PTB-PRO HEAVY DUTY THROUGHBOLTS RANGE

1 2

Cat No.	Description	1	2	Thread Size [mm]	Length [mm]	Head Size [mm]	Max t_{fix} [mm]	Box Quantity	Carton Quantity
DFM1110010	PTB-PRO M6x40 Throughbolt - Zinc Plated			M6 x 40		10	2	100	800
DFM1110000	PTB-PRO M6x55 Throughbolt - Zinc Plated	•		M6 x 55		10	5	100	800
DFM1110020	PTB-PRO M6x60 Throughbolt - Zinc Plated	•		M6 x 60		10	10	100	800
DFM1110040	PTB-PRO M6x85 Throughbolt - Zinc Plated	•		M6 x 85		10	35	100	400
DFM1110050	PTB-PRO M8x50 Throughbolt - Zinc Plated			M8 x 50		13	5	100	400
DFM1110060	PTB-PRO M8x65 Throughbolt - Zinc Plated		•	M8 x 60		13	5	100	400
DFM1110080	PTB-PRO M8x65 Throughbolt - Zinc Plated		•	M8 x 65		13	10	100	400
DFM1110100	PTB-PRO M8x75 Throughbolt - Zinc Plated		•	M8 x 75		13	20	100	400
DFM1110120	PTB-PRO M8x85 Throughbolt - Zinc Plated		•	M8 x 85		13	30	100	400
DFM1110140	PTB-PRO M8x95 Throughbolt - Zinc Plated		•	M8 x 95		13	40	100	400
DFM1110160	PTB-PRO M8x105 Throughbolt - Zinc Plated		•	M8 x 105		13	50	100	400
DFM1110180	PTB-PRO M8x130 Throughbolt - Zinc Plated		•	M8 x 130		13	75	50	200
DFM1110200	PTB-PRO M8x155 Throughbolt - Zinc Plated		•	M8 x 155		13	100	50	200
DFM1110220	PTB-PRO M8x205 Throughbolt - Zinc Plated		•	M8 x 205		13	150	50	200
DFM1110230	PTB-PRO M10x60 Throughbolt - Zinc Plated			M10 x 60		17	5	50	200
DFM1110260	PTB-PRO M10x85 Throughbolt - Zinc Plated		•	M10 x 85		17	5	50	200
DFM1110280	PTB-PRO M10x90 Throughbolt - Zinc Plated		•	M10 x 90		17	10	50	200
DFM1110320	PTB-PRO M10x100 Throughbolt - Zinc Plated		•	M10 x 100		17	20	50	200
DFM1110340	PTB-PRO M10x110 Throughbolt - Zinc Plated		•	M10 x 110		17	30	50	200
DFM1110360	PTB-PRO M10x120 Throughbolt - Zinc Plated		•	M10 x 120		17	40	50	200
DFM1110400	PTB-PRO M10x130 Throughbolt - Zinc Plated		•	M10 x 130		17	50	50	200
DFM1110440	PTB-PRO M10x160 Throughbolt - Zinc Plated		•	M10 x 160		17	80	50	200
DFM1110460	PTB-PRO M10x180 Throughbolt - Zinc Plated		•	M10 x 180		17	100	25	100
DFM1110480	PTB-PRO M10x220 Throughbolt - Zinc Plated		•	M10 x 220		17	140	25	100
DFM1110520	PTB-PRO M12x90 Throughbolt - Zinc Plated		•	M12 x 90		19	5	50	200
DFM1110540	PTB-PRO M12x95 Throughbolt - Zinc Plated		•	M12 x 95		19	10	50	200
DFM1110560	PTB-PRO M12x100 Throughbolt - Zinc Plated		•	M12 x 100		19	15	50	200
DFM1110580	PTB-PRO M12x105 Throughbolt - Zinc Plated		•	M12 x 105		19	20	25	100
DFM1110600	PTB-PRO M12x115 Throughbolt - Zinc Plated		•	M12 x 115		19	30	25	100
DFM1110620	PTB-PRO M12x120 Throughbolt - Zinc Plated		•	M12 x 120		19	35	25	100
DFM1110640	PTB-PRO M12x135 Throughbolt - Zinc Plated		•	M12 x 135		19	50	25	100
DFM1110660	PTB-PRO M12x165 Throughbolt - Zinc Plated		•	M12 x 165		19	80	25	100
DFM1110680	PTB-PRO M12x175 Throughbolt - Zinc Plated		•	M12 x 175		19	90	25	100
DFM1110700	PTB-PRO M12x185 Throughbolt - Zinc Plated		•	M12 x 185		19	100	25	100
DFM1110720	PTB-PRO M12x220 Throughbolt - Zinc Plated		•	M12 x 220		19	135	10	40
DFM1110740	PTB-PRO M16x115 Throughbolt - Zinc Plated		•	M16 x 115		24	5	25	100
DFM1110760	PTB-PRO M16x125 Throughbolt - Zinc Plated		•	M16 x 125		24	15	20	80
DFM1110780	PTB-PRO M16x135 Throughbolt - Zinc Plated		•	M16 x 135		24	25	20	80
DFM1110800	PTB-PRO M16x150 Throughbolt - Zinc Plated		•	M16 x 150		24	40	20	80
DFM1110810	PTB-PRO M16x160 Throughbolt - Zinc Plated		•	M16 x 160		24	50	10	40
DFM1110830	PTB-PRO M16x210 Throughbolt - Zinc Plated		•	M16 x 210		24	100	10	40
DFM1110870	PTB-PRO M20x125 Throughbolt - Zinc Plated			M20 x 125		30	5	10	40
DFM1110880	PTB-PRO M20x160 Throughbolt - Zinc Plated		•	M20 x 160		30	5	10	40
DFM1110900	PTB-PRO M20x170 Throughbolt - Zinc Plated		•	M20 x 170		30	15	10	40
DFM1110920	PTB-PRO M20x175 Throughbolt - Zinc Plated		•	M20 x 175		30	20	10	40
DFM1110940	PTB-PRO M20x185 Throughbolt - Zinc Plated		•	M20 x 185		30	30	10	40
DFM1110960	PTB-PRO M20x200 Throughbolt - Zinc Plated		•	M20 x 200		30	45	10	40
DFM1110980	PTB-PRO M20x215 Throughbolt - Zinc Plated		•	M20 x 215		30	60	10	40
DFM1110070	EN ISO 7093 (DIN 9021) Washer Only		•	M8	-	-	-	100	800
DFM1110250	EN ISO 7093 (DIN 9021) Washer Only		•	M10	-	-	-	100	800
DFM1110510	EN ISO 7093 (DIN 9021) Washer Only		•	M12	-	-	-	100	800
DFM1110730	EN ISO 7093 (DIN 9021) Washer Only		•	M16	-	-	-	100	800

PTB-SS-PRO HEAVY DUTY THROUGHBOLTS RANGE

Cat No.	Description	1	Thread Size [mm]	Length [mm]	Head Size [mm]	Max t_{fix} [mm]	Box Quantity	Carton Quantity
DFM1140000	PTB-SS M6 x 55 Throughbolt - Stainless Steel		M6 x 55		10	5	200	800
DFM1140020	PTB-SS M6 x 85 Throughbolt - Stainless Steel		M6 x 85		10	30	200	800
DFM1140050	PTB-SS M8 x 50 Throughbolt - Stainless Steel		M8 x 50		13	5	200	800
DFM1140190	PTB-SS M8 x 65 Throughbolt - Stainless Steel	•	M8 x 65		13	10	100	400
DFM1140200	PTB-SS M8 x 75 Throughbolt - Stainless Steel	•	M8 x 75		13	20	100	400
DFM1140220	PTB-SS M8 x 85 Throughbolt - Stainless Steel	•	M8 x 85		13	30	100	400
DFM1140250	PTB-SS M8 x 95 Throughbolt - Stainless Steel	•	M8 x 95		13	40	100	400
DFM1140270	PTB-SS M8 x 105 Throughbolt - Stainless Steel	•	M8 x 105		13	50	100	400
DFM1140300	PTB-SS M8 x 120 Throughbolt - Stainless Steel	•	M8 x 120		13	65	50	200
DFM1140310	PTB-SS M8 x 130 Throughbolt - Stainless Steel	•	M8 x 130		13	75	50	200
DFM1140350	PTB-SS M10 x 60 Throughbolt - Stainless Steel		M10 x 60		17	5	100	400
DFM1140360	PTB-SS M10 x 80 Throughbolt - Stainless Steel	•	M10 x 80		17	1	50	200
DFM1140400	PTB-SS M10 x 85 Throughbolt - Stainless Steel	•	M10 x 85		17	5	50	200
DFM1140430	PTB-SS M10 x 90 Throughbolt - Stainless Steel	•	M10 x 90		17	10	50	200
DFM1140450	PTB-SS M10 x 100 Throughbolt - Stainless Steel	•	M10 x 100		17	20	50	200
DFM1140480	PTB-SS M10 x 110 Throughbolt - Stainless Steel	•	M10 x 110		17	30	50	200
DFM1140500	PTB-SS M10 x 130 Throughbolt - Stainless Steel	•	M10 x 130		17	50	50	200
DFM1140530	PTB-SS M10 x 160 Throughbolt - Stainless Steel	•	M10 x 160		17	80	50	200
DFM1140550	PTB-SS M10 x 180 Throughbolt - Stainless Steel	•	M10 x 180		17	100	25	100
DFM1140600	PTB-SS M12 x 80 Throughbolt - Stainless Steel		M12 x 80		17	10	50	200
DFM1140700	PTB-SS M12 x 100 Throughbolt - Stainless Steel	•	M12 x 100		19	15	50	200
DFM1140750	PTB-SS M12 x 125 Throughbolt - Stainless Steel	•	M12 x 125		19	40	25	100
DFM1140800	PTB-SS M12 x 135 Throughbolt - Stainless Steel	•	M12 x 135		19	50	25	100
DFM1140850	PTB-SS M16 x 100 Throughbolt - Stainless Steel		M16 x 100		24	5	25	100
DFM1140870	PTB-SS M16 x 125 Throughbolt - Stainless Steel	•	M16 x 125		24	15	20	80
DFM1140900	PTB-SS M16 x 150 Throughbolt - Stainless Steel	•	M16 x 150		24	40	20	80
DFM1140930	PTB-SS M20 x 120 Throughbolt - Stainless Steel		M20 x 120		30	5	10	40
DFM1140950	PTB-SS M20 x 160 Throughbolt - Stainless Steel		M20 x 160		30	25	10	40

DEWALT®

Your DEWALT Dealer

DISCLAIMER FOR RECOMMENDATIONS, INFORMATION AND USE OF DATA

The recommendations, information and data contained in this manual are put together with the greatest care and accuracy possible. It is based on principles, equations and safety factors set out in the technical documentation of DEWALT Anchors & Fasteners, Inc. that are believed to be correct and current as of June 1, 2015. The information and data is subject to change after such date as DEWALT Anchors & Fasteners, Inc. reserves the right to change the designs, materials and specifications of the products in this manual without notice.

It is the responsibility of the design professional to ensure that a suitable product is selected, properly designed and used in the intended application. This includes that the selected product and its use is compliant with the applicable building codes and other legal requirements and will satisfy durability and performance criteria and margins of safety which they determine are applicable. The products must be used, handled, applied and installed strictly in accordance with all current instructions for use published by DEWALT Anchors & Fasteners, Inc.

The performance data given in this manual are the result of the evaluation of tests conducted under laboratory conditions. It is the responsibility of the designer and installer in charge to consider the conditions on site and to ensure the performance data given in the manual is applicable to the actual conditions. In particular the base material and environmental conditions have to be checked prior to installation. In case of doubt, contact the technical support of DEWALT Anchors & Fasteners, Inc.

07/2015 MP16767-GB

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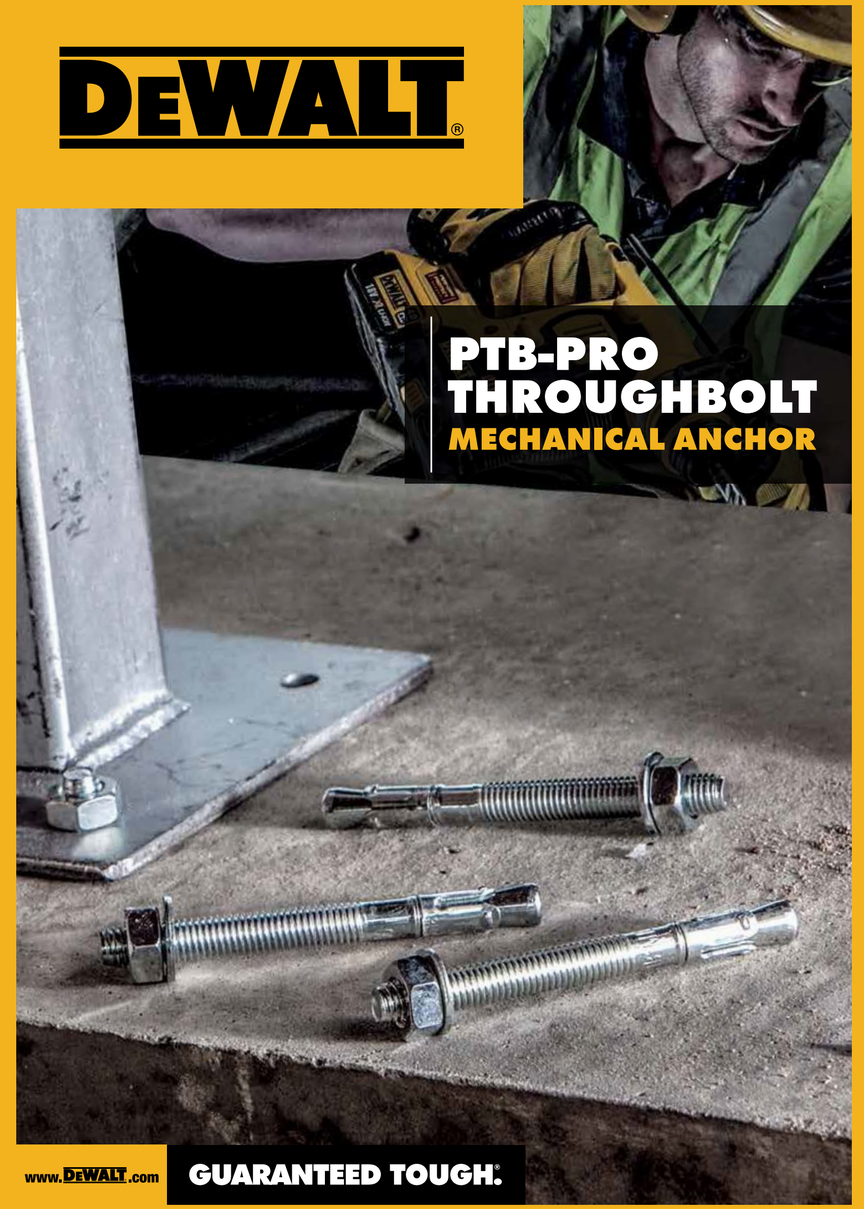


PTB-PRO THROUGHBOLT
MECHANICAL ANCHOR

www.DEWALT.com

GUARANTEED TOUGH®

CRACKED CONCRETE THROUGHBOLT APPROVED FOR FLEXIBLE EMBEDMENTS.

The PTB-PRO is a fully threaded, torque controlled, wedge expansion anchor designed for consistent performance in cracked and uncracked concrete and is availble in zinc plated (PTB-PRO) and stainless steel (PTB-SS-PRO).

The anchor is easy to install and suitable for a variety of base materials with a nominal drill bit size the same as the anchor diameter.

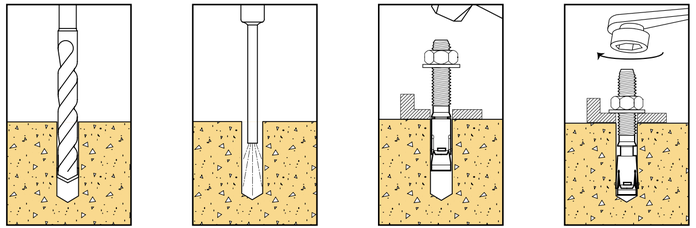
The wide range of available PTB-PRO anchor sizes also covers all common capacity demands with a superior load-displacement response that qualifies the PTB-PRO for both standard and adverse loading conditions.

- ETA Option 1 approval for cracked and uncracked concrete (PTB-PRO & PTB-SS-PRO)
- ETA part 6 approval for redundant systems (M6 PTB-PRO only)
- Approved for seismic load applications (M8-M16 PTB-PRO only)
- Two approved embedment depths (M12 & M16 PTB-PRO only)
- Long thread for flexibility in fixture thicknesses
- Special cone angle for quick installation
- F120 fire resistance (PTB-PRO only)

PTB-PRO is also available with hot dip galvanized finish (PTB-G, not approved).

To view the complete range visit **www.DEWALT.com**.

INSTALLATION DATA



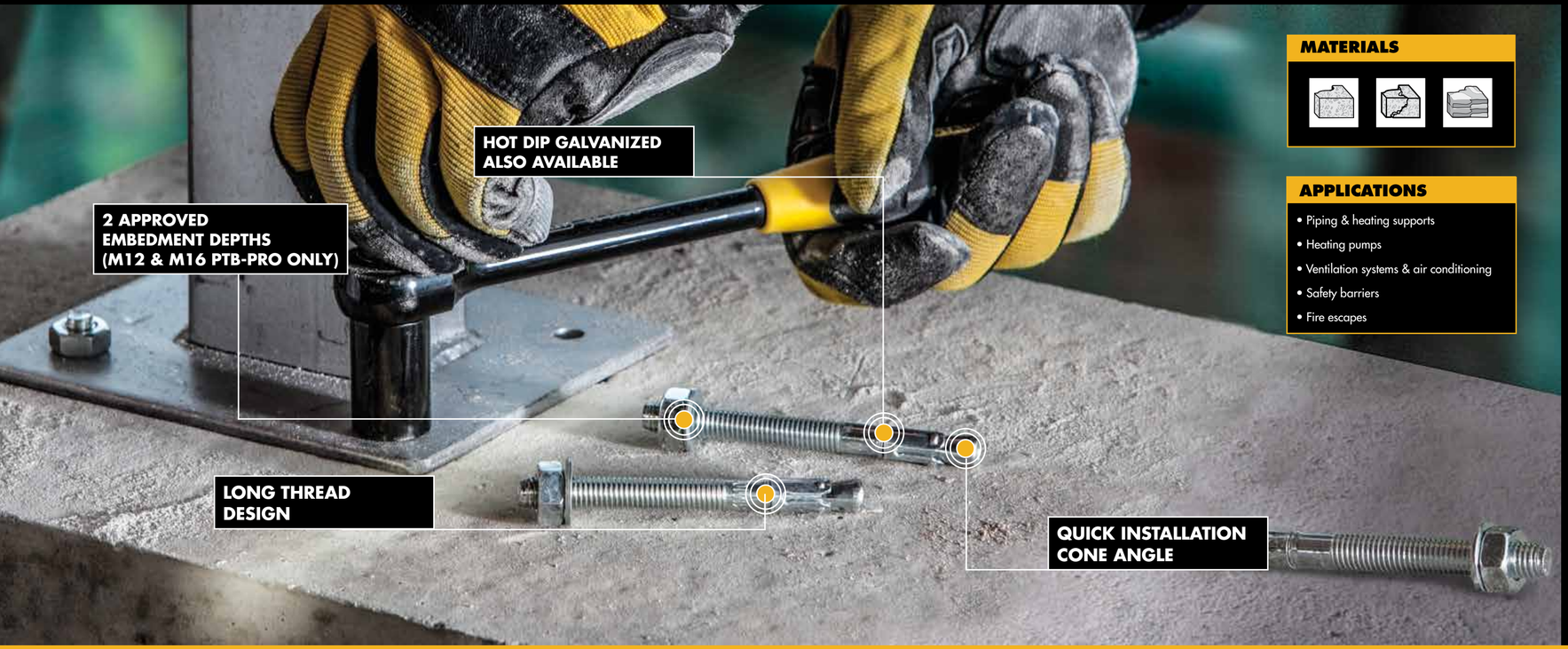
1) Using the proper drill bit size, drill a hole into the base material to the required depth.

2) Remove dust and debris from the hole using a hand pump or compressed air.

3) Drive the anchor into the hole at least to the minimum required embedment depth.

4) Tighten the anchor with a torque wrench by applying the required installation torque Tinst.

For complete installation instructions, see technical approval.

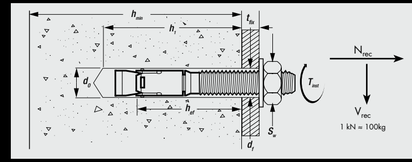


MATERIALS

APPLICATIONS

- Piping & heating supports
- Heating pumps
- Ventilation systems & air conditioning
- Safety barriers
- Fire escapes

LOADING DATA



*Size does not have ETA approval

Size	drill Ø d_0 [mm]	d_1 [mm]	h_{ef} min [mm]	h_{ef} max [mm]	h_1 for min h_{nom} [mm]	h_1 for max h_{nom} [mm]	t_{fix} for min h_{nom} [mm]	t_{fix} for max h_{nom} [mm]	T_{inst} [Nm]	h_{min} for min h_{nom} [mm]	h_{min} for max h_{nom} [mm]	min edge c_{min} [mm]	spacing s for c_{min} [mm]	min spacing s_{min} [mm]	edge c for t_{min} [mm]	uncracked concrete N_{rec} for min h_{nom} [kN]	uncracked concrete N_{rec} for max h_{nom} [kN]	cracked concrete N_{rec} for min h_{nom} [kN]	cracked concrete N_{rec} for max h_{nom} [kN]	V_{rec} for min h_{nom} [kN]	V_{rec} for max h_{nom} [kN]
ETA-13/0355 - REDUNDANT SYSTEMS ONLY																					
M6x40*	6	7	25			2		10	80		105	200	200	105	1.4					0.8	
M6x55	6	7	35		45	5		10	80		105	200	200	105			1.4		1.4		
M6x60	6	7	35		45	10		10	80		105	200	200	105			1.4		1.4		
M6x85	6	7	35		45	35		10	80		105	200	200	105			1.4		1.4		
ETA-13/0036 - OPTION 1 APPROVED																					
M8x50*	8	9	30		40	5		25	100		55	120	50	90	2.3					2.8	
M8 x 60	8	9	40		55	5		25	100		55	120	50	90	3.6		1.6		4.3		
M8 x 65	8	9	40		55	10		25	100		55	120	50	90	3.6		1.6		4.3		
M8 x 75	8	9	40		55	20		25	100		55	120	50	90	3.6		1.6		4.3		
M8 x 85	8	9	40		55	30		25	100		55	120	50	90	3.6		1.6		4.3		
M8 x 95	8	9	40		55	40		25	100		55	120	50	90	3.6		1.6		4.3		
M8 x 105	8	9	40		55	50		25	100		55	120	50	90	3.6		1.6		4.3		
M8 x 130	8	9	40		55	75		25	100		55	120	50	90	3.6		1.6		4.3		
M8 x 155	8	9	40		55	100		25	100		55	120	50	90	3.6		1.6		4.3		
M8 x 205	8	9	40		55	150		25	100		55	120	50	90	3.6		1.6		4.3		
M10 x 60*	10	12	35		45	5		45	120		60	150	55	90	3.4					3.5	
M10 x 85	10	12	60		75	5		45	120		60	150	55	90	7.6		3.6		8.9		
M10 x 90	10	12	60		75	10		45	120		60	150	55	90	7.6		3.6		8.9		
M10 x 100	10	12	60		75	20		45	120		60	150	55	90	7.6		3.6		8.9		
M10 x 110	10	12	60		75	30		45	120		60	150	55	90	7.6		3.6		8.9		
M10 x 120	10	12	60		75	40		45	120		60	150	55	90	7.6		3.6		8.9		
M10 x 130	10	12	60		75	50		45	120		60	150	55	90	7.6		3.6		8.9		
M10 x 160	10	12	60		75	80		45	120		60	150	55	90	7.6		3.6		8.9		
M10 x 180	10	12	60		75	100		45	120		60	150	55	90	7.6		3.6		8.9		
M10 x 220	10	12	60		75	140		45	120		60	150	55	90	7.6		3.6		8.9		
M12 x 90	12	14	60		75	5		70	120		65	190	60	100	11.2		4.8		12.0		
M12 x 95	12	14	60		75	10		70	120		65	190	60	100	11.2		4.8		12.0		
M12 x 100	12	14	60		75	15		70	120		65	190	60	100	11.2		4.8		12.0	12.0	
M12 x 105	12	14	60	80	75	95	5	20	70	120	160	65	190	60	100	11.2	14.3	4.8	4.8	12.0	12.0
M12 x 115	12	14	60	80	75	95	10	30	70	120	160	65	190	60	100	11.2	14.3	4.8	4.8	12.0	12.0
M12 x 120	12	14	60	80	75	95	15	35	70	120	160	65	190	60	100	11.2	14.3	4.8	4.8	12.0	12.0
M12 x 135	12	14	60	80	75	95	30	50	70	120	160	65	190	60	100	11.2	14.3	4.8	4.8	12.0	12.0
M12 x 165	12	14	60	80	75	95	60	80	70	120	160	65	190	60	100	11.2	14.3	4.8	4.8	12.0	12.0
M12 x 175	12	14	60	80	75	95	70	90	70	120	160	65	190	60	100	11.2	14.3	4.8	4.8	12.0	12.0
M12 x 185	12	14	60	80	75	95	80	100	70	120	160	65	190	60	100	11.2	14.3	4.8	4.8	12.0	12.0
M12 x 220	12	14	60	80	75	95	115	135	70	120	160	65	190	60	100	11.2	14.3	4.8	4.8	12.0	12.0
M16 x 115	16	18	80		100	5		120	160		85	160	70	130	14.3		9.9		21.1		
M16 x 125	16	18	80		100	15		120	160		85	160	70	130	14.3		9.9		21.1		
M16 x 135	16	18	80	100	100	120	5	25	120	160	200	85	160	70	130	14.3	24.0	9.9	9.9	21.1	21.1
M16 x 150	16	18	80	100	100	120	20	40	120	160	200	85	160	70	130	14.3	24.0	9.9	9.9	21.1	21.1
M16 x 160	16	18	80	100	100	120	30	50	120	160	200	85	160	70	130	14.3	24.0	9.9	9.9	21.1	21.1
M16 x 210	16	18	80	100	100	120	80	100	120	160	200	85	160	70	130	14.3	24.0	9.9	9.9	21.1	21.1
M20x125*	20	22	75		115	5		200	250		95	240	95	240	11.2					22.3	
M20x160	20	22	110		150	5		200	250		95	240	95	240	19.8		7.9		30.9		
M20x170	20	22	110		150	15		200	250		95	240	95	240	19.8		7.9		30.9		
M20x175	20	22	110		150	20		200	250		95	240	95	240	19.8		7.9		30.9		
M20x185	20	22	110		150	30		200	250		95	240	95	240	19.8		7.9		30.9		
M20x200	20	22	110		150	45		200	250		95	240	95	240	19.8		7.9		30.9		
M20x215	20	22	110		150	60		200	250		95	240	95	240	19.8		7.9		30.9		