



Certificate of Compliance

Tube and Fittings for Fire Protection Sprinkler Systems

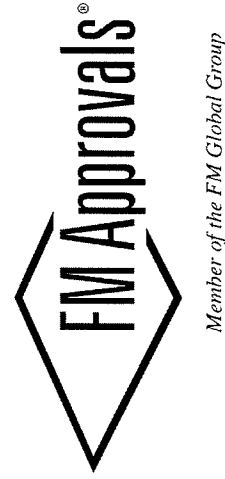
The following items are FM Approved for:

VSH Fittings B.V.
Oude Amersfoortseweg 99
1212 AA Hilversum
P.O. BOX 498, 1200 AL Hilversum
The Netherlands

when manufactured at the plant listed below:

Designation	Product Description	Nominal Tube Size, mm	Wall Thickness, mm	Rated working Pressure, psi (kPa)	Remarks
C1461	Carbon Steel Tube	22, 28, 35, 42, 54	1.5	175 (1205)	a, b, c, d, e
R 2750	Stainless steel 1.4401 Tube	22, 28	1.2	175 (1205)	a, c, d, e
R 2750	Stainless steel 1.4401 Tube	35, 42, 54	1.5	175 (1205)	a, c, d, e
R 2753	Stainless steel 1.4520 Tube	22, 28	1.2	175 (1205)	a, c, d, e
R 2753	Stainless steel 1.4520 Tube	35, 42, 54	1.5	175 (1205)	a, c, d, e
R 2752	Stainless steel 1.4521 Tube	22, 28	1.2	175 (1205)	a, c, d, e
R 2752	Stainless steel 1.4521 Tube	35, 42, 54	1.5	175 (1205)	a, c, d, e

- FM Approved for use with FM Approved tube fittings.
- FM Approved for wet sprinkler systems only.
- FM Approved for use with the Novopress ECO 301 assembly press tool.
- FM Approved for use in sprinkler branch lines only.
- FM Approved for use in sprinkler systems when joined to the sprinkler trunk pipework by FM Approved "Transition Fitting".





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Designation	Product Description	Nominal Size, mm	Rated working Pressure, psi (kPa)	Remarks
C 1401	Straight coupling 2x Press	22x22, 28x28, 35x35, 42x42, 54x54	175 (1205)	b, c, d, e, f, g
C 1402	Straight Connector Female	22xRp3/4, 28xRp1/2, 28xRp1, 35xRp1 1/4	175 (1205)	b, c, d, e, f, g
C 1403	Slip coupling 2x Press	22x22, 28x28, 35x35, 42X42, 54x54	175 (1205)	b, c, d, e, f, g
C 1405	Straight Connector Male	22xR3/4, 22xR1, 28xR3/4, 28xR1, 35xR1 1/4, 42xR1 1/2, 54xR2	175 (1205)	b, c, d, e, f, g
C 1407	Reducer Male x Press	28x22, 35x22, 35x28, 42x28, 42x35, 54x22, 54x28, 54x35, 54x42	175 (1205)	b, c, d, e, f, g
C 1408	Elbow 90° 2x Press	22x22, 28x28, 35x35, 42x42, 54x54	175 (1205)	b, c, d, e, f, g
C 1411	Elbow 90° Press x Round	22x22, 28x28, 35x35, 42x42, 54x54	175 (1205)	b, c, d, e, f, g
C 1412	Elbow 45° Press x Round	28x28, 35x35, 42x42, 54x54	175 (1205)	b, c, d, e, f, g
C 1413	Elbow 45° 2x Press	22x22, 28x28, 35x35, 42x42, 54x54	175 (1205)	b, c, d, e, f, g
C 1414	Tee Equal 3x Press	22x22x22, 28x28x28, 35x35x35, 42x42x42, 54x54x54	175 (1205)	b, c, d, e, f, g
C 1415	Tee Reduced 3x Press	22x28x22, 28x22x28, 35x22x35, 35x28x35, 42x22x42, 42x28x42, 42x35x42, 54x22x54, 54x28x54, 54x35x54, 54x42x54	175 (1205)	b, c, d, e, f, g
C 1417	Crossover 2x Male	22x22, 28x28	175 (1205)	b, c, d, e, f, g
C 1418	Tee Reduced Press x Female thread x Press	22xRp1/2x22, 22xRp3/4x22, 28xRp1/2x28, 28xRp3/4x28, 35xRp1/2x35, 35xRp3/4x35,	175 (1205)	b, c, d, e, f, g

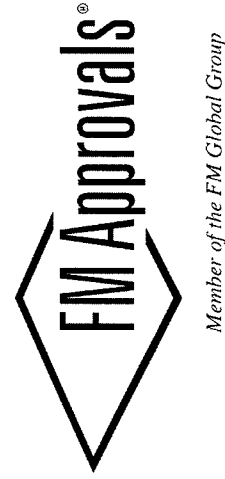


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C 1425	Bend 90° 2x Round	42xRp1/2x42, 42xRp3/4x42, 54xRp1/2x54, 54xRp3/4x54, 54xRp1x54	175 (1205)	b, c, d, e, f, g
C 1428	Angle adaptor 90° Press x Male thread	22x22, 28x28, 35x35, 42x42, 54x54	175 (1205)	b, c, d, e, f, g
C 1429	End cap 1 x Press	22xR3/4	175 (1205)	b, c, d, e, f, g
C 1430	Elbow 90° Press x Male thread	22, 28, 35, 42, 54	175 (1205)	b, c, d, e, f, g
C 1433	Straight connector Male x Female thread	22xR3/4, 28xR1, 35xR1 1/4, 42xR1 1/2, 54xR2	175 (1205)	b, c, d, e, f, g
C 1434	Pass Crossing 4 x Press	22xRp1/2, 22xRp3/4	175 (1205)	b, c, d, e, f, g
C 1435	Straight Union Press x Male thread	28x22x28x22	175 (1205)	b, c, d, e, f, g
C 1438	Elbow 90° Press x Female	22xR3/4, 28xR1, 35xR1 1/4, 42xR1 1/2, 54xR2	175 (1205)	b, c, d, e, f, g
C 1440	GROEF KOPP. X PRESS	25xRp1/2, 25xRp3/4, 35xRp1/2, 35xRp3/4	175 (1205)	b, c, d, e, f, g
R2701	STRAIGHT COUPLING (2XS-PR)	35, 42, 54	175 (1205)	a, b, c, e, f, g
R2702	STRAIGHT CONNECT (S-PRXFEM)	22x1/2, 22x3/4, 22x1, 28x3/4, 28x1, 28x5/4, 35x1, 35x5/4, 35x3/2, 42x5/4, 42x3/2, 54x3/2, 54x2	175 (1205)	a, b, c, e, f, g
R2703	SLIP COUPLING (2XS-PR)	22x22, 28x28, 35x35, 42x42, 54x54	175 (1205)	a, b, c, e, f, g
R2704	STRAIGHT TAP CON.(S-PRXFEM)	22x1, 28x5/4, 35x3/2, 42x1 3/4, 54x2 3/8	175 (1205)	a, b, c, e, f, g
R2705	STRAIGHT CON. (S-PRXMALE)	22X1/2, 22X3/4, 22X1, 28X3/4, 28X1, 28X5/4, 35X1, 35X5/4, 35X3/2, 42X5/4, 42X3/2, 54X3/2, 54X2	175 (1205)	a, b, c, e, f, g
R2707	REDUCER (ØXS-PR)	28X22, 35X22, 35X28, 42X22, 42X28, 42X35, 54X22, 54X28, 54X35, 54X42	175 (1205)	a, b, c, e, f, g





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R2708	ELBOW 90° (2 X S-PR)	22x22, 28x28, 35x35, 42x42, 54x54	175 (1205)	a, b, c, e, f, g
R2709	ANGLE CON. 90° (S-PRXFEM)	22X3/4, 28X1, 35X5/4	175 (1205)	a, b, c, e, f, g
R2711	ELBOW 90° (S-PRXØ)	22x22, 28x28, 35x35, 42x42, 54x54	175 (1205)	a, b, c, e, f, g
R2712	ELBOW 45° (S-PRXØ)	22x22, 28x28, 35x35, 42x42, 54x54	175 (1205)	a, b, c, e, f, g
R2713	ELBOW 45° (2 X S-PR)	22x22, 28x28, 35x35, 42x42, 54x54	175 (1205)	a, b, c, e, f, g
R2714	TEE EQUAL (3XS-PR)	22X22X22, 28X28X28, 35X35X35, 42X42X42, 54X54X54	175 (1205)	a, b, c, e, f, g
R2715	TEE REDUCED (3XS-PR)	28X22X28, 35X22X35, 35X28X35, 42X22X42, 42X28X42, 42X35X42, 54X22X54, 54X28X54, 54X35X54, 54X42X54	175 (1205)	a, b, c, e, f, g
R2717	CROSSOVER S-PR (ØXØ)	22X22, 28X28	175 (1205)	a, b, c, e, f, g
R2718	TEE (S-PRXFEMXS-PR)	22X1/2X22, 22X3/4X22, 28X1/2X28, 28X3/4X28, 35X1/2X35, 35X3/4X35, 42X1/2X42, 42X3/4X42, 54X1/2X54, 54X3/4X54, 54X2X54	175 (1205)	a, b, c, e, f, g
R2722	BENT PIPE 15° S-PR (ØXØ)	28x28, 35x35, 42x42, 54x54	175 (1205)	a, b, c, e, f, g
R2723	BENT PIPE 30° S-PR	28x28, 35x35, 42x42, 54x54	175 (1205)	a, b, c, e, f, g
R2724	BENT PIPE 60° S-PR (ØXØ)	28x28, 35x35, 42x42, 54x54	175 (1205)	a, b, c, e, f, g
R2725	BENT PIPE 90° S-PR (ØXØ)	28x28, 35x35, 42x42, 54x54	175 (1205)	a, b, c, e, f, g
R2726	FLANGE CONNECTOR PN10/16 S-PR	22, 28, 35, 42, 54	175 (1205)	a, b, c, e, f, g
R2728	ANGLE CON. 90° (S-PR)	22X3/4, 28X1, 35X5/4,	175 (1205)	a, b, c, e, f, g





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	PRXMALE)	42X3/2, 54X2		f, g
R2729	ENDCOUPLING	22 S-PR, 28 S-PR, 35 S-PR, 42 S-PR, 54 S-PR	175 (1205)	a, b, c, e, f, g
R2735	STRAIGHT UNION (S-PRXMALE)	22X1/2, 22X3/4, 22X1, 28X1, 35X11/4, 42X11/2, 54X2	175 (1205)	a, b, c, e, f, g
R2736	PUMP CONNECTOR S-PR	22X1.1/4, 22X1.1/2, 28X1.1/2, 35X2, 42X2.1/4, 54X2.3/4	175 (1205)	a, b, c, e, f, g
R2738	STRAIGHT UNION (S-PRXFEM)	22X3/4, 22 X1, 28X1, 35X11/4, 42X11/2, 54X2	175 (1205)	a, b, c, e, f, g

- Stainless steel.
- For use with 'VSH Fittings' FM Approved tube.
- FM Approved with the EDPM EP313 and EDPM EP737 'O-Ring'.
- FM Approved for wet sprinkler systems only.
- FM Approved for use with the Novopress ECO 301 assembly press tool.
- FM Approved for use in sprinkler branch lines only.
- FM Approved for use in sprinkler systems when joined to the sprinkler trunk pipework by FM Approved "Transition Fitting".

Manufactured by:

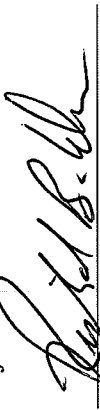
VSH Fittings B.V.
Oude Amersfoortseweg 99
1212 AA Hilversum
P.O. BOX 498, 1200 AL Hilversum
The Netherlands

FM Approvals confirms that the items have been found to comply with the following standards:

FM Approvals Standard 1920 (November 2007) and FM Standard 1630 (November 2004)

Project Identifier: 3034006

Date of Approval: June 2, 2009


Richard B. Dunne
Group Manager - Hydraulics

Date June 23, 2009



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