

## DI GROOVED FITTINGS-GROOVED CONCENTRIC REDUCER

Type: 240

Doc No: DS-400-240-01-E

### 1.0 PRODUCT OVERVIEW

Grooved concentric reducer is used for groove pipeline connection. It is mainly applied in the pipeline diameter change. The center of the two ends of the connection is in the same straight line, which can change the flow rate.



#### Dimensions:

1 1/4"(DN32) – 12"(DN300)

#### Design Standard:

ISO6182, AWWA C606, GB 5135.11

#### Connection Standard:

ASME B36.10, ASTM A53-A53M, ISO 4200

#### Working Pressure:

175PSI-500PSI

#### Application:

The grooved concentric reducer product is suitable for medium and low pressure pipeline systems with nominal pressure 175-500 PSI, nominal size DN32-DN300, temperature range of - 20 °C--+180°C, which are widely applied in water supply and drainage, fire-fighting, air conditioning, etc.

#### Pipe Material:

Welded and seamless rolled steel pipes according to ASME B36.10, ASTM A53-A53M, ISO 4200, GB/T 21835

#### Surface Treatment:

##### Sign Off:

Owner: \_\_\_\_\_ Contractor: \_\_\_\_\_

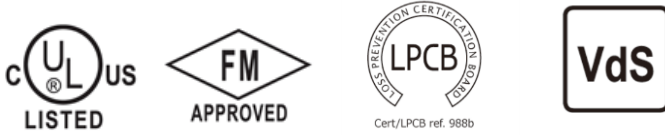
Engineer: \_\_\_\_\_

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- Electrophoretic painting
- Epoxy power painting
- Hot-dip galvanizing
- Black
- Others would be available upon clients' detailed request

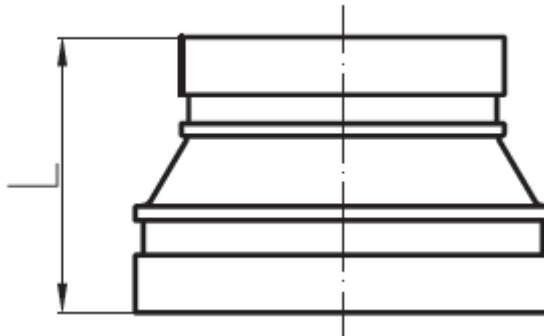
## 2.0 APPROVALS



## 3.0 SPECIFICATIONS-MATERIAL

Ductile iron according to ASTM A536, grade 65-45-12. The nodularity is more than 90%, ensuring excellent physical and mechanical properties.

## 4.0 DIMENSIONS AND PERFORMANCE



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Engineer: \_\_\_\_\_  
Approved & Date: \_\_\_\_\_

Nominal	Pipe	Working Pressure	Dimensions
Size	O.D.		L
mm/in	mm/in	PSI/MPa	mm/in
32X25 1 <sup>1</sup> / <sub>4</sub> X1	42.4X33.7 1.660X1.315	500 3.45	64 2.5
40X25 1 <sup>1</sup> / <sub>2</sub> X1	48.3X33.7 1.900X1.315	500 3.45	64 2.5
40X32 1 <sup>1</sup> / <sub>2</sub> X1 <sup>1</sup> / <sub>4</sub>	48.3X42.4 1.900X1.660	500 3.45	64 2.5
50X25 2X1	60.3X33.7 2.375X1.315	500 3.45	64 2.5
50X32 2X1 <sup>1</sup> / <sub>4</sub>	60.3X42.4 2.375X1.660	500 3.45	64 2.5
50X40 2X1 <sup>1</sup> / <sub>2</sub>	60.3X48.3 2.375X1.900	500 3.45	64 2.5
65X25 2 <sup>1</sup> / <sub>2</sub> X1	73.0x33.7 2.875X1.315	500 3.45	64 2.5
65X32 2 <sup>1</sup> / <sub>2</sub> X1 <sup>1</sup> / <sub>4</sub>	73.0X42.4 2.875X1.660	500 3.45	64 2.5
65X40 2 <sup>1</sup> / <sub>2</sub> X1 <sup>1</sup> / <sub>2</sub>	73.0X48.3 2.875X1.900	500 3.45	64 2.5
65X50 2 <sup>1</sup> / <sub>2</sub> X2	73.0X60.3 2.875X2.375	500 3.45	64 2.5
65X25 2 <sup>1</sup> / <sub>2</sub> X1	76.1 X33.7 3.000X1.315	500 3.45	64 2.5
65X32 2 <sup>1</sup> / <sub>2</sub> X1 <sup>1</sup> / <sub>4</sub>	76.1X42.4 3.000X1.660	500 3.45	64 2.5
65X40 2 <sup>1</sup> / <sub>2</sub> X1 <sup>1</sup> / <sub>2</sub>	76.1X48.3 3.000X1.900	500 3.45	64 2.5
65X50 2 <sup>1</sup> / <sub>2</sub> X2	76.1X60.3 3.000X2.375	500 3.45	64 2.5
80X25 3X1	88.9X33.7 3.500X1.315	500 3.45	64 2.5
80X32 3X1 <sup>1</sup> / <sub>4</sub>	88.9X42.4 3.500X1.660	500 3.45	64 2.5
80X40 3X1 <sup>1</sup> / <sub>2</sub>	88.9X48.3 3.500X1.900	500 3.45	64 2.5
80X50 3X2	88.9X60.3 3.500X2.375	500 3.45	64 2.5
80X65 3X2 <sup>1</sup> / <sub>2</sub>	88.9X73.0 3.500X2.875	500 3.45	64 2.5

**Sign Off:**

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Location: \_\_\_\_\_ Date: \_\_\_\_\_

Approved & Date: \_\_\_\_\_

Nominal	Pipe	Working Pressure	Dimensions
Size	O.D.		L
mm/in	mm/in	PSI/MPa	mm/in
80X65 3X2½	88.9X76.1 3.500X3.000	500 3.45	64 2.5
100X50 4X2	108.0X60.3 4.250X2.375	500 3.45	76 3
100X65 4X2½	108.0X73.0 4.250X2.875	500 3.45	76 3
100X65 4X2½	108.0X76.1 4.250X3.000	500 3.45	76 3
100X80 4X3	108.0X88.9 4.250X3.500	500 3.45	76 3
100X32 4X1¼	114.3X42.4 4.500X1.660	500 3.45	76 3
100X40 4X1½	114.3X48.3 4.500X1.900	500 3.45	76 3
100X50 4X2	114.3X60.3 4.500X2.375	500 3.45	76 3
100X65 4X2½	114.3X73.0 4.500X2.875	500 3.45	76 3
100X65 4X2½	114.3X76.1 4.500X3.000	500 3.45	76 3
100X80 4X3	114.3X88.9 4.500X3.500	500 3.45	76 3
125X100 5X4	133.0X108.0 5.250X4.250	500 3.45	89 3.5
125X100 15X4	133.0X114.3 5.250X4.500	500 3.45	89 3.5
125X50 5X2	139.7X60.3 5.500X2.375	500 3.45	89 3.5
125X65 5X2½	139.7X76.1 5.500X3.000	500 3.45	89 3.5
125X80 5X3	139.7X88.9 5.500X3.500	500 3.45	89 3.5
125X100 5X4	139.7X114.3 5.500X4.500	500 3.45	89 3.5
125X65 5X2½	141.3X73.0 5.563X2.875	500 3.45	89 3.5

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Approved & Date: \_\_\_\_\_

Nominal	Pipe	Working Pressure	Dimensions
Size	O.D.		L
mm/in	mm/in	PSI/MPa	mm/in
125X80	141.3X88.9	500	89
5X3	5.563X3.500	3.45	3.5
125X100	141.3X114.3	500	89
5X4	5.563X4.500	3.45	3.5
150X50	159.0X60.3	500	102
6X2	6.250X2.375	3.45	4
150X65	159.0X76.1	500	102
159.0X2½	6.250X3.000	3.45	4
150X80	159.0X88.9	500	102
6X3	6.250X3.500	3.45	4
150X100	159.0X108	500	102
6X4	6.250X4.250	3.45	4
150X100	159.0X114.3	500	102
6X4	6.250X4.500	3.45	4
150X125	159.0X133.0	500	102
6X5	6.250X5.250	3.45	4
150X50	165.1X60.3	500	102
6X2	6.500X2.375	3.45	4
150X65	165.1X76.1	500	102
6X2½	6.500X3.000	3.45	4
150X80	165.1X88.9	500	102
6X3	6.500X3.500	3.45	4
150X100	165.1X108.0	500	102
6X4	6.500X4.250	3.45	4
150X100	165.1X114.3	500	102
6X4	6.500X4.500	3.45	4
150X125	165.1X139.7	500	102
6X5	6.500X5.500	3.45	4
150X125	165.1X141.3	500	102
6X5	6.500X5.563	3.45	4
150X50	168.3X60.3	500	102
6X2	6.625X2.375	3.45	4
150X65	168.3X73.0	500	102
6X2½	6.625X2.875	3.45	4
150X65	168.3X76.1	500	102
6X2½	6.625X3.000	3.45	4

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Engineer: \_\_\_\_\_

Location: \_\_\_\_\_ Date: \_\_\_\_\_

Approved & Date: \_\_\_\_\_

Nominal	Pipe	Working Pressure	Dimensions
Size	O.D.		L
mm/in	mm/in	PSI/MPa	mm/in
150X80 6X3	168.3X88.9 6.625X3.500	500 3.45	102 4
150X100 6X4	168.3X114.3 6.625X4.500	500 3.45	102 4
150X125 6X5	168.3X139.7 6.625X5.500	500 3.45	102 4
150X125 6X5	168.3X141.3 6.625X5.563	500 3.45	102 4
200X100 8X4	216.3X114.3 8.516X4.500	300 2.07	127 5
200X150 8X6	216.3X165.1 8.516X6.500	300 2.07	127 5
200X65 8X2½	219.1X73.0 8.625X2.875	500 3.45	127 5
200X80 8X3	219.1X88.9 8.625X3.500	500 3.45	127 5
200X100 8X4	219.1X108.0 8.625X4.250	300 2.07	127 5
200X100 8X4	219.1X114.3 8.625X4.500	500 3.45	127 5
200X125 8X5	219.1X139.7 8.625X5.500	300 2.07	127 5
200X125 8X5	219.1X141.3 8.625X5.563	500 3.45	127 5
200X150 8X6	219.1X159.0 8.625X6.250	300 2.07	127 5
200X150 8X6	219.1X165.1 8.625X6.500	300 2.07	127 5
200X150 8X6	219.1X168.3 8.625X6.625	500 3.45	127 5
250X150 10X6	273.0X159.0 10.750X6.250	300 2.07	152 6
250X150 10X6	273.0X165.1 10.750X6.500	300 2.075	152 6
250X150 10X6	273.0X168.3 10.750X6.625	300 2.07	152 6

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Engineer: \_\_\_\_\_

Location: \_\_\_\_\_ Date: \_\_\_\_\_

Approved & Date: \_\_\_\_\_

Nominal	Pipe	Working Pressure	Dimensions
Size	O.D.		L
mm/in	mm/in	PSI/MPa	mm/in
250X200	273.0X219.1	300	152
10X8	10.750X8.625	2.07	6
300X200	323.9X219.1	300	178
12X8	12.750X8.625	2.07	7
300X250	323.9X273.0	300	178
12X10	12.750X10.750	2.07	7

## 5.0 REFERENCE MATERIALS

Approved certification for Grooved Fittings and Couplings

I-JM-Grooved fitting: Installation Instructions for grooved fittings and couplings

**Sign Off:**

Owner: \_\_\_\_\_ Contractor: \_\_\_\_\_

Location: \_\_\_\_\_ Date: \_\_\_\_\_

Engineer: \_\_\_\_\_

Approved & Date: \_\_\_\_\_