

## HIGH PRESSURE - precision pipes



### HPZ, HPC type

Cold drawn seamless precision pipes made of toughened steel.

**Material:** Steel grade E235+N according to EN 10305-4 standard.

Steel grade 37.4 NBK according to DIN 1630 (TDC - DIN 2391).

Zinc-plated coating, chromium (VI) free

**Length:** 6 meters (available in lengths of 2 or 3 meters)

code (black pipe)	code (zinc-plated pipe)	O.D. [mm]	wall thickness [mm]	I.D. [mm]	weight [kg/m]	theoretical press. [bar]		bursting pressure [bar]
						DIN2413 I static	DIN2413 III dynamic	
HR-HPZ1-06X1,0	HR-HPC1-06X1,0	6	1	4	0.123	389	374	1680
HR-HPZ1-08X1,5	HR-HPC1-08X1,5	8	1.5	5	0.240	431	414	1860
HR-HPZ1-10X1,0	HR-HPC1-10X1,0	10	1	8	0.222	282	249	870
HR-HPZ1-10X1,5	HR-HPC1-10X1,5	10	1.5	7	0.314	373	358	1380
HR-HPZ1-10X2,0	HR-HPC1-10X2,0	10	2	6	0.395	478	460	2100
HR-HPZ1-12X1,5	HR-HPC1-12X1,5	12	1.5	9	0.389	353	305	1150
HR-HPZ1-12X2,0	HR-HPC1-12X2,0	12	2	8	0.493	409	393	1580
HR-HPZ1-14X2,0	HR-HPC1-14X2,0	14	2	10	0.592	403	343	1340
HR-HPZ1-15X1,5	HR-HPC1-15X1,5	15	1.5	12	0.499	282	249	980
HR-HPZ1-15X2,0	HR-HPC1-15X2,0	15	2	11	0.641	376	323	1250
HR-HPZ1-16X2,0	HR-HPC1-16X2,0	16	2	12	0.691	353	305	1170
HR-HPZ1-18X2,0	HR-HPC1-18X2,0	18	2	14	0.789	313	274	1040
HR-HPZ1-20X3,0	HR-HPC1-20X3,0	20	3	14	1.260	373	358	1450
HR-HPZ1-22X2,0	HR-HPC1-22X2,0	22	2	18	0.986	256	228	850
HR-HPZ1-25X2,0	-	25	2	21	1.130	226	202	670
HR-HPZ1-25X3,0	HR-HPC1-25X3,0	25	3	19	1.630	338	294	1050
HR-HPZ1-28X2,0	HR-HPC1-28X2,0	28	2	24	1.280	201	182	620
HR-HPZ1-30X3,0	HR-HPC1-30X3,0	30	3	24	2.000	282	249	920
HR-HPZ1-35X3,0	HR-HPC1-35X3,0	35	3	29	2.370	242	216	720
HR-HPZ1-38X4,0	HR-HPC1-38X4,0	38	4	30	3.350	297	261	970
HR-HPZ1-42X4,0	-	42	4	34	3.750	269	238	850

Theoretical pressure according to DIN 2413-93.

#### Technical Delivery Conditions (TDC):

- pipes are annealed under controlled atmosphere (normalised NBK (+N)),
- surface protection: phosphate coating (black pipes) and light oil,
- smooth edges (free from burr), blinded, 6-meter lengths.

Dimension tolerance according to DIN 2462 (EN ISO 1127): D4/T3.

**Note! For pipe bending and processing tools - see chapter MACHINES AND ACCESSORIES.**

## HIGH PRESSURE - precision pipes



### HPS type

Cold drawn seamless precision pipes made of austenitic stainless steel.

**Material:** EN 1.4435, ASTM TP 316L

Dimensions and tolerances according to EN 10305-1

Pipes are also available in imperial sizes

**Length:** 6 m (can be cut into 2 or 3 m lengths)

code	O.D. [mm]	wall thickness [mm]	I.D. [mm]	weight [kg/m]	theoretical press. [bar]	
					EN 13480-3	ASME B31.3
HR-HPS1-06X1.0	6	1	4	0.13	510	470
HR-HPS1-08X1.0	8	1	6	0.18	366	340
HR-HPS1-08X1.5	8	1.5	5	0.24	587	537
HR-HPS1-10X1.0	10	1	8	0.23	286	267
HR-HPS1-10X1.5	10	1.5	7	0.32	451	417
HR-HPS1-10X2.0	10	2	6	0.4	635	577
HR-HPS1-12X1.5	12	1.5	9	0.39	366	340
HR-HPS1-12X2.0	12	2	8	0.5	510	470
HR-HPS1-14X2.0	14	2	10	0.6	426	395
HR-HPS1-15X1.5	15	1.5	12	0.51	286	267
HR-HPS1-15X2.0	15	2	11	0.65	394	366
HR-HPS1-16X2.0	16	2	12	0.7	366	340
HR-HPS1-18X1.5	18	1.5	15	0.62	234	220
HR-HPS1-18X2.0	18	2	14	0.8	321	299
HR-HPS1-20X2.5	20	2.5	15	1.09	366	340
HR-HPS1-22X2.0	22	2	18	1	257	241
HR-HPS1-25X2.0	25	2	21	1.15	224	210
HR-HPS1-25X2.5	25	2.5	20	1.41	286	267
HR-HPS1-25X3.0	25	3	19	1.65	350	326
HR-HPS1-28X2.0	28	2	24	1.3	198	186
HR-HPS1-30X3.0	30	3	24	2.03	286	267
HR-HPS1-35X3.0	35	3	29	2.4	241	226
HR-HPS1-38X3.0	38	3	32	2.63	221	207
HR-HPS1-38X4.0	38	4	30	3.41	302	282
HR-HPS1-42X3.0	42	3	36	2.93	198	186

#### Technical Delivery Conditions (TDC):

- pipes annealed after cold drawing process,
- 6 meter lengths,
- smooth, round edges, secured with caps.

Pipes compliant with the following standards:

- EN 10216-5 TC1
- ASTM A213-AW
- ASTM A269
- PED 97/23/EC
- NACE MR0175/ISO 15156

**Note! For pipe bending and processing tools - see chapter MACHINES AND ACCESSORIES.**