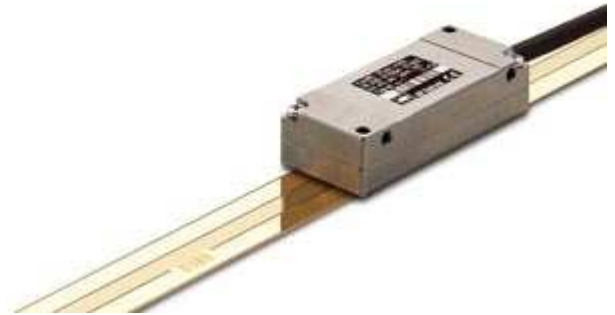


➤ MS 20 Series

Open Linear Encoder with single-field scanning

- Easy mounting as a result of large mounting tolerances
- High insensitivity to contamination by use of an extensive Quasi-singlefield scanning principle
- High traversing speed
- Integrated subdividing electronics in the encoder head for up to times 100 interpolation (before quadrature)
- "True" Reference Mark (accurate and repeatable from both traversing directions)
- **MS 20**: Two independent switch signals (optical) for individual functions
- **MS 21**: Position of Reference Mark can be selected by the customer
- **MS 21**: One switch signal for special functions



System resolution μm	Accuracy-grades Glass scale ±μm/m	Accuracy-grades Steel tape scale ±μm/m	Grating pitch μm	Output signal analog (Vpp)	Output signal digital (interpolation)
see *	±3, ±5	±5, ±15	40	MS 20.04, MS 21.04	--
2	±3, ±5	±5, ±15	40	--	MS 20.64, MS 21.64 (5)
1	±3, ±5	±5, ±15	40	--	MS 20.74, MS 21.74 (10)
0,5	±3, ±5	±5, ±15	40	--	MS 20.44, MS 21.44 (20)
0,4	±3, ±5	±5, ±15	40	--	MS 20.54, MS 21.54 (25)
0,2	±3, ±5	±5, ±15	40	--	MS 20.84, MS 21.84 (50)
0,1	±3, ±5	±5, ±15	40	--	MS 20.94, MS 21.94(100)

* = depending on external interpolation

Max. measuring length:

glass scale to 3040 mm
steel tape scale to 8840 mm

Position of the Reference Mark:
(RI)

standard separated by distances of n x 50 mm
resp. at any location selected by customer
MS 21: selected by customer

Output analog:

typical 1 Vpp

Output digital:

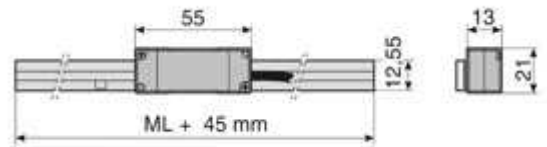
square wave signals (single ended)
with integrated Subdividing Electronics
Kabellänge bei dieser Ausführung max. 10 m

square wave signals (differential) via Line Driver RS 422 standard
with integrated Subdividing Electronics
with analog signal switch-over for setup

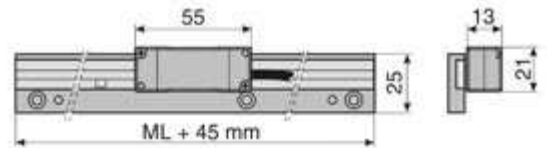
Tape carrier:
Different types
are available

MS 20/21.xx GK = Glass scale with adhesive tape

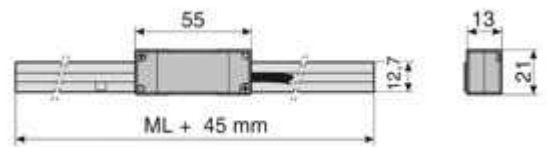
(Downloads at the end
of this side)



MS 20/21.xx GA = Glass scale mounted onto aluminium carrier,
and mounting bolts holes

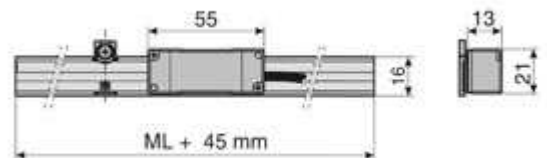


MS 20/21.xx MK = steel tape scale with adhesive tape



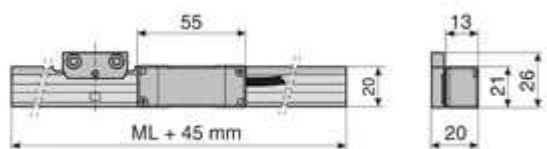
MS 20.xx MP = steel tape scale in aluminium carrier with clamping element,
carrier glued

MS 21.xx MP = on request



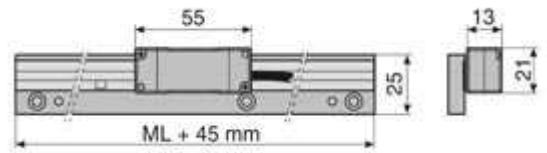
MS 20.xx MT = steel tape scale in aluminium carrier with clamping element,
and mounting bolts holes

MS 21.xx MT = on request



MS 20/21.xx MA = steel tape scale mounted onto aluminium carrier,
and mounting bolts holes

MS 20/21.xx MS = steel tape scale mounted onto steel carrier,
and mounting bolts holes



(techn. adjustment in reserve)

Dimensions and Mounting possibilities:
(for Adobe Acrobat 5.0 or higher)