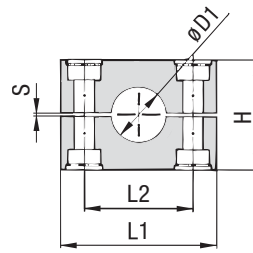
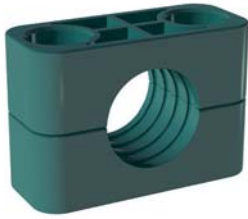


Clamp Body - Profiled Design

Profiled Inside Surface with Tension Clearance



Order Codes

Clamp Body

***3*006*PP**

One clamp body is consisting of two clamp halves.

- * 1st part of STAUFF Group 3
- * Exact outside diameter Ø D1 (mm) 006
- * Material code (see below) PP

Standard Materials



Polypropylene
Colour: Green
Material code: **PP**



Polyamide
Colour: Black
Material code: **PA**



Thermoplastic Elastomer (87 Shore-A)
Colour: Black
Material code: **SA**



Aluminium
Colour: Self-Colour
Material code: **AL**

See page A88 for material properties and technical information.

Special Materials

Please consult STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

See page A89 for material properties and technical information.

Product Features

- Proven, tested and trusted product in various markets
- Recommended for the safe installation of rigid pipes and tubes
- Available for all commonly used pipe and tube outside diameters
- Environmental protection due to vibration/noise reducing design
- Excellent weathering resistance, even under extreme conditions

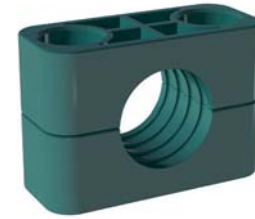
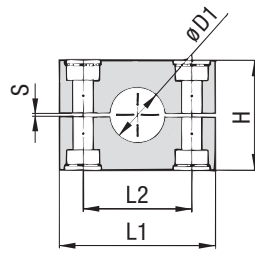
Group	STAUFF	DIN	Outside Diameter		Nominal Bore		Order Codes (2 Clamp Halves) (** = Material)	Dimensions (mm/in)								
			Pipe / Tube Ø D1 (mm)	(in)	Pipe (in)	Copper Tube (in)		L1 PP/PA/SA	L1 AL	L2	H	S min.	Width			
3S	1	6					3006 **									
		6,4	1/4				3006,4 **									
		8	5/16				3008 **									
		9,5	3/8		1/4		3009,5 **									
		10		1/8			3010 **									
		12					3012 **									
		12,7	1/2		3/8		3012,7 **	55	56	33	32	0,6	30,5			
		13,5		1/4			3013,5 **	2.16	2.20	1.30	1.26	.02	1.20			
		14					3014 **									
		15					3015 **									
		16	5/8		1/2		3016 **									
		17,2		3/8			3017,2 **									
18					3018 **											
20					3020 **											
4S	2	19	3/4			4019 **										
		20				4020 **										
		21,3		1/2		4021,3 **										
		22			3/4	4022 **	70	70	45	48	0,6	30,5				
		25				4025 **	2.76	2.76	1.77	1.89	.02	1.20				
		25,4	1			4025,4 **										
		26,9		3/4		4026,9 **										
		28				4028 **										
		30				4030 **										
		30				5030 **										
5S	3	32	1-1/4			5032 **										
		33,7		1		5033,7 **										
		35			1-1/4	5035 **	85	85	60	60	0,6	30,5				
		38	1-1/2			5038 **	3.35	3.35	2.36	2.36	.02	1.20				
		40				5040 **										
		41,3		1-1/2		5041,3 **										
		42		1-1/4		5042 **										
6S	4	38	1-1/2			6038 **										
		42		0		6042 **										
		44,5	1-3/4			6044,5 **										
		48,3		1-1/2		6048,3 **										
		50,8	2			6050,8 **										
		54			2	6054 **	115	120	90	89	2	45				
		55				6055 **	4.53	4.72	3.54	3.50	.08	1.77				
		57				6057 **										
		57,2	2-1/4			6057,2 **										
		60,3		2		6060,3 **										
63,5	2-1/2			6063,5 **												
65				6065 **												
70	2-3/4			6070 **												

See page A27 for STAUFF Group 7S to 12S (DIN Group 5 to 10).

Additional outside diameters are available upon request. Please consult STAUFF for further information.

Clamp Body - Profiled Design

Profiled Inside Surface with Tension Clearance



Group	DIN	Outside Diameter		Nominal Bore	Order Codes (2 Clamp Halves) (** = Material)	Dimensions (mm/in)						
		Ø D1 (mm)	(in)			Pipe (in)	L1 PP/PA	L1 AL	L2	H	S min.	Width
7S	5	60,3			7060,3 **							
		65			7065 **							
		70	2-3/4		7070 **							
		73		2-1/2 (ANSI B 36-10)	7073 **							
		75			7075 **	154	152	122	120	2	60	
		76,1	3	2-1/2 (DIN EN 10220)	7076,1 **	6.06	5.98	4.80	4.72	.08	2.36	
		80			7080 **							
		82,5			7082,5 **							
8S	6	88,9	3-1/2	3	7088,9 **							
		88,9	3-1/2	3	8088,9 **							
		100			8100 **							
		102	4	3-1/2	8102 **	206	208	168	168	2	80	
		108			8108 **	8.11	8.19	6.61	6.61	.08	3.15	
		114	4-1/2	4	8114 **							
9S	7	127	5		8127 **							
		133			8133 **							
		140		5	9127 **							
		140		5	9133 **							
		152	6		9140 **	251	255	205	200	3	91	
		152	6		9152 **	9.88	10.04	8.07	7.87	.12	3.58	
10S	8	159			9159 **							
		165			9165 **							
		168		6	9168 **							
		168		6	10168 **							
		177,8			10177,8 **							
		177,8			10193,7 **	336	326	265	270	3	120	
11S	9	193,7			10203 **	13.22	12.83	10.43	10.63	.12	4.72	
		203	8		10203 **							
		216			10216 **							
		219		8	10219 **							
12S	10	219		8	11219 **	470	470	395	410	8	162	
		273		10	11273 **	18.50	18.50	15.55	16.14	.31	6.38	
		324		12	11324 **							
12S	10	356		14	12356 **	630	630	534	530	20	182	
		406		16	12406 **	4.80	4.80	21.02	20.87	.79	7.16	

See page A26 for STAUFF Group 3S to 6S (DIN Group 1 to 4).

Additional outside diameters are available upon request. Please consult STAUFF for further information.

Order Codes
Clamp Body
***7*060,3*PP**

One clamp body is consisting of two clamp halves.

- * 1st part of STAUFF Group 7
- * Exact outside diameter Ø D1 (mm) 060,3
- * Material code (see below) PP

Standard Materials
Polypropylene
 Colour: Green
 Material code: **PP**
Polyamide
 Colour: Black
 Material code: **PA**
Aluminium
 Colour: Self-Colour
 Material code: **AL**

See page A88 for material properties and technical information.

Special Materials

Please consult STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

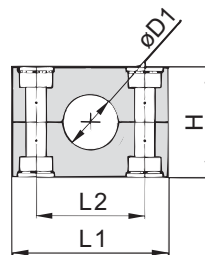
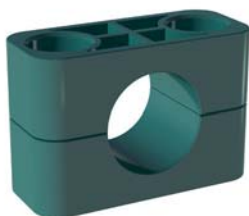
See page A89 for material properties and technical information.

Product Features

- Proven, tested and trusted product in various markets
- Recommended for the safe installation of rigid pipes and tubes
- Available for all commonly used pipe and tube outside diameters
- Environmental protection due to vibration/noise reducing design
- Excellent weathering resistance, even under extreme conditions

Clamp Body - Type H

Smooth Inside Surface without Tension Clearance



Order Codes

Clamp Body

***3*006*PPH**

One clamp body is consisting of two clamp halves.

- * 1st part of STAUFF Group 3
- * Exact outside diameter Ø D1 (mm) 006
- * Material code (see below) PPH

Standard Materials



Polypropylene
Colour: Green
Material code: **PPH**



Polyamide
Colour: Black
Material code: **PAH**



Thermoplastic Elastomer (87 Shore-A)
Colour: Black
Material code: **SAH**

See page A88 for material properties and technical information.

Special Materials

Please consult STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

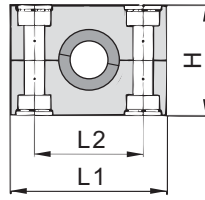
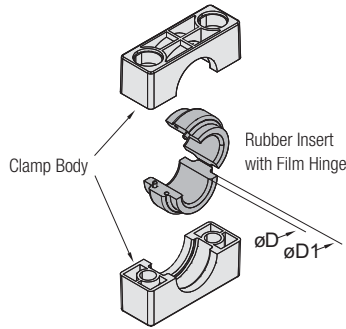
See page A89 for material properties and technical information.

Product Features

- Proven, tested and trusted product in various markets
- Recommended for the safe installation of hoses and cables
- Chamfered edges avoid damaging of the hose or cable
- Available for all commonly used hose and cable outside diameters
- Excellent weathering resistance, even under extreme conditions

Group	STAUFF	DIN	Outside Diameter		Nominal Bore Hydraulic Hose SAE 100 R2 AT (in)	Order Codes (2 Clamp Halves) (** = Material)	Dimensions (mm/m)						
			Ø D1 (mm)	(in)			L1	L2	H	Width			
3S	1	6				3006 ***	55	2.16	33	1.30	1.20	30,5	1,20
		6,4	1/4		3006,4 ***								
		8	5/16		3008 ***								
		9,5	3/8		3009,5 ***								
		10			3010 ***								
		12			3012 ***								
		12,7	1/2		3012,7 ***								
		13,5			3013,5 ***								
		14			3014 ***								
		15		1/4	3015 ***								
		16	5/8		3016 ***								
		17,2			3017,2 ***								
18			3018 ***										
4S	2	15		1/4	4015 ***	70	2.76	45	1.77	1.83	46,5	30,5	1,20
		19	3/4		4019 ***								
		19,8		3/8	4019,8 ***								
		20			4020 ***								
		21,3			4021,3 ***								
		22			4022 ***								
		22,1		1/2	4022,1 ***								
		25			4025 ***								
		25,1	5/8		4025,1 ***								
		25,4	1		4025,4 ***								
		26,9			4026,9 ***								
		28			4028 ***								
29,2		3/4	4029,2 ***										
30			4030 ***										
5S	3	30			5030 ***	85	3.35	60	2.36	2.28	58	30,5	1,20
		32	1-1/4		5032 ***								
		33,7			5033,7 ***								
		35			5035 ***								
		38	1-1/2		5038 ***								
		40			5040 ***								
		41,3			5041,3 ***								
		42			5042 ***								
6S	4	37,8		1	6037,8 ***	115	4.53	90	3.54	3.43	87	45	1,77
		38	1-1/2		6038 ***								
		42			6042 ***								
		44,5	1-3/4		6044,5 ***								
		48,3			6048,3 ***								
		48,4		1-1/4	6048,4 ***								
		50,8	2		6050,8 ***								
		54,4		1-1/2	6054,4 ***								
		55			6055 ***								
		57			6057 ***								
		57,2	2-1/4		6057,2 ***								
		60,3			6060,3 ***								
63,5	2-1/2		6063,5 ***										
65			6065 ***										
70	2-3/4		6070 ***										

Additional outside diameters are available upon request. Please consult STAUFF for further information.



Clamp Body with Rubber Insert Type RI



Group	STAUFF DIN	Outside Diameter Pipe / Tube / Hose Ø D		Order Codes (**R = Clamp Body Material)			Dimensions (mm/in)				
		(mm)	(in)	Clamp Assembly (Clamp Body + Rubber Insert)	Clamp Body (2 Clamp Halves)	Rubber Insert *	Ø D1	L1	L2	H	Width
4S	2	6		4006 **R	4S **R	RI 06 (4+4S)	25	70	45	46,5	30,5
		8	5/16	4008 **R		RI 08 (4+4S)					
		10		4010 **R		RI 10 (4+4S)					
		12		4012 **R		RI 12 (4+4S)					
		12,7	1/2	4012,7 **R		RI 12,7 (4+4S)					
		14		4014 **R		RI 14 (4+4S)					
		15		4015 **R		RI 15 (4+4S)					
		16	5/8	4016 **R		RI 16 (4+4S)					
		17,2		4017,2 **R		RI 17,2 (4+4S)					
		18		4018 **R		RI 18 (4+4S)					
19	3/4	4019 **R	RI 19 (4+4S)								
5S	3	20		5020 **R	5S **R	RI 20 (6+5S)	38	85	60	58	30,5
		21,3		5021,3 **R		RI 21,3 (6+5S)					
		22	7/8	5022 **R		RI 22 (6+5S)					
		25		5025 **R		RI 25 (6+5S)					
		26,9		5026,9 **R		RI 26,9 (6+5S)					
		28		5028 **R		RI 28 (6+5S)					
		30		5030 **R		RI 30 (6+5S)					
32	1-1/4	5032 **R	RI 32 (6+5S)								
6S	4	32	1-1/4	6032 **R	6S **R	RI 32 (6S)	64	115	90	87	45
		33,7		6033,7 **R		RI 33,7 (6S)					
		35		6035 **R		RI 35 (6S)					
		38,7		6038,7 **R		RI 38,7 (6S)					
		40		6040 **R		RI 40 (6S)					
		42		6042 **R		RI 42 (6S)					
		45,5		6045,5 **R		RI 45,5 (6S)					
		48		6048 **R		RI 48 (6S)					
		51	2	6051 **R		RI 51 (6S)					
		53,4		6053,4 **R		RI 53,4 (6S)					
56,4		6056,4 **R	RI 56,4 (6S)								
7S	5	55		7055 **R	7S **R	RI 55 (7S)	88	154	122	120	60
		57	2-1/4	7057 **R		RI 57 (7S)					
		60		7060 **R		RI 60 (7S)					
		63,5	2-1/2	7063,5 **R		RI 63,5 (7S)					
		65		7065 **R		RI 65 (7S)					
		70	2-3/4	7070 **R		RI 70 (7S)					
		72		7072 **R		RI 72 (7S)					
76	3	7076 **R	RI 76 (7S)								
8S	6	80		8080 **R	8S **R	RI 80 (8S)	114	208	168	168	80
		88,9	3-1/2	8088,9 **R		RI 88,9 (8S)					
		102		8102 **R		RI 102 (8S)					
9S	7	114		9114 **R	9S **R	RI 114 (9S)	150	251	205	200	91
		133	5-1/4	9133 **R		RI 133 (9S)					
		140		9140 **R		RI 140 (9S)					
10S	8	150		10150 **R	10S **R	RI 150 (10S)	200	336	265	270	120
		165		10165 **R		RI 165 (10S)					
		168		10168 **R		RI 168 (10S)					
		172		10172 **R		RI 172 (10S)					

* Rubber Inserts for Heavy Series clamp bodies, STAUFF Group 4S also fit into Standard Series clamp bodies, STAUFF Group 4.
 Rubber Inserts for Heavy Series clamp bodies, STAUFF Group 5S also fit into Standard Series clamp bodies, STAUFF Group 6.

Additional outside diameters are available upon request. Please consult STAUFF for further information.

Order Codes

Clamp Assembly *4*006*PPR

One assembly is consisting of one clamp body and one insert.
 * 1st part of STAUFF Group 4
 * Exact outside diameter Ø D (mm) 006
 * Material code (see below) PPR

Clamp Body *4S*PPR

One clamp body is consisting of two clamp halves.
 * STAUFF Group 4S
 * Material code (see below) PPR

Rubber Insert *RI*06*(4+4S)

* Rubber Insert RI
 * Exact outside diameter Ø D (mm) 06
 * STAUFF Group 4S (Heavy) and 4 (Standard) (4+4S)
 5S (Heavy) and 6 (Standard) (6+5S)
 6S (Heavy) (6S)
 7S (Heavy) (7S)
 8S (Heavy) (8S)
 9S (Heavy) (9S)
 10S (Heavy) (10S)

Standard Materials



Polypropylene
 Colour: Black
 Material code: **PPR**



Polyamide
 Colour: Black
 Material code: **PAR**



Rubber Insert
 4S to 6S: **Thermoplastic Elastomer** (73 Shore-A)
 7S to 10S: **Elastomer** (70 Shore-A)
 Colour: Black

See page A88 for properties and technical information.

Special Materials

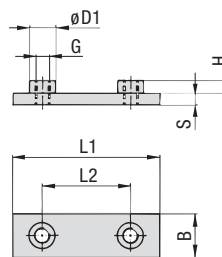
Please consult STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

See page A89 for properties and technical information.

Product Features

- Proven, tested and trusted product in various markets
- Either for the extra vibration/noise reducing installation of pipes and tubes or the extra gentle installation of hoses and cables
- Available for all commonly used outside diameters
- Excellent weathering resistance, even under extreme conditions

**Weld Plate for Single Clamps
Type SPAL**



Order Codes

Weld Plate

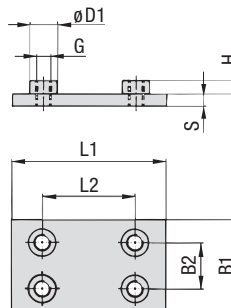
***SPAL*3S*U*W2**

- * Weld Plate for Single Clamps **SPAL**
- * STAUFF Group **3S**
- * Thread code Unified coarse (UNC) thread **U**
Metric ISO thread **M**
- * Material code Carbon Steel, untreated **W1**
Carbon Steel, phosphated **W2**
Carbon Steel, zinc/nickel-plated **W3**
Stainless Steel V2A **W4**
1.4301 / 1.4305 (AISI 304 / 303) **W5**
Stainless Steel V4A **W5**
1.4401 / 1.4571 (AISI 316 / 316 Ti)

Group	Dimensions (mm/in)	Order Codes							
STAUFF	DIN	(Standard Options)							
	L1	L2	B	S	H	Thread G	ØD1		
3S	1	74	33	30	8	8	M10	18	SPAL 3S M W2
		2.91	1.30	1.18	.31	.31	3/8-16 UNC	.71	SPAL 3S U W2
4S	2	86	45	30	8	8	M10	18	SPAL 4S M W2
		3.39	1.77	1.18	.31	.31	3/8-16 UNC	.71	SPAL 4S U W2
5S	3	100	60	30	8	8	M10	18	SPAL 5S M W2
		3.94	2.36	1.18	.31	.31	3/8-16 UNC	.71	SPAL 5S U W2
6S	4	140	90	45	10	8	M12	20	SPAL 6S M W2
		5.51	3.54	1.77	.39	.31	7/16-14 UNC	.78	SPAL 6S U W2
7S	5	180	122	60	10	12	M16	24	SPAL 7S M W2
		7.09	4.80	2.36	.39	.47	5/8-11 UNC	.94	SPAL 7S U W2
8S	6	226	168	80	15	18	M20	30	SPAL 8S M W1
		8.90	6.61	3.15	.59	.71	3/4-10 UNC	1.18	SPAL 8S U W1
9S	7	270	205	90	15	21	M24	35	SPAL 9S M W1
		10.63	8.07	3.54	.59	.83	7/8-9 UNC	1.38	SPAL 9S U W1
10S	8	340	265	120	25	21	M30	45	SPAL 10S M W1
		13.39	10.43	4.72	.98	.83	1-1/8-7 UNC	1.77	SPAL 10S U W1
11S	9	520	395	160	30	38	M30	50	SPAL 11S M W1
		20.47	15.55	6.30	1.18	1.50	1-1/4-7 UNC	1.97	SPAL 11S U W1
12S	10	680	534	180	30	38	M30	50	SPAL 12S M W1
		27.16	21.02	7.09	1.18	1.50	1-1/4-7 UNC	1.97	SPAL 12S U W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

**Weld Plate for Double Clamps
Type SPAS**



Order Codes

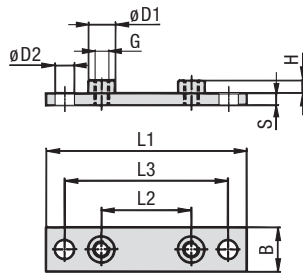
Weld Plate

***SPAS*3S*U*W2**

- * Weld Plate for Double Clamps **SPAS**
- * STAUFF Group **3S**
- * Thread code Unified coarse (UNC) thread **U**
Metric ISO thread **M**
- * Material code Carbon Steel, untreated **W1**
Carbon Steel, phosphated **W2**
Carbon Steel, zinc/nickel-plated **W3**
Stainless Steel V2A **W4**
1.4301 / 1.4305 (AISI 304 / 303) **W5**
Stainless Steel V4A **W5**
1.4401 / 1.4571 (AISI 316 / 316 Ti)

Group	Dimensions (mm/in)	Order Codes								
STAUFF	DIN	(Standard Options)								
	L1	L2	B1	B2	S	H	Thread G	ØD1		
3S	1	74	33	60	30,5	8	8	M10	18	SPAS 3S M W2
		2.91	1.30	2.36	1.20	.31	.31	3/8-16 UNC	.71	SPAS 3S U W2
4S	2	86	45	60	30,5	8	8	M10	18	SPAS 4S M W2
		3.39	1.77	2.36	1.20	.31	.31	3/8-16 UNC	.71	SPAS 4S U W2
5S	3	100	60	60	30,5	8	8	M10	18	SPAS 5S M W2
		3.94	2.36	2.36	1.20	.31	.31	3/8-16 UNC	.71	SPAS 5S U W2
6S	4	140	90	90	46	10	8	M12	20	SPAS 6S M W2
		5.51	3.54	3.54	1.81	.39	.31	7/16-14 UNC	.78	SPAS 6S U W2
7S	5	180	122	120	61	10	12	M16	24	SPAS 7S M W2
		7.09	4.80	4.72	2.40	.39	.47	5/8-11 UNC	.94	SPAS 7S U W2
8S	6	226	168	160	81	15	18	M20	30	SPAS 8S M W1
		8.90	6.61	6.61	3.19	.59	.71	3/4-10 UNC	1.18	SPAS 8S U W1
9S	7	270	205	180	91	15	21	M24	35	SPAS 9S M W1
		10.63	8.07	7.09	3.58	.59	.83	7/8-9 UNC	1.38	SPAS 9S U W1
10S	8	340	265	240	121	25	21	M30	45	SPAS 10S M W1
		13.39	10.43	9.45	4.78	.98	.83	1-1/8-7 UNC	1.77	SPAS 10S U W1
11S	9	520	395	324	166	30	38	M30	50	SPAS 11S M W1
		20.47	15.55	12.76	6.54	1.18	1.50	1-1/4-7 UNC	1.97	SPAS 11S U W1
12S	10	680	534	364	186	30	38	M30	50	SPAS 12S M W1
		27.16	21.02	14.33	7.32	1.18	1.50	1-1/4-7 UNC	1.97	SPAS 12S U W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.



Elongated Weld Plate for Single Clamps Type SPAL/DUEB



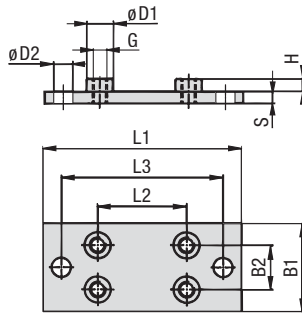
Group STAUFF	DIN	Dimensions (mm/in)										Order Codes (Standard Options)
		L1	L2	L3	B	S	H	Thread G	$\varnothing D1$	$\varnothing D2$		
3S	1	113	33	85	30	8	8	M10	18	13	SPAL/DUEB 3S M W2	
		4.45	1.30	3.35	1.18	.31	.31	3/8-16 UNC	.71	.51	SPAL/DUEB 3S U W2	
4S	2	125	45	97	30	8	8	M10	18	13	SPAL/DUEB 4S M W2	
		4.92	1.77	3.82	1.18	.31	.31	3/8-16 UNC	.71	.51	SPAL/DUEB 4S U W2	
5S	3	140	60	112	30	8	8	M10	18	13	SPAL/DUEB 5S M W2	
		5.51	2.36	4.41	1.18	.31	.31	3/8-16 UNC	.71	.51	SPAL/DUEB 5S U W2	
6S	4	187	90	155	45	10	8	M12	20	16	SPAL/DUEB 6S M W2	
		7.36	3.54	6.10	1.77	.39	.31	7/16-14 UNC	.78	.62	SPAL/DUEB 6S U W2	
7S	5	238	122	198	60	10	12	M16	24	21	SPAL/DUEB 7S M W2	
		9.37	4.80	7.80	2.36	.39	.47	5/8-11 UNC	.94	.83	SPAL/DUEB 7S U W2	
8S	6	309	168	259	80	15	18	M20	30	26	SPAL/DUEB 8S M W1	
		12.17	6.61	10.20	3.15	.59	.71	3/4-10 UNC	1.18	1.02	SPAL/DUEB 8S U W1	
9S	7	370	205	310	90	15	21	M24	35	31	SPAL/DUEB 9S M W1	
		14.57	8.07	12.20	3.54	.59	.83	7/8-9 UNC	1.38	1.22	SPAL/DUEB 9S U W1	
10S	8	440	265	380	120	25	21	M30	45	31	SPAL/DUEB 10S M W1	
		17.32	10.43	14.96	4.72	.98	.83	1-1/8-7 UNC	1.77	1.22	SPAL/DUEB 10S U W1	
11S	9	590	395	530	160	30	38	M30	50	31	SPAL/DUEB 11S M W1	
		23.23	15.55	20.87	6.30	1.18	1.50	1-1/4-7 UNC	1.97	1.22	SPAL/DUEB 11S U W1	
12S	10	750	534	690	180	30	38	M30	50	31	SPAL/DUEB 12S M W1	
		29.53	21.02	27.17	7.09	1.18	1.50	1-1/4-7 UNC	1.97	1.22	SPAL/DUEB 12S U W1	

Order Codes

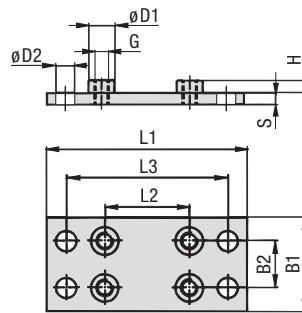
Weld Plate *SPAL/DUEB*3S*U*W2

* Elongated Weld Plate for Single Clamps	SPAL/DUEB
* STAUFF Group	3S
* Thread code	Unified coarse (UNC) thread U Metric ISO thread M
* Material code	Carbon Steel, untreated W1 Carbon Steel, phosphated W2 Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A W4 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A W5 1.4401 / 1.4571 (AISI 316 / 316 Ti)

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.
Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.



STAUFF Group 3S to 9S



STAUFF Group 10S to 12S

Elongated Weld Plate for Double Clamps Type SPAS/DUEB



Design for STAUFF Group 10S to 12S

Group STAUFF	DIN	Dimensions (mm/in)										Order Codes (Standard Options)
		L1	L2	L3	B1	B2	S	H	Thread G	$\varnothing D1$	$\varnothing D2$	
3S	1	113	33	85	60	30,5	8	8	M10	18	13	SPAS/DUEB 3S M W2
		4.45	1.30	3.35	2.36	1.20	.31	.31	3/8-16 UNC	.71	.51	SPAS/DUEB 3S U W2
4S	2	125	45	97	60	30,5	8	8	M10	18	13	SPAS/DUEB 4S M W2
		4.92	1.77	3.82	2.36	1.20	.31	.31	3/8-16 UNC	.71	.51	SPAS/DUEB 4S U W2
5S	3	140	60	112	60	30,5	8	8	M10	18	13	SPAS/DUEB 5S M W2
		5.51	2.36	4.41	2.36	1.20	.31	.31	3/8-16 UNC	.71	.51	SPAS/DUEB 5S U W2
6S	4	187	90	155	90	46	10	8	M12	20	16	SPAS/DUEB 6S M W2
		7.36	3.54	6.10	3.54	1.81	.39	.31	7/16-14 UNC	.78	.62	SPAS/DUEB 6S U W2
7S	5	238	122	198	120	61	10	12	M16	24	21	SPAS/DUEB 7S M W2
		9.37	4.80	7.80	4.72	2.40	.39	.47	5/8-11 UNC	.94	.83	SPAS/DUEB 7S U W2
8S	6	309	168	259	160	81	15	18	M20	30	26	SPAS/DUEB 8S M W1
		12.17	6.61	10.20	6.61	3.19	.59	.71	3/4-10 UNC	1.18	1.02	SPAS/DUEB 8S U W1
9S	7	370	205	310	180	91	15	21	M24	35	31	SPAS/DUEB 9S M W1
		14.57	8.07	12.20	7.09	3.58	.59	.83	7/8-9 UNC	1.38	1.22	SPAS/DUEB 9S U W1
10S	8	440	265	380	240	121	25	21	M30	45	31	SPAS/DUEB 10S M W1
		17.32	10.43	14.96	9.45	4.78	.98	.83	1-1/8-7 UNC	1.77	1.22	SPAS/DUEB 10S U W1
11S	9	590	395	530	324	166	30	38	M30	50	31	SPAS/DUEB 11S M W1
		23.23	15.55	20.87	12.76	6.54	1.18	1.50	1-1/4-7 UNC	1.97	1.22	SPAS/DUEB 11S U W1
12S	10	750	534	690	364	186	30	38	M30	50	31	SPAS/DUEB 12S M W1
		29.53	21.02	27.17	14.33	7.32	1.18	1.50	1-1/4-7 UNC	1.97	1.22	SPAS/DUEB 12S U W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.
Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

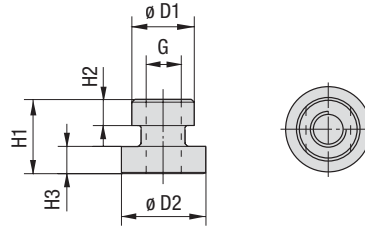
Order Codes

Weld Plate *SPAS/DUEB*3S*U*W2

* Elongated Weld Plate for Double Clamps	SPAS/DUEB
* STAUFF Group	3S
* Thread code	Unified coarse (UNC) thread U Metric ISO thread M
* Material code	Carbon Steel, untreated W1 Carbon Steel, phosphated W2 Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A W4 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A W5 1.4401 / 1.4571 (AISI 316 / 316 Ti)

Mounting Rail Nut

Type **GMV** (for Use with Mounting Rail STSV)



Order Codes

Mounting Rail Nut ***GMV*3-5S*U*W3**

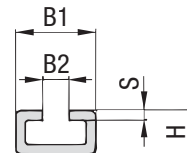
- * Mounting Rail Nut **GMV**
- * STAUFF Group 3S to 5S (DIN Group 1 to 3) **3-5S**
6S (DIN Group 4) **6S**
- * Thread code Unified coarse (UNC) thread **U**
Metric ISO thread **M**
- * Material code Carbon Steel, zinc/nickel-plated **W3**
Stainless Steel V2A **W4**
1.4301 / 1.4305 (AISI 304 / 303)
Stainless Steel V4A **W5**
1.4401 / 1.4571 (AISI 316 / 316 Ti)

Group	STAUFF	DIN	Dimensions (mm/in)					Thread G	Order Codes (Standard Options)
			ØD1	ØD2	H1	H2	H3		
3S		1							
4S		2	17,8 .70	24 .94	21 .83	7,6 .30	7,4 .29	M10 3/8-16 UNC	GMV 3-5S M W3 GMV 3-5S U W3
5S		3							
6S		4	19,8 .78	24 .94	23 .91	8,8 .35	8,2 .32	M12 7/16-14 UNC	GMV 6S M W3 GMV 6S U W3

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

Mounting Rail

Type **STSV** (for Use with Mounting Rail Nut GMV)



Order Codes

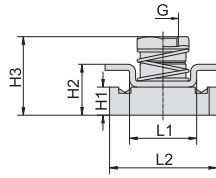
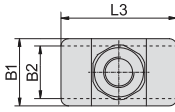
Mounting Rail ***STSV*1*W1**

- * Mounting Rail **STSV**
- * Length of rail 1 m / 3.28 ft **1**
2 m / 6.56 ft **2**
Alternative lengths available upon request. Consult STAUFF for further information.
- * Material code Carbon Steel, untreated **W1**
Carbon Steel, zinc/nickel-plated **W3**
Stainless Steel V4A **W5**
1.4401 / 1.4571 (AISI 316 / 316 Ti)

Group	STAUFF	DIN	Dimensions (mm/in)				Order Codes (Standard Options)	
			B1	B2	H	S	Length of Rail: 1 m / 3.28 ft	Length of Rail: 2 m / 6.56 ft
3S		1						
4S		2	40	13	22	5	STSV 1 W1	STSV 2 W1
5S		3	1.57	.39	.86	.19		
6S		4						

Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

Channel Rail Adaptor (for Use with Various Channel Rails) Type CRA



Group STAUFF	DIN	Dimensions (mm/in)										Order Codes (Standard Options)
		Thread G	L1	L2	L3	B1	B2	H1	H2	H3		
3S	1											
4S	2	M10	22	35	38	22	20,5	9,2	16,7	27,5	CRA 3-5S M W3 CRA 3-5S U W3	
		3/8-16 UNC	.87	1.38	1.50	.87	.81	.36	.66	1.08		
5S	3											
6S	4	M12	21,5	35	45	25	19	9,2	15,2	27,5	CRA 6S M W3 CRA 6S U W3	
		7/16-14 UNC	.85	1.38	1.77	.98	.75	.36	.60	1.08		

Order Codes

Adaptor

***CRA*3-5S*U*W3**

* Channel Rail Adaptor	CRA
* STAUFF Group	3S to 5S (DIN Group 1 to 3) 6S (DIN Group 4)
* Thread code	Unified coarse (UNC) thread Metric ISO thread
* Material code	Carbon Steel, zinc/nickel-plated Stainless Steel V4A
	1.4401 / 1.4571 (AISI 316 / 316 Ti)

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

Compatibility with Channel Rails

The STAUFF Channel Rail Adaptor, type CRA, is suitable for various channel rails, including the following types:



HALFEN	HILTI	UNISTRUT®	STAUFF (Cushion Clamp Series)
HM 41/41	MQ-21, MQ-41, MQ-52, MQ-72	P1000, P1000T, P1000V, P1000VT, P1001	SCS-048-1-PL, SCS-048-1-GR
HZA 41/22	MQ-21U, MQ-41U, MQ-72U	P2000, P2000T	SCS-120-1-PL, SCS-120-1-GR
HZM 41/41	MQ-21D, MQ-41D, MQ-52-72D	P3003, P3003T, P3300V, P3300VT, P3301	See page A85 for technical information.
HZM 41/22		P4000, P4000T	
HL 41/41, HL 41/B2		P5000, P5000T, P5001, P5500, P5500T, P5501	

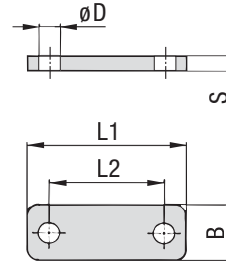
Consult STAUFF to check compatibility with additional types of channel rails.

Recommended Bolt Lengths when using the Channel Rail Adaptor, Type CRA

Group STAUFF	DIN	Hexagon Head Bolts AS (used with Cover Plates DPAL or DPAS)		Socket Cap Screws IS (used without Cover Plates DPAL or DPAS)	
		Metric ISO thread	Unified coarse (UNC) thread	Metric ISO thread	Unified coarse (UNC) thread
3S	1	M10 x 40	3/8-16 UNC x 1-1/2	M10 x 25	3/8-16 UNC x 1
4S	2	M10 x 55	3/8-16 UNC x 2-1/4	M10 x 40	3/8-16 UNC x 1-1/2
5S	3	M10 x 65	3/8-16 UNC x 2-3/4	M10 x 50	3/8-16 UNC x 2
6S	4	M12 x 100	7/16-14 UNC x 3-3/4	M12 x 75	7/16-14 UNC x 3

Clamp assemblies including Channel Rail Adaptors, type CRA are supplied with the recommended bolt lengths by default. See page A39 for further information on ordering.

**Cover Plate for Single Clamps
Type DPAL**



Order Codes

Cover Plate

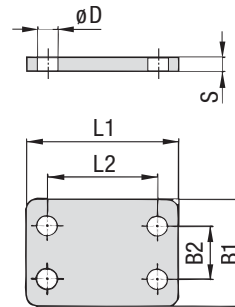
***DPAL*3S*W2**

- * Cover Plate for Single Clamps **DPAL**
- * STAUFF Group **3S**
- * Material code
 - Carbon Steel, untreated **W1**
 - Carbon Steel, phosphated **W2**
 - Carbon Steel, zinc/nickel-plated **W3**
 - Stainless Steel V2A **W4**
 - 1.4301 / 1.4305 (AISI 304 / 303) **W4**
 - Stainless Steel V4A **W5**
 - 1.4401 / 1.4571 (AISI 316 / 316 Ti) **W5**

Group	STAUFF	DIN	Dimensions (mm/in)					Order Codes (Standard Options)
			L1	L2	B	S	ØD	
3S	1		55	33	30	8	11	DPAL 3S W2
			2.16	1.30	1.18	.31	.43	
4S	2		70	45	30	8	11	DPAL 4S W2
			2.76	1.77	1.18	.31	.43	
5S	3		85	60	30	8	11	DPAL 5S W2
			3.35	2.36	1.18	.31	.43	
6S	4		115	90	45	10	14	DPAL 6S W2
			4.53	3.54	1.77	.39	.55	
7S	5		152	122	60	10	19	DPAL 7S W2
			5.98	4.80	2.36	.39	.75	
8S	6		206	168	80	15	22	DPAL 8S W1
			8.11	6.61	3.15	.59	.87	
9S	7		251	205	90	15	26	DPAL 9S W1
			9.88	8.07	3.54	.59	1.02	
10S	8		320	265	120	25	35	DPAL 10S W1
			12.60	10.43	4.72	.98	1.38	
11S	9		470	395	160	30	35	DPAL 11S W1
			18.50	15.55	6.30	1.18	1.38	
12S	10		630	534	180	30	35	DPAL 12S W1
			24.80	21.02	7.09	1.18	1.38	

Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

**Cover Plate for Double Clamps
Type DPAS**



Order Codes

Cover Plate

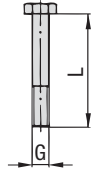
***DPAS*3S*W2**

- * Cover Plate for Double Clamps **DPAS**
- * STAUFF Group **3S**
- * Material code
 - Carbon Steel, untreated **W1**
 - Carbon Steel, phosphated **W2**
 - Carbon Steel, zinc/nickel-plated **W3**
 - Stainless Steel V2A **W4**
 - 1.4301 / 1.4305 (AISI 304 / 303) **W4**
 - Stainless Steel V4A **W5**
 - 1.4401 / 1.4571 (AISI 316 / 316 Ti) **W5**

Group	STAUFF	DIN	Dimensions (mm/in)					Order Codes (Standard Options)	
			L1	L2	B1	B2	S		ØD
3S	1		55	33	60	30,5	8	11	DPAS 3S W2
			2.16	1.30	2.36	1.20	.31	.43	
4S	2		70	45	60	30,5	8	11	DPAS 4S W2
			2.76	1.77	2.36	1.20	.31	.43	
5S	3		85	60	60	30,5	8	11	DPAS 5S W2
			3.35	2.36	2.36	1.20	.31	.43	
6S	4		115	90	90	46	10	14	DPAS 6S W2
			4.53	3.54	3.54	1.81	.39	.55	
7S	5		152	122	120	61	10	19	DPAS 7S W2
			5.98	4.80	4.72	2.40	.39	.75	
8S	6		206	168	160	81	15	22	DPAS 8S W1
			8.11	6.61	6.61	3.19	.59	.87	
9S	7		251	205	180	91	15	26	DPAS 9S W1
			9.88	8.07	7.09	3.58	.59	1.02	
10S	8		320	265	240	121	25	35	DPAS 10S W1
			12.60	10.43	9.45	4.78	.98	1.38	
11S	9		470	395	321	166	30	35	DPAS 11S W1
			18.50	15.55	12.64	6.54	1.18	1.38	
12S	10		630	534	361	186	30	35	DPAS 12S W1
			24.80	21.02	14.21	7.32	1.18	1.38	

Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

Hexagon Head Bolt Type AS


Hexagon Head Bolt AS

(according to DIN 931 / 933 or ANSI / ASME B18.2.1.)

Dimensions applicable only when used with Cover Plates DPAL or DPAS



Group STAUFF	DIN	Dimensions (mm/in) Thread G x L	Order Codes (Standard Options)
3S	1	M10 x 45	AS 3S M W3*
		3/8-16 UNC x 1-3/4	AS 3S U W3
4S	2	M10 x 60	AS 4S M W3*
		3/8-16 UNC x 2-1/4	AS 4S U W3
5S	3	M10 x 70	AS 5S M W3*
		3/8-16 UNC x 2-3/4	AS 5S U W3
6S	4	M12 x 100	AS 6S M W3*
		7/16-14 UNC x 4	AS 6S U W3
7S	5	M16 x 130	AS 7S M W3*
		5/8-11 UNC x 5-1/4	AS 7S U W3
8S	6	M20 x 190	AS 8S M W1
		3/4-10 UNC x 7-1/2	AS 8S U W1
9S	7	M24 x 220	AS 9S M W1
		7/8-9 UNC x 8-3/4	AS 9S U W1
10S	8	M30 x 300	AS 10S M W1
		1-1/8-7 UNC x 12	AS 10S U W1
11S	9	M30 x 450	AS 11S M W1
		1-1/4-7 UNC x 17-1/2	AS 11S U W1
12S	10	M30 x 560	AS 12S M W1
		1-1/4-7 UNC x 22	AS 12S U W1

Order Codes

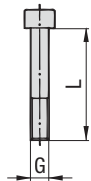
Hexagon Head Bolt *AS*3S*U*W3

* Type of bolt	Hexagon Head Bolt (according to DIN 931 / 933 or ANSI / ASME B18.2.1.)	AS
* STAUFF Group		3S
* Thread code	Unified coarse (UNC) thread Metric ISO thread	U M
* Material code	Carbon Steel, untreated Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W1 W3 W4 W5

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

* Standard finishing option for Heavy Series group sizes 3S to 7S for markets outside North America is W1 (Carbon Steel, untreated).

Socket Cap Screw Type IS


Socket Cap Screw IS

(according to ISO 4762 or ANSI / ASME B18.3)

Dimensions applicable only when used without Cover Plates



Group STAUFF	DIN	Dimensions (mm/in) Thread G x L	Order Codes (Standard Options)
3S	1	M10 x 30	IS 3S M W3*
		3/8-16 UNC x 1	IS 3S U W3
4S	2	M10 x 40	IS 4S M W3*
		3/8-16 UNC x 1-3/4	IS 4S U W3
5S	3	M10 x 50	IS 5S M W3*
		3/8-16 UNC x 2	IS 5S U W3
6S	4	M12 x 80	IS 6S M W3*
		7/16-14 UNC x 3-1/4	IS 6S U W3

Order Codes

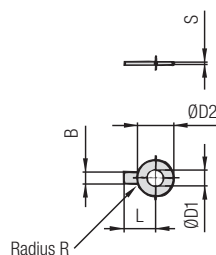
Socket Cap Screw *IS*3S*U*W3

* Type of Bolt	Socket Cap Screw (according to ISO 4762 or ANSI / ASME B18.3)	IS
* STAUFF Group		3S
* Thread code	Unified coarse (UNC) thread Metric ISO thread	U M
* Material code	Carbon Steel, untreated Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W1 W3 W4 W5

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

* Standard finishing option for markets outside North America is W1 (Carbon Steel, untreated).

**Safety Washer
Type SI (DIN 93)**



Safety Washer SI (according to DIN 93)

Order Codes

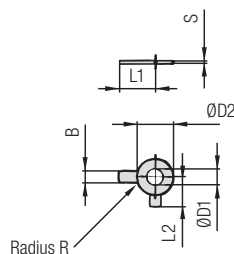
Safety Washer *SI*10,5*DIN 93*W3

- * Safety Washer SI
- * Exact inner diameter ØD1 (mm) 10,5
- * Type of washer Safety washer with 1 tab (according to DIN 93) DIN 93
- * Material code Carbon Steel, zinc/nickel-plated W3

Group	STAUFF	DIN	Dimensions (mm/in)					Order Codes (Standard Options)	
			ØD1	B	ØD2	L	R		S
3S	1		10,5	10	26	22	4	0,75	SI 10,5 DIN 93 W3
			.41	.39	1.02	.87	.16	.03	
4S	2		10,5	10	26	22	4	1	SI 10,5 DIN 93 W3
			.41	.39	1.02	.87	.16	.04	
5S	3		10,5	10	26	22	4	1	SI 10,5 DIN 93 W3
			.41	.39	1.02	.87	.16	.04	
6S	4		13	12	30	28	6	1	SI 13 DIN 93 W3
			.51	.47	1.18	1.10	.24	.04	
7S	5		17	15	36	32	6	1	SI 17 DIN 93 W3
			.67	.59	1.42	1.26	.24	.04	
8S	6		21	18	42	36	6	1	SI 21 DIN 93 W3
			.83	.71	1.65	1.42	.24	.04	
9S	7		25	20	50	42	6	1	SI 25 DIN 93 W3
			.98	.79	1.97	1.65	.24	.04	
10S	8		31	26	63	52	10	1,6	SI 31 DIN 93 W3
			1.22	1.02	2.48	2.05	.39	.06	
11S	9		31	26	63	52	10	1,6	SI 31 DIN 93 W3
			1.22	1.02	2.48	2.05	.39	.06	
12S	10		31	26	63	52	10	1,6	SI 31 DIN 93 W3
			1.22	1.02	2.48	2.05	.39	.06	

Safety Washers, type SI are used as locking devices to prevent Hexagon Head Bolts, type AS from loosening. Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

**Safety Washer
Type SI (DIN 463)**



Safety Washer SI (according to DIN 463)

Order Codes

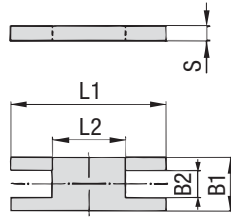
Safety Washer *SI*10,5*DIN 463*W3

- * Safety Washer SI
- * Exact inner diameter ØD1 (mm) 10,5
- * Type of washer Safety washer with 2 tabs (according to DIN 463) DIN 463
- * Material code Carbon Steel, zinc/nickel-plated W3

Group	STAUFF	DIN	Dimensions (mm/in)					Order Codes (Standard Options)		
			ØD1	B	ØD2	L1	L2		R	S
3S	1		10,5	10	21	22	13	4	0,75	SI 10,5 DIN 463 W3
			.41	.39	.83	.87	.51	.16	.03	
4S	2		10,5	10	21	22	13	4	1	SI 10,5 DIN 463 W3
			.41	.39	.83	.87	.51	.16	.04	
5S	3		10,5	10	21	22	13	4	1	SI 10,5 DIN 463 W3
			.41	.39	.83	.87	.51	.16	.04	
6S	4		13	12	24	28	15	6	1	SI 13 DIN 463 W3
			.51	.47	.94	1.10	.59	.24	.04	
7S	5		17	15	30	32	18	6	1	SI 17 DIN 463 W3
			.67	.59	1.18	1.26	.71	.24	.04	
8S	6		21	18	37	36	21	6	1	SI 21 DIN 463 W3
			.83	.71	1.46	1.42	.83	.24	.04	
9S	7		25	20	44	42	25	6	1	SI 25 DIN 463 W3
			.98	.79	1.73	1.65	.98	.24	.04	
10S	8		31	26	56	52	32	10	1,6	SI 31 DIN 463 W3
			1.22	1.02	2.20	2.05	1.26	.39	.06	
11S	9		31	26	56	52	32	10	1,6	SI 31 DIN 463 W3
			1.22	1.02	2.20	2.05	1.26	.39	.06	
12S	10		31	26	56	52	32	10	1,6	SI 31 DIN 463 W3
			1.22	1.02	2.20	2.05	1.26	.39	.06	

Safety Washers, type SI are used as locking devices to prevent Hexagon Head Bolts, type AS from loosening. Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

Safety Locking Plate (for Use with Stacking Bolt AF) Type SIP



Group STAUFF	DIN	Dimensions (mm/in)					Order Codes (Standard Options)
		L1	L2	B1	B2	S	
3S	1	57	13	30	15,2	8	SIP 3S W2
		2.24	.51	1.18	.60	.31	
4S	2	70	26	30	15,2	8	SIP 4S W2
		2.76	1.02	1.18	.60	.31	
5S	3	85	40	30	15,2	8	SIP 5S W2
		3.35	1.57	1.18	.60	.31	
6S	4	116	68	45	17,2	10	SIP 6S W2
		4.57	2.68	1.77	.68	.39	
7S	5	153	96	60	22	10	SIP 7S W2
		6.02	3.78	2.36	.87	.39	
8S	6	206	130	80	28	15	SIP 8S W1
		8.11	5.12	3.15	1.10	.59	
9S	7	251	166	90	31	15	SIP 9S W1
		9.88	6.54	3.54	1.22	.59	
10S	8	317	205	120	49	25	SIP 10 S W1
		12.48	8.07	4.72	1.93	.98	

Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

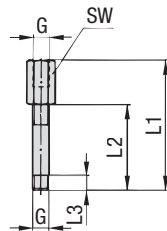
Order Codes

Safety Locking Plate

***SIP*3S*W2**

* Safety Locking Plate		SIP
* STAUFF Group		3S
* Material code	Carbon Steel, untreated	W1
	Carbon Steel, phosphated	W2
	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A	W4
	1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A	W5
	1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

Stacking Bolt (for Use with Safety Locking Plate SIP) Type AF



Group STAUFF	DIN	Dimensions (mm/in)					Order Codes (Standard Options)
		L1	L2	L3 min.	Hex	Thread G	
3S	1	49	25	15	15	M10	AF 3S M W3*
		1.93	.98	.59	.59	3/8-16 UNC	AF 3S U W3
4S	2	65	40	15	15	M10	AF 4S M W3*
		2.56	1.57	.59	.59	3/8-16 UNC	AF 4S U W3
5S	3	77	51	15	15	M10	AF 5S M W3*
		3.03	2.01	.59	.59	3/8-16 UNC	AF 5S U W3
6S	4	110	82	18	17	M12	AF 6S M W3*
		4.33	3.23	.71	.67	7/16-14 UNC	AF 6S U W3
7S	5	144	110	24	21	M16	AF 7S M W3*
		5.67	4.33	.94	.83	5/8-11 UNC	AF 7S U W3
8S	6	200	150	30	27	M20	AF 8S M W1*
		7.87	5.91	1.18	1.06	3/4-10 UNC	AF 8S U W1
9S	7	240	180	50	30	M24	AF 9S M W1*
		9.45	7.09	1.97	1.18	7/8-9 UNC	AF 9S U W1
10S	8	331	256	62	46	M30	AF 10S M W1*
		13.03	10.08	2.44	1.81	1-1/8-7 UNC	AF 10S U W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

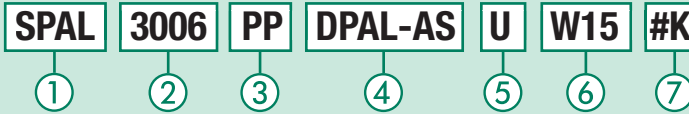
* Standard finishing option for markets outside North America is W2 (Carbon Steel, phosphated).

Order Codes

Stacking Bolt

***AF*3S*U*W3**

* Stacking Bolt		AF
* STAUFF Group		3S
* Thread code	Unified coarse (UNC) thread	U
	Metric ISO thread	M
* Material code	Carbon Steel, untreated	W1
	Carbon Steel, phosphated	W2
	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A	W4
	1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A	W5
	1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5



① Type of Installation

Please select the type of installation (e.g. Weld Plates, Rail Nuts, etc.) and add the corresponding Code to position ① of the order code for your clamp assembly.

Without Installation Equipment
Code: none

Installation on Weld Plate

Weld Plate for Single Clamps
Code: **SPAL**

Weld Plate for Double Clamps
Code: **SPAS**

Elongated Weld Plate for Single Clamps
Code: **SPAL/DUEB**

Elongated Weld Plate for Double Clamps
Code: **SPAS/DUEB**

Installation on Mounting / Channel Rail

Mounting Rail Nut
Code: **GMV** (for STAUFF Group 3S to 6S only)

Channel Rail Adaptor
Code: **CRA** (for STAUFF Group 3S to 6S only)

② Group Size & Diameter

Please select the required group size and diameter and add the corresponding Code to position ② of the order code for your clamp assembly.

Group	Outside Diameter P / T / H (mm)	Availability of Clamp Body Materials & Designs			Code
		Profiled Design	Type H	Type RI	
3S (1)	6	●	●	○	3006
	6,4	●	●	○	3006,4
	8	●	●	○	3008
	9,5	●	●	○	3009,5
	10	●	●	○	3010
	12	●	●	○	3012
	12,7	●	●	○	3012,7
	13,5	●	●	○	3013,5
	14	●	●	○	3014
	15	●	●	○	3015
	16	●	●	○	3016
17,2	●	●	○	3017,2	
18	●	●	○	3018	
20	●	○	○	3020	

② Group Size & Diameter CONTINUATION

Group	Outside Diameter P / T / H (mm)	Availability of Clamp Body Materials & Designs			Code
		Profiled Design	Type H	Type RI	
4S (2)	6	○	○	●	4006
	8	○	○	●	4008
	10	○	○	●	4010
	12	○	○	●	4012
	12,7	○	○	●	4012,7
	14	○	○	●	4014
	15	○	●	●	4015
	16	○	○	●	4016
	17,2	○	○	●	4017,2
	18	○	○	●	4018
	19	●	●	●	4019
	19,8	○	●	○	4019,8
	20	●	●	○	4020
	21,3	●	●	○	4021,3
	22	●	●	○	4022
	22,1	○	●	○	4022,1
	25	●	●	○	4025
	25,1	○	●	○	4025,1
	25,4	●	●	○	4025,4
	26,9	●	●	○	4026,9
28	●	●	○	4028	
29,2	○	●	○	4029,2	
30	●	●	○	4030	
5S (3)	20	○	○	●	5020
	21,3	○	○	●	5021,3
	22	○	○	●	5022
	25	○	○	●	5025
	26,9	○	○	●	5026,9
	28	○	○	●	5028
	30	●	●	●	5030
	32	●	●	●	5032
	33,7	●	●	○	5033,7
	35	●	●	○	5035
	38	●	●	○	5038
	40	●	●	○	5040
	41,3	●	●	○	5041,3
	42	●	●	○	5042
6S (4)	32	○	○	●	6032
	33,7	○	○	●	6033,7
	35	○	○	●	6035
	37,8	○	●	○	6037,8
	38	●	●	○	6038
	38,7	○	○	●	6038,7
	40	○	○	●	6040
	42	●	●	●	6042
	44,5	●	●	○	6044,5
	45,5	○	○	●	6045,5
	48	○	○	●	6048
	48,3	●	●	○	6048,3
	48,4	○	●	○	6048,4
	50,8	●	●	○	6050,8
	51	○	○	●	6051
	53,4	○	○	●	6053,4
	54	●	○	○	6054
	54,4	○	●	○	6054,4

② Group Size & Diameter CONTINUATION

Group	Outside Diameter P / T / H (mm)	Availability of Clamp Body Materials & Designs			Code	
		Profiled Design	Type H	Type RI		
6S (4)	55	●	●	○	6055	
	56,4	○	○	●	6056,4	
	57	●	●	○	6057	
	57,2	●	●	○	6057,2	
	60,3	●	●	○	6060,3	
	63,5	●	●	○	6063,5	
	65	●	●	○	6065	
	70	●	●	○	6070	
	7S (5)	55	○	○	●	7055
		57	○	○	●	7057
60		○	○	●	7060	
60,3		●	○	○	7060,3	
63,5		○	○	●	7063,5	
65		●	○	●	7065	
70		●	○	○	7070	
72		○	○	●	7072	
73		●	○	○	7073	
75		●	○	○	7075	
8S (6)	76	○	○	●	7076	
	76,1	●	○	○	7076,1	
	80	●	○	○	7080	
	82,5	●	○	○	7082,5	
	88,9	●	○	○	7088,9	
	80	○	○	●	8080	
	88,9	●	○	●	8088,9	
	100	●	○	○	8100	
	102	●	○	●	8102	
	108	●	○	○	8108	
114	●	○	○	8114		
9S (7)	127	●	○	○	8127	
	133	●	○	○	8133	
	114	○	○	●	9114	
	127	●	○	○	9127	
	133	●	○	○	9133	
	140	●	○	●	9140	
	152	●	○	○	9152	
	159	●	○	○	9159	
	165	●	○	○	9165	
	168	●	○	○	9168	
10S (8)	150	○	○	●	10150	
	165	○	○	●	10165	
	168	●	○	○	10168	
	172	○	○	●	10172	
	177,8	●	○	○	10177,8	
	193,7	●	○	○	10193,7	
	203	●	○	○	10203	
	216	●	○	○	10216	
11S (9)	219	●	○	○	10219	
	273	●	○	○	11273	
	324	●	○	○	11324	
12S (10)	356	●	○	○	12356	
	406	●	○	○	12406	

● Standard Option

Additional outside diameters are available upon request. Please consult STAUFF for further information.

Please see pages A40 and A41 with detailed order examples for some of the most popular Heavy Series clamp assemblies.

③ Clamp Body Design & Material

Please select the design and material of your clamp body and add the corresponding **Code** to position ③ of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in ②.

Profiled Design

Polypropylene
Code: **PP**

Polyamide
Code: **PA**

Thermoplastic Elastomer (87 Shore-A)
Code: **SA** (for STAUFF Group 3S to 6S only)

Aluminium
Code: **AL**

Type H (Smooth)

Polypropylene
Code: **PPH** (for STAUFF Group 3S to 6S only)

Polyamide
Code: **PAH** (for STAUFF Group 3S to 6S only)

Thermoplastic Elastomer (87 Shore-A)
Code: **SAH** (for STAUFF Group 3S to 6S only)

Type RI (with Rubber Insert)

Polypropylene
Code: **PPR** (for STAUFF Group 4S to 10S only)

Polyamide
Code: **PAR** (for STAUFF Group 4S to 10S only)

See page A88 for material properties and technical information.

Please consult STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

④ Mounting & Fitting Combination

Please select the mounting and fitting combination (e.g. bolts, screws, cover plates, etc.) and add the corresponding **Code** to position ④ of the order code for your clamp assembly.

Installation with Cover Plate and Bolts

Cover Plate for Single Clamps DPAL with Hexagon Head Bolts AS
Code: **DPAL-AS**

Cover Plate for Double Clamps DPAS with Hexagon Head Bolts AS
Code: **DPAS-AS**

Cover Plate for Single Clamps DPAL with Socket Cap Screws IS*
Code: **DPAL-IS** (for STAUFF Group 3S to 6S only)

Installation with Locking Plate and Bolts

Safety Locking Plate SIP with Stacking Bolts AF
Code: **SIP-AF**

Installation with Bolts only

Socket Cap Screws IS
Code: **IS**

* Special lengths of Socket Cap Screws IS required. For exact lengths, please see details of Hexagon Head Bolt, type AS (for use with Cover Plates DPAL or DPAS) on page A35.

⑤ Thread Type

Please select the required thread type and add the corresponding **Code** to position ⑤ of the order code for your clamp assembly.

Unified coarse (UNC) thread
Code: **U**

Metric ISO thread
Code: **M**

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

⑥ Material & Surface Finishing

Please select the required material & surface finishing of the metal parts and add the corresponding **Code** to position ⑥ of the order code for your clamp assembly.

Metal parts made of Carbon Steel, untreated **W1**

Metal parts made of Carbon Steel, phosphated **W2**

Metal parts made of Carbon Steel, zinc/nickel-plated **W3**

Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) **W4**

Metal parts made of Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) **W5**

Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated **W10**

Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, untreated **W12**

Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, untreated **W13**

Weld Plate / Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated **W15**

Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated **W16**

Safety Locking Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated **W17**

Safety Locking Plate made of Carbon Steel, untreated; Bolts made of Carbon Steel, phosphated **W18**

Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, untreated **W19**

Individual combinations of alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

⑦ Assembling & Kitting

If required, please select an additional assembling and kitting option and add the corresponding **Code** to the last position of the order code for your clamp assembly.

Components supplied separately
Code: **none** (standard option)

Components assembled
Code: **#A** (special option)

Components packed in kits
Code: **#K** (special option)



- 2x Hexagon Head Bolt**
Surface: W3
Thread: UNC
- 1x Cover Plate for Single Clamps**
Surface: W2
- 1x Clamp Body (two halves)**
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance
- 1x Weld Plate for Single Clamps**
Surface: W2
Thread: UNC

Order Code

SPAL 3006 PP DPAL-AS U W15

W15 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S) are the standard options for this type of installation.



- 4x Hexagon Head Bolt**
Surface: W3
Thread: UNC
- 1x Cover Plate for Double Clamps**
Surface: W2
- 2x Clamp Body (four halves)**
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance
- 1x Weld Plate for Double Clamps**
Surface: W2
Thread: UNC

Order Code

SPAS 3006 PP DPAS-AS U W15

W15 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S) are the standard options for this type of installation.



- 2x Hexagon Head Bolt**
Surface: W3
Thread: UNC
- 1x Cover Plate for Single Clamps**
Surface: W2
- 1x Clamp Body (two halves)**
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance
- 1x Elongated Weld Plate for Single Clamps**
Surface: W2
Thread: UNC

Order Code

SPAL/DUEB 3006 PP DPAL-AS U W15

W15 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S) are the standard options for this type of installation.



- 4x Hexagon Head Bolt**
Surface: W3
Thread: UNC
- 1x Cover Plate for Double Clamps**
Surface: W2
- 2x Clamp Body (four halves)**
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance
- 1x Elongated Weld Plate for Double Clamps**
Surface: W2
Thread: UNC

Order Code

SPAS/DUEB 3006 PP DPAS-AS U W15

W15 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S) are the standard options for this type of installation.



- 2x Socket Cap Screw**
Surface: W3
Thread: UNC
- 1x Clamp Body (two halves)**
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance
- 1x Weld Plate for Single Clamps**
Surface: W2
Thread: UNC

Order Code

SPAL 3006 PP IS U W10

W10 is the standard option for this type of installation. Available up to STAUFF Group 6S (DIN Group 4) only.



- 2x Socket Cap Screw**
Surface: W3
Thread: UNC
- 1x Clamp Body (two halves)**
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance
- 1x Elongated Weld Plate for Single Clamps**
Surface: W2
Thread: UNC

Order Code

SPAL/DUEB 3006 PP IS U W10

W10 is the standard option for this type of installation. Available up to STAUFF Group 6S (DIN Group 4) only.



- 2x **Hexagon Head Bolt**
Surface: W3
Thread: UNC
- 1x **Cover Plate for Single Clamps**
Surface: W2
- 1x **Clamp Body** (two halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance
- 2x **Mounting Rail Nut**
Surface: W3
Thread: UNC

Order Code (Mounting Rail STSV not included.)

GMV 3006 PP DPAL-AS U W16

W16 is the standard option for this type of installation.
Available up to STAUFF Group 6S (DIN Group 4) only.



- 2x **Socket Cap Screw**
Surface: W3
Thread: UNC
- 1x **Clamp Body** (two halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance
- 2x **Mounting Rail Nut**
Surface: W3
Thread: UNC

Order Code (Mounting Rail STSV not included.)

GMV 3006 PP IS U W3

W3 is the standard option for this type of installation.
Available up to STAUFF Group 6S (DIN Group 4) only.



- 2x **Hexagon Head Bolt**
Surface: W3
Thread: UNC
- 1x **Cover Plate for Single Clamps**
Surface: W2
- 1x **Clamp Body** (two halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance

Order Code

3006 PP DPAL-AS U W15

W15 (STAUFF Group 3S to 7S) and **W1** (STAUFF Group 8S to 12S)
are the standard options for this type of installation.



- 2x **Stacking Bolt**
Surface: W3
Thread: UNC
- 1x **Safety Locking Plate**
Surface: W2
- 1x **Clamp Body** (two halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance

Order Code

3006 PP SIP-AF M W17

W17 (STAUFF Group 3S to 7S) and **W1** (STAUFF Group 8S to 10S) are the standard options
for this type of installation. Available up to STAUFF Group 10S (DIN Group 8) only.

Thread codes

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

Unified coarse (UNC) thread	U
Metric ISO thread	M

Material codes

The below listed material codes describe the materials and surface finishings of metal parts that are most relevant for Heavy Series clamp assemblies. Individual combinations of alternative materials and surface finishings are available upon request. Consult STAUFF for further information.

Metal parts made of Carbon Steel, untreated	W1
Metal parts made of Carbon Steel, phosphated	W2
Metal parts made of Carbon Steel, zinc/nickel-plated	W3
Metal parts made of Stainless Steel V2A: 1.4301 / 1.4305 (AISI 304 / 303)	W4
Metal parts made of Stainless Steel V4A: 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5
Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated	W10
Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, untreated	W12
Mounting Rails Nut made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, untreated	W13
Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	W15
Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	W16
Safety Locking Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	W17
Safety Locking Plate made of Carbon Steel, untreated; Bolts made of Carbon Steel, phosphated	W18
Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, untreated	W19

Standard Clamp Body Materials



Material Code	PP	PA	AL	SA
Basic Material	Copolymeric Polypropylene	Polyamide	Aluminium AISi12	Thermoplastic Elastomer
Standard Colour	Green	Black	Natural	Black

Mechanical Properties				
Tensile E-Module	1073 N/mm ² (ISO 527)	> 1400 N/mm ² (ISO 527)	> 65000 N/mm ²	113 N/mm ² at +23 °C / +73.4 °F (ASTM D412)
Notch Impact Strength	7,5 kJ/m ² at +23 °C / +73.4 °F (acc. to Charpy / ISO 179/1eA)	> 15 kJ/m ² at +23 °C / +73.4 °F (acc. to Charpy / ISO 179/1eA)		
Low Temperature Notch Impact Strength	3,1 kJ/m ² at -30 °C / -22.0 °F (acc. to Charpy / ISO 179/1eA)	> 3 kJ/m ² at -30 °C / -22.0 °F (acc. to Charpy / ISO 179/1eA)		
Tensile Strength at Yield (Tensile Strength)	25 N/mm ² (ISO 527)	> 55 N/mm ² (ISO 527)	> 150 N/mm ² (ISO EN 10002)	15,9 N/mm ² (ASTM D412)
Ball Indentation Hardness (Brinell Hardness)	45,4 N/mm ² (ISO 2039-1)	> 65 N/mm ² (ISO 2039-1)	> 55 HBS	
Shore Hardness				87 A (ISO 868)

Thermal Properties				
Temperature Resistance (Continuous Exposure, Min ... Max)	-30 °C ... +90 °C / -22 °F ... +194 °F	-40 °C ... +120 °C / -40 °F ... +248 °F (Brief exposure up to +140 °C / +284 °F)	up to +300 °C / up to +572 °F	-40 °C ... +125 °C / -40 °F ... +257 °F

Chemical Properties				
Weak Acids	conditionally consistent	conditionally consistent	conditionally consistent	consistent
Solvents	conditionally consistent	conditionally consistent	conditionally consistent	conditionally consistent
Benzine	conditionally consistent	consistent	consistent	conditionally consistent
Mineral Oils	conditionally consistent	consistent	consistent	conditionally consistent
Other Oils	consistent	consistent	consistent	consistent
Alcohols	consistent	consistent	consistent	consistent
Seawater	consistent	consistent	consistent	consistent

The information for the Polyamide material PA and the Polyamide based materials PAV0 and PA-FF have been determined in a conditioned state according to ISO 1110. For Aluminium, the tensile strength (under reversed bending stress) and impact bending strength both rise constantly at decreasing temperatures whilst the value for breaking elongation decreases.

Standard Rubber Insert Materials



Thermoplastic Elastomer (73 Shore-A)

Standard Material for STAUFF Group 4 and 6 (Standard Series)
Standard Material for STAUFF Group 4S to 6S (Heavy Series)

Mechanical Properties

Shore Hardness: 73 A (ISO 868)
Modulus of Elasticity: 16 N/mm² at +23 °C / +73.4 °F
(ASTM D 412)
Tensile Stress: 8,3 N/mm² (ASTM D 412)

Thermal Properties

Temperature Resistance: -40 °C ... +125 °C / -40 °F ... +257 °F

Chemical Properties

Consistent against weak acids and solvents;
conditionally consistent against benzine and mineral oils;
consistent against other oils, alcohols and sea water.

Elastomer (70 Shore-A)

Standard Material for STAUFF Group 7S to 10S (Heavy Series)

Mechanical Properties

Shore Hardness: 70 A (DIN 53505)
Tensile Strength at Yield: 9 N/mm² (DIN 53504)
Tensile Strain at Break: 400 % (DIN 53504)
Tear-Growth Resistance: 9 N/mm (DIN 53507-A)
Compression Set: 20 % (DIN 53517)
(22h at +70 °C / +158 °F)

Consult STAUFF for further information.

Special Clamp Body Materials (Selection)
Preventive Fire Protection


PAVO	PA-FF	PPDA	PP6853	PPV0
Polyamide	Polyamide	Polypropylene	Polypropylene	Polypropylene
Grey	Black	White	White	Black

1500 N/mm ² (ISO 527-1/2)	1100 N/mm ² (ISO 527-1/2)	2200 N/mm ² (ISO 527) at +23 °C / +73.4 °F: 50 mm/min	1440 N/mm ² (ICE 60811-1-1)	
35 kJ/m ² at +23 °C / +73.4 °F (acc. to Charpy / ISO 179/1eA)	20 kJ/m ² at +23 °C / +73.4 °F (acc. to Charpy / ISO 179/1eA)	11,8 kJ/m ² at +23 °C / +73.4 °F (acc. to IZOD / ISO 179/1eA)	16 kJ/m ² at +23 °C / +73.4 °F (acc. to IZOD / ISO 179/1eA)	5 kJ/m ² at +23 °C / +73.4 °F (acc. to ISO 180/A)
		4,9 kJ/m ² at -25 °C / -13.0 °F (acc. to IZOD / ISO 179/1eA)		
45 N/mm ² (ISO 527-1/2)	50 N/mm ² (ISO 527-1/2)	15,1 N/mm ² (ISO 527) at +23 °C / +73.4 °F: 50 mm/min	20,4 N/mm ² (ICE 60811-1-1)	25 N/mm ² (ISO 527)
100 N/mm ² (ISO 2039-1)	100 N/mm ² (ISO 2039-1)			

-30 °C ... +120 °C / -22 °F ... +248 °F	-30 °C ... +120 °C / -22 °F ... +248 °F	-25 °C ... +90 °C / -13 °F ... +194 °F	-25 °C ... +90 °C / -13 °F ... +194 °F	-25 °C ... +90 °C / -13 °F ... +194 °F
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Approvals / Special Properties				
<p>Tested and approved according to UL94 (Vertical Burning Test)</p> <ul style="list-style-type: none"> Classification: 94V-0 (thickness: 0,4mm) <p>Tested and approved according to DIN 5510, Part 2</p> <ul style="list-style-type: none"> Combustibility classification: S3 Smoke development classification: SR2 Dripping classification: ST2 <p>Tested and approved according to NF F 16-101</p> <ul style="list-style-type: none"> Classification: I2 / F2 <p>Halogen- and phosphor-free flame retardant system</p> <p>Oxygen index: 34,0% (according to ISO 4589-2)</p> <p>Flammability temperature: 299 °C / 570 °F (according to ISO 4589-3, Annex A)</p> <p>High durability, good UV, weathering and chemical resistance</p>	<p>Tested and approved according to DIN 5510, Part 2</p> <ul style="list-style-type: none"> Combustibility classification: S4 Smoke development classification: SR2 Dripping classification: ST2 <p>Oxygen index: 28,0% (according to ISO 4589-2)</p> <p>Flammability temperature: 327 °C / 621 °F (according to ISO 4589-3, Annex A)</p> <p>High durability (even at low temperatures), mechanical strength and rigidity, good attrition resistance and fatigue strength, good UV resistance</p>	<p>Tested and approved according to Def Stan 07-247</p> <ul style="list-style-type: none"> Assessment: category B <p>Approved by the UK Ministry of Defence (MoD)</p> <p>Smoke index: 11,1% (according to Def Stan 02-711, thickness: 3,0 mm)</p> <p>Halogen-free flame retardant system</p> <p>Toxicity index: 0,9 / 100 g (according to Def Stan 02-713)</p> <p>Oxygen index: 30,9% (according to ISO 4589-2)</p> <p>Flammability temperature: 231 °C / 448 °F (according to ISO 4589-3, Annex A)</p>	<p>Tested and approved according to BS 6853 (Code of practice for fire precautions in the design / construction of passenger carrying trains)</p> <ul style="list-style-type: none"> Assessment: category 1a <p>Compliant to the requirements of London Underground / Metronet (standard 2-01001-002: Fire Safety Performance of Materials)</p> <p>Tested and approved according to DIN 5510, Part 2</p> <ul style="list-style-type: none"> Combustibility classification: S3 Smoke development classification: SR2 Dripping classification: ST2 <p>Tested and approved according to Def Stan 07-247</p> <ul style="list-style-type: none"> Assessment: category B <p>Smoke index: 6,1% (according to Def Stan 02-711, thickness: 3,0 mm)</p> <p>Halogen-free flame retardant system</p> <p>Toxicity index: 0,9 / 100 g (according to Def Stan 02-713)</p> <p>Oxygen index: 42,0% (according to ISO 4589-2)</p> <p>Flammability temperature: 325 °C / 617 °F (according to ISO 4589-3, Annex A)</p>	<p>Tested and approved according to UL94 (Vertical Burning Test)</p> <ul style="list-style-type: none"> Classification: 94V-0 (thickness: 3mm / 13mm)

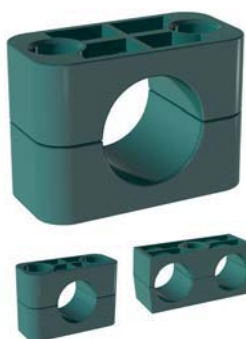
Standard Clamp Body Designs



Profiled Design

Profiled Inside Surface with Tension Clearance

- Available in the Standard, Heavy, Twin and Heavy Twin Series
- Recommended for the safe installation of rigid pipes or tubes
- Available for all commonly used outside diameters and nominal sizes
- Vibration/noise reducing and impact absorbing effect towards the direction of the line provided by the grooves on the inside of the clamp bodies
- To be used as fixed point clamp preventing the line from sliding (see page A93 for Maximum Loads in Pipe Direction)
- Clearance between the clamp halves provides tension of the tube or pipe



Type H (Smooth)

Smooth Inside Surface w/o Tension Clearance

- Available in the Standard, Heavy and Twin Series
- Recommended for the safe installation of hoses or cables
- Available for all commonly used outside diameters and nominal sizes
- Smooth inside surface and chamfered edges avoid damaging of the hose or cable
- To be used as guide allowing the line to slide
- Choose internal diameter of the clamp body slightly smaller than the outside diameter of the hose or cable to use it as fixed point clamp preventing the line from sliding



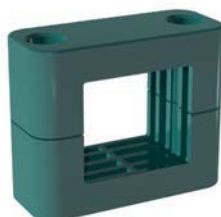
Type RI (with Rubber Insert)

- Available in the Standard, Heavy and Heavy Twin Series
- Recommended for the extra-gentle installation of pipes, tubes, hoses or cables
- Available for all commonly used outside diameters and nominal sizes
- Rubber insert made of Thermoplastic Elastomer with a hardness of 73 Shore-A provides most effective reduction of vibration and noise caused by vibration



Oval Design

- Available in the Standard and Heavy Series
- Recommended for the safe installation of electric cables with diameters between 20 mm (.79 in) and 72 mm (2.83 in)



Rectangular Design ▪ Type VK

- Available in the Standard Series (STAUFF Group 5)
- Recommended for the safe installation of proximity switches according to DIN EN 60947-5-2 or similar, rectangular construction, with a square of 40 mm x 40 mm (1.57 in x 1.57 in) or 40 mm x 36 mm (1.57 in x 1.42 in)

Materials and Surface Finishings of Metal Parts
Materials

Unless otherwise stated, all metal parts (e.g. weld plates, cover plates, bolts, rail nuts, etc.) are made of **Carbon Steel** (surface finishing according to material code).

Besides that, all metal parts are also available **ex stock** in two different stainless steel qualities:

Stainless Steel V2A

- 1.4301 / 1.4305 (AISI 304 / 303)
- Material code: W4


Stainless Steel V4A

- 1.4401 / 1.4571 (AISI 316 / 316 Ti)
- Material code: W5

Alternative materials are available upon request. Consult STAUFF for further information.

Surface Finishings

Unless otherwise stated, all metal parts made of Carbon Steel are available with the following standard surface finishings:

Carbon Steel, untreated

- Material code: W1

Carbon Steel, phosphated

- Fe/Znph r 10 according to DIN EN 12476
- Material code: W2

Carbon Steel, zinc/nickel-plated

- Fe/ZnNi (12...16) 6+6//A//T2 according to DIN 50962
- More than 720 hours resistance against red rust / base metal corrosion in the salt spray test to DIN EN ISO 9227
- Free of hexavalent chromium Cr(VI)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- Material code: W3

Alternative surface finishings are available upon request. Consult STAUFF for further information.



Original STAUFF Cover Plate with Zinc/Nickel-Coating: No signs of corrosion after **528 hours** in the salt spray chamber!



Original STAUFF Cover Plates with alternative surface finishings widely-used by competitors in the market (from left to right):

- Galvanisation and blue-chromating after **96 hours**
- Galvanisation and yellow-chromating after **192 hours**
- Zinc-coating, thick-film passivation and sealing after **192 hours**

In all three cases, signs of corrosion are quite clearly visible!

Consult STAUFF and ask for a detailed report.

Thread Conversion Chart
Metric ISO vs. Unified Coarse (UNC) Thread

Unless otherwise stated, all threaded parts available with Metric ISO thread or unified coarse (UNC) thread.

Standard Series (DIN 3015, Part 1)

Group STAUFF	DIN	Thread Metric ISO	Unified Coarse
1 to 8	0 to 8	M6	1/4-20 UNC

Heavy Series (DIN 3015, Part 2)

Group STAUFF	DIN	Thread Metric ISO	Unified Coarse
3S to 5S	1 to 3	M10	3/8-16 UNC
6S	4	M12	7/16-14 UNC
7S	5	M16	5/8-11 UNC
8S	6	M20	3/4-10 UNC
9S	7	M24	7/8-9 UNC
10S	8	M30	1-1/8-7 UNC
11S to 12S	9 to 10	M30	1-1/4-7 UNC

Twin Series (DIN 3015, Part 3)

Group STAUFF	DIN	Thread Metric ISO	Unified Coarse
1D	1	M6	1/4-20 UNC
2D to 5D	2 to 5	M8	5/16-18 UNC

Property Classes / Grades of Bolts and Screws

Hexagon Head Bolt

Socket Cap Screw

Slotted Head Screw

Bolt / Screw Type	Material Code	Property Class / Grade	Metric ISO Threaded Bolts / Screws	Unified Coarse Threaded Bolts / Screws
Hexagon Head Bolt Type AS	W1, W2, W3	8.8 (according to DIN EN ISO 898)		5 (according to SAE J429)
	W4	A2-70 (according to DIN EN ISO 3506)		AISI 304 / B8 (according to ASTM A193)
	W5	A4-70 (according to DIN EN ISO 3506)		AISI 316 / B8M (according to ASTM A193)
Socket Cap Screw Type IS	W1, W2, W3	8.8 (according to DIN EN ISO 898)		5 (according to SAE J429)
	W4	A2-70 (according to DIN EN ISO 3506)		AISI 304 / B8 (according to ASTM A193)
	W5	A4-70 (according to DIN EN ISO 3506)		AISI 316 / B8M (according to ASTM A193)
Slotted Head Screw Type LI	W1, W2, W3	4.8 (according to DIN EN ISO 898)		2 (according to SAE J429)
	W4	A2-70 (according to DIN EN ISO 3506)		AISI 304 / B8 (according to ASTM A193)
	W5	A4-70 (according to DIN EN ISO 3506)		AISI 316 / B8M (according to ASTM A193)

Unless otherwise stated, the above mentioned property classes / grades apply as standards for bolts and screws supplied by STAUFF. The information indicate the minimum requirements; higher property classes are available upon request. Consult STAUFF for details.

Basic Installation Instructions



Installation on Weld Plate

Different types of weld plates are available for all STAUFF Clamps according to DIN 3015 as well as for most of the other series and many custom-designed special clamps.

- Place weld plates in their designated positions. Please make sure these positions are suitable for the expected loads.
- Mark the locations of the weld plates to ensure best alignment.
- Weld the weld plates into position. Elongated weld plates can also be mounted to their positions by using screws or bolts.
- Push bottom clamp half onto weld plate.
- Insert pipe, tube, hose, cable or any other line type.
- Place second clamp half and cover plate (optional) on top and mount clamp assembly by using screws or bolts.



Installation on Mounting Rail

STAUFF Mounting Rails are available in different heights. STAUFF Rail Nuts are available for all STAUFF Clamps according to DIN 3015 (Heavy Series up to STAUFF Group 6S only) as well as for many custom-designed special clamps.

- Place mounting rails in their designated positions. Please make sure these bases are suitable for the expected loads.
- Mark the locations of the mounting rails to ensure best alignment.
- Weld the mounting rails into position. Mounting rails can also be mounted to their positions by using side-mounting brackets with screws or bolts.
- Insert rail nuts into mounting rail and turn until stop to lock (Standard and Twin Series) or slide in rail nut (Heavy Series).
- Push bottom clamp half onto rail nuts.
- Insert pipe, tube, hose, cable or any other line type.
- Place second clamp half and cover plate (optional) on top and mount clamp assembly by using screws or bolts.

The exact positions of the clamp assemblies can still be adjusted before being firmly bolted.



Multi-Level (Stacking) Installation

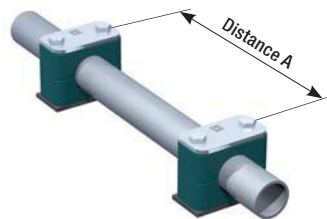
The multi-level installation of STAUFF Clamps permits easy stacking of several pipes, tubes, hoses, cables or any other line types, even with different outside diameters. The Twin Series also allows stacking of different group sizes (STAUFF Groups 2D to 5D).

The clamps are connected by stacking bolts. Safety locking plates inserted between the clamps prevent stacking bolts from turning.

- Push bottom clamp half onto weld plate or rail nuts.
- Insert pipe, tube, hose, cable or any other line type.
- Place second clamp half mount clamp assembly by using stacking bolts.
- Place safety locking plate on top of clamp assembly to prevent stacking bolts from turning.
- Proceed with next level as explained before.

STAUFF multi-level clamp assemblies can be mounted both to weld plates or to mounting rails.

Recommended Distance between Clamps



Installation next to Pipe Bends, Connectors / Couplings and Valves



Please note: The recommended distances between clamps stated below are standard values and valid for static loads only.

Outside Diameter (mm)		Distance A (m)	
(mm)	(in)	(m)	(ft)
6,0 ... 12,7	.2350	1,00	3,28
12,7 ... 22,0	.5086	1,20	3,94
22,0 ... 32,0	.86 ... 1.25	1,50	4,92
32,0 ... 38,0	1.25 ... 1.50	2,00	6,56
38,0 ... 57,0	1.5 ... 2.25	2,70	8,86
57,0 ... 75,0	2.25 ... 2.95	3,00	9,84
75,0 ... 76,1	2.95 ... 3.00	3,50	11,48
76,1 ... 88,9	3.00 ... 3.50	3,70	12,14
88,9 ... 102,0	3.50 ... 4.00	4,00	13,12
102,0 ... 114,0	4.00 ... 4.50	4,50	14,76

Outside Diameter (mm)		Distance A (m)	
(mm)	(in)	(m)	(ft)
114,0 ... 168,0	4.50 ... 6.60	5,00	16,40
168,0 ... 219,0	6.60 ... 8.60	6,00	19,68
219,0 ... 324,0	8.60 ... 12.70	6,70	21,98
324,0 ... 356,0	12.70 ... 14.00	7,00	22,96
356,0 ... 406,0	14.00 ... 16.00	7,50	24,60
406,0 ... 419,0	16.00 ... 16.50	8,20	26,90
419,0 ... 508,0	16.50 ... 20.00	8,50	27,88
508,0 ... 521,0	20.00 ... 20.50	9,00	29,52
521,0 ... 558,0	20.50 ... 22.00	10,00	32,80
558,0 ... 800,0	22.00 ... 31.50	12,50	41,00

Please note the following information on the installation of STAUFF Clamps next to pipe bends, connectors / couplings and valves:

Pipe Bends

Pipe bends should be supported by STAUFF Clamps as close to the bends as possible. Furthermore, it is recommended to design these clamps as fixed point clamps.

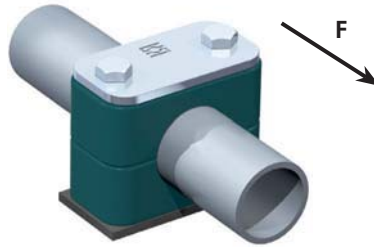
Connections / Couplings

The first clamp should be placed directly next to the connector / coupling. This protects the connector / coupling from vibrations.

Valves

If valves are incorporated in the pipelines, it is recommended that support is provided in front of and behind these valves.

Consult STAUFF for further information.

Tightening Torques and Maximum Loads In Pipe Direction


All tightening torques and maximum loads in pipe direction refer to STAUFF Clamp Bodies (profiled inside surface with tension clearance) with Cover Plates and Hexagon Head Bolts according to DIN EN ISO 4014/4017 (DIN 931/933).

The max. load in pipe direction (according to DIN 3015, Part 10) is an average value, determined by three tests at +23 °C / +73.4 °F with a steel pipe according to DIN EN 10220, St37 – rolled surface – taking static friction into consideration.

Standard Series (DIN 3015, Part 1)

Sliding starts when the shown values (F) are reached.

Group		Hexagon Head Bolt DIN EN ISO 4014/4017 (DIN 931/933)		Polypropylene				Polyamide				Aluminium			
STAUFF	DIN	Metric	Unified Coarse	Tightening Torque		Maximum Load in Pipe Direction F		Tightening Torque		Maximum Load in Pipe Direction F		Tightening Torque		Maximum Load in Pipe Direction F	
		ISO Thread	(UNC) Thread	(N-m)	(ft-lb)	(kN)	(lbf)	(N-m)	(ft-lb)	(kN)	(lbf)	(N-m)	(ft-lb)	(kN)	(lbf)
1	0	M6	1/4-20 UNC	8	6	0,6	135	10	7	0,6	135	12	9	3,5	787
1A	1	M6	1/4-20 UNC	8	6	1,1	247	10	7	0,7	157	12	9	4,2	944
2	2	M6	1/4-20 UNC	8	6	1,3	292	10	7	0,8	180	12	9	4,3	967
3	3	M6	1/4-20 UNC	8	6	1,4	315	10	7	1,6	360	12	9	4,9	1101
4	4	M6	1/4-20 UNC	8	6	1,5	337	10	7	1,7	382	12	9	5,0	1124
5	5	M6	1/4-20 UNC	8	6	1,9	427	10	7	2,0	450	12	9	7,3	1641
6	6	M6	1/4-20 UNC	8	6	2,0	450	10	7	2,5	562	12	9	8,9	2000
7	7	M6	1/4-20 UNC	8	6	2,3	517	10	7	3,2	719	NOT AVAILABLE!			
8	8	M6	1/4-20 UNC	8	6	2,6	585	10	7	3,5	787				

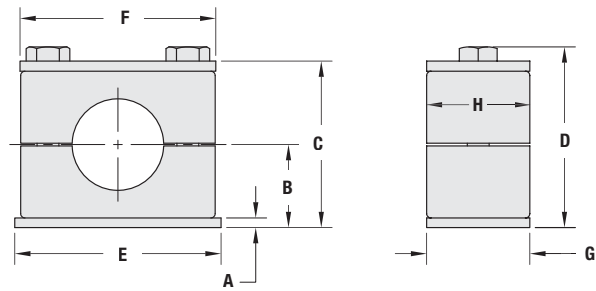
Heavy Series (DIN 3015, Part 2)

Group		Hexagon Head Bolt DIN EN ISO 4014/4017 (DIN 931/933)		Polypropylene				Polyamide				Aluminium			
STAUFF	DIN	Metric	Unified Coarse	Tightening Torque		Maximum Load in Pipe Direction F		Tightening Torque		Maximum Load in Pipe Direction F		Tightening Torque		Maximum Load in Pipe Direction F	
		ISO Thread	(UNC) Thread	(N-m)	(ft-lb)	(kN)	(lbf)	(N-m)	(ft-lb)	(kN)	(lbf)	(N-m)	(ft-lb)	(kN)	(lbf)
3S	1	M10	3/8-16 UNC	12	9	1,6	360	20	15	4,2	944	30	22	12,1	2720
4S	2	M10	3/8-16 UNC	12	9	2,9	652	20	15	4,5	1044	30	22	15,1	3395
5S	3	M10	3/8-16 UNC	15	11	3,3	742	25	18	5,1	1146	35	26	15,5	3485
6S	4	M12	7/16-14 UNC	30	22	8,2	1843	40	30	9,3	2090	55	41	29,5	6609
7S	5	M16	5/8-11 UNC	45	33	11,0	2472	55	41	15,8	3551	120	86	34,9	7845
8S	6	M20	3/4-10 UNC	80	59	14,0	3147	150	111	21,0	4720	220	162	50,0	11240
9S	7	M24	7/8-9 UNC	110	81	28,0	6300	200	148	32,0	7193	250	184	70,6	15871
10S	8	M30	1-1/8-7 UNC	180	133	40,0	8992	350	258	48,0	10790	500	369	84,5	18996
11S	9	M30	1-1/4-7 UNC	200	148	119,0	26752	370	273	125,0	27650	500	369	181,5	40802
12S	10	M30	1-1/4-7 UNC	270	199	168,0	37767	450	332	180,0	40465	600	443	244,5	54965

Twin Series (DIN 3015, Part 3)

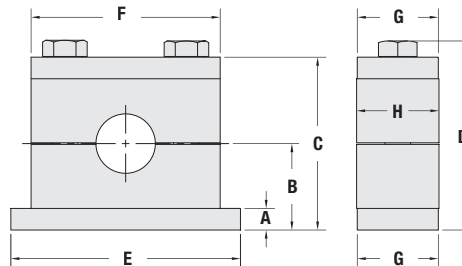
Group		Hexagon Head Bolt DIN EN ISO 4014/4017 (DIN 931/933)		Polypropylene				Polyamide			
STAUFF	DIN	Metric	Unified Coarse	Tightening Torque		Maximum Load in Pipe Direction F		Tightening Torque		Maximum Load in Pipe Direction F	
		ISO Thread	(UNC) Thread	(N-m)	(ft-lb)	(kN)	(lbf)	(N-m)	(ft-lb)	(kN)	(lbf)
1D	1	M6	1/4-20 UNC	5	4	0,9	202	5	4	0,9	202
2D	2	M8	5/16-18 UNC	12	9	2,1	472	12	9	2,2	495
3D	3	M10	5/16-18 UNC	12	9	1,9	427	12	9	2,0	450
4D	4	M12	5/16-18 UNC	12	9	2,7	607	12	9	2,9	652
5D	5	M16	5/16-18 UNC	8	6	1,7	382	8	6	2,5	562

Dimensions and Weights of Clamp Assemblies



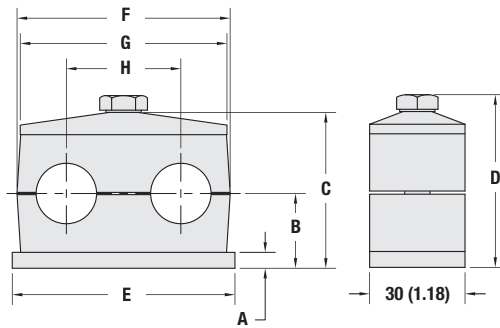
Standard Series (DIN 3015, Part 1)

Group	Dimensions (mm/in)												Weight per 100 Pcs. SP ** PP-DP-AS *** (kg/lbs)	
	STAUFF	DIN	A	B		C		D			E	F		G
				Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)					
1	0	3	16,5	16	33	32	37	36	31,5	28	30	30	6,20	
		.12	.65	.63	1.30	1.26	1.46	1.42	1.24	1.10	1.18	1.18	13,64	
1A	1	3	16,5	16	33	32	37	36	36	34	30	30	8,10	
		.12	.65	.63	1.30	1.26	1.46	1.42	1.41	1.33	1.18	1.18	17,82	
2	2	3	19,5	19	39	38	43	42	42	40,5	30	30	9,40	
		.12	.77	0.75	1.54	1.50	1.69	1.65	1.65	1.59	1.18	1.18	20,68	
3	3	3	21	20,75	42	41,5	46	45,5	50	48	30	30	11,20	
		.12	.83	.82	1.65	1.64	1.81	1.80	1.96	1.88	1.18	1.18	24,64	
4	4	3	24	23,75	48	47,5	52	51,5	60	57	30	30	13,70	
		.12	.94	.94	1.89	1.87	2.05	2.03	2.36	2.24	1.18	1.18	30,14	
5	5	3	32	31,25	64	62,5	68	66,5	71	70	30	30	17,10	
		.12	1.26	1.23	2.52	2.46	2.68	2.62	2.79	2.75	1.18	1.18	37,62	
6	6	3	36	35,25	72	70,5	76	74,5	88	86	30	30	21,30	
		.12	1.42	1.39	2.83	2.78	2.99	2.94	3.46	3.38	1.18	1.18	46,86	
7	7	5	51,5	51	103	102	107	106	122	118	30	30	42,10	
		.20	2.03	2.01	4.06	4.02	4.21	4.17	4.81	4.65	1.18	1.18	92,62	
8	8	5	64	63	128	126	132	130	148	144	30	30	44,00	
		.20	2.52	2.48	5.04	4.96	5.20	5.12	5.83	5.67	1.18	1.18	96,80	



Heavy Series (DIN 3015, Part 2)

Group	Dimensions (mm/in)												Weight per 1 Pc. SPAL *** PP-DPAL-AS *** (kg/lbs)			
	STAUFF	DIN	A	B		C		D			E	F		PP/ PA/SA	AL	G
				Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)							
3S	1	8	24	23,25	48	46,5	54,4	52,9	74	55	56	30	30,5	0,32		
		.31	.94	.92	1.89	1.83	2.14	2.09	2.91	2.16	2.20	1.18	1.20	.70		
4S	2	8	32	31,25	64	62,5	70,4	68,9	86	70	70	30	30,5	0,40		
		.31	1.26	1.23	2.52	2.46	2.77	2.72	3.39	2.76	2.76	1.18	1.20	.88		
5S	3	8	38	37	76	74	82,4	80,4	100	85	85	30	30,5	0,49		
		.31	1.50	1.46	2.99	2.91	3.24	3.17	3.94	3.35	3.35	1.18	1.20	1.08		
6S	4	10	54,5	53,5	109	107	116,5	114,5	140	115	120	45	45	1,21		
		.39	2.15	2.11	4.29	4.21	4.59	4.51	5.51	4.53	4.72	1.77	1.77	2,66		
7S	5	10	70		140		150		180	154	152	60	60	2,30		
		.39	2.76		5.51		5.91		7.09	6.06	5.98	2.36	2,36	5,06		
8S	6	15	99		198		210,5		226	206	208	80	80	6,00		
		.59	3.90		7.80		8.29		8.90	8.11	8.19	3.15	3,15	13,20		
9S	7	15	115		230		245		270	251	255	90	91	8,70		
		.59	4.53		9.06		9.65		10.63	9.88	10.04	3.54	3,58	19,14		
10S	8	25	160		320		338,7		340	336	326	120	120	22,16		
		.98	6.30		12.60		13.33		13.39	13.22	12.83	4.72	4,72	48,75		
11S	9	30	235		470		488,7		520	470	470	160	162	54,11		
		1.18	9.25		18.50		19.24		20.47	18.50	18.50	6.30	6,38	119,04		
12S	10	30	295		590		608,7		680	630	630	180	182	77,40		
		1.18	11.61		23.23		23.96		26.77	24.80	24.80	7.09	7,16	170,28		

Dimensions & Weights of Clamp Assemblies

Twin Series (DIN 3015, Part 3)

Group	STAUFF	DIN	Dimensions (mm/in)										Weight per 100 Pcs. SP**/**-PP-GD-AS*** (kg/lbs)	
			A	B		C		D		E	F	G		H
				Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)					
1D	1		3	16,5	16,25	37	36,5	41	40,5	37	36	34	20	7,60
			.12	.65	.64	1.46	1.44	1.61	1.59	1.46	1.42	1.34	.79	16.72
2D	2		5	18,5	18,25	39	38,5	44	43,5	55	53	52	29	13,50
			.20	.73	.72	1.54	1.52	1.73	1.71	2.17	2.09	2.05	1.14	29.70
3D	3		5	23,5	23,25	49	48,5	54	53,5	70	67	65	36	17,70
			.20	.93	.92	1.93	1.91	2.13	2.11	2.76	2.64	2.56	1.42	38.94
4D	4		5	25	24	52	50	57	55	85	80	79	45	20,40
			.20	.98	.94	2.05	1.97	2.24	2.17	3.35	3.15	3.11	1.77	44.88
5D	5		5	31,5	31	65	64	70	69	110	106	102	56	27,70
			.20	1.24	1.22	2.56	2.52	2.76	2.72	4.33	4.17	4.02	2.20	60.94

Packaging Units (Selection)
Standard Series (DIN 3015, Part 1)
Clamp Bodies (Polypropylene / Polyamide)

Group	STAUFF	DIN	Quantity per Bag (in Pcs.)
1 - 6		0 - 6	25
7 + 8		7 + 8	10

Clamp Bodies (Aluminium)

Group	STAUFF	DIN	Quantity per Bag (in Pcs.)
1 - 5		0 - 5	25
6		6	10

**Weld Plates (Type SP)
Cover Plates (Type DP)**

Group	STAUFF	DIN	Quantity per Bag (in Pcs.)
1 - 6		0 - 6	25
7 + 8		7 + 8	10

**Hexagon Rail Nut (Type SM)
Channel Rail Adaptor (Type CRA)**

Group	STAUFF	DIN	Quantity per Bag (in Pcs.)
1 - 8		0 - 8	50

Heavy Series (DIN 3015, Part 2)
Clamp Bodies (Polypropylene / Polyamide)

Group	STAUFF	DIN	Quantity per Bag (in Pcs.)
3S - 6S		1 - 4	20
7S		5	10
8S - 12S		6 - 10	1

Clamp Bodies (Aluminium)

Group	STAUFF	DIN	Quantity per Bag (in Pcs.)
3S - 7S		1 - 5	10
8S - 12S		6 - 10	1

**Weld Plates (Type SPAL)
Cover Plates (Type DPAL)**

Group	STAUFF	DIN	Quantity per Bag (in Pcs.)
3S - 6S		1 - 4	20
7S		5	10
8S - 12S		6 - 10	1

**Mounting Rail Nut (Type GMV)
Channel Rail Adaptor (Type CRA)**

Group	STAUFF	DIN	Quantity per Bag (in Pcs.)
3S - 6S		1 - 4	40

Twin Series (DIN 3015, Part 3)
Clamp Bodies (Polypropylene / Polyamide)

Group	STAUFF	DIN	Quantity per Bag (in Pcs.)
1D - 4D		1 - 4	25
5D		5	10

**Weld Plates (Type SPAL)
Cover Plates (Type DPAL)**

Group	STAUFF	DIN	Quantity per Bag (in Pcs.)
1D - 4D		1 - 4	25
5D		5	10

**Hexagon Rail Nut (Type SM)
Channel Rail Adaptor (Type CRA)**

Group	STAUFF	DIN	Quantity per Bag (in Pcs.)
1D		1	50
2D - 5D		2 - 5	25

Consult STAUFF and ask for standard packaging units for further components or special packaging options.

