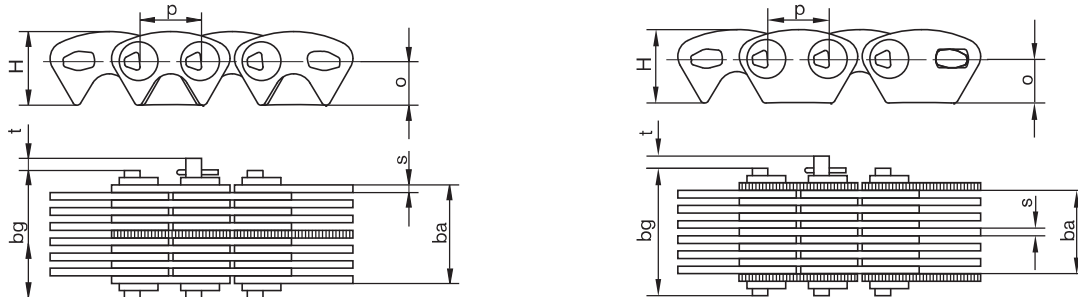


# HPC inverted tooth chains

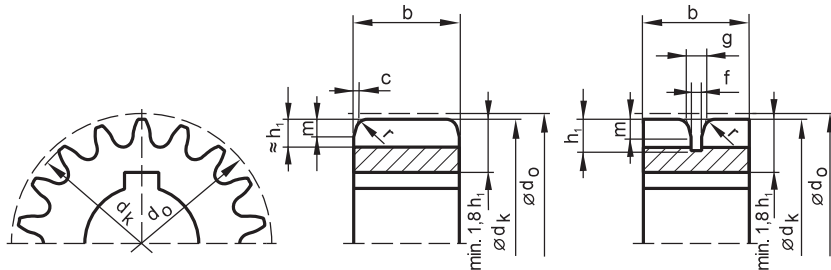


Pitch p	Designation no.	RZ	Nominal width $b_n$	Working width $b_a$	Total width $b_g$	Design breaking load	Weight [kg/m]	Sprocket width b	H	o	s	t
3/8" = 9.525 mm	HPC 015 A	10	15	12.5	19.9	25.4	1.0	11.5	11.3	6.8	1.5	2.0
	HPC 020 A	13	20	17.2	24.5	30.1	1.2	16.0				
	HPC 025	17	25	26.6	30.8	39.3	1.5	30.0				
	HPC 030	21	30	32.9	37.1	48.6	1.8	35.0				
	HPC 040	25	40	39.1	43.3	57.9	2.2	45.0				
	HPC 050	33	50	51.6	55.8	76.4	2.9	55.0				
	HPC 065	41	65	64.2	68.4	94.9	3.6	70.0				
1/2" = 12.7 mm	HPC 320 A	13	20	17.2	26.3	34.1	1.6	16.0	15.2	9.0	1.5	2.5
	HPC 325	17	25	26.6	32.6	52.7	2.0	30.0				
	HPC 330	21	30	32.9	38.9	65.1	2.4	35.0				
	HPC 350	33	50	51.6	57.6	102.3	3.8	55.0				
	HPC 375	49	75	76.7	82.7	152.0	5.6	80.0				
	HPC 3100	65	100	101.7	107.7	201.6	7.5	105.0				
	HPC 3125	81	125	126.8	132.8	251.3	9.3	130.0				
3/4" = 19.05 mm	HPC 525	13	25	27.0	34.0	80.1	3.0	30.0	22.5	13.5	2.0	3.5
	HPC 540	21	40	43.7	50.7	129.4	4.9	50.0				
	HPC 550	25	50	52.0	59.0	154.0	5.8	55.0				
	HPC 585	41	85	85.3	92.3	252.6	9.5	90.0				
	HPC 5100	49	100	101.9	108.9	301.9	11.4	105.0				
	HPC 5125	61	125	126.9	133.9	375.9	14.1	130.0				
	HPC 5150	73	150	151.8	158.8	449.8	16.9	155.0				
	HPC 5200	97	200	201.8	208.8	597.7	22.5	205.0				
1" = 25.4 mm	HPC 640	13	40	40.2	48.2	152.4	6.0	45.0	30.0	18.0	3.0	4.0
	HPC 650	17	50	52.6	60.6	199.4	7.9	55.0				
	HPC 665	21	65	65.0	73.0	246.3	9.7	70.0				
	HPC 675	25	75	77.4	85.4	293.2	11.6	80.0				
	HPC 6100	33	100	102.1	110.1	387.0	15.3	105.0				
	HPC 6125	41	125	126.9	134.9	480.9	19.0	130.0				
	HPC 6150	49	150	151.7	159.7	574.7	22.7	155.0				
	HPC 6200	65	200	201.2	209.2	762.4	30.1	205.0				
1 1/2" = 38.1 mm	HPC 850	17	50	52.8	64.8	303.4	11.8	60.0	45.0	27.0	3.0	6.0
	HPC 865	21	65	65.2	77.2	374.8	14.6	75.0				
	HPC 875	25	75	77.6	89.6	446.2	17.4	85.0				
	HPC 8100	33	100	102.5	114.5	589.0	22.9	110.0				
	HPC 8125	41	125	127.3	139.3	731.8	28.5	135.0				
	HPC 8150	49	150	152.1	164.1	874.6	34.1	160.0				
	HPC 8200	65	200	201.8	213.8	1160.2	45.2	210.0				

Dimensions in mm – Design breaking load in kN – RZ (Number of rows) = number of all link plates per joint – Other pitches and widths on request.

- HPC inverted tooth chains are delivered open and with a split pin lock if not specified otherwise.
- Revolving chains require an even number of links. Chains with an uneven number of links could not be closed.
- Uneven numbers of links are permitted only if the ends of the chain are connected to external parts.

# HPC inverted tooth sprockets



Minimum number of teeth:

3/8" to 3/4" = 17 teeth

1", 1 1/2" = 19 teeth

from 1 m/s ≥ = 23 teeth

Tip diameter $d_k$					
Number of teeth $z$	3/8"	1/2"	3/4"	1"	1 1/2"
17	46.3	61.5	92.7	-	-
18	49.5	65.7	98.9	-	-
19	52.6	69.9	105.1	139.8	210.4
20	55.7	74.0	111.4	148.1	222.8
21	58.8	78.2	117.6	156.4	235.2
22	61.9	82.3	123.8	164.6	247.5
23	65.0	86.4	129.9	172.8	259.9
24	68.1	90.5	136.1	181.1	272.2
25	71.1	94.7	142.3	189.3	284.5
26	74.2	98.8	148.4	197.5	296.8
27	77.3	102.9	154.6	205.7	309.0
28	80.4	107.0	160.7	213.8	321.3
29	83.4	111.1	166.8	222.0	333.6
30	86.5	115.1	173.0	230.2	345.8
31	89.6	119.2	179.1	238.4	358.1
33	95.7	127.4	191.3	254.7	382.5
35	101.8	135.6	203.6	271.0	407.0
37	107.9	143.7	215.8	287.3	431.4
39	114.0	151.9	228.0	303.5	455.8
41	120.1	160.0	240.2	319.8	480.2
43	126.2	168.1	252.4	336.0	504.5
45	132.3	176.2	264.6	352.3	528.9
47	138.4	184.4	276.8	368.5	553.2
49	144.5	192.5	288.9	384.8	577.6
51	150.6	200.6	301.1	401.0	601.9
55	162.7	216.8	325.5	433.4	650.6
60	177.9	237.1	355.9	474.0	711.4
70	208.3	277.6	416.6	555.0	832.9
80	238.7	318.1	477.4	636.0	954.4
90	269.1	358.6	538.1	716.9	1075.8
100	299.4	399.1	598.8	797.9	1197.2
110	329.8	439.6	659.5	878.8	1318.6
120	360.1	480.0	720.2	959.7	1439.9
130	390.4	520.5	780.9	1040.6	1561.3
140	420.8	560.9	841.5	1121.5	1682.6
150	451.1	601.4	902.2	1202.4	1803.9

Guideway and profile					
Pitch $p$	3/8"	1/2"	3/4"	1"	1 1/2"
$g$	4.0	4.0	5.0	8.0	9.0
$f$	3.0	3.0	4.0	6.0	6.0
$h_1$	5.5	7.0	11.0	14.0	22.0
$m$	4.0	5.0	8.0	9.0	16.0
$r$	2.0	2.0	3.0	3.0	4.0
$c$	0.5	0.5	0.5	1.0	1.5

The pitch circle diameter helps determine the correct external diameter of the sprocket with an attached chain in new condition.

**Pitch circle diameter:**

$$d_0 = \frac{p}{\sin(180^\circ/z)}$$

**Max. diameter incl. chain**

$$D_{max} = d_0 + 2 \cdot (H-o)$$

Dimensions in mm – Interpolate intermediate values