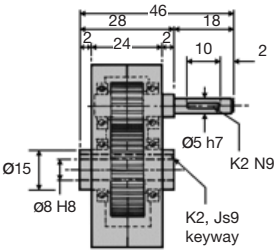
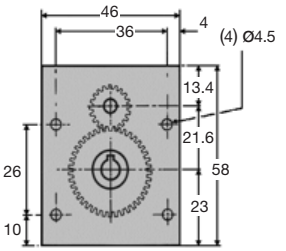
Offset Spur Gear Reducers HPCFF10

WEIGHT	0.21 Kg
BACKLASH (approx.)	1° approx
HOURS LIFE	12000 hr
MAX INPUT SPEED	2000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
GEAR MAT'L	817M40 (EN24) & 655M13 Case/HD (EN36)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 2:1	3:1	4:1	5:1	6:1	7:1
	2000	1.34	1.29	1.15	1.10	0.94	0.78
	1000	1.55	1.49	1.33	1.27	1.08	0.90
	500	1.85	1.78	1.58	1.51	1.30	1.07
	200	2.08	2.00	1.78	1.71	1.46	1.21
	100	2.44	2.35	2.09	2.00	1.71	1.42
	50	2.74	2.63	2.36	2.25	1.92	1.60
	10	3.70	3.57	3.16	3.03	2.60	2.16

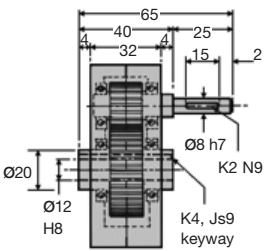
DISCOUNTS	
1 - 5	List Price
6 - 19	-5%
20 - 49	-10%
50 - 99	-15%
100 +	-20%

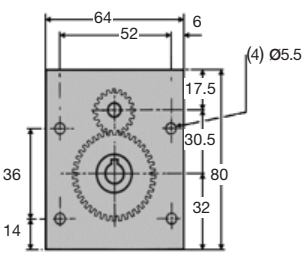
PART NUMBER	Ratio	% Effi. @ 1000 rpm	Max Input Speed	Max Output Speed	Nm Output @ 1000 rpm	PRICE EACH 1-5
HPCFF10-2	2:1	93	2000	1000	1.55	**£125.88**
HPCFF10-3	3:1	93	2000	666	1.49	**£125.88**
HPCFF10-4	4:1	93	2000	500	1.33	**£125.88**
HPCFF10-5	5:1	93	2000	400	1.27	**£125.88**
HPCFF10-6	6:1	93	2000	333	1.08	**£125.88**
HPCFF10-7	7:1	93	2000	285	0.90	**£125.88**
HPCFF10-XH	Hardened Gears 2:1 to 7:1 multiply torque figures by 2					**£222.52**

Other Info.
Testing in your application is necessary.
You will need to assess duty, cycles and confirm gearbox suitability with your own calculations.
Torque figures are to be used for guidance only.

HPCFF15 Offset Spur Gear Reducers

WEIGHT	0.55 Kg
BACKLASH (approx.)	1° approx
HOURS LIFE	12000 hr
MAX INPUT SPEED	2000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
GEAR MAT'L	817M40 (EN24) & 655M13 Case/HD (EN36)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 2:1	3:1	4:1	5:1	6:1	7:1
	2000	3.7	3.5	3.2	2.9	2.6	2.2
	1000	4.3	4.0	3.7	3.4	3.1	2.6
	500	5.0	4.8	4.4	4.0	3.6	3.0
	200	5.7	5.5	5.0	4.4	3.9	3.2
	100	6.7	6.5	5.9	5.1	4.5	3.7
	50	7.5	7.2	6.5	5.7	5.0	4.0
	10	10.0	9.8	9.0	8.0	7.3	6.1

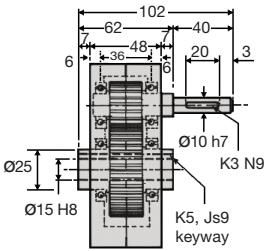
DISCOUNTS	
1 - 5	List Price
6 - 19	-5%
20 - 49	-10%
50 - 99	-15%
100 +	-20%

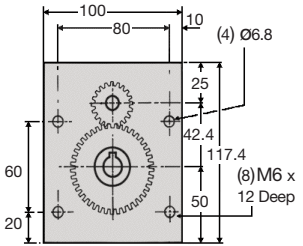
PART NUMBER	Ratio	% Effi. @ 1000 rpm	Max Input Speed	Max Output Speed	Nm Output @ 1000 rpm	PRICE EACH 1-5
HPCFF15-2	2:1	93	2000	1000	4.30	**£153.93**
HPCFF15-3	3:1	93	2000	666	4.00	**£153.93**
HPCFF15-4	4:1	93	2000	500	3.70	**£153.93**
HPCFF15-5	5:1	93	2000	400	3.40	**£153.93**
HPCFF15-6	6:1	93	2000	333	3.10	**£153.93**
HPCFF15-7	7:1	93	2000	285	2.60	**£153.93**
HPCFF15-XH	Hardened Gears 2:1 to 7:1 multiply torque figures by 2					**£276.97**

Other Info.
Testing in your application is necessary.
You will need to assess duty, cycles and confirm gearbox suitability with your own calculations.
Torque figures are to be used for guidance only.

Offset Spur Gear Reducers HPCFF20

WEIGHT	1.9 Kg
BACKLASH (approx.)	1° approx
HOURS LIFE	12000 hr
MAX INPUT SPEED	2000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
GEAR MAT'L	817M40 (EN24) & 655M13 Case/HD (EN36)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 2:1	3:1	4:1	5:1	6:1	7:1
	2000	9.20	8.70	8.00	6.90	6.60	5.80
	1000	10.8	10.2	9.50	8.20	7.80	6.90
	500	12.5	11.8	11.0	9.60	9.00	8.20
	200	15.0	14.2	13.1	11.5	10.8	9.80
	100	16.7	15.7	14.6	12.8	12.0	10.9
	50	19.2	18.1	16.8	14.5	13.8	12.5
	10	23.0	21.6	20.0	17.5	16.5	15.0

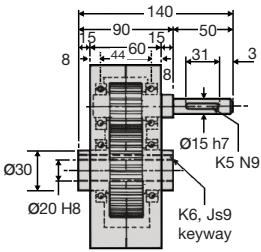
DISCOUNTS	
1 - 5	List Price
6 - 19	-5%
20 - 49	-10%
50 - 99	-15%
100 +	-20%

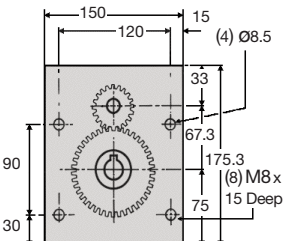
PART NUMBER	Ratio	% Effi. @ 1000 rpm	Max Input Speed	Max Output Speed	Nm Output @ 1000 rpm	PRICE EACH 1-5
HPCFF20-2	2:1	93	2000	1000	10.80	**£234.13**
HPCFF20-3	3:1	93	2000	666	10.20	**£234.13**
HPCFF20-4	4:1	93	2000	500	9.50	**£234.13**
HPCFF20-5	5:1	93	2000	400	8.20	**£234.13**
HPCFF20-6	6:1	93	2000	333	7.80	**£234.13**
HPCFF20-7	7:1	93	2000	285	6.90	**£234.13**
HPCFF20-XH	Hardened Gears 2:1 to 7:1 multiply torque figures by 2					**£391.15**

Other Info.
Testing in your application is necessary.
You will need to assess duty, cycles and confirm gearbox suitability with your own calculations.
Torque figures are to be used for guidance only.

HPCFF30 Offset Spur Gear Reducers

WEIGHT	5.5 Kg
BACKLASH (approx.)	1° approx
HOURS LIFE	12000 hr
MAX INPUT SPEED	2000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
GEAR MAT'L	817M40 (EN24) & 655M13 Case/HD (EN36)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque

RPM Input	Reduction ratio 2:1	3:1	4:1	5:1	6:1	7:1
2000	33.2	29.1	25.2	24.3	25.3	23.0
1000	39.1	34.4	29.8	28.7	30.0	27.1
500	45.2	39.7	34.4	33.1	34.5	31.3
200	54.3	47.6	41.3	39.7	41.4	37.5
100	60.4	52.9	45.9	44.2	46.0	41.8
50	69.0	60.8	53.0	50.8	53.0	48.0
10	83.0	72.7	63.0	60.7	63.3	57.5

DISCOUNTS

	List Price
1 - 5	
6 - 19	-5%
20 - 49	-10%
50 - 99	-15%
100 +	-20%

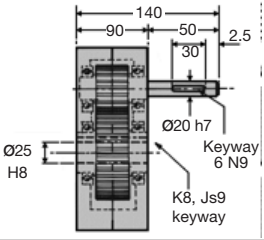
PART NUMBER	Ratio	% Effi. @ 1000 rpm	Max Input Speed	Max Output Speed	Nm Output @ 1000 rpm	PRICE EACH 1-5
HPCFF30-2	2:1	93	2000	1000	39.10	**£312.96**
HPCFF30-3	3:1	93	2000	666	34.40	**£312.96**
HPCFF30-4	4:1	93	2000	500	29.80	**£312.96**
HPCFF30-5	5:1	93	2000	400	28.70	**£312.96**
HPCFF30-6	6:1	93	2000	333	27.30	**£312.96**
HPCFF30-7	7:1	93	2000	285	25.10	**£312.96**
HPCFF30-XH	Hardened Gears 2:1 to 7:1 multiply torque figures by 2					**£487.69**

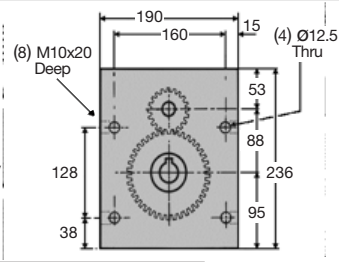
Other Info.
Testing in your application is necessary.
You will need to assess duty, cycles and confirm gearbox suitability with your own calculations.
Torque figures are to be used for guidance only.

Parallel Spur Gear Reducers

HPCFF40

WEIGHT	13.5 Kg
BACKLASH (approx.)	1° approx
HOURS LIFE	12000 hr
MAX INPUT SPEED	2000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
GEAR MAT'L	817M40 (EN24) & 655M13 Case/HD (EN36)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 2:1	3:1	4:1	5:1	6:1	7:1
	2000	83	83	76	70	61	59
	1000	90	90	82	76	66	64
	500	103	102	95	87	76	73
	200	120	120	110	102	89	86
	100	138	135	126	116	101	98
	50	156	155	146	136	117	113
	10	210	210	196	180	158	152

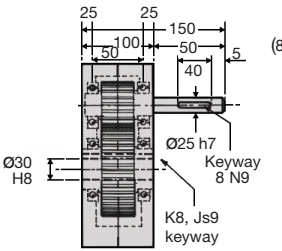
DISCOUNTS	
1 - 5	List Price
6 - 19	-5%
20 - 49	-10%
50 - 99	-15%
100 +	-20%

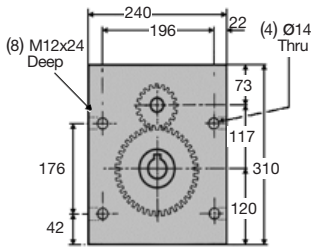
PART NUMBER	Ratio	% Effi. @ 1000 rpm	Max Input Speed	Max Output Speed	Nm Output @ 1000 rpm	PRICE EACH 1-5
HPCFF40-2	2:1	93	2000	1000	90	**£523.19**
HPCFF40-3	3:1	93	2000	666	90	**£523.19**
HPCFF40-4	4:1	93	2000	500	82	**£523.19**
HPCFF40-5	5:1	93	2000	400	76	**£523.19**
HPCFF40-6	6:1	93	2000	333	66	**£523.19**
HPCFF40-7	7:1	93	2000	285	64	**£523.19**
HPCFF40-XH	Hardened Gears 2:1 to 7:1 multiply torque figures by 2					**£685.59**

Other Info.
Testing in your application is necessary.
You will need to assess duty, cycles and confirm gearbox suitability with your own calculations.
Torque figures are to be used for guidance only.

HPCFF50 Parallel Spur Gear Reducers

WEIGHT	26.3 Kg
BACKLASH (approx.)	1° approx
HOURS LIFE	12000 hr
MAX INPUT SPEED	2000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
GEAR MAT'L	817M40 (EN24) & 655M13 Case/HD (EN36)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 2:1	3:1	4:1	5:1	6:1	7:1
	2000	166	156	147	138	120	111
	1000	180	168	160	149	130	120
	500	207	194	183	172	150	139
	200	242	226	214	200	175	162
	100	276	260	245	220	200	185
	50	318	300	282	264	230	212
	10	425	400	380	356	310	286

DISCOUNTS	
1 - 5	List Price
6 - 19	-5%
20 - 49	-10%
50 - 99	-15%
100 +	-20%

PART NUMBER	Ratio	% Effi. @ 1000 rpm	Max Input Speed	Max Output Speed	Nm Output @ 1000 rpm	PRICE EACH 1-5
HPCFF50-2	2:1	93	2000	1000	180	**£803.35**
HPCFF50-3	3:1	93	2000	666	168	**£803.35**
HPCFF50-4	4:1	93	2000	500	160	**£803.35**
HPCFF50-5	5:1	93	2000	400	149	**£803.35**
HPCFF50-6	6:1	93	2000	333	130	**£803.35**
HPCFF50-7	7:1	93	2000	285	120	**£803.35**
HPCFF50-XH	Hardened Gears 2:1 to 7:1 multiply torque figures by 2					**£964.70**

Other Info.
Testing in your application is necessary.
You will need to assess duty, cycles and confirm gearbox suitability with your own calculations.
Torque figures are to be used for guidance only.

HPC FF Type Gearbox Reducers

Technical

Backlash: 1° approx. on output shaft.
Torque: Torque figures are given as a guide only. Testing in your application is necessary.
Specials: Specials are available to any specification. Please consult our HPC Gears Technical Department.
Modifications: Are available on all our standard gearboxes. Please consult our HPC Gears Technical Department.
Keyways, Shafts and Bores: All shafts are ground to h7 tolerance. Bores are to H8 tolerance. Keys are DIN 6885 (sliding fit).
Lubrications: Gearboxes are greased for life with Shell Gadus S5V42P2.5 high performance grease.
Ratios: 2:1 - 7:1. Specials are available on request. Please consult our HPC Gears Technical Department.

Materials

Case: 2 part billet machine red anodised aluminium (6082T6).
Gears: High carbon steel (817M40) or 655M13 case hardened (2 x torque).
Bearings: High quality single row. Ball bearings with rubber seals.

Lubrication, Mounting and Operating Conditions

- Operating temperature range 0° C to 70° C. Standard grease.
- Wider range of operating temperatures are achievable by fitting steel shielded bearings - 30° C to +130° C. Please consult our HPC Gears Technical Department for advice.

- Gearboxes are designed as speed reducers.
- Shafts should always be connected with a flexible coupling.
- Always mount drive components as close to gearbox body as possible to prevent damage to shaft and bearing.
- Avoid all impact to unit on installation as this may cause internal damage.
- We recommend all modifications are carried out by HPC Gears prior to gearbox assembly.
- Modifications undertaken by customers will invalidate the warranty.