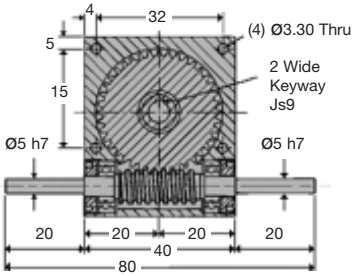
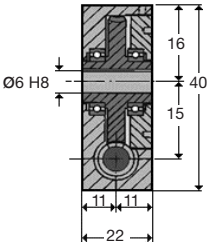
WEIGHT	0.15 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	6000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 6.66:1	8:1	10:1	13.33:1	20:1	40:1	80:1
	3000	1.05	1.13	1.20	1.28	1.43	1.58	0.94
	2000	1.28	1.28	1.35	1.35	1.58	1.80	1.07
	1000	1.58	1.73	1.73	1.88	2.03	2.18	1.28
	500	2.03	2.03	2.10	2.18	2.40	2.63	1.46
	200	2.55	2.63	2.63	2.78	2.93	3.08	1.70
	100	2.93	2.93	3.08	3.15	3.23	3.38	1.91
	50	3.30	3.38	3.38	3.45	3.53	3.60	2.04
	10	3.60	3.63	3.68	3.68	3.75	3.75	2.04

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

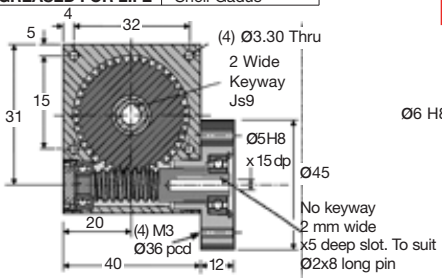
PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCP15-6	6.66:1	6000	900	86	Please Consult Technical	**£111.26**
HPCP15-8	8:1	6000	750	85		**£111.26**
HPCP15-10	10:1	6000	600	84		**£111.26**
HPCP15-13	13.33:1	6000	450	78		**£111.26**
HPCP15-20	20:1	6000	300	71		**£111.26**
HPCP15-40	40:1	6000	150	60		**£111.26**
HPCP15-80	80:1	6000	75	32		**£111.26**

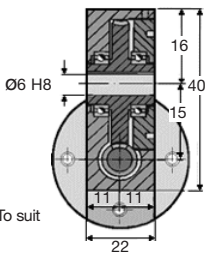
Output Shafts: HPCP20-X (Single), HPCP20-DX (Double): See page 1.23.

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.

HPCPF15 Worm / Wheel Reduction Hollow Input

WEIGHT	0.21 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	6000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 6.66:1	8:1	10:1	13.33:1	20:1	40:1	80:1
	3000	1.05	1.13	1.20	1.28	1.43	1.58	0.94
	2000	1.28	1.28	1.35	1.35	1.58	1.80	1.07
	1000	1.58	1.73	1.73	1.88	2.03	2.18	1.28
	500	2.03	2.03	2.10	2.18	2.40	2.63	1.46
	200	2.55	2.63	2.63	2.78	2.93	3.08	1.70
	100	2.93	2.93	3.08	3.15	3.23	3.38	1.91
	50	3.30	3.38	3.38	3.45	3.53	3.60	2.04
	10	3.60	3.63	3.68	3.68	3.75	3.75	2.04

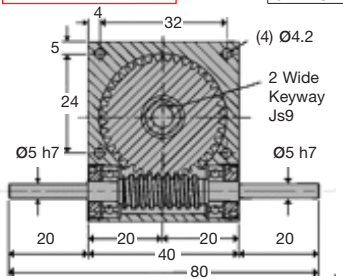
DISCOUNTS	
1 - 5	List Price
6 - 19	-5%
20 - 49	-10%
50 - 99	-15%
100 +	-20%

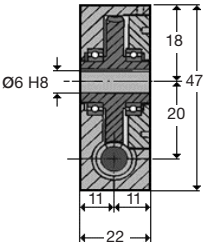
PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCPF15-6	6.66:1	6000	900	86	Please Consult Technical	£141.87
HPCPF15-8	8:1	6000	750	85		£141.87
HPCPF15-10	10:1	6000	600	84		£141.87
HPCPF15-13	13.33:1	6000	450	78		£141.87
HPCPF15-20	20:1	6000	300	71		£141.87
HPCPF15-40	40:1	6000	150	60		£141.87
HPCPF15-80	80:1	6000	75	32		£141.87

Output Shafts: HPCP20-X (Single), HPCP20-DX (Double): See page 1.23.

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

WEIGHT	0.18 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	6000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1	120:1
	3000	1.4	1.5	1.6	1.7	1.9	2.1	1.25
	2000	1.7	1.7	1.8	1.8	2.1	2.4	1.42
	1000	2.1	2.3	2.3	2.5	2.7	2.9	1.70
	500	2.7	2.7	2.8	2.9	3.2	3.5	1.94
	200	3.4	3.5	3.5	3.7	3.9	4.1	2.27
	100	3.9	3.9	4.1	4.2	4.3	4.5	2.55
	50	4.4	4.5	4.5	4.6	4.7	4.8	2.72
	10	4.8	4.8	4.9	4.9	5.0	5.0	2.72

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

PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCP20-10	10:1	6000	600	86	YES	**£123.50**
HPCP20-12	12:1	6000	500	85	YES	**£123.50**
HPCP20-15	15:1	6000	400	84	YES	**£123.50**
HPCP20-20	20:1	6000	300	78	YES	**£123.50**
HPCP20-30	30:1	6000	200	71	YES/NO	**£123.50**
HPCP20-60	60:1	6000	100	60	NO	**£123.50**
HPCP20-S	5:1-120:1	SPECIAL RATIO				**£157.29**
HPCP20-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£210.74**

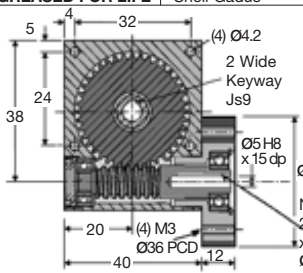
Output Shafts: HPCP20-X (Single), HPCP20-DX (Double): See page 1.23.

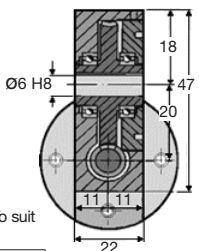
Testing in your application is necessary. You will need to assess duty, cycles and confirm gearbox suitability with your own calculations. Torque figures are to be used for guidance only.

HPCPF20 Worm / Wheel Reduction

Hollow Input

WEIGHT	0.23 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	6000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2)
GREASED FOR LIFE	Shell Gadus





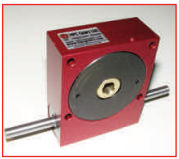
N.m. Output Torque	RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1	120:1
	3000	1.4	1.5	1.6	1.7	1.9	2.1	1.25
	2000	1.7	1.7	1.8	1.8	2.1	2.4	1.42
	1000	2.1	2.3	2.3	2.5	2.7	2.9	1.70
	500	2.7	2.7	2.8	2.9	3.2	3.5	1.94
	200	3.4	3.5	3.5	3.7	3.9	4.1	2.27
	100	3.9	3.9	4.1	4.2	4.3	4.5	2.55
	50	4.4	4.5	4.5	4.6	4.7	4.8	2.72
	10	4.8	4.8	4.9	4.9	5.0	5.0	2.72

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

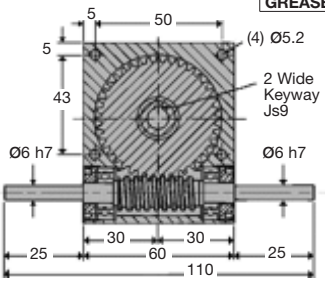
PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCPF20-10	10:1	6000	600	86	YES	**£157.47**
HPCPF20-12	12:1	6000	500	85	YES	**£157.47**
HPCPF20-15	15:1	6000	400	84	YES	**£157.47**
HPCPF20-20	20:1	6000	300	78	YES	**£157.47**
HPCPF20-30	30:1	6000	200	71	YES/NO	**£157.47**
HPCPF20-60	60:1	6000	100	60	NO	**£157.47**
HPCPF20-S	5:1-120:1			SPECIAL RATIO		**£195.28**
HPCPF20-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£261.54**

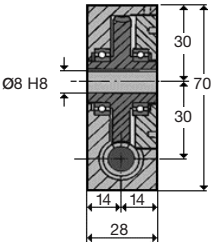
Output Shafts: HPCP20-X (Single), HPCP20-DX (Double): See page 1.23.

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



WEIGHT	0.48 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	5000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque

RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1
3000	2.5	2.5	2.6	2.7	3.0	3.5
2000	2.8	2.9	3.0	3.2	3.6	4.1
1000	3.5	3.7	4.0	4.2	4.5	5.0
500	4.6	4.7	4.9	5.1	5.3	5.8
200	5.4	5.6	5.7	5.9	6.2	6.6
100	6.0	6.0	6.5	6.5	7.0	7.5
50	7.5	7.8	8.0	8.3	8.3	8.6
10	8.0	8.0	8.3	8.5	8.5	8.8

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

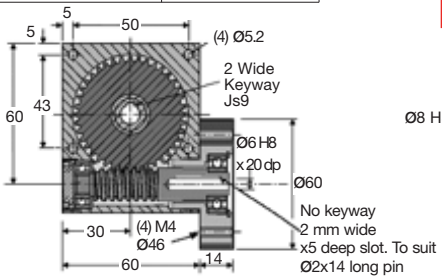
PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCP30-10	10:1	5000	500	90	YES	**£152.76**
HPCP30-12	12:1	5000	416	88	YES	**£152.76**
HPCP30-15	15:1	5000	333	86	YES	**£152.76**
HPCP30-20	20:1	5000	250	84	YES	**£152.76**
HPCP30-30	30:1	5000	166	78	YES/NO	**£152.76**
HPCP30-60	60:1	5000	83	70	NO	**£152.76**
HPCP30-S	5:1-120:1		SPECIAL RATIO			**£201.51**
HPCP30-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£268.58**

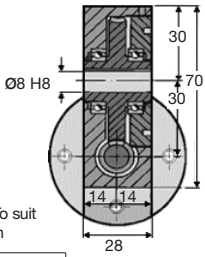
Output Shafts: HPCP30-X (Single), HPCP30-DX (Double): See page 1.23.

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.

HPCPF30 Worm / Wheel Reduction Hollow Input

WEIGHT	0.59 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	5000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1
	3000	2.5	2.5	2.6	2.7	3.0	3.5
	2000	2.8	2.9	3.0	3.2	3.6	4.1
	1000	3.5	3.7	4.0	4.2	4.5	5.0
	500	4.6	4.7	4.9	5.1	5.3	5.8
	200	5.4	5.6	5.7	5.9	6.2	6.6
	100	6.0	6.0	6.5	6.5	7.0	7.5
	50	7.5	7.8	8.0	8.3	8.3	8.6
	10	8.0	8.0	8.3	8.5	8.5	8.8

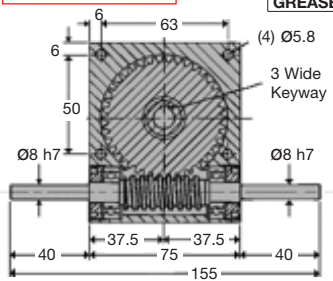
DISCOUNTS	
1 - 5	List Price
6 - 19	-5%
20 - 49	-10%
50 - 99	-15%
100 +	-20%

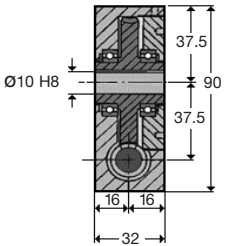
PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCPF30-10	10:1	5000	500	90	YES	**£189.38**
HPCPF30-12	12:1	5000	416	88	YES	**£189.38**
HPCPF30-15	15:1	5000	333	86	YES	**£189.38**
HPCPF30-20	20:1	5000	250	84	YES	**£189.38**
HPCPF30-30	30:1	5000	166	78	YES/NO	**£189.38**
HPCPF30-60	60:1	5000	83	70	NO	**£189.38**
HPCPF30-S	5:1-120:1			SPECIAL RATIO		**£250.28**
HPCPF30-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£333.59**

Output Shafts: HPCP30-X (Single), HPCP30-DX (Double): See page 1.23.

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

WEIGHT	0.92 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	4000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque

RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1
3000	5.0	5.2	5.4	5.6	6.4	7.2
2000	5.5	5.8	6.2	6.6	7.3	8.0
1000	7.1	7.5	8.0	8.2	9.0	10.0
500	8.9	9.1	9.6	10.0	10.5	11.4
200	11.6	11.9	12.3	12.5	13.5	14.2
100	13.4	13.6	14.1	14.6	15.3	16.0
50	15.1	15.5	16.2	16.4	17.3	17.6
10	17.6	17.6	17.6	17.7	17.8	18.0

DISCOUNTS

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

PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCP40-10	10:1	4000	400	89	YES	**£207.03**
HPCP40-12	12:1	4000	333	87	YES	**£207.03**
HPCP40-15	15:1	4000	266	85	YES	**£207.03**
HPCP40-20	20:1	4000	200	83	YES	**£207.03**
HPCP40-30	30:1	4000	133	76	YES/NO	**£207.03**
HPCP40-60	60:1	4000	66	65	NO	**£207.03**
HPCP40-S	5:1-120:1		SPECIAL RATIO			**£274.76**
HPCP40-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£327.09**

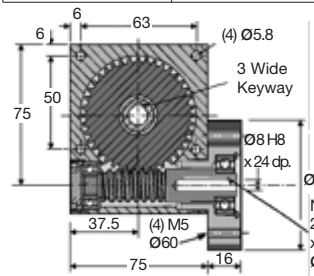
Output Shafts: HPCP40-X (Single), HPCP40-DX (Double): See page 1.23.

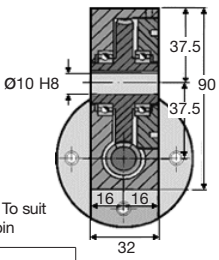
Testing in your application is necessary. You will need to assess duty, cycles and confirm gearbox suitability with your own calculations. Torque figures are to be used for guidance only.

HPCPF40 Worm / Wheel Reduction

Hollow Input

WEIGHT	1.15 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	4000 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1
	3000	5.0	5.2	5.4	5.6	6.4	7.2
	2000	5.5	5.8	6.2	6.6	7.3	8.0
	1000	7.1	7.5	8.0	8.2	9.0	10.0
	500	8.9	9.1	9.6	10.0	10.5	11.4
	200	11.6	11.9	12.3	12.5	13.5	14.2
	100	13.4	13.6	14.1	14.6	15.3	16.0
	50	15.1	15.5	16.2	16.4	17.3	17.6
	10	17.6	17.6	17.6	17.7	17.8	18.0

DISCOUNTS

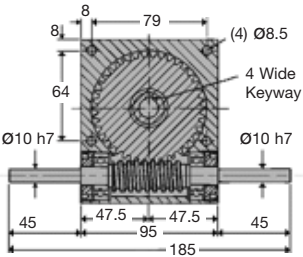
1 - 5	List Price
6 - 19	-5%
20 - 49	-10%
50 - 99	-15%
100 +	-20%

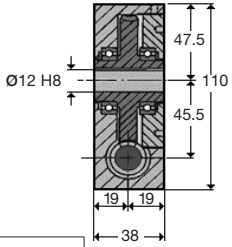
PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCPF40-10	10:1	4000	400	89	YES	**£257.13**
HPCPF40-12	12:1	4000	333	87	YES	**£257.13**
HPCPF40-15	15:1	4000	266	85	YES	**£257.13**
HPCPF40-20	20:1	4000	200	83	YES	**£257.13**
HPCPF40-30	30:1	4000	133	76	YES/NO	**£257.13**
HPCPF40-60	60:1	4000	66	65	NO	**£257.13**
HPCPF40-S	5:1-120:1			SPECIAL RATIO		**£341.28**
HPCPF40-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£427.65**

Output Shafts: HPCP40-X (Single), HPCP40-DX (Double): See page 1.23.

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

WEIGHT	1.70 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	3500 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1
	3000	10.3	10.8	11.3	12.2	13.2	14.7
	2000	11.7	12.2	12.7	13.2	14.7	17.1
	1000	14.7	15.2	16.2	17.1	18.1	20.6
	500	19.1	19.6	20.6	21.6	22.5	24.5
	200	24.4	25.5	26.4	27.0	28.9	30.0
	100	28.3	28.9	29.4	30.3	31.8	33.8
	50	32.3	32.8	33.8	34.3	34.5	35.2
	10	39.9	39.9	39.9	40.0	40.0	40.0

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

PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCP45-10	10:1	3500	350	90	YES	**£240.71**
HPCP45-12	12:1	3500	291	89	YES	**£240.71**
HPCP45-15	15:1	3500	233	86	YES	**£240.71**
HPCP45-20	20:1	3500	175	85	YES	**£240.71**
HPCP45-30	30:1	3500	116	78	YES/NO	**£240.71**
HPCP45-60	60:1	3500	58	67	NO	**£240.71**
HPCP45-S	5:1-120:1		SPECIAL RATIO			**£290.71**
HPCP45-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£355.63**

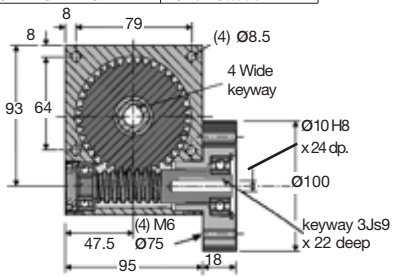
Output Shafts: HPCP45-X (Single), HPCP45-DX (Double): See page 1.23.

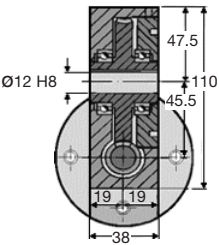
Testing in your application is necessary. You will need to assess duty, cycles and confirm gearbox suitability with your own calculations. Torque figures are to be used for guidance only.

HPCPF45 Worm / Wheel Reduction

Hollow Input

WEIGHT	2.10 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	3500 rpm
MATERIAL:	
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2)
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1
	3000	10.3	10.8	11.3	12.2	13.2	14.7
	2000	11.7	12.2	12.7	13.2	14.7	17.1
	1000	14.7	15.2	16.2	17.1	18.1	20.6
	500	19.1	19.6	20.6	21.6	22.5	24.5
	200	24.4	25.5	26.4	27.0	28.9	30.0
	100	28.3	28.9	29.4	30.3	31.8	33.8
	50	32.3	32.8	33.8	34.3	34.5	35.2
	10	39.9	39.9	39.9	40.0	40.0	40.0

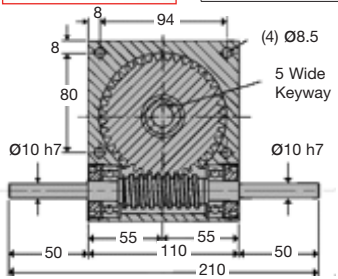
DISCOUNTS	
1 - 5	List Price
6 - 19	-5%
20 - 49	-10%
50 - 99	-15%
100 +	-20%

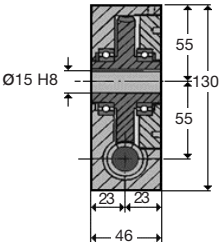
PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCPF45-10	10:1	3500	350	90	YES	**£298.95**
HPCPF45-12	12:1	3500	291	89	YES	**£298.95**
HPCPF45-15	15:1	3500	233	86	YES	**£298.95**
HPCPF45-20	20:1	3500	175	85	YES	**£298.95**
HPCPF45-30	30:1	3500	116	78	YES/NO	**£298.95**
HPCPF45-60	60:1	3500	58	67	NO	**£298.95**
HPCPF45-S	5:1-120:1			SPECIAL RATIO		**£361.05**
HPCPF45-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£441.71**

Output Shafts: HPCP45-X (Single), HPCP45-DX (Double): See page 1.23.

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

WEIGHT	2.40 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	3000 rpm
	MATERIAL:
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2) with Steel Hub
GREASED FOR LIFE	Shell Gadus





	RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1
N.m.	**3000**	13.4	14.0	14.8	16.2	17.6	20.4
	2000	16.2	16.9	18.3	19.1	20.4	23.9
	1000	21.1	22.5	23.2	24.6	25.3	28.8
Output Torque	**500**	27.4	28.1	28.8	30.2	31.6	35.1
	200	34.4	35.1	36.5	37.9	39.3	42.1
	100	40.0	41.4	42.1	42.8	44.9	46.3
	50	45.6	46.3	47.7	48.4	49.8	50.5
	10	56.8	56.8	56.8	57.0	57.0	57.0

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

PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCP55-10	10:1	3000	300	89	YES	**£285.24**
HPCP55-12	12:1	3000	250	88	YES	**£285.24**
HPCP55-15	15:1	3000	200	86	YES	**£285.24**
HPCP55-20	20:1	3000	150	84	YES	**£285.24**
HPCP55-30	30:1	3000	100	78	YES/NO	**£285.24**
HPCP55-60	60:1	3000	50	69	NO	**£285.24**
HPCP55-S	5:1-120:1	SPECIAL RATIO				**£327.81**
HPCP55-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£430.26**

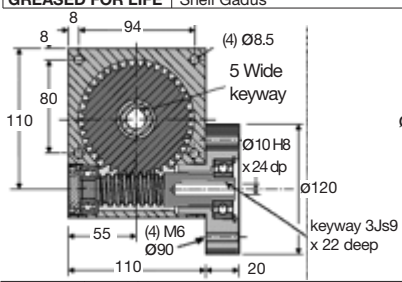
Output Shafts: HPCP55-X (Single), HPCP55-DX (Double): See page 1.23.

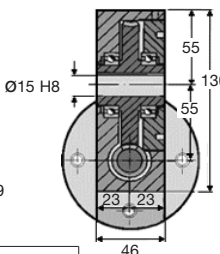
Testing in your application is necessary. You will need to assess duty, cycles and confirm gearbox suitability with your own calculations. Torque figures are to be used for guidance only.

HPCPF55 Worm / Wheel Reduction

Hollow Input

WEIGHT	3.04 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	3000 rpm
	MATERIAL:
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2) with Steel Hub
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1
	3000	13.4	14.0	14.8	16.2	17.6	20.4
	2000	16.2	16.9	18.3	19.1	20.4	23.9
	1000	21.1	22.5	23.2	24.6	25.3	28.8
	500	27.4	28.1	28.8	30.2	31.6	35.1
	200	34.4	35.1	36.5	37.9	39.3	42.1
	100	40.0	41.4	42.1	42.8	44.9	46.3
	50	45.6	46.3	47.7	48.4	49.8	50.5
	10	56.8	56.8	56.8	57.0	57.0	57.0

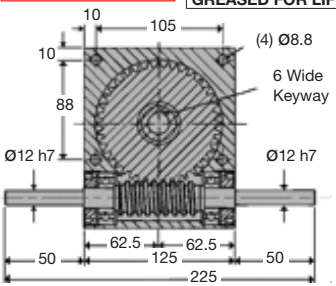
DISCOUNTS	
1 - 5	List Price
6 - 19	-5%
20 - 49	-10%
50 - 99	-15%
100 +	-20%

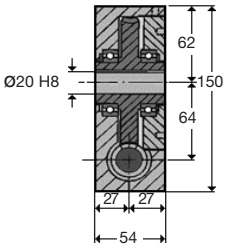
PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCPF55-10	10:1	3000	300	89	YES	**£354.31**
HPCPF55-12	12:1	3000	250	88	YES	**£354.31**
HPCPF55-15	15:1	3000	200	86	YES	**£354.31**
HPCPF55-20	20:1	3000	150	84	YES	**£354.31**
HPCPF55-30	30:1	3000	100	78	YES/NO	**£354.31**
HPCPF55-60	60:1	3000	50	69	NO	**£354.31**
HPCPF55-S	5:1-120:1			SPECIAL RATIO		**£407.18**
HPCPF55-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£562.56**

Output Shafts: HPCP55-X (Single), HPCP55-DX (Double): See page 1.23.

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

WEIGHT	4.1 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	3000 rpm
	MATERIAL:
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2) with Steel Hub
GREASED FOR LIFE	Shell Gadus





N.m.

Output Torque

RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1
3000	30	31	33	35	38	44
2000	33	36	39	41	44	50
1000	45	47	50	54	58	64
500	58	60	62	65	69	73
200	77	78	80	84	88	94
100	88	89	91	94	97	102
50	100	102	104	105	107	110
10	113	114	115	116	116	118

DISCOUNTS

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

PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCP60-10	10:1	3000	300	90	YES	**£360.57**
HPCP60-12	12:1	3000	250	89	YES	**£360.57**
HPCP60-15	15:1	3000	200	85	YES	**£360.57**
HPCP60-20	20:1	3000	150	85	YES	**£360.57**
HPCP60-30	30:1	3000	100	78	YES/NO	**£360.57**
HPCP60-60	60:1	3000	50	68	NO	**£355.57**
HPCP60-S	5:1-120:1			SPECIAL RATIO		**£377.27**
HPCP60-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£535.09**

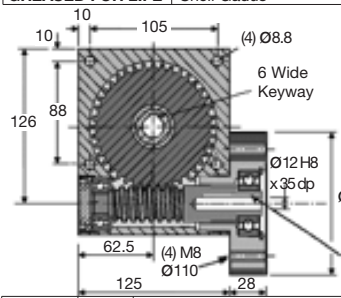
Output Shafts: HPCP60-X (Single), HPCP60-DX (Double): See page 1.23.

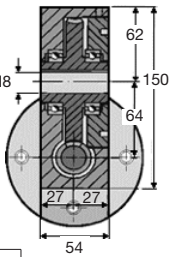
Testing in your application is necessary. You will need to assess duty, cycles and confirm gearbox suitability with your own calculations. Torque figures are to be used for guidance only.

HPCPF60 Worm / Wheel Reduction

Hollow Input

WEIGHT	5.1 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	3000 rpm
	MATERIAL:
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2) with Steel Hub
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque

RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1
3000	30	31	33	35	38	44
2000	33	36	39	41	44	50
1000	45	47	50	54	58	64
500	58	60	62	65	69	73
200	77	78	80	84	88	94
100	88	89	91	94	97	102
50	100	102	104	105	107	110
10	113	114	115	116	116	118

DISCOUNTS

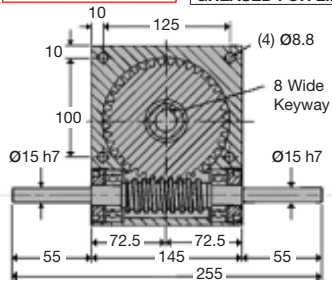
1 - 5	List Price
6 - 19	-5%
20 - 49	-10%
50 - 99	-15%
100 +	-20%

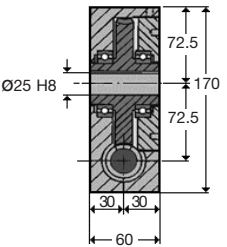
PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCPF60-10	10:1	3000	300	90	YES	**£399.71**
HPCPF60-12	12:1	3000	250	89	YES	**£399.71**
HPCPF60-15	15:1	3000	200	85	YES	**£399.71**
HPCPF60-20	20:1	3000	150	85	YES	**£399.71**
HPCPF60-30	30:1	3000	100	78	YES/NO	**£399.71**
HPCPF60-60	60:1	3000	50	68	NO	**£399.71**
HPCPF60-S	5:1-120:1			SPECIAL RATIO		**£467.02**
HPCPF60-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£611.66**

Output Shafts: HPCP60-X (Single), HPCP60-DX (Double): See page 1.23.

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

WEIGHT	6.40 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	3000 rpm
	MATERIAL:
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2) with Steel Hub
GREASED FOR LIFE	Shell Gadus





N.m.

Output Torque

RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1
3000	38	40	42	45	50	56
2000	47	49	53	55	61	69
1000	61	65	67	71	73	83
500	77	81	83	87	91	100
200	99	101	105	107	113	121
100	115	119	121	123	129	133
50	129	133	137	139	144	146
10	160	160	160	164	164	164

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

PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCP70-10	10:1	3000	300	90	YES	**£400.42**
HPCP70-12	12:1	3000	250	89	YES	**£400.42**
HPCP70-15	15:1	3000	200	86	YES	**£400.42**
HPCP70-20	20:1	3000	150	85	YES	**£400.42**
HPCP70-30	30:1	3000	100	78	YES/NO	**£400.42**
HPCP70-60	60:1	3000	50	67	NO	**£400.42**
HPCP70-S	5:1-120:1			SPECIAL RATIO		**£426.61**
HPCP70-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£628.14**

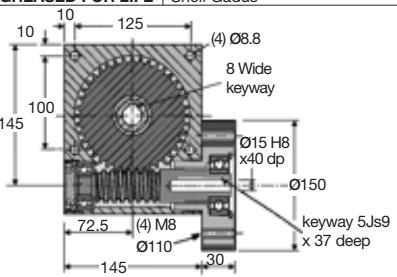
Output Shafts: HPCP70-X (Single), HPCP70-DX (Double): See page 1.23.

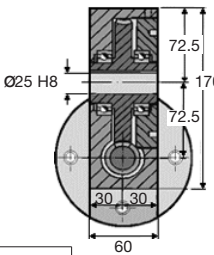
Testing in your application is necessary. You will need to assess duty, cycles and confirm gearbox suitability with your own calculations. Torque figures are to be used for guidance only.

HPCPF70 Worm / Wheel Reduction

Hollow Input

WEIGHT	7.90 Kg
BACKLASH	0° 30'
HOURS LIFE	12000 hr
MAX INPUT SPEED	3000 rpm
	MATERIAL:
CASE MAT'L	Aluminium HE30TF
WORM MAT'L	817M40(EN24)
WHEEL MAT'L	Alum. Bronze (AB2) with Steel Hub
GREASED FOR LIFE	Shell Gadus





N.m. Output Torque	RPM Input	Reduction ratio 10:1	12:1	15:1	20:1	30:1	60:1
	3000	38	40	42	45	50	56
	2000	47	49	53	55	61	69
	1000	61	65	67	71	73	83
	500	77	81	83	87	91	100
	200	99	101	105	107	113	121
	100	115	119	121	123	129	133
	50	129	133	137	139	144	146
	10	160	160	160	164	164	164

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

PART NUMBER	Ratio	Max Input Speed	Max Output Speed	% Effi. at 1000 Rpm	Backdrive	PRICE EACH 1-5
HPCPF70-10	10:1	3000	300	90	YES	**£450.75**
HPCPF70-12	12:1	3000	250	89	YES	**£450.75**
HPCPF70-15	15:1	3000	200	86	YES	**£450.75**
HPCPF70-20	20:1	3000	150	85	YES	**£450.75**
HPCPF70-30	30:1	3000	100	78	YES/NO	**£450.75**
HPCPF70-60	60:1	3000	50	67	NO	**£450.75**
HPCPF70-S	5:1-120:1			SPECIAL RATIO		**£533.28**
HPCPF70-A	SPECIAL MINIMUM BACKLASH 0° 8' OF ARC					**£645.42**

Output Shafts: HPCP70-X (Single), HPCP70-DX (Double): See page 1.23.

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 P, PF & PP Type Precision Worm Gear Reducers

Technical

Backlash (P-PF): Backlash figures given are at output. Standard backlash approx. 30 arc mins. Low backlash approx. 8 arc mins. On low backlash gearboxes eccentrics may be used to control backlash.
Backlash (PP): 2° approx.
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, Bores & Shafts: All bores are toleranced to H8 ISO 286. All shafts to h7 (ground). Keyways are machined to allow the use of parallel DIN 6885 keys (sliding fit).
Lubrications: Gearboxes are greased for life with Shell Gadus S5 V4 2P2.5 (synthetic high speed bearing grease).
Ratios (P-PF): 10:1 - 120:1. Specials are available. Please consult our HPC Gears Technical Department.
Ratios (PP): 10:1 - 400:1.

Materials

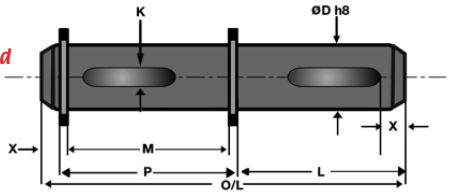
Case: Red anodised billet machined aluminium (6082 T6).
Worm: High carbon steel (817M40).
Wheel (P-PF): Billet machined aluminium bronze (CA104) P15 - P45. P55 - P70 use high carbon steel, output hub fitted with aluminium bronze wheel.
Wheel (PP): Billet machined aluminium bronze (CA104).
Bearings: High quality steel single row bearings with rubber or steel shields.
Screw Caps: Mild steel with a chemically blacked coating.

Lubrication, Mounting and Operating Conditions

- Operating temperature range 0° C to 70° C.
- 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.

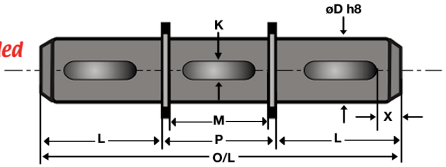
HPCP-X Single Sided



DISCOUNTS	1 - 5	6-19	20-39	40-59	60-99	100+
	List Price	-10%	-15%	-20%	-25%	-30%

PART NUMBER	ØD	O/L	M	P	X	L	K	PRICE EACH 1-5
SINGLE SIDED								
HPCP20-X	6	50.80	22	23.60	3.00	25	K2 x 22	**£15.25**
HPCP30-X	8	63.90	28	29.80	3.00	32	K2 x 22	**£18.11**
HPCP40-X	10	76.60	32	34.20	3.50	40	K3 x 20	**£20.35**
HPCP45-X	12	88.10	38	40.20	4.00	45	K4 x 25	**£21.73**
HPCP55-X	15	101.10	46	48.20	4.00	50	K5 x 30	**£24.19**
HPCP60-X	20	119.80	54	56.60	4.50	60	K6 x 32	**£28.30**
HPCP70-X	25	135.80	60	62.60	4.50	70	K8 x 40	**£32.24**

HPCP-DX Double Sided



PART NUMBER	ØD	O/L	M	P	X	L	K	PRICE EACH 1-5
DOUBLE SIDED								
HPCP20-DX	6	73.60	22	23.60	1.50	25	K2 x 22	**£20.30**
HPCP30-DX	8	93.80	28	29.80	5.45	32	K2 x 22	**£22.29**
HPCP40-DX	10	114.20	32	34.20	9.90	40	K3 x 20	**£24.69**
HPCP45-DX	12	130.20	38	40.20	4.00	45	K4 x 25	**£28.21**
HPCP55-DX	15	148.20	46	48.20	9.90	50	K5 x 30	**£30.10**
HPCP60-DX	20	176.60	54	56.60	4.50	60	K6 x 32	**£35.13**
HPCP70-DX	25	202.50	60	62.60	4.50	70	K8 x 40	**£39.90**

Material: 303 Stainless Steel, includes Steel Keys & Circlips.