | 8/32 M9 0920083 | 8/25 M10 0927013 | 8/67 FK 4D 0927014 |
| Cable NSHTÖU-J 4 x 25 mm ² | | Ø 35 mm | | | | Weight: 1,9 kg/m | |
| 16 | LT 6/12 N 4 M150- | 6/45 M3 0920086 | 6/29 M4 0920087 | 6/17 M8 0920088 | 6/17 M8 0920089 | 6/12 M9 0927015 | 6/25 FK 4D 0927016 |
| 32 | LT 6/15 N 4 M150- | 6/36 M4 0920092 | 6/29 M5 0920093 | 6/22 M8 0920094 | 6/15 M9 0920095 | 8/12 M10 0927017 | 6/32 FK 4D 0927018 |
| 48 | LT 8/18 N 4 M150- | 6/45 M4 0920097 | 6/36 M5 0920098 | 6/29 M8 0920099 | 6/20 M9 0920101 | 8/16 M10 0927019 | 6/45 FK 4D 0927020 |
| 72 | LT 8/21 N 4 M150- | 6/60 M4 0920104 | 67/36 M8 0920105 | 6/25 M9 0920106 | 8/16 M10 0920107 | 6/51 FK 4D 0927021 | 6/36 FK 4E 0927022 |
| 92 | LT 12/25 N 4 M150- | 8/67 M4 0920111 | 8/67 M7 0920112 | 8/28 M9 0920113 | 8/28 M9 0920114 | 8/22 M10 0927023 | 8/50 FK 4E 0927024 |
| 133 | LT 15/30 N 4 M150- | 8/96 M4 0920117 | 8/85 M7 0920118 | 8/41 M9 0920119 | 8/41 M9 0920121 | 8/85 FK 4D 0927025 | 8/57 FK 4E 0927026 |

Drive system - Torque motor

Drive system - Torque motor with frequency converter



REEL SELECTION CHART

Monospiral wrap, shaft gear, horizontal payout

Applications

1 2

| Cable NSHTÖU-J 4 x 25 mm ² | | Ø 35 mm | | | | Weight: 1,9 kg/m | |
|---------------------------------------|--------------------|----------------------|----------------------|------------------------|------------------------|------------------------|------------------------|
| active length [m] | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 60 m/min. | 80 m/min. |
| 150 | LT 12/30 N 4 M150- | 8/76 M5 0920124 | 8/67 M8 0920125 | 8/41 M9 0920126 | 8/28 M10 0920127 | 8/85 FK 4D 0927027 | 8/41 FK 6E 0927028 |
| 182 | LT 15/34 N 4 M150- | 10/94 M5 0920131 | 10/84 M8 0920132 | 10/54 M9 0920133 | 10/38 M10 0920134 | 10/84 FK 4E 0927029 | 10/54 FK 4F 0927030 |
| Cable NSHTÖU-J 4 x 35 mm ² | | Ø 39,5 mm | | | | Weight: 2,6 kg/m | |
| 13 | LT 6/12 N 4 M150- | 6/32 M4 0920137 | 6/25 M5 0920138 | 6/22 M8 0920139 | 6/15 M9 0920141 | 8/12 M10 0927031 | 6/29 FK 4D 0927032 |
| 29 | LT 6/15 N 4 M150- | 6/45 M4 0920143 | 6/29 M8 0920144 | 6/20 M9 0920145 | 8/13 M10 0920146 | 6/45 FK 4D 0927033 | 6/15 FK 4E 0927034 |
| 40 | LT 8/18 N 4 M150- | 6/51 M4 0920148 | 6/36 M8 0920149 | 6/22 M9 0920151 | 6/22 M9 0920152 | 6/51 FK 4D 0927035 | 6/36 FK 4E 0927036 |
| 63 | LT 8/21 N 4 M150- | 6/60 M5 0920155 | 6/45 M8 0920156 | 6/29 M9 0920157 | 8/22 M10 0920158 | 6/60 FK 4D 0927037 | 6/45 FK 4E 0927038 |
| 80 | LT 12/25 N 4 M150- | 8/85 M4 0920162 | 8/57 M8 0920163 | 8/36 M9 0920164 | 8/25 M10 0920165 | 8/76 FK 4D 0927039 | 8/57 FK 4E 0927040 |
| 111 | LT 15/30 N4 M150- | 10/94 M5 0920168 | 10/73 M8 0920169 | 10/54 M9 0920171 | 10/38 M10 0920172 | 10/94 FK 4D 0927041 | 10/73 FK 4E 0927042 |
| 130 | LT 12/30 N 4 M150- | 10/84 M8 0920175 | 10/73 M8 0920176 | 10/38 M10 0920177 | 10/73 FK 4E 0927043 | 10/73 FK 4E 0927044 | 10/54 FK 4F 0927045 |
| 159 | LT 15/34 N 4 M150- | 10/94 M8 0920182 | 10/65 M9 0920183 | 10/44 M10 0920184 | 10/94 FK 4E 0927046 | 10/94 FK 4E 0927047 | 10/65 FK 4F 0927048 |
| 201 | LT 18/38 N 4 M150- | 12/95 M6 0920188 | 12/73 M9 0920189 | 12/52 M10 0920191 | 12/95 FK 6D 0927049 | 12/72 FK 6D 0927050 | 12/85 FK 4F 0927051 |
| Cable NSHTÖU-J 4 x 50 mm ² | | Ø 46,5 mm | | | | Weight: 3,6 kg/m | |
| 48 | LT 8/21 N 4 M300- | 8/76 M7 0920195 | 8/36 M9 0920196 | 8/25 M10 0920197 | 8/67 FK 4D 0927052 | 8/50 FK 4E 0927053 | 8/36 FK 4F 0927054 |
| 62 | LT 12/25 N 4 M300- | 8/85 M5 0920202 | 8/67 M8 0920203 | 8/41 M9 0920204 | 8/32 M10 0927055 | 8/85 FK 4D 0927056 | 8/41 FK 6E 0927057 |
| 90 | LT 15/30 N 4 M300- | 10/94 M8 0920208 | 10/94 M8 0920209 | 10/65 M9 0920211 | 10/44 M10 0927058 | 10/84 FK 4E 0927059 | 10/65 FK 4F 0927060 |
| 111 | LT 12/30 N 4 M300- | 10/94 M8 0920215 | 10/65 M9 0920216 | 10/44 M10 0920217 | 10/94 FK 4E 0927061 | 10/65 FK 4F 0927062 | 10/65 FK 4F 0927063 |
| 137 | LT 15/34 N 4 M300- | 10/73 M9 0920222 | 10/73 M9 0920223 | 10/54 M10 0920224 | 10/73 FK 6E 0927064 | 10/84 FK 4F 0927065 | 10/54 FK 6F 0927066 |
| 166 | LT 18/38 N 4 M300- | 12/95 M9 0920228 | 12/95 M9 0920229 | 12/85 FK 6E 0926067 | 12/85 FK 6E 0927068 | 12/95 FK 4F 0927069 | 12/95 FK 4F 0927070 |
| 214 | LT 18/41 N 4 M300- | 12/73 M10 0920235 | 12/73 M10 0920236 | 12/72 FK 6F 0927071 | 12/72 FK 6F 0927072 | 12/72 FK 6F 0927073 | 12/85 FK 4G 0927074 |
| Cable NSHTÖU-J 4 x 70 mm ² | | Ø 51 mm | | | | Weight: 4,6 kg/m | |
| 57 | LT 12/25 N 4 M300- | 10/94 M5 0920242 | 10/54 M9 0920243 | 10/38 M10 0920244 | 10/73 FK 4E 0927075 | 10/73 FK 4E 0927076 | 10/54 FK 4F 0927077 |
| 83 | LT 15/30 N 4 M300- | 10/94 M6 0920248 | 10/73 M9 0920249 | 10/54 M10 0920251 | 10/94 FK 6D 0927078 | 10/73 FK 4F 0927079 | 10/73 FK 4F 0927080 |
| 97 | LT 12/30 N 4 M300- | 10/94 M6 0920255 | 10/54 M10 0920256 | 10/99 FK 6D 0927081 | 10/73 FK 6E 0927082 | 10/73 FK 4F 0927083 | 10/54 FK 4G 0927084 |

REEL SELECTION CHART

Monospiral wrap, shaft gear, horizontal payout

Applications

1 2



| Cable NSHTÖU-J 4 x 70 mm ² | | Ø 51 mm | | | | Weight: 4,6 kg/m | |
|---|--------------------|-----------------------|-----------------------|-------------------------|-------------------------|------------------------|------------------------|
| active length [m] | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 60 m/min. | 80 m/min. |
| 122 | LT 15/34 N 4 M300- | 10/94 M9 0920262 | 10/65 M10 0920263 | 12/85 FK 6E 0927085 | 12/85 FK 6E 0927086 | 12/95 FK 4F 0927087 | 12/72 FK 4G 0927088 |
| 148 | LT 18/38 N 4 M300- | 12/85 M10 0920268 | 12/85 M10 0920269 | 12/72 FK 6F 0927089 | 12/72 FK 6F 0927090 | 12/72 FK 6F 0927091 | 12/85 FK 4G 0927092 |
| 184 | LT 18/41 N 4 M300- | 12/95 M10 0920275 | 12/95 M10 0920276 | 12/85 FK 6F 0927093 | 12/85 FK 6F 0927094 | 12/85 FK 6F 0927095 | 12/95 FK 4G 0927096 |
| 236 | LT 18/45 N 4 M300- | 14/59 M11 0927097 | 14/59 M11 0927098 | 14/78 FK 6G 0927099 | 14/78 FK 6G 0927100 | 14/78 FK 4H 0929101 | 14/78 FK 4H 0927102 |
| Cable NSHTÖU-J 4 x 95 mm ² | | Ø 58,5 mm | | | | Weight: 6,2 kg/m | |
| 69 | LT 15/30 N 4 M300- | 12/95 M9 0920288 | 12/73 M10 0920289 | 12/95 FK 6E 0927103 | 12/95 FK 6E 0927104 | 12/95 FK 4F 0927105 | 12/72 FK 4G 0927106 |
| 85 | LT 12/30 N 4 M300- | 12/95 M9 0920295 | 12/73 M10 0920296 | 12/95 FK 6E 0927107 | 12/95 FK 4F 0927108 | 12/72 FK 4G 0927109 | 12/53 FK 4H 0927110 |
| 97 | LT 15/34 N 4 M300- | 12/85 M10 0920302 | 12/85 M10 0920303 | 12/85 FK 6F 0927111 | 12/85 FK 6F 0927112 | 12/85 FK 4G 0927113 | 12/72 FK 4H 0927114 |
| 120 | LT 18/38 N 4 M300- | 12/95 M10 0920308 | 12/95 M10 0920309 | 12/95 FK 6F 0927115 | 12/95 FK 6F 0927116 | 12/95 FK 4G 0927117 | 12/95 FK 4G 0927118 |
| 168 | LT 18/41 N 4 M300- | 12/60 M11 0927119 | 12/60 M11 0927120 | 12/85 FK 6G 0927121 | 12/85 FK 6G 0927122 | 12/95 FK 4H 0927123 | 12/95 FK 4H 0927124 |
| 194 | LT 18/45 N 4 M300- | 14/66 M11 0927125 | 14/66 M11 0927126 | 14/93 FK 6G 0927127 | 14/93 FK 6G 0927128 | 14/78 FK 4I 0927129 | 14/78 FK 4I 0927130 |
| 221 | LT 20/48 N 4 M300- | 14/78 M11 0927131 | 14/78 M11 0927132 | 14/78 M11 0927133 | 14/78 FK 6H 0927134 | 14/93 FK 4I 0927135 | 14/93 FK 4I 0927136 |
| Cable NSHTÖU-J 4 x 120 mm ² | | Ø 64 mm | | | | Weight: 7,6 kg/m | |
| 62 | LT 15/30 N 4 M500- | 12/85 M10 0920335 | 12/85 M10 0920336 | 12/72 FK 6F 0927137 | 12/72 FK 6F 0927138 | 12/72 FK 6F 0927139 | 12/85 FK 4G 0927140 |
| 70 | LT 12/30 N 4 M500- | 12/85 M10 0920342 | 12/44 M11 0927141 | 12/72 FK 6F 0927142 | 12/72 FK 6F 0927143 | 12/85 FK 4G 0927144 | 12/60 FK 4H 0927145 |
| 90 | LT 15/34 N 4 M500- | 12/95 M10 0920348 | 12/53 M11 0927146 | 12/95 FK 6F 0927147 | 12/95 FK 6F 0927148 | 12/95 FK 4G 0927149 | 12/85 FK 4H 0927150 |
| 113 | LT 18/38 N 4 M500- | 12/60 M11 0927151 | 12/60 M11 0927152 | 12/85 FK 6G 0927153 | 12/85 FK 6G 0927154 | 12/95 FK 4H 0927155 | 12/95 FK 4H 0927156 |
| 139 | LT 18/41 N 4 M500- | 14/78 M11 0927157 | 14/78 M11 0927158 | 14/93 FK 6G 0927159 | 14/93 FK 6G 0927160 | 14/78 FK 4I 0927161 | 14/78 FK 4I 0927162 |
| 188 | LT 18/45 N 4 M500- | 14/93 M11 0927163 | 14/93 M11 0927164 | 14/93 FK 6H 0927165 | 14/93 FK 6H 0927166 | 14/93 FK 4I 0927167 | 14/93 FK 4I 0927168 |
| 229 | LT 20/51 N 4 M500- | 16/101 M11 0927169 | 16/101 M11 0927170 | 16/101 FK 6H 0927171 | 16/101 FK 6H 0927172 | 16/80 FK 4K 0927173 | 16/80 FK 4K 0927174 |
| Cable NSHTÖU-J 24 x 1,5 mm ² | | Ø 30,5 mm | | | | Weight: 1,2 kg/m | |
| 19 | LT 6/12 N 24 K 60- | 6/36 M3 0920382 | 6/22 M4 0920383 | 6/17 M5 0920384 | 6/15 M8 0920385 | - | - |
| 38 | LT 6/15 N 24 K 60- | 6/45 M3 0920387 | 6/22 M5 0920388 | 6/20 M8 0920389 | 6/12 M9 0920391 | 8/12 M10 0927175 | 6/36 FK 4D 0927176 |
| 56 | LT 8/18 N 24 K 60- | 6/60 M3 0920393 | 6/36 M4 0920394 | 6/25 M8 0920395 | 6/15 M9 0920396 | - | - |

Drive system - Torque motor

Drive system - Torque motor with frequency converter



REEL SELECTION CHART

Monospiral wrap, shaft gear, horizontal payout

Applications

1 2

| Cable NSHTÖU-J 24 x 1,5 mm ² | | Ø 30,5 mm | | | | Weight: 1,2 kg/m | |
|---|--------------------|---------------------|---------------------|---------------------|----------------------|------------------------|------------------------|
| active length [m] | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 60 m/min. | 80 m/min. |
| 86 | LT 8/21 N 24 K60- | 6/45 M4 0920399 | 6/36 M5 0920401 | 6/29 M8 0920402 | 8/19 M9 0920403 | 8/16 M10 0927177 | 6/29 FK 4E 0927178 |
| 110 | LT 12/25 N 24 K60- | 8/85 M3 0920406 | 8/50 M5 0920407 | 8/36 M8 0920408 | 8/25 M9 0920409 | 8/19 M10 0927179 | 8/50 FK 4D 0927180 |
| 154 | LT 15/30 N 24 K60- | 8/76 M4 0920413 | 8/57 M5 0920414 | 8/50 M8 0920415 | 8/32 M9 0920416 | 8/25 M10 0927181 | 8/67 FK 4D 0927182 |
| Cable NSHTÖU-J 12 x 2,5 mm ² | | Ø 25,5 mm | | | | Weight: 0,85 kg/m | |
| 25 | LT 6/12 N 12 K60- | 6/45 M2 0920419 | 6/20 M4 0920421 | 6/15 M5 0920422 | 6/15 M8 0920423 | - | - |
| 48 | LT 6/15 N 12 K60- | 6/45 M3 0920425 | 6/24 M4 0920426 | 6/17 M8 0920427 | 6/17 M8 0920428 | - | - |
| 68 | LT 8/18 N 12 K60- | 6/51 M3 0920431 | 6/32 M4 0920432 | 6/29 M7 0920433 | 6/20 M8 0920434 | - | - |
| 104 | LT 8/21 N 12 K60- | 6/60 M3 0920437 | 6/32 M5 0920438 | 8/22 M6 0920439 | 6/17 M9 0920441 | 8/13 M10 0927183 | 6/45 FK 4D 0927184 |
| 133 | LT 12/25 N12 K60- | 8/76 M3 0920444 | 8/50 M4 0920445 | 8/32 M8 0920446 | 8/32 M8 0920447 | - | - |
| 181 | LT 15/30 N 12 K60- | 8/96 M3 0920451 | 8/67 M4 0920452 | 8/41 M8 0920453 | 8/41 M8 0920454 | 8/22 M10 0927185 | 8/22 M10 0927186 |
| Cable NSHTÖU-J 18 x 2,5 mm ² | | Ø 29,5 mm | | | | Weight: 1,2 kg/m | |
| 19 | LT 6/12 N 18 K60- | 6/36 M3 0920457 | 6/22 M4 0920458 | 6/17 M5 0920459 | 6/15 M8 0920461 | - | - |
| 38 | LT 6/15 N 18 K60- | 6/45 M3 0920463 | 6/22 M5 0920464 | 6/20 M8 0920465 | 6/12 M9 0920466 | 8/12 M10 0927187 | 6/25 FK 4D 0927188 |
| 56 | LT 8/18 N 18 K60- | 6/60 M3 0920468 | 6/36 M4 0920469 | 6/22 M8 0920471 | 6/22 M8 0920472 | - | - |
| 85 | LT 8/21 N 18 K60- | 6/45 M4 0920475 | 6/36 M5 0920476 | 6/29 M8 0920477 | 6/20 M9 0920478 | 8/13 M10 0927189 | 6/29 FK 4E 0927190 |
| 108 | LT 12/25 N 18 K60- | 8/85 M3 0920482 | 8/50 M5 0920483 | 8/36 M8 0920484 | 8/22 M9 0920485 | 8/19 M10 0927191 | 8/50 FK 4D 0927192 |
| 153 | LT 15/30 N 18 K60- | 8/76 M4 0920488 | 8/57 M5 0920489 | 8/50 M8 0920491 | 8/32 M9 0920492 | 8/25 M10 0927193 | 8/67 FK 4D 0927194 |
| 176 | LT 12/30 N 18 K60- | 8/76 M4 0920495 | 8/50 M8 0920496 | 8/32 M9 0920497 | 8/32 M9 0920498 | 8/67 FK 4D 0927195 | 8/50 FK 4E 0927196 |
| 220 | LT 15/34 N 18 K60- | 10/94 M4 0920502 | 10/65 M8 0920503 | 10/44 M9 0920504 | 10/30 M10 0920505 | 10/84 FK 4D 0927197 | 10/65 FK 4E 0927198 |
| Cable NSHTÖU-J 24 x 2,5 mm ² | | Ø 34,5 mm | | | | Weight: 1,65 kg/m | |
| 16 | LT 6/12 N 24 K60- | 6/45 M3 0920508 | 6/25 M4 0920509 | 6/17 M8 0920511 | 6/17 M8 0920512 | - | - |
| 32 | LT 6/15 N 24 K60- | 6/32 M4 0920514 | 6/25 M5 0920515 | 6/22 M8 0920516 | 6/15 M9 0920517 | 8/12 M10 0927199 | 6/29 FK 4D 0927200 |
| 48 | LT 8/18 N 24 K60- | 6/45 M4 0920519 | 6/32 M5 0920521 | 6/29 M8 0920522 | 6/17 M9 0920523 | 8/13 M10 0927201 | 6/36 FK 4D 0927202 |
| 71 | LT 8/21 N 24 K60- | 6/51 M4 0920526 | 6/36 M8 0920527 | 6/22 M9 0920528 | 6/22 M9 0920529 | 8/16 M10 0927203 | 6/32 FK 4E 0927204 |

REEL SELECTION CHART

Monospiral wrap, shaft gear, horizontal payout

Applications

1 2



| Cable NSHTÖU-J 24 x 2,5 mm ² | | Ø 34,5 mm | | | | Weight: 1,65 kg/m | |
|---|--------------------|----------------------|---------------------|----------------------|------------------------|------------------------|------------------------|
| active length [m] | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 60 m/min. | 80 m/min. |
| 91 | LT 12/25 N 24 K60- | 8/67 M4 0920533 | 8/50 M5 0920534 | 8/41 M8 0920535 | 8/28 M9 0920536 | 8/22 M10 0927205 | 8/57 FK 4D 0927206 |
| 133 | LT 15/30 N 24 K60- | 8/85 M4 0920539 | 8/67 M5 0920541 | 8/57 M8 0920542 | 8/36 M9 0920543 | 8/28 M10 0927207 | 8/76 FK 4D 0927208 |
| 149 | LT 12/30 N 24 K60- | 8/85 M4 0920546 | 8/57 M8 0920547 | 8/36 M9 0920548 | 8/28 M10 0920549 | 8/76 FK 4D 0927209 | 8/57 FK 4E 0927210 |
| 191 | LT 15/34 N 24 K60- | 10/94 M5 0920553 | 10/73 M8 0920554 | 10/54 M9 0920555 | 10/38 M10 0920556 | 10/73 FK 4E 0927211 | 10/73 FK 4E 0927212 |
| 226 | LT 18/38 N 24 K60- | 12/85 M8 0920559 | 12/85 M8 0920561 | 12/60 M9 0920562 | 12/44 M10 0920563 | 12/85 FK 4E 0927213 | 12/85 FK 4E 0927214 |
| Cable NSHTÖU-J 30 x 2,5 mm ² | | Ø 36,5 mm | | | | Weight: 1,90 kg/m | |
| 13 | LT 6/12 N 30 K60- | 6/45 M3 0920566 | 6/29 M4 0920567 | 6/17 M8 0920568 | 6/17 M8 0920569 | - | - |
| 32 | LT 6/15 N 30 K60- | 6/36 M4 0920572 | 6/29 M5 0920573 | 6/17 M9 0920574 | 6/17 M9 0920575 | 8/12 M10 0927215 | 6/32 FK 4D 0927216 |
| 44 | LT 8/18 N 30 K60- | 6/45 M4 0920577 | 6/36 M5 0920578 | 6/29 M8 0920579 | 6/20 M9 0920581 | 8/16 M10 0927217 | 6/45 FK 4D 0927218 |
| 67 | LT 8/21 N 30 K60- | 6/60 M4 0920584 | 6/53 M7 0920585 | 6/25 M9 0920586 | 8/16 M10 0920587 | 8/57 FK 4D 0927219 | 6/36 FK 4E 0927220 |
| 86 | LT 12/25 N 30 K60- | 8/67 M7 0920591 | 8/67 M7 0920592 | 8/28 M9 0920593 | 8/28 M9 0920594 | 8/22 M10 0927221 | 8/50 FK 4E 0927222 |
| 126 | LT 15/30 n 30 K60- | 8/96 M4 0920597 | 8/85 M7 0920598 | 8/41 M9 0920599 | 8/41 M9 0920601 | 8/85 FK 4D 0927223 | 8/57 FK 4E 0927224 |
| 143 | LT 12/30 N 30 K60- | 8/76 M5 0920604 | 8/67 M8 0920605 | 8/41 M9 0920606 | 8/28 M10 0920607 | 8/85 FK 4D 0927225 | 8/41 FK 6E 0927226 |
| 174 | LT 15/34 N 30 K60- | 10/94 M5 0920611 | 10/84 M8 0920612 | 10/54 M9 0920613 | 10/38 M10 0920614 | 10/84 FK 4E 0927227 | 10/54 FK 4F 0927228 |
| 219 | LT 18/38 N 30 K60- | 12/95 M8 0920617 | 12/95 M8 0920618 | 12/60 M9 0920619 | 12/44 M10 0920621 | 12/45 FK 4E 0927229 | 12/60 FK 6E 0927230 |
| Cable NSHTÖU-J 36 x 2,5 mm ² | | Ø 40 mm | | | | Weight: 2,20 kg/m | |
| 13 | LT 6/12 N 36 P25- | 6/29 M4 0920624 | 6/29 M4 0920625 | 6/20 M8 0920626 | 6/15 M9 0920627 | - | - |
| 29 | LT 6/15 N 36 P25- | 6/45 M4 0920629 | 6/25 M8 0920631 | 6/17 M9 0920632 | 6/17 M9 0920633 | 6/36 FK 4D 0927231 | 6/25 FK 4E 0927332 |
| 40 | LT 8/18 N 36 P25- | 6/51 M4 0920635 | 6/40 M5 0920636 | 6/32 M8 0920637 | 6/22 M9 0920638 | 8/16 M10 0927233 | 6/45 FK 4D 0927234 |
| 63 | LT 8/21 N 36 P25- | 6/60 M4 0920642 | 6/45 M8 0920643 | 6/25 M9 0920644 | 8/19 M10 0920645 | 6/51 FK 4D 0927235 | 6/45 FK 4E 0927236 |
| 73 | LT 12/25 N 36 P25- | 8/76 M4 0920648 | 8/72 M7 0920649 | 8/32 M9 0920651 | 8/32 M9 0920652 | 8/25 M10 0927237 | 8/50 FK 4E 0927238 |
| 112 | LT 15/30 N 36 P25- | 10/105 M4 0920655 | 10/65 M8 0920656 | 10/44 M9 0920657 | 10/44 M9 0920658 | 8/85 FK 4D 0927239 | 8/67 FK 4E 0927240 |
| 131 | LT 12/30 N 36 P25- | 10/105 M4 0920662 | 10/65 M8 0920663 | 10/44 M9 0920664 | 10/31 M10 0920665 | 8/67 FK 4E 0927241 | 8/50 FK 4F 0927242 |
| 160 | LT 15/34 N 36 P25- | 10/84 M8 0920668 | 10/84 M8 0920669 | 10/54 M9 0920671 | 10/44 M10 0927243 | 10/84 FK 4E 0927244 | 10/65 FK 4F 0927245 |
| 191 | LT 18/38 N 36 P25- | 12/85 M6 0920675 | 12/73 M9 0920676 | 12/53 M10 0920677 | 12/53 M10 0927246 | 12/95 FK 4E 0927247 | 12/95 FK 4E 0927248 |
| 230 | LT 18/41 N 36 P25- | 12/95 M6 0920682 | 12/73 M9 0920683 | 12/53 M10 0920684 | 12/95 FK 6D 0927249 | 12/72 FK 6E 0927250 | 12/85 FK 4F 0927251 |

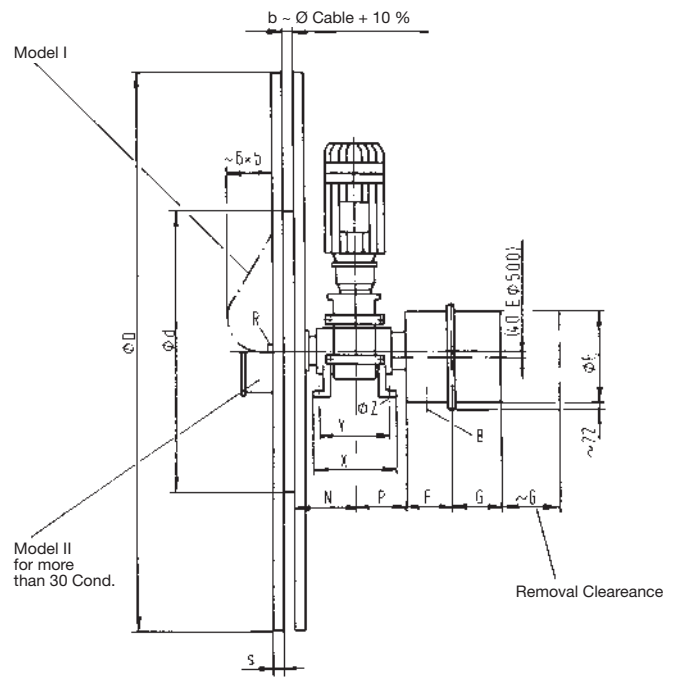
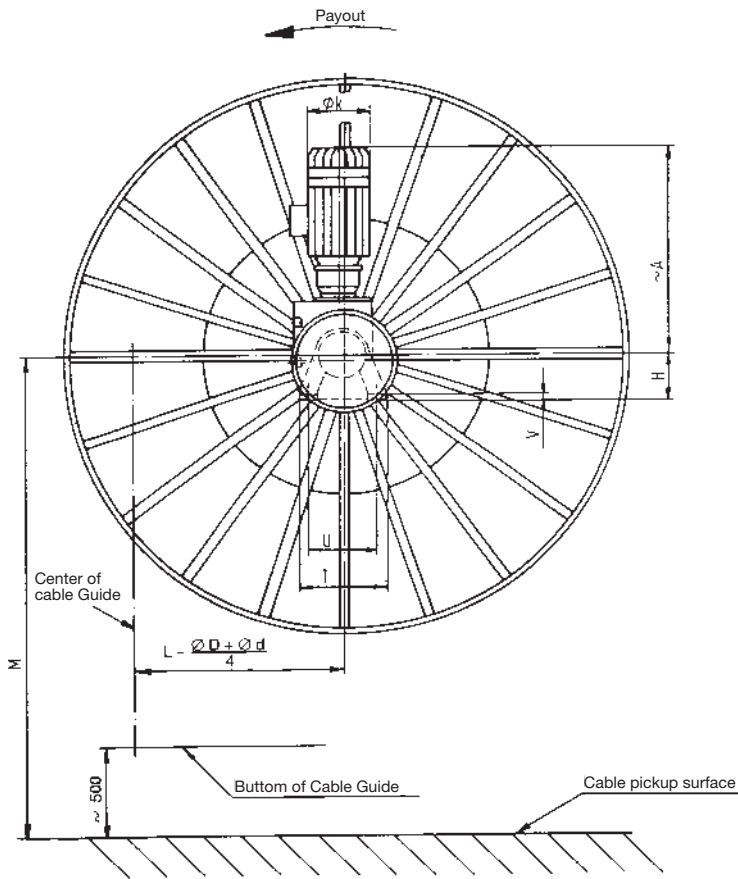
Drive system - Torque motor

Drive system - Torque motor with frequency converter



REEL DIMENSIONAL DATA for reel selection chart, pages 9-13

Monospiral wrap, shaft gear

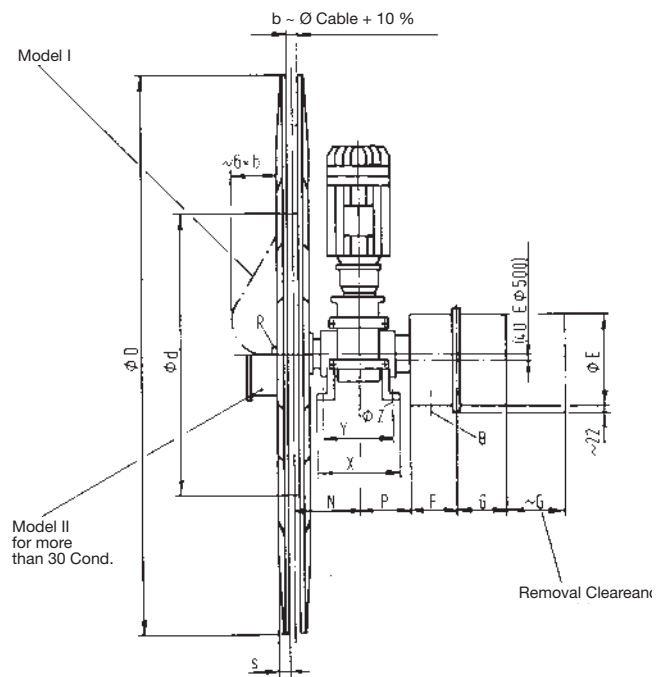
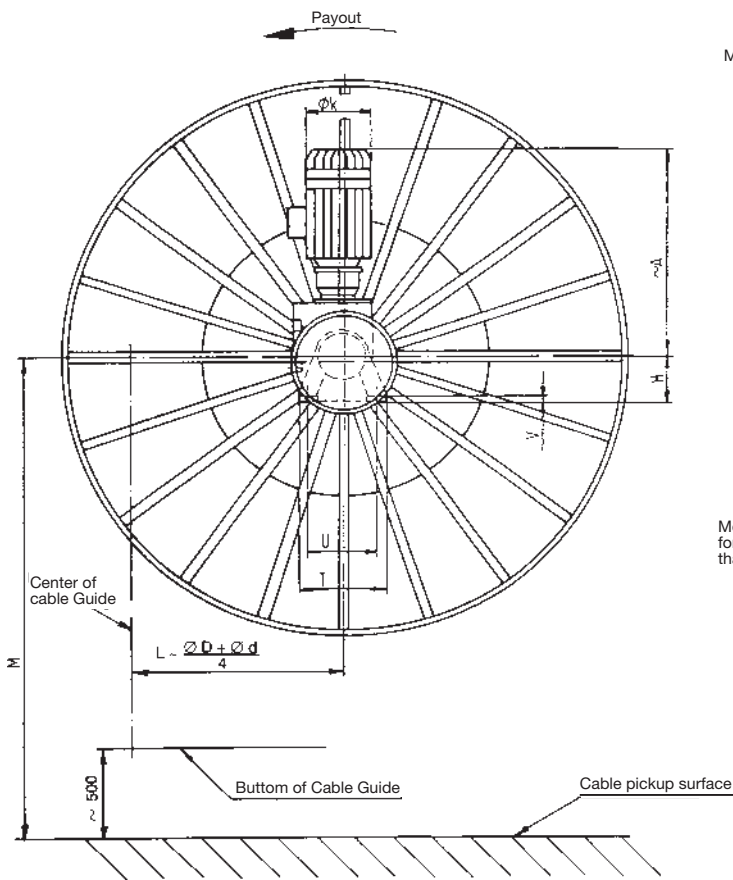


B = Cable entrance to brushes
R = Cable entrance to rings

| Type | A | Ø d | Ø D | H | Ø k | M | N | P | s | T | U | V | X | Y | Ø Z | ~ kg |
|-------------------------|------|------|------|-----|-----|-------|-----|-----|----|-----|-----|----|-----|-----|-----|------|
| LT 6/12N ... - 6 | 945 | 600 | 1200 | 140 | 250 | 1500* | 229 | 161 | 20 | 250 | 210 | 20 | 250 | 220 | 13 | 300 |
| - 8 | 855 | | | 175 | 246 | | 255 | 187 | | 300 | 240 | 25 | 300 | 260 | 17 | 350 |
| LT 6/15N ... - 6 | 945 | 600 | 1500 | 140 | 250 | 1500* | 229 | 161 | 20 | 250 | 210 | 20 | 250 | 220 | 13 | 310 |
| - 8 | 1055 | | | 175 | 274 | | 255 | 187 | | 300 | 240 | 25 | 300 | 260 | 17 | 420 |
| LT 8/18N ... - 6 | 945 | 800 | 1800 | 140 | 250 | 1500* | 229 | 161 | 30 | 250 | 210 | 20 | 250 | 220 | 13 | 320 |
| - 8 | 1100 | | | 175 | 320 | | 255 | 187 | | 300 | 240 | 25 | 300 | 260 | 17 | 460 |
| LT 8/21N ... - 6 | 945 | 800 | 2100 | 140 | 250 | 2000* | 229 | 161 | 40 | 250 | 210 | 20 | 250 | 220 | 13 | 360 |
| - 8 | 1055 | | | 175 | 274 | | 255 | 187 | | 300 | 240 | 25 | 300 | 260 | 17 | 400 |
| LT12/25N ... - 8 | 1055 | 1200 | 2500 | 175 | 274 | 2000* | 255 | 187 | 40 | 300 | 240 | 25 | 300 | 260 | 17 | 480 |
| -10 | 1210 | | | 210 | 380 | | 310 | 287 | | 380 | 310 | 30 | 355 | 300 | 22 | 640 |
| - 8 | 1185 | | | 175 | 380 | | 255 | 187 | | 300 | 240 | 25 | 300 | 260 | 17 | 660 |
| LT12/30N ... -10 | 1460 | 1200 | 3000 | 210 | | 3300 | 310 | 287 | 60 | 380 | 310 | 30 | 355 | 300 | 22 | 910 |
| -12 | 1505 | | | 250 | 470 | | 355 | 332 | | 450 | 360 | 35 | 450 | 380 | 26 | 1348 |
| - 8 | 1185 | | | 175 | 380 | | 255 | 187 | | 300 | 240 | 25 | 300 | 260 | 17 | 610 |
| LT15/30N ... -10 | 1460 | 1500 | 3000 | 210 | | 3300 | 310 | 287 | 50 | 380 | 310 | 30 | 355 | 300 | 22 | 800 |
| -12 | 1505 | | | 250 | 470 | | 355 | 332 | | 450 | 360 | 35 | 450 | 380 | 26 | 1170 |
| LT15/34N ... -10 | 1460 | 1500 | 3400 | 210 | 470 | 3450 | 310 | 287 | 60 | 380 | 310 | 30 | 355 | 300 | 22 | 1350 |
| -12 | 1535 | | | 250 | | | 355 | 332 | | 450 | 360 | 35 | 450 | 380 | 26 | 1500 |
| LT18/38N ... -12 | 1505 | 1800 | 3800 | 250 | 470 | 3650 | 355 | 332 | 70 | 450 | 360 | 35 | 450 | 380 | 26 | 1600 |
| LT18/41N ... -12 | 1535 | 1800 | 4150 | 250 | 470 | 3850 | 355 | 332 | 80 | 450 | 360 | 35 | 450 | 380 | 26 | 1780 |

REEL DIMENSIONAL DATA for reel selection chart, page 9-13

Monospiral wrap, shaft gear



B = Cable entrance to brushes
R = Cable entrance to rings

| Type | A | Ø d | Ø D | H | Ø k | M | N | P | s | T | U | V | X | Y | Ø Z | ≈ kg |
|---------------------|------|------|------|-----|-----|------|-----|-----|-----|-----|-----|----|-----|-----|-----|------|
| LT 18/45N . . . -14 | 1800 | 1800 | 4500 | 300 | 470 | 4000 | 480 | 371 | 135 | 550 | 470 | 40 | 540 | 450 | 33 | 2250 |
| LT 20/48N . . . -14 | 1800 | 2000 | 4800 | 300 | 470 | 4150 | 480 | 371 | 135 | 550 | 470 | 40 | 540 | 450 | 33 | 2270 |
| LT 20/51N . . . -16 | 1850 | 2000 | 5100 | 350 | 470 | 4300 | 532 | 410 | 150 | 640 | 520 | 45 | 640 | 540 | 39 | 3125 |

Dimensional data of collector assembly hoods p. drawings pages 14 and 15

| SRK-Type | E | F | G |
|----------|-------|-----|-----|
| 4 M 60 | Ø 340 | 153 | 153 |
| 7 K 60 | | | 353 |
| 12 K 60 | | | |
| 18 K 60 | | | |
| 24 K 60 | | | |
| 30 K 60 | | | 353 |
| 36 P 25 | | | |
| 4 M150 | Ø 500 | 203 | 153 |
| 4 M300 | | | |
| 4 M500 | | | |



REEL SELECTION CHART

Monospiral wrap, shaft gear, horizontal payout

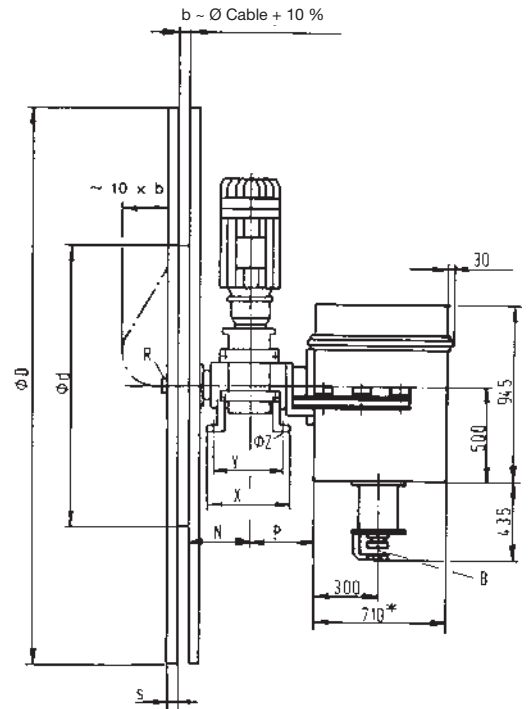
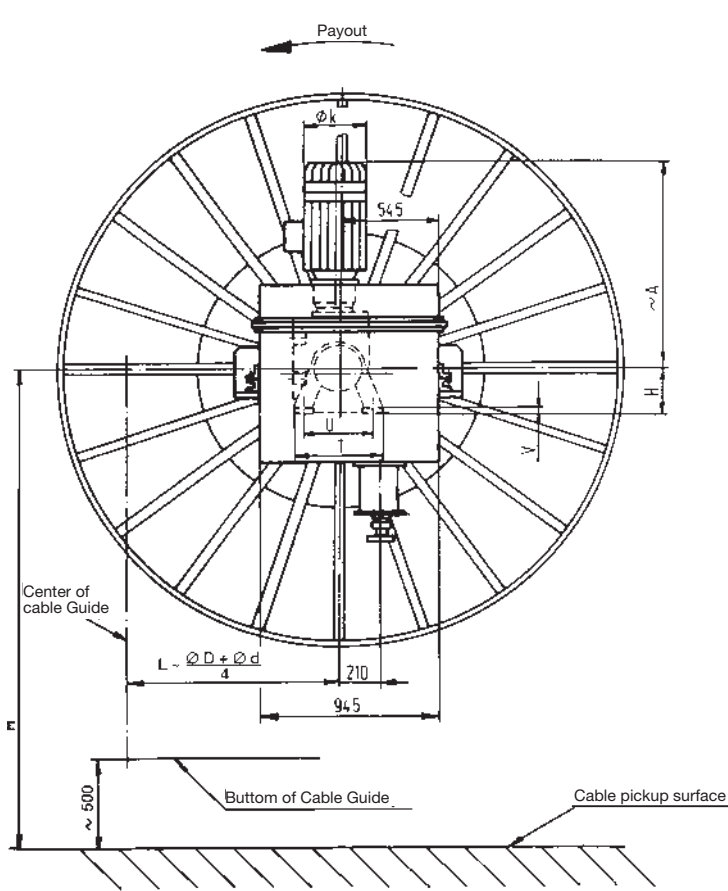
Applications

1 2

| Cable NTSCGEWÖU (SM-R) 6 KV 3 x 25 + 3 x 25/3 mm ² Ø 48,1 mm Weight: 3,15 kg/m | | | | | | | |
|--|--------------------|----------------------|----------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| active length [m] | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 50 m/min. | 60 m/min. |
| 124 | LT 15/34 H 4 K200- | 10/94 R9 0927252 | 10/73 R9 0927253 | 10/54 R10 0927254 | 10/94 FP 6D 0927255 | 10/73 FP 6E 0927256 | 10/73 FP 4F 0927257 |
| 150 | LT 18/38 H 4 K200- | 12/85 R9 0927258 | 12/85 R9 0927259 | 12/60 R10 0927260 | 12/85 FP 6E 0927261 | 12/85 FP 6E 0927262 | 12/85 FP 4F 0927263 |
| 198 | LT 18/41 H 4 K200- | 12/72 R10 0927264 | 12/72 R10 0927265 | 12/72 R10 0927266 | 12/95 FP 6E 0927267 | 12/72 FP 6F 0927268 | 12/72 FP 4G 0927269 |
| 237 | LT 18/45 H 4 K200- | 14/93 R10 0927270 | 14/93 R10 0927271 | 14/78 FP 6F 0927272 | 14/78 FP 6F 0927273 | 14/78 FP 6F 0927274 | 14/93 FP 4G 0927275 |
| 267 | LT 20/48 H 4 K200 | 14/93 R10 0927276 | 14/93 R10 0927277 | 14/93 FP 6F 0927278 | 14/93 FP 6F 0927279 | 14/93 FP 6F 0927280 | 14/93 FP 4G 0927281 |
| Cable NTSCGEWÖU 6 KV 3 x 35 + 3 x 35/3 mm ² Ø 53 mm Weight: 3,8 kg/m | | | | | | | |
| 107 | LT 15/34 H 4 K200- | 10/84 R9 0921034 | 10/84 R9 0921035 | 10/54 R10 0921036 | 10/84 FK 6E 0927282 | 10/84 FP 4F 0927283 | 10/84 FP 4F 0927284 |
| 131 | LT 18/38 H 4 K200- | 12/95 R9 0921041 | 12/95 R9 0921042 | 12/72 R10 0927285 | 12/95 FK 6E 0927286 | 12/95 FK 4F 0927287 | 12/95 FP 4F 0927288 |
| 179 | LT 18/41 H 4 K200- | 12/85 R10 0921047 | 12/85 R10 0921048 | 12/44 R11 0927289 | 12/72 FK 6F 0927290 | 12/72 FP 6F 0927291 | 12/85 FP 4G 0927292 |
| 219 | LT 18/45 H 4 K200- | 14/93 R10 0921054 | 14/93 R10 0921055 | 14/93 FP 6F 0927293 | 14/93 FP 6F 0927294 | 14/93 FP 4G 0927295 | 14/93 FP 4G 0927296 |
| 247 | LT 20/48 H 4 K200- | 14/52 R11 0927297 | 14/59 R11 0927298 | 14/93 FP 6F 0927299 | 14/93 FP 6F 0927300 | 14/93 FP 6F 0927301 | 14/78 FP 4H 0927302 |
| 277 | LT 20/51 H 4 K200- | 16/60 R11 0927303 | 16/60 R11 0927304 | 16/101 FP 6F 0927305 | 16/101 FP 6F 0927306 | 16/85 FP 4H 0927307 | 16/85 FP 4H 0927308 |
| Cable NTSCGEWÖU (SM-R) 10 KV 3 x 25 + 3 x 25/3 mm ² Ø 49,9 mm Weight: 3,52 kg/m | | | | | | | |
| 115 | LT 15/34 H 4 K200- | 10/84 R9 0927309 | 10/84 R9 0927310 | 10/65 R10 0927311 | 10/94 FP 6D 0927312 | 10/73 FP 6E 0927313 | 10/73 FP 4F 0927314 |
| 141 | LT 18/38 H 4 K200- | 12/95 R9 0927315 | 12/95 R9 0927316 | 12/72 R 10 0927317 | 12/85 FP 6E 0927318 | 12/85 FP 6E 0927319 | 12/95 FP 4F 0927320 |
| 188 | LT 18/41 H 4 K200- | 12/85 R10 0927321 | 12/85 R10 0927322 | 12/39 R11 0927323 | 12/72 FP 6F 0927324 | 12/85 FP 4G 0927325 | 12/85 FP 4G 0927326 |
| 228 | LT 18/45 H 4 K200- | 14/93 R10 0927327 | 14/93 R10 0927328 | 14/47 R11 0927329 | 14/78 FP 6F 0927330 | 14/78 FP 6F 0927331 | 14/93 FP 4G 0927332 |
| 256 | LT 20/48 H 4 K200- | 14/53 R11 0927333 | 14/52 R11 0927334 | 14/93 FP 6F 0927335 | 14/93 FP 6F 0927336 | 14/93 FP 6F 0927337 | 14/78 FP 4H 0927338 |
| Cable NTSCGEWÖU 10 KV 3 x 35 + 3 x 35/3 mm ² Ø 53,5 mm Weight: 3,95 kg/m | | | | | | | |
| 108 | LT 15/34 H 4 K200- | 10/84 R9 0921107 | 10/84 R9 0921108 | 10/65 R10 0927339 | 10/84 FK 6E 0927340 | 10/84 FP 4F 0927341 | 10/84 FP 4F 0927342 |
| 132 | LT 18/38 H 4 K200- | 12/95 R9 0921114 | 12/95 R9 0921115 | 12/72 R10 0927343 | 12/95 FP 6F 0927344 | 12/95 FK 4F 0927345 | 12/95 FP 4F 0927346 |
| 168 | LT 18/41 H 4 K200- | 12/85 R10 0921121 | 12/85 R10 0921122 | 12/85 FP 6F 0927347 | 12/85 FP 6F 0927348 | 12/85 FP 6F 0927349 | 12/85 FP 4G 0927350 |
| 220 | LT 18/45 H 4 K200- | 14/93 R10 0921127 | 14/93 R10 0921128 | 14/93 FP 6F 0927351 | 14/93 FP 6F 0927352 | 14/78 FP 4H 0927353 | 14/78 FP 4H 0927354 |
| 248 | LT 20/48 H 4 K200- | 14/54 R11 0927355 | 14/59 R11 0927356 | 14/59 R11 0927357 | 14/78 FP 6G 0927358 | 14/93 FP 4H 0927359 | 14/93 FP 4H 0927360 |
| 278 | LT 20/51 H 4 K200- | 16/60 R11 0927361 | 16/60 R11 0927362 | 16/60 R11 0927363 | 16/80 FP 6G 0927364 | 16/101 FP 4H 0927365 | 16/101 FP 4H 0927367 |

REEL DIMENSIONAL DATA for selection chart page 16

Monospiral wrap, shaft gear



B = Cable entrance to brushes
R = Cable entrance to rings

| Type | A | Ø d | Ø D | H | Ø k | M | N | P | s | T | U | V | X | Y | Ø Z | = kg |
|---------------------|------|------|------|-----|-----|------|-----|-----|-----|-----|-----|----|-----|-----|-----|------|
| LT 15/34H . . . -10 | 1460 | 1500 | 3400 | 210 | 380 | 3450 | 310 | 287 | 60 | 380 | 310 | 30 | 355 | 300 | 22 | 1310 |
| LT 18/38H . . . -12 | 1460 | 1800 | 3800 | 250 | 380 | 3650 | 355 | 332 | 70 | 450 | 360 | 35 | 450 | 380 | 26 | 1540 |
| LT 18/41H . . . -12 | 1505 | 1800 | 4150 | 250 | 380 | 3850 | 355 | 332 | 80 | 450 | 360 | 35 | 450 | 380 | 26 | 1720 |
| LT 18/45H . . . -14 | 1550 | 1800 | 4500 | 300 | 380 | 4000 | 500 | 371 | 80 | 550 | 470 | 40 | 540 | 450 | 33 | 2200 |
| LT 20/48H . . . -14 | 1550 | 2000 | 4800 | 300 | 470 | 4150 | 455 | 371 | 135 | 550 | 470 | 40 | 540 | 450 | 33 | 2570 |
| LT 20/51H . . . -16 | 1600 | 2000 | 5100 | 350 | 470 | 4300 | 505 | 410 | 135 | 640 | 520 | 45 | 640 | 540 | 39 | 3250 |

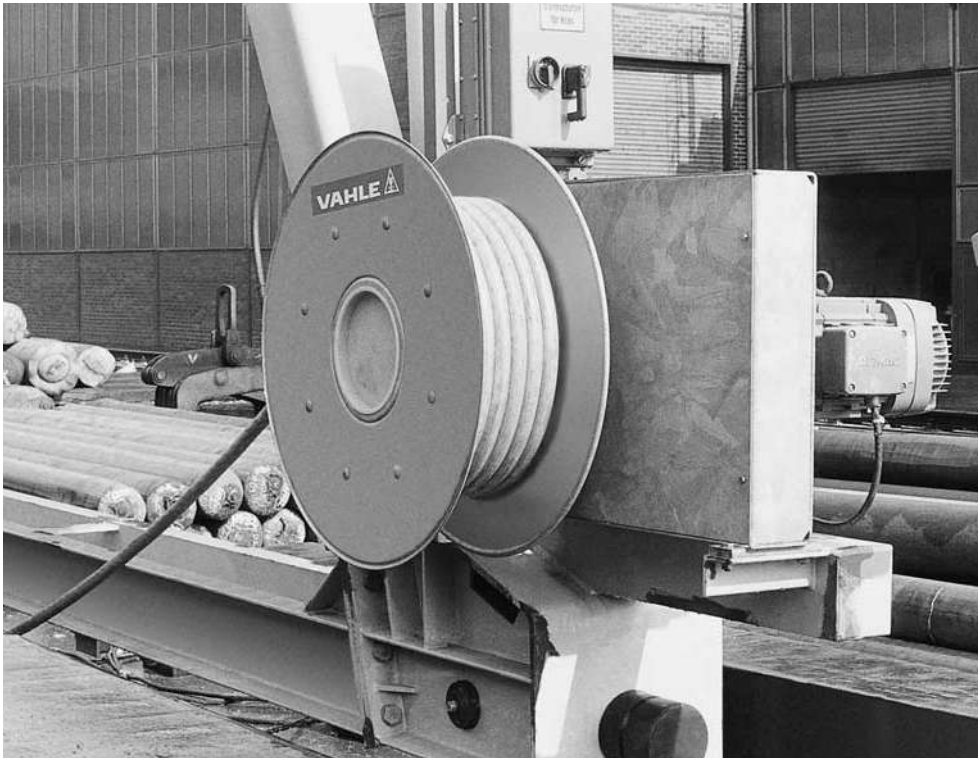
All dimensions in mm

* This dimension increases when using optic data links.



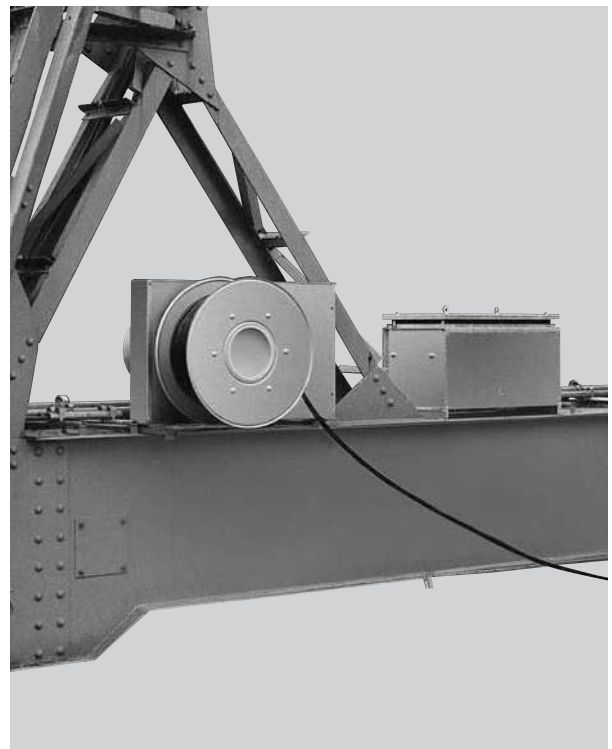
VAHLE LT-REELS IN ACTION

Random wrap, chain transmission, horizontal payout



Type LT 50 N 4 M 150-K/8 M 4
on a Portal Yard crane

Type LT 38 N 4 M 60-K/7 M 4
on a loading bridge



REEL SELECTION CHART

Random wrap, chain transmission, horizontal payout

Application

1



| Cable NSHTÖU-J 4 x 2,5 mm ² | | | Ø 16,5 mm | | | | Weight: 0,33 kg/m | | |
|--|-----|-------------------|---------------------|---------------------|---------------------|---------------------|-------------------|-------------------|--|
| active length [m] | LZ* | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 50 m/min. | 63 m/min. | |
| 32 | 3 | LT 28 N 4 M60- | K/8 M2 0922001 | K/8 M2 0922002 | K/6 M3 0922003 | K/6 M 3 0922004 | K/4 M4 0922005 | K/3 M5 0922006 | |
| 84 | 5 | LT 38 N 4 M 60- | K/9 M3 0922007 | K/9 M3 0922008 | K/9 M3 0922009 | K/5 M4 0922011 | K/5 M4 0922012 | K/4 M5 0922013 | |
| 124 | 5 | LT 50 N 4 M 60- | K/24 M1 0922014 | K/7 M4 0922015 | K/7 M4 0922016 | K/7 M4 0922017 | K/7 M4 0922018 | K/5 M5 0922019 | |
| Cable NSHTÖU-J 4 x 4 mm ² | | | Ø 19,5 mm | | | | Weight: 0,47 kg/m | | |
| 26 | 3 | LT 28 N 4 M60- | K/9 M2 0922021 | K/9 M2 0922022 | K/6 M3 0922023 | K/6 M3 0922024 | K/4 M4 0922025 | K/3 M5 0922026 | |
| 72 | 5 | LT 38 N 4 M60- | K/9 M3 0922027 | K/9 M3 0922028 | K/9 M3 0922029 | K/96 M4 0922031 | K/6 M4 0922032 | K/5 M5 0922033 | |
| 108 | 5 | LT 50 N 4 M60- | KG/24 M1 0922034 | K/7 M4 0922035 | K/7 M4 0922036 | K/7 M4 0922037 | K/7 M4 0922038 | K/6 M5 0922039 | |
| Cable NSHTÖU-J 4 x 6 mm ² | | | Ø 21 mm | | | | Weight: 0,6 kg/m | | |
| 14 | 2 | LT 28 N 4 M60- | K/8 M2 0922041 | K/8 M2 0922042 | K/6 M3 0922043 | K/6 M3 0922044 | K/3 M4 0922045 | K/3 M5 0922046 | |
| 49 | 4 | LT 38 N 4 M60- | K/9 M3 0922047 | K/9 M3 0922048 | K/9 M3 0922049 | K/6 M4 0922051 | K/6 M4 0922052 | K/4 M5 0922053 | |
| 100 | 5 | LT 50 N 4 M60- | KG/24 M1 0922054 | K/7 M4 0922055 | K/7 M4 0922056 | K/7 M4 0922057 | K/7 M4 0922058 | K/6 M5 0922059 | |
| 139 | 5 | LT 50. 1N 4 M60- | KG/24 M1 0922061 | K/7 M4 0922062 | K/7 M4 0922063 | K/7 M4 0922064 | K/7 M4 0922065 | K/6 M5 0922066 | |
| Cable NSHTÖU-J 4 x 10 mm ² | | | Ø 25,5 mm | | | | Weight: 0,95 kg/m | | |
| 31 | 3 | LT 38 N 4 M60- | K/8 M3 0922067 | K/8 M3 0922068 | K/8 M3 0922069 | K/6 M4 0922071 | K/6 M4 0922072 | K/4 M5 0922073 | |
| 64 | 4 | LT 50 N 4 M60- | KG/24 M1 0922074 | K/7 M4 0922075 | K/7 M4 0922076 | K/7 M4 0922077 | K/7 M4 0922078 | K/6 M5 0922079 | |
| 87 | 4 | LT 50. 1N 4 M60- | KG/29 M1 0922081 | K/9 M4 0922082 | K/9 M4 0922083 | K/9 M4 0922084 | K/7 M5 0922085 | K/7 M5 0922086 | |
| 150 | 5 | LT 70 N 4 M60- | KG/46 M1 0922087 | KG/30 M2 0922088 | KG/14 M4 0922089 | KG/14 M4 0922091 | K/8 M6 0922092 | K/6 M5 0922093 | |
| Cable NSHTÖU-J 4 x 16 mm ² | | | Ø 30 mm | | | | Weight: 1,4 kg/m | | |
| 23 | 3 | LT 38 N 4 M150- | K/9 M3 0922094 | K/9 M3 0922095 | K/9 M3 0922096 | K/6 M4 0922097 | K/6 M4 0922098 | K/4 M5 0922099 | |
| 50 | 4 | LT 50 N 4 M150- | KG/31 M1 0922101 | K/9 M4 0922102 | K/9 M4 0922103 | K/9 M4 0922104 | K/7 M5 0922105 | K/6 M8 0922106 | |
| 80 | 4 | LT 50. 1N 4 M150- | KG/35 M1 0922107 | K/23 M2 0922108 | K/8 M5 0922109 | K/9 M5 0922111 | K/8 M5 0922112 | K/7 M8 0922113 | |
| 140 | 5 | LT 70 N 4 M150- | KG/40 M2 0922114 | KG/29 M3 0922115 | KG/19 M4 0922116 | K/8 M9 0922117 | K/8 M9 0922118 | K/8 M9 0922119 | |

* LZ = No. of cable layers



REEL SELECTION CHART

Random wrap, horizontal payout

Application

1

| Cable NSHTÖU-J 4 x 25 mm ² | | | Ø 35 mm | | | Weight: 1,90 kg/m | | |
|---|-----|-------------------|---------------------|---------------------|---------------------|--------------------|--------------------|--------------------|
| active length [m] | LZ* | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 50 m/min. | 63 m/min. |
| 30 | 3 | LT 50 N 4 M150- | KG/33 M1 0922121 | KG/22 M2 0922122 | K/8 M5 0922123 | K/8 M5 0922124 | K/8 M5 0922125 | K/7 M8 0922126 |
| 47 | 3 | LT 50. 1N 4 M150- | KG/35 M1 0922127 | KG/22 M2 0922128 | K/8 M5 0922129 | K/8 M5 0922131 | K/8 M5 0922132 | K/7 M8 0922133 |
| 118 | 5 | LT 70 N 4 M150- | KG/43 M2 0922134 | KG/31 M3 0922135 | KG/20 M4 0922136 | K/8 M9 0922137 | K/8 M9 0922138 | K/8 M9 0922139 |
| Cable NSHTÖU-J 4 x 35 mm ² | | | Ø 39,5 mm | | | Weight: 2,60 kg/m | | |
| 42 | 3 | LT 50. 1N 4 M150- | KG/26 M3 0922141 | KG/16 M4 0922142 | K/9 M6 0922143 | K/9 M6 0922144 | K/7 M9 0922145 | K/5 M10 0922146 |
| 80 | 4 | LT 70 N 4 M150- | KG/41 M3 0922147 | KG/26 M4 0922148 | K/8 M10 0922149 | K/8 M10 0922151 | K/8 M10 0922152 | K/8 M10 0922153 |
| Cable NSHTÖU-J 7 x 1,5 mm ² | | | Ø 19 mm | | | Weight: 0,43 kg/m | | |
| 26 | 3 | LT 28 N 7 K60- | K/9 M2 0922154 | K/9 M2 0922155 | K/6 M3 0922156 | K/4 M4 0922157 | K/4 M4 0922158 | K/3 M5 0922159 |
| 72 | 5 | LT 38 N 7 K60- | K/9 M3 0922161 | K/9 M3 0922162 | K/9 M3 0922163 | K/6 M4 0922164 | K/5 M5 0922165 | K/3 M6 0922166 |
| 107 | 5 | LT 50 N 7 K60- | KG/24 M1 0922167 | K/7 M4 0922168 | K/7 M4 0922169 | K/7 M4 0922171 | K/7 M4 0922172 | K/6 M5 0922173 |
| 154 | 5 | LT 50. 1N 7 K60- | KG/24 M1 0922174 | K/7 M4 0922175 | K/7 M4 0922176 | K/7 M4 0922177 | K/7 M4 0922178 | K/6 M5 0922179 |
| Cable NSHTÖU-J 12 x 1,5 mm ² | | | Ø 22 mm | | | Weight: 0,60 kg/m | | |
| 14 | 2 | LT 28 N 12 K60- | K/8 M2 0922181 | K/8 M2 0922182 | K/6 M3 0922183 | K/4 M4 0922184 | K/4 M4 0922185 | K/3 M5 0922186 |
| 49 | 4 | LT 38 N 12 K60- | K/9 M3 0922187 | K/9 M3 0922188 | K/9 M3 0922189 | K/6 M4 0922191 | K/5 M5 0922192 | K/5 M5 0922193 |
| 92 | 5 | LT 50 N 12 K60- | KG/27 M1 0922194 | K/8 M4 0922195 | K/8 M4 0922196 | K/8 M4 0922197 | K/6 M5 0922198 | K/5 M8 0922199 |
| 139 | 5 | LT 50. 1N 12 K60- | KG/29 M1 0922201 | K/8 M4 0922202 | K/8 M4 0922203 | K/8 M4 0922204 | K/7 M5 0922205 | K/5 M9 0922206 |
| Cable NSHTÖU-J 24 x 1,5 mm ² | | | Ø 30,5 mm | | | Weight: 1,20 kg/m | | |
| 24 | 3 | LT 38 N 24 K60- | K/8 M4 0922207 | K/8 M4 0922208 | K/8 M4 0922209 | K/6 M5 0922211 | K/5 M8 0922212 | K/4 M6 0922213 |
| 50 | 4 | LT 50 N 24 K60- | KG/24 M2 0922214 | KG/17 M3 0922215 | K/9 M5 0922216 | K/9 M5 0922217 | K/7 M8 0922218 | K/6 M6 0922219 |
| 74 | 4 | LT 50. 1N 24 K60- | KG/25 M2 0922221 | KG/17 M3 0922222 | K/9 M5 0922223 | K/9 M5 0922224 | K/7 M8 0922225 | K/5 M9 0922226 |
| 128 | 5 | LT 70 N 24 K60- | KG/36 M2 0922227 | KG/26 M3 0922228 | KG/16 M4 0922229 | K/9 M6 0922231 | K/9 M6 0922232 | K/7 M9 0922233 |

* LZ = No. of cable layers

REEL SELECTION CHART

Random wrap, chain transmission, horizontal payout

Application **1**



| Cable NSHTÖU-J 7 x 2,5 mm ² | | | Ø 21,5 mm | | | | Weight: 0,56 kg/m | | |
|---|-----|--------------------------|---------------------|---------------------|---------------------|---------------------|-------------------|-------------------|--|
| active length [m] | LZ* | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 50 m/min. | 63 m/min. | |
| 14 | 2 | LT 28 N 7 K60- | K/8 M2 0922234 | K/8 M2 0922235 | K/6 M3 0922236 | K/4 M4 0922237 | K/4 M4 0922238 | K/3 M5 0922239 | |
| 49 | 4 | LT 38 N 7 K60- | K/9 M3 0922241 | K/9 M3 0922242 | K/9 M3 0922243 | K/6 M4 0922244 | K/6 M4 0922245 | K/4 M5 0922246 | |
| 92 | 5 | LT 50 N 7 K60- | KG/26 M1 0922247 | K/8 M4 0922248 | K/8 M4 0922249 | K/8 M4 0922251 | K/6 M5 0922252 | K/6 M5 0922253 | |
| 139 | 5 | LT 50. 1N 7 K60- | KG/27 M1 0922254 | K/8 M4 0922255 | K/8 M4 0922256 | K/8 M4 0922257 | K/6 M5 0922258 | K/5 M8 0922259 | |
| Cable NSHTÖU-J 12 x 2,5 mm ² | | | Ø 25,5 mm | | | | Weight: 0,85 kg/m | | |
| 31 | 3 | LT 38 N 12 K60- | KG/22 M1 0922261 | K/6 M4 0922262 | K/6 M4 0922263 | K/6 M4 0922264 | K/5 M5 0922265 | K/4 M8 0922266 | |
| 64 | 4 | LT 50 N 12 K60- | KG/30 M1 0922267 | K/9 M4 0922268 | K/9 M4 0922269 | K/9 M4 0922271 | K/7 M5 0922272 | K/6 M8 0922273 | |
| 87 | 4 | LT 50. 1N 12 K60- | KG/30 M1 0922274 | K/9 M4 0922275 | K/9 M4 0922276 | K/9 M4 0922277 | K/7 M5 0922278 | K/6 M8 0922279 | |
| 150 | 5 | LT 70 N 12 K60- | KG/46 M1 0922281 | KG/21 M3 0922282 | KG/13 M4 0922283 | KG/13 M4 0922284 | K/9 M8 0922285 | K/7 M6 0922286 | |
| Cable NSHTÖU-J 18 x 2,5 mm ² | | | Ø 29,5 mm | | | | Weight: 1,20 kg/m | | |
| 27 | 3 | LT 38 N 18 K60- | K/8 M4 0922287 | K/8 M4 0922288 | K/8 M4 0922289 | K/6 M5 0922291 | K/5 M8 0922292 | K/4 M6 0922293 | |
| 58 | 4 | LT 50 N 18 K60- | KG/24 M2 0922294 | KG/17 M3 0922295 | K/9 M5 0922296 | K/9 M5 0922297 | K/7 M8 0922298 | K/6 M6 0922299 | |
| 81 | 4 | LT 50. 1N 18 K60- | KG/24 M2 0922301 | KG/17 M3 0922302 | K/9 M5 0922303 | K/9 M5 0922304 | K/7 M8 0922305 | K/6 M6 0922306 | |
| 141 | 5 | LT 70 N 18 K60- | KG/36 M2 0922307 | KG/26 M3 0922308 | KG/16 M4 0922309 | K/9 M6 0922311 | K/9 M6 0922312 | K/7 M9 0922313 | |
| Cable NSHTÖU-J 24 x 2,5 mm ² | | | Ø 34,5 mm | | | | Weight: 1,65 kg/m | | |
| 30 | 3 | LT 50 N 24 K60- | KG/28 M2 0922314 | KG/19 M3 0922315 | KG/13 M4 0922316 | K/8 M8 0922317 | K/8 M8 0922318 | K/5 M9 0922319 | |
| 47 | 3 | LT 50. 1N 24 K60- | KG/28 M2 0922321 | KG/19 M3 0922322 | KG/13 M4 0922323 | K/8 M8 0922324 | K/7 M6 0922325 | K/5 M9 0922326 | |
| 118 | 5 | LT 70 N 24 K60- | KG/43 M2 0922327 | KG/20 M4 0922328 | K/8 M9 0922329 | K/8 M9 0922331 | K/8 M9 0922332 | K/8 M9 0922333 | |
| Cable NSHTÖU-J 30 x 2,5 mm ² | | | Ø 36,5 mm | | | | Weight: 1,90 kg/m | | |
| 30 | 3 | LT 50 N 30 K60- | KG/30 M2 0922334 | KG/13 M4 0922335 | KG/13 M4 0922336 | K/9 M8 0922337 | K/8 M6 0922338 | K/6 M9 0922339 | |
| 47 | 3 | LT 50. 1N 30 K60- | KG/30 M2 0922341 | KG/13 M4 0922342 | KG/13 M4 0922343 | K/9 M8 0922344 | K/8 M6 0922345 | K/6 M9 0922346 | |
| 118 | 5 | LT 70 N 30 K60- | KG/35 M3 0922347 | KG/23 M4 0922348 | K/9 M9 0922349 | K/9 M9 0922351 | K/9 M9 0922352 | K/9 M9 0922353 | |

* LZ = No. of cable layers



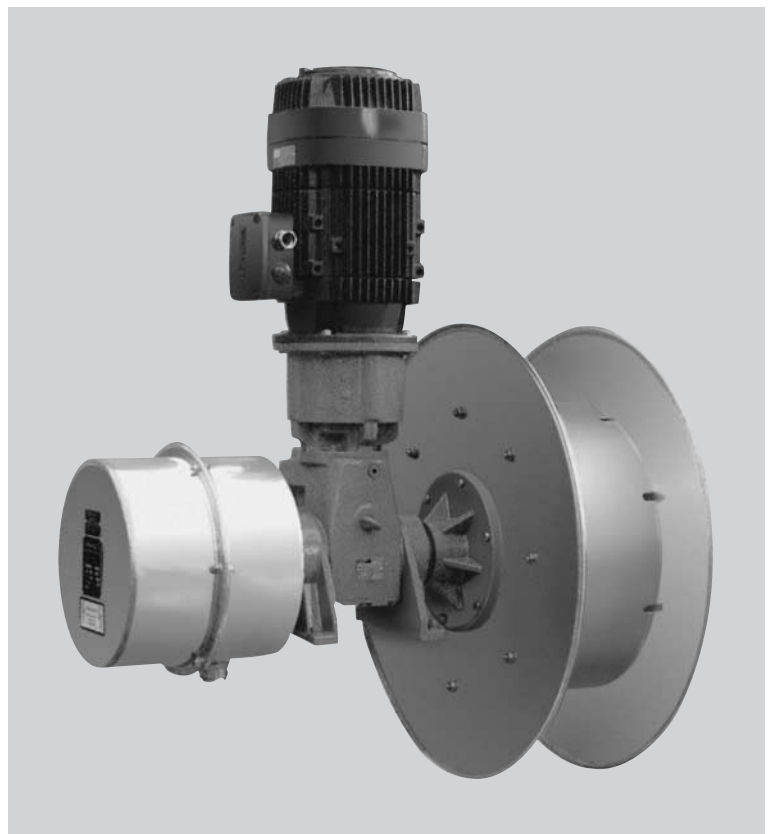
VAHLE MOTOR-DRIVEN REELS

Random wrap, shaft gear, horizontal payout



Type LT 28 N 4 M 60-6/12 M 1

Type LT 50 N 4 M 150-6/25 M 5



REEL SELECTION CHART

Random wrap, shaft gear, horizontal payout

Application **1**



| Cable NSHTÖU-J 4 x 2,5 mm ² | | | Ø 16,5 mm | | | | Weight: 0,33 kg/m | | |
|--|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|
| active length [m] | LZ* | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 50 m/min. | 63 m/min. | |
| 32 | 3 | LT 28 N 4 M60- | 6/15 M1 0923001 | 6/10 M2 0923002 | 6/7 M3 0923003 | - | - | - | |
| 84 | 5 | LT 38 N 4 M60- | 6/20 M1 0923004 | 6/15 M2 0923005 | 6/10 M3 0923006 | 6/7 M4 0923007 | - | - | |
| 124 | 5 | LT 50 N 4 M60- | 6/25 M1 0923008 | 6/17 M2 0923009 | 6/12 M3 0923011 | 6/10 M4 0923012 | 6/7 M5 0923013 | - | |
| Cable NSHTÖUu-J 4 x 4 mm ² | | | Ø 19,5 mm | | | | Weight: 0,47 kg/m | | |
| 26 | 3 | LT 28 N 4 M60- | 6/15 M1 0923014 | 6/10 M2 0923015 | 6/7 M3 0923016 | - | - | - | |
| 72 | 5 | LT 38 N 4 M60- | 6/22 M1 0923017 | 6/15 M2 0923018 | 6/10 M3 0923019 | 6/7 M4 0923021 | - | - | |
| 108 | 5 | LT 50 N 4 M60- | 6/25 M1 0923022 | 6/17 M2 0923023 | 6/12 M3 0923024 | 6/10 M4 0923025 | 6/7 M5 0923026 | - | |
| Cable NSHTÖU-J 4 x 6 mm ² | | | Ø 21 mm | | | | Weight: 0,60 kg/m | | |
| 14 | 2 | LT 28 N 4 M60- | 6/15 M1 0923027 | 6/10 M2 0923028 | 6/7 M3 0923029 | - | - | - | |
| 49 | 4 | LT 38 N 4 M60- | 6/20 M1 0923031 | 6/10 M3 0923032 | 6/10 M3 0923033 | 6/7 M4 0923034 | - | - | |
| 100 | 5 | LT 50 N 4 M60- | 6/29 M1 0923035 | 6/20 M2 0923036 | 6/12 M3 0923037 | 6/10 M4 0923038 | 6/7 M5 0923039 | - | |
| 139 | 5 | LT 50. 1N 4 M60- | 6/29 M1 0923041 | 6/20 M2 0923042 | 6/12 M3 0923043 | 6/10 M4 0923044 | 6/7 M5 0923045 | - | |
| Cable NSHTÖU-J 4 x 10 mm ² | | | Ø 25,5 mm | | | | Weight: 0,95 kg/m | | |
| 31 | 3 | LT 38 N 4 M60- | 6/22 M1 0923046 | 6/15 M2 0923047 | 6/10 M3 0923048 | 6/7 M4 0923049 | - | - | |
| 64 | 4 | LT 50 N 4 M60- | 6/32 M1 0923051 | 6/20 M2 0923052 | 6/10 M4 0923053 | 6/10 M4 0923054 | 6/7 M5 0923055 | - | |
| 87 | 4 | LT 50. 1N 4 M60- | 6/32 M1 0923056 | 6/20 M2 0923057 | 6/10 M4 0923058 | 6/10 M4 0923059 | 6/7 M5 0923061 | - | |
| 150 | 5 | LT 70 N 4 M60- | 8/50 M1 0923062 | 8/28 M2 0923063 | 8/16 M4 0923064 | 8/13 M4 0923065 | 8/12 M5 0923066 | 8/8 M6 0923067 | |
| 168 | 5 | LT 80 N 4 M60- | 10/38 M2 0923068 | 10/26 M3 0923069 | 10/16 M4 0923071 | 10/14 M5 0923072 | 10/11 M6 0923073 | 10/11 M8 0923074 | |
| Cable NSHTÖU-J 4 x 16 mm ² | | | Ø 30 mm | | | | Weight: 1,40 kg/m | | |
| 23 | 3 | LT 38 N 4 M150- | 6/25 M1 0923075 | 6/15 M3 0923076 | 6/10 M4 0923077 | 6/7 M5 0923078 | - | - | |
| 50 | 4 | LT 50 N 4 M150- | 6/25 M2 0923079 | 6/20 M3 0923081 | 6/12 M4 0923082 | 6/10 M4 0923083 | 6/7 M8 0923084 | - | |
| 80 | 4 | LT 50. 1N 4 M150- | 6/29 M2 0923085 | 6/20 M3 0923086 | 6/12 M4 0923087 | 6/10 M5 0923088 | 6/7 M8 0923089 | - | |
| 140 | 5 | LT 70 N 4 M150- | 8/41 M2 0923091 | 8/28 M3 0923092 | 8/19 M4 0923093 | 8/13 M5 0923094 | 8/12 M8 0923095 | 8/12 M8 0923096 | |
| 156 | 5 | LT 80 N 4 M150- | 10/44 M2 0923097 | 10/31 M3 0923098 | 10/19 M4 0923099 | 10/16 M5 0923101 | 10/11 M6 0923102 | 10/11 M6 0923103 | |

* LZ = No. of cable layers



REEL SELECTION CHART

Random wrap, shaft gear, horizontal payout

Application

1

| Cable NSHTÖU-J 4 x 25 mm ² | | | Ø 35 mm | | | | Weight: 1,90 kg/m | | |
|---|-----|-------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|--|
| active length [m] | LZ* | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 50 m/min. | 63 m/min. | |
| 30 | 3 | LT 50 N 4 M150- | 6/29 M2 0923104 | 6/20 M3 0923105 | 6/12 M4 0923106 | 6/10 M5 0923107 | 8/8 M8 0923108 | - | |
| 47 | 3 | LT 50. 1N 4 M150- | 6/29 M2 0923109 | 6/20 M3 0923111 | 6/12 M4 0923112 | 6/10 M5 0923113 | 8/8 M8 0923114 | - | |
| 118 | 5 | LT 70 N 4 M150- | 8/41 M2 0923115 | 8/22 M4 0923116 | 8/19 M4 0923117 | 8/13 M8 0923118 | 8/8 M9 0923119 | 8/8 M9 0923121 | |
| 130 | 5 | LT 80 N 4 M150- | 10/41 M3 0923122 | 10/26 M4 0923123 | 10/19 M5 0923124 | 10/16 M8 0923125 | 10/11 M9 0923126 | 10/11 M9 0923127 | |
| Cable NSHTÖU-J 4 x 35 mm ² | | | Ø 39,5 mm | | | | Weight: 2,60 kg/m | | |
| 42 | 3 | LT 50. 1N 4 M150- | 6/29 M3 0923128 | 6/17 M4 0923129 | 6/12 M8 0923131 | 6/10 M9 0923132 | 8/7 M9 0923133 | - | |
| 80 | 4 | LT 70 N 4 M150- | 8/41 M3 0923134 | 8/25 M4 0923135 | 8/16 M8 0923136 | 8/12 M9 0923137 | 8/12 M9 0923138 | 8/8 M10 0923139 | |
| 118 | 5 | LT 80 N 4 M150- | 10/31 M4 0923141 | 10/31 M4 0923142 | 10/19 M6 0923143 | 10/14 M9 0923144 | 10/11 M10 0923145 | 10/11 M10 0923146 | |
| Cable NSHTÖU-J 7 x 1,5 mm ² | | | Ø 19 mm | | | | Weight: 0,43 kg/m | | |
| 26 | 3 | LT 28 N 7 K60- | 6/15 M1 0923147 | 6/10 M2 0923148 | 6/7 M3 0923149 | - | - | - | |
| 72 | 5 | LT 38 N 7 K60- | 6/22 M1 0923151 | 6/15 M2 0923152 | 6/10 M3 0923153 | 6/7 M4 0923154 | - | - | |
| 107 | 5 | LT 50 N 7 K60- | 6/25 M1 0923155 | 6/17 M2 0923156 | 6/12 M3 0923157 | 6/10 M4 0923158 | 6/7 M5 0923159 | - | |
| 154 | 5 | LT 50. 1N 7 K60- | 6/25 M1 0923161 | 6/17 M2 0923162 | 6/12 M3 0923163 | 6/10 M4 0923164 | 6/7 M5 0923165 | - | |
| Cable NSHTÖU-J 12 x 1,5 mm ² | | | Ø 22 mm | | | | Weight: 0,60 kg/m | | |
| 14 | 2 | LT 28 N 12 K60- | 6/15 M1 0923166 | 6/10 M2 0923167 | 6/7 M3 0923168 | - | - | - | |
| 49 | 4 | LT 38 N 12 K60- | 6/22 M1 0923169 | 6/15 M2 0923171 | 6/10 M3 0923172 | 6/7 M4 0923173 | - | - | |
| 92 | 5 | LT 50 N 12 K60- | 6/29 M1 0923174 | 6/20 M2 0923175 | 6/10 M4 0923176 | 6/10 M4 0923177 | 6/7 M5 0923178 | - | |
| 139 | 5 | LT 50. 1N 12 K60- | 6/29 M1 0923179 | 6/20 M2 0923181 | 6/10 M4 0923182 | 6/10 M4 0923183 | 6/7 M5 0923184 | - | |
| Cable NSHTÖU-J 24 x 1,5 mm ² | | | Ø 30,5 mm | | | | Weight: 1,20 kg/m | | |
| 24 | 3 | LT 38 N 24 K60- | 6/20 M2 0923185 | 6/15 M3 0923186 | 6/10 M4 0923187 | 6/7 M5 0923188 | - | - | |
| 43 | 4 | LT 50 N 24 K60- | 6/25 M2 0923189 | 6/20 M3 0923191 | 6/12 M4 0923192 | 6/10 M5 0923193 | 8/8 M8 0923194 | - | |
| 74 | 4 | LT 50. 1N 24 K60- | 6/29 M2 0923195 | 6/20 M3 0923196 | 6/12 M4 0923197 | 6/10 M5 0923198 | 8/8 M8 0923199 | - | |
| 128 | 5 | LT 70 N 24 K60- | 8/41 M2 0923201 | 8/28 M3 0923202 | 8/19 M4 0923203 | 8/13 M5 0923204 | 8/12 M8 0923205 | 8/12 M8 0923206 | |
| 143 | 5 | LT 80 N 24 K60- | 10/44 M2 0923207 | 10/31 M3 0923208 | 10/19 M4 0923209 | 10/16 M5 0923211 | 10/11 M6 0923212 | 10/11 M6 0923213 | |

* LZ = No. of cable layers

REEL SELECTION CHART

Random wrap, shaft gear, horizontal payout

Application **1**



| Cable NSHTÖU-J 7 x 2,5 mm ² | | | Ø 21,5 mm | | | | Weight: 0,56 kg/m | | |
|---|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|
| active length [m] | LZ* | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 50 m/min. | 63 m/min. | |
| 14 | 2 | LT 28 N 7 K60- | 6/15 M1 0923214 | 6/10 M2 0923215 | 6/7 M3 0923216 | - | - | - | |
| 49 | 4 | LT 38 N 7 K60- | 6/22 M1 0923217 | 6/15 M2 0923218 | 6/10 M3 0923219 | 6/7 M4 0923221 | - | - | |
| 92 | 5 | LT 50 N 7 K60- | 6/29 M1 0923222 | 6/20 M2 0923223 | 6/10 M4 0923224 | 6/10 M4 0923225 | 6/7 M5 0923226 | - | |
| 139 | 5 | LT 50. 1N 7 K60- | 6/29 M1 0923227 | 6/20 M2 0923228 | 6/10 M4 0923229 | 6/10 M4 0923231 | 6/7 M5 0923232 | - | |
| Cable NSHTÖU-J 12 x 2,5 mm ² | | | Ø 25,5 mm | | | | Weight: 0,85 kg/m | | |
| 31 | 3 | LT 38 N 12 K60- | 6/22 M1 0923233 | 6/15 M2 0923234 | 6/7 M4 0923235 | 6/7 M4 0923236 | - | - | |
| 64 | 4 | LT 50 N 12 K60- | 6/32 M1 0923237 | 6/15 M3 0923238 | 6/10 M4 0923239 | 6/10 M4 0923241 | 6/7 M8 0923242 | - | |
| 87 | 4 | LT 50. 1N 12 K60- | 6/32 M1 0923243 | 6/15 M3 0923244 | 6/10 M4 0923245 | 6/10 M4 0923246 | 6/7 M8 0923247 | - | |
| 150 | 5 | LT 70 N 12 K60- | 8/32 M2 0923248 | 8/22 M3 0923249 | 8/16 M4 0923251 | 8/12 M5 0923252 | 8/8 M6 0923253 | 8/8 M6 0923254 | |
| 168 | 5 | LT 80 N 12 K60- | 10/38 M2 0923255 | 10/26 M3 0923256 | 10/16 M4 0923257 | 10/14 M5 0923258 | 10/11 M8 0923259 | 10/11 M8 0923261 | |
| Cable NSHTÖU-J 18 x 2,5 mm ² | | | Ø 29,5 mm | | | | Weight: 1,20 kg/m | | |
| 27 | 3 | LT 38 N 18 K60- | 6/20 M2 0923262 | 6/15 M3 0923263 | 6/10 M4 0923264 | 6/7 M5 0923265 | - | - | |
| 58 | 4 | LT 50 N 18 K60- | 6/25 M2 0923266 | 6/20 M3 0923267 | 6/12 M4 0923268 | 6/10 M8 0923269 | 8/8 M8 0923271 | - | |
| 81 | 4 | LT 50.1 N18 K60- | 6/25 M2 0923272 | 6/20 M3 0923273 | 6/12 M4 0923274 | 6/10 M5 0923275 | 8/8 M8 0923276 | - | |
| 141 | 5 | LT 70 N 18 K60- | 8/41 M2 0923277 | 8/19 M4 0923278 | 8/13 M5 0923279 | 8/13 M5 0923281 | 8/12 M8 0923282 | 8/8 M9 0923283 | |
| 156 | 5 | LT 80 N 18 K60- | 10/44 M2 0923284 | 10/31 M3 0923285 | 10/19 M4 0923286 | 10/11 M6 0923287 | 10/11 M6 0923288 | 10/11 M6 0923289 | |
| Cable NSHTÖU-J 24 x 2,5 mm ² | | | Ø 34,5 mm | | | | Weight: 1,65 kg/m | | |
| 30 | 3 | LT 50 N 24 K60- | 6/29 M2 0923291 | 6/20 M3 0923292 | 6/12 M5 0923293 | 6/10 M8 0923294 | 8/7 M6 0923295 | - | |
| 47 | 3 | LT 50. 1N 24 K60- | 6/29 M2 0923296 | 6/15 M4 0923297 | 6/12 M5 0923298 | 6/10 M8 0923299 | 6/7 M9 0923301 | - | |
| 118 | 5 | LT 70 N 24 K60- | 8/36 M3 0923302 | 8/22 M4 0923303 | 8/16 M5 0923304 | 8/12 M6 0923305 | 8/12 M9 0923306 | 8/7 M10 0923307 | |
| 131 | 5 | LT 80 N 24 K60- | 10/38 M3 0923308 | 10/23 M4 0923309 | 10/19 M5 0923311 | 10/16 M8 0923312 | 10/11 M9 0923313 | 10/11 M9 0923314 | |
| Cable NSHTÖU-J 30 x 2,5 mm ² | | | Ø 36,5 mm | | | | Weight: 1,90 kg/m | | |
| 30 | 3 | LT 50 N 30 K60- | 6/32 M2 0923315 | 6/15 M4 0923316 | 6/12 M5 0923317 | 6/10 M8 0923318 | 6/7 M9 0923319 | - | |
| 47 | 3 | LT 50. 1N K60- | 6/32 M2 0923321 | 6/15 M4 0923322 | 6/12 M5 0923323 | 6/10 M8 0923324 | 6/7 M9 0923325 | - | |
| 118 | 5 | LT 70 N 30 K60- | 8/41 M3 0923326 | 8/25 M4 0923327 | 8/19 M5 0923328 | 8/13 M6 0923329 | 8/12 M9 0923331 | 8/7 M10 0923332 | |
| 128 | 5 | LT 80 N 30 K60- | 10/44 M3 0923333 | 10/26 M4 0923334 | 10/16 M6 0923335 | 10/16 M6 0923336 | 10/11 M9 0923337 | 10/11 M9 0923338 | |

* LZ = No. of cable layers



REEL SELECTION CHART

Random wrap, chain transmission and shaft gear, vertical lift

Application

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| Dimensional data see ... | | | ... page 28 for chain transmission | | | ... page 29 for shaft gear transmission | | |
|--|-----|------------------------|---------------------------------------|---------------------|--------------------|--|--------------------|---------------------|
| Cable NSHTÖU-J 4 x 2,5 mm² | | | Ø 16,5 mm | | | Weight: 0,33 kg/m | | |
| active length [m] | LZ* | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 12 m/min. | 20 m/min. | 30 m/min. |
| 10 | 1,2 | LT 28 S 4 M60- | K/8 M2 0924001 | K/8 M2 0924002 | K/5 M3 0924003 | 6/12 M1 0924004 | 6/10 M2 0924005 | 6/7 M3 0924006 |
| 20 | 1,6 | LT 38 S 4 M60- | K/9 M3 0924007 | K/9 M3 0924008 | K/6 M4 0924009 | 6/20 M1 0924011 | 6/11 M3 0924012 | 6/7 M4 0924013 |
| Cable NSHTÖU-J 4 x 4 mm² | | | Ø 19,5 mm | | | Weight: 0,47 kg/m | | |
| 10 | 1,4 | LT 28 S 4 M60- | K/9 M2 0924014 | K/9 M2 0924015 | K/6 M3 0924016 | 6/15 M1 0924017 | 6/10 M2 0924018 | 6/7 M3 0924019 |
| 20 | 1,8 | LT 38 S 4 M60- | K/7 M4 0924021 | K/7 M4 0924022 | K/7 M4 0924023 | 6/17 M2 0924024 | 6/12 M3 0924025 | 6/10 M4 0924026 |
| 30 | 2,5 | LT 38 S 4 M60- | K/9 M4 0924027 | K/9 M4 0924028 | K/7 M5 0924029 | 6/20 M2 0924031 | 6/10 M4 0924032 | 6/7 M5 0924033 |
| Cable NSHTÖU-J 4 x 6 mm² | | | Ø 21 mm | | | Weight: 0,60 kg/m | | |
| 10 | 1,6 | LT 28 S 4 M60- | K/8 M3 0924034 | K/8 M3 0924035 | K/5 M4 0924036 | 6/12 M2 0924037 | 6/10 M3 0924038 | 6/7 M4 0924039 |
| 20 | 1,9 | LT 38 S 4 M60- | K/8 M4 0924041 | K/8 M4 0924042 | K/8 M4 0924043 | 6/20 M2 0924044 | 6/10 M4 0924045 | 6/10 M4 0924046 |
| 30 | 2,7 | LT 38 S 4 M60- | KG/17 M3 0924047 | K/8 M5 0924048 | K/8 M5 0924049 | 6/17 M3 0924051 | 6/12 M4 0924052 | 6/10 M5 0924053 |
| Cable NSHTÖU-J 4 x 10 mm² | | | Ø 25,5 mm | | | Weight: 0,95 kg/m | | |
| 10 | 1,3 | LT 38 S 4 M60- | K/8 M4 0924054 | K/8 M4 0924055 | K/8 M4 0924056 | 6/20 M2 0924057 | 6/10 M4 0924058 | 6/7 M5 0924059 |
| 20 | 2,1 | LT 38 S 4 M60- | KG/19 M3 0924061 | K/9 M5 0924062 | K/8 M8 0924063 | 6/20 M3 0924064 | 6/12 M4 0924065 | 6/10 M8 0924066 |
| 30 | 2,9 | LT 38 S 4 M60- | KG/16 M4 0924067 | K/8 M6 0924068 | K/8 M6 0924069 | 6/17 M4 0924071 | 6/12 M8 0924072 | 6/7 M9 0924073 |
| Cable NSHTÖU-J 4 x 16 mm² | | | Ø 30 mm | | | Weight: 1,40 kg/m | | |
| 10 | 1,6 | LT 38 S 4 M150- | KG/17 M3 0924074 | K/8 M5 0924075 | K/8 M5 0924076 | 6/20 M3 0924077 | 6/12 M4 0924078 | 6/10 M8 0924079 |
| 20 | 2,6 | LT 38 S 4 M150- | KG/16 M4 0924081 | K/9 M6 0924082 | K/9 M6 0924083 | 6/17 M4 0924084 | 6/12 M8 0924085 | 6/7 M9 0924086 |
| 30 | 2,7 | LT 50 S 4 M150- | KG/29 M4 0924087 | K/8 M10 0924088 | K/8 M10 0924089 | 6/29 M4 0924091 | 8/16 M6 0924092 | 8/12 M10 0924093 |
| Cable NSHTÖU-J 4 x 25 mm² | | | Ø 35 mm | | | Weight: 1,90 kg/m | | |
| 10 | 1,3 | LT 50 S 4 M150- | KG/29 M3 0924094 | KG/18 M4 0924095 | K/8 M9 0924096 | 6/29 M3 0924097 | 6/15 M5 0924098 | 6/10 M9 0924099 |
| 20 | 2,2 | LT 50 S 4 M150- | KG/29 M4 0924101 | K/8 M10 0924102 | K/8 M10 0924103 | 6/29 M4 0924104 | 8/16 M6 0924105 | 8/12 M10 0924106 |

* LZ = No. of cable layers

REEL SELECTION CHART

Random wrap, chain transmission and shaft gear, vertical lift

Application

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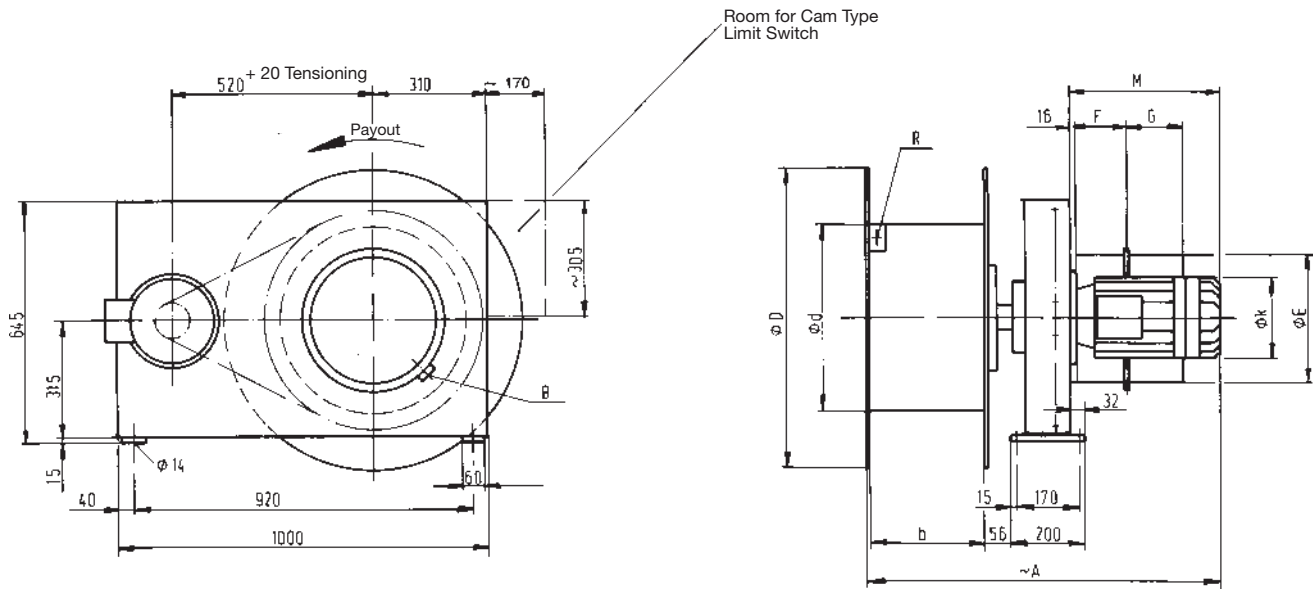
| Dimensinal data see ... | | | ... page 28 for chain transmission | | | ... page 29 for shaft gear transmission | | |
|---|-----|--------------------------|---------------------------------------|---------------------|--------------------|--|--------------------|--------------------|
| Cable NSHTÖU-J 12 x 1,5 mm² | | | Ø 22 mm | | | Weight: 0,60 kg/m | | |
| active length [m] | LZ* | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 12 m/min. | 20 m/min. | 30 m/min. |
| 10 | 1,5 | LT 28 S 12 K60- | K/8 M3 0924107 | K/8 M3 0924108 | K/5 M4 0924109 | 6/12 M2 0924111 | 6/10 M3 0924112 | 6/7 M4 0924113 |
| 20 | 1,9 | LT 38 S 12 K60- | K/8 M4 0924114 | K/8 M4 0924115 | K/8 M4 0924116 | 6/20 M2 0924117 | 6/10 M4 0924118 | 6/10 M4 0924119 |
| 30 | 2,7 | LT 38 S 12 K60- | KG/17 M3 0924121 | K/8 M5 0924122 | K/8 M5 0924123 | 6/20 M3 0924124 | 6/12 M4 0924125 | 6/10 M5 0924126 |
| Cable NSHTÖU-J 24 x 1,5 mm² | | | Ø 30,5 mm | | | Weight: 1,20 kg/m | | |
| 10 | 1,6 | LT 38 S 24 K60- | KG/17 M3 0924127 | K/8 M5 0924128 | K/8 M5 0924129 | 6/17 M3 0924131 | 6/12 M4 0924132 | 6/7 M8 0924133 |
| 20 | 2,6 | LT 38 S 24 K60- | KG/16 M4 0924134 | K/8 M6 0924135 | K/8 M6 0924136 | 6/17 M4 0924137 | 6/12 M5 0924138 | 6/7 M9 0924139 |
| 30 | 2,7 | LT 50 S 24 K60- | KG/26 M4 0924141 | K/8 M10 0924142 | K/8 M10 0924143 | 6/25 M4 0924144 | 6/17 M8 0924145 | 8/8 M10 0924146 |
| Cable NSHTÖU-J 7 x 2,5 mm² | | | Ø 21,5 mm | | | Weight: 0,56 kg/m | | |
| 10 | 1,5 | LT 28 S 7 K60- | K/7 M3 0924147 | K/7 M3 0924148 | K/7 M3 0924149 | 6/12 M2 0924151 | 6/10 M3 0924152 | 6/7 M4 0924153 |
| 20 | 1,9 | LT 38 S 7 K60- | K/8 M4 0924154 | K/8 M4 0924155 | K/8 M4 0924156 | 6/20 M2 0924157 | 6/10 M4 0924158 | 6/10 M4 0924159 |
| 30 | 2,7 | LT 38 S 7 K60- | KG/24 M2 0924161 | K/8 M5 0924162 | K/8 M5 0924163 | 6/17 M3 0924164 | 6/12 M4 0924165 | 6/10 M5 0924166 |
| Cable NSHTÖU-J 12 x 2,5 mm² | | | Ø 25,5 mm | | | Weight: 0,85 kg/m | | |
| 10 | 1,3 | LT 38 S 12 K60- | K/8 M4 0924167 | K/8 M4 0924168 | K/8 M4 0924169 | 6/20 M2 0924171 | 6/10 M4 0924172 | 6/7 M5 0924173 |
| 20 | 2,1 | LT 38 S 12 K60- | KG/18 M3 0924174 | K/9 M5 0924175 | K/9 M5 0924176 | 6/20 M3 0924177 | 6/12 M4 0924178 | 6/10 M8 0924179 |
| 30 | 2,9 | LT 38 S 12 K60- | KG/23 M3 0924181 | K/9 M8 0924182 | K/8 M6 0924183 | 6/15 M4 0924184 | 6/12 M5 0924185 | 8/8 M6 0924186 |
| Cable NSHTÖU-J 18 x 2,5 mm² | | | Ø 29,5 mm | | | Weight: 1,20 kg/m | | |
| 10 | 1,4 | LT 38 S 18 K60- | KG/24 M2 0924187 | K/8 M5 0924188 | K/8 M5 0924189 | 6/22 M2 0924191 | 6/12 M4 0924192 | 6/7 M8 0924193 |
| 20 | 2,3 | LT 38 S 18 K60- | KG/23 M3 0924194 | K/9 M8 0924195 | K/8 M6 0924196 | 6/22 M3 0924197 | 6/12 M5 0924198 | 6/7 M9 0924199 |
| 30 | 2,4 | LT 50 S 18 K60- | KG/26 M4 0924201 | K/8 M10 0924202 | K/8 M10 0924203 | 6/25 M4 0924204 | 6/17 M8 0924205 | 6/12 M9 0924206 |
| Cable NSHTÖU-J 24 x 2,5 mm² | | | Ø 34,5 mm | | | Weight: 1,65 kg/m | | |
| 10 | 1,3 | LT 50 S 24 K60- | KG/27 M3 0924207 | KG/18 M4 0924208 | K/9 M6 0924209 | 6/29 M3 0924211 | 6/17 M4 0924212 | 6/12 M8 0924213 |
| 20 | 2,2 | LT 50 S 24 K60- | KG/26 M4 0924214 | K/8 M10 0924215 | K/8 M10 0924216 | 6/25 M4 0924217 | 6/17 M8 0924218 | 6/12 M9 0924219 |
| Cable NSHTÖU-J 30 x 2,5 mm² | | | Ø 36,5 mm | | | Weight: 1,90 kg/m | | |
| 10 | 1,3 | LT 50 S 30 K60- | KG/31 M3 0924221 | KG/16 M5 0924222 | K/8 M9 0924223 | 6/32 M3 0924224 | 6/17 M5 0924225 | 6/10 M9 0924226 |
| 20 | 2,2 | LT 50. 1S 30 K60- | KG/29 M4 0924227 | K/8 M10 0924228 | K/8 M10 0924229 | 6/29 M4 0924231 | 6/12 M9 0924232 | 6/12 M9 0924233 |

* LZ = No. of cable layers



REEL DIMENSIONAL DATA for selection charts pages 19-21 and 26-27

Random wrap, chain transmission



B = Cable entrance to brushes
R = Cable entrance to rings

Application 1

horizontal payout - installation height max. 1.5 m

| Type | A | b | Ø d | Ø D | Ø k | M | ~ kg |
|----------------|------|-----|-----|------|-----|-----|------|
| LT 28 N...-K | 910 | 200 | 280 | 450 | 246 | 482 | 275 |
| LT 38 N...-K | 980 | 220 | 380 | 650 | 274 | 530 | 330 |
| ...-KG | 970 | | | | 158 | 520 | 260 |
| LT 50 N...-K | 1140 | 250 | 500 | 800 | 274 | 660 | 380 |
| ...-KG | 1170 | | | | 220 | 690 | 300 |
| LT 50. 1N...-K | 1240 | 350 | 500 | 900 | 274 | 660 | 400 |
| ...-KG | 1270 | | | | 220 | 690 | 310 |
| LT 70 N...-K | 1240 | 350 | 700 | 1200 | 274 | 660 | 470 |
| ...-KG | 1270 | | | | 220 | 690 | 390 |

Dimensional Data of collector assembly hoods

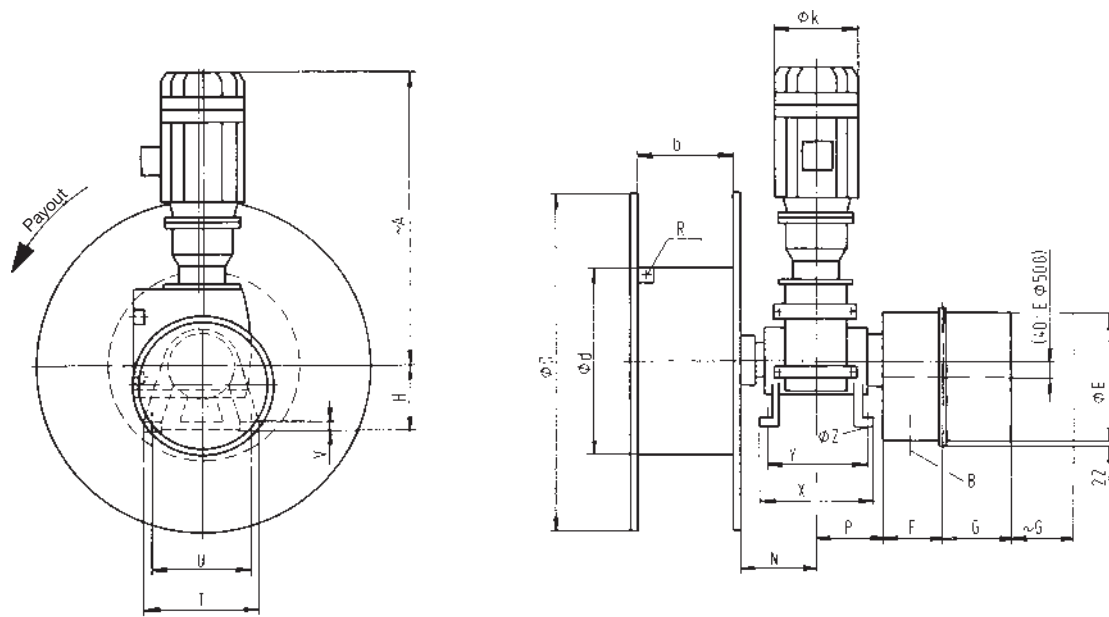
p. dwgs. page 28 and 29.

| SRK-Type | E | F | G |
|----------|-------|-----|-----|
| 4 M 60 | Ø 340 | 153 | 153 |
| 4 M150 | | | |
| 7 K 60 | | | |
| 12 K 60 | | | 353 |
| 18 K 60 | | | |
| 24 K 60 | | | |
| 30 K 60 | 553 | | |

Application 8

vertical lift

| Type | A | b | Ø d | Ø D | Ø k | M | ~ kg |
|----------------|------|-----|-----|-----|-----|-----|------|
| LT 28 S...-K | 832 | 200 | 280 | 450 | 220 | 405 | 260 |
| LT 38 S...-K | 960 | 220 | 380 | 650 | 224 | 513 | 300 |
| ...-KG | 1140 | | | | 220 | 690 | 280 |
| LT 50 S...-K | 1140 | 250 | 500 | 800 | 274 | 660 | 380 |
| ...-KG | 1170 | | | | 220 | 690 | 300 |
| LT 50. 1S...-K | 1240 | 350 | 500 | 900 | 274 | 660 | 400 |
| ...-KG | 1270 | | | | 220 | 690 | 310 |



B = Cable entrance to brushes
 R = Cable entrance to rings

Application 1

horizontal payout - installation high max. 1.5 m

| Type | A | b | Ø d | Ø D | H | Ø k | N | P | T | U | V | X | Y | Ø Z | ≈ kg |
|----------------|------|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| LT 28 N...- 6 | 705 | 200 | 280 | 450 | 140 | 196 | 229 | 161 | 250 | 210 | 20 | 250 | 220 | 13 | 190 |
| LT 38 N...- 6 | 860 | 220 | 380 | 650 | 140 | 246 | 229 | 161 | 250 | 210 | 20 | 250 | 220 | 13 | 240 |
| LT 50 N...- 6 | 945 | 250 | 500 | 800 | 140 | 250 | 229 | 161 | 250 | 210 | 20 | 250 | 220 | 13 | 270 |
| ...- 8 | | | | | 175 | 255 | 187 | 300 | 240 | 25 | 300 | 260 | 17 | 320 | |
| LT 50.1N...- 6 | 945 | 350 | 500 | 900 | 140 | 250 | 229 | 161 | 250 | 210 | 20 | 250 | 220 | 13 | 290 |
| ...- 8 | | | | | 175 | 255 | 187 | 300 | 240 | 25 | 300 | 260 | 17 | 350 | |
| LT 70 N...- 8 | 1055 | 350 | 700 | 1200 | 175 | 274 | 255 | 187 | 300 | 240 | 25 | 300 | 260 | 17 | 460 |
| LT 80 N...-10 | 1080 | 350 | 800 | 1400 | 210 | 274 | 310 | 296 | 380 | 310 | 30 | 355 | 300 | 22 | 550 |

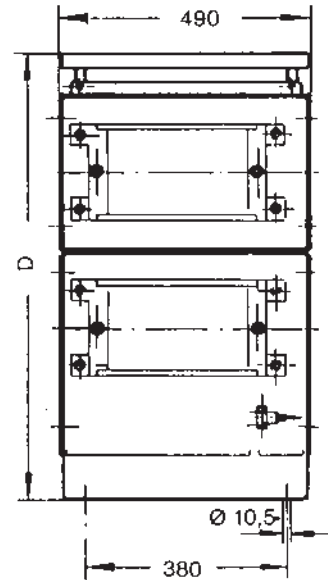
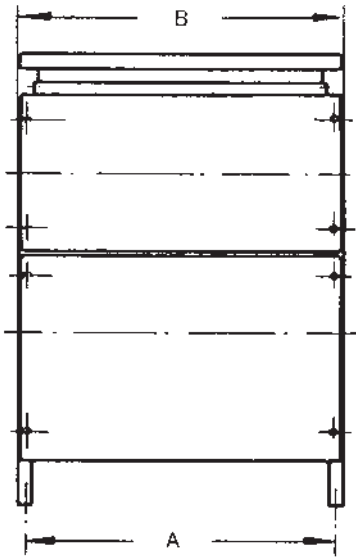
Application 8

vertical lift

| Type | A | b | Ø d | Ø D | H | Ø k | N | P | T | U | V | X | Y | Ø Z | ≈ kg |
|----------------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| LT 28 S...- 6 | 780 | 200 | 280 | 450 | 140 | 220 | 229 | 161 | 250 | 210 | 20 | 250 | 220 | 13 | 200 |
| LT 38 S...- 6 | 945 | 220 | 380 | 650 | 140 | 250 | 229 | 161 | 250 | 210 | 20 | 250 | 220 | 13 | 260 |
| LT 50 S...- 6 | 945 | 250 | 500 | 800 | 140 | 250 | 229 | 161 | 250 | 210 | 20 | 250 | 220 | 13 | 270 |
| ...- 8 | | | | | 1055 | 175 | 274 | 255 | 187 | 300 | 240 | 25 | 300 | 260 | 17 |
| LT 50.1S...- 6 | 780 | 350 | 500 | 900 | 140 | 220 | 229 | 161 | 250 | 210 | 20 | 250 | 220 | 13 | 250 |
| ...- 8 | | | | | 1055 | 175 | 274 | 255 | 187 | 300 | 240 | 25 | 300 | 260 | 17 |



For torque motor series



Standard Resistor Type FT, IP 13*

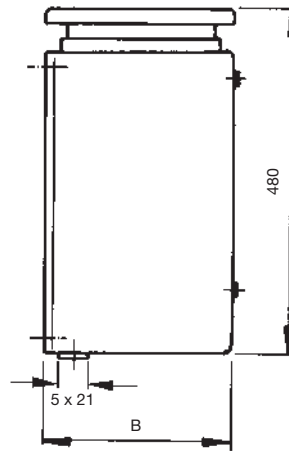
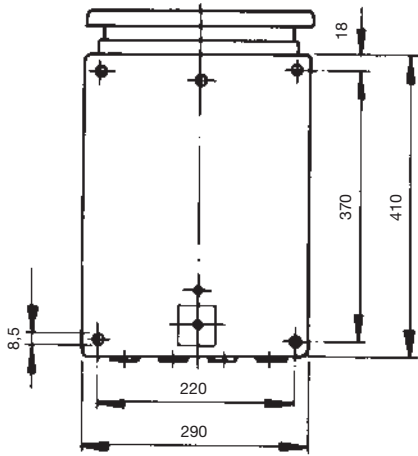
| for size | A | B | D | ~ kg | Cat.-No. |
|-------------|---------|-----|-----|------|----------|
| M 7 | 570 | 595 | 520 | 35 | 0926001 |
| M 8 | 370 | 395 | | 25 | 0926002 |
| M 9 | | | | | 0926003 |
| M 10 | 0926004 | | | | |
| M 11 | 570 | 595 | 520 | 35 | 0926005 |
| M 12 | 0926006 | | | | |
| M 13 | 770 | 795 | 770 | 50 | 0926007 |
| M 14 | 0926008 | | | | |

Step Resistor Type FS, IP 23

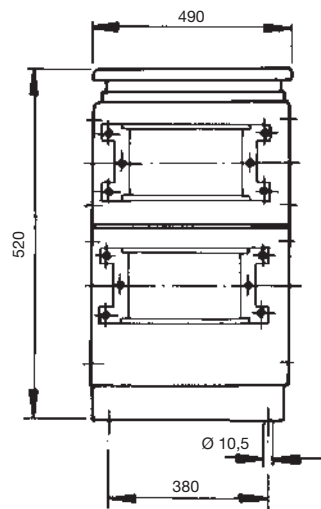
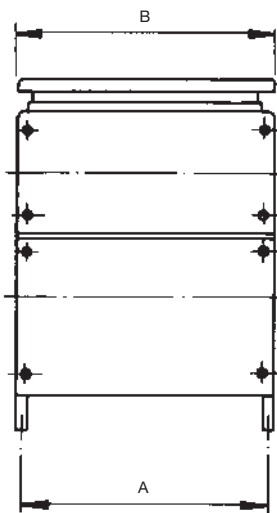
| for size | A | B | D | ~ kg | Cat.-No. |
|-------------|---------|-----|------|------|----------|
| R 7 | 770 | 795 | 520 | 50 | 0926016 |
| R 8 | | | | | 0926017 |
| R 9 | 570 | 595 | | 35 | 0926018 |
| R 10 | | | | | 0926019 |
| R 11 | 770 | 795 | 770 | 50 | 0926021 |
| R 12 | 0926022 | | | | |
| R 13 | 970 | 995 | 1100 | 85 | 0926023 |
| R 14 | | | | 100 | 0926024 |

Resistors to be installed as shown. Cooling is important. Dissipating air temperature can reach 200 °C. Connecting cable between reel drive motor and resistor should not exceed 10 m of length; otherwise check wire size.

For motors with frequency converter



FSL...
wall mounting



FS...
foot mounting

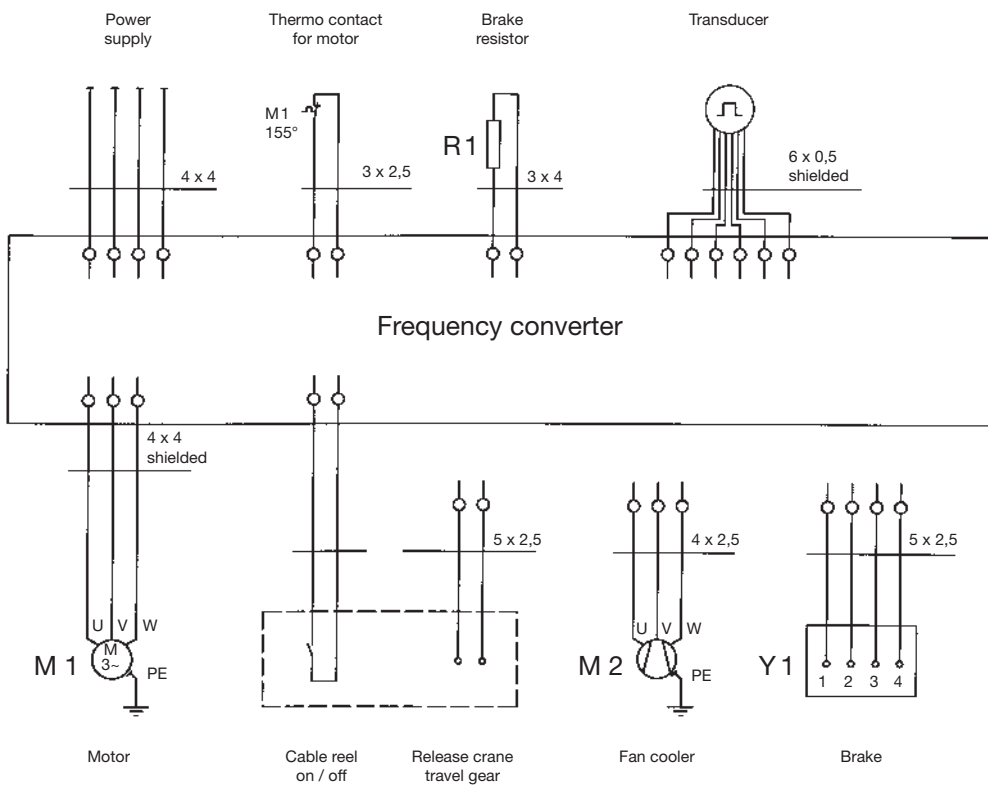
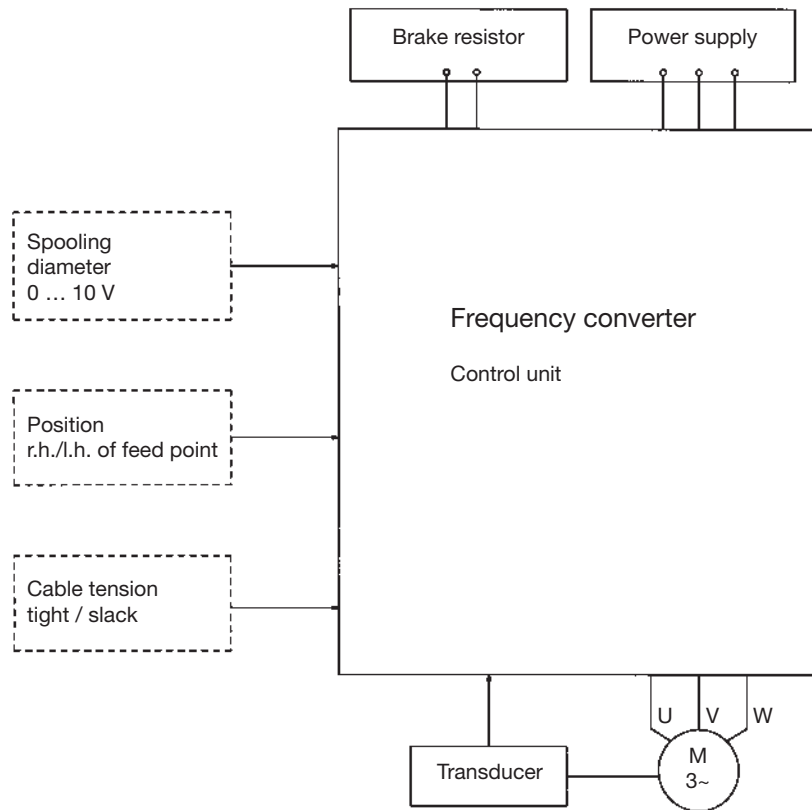
Protection code: IP 23

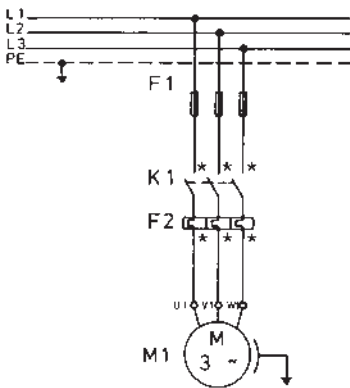
| for size | Resistor Type | A mm | B mm | kg | Cat.-No. |
|----------|---------------|------|------|----|----------|
| B | FSL 19 | - | 200 | 15 | 0926588 |
| C | | | | | 0926589 |
| D | | | | | 0926590 |
| E | | | | | 0926591 |
| F | | | | | 0926592 |
| G | | | | | 0926593 |
| H | FSL 20 | | 335 | 25 | 0926594 |
| J | FS 311 | 370 | 395 | 35 | 0926595 |
| K | FS 312 | 570 | 595 | | 0926596 |
| L | | | | | 0926597 |
| M | FS 313 | 770 | 795 | 50 | 0926598 |



WIRING DIAGRAMS

for Motor powered cable reels with frequency converter drive

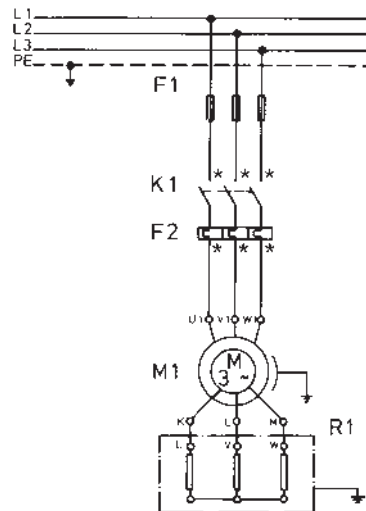




Squirrel cage torque motor

F1 Fuse main supply
F2 Overload relay
M1 Stall torque motor

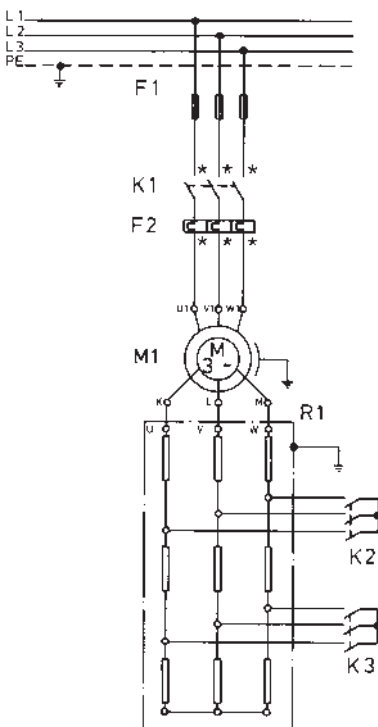
K1 Start Contactor
 – at 100 % DF: activated by control voltage (not travel motor connected)
 – at intermittent service: activated via travel motor (time-lag min. 15 s)



Slipping type torque motor with Standard Resistor

F1 Fuse main supply
F2 Overload relay
M1 Stall torque motor
R1 Standard Resistor

K1 Start Contactor
 – at 100 % DF: activated by control voltage (not travel motor connected)
 – at intermittent service: activated via travel motor (time-lag min. 15 s)



Slipping type torque motor with Step Resistor for torque setting

F1 Fuse main supply
F2 Overload relay
M1 Stall torque motor
R1 Standard Resistor

K1 Start Contactor
 – at 100 % DF: activated by control voltage (not travel motor connected)
 – at intermittent service: activated via travel motor (time-lag min. 15 s)

Torque Regulation:

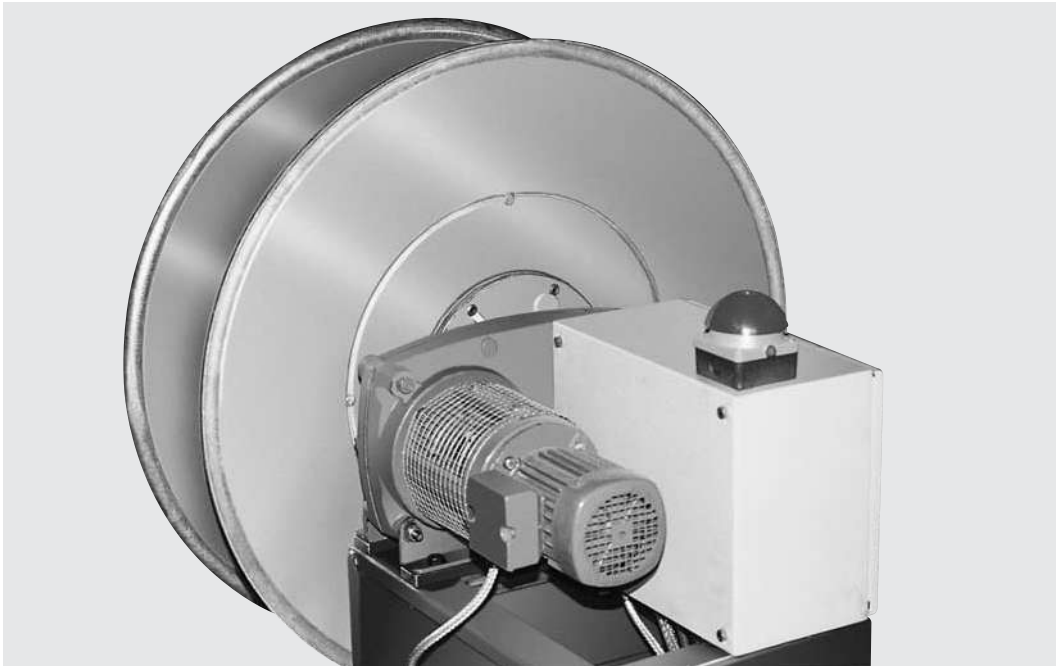
K2, K3 Torque moment selector with factory preset switch points

Activating: via cam type limit switch attached to the cable reel

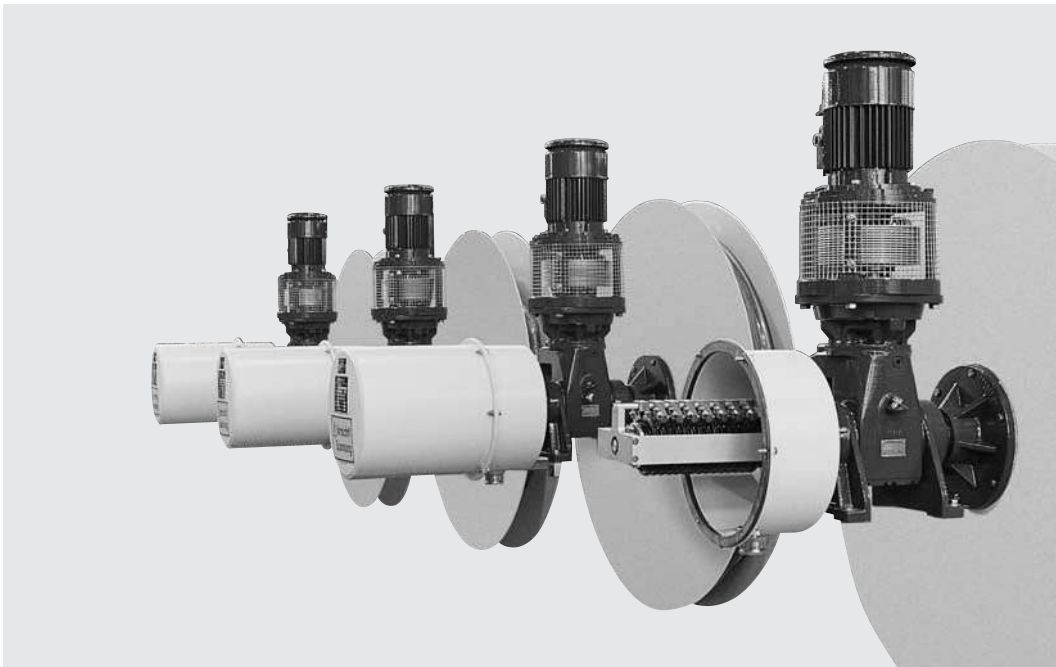


VAHLE MOTOR POWERED CABLE REELS

Magnet Coupling Series



Type LTM 50.1 N 24 K 60-95/42 M A



Type LTM 4/11 N 30 P 25-6/29 M 6 D



These electric motor driven reels use permanent magnet couplings for the required torque effect.

Two coupling sizes are available:

- No. 1.8 for a constant torque moment
- No. 7 for an adjustable torque moment (by changing the airgap).

The adequate starting torque of the standard AC Motor in any cycling or voltage is higher than the magnet coupling torque.

While the primary side works per the motor rotation (in the reeling up direction) the secondary coupling side rotates per the travel speed of the moving equipment.

- n = 0 standstill
- n = - retrieve
- n = + payout

keeping always a minimum torque moment set by the factory in accordance to the speed envisaged.

A back-stop device on the motor holds the cable in place when power is shut off.

Up to the certain air gap (torque moment) the coupling sizes 1.8 and 7 can operate at 100 % DF e. g. the electric motor running continuously under power, as long as the moving equipment is in operation.

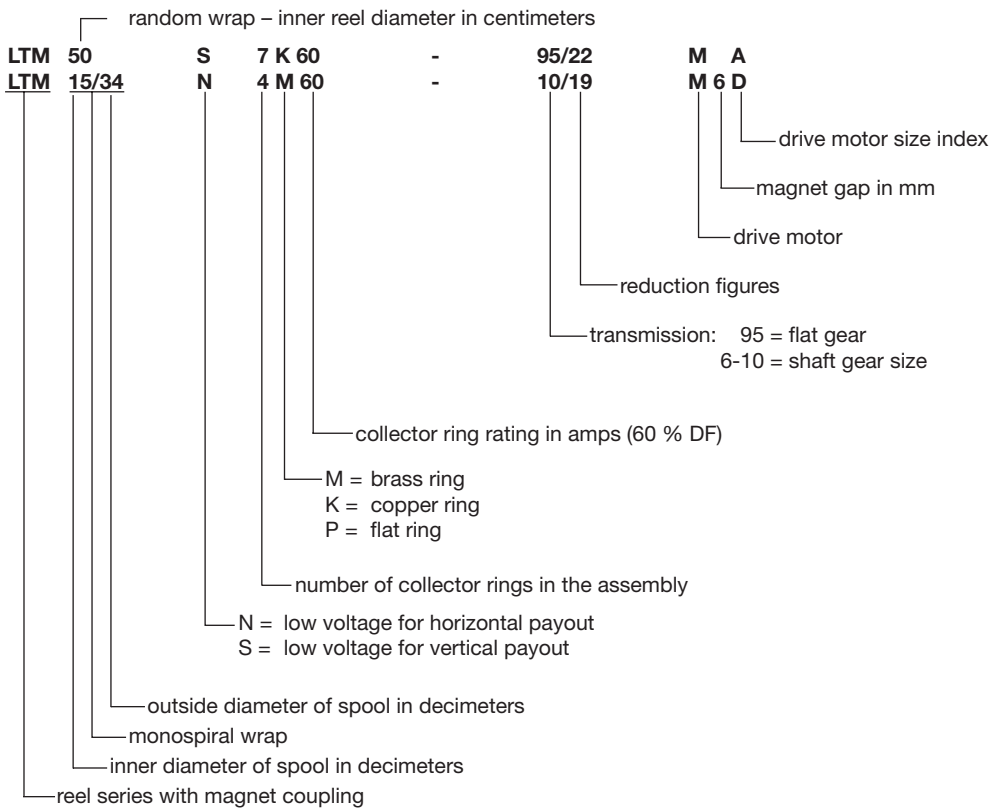
A drive-connected, intermittent service requires a built in timer maintaining cable pickup as the moving equipment decelerates after shutdown.

A few reel models, using coupling No. 7 require a payout sensor detecting the rotation of the reel ensuring that the reel motor is energized during cable recovery and de-energized during cable payout. This results in energy savings and extended unit life. See reel selection charts (*) and wiring diagram.



LTM MODEL EXPLANATION

Reel type definition



All Models are less cable

Reel Selection – Example

Job function requiring a reel for:

| | |
|-------------------------------|-------------------------|
| Active cable length | : 30 m |
| No. of conductors x wire size | : 4 x 6 mm ² |
| Cable diameter | : 21 mm |
| Cable weight | : 0,6 kg/m |
| Operating speed | : 40m/min |
| Application | : case 1 |
| Spool type | : monospiral |

The selection per chart on page 37:

Type : **LTM 6/12 N 4 M 60-95/51 MA**
 Cat.-No. : **0924429**

REEL SELECTION CHART

Monospiral wrap, shaft gear, horizontal payout

Applications

1 2



| Cable NSHTÖU-J 4 x 6 mm ² | | Ø 21 mm | | Weight: 0,60 kg/m | |
|---------------------------------------|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| active length [m] | Type | 20 m/min | 40 m/min | 60 m/min | 80 m/min |
| 30 | LTM 6/12 N 4 M60- | 95/51 MA 0924429 | 95/51 MA 0924429 | 6/20 M 6 D 0924432 | 6/20 M 6 D 0924432 |
| 57 | LTM 6/15 N 4 M60- | 6/25 M 6 D 0924433 | 6/25 M 6 D 0924433 | 6/25 M 6 D 0924433 | 6/25 M 6 D 0924433 |
| 79 | LTM 8/18 N 4 M60- | 6/32 M 6 D 0924434 | 6/32 M 6 D 0924434 | 6/32 M 6 D 0924434 | 6/32 M 6 D 0924434 |
| 126 | LTM 8/21 N 4 M60- | 6/36 M 6 D 0924435 | 6/36 M 6 D 0924435 | 6/36 M 6 D 0924435 | 6/25 M 4 E 0924436 |
| Cable NSHTÖU-J 4 x 10 mm ² | | Ø 25,5 mm | | Weight: 0,95 kg/m | |
| 25 | LTM 6/12 N 4 M60- | 6/22 M 6 D 0924437 | 6/22 M 6 D 0924437 | 6/22 M 6 D 0924437 | 6/22 M 6 D 0924437 |
| 48 | LTM 6/15 N 4 M60- | 6/29 M 6 D 0924438 | 6/29 M 6 D 0924438 | 6/29 M 6 D 0924438 | 6/20 M 4 E 0924439 |
| 68 | LTM 8/18 N 4 M60- | 6/36 M 6 D 0924441 | 6/36 M 6 D 0924441 | 6/36 M 6 D 0924441 | 6/25 M 4 E 0924442 |
| 104 | LTM 8/21 N 4 M60- | 6/45 M 6 D 0924443 | 6/45 M 6 D 0924443 | 6/45 M 6 D 0924443 | 6/29 M 4 E 0924444 |
| 133 | LTM 12/25 N 4 M60- | 8/57 M 6 D 0924445 | 8/57 M 6 D 0924445 | 8/57 M 6 D 0924445 | 8/36 M 4 E 0924446 |
| Cable NSHTÖU-J 4 x 16 mm ² | | Ø 30 mm | | Weight: 1,40 kg/m | |
| 19 | LTM 6/12 N 4 M150- | 6/29 M 6 D 0924447 | 6/29 M 6 D 0924447 | 6/29 M 6 D 0924447 | 6/20 M 4 E 0924448 |
| 38 | LTM 6/15 N 4 M150- | 6/36 M 6 D 0924449 | 6/36 M 6 D 0924449 | 6/36 M 6 D 0924449 | 6/25 M 4 E 0924451 |
| 56 | LTM 8/18 N 4 M150- | 6/45 M 6 D 0924452 | 6/45 M 6 D 0924452 | 6/45 M 6 D 0924452 | 6/32 M 4 E 0924453 |
| 85 | LTM 8/21 N 4 M150- | 6/60 M 6 D 0924454 | 6/60 M 6 D 0924454 | 6/36 M 4 E 0924455 | 6/36 M 4 E 0924455 |
| 109 | LTM 12/25 N 4 M150- | 8/67 M 6 D 0924456 | 8/67 M 6 D 0924456 | 8/50 M 4 E 0924457 | 8/50 M 4 E 0924457 |
| 153 | LTM 15/30 N 4 M150- | 8/67 M 4 E 0924458 | 8/67 M 4 E 0924458 | 8/67 M 4 E 0924458 | - |
| Cable NSHTÖU-J 4 x 25 mm ² | | Ø 35 mm | | Weight: 1,90 kg/m | |
| 16 | LTM 6/12 N 4 M150- | 6/32 M 6 D 0924461 | 6/32 M 6 D 0924461 | 6/32 M 6 D 0924461 | 6/22 M 4 E 0924462 |
| 32 | LTM 6/15 N 4 M150- | 6/45 M 6 D 0924463 | 6/45 M 6 D 0924463 | 6/29 M 4 E 0924464 | 6/29 M 4 E 0924464 |
| 48 | LTM 8/18 N 4 M150- | 6/51 M 6 D 0924465 | 6/51 M 6 D 0924465 | 6/36 M 4 E 0924466 | 6/36 M 4 E 0924466 |
| 72 | LTM 8/21 N 4 M150- | 6/45 M 4 E 0924467 | 6/45 M 4 E 0924467 | 6/45 M 4 E 0924467 | - |
| 92 | LTM 12/25 N 4 M150- | 8/57 M 4 E 0924469 | 8/57 M 4 E 0924469 | 8/57 M 4 E 0924469 | - |
| 133 | LTM 15/30 N 4 M150- | 8/76 M 4 E 0924472 | 8/76 M 4 E 0924472 | 8/76 M 4 E 0924472 | - |



REEL SELECTION CHART

Monospiral wrap, shaft gear, horizontal payout

Applications

1 2

| Cable NSHTÖU-J 4 x 25 mm ² | | Ø 35 mm | | Weight: 1,90 kg/m | |
|---|---------------------|-------------------------|-------------------------|-----------------------|-----------------------|
| active length [m] | Type | 20 m/min | 40 m/min | 60 m/min | 80 m/min |
| 150 | LTM 12/30 N 4 M150- | 8/76 M 4 E 0924473 | 8/76 M 4 E 0924473 | – | – |
| 182 | LTM 15/34 N 4 M150- | 10/105 M 4 E 0924475 | 10/105 M 4 E 0924475 | – | – |
| Cable NSHTÖU-J 4 x 35 mm ² | | Ø 39,5 mm | | Weight: 2,60 kg/m | |
| 13 | LTM 6/12 N 4 M150- | 6/29 M 4 E 0924477 | 6/29 M 4 E 0924477 | 6/29 M 4 E 0924477 | 6/29 M 4 E 0924477 |
| 29 | LTM 6/15 N 4 M150- | 6/36 M 4 E 0924478 | 6/36 M 4 E 0924478 | 6/36 M 4 E 0924478 | – |
| 40 | LTM 8/18 N 4 M150- | 6/45 M 4 E 0924481 | 6/45 M 4 E 0924481 | 6/45 M 4 E 0924481 | – |
| 63 | LTM 8/21 N 4 M150- | 6/51 M 4 E 0924483 | 6/51 M 4 E 0924483 | – | – |
| 80 | LTM 12/25 N 4 M150- | 8/57 M 3 E 0924485 | – | – | – |
| 111 | LTM 15/30 N 4 M150- | 10/73 M 3 E 0924487 | – | – | – |
| 130 | LTM 12/30 N 4 M150- | 10/73 M 3 E 0924489 | – | – | – |
| 159 | LTM 15/34 N 4 M150- | 10/94 M 3 E 0924492 | – | – | – |
| Cable NSHTÖU-J 4 x 50 mm ² | | Ø 46,5 mm | | Weight: 3,60 kg/m | |
| 48 | LTM 8/21 N 4 M300- | 8/67 M 4 E 0924494 | 8/67 M 4 E 0924494 | – | – |
| 62 | LTM 12/25 N 4 M300- | 8/85 M 4 E 0924496 | 8/85 M 4 E 0924496 | – | – |
| 90 | LTM 15/30 N 4 M300- | 10/94 M 3 E 0924498 | – | – | – |
| 111 | LTM 12/30 N 4 M300- | 10/94 M 3 E 0924501 | – | – | – |
| Cable NSHTÖU-J 4 x 70 mm ² | | Ø 51 mm | | Weight: 4,60 kg/m | |
| 57 | LTM 12/25 N 4 M300- | 10/84 M 3 E 0924503 | – | – | – |
| 83 | LTM 15/30 N 4 M300- | 10/105 M 3 E 0924505 | – | – | – |
| Cable NSHTÖU-J 24 x 1,5 mm ² | | Ø 30,5 mm | | Weight: 1,20 kg/m | |
| 19 | LTM 6/12 N 24 K60- | 6/25 M 6 D 0924507 | 6/25 M 6 D 0924507 | 6/25 M 6 D 0924507 | 6/25 M 6 D 0924507 |
| 38 | LTM 6/15 N 24 K60- | 6/36 M 6 D 0924508 | 6/36 M 6 D 0924508 | 6/36 M 6 D 0924508 | 6/25 M 4 E 0924509 |
| 56 | LTM 8/18 N 24 K60- | 6/45 M 6 D 0924511 | 6/45 M 6 D 0924511 | 6/45 M 6 D 0924511 | 6/29 M 4 E 0924512 |

REEL SELECTION CHART

Monospiral wrap, shaft gear, horizontal payout

Applications

1 2



| Cable NSHTÖU-J 24 x 1,5 mm ² | | Ø 30,5 mm | | Weight: 1,20 kg/m | |
|---|----------------------|------------------------|------------------------|------------------------|-----------------------|
| active length [m] | Type | 20 m/min | 40 m/min | 60 m/min | 80 m/min |
| 86 | LTM 8/21 N 24 K60- | 6/51 M 6 D 0924513 | 6/51 M 6 D 0924513 | 6/36 M 4 E 0924514 | 6/36 M 4 E 0924514 |
| 110 | LTM 12/25 N 24 K60- | 8/67 M 6 D 0924515 | 8/67 M 6 D 0924515 | 8/67 M 6 D 0924515 | 8/41 M 4 E 0924516 |
| 154 | LTM 15/30 N 24 K60- | 8/85 M 6 D 0924517 | 8/85 M 6 D 0924517 | 8/57 M 4 E 0924518 | 8/57 M 4 E 0924518 |
| Cable NSHTÖU-J 12 x 2,5 mm ² | | Ø 25,5 mm | | Weight: 0,85 kg/m | |
| 25 | LTM 6/12 N 12 K60- | 6/22 M 6 D 0924519 | 6/22 M 6 D 0924519 | 6/22 M 6 D 0924519 | 6/22 M 6 D 0924519 |
| 48 | LTM 6/15 N 12 K60- | 6/29 M 6 D 0924521 | 6/29 M 6 D 0924521 | 6/29 M 6 D 0924521 | 6/20 M 4 E 0924522 |
| 68 | LTM 8/18 N 12 K60- | 6/36 M 6 D 0924523 | 6/36 M 6 D 0924523 | 6/36 M 6 D 0924523 | 6/25 M 4 E 0924524 |
| 104 | LTM 8/21 N 12 K60- | 6/45 M 6 D 0924525 | 6/45 M 6 D 0924525 | 6/45 M 6 D 0924525 | 6/29 M 4 E 0924526 |
| 133 | LTM 12/25 N 12 K60- | 8/57 M 6 D 0924527 | 8/57 M 6 D 0924527 | 8/57 M 6 D 0924527 | 8/36 M 4 E 0924528 |
| 181 | LTM 15/30 N 12 K 60- | 8/76 M 6 D 0924529 | 8/76 M 6 D 0924529 | 8/76 M 6 D 0924529 | 8/50 M 4 E 0924531 |
| Cable NSHTÖU-J 18 x 2,5 mm ² | | Ø 29,5 mm | | Weight: 1,20 kg/m | |
| 19 | LTM 6/12 N 18 K60- | 6/25 M 6 D 0924532 | 6/25 M 6 D 0924532 | 6/25 M 6 D 0924532 | 6/25 M 6 D 0924532 |
| 38 | LTM 6/15 N 18 K60- | 6/36 M 6 D 0924533 | 6/36 M 6 D 0924533 | 6/36 M 6 D 0924533 | 6/22 M 4 E 0924534 |
| 56 | LTM 8/18 N 18 K60- | 6/45 M 6 D 0924535 | 6/45 M 6 D 0924535 | 6/45 M 6 D 0924535 | 6/29 M 4 E 0924536 |
| 85 | LTM 8/21 N 18 K60- | 6/51 M 6 D 0924537 | 6/51 M 6 D 0924537 | 6/36 M 4 E 0924538 | 6/36 M 4 E 0924538 |
| 108 | LTM 12/25 N 18 K60- | 8/67 M 6 D 0924539 | 8/67 M 6 D 0924539 | 8/67 M 6 D 0924539 | 8/41 M 4 E 0924541 |
| 153 | LTM 15/30 N 18 K60- | 8/85 M 6 D 0924542 | 8/85 M 6 D 0924542 | 8/57 M 4 E 0924543 | 8/57 M 4 E 0924543 |
| 176 | LTM 12/30 N 18 K60- | 8/67 M 4 E 0924544 | 8/67 M 4 E 0924544 | 8/67 M 4 E 0924544 | - |
| 220 | LTM 15/34 N 18 K60- | 10/84 M 4 E 0924546 | 10/84 M 4 E 0924546 | 10/84 M 4 E 0924546 | - |
| Cable NSHTÖU-J 24 x 2,5 mm ² | | Ø 34,5 mm | | Weight: 1,65 kg/m | |
| 16 | LTM 6/12 N 24 K60- | 6/32 M 6 D 0924548 | 6/32 M 6 D 0924548 | 6/32 M 6 D 0924548 | 6/22 M 4 E 0924549 |
| 32 | LTM 6/15 N 24 K60- | 6/36 M 6 D 0924551 | 6/36 M 6 D 0924551 | 6/36 M 6 D 0924551 | 6/25 M 4 E 0924552 |
| 48 | LTM 8/18 N 24 K60- | 6/51 M 6 D 0924553 | 6/51 M 6 D 0924553 | 6/32 M 4 E 0924554 | 6/32 M 4 E 0924554 |
| 71 | LTM 8/21 N 24 K60- | 6/60 M 6 D 0924555 | 6/60 M 6 D 0924555 | 6/45 M 4 E 0924556 | - |



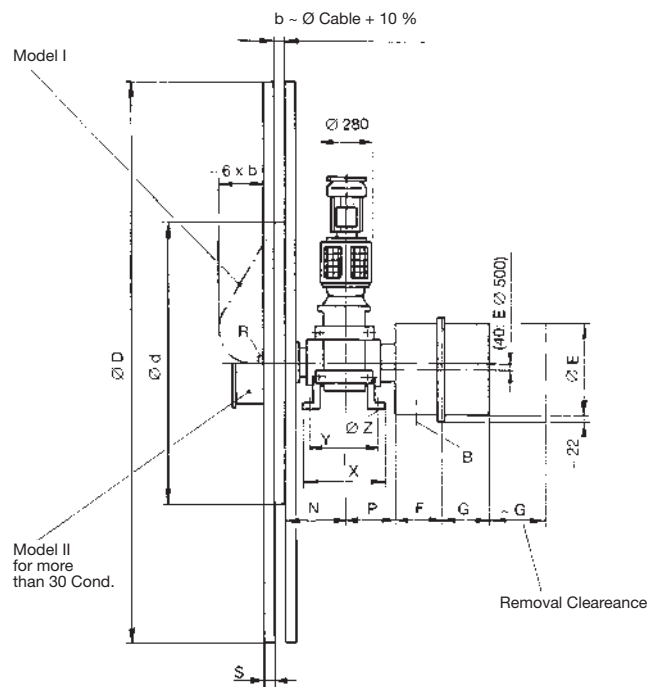
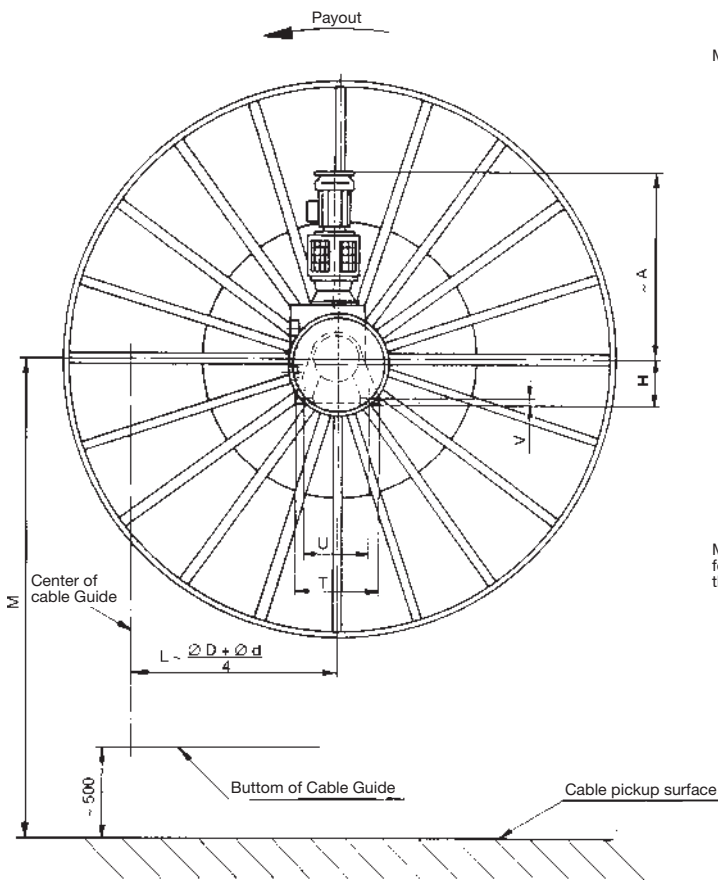
REEL SELECTION CHART

Monospiral wrap, shaft gear, horizontal payout

Applications

1 2

| Cable NSHTÖU-J 24 x 2,5 mm ² | | Ø 34,5 mm | | Weight: 1,65 kg/m | |
|---|---------------------|-------------------------|-------------------------|------------------------|-----------------------|
| active length [m] | Type | 20 m/min | 40 m/min | 60 m/min | 80 m/min |
| 91 | LTM 12/25 N 24 K60- | 8/76 M 6 D 0924558 | 8/76 M 6 D 0924558 | 8/50 M 4 E 0924559 | 8/50 M 4 E 0924559 |
| 133 | LTM 15/30 N 24 K60- | 8/67 M 4 E 0924561 | 8/67 M 4 E 0924561 | 8/67 M 4 E 0924561 | – |
| 149 | LTM 12/30 N 24 K60- | 8/67 M 4 E 0924563 | 8/67 M 4 E 0924563 | 8/67 M 4 E 0924563 | – |
| 191 | LTM 15/34 N 24 K60- | 10/94 M 4 E 0924564 | 10/94 M 4 E 0924564 | – | – |
| Cable NSHTÖU-J 30 x 2,5 mm ² | | Ø 36,5 mm | | Weight: 1,90 kg/m | |
| 13 | LTM 6/12 N 30 K60- | 6/32 M 6 D 0924566 | 6/32 M 6 D 0924566 | 6/32 M 6 D 0924566 | 6/22 M 4 E 0924567 |
| 32 | LTM 6/15 N 30 K60- | 6/45 M 6 D 0924568 | 6/45 M 6 D 0924568 | 6/29 M 4 E 0924569 | – |
| 44 | LTM 8/18 N 30 K60- | 6/51 M 6 D 0924572 | 6/51 M 6 D 0924572 | 6/36 M 4 E 0924573 | 6/36 M 4 E 0924573 |
| 67 | LTM 8/21 N 30 K60- | 6/67 M 6 D 0924574 | 6/67 M 6 D 0924574 | 6/45 M 4 E 0924575 | – |
| 86 | LTM 12/25 N 30 K60- | 8/85 M 6 D 0924577 | 8/85 M 6 D 0924577 | 8/57 M 4 E 0924578 | – |
| 126 | LTM 15/30 N 30 K60- | 8/76 M 4 E 0924581 | 8/76 M 4 E 0924581 | 8/76 M 4 E 0924581 | – |
| 143 | LTM 12/30 N 30 K60- | 8/76 M 4 E 0924583 | 8/76 M 4 E 0924583 | – | – |
| 174 | LTM 15/34 N 30 K60- | 10/94 M 4 E 0924585 | 10/94 M 4 E 0924585 | – | – |
| Cable NSHTÖU-J 36 x 2,5 mm ² | | Ø 40 mm | | Weight: 2,20 kg/m | |
| 13 | LTM 6/12 N 36 P25- | 6/36 M 6 D 0924587 | 6/36 M 6 D 0924587 | 6/36 M 6 D 0924587 | 6/25 M 4 E 0924588 |
| 29 | LTM 6/15 N 36 P25- | 6/51 M 6 D 0924589 | 6/51 M 6 D 0924589 | 6/32 M 4 E 0924591 | – |
| 40 | LTM 8/18 N 36 P25- | 6/60 M 6 D 0924593 | 6/60 M 6 D 0924593 | 6/45 M 4 E 0924594 | – |
| 63 | LTM 8/21 N 36 P25- | 6/51 M 4 E 0924596 | 6/51 M 4 E 0924596 | 6/36 M 3 E 0924597 | – |
| 73 | LTM 12/25 N 36 P25- | 8/57 M 4 E 0924599 | 8/57 M 4 E 0924599 | 8/57 M 4 E 0924599 | – |
| 112 | LTM 15/30 N 36 P25- | 10/84 M 4 E 0924602 | 10/84 M 4 E 0924602 | 10/84 M 4 E 0924602 | – |
| 131 | LTM 12/30 N 36 P25- | 10/84 M 4 E 0924604 | 10/84 M 4 E 0924604 | – | – |
| 160 | LTM 15/34 N 36 P25- | 10/105 M 4 E 0924606 | 10/105 M 4 E 0924606 | – | – |



B = Cable entrance to brushes
R = Cable entrance to rings

| Reel Type | A | Ø d | Ø D | H | M | N | P | s | T | U | V | X | Y | Ø Z | ~ kg |
|-----------------------------|-----|------|------|-----|-------|-----|-----|----|-----|-----|----|-----|-----|-----|------|
| LTM 6/12 N ... - 6 | 780 | 600 | 1200 | 140 | 1500* | 229 | 161 | 20 | 250 | 210 | 20 | 250 | 220 | 13 | 200 |
| - 8 | 810 | | | 175 | | 255 | 187 | | 300 | 240 | 25 | 300 | 260 | 17 | 240 |
| LTM 6/15 N ... - 6 | 780 | 600 | 1500 | 140 | 1500* | 229 | 161 | 20 | 250 | 210 | 20 | 250 | 220 | 13 | 210 |
| - 8 | 810 | | | 175 | | 255 | 187 | | 300 | 240 | 25 | 300 | 260 | 17 | 250 |
| LTM 8/18 N ... - 6 | 780 | 800 | 1800 | 140 | 1500* | 229 | 161 | 30 | 250 | 210 | 20 | 250 | 220 | 13 | 230 |
| - 8 | 810 | | | 175 | | 255 | 187 | | 300 | 240 | 25 | 300 | 260 | 17 | 270 |
| LTM 8/21 N ... - 6 | 780 | 800 | 2100 | 140 | 2000* | 229 | 161 | 40 | 250 | 210 | 20 | 250 | 220 | 13 | 265 |
| - 8 | 810 | | | 175 | | 255 | 187 | | 300 | 240 | 25 | 300 | 260 | 17 | 325 |
| LTM 12/25 N ... - 8 | 810 | 1200 | 2500 | 175 | 2000* | 255 | 187 | 40 | 300 | 240 | 25 | 300 | 260 | 17 | 340 |
| - 10 | 830 | | | 210 | | 310 | 287 | | 380 | 310 | 30 | 355 | 300 | 22 | 420 |
| LTM 12/30 N ... - 8 | 810 | | | 175 | | 255 | 187 | | 300 | 240 | 25 | 300 | 260 | 17 | 500 |
| - 10 | 830 | 1200 | 3000 | 210 | 3300 | 310 | 287 | 60 | 380 | 310 | 30 | 355 | 300 | 22 | 635 |
| LTM 15/30 N ... - 8 | 810 | | | 175 | | 255 | 187 | | 300 | 240 | 25 | 300 | 260 | 17 | 435 |
| - 10 | 830 | 1500 | 3000 | 210 | 3300 | 310 | 287 | 50 | 380 | 310 | 30 | 355 | 300 | 22 | 520 |
| LTM 15/34 N ... - 10 | 830 | 1500 | 3400 | 210 | 3450 | 310 | 287 | 60 | 380 | 310 | 30 | 355 | 300 | 22 | 760 |

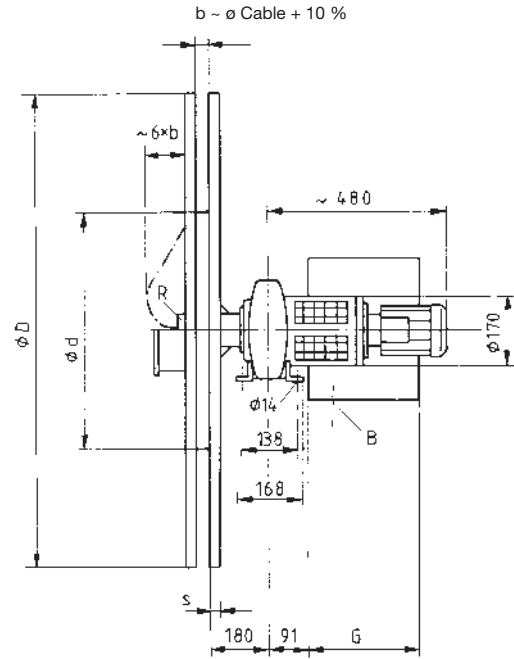
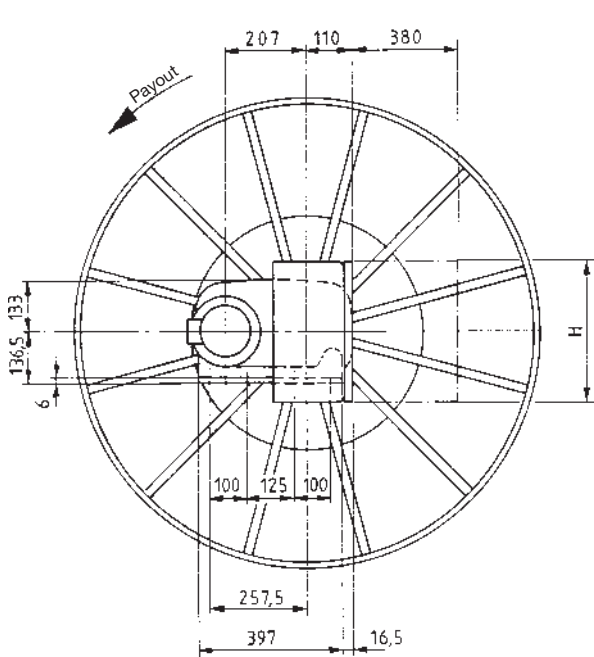
All dimensions in mm
* Installation height without using cable guide

Dimension of collector assembly hoods see page 42.



REEL DIMENSIONAL DATA for selection charts pages 37-40

Monospiral wrap, shaft gear



B = Cable entrance to brushes
R = Cable entrance to rings

horizontal payout - installation height max. 1.5 m

| Reel Type | Ø d | Ø D | b | N | S | ~ kg |
|---------------------------------|-----|------|----|-----|----|------|
| LTM 6/12 N 4M60-95/51 MA | 600 | 1200 | 25 | 180 | 20 | 155 |

Dimensional data of collector assembly hoods

Assembly hoods p. dwg. page 41

| Collector Type Assy | E | F | G |
|---------------------|-------|-----|-------|
| 4 M 60 | Ø 340 | 153 | 153 |
| 7 K 60 | | | 353 |
| 12 K 60 | | | |
| 18 K 60 | | | 553 |
| 24 K 60 | | | |
| 30 K 60 | | | 353 |
| 36 P 25 | | | |
| 4 M 150 | | | Ø 500 |
| 4 M 300 | 203 | | |

Assembly hoods p. dwg. page 42

| Collector Type Assy | G | H |
|---------------------|-----|-----|
| 4 M 60 | 380 | 300 |

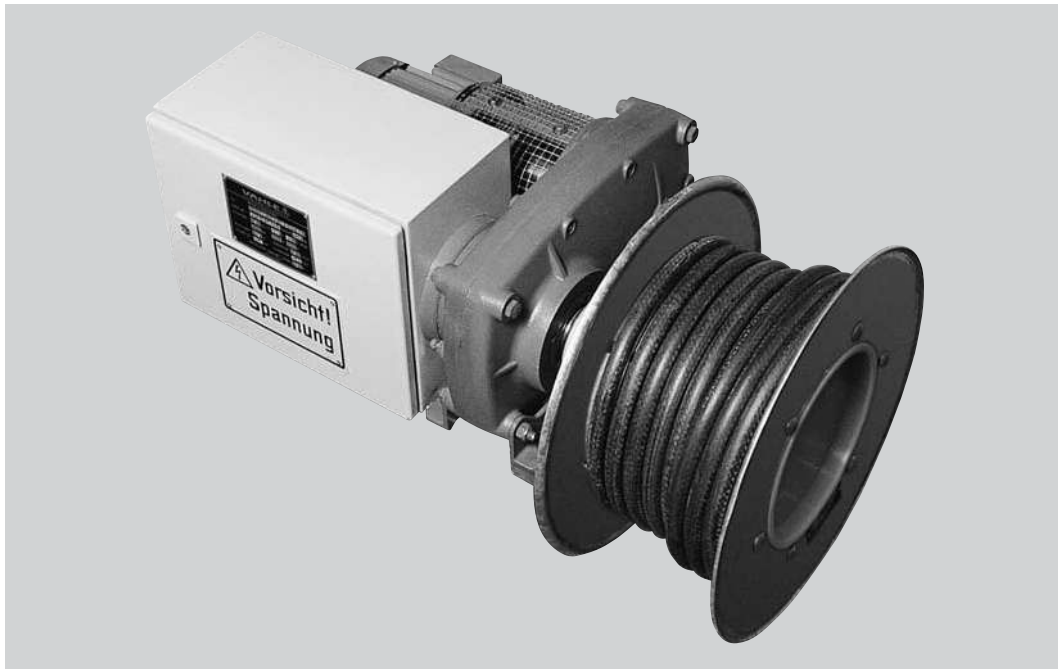


Type LTM 11/21 N 4 M 150-6/51 M 4 E



VAHLE MOTOR-DRIVEN REELS

Random wrap, flat gear



Type LTM 28 N 4 M 60-95/18 M A



Type LTM 38 N 12 K 60-95/30 M A

REEL SELECTION CHART

Random wrap, shaft gear, horizontal payout

Application

1



| active length [m] | | LZ* | Reel Type | 20 m/min. | 40 m/min. | 60 m/min. | 80 m/min. |
|--|---|-----|---------------------------|------------------------|--------------------------|------------------------|------------------------|
| Cable NSHTÖU-J 4 x 2,5 mm² | | | Ø 16,5 mm | | Weight: 0,33 kg/m | | |
| 32 | 3 | | LTM 28 N 4 M60- | 95/12 MA 0924396 | 95/12 MA 0924396 | 95/12 MA 0924396 | 95/12 MA 0924396 |
| 84 | 5 | | LTM 38 N 4 M60- | 95/18 MA 0924397 | 95/18 MA 0924397 | 95/18 MA 0924397 | 95/18 MA 0924397 |
| 124 | 5 | | LTM 50 N 4 M60- | 95/24 MA 0924398 | 95/24 MA 0924398 | 95/24 MA 0924398 | 95/24 MA 0924398 |
| Cable NSHTÖU-J 4 x 4 mm² | | | Ø 19,5 mm | | Weight: 0,47 kg/m | | |
| 26 | 3 | | LTM 28 N 4 M60- | 95/12 MA 0924399 | 95/12 MA 0924399 | 95/12 MA 0924399 | 95/12 MA 0924399 |
| 72 | 5 | | LTM 38 N 4 M60- | 95/18 MA 0924401 | 95/18 MA 0924401 | 95/18 MA 0924401 | 95/18 MA 0924401 |
| 108 | 5 | | LTM 50 N 4 M60- | 95/24 MA 0924402 | 95/24 MA 0924402 | 95/24 MA 0924402 | 95/24 MA 0924402 |
| Cable NSHTÖU-J 4 x 6 mm² | | | Ø 21 mm | | Weight: 0,60 kg/m | | |
| 14 | 2 | | LTM 28 N 4 M60- | 95/12 MA 0924403 | 95/12 MA 0924403 | 95/12 MA 0924403 | 95/12 MA 0924403 |
| 49 | 4 | | LTM 38 N 4 M60- | 95/18 MA 0924404 | 95/18 MA 0924404 | 95/18 MA 0924404 | 95/18 MA 0924404 |
| 100 | 5 | | LTM 50 N 4 M60- | 95/24 MA 0924405 | 95/24 MA 0924405 | 95/24 MA 0924405 | 95/24 MA 0924405 |
| 139 | 5 | | LTM 50.1 N 4 M60- | 95/27 MA 0924406 | 95/27 MA 0924406 | 95/27 MA 0924406 | 95/25 MA 0924407 |
| Cable NSHTÖU-J 4 x 10 mm² | | | Ø 25,5 mm | | Weight: 0,95 kg/m | | |
| 31 | 3 | | LTM 38 N 4 M60- | 95/18 MA 0924408 | 95/18 MA 0924408 | 95/18 MA 0924408 | 95/18 MA 0924408 |
| 64 | 4 | | LTM 50 N 4 M60- | 95/24 MA 0924409 | 95/24 MA 0924409 | 95/24 MA 0924409 | - - |
| 87 | 4 | | LTM 50.1 N 4 M60- | 95/30 MA 0924411 | 95/30 MA 0924411 | 95/30 MA 0924411 | 6/12 M 6 D 0924412 |
| 150 | 5 | | LTM 70 N 4 M60- | 8/19 M 6 D 0924413 | 8/19 M 6 D 0924413 | 8/19 M 6 D 0924413 | 8/19 M 6 D 0924413 |
| 168 | 5 | | LTM 80 N 4 M60- | 10/19 M 6 D 0924608 | 10/19 M 6 D 0924608 | 10/19 M 6 D 0924608 | 10/19 M 6 D 0924608 |
| Cable NSHTÖU-J 4 x 16 mm² | | | Ø 30 mm | | Weight: 1,40 kg/m | | |
| 23 | 3 | | LTM 38 N 4 M150- | 95/20 MA 0924414 | 95/20 MA 0924414 | 95/20 MA 0924414 | 95/19 MA 0924415 |
| 50 | 4 | | LTM 50 N 4 M150- | 95/30 MA 0924416 | 95/30 MA 0924416 | 95/30 MA 0924416 | 6/12 M 6 D 0924417 |
| 80 | 4 | | LTM 50.1 N 4 M150- | 6/15 M 6 D 0924418 | 6/15 M 6 D 0924418 | 6/15 M 6 D 0924418 | 6/15 M 6 D 0924418 |
| 140 | 5 | | LTM 70 N 4 M150- | 8/25 M 6 D 0924419 | 8/25 M 6 D 0924419 | 8/25 M 6 D 0924419 | 8/25 M 6 D 0924419 |
| 156 | 5 | | LTM 80 N 4 M150- | 10/26 M 6 D 0924609 | 10/26 M 6 D 0924609 | 10/26 M 6 D 0924609 | 10/29 M 6 D 0924609 |

* LZ = No. of cable layers



REEL SELECTION CHART

Random wrap, shaft gear, horizontal payout

Application

1

| Cable NSHTÖU-J 4 x 25 mm ² | | Ø 35 mm | | Weight: 1,90 kg/m | | | |
|---|-----|--------------------|------------------------|------------------------|------------------------|------------------------|--|
| active length [m] | LZ* | Reel Type | 20 m/min. | 40 m/min. | 60 m/min. | 80 m/min. | |
| 30 | 3 | LTM 50 N 4 M150- | 95/32 MA 0924421 | 95/32 MA 0924421 | 95/32 MA 0924421 | 6/12 M 6 D 0924422 | |
| 47 | 3 | LTM 50.1 N 4 M150- | 95/42 MA 0924423 | 95/42 MA 0924423 | 6/15 M 6 D 0924424 | 6/15 M 6 D 0924424 | |
| 118 | 5 | LTM 70 N 4 M150- | 8/28 M 6 D 0924425 | 8/28 M 6 D 0924425 | 8/28 M 6 D 0924425 | 8/28 M 6 D 0924425 | |
| 130 | 5 | LTM 80 N 4 M150- | 10/31 M 6 D 0924611 | 10/31 M 6 D 0924611 | 10/31 M 6 D 0924611 | 10/31 M 6 D 0924611 | |
| Cable NSHTÖU-J 4 x 35 mm ² | | Ø 39,5 mm | | Weight: 2,60 kg/m | | | |
| 42 | 3 | LTM 50.1 N 4 M150- | 6/22 M 6 D 0924426 | 6/22 M 6 D 0924426 | 6/22 M 6 D 0924426 | 6/22 M 6 D 0924426 | |
| 80 | 4 | LTM 70 N 4 M150- | 8/32 M 6 D 0924427 | 8/32 M 6 D 0924427 | 8/32 M 6 D 0924427 | 8/22 M 4 E 0924428 | |
| 118 | 5 | LTM 80 N 4 M150- | 10/38 M 6 D 0924612 | 10/38 M 6 D 0924612 | 10/38 M 6 D 0924612 | 10/26 M 4 E 0924613 | |
| Cable NSHTÖU-J 7 x 1,5 mm ² | | Ø 19 mm | | Weight: 0,43 kg/m | | | |
| 26 | 3 | LTM 28 N 7 K60- | 95/12 MA 0924614 | 95/12 MA 0924614 | 95/12 MA 0924614 | 95/12 MA 0924614 | |
| 72 | 5 | LTM 38 N 7 K60- | 95/19 MA 0924615 | 95/19 MA 0924615 | 95/19 MA 0924615 | 95/19 MA 0924615 | |
| 107 | 5 | LTM 50 N 7 K60- | 95/24 MA 0924616 | 95/24 MA 0924616 | 95/24 MA 0924616 | 95/24 MA 0924616 | |
| 154 | 5 | LTM 50.1 N 7 K60- | 95/24 MA 0924617 | 95/24 MA 0924617 | 95/24 MA 0924617 | 95/24 MA 0924617 | |
| Cable NSHTÖU-J 12 x 1,5 mm ² | | Ø 22 mm | | Weight: 0,60 kg/m | | | |
| 14 | 2 | LTM 28 N 12 K60- | 95/13 MA 0924618 | 95/13 MA 0924618 | 95/13 MA 0924618 | 95/13 MA 0924618 | |
| 49 | 4 | LTM 38 N 12 K60- | 95/19 MA 0924619 | 95/19 MA 0924619 | 95/19 MA 0924619 | 95/19 MA 0924619 | |
| 92 | 5 | LTM 50 N 12 K60- | 95/27 MA 0924621 | 95/27 MA 0924621 | 95/27 MA 0924621 | 6/10 M 6 D 0924622 | |
| 139 | 5 | LTM 50.1 N 12 K60- | 95/27 MA 0924623 | 95/27 MA 0924623 | 95/27 MA 0924623 | 6/10 M 6 D 0924624 | |
| Cable NSHTÖU-J 30 x 2,5 mm ² | | Ø 30,5 mm | | Weight: 1,20 kg/m | | | |
| 24 | 3 | LTM 38 N 24 K60- | 95/30 MA 0924625 | 95/30 MA 0924625 | 6/12 M 6 D 0924626 | 6/12 M 6 D 0924626 | |
| 50 | 4 | LTM 50 N 24 K60- | 95/38 MA 0924627 | 95/38 MA 0924627 | 6/15 M 6 D 0924628 | 6/15 M 6 D 0924628 | |
| 74 | 4 | LTM 50.1 N 24 K60- | 95/38 MA 0924629 | 95/38 MA 0924629 | 6/15 M 6 D 0924631 | 6/15 M 6 D 0924631 | |
| 128 | 5 | LTM 70 N 24 K60- | 8/22 M 6 D 0924632 | 8/22 M 6 D 0924632 | 8/22 M 6 D 0924632 | 8/22 M 6 D 0924632 | |
| 143 | 5 | LTM 80 N 24 K60- | 10/23 M 6 D 0924633 | 10/23 M 6 D 0924633 | 10/23 M 6 D 0924633 | 10/23 M 6 D 0924633 | |

* LZ = No. of cable layers

REEL SELECTION CHART

Random wrap, shaft gear, horizontal payout

Application

1



| Cable NSHTÖU-J 7 x 2,5 mm ² | | Ø 21,5 mm | | Weight: 0,56 kg/m | | |
|---|-----|--------------------|------------------------|------------------------|------------------------|------------------------|
| active length [m] | LZ* | Reel Type | 20 m/min. | 40 m/min. | 60 m/min. | 80 m/min. |
| 14 | 2 | LTM 28 N 7 K60- | 95/12 MA 0924634 | 95/12 MA 0924634 | 95/12 MA 0924634 | 95/12 MA 0924634 |
| 49 | 4 | LTM 38 N 7 K60- | 95/19 MA 0924635 | 95/19 MA 0924635 | 95/19 MA 0924635 | 95/19 MA 0924635 |
| 92 | 5 | LTM 50 N 7 K60- | 95/27 MA 0924636 | 95/27 MA 0924636 | 95/27 MA 0924636 | 6/10 M 6 D 0924637 |
| 139 | 5 | LTM 50.1 N 7 K60- | 95/27 MA 0924638 | 95/27 MA 0924638 | 95/27 MA 0924638 | 6/10 M 6 D 0924639 |
| Cable NSHTÖU-J 12 x 2,5 mm ² | | Ø 25,5 mm | | Weight: 0,85 kg/m | | |
| 31 | 3 | LTM 38 N 12 K60- | 95/20 MA 0924641 | 95/20 MA 0924641 | 95/20 MA 0924641 | 6/10 M 6 D 0924642 |
| 64 | 4 | LTM 50 N 12 K60- | 95/30 MA 0924643 | 95/30 MA 0924643 | 95/30 MA 0924643 | 6/12 M 6 D 0924644 |
| 87 | 4 | LTM 50.1 N 12 K60- | 95/30 MA 0924645 | 95/30 MA 0924645 | 95/30 MA 0924645 | 6/12 M 6 D 0924646 |
| 150 | 5 | LTM 70 N 12 K60- | 8/16 M 6 D 0924647 | 8/16 M 6 D 0924647 | 8/16 M 6 D 0924647 | 8/16 M 6 D 0924647 |
| 168 | 5 | LTM 80 N 12 K60- | 10/19 M 6 D 0924648 | 10/19 M 6 D 0924648 | 10/19 M 6 D 0924648 | 10/19 M 6 D 0924648 |
| Cable NSHTÖU-J 18 x 2,5 mm ² | | Ø 29,5 mm | | Weight: 1,20 kg/m | | |
| 27 | 3 | LTM 38 N 18 K60- | 95/27 MA 0924649 | 95/27 MA 0924649 | 6/10 M 6 D 0924651 | 6/10 M 6 D 0924651 |
| 58 | 4 | LTM 50 N 18 K60- | 95/38 MA 0924652 | 95/38 MA 0924652 | 6/15 M 6 D 0924653 | 6/15 M 6 D 0924653 |
| 81 | 4 | LTM 50.1 N 18 K60- | 95/38 MA 0924654 | 95/38 MA 0924654 | 6/15 M 6 D 0924655 | 6/15 M 6 D 0924655 |
| 141 | 5 | LTM 70 N 18 K60- | 8/22 M 6 D 0924656 | 8/22 M 6 D 0924656 | 8/22 M 6 D 0924656 | 8/22 M 6 D 0924656 |
| 156 | 5 | LTM 80 N 18 K60- | 10/23 M 6 D 0924657 | 10/23 M 6 D 0924657 | 10/23 M 6 D 0924657 | 10/23 M 6 D 0924657 |
| Cable NSHTÖU-J 24 x 2,5 mm ² | | Ø 34,5 mm | | Weight: 1,65 kg/m | | |
| 30 | 3 | LTM 50 N 24 K60- | 95/42 MA 0924658 | 95/42 MA 0924658 | 6/17 M 6 D 0924659 | 6/17 M 6 D 0924659 |
| 47 | 3 | LTM 50.1 N 24 K60- | 95/42 MA 0924661 | 95/42 MA 0924661 | 6/17 M 6 D 0924662 | 6/17 M 6 D 0924662 |
| 118 | 5 | LTM 70 N 24 K60- | 8/28 M 6 D 0924663 | 8/28 M 6 D 0924663 | 8/28 M 6 D 0924663 | 8/28 M 6 D 0924663 |
| 131 | 5 | LTM 80 N 24 K60- | 10/31 M 6 D 0924664 | 10/31 M 6 D 0924664 | 10/31 M 6 D 0924664 | 10/31 M 6 D 0924664 |
| Cable NSHTÖU-J 30 x 2,5 mm ² | | Ø 36,5 mm | | Weight: 1,90 kg/m | | |
| 30 | 3 | LTM 50 N 30 K60- | 95/47 MA 0924665 | 95/47 MA 0924665 | 6/17 M 6 D 0924666 | 6/17 M 6 D 0924666 |
| 47 | 3 | LTM 50.1 N 30 K60- | 95/47 MA 0924667 | 95/47 MA 0924667 | 6/17 M 6 D 0924668 | 6/17 M 6 D 0924668 |
| 118 | 5 | LTM 70 N 30 K60- | 8/28 M 6 D 0924669 | 8/28 M 6 D 0924669 | 8/28 M 6 D 0924669 | 8/28 M 6 D 0924669 |
| 128 | 5 | LTM 80 N 30 K60- | 10/31 M 6 D 0924671 | 10/31 M 6 D 0924671 | 10/31 M 6 D 0924671 | 10/31 M 6 D 0924671 |

* LZ = No. of cable layers



REEL SELECTION CHART

Random wrap, shaft gear, vertical lift

Application

8

| active length [m] | | LZ* | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 60 m/min. |
|--|-----|------------------|-----------------------|-----------------------|-----------------------|--------------------------|-----------------------|-----------|
| Cable NSHTÖU-J 4 x 2,5 mm² | | | Ø 16,5 mm | | | Weight: 0,33 kg/m | | |
| 10 | 1,2 | LTM 28 S 4 M60- | 95/12 MA 0924672 | 95/12 MA 0924672 | 95/12 MA 0924672 | 95/12 MA 0924672 | 95/12 MA 0924672 | |
| 20 | 1,6 | LTM 38 S 4 M60- | 95/20 MA 0924673 | 95/20 MA 0924673 | 95/20 MA 0924673 | 95/20 MA 0924673 | 95/20 MA 0924673 | |
| Cable NSHTÖU-J 4 x 4 mm² | | | Ø 19,5 mm | | | Weight: 0,47 kg/m | | |
| 10 | 1,4 | LTM 28 S 4 M60- | 95/13 MA 0924674 | 95/13 MA 0924674 | 95/13 MA 0924674 | 95/13 MA 0924674 | 95/13 MA 0924674 | |
| 20 | 1,8 | LTM 38 S 4 M60- | 95/24 MA 0924675 | 95/24 MA 0924675 | 95/24 MA 0924675 | 95/24 MA 0924675 | 95/24 MA 0924675 | |
| 30 | 2,5 | LTM 38 S 4 M60- | 95/30 MA 0924676 | 95/30 MA 0924676 | 95/30 MA 0924676 | 95/30 MA 0924676 | 6/12 M 6 D 0924677 | |
| Cable NSHTÖU-J 4 x 6 mm² | | | Ø 21 mm | | | Weight: 0,60 kg/m | | |
| 10 | 1,6 | LTM 28 S 4 M60- | 95/15 MA 0924678 | 95/15 MA 0924678 | 95/15 MA 0924678 | 95/15 MA 0924678 | 95/15 MA 0924678 | |
| 20 | 1,9 | LTM 38 S 4 M60- | 95/27 MA 0924679 | 95/27 MA 0924679 | 95/27 MA 0924679 | 95/27 MA 0924679 | 6/12 M 6 D 0924681 | |
| 30 | 2,7 | LTM 38 S 4 M60- | 95/35 MA 0924682 | 95/35 MA 0924682 | 95/35 MA 0924682 | 95/35 MA 0924682 | 6/15 M 6 D 0924683 | |
| Cable NSHTÖU-J 4 x 10 mm² | | | Ø 25,5 mm | | | Weight: 0,95 kg/m | | |
| 10 | 1,3 | LTM 38 S 4 M60- | 95/27 MA 0924684 | 95/27 MA 0924684 | 95/27 MA 0924684 | 95/27 MA 0924684 | 6/12 M 6 D 0924685 | |
| 20 | 2,1 | LTM 38 S 4 M60- | 95/38 MA 0924686 | 95/38 MA 0924686 | 95/38 MA 0924686 | 95/38 MA 0924686 | 6/15 M 6 D 0924689 | |
| 30 | 2,9 | LTM 38 S 4 M60- | 95/51 MA 0924691 | 95/51 MA 0924691 | 95/51 MA 0924691 | 6/20 M 6 D 0924692 | 6/20 M 6 D 0924692 | |
| Cable NSHTÖU-J 4 x 16 mm² | | | Ø 30 mm | | | Weight: 1,40 kg/m | | |
| 10 | 1,6 | LTM 38 S 4 M150- | 95/35 MA 0924693 | 95/35 MA 0924693 | 95/35 MA 0924693 | 95/35 MA 0924693 | 6/15 M 6 D 0924694 | |
| 20 | 2,6 | LTM 38 S 4 M150- | 95/51 MA 0924695 | 95/51 MA 0924695 | 95/51 MA 0924695 | 6/20 M 6 D 0924696 | 6/20 M 6 D 0924696 | |
| 30 | 2,7 | LTM 50 S 4 M150- | 6/36 M 6 D 0924697 | 6/36 M 6 D 0924697 | 6/36 M 6 D 0924697 | 6/36 M 6 D 0924697 | 6/25 M 4 E 0924698 | |
| Cable NSHTÖU-J 4 x 25 mm² | | | Ø 35 mm | | | Weight: 1,90 kg/m | | |
| 10 | 1,3 | LTM 50 S 4 M150- | 6/22 M 6 D 0924699 | 6/22 M 6 D 0924699 | 6/22 M 6 D 0924699 | 6/22 M 6 D 0924699 | 6/22 M 6 D 0924699 | |
| 20 | 2,2 | LTM 50 S 4 M150- | 6/36 M 6 D 0924701 | 6/36 M 6 D 0924701 | 6/36 M 6 D 0924701 | 6/36 M 6 D 0924701 | 6/25 M 4 E 0924702 | |

* LZ = No. of cable layers

REEL SELECTION CHART

Random wrap, shaft gear, vertical lift

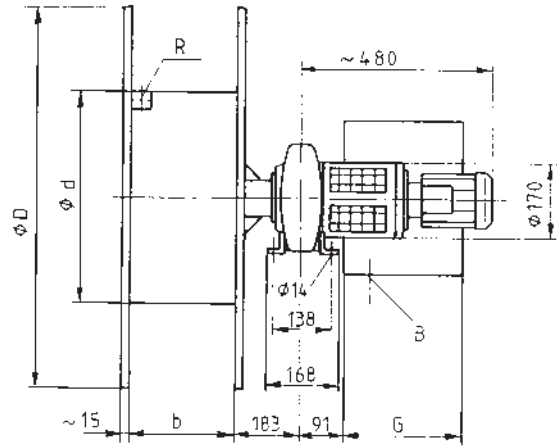
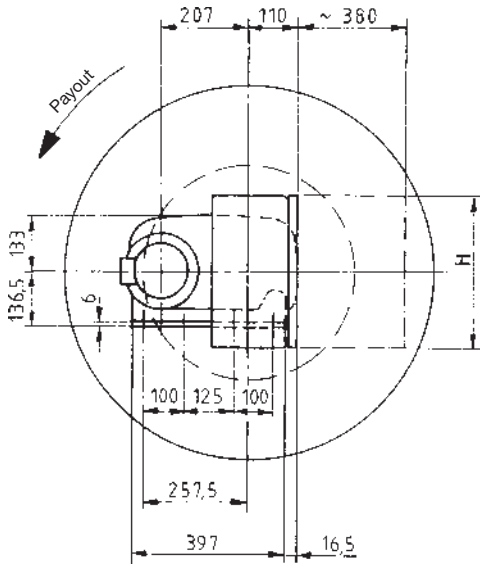
Application

8



| Cable NSHTÖU-J 12 x 1,5 mm ² | | | Ø 22 mm | | | Weight: 0,60 kg/m | |
|---|-----|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| active length [m] | LZ* | Reel Type | 12 m/min. | 20 m/min. | 30 m/min. | 40 m/min. | 60 m/min. |
| 10 | 1,5 | LTM 28 S 12 K60- | 95/17 MA 0924703 | 95/17 MA 0924703 | 95/17 MA 0924703 | 95/17 MA 0924703 | 95/17 MA 0924703 |
| 20 | 1,9 | LTM 38 S 12 K60- | 95/27 MA 0924704 | 95/27 MA 0924704 | 95/27 MA 0924704 | 95/27 MA 0924704 | 6/12 M 6 D 0924705 |
| 30 | 2,7 | LTM 38 S 12 K60- | 95/35 MA 0924706 | 95/35 MA 0924706 | 95/35 MA 0924706 | 95/35 MA 0924706 | 6/15 M 6 D 0924707 |
| Cable NSHTÖU-J 24 x 1,5 mm ² | | | Ø 30,5 mm | | | Weight: 1,20 kg/m | |
| 10 | 1,6 | LTM 38 S 24 K60- | 95/35 MA 0924708 | 95/35 MA 0924708 | 95/35 MA 0924708 | 95/35 MA 0924708 | 6/12 M 6 D 0924709 |
| 20 | 2,6 | LTM 38 S 24 K60- | 95/51 MA 0924711 | 95/51 MA 0924711 | 95/51 MA 0924711 | 6/20 M 6 D 0924712 | 6/20 M 6 D 0924712 |
| 30 | 2,7 | LTM 50 S 24 K60- | 6/32 M 6 D 0924713 | 6/32 M 6 D 0924713 | 6/32 M 6 D 0924713 | 6/32 M 6 D 0924713 | 6/22 M 4 E 0924714 |
| Cable NSHTÖU-J 7 x 2,5 mm ² | | | Ø 21,5 mm | | | Weight: 0,56 kg/m | |
| 10 | 1,5 | LTM 28 S 7 K60- | 95/16 MA 0924715 | 95/16 MA 0924715 | 95/16 MA 0924715 | 95/16 MA 0924715 | 95/16 MA 0924715 |
| 20 | 1,9 | LTM 38 S 7 K60- | 95/27 MA 0924716 | 95/27 MA 0924716 | 95/27 MA 0924716 | 95/27 MA 0924716 | 6/10 M 6 D 0924717 |
| 30 | 2,7 | LTM 38 S 7 K60- | 95/35 MA 0924718 | 95/35 MA 0924718 | 95/35 MA 0924718 | 95/35 MA 0924718 | 6/12 M 6 D 0924719 |
| Cable NSHTÖU-J 12 x 2,5 mm ² | | | Ø 25,5 mm | | | Weight: 0,85 kg/m | |
| 10 | 1,3 | LTM 38 S 12 K60- | 95/27 MA 0924721 | 95/27 MA 0924721 | 95/27 MA 0924721 | 95/27 MA 0924721 | 6/10 M 6 D 0924722 |
| 20 | 2,1 | LTM 38 S 12 K60- | 95/38 MA 0924723 | 95/38 MA 0924723 | 95/38 MA 0924723 | 95/38 MA 0924723 | 6/15 M 6 D 0924724 |
| 30 | 2,9 | LTM 38 S 12 K60- | 95/47 MA 0924725 | 95/47 MA 0924725 | 95/47 MA 0924725 | 6/17 M 6 D 0924726 | 6/17 M 6 D 0924726 |
| Cable NSHTÖU-J 18 x 2,5 mm ² | | | Ø 29,5 mm | | | Weight: 1,20 kg/m | |
| 10 | 1,4 | LTM 38 S 18 K60- | 95/35 MA 0924727 | 95/35 MA 0924727 | 95/35 MA 0924727 | 95/35 MA 0924727 | 6/15 M 6 D 0924728 |
| 20 | 2,3 | LTM 38 S 18 K60- | 95/47 MA 0924729 | 95/47 MA 0924729 | 95/47 MA 0924729 | 6/17 M 6 D 0924731 | 6/17 M 6 D 0924731 |
| 30 | 2,4 | LTM 50 S 18 K60- | 6/32 M 6 D 0924732 | 6/32 M 6 D 0924732 | 6/32 M 6 D 0924732 | 6/32 M 6 D 0924732 | 6/22 M 4 E 0924733 |
| Cable NSHTÖU-J 24 x 2,5 mm ² | | | Ø 34,5 mm | | | Weight: 1,65 kg/m | |
| 10 | 1,3 | LTM 50 S 24 K60- | 6/22 M 6 D 0924734 | 6/22 M 6 D 0924734 | 6/22 M 6 D 0924734 | 6/22 M 6 D 0924734 | 6/22 M 6 D 0924734 |
| 20 | 2,2 | LTM 50 S 24 K60- | 6/32 M 6 D 0924735 | 6/32 M 6 D 0924735 | 6/32 M 6 D 0924735 | 6/32 M 6 D 0924735 | 6/22 M 4 E 0924736 |
| Cable NSHTÖU-J 30 x 2,5 mm ² | | | Ø 36,5 mm | | | Weight: 1,90 kg/m | |
| 10 | 1,3 | LTM 50 S 30 K60- | 6/25 M 6 D 0924737 | 6/25 M 6 D 0924737 | 6/25 M 6 D 0924737 | 6/25 M 6 D 0924737 | 6/17 M 4 E 0924738 |
| 20 | 2,2 | LTM 50.1 S 30 K60- | 6/36 M 6 D 0924739 | 6/36 M 6 D 0924739 | 6/36 M 6 D 0924739 | 6/36 M 6 D 0924739 | 6/25 M 4 E 0924741 |

* LZ = No. of cable layers



B = Cable entrance to brushes
R = Cable entrance to rings

Applications 1 8

| Reel Type | b | ϕd | ϕD | ~ kg |
|---|-----|----------|----------|------|
| LTM 28 N ... -95/ ... MA S | 200 | 280 | 450 | 125 |
| LTM 38 N ... -95/ ... MA S | 220 | 380 | 650 | 150 |
| LTM 50 N ... -95/ ... MA | 250 | 500 | 800 | 175 |
| LTM 50.1 N ... -95/ ... MA | 350 | 500 | 900 | 200 |

Dimensional data of collector assembly hoods

Assembly hoods p. dwg. page 50

| Collector Assy Type | E | F | G |
|---------------------|------------|-----|-----|
| 4 M 60 | $\phi 340$ | 153 | 153 |
| 7 K 60 | | | 353 |
| 12 K 60 | | | 553 |
| 18 K 60 | | | 353 |
| 24 K 60 | | | 153 |
| 30 K 60 | | | 203 |
| 36 P 25 | $\phi 500$ | 203 | 153 |
| 4 M150 | | | 203 |
| 4 M300 | | | 203 |

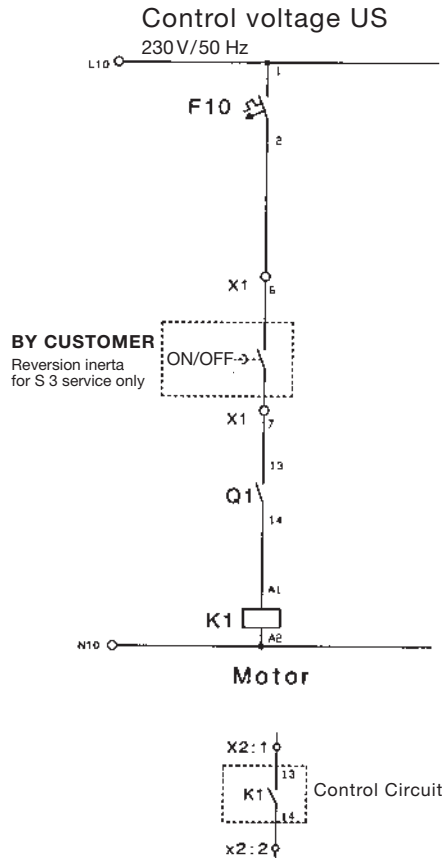
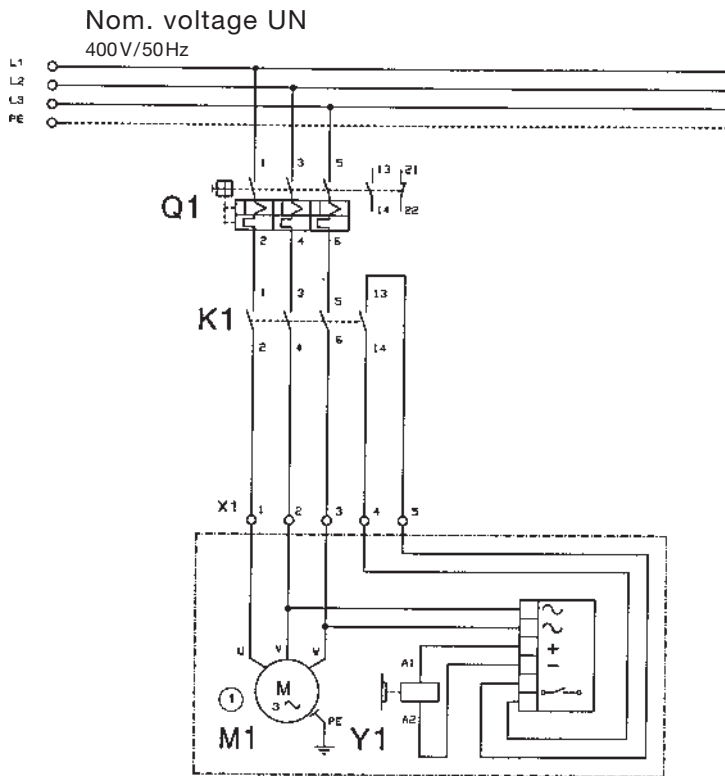
Assembly hoods p. dwg. above

| Collector Assy Type | G | H |
|---------------------|-----|-----|
| 4 M 60 | 380 | 300 |
| 7 K 60 | | |
| 12 K 60 | | |
| 18 K 60 | 600 | 380 |
| 24 K 60 | | |
| 30 K 60 | 700 | |
| 36 P 25 | 600 | |
| 4 M150 | 300 | |



WIRING DIAGRAMS

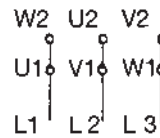
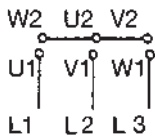
for cable reels with magnet coupling series



VAHLE's supply includes ① ○ ○ only. Further outfit on special order.

Motor
star-connected
(e. g.: supply voltage 400 V)
(Motor 230/400 V)

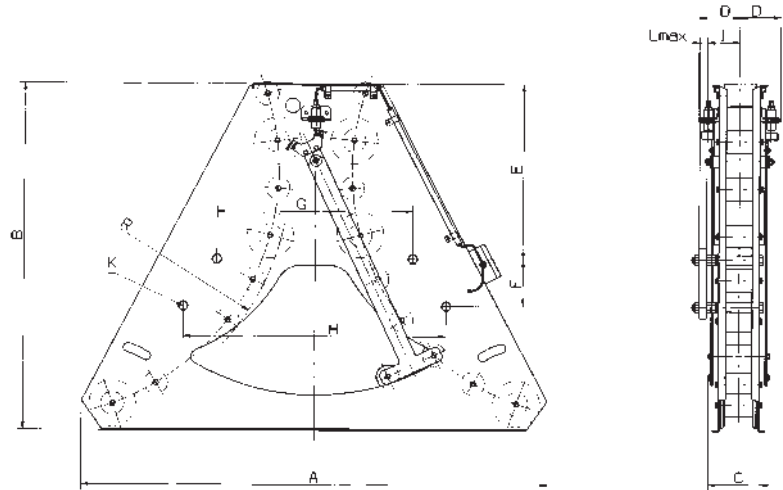
Motor
delta-connected
(e. g.: supply voltage 400 V)
(Motor 400/690 V)



| Motor size | kW | n_L [min. ⁻¹] RPM under load | Md [Nm] Torque Moment | DF [%] | UT [°C] Oper. Temperature | U _N [V] Nom. Voltage | F _N [Hz] Nom. Frequency | I _N [A] Nom. Amperage | cos. φ |
|------------|------|---|-----------------------------|--------|---------------------------------|------------------------------------|---------------------------------------|-------------------------------------|--------|
| M E | 1,5 | 1405 | 10 | 100 | 40 | 400 | | 3,5 | 0.82 |
| M D | 1,1 | 1410 | 7,5 | | | | 50 | 2,65 | 0.81 |
| M A | 0,37 | 1375 | 2,5 | | | | | 1,06 | 0.76 |



Guide roller assembly
monospiral wrap
two-way payout
for up to 1000 Volt applications
 More than 1000 Volt ratings require
 r min. = 15 times cable OD



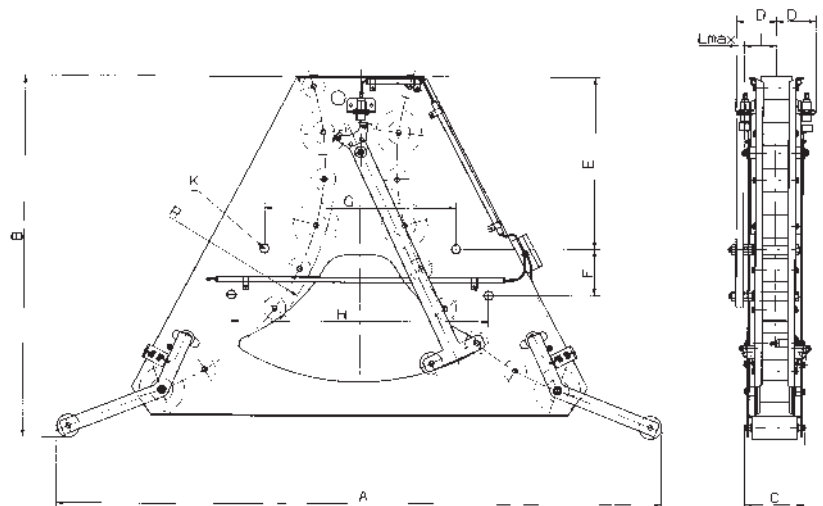
Assy without Pendulum

| Type | max. cable. Ø | A | B | C | D | E | F | G | H | I | K | R | ≈ kg | Cat.-No. |
|-------------|---------------|------|------|-----|---|-----|-----|-----|------|------|------|------|------|-----------|
| R 6 | 55 | 1140 | 860 | 145 | – | 360 | 125 | 430 | 598 | 92,5 | M 16 | 600 | 85 | 0 924 994 |
| R 9 | 75 | 1595 | 1200 | 180 | – | 606 | 164 | 670 | 900 | 111 | M 20 | 900 | 150 | 0 924 995 |
| R 12 | 83 | 2100 | 1660 | 210 | – | 560 | 500 | 740 | 1200 | 111 | M 20 | 1200 | 250 | 0 924 996 |

Assy with Pendulum

for torque moment regulation at cable anchor position (midpoint) and/or for slack cable control.

| Type | max. cable. Ø | A | B | C | D | E | F | G | H | I | K | R | ≈ kg | Cat.-No. c/w pos. switch | Cat.-No. w/o pos. switch |
|-------------|---------------|------|------|-----|-----|-----|-----|------|------|------|------|------|------|--------------------------|--------------------------|
| R 6 | 55 | 1140 | 860 | 175 | 123 | 360 | 125 | 4305 | 598 | 92,5 | M 16 | 600 | 90 | 0 926 575 | 0 924 997 |
| R 9 | 75 | 1595 | 1200 | 210 | 140 | 606 | 164 | 670 | 900 | 111 | M 20 | 900 | 155 | 0 925 072 | 0 924 998 |
| R 12 | 83 | 2100 | 1660 | 210 | 140 | 560 | 500 | 740 | 1200 | 111 | M 20 | 1200 | 255 | 0 926 572 | 0 924 999 |



Assy with Tension Control

| Type | max. cable Ø | A | B | C | D | E | F | G | H | I | K | R | ≈ kg | Cat.-No. c/w pos. switch | Cat.-No. w/o pos. switch |
|--------------|--------------|------|------|-----|-----|-----|-----|-----|------|------|------|------|------|--------------------------|--------------------------|
| RZ 6 | 55 | 1700 | 930 | 185 | 123 | 360 | 125 | 430 | 598 | 92,5 | M 16 | 600 | 95 | 0 926 576 | 0 924 742 |
| RZ 9 | 75 | 2175 | 1240 | 220 | 140 | 606 | 164 | 670 | 900 | 111 | M 20 | 900 | 160 | 0 925 073 | 0 925 002 |
| RZ 12 | 83 | 2600 | 1710 | 220 | 140 | 560 | 500 | 740 | 1200 | 111 | M 20 | 1200 | 260 | 0 926 573 | 0 925 003 |

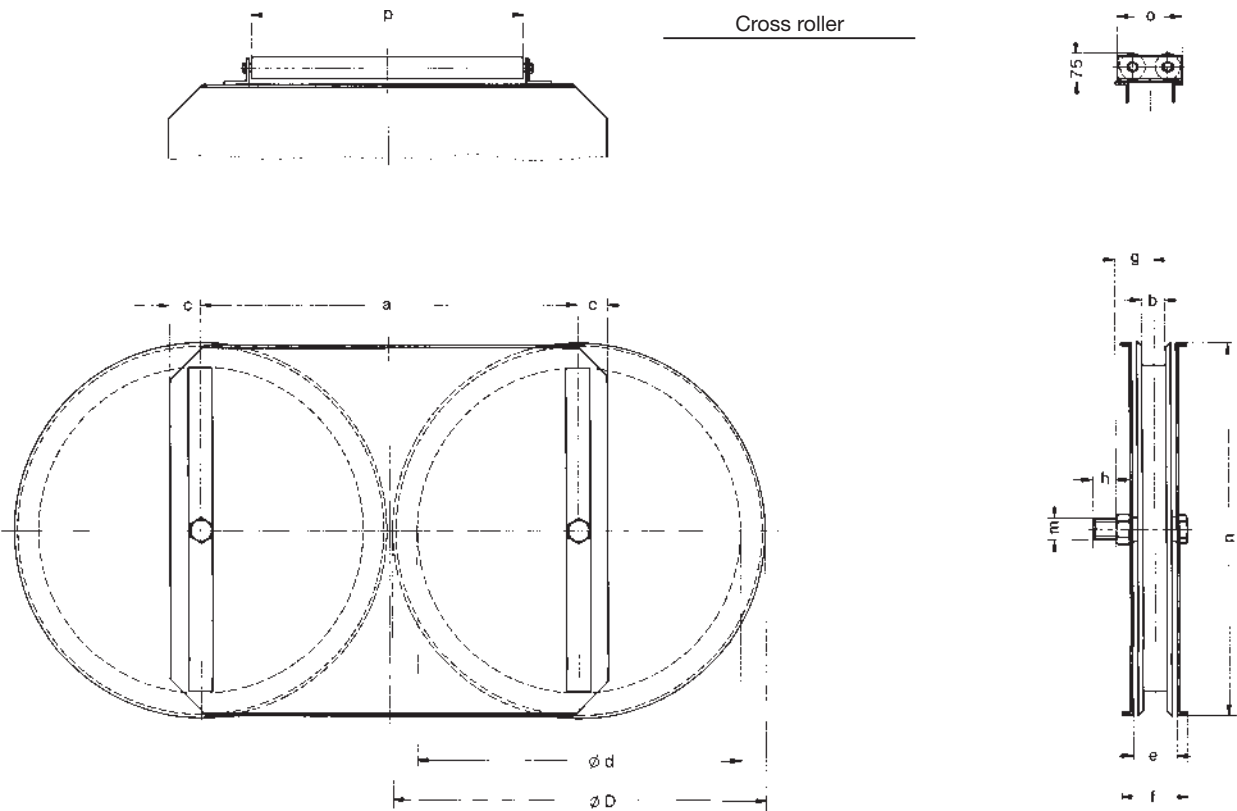


ACCESSORIES

Double sheave guides

Double sheave guides

used for up to 1000 Volt applications
two-way payout



Assy without cross roller

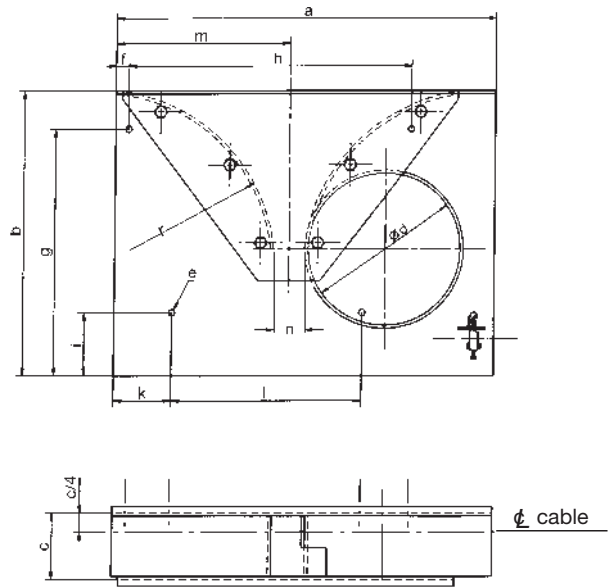
| Type | Cat.-No. | max. cable. Ø | a | b | c | Ø d | Ø D | e | f | g | h | m | n | o | P | ≈kg |
|--------|----------|---------------|------|----|----|-----|------|-----|-----|-----|----|------|------|-----|-----|-----|
| SU - 1 | 0901635 | 23 | 455 | 70 | 33 | 350 | 450 | 114 | 170 | 85 | 50 | M 24 | 445 | 180 | 315 | 34 |
| SU - 2 | 0901636 | 33,5 | 655 | | 48 | 503 | 650 | | | | | | 640 | | 400 | 90 |
| SU - 3 | 0901637 | 44 | 785 | | 80 | 663 | 780 | | | | | | 770 | | 500 | 120 |
| SU - 4 | 0901638 | 52 | 905 | | 75 | 783 | 900 | | | | | | 890 | | 600 | 130 |
| SU - 5 | 0901639 | 60 | 1105 | 80 | 73 | 900 | 1100 | 134 | 192 | 103 | 62 | M 30 | 1090 | 210 | 800 | 220 |

Assy with cross roller

| Type | Cat.-No. | max. cable. Ø | a | b | c | Ø d | Ø D | e | f | g | h | m | n | o | P | ≈kg |
|---------|----------|---------------|------|----|----|-----|------|-----|-----|-----|----|------|------|-----|-----|-----|
| SU - R1 | 0901630 | 23 | 455 | 70 | 33 | 350 | 450 | 114 | 170 | 85 | 50 | M 24 | 445 | 180 | 315 | 34 |
| SU - R2 | 0901631 | 33,5 | 655 | | 48 | 503 | 650 | | | | | | 640 | | 400 | 96 |
| SU - R3 | 0901632 | 44 | 785 | | 80 | 663 | 780 | | | | | | 770 | | 500 | 126 |
| SU - R4 | 0901633 | 52 | 905 | | 75 | 783 | 900 | | | | | | 890 | | 600 | 136 |
| SU - R5 | 0901634 | 60 | 1105 | 80 | 73 | 900 | 1100 | 134 | 192 | 103 | 62 | M 30 | 1090 | 210 | 800 | 226 |

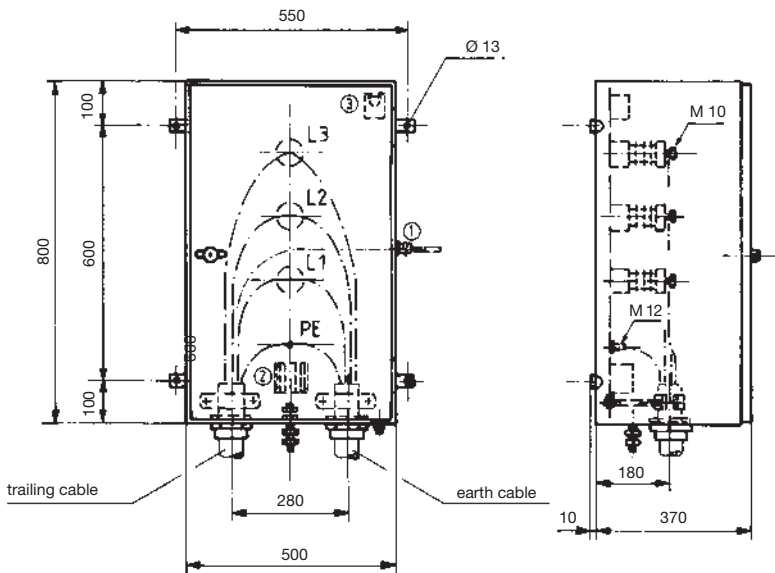
Feed-point Funnels used applications up to 1000 Volt · two-way payout.
All usual travel speeds and frequency passing over midpoint.

| Type | ETZ 3 | ETZ 4 | ETZ 5 | ETZ 7 | ETZ 9 | ETZ 12 |
|--------------|---------|---------|---------|-------------|-------------|---------|
| Cat.-No. | 0921380 | 0921390 | 0921400 | 0921410 | 0921720 | 0926651 |
| max. cable Ø | 34 | 50 | 62 | 80 ~ 60* | 90 ~ 70* | ~ 90* |
| a | 650 | 900 | 1220 | 1760 | 2070 | 2660 |
| b | 530 | 700 | 900 | 1200 | 1475 | 1930 |
| c | 106 | 146 | 208 | 208 | 216 | 60 |
| d / r | 275 | 400 | 500 | 700 | 900 | 1200 |
| e | 14 | 18 | | | 22 | 22 |
| f | 40 | | | 200 | 125 | 150 |
| g | 405 | 550 | 780 | 1080 | 1325 | 1780 |
| h | 400 | 740 | 900 | 1100 | 1820 | 2220 |
| i | 200 | | | | 275 | 330 |
| k | 120 | 210 | 180 | 350 | 1250 | 1660 |
| l | 300 | 400 | 600 | 800 | 695 | 920 |
| m | 270 | 410 | 480 | 750 | 960 | 1260 |
| n | 60 | 80 | 100 | | 120 | 120 |
| ~ kg | 15 | 28 | 52 | 100 | 130 | 200 |



* allowed for applications of more than 1000 V.

Terminal box 10 kV



Options: ① fibre optic link (LWL)
②, ③ heating

| Type | Cat.-No. |
|--|----------|
| Terminal box 10 kV | 926653 |
| Terminal box with LWL-connection | 926654 |
| Terminal box with heating | 926655 |
| Terminal box with LWL-connection and heating | 926656 |



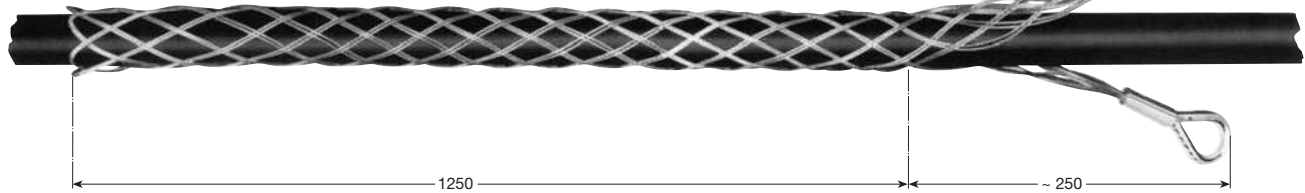
ACCESSORIES

Cable grips Anchor clamps Support rollers

Wire mesh strain relief grips, 1250 mm long

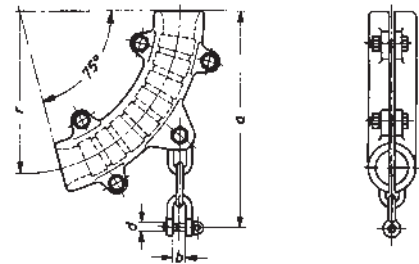
| Type | Cat.-No. | for cable OD mm | Permissible tension* kg |
|--------------|----------|-----------------|-------------------------|
| VLZ 1 | 0901620 | 15-20 | 930 |
| VLZ 2 | 0901621 | 20-30 | 1165 |
| VLZ 3 | 0901622 | 30-40 | 1400 |
| VLZ 4 | 0901623 | 40-50 | 1630 |

* 3-times safety factor considered



Turnover Anchor Clamps for up to 1000 Volt applications for one- or two-way payout and low travelling speeds

Mainly used in connection with plug & socket service
or when feeding from underneath the cable tray is impossible

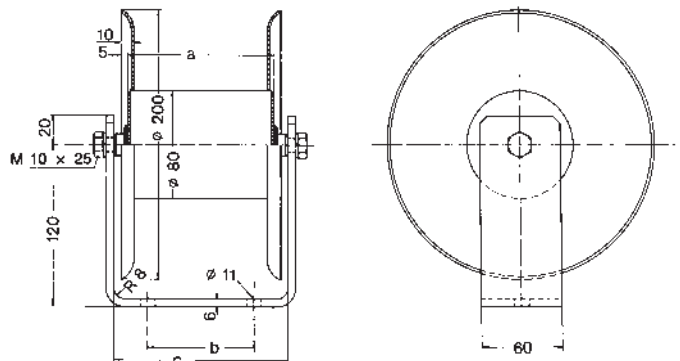


| Type | Cat.-No. | for cable OD mm | r | a | d | b | Weight ~ kg |
|-------------|----------|-----------------|-----|-----|----|----|-------------|
| LS 1 | 0921420 | - 21.5 | 100 | 205 | 10 | 14 | 1.6 |
| LS 2 | 0921430 | > 21.5 - 28.0 | 130 | 225 | | | 2.5 |
| LS 3 | 0921440 | > 28.0 - 36.5 | 170 | 265 | 12 | 17 | 3.5 |
| LS 4 | 0921450 | > 36.5 - 48.0 | 220 | 300 | | | 5.5 |
| LS 5 | 0921460 | > 48.0 - 63.0 | 290 | 405 | 16 | 21 | 8.5 |

Cable Support Rollers

| Type | Cat.-No. | a | | | Weight ~ kg | |
|--------------------------|----------|-----|-----|-----|-------------|----------------|
| | | a | b | c | | |
| TR 80/110 B 200 | 0924450 | 110 | - | 130 | 2.25 | w/o bracket |
| TR 80/300 B 200 | 0924460 | 300 | - | 320 | 3.25 | |
| TR 80/500 B 200 | 0924470 | 500 | - | 520 | 4.50 | |
| TR 80/110 B 200 H | 0924480 | 110 | 80 | 130 | 3.50 | c/w bracket |
| TR 80/300 B 200 H | 0924490 | 300 | 250 | 320 | 5.15 | |
| TR 80/500 B 200 H | 0924500 | 500 | 400 | 520 | 6.90 | |

Rollers include bolts and washers.



Motor reels - Model LTF - with frequency inverter drive

Careful treatment and long life of cable is achieved by stepless variable torque regulation. All dynamic loads are being considered.

Standard, robust AC motors are used and the frequency inverter is easily programmable. Additional PLC's are not required.

There is a considerable saving of electric energy over conventional drive systems (e.g. torque motors).



Model LTF - with frequency inverter drive, designed for heavy duty and high speed applications.

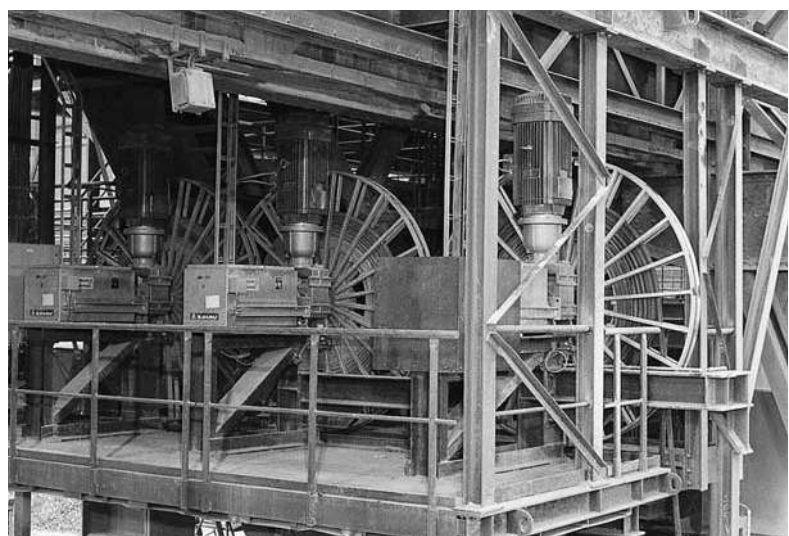
Motor reels with fibre optic links

Using fibre optic cables on motor reels for continuous data transmission between rotating and stationary system parts requires fibre optic links (usually 6 FO-elements 50/125 or 62,5/125).

This unit guarantees an interruption-free performance to transfer data between computer interfaces, analogous measurements, video signals etc.

A combined fibre optic-copper link is also available.

Recommendations and dimensions to meet your requirements will be furnished on request.



Cable Reels LT in use at a steel mill handling communication cable.



FURTHER MODELS

Model HS - with electro-hydraulic drive for constant torque, designed to power moving equipment operating under severe heavy-duty conditions at high speeds and using heavy-gauge cable.

The hydraulic drive works elastically, thus minimizing cable strain caused by abrupt starting, braking or during flipover point operation.



HS level wind Cable Reel powering Yard Crane incorporates steering mechanism and double sheave cable guide

Model HSB - with electro-hydraulic drive and variable torque for constant cable tension is especially well suited for high-voltage cables and small cross section conductors not tolerating high mechanical stress.

Reels are designed for monospiral wrap with the elastic drive adapting to the spooling diameter.

A taut and slack cable monitoring device is optional.



HSB monospiral wrap Cable Reel used on Container Crane with cable guide and tension control assembly



VAHLE POWERCOM® 485
Motor powered cable reels with VAHLE
POWERCOM® Data Transmission Systems

The interference-free data transmission system works in conjunction with Vahle reels on standard non-screened conductor cables and normal slip-rings.

Our catalog no. 9c has all the details for you.

Model LT/S & HS/S - for level wind, one or multilayer operation to handle extra long cable when there is no room for a monospiral reel.

These wide spools feature a cable steering and distribution mechanism allowing cable payout in a right angle or in parallel to the reel axis.

Mainly meant for extreme heavy working conditions, the LT/S & HS/S kind of drive unit is chosen in accordance to the application.

A taut and slack cable monitoring device is optional.



Foto shows LT/S 150 GH and LT/S G in action



Catalog No.

| | |
|---|------|
| Copperhead Conductor Systems | 1 a |
| Battery Charging Systems | 1 b |
| Insulated Conductor Systems U 10 | 2 a |
| Insulated Conductor Systems U 20 – U 30 – U 40 | 2 b |
| Insulated Conductor Systems U 15 – U 25 – U 35 | 2 c |
| Aluminium Enclosed Conductor Systems LSV – LSVG | 3 a |
| Steel Enclosed Conductor Systems SLG – HSL | 3 b |
| Powerail Enclosed Conductor Systems KBSL – KSL – KSLT – KSG | 4 a |
| Powerail Enclosed Conductor Systems VKS – VKL | 4 b |
| Powerail Enclosed Conductor System MKLD – MKLF – MKLS | 4 c |
| Heavy Enclosed Conductor Systems | 5 |
| Trolley Wire and Accessories | 6 |
| Cable Tenders | 7 |
| Cable Carriers for □-tracks | 8 a |
| Cable Carriers for Flatform Cable on I-beams | 8 bF |
| Cable Carriers for Round Cable on I-beams | 8 bR |
| Cable Carriers for ◇-tracks | 8 c |
| Conductor Cables and Fittings | 8 L |
| Spring Operated Cable Reels | 9 a |
| Overload Protection Systems | 9 b |
| VAHLE POWERCOM® – Data Transmission Systems | 9 c |
| CPS – Contactless Power Supply | 9 d |
| SMG – Slotted Microwave Guide | 9 e |
| Position Encoding System | 9 f |
| Motor Powered Cable Reels | 10 |

