

Resistances

Resistances in concrete class C20/25 for an isolated anchor without spacing or concrete edge distance effects are indicated in the following table:

Characteristic Resistance [kN]

General parameters			Standard installation depth		Reduced installation depth	
Family	Code	Size	Tension N _{Rk}	Shear V _{Rk}	Tension N _{Rk}	Shear V _{Rk}
TBA	TBA06045	M6 x 45	6.15	5.10	----	----
	TBA06055	M6 x 55	6.15	5.10	----	----
	TBA06060	M6 x 60	7.40	5.10	----	----
	TBA06065	M6 x 65	7.40	5.10	----	----
	TBA06070	M6 x 70	7.40	5.10	----	----
	TBA06080	M6 x 80	7.40	5.10	----	----
	TBA06085	M6 x 85	7.40	5.10	----	----
	TBA06090	M6 x 90	7.40	5.10	----	----
	TBA06100	M6 x 100	7.40	5.10	----	----
	TBA06110	M6 x 110	7.40	5.10	----	----
	TBA06120	M6 x 120	7.40	5.10	----	----
	TBA06130	M6 x 130	7.40	5.10	----	----
	TBA06140	M6 x 140	7.40	5.10	----	----
	TBA06150	M6 x 150	7.40	5.10	----	----
	TBA06160	M6 x 160	7.40	5.10	----	----
	TBA06170	M6 x 170	7.40	5.10	----	----
	TBA06180	M6 x 180	7.40	5.10	----	----
	TBA08050	M8 x 50	----	----	5.43	5.43
	TBA08060	M8 x 60	----	----	10.00	10.19
	TBA08065	M8 x 65				
	TBA08075	M8 x 75	13.00	9.30	10.00	10.19
	TBA08090	M8 x 90	13.00	9.30	10.00	10.19
	TBA08115	M8 x 115	13.00	9.30	10.00	10.19
	TBA08120	M8 x 120	13.00	9.30	10.00	10.19
	TBA08130	M8 x 130	13.00	9.30	10.00	10.19
	TBA08155	M8 x 155	13.00	9.30	10.00	10.19
	TBA10065	M10 x 65	----	----	12.45	12.45
	TBA10070	M10 x 70	----	----	13.39	13.39
	TBA10080	M10 x 80	19.00	14.70	13.39	13.39
	TBA10090	M10 x 90	19.00	14.70	13.39	13.39
	TBA10100	M10 x 100	19.00	14.70	13.39	13.39
	TBA10120	M10 x 120	19.00	14.70	13.39	13.39
	TBA10140	M10 x 140	19.00	14.70	13.39	13.39
	TBA10150	M10 x 150	19.00	14.70	13.39	13.39
	TBA10160	M10 x 160	19.00	14.70	13.39	13.39
	TBA10170	M10 x 170	19.00	14.70	13.39	13.39
	TBA10210	M10 x 210	19.00	14.70	13.39	13.39
	TBA10230	M10 x 230	19.00	14.70	13.39	13.39
	TBA12075	M12 x 75	----	----	13.87	13.87
	TBA12080	M12 x 80	----	----	17.39	17.39
	TBA12090	M12 x 90	----	----	17.39	17.39
	TBA12100	M12 x 100	25.78	20.60	17.39	17.39
	TBA12110	M12 x 110	25.78	20.60	17.39	17.39
	TBA12120	M12 x 120	25.78	20.60	17.39	17.39
	TBA12140	M12 x 140	25.78	20.60	17.39	17.39
	TBA12160	M12 x 160	25.78	20.60	17.39	17.39
	TBA12180	M12 x 180	25.78	20.60	17.39	17.39
	TBA12220	M12 x 220	25.78	20.60	17.39	17.39
	TBA12250	M12 x 250	25.78	20.60	17.39	17.39

Characteristic Resistance [kN]

General parameters			Standard installation depth		Reduced installation depth	
Family	Code	Size	Tension N _{Rk}	Shear V _{Rk}	Tension N _{Rk}	Shear V _{Rk}
TBA	TBA14080	M14 x 80	----	----	13.39	13.39
	TBA14100	M14 x 100	----	----	24.02	28.10
	TBA14120	M14 x 120	31.95	28.10	----	----
	TBA14145	M14 x 145	31.95	28.10	----	----
	TBA14170	M14 x 170	31.95	28.10	----	----
	TBA14220	M14 x 220	31.95	28.10	----	----
	TBa14250	M14 x 250	31.95	28.10	----	----
	TBA16090	M16 x 90	----	----	16.87	16.87
	TBA16110	M16 x 110	----	----	25.78	38.40
	TBA16125	M16 x 125	37.87	38.40	25.78	38.40
	TBA16145	M16 x 145	37.87	38.40	25.78	38.40
	TBA16170	M16 x 170	37.87	38.40	25.78	38.40
	TBA16220	M16 x 220	37.87	38.40	25.78	38.40
	TBA162250	M16 x 140	37.87	38.40	25.78	38.40
	TBA16280	M16 x 250	37.87	38.40	25.78	38.40
	TBA20120	M16 x 280	37.87	38.40	25.78	38.40
	TBA06170	M20 x 120	----	----	29.43	58.86
	TBA20170	M20 x 170	51.42	56.30	31.95	63.90
	TBA20220	M20 x 220	51.42	56.30	31.95	63.90
	TBA20270	M20 x 270	51.42	56.30	31.95	63.90
	TBA24180	M24 x 180	50.00	84.70	----	----
	TBA24260	M24 x 260	50.00	84.70	----	----

1 KN ≈ 100 kg
Values underlined and in italics show Steel failure, **bold** values concrete failure and other indicate pull out failure.

Design Resistances [kN]

General parameters			Standard installation depth		Reduced installation depth	
Family	Code	Size	Tension N _{Rd}	Shear V _{Rd}	Tension N _{Rd}	Shear V _{Rd}
TBA	TBA06045	M6 x 45	4.10	4.08	----	----
	TBA06055	M6 x 55	4.10	4.08	----	----
	TBA06060	M6 x 60	5.29	4.08	----	----
	TBA06065	M6 x 65	5.29	4.08	----	----
	TBA06070	M6 x 70	5.29	4.08	----	----
	TBA06080	M6 x 80	5.29	4.08	----	----
	TBA06085	M6 x 85	5.29	4.08	----	----
	TBA06090	M6 x 90	5.29	4.08	----	----
	TBA06100	M6 x 100	5.29	4.08	----	----
	TBA06110	M6 x 110	5.29	4.08	----	----
	TBA06120	M6 x 120	5.29	4.08	----	----
	TBA06130	M6 x 130	5.29	4.08	----	----
	TBA06140	M6 x 140	5.29	4.08	----	----
	TBA06150	M6 x 150	5.29	4.08	----	----
	TBA06160	M6 x 160	5.29	4.08	----	----
	TBA06170	M6 x 170	5.29	4.08	----	----
	TBA06180	M6 x 180	5.29	4.08	----	----
	TBA08050	M8 x 50	----	----	3.62	3.62
	TBA08060	M8 x 60	----	----	6.67	6.79
	TBA08065	M8 x 65	----	----	6.67	6.79
	TBA08075	M8 x 75	9.29	7.44	6.67	6.79
	TBA08090	M8 x 90	9.29	7.44	6.67	6.79
	TBA08115	M8 x 115	9.29	7.44	6.67	6.79
	TBA08120	M8 x 120	9.29	7.44	6.67	6.79
	TBA08130	M8 x 130	9.29	7.44	6.67	6.79
	TBA08155	M8 x 155	9.29	7.44	6.67	6.79
	TBA10065	M10 x 65	----	----	8.30	8.30
	TBA10070	M10 x 70	----	----	8.93	8.93
	TBA10080	M10 x 80	12.67	11.76	8.93	8.93
	TBA10090	M10 x 90	12.67	11.76	8.93	8.93
	TBA10100	M10 x 100	12.67	11.76	8.93	8.93
	TBA10120	M10 x 120	12.67	11.76	8.93	8.93
	TBA10140	M10 x 140	12.67	11.76	8.93	8.93
	TBA10150	M10 x 150	12.67	11.76	8.93	8.93
	TBA10160	M10 x 160	12.67	11.76	8.93	8.93
	TBA10170	M10 x 170	12.67	11.76	8.93	8.93
	TBA10210	M10 x 210	12.67	11.76	8.93	8.93
	TBA10230	M10 x 230	12.67	11.76	8.93	8.93
	TBA12075	M12 x 75	----	----	9.25	9.25
	TBA12080	M12 x 80	----	----	11.60	11.60
	TBA12090	M12 x 90	----	----	11.60	11.60
	TBA12100	M12 x 100	17.19	16.48	11.60	11.60
	TBA12110	M12 x 110	17.19	16.48	11.60	11.60
	TBA12120	M12 x 120	17.19	16.48	11.60	11.60
	TBA12140	M12 x 140	17.19	16.48	11.60	11.60
	TBA12160	M12 x 160	17.19	16.48	11.60	11.60
	TBA12180	M12 x 180	17.19	16.48	11.60	11.60
	TBA12220	M12 x 220	17.19	16.48	11.60	11.60
	TBA12250	M12 x 250	17.19	16.48	11.60	11.60

Characteristic Resistance [kN]

General parameters			Standard installation depth		Reduced installation depth	
Family	Code	Size	Tension N _{Rd}	Shear V _{Rd}	Tension N _{Rd}	Shear V _{Rd}
TBA	TBA14080	M14 x 80	----	----	8.93	8.93
	TBA14100	M14 x 100	----	----	16.01	22.48
	TBA14120	M14 x 120	21.30	22.48	----	----
	TBA14145	M14 x 145	21.30	22.48	----	----
	TBA14170	M14 x 170	21.30	22.48	----	----
	TBA14220	M14 x 220	21.30	22.48	----	----
	TBA14250	M14 x 250	21.30	22.48	----	----
	TBA16090	M16 x 90	----	----	11.25	11.25
	TBA16110	M16 x 110	----	----	17.19	30.72
	TBA16125	M16 x 125	25.25	30.72	17.19	30.72
	TBA16145	M16 x 145	25.25	30.72	17.19	30.72
	TBA16170	M16 x 170	25.25	30.72	17.19	30.72
	TBA16220	M16 x 220	25.25	30.72	17.19	30.72
	TBA16250	M16 x 250	25.25	30.72	17.19	30.72
	TBA16280	M16 x 280	25.25	30.72	17.19	30.72
	TBA20120	M20 x 120	----	----	19.62	39.24
	TBA20170	M20 x 170	34.28	45.04	21.30	42.60
	TBA20220	M20 x 220	34.28	45.04	21.30	42.60
	TBA20270	M20 x 270	34.28	45.04	21.30	42.60
	TBA24180	M24 x 180	27.78	67.76	----	----
	TBA24260	M24 x 260	27.78	67.76	----	----

1 KN ≈ 100 kg
Values *underlined and in italics* show Steel failure, **bold** values concrete failure and other indicate pull out failure.

Maximum Loads Recommended [kN] (with $\gamma F= 1.4$)

General parameters			Standard installation depth		Reduced installation depth	
Family	Code	Size	Tension N_{rec}	Shear V_{rec}	Tension N_{rec}	Shear V_{rec}
TBA	TBA06045	M6 x 45	2.93	2.91	----	----
	TBA06055	M6 x 55	2.93	2.91	----	----
	TBA06060	M6 x 60	3.78	2.91	----	----
	TBA06065	M6 x 65	3.78	2.91	----	----
	TBA06070	M6 x 70	3.78	2.91	----	----
	TBA06080	M6 x 80	3.78	2.91	----	----
	TBA06085	M6 x 85	3.78	2.91	----	----
	TBA06090	M6 x 90	3.78	2.91	----	----
	TBA06100	M6 x 100	3.78	2.91	----	----
	TBA06110	M6 x 110	3.78	2.91	----	----
	TBA06120	M6 x 120	3.78	2.91	----	----
	TBA06130	M6 x 130	3.78	2.91	----	----
	TBA06140	M6 x 140	3.78	2.91	----	----
	TBA06150	M6 x 150	3.78	2.91	----	----
	TBA06160	M6 x 160	3.78	2.91	----	----
	TBA06170	M6 x 170	3.78	2.91	----	----
	TBA06180	M6 x 180	3.78	2.91	----	----
	TBA08050	M8 x 50	----	----	2.58	2.58
	TBA08060	M8 x 60	----	----	4.76	4.85
	TBA08065	M8 x 65	----	----	4.76	4.85
	TBA08075	M8 x 75	6.63	5.31	4.76	4.85
	TBA08090	M8 x 90	6.63	5.31	4.76	4.85
	TBA08115	M8 x 115	6.63	5.31	4.76	4.85
	TBA08120	M8 x 120	6.63	5.31	4.76	4.85
	TBA08130	M8 x 130	6.63	5.31	4.76	4.85
	TBA08155	M8 x 155	6.63	5.31	4.76	4.85
	TBA10065	M10 x 65	----	----	5.93	5.93
	TBA10070	M10 x 70	----	----	6.38	6.38
	TBA10080	M10 x 80	9.05	8.40	6.38	6.38
	TBA10090	M10 x 90	9.05	8.40	6.38	6.38
	TBA10100	M10 x 100	9.05	8.40	6.38	6.38
	TBA10120	M10 x 120	9.05	8.40	6.38	6.38
	TBA10140	M10 x 140	9.05	8.40	6.38	6.38
	TBA10150	M10 x 150	9.05	8.40	6.38	6.38
	TBA10160	M10 x 160	9.05	8.40	6.38	6.38
	TBA10170	M10 x 170	9.05	8.40	6.38	6.38
	TBA10210	M10 x 210	9.05	8.40	6.38	6.38
	TBA10230	M10 x 230	9.05	8.40	6.38	6.38
	TBA12075	M12 x 75	----	----	6.61	6.61
	TBA12080	M12 x 80	----	----	8.28	8.28
	TBA12090	M12 x 90	----	----	8.28	8.28
	TBA12100	M12 x 100	12.28	11.77	8.28	8.28
	TBA12110	M12 x 110	12.28	11.77	8.28	8.28
	TBA12120	M12 x 120	12.28	11.77	8.28	8.28
	TBA12140	M12 x 140	12.28	11.77	8.28	8.28
	TBA12160	M12 x 160	12.28	11.77	8.28	8.28
	TBA12180	M12 x 180	12.28	11.77	8.28	8.28
	TBA12220	M12 x 220	12.28	11.77	8.28	8.28
	TBA12250	M12 x 250	12.28	11.77	8.28	8.28

Anchor Fasteners - Indo Construction Fastening Systems

General parameters			Standard installation depth		Reduced installation depth	
Family	Code	Size	Tension N_{rec}	Shear V_{rec}	Tension N_{rec}	Shear V_{rec}
TBA	TBA14080	M14 x 80	----	----	6.38	6.38
	TBA14100	M14 x 100	----	----	11.44	16.06
	TBA14120	M14 x 120	15.22	16.06	----	----
	TBA14145	M14 x 145	15.22	16.06	----	----
	TBA14170	M14 x 170	15.22	16.06	----	----
	TBA14220	M14 x 220	15.22	16.06	----	----
	TBa14250	M14 x 250	15.22	16.06	----	----
	TBA16090	M16 x 90	----	----	8.03	8.03
	TBA16110	M16 x 110	----	----	12.28	21.94
	TBA16125	M16 x 125	18.03	21.94	12.28	21.94
	TBA16145	M16 x 145	18.03	21.94	12.28	21.94
	TBA16170	M16 x 170	18.03	21.94	12.28	21.94
	TBA16220	M16 x 220	18.03	21.94	12.28	21.94
	TBA162250	M16 x 140	18.03	21.94	12.28	21.94
	TBA16280	M16 x 250	18.03	21.94	12.28	21.94
	TBA20120	M16 x 280	18.03	21.94	12.28	21.94
	TBA06170	M20 x 120	----	----	14.01	28.03
	TBA20170	M20 x 170	24.49	32.17	15.22	30.43
	TBA20220	M20 x 220	24.49	32.17	15.22	30.43
	TBA20270	M20 x 270	24.49	32.17	15.22	30.43
	TBA24180	M24 x 180	19.84	48.40	----	----
	TBA24260	M24 x 260	19.84	48.40	----	----

1 kN ≈ 100 kg

Values underlined and in italics show Steel failure, **bold** values concrete failure and other indicate pull out failure.

CHANNEL PARTNER



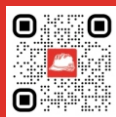
INDO SPARK CONSTRUCTION SERVICES

CORPORATE OFFICE

198, E ward, Tararani Chowk,
Near Geeta Mandir,
Kolhapur - 416 003 (Mah.India)
Toll Free : 1800 123 500 023
E-mail : mail@indospark.com

BRANCHES

Pune | Mumbai



FOLLOW US



www.indospark.com