

Channel

4Dimension channel is cold formed on our modern rolling mills from 18 Ga. (1.2mm) low carbon steel. A continuous slot with inturred lips and up to three dovetail designed sides provide the ability to make attachments on multiple sides of channel.

Lengths & Tolerances

All channels excluding SH style: $\pm 1/8"$ (3.2mm) on 10' (3.05m) and $\pm 3/16"$ (4.76mm) on 20' (6.09m)

All 'SH' channels only: $\pm 1/4"$ (6.35mm) on 10' (3.05m) and $\pm 1/2"$ (12.70mm) on 20' (6.09m)

Custom lengths are available upon request.

Slots

Slotted series of channels offer full flexibility. A variety of pre-punched slot patterns eliminate the need for precise field measuring for hole locations. Slots offer wide adjustments in the alignment and bolt sizing.

Dove-Tail Sides

A variety of pre-punched $9/16"$ (14.3 mm) diameter hole patterns are available in our channels. These hole patterns provide an economical alternative to costly field drilling required for many applications.

Materials & Finishes (Unless otherwise noted)

Steel: Plain & Pre-galvanized

18 Ga. (1.2mm)

Note: A minimum order may apply on special material and finishes.

Design Load (Steel & Stainless Steel)

The design loads given for strut beam loads are based on a simple beam condition. This allowable stress results in a safety factor of 1.68.

Metric

Metric dimensions are shown in parentheses. Unless noted, all metric dimensions are in millimeters.

Compatibility of strut products with 4Dimension Strut System

Throughout the catalog, strut products that are compatible with the 4Dimension strut system will be flagged with the following symbol.



Recommended Torque (as shown in tables)

Note: Refer to bottom of page 7 for special torquing note of 4D21SH and 4D22SH or 4D21S and 4D22S trapeze assemblies.

Finish Code	Finish	Specification
PLN	Plain	ASTM A1011, 50,000 PSI min. yield
GRN	DURA GREEN™	
GLV	Pre-Galvanized	ASTM A653 50,000 PSI min. yield
HDG	Hot-Dipped Galvanized	ASTM A123
YZN	Yellow Zinc Chromate	ASTM B633 SC3 Type II
SS4	Stainless Steel Type 304	ASTM A240
SS6	Stainless Steel Type 316	ASTM A240

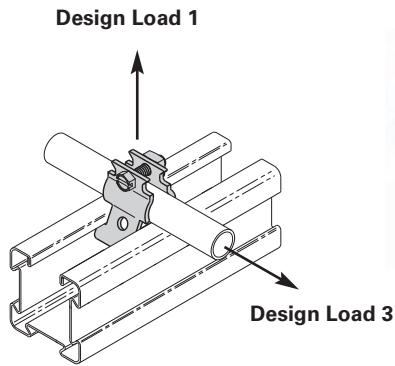
Bolt Size	1/4"-20	5/16"-18	3/8"-16	1/2"-13
Foot/Lbs.	6	11	19	50
Nm	8	15	26	68

Bolt Size	M6x1	M8 x1.25	M10 x 1.5	M12x1.75
Nm	12	17	36	62
Foot/Lbs.	9	13	27	46

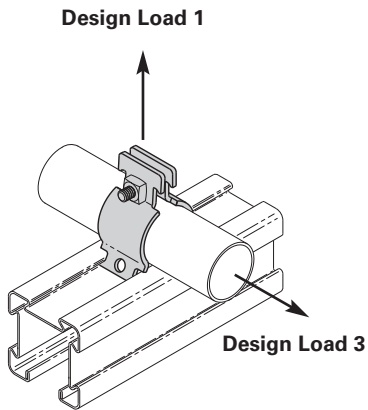
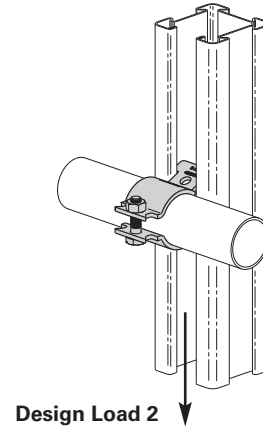
4D2000 Series O.D. Pipe & Conduit Clamps

- Safety Factor of 3 (open side)
Safety Factor of 3 (dove-tail side)
- Add PA to suffix for pre-assembled pipe clamps
- Includes Combination Recess Hex Head Machine Screw and Square Nut.
- Material: 12 Ga. (2.6mm)
ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN, HDG, SS4, SS6, DCU, AL
- Patent Pending

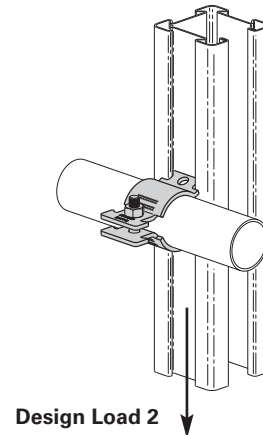
Universal Pipe Clamps (Interchangeable With 4Dimension & Traditional Strut In Dove-Tail & Open Sides)



Open Side
Design Loads



Dove-Tail Side
Design Loads



Open Side Installation



Dove-Tail Side Installation



Dimensions are in inches unless otherwise noted. Metric dimensions are in parentheses and are in millimeters unless otherwise noted.

4Dimension™ Pipe Clamps

Universal Pipe Clamps

(Interchangeable With 4Dimension & Traditional Strut
In Dove-Tail & Open Sides)

Part No.	O.D. Tubing Size		EMT Conduit Size		Rigid Conduit Size		Copper Tubing Size		Hardware Size	Clamp Weight Per 100 Pair	*† Wt. Per 100 ft. (30.5m)		** Wt. Per 100 ft. (30.5m)		
	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)			Lbs.	(kg)	Lbs.	(kg)	Lbs.
4D2023	1/4"	(6.3)	--	--	--	--	--	--	1/4"-20	8	(3.6)	15.0†	(6.8)	--	(--)
4D2024	3/8"	(9.5)	--	--	--	--	1/4"	(6)	1/4"-20	8	(3.6)	27.4†	(12.4)	17.7	(8.0)
4D2025	1/2"	(12.7)	--	--	--	--	3/8"	(10)	1/4"-20	9	(4.1)	50.2†	(22.8)	32.4	(14.7)
4D2026	5/8"	(15.9)	--	--	--	--	1/2"	(15)	1/4"-20	10	(4.5)	69.5†	(31.5)	43.9	(19.0)
4D2000	--	--	3/8"	(10)	--	--	--	--	1/4"-20	10	(4.5)	36.6*	(16.6)	--	(--)
4D2001	--	--	1/2"	(15)	3/8"	(10)	--	--	1/4"-20	10	(4.5)	65.1*	(29.5)	--	(--)
4D2027	3/4"	(19.0)	--	--	--	--	--	--	1/4"-20	10	(4.5)	89.5†	(40.6)	--	(--)
4D2008	7/8"	(22.2)	--	--	1/2"	(15)	3/4"	(20)	1/4"-20	11	(5.0)	101.1*	(45.9)	83.0	(37.6)
4D2002	--	--	3/4"	(20)	--	--	--	--	1/4"-20	11	(5.0)	84.3*	(38.2)	--	(--)
4D2009	1"	(25.4)	--	--	3/4"	(20)	--	--	1/4"-20	15	(6.8)	145.8*	(66.1)	--	(--)
4D2030	1 1/8"	(28.6)	--	--	--	--	1"	(25)	1/4"-20	15	(6.8)	166.8†	(75.6)	117.7	(53.3)
4D2003	--	--	1"	(25)	--	--	--	--	1/4"-20	16	(7.2)	130.3*	(59.1)	--	(--)
4D2031	1 1/4"	(31.7)	--	--	--	--	--	--	1/4"-20	16	(7.2)	192.5†	(87.3)	--	(--)
4D2010	1 3/8"	(34.9)	--	--	1"	(25)	1 1/4"	(32)	1/4"-20	17	(7.7)	219.3*	(99.5)	156.8	(71.1)
4D2004	1 1/2"	(38.1)	1 1/4"	(32)	--	--	--	--	1/4"-20	19	(8.6)	212.3*	(96.3)	--	(--)
4D2011	1 5/8"	(41.3)	--	--	1 1/4"	(32)	1 1/2"	(40)	1/4"-20	19	(8.6)	318.3*	(144.4)	210.7	(95.6)
4D2005	1 3/4"	(44.4)	1 1/2"	(40)	--	--	--	--	1/4"-20	28	(12.7)	269.8*	(122.4)	--	(--)
4D2012	1 7/8"	(47.6)	--	--	1 1/2"	(40)	--	--	1/4"-20	30	(13.6)	408.8*	(185.4)	--	(--)
4D2037	2"	(50.8)	--	--	--	--	--	--	1/4"-20	30	(13.6)	370.8†	(168.2)	--	(--)
4D2038	2 1/8"	(54.0)	--	--	--	--	2"	(50)	1/4"-20	32	(14.5)	451.5†	(204.8)	336.6	(152.7)
4D2006	--	--	2"	(50)	--	--	--	--	1/4"-20	33	(14.9)	401.8*	(182.3)	--	(--)
4D2039	2 1/4"	(57.1)	--	--	--	--	--	--	1/4"-20	32	(14.5)	476.8†	(216.3)	--	(--)
4D2013	2 3/8"	(60.3)	--	--	2"	(50)	--	--	1/4"-20	34	(15.4)	593.8*	(269.3)	--	(--)
4D2041	2 1/2"	(63.5)	--	--	--	--	--	--	1/4"-20	35	(15.9)	553.5†	(251.0)	--	(--)
4D2042	2 5/8"	(66.7)	--	--	--	--	2 1/2"	(65)	1/4"-20	35	(15.9)	593.5†	(269.2)	491.4	(222.9)
4D2043	2 3/4"	(69.8)	--	--	--	--	--	--	1/4"-20	38	(17.2)	634.3†	(287.7)	--	(--)
4D2014	2 7/8"	(73.0)	--	--	2 1/2"	(65)	--	--	1/4"-20	38	(17.2)	901.0*	(408.7)	--	(--)
4D2045	3"	(76.2)	--	--	--	--	--	--	1/4"-20	38	(17.2)	874.1†	(396.5)	--	(--)
4D2046	3 1/8"	(79.4)	--	--	--	--	3"	(80)	1/4"-20	39	(17.7)	925.4†	(419.7)	695.9	(315.7)
4D2047	3 1/4"	(82.5)	--	--	--	--	--	--	1/4"-20	41	(18.6)	978.0†	(443.6)	--	(--)
4D2048	3 3/8"	(85.7)	--	--	--	--	--	--	1/4"-20	43	(19.5)	1115.7†	(506.1)	--	(--)
4D2015	3 1/2"	(88.9)	--	--	3"	(80)	--	--	1/4"-20	44	(20.0)	1259.0*	(571.1)	--	(--)
4D2050	3 5/8"	(92.1)	--	--	--	--	3 1/2"	(90)	1/4"-20	54	(24.5)	1233.5†	(559.5)	902.1	(409.3)
4D2051	3 3/4"	(95.1)	--	--	--	--	--	--	1/4"-20	57	(25.8)	1294.0†	(586.9)	--	(--)
4D2052	3 7/8"	(98.4)	--	--	--	--	--	--	1/4"-20	55	(25.0)	1355.6†	(614.9)	--	(--)
4D2016	4"	(101.6)	--	--	3 1/2"	(90)	--	--	1/4"-20	57	(25.8)	1674.8*	(759.6)	--	(--)
4D2017	4 1/2"	(113.3)	--	--	4"	(100)	--	--	1/4"-20	60	(27.2)	1967.0*	(892.2)	--	(--)

* Weight of conduit/tubing and conductors per 100 ft. (30.5m). Where clamp size fits multiple conduit/pipe sizes the weight is for the heaviest size.

** Weight of copper tubing and water per 100 ft. (30.5m).

† Weight of OD tubing and water per 100 ft. (30.5m) based on the mid-range tubing thicknesses.

Dimensions are in inches unless otherwise noted. Metric dimensions are in parentheses and are in millimeters unless otherwise noted.

4Dimension™ UPC Number Chart

Part Number	Finish / Material UPC Number									
	PLN	GLV	HDG	GRN	SS4	SS6	YZN	ZN	AL	DCU
4D21-120	79903858229	79903858228	79903858230	79903858231	79903858233	79903858234	79903858232	--	--	--
4D21-240	79903858236	79903858235	79903858237	79903858238	79903858240	79903858241	79903858239	--	--	--
4D21S-120	79903858243	79903858242	79903858244	79903858245	79903858247	79903858248	79903858246	--	--	--
4D21S-240	79903858250	79903858249	79903858251	79903858252	79903858254	79903858255	79903858253	--	--	--
4D21SH-120	79903858257	79903858256	79903858258	79903858259	79903858261	79903858262	79903858260	--	--	--
4D21SH-240	79903858264	79903858263	79903858265	79903858266	79903858268	79903858269	79903858267	--	--	--
4D22-120	79903858271	79903858270	79903858272	79903858273	79903858275	79903858276	79903858274	--	--	--
4D22-240	79903858278	79903858277	79903858279	79903858280	79903858282	79903858283	79903858281	--	--	--
4D22S-120	79903858285	79903858284	79903858286	79903858287	79903858289	79903858290	79903858288	--	--	--
4D22S-240	79903858292	79903858291	79903858293	79903858294	79903858296	79903858297	79903858295	--	--	--
4D22SH-120	79903858299	79903858298	79903858300	79903858301	79903858303	79903858304	79903858302	--	--	--
4D22SH-240	79903858306	79903858305	79903858308	79903858308	79903858310	79903858311	79903858309	--	--	--
4D2000	--	--	79903858352	--	79903858353	79903858354	--	79903858351	79903858355	--
4D2000PA	--	--	79903858507	--	79903858508	79903858509	--	79903858506	79903858510	--
4D2001	--	--	79903858357	--	79903858358	79903858359	--	79903858356	79903858360	--
4D2001PA	--	--	79903858512	--	79903858513	79903858514	79903858516	79903858511	79903858515	--
4D2002	--	--	79903858362	--	79903858363	79903858364	--	79903858361	79903858365	--
4D2002PA	--	--	79903858518	--	79903858519	79903858520	79903858522	79903858517	79903858521	--
4D2003	--	--	79903858367	--	79903858368	79903858369	--	79903858366	79903858370	--
4D2003PA	--	--	79903858524	--	79903858525	79903858526	79903858528	79903858523	79903858527	--
4D2004	--	--	79903858372	--	79903858373	79903858374	--	79903858371	79903858375	--
4D2004PA	--	--	79903858530	--	79903858531	79903858532	--	79903858529	79903858533	--
4D2005	--	--	79903858377	--	79903858378	79903858379	--	79903858376	79903858380	--
4D2005PA	--	--	79903858777	--	79903858778	79903858779	--	79903858776	79903858780	--
4D2006	--	--	79903858382	--	79903858383	79903858384	--	79903858381	79903858385	--
4D2006PA	--	--	79903858535	--	79903858536	79903858537	--	79903858534	79903858538	--
4D2008	--	--	79903858387	--	79903858388	79903858389	--	79903858386	79903858390	79903858438
4D2008PA	--	--	79903858540	--	79903858541	79903858542	--	79903858539	79903858543	79903858588
4D2009	--	--	79903858392	--	79903858393	79903858394	79903858396	79903858391	79903858395	--
4D2009PA	--	--	79903858545	--	79903858546	79903858547	--	79903858544	79903858548	--
4D2010	--	--	79903858398	--	79903858399	79903858400	79903858402	79903858397	79903858401	79903858440
4D2010PA	--	--	79903858550	--	79903858551	79903858552	--	79903858549	79903858553	79903858590
4D2011	--	--	79903858404	--	79903858405	79903858406	--	79903858403	79903858407	79903858441
4D2011PA	--	--	79903858555	--	79903858556	79903858557	--	79903858554	79903858558	79903858591
4D2012	--	--	79903858409	--	79903858410	79903858411	--	79903858408	79903858412	--
4D2012PA	--	--	79903858560	--	79903858561	79903858562	--	79903858559	79903858563	--
4D2013	--	--	79903858414	--	79903858415	79903858416	79903858418	79903858413	79903858417	--
4D2013PA	--	--	79903858565	--	79903858566	79903858567	--	79903858564	79903858568	--
4D2014	--	--	79903858420	--	79903858421	79903858422	--	79903858419	79903858423	--
4D2014PA	--	--	79903858570	--	79903858571	79903858572	--	79903858569	79903858573	--
4D2015	--	--	79903858425	--	79903858426	79903858427	--	79903858424	79903858428	--
4D2015PA	--	--	79903858575	--	79903858576	79903858577	--	79903858574	79903858578	--
4D2016	--	--	79903858430	--	79903858431	79903858432	--	79903858429	79903858433	--
4D2016PA	--	--	79903858580	--	79903858581	79903858582	--	79903858579	79903858583	--
4D2017	--	--	79903865476	--	--	--	--	79903864496	--	--
4D2017PA	--	--	79903865477	--	--	--	--	79903864497	--	--