

The DSC 45-100 is a series of high-torque servo motors that are up to 30% more compact than conventional servo motors.

With its new DSC servo motors, Baumüller is making the torque motor servo-ready. This series focuses on improved performance by increasing torque densities. This also drastically reduces the volume of the device.

In spite of the increased torque, typical speed ranges of up to 4000 rpm is still provided by these motors. The new DSCs are up to 30% more compact than conventional servo motors. The DSC 45-100 series features a smooth housing surface contamination build-up. These motors are particularly easy to mount and offer a high environmental protection classification.

DSC 45-100 - The compact series

- Permanent magnet synchronous servo motors
- Compact design with high power density
- Excellent smooth running characteristics
- High overload capability
- Almost no cogging torque
- Smooth housing surface – easy to keep clean
- Slim, uniform housing design
- Main connection and encoder connection via rotatable standard connectors
- IP65 type protection, totally enclosed non-ventilated
- Encoder: resolver, sincos (option)
- All types available with brake as an option



The DSD-range ist available in unventilated versions, air- and water cooled.



DSC 45-100 (non-ventilated) technical data

| | DSC 45 | DSC 56 | DSC 71 | DSC 100 |
|------------|-------------|-------------|-------------|-------------|
| Pn [kW] | 0,5 - 1,3 | 0,6 - 5,3 | 1,2 - 14 | 2,3 - 18 |
| nM [min-1] | 2000 - 4000 | 1000 - 4000 | 1000 - 4000 | 1000 - 3000 |
| M0 [Nm] | 2,7 - 6,2 | 6,2 - 21 | 18 - 58 | 24 - 105 |

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|---------------|---------------|---------------|---------------|----------------|
| M0max [Nm] | 8,5 - 25,5 | 16 - 48 | 28 - 84 | 42 - 126 |
| Länge * [mm] | 159 - 255 | 170 - 450 | 190 - 482 | 215 - 583 |
| | DSC 45 | DSC 56 | DSC 71 | DSC 100 |
| Pn [hp] | 0,7 - 1,7 | 0,8 - 7,1 | 1,6 - 18,8 | 3 - 24 |
| nM [min-1] | 2000 - 4000 | 1000 - 4000 | 1000 - 4000 | 1000 - 3000 |
| M0 [lb ft] | 2 - 4,6 | 4,6 - 15,5 | 8,8 - 42,7 | 17,7 - 77 |
| M0max [lb ft] | 6,3 - 18,8 | 11,8 - 35,4 | 20,6 - 62 | 31 - 93 |
| Length * [in] | 6,3 - 10 | 6,7 - 17,7 | 7,5 - 19 | 8,5 - 23 |

* Length not including shaft

Subject to change.

Technical documentation in preparation.