



isel[®]
From Components to Systems

NEW

ile20/20

LINEAR UNIT

WITH BALL SCREW DRIVE



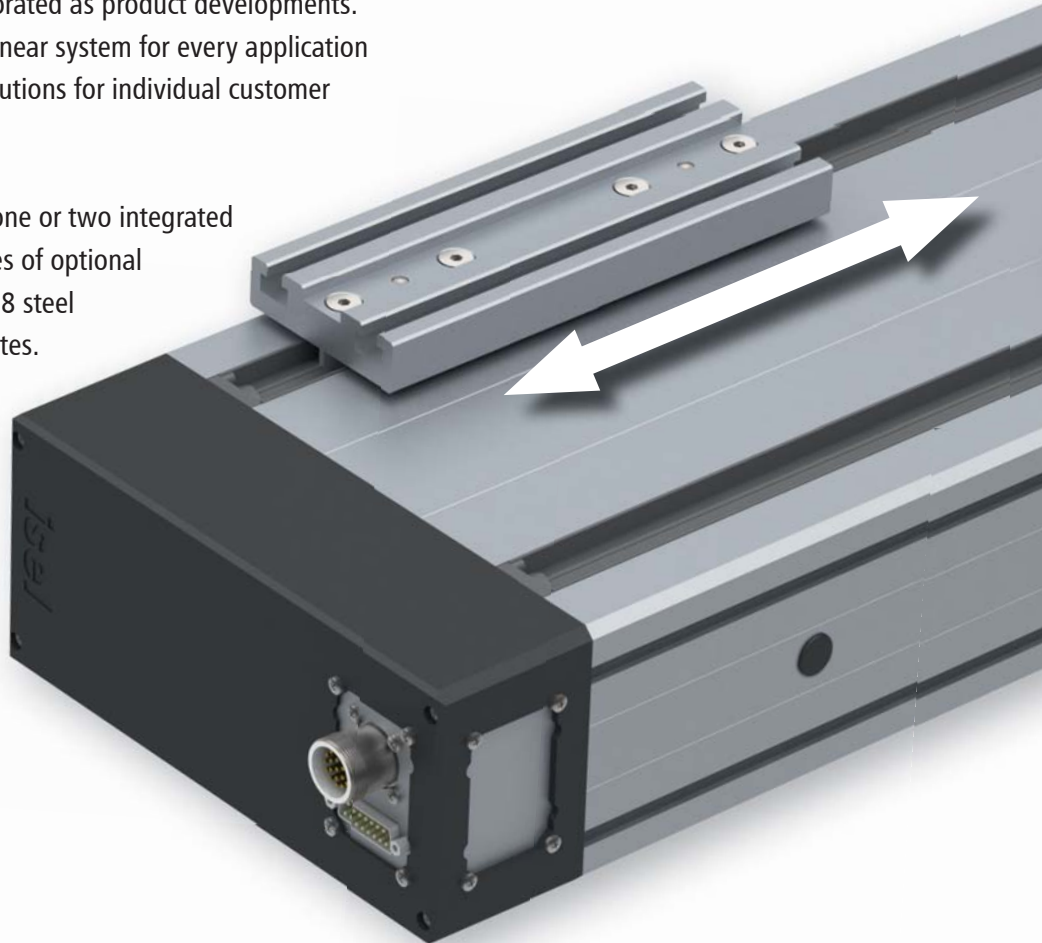
- optimized bending stiffness and improved linearity
- increased payloads and feed forces
- compatible with the LES predecessor



ile20/20

The linear unit **iLE 20/20** is based on a sophisticated linear technology, which has been continuously developed by many years of experience and numerous specific customer requirements. Customer requests and experiences from the service fields have been incorporated as product developments. This enables us to offer a suitable linear system for every application as well as to design tailor-made solutions for individual customer requirements.

The linear units are available with one or two integrated ball screw drives (\varnothing 20 mm), inclines of optional 5/10/20/40 mm and with 2, 4, 6 or 8 steel slides with aluminium clamping plates.



FEATURES

- aluminium shaft profile, anodized
- plan-milled clamping surface
- 20 mm precision steel rails with steel slides
- 20 mm ball Screw
- profile sealing with abrasion-resistant sealing lips
- two end - and reference switches
- repeat accuracy ± 0.02 mm

TECHNICAL DATA

inertia torque I_x	705 cm ⁴
inertia torque I_y	2807 cm ⁴
centroid of an area	39,5 mm
cross-sectional area	54,22 cm ²
material	EN AW-6060 T66
anodization	E6/EV1
weight with steel rail guide	19,2 kg/m
weight with steel rail guide and KG-spindle	21,5 kg/m



Two drives – one axis

The linear unit offers the possibility to implement two independent linear movements in one unit by installing two ball screw spindles. Thus 2 linear movements with the smallest dimensions can be realized

- high-rigid and high-precision drive unit with smallest dimensions
- high load capacity, high precision and high stiffness thanks to integrated profile rail guidance
- high positioning and repeatability due to ball screw drive with backlash-free nut system
- high processing speeds with high precision due to ball rail guides, large spindle diameters and inclines

OPTIONS

- step or servo motor
- external limit switches
- energy chains
- connecting elements
- bellows

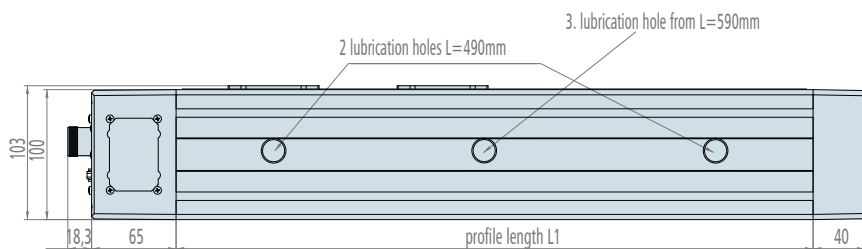
PERMISSIBLE SPINDLE SPEEDS

KG-spindle \varnothing 20 mm, fixed-lot storage

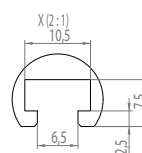
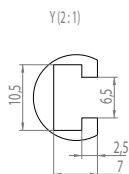
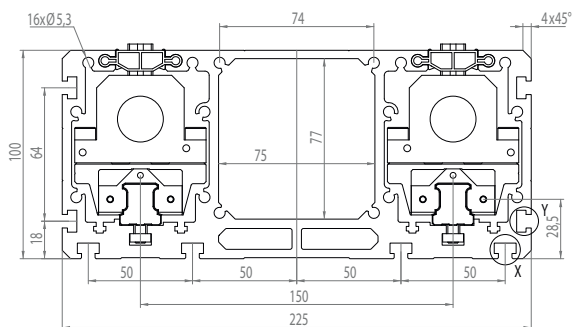
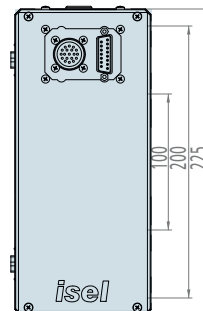
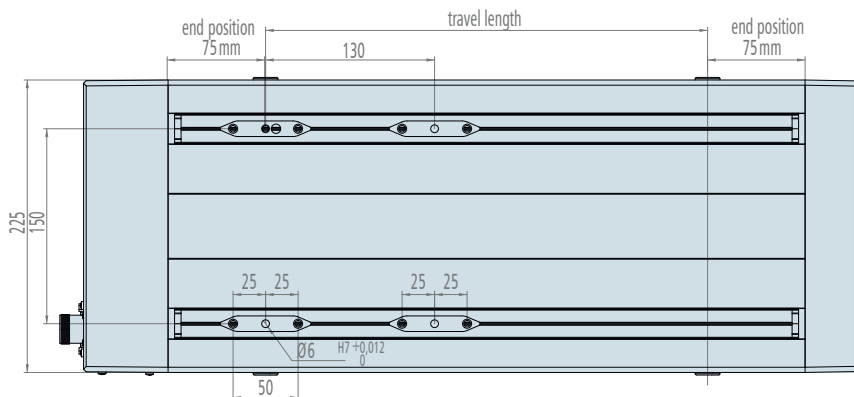
profile length [mm]	spindle pitch p [mm]	5	10	20
	max. permissible spindle speed n zul. [1/min]	max. permissible feed rate v zul. [mm/s]		
490	6000	500	1000	2000
990	4000	333	667	1333
1390	2000	167	333	667
1490*	4000	333	667	1333
1990*	2000	167	333	667
2490*	1500	125	250	500
2990*	1000	83	167	333
3490*	700	58	117	233

* with spindle underpinning

DIMENSIONED DRAWING



Travel length	
with 2 x steel carriages	L1-150 mm
with 4 x steel carriages	L1-280 mm
with 6 x steel carriages	L1-410 mm
with 8 x steel carriages	L1-540 mm



ORDERING KEY

238 **XXX** **XXXX**

Antrieb

- 2 = integriertd
belt drive module
- 3 = preparation
direkt drive module

steel carriage

- 1 = 2 steel carriages
- 2 = 4 steel carriages
- 3 = 6 steel carriages
- 4 = 8 steel carriages

ball-type linear drive

- 0 = non
- 3 = pitch 5 mm
- 4 = pitch 10 mm
- 5 = pitch 20 mm
- 6 = pitch 40 mm

profile length

- e.g. **0029** = 290 mm (min.)
- 0389** = 3890 mm (max.)

version with two spindles
on request

ile20/20

iselGermanyAG

Bürgermeister-Ebert-Straße 40, D-36124 Eichenzell
Tel: +49 (0) 66 59/981 - 700 | E-Mail: automation@isel.com

www.isel.com