CLAIMS:

1. A fitting for conduits having a reference axis, comprising:

a first threaded fitting component;

a conduit gripping device receivable within the first threaded fitting component;

a second threaded fitting component that threadably joins with the first threaded fitting component to produce relative axial stroke between the first threaded fitting component and the second threaded fitting component, wherein when the fitting is pulled-up on a conduit the first fitting component and the second fitting component can be joined together to a first relative axial position of the first and second fitting components to effect conduit grip and seal by the conduit gripping device at the first relative axial position; and

a stroke resisting member having a first axial length, the stroke resisting member being disposed between a threaded portion of the first fitting component and a radially extending portion of the second fitting component, and including a first end portion axially fixed to the first fitting component and having a first radial thickness, a second end portion including a radially extending bearing portion having a second radial thickness, and a web connecting the first and second end portions, the web having a third radial thickness smaller than each of the first and second radial thicknesses and defining an axially deformable portion;

wherein the bearing portion of the stroke resisting member is axially engaged by the radially extending portion of the second fitting component when the first and second fitting components are joined together to the first relative axial position, the stroke resisting member resisting additional axial stroke of the first and second fitting components, such that a tightening torque beyond the first relative axial position is increased by the axial engagement; and

wherein the axially deformable portion of the stroke resisting member is plastically compressed such that the stroke resisting member has a second axial length smaller than the first axial length when the first and second fitting components are joined together to a second relative axial position advanced beyond the first relative axial position.

2. The fitting of claim 1, wherein the stroke resisting member is integral with the first fitting component.

3. The fitting of claim 1, wherein the stroke resisting member is assembled with the first fitting component, such that the first fitting component and the stroke resisting member are retained together as a discontinuous preassembly.

4. The fitting of claim 1, wherein the first fitting component comprises a female threaded nut.

5. The fitting of claim 4, wherein the stroke resisting member is axially fixed to the female threaded nut.

6. The fitting of claim 1 wherein the first end portion of the stroke resisting member comprises a first base portion defining the first radial thickness and a first wall portion having a fourth radial thickness smaller than the first radial thickness and extending axially from the first base portion toward the second end portion, and the second end portion of the stroke resisting member comprises a second base portion defining the second radial thickness and a second wall portion having a fifth radial thickness smaller than the second radial thickness and extending axially from the second base portion toward the first end portion, with the web portion extending from the first wall portion to the second wall portion.

7. A fitting for conduits having a reference axis, comprising:

a first threaded fitting component;

a conduit gripping device receivable within the first threaded fitting component;

a second threaded fitting component that threadably joins with the first threaded fitting component to produce relative axial stroke between the first threaded fitting component and the second threaded fitting component, wherein when the fitting is pulled-up on a conduit the first fitting component and the second fitting component can be joined together to a first relative axial position of the first and second fitting components to effect conduit grip and seal by the conduit gripping device at the first relative axial position; and

a stroke resisting member disposed between a threaded portion of the first fitting component and a radially extending portion of the second fitting component, wherein the stroke resisting member comprises a proximal ring portion having a first radial thickness, a distal ring portion having a second radial thickness, a first wall portion having a third radial thickness smaller

than the first radial thickness and extending axially from the proximal ring toward the distal ring, a second wall portion having a fourth radial thickness smaller than the second radial thickness and extending axially from the distal ring toward the proximal ring, and a web connecting the first and second wall portions, the web being angled with respect to each of the first and second wall portions to define a hinge portion.

8. The fitting of claim 7, wherein the proximal ring portion is integral with the first fitting component.

9. The fitting of claim 7, wherein the proximal ring portion includes a radially inward extending protrusion for cartridging engagement with a threaded fitting component.

10. The fitting of claim 7, wherein the distal ring portion comprises a radially extending bearing surface for engaging the radially extending portion of the second fitting component.

11. The fitting of claim 7, wherein the first wall portion extends from an inner radial portion of the proximal ring.

12. The fitting of claim 11, wherein the second wall portion extends from an inner radial portion of the distal ring.

13. The fitting of claim 7, wherein the first wall portion has a first outer diameter and the second wall portion has a second outer diameter different from the first outer diameter.

14. The fitting of claim 7, wherein the first wall portion has a first inner diameter and the second wall portion has a second inner diameter different from the first inner diameter.

15. The fitting of claim 7, wherein the web includes a portion that is generally V-shaped when viewed in longitudinal cross-section.

16. The fitting of claim 7, wherein the hinge portion of the web is entirely radially outward of the first and second wall portions.

17. The fitting of claim 7, wherein the web plastically deforms under axial compression, thereby reducing an axial length of the stroke resisting member.

18. The fitting of claim 7, wherein the web buckles when an axial load is applied to one of the proximal ring portion and the distal ring portion, thereby reducing an axial length of the stroke resisting member.

19. The fitting of claim 7, wherein the stroke resisting member is generally W-shaped when viewed in longitudinal cross-section.

20. The fitting of claim 7, wherein the web has a uniform thickness.

21. A fitting for conduits having a reference axis, comprising:

a first threaded fitting component;

a conduit gripping device receivable within the first threaded fitting component;

a second threaded fitting component that threadably joins with the first threaded fitting component to produce relative axial stroke between the first threaded fitting component and the second threaded fitting component, wherein when the fitting is pulled-up on a conduit the first fitting component and the second fitting component can be joined together to a first relative axial position of the first and second fitting components to effect conduit grip and seal by the conduit gripping device at the first relative axial position; and

a stroke resisting member disposed between a threaded portion of the first fitting component and a radially extending portion of the second fitting component, the stroke resisting member including an annular body having a central axis and comprising a proximal ring portion having a first radial thickness, a distal ring portion having a second radial thickness, a first wall portion having a third radial thickness smaller than the first radial thickness and extending axially from the proximal ring toward the distal ring, a second wall portion having a fourth radial thickness smaller than the second radial thickness and extending axially from the distal ring toward the

proximal ring, and a web connecting the first and second wall portions, the web being angled with respect to each of the first and second wall portions to define a hinge portion.

22. A fitting for conduits having a reference axis, comprising:

a first threaded fitting component;

a conduit gripping device receivable within the first threaded fitting component;

a second threaded fitting component that threadably joins with the first threaded fitting component to produce relative axial stroke between the first threaded fitting component and the second threaded fitting component, wherein when the fitting is pulled-up on a conduit the first fitting component and the second fitting component can be joined together to a first relative axial position of the first and second fitting components to effect conduit grip and seal by the conduit gripping device at the first relative axial position; and

a stroke resisting member disposed between a threaded portion of the first fitting component and a radially extending portion of the second fitting component, the stroke resisting member including a first end portion axially fixed to the first fitting component and having a first radial thickness, a second end portion including a radially extending bearing portion having a second radial thickness, and a web connecting the first and second end portions, the web having a third radial thickness smaller than each of the first and second radial thicknesses and defining a hinge portion.

23. A stroke resisting member for a fitting, the stroke resisting member comprising:

an annular body having a central axis and comprising a proximal ring portion having a first radial thickness, a distal ring portion having a second radial thickness, a first wall portion having a third radial thickness smaller than the first radial thickness and extending axially from the proximal ring toward the distal ring, a second wall portion having a fourth radial thickness smaller than the second radial thickness and extending axially from the distal ring toward the proximal ring, and a web connecting the first and second wall portions, the web being angled with respect to each of the first and second wall portions to define a hinge portion.

24. A fitting component comprising:

a threaded annular body having a central axis and comprising an internal bore; and

a stroke resisting member including a first end portion axially fixed to the threaded annular body and having a first radial thickness, a second end portion including a radially extending bearing portion having a second radial thickness, and a web connecting the first and second end portions, the web having a third radial thickness smaller than each of the first and second radial thicknesses and defining a hinge portion.

25. The fitting component of claim 24, wherein the threaded annular body comprises a female threaded fitting nut.

26. The fitting component of claim 24, wherein the first end portion of the stroke resisting member is integrally formed with the threaded annular body.

27. The fitting component of claim 24, wherein the first end portion of the stroke resisting member is assembled with the threaded annular body such that the threaded annular body and the stroke resisting member are retained together as a discontinuous preassembly.

28. The fitting component of claim 24, wherein the first end portion of the stroke resisting member comprises a first base portion defining the first radial thickness and a first wall portion having a fourth radial thickness smaller than the first radial thickness and extending axially from the first base portion toward the second end portion, and the second end portion of the stroke resisting member comprises a second base portion defining the second radial thickness and a second wall portion having a fifth radial thickness smaller than the second radial thickness and extending axially from the second base portion toward the first end portion, with the web portion extending from the first wall portion to the second wall portion.

29. The fitting component of claim 24, wherein the web plastically deforms under axial compression, thereby reducing an axial length of the stroke resisting member.

30. The fitting component of claim 24, wherein the web portion buckles when an axial load is applied to the bearing portion, thereby reducing an axial length of the stroke resisting member.

31. A subassembly for a conduit fitting, comprising:

a first ferrule and a second ferrule being alignable relative to an axis, the first ferrule comprising a camming surface at a back portion thereof, the second ferrule comprising a surface that contacts the camming surface when the first ferrule and the second ferrule are axially moved together along the axis,

a retaining structure that retains the first ferrule and the second ferrule together as a subassembly, the retaining structure comprising a member at a rearward portion of the first ferrule; the member comprising a wall that delimits a recess; the second ferrule comprising a portion that is disposed in the recess,

the wall comprising a portion that is acute relative to the axis in a forward direction.

32. A ferrule comprising:

a unitary body with a bore therethrough along an axis, a member that extends from a back portion of the body; the member comprising a web and a hook, the member comprising a wall that forms part of the web and the hook, and wherein the wall, the web and the hook delimit a recess,

the hook and the web being joined by a portion of the wall that forms a hinge;

wherein the hook includes a camming surface extending rearward and radially outward from an axially extending radially inward end portion, the camming surface being angled with respect to the radially inward end portion.

33. A subassembly for a conduit fitting, comprising:

a first ferrule and a second ferrule being alignable relative to an axis,

a retaining structure that retains the first ferrule and the second ferrule together as a subassembly, the retaining structure comprising a member at a back portion of the first ferrule;

the member comprising a web, a hook, and a wall that forms part of the web and the hook and delimits a recess; the second ferrule comprising a portion that is disposed in the recess,

the wall comprising a crease that joins the hook to the web, the wall comprising a portion that is acute in a forward direction relative to the axis.

34. A subassembly for a conduit fitting, comprising:

a first ferrule and a second ferrule being alignable relative to an axis,

a retaining structure that retains the first ferrule and the second ferrule together in axial alignment as a subassembly, the retaining structure comprising a member at a back portion of the first ferrule;

the member comprising a web, a hook, and a wall that forms part of the web and the hook and delimits a recess; the second ferrule comprising a portion that is received in the recess when the first ferrule and the second ferrule are retained together,

the wall comprising a crease that joins the hook to the web, the hook being deformed in a forward direction relative to a radial line from the axis.

35. A method of cartridging first and second ferrules as a discontinuous preassembly, the method comprising:

providing a first ferrule having a rearward extending retaining member defining an inner radial recess, the retaining member including a radially inward extension defining a rearward facing camming surface;

aligning a second ferrule with the first ferrule along a common central axis;

axially pressing the second ferrule against the first ferrule such that a radially outward projection of the second ferrule engages the camming surface of the retaining member to axially deform and radially expand the radially inward extension, thereby receiving the second ferrule projection in the inner radial recess;

wherein at least one of the axial deformation and the radial expansion of the radially inward extension is at least partially elastic, such that the radially inward extension snaps into a second ferrule retaining condition after the second ferrule projection is received in the inner radial recess.

36. A ferrule comprising:

a unitary body with a bore therethrough along an axis, a member that extends from a back portion of the body; the member comprising a web and a radially inward extension together defining an inner radial recess, and a radially outward flange separated from the back portion of the body by the web.

37. A fitting for conduits having a reference axis, comprising:

a first threaded fitting component;

a second threaded fitting component that threadably joins with the first threaded fitting component to produce relative axial stroke between the first threaded fitting component and the second threaded fitting component;

a first conduit gripping device; and

a second conduit gripping device, wherein when the fitting is pulled-up on a conduit the first fitting component and the second fitting component can be joined together to a first relative axial position of the first fitting component and the second fitting component to effect conduit grip and seal at the first relative axial position, with a rear surface of the first conduit gripping device engaging a front surface of the second conduit gripping device;

wherein at least one of the first conduit gripping device and the second conduit gripping device comprises a stroke resisting member axially engaging a bearing surface of the other of the first conduit gripping device and the second conduit gripping device at a location spaced apart from the rear surface first conduit gripping device and the front surface of the second conduit gripping device when the first and second fitting components are joined together to the first relative axial position, such that a tightening torque beyond the first relative axial position is increased by the axial engagement; and

wherein the stroke resisting member is plastically axially compressed when the first and second fitting components are joined together to a second relative axial position advanced beyond the first relative axial position.

38. A ferrule set comprising:

a first ferrule including a stroke resisting member extending axially rearward from a back portion of the first ferrule; and

a second ferrule having a radially extending outer flange portion, wherein a majority of the outer flange portion is radially aligned with a majority of a rearmost end surface of the stroke resisting member when the first and second ferrules are aligned about a common central axis.

39. A fitting comprising:

a first fitting component and a second fitting component that can be joined to said first fitting component to form a fitting assembly; and

a ferrule receivable between the first fitting component and the second fitting component, the ferrule including a forward portion that engages a tapered camming surface of the first fitting component, and a contoured surface extending rearward from the forward portion at a continuous rearward declining angle with respect to the forward portion.

40. A ferrule comprising a forward frustoconical portion, a contoured surface extending rearward from the forward portion at a continuous rearward declining angle with respect to the forward portion, and a rear flange portion extending radially outward of the contoured surface.