

Technical static values BRAWO® UVPox US

BRAWO SYSTEMS

Stand: 2024-11-11

Technical values for the stability calculation (BRAWO® UVPox US)

Circumference E-modulus 3-min short-term:	DIN EN 1228	2200 N/mm ²
Circumference E-modulus long-term:	DIN EN 1228	607 N/mm ²
3-point bending E-modulus short-term:	DIN EN ISO 11296-4	2100 N/mm ²
3-point bending E-modulus long-term:	DIN EN ISO 11296-4	580 N/mm ²
3-point flexural strength short-time:	DIN EN ISO 11296-4	30 N/mm ²
3-point flexural strength long-time:	DIN EN ISO 11296-4	8 N/mm ²
Compressive strength short-term:	DIN EN ISO 604	87 N/mm ²
Compressive strength long-term:	DIN EN ISO 604	24 N/mm ²
Attenuation factor:		3,62
Poisson's ratio μ :		0,36
Security factor γ :		1,35

Achievable wall thicknesses for the BRAWOLINER®

BRAWOLINER®	DN tube	Wall thickness	SN ¹⁾	(SN > 500 N/m ²)	Max. GW over pipe base (>1,5m) ⁴⁾
BRAWOLINER® DN100	DN 100	3,5 mm	8747 N/m ²	Yes	5,0 m
	DN 120	3,0 mm	3091 N/m ²	Yes	5,0 m
BRAWOLINER® DN125	DN 125	3,5 mm	4382 N/m ²	Yes	5,0 m
	DN 150	3,0 mm	1558 N/m ²	Yes	2,3 m
BRAWOLINER® DN150	DN 150	3,5 mm	2500 N/m ²	Yes	3,5 m
	DN 175	3,0 mm	973 N/m ²	Yes	1,7 m
BRAWOLINER® DN200	DN 200	3,5 mm	1036 N/m ²	Yes	1,8 m
	DN 250	3,0 mm	328 N/m ²	No	

BRAWOLINER® XT	DN tube	Wall thickness	SN ¹⁾	(SN > 500 N/m ²)	Max. GW over pipe base (>1,5m) ⁴⁾
BRAWOLINER® XT DN100	DN 100	4,5 mm	19181 N/m ²	Yes	5,0 m
	DN 125	4,0 mm	6623 N/m ²	Yes	5,0 m
BRAWOLINER® XT DN125	DN 125	4,5 mm	9548 N/m ²	Yes	5,0 m
	DN 150	4,0 mm	3770 N/m ²	Yes	4,8 m
BRAWOLINER® XT DN150	DN 150	4,5 mm	5424 N/m ²	Yes	5,0 m
	DN 175	4,0 mm	2347 N/m ²	Yes	3,3 m
BRAWOLINER® XT DN200/250	DN 200	4,5 mm	2236 N/m ²	Yes	3,2 m
	DN 250	4,0 mm	788 N/m ²	Yes	1,5 m

BRAWOLINER® 3D	DN tube	Wall thickness	SN ¹⁾	(SN > 500 N/m ²)	Max. GW over pipe base (>1,5m) ⁴⁾
BRAWOLINER® 3D DN 70-100	DN 70	4,0 mm	40812 N/m ²	Yes	5,0 m
	DN 80	3,5 mm	17557 N/m ²	Yes	5,0 m
	DN 100	3,0 mm	5424 N/m ²	Yes	5,0 m
BRAWOLINER® 3D DN 100-150 ²⁾	DN 100	4,0 mm	13262 N/m ²	Yes	5,0 m
	DN 125	3,5 mm	4382 N/m ²	Yes	5,0 m
	DN 150	3,0 mm	1558 N/m ²	Yes	2,3 m
BRAWOLINER® 3D DN 150-225 ²⁾	DN 150	4,0 mm	3770 N/m ²	Yes	4,8 m
	DN 200	3,5 mm	1036 N/m ²	Yes	1,8 m
	DN 225	3,0 mm	452 N/m ²	No	
BRAWOLINER® 3D DN 200-300 ²⁾	DN 200	5,3 mm	3698 N/m ²	Yes	4,7 m
	DN 225	5,0 mm	2152 N/m ²	Yes	3,1 m
	DN 250	4,8 mm	1375 N/m ²	Yes	2,2 m
	DN 300	4,5 mm	647 N/m ²	Yes	1,2 m ³⁾

¹⁾ Calculation of nominal ring stiffness (SN) in accordance with DIN EN 1228

E = Circumference E-modulus 3-min short-term ; e = wall thickness ; de = internal diameter old pipe

$$SN = \frac{E \cdot e^3}{12 \cdot (d_e - e)^3}$$

²⁾ Part of DIBt approval Z-42.3-566

³⁾ Value is below the minimum load of $h_{w,so} = d_n + 0,1m \geq 1,5m$ (DWA-A 143 Part 2)

⁴⁾ DWA-A 143 Part 2