

Product



No. 1 Position

Pneumatic Lifting-Swivel Unit

Product features

Unique Selling Points:

- ✓ Highly flexible control
- ✓ Due to the intelligent valve box , plug & play is possible
- ✓ Compact design – easy assembly
- ✓ As to the 180° version: Alternatively to the typical Pick & Place unit, where the workpieces are simultaneously turned by 180° (see motion sequence on page 2), and due to the use of the lifting-swivel unit, the use of an additional rotary unit is not necessary for turning the workpiece.

Further Product Features:

- ✓ Rigid design
- ✓ Short cycle times
- ✓ Due to the use of the control unit, two waiting positions can be adjusted.
- ✓ Since the horizontal and vertical motion of the unit overlap, it is very quiet and quickly running.

Market and Competitors

Main Competitors

- ✓ Unimec (CH)

2 sizes

Description BP 66 & BP 100



Vertikal-Hub (mm)	0 - 15 0 - 30 0 - 45
Drehwinkel (°)	0 - 90 20 - 120 80 - 180
Winkelgenauigkeit (°)	15
Last-Trägheitsmoment (kg.m ²)	0,008
Drehmoment (Nm)	0,6
Vertikal-Kraft (N)	150
Arbeitskadenz (C30)	siehe Diagramm
Betriebsdruck (bar)	3 - 6
Arbeitsposition	gleichgültig
Netto Gewicht (kg)	1,6 - 2,1

Difference to our modules

- max. pick per minute < 60 1/min
- Module has no damping in vertical direction, drives onto the fixed stop and is therefore loud!!!

Here you will be transferred to the homepage

<http://www.unimecsa.ch/default.asp?MenuID=4341&PageID=2749>

Cost Effectiveness / Customer Benefits

Maximum productivity due to shorter cycle times and maximum robustness.

- ✓ Higher cycle rates involve lower cycle times, and a considerably higher productivity.
- ✓ Highly flexible control. Therefore it can be directly stopped over the mounting and depositing position for driving out of the working area, and results in an overall increase of process reliability.
- ✓ The swiveling stroke per side is adjustably by $\pm 2^\circ$, and the tolerances of the mounting and depositing position can be compensated.
- ✓ The vertical stroke per side can be adjusted independently from each other and can vary by 10 mm: Various mounting and depositing positions can be adjusted.
- ✓ Fully integrated into the GEMOTEC modular system. Therefore maximum flexibility/ modularity are achieved.
- ✓ Combined with an intelligent valve box, higher operating comfort, and shorter commissioning times (not yet approved).

Questions about the product? Your contact person is J. Khoury (+49 - 7133 - 103 - 2667)

Technical Data / Functions

Technical Data

Swivelling angle: Optional 90° or 180° Swiveling angle adjustment per end position: $\pm 2^\circ$

Vertical stroke: 40 mm, there from 20mm linear

Vertical stroke adjustment per end position: 10 mm

Vertical stroke difference: maximum 10 mm

Operating pressure: 5 bar

Torque: 3,7 Nm (5 bar)

Stroke force: 320 N (5 bar)

Max. mass moment of inertia: 0,03 kgm² (see chart)

2 waiting positions can be approached

Function

The motions of a vertical cylinder and a rotary drive are positively driven via a curved roller. Therefore the response time of the cylinders is shorter than of conventional stroke-swivel units and allows a cycle rate of up to 90 cycles/min. (at a minimum payload, and a 180°swivelling angle, pure swivel time without gripping times or something similar) can be achieved.

Industries and Applications

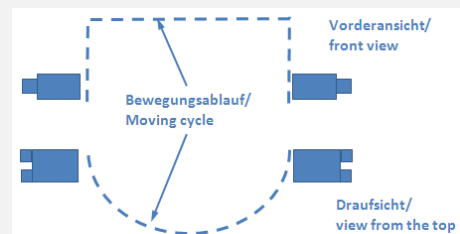
The DRL particular convinces in the following industries:

- ✓ Electronics assembly
- ✓ Assembly and handling technology
- ✓ Leisure time goods/household goods
- ✓ Medical technology

Applications

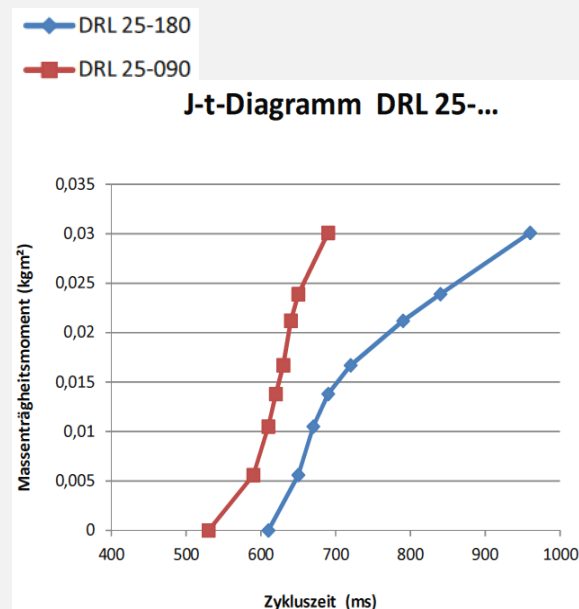
- ✓ Assembly of electrical plugs
- ✓ Circuit board assembly
- ✓ Assembly of cannulas
- ✓ Assembly of ABS valves
- ✓ Assembly of fuse switches

Motion sequence of the DRL



Additional Information

Load diagram



Cross Section



1. Housing
2. Drive, turning
3. Driving Cylinder vertical
4. End position damping
5. Curved Roller
6. Attachment connection

Questions about the product? Your contact person is J. Khoury (+49 - 7133 - 103 - 2667)