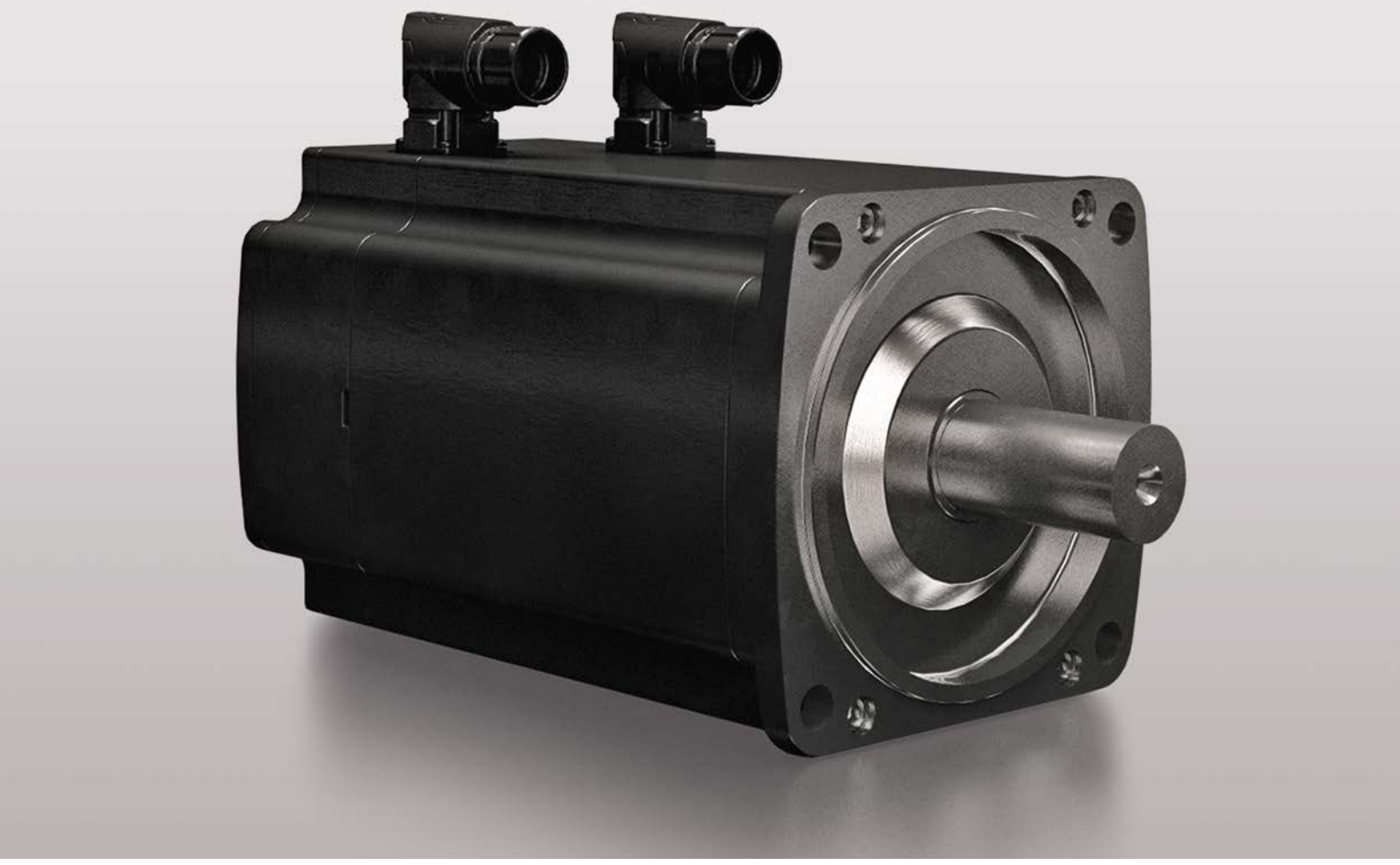
BAUMÜLLER



DSC2 MOTORS

Extremely compact and powerful – the new DSC2 motor generation in six lengths

The DSC2 motors cover a speed range from 1,000 to 5,000 rpm.
Compared to other servo motors, they are up to 15 percent more compact.

DSC2 045–100

Compact Servo Motors

The DSC2 motors cover a speed range from 1,000 to 5,000 rpm. Compared to conventional servo motors, they are up to 15 percent more compact. A wide variety of cooling options, connections, gears, brakes and encoders create application-specific and flexible motor solutions. The low dead weight and minimal dimensions make the DSC2 a good solution for moving axes. The minimal cogging torque ensures precise positioning and high control quality. The advantage: precision in the process is increased. The motor also has a low CO_2 footprint due to the reduced use of materials.

- Cooling options: uncooled, air-cooled, water-cooled
- Encoders: Resolver, Hiperface DSL, Hiperface, EnDat 2.2
- Optionally with brake
- Single cable technology

INCREASED POWER DENSITY

HIGHEST PRECISION

INCREASED DYNAMICS

HIGH ENERGY EFFICIENCY

HIGH SCALABILITY

- Permanent magnet synchronous servo motors
- Compact type of construction with high power density
- Degree of protection up to IP 65 regardless of the cooling method
- Main connection via rotatable plug or terminal box
- Single cable technology available
- Very good concentricity properties
- Smooth housing surface - not susceptible to dirt
- Slim, integrated housing design
- High overload capability
- Encoder options: Resolver, Hiperface DSL, Hiperface, EnDAT 2.2
- All types optionally with brake

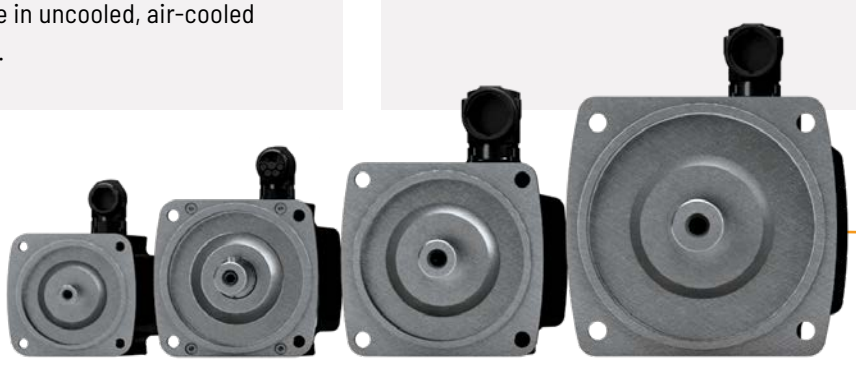
Cooling methods

UNCOOLED | **AIR-COOLED** | **WATER-COOLED**

The DSC2 range is available in uncooled, air-cooled and water-cooled versions.

Spectrum

Power
Torque
Acceleration

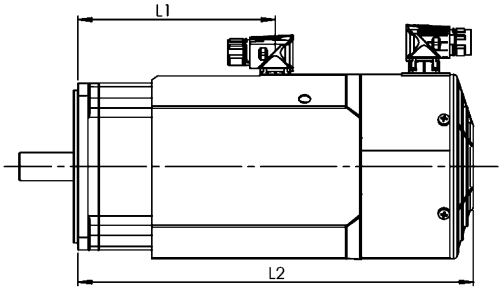


Excellent combination of overall length and flexibility with maximum torque density at the same time. Energy efficiency is about 94 percent.

DSC2 045-100 – Technical data

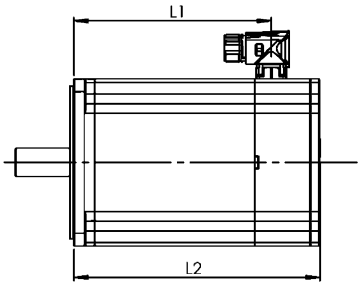
Type	P_N		n_N	J		M_0		$M_{0\,MAX}$	
	[kW]	[hp]	[min^{-1}]	[$kgcm^2$]	[lb in^2]	[Nm]	[lbf ft]	[Nm]	[lbf ft]
DSC2-045 *	*	*	*	*	*	*	*	*	*
DSC2-056 *	*	*	*	*	*	*	*	*	*
DSC2-071	1.21 – 36	1.62 – 48	1000 – 5000	9.5 – 48.9	3.2 – 16.7	12.6 – 120	9.3 – 88.5	25 – 170	18.4 – 125
DSC2-100 *	*	*	*	*	*	*	*	*	*

The values specified are maximum values.
For details, please refer to the technical documentation.
*) in preparation



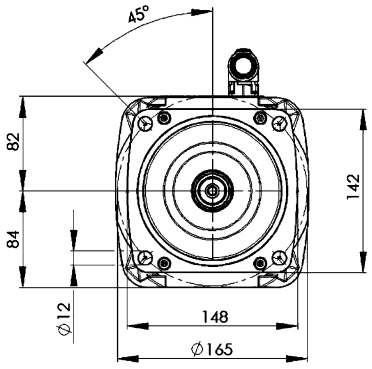
Version with fan

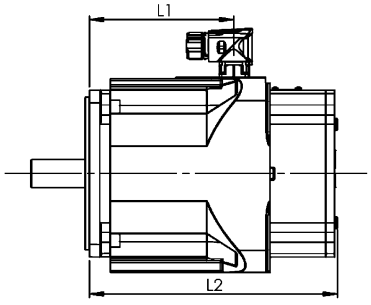
Motorbaulängen motorsize	L1	L2
DSC2-071 AA	136	305
DSC2-071 BB	168	337
DSC2-071 CC	200	369
DSC2-071 DD	232	401
DSC2-071 EE	264	433
DSC2-071 FF	296	465



Version uncooled

Motorbaulängen motorsize	L1	L2
DSC2-071 AA	136	178
DSC2-071 BB	168	210
DSC2-071 CC	200	242
DSC2-071 DD	232	274
DSC2-071 EE	264	306
DSC2-071 FF	296	338





Version water cooled

Motorbaulängen motorsize	L1	L2
DSC2-071 AA	91	179
DSC2-071 BB	123	211
DSC2-071 CC	155	243
DSC2-071 DD	187	275
DSC2-071 EE	219	307
DSC2-071 FF	251	339

Type code

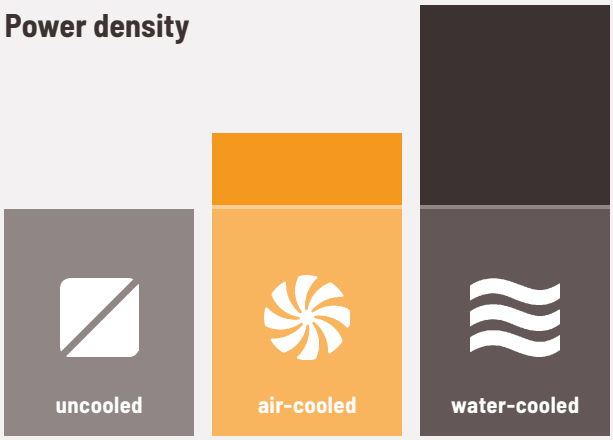
DSC2-□□□□□□□-□□-□□-□□□□-□□□-□□□-□-000

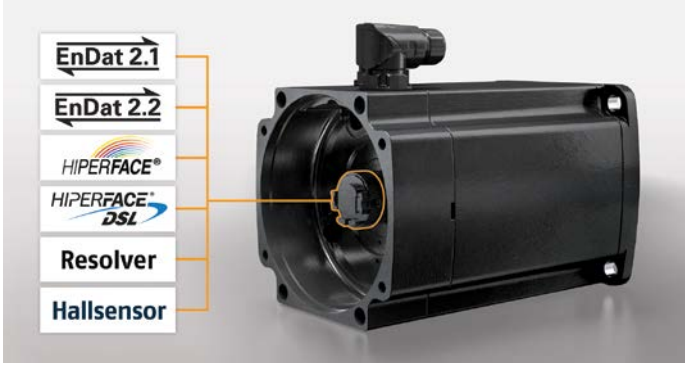
Overall size	**045, 056, 071, 100**
Overall length	**AA ... FF**
Degree of protection	IP**64**, IP**65**
Cooling type	**U** – uncooled, **O** – air-cooled, **W** - water cooled
Nominal speed class	**10** – 1000 min^{-1} ... **50** – 5000 min^{-1}
UZK DC	**54** – 540 V
Encoder type	**O** – no encoder, **A** - Resolver, **B** – EDS35, **C** – EDM35, **D** – SRS50, **E** – SRM50, **F** – ECN1313, **G** – EQN1325, **H** – ECN1325, **I** – EQN1337, **J** – EES37, **K** – EEM37, **L** – SEK37, **M** – SEL37, **N** - Hallsensor, **P** – ECI1319, **Q** – EQI1331
Encoder option	**O** – none, **E** – E-Type plate, **S** - Safety, **T** – E-Type plate + Safety
Shaft option	**A** – smooth shaft, **B** – with parallel key
Type main connection	**A** – single cable solution, **B** – device sockets Speedtec (PT1000 on main connection), **D** – device sockets Speedtec (PT1000 on encoder socket), **K** – terminal box (with PT1000 connection), **N** – terminal box (PT1000 on encoder socket)
Main outlet port	**T** – top, **B** – bottom, **L** – left, **R** – right, **D** – A-side, **N** – B-side, **P** – pivoted
Encoder outlet port	**O** – without encoder socket, **T** – top, **B** – bottom, **L** – left, **R** – right, **D** – A-side, **N** – B-side, **P** – pivoted
Bearing	**K** – ball bearing, **R** - roller bearing
Vibration level	**A** – vibration level A, **B** – vibration level B
True running	**N** - normal, **R** – reduced
Gears / pump mounting	**O** – without, **A** – BPE gear box, **B** – BPEF gear box, **C** – BPEA gear box, **D** – BPN gear box, **E** – BPNA gear box, **F** – BPNF gear box, **G** – BPV gear box, **H** – BPVF gear box, **Z** – pump mounting Advanced Line

Cooling options

The DSC2 range is available in uncooled, air-cooled and water-cooled versions. The most compact variant of the DSC2 is made possible by the water cooling concept.
The active cooling increases the power density. In addition, close installation of several servo motors is possible without any problems due to the good heat dissipation. This saves space in the machine and is a plus point especially for applications with many axes.

Power density



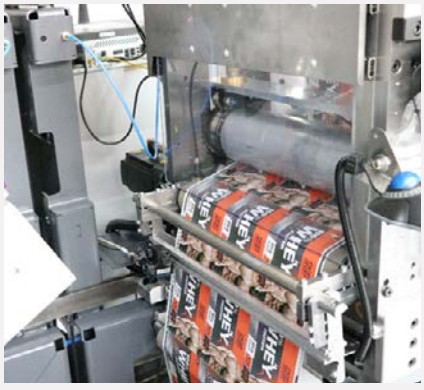


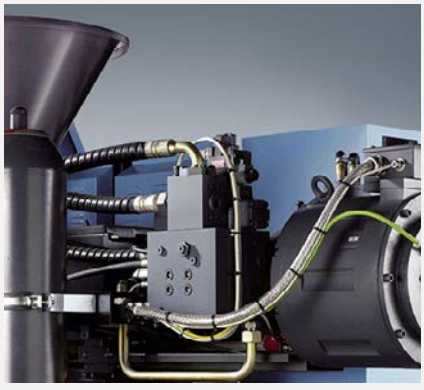
Encoder interfaces

We work with numerous manufacturers and offer analog, digital and reliable rotary encoder systems. These differ, among other things, regarding their accuracy. Our drive experts advise you on the different variants depending on your requirements. The range extends from resolver to Sick to Heidenhain encoders with their different protocols.

Areas of application

- Plastics machines
- Textile machines
- Robotics
- Packaging machines
- Printing machines
- Metalworking machines
- Environmental and recycling technology
- Medical technology and pharmaceuticals





HOUSE OF AUTOMATION

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