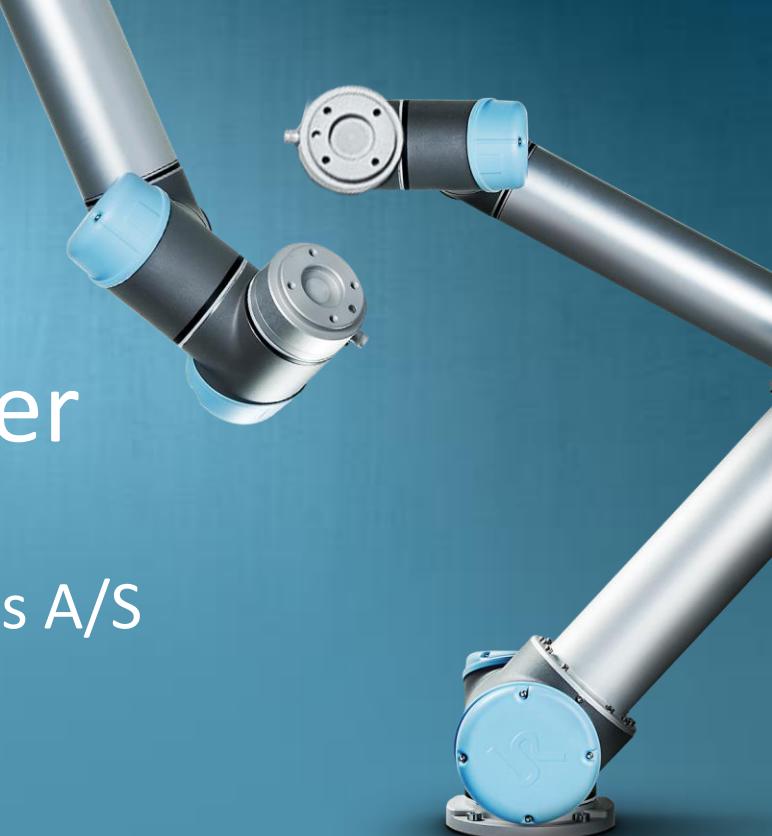


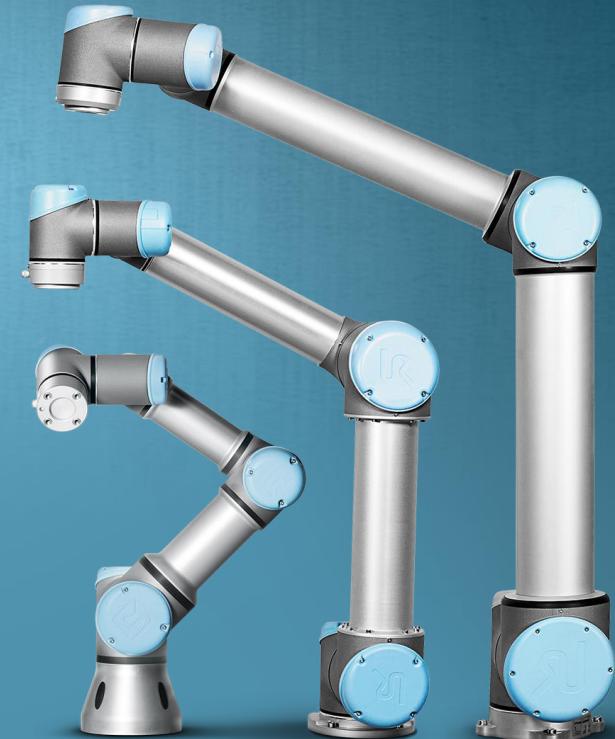


UNIVERSAL ROBOTS

Automatiser  
Med  
Universal Robots A/S



- 1 Firma
- 2 Automation for alle
- 3 Nemt og svært at automatisere
- 4 Fordeler med Universal Robots
- 5 Application viden
- 6 Produkter
- 7 Spørgsmål



# Omkring firmaet



300+ Ansatte  
18 Nationaliteter  
Kontorer i 13 Lande  
Over +400 Distributører  
21 Internationale Awards

# Robot som et værktøj

## Choose the right tool



**195** DAYS | AVERAGE PAYBACK PERIOD



### Get the results that only the right tool can give

When you're ready to automate your business, choose the automation tool that fits your needs exactly.

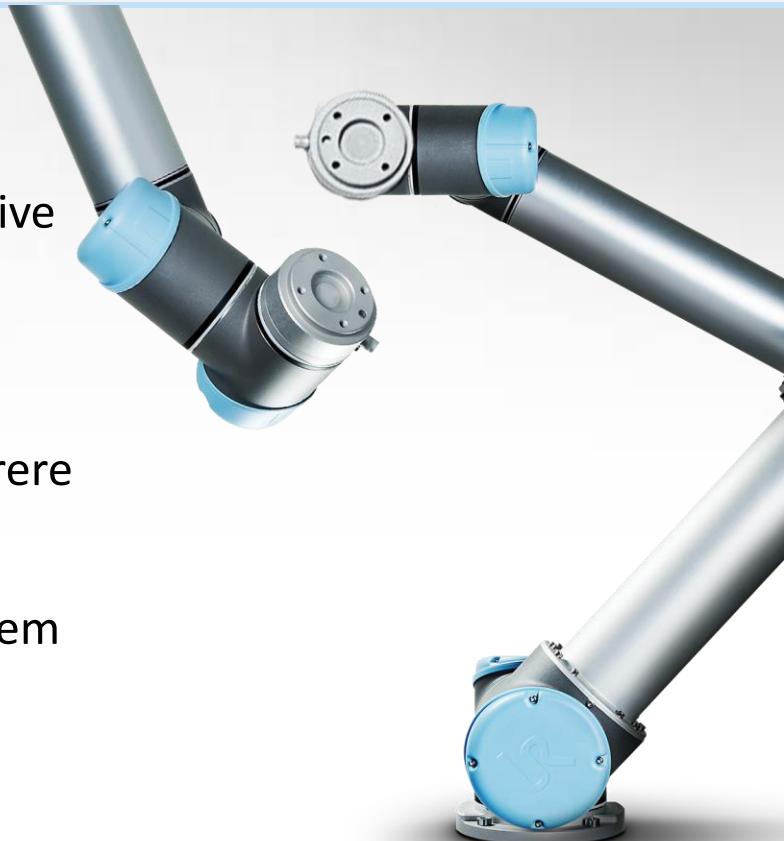
Collaborative robot arms from Universal Robots work safely side-by-side with your employees. These innovative automation tools are lightweight and easy to move and program, so you can optimize production for processes from gluing, welding and assembly to machine tending and pick-and-place. And Universal Robots offers the fastest payback in the industry.

Get the results that only the right tool can provide. Book a demo at your local distributor or read more at  
[www.universal-robots.com](http://www.universal-robots.com)



# Automation for alle

- UR designer og bygger revolutionærer collaborative robotter
- Perfekt til alle størrelser af virksomheder
- UR producter er så brugervenlige at alle kan operere dem
- Og så prisvenlige at stortset alle kan investere I dem
- Lav total pris

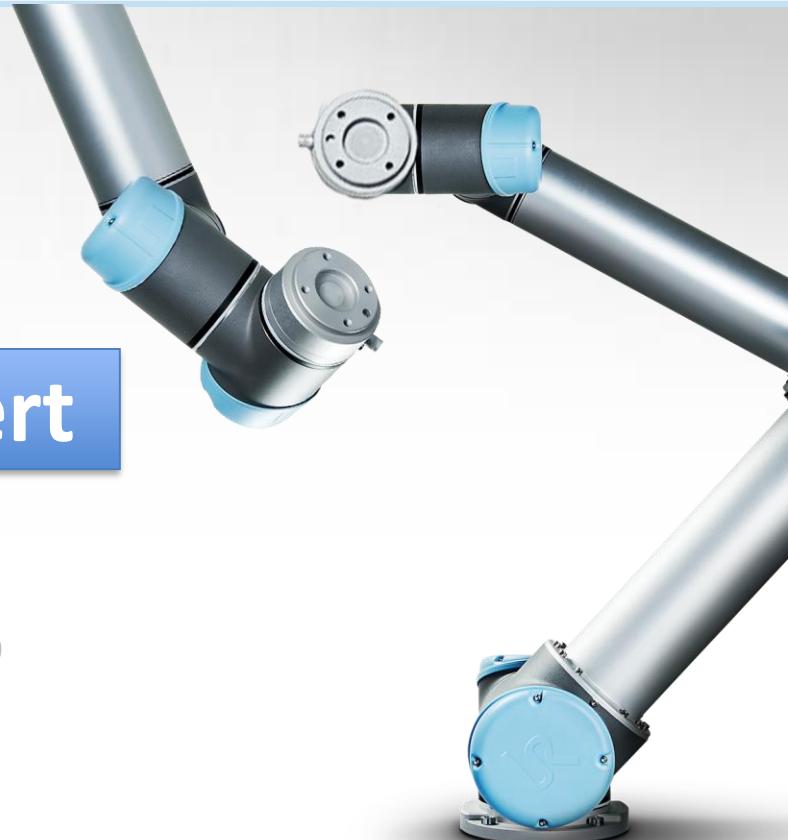


Nemt

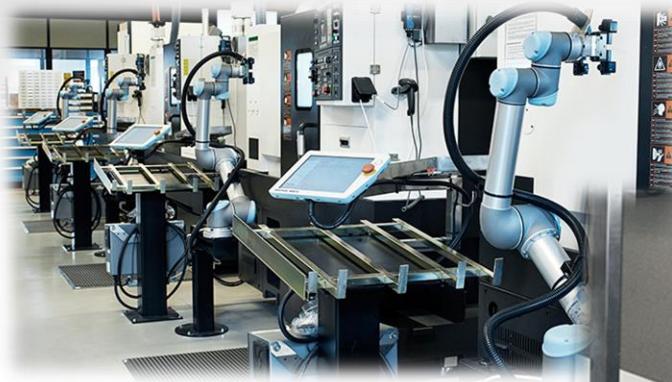
Eller

Svært

AT AUTOMATISERE?



# Nem Automation



Håndtering af maskiner



Pakning og palletering



Pick and Place

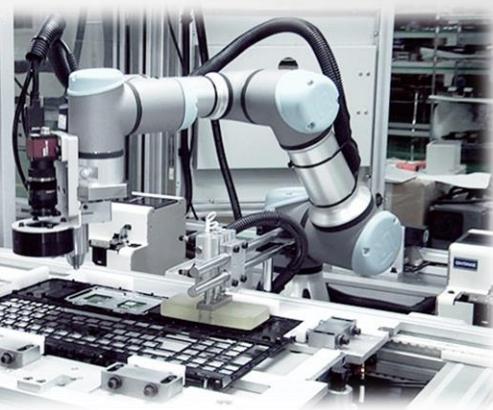
# Svær Automation



Fler operationer



Kompleks griber med  
kommunikation til flere maskiner



Vision systemer

# Fordele med Universal Robots

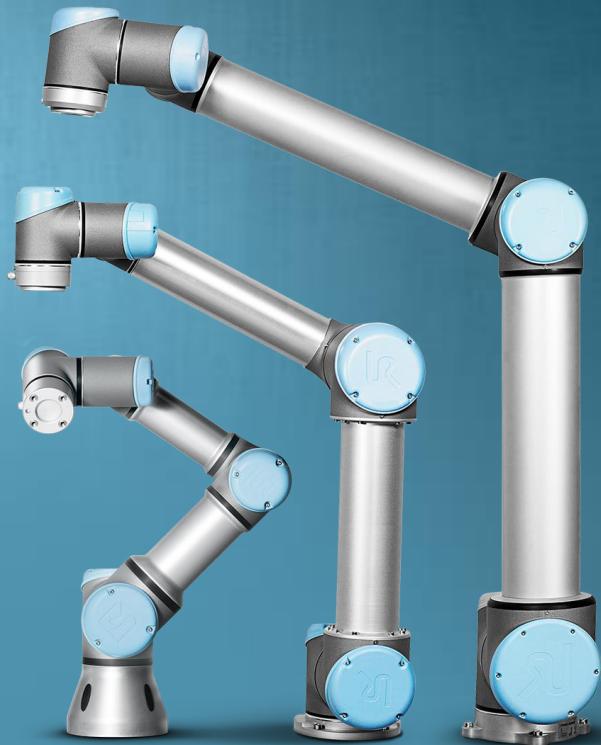
Nem Programmering

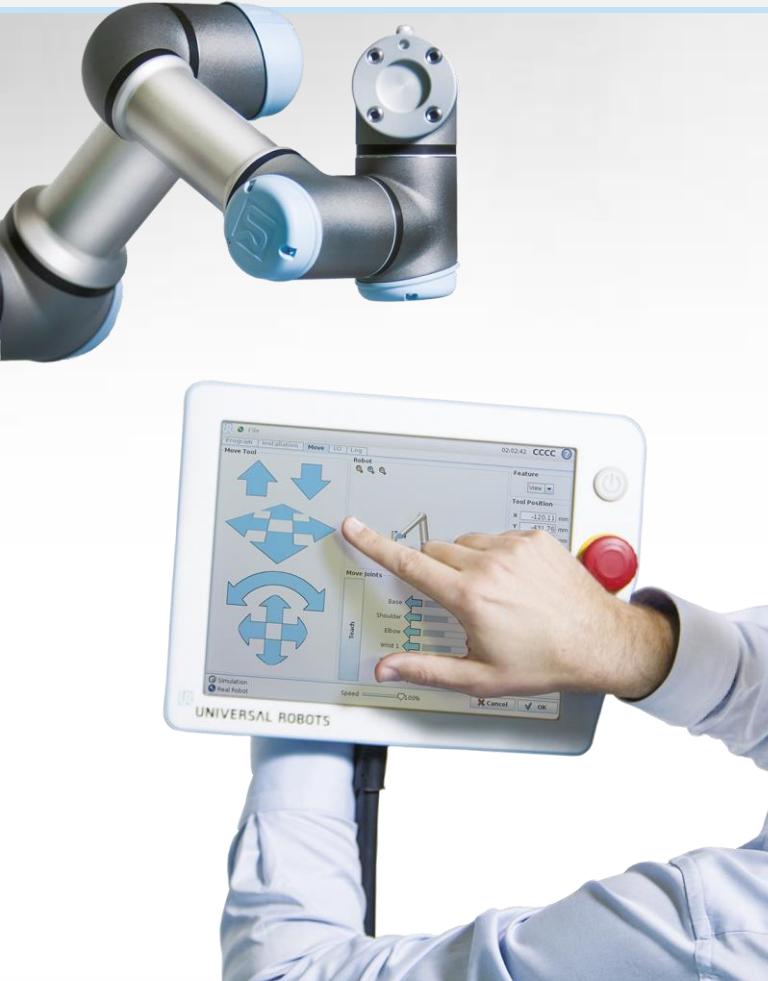
Hurtig Set-up

Flexibel Udnyttelse

Kollaborativ og Sikker

Hurtigste Payback I industrien





# Nem Programmering

- Mest intuitive user interface I industrien.
- Operatører uden nogen programmeringserfaring kan let lære at programmere robotten ved at bruge 3D Teach Pendanten
- Nem at bruge. Flyt robotten til ønsket viapunkter eller rør ved piletasterne på Tableten
- Sparer prisen på dyre programmører.

# Hurtig Set-up



- “Plug and play”. Tilkobler med 230V og så er du oppe og køre.
- UR har revolutioneret robot set-up tid. Dramatisk reduktion af tid brugt.
- Imens industrien har en opsætningstid på 2 uger i gennemsnit, har UR  $\frac{1}{2}$  dag.
- Ud af boksen oplevelse for en utrænet operatør til at pakke robotten ud, sætte den op og programmere den simple opgave indenfor en time.

# Flexibelt arbejdsmiljø



- UR robotten er letvægt, pladsbesparende og nem at rejustere så den passer til din nuværende produktion.
- Den hurtige og let tilgængelige robot giver dig mulighed for at automatisere næsten alle manuelle opgaver.
- Man har mulighed for at genbruge programmeringen af opgaver.

# Kollaborativ og Sikker



- 80% af UR robotten “worldwide” kører uden sikkerhedsafskærmning(efter risikovurdering) og arbejder side om side med mennesker.
- Erstatter menneskelige operatører i beskidt, farligt og ensidigt arbejde.
- Reducere repetitive og uheldige skader.
- Sikkerhedssystemet på robotterne er godkendt og certiceret af TÜV

# Hurtigst Payback I Industrien

**195** | AVERAGE PAYBACK PERIOD  
**DAYS**

- Gennemsnitlig payback tid på kun 195 dage
- Alle fordelene ved advanceret robot automatisering – uden nogle traditionel ekstra omkostning i forhold til programmering, set-up eller afskærmning.
- Robotautomation er nu til at betale for, selv i mindre virksomheder.



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# Applikationsviden

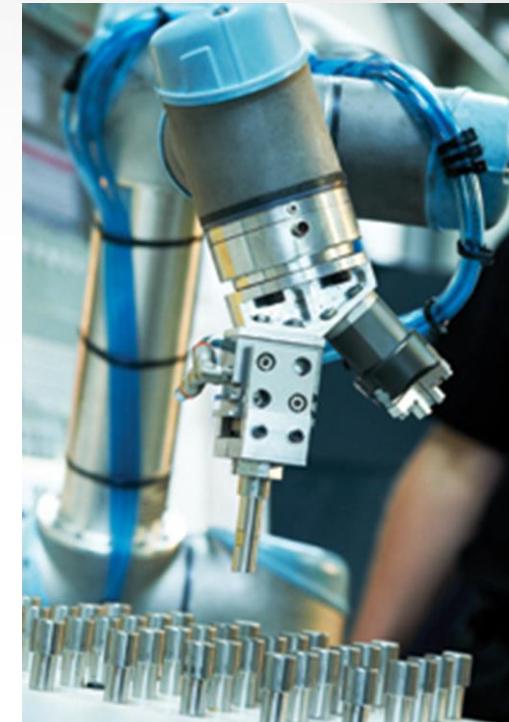
# Screw driving

[Video](#)



# Pick and Place, Håndtering af CNC

- Flest håndtering af CNC maskiner kan blive kørt af en UR robot
- En af de mest bruge applikationer
- Større produktivitet og flexibilitet
- Nem programmering gør det perfekt, også for virksomheder med mindre seriestørrelser
- Se en [video](#) hvor den håndterer en CNC maskine



# Welding

- Numerous types of welding are possible with the UR robot, such as TIG, MIG, Spot, Arc, Ultrasound and Plasma
- Increases reliability and quality
- Faster cycle times
- No breaks in production and less wasted materials
- Watch a [video](#) on automated welding



# Pick and Place, Injection molding machine

- Euromap 67 incl. cable connection to the injection moulding machine is an available option
- Relieves operator from hard repetitive work and eliminates the risk of injuries from operators handling
- To hold costs down, moulding operation of plastic products work 3 shifts. Costs are reduced significantly
- Euromap 67 delivers user friendly templates ensuring easy & fast programming as well as input & output communication signals between robot and injection moulding machine
- Watch a [video](#) on injection moulding automation



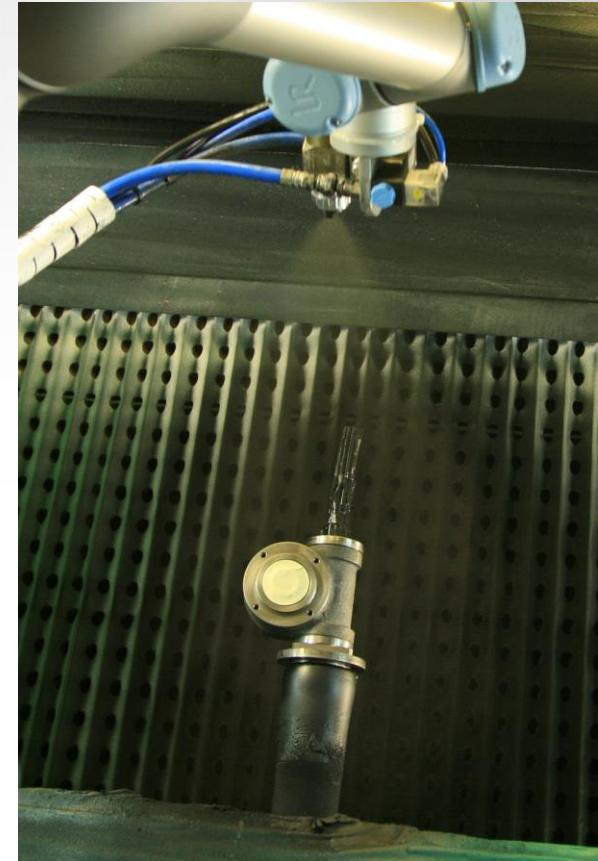
# Assembly

- Gripper can be customized to various manufacturing requirements
- Expand production capabilities
- Increase production speed and consistency
- Relieves workers from repetitive work and releases them to other tasks
- Watch a [video](#) on assembly automation



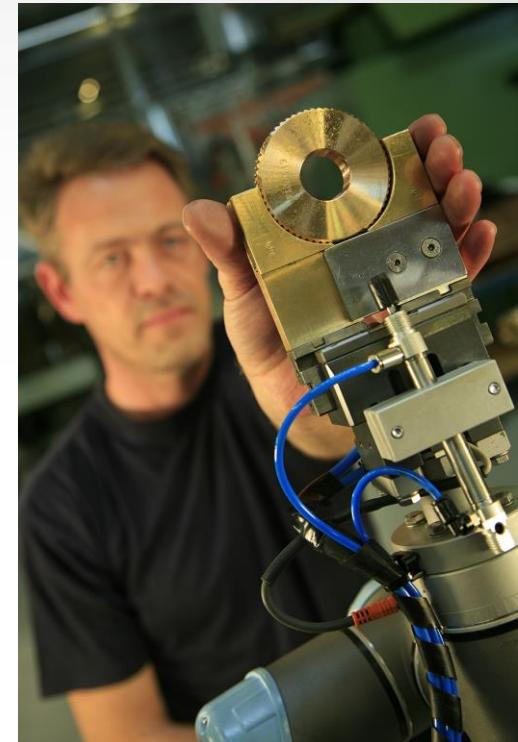
# Painting

- Suitable for numerous painting applications  
(with the exception of explosive chemical paints)
- Increases the quality and consistency of the finish
- Reduces operating costs
- Reduction of environmental impact
- Watch a [video](#) on painting automation



# Polishing / Sanding / De-gating / Machining

- Optimization of speed and precision
- Relieves workers of repetitive work
- Can be programmed to apply the exact amount of pressure required
- Watch a [video](#) on machining automation



# Gluing

- Helps avoid shipping defective or faulty parts
- Ensures consistency and predictable quality
- Watch a [video](#) on Vision Camera automation



# Quality Inspection / Vision Camera

- Applicable in many industries from sinks to windows and automobile parts
- Provides even distribution of adhesive onto the product
- High precision and consistency
- Reduces cycle time



# Labelling

- Optimization speed and precision of labelling
- Relieves workers of repetitive, monotonous work
- Increases reliability and quality
- Watch a [video](#) on Labelling automation



# Packaging & Palletizing

- Relieves workers of repetitive work
- Lowers operating costs
- Increases accuracy and reduces time spent repackaging due to mistakes
- Watch a [video](#) on packaging automation

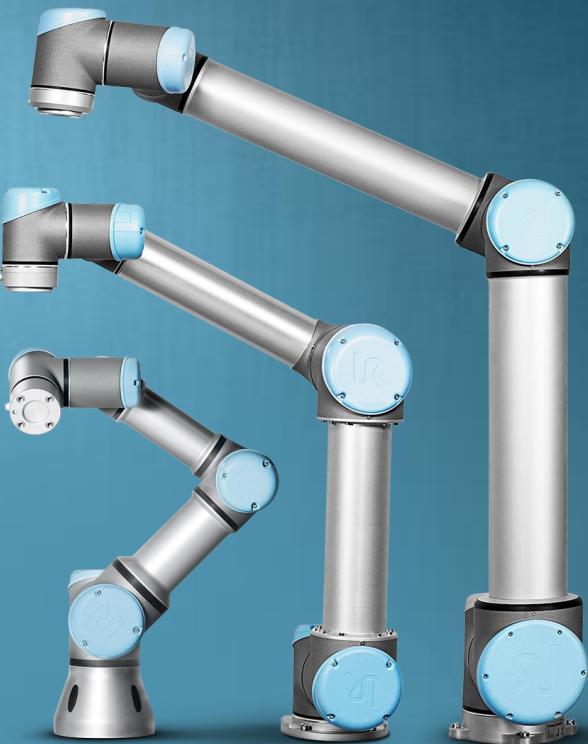


# Material Testing

- Relieves workers of repetitive work
- Lowering operating costs
- Delivers consistent testing of materials; always applies the same pressure, regardless of the



	<b>UR3</b>	<b>UR5</b>	<b>UR10</b>
<i>Payload</i>	3 kg.	5 kg.	10 kg.
<i>Reach</i>	500 mm	850 mm	1300 mm
<i>Joint ranges</i>	+/-360° Infinite rotation on end joint	+/-360°	+/-360°
<i>Repeatability</i>	+/-0.1 mm	+/-0.1 mm	+/-0.1 mm
<i>Joint max. Speed</i>	180°/sec and 360°/sec	180°/sec	120°/sec and 180°/sec
<i>Tool max. speed</i>	1000 mm/sec	1000 mm/sec	1000 mm/sec
<i>Weight</i>	11.0 kg	18.4 kg	28.9 kg
<i>IP rating</i>	IP64	IP54	IP54
<i>Temp. range</i>	0-50°C	0-50°C	0-50°C
<i>Power supply</i>	100-240V AC, 50-60 Hz	100-240V AC, 50-60 Hz	100-240V AC, 50-60Hz



- Additional specs can be found on [www.universal-robots.com](http://www.universal-robots.com)



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# Spørgsmål?

