

Datasheet for a thermoplastic cylindrical tank flatbottomed tank made from PE 80 according to DVS 2205

For company:	Musterman Industry		
Installation place:			
Installation:	inside		
Lifetime:	10 Years		
Medium:	Sea water (-)		
Density of medium:	1,11 g/cm ³		
Temperature:	30 ° C		
Safety factor:	2,0		
Reduction factor:	A_2 / A_{2l}	1,0	/ 1,0
Type of roof:	flat roof		
Type of bottom:	flat bottom		
Ventilation:	Roof bend airing		
Drawing number:	00001		
Tank number:	0001		

Loadings

Pressure of medium:	$p_{\bar{u}}$	0,000 bar		p_u	0,000 bar
	$p_{\bar{u}_k}$	0,005 bar		p_{u_k}	0,003 bar
Loadings on the roof:	G_A	0	N		
Weight of whole tank:	G_E	57.546	N		
Weight of roof:	G_D	8.415	N		
Weight of cylinder:	G_Z	41.789	N		
Weight of bottom:	G_B	7.343	N		
Weight of medium:	G_F	1.386.676	N		

Dimensions

Internal diameter:	d	5.000	mm	
Total height:	h	7.000	mm	
Cylindrical height:	h_z	6.970	mm	
Required filling level:	h_f	6.486	mm	(127,3 m ³)
Installation height:	h_A	8.626	mm	
flat roof:	s_D	30	mm	
Height of rigidities / thickne	h_s	240	mm	S_s 30 mm
Distance of rigidities:		714	mm	

Bottom:	s_B	40	mm
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Sections

	<u>Wall thickness</u>		<u>Height of Section</u>
1	20	mm	1.970 mm
2	35	mm	2.000 mm
3	50	mm	1.500 mm
4 bent at elevated temperature	65	mm	1.500 mm

Thickness of welding seam bottom/wall:				a	28	mm
Lifting lugs:	b_{δ}	561	mm	d_L	21	mm
	s_{δ}	79	mm			
Thickness of welding seams for lifting lugs:				a	14	mm
Quantity of anchorages:		0				

Roof nozzles

No specification