CLAIMS

1. A door seal, comprising
a fastening element (20) for fastening to a door,
a seal receiving element (40),
a lowering mechanism unit which mechanically couples the fastening element (20) to the seal receiving element (40) and which is designed in order to lower the seal receiving element (40) relative to the fastening element (20) from a raised position into a lowered position and conversely to raise same from the lowered position to the raised position, and
a sealing element (50) which is fastened to the seal receiving element (40) and extends in a longitudinal direction,
wherein the sealing element (50) provides a first sealing line (54a) by means of a first sealing element portion (54) which is lowerable and raisable by means of the lowering mechanism unit,
wherein the first sealing element portion (54) is a sealing lip and/or a sealing arc, wherein the sealing arc extends from a first arc end to a second arc end, and wherein the two arc ends are lowerable and raisable together with the seal receiving element,
characterized
in that the sealing element (50) provides a second sealing line (55a), which runs parallel to the first sealing line (54a), by means of a second sealing element portion (55),
in that the second sealing element portion (55) has a first side and a second side (52, 56), wherein the first side (52) is lowerable and raisable by means of the lowering mechanism unit, and the second side (56) is fixed in the position in relation to the fastening element (20), and

in that, in the lowered state, the first and the second sealing line (54a, 55a) seal against a surface located outside the door seal.

2. The door seal as claimed in claim 1, wherein the second sealing element portion is formed by a sealing leg arc (55), in particular wherein the second sealing element portion is a rolling seal.

3. The door seal as claimed in either of claims 1 and 2, wherein the first sealing element portion (54) is lowerable and raisable with a full lowering stroke of the lowering mechanism unit, wherein the full lowering stroke defines a distance, and wherein, in the raised state, the second side (56) of the second sealing element portion (55) is mounted along this distance at a lower height than the first sealing element portion (54).

4. The door seal as claimed in one of claims 1 to 3, wherein the first sealing element portion (54) is lowerable and raisable with a full lowering stroke of the lowering mechanism unit, and wherein the second sealing element portion (55) is lowerable and raisable by means of the lowering mechanism with a fraction, in particular half, of the lowering stroke of the lowering mechanism unit.

5. The door seal as claimed in one of claims 1 to 4, wherein the second side (56) of the second sealing element portion (55) is arranged offset laterally transversely with respect to the longitudinal direction for the fastening of the first sealing element portion (54).

6. The door seal as claimed in one of claims 1 to 5, wherein the first and the second sealing element portion (54, 55), preferably wherein the entire

sealing element (50), are/is designed as a single piece.

7. The door seal as claimed in one of claims 1 to 6, characterized in that the sealing element (50) is mounted in a freely displaceable manner in the longitudinal direction relative to the fastening element (20), and is preferably mounted in a freely displaceable manner on the seal receiving element (40).

8. The door seal as claimed in claims 1 to 7, characterized in that the lowering mechanism unit moves the seal receiving element (40) relative to the fastening element (20) between a raised and a lowered position on a movement path which contains a vertical movement component and a horizontal movement component running in the longitudinal direction of the sealing element (50), and in that the sealing element (50) is fastened in a fixed manner with respect to the fastening element (20) in the longitudinal direction and so as to be movable relative to the seal receiving element (40) in the longitudinal direction of the sealing element (50).

9. The door seal as claimed in one of the preceding claims, characterized in that the sealing element (50) has a first fastening portion (52) for fastening to the seal receiving element (40) and a second fastening portion (56), which is spaced apart from the first fastening portion (52), for fastening the sealing element (50) to the door or to the fastening element (20).

10. The door seal as claimed in claim 9, characterized in that the first fastening portion (52) is fastened to the seal receiving element (40), and

the second sealing line (55a) is arranged mechanically between the first and the second fastening portion (52, 56).

11. The door seal as claimed in claim 9 or 10, characterized in that the first fastening portion (52) is displaceable relative to the fastening element (40) and the second fastening portion (56) is designed for positionally fixed fastening to the door or to the fastening element (20).

12. The door seal as claimed in one of the preceding claims,
- characterized in that
- the fastening element (20)
- the seal receiving element (40),
- the first sealing element portion (54),
- the second sealing element portion (55),
- the first fastening portion (52), and/or
- the second fastening portion (56)

extend over the entire length of the sealing element (50).

13. The door seal as claimed in one of the preceding claims, characterized in that
- the first fastening portion (52) extends parallel and over the same length as the second fastening portion (56), and/or
- the first sealing element portion (52) extends parallel and over the same length as the second sealing element portion (56).

14. The door seal as claimed in one of the preceding claims, characterized in that the second sealing line (55a) is formed on an arc portion (55) which is arched convexly outward and preferably, at one arc end, has a first fastening region (56) for positionally fixed fastening of the sealing

element to the door or to the fastening element (20), and, at another arc end, has a second fastening region (52) for the vertically movable fastening relative to the fastening element (20).

15. The door seal as claimed in one of the preceding claims, characterized in that the sealing element (50) has a first fastening region (56) for positionally fixed fastening of the sealing element (50) to the door, and a second fastening region (52) for the vertically movable fastening relative to the fastening element (20), and in that a frame sealing portion of the sealing element (50) extends from the second fastening region (52) beyond the first fastening region (56) for positioning in the door leaf surface and sealing against the door frame.

16. A door leaf with a door seal as claimed in one of the preceding claims, characterized in that the second sealing element portion (55) reaches as far as the border of the lower edge of the door leaf, in particular in such a manner that the second sealing line (55a) is arranged adjacent to the border of the lower edge of the door leaf, and is preferably arranged at a distance of less than 10 mm, preferably less than 7.5 mm, from the border of the lower edge of the door leaf.

17. The door leaf as claimed in claim 16, characterized in that the second sealing element portion (55) is designed as a frame sealing portion and extends into the plane of the door leaf surface facing the frame, or extends beyond said plane.

18. Use of a door seal as claimed in claim 9 or a claim referring back to claim 9 for sealing the

air gap between a door and a floor or a floor sill in such a manner that the second fastening portion (55) is fastened in a border region of a lower edge of the door or to the fastening element (20).

19. The use as claimed in claim 18 with a door seal as claimed in claim 14 in such a manner that part of the second fastening portion (55) runs in the border region of the lower edge of the door, preferably in alignment with the door leaf surface above the lower edge border region.

20. A door seal, comprising
- a fastening element (20) for fastening to a door,
- a seal receiving element (40),
- a lowering mechanism unit which mechanically couples the fastening element (20) to the seal receiving element (40) and which is designed in order to lower the seal receiving element (40) from a raised position into a lowered position and conversely to raise same from the lowered position to the raised position, and
- a sealing element (50) which is fastened to the seal receiving element (40) and extends in a longitudinal direction,
characterized in that the sealing element (50) is mounted in a freely displaceable manner in the longitudinal direction relative to the fastening element (20), and preferably is mounted in a freely displaceable manner on the seal receiving element (40).

CLAIMS

1. A door seal, comprising
a fastening element for fastening to a door,
a seal receiving element,
a lowering mechanism unit which mechanically couples the fastening element to the seal receiving element and which is designed in order to lower the seal receiving element relative to the fastening element from a raised position into a lowered position and conversely to raise same from the lowered position to the raised position, and
a sealing element which is fastened to the seal receiving element and extends in a longitudinal direction,
wherein the sealing element provides a first sealing line by means of a first sealing element portion, which is lowerable and raisable by means of the lowering mechanism unit,
wherein the first sealing element portion is a sealing lip, wherein the sealing lip is lowerable and raisable as a whole together with the seal receiving element,
wherein the sealing element provides a second sealing line, which runs parallel to the first sealing line, by means of a second sealing element portion,
wherein the second sealing element portion has a first side and a second side, wherein the first side is lowerable and raisable by means of the lowering mechanism unit, and the second side is fixed in its position in relation to the fastening element, and
wherein, in the lowered state, the first and the second sealing line seal against a surface located outside the door seal.

2. A door seal, comprising

a fastening element for fastening to a door,
a seal receiving element,
a lowering mechanism unit which mechanically couples the fastening element to the seal receiving element and which is designed in order to lower the seal receiving element relative to the fastening element from a raised position into a lowered position and conversely to raise same from the lowered position to the raised position, and
a sealing element which is fastened to the seal receiving element and extends in a longitudinal direction,
wherein the sealing element provides a first sealing line by means of a first sealing element portion, which is lowerable and raisable by means of the lowering mechanism unit,
wherein the first sealing element portion is a sealing arc, wherein the sealing arc extends from a first arc end to a second arc end, and wherein the two arc ends are lowerable and raisable together with the seal receiving element,
wherein the sealing element provides a second sealing line, which runs parallel to the first sealing line, by means of a second sealing element portion,
wherein the second sealing element portion has a first side and a second side, wherein the first side is lowerable and raisable by means of the lowering mechanism unit, and the second side is fixed in its position in relation to the fastening element, and
wherein, in the lowered state, the first and the second sealing line seal against a surface located outside the door seal.

3. A door seal, comprising
a fastening element for fastening to a door,
a seal receiving element,

a lowering mechanism unit which mechanically couples the fastening element to the seal receiving element and which is designed in order to lower the seal receiving element relative to the fastening element from a raised position into a lowered position and conversely to raise same from the lowered position to the raised position, and

a sealing element which is fastened to the seal receiving element and extends in a longitudinal direction,

wherein the sealing element provides a first sealing line by means of a first sealing element portion, which is lowerable and raisable by means of the lowering mechanism unit,

wherein the first sealing element portion is a sealing lip and a sealing arc, wherein the sealing lip is lowerable and raisable as a whole together with the seal receiving element and wherein the sealing arc extends from a first arc end to a second arc end, and wherein the two arc ends are lowerable and raisable together with the seal receiving element,

wherein the sealing element provides a second sealing line, which runs parallel to the first sealing line, by means of a second sealing element portion,

wherein the second sealing element portion has a first side and a second side, wherein the first side is lowerable and raisable by means of the lowering mechanism unit, and the second side is fixed in its position in relation to the fastening element, and

wherein, in the lowered state, the first and the second sealing line seal against a surface located outside the door seal.

4. The door seal as claimed in one of claims 1 to 3, wherein the second sealing element portion is formed by a sealing leg arc.

5. The door seal as claimed in any one of claims 1 to 4, wherein the first sealing element portion is lowerable and raisable with a full lowering stroke of the lowering mechanism unit, wherein the full lowering stroke defines a distance, and wherein, in the raised state, the second side of the second sealing element portion is mounted along this distance at a lower height than the first sealing element portion.

6. The door seal as claimed in any one of claims 1 to 5, wherein the first sealing element portion is lowerable and raisable with a full lowering stroke of the lowering mechanism unit, and wherein the second sealing element portion is lowerable and raisable by means of the lowering mechanism with a fraction of the lowering stroke of the lowering mechanism unit.

7. The door seal as claimed in any one of claims 1 to 6, wherein the second side of the second sealing element portion is arranged offset laterally transversely with respect to the longitudinal direction for the fastening of the first sealing element portion.

8. The door seal as claimed in any one of claims 1 to 7, wherein the first and the second sealing element portion are designed as a single piece.

9. The door seal as claimed in any one of claims 1 to 8, wherein the sealing element is mounted in a freely displaceable manner in the longitudinal direction relative to the fastening element and is

mounted in a freely displaceable manner on the seal receiving element.

10. The door seal as claimed in any one of claims 1 to 9, wherein the lowering mechanism unit moves the seal receiving element relative to the fastening element between a raised and a lowered position on a movement path which contains a vertical movement component and a horizontal movement component running in the longitudinal direction of the sealing element, and wherein the sealing element is fastened in a fixed manner with respect to the fastening element in the longitudinal direction and so as to be movable relative to the seal receiving element in the longitudinal direction of the sealing element.

11. The door seal as claimed in any one of the preceding claims, wherein the sealing element has a first fastening portion for fastening to the seal receiving element and a second fastening portion, which is spaced apart from the first fastening portion, for fastening the sealing element to the door or to the fastening element.

12. The door seal as claimed in claim 11, wherein the first fastening portion is fastened to the seal receiving element, and the second sealing line is arranged mechanically between the first and the second fastening portion.

13. The door seal as claimed in claim 11 or 12, wherein the first fastening portion is displaceable relative to the fastening element and the second fastening portion is designed for positionally fixed fastening to the door or to the fastening element.

14. The door seal as claimed in any one of the preceding claims,
wherein
- the fastening element,
- the seal receiving element,
- the first sealing element portion,
- the second sealing element portion,
- the first fastening portion, and/or
- the second fastening portion

extend over the entire length of the sealing element.

15. The door seal as claimed in any one of the preceding claims, wherein
- the first fastening portion extends parallel and over the same length as the second fastening portion, and/or
- the first sealing element portion extends parallel and over the same length as the second sealing element portion.

16. The door seal as claimed in any one of the preceding claims, wherein the second sealing line is formed on an arc portion which is arched convexly outward.

17. The door seal as claimed in any one of the preceding claims, wherein the sealing element has a first fastening region for positionally fixed fastening of the sealing element to the door, and a second fastening region for the vertically movable fastening relative to the fastening element, and wherein a frame sealing portion of the sealing element extends from the second fastening region beyond the first fastening region for positioning in the door leaf surface and sealing against the door frame.

18. A door leaf with a door seal as claimed in any one of the preceding claims, wherein the second sealing element portion reaches as far as the border of the lower edge of the door leaf.

19. The door leaf as claimed in claim 18, wherein the second sealing element portion is designed as a frame sealing portion and extends into the plane of the door leaf surface facing the frame, or extends beyond said plane.

20. Use of a door seal as claimed in claim 11 or any claim referring back to claim 11 for sealing the air gap between a door and a floor or a floor sill in such a manner that the second fastening portion is fastened in a border region of a lower edge of the door or to the fastening element.

21. The use as claimed in claim 20 with a door seal as claimed in claim 16 in such a manner that part of the second fastening portion runs in the border region of the lower edge of the door.

22. The door seal as claimed in claim 1, wherein the second sealing element portion is a rolling seal.

23. The door seal as claimed in claim 16, wherein the second sealing line has, at one arc end, a first fastening region for stationary fastening of the sealing element to the door or to the fastening element, and, at another arc end, has a second fastening region for the vertically movable fastening relative to the fastening element.

24. The door leaf as claimed in claim 18, wherein the second sealing element portion reaches as far as the border of the lower edge of the door leaf in such a manner that the second sealing line is

arranged adjacent to the border of the lower edge of the door leaf.