

APPROVED

Certificate of Compliance

This certificate is issued for the following:

Compression Type Pipe and Fittings
SIZES 22, 28, 35, 42, 54, 76, 89 and 108 mm
(See Table Attached)

Prepared for:

MIM Kembla
Gloucester Boulevard
PO Box 21
Port Kembla, NSW 2505
Australia

FM Approvals Class: 1920, dated November 2007

Approval Identification: 0003051399 Approval Granted: January 23, 2014

To verify the availability of the Approved product, please refer to www.approvalguide.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.

Richard B. Dumme
Group Manager – Fire Protection
FM Approvals
1151 Boston-Providence Turnpike
Norwood, MA 02062



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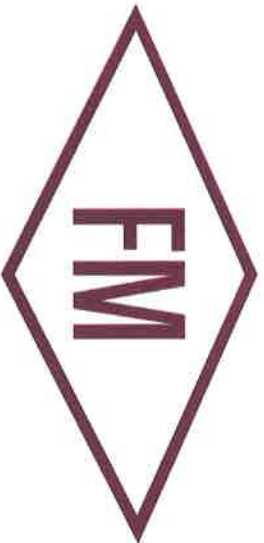
| Product | Listing Country | Nominal Pipe Size, In. | Rated Working Pressure, psi | Rated Working Pressure, kPa | Certification Type |
|--|-----------------|---|-----------------------------|-----------------------------|--------------------|
| Series X9525 Press Tube ^{c, d, e, i, k, m, n} | Australia | 22, 28, 35, 42, 54, 76, 89, 108 mm | 175 | 1205 | FM Approved |

c -FM Approved for use with the following assembly tools: Novopress ACO202, Novopress ACO 041
d -FM Approved for use in branch lines only.
e -FM Approved for use in sprinkler systems when joined to the sprinkler trunk pipework by an FM Approved "Transition Fitting"
i -FM Approved for use with a 12 ft maximum hanger spacing.
k -FM Approved for use in dry sprinkler systems.
m -FM Approved for use in all steel sprinkler systems composed of uncoated steel pipe.
n -FM Approved for use in hybrid systems composed of uncoated steel and plastic piping.

| Product Designation | Fitting Description | Nominal Pipe Size, mm | Rated Working Pressure, psi (kPa) | Remarks |
|---------------------|--|--|-----------------------------------|---------------|
| X9545 | Bend, 90° Female Press x Male Press | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9550 | Bend, 90° Female Press x Female Press | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9560 | Bend, 90° Female Press x Male Thread | 22 x R 3/4 28 x R 1 35 x R 1-1/4 42 x R 1-1/2 54 x R 2 | 175 (1205) | a, b, c, d, e |
| X9555 | Bend 90° Female Press x Female Thread | 22 x R 3/4 28 x R 1 35 x R 1-1/4 | 175 (1205) | a, b, c, d, e |
| X9575 | Bend, 90° Male Press x Male Press | 22, 28, 35, 42, 54 | 175 (1205) | a, b, c, d, e |
| X9565 | Bend 45° Female Press x Male Press | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9570 | Bend, 45° Female Press x Female Press | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |



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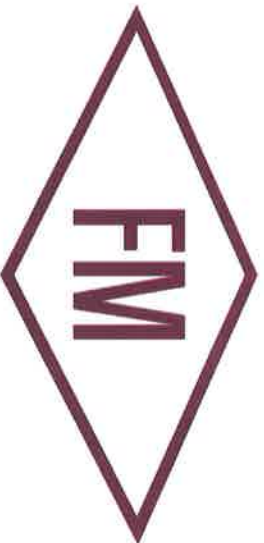
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| Product Designation | Fitting Description | Nominal Pipe Size, mm | Rated Working Pressure, psi (KPa) | Remarks |
|---------------------|---|---|-----------------------------------|---------------|
| X9590 | Bend 45° Male Press x Male Press | 22, 28, 35, 42, 54 | 175 (1205) | a, b, c, d, e |
| X9600 | Bend 15° Male Press x Male Press | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9595 | Bend, 30° Male Press x Male Press | 22, 28, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9580 | Bend, 75° Male Press x Male Press | 22, 28, 35, 42, 54 | 175 (1205) | a, b, c, d, e |
| X9585 | Bend, 60° Male Press x Male Press | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9695 | Cross-Over Female Press x Female Press | 22, 28 | 175 (1205) | a, b, c, d, e |
| X9690 | Cross-Over Male Press x Male Press | 22, 28 | 175 (1205) | a, b, c, d, e |
| X9625 | Equal Tee, Female Press Ends | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9630 | Reducing Tees, Female Press Ends | 28 x 22 x 22, 28 x 22 x 28, 35 x 22 x 35, 35 x 28 x 35, 42 x 22 x 42, 42 x 28 x 42, 42 x 35 x 42, 54 x 22 x 54 | 175 (1205) | a, b, c, d, e |
| X9631 | Reducing Tees, Female Press Ends | 54 x 28 x 54, 54 x 35 x 54, 54 x 42 x 54, 76 x 22 x 76, 76 x 28 x 76, 76 x 35 x 76, 76 x 42 x 76, 76 x 54 x 76, 89 x 22 x 89, 89 x 28 x 89, 89 x 35 x 89, 89 x 42 x 89, 89 x 54 x 89, 89 x 76 x 89, 108 x 22 x 108, 108 x 28 x 108 | 175 (1205) | a, b, c, d, e |



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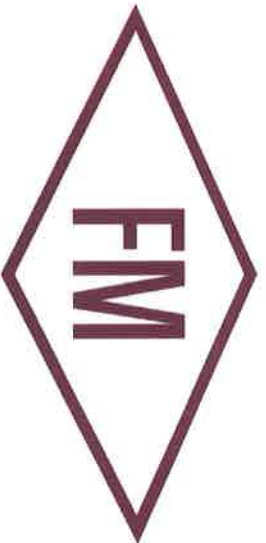
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| Product Designation | Fitting Description | Nominal Pipe Size, mm | Rated Working Pressure, psi (kPa) | Remarks |
|---------------------|---|--|-----------------------------------|---------------|
| X9632 | Reducing Tees, Female Press Ends | 108 x 35 x 108, 108 x 42 x 108, 108 x 54 x 108, 108 x 76 x 108, 108 x 89 x 108 | 175 (1205) | a, b, c, d, e |
| X9645 | Tee | 22 x Rp 1/2 x 22, 22 x Rp 3/4 x 22, 28 x Rp 1/2 x 28, 28 x Rp 3/4 x 28, 28 x Rp 1 x 28, 35 x Rp 1/2 x 35, 35 x Rp 3/4 x 35, 35 x Rp 1-1/4 x 35, 42 x Rp 1/2 x 42 | 175 (1205) | a, b, c, d, e |
| X9646 | Tee | 42 x Rp 3/4 x 42, 42 x Rp 1-1/2 x 42, 54 x Rp 1/2 x 54, 54 x Rp 3/4 x 54, 54 x Rp 2 x 54, 76 x Rp 3/4 x 76, 76 x Rp 2 x 76, 89 x Rp 3/4 x 89, 89 x Rp 2 x 89, 108 x Rp 3/4 x 108, 108 x Rp 2 x 108 | 175 (1205) | a, b, c, d, e |
| X9540 | Reducing Coupling Male Press x Female Press | 28 x 22, 35 x 22, 35 x 28, 42 x 22, 42 x 28, 42 x 35, 54 x 28, 54 x 35 | 175 (1205) | a, b, c, d, e |
| X9541 | Reducing Coupling Male Press x Female Press | 54 x 42, 76 x 54, 89 x 54, 89 x 76, 108 x 54, 108 x 76, 108 x 89 | 175 (1205) | a, b, c, d, e |
| X9605 | Reducing Coupling Female Press x Male Thread | 22 x R 1/2, 22 x R 3/4, 22 x R 1, 28 x R 3/4, 28 x R 1, 35 x R 1, 35 x R 1-1/4, 42 x R 1-1/2 | 175 (1205) | a, b, c, d, e |



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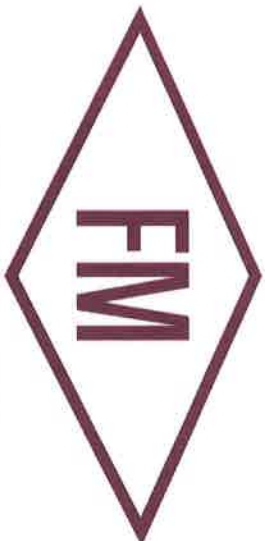
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| Product Designation | Fitting Description | Nominal Pipe Size, mm | Rated Working Pressure, psi (kPa) | Remarks |
|---------------------|---|---|-----------------------------------|---------------|
| X9606 | Reducing Coupling Female Press x Male Thread | 54 x R 2, 76 x R 2-1/2, 89 x R 3, 108 x R 4 | 175 (1205) | a, b, c, d, e |
| X9620 | Adapter Male Press x Female Thread | 22 x Rp 1/2, 22 x Rp 3/4, 28 x Rp 3/4 | 175 (1205) | a, b, c, d, e |
| X9530 | Coupling Female Press x Female Press | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9615 | Adapter Female Press x Female Thread | 22 x Rp 1/2, 22 x Rp 3/4, 22 x Rp 1, 28 x Rp 3/4, 28 x Rp 1, 35 x Rp 1-1/4, 42 x Rp 1-1/2, 54 x Rp 2 | 175 (1205) | a, b, c, d, e |
| X9535 | Slip Coupling Female Press x Female Press | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9610 | Male Adapter Male Press x Male Thread | 22 x R 1/2, 22 x R 3/4, 28 x R 1 | 175 (1205) | a, b, c, d, e |
| X9301 | End Cap Female Press | 22, 28, 35, 42, 54 | 175 (1205) | a, b, c, d, e |
| X9670 | Union, Flat Seat Female Press x Female Thread | 22 x 3/4, 22 x 1, 28 x 3/4, 28 x 1, 35 x 1-1/4, 42 x 1-1/2, 54 x 2 | 175 (1205) | a, b, c, d, e |
| X9675 | Union, Flat Seat Female Press x Male Thread | 22 x 3/4, 28 x 1, 35 x 1-1/4, 42 x 1-1/2, 54 x 2 | 175 (1205) | a, b, c, d, e |
| X9660 | Wall Plate Elbow, Female Press x Female Thread | 22 x 3/4, 28 x 1 | 175 (1205) | a, b, c, d, e |
| X9680 | Crimping Flange Female Press x Flange | DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN 100 | 175 (1205) | a, b, c, d, e |



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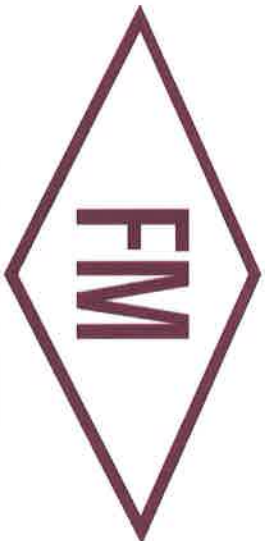
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Notes:

| |
|---|
| a. FM Approved for use with the following assembly tools: Novopress ACO202, Novopress ACO 401 |
| b. FM Approved for use in sprinkler branch lines only. |
| c. Stainless steel fittings |
| d. For use as valve trim, gauge connections, or other auxiliary piping in sizes below 35 mm nominal size. |
| e. FM Approved for use in sprinkler systems when joined to the sprinkler trunk pipe work by FM Approved "Transition Fitting". |



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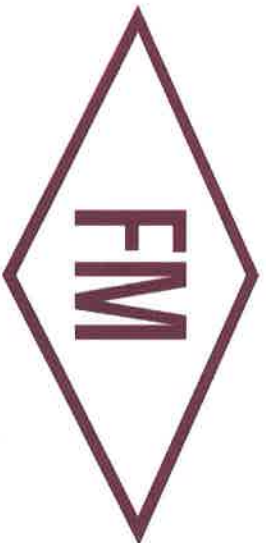
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| Product Designation | Fitting Description | Nominal Pipe Size, mm | Rated Working Pressure, psi (kPa) | Remarks |
|---------------------|--|---|-----------------------------------|---------------|
| X9546 | Bend, 90° Female Press x Male Press | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9551 | Bend, 90° Female Press x Female Press | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9561 | Bend, 90° Female Press x Male Thread | 22 x R ¾, 28 x R 1, 35 x R 1-1/4, 42 x R 1-1/2 54 x R 2 | 175 (1205) | a, b, c, d, e |
| X9556 | Bend, 90° Female Press x Female Thread | 22 x R ¾, 28 x R 1, 35 x R 1-1/4 | 175 (1205) | a, b, c, d, e |
| X9566 | Bend, 45° Female Press x Male Press | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9571 | Bend, 45° Female Press Ends | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9626 | Equal Tee, Female Press Ends | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9635 | Reducing Tee Female Press Ends | 28 x 22 x 22, 28 x 22 x 28, 35 x 22 x 35, 35 x 28 x 35, 42 x 22 x 42, 42 x 28 x 42, 42 x 35 x 42, 54 x 22 x 54 | 175 (1205) | a, b, c, d, e |



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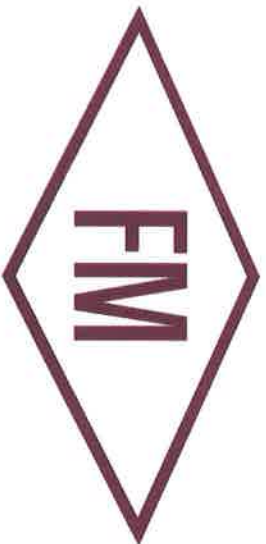
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| Product Designation | Fitting Description | Nominal Pipe Size, mm | Rated Working Pressure, psi (kPa) | Remarks |
|---------------------|---|---|-----------------------------------|---------------|
| X9636 | Reducing Tee Female Press Ends | 54 x 28 x 54, 54 x 35 x 54, 54 x 42 x 54, 76 x 22 x 76, 76 x 28 x 76, 76 x 35 x 76, 76 x 42 x 76, 76 x 54 x 76, 89 x 22 x 89, 89 x 28 x 89, 89 x 35 x 89, 89 x 42 x 89, 89 x 54 x 89, 89 x 76 x 89, 108 x 22 x 108, 108 x 28 x 108 | 175 (1205) | a, b, c, d, e |
| X9637 | Reducing Tee Female Press Ends | 108 x 35 x 108, 108 x 42 x 108, 108 x 54 x 108, 108 x 76 x 108, 108 x 89 x 108 | 175 (1205) | a, b, c, d, e |
| X9650 | Reducing Tee Female Press x Female Thread | 22 x Rp ½ x 22, 22 x Rp ¾ x 22, 28 x Rp ½ x 28, 28 x Rp ¾ x 28, 28 x Rp 1 x 28, 35 x Rp ½ x 35, 35 x Rp ¾ x 35, 35 x Rp 1-1/4 x 35, 42 x Rp ½ x 42 | 175 (1205) | a, b, c, d, e |
| X9651 | Reducing Tee Female Press x Female Thread | 42 x Rp ¾ x 42, 42 x Rp 1-1/4 x 42, 54 x Rp ½ x 54, 54 x Rp ¾ x 54, 54 x Rp 2 x 54, 76 x Rp ¾ x 76 76 x Rp 2 x 76 89 x Rp ¾ x 89 89 x Rp 2 x 89 108 x Rp ¾ x 108 108 x Rp 2 x 108 | 175 (1205) | a, b, c, d, e |



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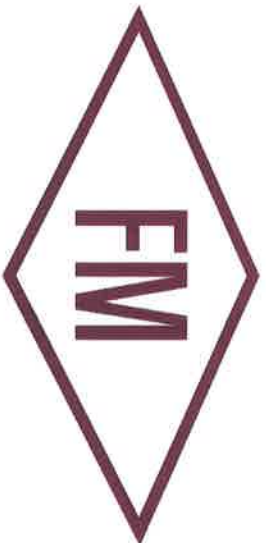
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| Product Designation | Fitting Description | Nominal Pipe Size, mm | Rated Working Pressure, psi (kPa) | Remarks |
|---------------------|--|--|-----------------------------------|---------------|
| X9541 | Reducing Coupling Female Press x Male Press | 28 x 22, 35 x 22, 35 x 28, 42 x 22, | 175 (1205) | a, b, c, d, e |
| X9542 | Reducing Coupling Female Press x Male Press | 42 x 28, 42 x 35, 54 x 28, 54 x 35, 54 x 42, 76 x 54, 89 x 54, 89 x 76, 108 x 54, 108 x 76, 108 x 89 | 175 (1205) | a, b, c, d, e |
| X9606 | Reducing Coupling Female Press x Male Thread | 22 x R 1/2, 22 x R 3/4, 22 x R 1, 28 x R 3/4, 28 x R 1 | 175 (1205) | a, b, c, d, e |
| X9607 | Reducing Coupling Female Press x Male Thread | 35 x R 1, 35 x R 1-1/4, 42 x R 1-1/2, 54 x R 2, 76 x R 2-1/2, 89 x R 3, 108 x R 4 | 175 (1205) | a, b, c, d, e |
| X9531 | Coupling, Female Press Ends | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9616 | Adapter Female Press x Female Thread | 22 x Rp 1/2, 22 x Rp 3/4, 22 x Rp 1, 28 x Rp 3/4, 28 x Rp 1, 35 x Rp 1-1/4, 42 x Rp 1-1/2, 54 x Rp 2 | 175 (1205) | a, b, c, d, e |
| X9536 | Slip Coupling Female Press Ends | 22, 28, 35, 42, 54, 76, 89, 108 | 175 (1205) | a, b, c, d, e |
| X9686 | End Cap Female Press | 22, 28, 35, 42, 54 | 175 (1205) | a, b, c, d, e |
| X9671 | Union, Flat Seat Female Press x Female Thread | 22 x 3/4, 22 x 1, 28 x 3/4, 28 x 1, 35 x 1-1/4, 42 x 1-1/2, 54 x 2 | 175 (1205) | a, b, c, d, e |
| X9676 | Union, Flat Seat Female Press x Male Thread | 22 x 3/4, 28 x 1, 35 x 1-1/4, 42 x 1-1/2, 54 x 2 | 175 (1205) | a, b, c, d, e |
| X9661 | Elbow, Wall Plate Female Press x Thread | 22 x 3/4, 28 x 1 | 175 (1205) | a, b, c, d, e |



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| Product Designation | Fitting Description | Nominal Pipe Size, mm | Rated Working Pressure, psi (kPa) | Remarks |
|---------------------|---|---|-----------------------------------|---------------|
| X9681 | Flange Adapter Female Press x Flange | DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100 | 175 (1205) | a, b, c, d, e |

Notes:

- a. FM Approved for use with the following assembly tools: Novopress ACO202, Novopress ACO 401
- b. FM Approved for use in sprinkler branch lines only.
- c. Stainless steel fittings
- d. For use as valve trim, gauge connections, or other auxiliary piping in sizes below 35 mm nominal size.
- e. FM Approved for use in sprinkler systems when joined to the sprinkler trunk pipe work by FM Approved "Transition Fitting".



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