EHS

APPLICATION

Electrical actuation of power chucks/collet chucks with through-hole.

TYPE

Hollow clamping cylinder with bar through-hole up to 67 mm.

CUSTOMER BENEFITS

- Energy-efficient, since energy is only required during the clamping and unclamping operation
- Flexible use thanks to optimal stroke and force control option (force change, even during rotation)
- High precision thanks to low thermal influences
- Increase in operational safety and quality thanks to constant monitoring of the clamping status
- Low-maintenance and environmentally friendly thanks to omission of hydraulic components
- Stroke sensor outside of dirty area to reduce error susceptibility

TECHNICAL FEATURES

- Coolant collector
- Standard spindle fastening: EHS-37 from the rear, EHS-67 from the front (other spindle flanges on request)
- Motor mount must be fastened to the machine

Scope of delivery:
Mechanical electric clamping cylinder, incl. stroke and force sensor, stationary motor mount, incl. connection components of the toothed belt drive

Note:
Servo motor, control unit, servo amplifier, set of cables and electronic accessories must be ordered separately

Sample calculation for energy savings with an electrical cylinder:

Energy consumption of an oil-operated clamping cylinder

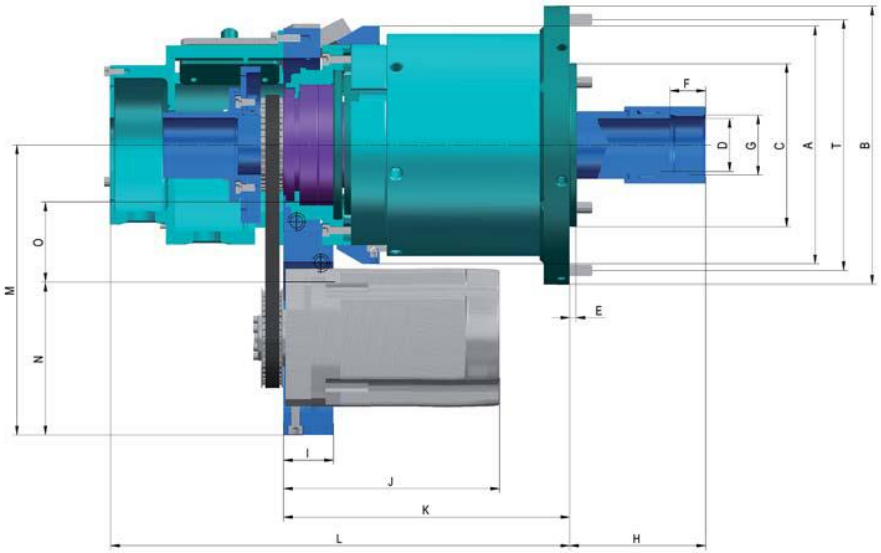
Output of hydraulic unit:	1,5 kW
Power dissipation from cylinders:	0,9 kW
Total output of an oil-operated clamping cylinder:	2,4 kW
Energy consumption per year:	14.400 kWh

Energy consumption of an electrical cylinder:

Total output of the EHS:	0,1 kW
Energy consumption per year:	600 kWh
Energy saving potential per year:	**13.800 kWh**

The above assumptions have been based on a standard manufacturing process in three-shift operation and may vary depending on the application involved. Where greater efficiency is achieved in the processing (e.g. by getting the best possible match between the cylinder and the process, or through shorter lift times), even more energy can be saved by indirect means.

EHS



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Electrical cylinder with through-hole EHS

Item no.	1289821 ▲	1290622 ▲
Pull force area kN	5-50	5-68
Total stroke mm	32	32
External Ø A mm	167	255,5
Ø B mm	195	209,8
C h 6 mm	115	170
Through-hole D mm	37	67
E mm	5	8
T Pitch circle spindle connection	176 (M8 - 6x60°) Fastening from the rear	196 (M6 - 12x30°) Fastening from the front
F mm	25	25
G	M42x1,5	M75x2
Stroke min/max	63/95	57/89
I mm	35	33,5
J mm	151,5	177,5
K mm	200,7	226,6
L mm	322,5	348
M mm	203	260
N mm	98	130
O mm	55	55
Speed max. min-1	6000	6000
Weight approx. kg	28,9	60
Rotating mass kg	25	53
Moment of inertia kg/m2	0,086	0,36