## MOTION

The following denotations shall be used:

 $\mathbb{R}$  the set of real numbers.

 $\overline{\mathbb{R}} \quad \overline{\mathbb{R}} := \mathbb{R} \cup \{-\infty, +\infty\}.$ 

 $\mathbb{IR}$  the set of nonempty, closed and bounded real intervals.

 $\overline{\mathbb{IR}}$  the set of closed real intervals, including unbounded intervals and the empty set.

 $\mathbb{F}$  the set of (finite) floating-point numbers representable in some floating-point format.

$$\overline{\mathbb{F}}$$
  $\overline{\mathbb{F}} := \mathbb{F} \cup \{-\infty, +\infty\}.$ 

 $\mathbb{IF}$  the intervals of  $\mathbb{IR}$  whose bounds are in  $\mathbb{F}$ .

 $\overline{\mathbb{IF}}$  the intervals of  $\overline{\mathbb{IR}}$  whose bounds are in  $\overline{\mathbb{F}}$  and the empty set.