

# SELECTION TABLE EUROPE

Model	Project Type	Maximum Bearing Capacity				Lateral capacity <sup>5</sup>	Factored bending resistance
		Compression <sup>2 3 4</sup>		Tension <sup>1 2</sup>			
		SLS <sup>6</sup>	ULS <sup>7</sup>	SLS <sup>6</sup>	ULS <sup>7</sup>	SLS	
		(kN)	(kN)	(kN)	(kN)	(kN)	
<b>P1</b> Ø 48.3 mm (1.9 in)	<b>Light Residential</b> (deck without roof, stairs, etc.)	30	42	15	21	2,2	1,4
<b>P2</b> Ø 60.3 mm (2.4 in)	<b>Medium Residential and Light Commercial</b> (deck, carport, sunroom, single story residential addition, etc.)	49	69	24	34	4,4	2,4
<b>P3</b> Ø 88.9 mm (3.5 in)	<b>Heavy Residential, Light to Medium Commercial and Industrial</b> (two-story residential addition, cottage, sign, carport, solar panel, new construction, underpinning, boardwalk, tie-back, etc.)	150	210	75	105	10,0	8,8
<b>P4</b> Ø 101.6 mm (4 in)	<b>Heavy Residential, Light to Medium Commercial and Industrial</b> (cottage, sign, light post, solar panel, new construction, boardwalk, tie-back, bollard, etc.)	200	280	100	140	12,0	12,3
<b>P3-HD</b> Ø 88.9 mm (3.5 in)	<b>Heavy Residential, Light to Heavy Commercial and Industrial</b> (new construction, underpinning, tie-back, etc.)	200	280	100	140	10,0	12,8
<b>P4-HD</b> Ø 101.6 mm (4 in)	<b>Heavy Residential, Light to Heavy Commercial and Industrial</b> (new construction, retaining wall, tie-back, etc.)	225	315	113	158	12,0	17,9
<b>P5</b> Ø 141.3 mm (5.6 in)	<b>Heavy Residential, Light to Heavy Commercial and Industrial</b> (cottage, sign, light post, new construction, boardwalk, solar panel, bollard, retaining wall, etc.)	225	315	113	158	20,0	29,2
<b>P6</b> Ø 168.3 mm (6.6 in)	<b>Heavy Residential, Light to Heavy Commercial and Industrial</b> (sign, light post, new construction, solar panel, bollard, retaining wall, etc.)	225	315	113	158	25,0	45,9

## Notes :

1. The tension load capacity can be attained, conservatively, by halving the values of compression bearing capacity. Contact the TMP Engineering department for tension applications.
2. The maximum compression/tension load (SLS) shown in the selection table limit the settlements to 12 mm.
3. The maximum compression bearing capacity (SLS) is determined by the maximum torque applied by the installation equipment.
4. When the helical pile is laterally unsupported (very loose / soft, liquefiable soils, water current, or wind), the structural resistance of the helical pile must be approved by TMP Engineering Department.
5. Lateral capacity shown is based on dense soil with free head condition. Contact the TMP Engineering Department for other conditions.
6. SLS values are based on a minimum safety factor of 2 on the ultimate geotechnical resistance.
7. Factored geotechnical resistance at ULS.

## Comments :

- Larger Techno Metal Post can be used for applications requiring a lateral or bending resistance higher than shown in the selection table.
- For any technical questions, please contact the TMP Engineering Department