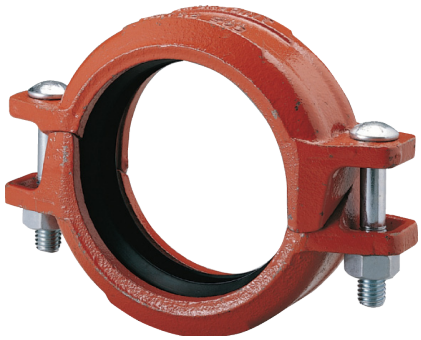
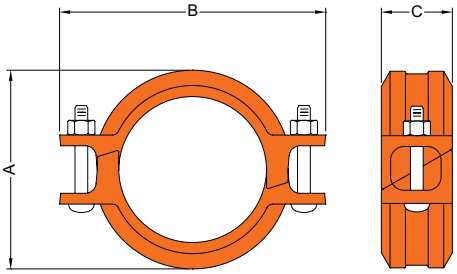
SHURJOINT®
submittal sheet

Z07

heavy duty rigid coupling | angle-pad design





ensure coupling bolt pads make metal-to-metal contact.

job name:	
job location:	
engineer:	
contractor:	
tag:	
po#:	
rep:	
wholesale dist.:	

the Shurjoint model Z07 is an angle-pad design rigid coupling for general piping applications where rigidity is required including valve connections, mechanical rooms, fire mains and long straight runs. the angle-pad design allows the coupling housings to slide along the bolt pads when tightened. the result is an offset clamping action which provides a rigid joint that resists flexural and torsional loads. Support and hanging requirements correspond to ANSI B31.1, B31.9 and NFPA 13.

the Shurjoint model Z07 is available with a standard “C” shaped or GapSeal gasket in a variety grades to meet your specific service requirements.

for fire protection pressure rating, listing, and approval information, refer to data sheet B-42 or visit www.shurjoint.com for details or contact Shurjoint.

dimensions

NOMINAL SIZE	PIPE O.D.	MAX. WORKING PRESSURE (CWP*)	MAX. END LOAD (CWP)	AXIAL DISPLACEMENT †	DIMENSIONS			BOLT		WEIGHT
					A	B	C	NO.	SIZE	
in	in	PSI	lb	in	in	in	in		in	lb
mm	mm	Bar	kN	mm	mm	mm	mm		mm	kg
1-1/4	1.660	750	1620	0-0.05	2.68	4.13	1.85	2	3/8 x 2-1/8	1.6
32	42.2	52	7.27	0-1.2	68	105	47		M10 x 55	0.7
1-1/2	1.900	750	2120	0-0.05	2.91	4.53	1.85	2	3/8 x 2-1/8	2.0
40	48.3	52	9.52	0-1.2	74	115	47		M10 x 55	0.9
2	2.375	750	3320	0-0.07	3.39	4.69	1.88	2	3/8 x 2-3/4	2.4
50	60.3	52	14.84	0-1.7	86	119	48		M10 x 70	1.1
2-1/2	2.875	750	4860	0-0.07	3.94	5.50	1.88	2	3/8 x 2-3/4	2.4
65	73.0	52	21.75	0-1.7	100	140	48		M10 x 70	1.1
3	3.500	750	7210	0-0.07	4.53	6.54	1.88	2	1/2 x 3	3.1
80	88.9	52	32.26	0-1.7	115	166	48		M12 x 75	1.4
4	4.500	750	11920	0-0.16	5.78	8.11	2.13	2	1/2 x 3	4.4
100	114.3	52	53.33	0-4.1	147	206	54		M12 x 75	2.0
5	5.563	750	18220	0-0.16	6.97	9.45	2.09	2	5/8 x 3-1/2	7.5
125	141.3	52	81.50	0-4.1	177	240	53		M16 x 90	3.2
6	6.625	700	24110	0-0.16	8.00	10.67	2.56	2	7/8 x 6-1/2	27.4
150	168.3	48	106.73	0-4.1	203	271	65		-	10.4
8	8.625	600	35030	0-0.19	10.55	13.46	2.56	2	7/8 x 6-1/2	26.0
200	219.1	42	158.27	0-4.8	268	342	64		M20 x 120	7.1
10	10.750	500	45350	0-0.13	12.86	15.60	2.56	2	7/8 x 6-1/2	27.4
250	273.0	35	204.77	0-3.2	327	396	65		-	10.4
12	12.750	400	51040	0-0.13	14.86	17.80	2.56	2	7/8 x 6-1/2	26.0
300	323.9	28	230.59	0-3.2	377	452	65		-	11.8

* working pressure is based on roll grooved standard wall carbon steel pipe.
† allowable axial displacement is for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. these values are maximums; for design and installation purposes these figures should be reduced by: 50% for 3/4” - 3-1/2”; 25% for 4” and larger to compensate for job site conditions.

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material specifications
housing:
- ductile iron to ASTM A536, Gr. 65-45-12 and or ASTM A395 Gr.65-45-15, min. tensile strength 65,000 psi (448 MPa).

surface finish:
- standard painted finishes in orange.
- hot dipped zinc galvanized (option)

rubber gasket:
grade "E-pw" EPDM (color code: double green stripe)
- good for cold & hot water up to +230°F (+110°C). Also good for services for water with acid, water with chlorine, chloramine, deionized water, seawater and waste water, dilute acids, oil-free air and many chemicals.
- approved under NSF/ANSI 61 and NSF/ANSI 372 for potable water service to +180°F (+82°C). Also good for services for water with acid, water with chlorine, deionized water, seawater and waste water, dilute acids, oil-free air and many chemicals.
- **not recommended for petroleum oils, minerals oils, solvents and aromatic hydrocarbons.**
- maximum temperature range: -30°F (-34°C) to +230°F (+110°C).
  *EPDM gaskets for water services are not recommended for steam services.

(option) grade "T" nitrile (color code: orange stripe)
- recommended for petroleum products, air with oil vapors, vegetable and mineral oils.
- temperature range: -20°F to +180°F (-29°C to +82°C)
- **do not use for hot wateR above +150°F (+66°C) or hot dry air above +140°F (+60°C).**

other options
grade "O" - fluoroelastomer
grade "L" - silicone
- for dry systems we recommend the use of the Shurjoint gap seal gasket.
- for additional details contact Shurjoint.

bolts & nuts:
- heat treated carbon manganese steel track bolts to ASTM A449-83a (or A183 Gr. 2), minimum tensile strength 110,000 psi (758 MPa), Zinc electroplated, with heavy-duty hexagonal nuts to ASTM A563.

performance data
the following tables show the maximum working pressures (CWP) of Shurjoint model Z07 standard rigid coupling used on both carbon steel and stainless steel pipes. Shurjoint ductile iron couplings can be used in conjunction with stainless steel pipe in non-corrosive environment as the flow media does not come in direct contact with the coupling housings but rather only the gasket.

carbon steel pipe

NOMINAL SIZE	CUT-GROOVED		ROLL-GROOVED	
	XS	STD	STD	SCH. 10
in	psi	psi	psi	psi
mm	Bar	Bar	Bar	Bar
1-1/4	750	750	750	600
32	52	52	52	42
1-1/2	750	750	750	600
40	52	52	52	42
2	750	750	750	600
50	52	52	52	42
2-1/2	750	750	750	600
65	52	52	52	42
3	750	750	750	600
80	52	52	52	42
4	750	750	750	600
100	52	52	52	42
5	750	750	750	500
125	52	52	52	35
6	700	700	700	400
150	48	48	48	28
8	600	600	600	350
200	42	42	42	24
10	500	500	500	300
250	35	35	35	20
12	400	400	400	250
300	28	28	28	17

stainless steel pipe

NOM. SIZE	CUT-GROOVED		ROLL-GROOVED		
	SCH. 80S	SCH. 40S	SCH. 40S	SCH. 10S	SCH. 5S
in	psi	psi	psi	psi	psi
mm	Bar	Bar	Bar	Bar	Bar
1-1/4	750	750	750	750	300
32	52	52	52	52	20
1-1/2	750	750	750	750	300
40	52	52	52	52	20
2	750	750	750	700	300
50	52	52	52	48	20
2½	750	750	750	700	300
65	52	52	52	48	20
3	750	750	750	500	300
80	52	52	52	35	20
4	750	750	750	500	250
100	52	52	52	34	17
5	750	750	650	500	NR
125	52	52	45	34	
6	700	700	600	300	NR
150	48	48	41	20	
8	600	600	450	300	NR
200	42	42	31	21	
10	500	500	450	150	NR
250	35	35	31	10	
12	400	400	400	100	NR
300	28	28	28	7	

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listings/approvals

the information provided below is based on the latest listing and approval data at the time of publication. listings/approvals are subject to change and/or additions by the approvals agencies. contact Shurjoint for the performance on other pipes and the latest listings and approvals

standard pipe

NOM. SIZE	cULus	cULus/FM		VdS	LPCB
	Sch. 5	Sch. 10	Sch. 40		
in	PSI	PSI	PSI	Bar	PSI
mm	Bar	Bar	Bar		Bar
1-1/4	175	500	500	16	300
32	12	35	35		20
1-1/2	175	500	500	16	300
40	12	35	35		20
2	175	500	500	16	300
50	12	35	35		20
1-1/2	N/A	500	500	N/A	N/A
65		35	35		
3	N/A	500	500	16	300
80		35	35		20
4	N/A	500	500	16	300
100		35	35		20
5	N/A	400	400	N/A	N/A
125		28	28		
6	N/A	400	400	16	N/A
150		28	28		
8	N/A	400	400	16	300
200		28	28		20
10	N/A	350	350	12.5	300
250		24	24		20
12	N/A	350	350	12.5	300
300		24	24		20

general notes

- maximum working pressure (CWP) listed is the maximum cold water pressure for general piping services tested to ASTM F1476 and or AWWA C606 methods. figures listed are based on roll- or cut-grooved standard wall carbon steel pipe. for other pipe schedules or pipe materials, contact Shurjoint for additional information.
- max. end load is calculated based on the maximum working pressure (CWP).
- listed and or Approved Pressures are pressure ratings for fire protection systems, tested and approved by various approval bodies. please always refer to the latest approval data posted on the Shurjoint website.
- field joint test: for one time only the system may be tested hydrostatically at 1.5 times the maximum working pressure listed (AWWA C606 5.2.3).
- warning: piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.
- the 10 year limited Warranty applies to manufacturing defects only and does not cover severe service/temperature applications or wear parts.
- Shurjoint reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.