



# Flamco

Flow of Innovation

## Wall mounting

## Max. load on threaded rod & tube

Ø	Threaded rods (ISO 965-2, Quality 4.8)						Threaded tubes with internal thread (ISO 228)	Threaded tubes with external thread (ISO 228)			
	M6	M8	M10	M12	M16	M20	½"	½"	¾"	1"	
l <sub>x</sub> [mm <sup>4</sup> ]	25	86	218	462	1.655	4.033	4.189	3.429	8.752	22.151	
W <sub>x</sub> [mm <sup>3</sup> ]	11	27	53	94	244	476	351.912	368	1.293	1.463	
M <sub>b</sub> [Nmm]	1.705	4.254	8.535	15.012	39.078	76.224	62.940	58.902	206.832	234.011	
L [MM]	Max. load on end of rod / pipe L [N]										
50	34	85	171	300	782	1.524	1.259	1.178	4.137	4.680	
75	19	57	114	200	521	1.016	839	785	2.758	3.120	
100	11	36	85	150	391	762	629	589	2.068	2.340	
125	-	23	59	120	313	610	504	471	1.655	1.872	
150	-	16	41	86	261	508	420	393	1.379	1.560	
175	-	12	30	63	223	436	360	337	1.182	1.337	
200	-	-	23	49	174	381	315	295	919	1.170	
225	-	-	18	38	137	335	280	262	726	1.040	
250	-	-	15	31	111	271	252	230	588	936	
300	-	-	10	22	77	188	196	160	408	780	
350	-	-	-	16	57	138	144	118	300	669	
400	-	-	-	12	43	106	110	90	230	581	
450	-	-	-	10	34	84	87	71	182	459	
500	-	-	-	-	28	68	70	58	147	372	
600	-	-	-	-	19	47	49	40	102	258	
700	-	-	-	-	14	35	36	29	75	190	
800	-	-	-	-	11	26	27	23	57	145	
900	-	-	-	-	-	21	22	18	45	115	
1000	-	-	-	-	-	17	18	14	37	93	

f =	$\frac{F \times L^3}{3 \times E \times I}$	mm	Deflection
f <sub>max</sub> =	$\frac{L}{150}$	mm	Permissible deflection
σ =	$\frac{F \times L}{W}$	N/mm <sup>2</sup>	Tension
σ <sub>max</sub> =	160	N/mm <sup>2</sup>	Permissible bending stress
I <sub>x</sub> =	$\frac{\pi \times d^4}{64}$	mm <sup>4</sup>	Moment of inertia
W <sub>x</sub> =	$\frac{\pi \times d^3}{32}$	mm <sup>3</sup>	Section modulus
E =	21,000	N/mm <sup>2</sup>	Tensile modulus
M <sub>b</sub> =	25	Nmm	Bending moment

The lowest value is normative.

