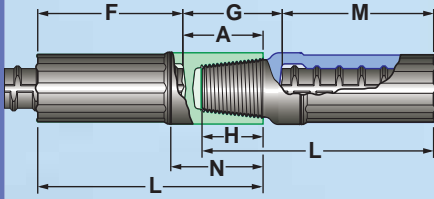
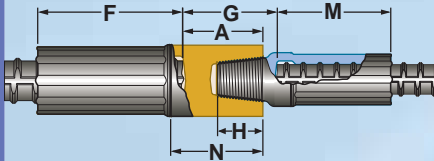


GRIP-TWIST® DATA SHEET — Dimensions and Data [metric units]

TAPER THREADED GRIP-TWIST



TRANSITION GRIP-TWIST



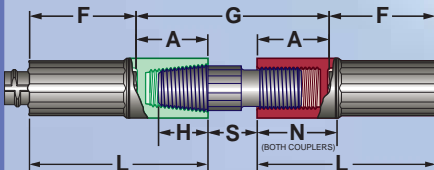
REBAR SIZE Metric (US) [Can]	COUPLER OUTSIDE DIAMETER (mm)	COUPLER LENGTH AFTER SWAGING L (mm)
10 (#3)	19	61
12 (#4)	22	75
16 (#5) [15M]	28	92
20 (#6) [20M]	35	110
22 (#7)	40	127
25 (#8) [25M]	45	145
29 (#9) [30M]	49	165
32 (#10)	56	184
36 (#11) [35M]	60	194
38 (#12)	68	204
40 (#13)	70	218
43 (#14) [45M]	73	238
50 (#16)	86	275
57 (#18) [55M]	98	310

* contact Barsplice for Canadian Transition sizes

REBAR SIZE Metric [Can]	FEMALE COUPLER PRODUCT CODE	MALE COUPLER PRODUCT CODE	TAPER GRIP-TWIST COLOR CODE	COUPLER WEIGHT (kg)		DIMENSIONS (mm)					
				FEMALE	MALE	BAR INSERTION after swaging F M		REBAR GAP G	MALE INSERTION H	END ALLOWANCE A	Non-Swaged LENGTH N
10	TT3F	TT3M	Orange	0.09	0.08	35	35	38	14	27	30
12	TT4F	TT4M	Pink	0.12	0.12	45	45	41	19	30	33
16 [15M]	TT5F	TT5M	Red	0.24	0.23	57	57	48	23	35	40
20 [20M]	TT6F	TT6M	Yellow	0.45	0.43	67	67	54	29	41	46
22	TT7F	TT7M	Blue	0.68	0.64	79	79	64	33	48	54
25 [25M]	TT8F	TT8M	Black	0.97	0.91	89	89	73	38	54	60
29 [30M]	TT9F [30M-TT9F]	TT9M [30M-TT9M]	Red	1.31	1.29	102	102	83	45	62	70
32	TT10F	TT10M	Yellow	1.86	1.81	111	111	92	51	71	79
36 [35M]	TT11F	TT11M	Blue	2.26	2.29	121	121	89	54	71	81
38	TT12F	TT12M	Brown	3.06	2.75	126	126	100	56	78	87
40	TT13F	TT13M	Black	3.67	3.56	135	135	105	60	83	92
43 [45M]	TT14F	TT14M	Pink	4.12	4.20	152	152	111	64	86	98
50	TT16F	TT16M	Gray	6.80	6.67	170	170	136	73	105	121
57 [55M]	TT18F	TT18M	Red	10.0	10.1	197	194	143	83	110	129

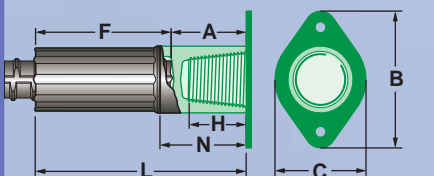
REBAR SIZE Metric *	FEMALE COUPLER PRODUCT CODE	MALE COUPLER PRODUCT CODE	COLOR CODE		COUPLER WEIGHT (kg)		DIMENSIONS (mm)					
			TAPER FEMALE TRANS.	TAPER MALE	FEMALE	MALE	BAR INSERTION after swaging F M		REBAR GAP G	MALE INSERTION H	END ALLOWANCE A	Non-Swaged LENGTH N
12/10	TT4/3F	TT3M	Red	Pink	0.16	0.08	45	35	41	14	30	33
16/12	TT5/4F	TT4M	Red	Pink	0.29	0.14	57	45	48	19	35	40
20/12	TT6/4F	TT4M	Yellow	Pink	0.51	0.14	70	45	54	19	40	46
20/16	TT6/5F	TT5M	Red	Red	0.48	0.24	70	56	54	23	40	46
22/16	TT7/5F	TT5M	Blue	Red	0.75	0.24	79	56	60	23	48	54
22/20	TT7/6F	TT6M	Blue	Yellow	0.71	0.41	79	67	64	29	48	54
25/16	TT8/5F	TT5M	Black	Red	1.14	0.24	91	56	67	23	54	60
25/20	TT8/6F	TT6M	Black	Yellow	1.10	0.41	91	67	70	29	54	60
25/22	TT8/7F	TT7M	Black	Blue	1.03	0.64	91	78	73	33	54	60
29/16	TT9/5F	TT5M	Red	Red	1.60	0.24	102	56	76	23	62	70
29/20	TT9/6F	TT6M	Red	Yellow	1.56	0.41	102	67	76	29	62	70
29/22	TT9/7F	TT7M	Red	Blue	1.49	0.64	102	78	79	33	62	70
29/25	TT9/8F	TT8M	Red	Black	1.41	0.91	102	89	83	38	62	70
32/20	TT10/6F	TT6M	Yellow	Yellow	2.22	0.41	114	67	86	29	70	79
32/22	TT10/7F	TT7M	Yellow	Blue	2.16	0.64	114	78	86	33	70	79
32/25	TT10/8F	TT8M	Yellow	Black	2.07	0.91	114	89	89	38	70	79
32/29	TT10/9F	TT9M	Yellow	Red	1.95	1.29	114	99	92	45	70	79
36/22	TT11/7F	TT7M	Blue	Blue	2.74	0.41	124	78	86	33	70	79
36/25	TT11/8F	TT8M	Blue	Black	2.65	0.91	124	89	89	38	70	79
36/29	TT11/9F	TT9M	Blue	Red	2.53	1.29	124	99	92	45	70	79
36/32	TT11/10F	TT10M	Blue	Yellow	2.38	1.81	124	111	95	50	70	79
43/22	TT14/7F	TT7M	Pink	Blue	3.96	0.41	108	78	89	33	72	83
43/25	TT14/8F	TT8M	Pink	Black	3.88	0.91	108	89	92	38	72	83
43/29	TT14/9F	TT9M	Pink	Red	3.75	1.29	108	99	92	45	72	83
43/32	TT14/10F	TT10M	Pink	Yellow	3.60	1.81	108	111	95	50	72	83
43/36	TT14/11F	TT11M	Pink	Blue	3.43	2.27	108	125	92	54	72	83
57/29	TT18/9F	TT9M	Red	Red	8.66	1.29	127	99	108	45	86	102
57/32	TT18/10F	TT10M	Red	Yellow	8.53	1.81	127	111	108	5	86	102
57/36	TT18/11F	TT11M	Red	Blue	8.35	2.27	127	125	105	54	86	102
57/43	TT18/14F	TT14M	Red	Pink	7.85	4.13	127	149	114	64	86	102

GRIP-TWIST POSITION COUPLER



REBAR SIZE Metric [Can]	FEMALE POSITION PRODUCT CODE	STUD POSITION PRODUCT CODE	POSITION TAPER GRIP-TWIST COLOR CODE	COUPLER WEIGHT (kg)		DIMENSIONS (mm)					
				Taper FEMALE	POSITION w/ Stud	BAR INSERTION after swaging F	REBAR GAP G	TAPER MALE INSERTION H	END ALLOWANCE A	Non-Swaged LENGTH N	SPACE after assembly S
16 [15M]	5PF	TT5RP	Red	0.24	0.41	57	98	24	35	40	29
20 [20M]	6PF	TT6RP	Yellow	0.45	0.73	67	111	29	41	46	32
22	7PF	TT7RP	Blue	0.68	1.16	79	137	33	48	54	41
25 [25M]	8PF	TT8RP	Black	0.95	1.56	89	146	38	54	60	38
29 [30M]	9PF [30M-PF]	TT9RP	Red	1.29	2.20	102	165	45	62	70	41
32	10PF	TT10RP	Yellow	1.84	3.15	114	187	51	71	79	48
36 [35M]	11PF	TT11RP	Blue	2.22	3.99	124	184	54	71	81	45
38	12PF	TT12RP	Brown	3.06	5.01	126	204	56	78	87	48
40	13PF	TT13RP	Black	3.67	5.97	135	217	60	83	92	51
43 [45M]	14PF	TT14RP	Pink	4.11	6.94	152	222	64	86	98	54
50	16PF	TT16RP	Gray	6.80	11.3	170	264	73	105	121	54
57 [55M]	18PF	TT18RP	Red	10.2	15.9	200	273	83	110	129	54

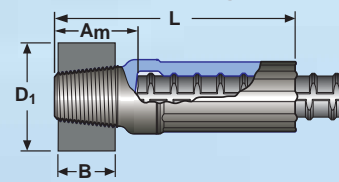
GRIP-TWIST FLANGED COUPLER



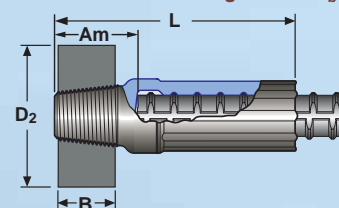
REBAR SIZE Metric [Can]	FEMALE FLANGED PRODUCT CODE	TAPER GRIP-TWIST COLOR CODE	FEMALE COUPLER PLUS FLANGE WEIGHT (kg)	DIMENSIONS (mm)					
				BAR INSERTION after swaging F	FLANGE HEIGHT B	FLANGE WIDTH C	MALE INSERTION H	END ALLOWANCE A	Non-Swaged LENGTH N
12	TT4FWFL	Pink	0.15	45	49	35	19	30	33
16 [15M]	TT5FWFL	Red	0.26	57	60	41	24	35	40
20 [20M]	TT6FWFL	Yellow	0.48	67	70	48	29	41	46
22	TT7FWFL	Blue	0.71	79	75	52	33	48	54
25 [25M]	TT8FWFL	Black	1.00	89	83	57	38	54	60
29 [30M]	TT9FWFL [30M-TT9FWFL]	Red	1.35	102	87	60	45	62	70
32	TT10FWFL	Yellow	1.91	111	97	67	51	71	79
36 [35M]	TT11FWFL	Blue	2.31	121	95	70	54	71	81

GRIP-TWIST® Mechanical Anchorage – Dimensions and Data [metric units]

TAPER THREADED DoughNUT 5A_b



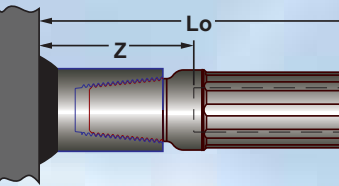
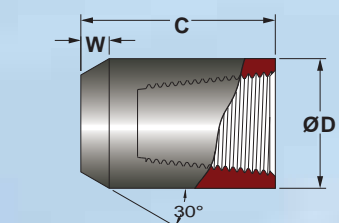
TAPER THREADED DoughNUT 10A_b



Rebar Size Metric (US) [Can]	Male Coupler Product Code	TDS Head Product Code	TDX Head Product Code	Coupler Length after Swaging L (mm)	End Allowance Am (mm)	Thickness B (mm)	Head Diameter & Weight * TDS Series [5A _b]		Head Diameter & Weight ** TDX Series [10A _b]	
							D1 (mm)	Wt (kg)	D2 (mm)	Wt (kg)
12 (#4)	TT4M	4TDS	4TDX	75	30	19	32	0.10	45	0.21
16 (#5) [15M]	TT5M	5TDS	5TDX	92	35	22	38	0.16	51	0.32
20 (#6) [20M]	TT6M	6TDS	6TDX	110	41	24	45	0.23	60	0.48
22 (#7)	TT7M	7TDS	7TDX	127	48	32	51	0.39	73	0.93
25 (#8) [25M]	TT8M	8TDS	8TDX	145	54	33	60	0.59	83	1.25
29 (#9) [30M]	TT9M [30M-TT9M]	9TDS	9TDX	165	62	38	70	0.86	95	1.86
32 (#10)	TT10M	10TDS	10TDX	184	71	41	73	1.00	102	2.25
36 (#11) [35M]	TT11M	11TDS	11TDX	194	71	45	83	1.50	114	3.08
38 (#12)	TT12M	12TDS	12TDX	204	78	48	86	1.61	121	3.58
40 (#13)	TT13M	13TDS	13TDX	218	83	51	89	1.73	127	4.30
43 (#14) [45M]	TT14M	14TDS	14TDX	238	87	54	95	2.18	140	5.62
50 (#16)	TT16M	16TDS	16TDX	275	105	62	114	3.65	159	8.28
57 (#18) [55M]	TT18M	18TDS	18TDX	310	115	70	127	4.94	184	12.6

* Head Cross Sectional Area is approximately 5 x Rebar Area ** Head Cross Sectional Area is approximately 10 x Rebar Area

GRIP-TWIST STRUCTURAL CONNECTOR



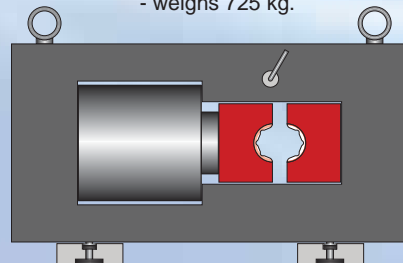
Rebar Size US [metric]	Structural Connector Product Code	Taper Grip-Twist Color Code	Structural Connector Weight (kg)	DIMENSIONS (mm)				
				Structural Connector Outside Dia. D	Structural Connector Length C	Weld Bevel Length W	Gap Z	Overall Length Lo
12 (#4)	TT4SC	Pink	0.07	22	35	5	44	89
16 (#5) [15M]	TT5SC	Red	0.14	29	43	6	54	110
20 (#6) [20M]	TT6SC	Yellow	0.27	35	51	6	64	130
22 (#7)	TT7SC	Blue	0.39	40	59	8	75	152
25 (#8) [25M]	TT8SC	Black	0.52	45	67	10	84	173
29 (#9) [30M]	TT9SC	Red	0.73	49	76	11	97	197
32 (#10)	TT10SC	Yellow	1.00	56	86	13	106	218
36 (#11) [35M]	TT11SC	Blue	1.25	60	91	14	114	238
38 (#12)	TT12SC	Brown	1.30	68	96	15	118	244
40 (#13)	TT13SC	Black	1.80	70	104	16	126	261
43 (#14) [45M]	TT14SC	Pink	2.29	73	111	17	137	286
50 (#16)	TT16SC	Gray	3.50	86	131	19	162	332
57 (#18) [55M]	TT18SC	Red	5.33	97	146	22	179	373

GRIP-TWIST® — Equipment and Installation

A Bench Press BP2600 fitted with a two-piece die set and powered by an electrically-driven hydraulic pump is used by the rebar fabricator to efficiently swage Grip-Twist® coupler components. The equipment operator depresses a foot control to actuate the system. As the ram extends and pushes the dies towards each other, the coupler component is forced to deform around the rebar and interlock with the bar profile. When a swaging bite has been completed, a pressure switch automatically stops the process and the operator retracts the ram for the next bite. For ease of use, swaging dies are color coded and stamped with a serial number that indicates the rebar and coupler size. Color codes are shown on Grip-Twist® Dimensions and Data Charts. *NOTE: In lieu of shop installation, it may sometimes be appropriate to use BPI-Grip field-swaging equipment such as press models BG1140M or BG750M - contact BPI for assistance with your application.*

BP2600

Bench press for swaging all sizes up to Ø 57mm. Double acting cylinder produces 300 tons of force connected to 10 or 15 hp pump for high fabrication shop productivity - includes foot control, lifting eyes and leveling feet - weighs 725 kg.



BPI® COUPLER SIZES
Ø10 - Ø57 mm

BPI®
Equipment is available for lease or purchase. Equipment must be used in accordance with manuals, lease agreements, manufacturers' directions and all safety instructions.

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