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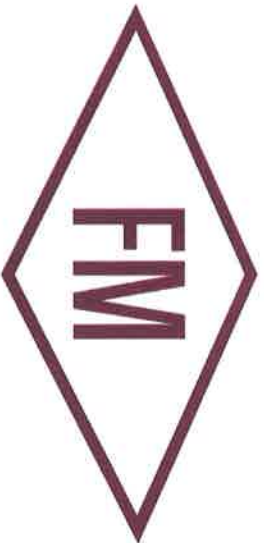
Product	Listing Country	Nominal Pipe Size, In.	Rated Working Pressure, psi	Rated Working Pressure, kPa	Certification Type
Series X9525 Press Tube ^{c, d, e, i, k, m, n}	Australia	22, 28, 35, 42, 54, 76, 89, 108 mm	175	1205	FM Approved

- 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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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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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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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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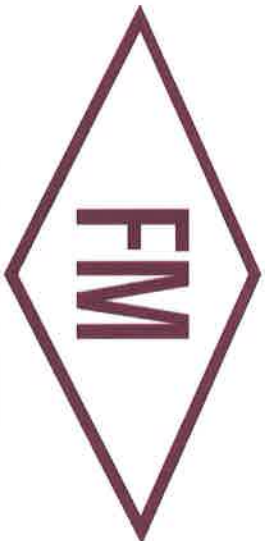
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Notes:

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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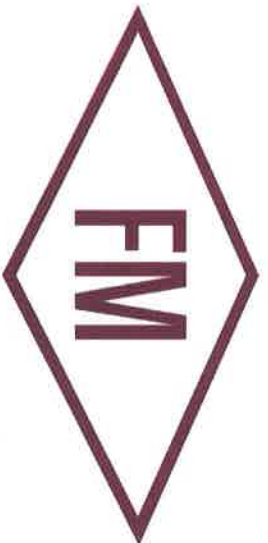
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Product Designation	Fitting Description	Nominal Pipe Size, mm	Rated Working Pressure, psi (kPa)	Remarks
X9546	Bend, 90° Female Press x Male Press	22, 28, 35, 42, 54, 76, 89, 108	175 (1205)	a, b, c, d, e
X9551	Bend, 90° Female Press x Female Press	22, 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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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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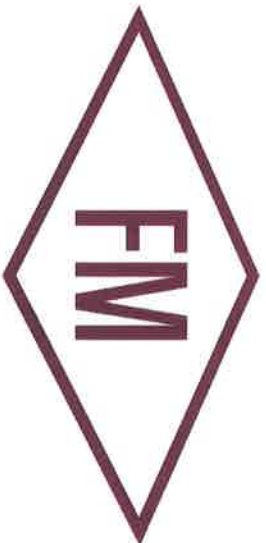
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Product Designation	Fitting Description	Nominal Pipe Size, mm	Rated Working Pressure, psi (kPa)	Remarks
X9541	Reducing Coupling Female Press x Male Press	28 x 22, 35 x 22, 35 x 28, 42 x 22,	175 (1205)	a, b, c, d, e
X9542	Reducing Coupling Female Press 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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