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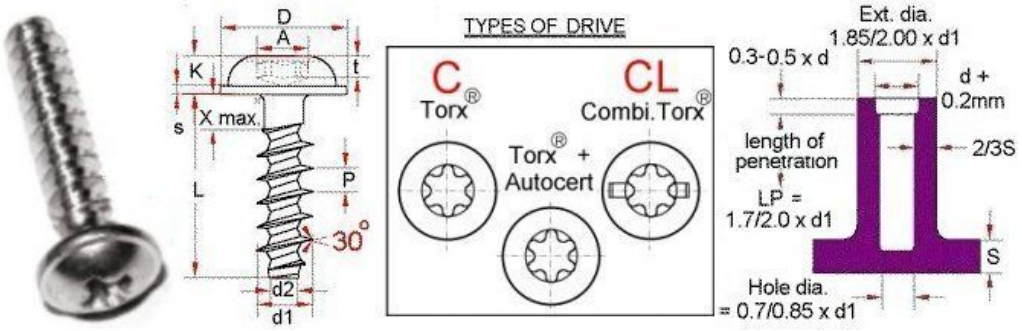
Series: 20210 Type: 1451



Polyplast 30 Torx Flange

Part No.	Diam. d1	Diam. d2	Pitch p	X max	X Min.	Head dia. D	Dim K	Flange height s	Torx*	A max	t max/min
1451K 20xL	2.0	1.15	0.89	2.0	1.0	4.0	1.3	0.40	T 6	1.75	0.50/0.65
1451K 22xL	2.2	1.25	0.98	2.2	1.1	4.5	1.4	0.50	T 6	1.75	0.70/0.85
1451K 25xL	2.5	1.40	1.12	2.5	1.3	5.0	1.5	0.50	T 6	1.75	0.70/0.85
1451K 30xL	3.0	1.66	1.34	3.0	1.5	6.0	2.1	0.60	T 6	1.75	1.00/1.30
1451K 35xL	3.5	1.91	1.57	3.5	1.8	7.0	2.4	0.70	T 10	2.80	1.10/1.40
1451K 40xL	4.0	2.17	1.79	4.0	2.0	8.0	2.6	0.80	T 20	3.95	1.25/1.70
1451K 50xL	5.0	2.68	2.24	5.0	2.5	10.0	3.3	1.00	T 20	3.95	1.40/1.80
1451K 60xL	6.0	3.19	2.69	6.0	3.0	12.0	3.6	1.20	T 25	4.50	1.60/2.00
1451K 70xL	7.0	3.70	3.14	7.0	3.5	14.0	4.2	1.40	T 30	5.60	2.00/2.40
1451K 80xL	8.0	4.21	3.59	8.0	4.0	16.0	4.8	1.60	T 40	6.75	2.70/3.20
1451K 100xL	10.0	5.23	4.49	10.0	5.0	20.0	5.5	2.00	T 40	6.75	2.70/3.20

Substitute the length for the L In the part no. to specify the exact part required. The 30 deg. Flank angle and recessed core diameter of these thread forming screws for plastic have been developed following theoretical appraisal, exhaustive calculations and final proof testing. The 30 deg. Flank angle produces low radial forces when engaging the plastic, therefore resulting in less radial stresses and tension. In other words the hoop stresses in the plastic bosses are less than those experienced with conventional screws. The recessed core geometry provides the ideal flow director for the displaced plastic, encouraging a uniform flow to fill the pitch of the screw without material jamming. This results in the maximum amount of plastic being engaged to provide higher sheer loads, due to the increased bearing depth of the thread. A combination of the above and the ease of penetration of the 30 deg. Flank angle through the material and the way in which the plastic flows, reduces the torque required to drive the screw in. This fact therefore increases the margin between drive torque and stripping torque which of course minimises the potential of stripping during installation. The optimum pitch and maximum fill features provided by the recessed core results in a large area of plastic to be sheered prior to screw failure in tension. This creates a high resistance to pullout loads.