

MSA 352 SERIES - TECHNICAL DATA

Features:

- Max. measuring length: 3040 mm
- Rigid mounting; large cross-section
- Mounting holes on the extrusion ends
- Reference marks
- Additional mounting support for longer measuring lengths
- MSA 352 is equipped with an additional set of sealing lips; the other features are identical with MSA 350

Optional: the MSA 352 is available with air inlets on extrusion ends.

In addition to the two sets of sealing lips, low pressure air helps to keep out coolants and contamination.

The RSF **air pressure unit DA 400** is designed to clean and regulate the encoder air.

Scale model	System resolution [µm]	Accuracy grades [µm/m]	Grating pitch [µm]	Integrated interpolation	Max. velocity [m/s] continuous	Max. velocity [m/s] momentary
Square-wave signals with integrated Subdividing Electronics						
MSA 352.24	10	±10	40	times 1	1	2
MSA 352.23	5	±5, ±10	20	times 1	1	2
MSA 352.64	2	±5, ±10	40	times 5	1	2
MSA 352.63	1	±5, ±10	20	times 5	1	1
MSA 352.73	0,5	±5, ±10	20	times 10	1	1

Other accuracy grades or grating pitches (e. g. Inch) on request

Standard measuring lengths [mm]:

170, 220, 270, 320, 370, 420, 470, 520, 620, 670, 720, 770, 820, 920, 1040, 1140, 1240, 1340, 1440, 1540, 1640, 1740, 1840, 2040, 2240, 2440, 2640, 2840, 3040

Scale unit:

Glass scale ($\alpha \approx 8.5 \times 10^{-6}/K$)

Location of the reference marks:

- Distance-coded reference marks: after travelling max. 20 mm the absolute position is available
- Up to measuring length 920 mm: one reference mark in the middle of the measuring length or 35 mm from both ends of measuring length; measuring length 1040 mm and longer: 45 mm from both ends of measuring length
- Optional: one reference mark at any location; additional reference marks by distances of $n \times 50$ mm

Required moving force:

Two sets of sealing lips: < 6 N

RoHS-conformity:

The Linear Encoders of the MSA 352 series comply with the guideline of the RoHS-directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment

Environmental sealing acc. EN 60529:

- With two sets of sealing lips: IP 54
- With DA 400: IP 64

Permissible temperature

-20 °C to +70 °C (storage)
0 °C to +50 °C (operation)

Weight (approx.):

3 kg/m (scale spar) + 0.4 kg (reading head with 3 m cable)

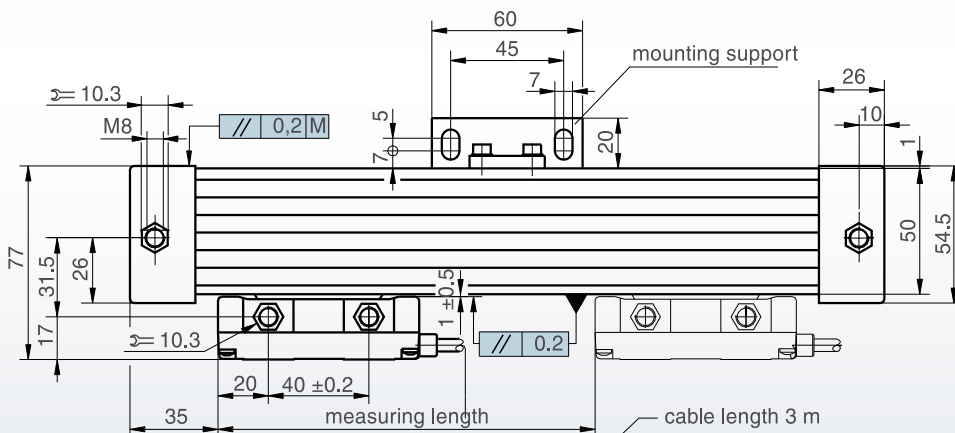
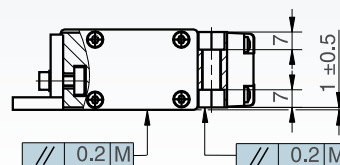
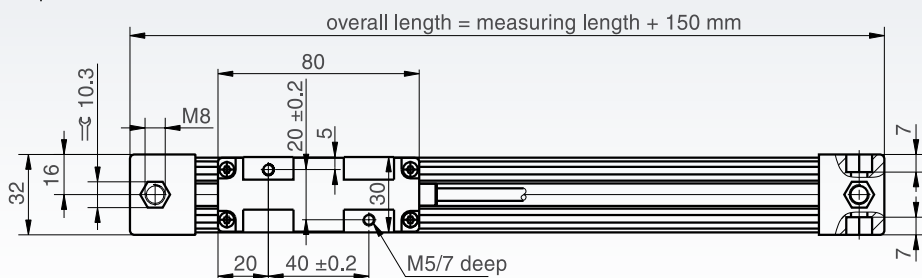
Signal output (optional)

- **Square-wave signals** (single ended) with integrated Subdividing Electronics
- **Square-wave signals** (differential) via Line Driver RS 422 Standard with integrated Subdividing Electronics

Power supply:

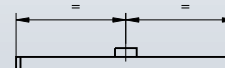
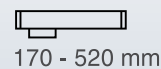
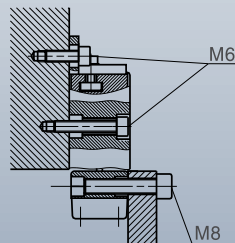
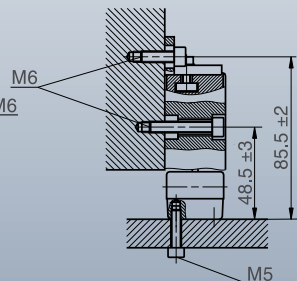
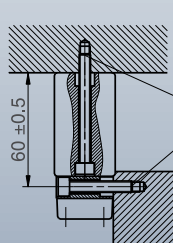
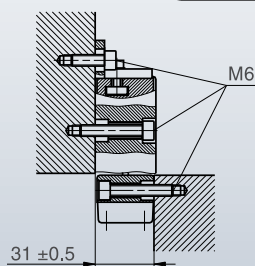
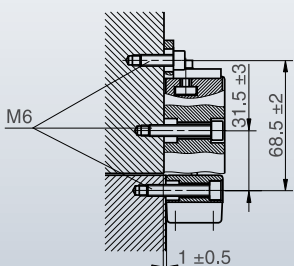
+5 V ±5%, < 150 mA (without interpolation, unloaded)
< 200 mA (with interpolation, unloaded)

DIMENSIONS - TOLERANCES - MOUNTING POSSIBILITIES



M = machine guideway

quantity and position of the mounting support per measuring length



620 - 1020 mm 1x



1140 - 2040 mm 2x
2240 - 3040 mm 3x