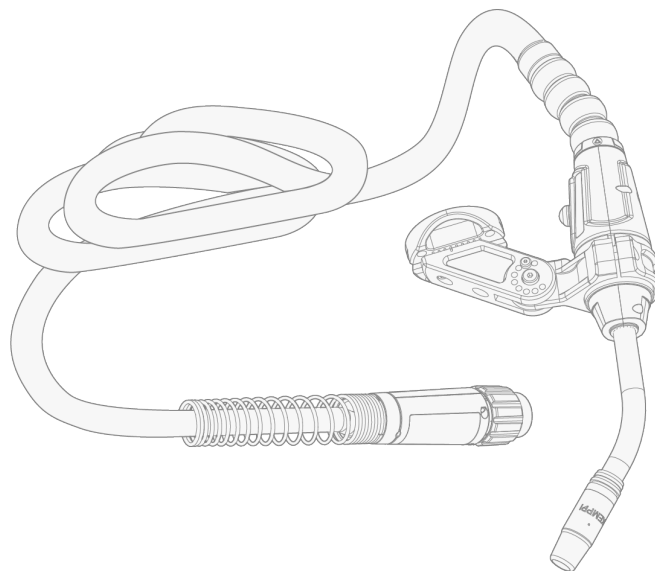


# FLEXLITE GXE-C



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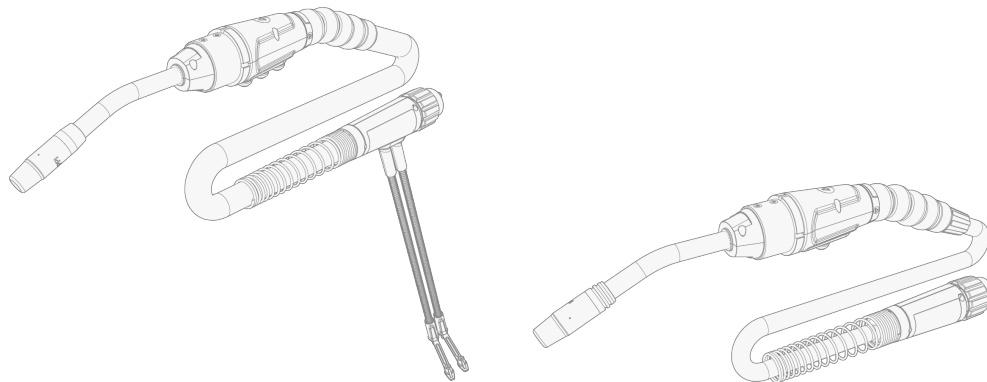
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## 1. GENERAL

These instructions describe the use of Kemppi's Flexlite GXe-C MIG welding torches designed for professional cobot welding (collaborative robot welding). The Flexlite GXe-C range covers both water-cooled (W) and gas-cooled (G) models. The Flexlite GXe-C welding torches are available in model series 3 and 5 – both incorporating Euro welding connectors.



Flexlite GXe-C torch models	
Series 3:	Series 5:
GXe-C 353G0D35	GXe-C 355G0D35
GXe-C 353G0D5	GXe-C C355G0D5
GXe-C 353G22D35	GXe-C 355G22D35
GXe-C 353G22D5	GXe-C 355G22D5
GXe-C 353G35D35	GXe-C 355G35D35
GXe-C 353G35D5	GXe-C 355G35D5
GXe-C 503W0D35	GXe-C 505W0D35
GXe-C 503W0D5	GXe-C 505W0D5
GXe-C 503W22D35	GXe-C 505W22D35
GXe-C 503W22D5	GXe-C 505W22D5
GXe-C 503W35D35	GXe-C 505W35D35
GXe-C 503W35D5	GXe-C 505W35D5

In model names: G = gas-cooled, W = water-cooled, D = neck angle.

### Equipment compatibility

The Flexlite GXe-C welding torches are compatible with the following Kemppi devices, provided they have the required firmware version installed:

- X5 FastMig AP and APC equipment
- Master M 358

- Master M 355
- Master M 353
- AX MIG Welder

For information on the required firmware versions, refer to "Welding equipment firmware versions" on page 23.

### Important notes

Read the instructions through carefully.

Items in the manual that require particular attention in order to minimize damage and harm are indicated with the below symbols. Read these sections carefully and follow their instructions.



*Note: Gives the user a useful piece of information.*



*Caution: Describes a situation that may result in damage to the equipment or system.*



*Warning: Describes a potentially dangerous situation. If not avoided, it will result in personal damage or fatal injury.*


### DISCLAIMER

While every effort has been made to ensure that the information contained in this guide is accurate and complete, no liability can be accepted for any errors or omissions. Kemppi reserves the right to change the specification of the product described at any time without prior notice. Do not copy, record, reproduce or transmit the contents of this guide without prior permission from Kemppi.

The source language for this document is English. All other language versions available are either professional human translations or advanced machine translations. Any feedback regarding translation terminology can be sent to [userdoc@kemppi.com](mailto:userdoc@kemppi.com).

## 1.1 WELDING SAFETY

Welding is always classified as hot work, and welding equipment typically contains high-voltage circuits. If you are not familiar with welding and welding principles, it is recommended that you acquire welding training or professional guidance before commencing welding. The welding equipment mentioned in this manual is intended for professional use in an industrial environment.

 *For your own safety, and that of your working environment, pay particular attention to the safety instructions delivered with the equipment.*

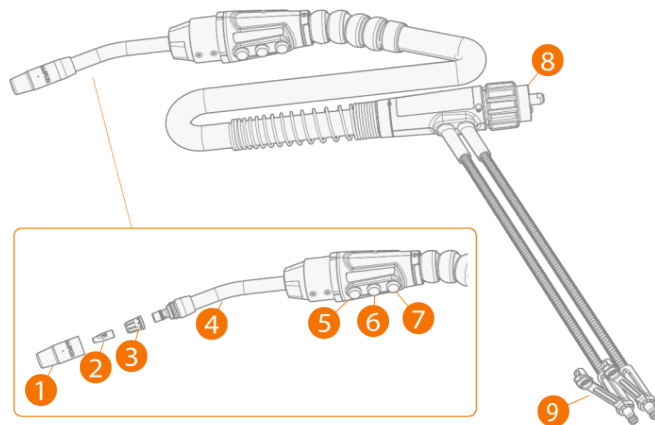
You can also access and download the safety instructions by using these links:

- [Safety](https://kemp.cc/safety/general)  
(<https://kemp.cc/safety/general>)
- [Personal protection](https://kemp.cc/safety/ppe)  
(<https://kemp.cc/safety/ppe>)
- [Welding guns and torches](https://kemp.cc/safety/torches)  
(<https://kemp.cc/safety/torches>)

## 2. ABOUT EQUIPMENT

**i** The exact visual details may be different between different Flexlite GXe-C models.

### Series 5 GXe-C:

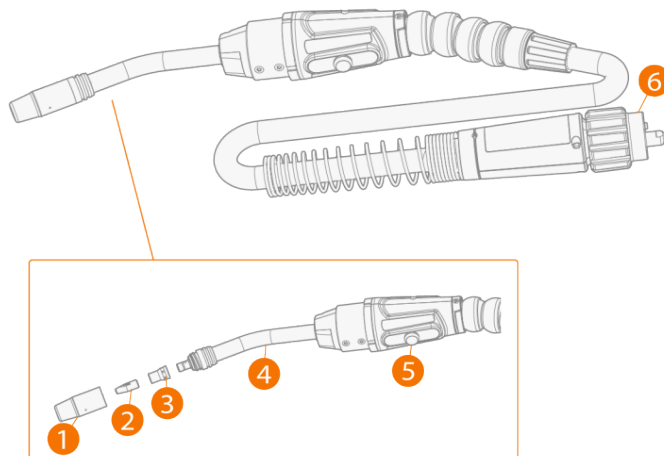


1. Gas nozzle
2. Contact tip
3. Contact tip adapter / gas diffuser
4. Torch neck
5. Wire inch forward button
6. Gas test button
7. Wire inch backward button

>> This is used for fine adjustment of the filler wire length only (it does not rotate the wire spool).

**i** In series 5 models the arc is ignited by pressing the buttons gas test (6) and wire inch backward (7) simultaneously. For more information, refer to "Operation" on page 33.

8. Torch connector
  9. Coolant inlet and outlet hose connectors
- >> With water-cooled welding torches only.

**Series 3 GXe-C:**


1. Gas nozzle
2. Contact tip
3. Contact tip adapter / gas diffuser
4. Torch neck
5. Start button
6. Torch connector.

**Installation accessories**

The following installation accessories are available for installing the Flexlite GXe-C welding torch on a cobot:

- Adapter flange: ISO 9409-1-50 M6 Adapter Flange (weight 0.12 kg)
- Mounting bracket, size S: GXe-C Bracket Flex Mount S (weight 0.43 kg)
- Mounting bracket, size M: GXe-C Bracket Flex Mount M (weight 0.50 kg)
- Welding torch holder: GXe-C Holder (weight 0.19 kg)

For information on installing the welding torch on a cobot, refer to "Installing welding torch on cobot" on page 12.

**Other accessories**

- Touch sensing kit: GXe-C Touch Sensing Kit (with AX MIG Welder only)
- Mechanization kit: GXe-C MT Kit
- Cable securing straps
- Teaching tip


For more information, refer to "Optional accessories" on the next page.


For more information on the accessories, contact your local Kemppi dealer.

**EQUIPMENT IDENTIFICATION**
**Quick Response (QR) code**

Device-related information or a web link to such information may be found in the form of a QR code on the device. The code can be read, for example, with a mobile device camera and a QR code application.

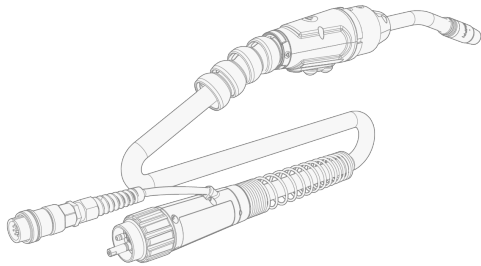
## 2.1 OPTIONAL ACCESSORIES

 Use caution when handling cables and connectors. Ensure that the cables are not caught and/or damaged between the protective covers.

 For information on your welding equipment's connectors, refer to your welding equipment's instructions.

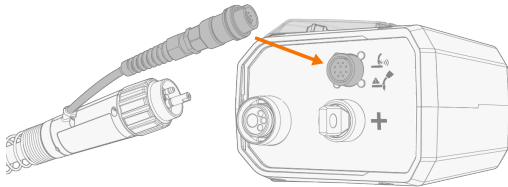
For more information on optional accessories, contact your local Kemppi dealer.

### Touch sensing kit: GXe-C Touch Sensing Kit (with AX MIG Welder only)

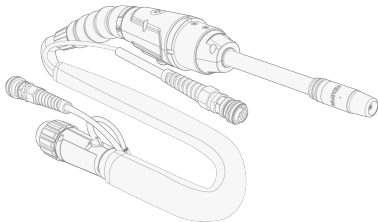


The GXe-C Touch Sensing Kit is used to enable touch sensing with gas nozzle. The GXe-C Touch Sensing Kit is delivered with dedicated installation instructions.


Connect the GXe-C Touch Sensing Kit cable to the peripheral connector in the R500 wire feeder.



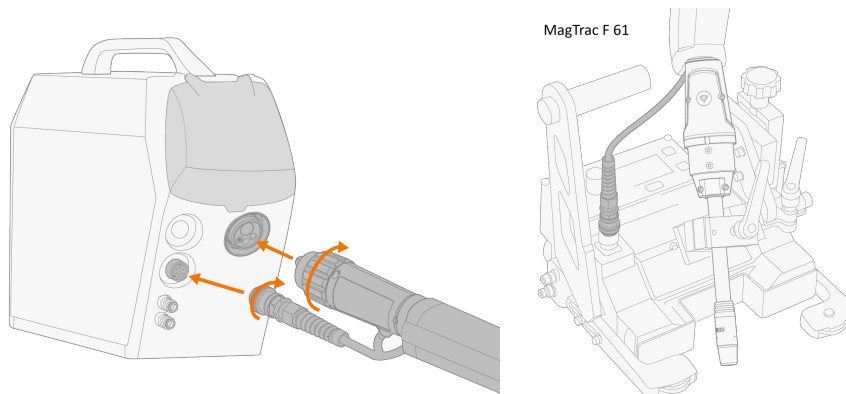
### Mechanization kit: GXe-C MT Kit



The GXe-C MT Kit is used for connecting the Flexlite GXe-C welding torch to the MagTrac F 61 welding carriage. The GXe-C MT Kit is delivered with dedicated installation instructions. For information on the MagTrac F 61 welding carriage, refer to [Kemppi Userdoc](#).

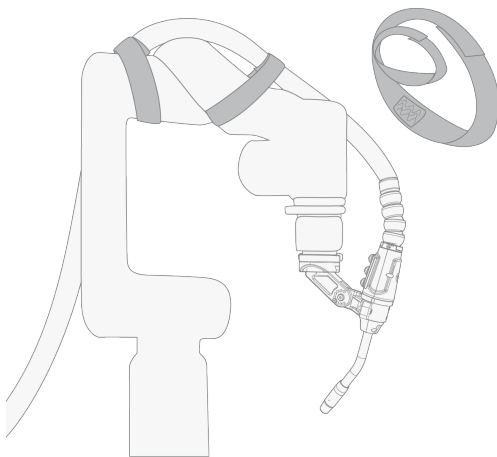
 When the Flexlite GXe-C welding torch is connected to the welding carriage, the function buttons on the welding torch are inactive.

Connect the GXe-C MT Kit cable to the control cable connector of your welding device and to the bus connector of the MagTrac F 61 welding carriage.



### Cable securing straps

Cable securing straps are used to hold the Flexlite GXe-C welding torch cable in place on the cobot.





### Teaching tip

Use the teaching tip instead of the contact tip to teach the welding path to the cobot without actually welding.



### 3. INSTALLATION

 *Ensure that the welding equipment is not connected to the mains or that the welding torch is not connected to the welding machine until the installation is complete.*

 *Protect the equipment from rain and direct sunshine.*

#### **Before installation and use**

Ensure compliance with your local and national safety requirements regarding the installation and use of high voltage units.

Check the contents of the packages and make sure the parts are not damaged.

"Assembling welding torch" on the next page

"Installing welding torch on cobot" on page 12

"Adjusting welding torch angle" on page 14


"Adjusting welding torch position" on page 18

"Connecting welding torch to welding device" on page 24

"Optional accessories" on page 8

"Installing and replacing wire liner" on page 26

## 3.1 ASSEMBLING WELDING TORCH

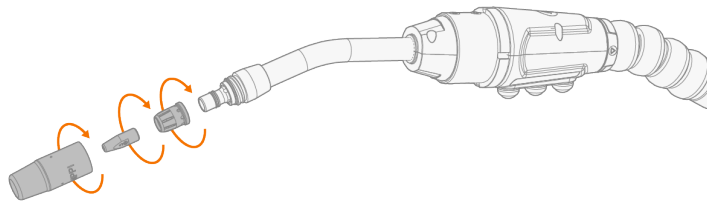
 For the correct components, refer to "Component selection" on page 71.

Tools needed:



8 mm

1. Attach the contact tip adapter and hand-tighten it firmly in place. It is important to tighten the adapter properly to enable a tight connection of the contact tip to the welding torch.
2. Attach the contact tip and secure it with spanner.
3. Attach the gas nozzle and hand-tighten it firmly in place.



## 3.2 INSTALLING WELDING TORCH ON COBOT

Install the Flexlite GXe-C welding torch on a cobot using the mounting bracket (GXe-C Bracket Flex Mount S/M) and the adapter flange (ISO 9409-1-50 M6 Adapter Flange).

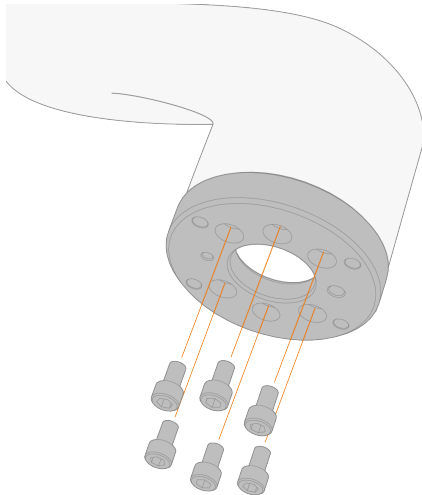
 *Do not exceed the torque values given. Over-tightening may damage the fixing accessories.*

Tools needed:

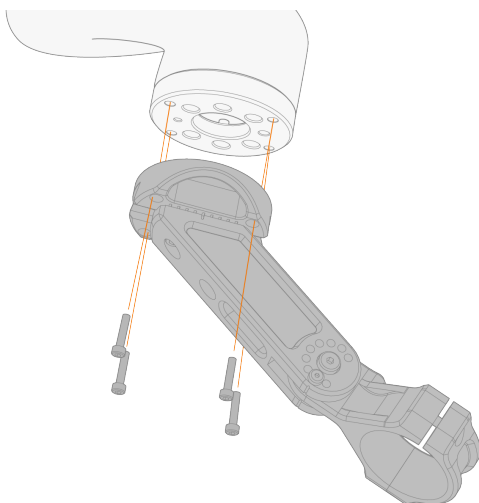


3 / 4 / 5 mm

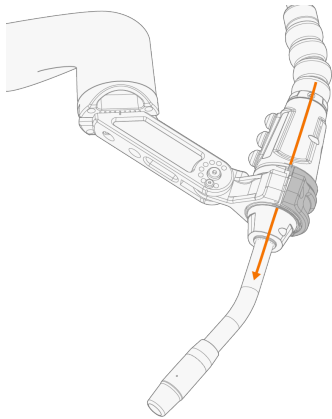
1. Install the adapter flange on the cobot with the six fixing screws. (For Nm torque, refer to the cobot manufacturer's operating manual.)



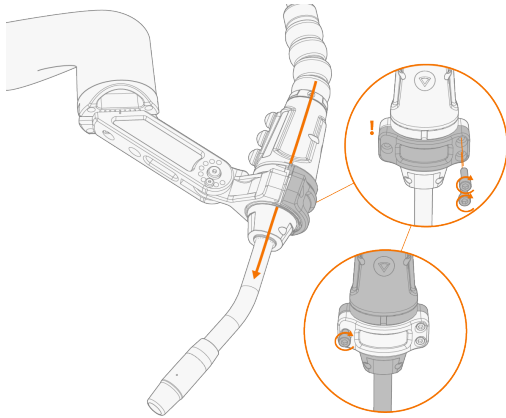
2. Install the mounting bracket on the adapter flange with the four fixing screws. Tighten to 1.8 Nm torque.



3. Install the GXe-C welding torch into the welding torch holder.



4. Tighten first the two fixing screws on the right and then the fixing screw on the left to 8 Nm torque.



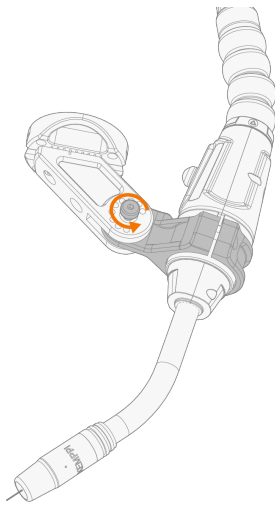
For instructions on adjusting the welding torch angle and position, refer to "Adjusting welding torch angle" on the next page and "Adjusting welding torch position" on page 18.

### 3.3 ADJUSTING WELDING TORCH ANGLE

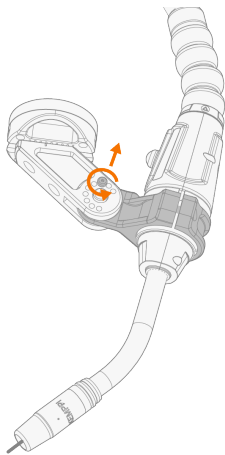
Tools needed:



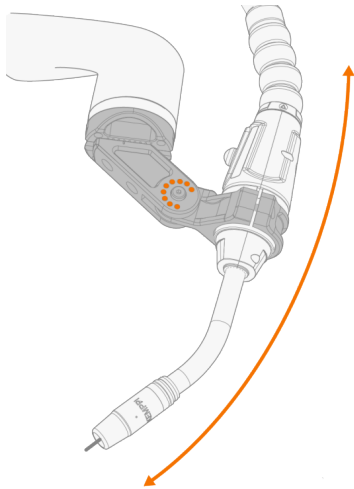
1. Loosen the welding torch holder's fixing screw.



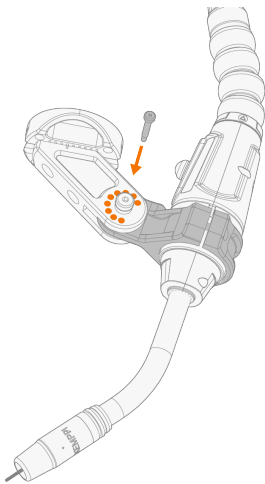
2. Remove the angle adjustment screw.



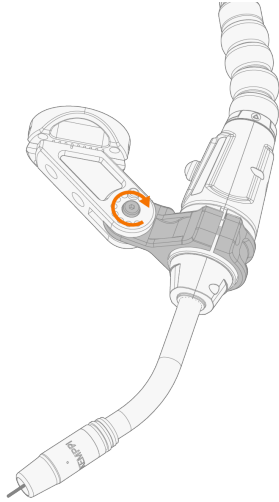
3. Find the correct angle. For more information, refer to "Bracket angles" on the next page.



4. Lock the angle by inserting the angle adjustment screw. Tighten to 0.5 Nm torque (or hand-tighten).




5. Tighten the welding torch holder's fixing screw to 30 Nm torque.

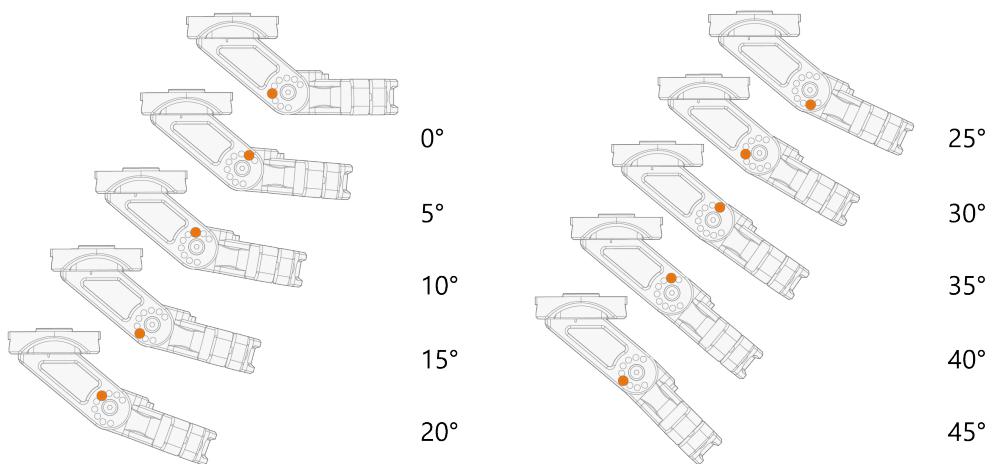


### 3.3.1 BRACKET ANGLES

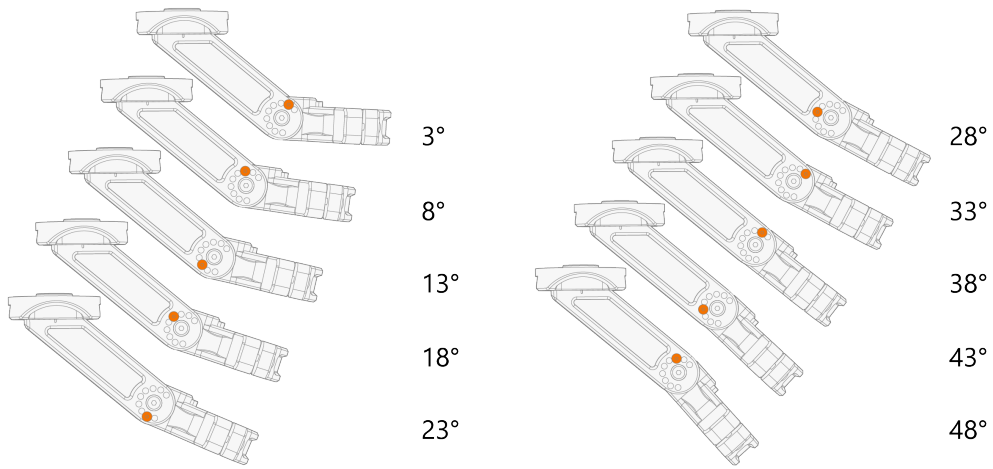
This section describes the locking positions of the angle adjustment screws for the different bracket angles.

-  *The bracket angle is adjusted in 5° increments. Each increment has a dedicated screw locking position.*

#### GXe-C Bracket Flex Mount S



**GXe-C Bracket Flex Mount M**



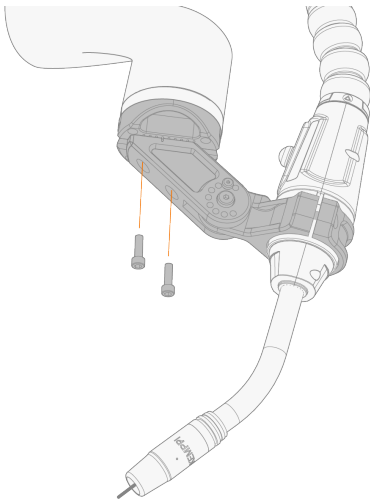
### 3.4 ADJUSTING WELDING TORCH POSITION

Tools needed:




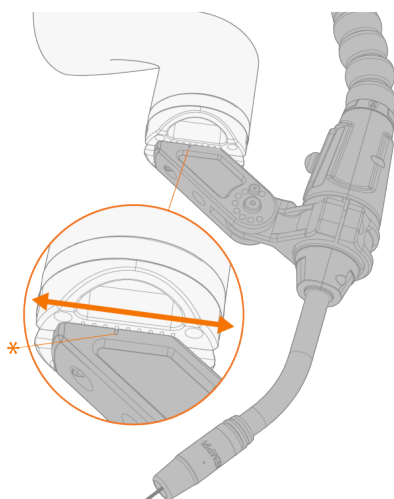
5 mm

1. Remove the two fixing screws from the mounting bracket.

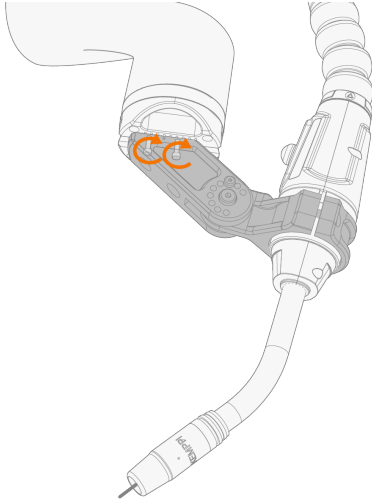


2. Slide the welding torch to the correct position.

 *The welding torch position is adjustable in 5 mm increments. Make sure the alignment mark (\*) aligns with the scale mark.*



3. Lock the position of the welding torch with the two fixing screws. Tighten to 8 Nm torque.



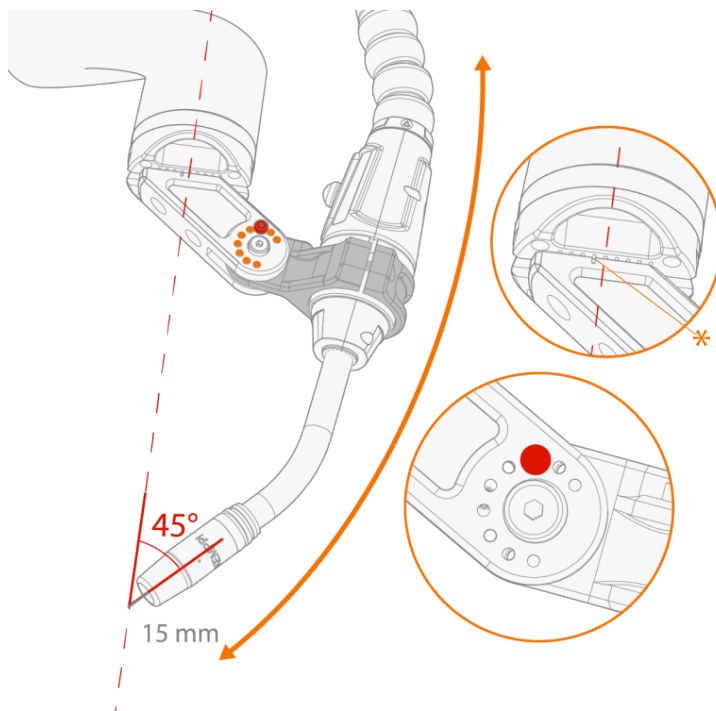
### 3.5 WELDING TORCH ANGLE AND POSITION FOR SIX-AXIS COBOT

With a six-axis cobot, the optimal angle of the welding torch to the work piece is 45°. This section describes how to achieve the optimal welding torch angle and position with the Flexlite GXe-C welding torch neck angle and mounting bracket combinations. The filler wire stick-out length is 15 mm.

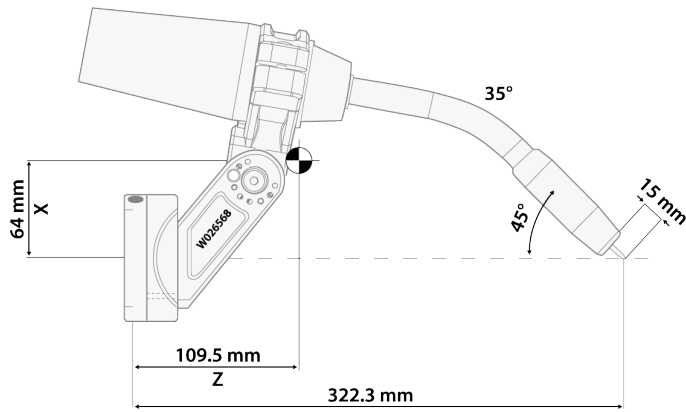
For more information, refer to "Adjusting welding torch angle" on page 14 and "Adjusting welding torch position" on page 18.

#### Flexlite GXe-C welding torch with a neck angle of 35°

Use the GXe-C Bracket Flex Mount S with the Flexlite GXe-C welding torch with a neck angle of 35° and adjust as follows (note the alignment mark \*):



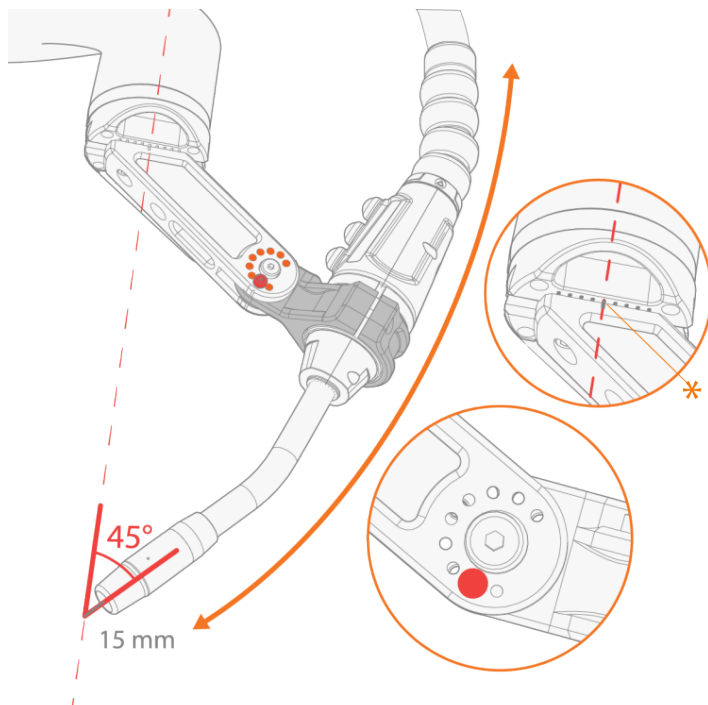
Dimensions and center of mass position in optimal setup:



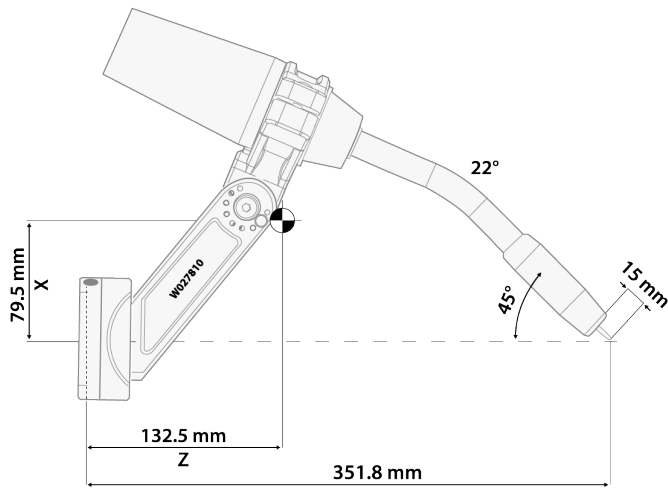
Weight without cable pack: 1.5 kg

**Flexlite GXe-C welding torch with a neck angle of 22°**

Use the GXe-C Bracket Flex Mount M with the Flexlite GXe-C welding torch with a neck angle of 22° and adjust as follows (note the alignment mark \*):




Dimensions and center of mass position in optimal setup:



Weight without cable pack: 1.6 kg

## 3.6 WELDING EQUIPMENT FIRMWARE VERSIONS

 *Ensure that your welding equipment has the required firmware version for cobot welding. Using the Flexlite GXe-C cobot welding torch with a welding device that does not have the appropriate firmware version will cause the device to malfunction.*

The following lists the welding equipment firmware versions required for welding with the Flexlite GXe-C welding torch:

- **AX MIG Welder**
  - >> R500 Wire Feeder EUR: 1.10.01.0 or later. The welding torch function buttons are supported (in GXe-C series 5 only) in devices with S/N C0009418 (A001 PCB W020545 -R04) or later.
  - >> R500 Wire Feeder EUR+: 1.10.01.0 or later. The welding torch function buttons are supported (in GXe-C series 5 only) in devices with S/N C0008277 (A001 PCB W020545-R04) or later.
  - >> R500 Wire Feeder RH EUR+: 1.10.01.0 or later. The welding torch function buttons are supported (in GXe-C series 5 only).
  - >> R500 Wire Feeder HD EUR+: 1.00.00.0 or later.
  - >> AX Manager: 1.10.10.0 or later.
- **X5 FastMig**
  - >> X5 Wire Feeder 300 AP/APC: 1.54.00.0 or later. In GXe-C series 5 the start button combination is supported in devices with S/N 3152285 (A001 PCB W015171-R08) or later.
  - >> X5 Wire Feeder HD300 AP/APC: 1.54.00.0 or later. In GXe-C series 5 the start button combination is supported in devices with S/N 3152285 (A001 PCB W015171-R08) or later.
  - >> Control panel AP/APC: 1.14.00.0 or later.
- **Master M 358**
  - >> Database: 1.20.00.0 or later
  - >> Control panel: 1.14.00.0 or later






You can find the firmware version information in the control panel: **Info - Device info.**

- **Master M 355**
  - >> DB SW version: 1.20.00.0 or later
  - >> Panel SW version: 1.20.00.0 or later
- **Master M 353**
  - >> DB SW version: 1.20.00.0 or later
  - >> Panel SW version: 1.20.00.0 or later

You can find the firmware version information in the control panel: **System settings - Device info.**

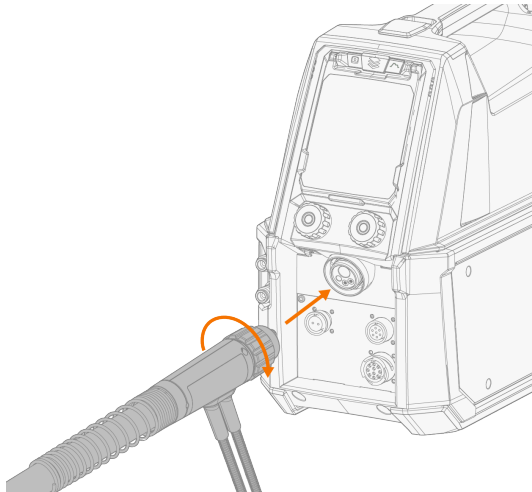
For more information on firmware and software updates, contact your local Kemppi dealer or go to [Kemppi.com](http://Kemppi.com).

## 3.7 CONNECTING WELDING TORCH TO WELDING DEVICE

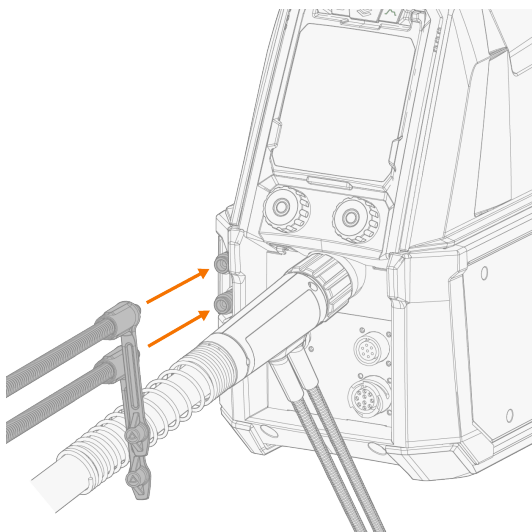
-  *Ensure that the firmware version required for cobot welding is installed on your welding device. Refer to "Welding equipment firmware versions" on the previous page.*
-  *Hand-tighten the welding torch connectors. Loose connectors may overheat, create contact disturbances, mechanical damage and water or gas leakage.*
-  *If the filler wire is installed in the system, remove it before connecting the welding torch.*
-  *For connecting the welding torch (and applicable extension parts), refer also to your welding equipment's instructions.*
-  *If not already preinstalled, the wire liner must be installed before connecting the welding torch. Refer to "Replacing steel wire liner" on page 29 for instructions.*

### To connect the welding torch:

1. Connect the welding torch to the Euro connector of your welding equipment. Secure the connector in place by turning the collar clockwise.



2. Water-cooled models only: Connect the coolant inlet and outlet hoses to your welding equipment. Note that the connectors are color-coded.





*Make sure to connect the coolant hoses to the correct hose connectors. If the connections cross, the welding torch may overheat.*




## 3.8 INSTALLING AND REPLACING WIRE LINER

The Flexlite GXe-C welding torch cable packs are delivered with the wire liner preinstalled. Refer to this section when the wire liner needs to be replaced.

The wire liner is a consumable part, which needs to be changed if worn and when the filler wire material changes.

For replacing the steel wire liner, refer to "Replacing steel wire liner" on page 29.

For replacing the DL Chili wire liner, refer to "Replacing DL Chili wire liner" below.

-  *If you change the filler wire to a different diameter or material, change also the feed rolls in the wire feed system accordingly.*
-  *With most of the Flexlite GXe-C welding torch models both steel wire liner and DL Chili wire liner can be used.*
-  *The filler wire must be removed before the wire liner replacement. Always read the instructions delivered with the replacement wire liner as well.*

### 3.8.1 REPLACING DL CHILI WIRE LINER

Tools needed:



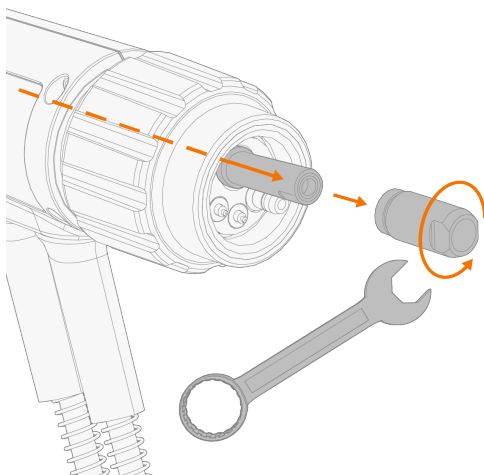
#### Removing and inserting wire liner

*The visual details may vary slightly between different welding torch models. The method is the same for both gas- and water-cooled welding torches.*


1. Straighten the welding torch cable.

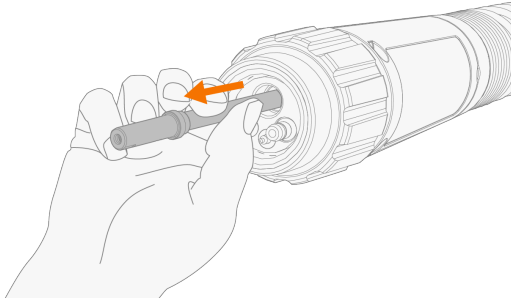


2. At the wire feeder end of the cable, remove the wire liner's sleeve nut.




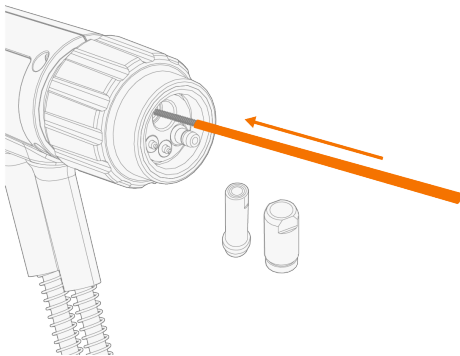
3. Remove the old wire liner from the cable hose.


 *If you still plan to use the same wire liner later, make sure not to damage the wire liner at this stage.*

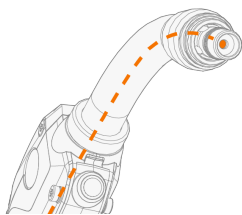


4. Feed the new wire liner into the cable hose until it stops at the torch neck end.

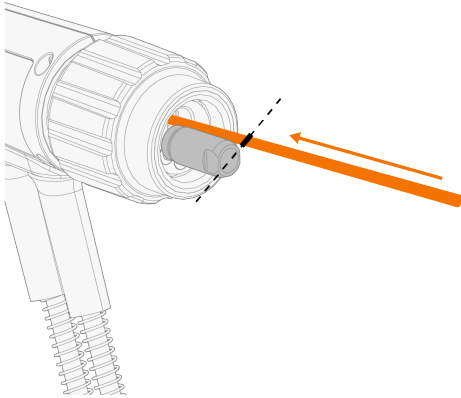
 *The standard DL Chili wire liner includes a short metal spiral section at its front end. This metal spiral end goes in first.*



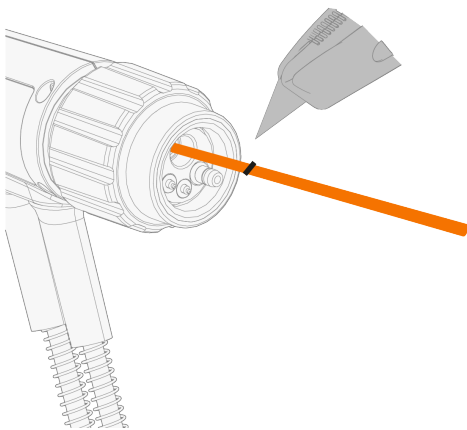
 *To ensure that the wire liner is in the correct position, temporarily remove the welding torch contact tip. For more information on the contact tip, refer to "About equipment" on page 6 and "Assembling welding torch" on page 11.*



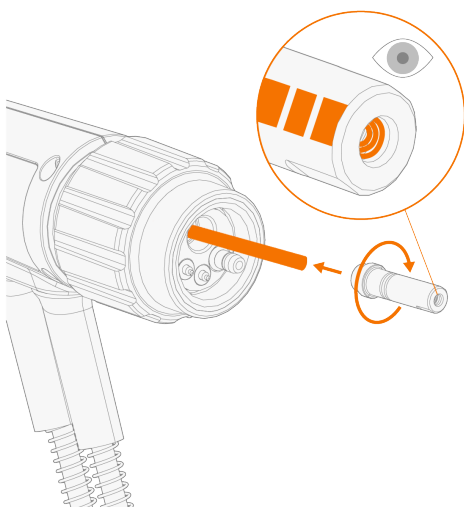
5. Insert the sleeve nut next to the wire liner for measure. (Do not install the sleeve nut in its actual position at this stage.)



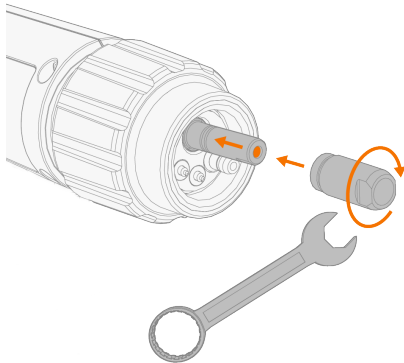
6. Using carpet knife, cut the wire liner flush with the sleeve nut end.



7. Insert the retainer cone onto the wire liner and push in place. Ensure that the wire liner goes all the way into the tip of the retainer cone.

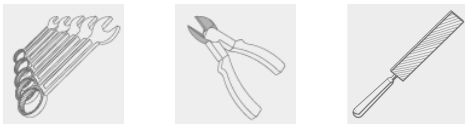


8. Place the sleeve nut on the wire liner and secure it in place by tightening it to 5 Nm torque.



### 3.8.2 REPLACING STEEL WIRE LINER

Tools needed:



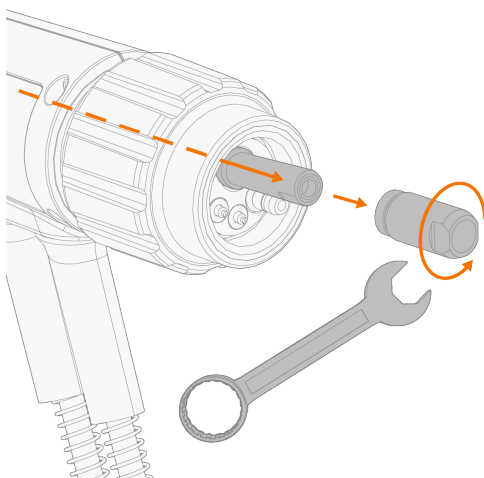
#### Removing and inserting wire liner

*The visual details may vary slightly between different welding torch models. The method is the same for both gas- and water-cooled welding torches.*


1. Straighten the welding torch cable.

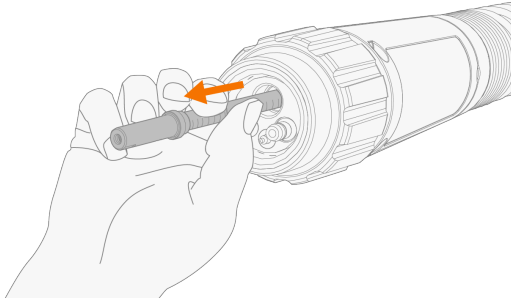


2. At the wire feeder end of the cable, remove the wire liner's sleeve nut.




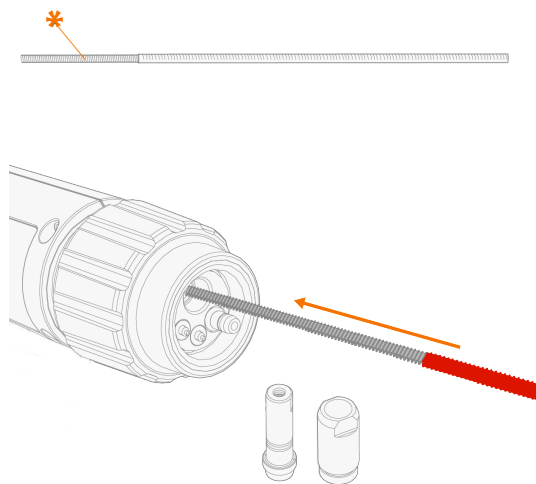
3. Remove the old wire liner from the cable hose.


 *If you still plan to use the same wire liner later, make sure not to damage the wire liner at this stage.*

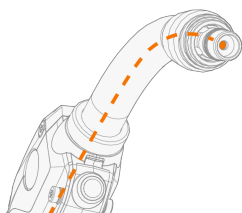


4. Feed the new wire liner into the cable hose until it stops at the torch neck end.

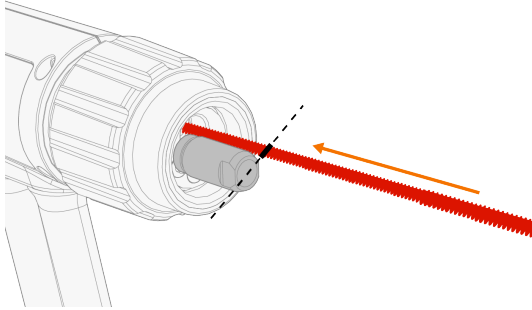
 *The standard steel wire liner includes a stripped steel spiral section (\*) in the welding torch end. This longer stripped section goes in first.*



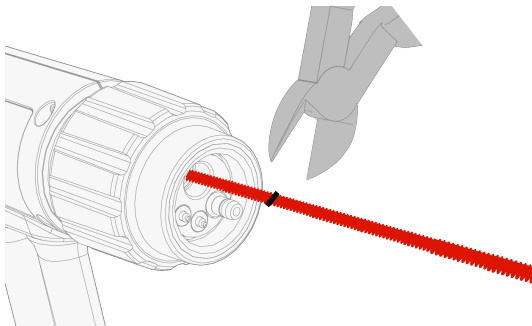
 *To ensure that the wire liner is in the correct position, temporarily remove the welding torch contact tip. For more information on the contact tip, refer to "About equipment" on page 6 and "Assembling welding torch" on page 11.*



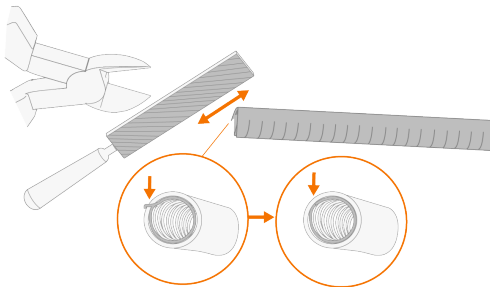
5. Insert the sleeve nut next to the wire liner for measure. (Do not install the sleeve nut in its actual position at this stage.)



6. Using side cutting pliers, cut the wire liner flush with sleeve nut end.

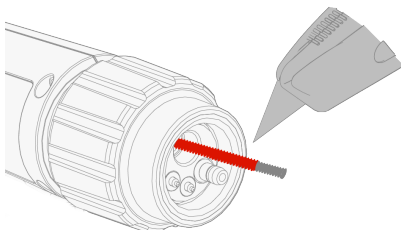


7. File the end of the wire liner.

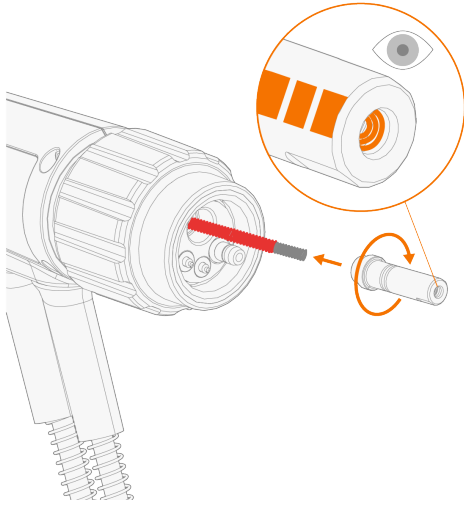


**⚠** Don't leave any rough, inward edges that could potentially damage the filler wire.

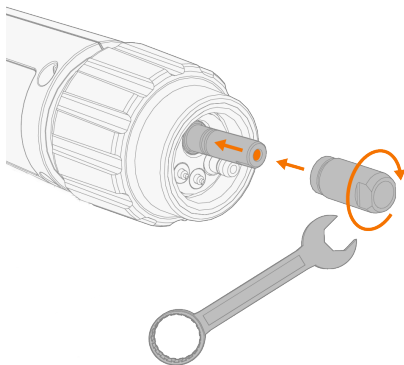
8. Strip the end of the wire liner for approximately 10...20 mm.



9. Insert the retainer cone onto the wire liner and push it in place. Ensure that the wire liner goes all the way into the tip of the retainer cone.







10. Place the sleeve nut on the wire liner and secure it in place by tightening it to 5 Nm torque.



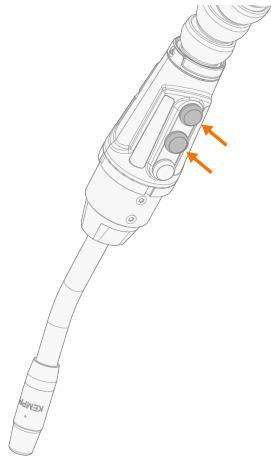
## 4. OPERATION

Before using the equipment, ensure that all the necessary installation actions have been completed according to your equipment setup and instructions.

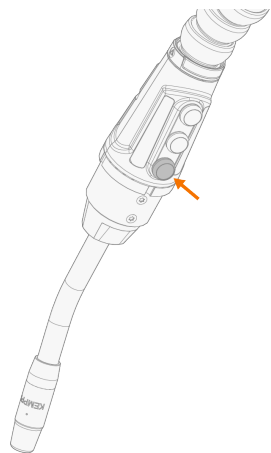
-  *Welding is forbidden in places where there is an immediate fire or explosion hazard!*
-  *Welding fumes may cause injury. Take care to ensure sufficient ventilation during welding and wear respiratory protection!*
-  *Always check before use that interconnecting cable, shielding gas hose, earth return lead/clamp and mains cable are in serviceable condition. Ensure that the connectors are correctly fastened. Loose connectors can impair welding performance and damage connectors.*
-  *When the Flexlite GXe-C welding torch is connected to the MagTrac F 61 welding carriage, the function buttons on the welding torch are inactive (this applies to both series 3 and series 5 models).*

### Series 5 GXe-C:

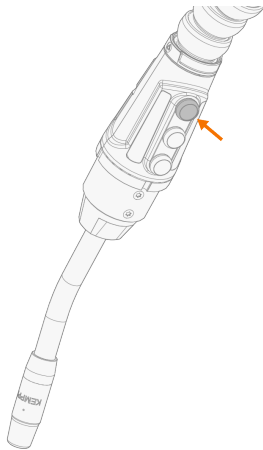
To start welding, press the gas test and wire inch backward buttons simultaneously.



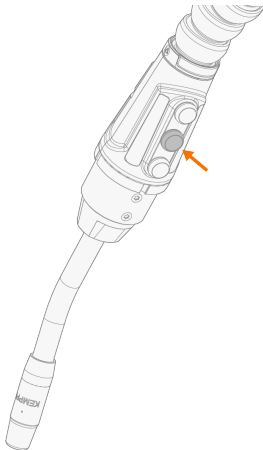
To feed the filler wire forward, press the wire inch forward button.



To feed the filler wire backward, press the wire inch backward button.

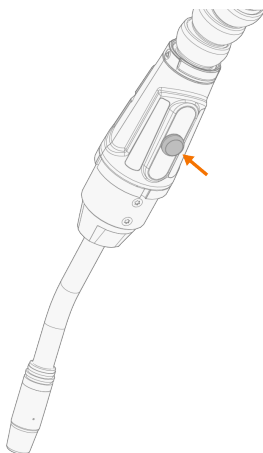


To test the shielding gas flow, press the gas test button.



**Series 3 GXe-C:**

To start welding, press the start button.




## 5. MAINTENANCE


When planning routine maintenance, consider the operating frequency of the welding equipment and the working environment.

Correct operation of the welding equipment and regular maintenance helps you avoid unnecessary downtime and equipment failure. Mainly due to the high temperatures, MIG welding torches require regular checks and maintenance. Periodically, check the cables set for damage and ensure connections are tightened correctly.

### Daily maintenance

 *Disconnect the power source from the mains power supply before handling electrical cables.*


- Check regularly that all the components are tightly fastened.
- Check that the current transfer surface on the Kemppi torch adapter is clean and unscratched, and the connector pins are straight and undamaged.
- Check the protective hose on the cable for damage.
- Check the O-rings in the welding torch gas connector for wear and damage.

 *The gas-cooled GXe torch does not have O-rings.*

- Clean dust from the liner with pressurized air every time you change the wire spool, or every day during heavy use.
- Check and remove any spatter build-up from the nozzle.
- When not using the torch, keep it in the welding torch holder on the wire feeder.


For repairs, contact your Kemppi dealer.

### Periodic maintenance

 *Only qualified service personnel are allowed to carry out periodic maintenance.*

Check the electrical connectors of the unit at least every six months. Clean oxidized parts and tighten loose connectors.

 *Use the correct tension torque when fastening loose parts.*

 *Do not use pressure washing devices.*

### Service workshops

Kemppi Service Workshops complete the welding system maintenance according to the Kemppi service agreement.


The main aspects in the service workshop maintenance procedure are:

- Cleanup of the machine
- Maintenance of the welding tools
- Checkup of the connectors and switches
- Checkup of all electric connections
- Checkup of the power source mains cable and plug
- Repair of defective parts and replacement of defective components

- Maintenance test
- Test and calibration of operation and performance values when needed.

Find your closest service workshop at Kempfi website.

## 5.1 TROUBLESHOOTING

 *The problems and the possible causes listed are not definitive, but suggest some typical situations that may turn up during normal use of the welding system. For further information and assistance, contact your nearest Kemppi service workshop.*

### General:

The welding system does not power up

- Check that the mains cable is plugged in properly.
- Check that the mains switch of the power source is at the ON position.
- Check that the mains power distribution is on.
- Check the mains fuse and/or the circuit breaker.
- Check that the earth return cable is connected.

The welding system stops working

- The torch may have overheated. Wait for it to cool down.
- Check that none of the cables is loose.
- The wire feeder may have overheated. Wait for it to cool down and see that the welding current cable is properly attached.
- The power source may have overheated. Wait for it to cool down and see that the cooling fans work properly and the air flow is unobstructed.

### Wire feeder:

The filler wire on the spool unravels

- Check that the spool locking cover is closed.

The wire feeder does not feed the filler wire

- Check that the filler wire has not run out.
- Check that the filler wire is properly routed through the feed rolls to the wire liner.
- Check that the pressure handle is properly closed.
- Check that the feed roll pressure is adjusted correctly for the filler wire.
- Blow compressed air through the wire liner to check that it is not blocked.

### Welding torch:

The wire burns into the contact tip

- Make sure the size and type of the current tip and liner are suitable for the filler wire.
- Make sure the wire liner is clean.
- Make sure the wire liner does not make any steep loops.
- Check the motor current level. If the current is too high, there may be problems in the wire liner.
- Check the tightness of the feeding rolls. Too tight feeding rolls may affect soft filler wires, such as aluminum and flux-cored wires.

The torch overheats

- Make sure the torch neck is correctly connected to the handle.
- Make sure that the contact tip adapter is properly hand-tightened and the contact tip properly attached to it.
- Make sure that the welding parameters are within the range of the welding torch and the neck. The torch and the neck have separate limits for the maximum current; the lower one of these is the maximum current that can be used.

The torch neck overheats

- Make sure you are using original Kemppi consumable and spare parts. Incorrect spare part materials may cause the overheating of the neck.

The welding torch connector overheats

- Make sure the connector is properly connected to the wire feeder.
- Make sure the current transfer surface and the connector pins of the torch connector are clean and undamaged.

The torch vibrates too much during welding

- Check the tightness of the contact tip adapter and contact tip.
- Check the motor current.
- Check the wire liner (e.g. for dirt and to ensure that the wire liner has been cut properly).
- Check the filler wire. It must be straight and start coiling when it comes out from the contact tip. If not, check the tightness of the feeding rolls.
- Check the filler wire batch for any quality issues with the wire.

### **Weld quality:**

Dirty and/or poor weld quality

- Check that the shielding gas has not run out.
- Check that the shielding gas flow is unobstructed.
- Check that the gas type is correct for the application.
- Check the polarity of the torch/electrode.
- Check that the welding procedure is correct for the application.

Varying welding performance

- Check that the wire feed mechanism is adjusted properly.
- Blow compressed air through the wire liner to check that it is not blocked.
- Check that the wire liner is correct for the selected wire size and type.
- Check the welding torch contact tip's size, type and wear.
- Check that the welding torch is not overheating.
- Check that the earth return clamp is properly attached to a clean surface of the workpiece.

High spatter volume

- Check the welding parameter values and welding procedure.
- Check the gas type and flow.
- Check the polarity of the torch/electrode.
- Check that the filler wire is correct for the current application.

### **Cobot welding:**

Welding starts even though the arc has not been ignited by pressing the start button or start button combination.

- The firmware version of the welding device is not correct. Install the firmware version required for cobot welding on your welding device.

With X5 FastMig, the arc does not ignite by pressing the start button combination.

- Check that your welding device has an up-to-date firmware version.
- Check that your wire feeder has S/N 3152285 (A001 PCB W015171-R08) or later.

## 5.2 DISPOSAL



Do not dispose of any electrical equipment with normal waste!

In observance of WEEE Directive 2012/19/EU on waste of electrical and electronic equipment and European Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment, and their implementation in accordance with national law, electrical equipment that has reached the end of its life must be collected separately and taken to an appropriate environmentally responsible recycling facility. The owner of the equipment is obliged to deliver a decommissioned unit to a regional collection center, as per the instructions of local authorities or a Kemppli representative. By applying these European Directives you improve the environment and human health.

For more information:



## 6. TECHNICAL DATA

"Technical data: Flexlite GXe-C 353G 0D (gas-cooled)" on the next page

"Technical data: Flexlite GXe-C 353G 22D (gas-cooled)" on page 43

"Technical data: Flexlite GXe-C 353G 35D (gas-cooled)" on page 45

"Technical data: Flexlite GXe-C 355G 0D (gas-cooled)" on page 47

"Technical data: Flexlite GXe-C 355G 22D (gas-cooled)" on page 49

"Technical data: Flexlite GXe-C 355G 35D (gas-cooled)" on page 51

"Technical data: Flexlite GXe-C 503W 0D (water-cooled)" on page 53

"Technical data: Flexlite GXe-C 503W 22D (water-cooled)" on page 56

"Technical data: Flexlite GXe-C 503W 35D (water-cooled)" on page 59

"Technical data: Flexlite GXe-C 505W 0D (water-cooled)" on page 62

"Technical data: Flexlite GXe-C 505W 22D (water-cooled)" on page 65

"Technical data: Flexlite GXe-C 505W 35D (water-cooled)" on page 68

## 6.1 TECHNICAL DATA: FLEXLITE GXE-C 353G 0D (GAS-COOLED)

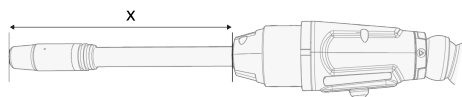
GXe-C 353G 0D	
Feature	Value
Welding connection type	Euro
Type of cooling	Air
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	350 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Gun handle	No
Neck type	Standard
Neck dimensions: length	206.5 mm
Neck dimensions: height	0 mm
Neck dimensions: angle	0 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	No
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	4.55 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

GXe-C 353G 0D	
Feature	Value
Welding connection type	Euro

Type of cooling	Air
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	350 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Gun handle	No
Neck type	Standard
Neck dimensions: length	206.5 mm
Neck dimensions: height	0 mm
Neck dimensions: angle	0 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	No
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	3.7 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

Neck dimensions, G-models:

$x = \text{length}$



## 6.2 TECHNICAL DATA: FLEXLITE GXE-C 353G 22D (GAS-COOLED)

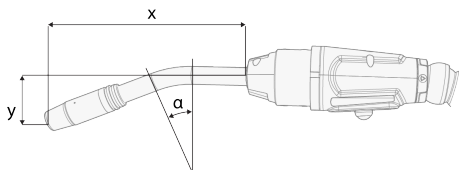
GXe-C 353G 22D	
Feature	Value
Welding connection type	Euro
Type of cooling	Air
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO <sub>2</sub>	350 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Gun handle	No
Neck type	Standard
Neck dimensions: length	197.3 mm
Neck dimensions: height	49.8 mm
Neck dimensions: angle	22 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	No
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	4.55 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

GXe-C 353G 22D	
Feature	Value
Welding connection type	Euro

Type of cooling	Air
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	350 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Gun handle	No
Neck type	Standard
Neck dimensions: length	197.3 mm
Neck dimensions: height	49.8 mm
Neck dimensions: angle	22 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	No
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	3.7 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

Neck dimensions, G-models:

$y$  = height,  $x$  = length,  $\alpha$  = angle



## 6.3 TECHNICAL DATA: FLEXLITE GXE-C 353G 35D (GAS-COOLED)

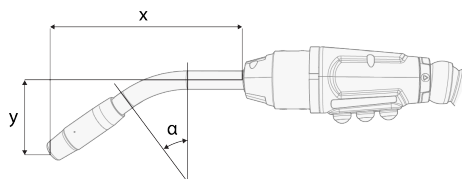
GXe-C 353G 35D	
Feature	Value
Welding connection type	Euro
Type of cooling	Air
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO <sub>2</sub>	350 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Gun handle	No
Neck type	Standard
Neck dimensions: length	186.3 mm
Neck dimensions: height	70.2 mm
Neck dimensions: angle	35 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	No
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	4.55 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

GXe-C 353G 35D	
Feature	Value
Welding connection type	Euro

Type of cooling	Air
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	350 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Gun handle	No
Neck type	Standard
Neck dimensions: length	186.3 mm
Neck dimensions: height	70.2 mm
Neck dimensions: angle	35 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	No
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	3.7 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

Neck dimensions, G-models:

$y$  = height,  $x$  = length,  $\alpha$  = angle



## 6.4 TECHNICAL DATA: FLEXLITE GXE-C 355G 0D (GAS-COOLED)

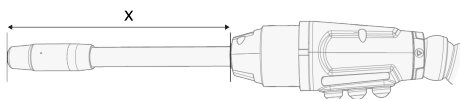
GXe-C 355G 0D	
Feature	Value
Welding connection type	Euro
Type of cooling	Air
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	350 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Gun handle	No
Neck type	Standard
Neck dimensions: length	206.5 mm
Neck dimensions: height	0 mm
Neck dimensions: angle	0 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	Yes
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	4.55 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

GXe-C 355G 0D	
Feature	Value
Welding connection type	Euro

Type of cooling	Air
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	350 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Gun handle	No
Neck type	Standard
Neck dimensions: length	206.5 mm
Neck dimensions: height	0 mm
Neck dimensions: angle	0 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	Yes
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	3.7 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

Neck dimensions, G-models:

$x$  = length



## 6.5 TECHNICAL DATA: FLEXLITE GXE-C 355G 22D (GAS-COOLED)

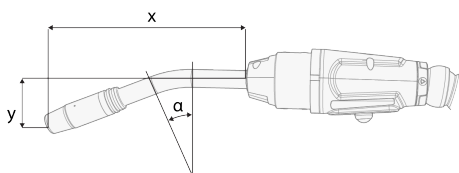
GXe-C 355G 22D	
Feature	Value
Welding connection type	Euro
Type of cooling	Air
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO <sub>2</sub>	350 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Gun handle	No
Neck type	Standard
Neck dimensions: length	197.3 mm
Neck dimensions: height	49.8 mm
Neck dimensions: angle	22 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	Yes
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	4.55 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

GXe-C 355G 22D	
Feature	Value
Welding connection type	Euro

Type of cooling	Air
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	350 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Gun handle	No
Neck type	Standard
Neck dimensions: length	197.3 mm
Neck dimensions: height	49.8 mm
Neck dimensions: angle	22 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	Yes
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	3.7 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

Neck dimensions, G-models:

$y$  = height,  $x$  = length,  $\alpha$  = angle



## 6.6 TECHNICAL DATA: FLEXLITE GXE-C 355G 35D (GAS-COOLED)

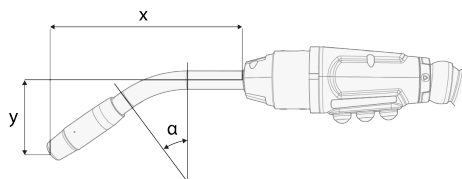
GXe-C 355G 35D	
Feature	Value
Welding connection type	Euro
Type of cooling	Air
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO <sub>2</sub>	350 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Gun handle	No
Neck type	Standard
Neck dimensions: length	186.3 mm
Neck dimensions: height	70.2 mm
Neck dimensions: angle	35 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	Yes
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	4.55 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

GXe-C 355G 35D	
Feature	Value
Welding connection type	Euro

Type of cooling	Air
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	350 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Gun handle	No
Neck type	Standard
Neck dimensions: length	186.3 mm
Neck dimensions: height	70.2 mm
Neck dimensions: angle	35 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	Yes
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	3.7 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

Neck dimensions, G-models:

$y$  = height,  $x$  = length,  $\alpha$  = angle



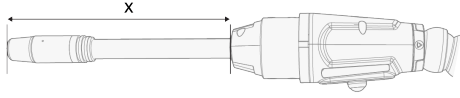
## 6.7 TECHNICAL DATA: FLEXLITE GXE-C 503W 0D (WATER-COOLED)

GXe-C 503W 0D	
Feature	Value
Welding connection type	Euro
Type of cooling	Liquid
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	500 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Coolant flow rate	1 l/min
Minimum cooling power at 1 l/min	0.9 kW
Maximum coolant pressure	5 Bar
Gun handle	No
Neck type	Standard
Neck dimensions: length	206.5 mm
Neck dimensions: height	0 mm
Neck dimensions: angle	0 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	No
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	4.7 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

GXe-C 503W 0D	
Feature	Value
Welding connection type	Euro
Type of cooling	Liquid
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO <sub>2</sub>	500 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Coolant flow rate	1 l/min
Minimum cooling power at 1 l/min	0.9 kW
Maximum coolant pressure	5 Bar
Gun handle	No
Neck type	Standard
Neck dimensions: length	206.5 mm
Neck dimensions: height	0 mm
Neck dimensions: angle	0 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	No
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	3.8 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

Neck dimensions, G-models:

$x = \text{length}$



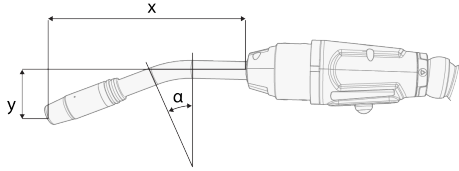
## 6.8 TECHNICAL DATA: FLEXLITE GXE-C 503W 22D (WATER-COOLED)

GXe-C 503W 22D	
Feature	Value
Welding connection type	Euro
Type of cooling	Liquid
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	500 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Coolant flow rate	1 l/min
Minimum cooling power at 1 l/min	0.9 kW
Maximum coolant pressure	5 Bar
Gun handle	No
Neck type	Standard
Neck dimensions: length	197.3 mm
Neck dimensions: height	49.8 mm
Neck dimensions: angle	22 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	No
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	4.7 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

GXe-C 503W 22D	
Feature	Value
Welding connection type	Euro
Type of cooling	Liquid
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	500 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Coolant flow rate	1 l/min
Minimum cooling power at 1 l/min	0.9 kW
Maximum coolant pressure	5 Bar
Gun handle	No
Neck type	Standard
Neck dimensions: length	197.3 mm
Neck dimensions: height	49.8 mm
Neck dimensions: angle	22 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	No
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	3.8 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

Neck dimensions, G-models:

$y$  = height,  $x$  = length,  $\alpha$  = angle



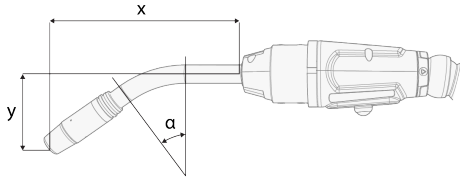
## 6.9 TECHNICAL DATA: FLEXLITE GXE-C 503W 35D (WATER-COOLED)

GXe-C 503W 35D	
Feature	Value
Welding connection type	Euro
Type of cooling	Liquid
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO <sub>2</sub>	500 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Coolant flow rate	1 l/min
Minimum cooling power at 1 l/min	0.9 kW
Maximum coolant pressure	5 Bar
Gun handle	No
Neck type	Standard
Neck dimensions: length	186.3 mm
Neck dimensions: height	70.2 mm
Neck dimensions: angle	35 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	No
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	4.7 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

GXe-C 503W 35D	
Feature	Value
Welding connection type	Euro
Type of cooling	Liquid
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	500 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Coolant flow rate	1 l/min
Minimum cooling power at 1 l/min	0.9 kW
Maximum coolant pressure	5 Bar
Gun handle	No
Neck type	Standard
Neck dimensions: length	186.3 mm
Neck dimensions: height	70.2 mm
Neck dimensions: angle	35 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	No
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	3.8 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

Neck dimensions, G-models:

$y$  = height,  $x$  = length,  $\alpha$  = angle



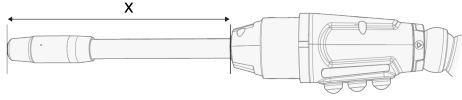
## 6.10 TECHNICAL DATA: FLEXLITE GXE-C 505W 0D (WATER-COOLED)

GXe-C 505W 0D	
Feature	Value
Welding connection type	Euro
Type of cooling	Liquid
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	500 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Coolant flow rate	1 l/min
Minimum cooling power at 1 l/min	0.9 kW
Maximum coolant pressure	5 Bar
Gun handle	No
Neck type	Standard
Neck dimensions: length	206.5 mm
Neck dimensions: height	0 mm
Neck dimensions: angle	0 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	Yes
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	4.7 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

GXe-C 505W 0D	
Feature	Value
Welding connection type	Euro
Type of cooling	Liquid
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO <sub>2</sub>	500 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Coolant flow rate	1 l/min
Minimum cooling power at 1 l/min	0.9 kW
Maximum coolant pressure	5 Bar
Gun handle	No
Neck type	Standard
Neck dimensions: length	206.5 mm
Neck dimensions: height	0 mm
Neck dimensions: angle	0 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	Yes
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	3.8 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

Neck dimensions, G-models:

$x$  = length



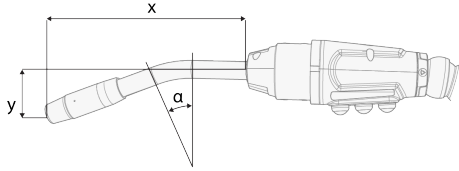
## 6.11 TECHNICAL DATA: FLEXLITE GXE-C 505W 22D (WATER-COOLED)

GXe-C 505W 22D	
Feature	Value
Welding connection type	Euro
Type of cooling	Liquid
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	500 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Coolant flow rate	1 l/min
Minimum cooling power at 1 l/min	0.9 kW
Maximum coolant pressure	5 Bar
Gun handle	No
Neck type	Standard
Neck dimensions: length	197.3 mm
Neck dimensions: height	49.8 mm
Neck dimensions: angle	22 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	Yes
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	4.7 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

GXe-C 505W 22D	
Feature	Value
Welding connection type	Euro
Type of cooling	Liquid
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO <sub>2</sub>	500 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Coolant flow rate	1 l/min
Minimum cooling power at 1 l/min	0.9 kW
Maximum coolant pressure	5 Bar
Gun handle	No
Neck type	Standard
Neck dimensions: length	197.3 mm
Neck dimensions: height	49.8 mm
Neck dimensions: angle	22 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	Yes
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	3.8 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

Neck dimensions, G-models:

$y$  = height,  $x$  = length,  $\alpha$  = angle



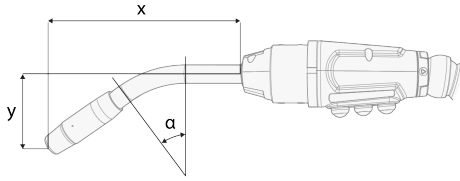
## 6.12 TECHNICAL DATA: FLEXLITE GXE-C 505W 35D (WATER-COOLED)

GXe-C 505W 35D	
Feature	Value
Welding connection type	Euro
Type of cooling	Liquid
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO2	500 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Coolant flow rate	1 l/min
Minimum cooling power at 1 l/min	0.9 kW
Maximum coolant pressure	5 Bar
Gun handle	No
Neck type	Standard
Neck dimensions: length	186.3 mm
Neck dimensions: height	70.2 mm
Neck dimensions: angle	35 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	Yes
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	4.7 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7

GXe-C 505W 35D	
Feature	Value
Welding connection type	Euro
Type of cooling	Liquid
Contact tip	M10X1
Method of guidance	Mechanical
Load capacity 100% / Ar + 18% CO <sub>2</sub>	500 A
Load capacity test, filler wire material	Fe
Load capacity test, filler wire diameter	1.6 mm
Load capacity test, stick out length	22 mm
Load capacity test, gas flow	20 l/min
Wire diameter	0.8...1.6 mm
Filler wire diameter, Fe	0.8...1.6 mm
Filler wire diameter, Ss	0.8...1.6 mm
Filler wire diameter, Al	0.8...1.6 mm
Filler wire diameter, Fe-MC/FC	0.9...1.6 mm
Filler wire diameter, Ss-MC/FC	0.9...1.6 mm
Coolant flow rate	1 l/min
Minimum cooling power at 1 l/min	0.9 kW
Maximum coolant pressure	5 Bar
Gun handle	No
Neck type	Standard
Neck dimensions: length	186.3 mm
Neck dimensions: height	70.2 mm
Neck dimensions: angle	35 °
Rating of electrical components (remote, nominal)	24 V
Rating of electrical components (remote, nominal)	10 mA
Remote control	Yes
Operating temperature range	-20...40 °C
Storage temperature range	-40...60 °C
Weight with cable pack	3.8 kg
Weight without cable pack	0.8 kg
Standards	IEC 60974-7









Neck dimensions, G-models:

$y$  = height,  $x$  = length,  $\alpha$  = angle



## 6.13 COMPONENT SELECTION

The following table lists the Flexlite GXe-C gas nozzles and contact tips in the factory setup.

Model	Gas nozzle	Contact tip
GXe-C 353G	25/15 L59 HD 	1.2C1 L+, M10 
GXe-C 355G	25/15 L59 HD 	1.2C1 L+, M10 
GXe-C 503W	25/15 L59 HD 	1.2C1 L+, M10 
GXe-C 505W	25/15 L59 HD 	1.2C1 L+, M10 

Gas nozzle: **OD/D L**

The markings in the gas nozzle specification stand for: OD = outer diameter (at the widest point), D = diameter (inner diameter of the gas nozzle tip), L = length, HD = heavy-duty.

In the contact tip specification: L+ = Life+ contact tip with longer life time.

## 7. ORDERING INFORMATION

For Flexlite GXe-C ordering information and optional accessories, refer to [Kemppi.com](https://www.kemppi.com).