



INTRODUCTION

All information necessary for a correct assembly to ensure trouble free operation of the cable reel are described in the present operating instructions. The warranty given by the manufacturer is only valid if these operating instructions are observed and adhered to. Terms and conditions are available upon request or at <https://www.schill.de/en/footer/general-terms>.

Additional user manuals for other product variants can be found at <https://www.schill.de/en/downloads> or received on request (see "CONTACT").

GENERAL

The automatic cable rewriter with integrated charging electronics provides the simple means for modern AC charging of electrically powered vehicles (EV). The cable is only pulled out when needed and in the required length. The remainder stays neatly stored on the cable reel and is protected from contamination and damage. The power connection is always accessible, but never in the way. The cable length can be easily adapted to a changing parking situation. There is no cable chaos, no tripping hazard anymore. If the charging connection is no longer needed, a short pull on the cable stopper will suffice and the cable will roll up neatly. The automatic cable rewriter ensures safety and order.

HANDLING

The coiled cable should be pulled out to the required length against the spring tension, but please refrain from the use of undue force. The cable is coiled and fixed in position as described under "LOCKING DEVICE". The cable should never be pushed in manually. If the cable becomes entangled when winding it onto the reel, simply pull the cable out again and then rewind.

Incorrect use caused by torsional stress together with simultaneous expansion of cable should be avoided

MAINTENANCE

The cable reel does not require any maintenance, due to the excellent antifriction properties of the plastic bearing. However, the cable must be checked in regular intervals for damages and replaced if necessary.

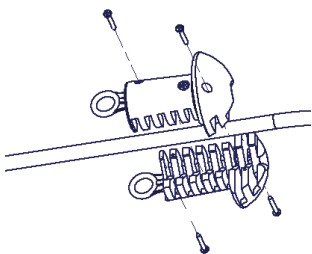
In the event of cable damages, please contact us (see "CONTACT").

SPIRAL SPRING

The spiral spring is subject to natural wear and tear and can result in a fatigue fracture of the spring steel. Based on experience, we recommend changing the spring after approx. 30.000 operations. The term "operations" defines not only a complete winding and unwinding of the spring but includes also a partial movement of the spring.

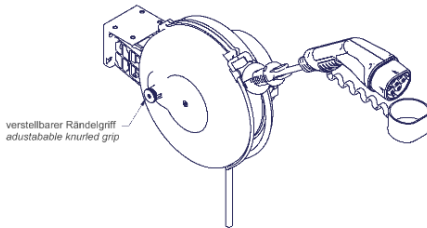
In the event of spring breakage or spring fatigue, please contact us (see "CONTACT").

CABLE STOPPER



The length of the available cable can be individually adjusted with the provided cable stopper. The reliable clamping adapts to various cable diameters between 6 and 12 mm. For a thicker cable, a larger version is available. The stopper also serves as a safeguard against retraction of the cable in case of a not intended release. It should therefore never be removed.

LOCKING DEVICE



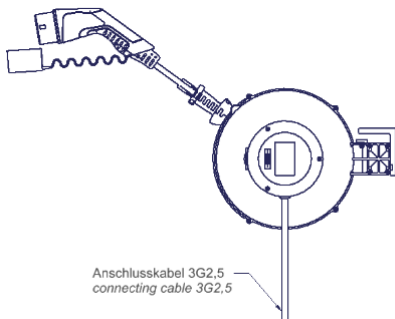
As a standard feature the cable reel has a disengageable cable locking device. The latching mechanism ensures that the pulled-out cable stays without traction fixed in place. When the cable is being pulled out, the spring detent passes over a series of grooves. An audible click indicates that the locking device is engaged. If you gently rewind the cable after the clicking sound, you will notice that the spring detent will engage into the notches, locking the cable in position. The cable can be disengaged by gently continuing to pull the cable until the click can no longer be heard. The tensioned spring will pull the cable back onto the reel.

Only the locking device **FT 260 and FT 350** can be disengaged by pulling the knurled grip out by approx. 1cm and turning it between 90° and 180°. This will disengage the locking device the cable is then constantly under tension.

ATTENTION

Do not release the cable when rewinding, the tension of the spring can accelerate the winding speed to such a degree that the swinging cable end could cause injury. Also damage to the cable and spring could be the result of such an action.

CONNECTING



To connect the reel to the mains/supply service a 2m connection cable H07RN-F 3G2,5 / H07 RN-F 5G2,5 is mounted. As a standard a plug-in connector is not included in the scope of supply.

The connection cable can be shortened and connected in individual lengths.

ATTENTION

- Observe installation instructions
- According to DIN VDE 0100-722 (VDE 0100-722): 2013-01, a separate circuit must be set up for each charging socket (IEC 60364-7-722: Low-voltage electrical installations - Part 7-722: Requirements for special installations or locations - supply of electric vehicle)
- Protection via residual current device (RCD) at least type A, which switches off with AC or pulsating residual current with $I_{\Delta n} \geq 30\text{mA}$
- If DC fault currents $I_{\Delta n} \geq \text{DC } 6\text{mA}$ can occur due to insulation faults in the charging circuit, a residual current device (RCD) type B is required or suitable protective measures for DC fault currents $\geq \text{DC } 6\text{mA}$ must be provided (e.g. DC residual current monitoring device).

EXTENSION CABLE

The included standard cables are designed to tolerate the weight of the pulled-out cable including the cable stopper. Additional weights are not allowed. The mounted cables are limited to the specified lengths. Never use excessive force to unwind the cable as this can damage both the cable and the reel. Should the cable be blocked while coiling up, please pull the cable out again and recoil. Attention should also be paid to section „GENERAL“.

If the cable is damaged, please contact us (see "CONTACT").

LOAD

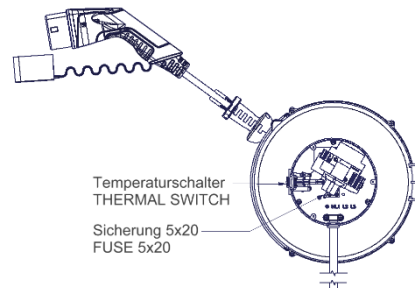
Please refer to the details on the product label or if the cable is fitted by yourself, please adhere to the details supplied by DIN EN 50565-1 regarding the performance of the used cable.

FUSE / THERMAL SAFETY GUARDS

The integrated charging electronics is protected with a 5x20 glass bulb fuse. Accessible from the outside, this is located on the operating and signaling devices on the front of the charger. To change the fuse, remove the cap of the fuse holder the glass bulb fuse can then be replaced.

The series of these automatic cable reels with integrated charging electronics is dimensioned so that there is no excessive heat development when the cable is rolled up or unrolled. A self-holding temperature switch is installed to protect against unusual heat development. If the switch is tripped, the charging of the electric vehicle is interrupted. After an appropriate cooling phase, operation can be resumed by pressing the red temperature switch.

See also "OPERATING AND SIGNALING ELEMENTS".



READY FOR USE

Before commissioning, please conduct an electrical check according to VDE 0100 or to the respective national standard. Check that the end of the pull-out cable is correctly fitted with a charging socket. After connecting to the power supply (see "CONNECTING"), the cable reel should be live and ready for use.

If this is not the case, the fuse and thermal safety guard must be checked (see "FUSE / THERMAL SAFETY GUARD").

INSTALLATION

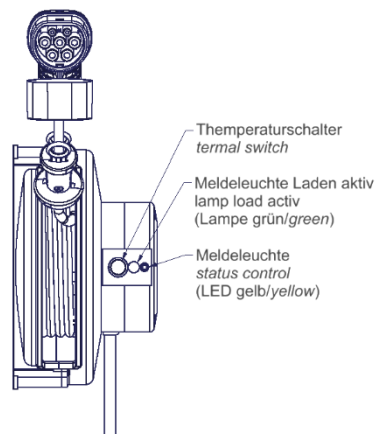
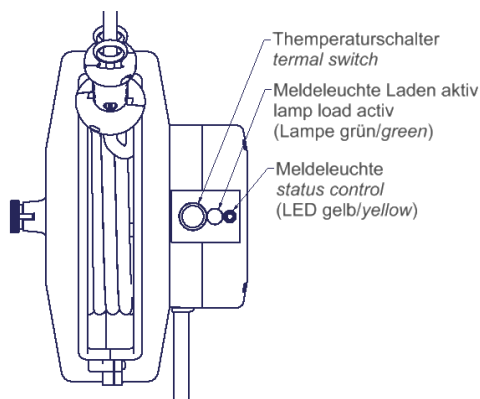
Pull out the extension cable to the desired length and lock (see "locking device"). Connect the charging socket to the electrical vehicle (EV). Switch on the automatic cable reel with integrated charging electronics using the rocker switch (ON / OFF). A flashing LED (STATUS CONTROL) signals operational readiness. If this is not the case, the fuses must be checked. Observe the description under "OPERATING AND SIGNALING ELEMENTS".

OPERATING AND SIGNALING ELEMENTS

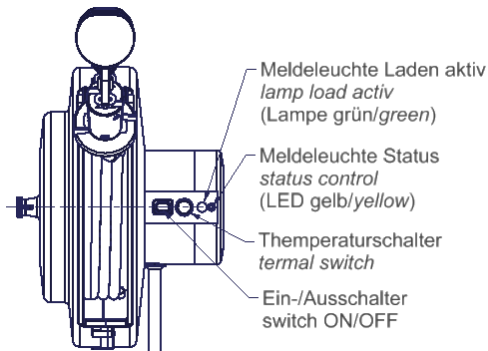
FT 260.0416.102.xxxx.xxxx-xxxx

FT 350.0416.102.xxxx.xxxx-xxxx

EFT 265.0416.102.xxxx.xxxx-xxxx



T 350.0616.102.xxxx.xxxx-xxxx



Signal lamp STATUS CONTROL (LED yellow)

Different flashing frequencies of the indicator light is shown the status of the charging controller.

LED- flashing frequencies	meaning
1x fast + pause	No vehicle detected - standby
2x fast + pause	Vehicle detected
1x long + pause	Vehicle requests charging (contactor is switched)
20x fast in 0,5 sec	The current setting mode is called up or exited
1x fast alle 0,3 sec	Current setting mode - further current value setting
error states (no charging)	
3x fast + pause	controller is disabled in software (FW >= 6)
4x fast + pause	charging with ventilation is disabled (FW >= 13)
5x fast + pause	Pilot signal check failed (FW >= 11)
6x fast + pause	Residual current check failure (FW >= 16)

Signal lamp LOAD ACTIVE (lamp green):

Contactors is switched (loading vehicle)

THERMAL SWITCH:

Switches off the charging process when a critical temperature is reached

If the electronics of the automatic cable winder are defective, please contact us (see "CONTACT").

TECHNICAL DATA

Our cable reels with their robust design are made for operating in factories and workshops. The sturdy plastic design, made from high-quality materials, is completely electrically insulated, corrosion resistant and has very good winding characteristics. The cable reels come as a standard without connection cable and plug-in device.

- Spiral spring for approx. 30. 000 operations
- Cable locking device with spring detent (disengageable only FT/FTE versions)
- Slip ring depended on versions
- High quality flat slip rings 16A 230 / 400V AC - 16A with double contacts
- Universal holder for wall or ceiling installation
- Ambient temperature range -25°C bis 40°C
- IP classification IP 20
- Protection class II
- Protection / internals
 - Self-retaining thermal guard (56°C±5°C)
 - glass fuse 5x20 400mA slow
 - electric contactor 2-way, 20A (3,7kW)
- Input / power connection
 - Connecting cable (standard 2m / optional >2m)
 - H07RN-F 3G2,5 (3,7kW)

- H07RN-F 5G2,5 (11kW)
- Nominal voltage: 230 / 400V AC
- Rated current: 16A
- Nominal frequency: 50Hz
- 16A back-up fuse (required by customer) recommended C characteristic
- RCCB, type A, 30 mA (required by customer)
- DC residual current detection electronic, I Δ n DC \geq 6 mA (required by customer)
- *alternatively, RCCB type B (required by customer)*
- Exit / vehicle connection
 - Length of pull-out cable with charging socket type 2 (optional type 1)
 - FT 260 / EFT 265: 5m 3G2.5+1x0,5 (3,7kW)
 - FT 350 : 8m 3G2.5+1x0,5 (3,7kW) / 5G2.5+1x0,5 (11kW)
 - Standards for the charging cable: IEC 60332-1; IEC 60228; DIN EN 50620; DIN EN 50363-10-2; DIN EN 50267-2-1; DIN EN 50363-10-2; ISO 4982-2
 - Cable stopper FT 260 / EFT 265 with segmented gentle clamp 6 – 12 mm / FT 350 with segmented gentle clamp 6 – 16 mm
 - Output voltage: 230 / 400V AC
 - Maximum charging current 16 A
 - Maximum charging power [kW]: 3,6 /11
 - Communication EV according to IEC 61851-1, mode 3

The stated operating temperatures relates only to the standard cable reel as described below. Specification for plug in devices can be found within the relevant standard DIN EN 60390.

Additional information with respect to cable types, spring tensions, power loads and weights can be found on the product rating plate, in our current product catalogue and also on our website <https://www.schill.de/en/>

The dimensions, weights, lengths, colours and traction are subject to modifications. We cannot rule out discrepancies and we reserve the right to make technical changes to the product without giving advance notice.

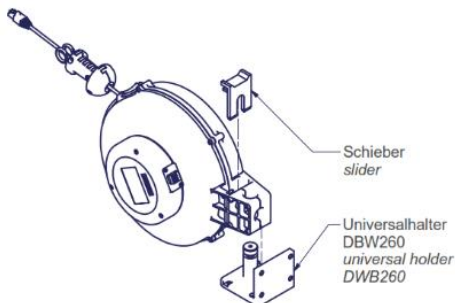
INSTALLATION HEIGHT

The installation height of the cable revider is not limited. The maximum extension length is the specified cable length. The standard cables are designed to withstand the weight of the extended cable included cable stopper. Additional tensile forces (cause by additional weights for example) are not permitted.

When the cable is pull-out horizontally due to the weight of cable a slack occurs. This is about 10% of the cable pull-out length.

FITTING INSTRUCTIONS FT 260

Wall installation with universal holder DWB260

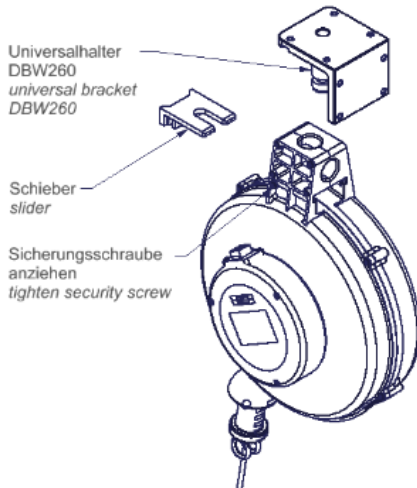


The cable reel can be rotated 150°.

PLEASE NOTE

The cable reel housing must be pushed onto the universal holder pin, then insert the slider into the intended position of the cable reel housing.

Ceiling installation with universal holder DWB260



The cable reel can be rotated 360 °.

⚠ PLEASE NOTE

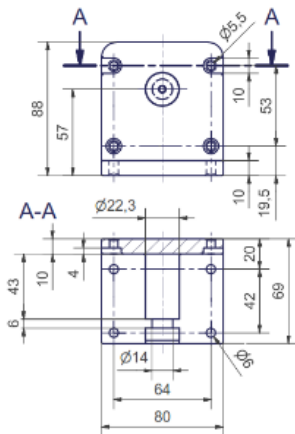
The cable reel housing must be pushed onto the universal holder pin, then insert the slider into the intended position of the cable reel housing. **Do not forget to fix the slider with the securing screw!**

⚠ ATTENTION

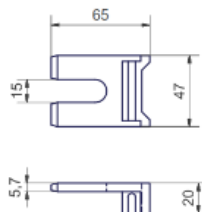
If repeated over-tightening, the connection cable can be mechanically stressed and torn off.

universal holder DWB260 with slider

Universalhalter DWB260
Universal holder DWB260



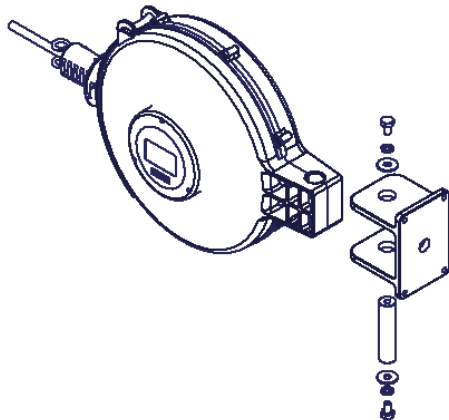
Schieber für DWB260
Slider for DWB260



The DWB 260 universal holder is included in the scope of supply.

FITTING INSTRUCTIONS FT 350

Wall installation with universal holder WB 038/350



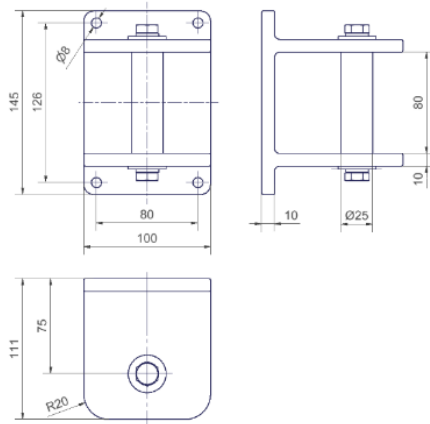
The cable reel can be rotated 150°.

⚠ PLEASE NOTE

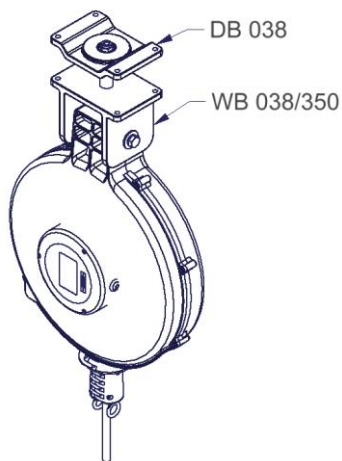
Tighten screws with 40Nm.

Wall holder WB 038/350

The WB 038/350 wall holder is included in the scope of supply.



Ceiling installation with universal holder WB 038 / 350 and DB 038

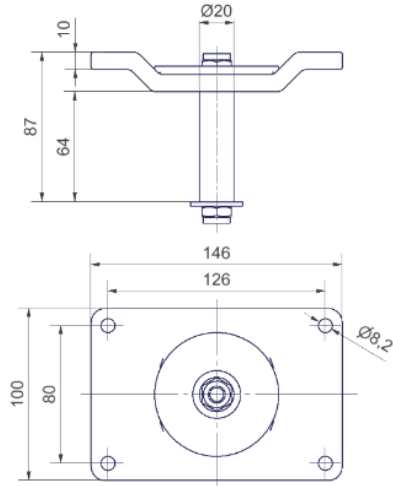


The extension cable swivels on a 360° axis.

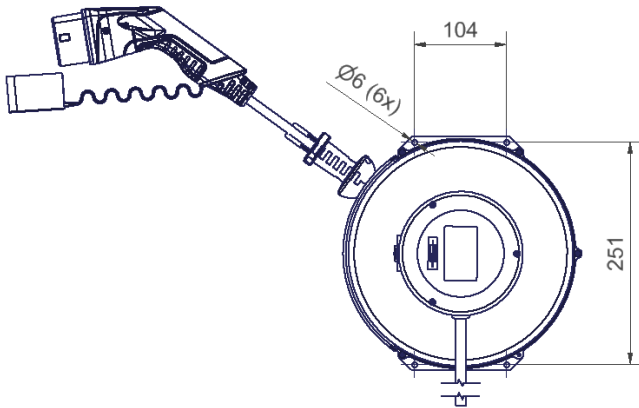
⚠ Attention

More than one complete rotation can will strain the mounted connecting cable.

Ceiling holder DB 038



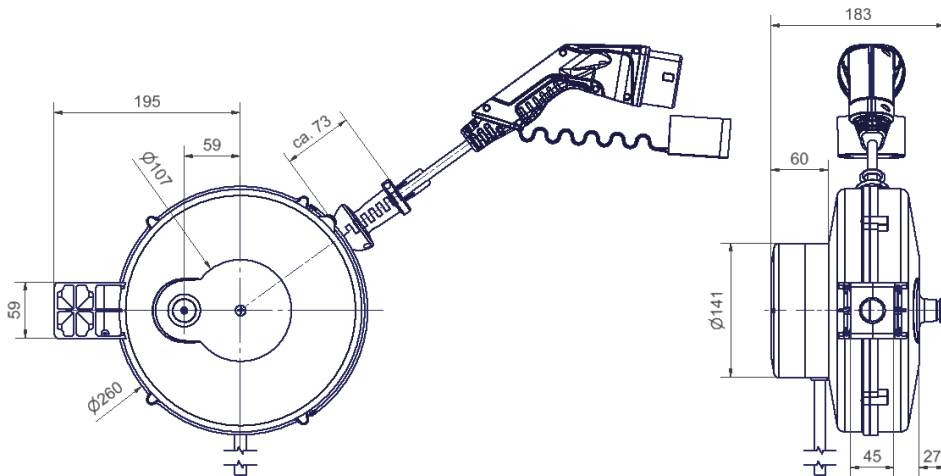
FITTING INSTRUCTIONS EFT 265



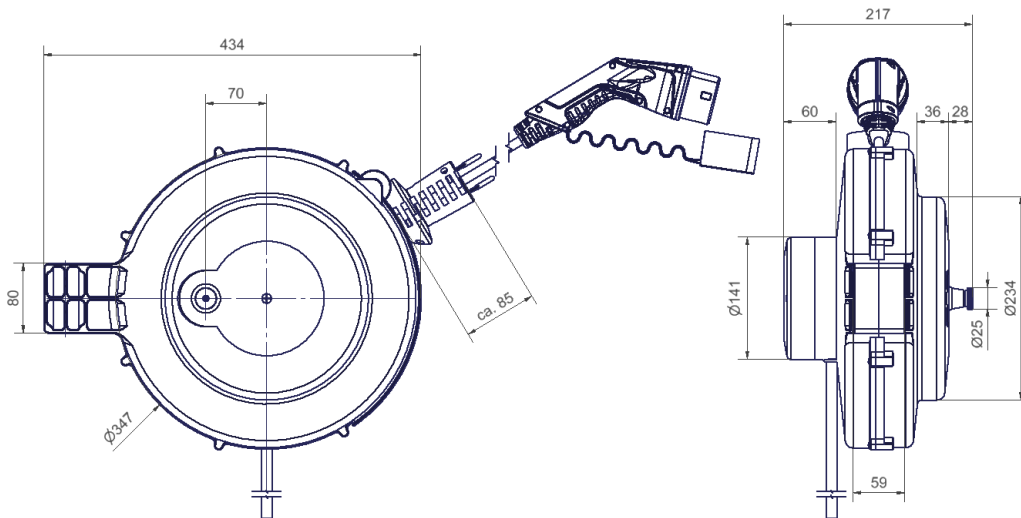
Befestigungsschrauben sind nicht im Lieferumfang enthalten.

DIMENSION

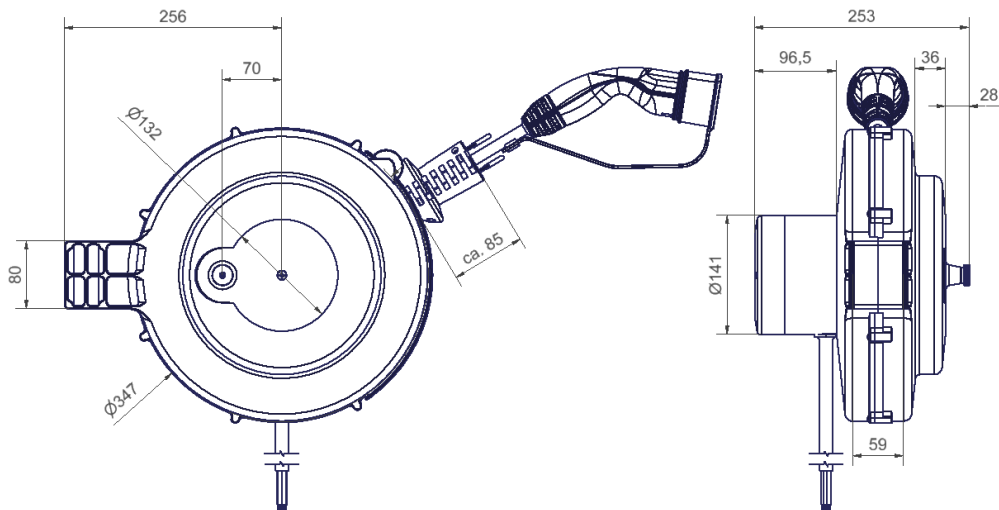
FT 260.0416.102



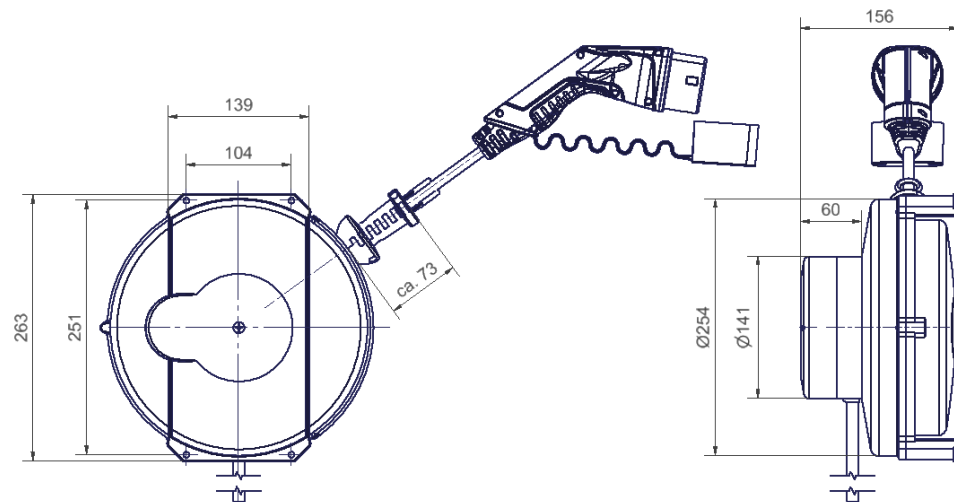
FT 350.0416.102



FT 350.0616.I02



EFT 265.0416.I02



The dimensions, weights, lengths, colours and traction are subject to modifications. We cannot rule out discrepancies and we reserve the right to make technical changes to the product without giving advance notice.

TIGHTENING TORQUE

Gehäuseschrauben <i>cover screws</i>	0,8 Nm
Achsschraube <i>axle screw</i>	1 Nm
Zugentlastung <i>strain relief</i>	0,8 Nm
Kabelstopper <i>Cable stopper</i>	0,8 Nm

elektrische Anschlüsse <i>electrical connections</i>	0,5 Nm
MS-Schleifring Mutter M3,5 <i>MS slip ring nut M3,5</i>	0,3 - 0,35 Nm
MS-Schleifring Schraube M3 <i>MS slip ring screw M3</i>	0,6 - 0,7 Nm

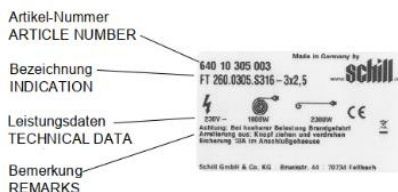
DECLARATION OF CONFORMITY

Declarations of conformity are available upon request or at <https://www.schill.de/en/downloads/>

SPARE PART ORDER

If you require spare parts, please contact our local distribution partner or give us a ring on 0049 711/ 578807-0 or send a mail at sales@schill.de.

Please have the product number or the part number ready.



CONTACT

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CHANGES

version	changes	date
A	extended display indicator signal lamp status control / new Version FT 350 / update	25.09.2020