

M45

M Square - Gear

416lb in

Rating - Aluminum WORM GEARBOXES



QUICK SELECTION / Selezione veloce

input speed (n₁) = 1750 min⁻¹

Output Speed n ₂ [min ⁻¹]	Ratio i	Motor power P _{1M} [HP]	Output torque M _{2M} [lb in]	Service factor f.s.	Nominal power P _{1R} [HP]	Nominal torque M _{2R} [lb in]	Available NEMA motor flanges		Dynamic efficiency RD	Tooth Module [mm]	 Ratios code
							-W	-			
							56C	-			
250.0	7	1	202	1.8	1.34	363			80	2.2	01
175.0	10	1	285	1.4	1.02	389			79	2.2	02
125.0	14	0.75	291	1.3	0.75	389			77	2.4	03
83.3	21	0.75	380	1.0	0.55	372			67	1.6	04
62.5	28	0.5	328	1.3	0.47	416			65	2.5	05
47.3	37	0.33	277	1.3	0.32	363			63	1.8	06
38.0	46	0.33	323	1.1	0.28	363			59	1.5	07
29.2	60	0.25	303	1.2	0.22	363			56	1.2	08
25.0	70	0.25	340	0.8	0.15	266			54	1.0	09
17.2	102	0.25*	450	<0.8	0.11	257			49	0.72	10

Motor Flanges Available
Flange Motore Disponibili

 B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

 C) Motor Flange Holes Position
Posizione Fori Flangia Motore

* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit M45 is supplied with synthetic oil, providing “long life” lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.
For complete documentation please visit our web site.

I Il riduttore tipo M45 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño M45 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.
Para documentación completa, consultar nuestra Web.

LUBRICATION M45 Oil Quantity 3.17 ounces

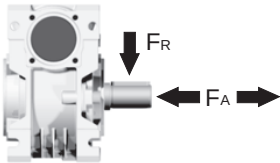
SHELL Omala S4 WE 320	ENI Telium VSF 320
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For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

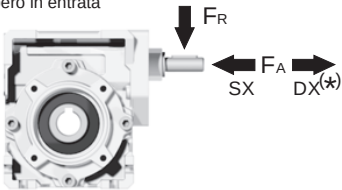
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n ₂ [min ⁻¹]	FA [lb]	FR [lb]
200	40	202
150	45	225
100	49	247
75	54	270
50	58	315
25	67	405
15	90	450

Input shaft
albero in entrata



n ₁ [min ⁻¹]	FA [lb]	FR [lb]
1750	9	47

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

INCH

3D dimensions on the Web

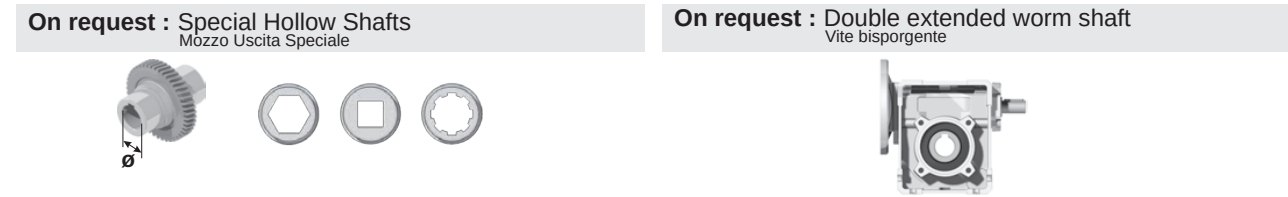
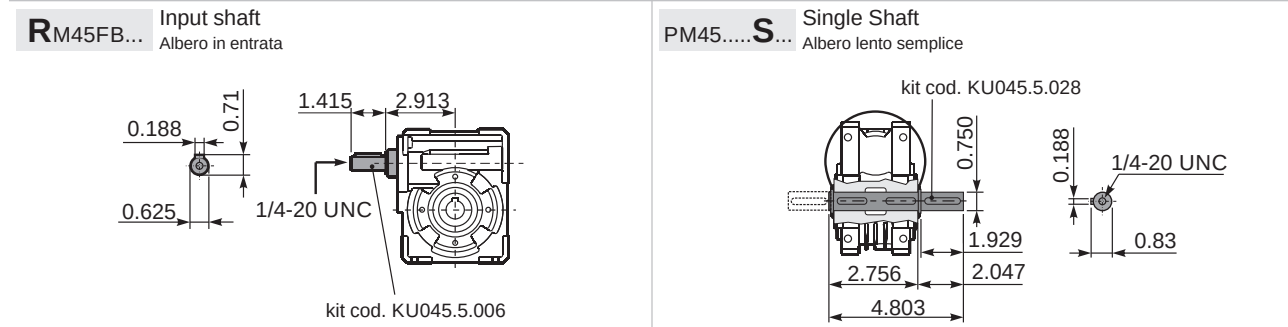
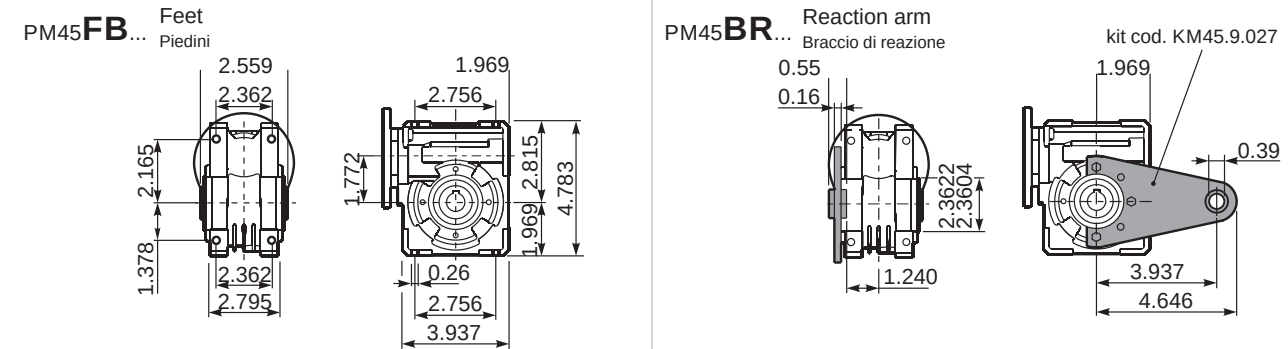
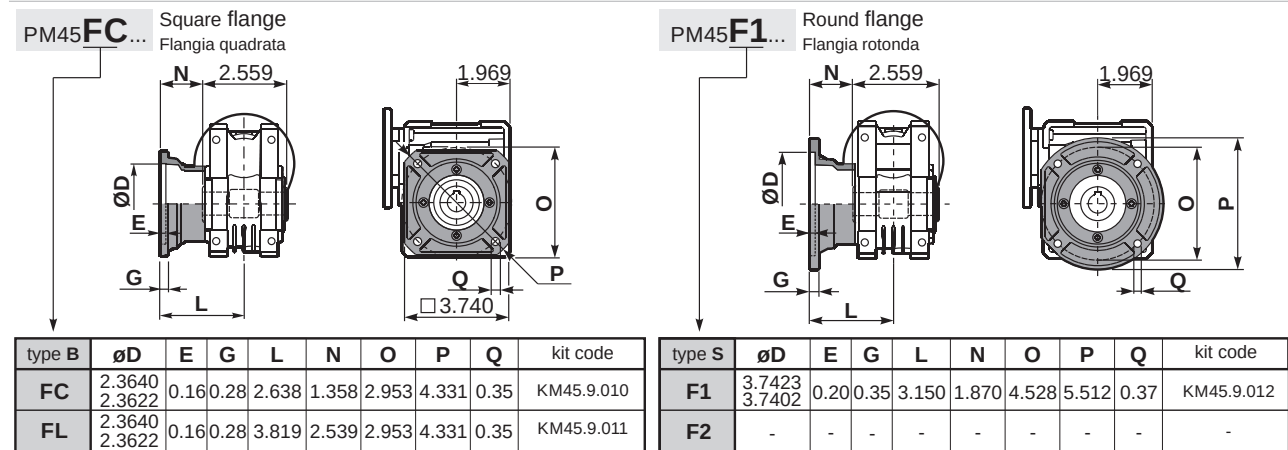
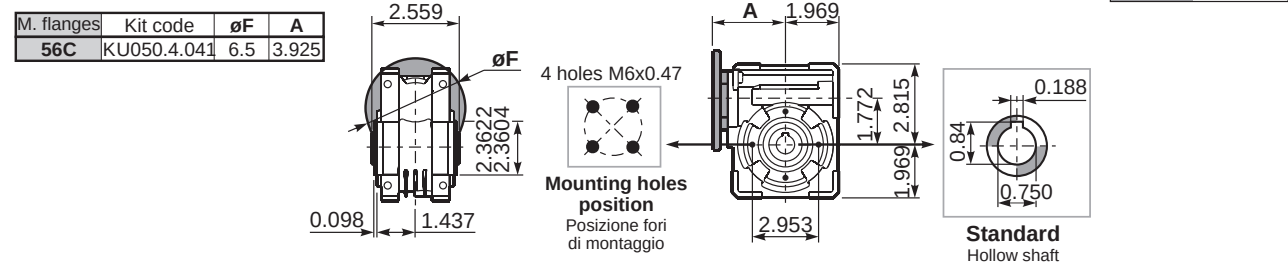
M Square - Gear
416lb in

M45

PM45**FB**... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore

5.07 lb



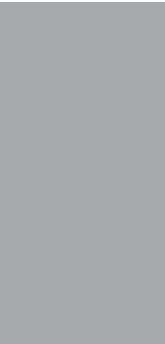
M50

M Square - Gear

779lb in

Rating - Aluminum WORM GEARBOXES



▪ QUICK SELECTION / Selezione veloce							input speed (n ₁) = 1750 min ⁻¹				
Output Speed	Ratio	Motor power	Output torque	Service factor	Nominal power	Nominal torque	Available NEMA motor flanges		Dynamic efficiency	Tooth Module	
n ₂ [min ⁻¹]	i	P _{1M} [HP]	M _{2M} [lb in]	f.s.	P _{1R} [HP]	M _{2R} [lb in]	-W	-			
							56C	-		RD	Ratios code
250.0	7	2	413	1.6	3.25	664		-	82	2.5	01
175.0	10	2	576	1.2	2.43	690			80	2.4	02
125.0	14	1.5	598	1.2	1.78	699			79	2.6	03
97.2	18	1	486	1.4	1.38	664			75	2.0	04
67.3	26	1	646	1.0	0.99	628			69	2.7	05
58.3	30	1	756	1.0	1.04	779			70	2.5	12
48.6	36	0.75	671	1.1	0.82	726			69	2.1	06
40.7	43	0.5	511	1.4	0.72	726			66	1.8	07
35.0	50	0.5	558	1.2	0.61	673			62	1.5	13
29.2	60	0.5	627	1.0	0.51	628			58	1.3	08
25.7	68	0.33	461	1.3	0.42	584			57	1.2	09
21.9	80	0.33	513	1.1	0.37	575			54	1.0	10
17.5	100	0.25	450	1.1	0.27	487	50	0.8	11		

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit M50 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.
For complete documentation please visit our web site.

I Il riduttore tipo M50 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño M50 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.
Para documentación completa, consultar nuestra Web.

▪ LUBRICATION M50 Oil Quantity 4.93 ounces	
SHELL Omala S4 WE 320	ENI Telium VSF 320
For all details on lubrication and plugs check our website Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web	

tab. 1

Output shaft

Albero di uscita

n ₂ [min ⁻¹]	FA [lb]	FR [lb]
200	54	270
150	63	315
100	67	337
75	76	382
50	85	427
25	108	562
15	126	629

Input shaft

albero in entrata

n ₁ [min ⁻¹]	FA [lb]	FR [lb]
1750	17	85

*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

2-7

Fonte da Portela Camiño Feira-Bembrive 7 36214 - Vigo - España - rodavigo@rodavigo.com

INCH

3D dimensions on the Web

M Square - Gear
779lb in

M50

PM50**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56C	KU050.4.041	6.5	4.083

3.189

øF

2.7559

2.7541

0.098

1.713

4 holes M8x0.43

Mounting holes position

Posizione fori di montaggio

A 2.362

1.969

3.307

2.362

3.346

0.250

1.12

1.000

Standard
Hollow shaft

3.189

Gearbox weight

peso riduttore

7.165 lb

2

PM50**FC**... Square flange
Flangia quadrata

øD

E

G

L

N

3.189

2.362

O

P

Q

4.331

type B	øD	E	G	L	N	O	P	Q	kit code
FC	2.7577 2.7559	0.20	0.35	3.543	1.949	3.346	4.921	0.43	KM50.9.010
FL	2.7577 2.7559	0.20	0.35	4.724	3.130	3.346	4.921	0.43	KM50.9.011

PM50**F1**... Round flange
Flangia rotonda

øD

E

G

L

N

3.189

2.362

O

P

Q

type S	øD	E	G	L	N	O	P	Q	kit code
F1	4.3328 4.3307	0.20	0.39	3.504	1.909	5.118	6.299	0.37	KM50.9.012
F2	3.7423 3.7402	0.20	0.57	2.835	1.240	4.528	5.512	0.43	KM50.9.013

PM50**FB**... Feet
Piedini

3.189

2.756

2.520

1.575

2.756

3.346

2.362

3.150

1.969

3.307

5.669

2.362

0.33

3.150

4.724

PM50**BR**... Reaction arm
Braccio di reazione

0.55

0.16

2.7559

2.7541

1.516

kit cod. KM50.9.027

2.362

0.39

3.937

4.646

RM50**FB**... Input shaft
Albero in entrata

0.188

0.71

0.625

1/4-20 UNC

1.415

3.130

kit cod. KU045.5.006

PM50.....**S**... Single Shaft
Albero lento semplice

kit cod. KU050.5.028

1.000

2.130

2.287

3.405

5.693

0.250

5/6-18UNC

1.11

On request : Special Hollow Shafts
Mozzo Uscita Speciale

On request : Double extended worm shaft
Vite bisporgente

M63

M Square - Gear

1416lb in

Rating - Aluminum WORM GEARBOXES



▪ QUICK SELECTION / Selezione veloce							input speed (n _i) = 1750 min ⁻¹				
Output Speed	Ratio	Motor power	Output torque	Service factor	Nominal power	Nominal torque	Available NEMA motor flanges		Dynamic efficiency	Tooth Module 	 Ratios code
n ₂ [min ⁻¹]	i	P _{1W} [HP]	M _{2M} [lb in]	f.s.	P _{1R} [HP]	M _{2R} [lb in]	-W	-X			
							56C	143-5TC			
250.0	7	2	419	2.7	5.49	1133	B		83	3.1	01
175.0	10	2	583	2.0	4.12	1186	B		81	3.1	02
116.7	15	2	854	1.5	3.11	1310	B		79	3.1	03
92.1	19	2	1068	1.2	2.44	1283	B		78	2.6	04
72.9	24	1.5	972	1.3	1.96	1257	B		75	2.0	05
58.3	30	1.5	1199	1.2	1.79	1416	B		74	3.2	06
48.6	36	1.5	1323	1.0	1.50	1301	B		68	2.7	07
43.8	40	1	951	1.4	1.40	1310	B		66	2.5	13
38.9	45	1	1070	1.1	1.13	1195	B		66	2.1	08
29.2	60	0.75	1005	1.2	0.90	1195	B		62	1.6	12
26.1	67	0.75	1086	1.0	0.77	1097	B		60	1.5	09
21.9	80	0.5	821	1.3	0.67	1080	B		57	1.3	10
18.6	94	0.5	880	1.2	0.61	1053	B		52	1.1	11

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit M63 is supplied with synthetic oil, providing “long life” lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.
For complete documentation please visit our web site.

I Il riduttore tipo M63 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño M63 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.
Para documentación completa, consultar nuestra Web.

▪ LUBRICATION M63 Oil Quantity 10.56 ounces

SHELL Omala S4 WE 320	ENI Telium VSF 320
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For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS			
Output shaft Albero di uscita			
	n ₂ [min ⁻¹]	FA [lb]	FR [lb]
	200	81	404.5
	150	90	450
	100	103.5	517
	75	112.5	562
	50	135	674.5
	25	157	854
	15	180	899
Input shaft albero in entrata			
	n ₁ [min ⁻¹]	FA [lb]	FR [lb]
	1750	20	101
*Strong axial loads in the DX direction are not allowed. Non sono consentiti forti carichi assiali con direzione DX			

tab. 2

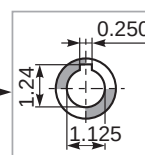
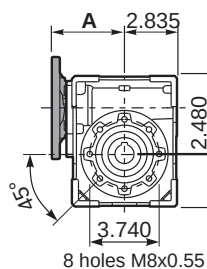
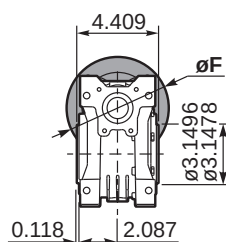
3D dimensions on the Web

M Square - Gear
1416lb in M 63

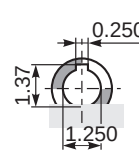
PM63**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56C	KU063.4.041	6.50	4.449
143/5 TC	KU063.4.041	6.50	4.449

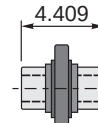
Gearbox weight peso riduttore	13.23 lb
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Standard Hollow shaft

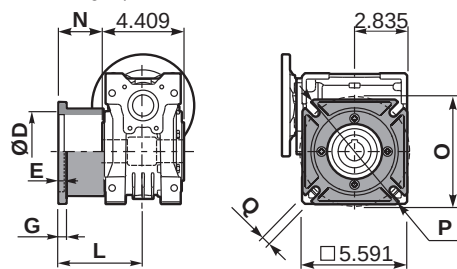


On request
A richiesta



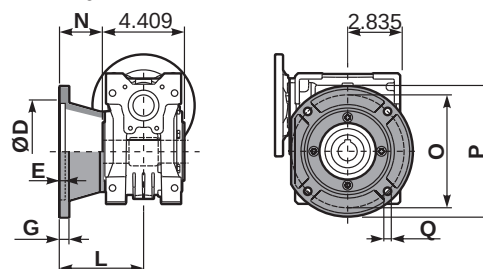
2

PM63**FC**... Square flange
Flangia quadrata

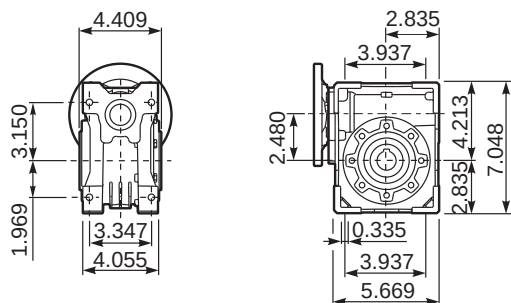


type B	ØD	E	G	L	N	O	P	Q	kit code
FC	4.5296 4.5276	0.24	0.39	3.228	1.024	5.906	7.087	0.43	KM63.9.010
FL	4.5296 4.5276	0.24	0.39	4.409	2.205	5.906	7.087	0.43	KM63.9.011

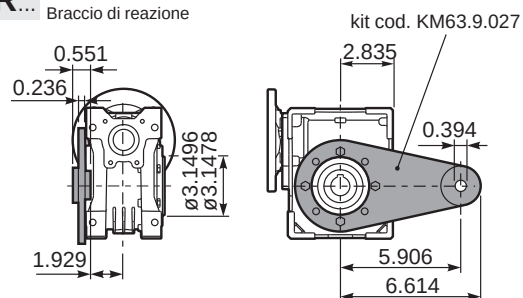
PM63 F1 ...	Round flange Flangia rotonda
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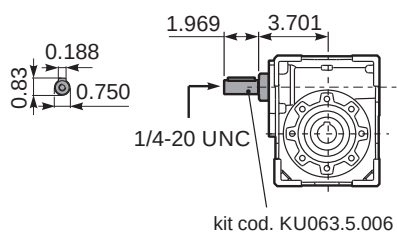
type S	$\varnothing D$	E	G	L	N	O	P	Q	kit code
F1	5.1205 5.1181	0.20	0.39	3.858	1.653	6.496	7.874	0.43	KM63.9.012
F2	5.1205 5.1181	0.20	0.39	4.213	2.008	6.496	7.874	0.43	KM63.9.013
F3	4.3327 4.3307	0.20	0.65	3.169	0.965	5.118	6.299	0.43	KM63.9.014

PM63**FB**... Feet
Piedini

PM63 BR ...	Reaction arm Braccio di reazione
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R M63FB...	Input shaft Albero in entrata
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M85

M Square - Gear

3222lb in

Rating - Aluminum WORM GEARBOXES



▪ QUICK SELECTION / Selezione veloce							input speed (n ₁) = 1750 min ⁻¹					
Output Speed n ₂ [min ⁻¹]	Ratio i	Motor power P _{1M} [HP]	Output torque M _{2M} [lb in]	Service factor f.s.	Nominal power P _{1R} [HP]	Nominal torque M _{2R} [lb in]	Available NEMA motor flanges			Dynamic efficiency RD	Tooth Module  [mm]	 Ratios code
							-W	-X	-Y			
							56C	143-5TC	182-4TC			
250.0	7	5	1109	2.2	10.91	2390	B	B		88	4.23	01
175.0	10	5	1441	1.8	9.27	2638	B	B		80	4.2	02
125.0	14	5	1967	1.4	7.30	2832	B	B		78	4.5	03
87.5	20	5	2845	1.0	4.87	2735	B	B		79	3.4	04
79.5	22	3	1854	1.5	4.48	2735	B	B		78	3.1	05
62.5	28	3	2269	1.4	4.32	3222	B	B		75	4.7	06
46.1	38	3	2915	1.1	3.26	3124	B	B		71	3.5	07
38.0	46	2	2253	1.3	2.72	3027	B	B		68	3.1	08
33.7	52	2	2472	1.1	2.20	2682	B	B		66	2.7	09
26.1	67	1.5	2353	1.1	1.73	2682	B	B		65	2.1	10
23.6	74	1.5	2319	1.1	1.63	2487	B	B		58	1.9	11
18.2	96	1	1833	1.2	1.24	2248	B	B		53	1.5	12

Motor Flanges Available
Flange Motore Disponibili

 B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

 C) Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit M85 is supplied with synthetic oil, providing “long life” lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.
For complete documentation please visit our web site.

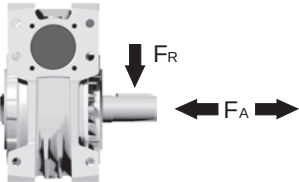
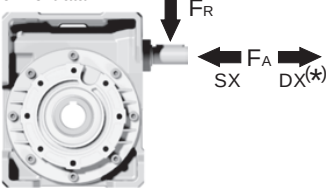
I Il riduttore tipo M85 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.
Per la documentazione completa consulta il nostro sito.

E El reductor tamaño M85 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.
Para documentación completa, consultar nuestra Web.

▪ LUBRICATION M85 Oil Quantity 42.23 ounces

SHELL Omala S4 WE 320	ENI Telium VSF 320
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For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS			
Output shaft Albero di uscita			
	n ₂ [min ⁻¹]	FA [lb]	FR [lb]
	200	112	562
	150	130	652
	100	135	674
	75	157	787
	50	180	899
	25	225	1124
	15	261	1304
Input shaft albero in entrata			
	n ₁ [min ⁻¹]	FA [lb]	FR [lb]
	1750	29	146
*Strong axial loads in the DX direction are not allowed. Non sono consentiti forti carichi assiali con direzione DX			

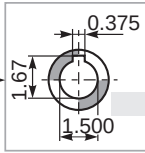
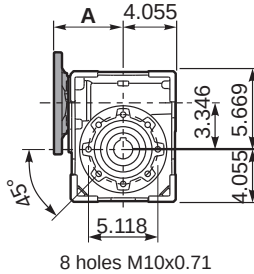
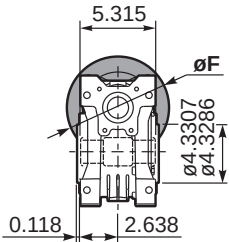
tab. 2

3D dimensions on the Web

M Square - Gear
3222lb in M85

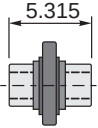
PM85FB... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56C	KU085.4.041	6.50	4.823
143/5 TC	KU085.4.041	6.50	4.823
182/4 TC	KU085.4.042	8.88	5.528



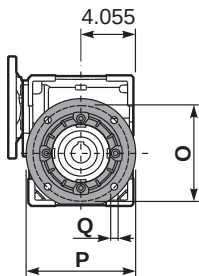
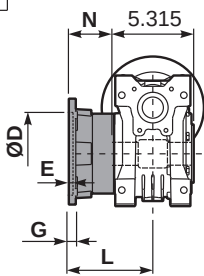
Standard
Hollow shaft

Gearbox weight
peso riduttore 41.23 lb



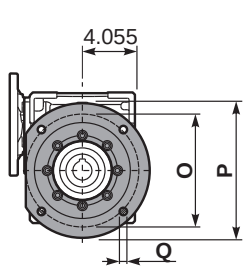
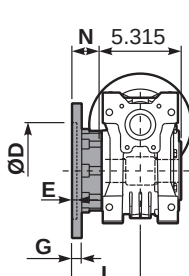
2

PM85FC... Output flange
Flangia uscita



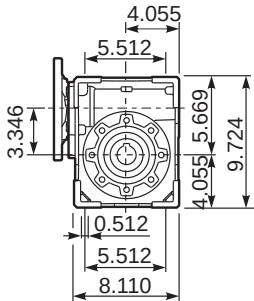
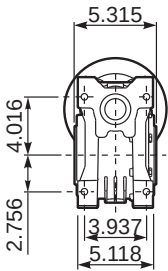
type B	øD	E	G	L	N	O	P	Q	kit code
FC	5.9867 5.9843	0.20	0.63	4.370	1.713	6.929	8.071	0.51	K085.9.010
FL	7.0891 7.0866	0.24	0.71	4.803	2.146	8.465	9.843	0.55	KM85.9.011

PM85F1... Output flange
Flangia uscita

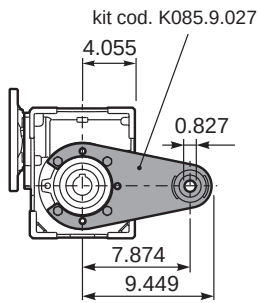
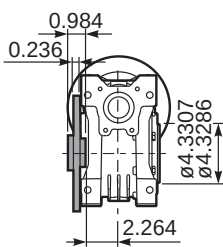


type S	øD	E	G	L	N	O	P	Q	kit code
F1	5.1200 5.1181	0.20	0.51	4.311	1.654	6.496	7.874	0.51	KS085.9.015
F2	5.9867 5.9843	0.20	0.63	5.965	3.307	6.929	8.071	0.51	K085.9.010 K085.0.201

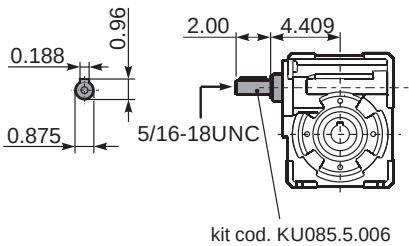
PM85FB... Feet
Piedini



PM85BR... Reaction arm
Braccio di reazione



RM85FB... Input shaft
Albero in entrata



PM85.....S... Single Shaft
Albero lento semplice

