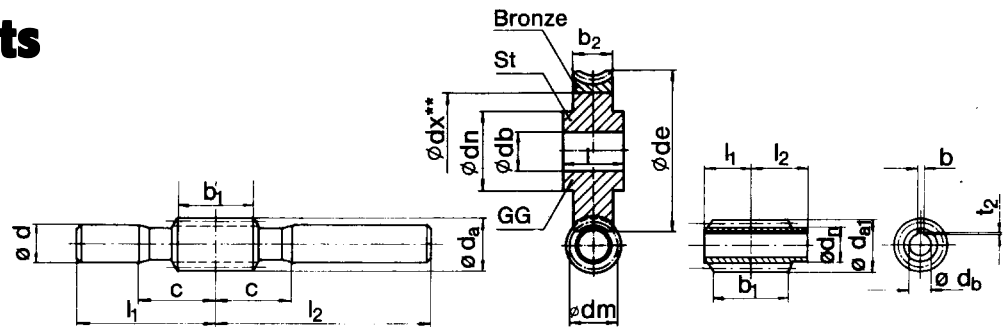


# Worm Gear Units

## DIN 3975/3976

### Right Hand



**Worm Shaft (Material: 16 MnCr 5/ AISI 5115)**

**50 mm Center Distance**

Part No.	Ratio	Module	Threads	dm	da	d	c	l <sub>1</sub>	l <sub>2</sub>	b <sub>1</sub>	Weight kg
WS50x2.5x4x26.5	7.25:1	2.5	4	26.5	31.5	22	33	65	115	34	0.574
WS50x2x4x22.4	9.50:1	2	4	22.4	26.4	22	30	65	115	32	0.523
WS50x1.6x4x23	12.00:1	1.6	4	23	26.2	22	30	65	115	28	0.532
WS50x2.5x2x26.5	14.50:1	2.5	2	26.5	31.5	22	30	65	115	34	0.576
WS50x2x2x22.4	19.00:1	2	2	22.4	26.4	22	30	65	115	32	0.523
WS50x1.6x2x23	24.00:1	1.6	2	23	26.2	22	30	65	115	28	0.532
WS50x2.5x1x26.5	29.00:1	2.5	1	26.5	31.5	22	30	65	115	34	0.576
WS50x2x1x22.4	38.00:1	2	1	22.4	26.4	22	30	65	115	32	0.523
WS50x1.6x1x23	48.00:1	1.6	1	23	26.2	22	30	65	115	28	0.532
WS50x1.25x1x22.4	62.00:1	1.25	1	22.4	24.9	22	25	65	115	25	0.528
WS50x1x1x18	82.00:1	1	1	18	20	20.5	25	65	115	22	0.430

Note: WS = unhardened; WHS = hardened (shaft extensions are soft for machining)

### Worm Gear

Part No.	Ratio	Module	Threads	Teeth	d <sub>e</sub>	d <sub>n</sub>	d <sub>b</sub>	dx	b <sub>2</sub>	l	Weight kg	Weight kg
WG50x2.5x4x29	7.25:1	2.5	4	29	82	50	20	52	20	26	0.755	0.656
WG50x2x4x38	9.50:1	2	4	38	84	50	20	59	18	26	0.790	0.688
WG50x1.6x4x48	12.00:1	1.6	4	48	82	50	20	59	16	26	0.733	0.636
WG50x2.5x2x29	14.50:1	2.5	2	29	82	50	20	52	20	26	0.755	0.656
WG50x2x2x38	19.00:1	2	2	38	84	50	20	59	18	26	0.790	0.688
WG50x1.6x2x48	24.00:1	1.6	2	48	82	50	20	59	16	26	0.733	0.636
WG50x2.5x1x29	29.00:1	2.5	1	29	82	50	20	52	20	26	0.755	0.656
WG50x2x1x38	38.00:1	2	1	38	84	50	20	59	18	26	0.790	0.688
WG50x1.6x1x48	48.00:1	1.6	1	48	82	50	20	59	16	26	0.733	0.636
WG50x1.25x1x62	62.00:1	1.25	1	62	82	50	15	61	16	22	0.776	0.676
WG50x1x1x82	82.00:1	1	1	82	84.9	50	15	66	14	22	0.734	0.638

Note: WGB = brass worm gear; WGC = cast worm gear

### Bored Worm (Material: C 45/ AISI 1045)

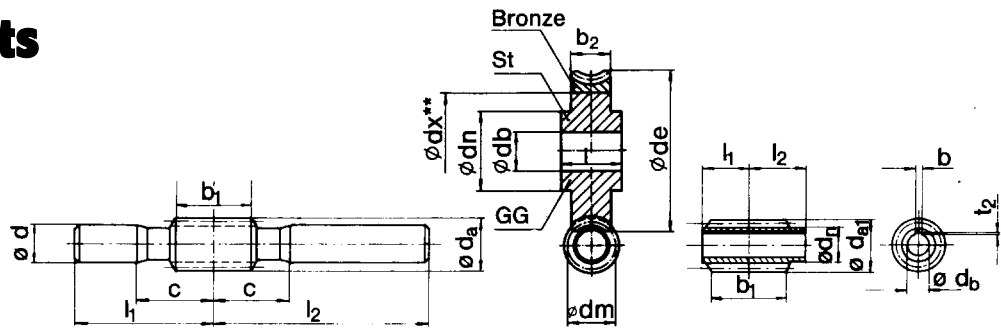
Part No.	Ratio	Module	Threads	dm	d <sub>a</sub>	d <sub>n</sub>	d <sub>b</sub>	b	t <sub>2</sub>	l <sub>1</sub>	l <sub>2</sub>	b <sub>1</sub>	Weight kg
W50x2.5x4x26.5	7.25:1	2.5	4	26.5	31.5	20	12	4	1.8	19.5	27.5	34	0.137
W50x2x4x22.4	9.50:1	2	4	22.4	26.4	17	10	3	1.4	18.5	24.5	32	0.091
W50x1.6x4x23	12.00:1	1.6	4	23	26.2	18.5	12	4	1.8	16.0	24.0	28	0.080
W50x2.5x2x26.5	14.50:1	2.5	2	26.5	31.5	20	12	4	1.8	19.5	27.5	34	0.137
W50x2x2x22.4	19.00:1	2	2	22.4	26.4	17	10	3	1.4	18.5	24.5	32	0.091
W50x1.6x2x23	24.00:1	1.6	2	23	26.2	18.5	12	4	1.8	16.0	24.0	28	0.080
W50x2.5x1x26.5	29.00:1	2.5	1	26.5	31.5	20	12	4	1.8	19.5	27.5	34	0.137
W50x2x1x22.4	38.00:1	2	1	22.4	26.4	17	10	3	1.4	18.5	24.5	32	0.091
W50x1.6x1x23	48.00:1	1.6	1	23	26.2	18.5	12	4	1.8	16.0	24.0	28	0.080
W50x1.25x1x22.4	62.00:1	1.25	1	22.4	24.9	19	12	4	1.8	14.5	22.5	25	0.070
W50x1x1x18	82.00:1	1	1	18	20	15	10	3	1.4	12.5	18.5	22	0.037

Note: Bored and keyed to DIN 6885

# Worm Gear Units

## DIN 3975/3976

### Right Hand



#### Worm Shaft (Material: 16 MnCr 5/ AISI 5115)

**63 mm Center Distance**

Part No.	Ratio	Module	Threads	$d_m$	$d_a$	$d$	$c$	$l_1$	$l_2$	$b_1$	Weight kg
WS63x3.15x4x33.5	7.25:1	3.15	4	33.5	39.8	27	40	75	135	40	1.03
WS63x2.5x4x26.5	9.75:1	2.5	4	26.5	31.5	27	40	75	135	40	0.888
WS63x2x4x28	12.25:1	2	4	28	32	27	35	75	135	32	0.931
WS63x3.15x2x33.5	14.50:1	3.15	2	33.5	39.8	27	35	75	135	40	1.04
WS63x2.5x2x26.5	19.50:1	2.5	2	26.5	31.5	27	35	75	135	40	0.900
WS63x2x2x28	24.50:1	2	2	28	32	27	35	75	135	32	0.931
WS63x3.15x1x33.5	29.00:1	3.15	1	33.5	39.8	27	35	75	135	40	1.04
WS63x2.5x1x26.5	39.00:1	2.5	1	26.5	31.5	27	35	75	135	40	0.900
WS63x2x1x28	49.00:1	2	1	28	32	27	35	75	135	32	0.931
WS63x1.6x1x28	61.00:1	1.6	1	28	31.2	27	30	75	135	30	0.935
WS63x1.25x1x22.4	83.00:1	1.25	1	22.4	24.9	25.5	25	75	135	25	0.789

Note: WS = unhardened; WHS = hardened (shaft extensions are soft for machining)

#### Worm Gear

Part No.	Ratio	Module	Threads	Teeth	$d_e$	$d_n$	$d_b$	$dx$	$b_2$	$l$	Weight kg	Weight kg
WG63x3.15x4x29	7.25:1	3.15	4	29	102	60	25	68	26	32	1.50	1.31
WG63x2.5x4x39	9.75:1	2.5	4	39	107	60	25	78	22	32	1.57	1.36
WG63x2x4x49	12.25:1	2	4	49	104	60	25	80	20	32	1.44	1.25
WG63x3.15x2x29	14.50:1	3.15	2	29	102	60	25	68	26	32	1.50	1.31
WG63x2.5x2x39	19.50:1	2.5	2	39	107	60	25	78	22	32	1.57	1.36
WG63x2x2x49	24.50:1	2	2	49	104	60	25	80	20	32	1.44	1.25
WG63x3.15x1x29	29.00:1	3.15	1	29	102	60	25	68	26	32	1.50	1.31
WG63x2.5x1x39	39.00:1	2.5	1	39	107	60	25	78	22	32	1.57	1.36
WG63x2x1x49	49.00:1	2	1	49	104	60	25	80	20	32	1.44	1.25
WG63x1.6x1x61	61.00:1	1.6	1	61	104	60	20	81	20	32	1.48	1.29
WG63x1.25x1x83	83.00:1	1.25	1	83	107.4	60	20	87	16	26	1.32	1.15

Note: WGB = brass worm gear; WGC = cast worm gear

#### Bored Worm (Material: C 45/ AISI 1045)

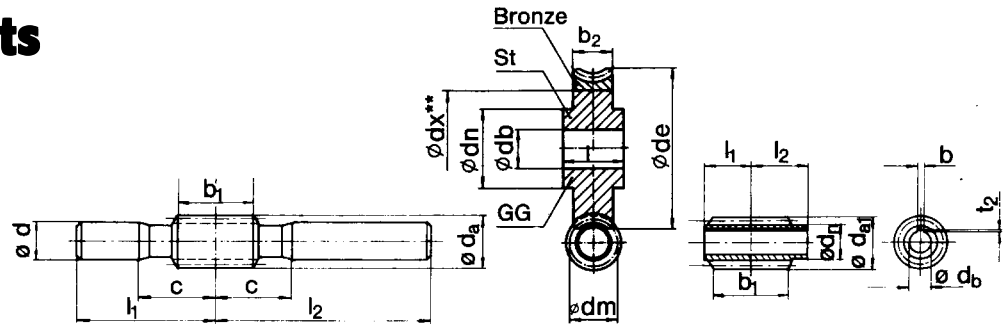
Part No.	Ratio	Module	Threads	$d_m$	$d_a$	$d_n$	$d_b$	$b$	$t_2$	$l_1$	$l_2$	$b_1$	Weight kg
W63x3.15x4x33.5	7.25:1	3.15	4	33.5	39.8	25	16	5	2.3	23	33	40	0.248
W63x2.5x4x26.5	9.75:1	2.5	4	26.5	31.5	20	12	4	1.8	22.5	30.5	40	0.158
W63x2x4x28	12.25:1	2	4	28	32	22.5	14	5	2.3	18.5	28.5	32	0.144
W63x3.15x2x33.5	14.50:1	3.15	2	33.5	39.8	25	16	5	2.3	23	33	40	0.248
W63x2.5x2x26.5	19.50:1	2.5	2	26.5	31.5	20	12	4	1.8	22.5	30.5	40	0.158
W63x2x2x28	24.50:1	2	2	28	32	22.5	14	5	2.3	18.5	28.5	32	0.144
W63x3.15x1x33.5	29.00:1	3.15	1	33.5	39.8	25	16	5	2.3	23	33	40	0.248
W63x2.5x1x26.5	39.00:1	2.5	1	26.5	31.5	20	12	4	1.8	22.5	30.5	40	0.158
W63x2x1x28	49.00:1	2	1	28	32	22.5	14	5	2.3	18.5	28.5	32	0.144
W63x1.6x1x28	61.00:1	1.6	1	28	31.2	23.5	16	5	2.3	17	27	30	0.123
W63x1.25x1x22.4	83.00:1	1.25	1	22.4	24.9	19	12	4	1.8	14.5	22.5	25	0.070

Note: Bored and keyed to DIN 6885

# Worm Gear Units

## DIN 3975/3976

### Right Hand



#### Worm Shaft (Material: 16 MnCr 5/ AISI 5115)

80 mm Center Distance

Part No.	Ratio	Module	Threads	$d_m$	$d_a$	$d$	$c$	$l_1$	$l_2$	$b_1$	Weight kg
WS80x4x4x40	7.5:1	4	4	40	48	32	50	90	170	50	1.81
WS80x3.15x4x33.5	10.0:1	3.15	4	33.5	39.8	32	46	90	170	46	1.61
WS80x2.5x4x33.5	12.5:1	2.5	4	33.5	38.5	32	42	90	170	46	1.63
WS80x4x2x40	15.0:1	4	2	40	48	32	42	90	170	50	1.82
WS80x3.15x2x33.5	20.0:1	3.15	2	33.5	39.8	32	42	90	170	46	1.61
WS80x2.5x2x33.5	25.0:1	2.5	2	33.5	38.5	32	42	90	170	46	1.63
WS80x4x1x40	30.0:1	4	1	40	48	32	42	90	170	50	1.82
WS80x3.15x1x33.5	40.0:1	3.15	1	33.5	39.8	32	42	90	170	46	1.61
WS80x2.5x1x33.5	50.0:1	2.5	1	33.5	38.5	32	42	90	170	46	1.63
WS80x2x1x35.5	62.0:1	2	1	35.5	39.5	32	35	90	170	38	1.67
WS80x1.6x1x28	82.0:1	1.6	1	28	31.2	30.5	35	90	170	36	1.42

Note: WS = unhardened; WHS = hardened (shaft extensions are soft for machining)

#### Worm Gear

Part No.	Ratio	Module	Threads	Teeth	$d_o$	$d_n$	$d_b$	$dx$	$b_2$	$l$	Weight kg	Weight kg
WG80x4x4x30	7.5:1	4	4	30	132	70	30	94	32	40	3.10	2.70
WG80x3.15x4x40	10.0:1	3.15	4	40	136	70	30	103	28	40	2.99	2.61
WG80x2.5x4x50	12.5:1	2.5	4	50	134	70	30	105	26	40	2.93	2.55
WG80x4x2x30	15.0:1	4	2	30	132	70	30	94	32	40	3.10	2.70
WG80x3.15x2x40	20.0:1	3.15	2	40	136	70	30	103	28	40	2.99	2.61
WG80x2.5x2x50	25.0:1	2.5	2	50	134	70	30	105	26	40	2.93	2.55
WG80x4x1x30	30.0:1	4	1	30	132	70	30	94	32	40	3.10	2.70
WG80x3.15x1x40	40.0:1	3.15	1	40	136	70	30	103	38	40	2.99	2.61
WG80x2.5x1x50	50.0:1	2.5	1	50	134	70	30	105	26	40	2.93	2.55
WG80x2x1x62	62.0:1	2	1	62	131	70	30	106	24	40	2.70	2.35
WG80x1.6x1x82	82.0:1	1.6	1	82	137	70	30	114	18	40	2.48	2.16

Note: WGB = brass worm gear; WGC = cast worm gear

#### Bored Worm (Material: C 45/ AISI 1045)

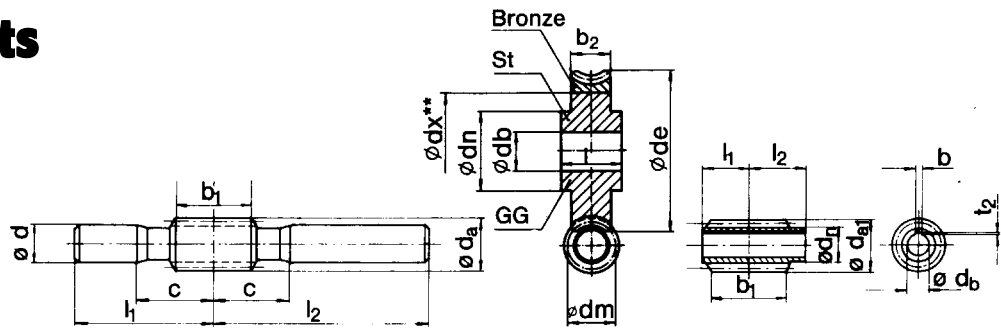
Part No.	Ratio	Module	Threads	$d_m$	$d_a$	$d_n$	$d_b$	$b$	$t_2$	$l_1$	$l_2$	$b_1$	Weight kg
W80x4x4x30	7.5:1	4	4	40	48	30	20	6	2.8	29.0	39.0	50	0.429
W80x3.15x4x40	10.0:1	3.15	4	33.5	39.8	25	16	5	2.3	26.0	36.0	46	0.280
W80x2.5x4x50	12.5:1	2.5	4	33.5	38.5	27	18	6	2.8	25.5	37.5	46	0.266
W80x4x2x30	15.0:1	4	2	40	48	30	20	6	2.8	29.0	39.0	50	0.429
W80x3.15x2x40	20.0:1	3.15	2	33.5	39.8	25	16	5	2.3	26.0	36.0	46	0.280
W80x2.5x2x50	25.0:1	2.5	2	33.5	38.5	27	18	6	2.8	25.5	37.5	46	0.266
W80x4x1x30	30.0:1	4	1	40	48	30	20	6	2.8	29.0	39.0	50	0.429
W80x3.15x1x40	40.0:1	3.15	1	33.5	39.8	25	16	5	2.3	26.0	36.0	46	0.280
W80x2.5x1x50	50.0:1	2.5	1	33.5	38.5	27	18	6	2.8	25.5	37.5	46	0.266
W80x2x1x62	62.0:1	2	1	35.5	39.5	30	20	6	2.8	21.5	33.5	38	0.249
W80x1.6x1x82	82.0:1	1.6	1	28	31.2	23.5	16	5	2.3	20.0	30.0	36	0.143

Note: Bored and keyed to DIN 6885

# Worm Gear Units

## DIN 3975/3976

### Right Hand



#### Worm Shaft (Material: 16 MnCr 5/ AISI 5115)

100 mm Center Distance

Part No.	Ratio	Module	Threads	dm	d <sub>a</sub>	d	c	l <sub>1</sub>	l <sub>2</sub>	b <sub>1</sub>	Weight kg
WS100x5x4x50	7.5:1	5	4	50	60	37	40	130	220	60	3.39
WS100x4x4x40	10.0:1	4	4	40	48	37	54	130	220	54	2.94
WS100x3.15x4x42.5	12.5:1	3.15	4	42.5	48.8	37	45	130	220	50	3.07
WS100x5x2x50	15.0:1	5	2	50	60	37	40	130	220	60	3.39
WS100x4x2x40	20.0:1	4	2	40	48	37	45	130	220	54	2.98
WS100x3.15x2x42.5	25.0:1	3.15	2	42.5	48.8	37	45	130	220	50	3.07
WS100x5x1x50	30.0:1	5	1	50	60	37	40	130	220	60	3.39
WS100x4x1x40	40.0:1	4	1	40	48	37	45	130	220	54	2.98
WS100x3.15x1x42.5	50.0:1	3.15	1	42.5	48.8	37	45	130	220	50	3.07
WS100x2.5x1x42.5	62.0:1	2.5	1	42.5	47.5	37	40	130	220	45	3.07
WS100x2x1x35.5	82.0:1	2	1	35.5	39.5	37	40	130	220	42	2.88

Note: WS = unhardened; WHS = hardened (shaft extensions are soft for machining)

#### Worm Gear

Part No.	Ratio	Module	Threads	Teeth	d <sub>e</sub>	d <sub>n</sub>	d <sub>b</sub>	dx	b <sub>2</sub>	l	Weight kg	Weight kg
WG100x5x4x30	7.5:1	5	4	30	165	85	40	120	40	50	5.98	5.20
WG100x4x4x40	10.0:1	4	4	40	172	85	40	134	34	50	6.06	5.29
WG100x3.15x4x50	12.5:1	3.15	4	50	167	85	40	134	32	50	5.65	4.93
WG100x5x2x30	15.0:1	5	2	30	165	85	40	120	40	50	5.98	5.20
WG100x4x2x40	20.0:1	4	2	40	172	85	40	134	34	50	6.06	5.29
WG100x3.15x2x50	25.0:1	3.15	2	50	167	85	40	134	32	50	5.65	4.93
WG100x5x1x30	30.0:1	5	1	30	165	85	40	120	40	50	5.98	5.20
WG100x4x1x40	40.0:1	4	1	40	172	85	40	134	34	50	6.06	5.29
WG100x3.15x1x50	50.0:1	3.15	1	50	167	85	40	134	32	50	5.65	4.93
WG100x2.5x1x63	62.0:1	2.5	1	63	165	85	40	137	28	50	5.16	4.50
WG100x2x1x82	82.0:1	2	1	82	170.5	85	40	146	24	50	5.07	4.41

Note: WGB = brass worm gear; WGC = cast worm gear

#### Bored Worm (Material: C 45/ AISI 1045)

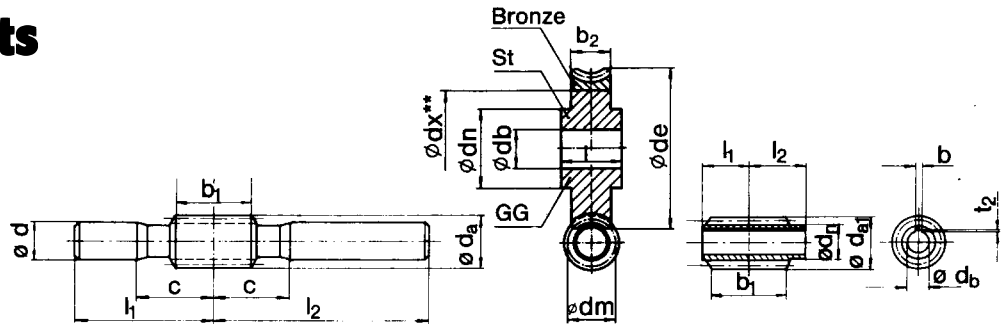
Part No.	Ratio	Module	Threads	dm	d <sub>a</sub>	d <sub>n</sub>	d <sub>b</sub>	b	t <sub>2</sub>	l <sub>1</sub>	l <sub>2</sub>	b <sub>1</sub>	Weight kg
W100x5x4x50	7.5:1	5	4	50	60	37.5	26	8	3.3	35	50	60	0.776
W100x4x4x40	10.0:1	4	4	40	48	30	20	6	2.8	31	42	54	0.451
W100x3.15x4x52.5	12.5:1	3.15	4	42.5	48.8	34.5	24	8	3.3	28	44	50	0.450
W100x5x2x50	15.0:1	5	2	50	60	37.5	26	8	3.3	35	50	60	0.776
W100x4x2x40	20.0:1	4	2	40	48	30	20	6	2.8	31	42	54	0.451
W100x3.15x2x42.5	25.0:1	3.15	2	42.5	48.8	34.5	24	8	3.3	28	44	50	0.450
W100x5x1x50	30.0:1	5	1	50	60	37.5	26	8	3.3	35	50	60	0.776
W100x4x1x40	40.0:1	4	1	40	48	30	20	6	2.8	31	42	54	0.451
W100x3.15x1x42.5	50.0:1	3.15	1	42.5	48.8	34.5	24	8	3.3	28	44	50	0.450
W100x2.5x1x42.5	62.0:1	2.5	1	42.5	47.5	35.5	26	8	3.3	25	41	45	0.385
W100x2x1x35.5	82.0:1	2	1	35.5	39.5	30	20	6	2.8	23.5	35.5	42	0.270

Note: Bored and keyed to DIN 6885

# Worm Gear Units

## DIN 3975/3976

### Right Hand



#### Worm Shaft (Material: 16 MnCr 5/ AISI 5115)

125 mm Center Distance

Part No.	Ratio	Module	Threads	$d_m$	$d_a$	$d$	$c$	$l_1$	$l_2$	$b_1$	Weight kg
WS125x6.3x4x63	7.25:1	6.3	4	63	75.6	47.5	50	150	250	86	6.52
WS125x5x4x50	10.00:1	5	4	50	60	50	68	150	250	69	5.89
WS125x4x4x50	12.50:1	4	4	50	58	50	56	150	250	60	6.02
WS125x6.3x2x63	14.50:1	6.3	2	63	75.6	50	68	150	250	86	6.91
WS125x5x2x50	20.00:1	5	2	50	60	50	56	150	250	69	5.99
WS125x4x2x50	25.00:1	4	2	50	58	50	56	150	250	60	6.02
WS125x6.3x1x63	29.00:1	6.3	1	63	75.6	50	62	150	250	86	6.89
WS125x5x1x50	40.00:1	5	1	50	60	50	56	150	250	69	5.99
WS125x4x1x50	50.00:1	4	1	50	58	50	56	150	250	60	6.02
WS125x3.15x1x53	62.00:1	3.15	1	53	59.3	50	50	150	250	60	6.19
WS125x2.5x1x42.5	83.00:1	2.5	1	42.5	47.5	47	50	150	250	50	5.18

Note: WS = unhardened; WHS = hardened (shaft extensions are soft for machining)

#### Worm Gear

Part No.	Ratio	Module	Threads	Teeth	$d_o$	$d_n$	$d_b$	$dx$	$b_2$	$l$	Weight kg	Weight kg
WG125x6.3x4x29	7.25:1	6.3	4	29	206	100	50	148	50	60	11.33	9.87
WG125x5x4x40	10.00:1	5	4	40	215	100	50	170	40	60	11.05	9.61
WG125x4x4x50	12.50:1	4	4	50	212	100	50	174	34	60	10.25	8.93
WG125x6.3x2x29	14.50:1	6.3	2	29	206	100	50	148	50	60	11.33	9.87
WG125x5x2x40	20.00:1	5	2	40	215	100	50	170	40	60	11.05	9.61
WG125x4x2x50	25.00:1	4	2	50	212	100	50	174	34	60	10.25	8.93
WG125x6.3x1x29	29.00:1	6.3	1	29	206	100	50	148	50	60	11.33	9.87
WG125x5x1x40	40.00:1	5	1	40	215	100	50	170	40	60	11.05	9.61
WG125x4x1x50	50.00:1	4	1	50	212	100	50	174	34	60	10.25	8.93
WG125x3.15x1x62	62.00:1	3.15	1	62	206.5	100	50	174	34	60	9.55	8.32
WG125x2.5x1x83	83.00:1	2.5	1	83	215	100	50	186	28	60	9.19	7.95

Note: WGB = brass worm gear; WGC = cast worm gear

#### Bored Worm (Material: C 45/ AISI 1045)

Part No.	Ratio	Module	Threads	$d_m$	$d_a$	$d_n$	$d_b$	$b$	$t_2$	$l_1$	$l_2$	$b_1$	Weight kg
W125x6.3x4x63	7.25:1	6.3	4	63	75.6	47	32	10	3.3	49.0	68.0	86	1.78
W125x5x4x50	10.00:1	5	4	50	60	37	26	8	3.3	39.5	54.5	69	0.882
W125x4x4x50	12.50:1	4	4	50	58	40	30	8	3.3	34.0	50.0	60	0.675
W125x6.3x2x63	14.50:1	6.3	2	63	75.6	47	32	10	3.3	49.0	68.0	86	1.78
W125x5x2x50	20.00:1	5	2	50	60	37	26	8	3.3	39.5	54.5	69	0.882
W125x4x2x50	25.00:1	4	2	50	58	40	30	8	3.3	34.0	50.0	60	0.675
W125x6.3x1x63	29.00:1	6.3	1	63	75.6	47	32	10	3.3	49.0	68.0	86	1.78
W125x5x1x50	40.00:1	5	1	50	60	37	26	8	3.3	39.5	54.5	69	0.882
W125x4x1x50	50.00:1	4	1	50	58	40	30	8	3.3	34.0	50.0	60	0.675
W125x3.15x1x53	62.00:1	3.15	1	53	59.3	45	32	10	3.3	33.0	53.0	60	0.813
W125x2.5x1x42.5	83.00:1	2.5	1	42.5	47.5	36	26	8	3.3	27.5	43.5	50	0.419

Note: Bored and keyed to DIN 6885