

NAHTLOSE KALTGEZOGENE ROHRE FÜR HYDRAULIK- UND PNEUMATIK-DRUCKLEITUNGEN PHOSPHATIERT

SEAMLESS PRECISION STEEL TUBES USED AS PRESSURE LINES FOR HYDRAULIC AND PNEUMATIC PURPOSES PHOSPHATED

Technische Kurzinformation <i>Technical information</i>	Kurzzeichen: HPL (HPL-Rohre phosphatiert) <i>Symbol: HPL (Tubes HPL, phosphated)</i>
Norm für technische Lieferbedingungen und Abmessungen <i>Standard for technical delivery conditions and sizes</i>	EN 10305-4
Werkstoff / <i>Steel grade</i>	E235+N - 1.0308 E355+N - 1.0580
Weitere Normen / <i>Other standards</i>	DIN 2445/2 Nahtlose Stahlrohre für schwellende Beanspruchung <i>Seamless steel tubes for pulsating stress</i>
Abmessungsbereich / <i>Size range</i>	A.D. O.D. 4 - 115 mm / W.D. W.T. 0,5 - 10 mm
Werkszeugnis / <i>Certification</i>	EN 10204
Lieferzustand / <i>Supplied condition</i>	+N = normalgeglüht / +N = <i>normalized</i>
Oberflächenschutz / <i>Surface protection</i>	I.D. ≥ 6 mm außen und innen phosphatiert und geölt <i>I.D. ≥ 6 mm outside and inside phosphated and oiled</i> I.D. < 6 mm außen und innen geölt <i>I.D. < 6 mm outside and inside oiled</i>
Herstellungslänge / <i>Production length</i>	6 m

NAHTLOSE KALTGEZOGENE ROHRE FÜR HYDRAULIK- UND PNEUMATIK-DRUCKLEITUNGEN VERZINKT

SEAMLESS PRECISION STEEL TUBES USED AS PRESSURE LINES FOR HYDRAULIC AND PNEUMATIC PURPOSES GALVANIZED

Technische Kurzinformation <i>Technical information</i>	Kurzzeichen: ZISTA (Zista-Rohre, verzinkt) <i>Symbol: ZISTA (Tubes Zista, galvanized)</i>
Norm für technische Lieferbedingungen und Abmessungen <i>Standard for technical delivery conditions and sizes</i>	EN 10305-4
Werkstoff / <i>Steel grade</i>	E235+N - 1.0308 E355+N - 1.0580
Weitere Normen / <i>Other standards</i>	DIN 2445/2 Nahtlose Stahlrohre für schwellende Beanspruchung <i>Seamless steel tubes for pulsating stress</i>
Abmessungsbereich / <i>Size range</i>	A.D. O.D. 4 - 60 mm / W.D. W.T. 0,75 - 6 mm
Werkszeugnis / <i>Certification</i>	EN 10204
Lieferzustand / <i>Supplied condition</i>	+N = normalgeglüht / +N = <i>normalized</i>
Oberflächenschutz / <i>Surface protection</i>	außen galvanisch verzinkt, Zinkauflage 10 - 15 µ <i>outside electrogalvanized, zinc layer 10 - 15 µ</i>
Herstellungslänge / <i>Production length</i>	6 m

Ab Werkslager liefern wir weitere Dimensionen und Werkstoffe.
We also supply ex works stock additional dimensions and steel grades.

A.D. Außendurchmesser
O.D. *outside diameter*

I.D. Innendurchmesser
I.D. *inside diameter*

W.D. Wanddicke
W.T. *wall thickness*

A.D. O.D. mm	W.D. W.T. mm	I.D. I.D. mm	Kg/m	HPL E235+N EN10305-4	HPL E355+N EN10305-4	ZISTA E235+N EN10305-4	ZISTA E355+N EN10305-4
4	1	2	0,074	●		●	
5	1	3	0,099	●		●	
6	0,75	4,5	0,097			●	
	1	4	0,123	●	●	●	
	1,5	3	0,166	●	●	●	
	2	2	0,197	●		●	
8	1	6	0,173	●	●	●	
	1,5	5	0,24	●	●	●	
	2	4	0,296	●		●	
	2,5	3	0,339	●			
10	1	8	0,222	●	●	●	
	1,5	7	0,314	●	●	●	
	2	6	0,395	●		●	
	2,5	5	0,462	●		●	
	3	4	0,518	●			
12	1	10	0,271	●		●	●
	1,5	9	0,388	●	●	●	●
	2	8	0,493	●	●	●	●
	2,5	7	0,586	●		●	
	3	6	0,666	●	●	●	
	3,5	5	0,734	●			
14	1	12	0,321			●	
	1,5	11	0,462	●		●	●
	2	10	0,592	●		●	●
	2,5	9	0,709	●		●	
	3	8	0,814	●			
	3,5	7	0,906	●			
	4	6	0,986	●			
15	1	13	0,345	●		●	
	1,5	12	0,499	●	●	●	
	2	11	0,641	●	●	●	
	2,5	10	0,771	●		●	
	3	9	0,888	●			
	3,5	8	0,993	●			
	4	7	1,09	●			
16	1	14	0,37	●			
	1,5	13	0,536	●		●	
	2	12	0,69	●	●	●	●
	2,5	11	0,832	●	●	●	●
	3	10	0,962	●		●	
	3,5	9	1,08	●			
	4	8	1,18	●			
18	1	16	0,419	●		●	
	1,5	15	0,61	●	●	●	●
	2	14	0,789	●	●	●	●
	2,5	13	0,956	●		●	
	3	12	1,11	●			
	3,5	11	1,25	●			
20	1,5	17	0,684	●		●	●
	2	16	0,888	●	●	●	●
	2,5	15	1,08	●	●	●	●
	3	14	1,26	●	●	●	
	3,5	13	1,42	●			
	4	12	1,58	●			
	5	10	1,85	●			

A.D. O.D. mm	W.D. W.T. mm	I.D. I.D. mm	Kg/m	HPL E235+N EN10305-4	HPL E355+N EN10305-4	ZISTA E235+N EN10305-4	ZISTA E355+N EN10305-4
22	1,5	19	0,758	●		●	
	2	18	0,986	●	●	●	●
	2,5	17	1,2	●		●	●
	3	16	1,41	●		●	●
	4	14	1,78	●			
25	1,5	22	0,869	●		●	
	2	21	1,13	●	●	●	●
	2,5	20	1,39	●	●	●	●
	3	19	1,63	●	●	●	●
	3,5	18	1,86	●	●	●	
	4	17	2,07	●	●	●	●
	4,5	16	2,28	●			
	5	15	2,47	●			
28	1,5	25	0,98	●		●	
	2	24	1,28	●		●	●
	2,5	23	1,57	●	●	●	●
	3	22	1,85	●	●	●	●
	4	20	2,37			●	
	5	18	2,84	●			
30	1,5	27	1,05			●	
	2	26	1,38	●	●	●	●
	2,5	25	1,7	●		●	
	3	24	2	●	●	●	●
	3,5	23	2,29	●			
	4	22	2,57	●	●	●	●
	5	20	3,08	●	●	●	
32	4	24	2,76	●			
35	2	31	1,63	●	●	●	
	2,5	30	2	●		●	
	3	29	2,37	●	●	●	●
	4	27	3,06	●		●	
	5	25	3,7	●		●	
	6	23	4,29	●			
38	2	34	1,78	●		●	●
	2,5	33	2,19	●			
	3	32	2,59	●	●	●	
	3,5	31	2,98	●			
	4	30	3,35	●		●	●
	5	28	4,07	●	●	●	●
	6	26	4,74	●	●	●	
40	2	36	1,87			●	
	3	34	2,74	●		●	
	4	32	3,55	●		●	
	5	30	4,32	●	●	●	
42	2	38	1,97	●	●	●	●
	2,5	37	2,44	●			
	3	36	2,89	●	●	●	●
	3,5	35	3,32	●			
	4	34	3,75	●	●	●	
	5	32	4,56	●	●	●	
	6	30	5,33	●		●	
48	5	38	5,3	●			
50	2	46	2,37			●	
	3	44	3,48	●	●		
	4	42	4,54	●			

A.D. O.D. mm	W.D. W.T. mm	I.D. I.D. mm	Kg/m	HPL E235+N EN10305-4	HPL E355+N EN10305-4	ZISTA E235+N EN10305-4	ZISTA E355+N EN10305-4
50	5	40	5,55	●	●		
	6	38	6,51		●		
	9	32	9,1	●			
60	3	54	4,22	●	●	●	
	4	52	5,52	●			
	5	50	6,78	●	●	●	
	10	40	12,33	●			
70	4	62	6,51	●	●		
	5	60	8,02	●			
75	3	69	5,33	●			
90	3,5	83	7,47	●			
115	4	107	10,95	●			