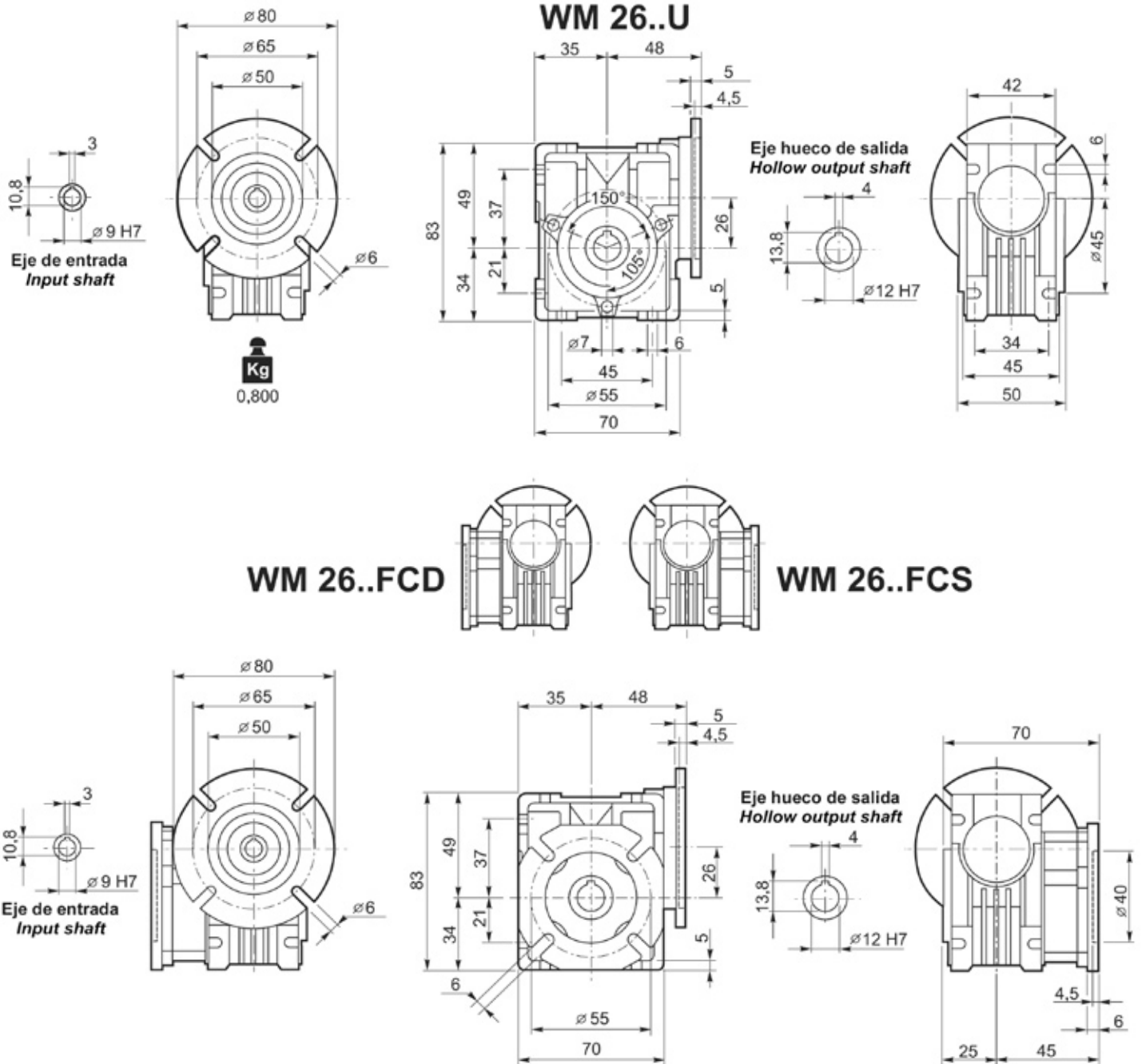


GEARBOX

WM 26

8 Nm



TECHNICAL CHARACTERISTICS

Worm gearbox. Life-time lubrication by grease, therefore it is main tenance-free.

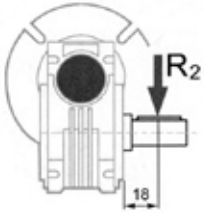
- **Housing.** Die-casting aluminium.
- **Worm-shaft.** Hardened steel with grinding.
- **Worm-wheels.** B14 bronze wheel.
- **Output shaft.** Optional, see Fig. 1 in back page.

MOTOR COUPLING

- **IEC AC motor:**
Three phase and single phase. Gr. 56 - B14 form.
Three phase and single phase, 2 or 4 poles K90 motor with or without brake. Gr. 56 - B14 form.
- **DC motor:**
Motors at 12, 24, 90 or 180 V. From 100 to 180 W.

OUTPUT RADIAL LOADS

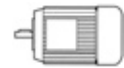
On the following table there are the allowable radial loads on the output shaft, referred to the rated power with $sf=1$ and applied to a distance of 18 mm. from the wheel.



n_2 [min ⁻¹]	280	187	140	93	70	47	35	28	23	18	15
R_2 [N]	390	400	490	580	610	610	610	610	610	610	610

DESIGNATION

Type	Ratio	Version	Motor type	Input flange
WM 26	10	U	P56	B14
	5-10-15-20 30-40-50-60	U FCS FCD	P56	B14



Type and frame of the motor (if requested)

TECHNICAL DATA

		i								
		5	10	15	20	30	40	50	60	
$n_1 = 1400$ min⁻¹	n_2 (min ⁻¹)	280	140	93	70	47	35	28	23	
	M_n (Nm)	9	10	10	10	11	11	10	9	
	RD %	85	81	76	72	63	58	53	50	
$P_1 = 0,06$ kW	P56	M_2 (Nm)	1,7	3,3	4,7	5,9	7,7	9,5	10	9,0
		sf	5,2	3,0	2,1	1,7	1,4	1,2	1,0	1,0
$P_1 = 0,09$ kW	P56	M_2 (Nm)	2,6	5,0	7,0	8,8	11	11	10	9,0
		sf	3,4	2,0	1,4	1,1	1,0	1,0	1,0	1,0
Worm wheel data		Z1	4	3	2	2	1	1	1	1
		Mx	1,85	1,2	1,2	0,9	1,2	0,9	0,75	0,6
		B	26° 16'	12° 41'	8° 32'	6° 25'	4° 17'	3° 13'	2° 58'	2° 9'

N.B. The marked areas indicate the possible assembly of the indicated motors, but remind to check that the torque M_2 does not exceed the nominal value M_n of the gearbox.

SYMBOLS

- n_1 (min⁻¹): Input speed
 n_2 (min⁻¹): Output speed
i : Ratio
 P_1 (kW) : Input power
 M_n (Nm) : Maximal gearbox torque
 M_2 (Nm) : Output torque referred to P_1
 sf : Service factor
RD (%) : Dynamic efficiency
 R_2 : Maximal output radial load
Z1 : Worm starts
Mx : Module
B : Helix angle

OPTIONAL OUTPUT SHAFT

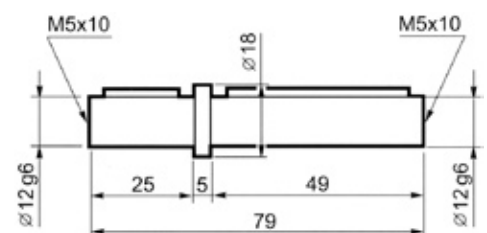
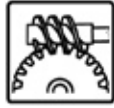


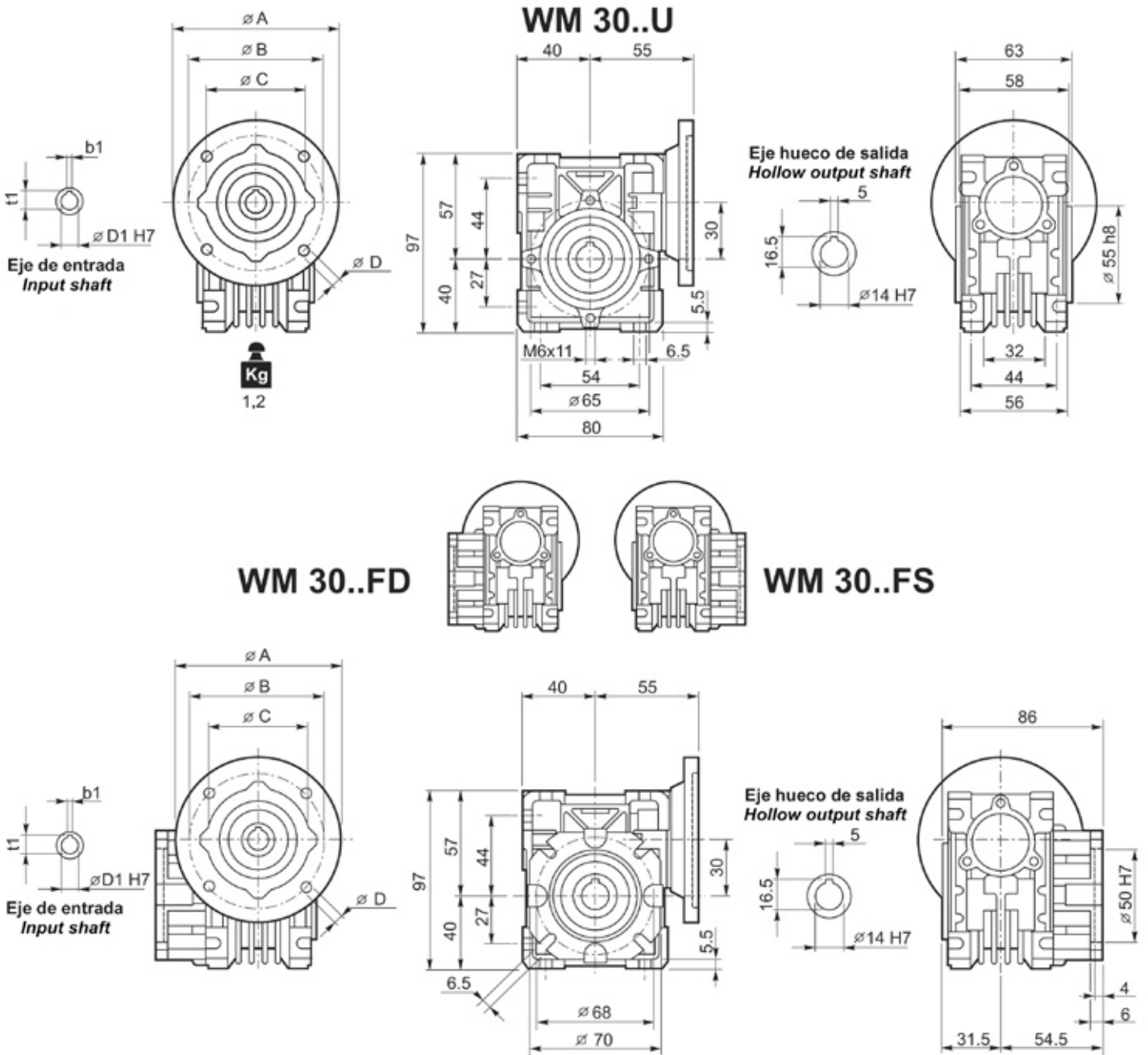
Fig. 1



GEARBOX

WM 30

12 Nm



		A	B	C	D	D1	t1	b1			A	B	C	D	D1	t1	b1
P56	B5	120	100	80	6.5	9	10.8	3	P63	B5	140	115	95	9	11	12.8	4
	B14	80	65	50	6					B14	90	75	60	6			

TECHNICAL CHARACTERISTICS

Worm gearbox. Life-time lubrication by grease, therefore it is main tenance-free.

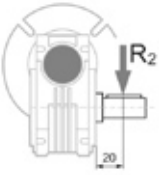
- **Housing.** Die-casting aluminium.
- **Worm-shaft.** Hardened steel with grinding.
- **Worm-wheels.** B14 bronze wheel.
- **Output shaft.** Optional.

MOTOR COUPLING

- **IEC AC motor:**
Three phase and single phase. Gr. 63 - B14 form.
- **DC motor:** To consult.


OUTPUT RADIAL LOADS

On the following table there are the allowable radial loads on the output shaft, referred to the rated power with $sf=1$ and applied to a distance of 20 mm. from the wheel.



n_2 [min ⁻¹]	280	187	140	93	70	47	35	28	23	18	14
R_2 [N]	550	650	750	850	950	1100	1200	1300	1350	1400	1500

DESIGNATION

T Type	Ratio	Version	Motor type	Input flange	
WM 30	10	U	P56	B14	Type and frame of the motor (if requested)
	7,5-10-15 20-25-30-40 50-60-80	U FS FD	P56 P63	B5 B14	

TECHNICAL DATA

		i										
		7,5	10	15	20	25	30	40	50	60	80	
$n_1 = 1400$ min⁻¹	n_2 (min ⁻¹)	187	140	93	70	56	47	35	28	23	18	
	M_n (Nm)	16	17	18	18	20	20	19	18	18	12	
	RD %	88	85	79	76	69	66	60	57	53	44	
$P_1 = 0,06$ kW	P56	M_2 (Nm)	2,7	3,5	4,9	6,2	7,1	8,1	9,8	12	13	12
		sf	5,9	4,9	3,7	2,9	2,8	2,5	1,9	1,5	1,4	1,0
$P_1 = 0,09$ kW	P56	M_2 (Nm)	4,1	5,2	7,3	9,3	11	12	15	17	18	12
		sf	3,9	3,3	2,5	1,9	1,9	1,6	1,3	1,0	1,0	1,0
$P_1 = 0,13$ kW	P63	M_2 (Nm)	5,9	7,5	11	13	15	1,8	19	18	On request	
		sf	2,7	2,3	1,7	1,3	1,3	1,1	1,0	1,0		
$P_1 = 0,18$ kW	P63	M_2 (Nm)	8,1	10,4	15	19	20	20	19	18	On request	
		sf	2,0	1,6	1,2	1,0	1,0	1,0	1,0	1,0		

N.B. The marked areas indicate the possible assembly of the indicated motors, but remind to check that the torque M_2 does not exceed the nominal value M_n of the gearbox.

SYMBOLS

n_1 (min⁻¹): Input speed

n_2 (min⁻¹): Output speed

i : Ratio

P_1 (kW) : Input power

M_n (Nm) : Maximal gearbox torque

M_2 (Nm): Output torque referred to P_1

sf : Service factor

RD (%) : Dynamic efficiency

R_2 : Permitted output radial load



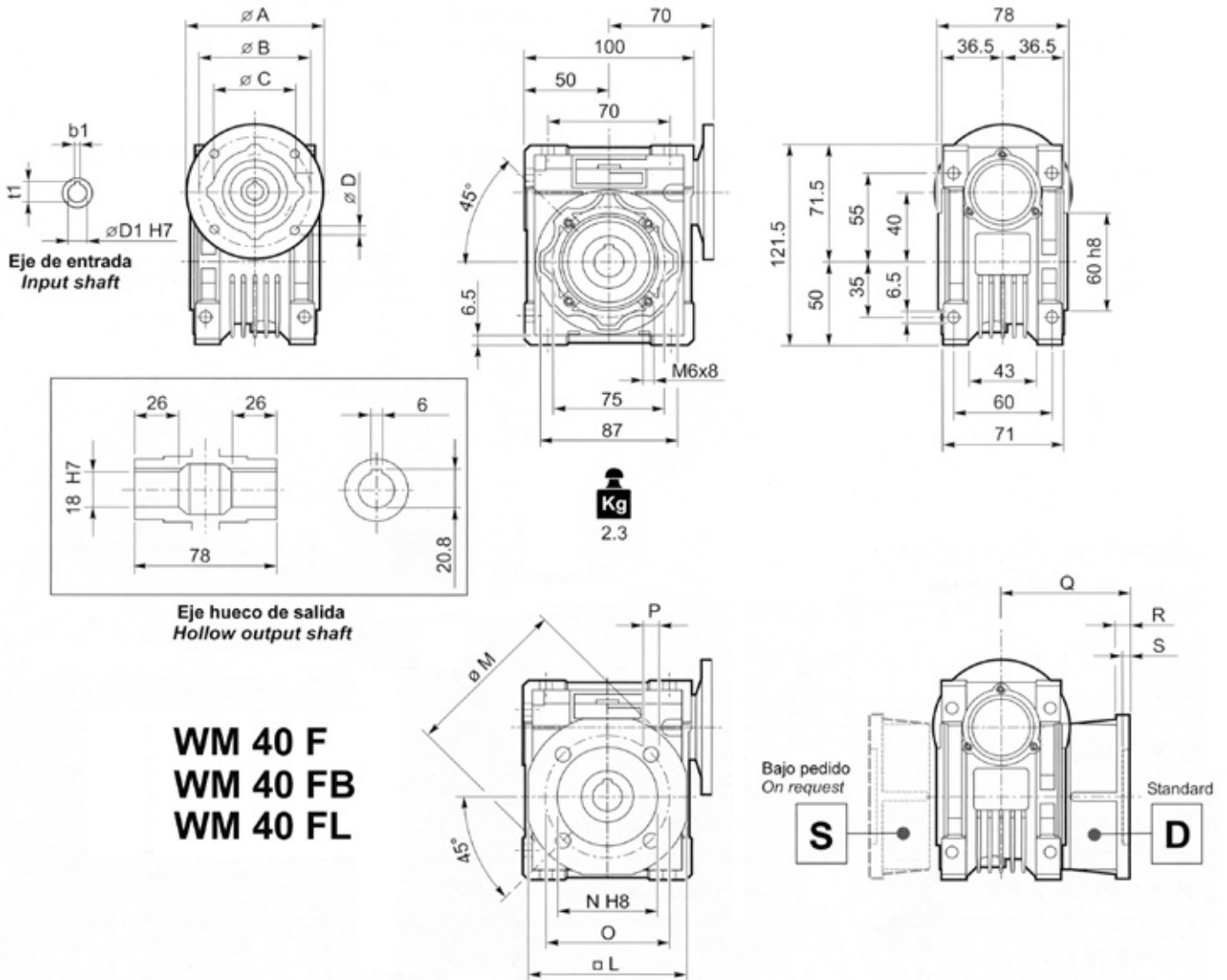
GEARBOX

WM 40

27 Nm



WM 40 U



WM 40 F
WM 40 FB
WM 40 FL

		A	B	C	D	D1	t1	b1
P56	B5	120	100	80	6.5	9	10.8	3
	B14	90	75	60	6	11	12.8	4
P63	B5	140	115	95	9	14	16.3	5
	B14	90	75	60	6	11	12.8	4
P71	B5	160	130	110	9	14	16.3	5
	B14	105	85	70	6.5	14	16.3	5

	L	M	N	O	P	Q	R	S
WM 40 F	95	110	60	75	9	67	7	4
WM 40 FB	—	140	95	115	9.5	76.5	9	5
WM 40 FL	95	110	60	87	9	97	7	4

TECHNICAL CHARACTERISTICS

Worm gearbox. Life-time lubrication by grease, therefore it is main tenance-free.

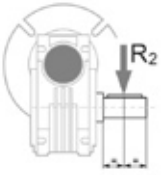
- **Housing.** Die-casting aluminium.
- **Worm-shaft.** Hardened steel with grinding.
- **Worm-wheels.** B14 bronze wheel.
- **Output shaft.** Optional.

MOTOR COUPLING

- **IEC AC motor:**
Three phase and single phase. Gr. 63 - B14 form.
- **DC motor:** To consult.


OUTPUT RADIAL LOADS

On the following table there are the allowable radial loads on the output shaft, referred to the rated power with $sf=1$ and applied to a distance of 20 mm. from the wheel.



n_2 [min^{-1}]	187	140	93	70	56	47	35	28	23	18	14
R_2 [N]	1000	1100	1260	1420	1570	1630	1680	1780	1890	2200	2410

DESIGNATION

Type	Ratio	Version	Motor type	Input flange	
WM 40	10	U	P71	B14	Type and frame of the motor (if requested)
	7,5-10-15 20-25-30-40 50-60-80-100	U FS FD	P56 P63 P71	B5 B14	

TECHNICAL DATA

		i											
		7.5	10	15	20	25	30	40	50	60	80	100	
$n_1 = 1400 \text{ min}^{-1}$	n_2 [min^{-1}]	187	140	93	70	56	47	35	28	23	18	14	
	M_n [Nm]	35	37	37	39	40	43	40	38	36	33	29	
	RD %	86	84	81	77	71	68	65	63	58	55	47	
$P_1 = 0.06 \text{ kW}$	P56	M_2 [Nm]	Bajo pedido / On request							13	14	18	19
		sf								3.0	2.5	1.9	1.5
$P_1 = 0.09 \text{ kW}$	P56	M_2 [Nm]	Bajo pedido / On request							19	21	27	29
		sf								2.0	1.7	1.3	1.0
$P_1 = 0.12 \text{ kW}$	P63	M_2 [Nm]	5.3	6.9	10	13	15	17	21	26	28	36	29
		sf	6.6	5.3	3.7	3.0	2.6	2.5	1.9	1.5	1.3	1.0	1.0
$P_1 = 0.18 \text{ kW}$	P63	M_2 [Nm]	7.9	10	15	19	22	25	32	39	36	37	29
		sf	4.4	3.7	2.5	2.1	1.7	1.7	1.3	1.0	1.0	1.0	1.0
$P_1 = 0.25 \text{ kW}$	P71	M_2 [Nm]	11	14	21	26	30	35	40	Bajo pedido / On request			
		sf	3.2	2.6	1.9	1.5	1.3	1.2	1.0				
$P_1 = 0.37 \text{ kW}$	P71	M_2 [Nm]	16	21	31	39	40	43	40	Bajo pedido / On request			
		sf	2.2	1.8	1.2	1.0	1.0	1.0	1.0				

N.B. The marked areas indicate the possible assembly of the indicated motors, but remind to check that the torque M_2 does not exceed the nominal value M_n of the gearbox.

SYMBOLS

n_1 (min^{-1}): Input speed

n_2 (min^{-1}): Output speed

i : Ratio

P_1 (kW) : Input power

M_n (Nm) : Maximal gearbox torque

M_2 (Nm): Output torque referred to P_1

sf : Service factor

RD (%) : Dynamic efficiency

R_2 : Permitted output radial load



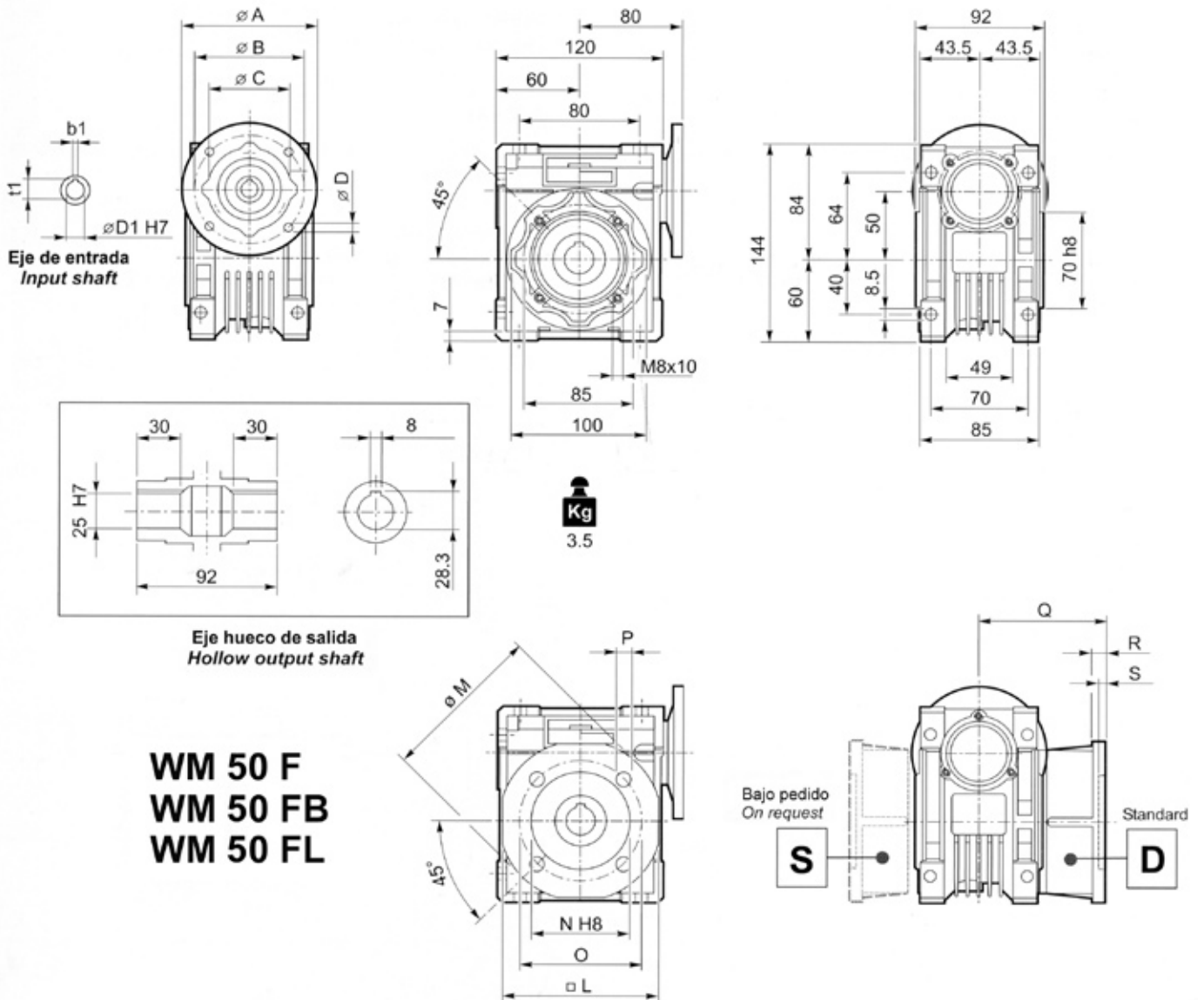
GEARBOX

WM 50

50 Nm



WM 50 U



		A	B	C	D	D1	t1	b1
P63	B5	140	115	95	9	11	12.8	4
	B14	105	85	70	6.5	14	16.3	5
P71	B5	160	130	110	9	19	21.8	6
	B14	120	100	80	6.5			

	L	M	N	O	P	Q	R	S
WM 50 F	110	125	70	85	11	90	9	5
WM 50 FB	—	160	110	130	9.5	87.5	10	5
WM 50 FL	110	125	70	90	11	120	9	5

TECHNICAL CHARACTERISTICS

Worm gearbox. Life-time lubrication by grease, therefore it is main tenance-free.

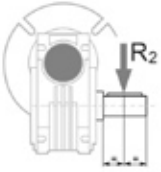
- **Housing.** Die-casting aluminium.
- **Worm-shaft.** Hardened steel with grinding.
- **Worm-wheels.** B14 bronze wheel.
- **Output shaft.** Optional.

MOTOR COUPLING

- **IEC AC motor:**
Three phase and single phase. Gr. 63 - B14 form.
- **DC motor:** To consult.


OUTPUT RADIAL LOADS

On the following table there are the allowable radial loads on the output shaft, referred to the rated power with $sf=1$ and applied to a distance of 20 mm. from the wheel.



n_2 [min^{-1}]	187	140	93	70	56	47	35	28	23	18	14
R_2 [N]	1340	1520	1700	1940	2200	2270	2340	2520	2710	2990	3360

DESIGNATION

Type	Ratio	Version	Motor type	Input flange	
WM 50	10	U	P80	B14	Type and frame of the motor (if requested)
	7,5-10-15 20-25-30-40 50-60-80-100	U FS FD	P63 P71 P80	B5 B14	

TECHNICAL DATA

			i										
			7.5	10	15	20	25	30	40	50	60	80	100
$n_1 = 1400 \text{ min}^{-1}$	n_2 [min^{-1}]		187	140	93	70	56	47	35	28	23	18	14
	M_n [Nm]		62	68	72	68	69	79	76	71	63	59	52
	RD %		86	84	81	78	75	71	67	63	58	52	47
$P_1 = 0.12 \text{ kW}$	P63	M_2 [Nm] sf	Bajo pedido / On request						22 3.5	26 2.8	28 2.2	34 1.7	38 1.3
$P_1 = 0.18 \text{ kW}$	P63	M_2 [Nm] sf	Bajo pedido / On request						33 2.4	39 1.9	43 1.9	51 1.1	52 1.0
$P_1 = 0.25 \text{ kW}$	P71	M_2 [Nm] sf	11 5.6	14 4.9	21 3.4	27 2.6	32 2.2	36 2.2	46 1.7	54 1.3	59 1.1	59 1.0	
$P_1 = 0.37 \text{ kW}$	P71	M_2 [Nm] sf	16 3.9	21 3.2	31 2.3	39 1.7	47 1.5	54 1.5	68 1.2	80 1.0	63 1.0	59 1.0	
$P_1 = 0.55 \text{ kW}$	P80	M_2 [Nm] sf	24 2.5	32 2.1	46 1.6	59 1.2	70 1.0	79 1.0	Bajo pedido / On request				
$P_1 = 0.75 \text{ kW}$	P80	M_2 [Nm] sf	33 1.8	43 1.5	62 1.1	68 1.0	69 1.0	79 1.0	Bajo pedido / On request				

N.B. The marked areas indicate the possible assembly of the indicated motors, but remind to check that the torque M_2 does not exceed the nominal value M_n of the gearbox.

SYMBOLS

n_1 (min^{-1}): Input speed

n_2 (min^{-1}): Output speed

i : Ratio

P_1 (kW) : Input power

M_n (Nm) : Maximal gearbox torque

M_2 (Nm): Output torque referred to P_1

sf : Service factor

RD (%) : Dynamic efficiency

R_2 : Permitted output radial load