



UNIVERSAL ROBOTS

# User Manual

## g-Series Robot Cable





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# 1. Part Description

This document describes Universal Robots Robot Cable options.

## 1.1. Company Details

Universal Robots A/S

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<https://www.universal-robots.com>

# 2. EN: UR g-Series Robot Cable Options

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Robot Cables connect the UR g-Series robot arm to the UR Control Box.

Warnings



**WARNING: ELECTRICITY**

Conducting installation and/or maintenance of equipment connected to a power source can result in injury or death due to electric shock.

- Disconnect equipment from the power source before conducting installation or maintenance tasks.



**NOTICE**

Improper cable selection, usage, or connections can result in loss of power to the robot arm.

- Do not extend the connection by joining more than one cable between the Control Box and the robot.



**NOTICE**

Connecting the Base Flange cable directly to any Control Box can result in damage to equipment and property.

- Do not connect the Base Flange cable to your Control Box.
- Always use a UR robot cable to connect the Base Flange to your Control Box.



**READ MANUAL**

Failure to use the robot in accordance with the intended use can result in hazardous situations.

- Read and follow the recommendations for intended use and the specifications provided in the User Manual.
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## 2.1. g-Series Cables

| Sales Item Number                       |         | 201929             | 201931   | 201934   | 201936   | 201938   | -                  | -       |
|-----------------------------------------|---------|--------------------|----------|----------|----------|----------|--------------------|---------|
| Label Number                            |         | 78872100           | 78872200 | 78872300 | 78872400 | 78872500 |                    |         |
| Length                                  |         | 1 m                | 2 m      | 3 m      | 6 m      | 12 m     | 12-20 m            | 20-40 m |
| Outer Material                          |         | PU or PUR          |          |          |          |          | PU                 |         |
| Diameter                                |         | 13.8 mm ± 0.8      |          |          |          |          | 18.4 mm ± 0.5      |         |
| Robot Cable- Robot arm end connector    |         | Harting Receptacle |          |          |          |          | Harting Receptacle |         |
| Robot Cable - Control Box end connector |         | Harting Plug       |          |          |          |          | Harting Plug       |         |
| Max tensile strain                      | Static  | 282 N              |          |          |          |          | 417 N              |         |
|                                         | Dynamic | n/a                |          |          |          |          | n/a                |         |
| Bend Radius                             | Static  | 4x diameter        |          |          |          |          | 4x diameter        |         |
|                                         | Dynamic | n/a                |          |          |          |          | n/a                |         |
| Mating cycles                           |         | 500                |          |          |          |          | 500                |         |

| Sales Item Number                       |         | 201953             | 201956   | 201958   | -                  | -                  |
|-----------------------------------------|---------|--------------------|----------|----------|--------------------|--------------------|
| Label Number                            |         | 78872800           | 77281700 | 78872900 |                    |                    |
| Length                                  |         | 3 m                | 6 m      | 12 m     | 12-20 m            | 20-40 m            |
| Outer Material                          |         | TPU                |          |          | TPU                | TPU                |
| Diameter                                |         | 16.5 mm ± 0.4      |          |          | 16.5 mm ± 0.4      | 20.1 mm ± 0.4      |
| Robot Cable- Robot arm end connector    |         | Harting Receptacle |          |          | Harting Receptacle | Harting Receptacle |
| Robot Cable - Control Box end connector |         | Harting Plug       |          |          | Harting Plug       | Harting Plug       |
| Torsion                                 |         | ±30 deg/m          |          |          | ±30 deg/m          | ±30 deg/m          |
| Max speed                               |         | 120 m/min (2 m/s)  |          |          | 120 m/min (2 m/s)  | 120 m/min (2 m/s)  |
| Max acceleration                        |         | 10 m/s²            |          |          | 10 m/s²            | 10 m/s²            |
| Bending Cycles                          |         | 5 million          |          |          | 5 million          | 5 million          |
| Max tensile strain                      | Static  | 940 N              |          |          | 940 N              | 1576 N             |
|                                         | Dynamic | 376 N              |          |          | 376 N              | 472 N              |
| Bend Radius                             | Static  | 4x diameter        |          |          | 4x diameter        | 4x diameter        |
|                                         | Dynamic | 8x diameter        |          |          | 8x diameter        | 8x diameter        |
| Mating cycles                           |         | 500                |          |          | 500                | 500                |

The set includes: 1 Robot Cable & this document.

To order a Robot Cable, visit: <https://www.universal-robots.com>

Software Name: PolyScope X  
Software Version: 10.14  
Document Version: **10.20.375**





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