

# Crossed Helical Gears *Materials*

Steel Crossed Axis @ 90° STD : Steel 214M15/045M10

48 DP 45°H.A. ALTERNATIVE : Brass, Tufnol or Delrin

20° P.A. SPECIAL TEETH : between 10 - 250

TORQUE CHECK 50 teeth x 1000 rpm	214M15 303S21	214M15 Cse/HD	Brass	Tufnol	
variations at back	<b>TORQUE Nm.</b>	0.125	0.823	0.626	0.449
	<b>K.W.</b>	0.013	0.087	0.065	0.047



RH 45°



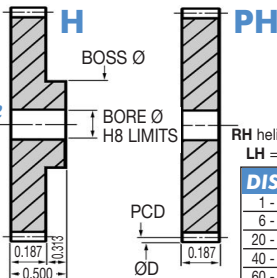
LH available  
on request.

RH 45°

RH runs with RH

Popular sizes in stock.

Any two part numbers of this pitch will run together.



RH helix is standard.  
LH = price + 33%.

## DISCOUNTS

	List Price
1 - 5	
6 - 19	- 12%
20 - 39	- 25%
40 - 59	- 33%
60 - 99	- 37%
100 - 200	- 42%

PART NUMBER	TEETH	PCD (ins)	ØD (ins)	BOSS Ø (ins)	BORE Ø (ins)	PRICE EACH 1 - 5	
						H	PH
H48-10	10	0.295	0.336	0.312	0.125	£10.42	£8.83
H48-11	11	0.324	0.366	0.312	0.125	£10.72	£9.18
H48-12	12	0.354	0.395	0.312	0.125	£10.76	£9.32
H48-13	13	0.383	0.425	0.312	0.125	£10.97	£9.55
H48-14	14	0.412	0.454	0.312	0.125	£11.15	£9.61
H48-15	15	0.442	0.484	0.375	0.187	£11.30	£9.72
H48-16	16	0.471	0.513	0.375	0.187	£11.49	£9.82
H48-17	17	0.501	0.543	0.375	0.187	£11.50	£9.84
H48-18	18	0.530	0.572	0.437	0.187	£11.73	£9.97
H48-19	19	0.560	0.601	0.437	0.187	£11.84	£10.02
H48-20	20	0.589	0.631	0.500	0.187	£12.06	£10.22
H48-21	21	0.619	0.660	0.500	0.187	£12.15	£10.24
H48-22	22	0.648	0.690	0.500	0.187	£12.40	£10.30
H48-23	23	0.678	0.719	0.500	0.187	£12.56	£10.42
H48-24	24	0.707	0.749	0.500	0.187	£12.69	£10.47
H48-25	25	0.737	0.778	0.500	0.187	£12.83	£10.65
H48-26	26	0.766	0.808	0.500	0.187	£13.30	£10.80
H48-27	27	0.795	0.837	0.500	0.187	£13.63	£10.95
H48-28	28	0.825	0.867	0.500	0.187	£13.64	£11.28
H48-29	29	0.854	0.896	0.500	0.187	£13.98	£11.35
H48-30	30	0.884	0.926	0.500	0.250	£14.33	£11.66
H48-31	31	0.913	0.955	0.500	0.250	£14.50	£11.81
H48-32	32	0.943	0.984	0.500	0.250	£14.77	£12.09

Helical Gears Crossed Axis Steel DP 48

25.42



Unit 14, Foxwood Ind. Park, Foxwood Rd. Chesterfield, Derbyshire S41 9RN

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PART NUMBER	TEETH	PCD (ins)	ØD (ins)	BOSS Ø (ins)	BORE Ø (ins)	PRICE EACH 1 - 5	
						H	PH
H48-33	33	0.972	1.014	0.500	0.250	£14.83	£12.15
H48-34	34	1.002	1.043	0.500	0.250	£15.23	£12.22
H48-35	35	1.031	1.073	0.500	0.250	£15.45	£12.40
H48-36	36	1.061	1.102	0.500	0.250	£15.55	£12.51
H48-37	37	1.090	1.132	0.500	0.250	£15.77	£12.75
H48-38	38	1.120	1.161	0.500	0.250	£15.87	£12.83
H48-39	39	1.149	1.191	0.500	0.250	£16.12	£13.03
H48-40	40	1.179	1.220	0.500	0.250	£16.19	£13.14
H48-41	41	1.208	1.250	0.500	0.250	£16.27	£13.27
H48-42	42	1.237	1.279	0.500	0.250	£16.38	£13.37
H48-43	43	1.267	1.309	0.500	0.250	£16.60	£13.59
H48-44	44	1.296	1.338	0.500	0.250	£16.72	£13.68
H48-45	45	1.326	1.367	0.500	0.250	£16.92	£13.93
H48-46	46	1.355	1.397	0.500	0.250	£16.95	£13.98
H48-47	47	1.385	1.426	0.500	0.250	£16.96	£14.02
H48-48	48	1.414	1.456	0.500	0.250	£16.98	£14.05
H48-49	49	1.444	1.485	0.500	0.250	£17.06	£14.13
H48-50	50	1.473	1.515	0.500	0.250	£17.09	£14.15
H48-51	51	1.503	1.544	0.500	0.250	£17.13	£14.20
H48-52	52	1.532	1.574	0.500	0.250	£17.38	£14.46
H48-53	53	1.562	1.603	0.500	0.250	£17.44	£14.50
H48-54	54	1.591	1.633	0.500	0.250	£17.76	£14.77
H48-55	55	1.620	1.662	0.500	0.250	£17.90	£15.04
H48-56	56	1.650	1.692	0.500	0.250	£17.98	£15.07
H48-57	57	1.679	1.721	0.500	0.250	£18.23	£15.40
H48-58	58	1.709	1.751	0.500	0.250	£18.25	£15.42
H48-59	59	1.738	1.780	0.500	0.250	£18.30	£15.47
H48-60	60	1.768	1.809	0.500	0.250	£18.71	£15.51
H48-61	61	1.797	1.839	0.500	0.250	£18.76	£15.57
H48-62	62	1.827	1.868	0.500	0.250	£19.27	£15.76
H48-63	63	1.856	1.898	0.500	0.250	£19.46	£15.90
H48-64	64	1.886	1.927	0.500	0.250	£19.69	£16.46
H48-65	65	1.915	1.957	0.500	0.250	£19.71	£16.49
H48-68	68	2.003	2.045	0.750	0.312	£19.73	£17.69
H48-70	70	2.062	2.104	0.750	0.312	£20.42	£17.76
H48-72	72	2.121	2.163	0.750	0.312	£22.99	£20.31
H48-75	75	2.210	2.251	0.750	0.312	£23.84	£20.34
H48-77	77	2.269	2.310	0.750	0.312	£23.92	£20.35
H48-80	80	2.357	2.399	0.750	0.312	£24.73	£20.37
H48-84	84	2.475	2.517	0.750	0.312	£24.77	£20.42
H48-86	86	2.534	2.575	0.750	0.312	£27.18	£21.52
H48-88	88	2.593	2.634	0.750	0.312	£27.69	£21.60
H48-90	90	2.652	2.693	0.750	0.312	£29.27	£21.62
H48-96	96	2.828	2.870	0.750	0.312	£30.72	£21.65
H48-100	100	2.946	2.988	0.750	0.312	£33.47	£23.88
H48-120	120	3.536	3.577	0.750	0.375	£36.91	£27.60
H48-140	140	4.125	4.166	0.750	0.375	£39.96	£31.99

*'Never Knowingly Outpriced'*

*Gears with a greater number of teeth than listed are subject to different face widths, boss and bore. Please consult Technical for sizes.*



# Crossed Helical Gears Materials

Plastic Crossed Axis @ 90°

**48 DP**

45° H.A.  
20° P.A.

STD : White Delrin  
(fully machined)

SPECIAL TEETH : between 9 - 250



TORQUE CHECK	
50 teeth x 1000 rpm	
variations at back	TORQUE Nm. 0.03



**RH 45°**

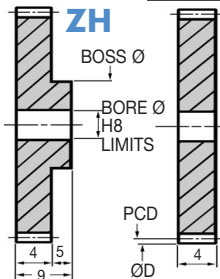


LH available on request.

**RH 45°**

RH runs with RH  
Popular sizes in stock.

Any two part numbers of this pitch will run together.



**ZPH**

RH helix is standard.  
LH = price + 33%.

### DISCOUNTS

Quantity	List Price
1 - 5	
6 - 29	- 22%
30 - 99	- 44%
100 - 399	- 47%
400 - 999	- 50%
1000 - 5000	- 53%

Helical Gears Crossed Axis Plastic DP 48

PART NUMBER	TEETH	PCD (ins)	ØD (ins)	BOSS Ø (ins)	BORE Ø (mm)	PRICE EACH 1 - 5	ZH	ZPH
ZH48-10	10	0.295	0.336	0.336	2	£5.48	£4.04	
ZH48-11	11	0.324	0.366	0.366	2	£5.49	£4.07	
ZH48-12	12	0.354	0.395	0.395	2	£5.50	£4.08	
ZH48-13	13	0.383	0.425	0.393	3	£5.52	£4.21	
ZH48-14	14	0.412	0.454	0.393	3	£5.54	£4.24	
ZH48-15	15	0.442	0.484	0.393	3	£5.67	£4.27	
ZH48-16	16	0.471	0.513	0.393	3	£5.79	£4.36	
ZH48-17	17	0.501	0.543	0.393	3	£5.85	£4.38	
ZH48-18	18	0.530	0.572	0.393	3	£5.90	£4.44	
ZH48-19	19	0.560	0.601	0.393	3	£6.04	£4.49	
ZH48-20	20	0.589	0.631	0.393	3	£6.06	£4.61	
ZH48-21	21	0.619	0.660	0.393	3	£6.20	£4.62	
ZH48-22	22	0.648	0.690	0.551	4	£6.30	£4.75	
ZH48-23	23	0.678	0.719	0.551	4	£6.38	£4.79	
ZH48-24	24	0.707	0.749	0.551	4	£6.39	£4.83	
ZH48-25	25	0.737	0.778	0.551	4	£6.68	£4.85	
ZH48-26	26	0.766	0.808	0.551	4	£6.76	£5.09	
ZH48-27	27	0.795	0.837	0.551	4	£6.77	£5.19	
ZH48-28	28	0.825	0.867	0.551	4	£7.02	£5.22	
ZH48-29	29	0.854	0.896	0.551	4	£7.14	£5.33	
ZH48-30	30	0.884	0.926	0.551	4	£7.31	£5.52	
ZH48-31	31	0.913	0.955	0.551	4	£7.38	£5.54	
ZH48-32	32	0.943	0.984	0.551	4	£7.40	£5.67	

**25.44**



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PART NUMBER	TEETH	PCD (ins)	ØD (ins)	BOSS Ø (ins)	BORE Ø (mm)	PRICE EACH 1 - 5 ZH	ZPH
ZH48-33	33	0.972	1.014	0.551	4	£7.64	£5.72
ZH48-34	34	1.002	1.043	0.551	4	£7.73	£5.85
ZH48-35	35	1.031	1.073	0.551	4	£7.75	£5.90
ZH48-36	36	1.061	1.102	0.551	4	£7.87	£5.95
ZH48-37	37	1.090	1.132	0.551	4	£8.73	£6.06
ZH48-38	38	1.120	1.161	0.551	4	£8.88	£6.72
ZH48-39	39	1.149	1.191	0.551	4	£8.93	£6.75
ZH48-40	40	1.179	1.220	0.551	4	£8.96	£6.77
ZH48-41	41	1.208	1.250	0.551	4	£9.04	£6.87
ZH48-42	42	1.237	1.279	0.551	4	£9.18	£6.95
ZH48-43	43	1.267	1.309	0.551	4	£9.26	£7.02
ZH48-44	44	1.296	1.338	0.551	4	£9.30	£7.04
ZH48-45	45	1.326	1.367	0.551	4	£9.32	£7.09
ZH48-46	46	1.355	1.397	0.551	4	£9.38	£7.10
ZH48-47	47	1.385	1.426	0.551	4	£9.40	£7.12
ZH48-48	48	1.414	1.456	0.551	4	£9.47	£7.14
ZH48-49	49	1.444	1.485	0.551	4	£9.47	£7.40
ZH48-50	50	1.473	1.515	0.629	5	£9.48	£7.45
ZH48-51	51	1.503	1.544	0.629	5	£9.49	£7.49
ZH48-52	52	1.532	1.574	0.629	5	£10.95	£8.36
ZH48-53	53	1.562	1.603	0.629	5	£10.97	£8.38
ZH48-54	54	1.591	1.633	0.629	5	£11.12	£8.53
ZH48-55	55	1.620	1.662	0.629	5	£11.28	£8.59
ZH48-56	56	1.650	1.692	0.629	5	£11.49	£8.62
ZH48-57	57	1.679	1.721	0.629	5	£11.50	£8.73
ZH48-58	58	1.709	1.751	0.629	5	£11.51	£8.77
ZH48-59	59	1.738	1.780	0.629	5	£11.74	£8.81
ZH48-60	60	1.768	1.809	0.629	5	£11.76	£9.02
ZH48-61	61	1.797	1.839	0.629	5	£11.96	£9.04
ZH48-62	62	1.827	1.868	0.629	5	£12.22	£9.30
ZH48-63	63	1.856	1.898	0.629	5	£12.62	£9.31
ZH48-64	64	1.886	1.927	0.629	5	£14.83	£9.32
ZH48-65	65	1.915	1.957	0.629	5	£14.90	£11.28
ZH48-68	68	2.003	2.045	0.629	5	£15.42	£11.47
ZH48-70	70	2.062	2.104	0.629	5	£17.34	£11.76
ZH48-72	72	2.121	2.163	0.629	5	£17.99	£13.30
ZH48-75	75	2.210	2.251	0.629	5	£20.55	£13.78
ZH48-77	77	2.269	2.310	0.629	5	£21.15	£15.71
ZH48-80	80	2.357	2.399	0.629	5	£21.24	£16.23
ZH48-84	84	2.475	2.517	0.708	6	£23.30	£16.25
ZH48-86	86	2.534	2.575	0.708	6	£23.80	£17.87
ZH48-88	88	2.593	2.634	0.708	6	£25.22	£18.18
ZH48-90	90	2.652	2.693	0.708	6	£26.31	£19.59
ZH48-96	96	2.828	2.870	0.708	6	£28.69	£20.11
ZH48-100	100	2.946	2.988	0.708	6	£37.08	£21.98
ZH48-120	120	3.536	3.577	0.787	8	£37.20	£28.58
ZH48-128	128	3.771	3.813	0.787	8	£48.45	£39.79

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