



Certificate of Compliance

This certificate is issued for the following:

Pipe Couplings and Fittings for Aboveground Fire Protection Systems

Groovex LLC, Pipe Fittings
(see complete listing on following pages)

Prepared for:

Groovex LLC
Chasovaya St Building 28/4, Office 16,
Moscow (federal city) 12315,
Russian Federation

FM Approvals Class: 1920
FM Approvals Standard: Class Series 1920 (November 2007)

Approval Identification: PR458594

Approval Granted: November 11, 2020

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.

A handwritten signature in black ink, appearing to read 'D.B. Fuller', is written over a horizontal line.

David B. Fuller
VP, Manager – Fire Protection
FM Approvals
1151 Boston-Providence Turnpike
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Model No	Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
KK90	90° Elbow Grooved	2, 2 1/2, 3, 4, 5, 6, 8, 10, 12 76.1, 108, 133, 139.7, 159, 165.1 mm	300	(2070)	b, c, f, g, h, i
K90	Long Radius 90° Elbow Grooved	1, 1 1/4, 1 1/2	300	(2070)	b, c, f, g, h, i
KC90	Long Radius 90° Elbow Grooved	2, 2 1/2, 3, 4, 5, 6, 8 76.1, 108, 133, 139.7, 159, 165.1 mm	300	(2070)	b, c, f, g, h, i
K45	45° Elbow Grooved	1, 1 1/4, 1 1/2	300	(2070)	b, c, f, g, h, i
KK45	45° Elbow Grooved	2, 2 1/2, 3, 4, 5, 6, 8, 10, 12 76.1, 108, 133, 139.7, 159, 165.1 mm	300	(2070)	b, c, f, g, h, i
KC45	45° Long Radius Elbow Grooved	2, 2 1/2, 3, 4, 5, 6, 8 76.1, 139.7, 165.1 mm	300	(2070)	b, c, f, g, h, i
KC22	22.5° Elbow Grooved	2, 2 1/2, 3, 4, 5, 6, 8 76.1, 139.7, 165.1 mm	300	(2070)	b, c, f, g, h, i
KC11	11.25° Elbow Grooved	2, 2 1/2, 3, 4, 5, 6, 8 76.1, 139.7, 165.1 mm	300	(2070)	b, c, f, g, h, i
KP90	90° Reducing End of Line Elbow	1 1/2 x 1/2, 3/4, 1 2 x 1/2, 3/4, 1	300	(2070)	a, b, f, g, h, i
TMK	Equal Tee Grooved	2, 2 1/2, 3, 4, 5, 6, 8, 10, 12 76.1, 108, 133, 139.7, 159, 165.1 mm	300	(2070)	b, c, f, g, h, i



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TMC	Long Equal Tee Grooved	1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8 76.1, 108, 133, 139.7, 159, 165.1 mm	300	(2070)	b, c, f, g, h, i
TPM	Reducing Tee Grooved	1 1/2 x 1 1/4 2 x 1 1/4, 1 1/2 2 1/2 x 1 1/2, 2 76.1 mm x 1 1/2, 2 3 x 2, 76.1 mm, 2 1/2 108 mm x 76.1 mm, 3 4 x 2, 76.1 mm, 2 1/2, 3 5 x 2, 2 1/2, 76.1mm, 3, 4 139.7 mm x 2, 76.1 mm, 2 1/2, 3, 4 159 mm x 76.1 mm, 3, 4, 139.7 mm 165 mm x 2, 76.1 mm, 3, 4, 139.7 mm 6 x 2, 2 1/2, 76.1mm, 3, 4, 5, 139.7mm 8 x 4, 5, 139.7 mm, 165.1 mm, 6 10 x 4, 6, 8, 165.1 mm 12 x 4, 6, 8, 10, 165.1 mm	300	(2070)	b, c, f, g, h, i
TPR	Reducing Tee (Threaded Outlet)	2 x 1, 1 1/4, 1 1/2 2 1/2 x 1, 1 1/4, 1 1/2, 2 76.1 mm x 1, 1 1/4, 1 1/2, 2 3 x 1, 1 1/4, 1 1/2, 2, 2 1/2 4 x 1, 1 1/4, 1 1/2, 2, 2 1/2, 3 139.7 mm x 1 1/4, 1 1/2, 2, 2 1/2, 3, 4 5 x 1 1/4, 1 1/2, 2, 2 1/2, 3, 4 6 x 2, 2 1/2, 3, 4 165.1 mm x 2, 2 1/2, 3, 4 8 x 2 1/2, 3, 4	300	(2070)	a, b, c, f, g, h, i



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ZG	Cap Grooved	1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8, 10, 12 76.1, 108, 133, 139.7, 159, 165.1 mm	300	(2070)	b, c, f, g, h, i
ZGO	Cap Grooved with threaded hole	2 x 1, 1 1/2 2 1/2 x 1, 1 1/4, 1 1/2, 2 76.1mm x 1, 1 1/4, 1 1/2, 2 3 x 1, 1 1/4, 1 1/2, 2 4 x 1, 2, 1 1/4, 1 1/2 5 x 2 139.7 mm x 2 6 x 1 6 x 2 165.1 mm x 1, 2 8 x 2	300	(2070)	a, b, c, f, g, h, i
PM	Concentric Reducer Grooved	1 1/2 x 1 1/4 2 x 1 1/4, 1 1/2 2 1/2 x 1 1/4, 1 1/2 76.1 mm x 1 1/4, 1 1/2, 2 3 x 1 1/4, 1 1/2, 2, 2 1/2, 76.1 mm 108 mm x 76.1 mm, 3 4 x 1 1/4, 1 1/2, 2, 2 1/2, 76.1 mm, 3 133 mm x 76.1 mm, 3, 4 139.7 mm x 2, 2 1/2, 76.1 mm, 3, 4 5 x 2, 2 1/2, 76.1 mm, 3, 4 6 x 2, 2 1/2, 76.1 mm, 3, 4, 5 159 mm x 76 mm, 3, 4, 139.7 mm 165.1 mm x 2, 2 1/2, 76.1 mm, 3, 4, 139.7 mm 8 x 4, 139.7 mm, 5, 6, 165 mm	300	(2070)	b, c, f, g, h, i
PR	Concentric Reducer Grooved x Metric Threaded Small End	2 x 1, 1 1/4, 1 1/2 2 1/2 x 1, 1 1/4, 1 1/2, 2 76.1 mm x 1, 1 1/4, 1 1/2, 2 3 x 1, 1 1/4, 1 1/2, 2	300	(2070)	a, b, c, f, g, h, i



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		108 mm x 1, 1 1/4, 1 1/2, 2 4 x 1, 1 1/4, 1 1/2, 2, 2 1/2 133 mm x 1, 1 1/4, 1 1/2, 2 139.7 mm x 1, 1 1/4, 1 1/2,, 2, 2 1/2 5 x 1, 1 1/4, 1 1/2, 2, 2 1/2 159 mm x 1, 1 1/4, 1 1/2, 2, 2 1/2, 3 165.1 mm x 1, 1 1/4, 1 1/2, 2, 2 1/2, 3 6 x 1, 1 1/4, 1 1/2, 2, 2 1/2 8 x 2, 2 1/2, 3			
KM	Equal Cross Grooved	2, 2 1/2, 3, 4, 5, 6 76.1, 108, 133, 139.7, 159, 165.1 mm	300	(2070)	b, c, f, g, h, i
KM	Equal Cross Grooved	8	232	(1600)	b, c, f, g, h, i
AF	Flange Adapter Grooved	2, 2 1/2, 3, 4, 5, 6, 8 76.1, 108, 133, 139.7, 159, 165.1 mm	300	(2070)	b, c, d, f, g, h, i

Remarks:

- Threads per ISO RC series threads
- Product is marked with acceptable trade name of either "Groovex" or "G"
- Available with Cut Grooves
- Available with PN16 Flanges
- Available with ANSI 125/150 Flanges
- FM Approved for Use with either a Red, Orange, Black, Yellow, Blue, Green or Silver Painted Surface Finish
- FM Approved for Use with either a Red, Orange, Black, Yellow, Blue, Green or Silver Epoxy Powder Coat Surface Finish
- FM Approved for Use with a Silvery White Colored Dacromet Surface Finish
- FM Approved for Use with a Hot Dip Galvanized Surface Finish



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Certificate of Compliance

This certificate is issued for the following:

Pipe Couplings and Fittings for Aboveground Fire Protection Systems

Model XM, XP, XPM, XPC

Prepared for:

Groovex LLC
Chasovaya St Building 28/4, Office 16,
Moscow (federal city) 12315,
Russian Federation

FM Approvals Class: 1920
FM Approvals Standard: Class Series 1920 (November 2007)

Approval Identification: PR458594

Approval Granted: November 11, 2020

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David B. Fuller
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Certificate of Compliance

This certificate is issued for the following:

Pipe Couplings and Fittings for Aboveground Fire Protection Systems

Model MJ

Prepared for:

Groovex LLC
Chasovaya St Building 28/4, Office 16,
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Certificate of Compliance

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Model MG

Prepared for:

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Certificate of Compliance

This certificate is issued for the following:

Pipe Couplings and Fittings for Aboveground Fire Protection Systems

Model MPG

Prepared for:

Groovex LLC
Chasovaya St Building 28/4, Office 16,
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Russian Federation

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Certificate of Compliance

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Model GKS

Prepared for:

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Approval Identification: PR458594

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Certificate of Compliance

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Model FN

Prepared for:

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Certificate of Compliance

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Pipe Couplings and Fittings for Aboveground Fire Protection Systems

Model MPU

Prepared for:

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