



SHIELD

Pipes & Fittings



SHIELD

7FMA

SHIELD

Introduction

SHIELD is a company created to cater to the infrastructure, fire protection and building services industries with a comprehensive range of products designed to be competitive and of assured quality.

We stay ahead of today's evolving market requirements by committing to a program of continued research and development.

We are able to maintain our high standards by ensuring that our worldwide manufacturing networks are the most advanced in the industry in Europe, Asia and America in terms of quality and delivery lead time. Our fully experienced and professional staff is there to provide engineering expertise and after sales service exactly when you need it.

Combine this with highly responsive and customer focused network of distribution centres around the world, you will find that customer satisfaction is what we excel at.

We are justifiably proud of our global client base. With offices and facilities in the UK and Middle East, we are able to comprehend the specific needs of your particular region.

SHIELD
PIPING
SYSTEM

Trusted Worldwide

Contents

Pipes	Page
Pipes (BS 1387)	2
Pipes (ASTM A53)	3
Threaded Fittings	4
Elbow 90° - SDT-100	5
Reducing Elbow 90° - SDT-101	5
Elbow 45° - SDT-200	5
Tee - SDT-12	6
Reducing Tee - SDT-53	6
Reducing Coupling - SDT-30	7
Cross - SDT-13	7
Reducing Cross - SDT-51	7
Straight Coupling - SDT-22	8
Plug - SDT-55	8
Cap - SDT-14	8
Hex Bushing - SDT-57	9
Union - SDT-59	9
Hex Nipple - SDT-11	9
Hex Reducing Nipple - SDT-111	9
Grooved Fittings	10
Rigid Coupling - Standard - SDG-22	11
Rigid Coupling - Light - SDG-20	12
Flexible Couplings - Heavy Duty - SDG-27	12
Flexible Couplings - Standard - SDG-25	13
Flexible Couplings - Light - SDG-21	14
Reducing Couplings - SDG-30	15
Angle Pad Coupling - SDG-24	16
Elbows - 90° SDG-100, 45° SDG-200, 90° SDG-105	17
Elbows - 22.5° SDG-225, 11.25° SDG-112	18
Tee - SDG-12, Cross Tee - SDG-13, Tee - SDG-102	19
Cap - SDG-14	19
Grooved Flange - SDG-15, Adaptor Flange - SDG-16	20
Reducing Tee - SDG-53	21
Concentric Reducer Grooved - SDG-35, Threaded - SDG-37	22
Eccentric Reducer Grooved - SDG-33	23
Mechanical Tee Threaded Outlet - SDG-42	24
Mechanical Tee Grooved Outlet - SDG-44	25
Mechanical Cross Threaded - SDG-47	26
Mechanical Cross Grooved - SDG-49	27
Mechanical Tee U-Bolt - SDG-40	28
Groove Specifications	28
Pipe Support & Accessories	29
Swivel Hanger - SD-HB	29
Clevis Hanger - SD-HC	30
Pipe Clamp with Lining - SD-GE-RLC	31
Pipe Clamp - SD-GE-PPC	33
U Strap Hanger with Lining - SD-GE-RUS	34
U Strap Hanger - SD-GE-US	35
Riser Hanger or Clamp with Lining - SD-GE-RRC	36
Riser Hanger or Clamp - SD-GE-PRC	37
U-Bolt - SD-UB	38
Rubber Support Insert - SD-RSI	39
Threaded Rod - SD-TR	40
Beam Clamp - SD-CBC	41

Shield Pipes Technical Data

Black and hot dipped galvanized steel welded pipes
Conforming to BS 1387:1985 (EN 10255)

C L A S S	Nominal Bore		Outside Diameter				Wall Thickness		Weight of Black Pipes						Weight of Galvanised Pipes (Calculated)						No. of pipes packed per standard bundle (1 Tonne Approx.)	
			Max.		Min.				Plain Ended			Screwed & Socketed			Plain Ended			Screwed & Socketed				
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	kg/mtr	mtr/ton	ft/ton	kg/mtr	mtr/ton	ft/ton	kg/mtr	mtr/ton	ft/ton	kg/mtr	mtr/ton	ft/ton		kg/mtr
L I G H T (A)	1/2	15	0.843	21.4	0.827	21.0	0.079	2.00	0.947	1056	3465	0.956	1046	3432	1.000	1000	3281	1.009	991	3251	160	
	3/4	20	1.059	26.9	1.039	26.4	0.091	2.30	1.380	725	2379	1.390	719	2359	1.440	694	2277	1.460	690	2264	110	
	1	25	1.331	33.8	1.307	33.2	0.102	2.60	1.980	505	1657	2.000	500	1640	2.060	485	1591	2.090	478	1568	80	
	1 1/4	32	1.673	42.5	1.650	41.9	0.102	2.60	2.540	394	1293	2.570	389	1276	2.640	379	1243	2.680	373	1224	61	
	1 1/2	40	1.906	48.4	1.882	47.8	0.114	2.90	3.230	310	1017	3.270	306	1004	3.350	298	978	3.400	294	965	51	
	2	50	2.370	60.2	2.346	59.6	0.114	2.90	4.080	245	804	4.150	241	791	4.220	237	778	4.300	233	764	37	
	2 1/2	65	2.991	76.6	2.961	75.2	0.124	3.20	5.710	175	574	5.830	172	564	5.890	170	558	6.020	166	545	27	
3	80	3.492	88.7	3.461	87.9	0.124	3.20	6.720	149	489	6.890	145	476	6.930	144	472	7.100	141	463	24		
4	100	4.484	113.9	4.449	113.0	0.142	3.60	9.750	103	338	10.000	100	328	10.030	100	328	10.280	97	318	16		
M E D I U M (B)	1/2	15	0.854	21.7	0.831	21.1	0.102	2.60	1.210	826	2710	1.220	820	2690	1.250	794	2605	1.260	787	2582	130	
	3/4	20	1.071	27.2	1.047	26.6	0.102	2.60	1.560	641	2103	1.570	637	2090	1.620	617	2024	1.640	610	2001	100	
	1	25	1.346	34.2	1.315	33.4	0.124	3.20	2.410	415	1362	2.430	412	1352	2.490	402	1319	2.510	398	1306	65	
	1 1/4	32	1.689	42.9	1.657	42.1	0.124	3.20	3.100	323	1060	3.130	319	1047	3.200	312	1024	3.230	310	1017	51	
	1 1/2	40	1.921	48.8	1.890	48.0	0.124	3.20	3.570	280	919	3.610	277	909	3.680	272	892	3.720	269	883	44	
	2	50	2.394	60.8	2.354	59.8	0.142	3.60	5.030	199	653	5.100	196	643	5.170	193	633	5.250	190	623	30	
	2 1/2	65	3.016	76.6	2.969	75.4	0.142	3.60	6.430	156	512	6.550	153	502	6.610	151	495	6.730	149	489	24	
3	80	3.524	89.5	3.469	88.1	0.157	4.00	8.370	119	390	8.540	117	384	8.580	117	384	8.760	114	374	19		
4	100	4.524	114.9	4.461	113.3	0.177	4.50	12.200	82	269	12.500	80	262	12.480	80	260	12.690	79	259	14		
5	125	5.535	140.6	5.461	138.7	0.197	5.00	16.600	60	197	17.100	58	190	16.940	59	194	17.440	57	187	10		
6	150	6.539	166.1	6.461	164.1	0.197	5.00	19.70	51	167	20.300	49	161	20.100	50	164	20.710	48	157	7		
H E A V Y (C)	1/2	15	0.854	21.7	0.831	21.1	0.124	3.20	1.440	694	2277	1.450	690	2264	1.490	671	2202	1.500	667	2188	110	
	3/4	20	1.071	27.2	1.047	26.6	0.124	3.20	1.870	535	1755	1.880	532	1745	1.930	518	1700	1.950	513	1683	80	
	1	25	1.346	34.2	1.315	33.4	0.157	4.00	2.940	340	1115	2.960	338	1109	3.010	332	1089	3.040	329	1079	55	
	1 1/4	32	1.689	42.9	1.657	42.1	0.157	4.00	3.800	263	863	3.830	261	856	3.900	256	840	3.930	254	833	44	
	1 1/2	40	1.921	48.8	1.890	48.0	0.157	4.00	4.380	228	748	4.420	226	741	4.490	223	732	4.530	221	725	37	
	2	50	2.394	60.8	2.354	59.8	0.177	4.50	6.190	162	531	6.260	160	525	6.330	158	518	6.400	156	512	27	
	2 1/2	65	3.016	76.6	2.969	75.4	0.177	4.50	7.930	126	413	8.050	124	407	8.110	123	404	8.230	121	397	20	
3	80	3.524	89.5	3.469	88.1	0.197	5.00	10.300	97	318	10.500	95	312	10.510	95	312	10.710	93	307	16		
4	100	4.524	114.9	4.461	113.3	0.213	5.40	14.500	69	226	14.800	68	223	14.770	68	223	15.070	67	220	12		
5	125	5.535	140.6	5.461	138.7	0.213	5.40	17.900	56	184	18.400	54	177	18.210	55	180	18.730	53	174	10		
6	150	6.539	166.1	6.461	164.1	0.213	5.40	21.300	47	154	21.900	46	151	21.700	46	151	22.300	45	148	7		

Tolerances:
THICKNESS: Light Tube -8%, Medium and Heavy Tubes -10%.
WEIGHT: Single Tube +10% -8%, Quantity - 150 metres and above of one size & class ±4%.
LENGTH: 6 metres ±0.05 metres

SHIELD reserves the right to change the contents without notice.

Shield Pipes



Seamless steel pipe & welded steel pipe to ASTM A53, Grade A & B (Sizes, Dimensions & Weights)



Nominal Pipe size Inches	O.D. mm	Schedule 10		Schedule 20		Schedule 30		Standard		Schedule 40		Schedule 60		Schedule 80	
		Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.
3/8	17.1	-	-	-	-	-	-	2.31	0.84	2.31	0.84	-	-	3.20	1.10
1/2	21.3	-	-	-	-	-	-	2.77	1.27	2.77	1.27	-	-	3.73	1.62
3/4	26.7	-	-	-	-	-	-	2.87	1.69	2.87	1.69	-	-	3.91	2.21
1	33.4	-	-	-	-	-	-	3.38	2.50	3.38	2.50	-	-	4.55	3.25
1 1/4	42.2	-	-	-	-	-	-	3.56	3.39	3.56	3.39	-	-	4.85	4.47
1 1/2	48.3	-	-	-	-	-	-	3.68	4.05	3.68	4.05	-	-	5.08	5.39
2	60.3	-	-	-	-	-	-	3.91	5.44	3.91	5.44	-	-	5.54	7.48
2 1/2	73.0	-	-	-	-	-	-	5.16	8.63	5.16	8.63	-	-	7.01	11.41
3	88.9	-	-	-	-	-	-	5.49	11.29	5.49	11.29	-	-	7.62	15.27
3 1/2	101.6	-	-	-	-	-	-	5.74	13.57	5.74	13.57	-	-	8.08	18.63
4	114.3	-	-	-	-	-	-	6.02	16.07	6.02	16.07	-	-	8.56	22.32
5	141.3	-	-	-	-	-	-	6.55	21.77	6.55	21.77	-	-	9.52	30.94
6	168.3	-	-	-	-	-	-	7.11	28.26	7.11	28.26	-	-	10.97	42.56
8	219.1	-	-	6.35	33.31	7.04	36.31	8.18	42.55	8.18	42.55	10.31	53.08	12.70	64.64
10	273.0	-	-	6.35	41.75	7.80	51.01	9.27	60.29	9.27	60.29	12.70	81.52	15.09	95.97
12	323.8	-	-	6.35	49.71	8.38	65.18	9.52	73.78	10.31	79.70	14.27	108.92	17.48	132.04
14	355.6	6.35	54.69	7.92	67.90	9.52	81.25	9.52	81.25	11.13	94.55	15.09	126.71	19.05	158.10
16	406.4	6.35	62.64	7.92	77.83	9.52	93.17	9.52	93.17	12.70	123.30	16.66	160.12	21.44	203.53
18	457.2	6.35	70.60	7.92	87.75	11.13	122.43	9.52	105.10	14.27	155.87	19.05	205.83	23.83	254.67
20	508.0	6.35	78.55	9.52	117.02	12.70	155.12	9.52	117.02	15.09	183.42	20.62	247.83	26.19	311.17
24	610.0	6.35	94.46	9.52	140.88	14.27	209.50	9.52	140.88	17.48	255.24	24.61	355.02	30.96	441.78
26	660.0	7.92	127.43	12.70	202.85	-	-	9.52	152.80	-	-	-	-	-	-

Shield reserves the right to change the contents without notice.

Tensile Requirements

	Grade A	Grade B
Tensile Strength, Min, Psi [MPa]	48,000 [330]	60,000 [415]
Yield Strength, Min, Psi [MPa]	30,000 [205]	35,000 [240]

Wall = Wall thickness in mm

Wt. = Weight in Kg / Mtr.

Available in black & hot dipped galvanized

* UL & FM details are available in their respective certificates.

Hydrostatic pressure test applied as per ASTM Standards

Shield Threaded Fittings

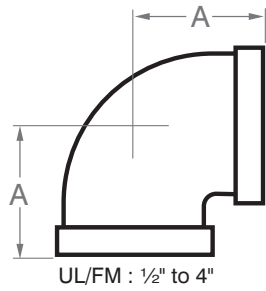
Shield Threaded Fittings feature a complete range of ductile iron / malleable iron threaded fittings in a wide variety of configurations in sizes from 1/2" to 6".

Shield fittings are UL, ULC listed and FM approved for water line and fire protection applications.

Materials	Ductile iron ASTM A536, BS EN 1563 Malleable Iron BS EN 1562
Max. Working Pressure	500 PSI
Dimensions	American Standard ASME B16.3, B16.4, B16.14, Unions B16.39 British Standard BS EN 10242, BS 143 & 1256
Threads	American Standard ANSI B1.20.1 British Standard BS 21, ISO 7/1 (Taper)
Finish	Black or hot dipped galvanized

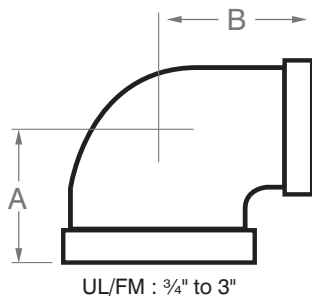


Shield Threaded Fittings



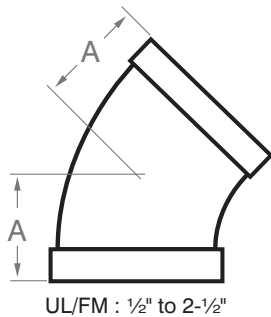
SDT-100 ELBOW 90°

Nominal Size Inch	A Inch	Nominal Size Inch	A Inch
1/2	1.12	2 1/2	2.70
3/4	1.31	3	3.08
1	1.50	3 1/2	3.42
1 1/4	1.75	4	3.79
1 1/2	1.95	5	4.50
2	2.25	6	5.13



SDT-101 REDUCING ELBOW 90°

Nominal Size Inch	A Inch	B Inch
3/4 x 1/2	1.20	1.22
1 x 1/2	1.26	1.36
1 x 3/4	1.37	1.45
1 1/4 x 1/2	1.34	1.53
1 1/4 x 3/4	1.45	1.62
1 1/4 x 1	1.58	1.67
1 1/2 x 1/2	1.41	1.66
1 1/2 x 3/4	1.52	1.75
1 1/2 x 1	1.65	1.80
1 1/2 x 1 1/4	1.82	1.88
2 x 3/4	1.60	1.97
2 x 1	1.73	2.02
2 x 1 1/2	2.02	2.16
2 1/2 x 2	2.39	2.60
2 1/2 x 1 1/2	2.16	2.51
3 x 2 1/2	2.83	3.00
3 x 2	2.52	2.89
4 x 3	3.30	3.60



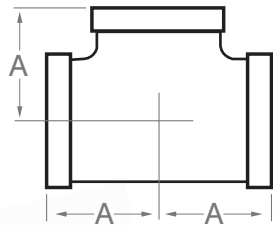
SDT-200 ELBOW 45°

Nominal Size Inch	A Inch	Nominal Size Inch	A Inch
1/2	0.88	2 1/2	1.95
3/4	0.98	3	2.17
1	1.12	3 1/2	2.39
1 1/4	1.29	4	2.61
1 1/2	1.43	5	3.05
2	1.68	6	3.46

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Shield Threaded Fittings

SDT-12 TEE

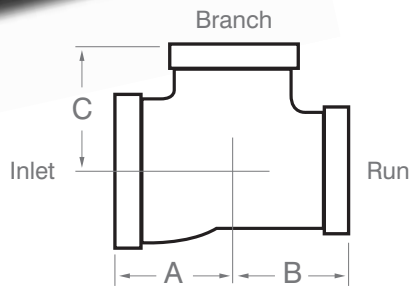


UL/FM: 1/2" to 4"

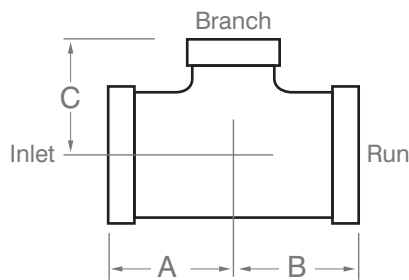
Nominal Size Inch	A Inch	Nominal Size Inch	A Inch
1/2	1.12	2 1/2	2.70
3/4	1.31	3	3.08
1	1.50	3 1/2	3.42
1 1/4	1.75	4	3.79
1 1/2	1.95	5	4.50
2	2.25	6	5.13



SDT-53 REDUCING TEE



UL/FM: 3/4" to 2-1/2"



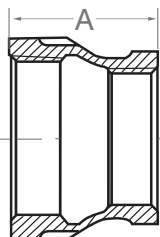
UL/FM: 3/4" to 3"

Nominal Size			A	B	C	
Inlet Inch	Run Inch	Branch Inch	Inch	Inch	Inch	
3/4	3/4	1/2	1.20	1.20	1.22	
1	1/2	1	1.50	1.36	1.50	
		3/4	1.26	1.20	1.36	
	1	3/4	1.37	1.31	1.45	
		1	1.50	1.45	1.50	
1 1/4	1	1/2	1.26	1.26	1.36	
		3/4	1.37	1.37	1.45	
		1	1.58	1.50	1.67	
	1 1/4	1 1/4	1.75	1.67	1.75	
		1/2	1.34	1.34	1.53	
		3/4	1.45	1.45	1.62	
1 1/2	1	1	1.58	1.58	1.67	
		1/2	1.44	1.31	1.69	
		3/4	1.50	1.37	1.75	
		1	1.65	1.50	1.80	
	1 1/4	1 1/2	1.94	1.80	1.94	
		1/2	1.41	1.34	1.66	
		3/4	1.52	1.45	1.75	
		1	1.65	1.58	1.80	
	2	1 1/2	1/2	1.41	1.41	1.66
			3/4	1.52	1.52	1.75
		2	1	1.65	1.65	1.80
			1 1/4	1.82	1.82	1.88
1 1/2		1	1.73	1.65	2.02	
		1 1/2	2.02	1.94	2.16	
		2	2.25	2.16	2.25	
		1/2	1.49	1.49	1.88	
2 1/2	2	3/4	1.60	1.60	1.97	
		1	1.73	1.73	2.02	
	1 1/2	1 1/4	1.90	1.90	2.10	
		1 1/2	2.02	2.02	2.16	
2 1/2	2	3/4	1.74	1.60	2.32	

Note: Sizes available upto 6" x 6" x 2"

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Shield Threaded Fittings



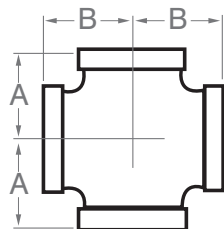
UL/FM: 1/2" to 1-1/2"

SDT-30 REDUCING COUPLING

Nominal Size Inch	A Inch	Nominal Size Inch	A Inch
3/4 x 1/2	1.52	1 1/2 x 1 1/4	2.18
1 x 1/2	1.67	2 x 1	2.53
1 x 3/4	1.67	2 x 1 1/4	2.53
1 1/4 x 3/4	1.93	2 x 1 1/2	2.53
1 1/4 x 1	1.93	2 1/2 x 2	2.68
1 1/2 x 1	2.18		

Note: Sizes are available up to 6"

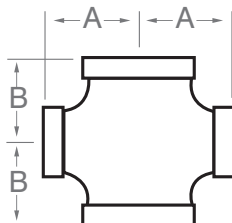
SDT-13 CROSS



UL/FM : 1" to 2"

Nominal Size Inch	A Inch	B Inch
1	1.50	1.50
1 1/4	1.75	1.75
1 1/2	1.95	1.95
2	2.25	2.25
2 1/2	2.70	2.70
3	3.08	3.08
3 1/2	3.42	3.42
4	3.79	3.79
5	4.50	4.50
6	5.13	5.13

SDT-51 REDUCING CROSS



UL/FM : 1-1/4" to 2"

Nominal Size Inch	A Inch	B Inch
1 1/4 x 1 1/4 x 1 x 1	1.67	1.58
1 1/2 x 1 1/2 x 1 x 1	1.80	1.65
2 x 2 x 1 x 1	2.02	1.73
2 1/2 x 2 1/2 x 2 x 2	2.37	2.60
3 x 3 x 2 x 2	2.52	2.89

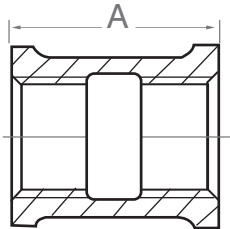
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Factory Mutual System



Shield Threaded Fittings

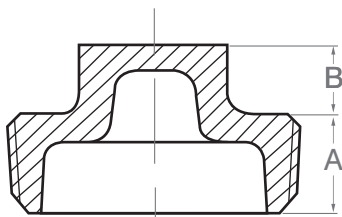


UL/FM : 1/2" to 2-1/2"

SDT-22 STRAIGHT COUPLING

Nominal Size Inch	A Inch	Nominal Size Inch	A Inch
1/2	1.34	2	2.53
3/4	1.52	2 1/2	2.68
1	1.67	3	3.18
1 1/4	1.93	4	3.69
1 1/2	2.18		

Note: Sizes are available up to 6"

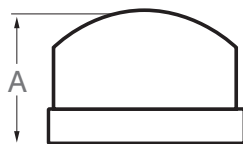


UL/FM : 1/2" to 2"

SDT-55 PLUG

Nominal Size Inch	A Inch	B Inch
1/2	0.56	0.38
3/4	0.63	0.44
1	0.75	0.50
1 1/4	0.80	0.56
1 1/2	0.83	0.62
2	0.88	0.58
2 1/2	1.07	0.74
3	1.13	0.80
3 1/2	1.18	0.86

Note: Sizes are available up to 6"



UL/FM : 1/2" to 2-1/2"

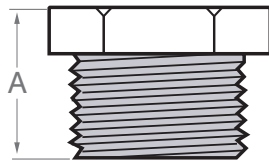
SDT-14 CAP

Nominal Size Inch	A Inch	Nominal Size Inch	A Inch
1/2	0.87	2	1.45
3/4	0.97	2 1/2	1.70
1	1.16	3	1.80
1 1/4	1.28	4	2.08
1 1/2	1.33	6	2.55

SHIELD reserves the right to change the contents without notice.

Shield Threaded Fittings

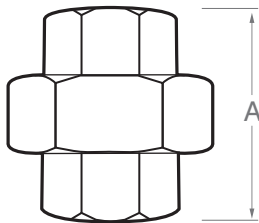
SDT-57 HEX BUSHING



UL/FM: 3/4" to 2"

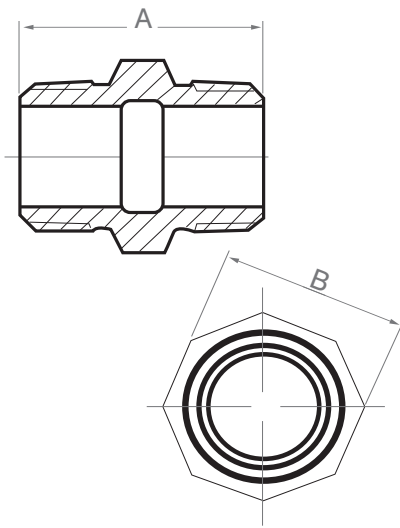
Nominal Size Inch	A Inch
1 x 1/2	1.06
1 x 3/4	1.06
1 1/4 x 1	1.18
1 1/2 x 1	1.26
1 1/2 x 1 1/4	1.26
2 x 1	1.34
2 x 1 1/4	1.34
2 x 1 1/2	1.34

SDT-59 UNION



UL/FM: 1" to 2"

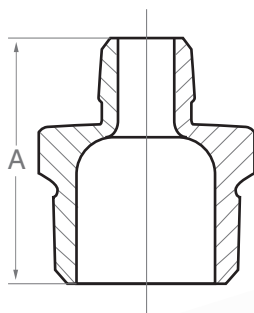
Nominal Size Inch	A Inch
1/2	1.72
3/4	1.94
1	2.06
1 1/4	2.26
1 1/2	2.41
2	2.75
2 1/2	3.22
3	3.50
4	3.85



SDT-11 HEX NIPPLE

Nominal Size Inch	A Inch	B Inch
1/2	1.57	0.98
3/4	1.77	1.18
1	2.05	1.45
1 1/4	2.20	1.81
1 1/2	2.28	2.05
2	2.56	2.52
2 1/2	2.83	3.15
3	3.15	3.70
4	3.62	4.65

SDT-111 HEX REDUCING NIPPLE



Nominal Size Inch	A mm
1/4 x 1/8	31.00
1 x 3/4	54.00
1 1/4 x 1/2	57.00
2 x 1 1/2	68.00
2 1/2 x 1	75.00
2 1/2 x 1 1/4	75.00
2 1/2 x 1 1/2	75.00
2 1/2 x 2	75.00
3 x 1 1/2	83.00
3 x 2	83.00
3 x 2 1/2	83.00

SHIELD reserves the right to change the contents without notice.



Shield Grooved Fittings



The Shield Grooved System provides an economical and efficient piping system solution and offers significant benefits when compared to conventional types of pipe connections including:

- Faster Installation
- Because there is no need for welding or heating, the Shield System ensures a safer and reliable working environment
- Ensures easy alignment
- Reduces noise and vibration
- Easy to install and remove in case of any maintenance requirements



Feature a wide range of coupling and fittings for piping applications in Air Conditioning, Fire Fighting Systems and water pipe lines etc.

Shield Grooved Systems offer 3 types of couplings:

High Pressure Couplings (Flexible) • Medium Pressure Couplings (Rigid, Flexible) • Light Pressure Couplings (Rigid, Flexible)

Material

Shield Grooved Coupling housing and other grooved fittings are cast from Ductile Iron to ASTM A536 Grade 65-45-12 in red paint or hot dipped galvanized, bolts are carbon steel to ISO 898 - 1 class 8.8 heat treated.

Gasket (C shaped)

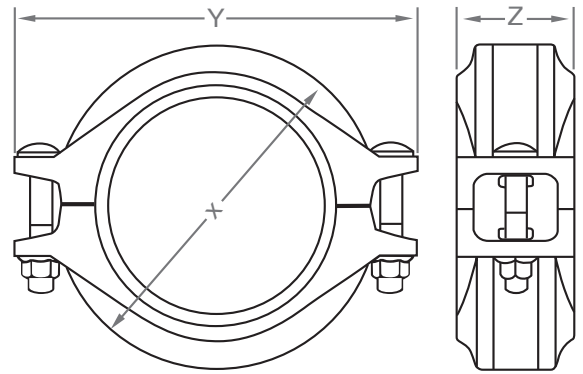
It is important to use the gasket that suits your application, use the table below to select the optimum gasket.

Material	Temp Range	Colour	General Recommended Application
EPDM	-34°C to +110°C	Green Strip	Hot water service, variety of diluted acid, oil free air, chemical. This is NOT recommended for Petroleum services.
Nitrile	-29°C to +82°C	Orange Strip	Petroleum products, vegetable and mineral oils, air with oil vapours. This is NOT recommended for hot water +66°C or for hot dry air over +60°C.
Silicone	-34°C to +177°C	Red Gasket	Dry heat and air without hydrocarbons up to +177°C and certain chemicals

SHIELD Grooved Coupling EPDM Gaskets must be lubricated on the lips and outside back prior to assembly using silicon based non-petroleum lubricant.

For more details about lubricant for other types of gasket, please contact us.

Shield Rigid Coupling



SDG-22 Standard

Nominal Size	Pipe O.D.	Maximum Working Pressure PSI	Dimensions			Bolt/Nut No. - Size mm
			X mm	Y mm	Z mm	
1	33.4	500	59	100	44	2 ³ / ₈ x 55
1 ¹ / ₄	42.2	500	66	105	45.05	2 ³ / ₈ x 55
1 ¹ / ₂	48.3	500	72	110	45.5	2 ³ / ₈ x 55
2	60.3	500	86	132.5	46.5	2 ³ / ₈ x 55
2 ¹ / ₂	73.0	500	99	154	46.5	2 ¹ / ₂ x 60
3 O.D	76.1	500	102.5	152.5	46.5	2 ¹ / ₂ x 70
3	88.9	500	117	168.5	46.5	2 ¹ / ₂ x 75
4	114.3	500	148	200	52.5	2 ¹ / ₂ x 75
5 ¹ / ₂ O.D	139.7	500	172	235	52.5	2 ⁵ / ₈ x 85
5	141.3	500	172	231.5	52.5	2 ⁵ / ₈ x 85
6 ¹ / ₂ O.D	165.1	500	199.5	267.5	53.5	2 ⁵ / ₈ x 85
6	168.3	500	203	271.5	53.5	2 ⁵ / ₈ x 85
8	219.1	450	246.5	350	61.5	2 ³ / ₄ x 115
10	273.0	300	333	428	63	2 ³ / ₄ x 115
12	323.9	300	390	470	63	2 ⁷ / ₈ x 140
14	355.6	300	415	510	72	3 ⁷ / ₈ x 140
16	406.4	300	468	575	72	3 ⁷ / ₈ x 140
18	457.2	225	508	608	78	3 ⁷ / ₈ x 140
20	508.0	225	563	660	78	4 ⁷ / ₈ x 140
24	610.0	225	668	772	78	4-1 x 140

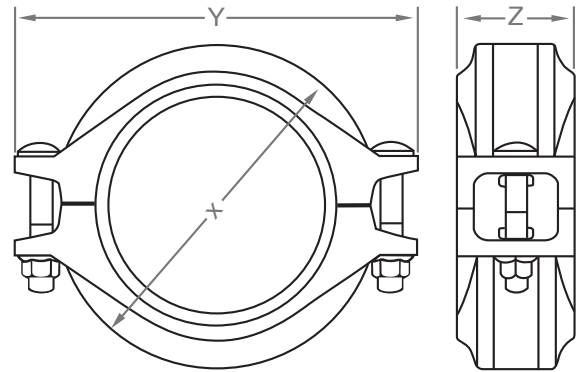
SHIELD reserves the right to change the contents without notice • Refer to UL/FM approvals for details.



Shield Rigid Coupling provides rigid joints to prevent linear movement of pipe assembly. With a unique ends locked design, SDG-22 coupling can be used when the application or design calls for rigid installations.



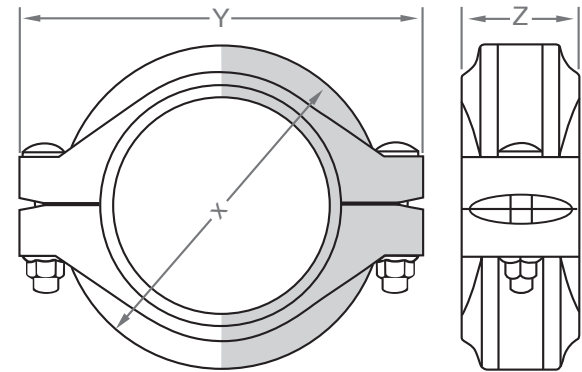
Shield Light Rigid Coupling



SDG-20

Nominal Size	Pipe O.D.	Maximum Working Pressure	Dimensions			Bolt/Nut No. - Size
			X	Y	Z	
Inch	mm	PSI	mm	mm	mm	mm
3	88.9	350	114	160	45.0	2 $\frac{3}{4}$ x 55
4	114.3	350	140	192	46.5	2 $\frac{1}{2}$ x 70
5 $\frac{1}{2}$ O.D.	139.7	350	168	225	50.0	2 $\frac{1}{2}$ x 75
5	141.3	350	170	225	50.0	2 $\frac{1}{2}$ x 75
6 $\frac{1}{2}$ O.D.	165.1	350	195	250	50.0	2 $\frac{1}{2}$ x 75
6	168.3	350	200	255	50.0	2 $\frac{1}{2}$ x 75
8	219.1	350	255	324	58.0	2 $\frac{5}{8}$ x 85
10	273.0	300	318	410	63.0	2 $\frac{3}{4}$ x 120

Shield Flexible Couplings



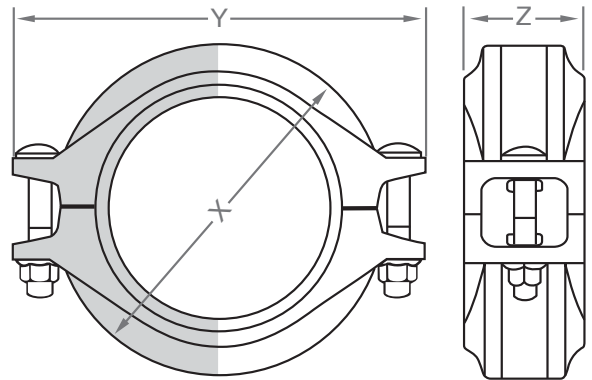
SDG-27 Heavy Duty

Nominal Size	Pipe O.D.	Maximum Working Pressure	Dimensions			Bolt/Nut No. - Size
			X	Y	Z	
Inch	mm	PSI	mm	mm	mm	mm
2	60.3	750	91	133	46.5	2 $\frac{1}{2}$ x 75
2 $\frac{1}{2}$	73.0	750	104	165	46.5	2 $\frac{1}{2}$ x 75
3 O.D.	76.1	750	107	165	46.5	2 $\frac{1}{2}$ x 75
3	88.9	750	122	171	47.0	2 $\frac{1}{2}$ x 75
4	114.3	750	151.5	213	52.0	2 $\frac{5}{8}$ x 85
5	141.3	750	182	241	52.0	2 $\frac{3}{4}$ x 115
6 $\frac{1}{2}$ O.D.	165.1	750	208	281	52.0	2 $\frac{3}{4}$ x 115
6	168.3	750	210	286	52.0	2 $\frac{3}{4}$ x 115
8	219.1	750	268	354	62.0	2 $\frac{7}{8}$ x 140

Shield SDG-27 is a high pressure flexible coupling can be used in different applications where high pressure service is required.

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Shield Flexible Couplings



SDG-25 Standard

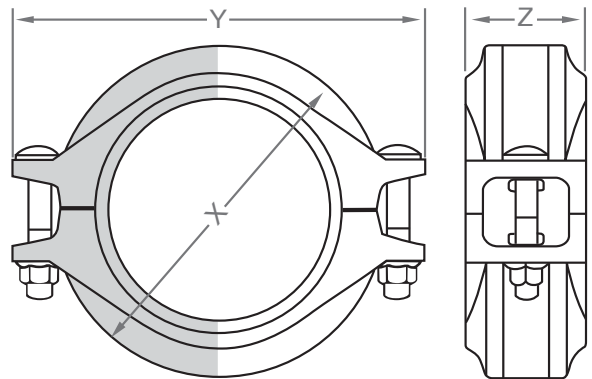
Nominal Size	Pipe O.D.	Maximum Working Pressure PSI	Dimensions			Bolt/Nut No. - Size mm
			X mm	Y mm	Z mm	
1 1/4	42.2	500	66.5	103.0	45.5	2 3/8 x 55
1 1/2	48.3	500	72.0	108.0	45.0	2 3/8 x 55
2	60.3	500	84	129.0	45.0	2 3/8 x 55
2 1/2	73.0	500	101	142.0	45.5	2 3/8 x 55
3 O.D	76.1	500	102	147.0	45.5	2 3/8 x 55
3	88.9	500	116.0	163.5	45.5	2 1/2 x 75
4	114.3	500	145	197.0	50.0	2 1/2 x 75
5 1/2 O.D	139.7	500	169	237.5	51.0	2 5/8 x 80
5	141.3	500	169	230.0	51.0	2 5/8 x 80
6 1/2 O.D	165.1	500	196.5	261.5	51.0	2 5/8 x 85
6	168.3	500	201	268.0	51.0	2 5/8 x 85
8	219.1	450	260.5	349.5	58.5	2 3/4 x 115
10	273.0	300	318	395.0	65.0	2 3/4 x 120
12	323.9	300	368.7	458.2	65.0	2 7/8 x 140
14	355.6	300	402	493.0	72.0	3 7/8 x 140
16	406.4	300	458	547.0	72.0	3 7/8 x 140
18	457.2	300	505	598.0	78.0	3 7/8 x 140
20	508.0	300	550	648.0	78.0	4 7/8 x 140
24	610.0	300	662	774.0	78.0	4-1 x 140

Shield Flexible Couplings allow controlled angular movement of the pipe to assist alignment and installation. The advantage of flexibility must be considered in the design for hanger and support spacing.

SHIELD reserves the right to change the contents without notice • Refer to UL/FM approvals for details.



Shield Light Flexible Coupling



SDG-21

Nominal Size	Pipe O.D.	Maximum Working Pressure	Dimensions			Bolt/Nut No. - Size
			X	Y	Z	
Inch	mm	PSI	mm	mm	mm	mm
4	114.3	300	139	182	50	2 ³ / ₈ x 58
5½ O.D.	139.7	450	168	228	51	2 ⁵ / ₈ x 80
6½ O.D.	165.1	300	192	244	51	2½ x 75
6	168.3	300	200	266	52	2 ⁵ / ₈ x 85
10	273.0	300	320	398	64	2¾ x 120

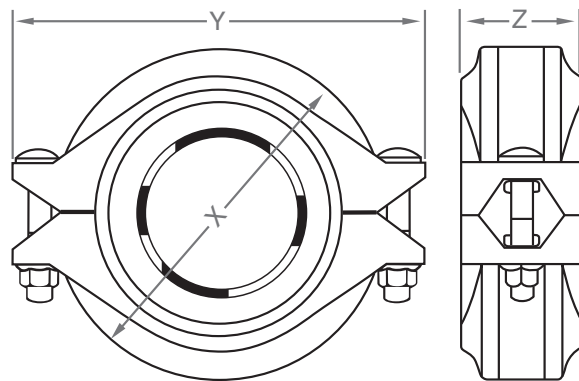
SDG-21 is designed for a maximum working pressure of 300psi. The flexibility benefits of this coupling can be used in applications where high pressure is not required.

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Shield Reducing Coupling



SDG-30

Shield SDG-30 Reducing Coupling allows in line reduction of the pipe diameter on a piping run. SDG-30 can also replace the need for two couplings as well as reducing fittings.

Nominal Size	Pipe O.D.	Maximum Working Pressure	Dimensions			Bolt/Nut No. - Size
			X	Y	Z	
Inch	mm	PSI	mm	mm	mm	mm
2 x 1½	60.3 x 48.3	300	86.0	125	44.0	2¾ x 55
2½ x 2	73.0 x 60.3	300	100.0	138	45.0	2¾ x 55
3 O.D. x 2	76.1 x 60.3	300	102.0	144	45.0	2¾ x 55
3 x 2	88.9 x 60.3	300	115.0	168	46.0	2½ x 70
3 x 2½	88.9 x 73.0	300	115.0	168	46.0	2½ x 70
3 x 3 O.D.	88.9 x 76.1	300	115.0	172	46.0	2½ x 70
4 x 2	114.3 x 60.3	300	144.0	198	50.0	2½ x 70
4 x 2½	114.3 x 73.0	300	144.0	198	50.0	2½ x 70
4 x 3 O.D.	114.3 x 76.1	300	144.0	202	50.0	2½ x 70
4 x 3	114.3 x 88.9	300	148.0	198	50.0	2½ x 70
6½ O.D. x 3	165.1 x 88.9	300	200.0	260	51.0	2¾ x 115
6½ O.D. x 4	165.1 x 114.3	300	197.0	260	51.0	2¾ x 85
6 x 3	168.3 x 88.9	300	200.0	268	51.0	2¾ x 85
6 x 4	168.3 x 114.3	300	202.5	268	52.5	2¾ x 85
8 x 6½ O.D.	219.1 x 165.1	300	257.0	335	60.0	2¾ x 115
8 x 6	219.1 x 168.3	300	260.0	338	60.0	2¾ x 115

SHIELD reserves the right to change the contents without notice • Refer to UL/FM approvals for details.

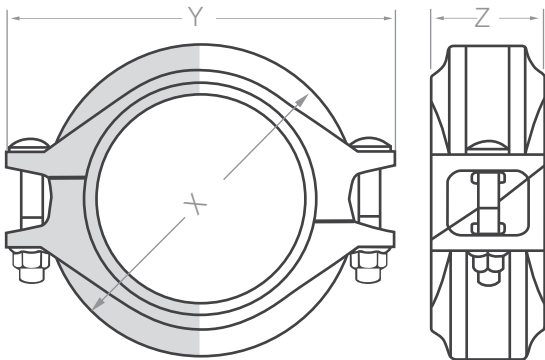


Shield Angle Pad Coupling

SDG-24

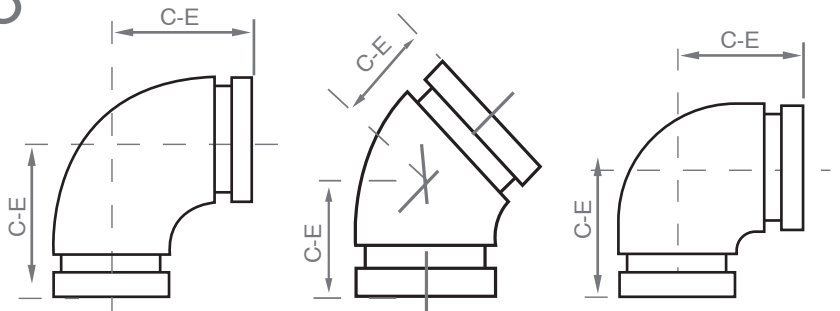
Nominal Size	Pipe O.D.	Maximum Working Pressure	Dimensions			Bolt/Nut No. - Size
			X	Y	Z	
Inch	mm	PSI	mm	mm	mm	mm
1¼	42.4	500	64	99	46.5	2-M10 x 55
1½	48.3	500	70	105	46.5	2-M10 x 55
2	60.3	500	85	121	46.5	2-M10 x 55
2½	73.0	300	99	134	47.5	2-M10 x 63
3 O.D.	76.1	500	102	137	47.5	2-M10 x 63
3	88.9	500	115	150	47.5	2-M10 x 60
4	114.3	500	142	180	50.0	2-M10 x 65
5½ O.D.	139.7	300	171	214	52.5	2-M12 x 75
6½ O.D.	165.1	300	198	242	52.5	2-M12 x 75
6	168.3	300	201	245	52.5	2-M12 x 75
8	219.1	300	258	331	63.5	2-M20 x 110
10	273.0	300	321	406	64.5	2-M22 x 140

SHIELD reserves the right to change the contents without notice • Refer to UL/FM approvals for details.





Shield 90° & 45° Elbows



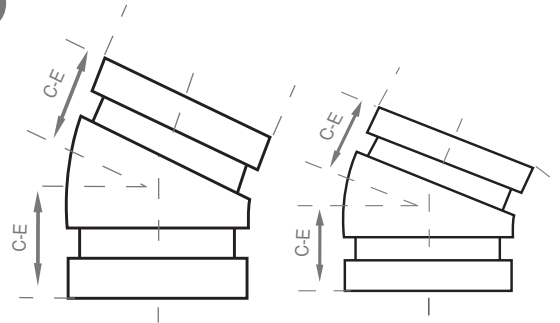
90° SDG-100, 45° SDG-200, 90° SDG-105

Nominal Size	Pipe O.D.	Maximum Working Pressure	90° SDG-100	45° SDG-200	90° SDG-105	
			Dimensions	Dimensions	Maximum Working Pressure	C-E
Inch	mm	PSI	C-E mm	C-E mm	PSI	mm
1	33.4	500	57	38.0		
1 1/4	42.2	500	70	44.0		
1 1/2	48.3	500	70	44.0		
2	60.3	500	82.50	51.0	300	70.00
2 1/2	73.0	500	95	57.0	300	76.00
3 O.D	76.1	500	101.50	57.0	300	76.00
3	88.9	500	108	64.0	300	85.50
4	114.3	500	127	76.0	300	101.00
5 1/2 O.D	139.7	500	140	82.5	300	101.00
5	141.3	500	140	83.0	300	124.00
6 1/2 O.D	165.1	500	165	89.0	300	140.00
6	168.3	500	165	89.0	300	140.00
8	219.1	500	197	108.0	300	175.00
10	273.0	500	229	120.0		
12	323.9	500	254	133.0		
14	355.6	300	279	152.0		
16	406.4	300	305	184.0		
18	457.2	300	394	203.0		

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Shield 22.5° & 11.25° Elbows



22.5° SDG-225 & 11.25° SDG-112

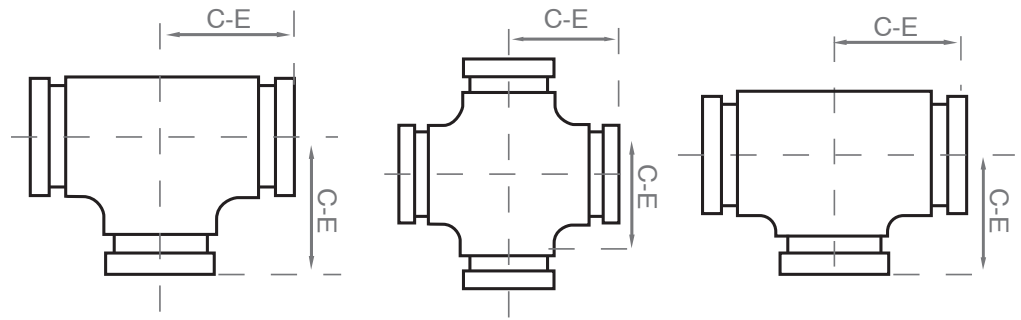
Nominal Size	Pipe O.D.	Maximum Working Pressure	22.5° Elbow Dimensions C-E	11.25° Elbow Dimensions C-E
Inch	mm	PSI	mm	mm
1¼	42.4	500	45	35
1½	48.3	500	45	35
2	60.3	500	48	35
2½	73.0	500	51	38
3 O.D.	76.1	500	51	38
3	88.9	500	57	38
4	114.3	500	73	44
5½ O.D.	139.7	500	73	51
6½ O.D.	165.1	500	79	51
6	168.3	500	79	51
8	219.1	500	98	51

SHIELD reserves the right to change the contents without notice.



Factory Mutual System

Shield Tees



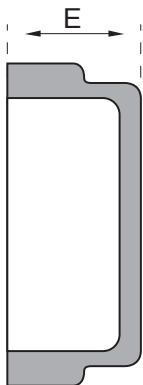
SDG-12 Tee, SDG-13 Cross Tee, SDG-102 Tee

Nominal Size	Pipe O.D.	Maximum Working Pressure	SDG-12 Tee	SDG-13 Cross Tee	SDG-102 Tee (Short)	
			Dimensions	Dimensions	Dimensions	Dimensions
			C-E	C-E	Maximum Working Pressure	C-E
Inch	mm	PSI	mm	mm	PSI	mm
1	33.7	500	57.0	-	-	-
1¼	42.4	500	70.0	70.0	-	-
1½	48.3	500	70.0	70.0	-	-
2	60.3	500	82.5	70.0	300	70.0
2½	73.0	500	95.0	76.0	300	76.0
3 O.D.	76.1	500	95.0	76.0	300	76.0
3	88.9	500	108.0	85.5	300	85.5
4	114.3	500	127.0	101.0	300	101.0
5½ O.D.	139.7	500	140.0	124.0	300	124.0
5	141.3	500	140.0	124.0	300	124.0
6½ O.D.	165.1	500	165.0	140.0	300	140.0
6	168.3	500	165.0	140.0	300	140.0
8	219.1	500	197.0	175.0	300	175.0
10	273.0	500	229.0	229.0	-	-
12	323.9	500	254.0	254.0	-	-
14	377.0	300	279.0	279.0	-	-
16	406.4	300	305.0	305.0	-	-
18	457.2	300	342.0	343.0	-	-
20	508.0	300	381.0	381.0	-	-
24	609.6	300	432.0	432.0	-	-

• Reducing cross (grooved, threaded) are also available contact shield for details.

Shield Cap

SDG-14



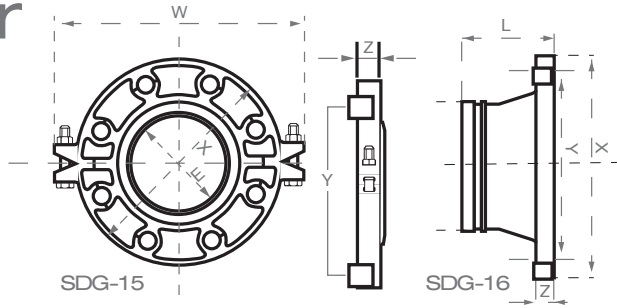
Nominal Size	Pipe O.D.	Maximum Working Pressure	Cap Dimension
Inch	mm	PSI/Mpa	E mm
1¼	42.2	500	25.50
1½	48.3	500	25.50
2	60.3	500	25.50
2½	73.0	500	25.50
3 O.D.	76.1	500	25.50
3	88.9	500	25.50
4	114.3	500	27
5½ O.D.	139.7	500	27
5	141.3	500	27
6½ O.D.	165.1	500	27
6	168.3	500	27
8	219.1	500	30.2
10	273.0	500	32
12	323.9	500	32

• SHIELD reserves the right to change the contents without notice • Refer to UL/FM approvals for details.

Shield Grooved & Adaptor Flange

Grooved Flange SDG-15 & Adaptor Flange SDG-16

PN10/PN16



Nominal Size	Pipe O.D.	Max. Working Pressure	Grooved Flange Dimensions						Adaptor Flange Dimensions					
			W	Z	X	Y	E	Bolt / Nut No. - Size		L	X	Y	Z	Bolt / Nut No. - Size
Inch	mm	PSI	mm	mm	mm	mm	mm	mm		mm	mm	mm	mm	mm
1½	48.3	300	195.0	18.5	150	110	45.4	2-M10 x 50	4-M16	60.5	150	110	16	4-M16
2	60.3	300	220.0	18.5	165	125	57.5	2-M10 x 50	4-M16	65.0	165	125	16	4-M16
3 O.D.	76.1	300	235.0	18.5	185	145	72.7	2-M10 x 50	4-M16	65.0	185	145	16	4-M16
3	88.9	300	252.0	18.5	195	160	85.5	2-M10 x 50	8-M16	65.0	200	160	16	8-M16
4	114.3	300	279.0	18.5	224	180	110.5	2-M10 x 50	8-M16	70.0	220	180	16	8-M16
5½ O.D.	139.7	300	320.0	23.0	250	210	135.5	2-M12 x 65	8-M16	70.0	250	210	18	8-M16
6½ O.D.	165.1	300	346.0	21.5	280	240	160.8	2-M12 x 65	8-M20	70.0	285	240	18	8-M20
6	168.3	300	346.0	24.0	280	240	164.3	2-M12 x 65	8-M20	70.0	285	240	18	8-M20
8	219.1	300	414.3	30.0	340	295	214.9	2¾ x 70	12-M20	80.0	340	295	19	12-M20
10	273.0	300	480.0	25.5	405	355	268.9	2¾ x 70	12-M24	85.0	405	355	21	12-M24
12	323.9	300	530.5	25.5	460	410	318.9	2¾ x 70	12-M24	90.0	460	410	24	12-M24

ANSI 125/150

Nominal Size	Pipe O.D.	Max. Working Pressure	Grooved Flange Dimensions						Adaptor Flange Dimensions					
			W	X	Z	Y	E	Bolt / Nut No. - Size		L	X	Y	Z	Bolt / Nut No. - Size
Inch	mm	PSI	mm	mm	mm	mm	mm	mm		mm	mm	mm	mm	mm
2	60.3	300	206.0	19.0	152.0	121.0	57.5	2-M10 x 50	4-5/8	65.0	152	120.5	16	4-5/8
2½	73.0	300	-	-	-	-	-	-	-	65.0	185	139.7	16	4-5/8
3 O.D.	76.1	300	230.0	19.0	178.0	140.0	72.7	2-M10 x 50	4-5/8	-	-	-	-	-
3	88.9	300	246.0	19.0	191.0	152.0	85.5	2-M10 x 50	4-5/8	65.0	200	152.4	16	8-5/8
4	114.3	300	280.0	19.0	229.0	191.0	110.5	2-M12 x 55	8-5/8	70.0	229	190.5	16	8-5/8
6	168.3	300	346.0	24.0	280.0	241.3	164.3	2-M12 x 65	8-3/4	70.0	282	241.3	18	8-3/4
8	219.1	300	414.3	30.0	341.4	298.5	214.9	2¾ x 70	8-3/4	75.0	340	298.5	19	8-3/4
10	273.0	300	481.2	30.3	405.6	361.95	268.9	2¾ x 70	12-7/8	85.0	406	362.0	21	12-7/8
12	323.9	300	553.3	30.4	482.6	431.8	318.9	2¾ x 70	12-7/8	-	-	-	-	-
14	355.6	300	590.0	37.0	535.0	476.3	350.6	-	12-1	127.0	535	476.3	33	12-1
16	406.4	300	650.0	37.0	595.0	539.8	401.5	-	16-1	127.0	595	539.8	34.5	16-1
18	457.2	300	690.0	40.0	635.0	577.8	452.2	-	16-11/8	140.0	642	577.8	40	16-11/8
20	508.0	300	765.0	43.0	700.0	635.0	503.0	-	20-11/8	152.0	700	635.0	43	20-11/8
24	609.6	300	875.0	49.0	815.0	749.3	601.6	-	20-11/4	152.0	815	749.3	49	20-11/4

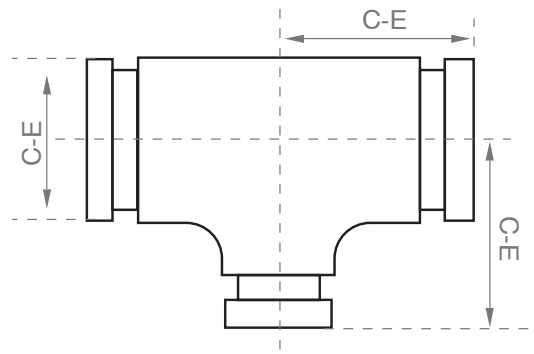
Class 300

Size	Grooved Flange Dimensions						
	O.D. of Flange	I.D.	Thickness	PCD	O.D. Inc. Bolt	Bolt Size	
Inch	mm	X	E	Z	Y	W	Inch
		mm	mm	mm	mm	mm	
2½	73.0	190	69.60	24.6	149.2	244.0	8 - 3/4
3	88.9	210	84.60	28.0	168.3	274.0	8 - 3/4
4	114.3	255	110.20	31.5	200.0	310.0	8 - 3/4
6	168.3	320	164.20	35.5	269.9	388.0	12 - 3/4
8	219.1	380	214.93	41.0	330.2	470.4	12 - 7/8

SHIELD reserves the right to change the contents without notice • Refer to UL/FM approvals for details.



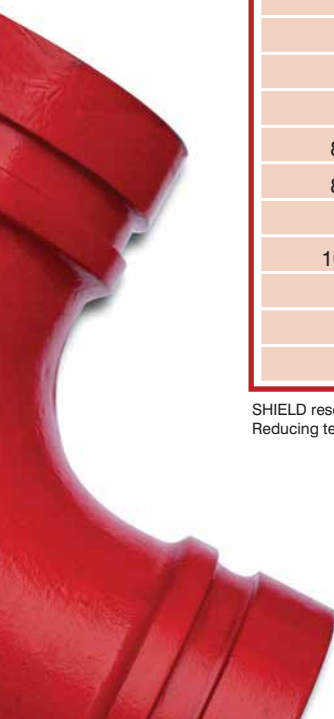
Shield Grooved Reducing Tee



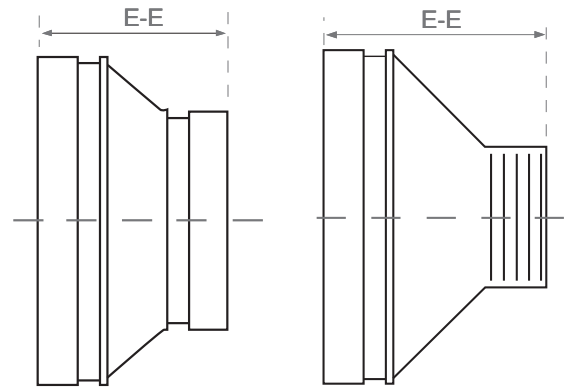
SDG-53

Nominal Size Inch	Pipe O.D. mm	Maximum Working Pressure PSI	C-E mm
2 x 1	60.3 x 33.4	500	82.5
2 x 1½	60.3 x 48.3	500	82.5
30.D x 2	76.1 x 60.3	500	101.5
3 x 1	76.1 x 33.4	500	108
3 x 2	88.9 x 60.3	500	108
3 x 3 O.D	88.9 x 76.1	500	108
4 x 1	114.3 x 33.4	500	127
4 x 2	114.3 x 60.3	500	127
4 x 3 O.D	114.3 x 76.1	500	127
4 x 3	114.3 x 88.9	500	127
5½ O.D x 2	139.7 x 60.3	500	139.5
5½ O.D x 3 O.D	139.7 x 76.1	500	139.5
5½ O.D x 3	139.7 x 88.9	500	139.5
5½ O.D x 4	139.7 x 114.3	500	139.5
5 x 2	141.3 x 60.3	500	139.5
6 ½ O.D x 2	165.1 x 60.3	500	165
6 ½ O.D x 3 O.D	165.1 x 76.1	500	165
6 ½ O.D x 3	165.1 x 88.9	500	165
6 ½ O.D x 4	165.1 x 114.3	500	165
6½ O.D x 51/2 O.D	165.1 x 139.7	500	165
6 x 2	168.3 x 60.3	500	165
6 x 2½	168.3 x 73.0	500	165
6 x 4	168.3 x 114.3	500	165
6 x 5	168.3 x 141.3	500	165
8 x 2	219.1 x 60.3	500	197
8 x 3 O.D	219.1 x 76.1	500	197
8 x 3	219.1 x 88.9	500	197
8 x 4	219.1 x 114.3	500	197
8 x 5½ O.D	219.1 x 139.7	500	197
8 x 6½ O.D	219.1 x 165.1	500	197
8 x 6	219.1 x 168.3	500	197
10 x 6½ O.D	273.0 x 165.1	500	229
10 x 8	273.0 x 219.1	500	229
12 x 8	323.9 x 219.1	500	254
12 x 10	323.9 x 273.0	500	254

SHIELD reserves the right to change the contents without notice • Please refer to UL/FM approvals for details.
Reducing tee SDG-55 threaded outlet are also available, contact Shield for details.



Shield Concentric Reducer



Grooved SDG-35 & Threaded SDG-37

Nominal Size	Pipe O.D.	Maximum Working Pressure	SDG-35 Grooved	SDG-37 Threaded
			Dimensions E-E	Dimensions E-E
Inch	mm	PSI	mm	mm
2 x 1 ¹ / ₄	60.3 x 42.2	500	64	64
2 x 1 ¹ / ₂	60.3 x 48.3	500	64	64
2 ¹ / ₂ x 2	73.0 x 60.3	500	64	64
3 O.D x 2	76.1 x 60.3	500	64	64
3 x 1	88.9 x 33.4	500	64	64
3 x 1 ¹ / ₂	88.9 x 48.3	500	64	64
3 x 2	88.9 x 60.3	500	64	64
3 x 2 ¹ / ₂	88.9 x 73.0	500	64	64
3 x 3 O.D	88.9 x 76.1	500	64	64
4 x 1 ¹ / ₄	114.3 x 42.2	500	76	76
4 x 1 ¹ / ₂	114.3 x 48.3	500	76	76
4 x 2	114.3 x 60.3	500	76	76
4 x 2 ¹ / ₂	114.3 x 73.0	500	76	76
4 x 3 O.D	114.3 x 76.1	500	76	76
4 x 3	114.3 x 88.9	500	76	76
5 ¹ / ₂ O.D x 2	139.7 x 60.3	500	102	102
5 ¹ / ₂ O.D x 3 O.D	139.7 x 76.1	500	102	102
5 ¹ / ₂ O.D x 3	139.7 x 88.9	500	102	102
5 ¹ / ₂ O.D x 4	139.7 x 114.3	500	102	102
6 ¹ / ₂ O.D x 2	165.1 x 60.3	500	102	102
6 ¹ / ₂ O.D x 3 O.D	165.1 x 76.1	500	102	102
6 ¹ / ₂ O.D x 3	165.1 x 88.9	500	102	102
6 ¹ / ₂ O.D x 4	165.1 x 114.3	500	102	102
6 ¹ / ₂ O.D x 5 ¹ / ₂ O.D	165.1 x 139.7	500	102	102

SHIELD reserves the right to change the contents without notice • Please refer to UL/FM approvals for details.



Shield Concentric Reducer (Continued)

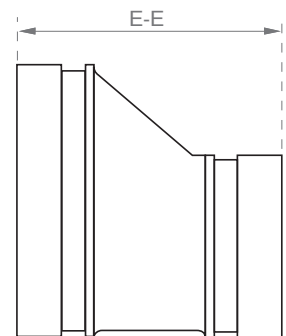


Grooved SDG-35 & Threaded SDG-37

Nominal Size	Pipe O.D.	Maximum Working Pressure	SDG-35 Grooved Dimensions	SDG-37 Threaded Dimensions
			E-E mm	E-E mm
Inch	mm	PSI		
6 x 2	168.3 x 60.3	500	102	102
6 x 2½	168.3 x 73.0	500	102	102
6 x 3 O.D.	168.3 x 76.1	500	102	102
6 x 3	168.3 x 88.9	500	102	102
6 x 4	168.3 x 114.3	500	102	102
6 x 5½ O.D.	168.3 x 139.7	500	102	102
6 x 5	168.3 x 141.3	500	102	102
8 x 2½	219.1 x 73.0	500	127	127
8 x 3	219.1 x 88.9	500	127	127
8 x 4	219.1 x 114.3	500	127	127
8 x 5½ O.D.	219.1 x 139.7	500	127	127
8 x 5	219.1 x 141.3	500	127	127
8 x 6½ O.D.	219.1 x 165.1	500	127	127
8 x 6	219.1 x 168.3	500	127	127
10 x 6½ O.D.	373.0 x 165.1	500	152	152
10 x 8	273.0 x 219.1	500	152	152
12 x 8	323.9 x 219.1	500	178	178
12 x 10	323.9 x 273.0	500	178	178
16 x 12	406.4 x 323.9	300	229	229
16 x 14	406.4 x 355.6	300	229	229
18 x 14	457.2 x 355.6	300	241	241
18 x 16	457.2 x 406.4	300	241	241

Shield Grooved Eccentric Reducer

Grooved SDG-33

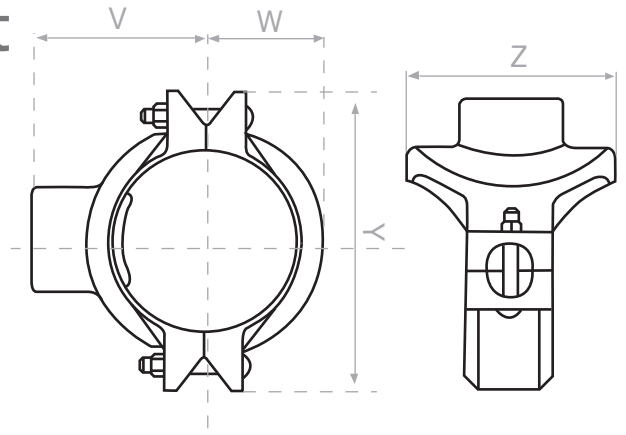


Nominal Size Grooved x Grooved	Pipe O.D.	Maximum Working Pressure	SDG-33 Grooved Dimensions
			E-E
Inch	mm	PSI	mm
4 x 3 O.D.	114.3 x 76.1	500	102
4 x 3	114.3 x 88.9	500	102
5½ O.D x 4	139.7 x 114.3	500	127
6½ O.D x 3	165.1 x 88.9	500	140
6½ O.D x 4	165.1 x 114.3	500	140
6½ O.D x 5½ O.D.	165.1 x 139.7	500	140
8 x 4	219.1 x 114.3	500	215

SHIELD reserves the right to change the contents without notice • Please refer to UL/FM approvals for details.



Shield Threaded Outlet Mechanical Tee



SDG-42

Nominal Size Run x Branch Inch	Pipe O.D. mm	Maximum Working Pressure PSI	Hole Dia +1.6 mm	Dimensions				Bolt Size mm
				Y mm	Z mm	V mm	W mm	
4 x 3 O.D.	114.3 x 76.1	300	70	178	103.5	98	67.5	1/2 x75
4 x 3	114.3 x 88.9	300	89	178	124.0	98	67.5	1/2 x75
5 1/2 O.D. x 1	139.7 x 33.7	300	38	210	77.0	100	82.0	5/8 x 85
5 1/2 O.D. x 1 1/4	139.7 x 42.4	300	51	210	91.0	105	82.0	5/8 x 85
5 1/2 O.D. x 1 1/2	139.7 x 48.3	300	51	210	91.0	105	82.0	5/8 x 85
5 1/2 O.D. x 2	139.7 x 60.3	300	64	210	110.0	108	82.0	5/8 x 85
5 1/2 O.D. x 3 O.D.	139.7 x 76.1	300	70	210	110.0	115	82.0	5/8 x 85
5 1/2 O.D. x 3	139.7 x 88.9	300	89	210	130.0	115	82.0	5/8 x 85
5 1/2 O.D. x 4	139.7 x 114.3	300	114	210	153.0	118	82.0	5/8 x 85
5 x 1 1/4	141.3 x 42.4	300	51	210	91.0	105	82.0	5/8 x 85
6 1/2 O.D. x 1/2	165.1 x 21.3	300	38	235	77.0	115	94.5	5/8 x 105
6 1/2 O.D. x 3/4	165.1 x 26.9	300	38	235	77.0	115	94.5	5/8 x 105
6 1/2 O.D. x 1	165.1 x 33.7	300	38	235	77.0	115	94.5	5/8 x 105
6 1/2 O.D. x 1 1/4	165.1 x 42.4	300	51	235	92.5	115	94.5	5/8 x 105
6 1/2 O.D. x 1 1/2	165.1 x 48.3	300	51	235	92.5	115	94.5	5/8 x 105
6 1/2 O.D. x 2	165.1 x 60.3	300	64	235	110.0	120	94.5	5/8 x 105
6 1/2 O.D. x 3 O.D.	165.1 x 76.1	300	70	235	110.0	125	94.5	5/8 x 105
6 1/2 O.D. x 3	165.1 x 88.9	300	89	235	130.0	125	94.5	5/8 x 105
6 1/2 O.D. x 4	165.1 x 114.3	225	114	240	155.0	130	94.5	5/8 x 105
6 x 1 1/4	168.3 x 42.4	300	51	240	92.5	115	96.5	5/8 x 105
6 x 1 1/2	168.3 x 48.3	300	51	240	92.5	115	96.5	5/8 x 105
6 x 2	168.3 x 60.3	300	64	240	110.0	121	96.5	5/8 x 105
6 x 2 1/2	168.3 x 73.0	300	70	240	110.0	127	96.5	5/8 x 105
6 x 3 O.D.	168.3 x 76.1	300	70	240	110.0	127	96.5	5/8 x 105
6 x 3	168.3 x 88.9	300	89	240	130.0	127	96.5	5/8 x 105
6 x 4	168.3 x 114.3	300	114	240	155.0	130	96.5	5/8 x 105
8 x 1	219.1 x 33.7	300	38	300	78.0	140	123.0	3/4 x 115
8 x 1 1/4	219.1 x 42.4	300	51	300	96.5	140	123.0	3/4 x 115
8 x 1 1/2	219.1 x 48.3	300	51	300	96.5	143	123.0	3/4 x 115
8 x 2	219.1 x 60.3	300	64	300	117.0	149	123.0	3/4 x 115
8 x 2 1/2	219.1 x 73.0	300	70	300	117.0	155	123.0	3/4 x 115
8 x 3 O.D.	219.1 x 76.1	300	70	300	117.0	155	123.0	3/4 x 115
8 x 3	219.1 x 88.9	300	89	300	133.5	155	123.0	3/4 x 115
8 x 4	219.1 x 114.3	300	114	300	164.0	160	123.0	3/4 x 115

Shield Mechanical Tees allow a direct branch connection to be made on a pipe run where sufficient space allows a hole to be cut. Material: Ductile Iron ASTM A536. Gasket material EPDM. Threads are available to BSPT or NPT and can be supplied in red coating or hot dipped galvanized.

SHIELD reserves the right to change the contents without notice.

The mechanical tee and cross features a gap between the bolt pads. Do not attempt to bring bolt pads together which would result in metal to metal when tightening bolts and nuts. Note that excessive torque may cause joint failure - the following table provides recommended bolt fastening torque.

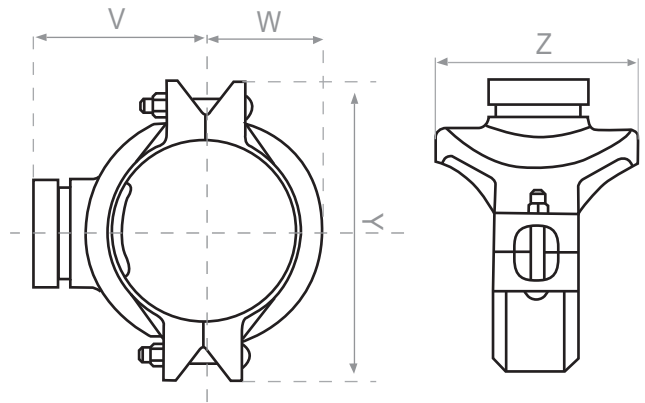
Bolt Size	Recommended Bolt Torque N - m
3/8"	40 ~ 60
1/2"	110 ~ 135
5/8"	135 ~ 175
3/4"	175 ~ 245
7/8"	245 ~ 325





Grooved Outlet Mechanical Tee

SDG-44

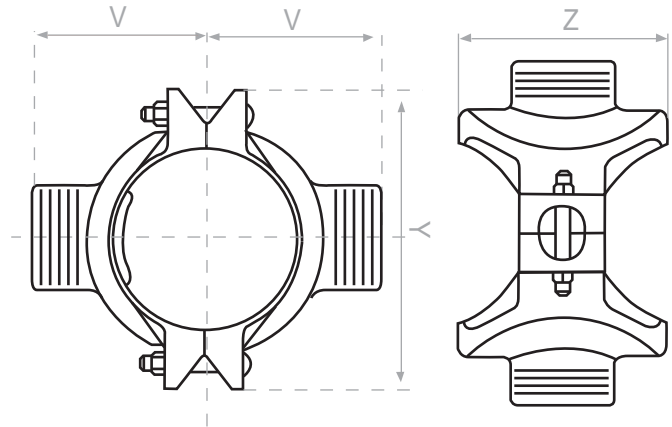
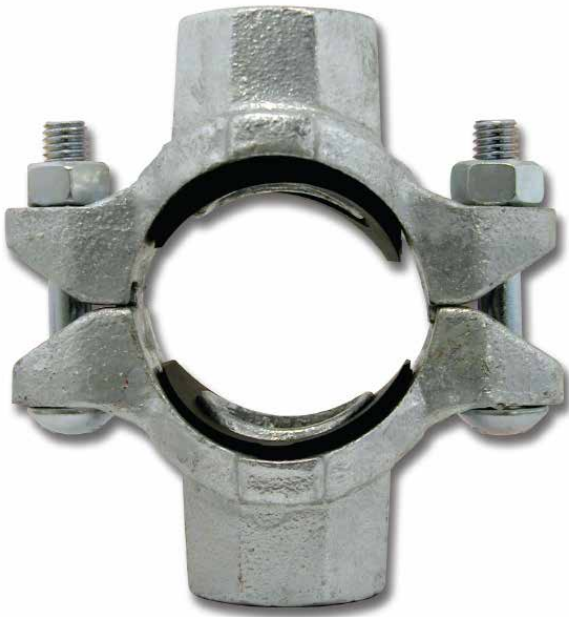


Nominal Size Run x Branch Inch	Pipe O.D. mm	Maximum Working Pressure PSI	Hole Dia +1.6 mm	Dimensions				Bolt Size mm
				Y mm	Z mm	V mm	W mm	
2 1/2 x 1 1/4	73.0 x 42.2	300	51	144	84.5	75	49	1/2 x 60
3 x 2	88.9 x 60.3	300	64	160	104	92	53.5	1/2 x 75
4 x 2	114.3 x 60.3	300	64	186	104.4	101.5	68	1/2 x 75
4 x 2 1/2	114.3 x 73.0	300	70	186	104.4	101.5	68	1/2 x 75
4 x 3 O.D	114.3 x 76.1	300	70	186	104.4	101.5	68	1/2 x 75
4 x 3	114.3 x 88.9	300	89	186	124	101.5	68	1/2 x 75
5 1/2 O.D x 2	139.7 x 60.3	300	70	226	114	119	81	5/8 x 85
5 1/2 O.D x 3 O.D	139.7 x 76.1	300	70	226	114	119	81	5/8 x 85
5 1/2 O.D x 3	139.7 x 88.9	300	89	226	136	122	81	5/8 x 85
6 1/2 O.D x 2	165.1 x 60.3	300	64	242	112	127.5	95	5/8 x 110
6 1/2 OD x 3 O.D	165.1 x 76.1	300	70	242	112	127.5	95	5/8 x 110
6 1/2 O.D x 3	165.1 x 88.9	300	89	242	142.6	141	95	5/8 x 110
6 1/2 O.D x 4	165.1 x 114.3	300	114	242	157	141	95	5/8 x 110
6 x 2	168.3 x 60.3	300	64	246	114	134	98.5	5/8 x 110
6 x 4	168.3 x 114.3	300	114	246	157	142	98.5	5/8 x 110
8 x 2	219.1 x 60.3	300	70	320	118	158	123	3/4 x 115
8 x 3 O.D	219.1 x 76.1	300	70	320	118	158	123	3/4 x 115
8 x 3	219.1 x 88.9	300	89	320	142	161	123	3/4 x 115
8 x 4	219.1 x 114.3	300	114	320	170	162	123	3/4 x 115

SHIELD reserves the right to change the contents without notice.



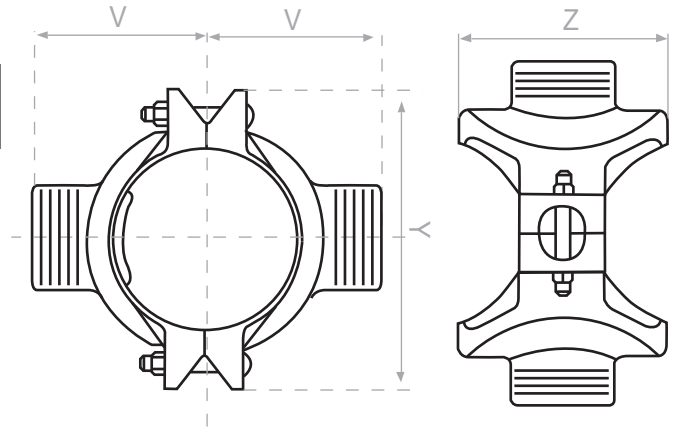
Shield Threaded Mechanical Cross



SDG-47

Nominal Size Run x Branch Inch	Pipe O.D. mm	Maximum Working Pressure PSI	Hole Dia +1.6 mm	Dimensions			Bolt Size mm
				Y mm	Z mm	V mm	
3 x 1/2	88.9 x 21.3	300	38	150	71.0	78.0	1/2 x 75
3 x 3/4	88.9 x 26.9	300	38	150	71.0	78.0	1/2 x 75
3 x 1	88.9 x 33.7	300	38	150	71.0	71.0	1/2 x 75
3 x 1 1/4	88.9 x 42.2	300	51	150	84.5	74.0	1/2 x 75
3 x 1 1/2	88.9 x 48.3	300	51	150	84.5	74.0	1/2 x 75
4 x 1/2	114.3 x 21.3	300	38	178	77.5	82.0	1/2 x 75
4 x 3/4	114.3 x 26.9	300	38	178	77.5	82.0	1/2 x 75
4 x 1	114.3 x 33.7	300	38	178	77.5	82.0	1/2 x 75
4 x 1 1/4	114.3 x 42.2	300	51	178	88.0	89.5	1/2 x 75
4 x 1 1/2	114.3 x 48.3	300	51	178	88.0	89.5	1/2 x 75
4 x 2	114.3 x 60.3	300	64	178	103.5	92.0	1/2 x 75
5 1/2 O.D. x 1	139.7 x 33.7	300	38	210	77.0	100.0	5/8 x 85
5 1/2 O.D. x 1 1/4	139.7 x 42.4	300	51	210	91.0	105.0	5/8 x 85
5 1/2 O.D. x 1 1/2	139.7 x 48.3	300	51	210	91.0	105.0	5/8 x 85
5 1/2 O.D. x 2	139.7 x 60.3	300	64	210	110.0	108.0	5/8 x 85
5 1/2 O.D. x 3 O.D.	139.7 x 76.1	300	70	210	110.0	115.0	5/8 x 85

Shield Grooved Mechanical Cross



SDG-49

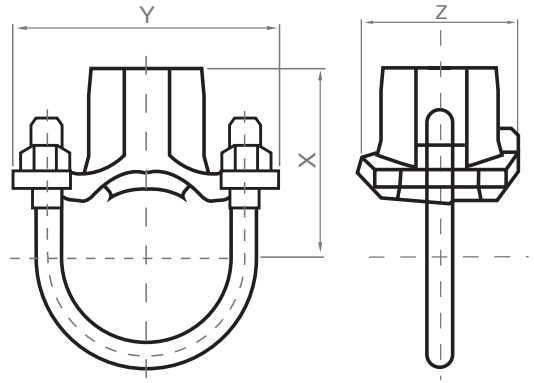
Nominal Size Run x Branch Inch	Pipe O.D. mm	Maximum Working Pressure PSI	Hole Dia +1.6 mm	Dimensions			Bolt Size mm
				Y mm	Z mm	V mm	
2 1/2 x 1 1/4	73.0 x 42.2	300	51	144	84.5	75	1/2 x 60
3 x 2	88.9 x 60.3	300	64	160	104	92	1/2 x 75
4 x 2	114.3 x 60.3	300	64	186	104.4	101.5	1/2 x 75
4 x 2 1/2	114.3 x 73.0	300	70	186	104.4	101.5	1/2 x 75
4 x 3 O.D.	114.3 x 76.1	300	70	186	104.4	101.5	1/2 x 75
4 x 3	114.3 x 88.9	300	89	186	124	101.5	1/2 x 75
5 1/2 O.D x 2	139.7 x 60.3	300	70	226	114	119	5/8 x 85
5 1/2 O.D x 3 O.D.	139.7 x 76.1	300	70	226	114	119	5/8 x 85
5 1/2 O.D x 3	139.7 x 88.9	300	89	226	136	122	5/8 x 85
6 1/2 O.D x 2	165.1 x 60.3	300	64	242	112	127.5	5/8 x 110
6 1/2 O.D x 3 O.D.	165.1 x 76.1	300	70	242	112	127.5	5/8 x 110
6 1/2 O.D x 3	165.1 x 88.9	300	89	242	142.6	141	5/8 x 110
6 1/2 O.D x 4	165.1 x 114.3	300	114	242	157	141	5/8 x 110
6 x 2	168.3 x 60.3	300	64	246	114	134	5/8 x 110
6 x 4	168.3 x 114.3	300	114	246	157	142	5/8 x 110
8 x 2	219.1 x 60.3	300	70	320	118	158	3/4 x 115
8 x 3 O.D.	219.1 x 76.1	300	70	320	118	158	3/4 x 115
8 x 3	219.1 x 88.9	300	89	320	142	161	3/4 x 115
8 x 4	219.1 x 114.3	300	114	320	170	162	3/4 x 115

SHIELD reserves the right to change the contents without notice.



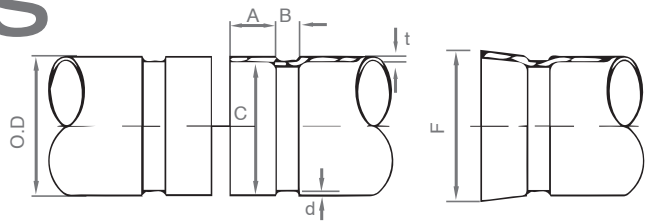
Shield U-Bolt Mechanical Tee

SDG-40



Nominal Size	Hole Dia +1.6	Maximum Working Pressure PSI	Dimensions			U Bolt Size
			X mm	Y mm	Z mm	
1 1/4 x 1/2	30	300	53.0	89.0	56.0	3/8 x 60
1 1/4 x 3/4	30	300	53.0	89.0	56.0	3/8 x 60
1 1/4 x 1	30	300	56.0	89.0	56.0	3/8 x 60
1 1/2 x 1/2	30	300	55.0	89.0	56.0	3/8 x 67
1 1/2 x 3/4	30	300	55.0	89.0	56.0	3/8 x 67
1 1/2 x 1	30	300	58.0	89.0	56.0	3/8 x 67
2 x 1/2	30	300	64.0	98.0	56.0	3/8 x 82
2 x 3/4	30	300	64.0	98.0	56.0	3/8 x 82
2 x 1	30	300	67.0	98.0	56.0	3/8 x 82
2 1/2 x 1/2	30	300	69.0	111.0	56.0	3/8 x 95
2 1/2 x 3/4	30	300	69.0	111.0	56.0	3/8 x 95
2 1/2 x 1	30	300	72.0	111.0	56.0	3/8 x 95

Shield Groove Specifications



Nominal Size	Pipe Outside Diameter			Gasket Seat 'A' (+/-)0.030 Inch	Groove Diameter 'C'		Groove Width 'B'		Groove Depth 'd'	Minimum Pipe Wall Thickness 't'		Max 'F' Flare Dia. Roll Groove
	Actual Inch	Tolerance			Maximum Inch	Tolerance (+/-)0.000	Roll Groove (+/-)0.030	Cut Groove (+/-)0.031		Roll Groove	Cut Groove	
		(+) Inch	(-) Inch									
1 1/4	1.660	0.016	0.016	0.625	1.535	-0.015	0.281	0.312	0.063	0.065	0.140	1.77
1 1/2	1.900	0.019	0.019	0.625	1.775	-0.015	0.281	0.312	0.063	0.065	0.140	2.01
2	2.375	0.024	0.024	0.625	2.250	-0.015	0.344	0.312	0.063	0.065	0.154	2.48
2 1/2	2.875	0.029	0.029	0.625	2.720	-0.018	0.344	0.312	0.078	0.083	0.187	2.98
3 OD	3.000	0.030	0.030	0.625	2.845	-0.018	0.344	0.312	0.078	0.083	0.188	3.10
3	3.500	0.035	0.031	0.625	3.344	-0.018	0.344	0.312	0.078	0.083	0.188	3.60
4	4.500	0.045	0.031	0.625	4.334	-0.020	0.344	0.312	0.083	0.083	0.203	4.60
5 1/2 OD	5.500	0.056	0.031	0.625	5.334	-0.020	0.344	0.375	0.083	0.109	0.203	5.60
5	5.563	0.056	0.031	0.625	5.395	-0.022	0.344	0.375	0.084	0.109	0.203	5.66
6	6.625	0.063	0.031	0.625	6.445	-0.022	0.344	0.375	0.085	0.109	0.219	6.73
8	8.625	0.063	0.031	0.750	8.441	-0.025	0.469	0.375	0.092	0.109	0.238	8.80
10	10.750	0.063	0.031	0.750	10.562	-0.027	0.469	0.500	0.094	0.134	0.250	10.92
12	12.750	0.063	0.031	0.750	12.531	-0.030	0.469	0.500	0.109	0.156	0.279	12.92

• SHIELD reserves the right to change the contents without notice.

Shield Swivel Ring Hanger

Model : SD-HB

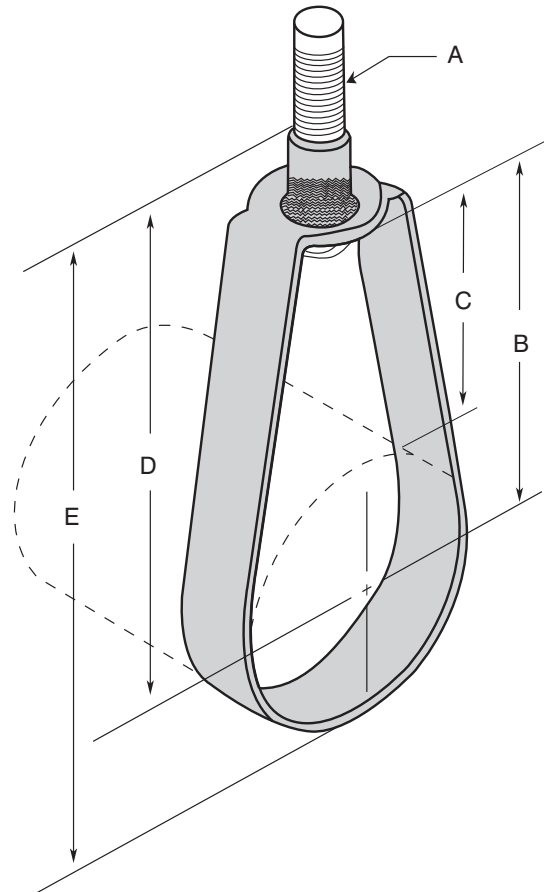
Function

Designed for the suspension of non-insulated stationary pipe lines. The insert nut allows a vertical adjustment after installation, is tapped to NFPA reduced rod size standards. SD-HBF has a layer of felt which separates the pipe from the hanger to reduce vibration and sound.

Federal Specification WW-H-171E & A-A-1192 (Type 10)
 Manufacturers Standardization Society MSS SP-69 & SP-58 (Type 10)
 UL Listed/FM Approved.

Material

and Finish : Pre-Galvanized coil adheres to ASTM A653 G90



SD-HB

Pipe Size	Rod Size A	B	Adj.			Max. Load lbs.
			C	D	E	
1/2	3/8	17/8	17/16	23/4	31/16	300
3/4	3/8	111/16	11/8	21/2	31/16	300
1	3/8	15/8	1	21/2	33/16	300
11/4	3/8	115/16	11/16	213/16	39/16	300
11/2	3/8	21/8	11/16	31/8	37/8	300
2	3/8	27/16	11/8	35/16	43/8	300
21/2	3/8	23/4	11/4	311/16	5	525
3	3/8	27/8	11/8	33/4	59/16	525
31/2	3/8	33/8	13/8	45/16	65/16	525
4	3/8	37/8	11/2	41/2	7	650
5	1/2	45/8	15/8	55/8	83/8	1000
6	1/2	55/8	21/4	61/2	913/16	1000
8	1/2	613/16	27/16	715/16	121/4	1000

Note: a) Swivel Nut is coming along with hanger
 b) Swivel Nut is available for 10mm and 12mm Rod size
 c) Refer to UL/FM certificates for more information



Shield Clevis Hanger

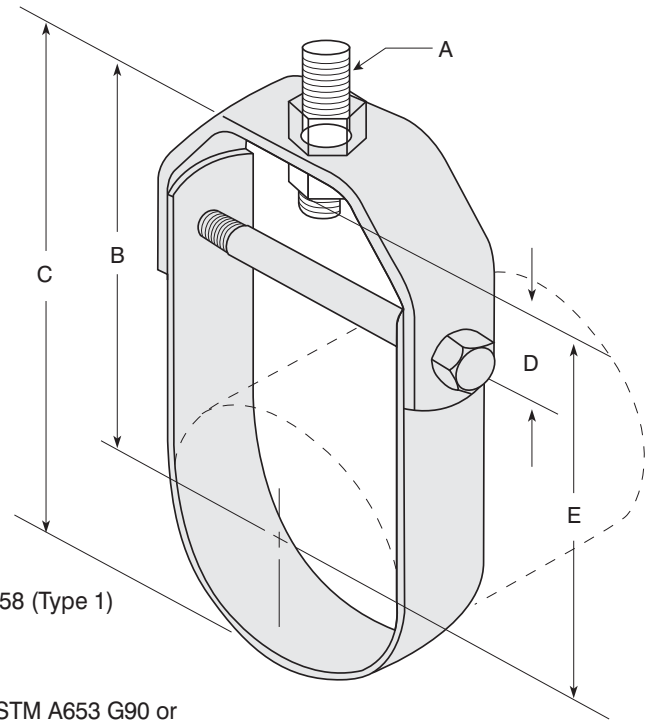
Model : SD-HC

Function

Designed for the suspension of non-insulated stationary pipe lines. SD-HCF has a layer of felt which separates the pipe from the hanger to reduce vibration and sound.

Federal Specification WW-H-171E & A-A-1192A (Type 1)
Manufacturers Standardization Society MSS SP-69 & SP-58 (Type 1)
UL Listed/FM Approved.

Material : Pre-Galvanized coil (upto 4") adheres to ASTM A653 G90 or
and Finish : Low Carbon Steel - Electro Galvanized to ASTM B633 or
Low Carbon Steel - Hot dipped galvanized to ASTM A123



SD-HC

Pipe Size	Rod Size A	B	Adj.			Cross Bolt	Max. Load lbs.
			C	D	E		
1/2	3/8	27/16	27/8	1 1/8	2	1/4	610
3/4	3/8	25/8	3 1/8	1 1/4	2 3/16	1/4	610
1	3/8	3 1/16	3 3/4	1 5/8	2 5/8	1/4	610
1 1/4	3/8	3 3/8	4 3/16	1 5/8	2 15/16	1/4	610
1 1/2	3/8	3 1/2	4 7/16	1 1/2	3 1/16	1/4	610
2	3/8	3 3/4	5	1 5/8	3 5/16	1/4	610
2 1/2	1/2	3 7/8	5 3/8	1 1/8	3 1/4	3/8	1130
3	1/2	4 1/4	6	1 1/8	3 5/8	3/8	1130
3 1/2	1/2	4 1/2	6 1/2	1 1/4	3 7/8	3/8	1130
4	5/8	5 1/2	7 11/16	1 3/4	4 11/16	3/8	1430
5	5/8	6 1/8	9 1/8	1 7/8	5 5/16	1/2	1430
6	3/4	6 7/8	10 1/8	1 5/8	6	1/2	1940
8	7/8	8 3/4	12 7/8	2 1/8	7 7/8	5/8	2000
10	7/8	9 1/4	14 5/8	1 3/4	8 1/8	3/4	3600
12	7/8	11 5/8	18	2 1/2	10 1/2	3/4	3800
14	1	12 3/4	19 3/4	2 5/8	11 1/4	7/8	4200
16	1	14 1/8	22 1/8	2 5/8	13 5/8	1	4600
18	1 1/8	16 1/2	25 1/2	3 1/2	15	1 1/8	4800
20	1 1/4	18	28	4 1/8	16 1/8	1 1/4	4800
24	1 1/4	20 1/4	32 1/4	4 3/4	18 3/8	1 1/4	4800
30	1 1/4	24 1/2	38 7/8	5 1/2	21 1/2	1 1/4	6000
36	1 1/2	32	50	8 3/4	30	1 1/2	9500

Note: a) Use of an upper locknut ensures proper performance. Pipe spacers provided on 30" and larger clevises. If ordering SD-HCF felt lined hangers for pipe size of 3 1/2" or under, order the next largest size to allow for the thickness of the felt lining.

b) "D" Adjustment (Top of cross bolt to bottom of hanger rod nut).

c) When an over-sized clevis is used, a pipe spacer should be placed over the clevis bolt to prevent the lower U-strap from moving inward.

Shield Pipe Clamp With Lining

Model : SD-GE-RLC



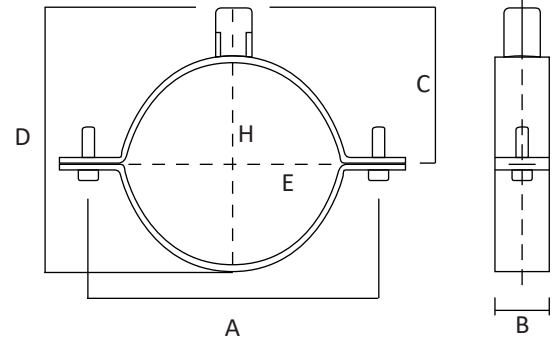
Features:

- Designed for Horizontal, vertical and suspended installations.
- Suitable for Steel, copper and PVC pipes.
- Welded Nut M8/M10 with option of M10/M12.
- Connection thread with M8/M10 dual-tapped boss.
- Side Screw: 6 x 20 – Phillip head with vicer.
- High rigidity due to reinforcing rib.
- With highly elastic vibration control lining, vibration control tested.

Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58 (Type 12)
Federal Specification WW-H-171E & A-A-1192A (Type 25)

Material: Mild Steel & EPDM Rubber.

Finishing: Electro galvanized as per ASTM B633 Standards.



Model No	Size	Pipe O.D	Dimensions						Maximum Load
			H mm	E mm	A mm	B mm	C mm	D mm	
SD-GE-RLC 3/8	3/8"	17.1	15	19	59	20	23	30	450
SD-GE-RLC 1/2	1/2"	21.3	20	25	66	20	26	37	450
SD-GE-RLC 3/4	3/4"	26.7	26	30	72	20	29	43	450
SD-GE-RLC 1	1"	33.4	32	36	79	20	33	50	450
SD-GE-RLC 1 1/4	1 1/4"	42.2	38	43	86	20	36	57	450
SD-GE-RLC 1 1/2	1 1/2"	48.3	47	51	92	20	39	63	450
SD-GE-RLC 1 1/2-54	-	54.0	53	58	98	20	42	69	450
SD-GE-RLC 2	2"	60.3	60	64	104	20	45	75	450
SD-GE-RLC 2-63	-	63.0	63	66	108	20	47	72	450
SD-GE-RLC 2-70	-	70.0	68	72	114	20	50	85	450
SD-GE-RLC 2 1/2	2 1/2"	73.0	74	80	119	20	53	90	600
SD-GE-RLC 2 1/2-83	-	83.0	81	86	127	20	57	98	600
SD-GE-RLC 3	3"	88.9	87	92	134	20	60	105	600
SD-GE-RLC 3 1/2	3 1/2"	101.6	99	105	144	20	65	115	600
SD-GE-RLC 3 1/2-110	-	110.0	107	112	164	20	70	125	600
SD-GE-RLC 4	4"	114.3	113	118	159	20	73	130	600
SD-GE-RLC 4-125	-	125.0	125	130	169	20	78	140	600
SD-GE-RLC 4-133	-	133.0	131	137	177	20	82	148	600
SD-GE-RLC 5	5"	141.3	138	142	184	20	85	155	600
SD-GE-RLC 5-150	-	150.0	148	153	194	20	90	165	600
SD-GE-RLC 5-160	-	160.0	159	166	204	25	95	175	600
SD-GE-RLC 6	6"	168.3	168	172	212	25	99	183	600
SD-GE-RLC 6-210	-	210.0	200	212	244	25	115	215	950
SD-GE-RLC 8	8"	219.1	215	220	264	25	125	235	950
SD-GE-RLC 10	10"	273.0	269	274	294	25	140	265	950
SD-GE-RLC 12	12"	323.8	313	318	367	25	177	339	1200

Notes:

- Measurements are subject to 5% tolerance.
- Other Sizes available on request.
- Hot Dipped Galvanized can be supplied upon request.
- SHIELD reserves the right to change the contents without notice.

Shield Pipe Clamp With Lining

Model : SD-GE-RLC



Selection of Lined Pipe Hangers for Different Types of Pipes:

Model No	Copper mm	Steel (SCH 40)		UPVC / PE	ABS
		Inch	mm		
SD-GE-RLC 3/8	15, 18	-	16	-	-
SD-GE-RLC 1/2	22	1/2"	22	20	DN15 (21.4)
SD-GE-RLC 3/4	24, 28	3/4"	28	25	DN20 (26.8)
SD-GE-RLC 1	35	1"	35	32, 38	DN25 (33.6)
SD-GE-RLC 1 1/4	42	1 1/4"	42	40, 43	DN32 (42.3)
SD-GE-RLC 1 1/2	-	1 1/2"	48	45	DN40 (48.3)
SD-GE-RLC 1 1/2-54	54	-	-	54	-
SD-GE-RLC 2	64	2"	60	60	DN50 (60.4)
SD-GE-RLC 2-63	-	-	-	-	-
SD-GE-RLC 2-70	67, 70	-	-	70	-
SD-GE-RLC 2 1/2	76	2 1/2"	75	75	DN65 (75.4)
SD-GE-RLC 2 1/2-83	80	-	-	83	-
SD-GE-RLC 3	-	3"	90	90	-
SD-GE-RLC 3 1/2	102, 105	-	-	102	DN80 (88.9)
SD-GE-RLC 3 1/2-110	108	-	-	110	-
SD-GE-RLC 4	-	4"	115	115	DN100 (114.3)
SD-GE-RLC 4-125	125	-	-	125	-
SD-GE-RLC 4-133	-	-	-	135	-
SD-GE-RLC 5	-	5"	140	140	DN125 (21.4)
SD-GE-RLC 5-150	-	-	-	152	-
SD-GE-RLC 5-160	159	-	-	160	-
SD-GE-RLC 6	167	6"	168	-	DN150 (168.3)
SD-GE-RLC 6-210	206	-	-	200	-
SD-GE-RLC 8	-	8"	219	220, 225	DN200 (225.0)
SD-GE-RLC 10	-	-	-	250	DN225 (250.4)
SD-GE-RLC 12	-	-	-	-	DN300 (315.5)

Notes:

- Measurements are subject to 5% tolerance
- SHIELD reserves the right to change the contents without notice.

Shield Pipe Clamp

Model : SD-GE-PPC



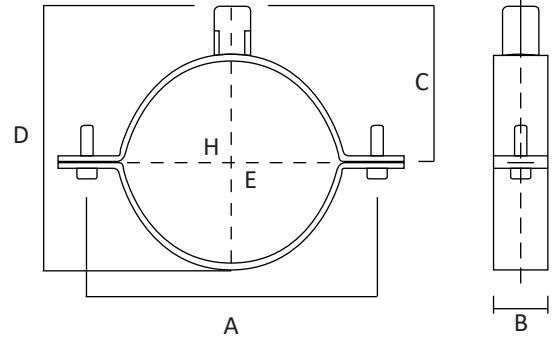
Features:

- Designed for Horizontal, vertical and suspended installations.
- Welded Nut M8/M10 with option of M10/M12.
- High - Strength round welded connecting nuts.
- The two locking screws allow adjustment.
- Can be used as a pipe anchor point.
- Suitable for installations without vibration control requirements.

Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58 (Type 12)
Federal Specification WW-H-171E & A-A-1192A (Type 25)

Material: Mild Steel.

Finishing: Electro galvanized as per ASTM B633 Standards.



Model No	Size Inch	Pipe O.D mm	Dimensions						Maximum Load Kg
			H mm	E mm	A mm	B mm	C mm	D mm	
SD-GE-PPC 3/8	3/8"	17.1	15	19	59	20	23	30	450
SD-GE-PPC 1/2	1/2"	21.3	20	25	66	20	26	37	450
SD-GE-PPC 3/4	3/4"	26.7	26	30	72	20	29	43	450
SD-GE-PPC 1	1"	33.4	32	36	79	20	33	50	450
SD-GE-PPC 1 1/4	1 1/4"	42.2	38	43	86	20	36	57	450
SD-GE-PPC 1 1/2	1 1/2"	48.3	47	51	92	20	39	63	450
SD-GE-PPC 1 1/2-54	-	54.0	53	58	98	20	42	69	450
SD-GE-PPC 2	2"	60.3	60	64	104	20	45	75	450
SD-GE-PPC 2-63	-	63.0	63	66	108	20	47	72	450
SD-GE-PPC 2-70	-	70.0	68	72	114	20	50	85	450
SD-GE-PPC 2 1/2	2 1/2"	73.0	74	80	119	20	53	90	600
SD-GE-PPC 2 1/2-83	-	83.0	81	86	127	20	57	98	600
SD-GE-PPC 3	3"	88.9	87	92	134	20	60	105	600
SD-GE-PPC 3 1/2	3 1/2"	101.6	99	105	144	20	65	115	600
SD-GE-PPC 3 1/2-110	-	110.0	107	112	164	20	70	125	600
SD-GE-PPC 4	4"	114.3	113	118	159	20	73	130	600
SD-GE-PPC 4-125	-	125.0	125	130	169	20	78	140	600
SD-GE-PPC 4-133	-	133.0	131	137	177	20	82	148	600
SD-GE-PPC 5	5"	141.3	138	142	184	20	85	155	600
SD-GE-PPC 5-150	-	150.0	148	153	194	20	90	165	600
SD-GE-PPC 5-160	-	160.0	159	166	204	25	95	175	600
SD-GE-PPC 6	6"	168.3	168	172	212	25	99	183	600
SD-GE-PPC 6-210	-	210.0	200	212	244	25	115	215	950
SD-GE-PPC 8	8"	219.1	215	220	264	25	125	235	950
SD-GE-PPC 10	10"	273.0	269	274	294	25	140	265	950
SD-GE-PPC 12	12"	323.8	313	318	367	25	177	339	1200

Notes:

- Measurements are subject to 5% tolerance
- Other Sizes available on request
- Hot Dipped Galvanized can be supplied upon request
- SHIELD reserves the right to change the contents without notice.

Shield U Strap Hanger with Lining

Model : SD-GE-RUS

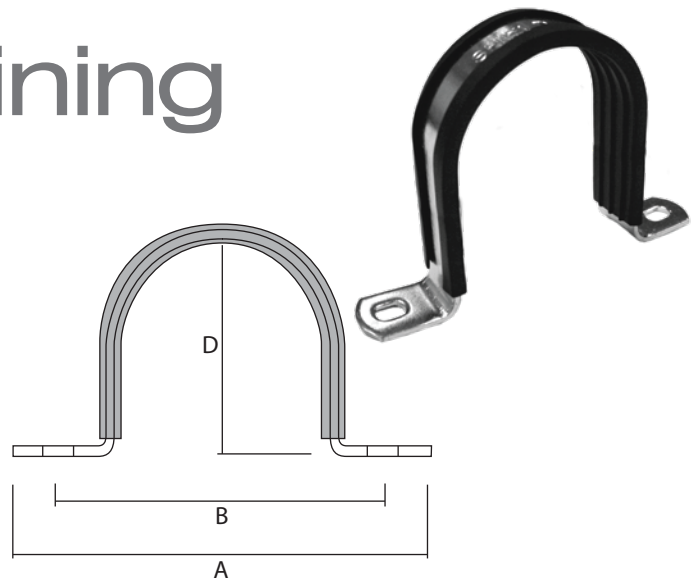
Features:

- Designed for mount plain or insulated pipes.
- It can be used as a pipe anchor with Rubber Support Insert also.
- Vibration and Sound Control tested & verified with highly elastic lining.

Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58
Federal Specification WW-H-171E & A-A-1192A

Material: Mild Steel & EPDM Rubber

Finishing: Electro galvanized as per ASTM B 633 Standards



Model No	Pipe Size Inch	Pipe O.D mm	A mm	B mm	Width mm	Bolt Size	Maximum Load Kg
SD-GE-RUS 1/2	1/2"	21.3	76	51	20	M8	500
SD-GE-RUS 3/4	3/4"	26.7	82	57	20	M8	500
SD-GE-RUS 1	1"	33.4	89	64	20	M8	500
SD-GE-RUS 1 1/4	1 1/4"	42.2	96	71	20	M8	500
SD-GE-RUS 1 1/2	1 1/2"	48.3	102	77	20	M8	500
SD-GE-RUS 1 1/2-54	-	54.0	108	83	20	M8	500
SD-GE-RUS 2	2"	60.3	114	89	20	M8	500
SD-GE-RUS 2-67	-	67.0	121	96	25	M8	500
SD-GE-RUS 2 1/2	2 1/2"	73.0	145	113	25	M8	600
SD-GE-RUS 2 1/2-82	-	82.0	152	120	25	M8	600
SD-GE-RUS 3	3"	88.9	160	128	25	M8	600
SD-GE-RUS 3 1/2	3 1/2"	101.6	170	138	25	M8	600
SD-GE-RUS 3 1/2-110	-	110.0	178	146	25	M8	600
SD-GE-RUS 4	4"	114.3	185	153	25	M8	600
SD-GE-RUS 4-126	-	126.0	196	164	30	M8	600
SD-GE-RUS 5	5"	141.3	210	178	30	M10	600
SD-GE-RUS 5-148	-	148.0	218	186	30	M10	600
SD-GE-RUS 5-155	-	155.0	225	193	30	M10	600
SD-GE-RUS 6	6"	168.3	237	205	30	M10	600
SD-GE-RUS 6-179	-	179.0	249	217	30	M10	600
SD-GE-RUS 6-190	-	190.0	260	228	30	M10	800
SD-GE-RUS 6-205	-	205.0	275	243	30	M10	800
SD-GE-RUS 8	8"	219.1	289	257	30	M10	800
SD-GE-RUS 8-230	-	230.0	300	268	30	M10	800
SD-GE-RUS 8-241	-	241.0	332	291	30	M12	1250
SD-GE-RUS 8-263	-	263.0	354	313	30	M12	1250
SD-GE-RUS 10	10"	273.0	364	323	30	M18	1250
SD-GE-RUS 10-295	-	295.0	386	345	40	M18	1250

Notes:

- Measurements are subject to 5% tolerance.
- Other Sizes available on request.
- Hot Dipped Galvanized can be supplied upon request.
- SHIELD reserves the right to change the contents without notice.

Shield U Strap Hanger

Model : SD-GE-US

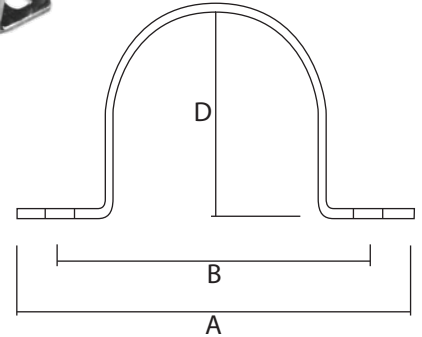
Features:

- Designed for mount plain or insulated pipes.
- U Strap Hangers can be used as a pipe anchor with rubber support inserts also.

Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58 (Type 26)
Federal Specification WW-H-171E & A-A-1192A (Type 26)

Material: Mild Steel.

Finishing: Electrogalvanized as per ASTM B 633 Standards.



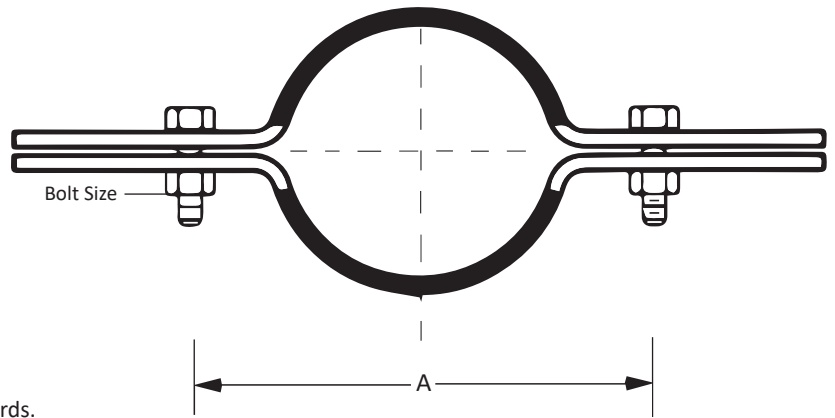
Model No	Pipe Size Inch	Pipe O.D mm	A mm	B mm	Width mm	Bolt Size	Maximum Load Kg
SD-GE-US 1/2	1/2"	21.3	76	51	20	M8	500
SD-GE-US 3/4	3/4"	26.7	82	57	20	M8	500
SD-GE-US 1	1"	33.4	89	64	20	M8	500
SD-GE-US 1 1/4	1 1/4"	42.2	96	71	20	M8	500
SD-GE-US 1 1/2	1 1/2"	48.3	102	77	20	M8	500
SD-GE-US 1 1/2-54	-	54.0	108	83	20	M8	500
SD-GE-US 2	2"	60.3	114	89	20	M8	500
SD-GE-US 2-67	-	67.0	121	96	25	M8	500
SD-GE-US 2 1/2	2 1/2"	73.0	145	113	25	M8	600
SD-GE-US 2 1/2-82	-	82.0	152	120	25	M8	600
SD-GE-US 3	3"	88.9	160	128	25	M8	600
SD-GE-US 3 1/2	3 1/2"	101.6	170	138	25	M8	600
SD-GE-US 3 1/2-110	-	110.0	178	146	25	M8	600
SD-GE-US 4	4"	114.3	185	153	25	M8	600
SD-GE-US 4-126	-	126.0	196	164	30	M8	600
SD-GE-US 5	5"	141.3	210	178	30	M10	600
SD-GE-US 5-148	-	148.0	218	186	30	M10	600
SD-GE-US 5-155	-	155.0	225	193	30	M10	600
SD-GE-US 6	6"	168.3	237	205	30	M10	600
SD-GE-US 6-179	-	179.0	249	217	30	M10	600
SD-GE-US 6-190	-	190.0	260	228	30	M10	800
SD-GE-US 6-205	-	205.0	275	243	30	M10	800
SD-GE-US 8	8"	219.1	289	257	30	M10	800
SD-GE-US 8-230	-	230.0	300	268	30	M10	800
SD-GE-US 8-241	-	241.0	332	291	30	M12	1250
SD-GE-US 8-263	-	263.0	354	313	30	M12	1250
SD-GE-US 10	10"	273.0	364	323	30	M18	1250
SD-GE-US 10-295	-	295.0	386	345	40	M18	1250

Notes:

- Measurements are subject to 5% tolerance.
- Other Sizes available on request.
- Hot Dipped Galvanized can be supplied upon request.
- SHIELD reserves the right to change the contents without notice.

Shield Riser Hanger or Clamp with Lining

Model : SD-GE-RRC



Features:

Designed to act as a rigid support / guide for vertical pipes to control the suspension in pipeline.
Equally useable in most of the pipe types.

- Strengthened bolts for high load capacity.
- Highly elastic lining for sound and vibrations control.

Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58 (Type 8)
Federal Specification WW-H-171E & A-A-1192A (Type 8)

Material: Mild Steel & EPDM Rubber

Finishing: Electrogalvanized as per ASTM B633 Standards.

Model No	Pipe Size Inch	Pipe O.D mm	A mm	Bolt Size	Maximum Load Kg
SD-GE-RRC 1/2	1/2"	21.3	57	M10	1250
SD-GE-RRC 3/4	3/4"	26.7	68	M10	1250
SD-GE-RRC 1	1"	33.4	76	M10	1250
SD-GE-RRC 1 1/4	1 1/4"	42.2	90	M10	1250
SD-GE-RRC 1 1/2	1 1/2"	48.3	110	M10	1250
SD-GE-RRC 2	2"	60.3	130	M10	1850
SD-GE-RRC 2 1/2	2 1/2"	73.0	142	M12	1850
SD-GE-RRC 3	3"	88.9	161	M12	2250
SD-GE-RRC 4	4"	114.3	190	M12	3600
SD-GE-RRC 6	6"	168.3	258	M16	4500
SD-GE-RRC 8	8"	219.1	333	M16	4500
SD-GE-RRC 10	10"	273.0	409	M16	5800
SD-GE-RRC 12	12"	323.8	467	M20	7300

Notes:

- Measurements are subject to 5% tolerance.
- Other Sizes available on request.
- Hot Dipped Galvanized can be supplied upon request.
- SHIELD reserves the right to change the contents without notice.

Shield Riser Hanger or Clamp

Model : SD-GE-PRC

Features:

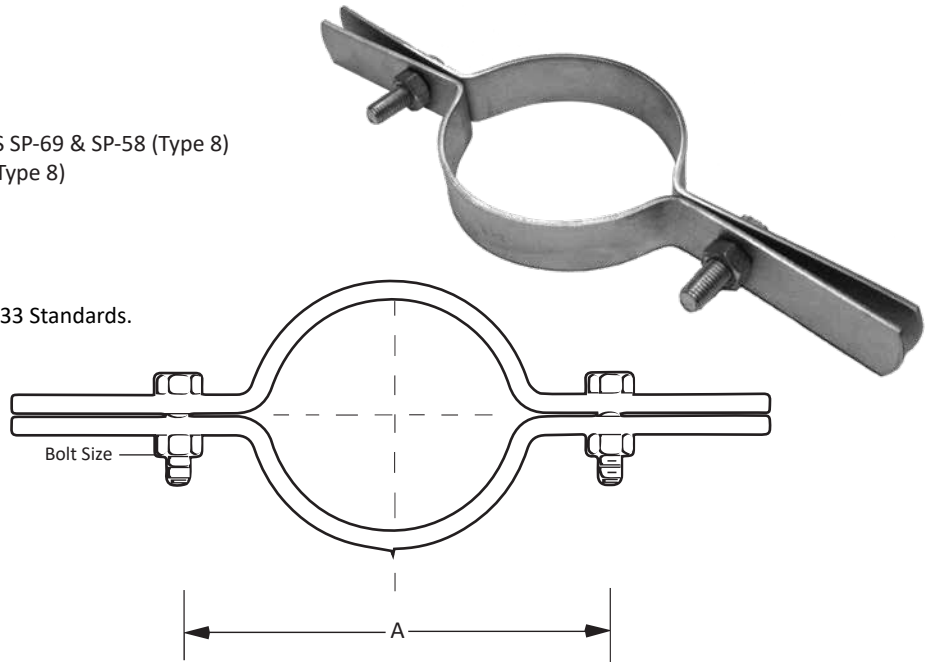
Designed to act as a rigid support for vertical pipes to control the suspension in pipeline. Equally useable in most of the pipe types.

- Strengthened bolts for high load capacity.

Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58 (Type 8)
Federal Specification WW-H-171E & A-A-1192A (Type 8)

Material: Mild Steel

Finishing: Electrogalvanized as per ASTM B633 Standards.



Model No	Pipe Size Inch	Pipe O.D mm	A mm	Bolt Size	Maximum Load Kg
SD-GE-PRC 1/2	1/2"	21.3	57	M10	1250
SD-GE-PRC 3/4	3/4"	26.7	68	M10	1250
SD-GE-PRC 1	1"	33.4	76	M10	1250
SD-GE-PRC 1 1/4	1 1/4"	42.2	90	M10	1250
SD-GE-PRC 1 1/2	1 1/2"	48.3	110	M10	1250
SD-GE-PRC 2	2"	60.3	130	M10	1850
SD-GE-PRC 2 1/2	2 1/2"	73.0	142	M12	1850
SD-GE-PRC 3	3"	88.9	161	M12	2250
SD-GE-PRC 4	4"	114.3	190	M12	3600
SD-GE-PRC 6	6"	168.3	258	M16	4500
SD-GE-PRC 8	8"	219.1	333	M16	4500
SD-GE-PRC 10	10"	273.0	409	M16	5800
SD-GE-PRC 12	12"	323.8	467	M20	7300

Notes:

- Measurements are subject to 5% tolerance.
- Other Sizes available on request.
- Hot Dipped Galvanized can be supplied upon request.
- SHIELD reserves the right to change the contents without notice.

Shield U-Bolt

Model : SD-UB

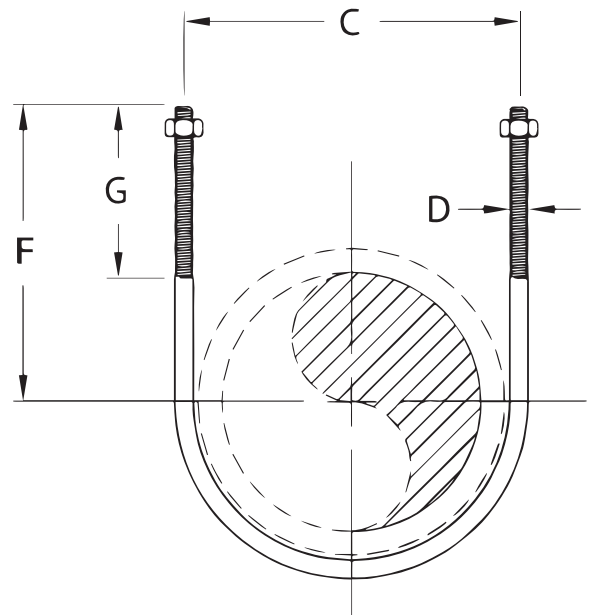
Features:

- Designed to use as a support, anchor or guide for various types of pipes.
- High load capacity due to one piece design.
- Supplied with two Nuts & Washers.
- Special U bolts with Longer Tangents and Threads can be furnished upon request.

Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58 (Type 24)
Federal Specification WW-H-171E & A-A-1192A (Type 24)

Material: Mild Steel

Finishing: Electro galvanized as per ASTM B 633 Standards.



Model No	Nominal Pipe Size Inch	Dimensions			
		D mm	C mm	F mm	G mm
SD-UB 1/2	1/2"	M8	31	35	35
SD-UB 3/4	3/4"	M10	39	40	38
SD-UB 1	1"	M10	45	45	40
SD-UB 1 1/4	1 1/4"	M10	54	55	45
SD-UB 1 1/2	1 1/2"	M10	60	55	45
SD-UB 2	2"	M10	72	60	45
SD-UB 2 1/2	2 1/2"	M10	86	75	55
SD-UB 3	3"	M10	102	80	55
SD-UB 4	4"	M10	128	95	55
SD-UB 6	6"	M12	184	130	70
SD-UB 8	8"	M12	239	155	70
SD-UB 10	10"	M20	273	370	100
SD-UB 12	12"	M20	324	420	100
SD-UB 14	14"	M20	356	455	100
SD-UB 16	16"	M20	406	505	100
SD-UB 18	18"	M24	457	555	100
SD-UB 20	20"	M24	508	605	100
SD-UB 24	24"	M24	610	710	100

Notes:

- Measurements are subject to 5% tolerance.
- Other Sizes available on request.
- U Bolt sizes can be modified to match with Rubber support inserts.
- Alternate rod sizes for different pipe sizes are also available.
- Hot Dipped Galvanized can be supplied upon request.
- SHIELD reserves the right to change the contents without notice.

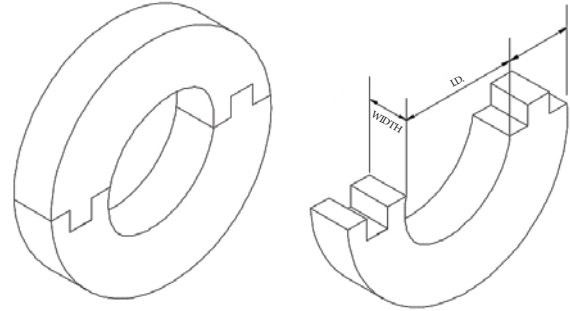
Shield Rubber Support Insert

Model : SD-RSI



Features:

- Very high load bearing capacity.
- Dimensionally accurate as each piece is moulded.
- Tongue and Groove design for small sizes.
- Unique DOVETAIL lock for higher sizes.
- Excellent resistance to Deterioration / Distortion.
- Available with steel reinforcements for higher sizes.



Material: EPDM Rubber

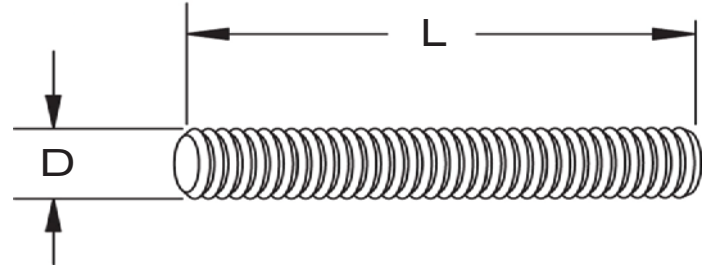
Nominal Pipe Sizes		Schedule 40 Steel Pipe OD	Width of Rubber Support Insert	Part numbers for Rubber Support Insert Thickness								
Inch	mm			mm	mm	1/2" (13)	3/4" (19)	1" (25)	1 1/4" (32)	1 1/2" (38)	2" (50)	2 1/2" (65)
				Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)
1/2"	15	21.3	25	SD-RSI13-01	SD-RSI19-01	SD-RSI25-01	SD-RSI32-01	SD-RSI38-01	SD-RSI50-01	SD-RSI65-01	SD-RSI75-01	
3/4"	20	26.7	25	SD-RSI13-02	SD-RSI19-02	SD-RSI25-02	SD-RSI32-02	SD-RSI38-02	SD-RSI50-02	SD-RSI65-02	SD-RSI75-02	
1"	25	33.4	25	SD-RSI13-03	SD-RSI19-03	SD-RSI25-03	SD-RSI32-03	SD-RSI38-03	SD-RSI50-03	SD-RSI65-03	SD-RSI75-03	
1 1/4"	32	42.2	25	SD-RSI13-04	SD-RSI19-04	SD-RSI25-04	SD-RSI32-04	SD-RSI38-04	SD-RSI50-04	SD-RSI65-04	SD-RSI75-04	
1 1/2"	40	48.3	25	SD-RSI13-05	SD-RSI19-05	SD-RSI25-05	SD-RSI32-05	SD-RSI38-05	SD-RSI50-05	SD-RSI65-05	SD-RSI75-05	
2"	50	60.3	25	SD-RSI13-06	SD-RSI19-06	SD-RSI25-06	SD-RSI32-06	SD-RSI38-06	SD-RSI50-06	SD-RSI65-06	SD-RSI75-06	
2 1/2"	65	73.0	38	SD-RSI13-07	SD-RSI19-07	SD-RSI25-07	SD-RSI32-07	SD-RSI38-07	SD-RSI50-07	SD-RSI65-07	SD-RSI75-07	
3"	80	88.9	38	SD-RSI13-08	SD-RSI19-08	SD-RSI25-08	SD-RSI32-08	SD-RSI38-08	SD-RSI50-08	SD-RSI65-08	SD-RSI75-08	
3 1/2"	90	101.6	38	SD-RSI13-09	SD-RSI19-09	SD-RSI25-09	SD-RSI32-09	SD-RSI38-09	SD-RSI50-09	SD-RSI65-09	SD-RSI75-09	
4"	100	114.3	38	SD-RSI13-10	SD-RSI19-10	SD-RSI25-10	SD-RSI32-10	SD-RSI38-10	SD-RSI50-10	SD-RSI65-10	SD-RSI75-10	
5"	125	141.3	38	SD-RSI13-11	SD-RSI19-11	SD-RSI25-11	SD-RSI32-11	SD-RSI38-11	SD-RSI50-11	SD-RSI65-11	SD-RSI75-11	
6"	150	168.3	50	SD-RSI13-12	SD-RSI19-12	SD-RSI25-12	SD-RSI32-12	SD-RSI38-12	SD-RSI50-12	SD-RSI65-12	SD-RSI75-12	
8"	200	219.1	50	SD-RSI13-13	SD-RSI19-13	SD-RSI25-13	SD-RSI32-13	SD-RSI38-13	SD-RSI50-13	SD-RSI65-13	SD-RSI75-13	
10"	250	273.0	50	SD-RSI13-14	SD-RSI19-14	SD-RSI25-14	SD-RSI32-14	SD-RSI38-14	SD-RSI50-14	SD-RSI65-14	SD-RSI75-14	
12"	300	323.8	50	SD-RSI13-15	SD-RSI19-15	SD-RSI25-15	SD-RSI32-15	SD-RSI38-15	SD-RSI50-15	SD-RSI65-15	SD-RSI75-15	
14"	350	355.6	50	SD-RSI13-16	SD-RSI19-16	SD-RSI25-16	SD-RSI32-16	SD-RSI38-16	SD-RSI50-16	SD-RSI65-16	SD-RSI75-16	
16"	400	406.4	50	SD-RSI13-17	SD-RSI19-17	SD-RSI25-17	SD-RSI32-17	SD-RSI38-17	SD-RSI50-17	SD-RSI65-17	SD-RSI75-17	
18"	450	457.2	50	SD-RSI13-18	SD-RSI19-18	SD-RSI25-18	SD-RSI32-18	SD-RSI38-18	SD-RSI50-18	SD-RSI65-18	SD-RSI75-18	
20"	500	508.0	50	SD-RSI13-19	SD-RSI19-19	SD-RSI25-19	SD-RSI32-19	SD-RSI38-19	SD-RSI50-19	SD-RSI65-19	SD-RSI75-19	
24"	600	610.0	50	SD-RSI13-20	SD-RSI19-20	SD-RSI25-20	SD-RSI32-20	SD-RSI38-20	SD-RSI50-20	SD-RSI65-20	SD-RSI75-20	

Notes:

- Measurements are subject to 5% tolerance.
- Other Sizes available on request.
- SHIELD reserves the right to change the contents without notice.
- Self extinguishing rubber Inserts also available on request.

Shield Threaded Rod

Model : SD-TR



Features:

- Designed for use as a Double end Studs with a nut on either side or as studs.
- Right Handed.
- Coarse Threads.
- Commercial Nut Fit.

Material: Low Carbon Steel

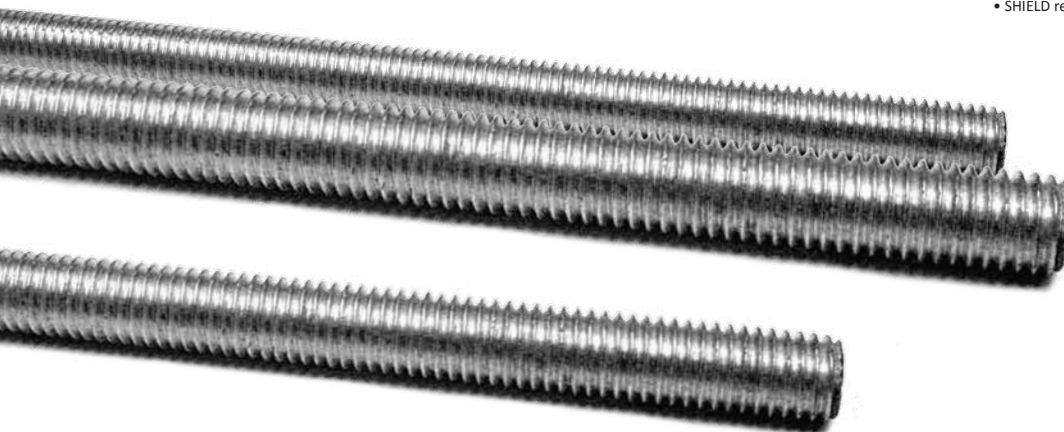
Standard: DIN 975, steel - Property Class 4.8

Finishing: Zinc Plated.

Thread (D)	Coarse & Fine Thread Length (L) = 1000mm, 2000mm & 3000 mm										
	MM	M4	M5	M6	M7	M8	M8	M10	M10	M12	M12
Diameter	INCH	0.157	0.197	0.236	0.276	0.315	0.315	0.315	0.394	0.472	0.472
Pitch	MM	0.700	0.800	1.000	1.000	1.000	1.250	1.250	1.500	1.250	1.750
Thread (D)	MM	M14	M16	M16	M18	M20	M20	M22	M24	M27	M30
Diameter	INCH	0.551	0.630	0.630	0.709	0.787	0.787	0.866	0.945	1.063	1.181
Pitch	MM	2.000	1.500	2.000	2.500	1.500	2.500	2.500	3.000	3.000	3.500
Thread (D)	MM	M33	M36	M39	M42	M45	M48	M52	M56	M60	M64
Diameter	INCH	1.299	1.417	1.535	1.654	1.772	1.890	2.047	2.205	2.362	2.520
Pitch	MM	3.500	4.000	4.000	4.500	4.500	5.000	5.000	5.500	5.500	6.000

Notes:

- Measurements are subject to 5% tolerance.
- Other Sizes available on request.
- Left Handed is Available upon request.
- Hot Dipped Galvanized can be supplied upon request.
- SHIELD reserves the right to change the contents without notice.



Shield Beam Clamp

Model : SD-CBC

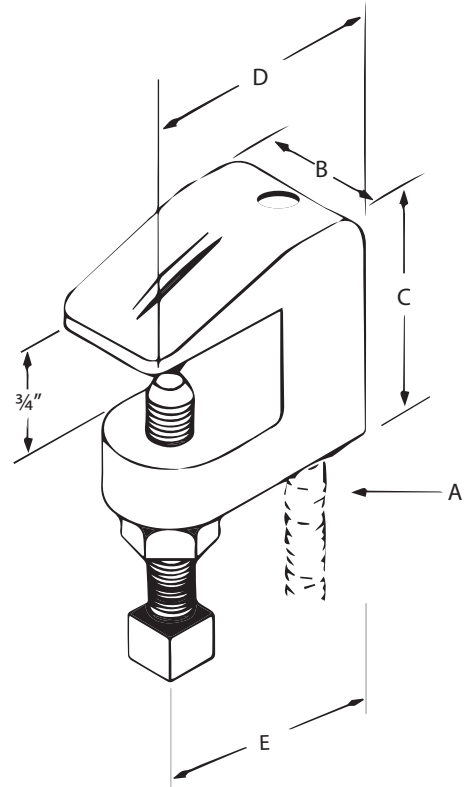
Features:

Beam Clamps are designed to clamp hanger rod to the beam's top flange or bar joist. Universal open U design allows for adjustments and permissible to use in an inverted position on the bottom flange of the beam also.

Manufacturers Standardization Society ANSI/MSS SP-69 (Type 19 & 23)
Federal Specification WW-H-171E (Type 23) & A-A-1192A (Type 19 & 23)

Material: Ductile iron ASTM A536

Finishing: Electro galvanized as per ASTM B 633 Standards.



Model No	Rod Size A Inch (mm)	Dimensions				Max. Pipe Size Inch	Maximum Load lbs.
		B mm	C mm	D mm	E mm		
SD-CBC-110	3/8 (10)	21	40	49	42	4	250
SD-CBCA-115	1/2 (12)	30.2	46.1	55.6	46.5	8	750

Notes:

- Measurements are subject to 5% tolerance.
- Other Sizes available on request.
- Hot Dipped Galvanized can be supplied upon request.
- SHIELD reserves the right to change the contents without notice.

Factory Mutual System





For further information on any aspect of the
Shield range of Pipes & Fittings please contact your nearest office.

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