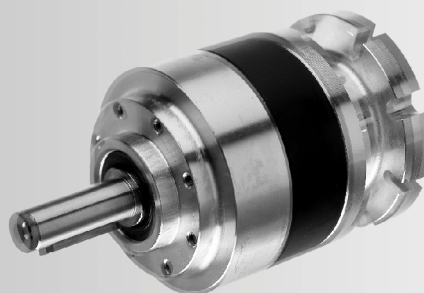
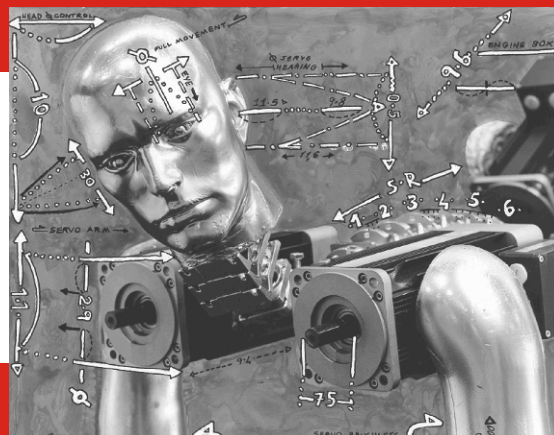
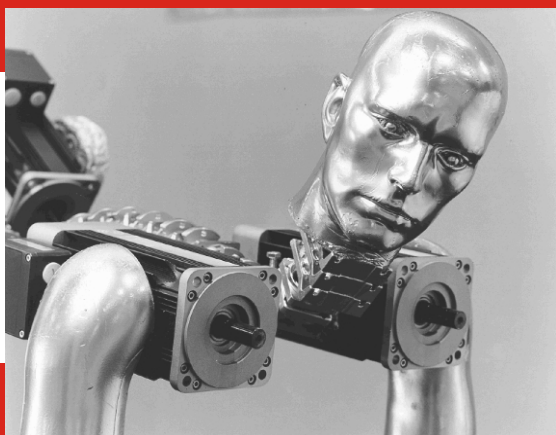


**EPG**



## PLANETARY GEARBOXES



**MOTOR  
POWER  
COMPANY**

[www.motorpowergroup.com](http://www.motorpowergroup.com)

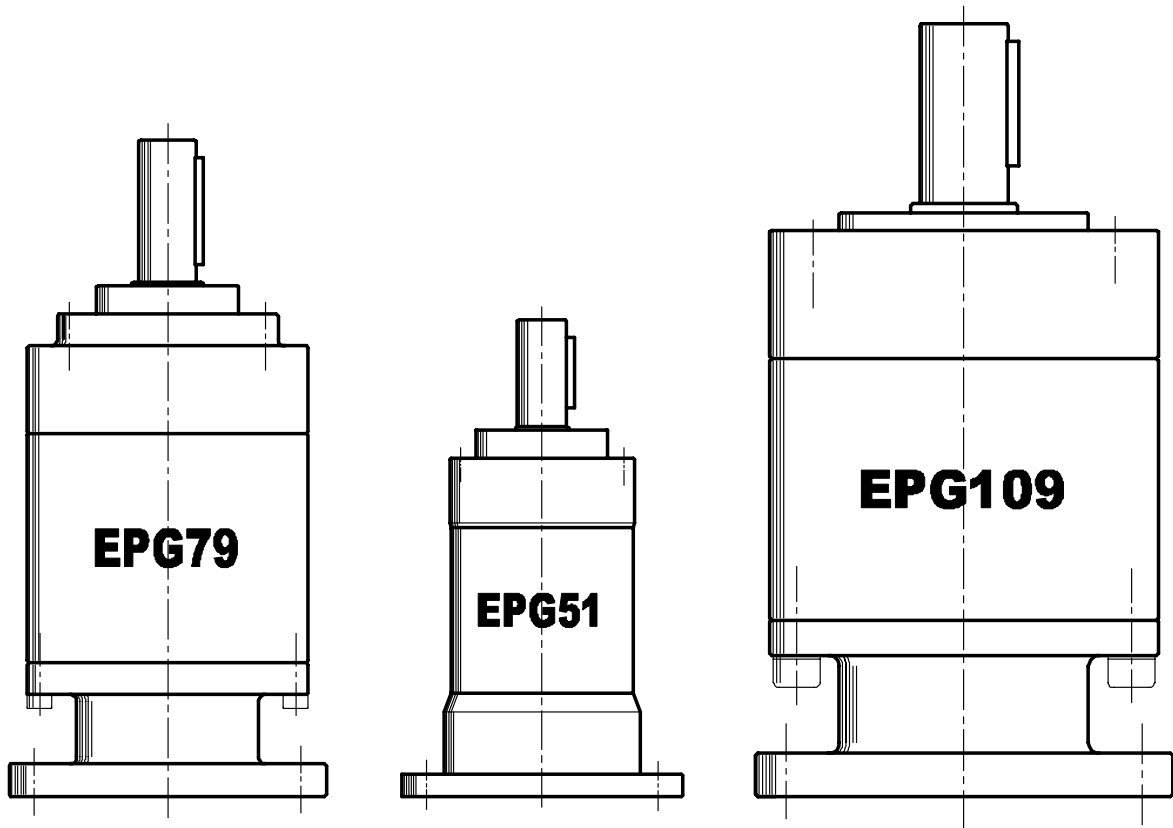
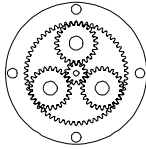
# EPG

The epicycloidal reducers series EPG is designed for the coupling with rotative motors range. Mounting EPG reducers makes the dimensions of the coupling part extremely compact, also thanks to the possibility of mounting the pinion directly on the motor shaft.



Gearbox Typ	Stages	Ratio	Rated Torque (Nm)	Peak Torque (Nm)	Rated Speed Input (rpm)	Max Speed Output (rpm)	Axial Load (N)	Radial Load (N)	Efficiency	Backlash	Diameter (mm)	Lenght (mm)
EPG51	1	1:3 1:4 1:5 1:6	7 *(3.5)	10 *(5)	3000	4000	140	310	0.94	≤15'	51 52	77
	2	1:9 1:12 1:15 1:16 1:18 1:20 1:24 1:25 1:30 1:36	15 *(10)	19 *(15)	3000	4000	140	310	0.91	≤20'	51 52	90
	3	1:45 1:48 1:54 1:60 1:64 1:72 1:75 1:80 1:90 1:96 1:100 1:108 1:120 1:125 1:144 1:150 1:180 1:216	25 *(22)	30 *(27)	3000	4000	140	310	0.89	≤25'	51 52	103
EPG79	1	1:3 1:4 1:5 1:6	28	40	3000	4000	350 **(1000)	600 **(2500)	0.94	≤15'	79	105.5
	2	1:9 1:12 1:15 1:16 1:18 1:20 1:24 1:25 1:30 1:36	44	70	3000	4000	350 **(1000)	600 **(2500)	0.91	≤18'	79	124.5
	3	1:45 1:48 1:54 1:60 1:64 1:72 1:75 1:80 1:90 1:96 1:100 1:108 1:120 1:125 1:144 1:150 1:180 1:216	75	120	3000	4000	350 **(1000)	600 **(2500)	0.89	≤23'	79	143.5
EPG109	1	1:3 1:4 1:5 1:6 1:9	80 100 80	100 180 100	3000	4000	800 **(1600)	1300 **(4000)	0.94	≤15'	109	126.5
	2	1:12 1:15 1:16 1:18 1:20 1:24 1:25 1:30 1:36	140	200	3000	4000	800 **(1600)	1300 **(4000)	0.91	≤18'	109	159
	3	1:45 1:48 1:54 1:60 1:64 1:72 1:75 1:80 1:90 1:96 1:100 1:108 1:120 1:125 1:144 1:150 1:180 1:216	190	320	3000	4000	800 **(1600)	1300 **(4000)	0.89	≤23'	109	191.5

\* THIS VALUE IS REFERRED TO THE REDUCER WITH FIRST SPEED STAGE IN SYNTHETIC MATERIAL  
 \*\*THIS VALUE IS REFERRED TO THE REDUCER WITH CONICAL BEARINGS



# **EPG SERIES**

## **EPICYCLOIDAL REDUCER**

### **FOR**

## **POWER TRANSMISSION**

# EPG 51

## EPICYCLOIDAL REDUCERS

### HOW TO ORDER AN EPG REDUCER

EPG	51	1	3	7	5	R	14	---
SERIES	TYPE	STAGES	RATIO	Ø INPUT SHAFT	INPUT FLANGE	OUTPUT FLANGE	Ø OUTPUT SHAFT	OPTIONS
EPG	51	1 2 3  Bigger stages on request	3 ÷ 216	7 9	1=Penta 2=B14/56 Square 5=B14/56 Round	R=D:37 ( only with Ø14 shaft) S=D:32 (only with Ø12 shaft)	12 (only with S flange) 14 (only with R flange)	*02=synthetic material on first speed stage gears XX=Backlash on request (XX=g)  THESE OPTIONS MUST BE ORDERED SEPARATELY  51= output flange B5 D:80 (only with R flange) 53= h:56 foot (only with R flange)

### PERFORMANCE CHARACTERISTICS

STAGES	RATIO	RATED TORQ. (Nm)	STARTING TORQ. (Nm)	RATED SPEED INPUT (rpm)	GIRI MAX INPUT (rpm)	AXIAL LOAD (N)	RADIAL LOAD (N)	EFFICIENCY	BACKLASH
1	1:3	7 *(3,5)	10 *(5)	3000	4000	140	310	0.94	≤ 15'
	1:4								
	1:5								
	1:6								
2	1:9	15 *(10)	19 *(15)	3000	4000	140	310	0.91	≤ 20'
	1:12								
	1:15								
	1:16								
	1:18								
	1:20								
	1:24								
	1:25								
	1:30								
1:36									
3	1:45	25 *(22)	30 *(27)	3000	4000	140	310	0.89	≤ 25'
	1:48								
	1:54								
	1:60								
	1:64								
	1:72								
	1:75								
	1:80								
	1:90								
	1:96								
	1:100								
	1:108								
	1:120								
	1:125								
	1:144								
1:150									
1:180									
1:216									

Gioco: Gioco max (ARC/min) misurato sull'albero in uscita (output) con albero in entrata (input) bloccato, applicando una coppia pari al 2% della coppia nominale.  
 Coppia nominale: Coppia continua sopportabile alla velocità nominale con durata > 10000 ore.  
 Coppia di spunto: Coppia pulsante accettabile durante un ciclo di lavoro.

Lubrication : **LONG – LIFE**

\*THIS VALUE IS REFERED TO THE REDUCER WITH FIRST SPEED STAGE IN SYNTHETIC MATERIAL

Protection class : **IP65**

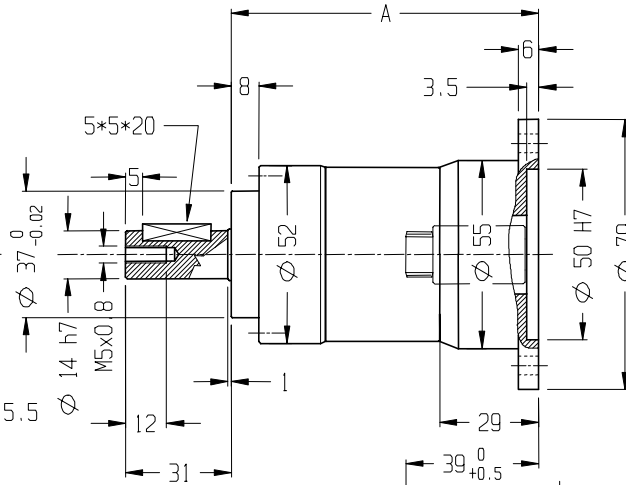
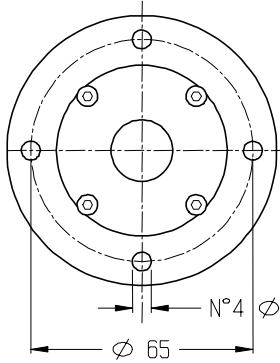
THE MANUFACTURER RESERVES THE RIGHT TO MODIFY THE PRODUCT WITHOUT NOTICE

# EPG 51

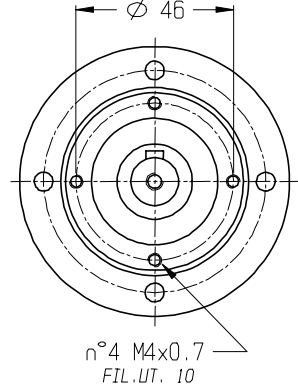
DIMENSIONS (mm)

**STANDARD**

**INPUT FLANGE 5 type**



**OUTPUT FLANGE R type**

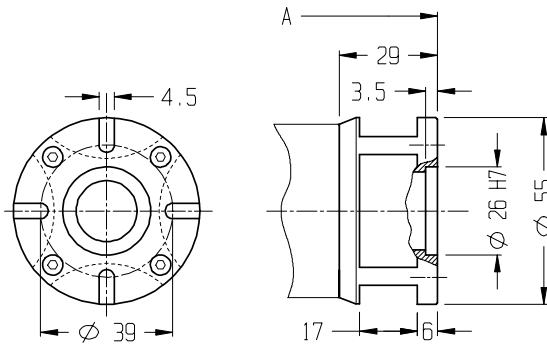


Weight Kg	1 St.	2 St.	3 St.
	0.73	0.93	1.23

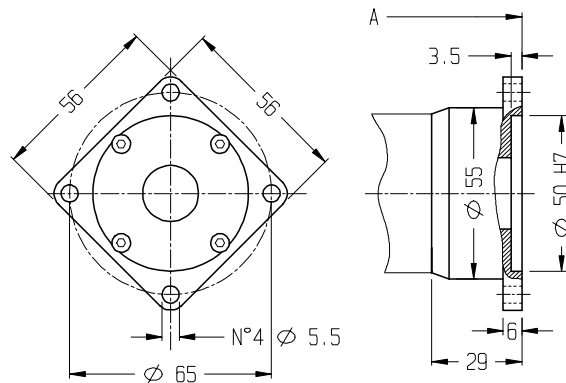
LENGHT. (mm)	A
1 Stage	77
2 Stage	90
3 Stage	103

Ø input E
Ø 7 H7
Ø 9 H7

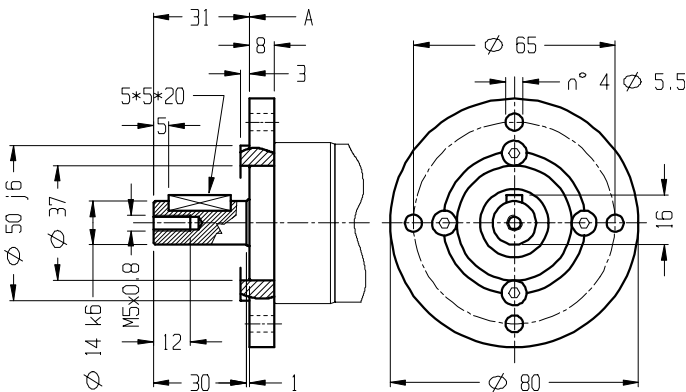
**PENTA 1 INPUT FLANGE type 1**



**B14/56 SQUARE INPUT FLANGE type 2**

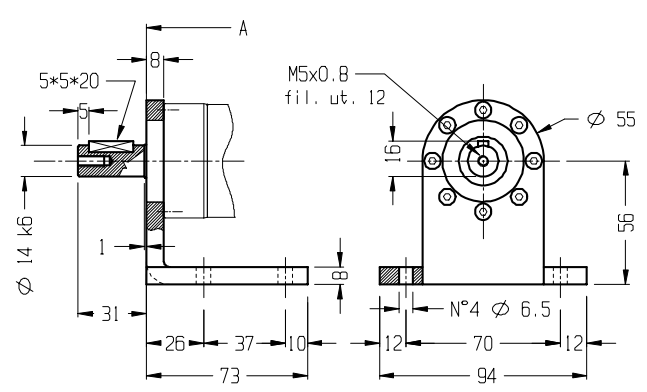


**B5 D:80 OUTPUT FLANGE opt 51**



Couple only with R type flange

**H=56 FOOT opt 53**

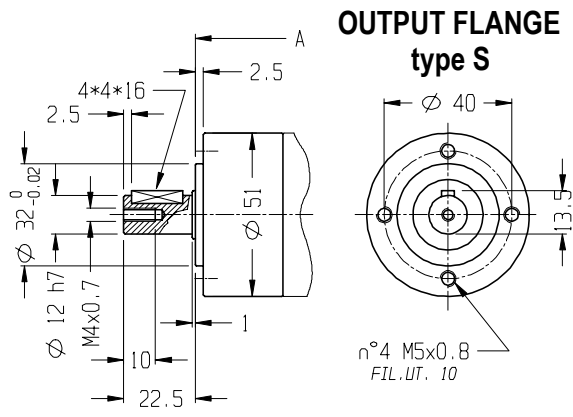


Couple only with R type flange

# EPG 51

DIMENSIONS (mm)

**Ø 12 OUTPUT SHAFT**



Couple only with S type flange

# EPG 79

## EPICYCLOIDAL REDUCERS

### HOW TO ORDER AN EPG REDUCER

EPG	79	1	3	9	6	R	16	---
SERIES	TYPE	STAGES	RATIO	Ø INPUT SHAFT	INPUT FLANGE	OUTPUT FLANGE	Ø OUTPUT SHAFT	OPTIONS
EPG	79	1 2 3	3 ÷ 216	<b>9</b> <b>11</b> <b>14</b> <i>19 (only with flange 4 and option 51)</i>	<b>3=B5/56</b> <i>T85 1,2-2,2</i> <i>Ø14 shaft</i> <b>4=B5/56</b> <i>T85 3,2-4,2</i> <i>Ø19 shaft</i> <b>5=B14/56</b> <i>Round</i> <b>6=B14/63</b> <i>Round</i>	<b>R=D:40</b> ( only with Ø16 shaft) <b>S=D:50</b> (only with Ø19 shaft)	<b>16</b> (only with R flange) <b>19</b> (only with S flange)	* <b>00</b> = conical bearings * <b>XX</b> =backlash on request (XX=g)  THESE OPTIONS MUST BE ORDERED SEPARATELY  <b>51</b> = B5/71 input flange (only with flange 6) <b>53</b> = h:63 foot (only with R flange) <b>54</b> = B5 D:90 output flange (only with R flange)

### PERFORMANCE CHARACTERISTICS

STAGES	RATIO	RATED TORQ.(Nm)	STARTING TORQ. (Nm)	RATED SPEED INPUT(rpm)	GIRI MAX INPUT (rpm)	AXIAL LOAD (N)	RADIAL LOAD (N)	EFFICIENCY	BACKLASH
1	1:3	28	40	3000	4000	350 *(1000)	600 *(2500)	0.94	≤ 15'
	1:4								
	1:5								
	1:6								
2	1:9	44	70	3000	4000	350 *(1000)	600 *(2500)	0.91	≤ 18'
	1:12								
	1:15								
	1:16								
	1:18								
	1:20								
	1:24								
	1:25								
	1:30								
1:36									
3	1:45	75	120	3000	4000	350 *(1000)	600 *(2500)	0.89	≤ 23'
	1:48								
	1:54								
	1:60								
	1:64								
	1:72								
	1:75								
	1:80								
	1:90								
	1:96								
	1:100								
	1:108								
	1:120								
	1:125								
	1:144								
1:150									
1:180									
1:216									

Gioco max (ARC/min) misurato sull'albero in uscita (output) con albero in entrata (input) bloccato, applicando una coppia pari al 2% della coppia nominale.  
 Coppia nominale: Coppia continua sopportabile alla velocità nominale con durata > 10000 ore.  
 Coppia di spunto: Coppia pulsante accettabile durante un ciclo di lavoro.

Lubrication : **LONG – LIFE**

Protection class : **IP65**

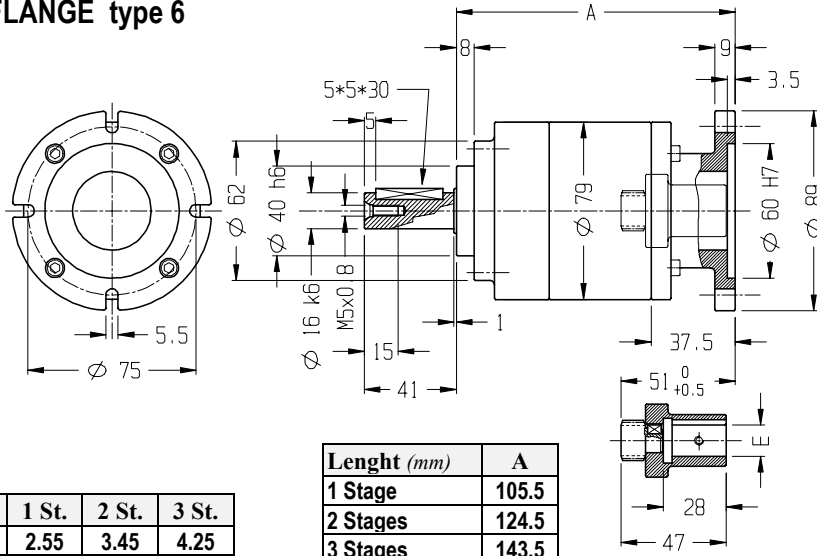
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# EPG79

DIMENSIONS (mm)

**STANDARD**

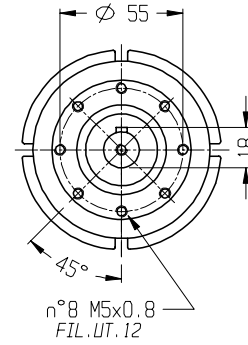
**INPUT FLANGE type 6**



weight	1 St.	2 St.	3 St.
Kg	2.55	3.45	4.25

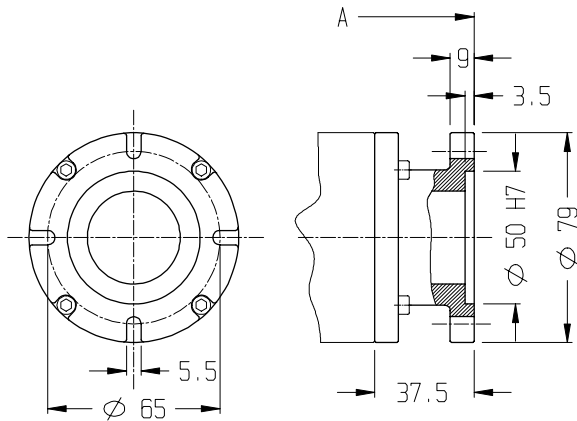
Lenght (mm)	A
1 Stage	105.5
2 Stages	124.5
3 Stages	143.5

**OUTPUT FLANGE R type**

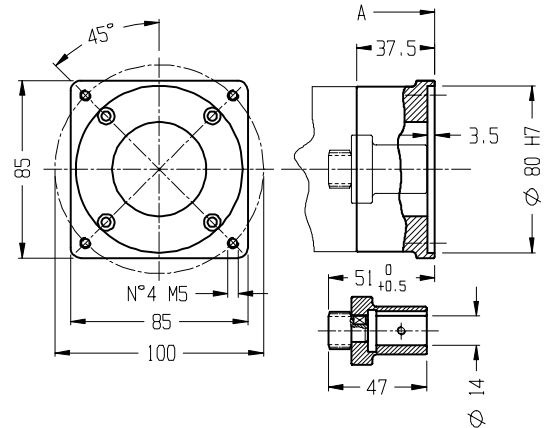


Ø input E
Ø 9 H7
Ø 11H7
Ø 14 H7

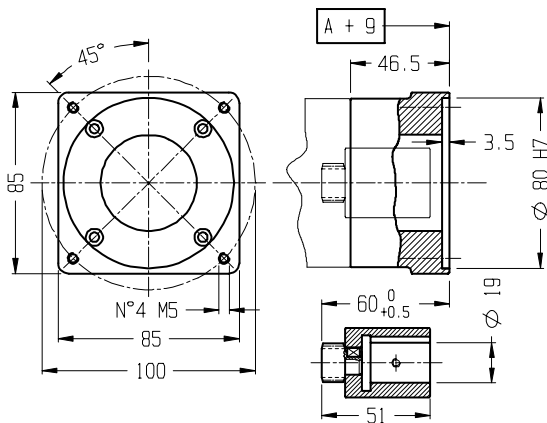
**B14/56 ROUND INPUT FLANGE type 5**



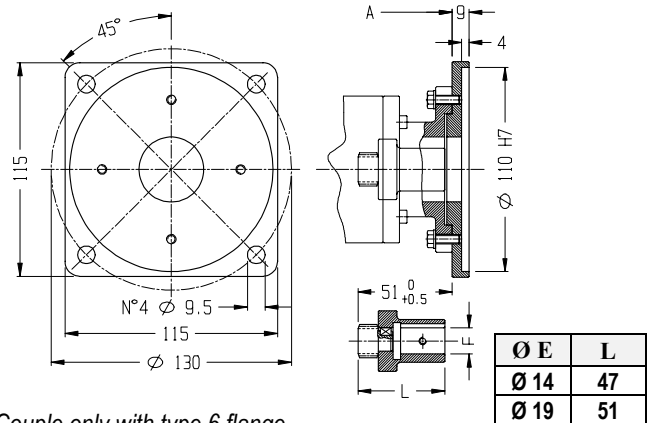
**B5/56 INPUT FLANGE FOR T85 1,2 - 2,2 Ø14 type 3**



**B5/56 INPUT FLANGE FOR T85 3,2 - 4,2 Ø19 type 4**



**B5/71 INPUT FLANGE opt 51**



Ø E	L
Ø 14	47
Ø 19	51

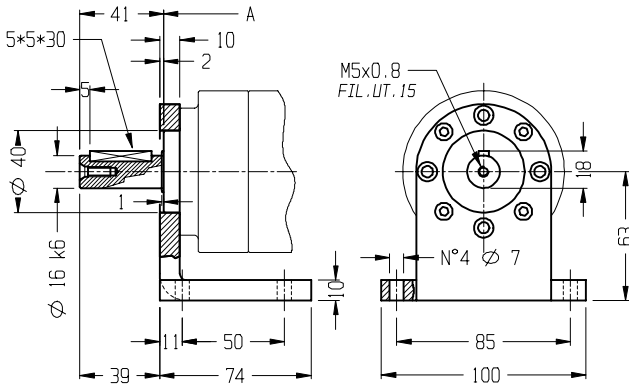
Couple only with type 6 flange



# EPG 79

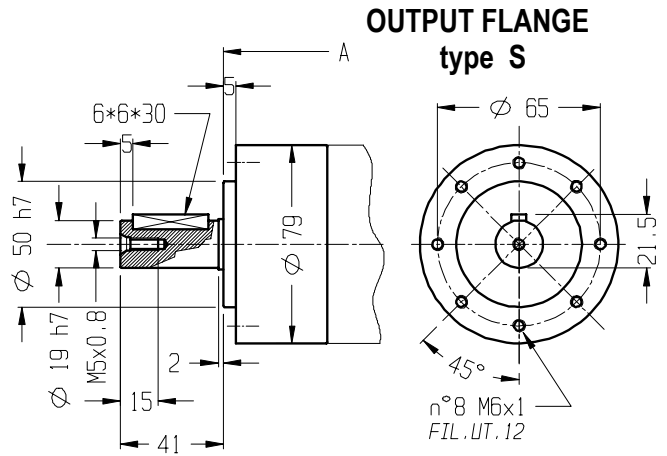
DIMENSIONS (mm)

**H=63 FOOT opt 53**



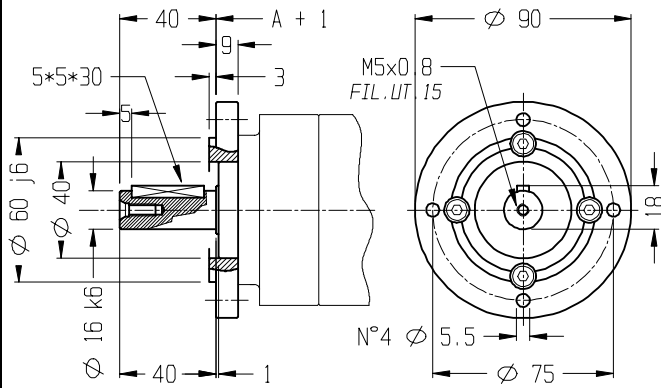
Couple only with type R flange

**Ø 19 OUTPUT SHAFT**



Couple only with type S flange

**OUTPUT FLANGE B5 D:90 opt 54**



Couple only with type R flange

# EPG109 EPICYCLOIDAL REDUCERS

## HOW TO ORDER AN EPG REDUCER

EPG	51	1	3	14	8	S	25	---
SERIES	TYPE	STAGES	RATIO	Ø INPUT SHAFT	INPUT FLANGE	OUTPUT FLANGE	Ø OUTPUT SHAFT	OPTIONS
EPG	109	1 2 3	3 ÷ 216  Bigger stages on request	14 19	2=B5/71 Square 8=B5/56 Round	S=D:70 (only with Ø25 shaft)	25 (only with S flange)	*00=conical bearings XX=backlash on request (XX=g)  THIS OPTION MUST BE ORDERED SEPARATELY  53= h:71 foot (only with S flange)

## PERFORMANCE CHARACTERISTICS

STAGES	RATIO	RATED TORQ. (Nm)	STARTING TORQ. (Nm)	RATED SPEED INPUT (rpm)	MAX INPUT SPEED (rpm)	AXIAL LOAD (N)	RADIAL LOAD (N)	EFFICIENCY	BACKLASH
1	1:3	80	100	3000	4000	800 *(1600)	1300 *(4000)	0.94	≤ 15'
	1:4	100	180						
	1:5								
	1:6								
2	1:9	80	100	3000	4000	800 *(1600)	1300 *(4000)	0.91	≤ 18'
	1:12	140	200						
	1:15								
	1:16								
	1:18								
	1:20								
	1:24								
	1:25								
1:30									
3	1:36	190	320	3000	4000	800 *(1600)	1300 *(4000)	0.89	≤ 23'
	1:45								
	1:48								
	1:54								
	1:60								
	1:64								
	1:72								
	1:75								
	1:80								
	1:90								
	1:96								
	1:100								
	1:108								
	1:120								
1:125									
1:144									
1:150									
1:180									
1:216									

Gioco: Gioco max (ARC/min) misurato sull'albero in uscita (output) con albero in entrata (input) bloccato, applicando una coppia pari al 2% della coppia nominale.  
Coppia nominale: Coppia continua sopportabile alla velocità nominale con durata >10000 ore.  
Coppia di spunto: Coppia pulsante accettabile durante un ciclo di lavoro.

Lubrication : **LONG – LIFE**

Protection class : **IP65**

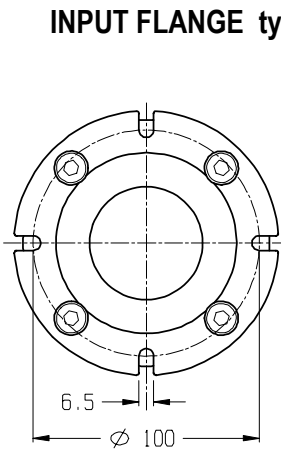
THE MANUFACTURIER RESERVES THE RIGHT TO MODIFY THE PRODUCT WITHOUT NOTICE.

# EPG109

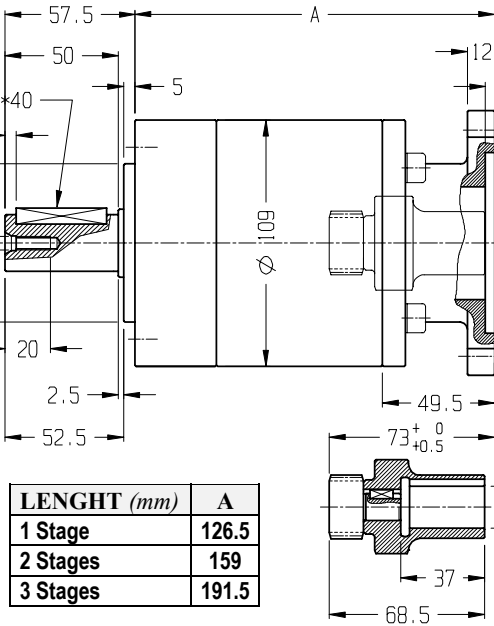
DIMENSIONS (mm)

**STANDARD**

**INPUT FLANGE type 8**

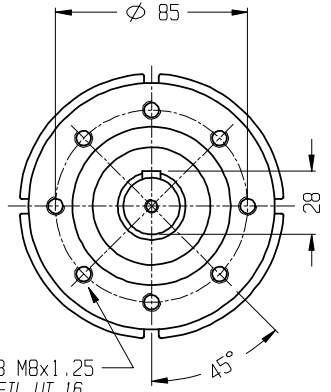


Weight Kg	1 St.	2 St.	3 St.
	6.6	8.6	10.6



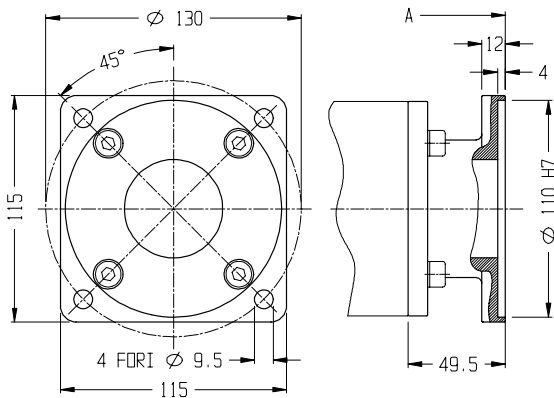
LENGHT (mm)	A
1 Stage	126.5
2 Stages	159
3 Stages	191.5

**OUTPUT FLANGE type S**

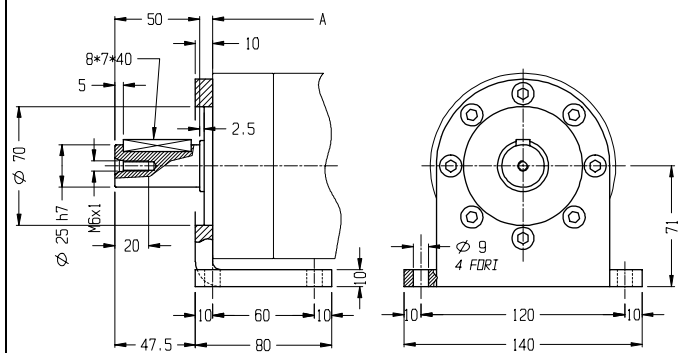


Ø input E
Ø 14 H7
Ø 19 H7

**B5/71 SQUARE INPUT FLANGE type 2**



**H=71 FOOT opt 53**



Couple only with type S flange