



APPROVED

Certificate of Compliance

Pipe Fittings

The following fittings are FM Approved when manufactured by Shanghai Vision Mechanical Joint Co. Ltd. at the plants listed on page 6:

Product Designation	Fitting Description	Nominal Pipe Size, in./ mm	Rated Working Pressure, psi (kPa)	Remarks
002	Short Radius 90° Elbow	1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8 45, 57, 76, 108, 133, 140, 159, 165 mm	300 (2070)	
002L	90° Elbow	1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8, 10, 12 76, 108, 133, 140, 159, 165 mm	300 (2070)	
002D	90° Drain Elbow	1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8 76, 108, 133, 140, 159, 165 mm	300 (2070)	
003	45° Elbow	1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8, 10, 12 57, 76, 108, 133, 140, 159, 165 mm	300 (2070)	
0031	22.5° Elbow	1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 6, 8 45, 57, 76, 108, 133, 140, 159, 165 mm	300 (2070)	
004	Short Radius Equal Tee	1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8 76, 108, 133, 140, 159, 165 mm	300 (2070)	
004L	Long Radius Equal Tee	1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8, 10, 12 76, 108, 133, 140, 159, 165 mm	300 (2070)	
005	Cap Grooved	1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5, 6 57, 76, 108, 133, 140, 159, 165 mm	300 (2070)	
005H	Cap 1/2, 3/4 and 1 outlet	2, 2 1/2, 3, 4, 5, 6 76, 108, 133, 140, 159, 165 mm	300 (2070)	
006	90° Reducing Elbow Grooved	2 x 1 1/2 3 x 2 4 x 3 6 x 4	300 (2070)	
006RT	90° Reducing Elbow Grooved x Thread	1 1/4 x 1/2, 3/4, 1 1 1/2 x 1/2, 3/4, 1 2 x 1/2, 3/4, 1 2-1/2 x 1/2, 3/4, 1 76 x 1/2, 3/4, 1	300 (2070)	
008	Concentric Reducer Grooved	1-1/4 x 1 1 1/2 x 1, 1 1/4	300 (2070)	



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Product Designation	Fitting Description	Nominal Pipe Size, in./ mm	Rated Working Pressure, psi (kPa)	Remarks
008	Concentric Reducer Grooved	2 x 1, 1 1/4, 1 1/2 2 1/2 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 1/4, 1 1/2, 2, 2 1/2, 3 5 x 1 1/4, 1 1/2, 2, 2 1/2, 3 6 x 1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5 8 x 1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5, 6 10 x 6, 8 12 x 6, 8, 10	300 (2070)	
008	Concentric Reducer Grooved	57 x 42, 45, 48 mm 76 x 42, 48, 57, 60 mm 89 x 57, 76 mm 108 x 42, 48, 57, 60, 73, 76, 89 mm 114 x 57, 76 mm 133 x 42, 48, 57, 60, 73, 76, 89, 108, 114 mm 140 x 42, 48, 57, 60, 73, 76, 89, 108, 114 mm 159 x 42, 48, 57, 60, 73, 76, 89, 108, 114, 133, 140 mm 165 x 42, 48, 57, 60, 73, 76, 89, 108, 114, 133, 140 mm 168 x 57, 76, 108, 140 mm 219 x 57, 76, 108, 133, 140, 159, 165 mm 273 x 165 mm 324 x 165 mm	300 (2070)	
009	Concentric Reducer (Threaded Small End)	1 1/4 x 1/2, 3/4, 1 1 1/2 x 1/2, 3/4, 1, 1 1/4 2 x 1/2, 3/4, 1, 1 1/4, 1 1/2 2 1/2 x 1/2, 3/4, 1, 1 1/4, 1 1/2, 2 3 x 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2 4 x 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3 6 x 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3 8 x 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4	300 (2070)	a, b
009	Concentric Reducer (Threaded Small End)	45 x 33, 42 mm 57 x 21, 27, 33, 42, 48 mm 76 x 21, 27, 33, 42, 48, 60 mm 89 x 76 mm 108 x 21, 27, 33, 42, 48, 60, 73, 76, 89 mm 114 x 76 mm 133 x 21, 27, 33, 42, 48, 60, 73, 76, 89 mm 140 x 21, 27, 33, 42, 48, 60, 73, 76, 89 mm	300 (2070)	a, b



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Product Designation	Fitting Description	Nominal Pipe Size, in./ mm	Rated Working Pressure, psi (kPa)	Remarks
009	Concentric Reducer (Threaded Small End)	159 x 21, 27, 33, 42, 48, 60, 73, 76, 89 mm 165 x 21, 27, 33, 42, 48, 60, 73, 76, 89 mm 168 x 76 mm 219 x 76, 140 mm	300 (2070)	a, b
010	Equal Cross Grooved	1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8 45, 57, 76, 108, 133, 140, 159, 165 mm	300 (2070)	
010L	Long Radius Cross Grooved	1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8, 10, 12 45, 57, 76, 108, 133, 140, 159, 165 mm	300 (2070)	
011	Reducing Branch Tee 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, 2 3 x 1 1/4, 1 1/2, 2, 2 1/2 4 x 1 1/4, 1 1/2, 2, 2 1/2, 3 5 x 1 1/4, 1 1/2, 2, 2 1/2, 3, 4 6 x 1 1/4, 1 1/2, 2, 2 1/2, 3, 4 8 x 1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 6 10 x 4, 6, 8 12 x 4, 6, 8, 10	300 (2070)	
011	Reducing Branch Tee Grooved	57 x 42, 48 mm 73 x 57 mm 76 x 42, 48, 57, 60 mm 89 x 57, 76 mm 108 x 42, 48, 57, 60, 73, 76, 89 mm 114 x 57, 76 mm 133 x 42, 48, 57, 60, 73, 76, 89, 108, 114 mm 140 x 42, 48, 57, 60, 73, 76, 89, 108, 114 mm 141 x 76 mm 159 x 42, 48, 57, 60, 73, 76, 89, 108, 114, 133, 140 mm 165 x 42, 48, 57, 60, 73, 76, 89, 108, 114, 133, 140 mm 168 x 57, 76, 108, 133, 140 mm 219 x 57, 76, 108, 133, 140, 159, 165 mm 273 x 133, 140, 159, 165 mm 324 x 133, 140, 159, 165 mm	300 (2070)	



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Product Designation	Fitting Description	Nominal Pipe Size, in./mm	Rated Working Pressure, psi (kPa)	Remarks
011L	Reducing Branch Tee 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, 2 3 x 1 1/4, 1 1/2, 2, 2 1/2 4 x 1 1/4, 1 1/2, 2, 2 1/2, 3 5 x 1 1/4, 1 1/2, 2, 2 1/2, 3, 4 6 x 1 1/4, 1 1/2, 2, 2 1/2, 3, 4 8 x 1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 6 10 x 4, 6, 8 12 x 4, 6, 8, 10	300 (2070)	
011L	Reducing Branch Tee Grooved	57 x 42, 48 mm 73 x 57 mm 76 x 42, 48, 57, 60 mm 89 x 57, 76 mm 108 x 42, 48, 57, 60, 73, 76, 89 mm 114 x 57, 76 mm 133 x 42, 48, 57, 60, 73, 76, 89, 108, 114 mm 140 x 42, 48, 57, 60, 73, 76, 89, 108, 114 mm 141 x 76 mm 159 x 42, 48, 57, 60, 73, 76, 89, 108, 114, 133, 140 mm 165 x 42, 48, 57, 60, 73, 76, 89, 108, 114, 133, 140 mm 168 x 57, 76, 108, 133, 140 mm 219 x 57, 76, 108, 133, 140, 159, 165 mm 273 x 133, 140, 159, 165 mm 324 x 133, 140, 159, 165 mm	300 (2070)	
012	Reducing Threaded Outlet Tee	1 1/4 x 1/2, 3/4, 1 1 1/2 x 1/2, 3/4, 1, 1 1/4 2 x 1/2, 3/4, 1, 1 1/4, 1 1/2 2 1/2 x 1/2, 3/4, 1, 1 1/4, 1 1/2, 2 3 x 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2 4 x 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3 6 x 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3 8 x 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3	300 (2070)	a, b
012	Reducing Threaded Outlet Tee	45 x 27, 33 mm 57 x 21, 27, 33, 42, 48 mm 76 x 21, 27, 33, 42, 48, 60 mm 89 x 76 mm 108 x 21, 27, 33, 42, 48, 60, 73, 76, 89 mm	300 (2070)	a, b



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Product Designation	Fitting Description	Nominal Pipe Size, in./ mm	Rated Working Pressure, psi (kPa)	Remarks
012	Reducing Threaded Outlet Tee	114 x 76 mm 133 x 21, 27, 33, 42, 48, 60, 73, 76, 89 mm 140 x 21, 27, 33, 42, 48, 60, 73, 76, 89 mm 159 x 21, 27, 33, 42, 48, 60, 73, 76, 89 mm 165 x 21, 27, 33, 42, 48, 60, 73, 76, 89 mm 168 x 76 mm 219 x 76 mm	300 (2070)	a, b
013	Eccentric Reducer Grooved	2 1/2 x 2 3 x 2 1/2 4 x 2, 2-1/2, 3 6 x 3, 4 8 x 4, 6 10 x 6, 8 12 x 8, 10	300 (2070)	
013	Eccentric Reducer Grooved	76 x 2 89 x 76 mm 108 x 73, 76, 89 114 x 76 mm 133 x 89, 108, 114 140 x 89, 108, 114 159 x 60, 76, 89, 108, 114, 133, 140 mm 165 x 60, 76, 89, 108, 114, 133, 140 mm 168 x 108, 133, 140mm 219 x 108, 133, 140, 159, 165 mm 273 x 165 mm	300 (2070)	
015	Grooved End Flange	1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8, 10, 12 45, 57, 76, 108, 133, 140, 159, 165 mm	300 (2070)	

Remarks:

- a. Threads per ANSI/ASME B1.20.1 for tapered pipe threads (NPT).
- b. Threads per Chinese National Standard GB-3289.1-3289.39-82



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Manufactured by:

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Ningbo Vision Pipefitting Co., Ltd.
Xinquan Villa, Xiaogang, Beilun District,
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FM Approvals confirms that the items have been found to comply with the following standard:

FM Approval Standard 1920, dated November 2007

Project Identifier	Date of Approval
3035856	August 06, 2009
3032590	December 11, 2008
3033311	August 14, 2008
3024636	March 30, 2006
3017719	September 30, 2004
3014035	April 17, 2003

A handwritten signature in black ink, appearing to read 'Richard B. Dunne'.

Richard B. Dunne, Manager, Hydraulics Group

August 6, 2009
Date



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