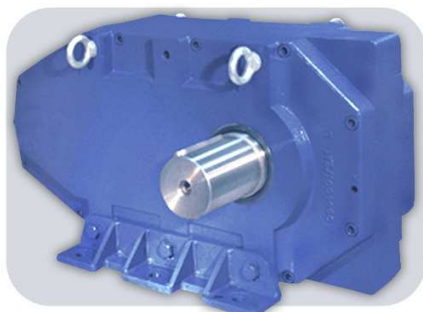


Helical Gearbox C3P (Parallel)



C3 gearboxes are used for the drive of machines with low revolutions and equipment at various industrial branches e.g. at building industry, agriculture transport technique, machinery to the machina drive tec. They can work at both directions of rotation. They are characterized by high reliability.

Range of outputs 0,75 až 11 kW.

Range of ratios 2,5 až 31,5.

Table of gearbox outputs

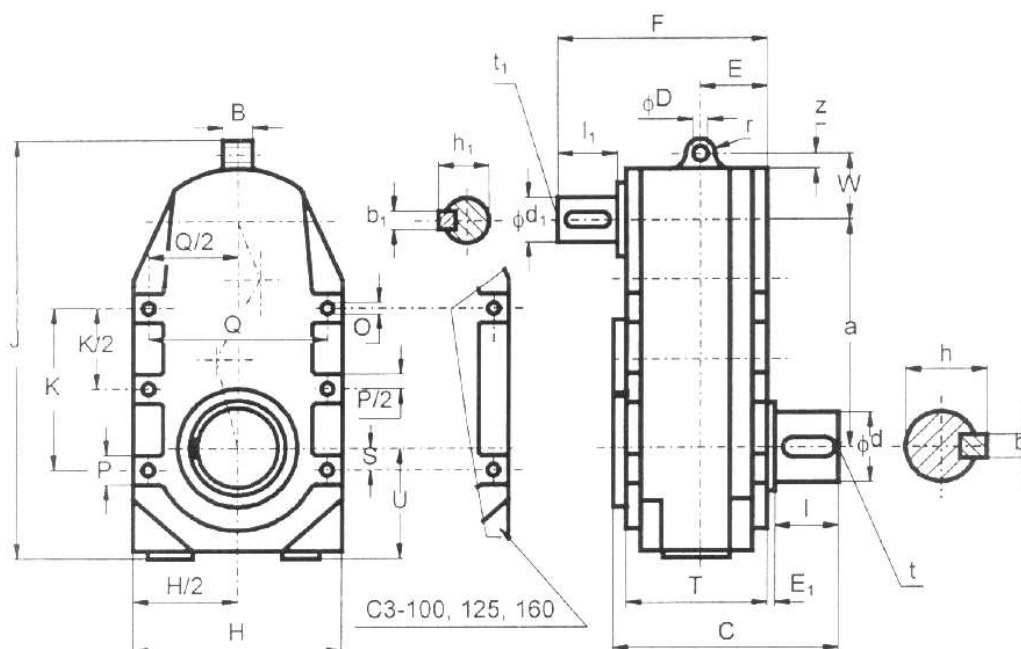
At this table there are mentioned the outputs that can the gearboxes transfer at uniform loading without impact (operating coefficient $f_p = 1$) for revolutions values in reply to synchronous revolutions of various electric motor.

Type	Ratio i	Output P (kW)		Torque Mk ₂ (Nm)
		950 ot/min	1440 ot/min	
C3-100	16	4	5,7	600
	20	3,2	4,5	600
	25	2,5	3,6	600
	31,5	2	2,8	600
	40	1,7	2,3	620
	50	1,3	1,9	600
	63	1	1,6	560
	80	0,8	1,2	620
	100	0,6	0,9	600
	125	0,5	0,7	560
C3-125	16	7,8	11,3	1 200
	20	6,3	9	1 200
	25	5	7,2	1 200
	31,5	4	5,8	1 230
	40	3,3	4,7	1 240
	50	2,5	3,6	1 200
	63	1,9	2,7	1 250
	80	1,7	2,4	1 240
	100	1,3	1,9	1 200
	125	1	1,6	1 250
C3-160	16	12,5	18,1	1 910
	20	12,5	18,1	2 390
	25	9,7	13,8	2 320
	31,5	8,2	11,7	2 470
	40	6,6	9,4	2 510
	50	5	7,2	2 390
	63	4	5,7	2 390
	80	3,2	4,5	2 390
	100	2,5	3,6	2 390
	125	1,9	2,7	2 240

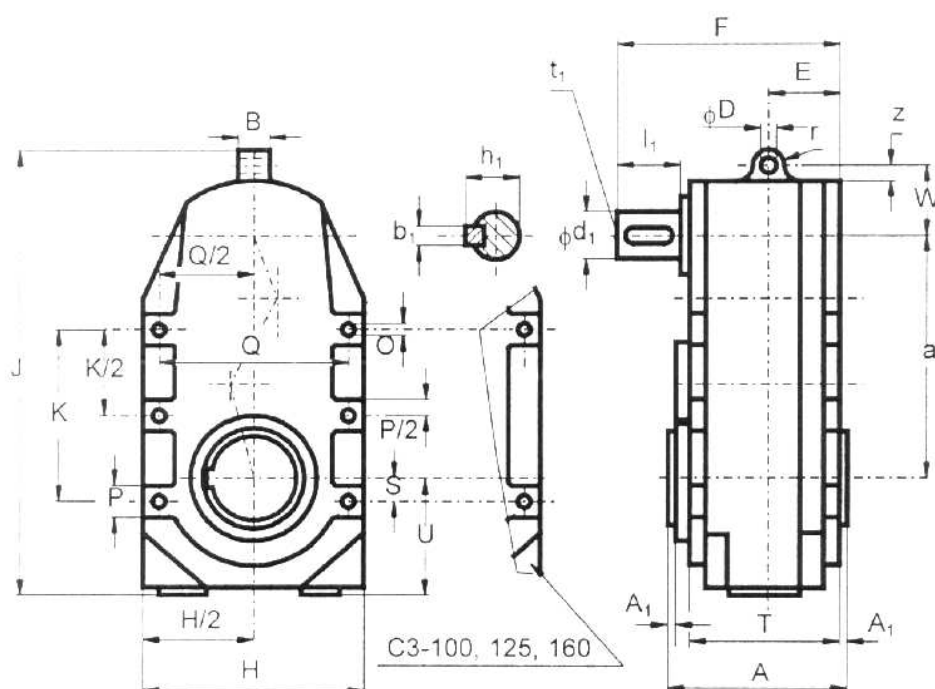
Type	Ratio i	Output P (kW)		Torque Mk ₂ (Nm)
		950 ot/min	1440 ot/min	
C3-200	16	19,4	27,5	2 940
	20	19,4	27,5	3 700
	25	19,4	27,5	4 630
	31,5	15,6	22,5	4 710
	40	13,2	18,8	5 010
	50	10	14,4	4 780
	63	7,8	11,3	4 780
	80	6,3	9	4 780
	100	4,7	6,8	4 480
	125	4	5,7	4 700
C3-250	16	37,5	53,8	6 200
	20	37,5	53,8	7 170
	25	37,5	53,8	8 960
	31,5	31,3	45	9 420
	40	25	35,6	9 560
	50	20	28,8	9 560
	63	15,6	22,5	9 560
	80	12,5	18,1	9 560
	100	10	14,4	9 560
	125	7,8	11,3	9 330
C3-315	16	68,8	100	14 700
	20	68,8	100	15 600
	25	68,8	100	16 420
	31,5	55	78,1	16 670
	40	45,7	65,7	17 425
	50	37,5	53,8	17 910
	63	26,9	38,2	16 040
	80	22	31,3	16 720
	100	18,8	26,9	17 910
	125	12,5	17,5	14 920

C3 without bases, without motor

With cylindrycal outlet shaft



With hollow outlet shaft



C3 without bases, without motor

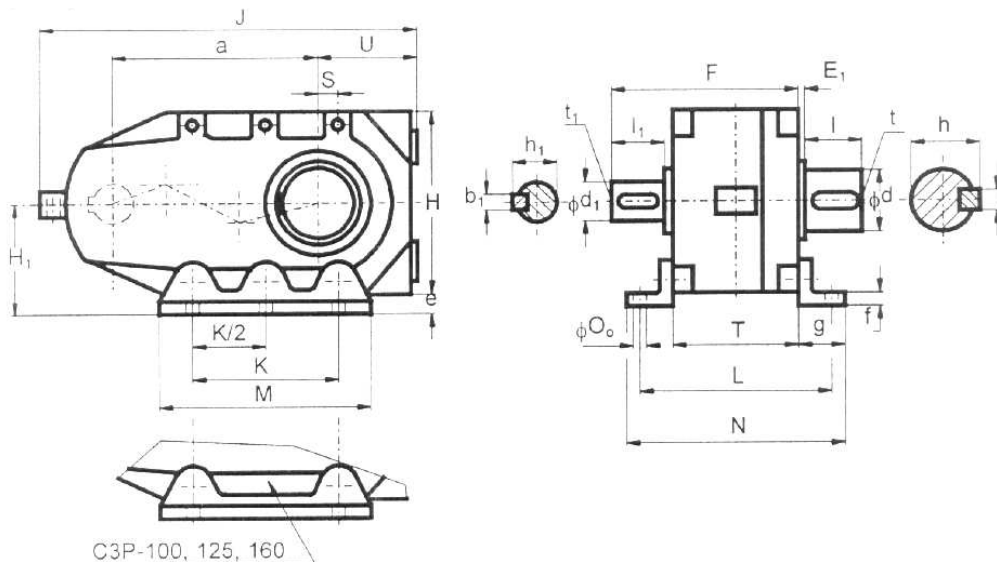
Type	Main dimensions																	Outlet shaft					
	a	r	z	B	D	E	H	J	K	O	P	Q	R _o	S	T	U	W	F	d ₁	l ₁	b ₁	h ₁	t ₁
C3-100	226	20	23	40	18	85	200	477	130	M12	35	170	19	18	162	118	113	201	22 m5	36	6 P9	24,5	M8
C3-125	275	20	23	40	18	100	244	548	190	M16	44	200	25	20	192	140	113	232	22 m5	36	6 P9	24,5	M8
C3-160	359	22	28	50	22	111	304	682	210	M16	50	250	25	27	222	170	131	268	28 m5	42	8 P9	30,9	M10
C3-200	464	30	33	60	26	118	392	840	250	M16	60	340	25	27	225	210	137	286	32 k6	58	10 P9	35,3	M12
C3-250	581	35	38	80	30	138	480	1 006	420	M20	70	410	25	38	264	248	142	349	45 k6	82	14 P9	48,5	M16
C3-315	716	38	40	90	33	170	600	1 268	450	M24	80	530	35	83	330	315	200	428	50 k6	82	14 P9	53,5	M16

R_o- depth of thread ,O'

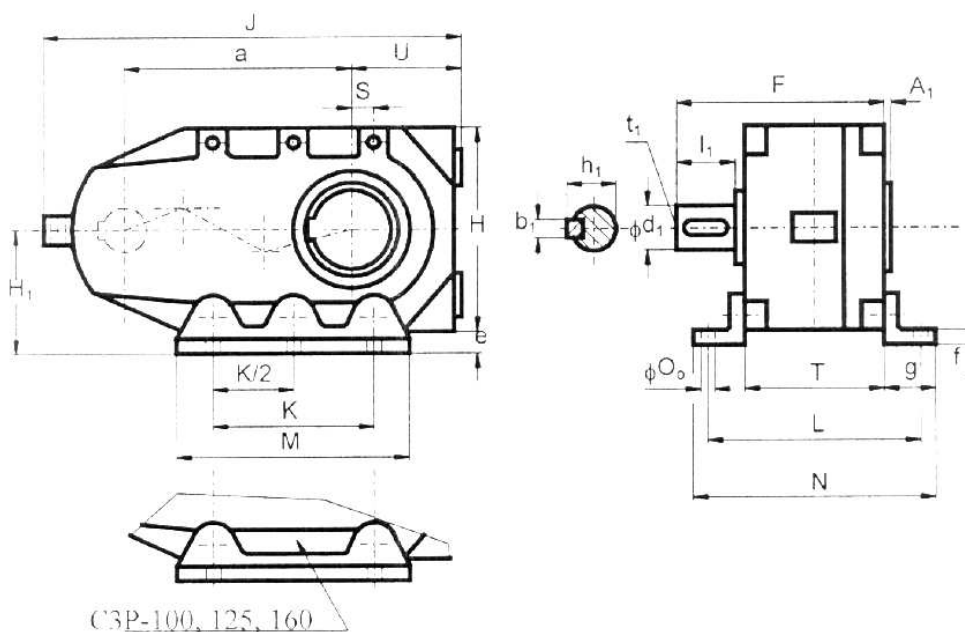
Type	Cylindrical outlet shaft								Hollow outlet shaft		
	C	E ₁	d	l	b	h	t	c. kg	A	A ₁	c. kg
C3-100	260	2	50 k6	82	14 P9	53,5	M20	42	174	2	39,5
C3-125	313	3	60 m6	105	18 P9	64,2	M20	70	204	2	64
C3-160	344	3	75 m6	105	20 P9	79,6	M20	121	236	3	114
C3-200	380	6	95 m6	130	25 P9	100,3	M24	220	240	2	205
C3-250	461	11,5	120 m6	165	32 P9	126,9	M24	331	286	4,5	294
C3-315	563	12	140 m6	200	36 P9	147,7	M24	607	351	6	551

C3P with bases, without motor

With cylindrical outlet shaft



With hollow outlet shaft



C3P with bases, without motor

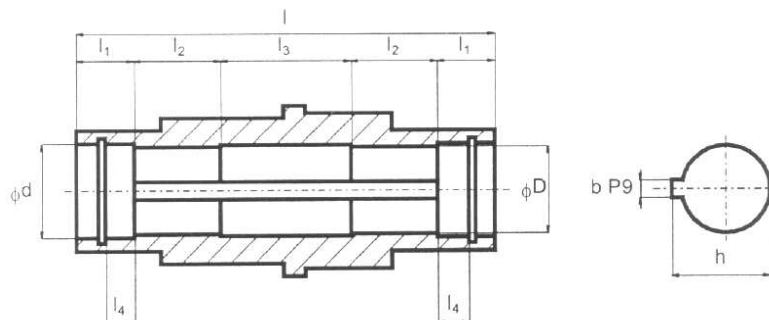
S cylindrical outlet shaft

Type	Main dimensions					Bases										Outlet shaft					
	a	H	J	T	U	H ₁	K	L	M	N	O ₀	S	e	f	g	F	d ₁	l ₁	b ₁	h ₁	t ₁
C3P-100	226	200	477	162	118	125	130	240	190	282	14	18	25	12	60	201	22 m5	36	6 P9	24,5	M8
C3P-125	275	244	548	192	140	150	190	280	250	332	18	20	28	15	70	232	22 m5	36	6 P9	24,5	M8
C3P-160	359	304	682	222	170	180	210	320	290	372	18	27	28	16	75	268	28 m5	42	8 P9	30,9	M10
C3P-200	464	392	840	225	210	225	250	320	330	371	22	27	29	18	73	286	32 k6	58	10 P9	35,3	M12
C3P-250	581	480	1 006	264	248	265	420	394	534	464	26	38	25	20	100	349	45 k6	82	14 P9	48,5	M16
C3P-315	716	600	1 268	330	315	335	450	480	586	550	33	83	35	25	110	428	50 k6	82	14 P9	53,5	M16

Type	Cylindrical outlet shaft							Hollow outlet shaft	
	E ₁	d	l	b	h	t	c. kg	A ₁	c. kg
C3P-100	2	50 k6	82	14 P9	53,5	M20	46	2	43,5
C3P-125	3	60 m6	105	18 P9	64,2	M20	76	2	70
C3P-160	3	75 m6	105	20 P9	79,6	M20	129	3	122
C3P-200	6	95 m6	130	25 P9	100,3	M24	231	2	216
C3P-250	11,5	120 m6	165	32 P9	126,9	M24	360	4,5	323
C3P-315	12	140 m6	200	36 P9	147,7	M24	643	6	587

C3(P)

Hollow outlet shaft



Type	D	b	h	d	l	l ₁	l ₂	l ₃	l ₄
C3-100	40	12	43,1	50	174	25	35	54	18
C3-125	45	12	48,1	55	204	25	40	74	18
C3-160	60	18	64,2	72	236	37	50	62	30
C3-200	75	20	79,6	90	240	44	60	32	35
C3-250	95	25	100,3	110	286	43	70	60	32
C3-315	120	32	126,9	140	351	44	80	103	33

Assembly and dismantling of the gearbox with hollow outlet shaft

Assembly and dismantling of the gearbox with hollow outlet shaft on the shaft of driven machine is shown on the pictures. Mentioned operations are executed with the aid of insert with threads, screws and nut. At the hole end of hollow shaft is the recess for the retaining ring. The retaining ring serves to insert pressure taking-up. On the third picture there is shown the shafts fixing after assembly of the gearbox on the driven machine. The insert with threads is not the part of the gearbox.

Type	a	b	c	d	D	e	f
C3-100	M12	M8	24	36	50	4,5	12
C3-125	M12	M10	27	40	55	4,5	13
C3-160	M16	M12	36	54	72	4	16
C3-200	M16	M14	47	71	90	5	21
C3-250	M20	M16	60	88	110	6	26
C3-315	M24	M18	85	117	140	6	32

