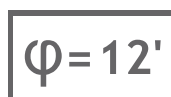

Stepper Gearboxes

STEPPER GEARBOXES SG SERIES TABLE OF CONTENTS

SG SERIES STEPPER GEARBOXES	GEARBOX BODY (mm.)	MAXIMUM VELOCITY (min ⁻¹)	BACKLASH (arcmin)	EMERGENCY TORQUE (Nm)	MOTOR COUPLING (Flange Size)	TECHNICAL DATA DATI TECNICI/ (page/pagina)
<i>i=3</i>						
SG-P11-050-003-12-HH-712X	55	4000	12'	28	NEMA 23	59
SG-P11-050-003-12-HH-782X	55	4000	12'	28	60 mm.	60
SG-P11-070-003-12-SM-286X	70	4000	12'	60	NEMA 34	61
<i>i=5</i>						
SG-P12-040-005-15-HH-712X	40	5000	<15'	30	NEMA 17	62
SG-P11-050-005-12-HH-712X	55	5000	12'	30	NEMA 23	63
SG-P11-050-005-12-HH-782X	55	5000	12'	30	60 mm.	64
SG-P11-050-005-12-SM-2861	55	5000	12'	30		65
SG-P11-070-005-12-SM-286X	70	5000	12'	70	NEMA 34	66
<i>i=9</i>						
SG-P11-050-009-12-HH-712X	55	6000	12'	28	NEMA 23	67
<i>i=10</i>						
SG-P12-040-010-15-HH-52XX	40	5000	<15'	25	NEMA 17	68
SG-P11-070-010-12-HH-782X	70	6000	12'	60	60 mm.	69
SG-P11-070-010-12-SM-2861	70	6000	12'	60	NEMA 34	70
SG-P11-090-010-12-SM-286X	90	6000	12'	150	NEMA 34	71
<i>i=25</i>						
SG-P12-040-025-19-HH-52XX	40	5000	<19'	30	NEMA 17	72



SG-P11-050-003-12-HH-712X-00000

PLANETARY GEARBOXES

SG 050

$i=003$

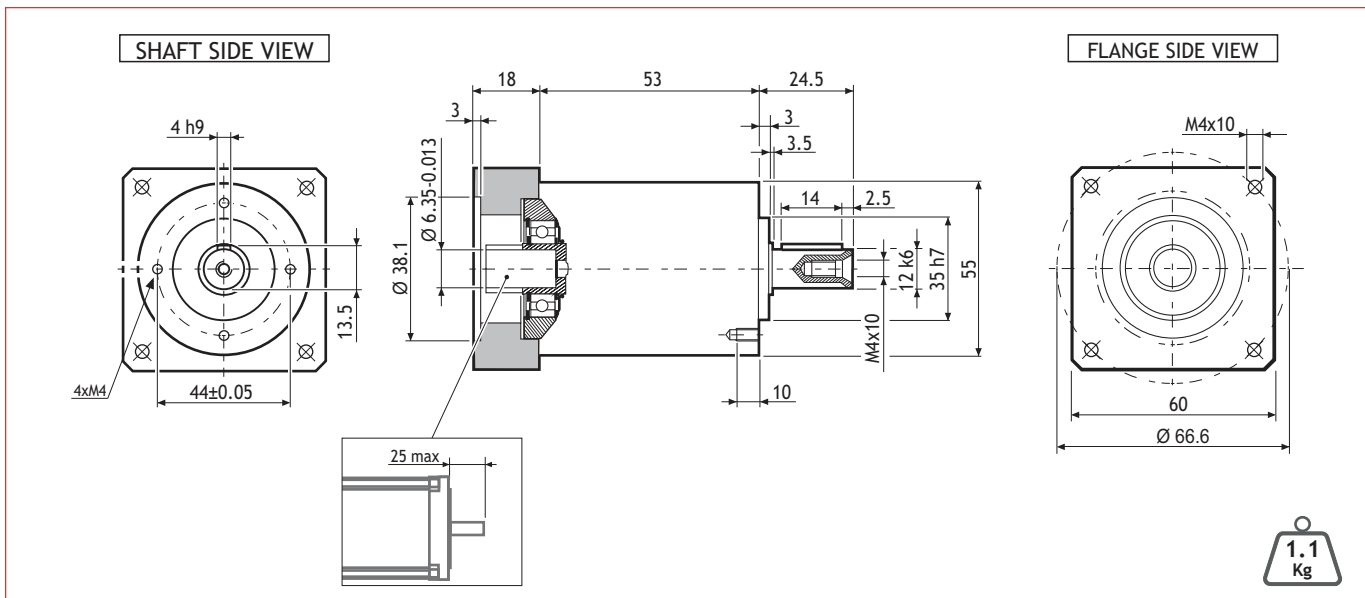
$\varphi=12'$

MADE IN ITALY

IP64



Dimensions (Units:mm)



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kgm]
SG-P11-050-003-12-HH-712X-00000	10	16	28	12'	3300	4000	0.9	500	600	97	0.07x10 ⁻⁴

Suggested motors

	103-H7123 SERIES	103-H7126 SERIES
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MOUNTING OPERATION MODE: ■ Tightening torque M=5 Nm ■ Locking bolt M4 ■ R.T.A. Quality Control

SG-P11-050-003-12-HH-782X-00000

PLANETARY GEARBOXES

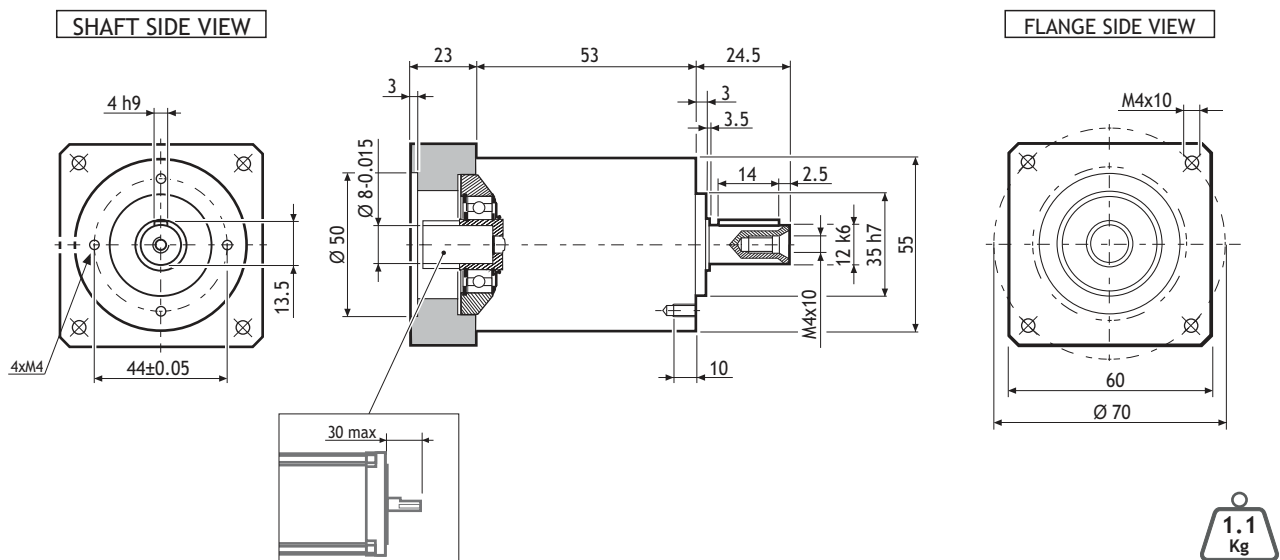
SG 050

 $i=003$ $\varphi=12'$ MADE
IN
ITALY

IP64

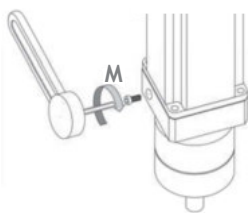


Dimensions (Units:mm)



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kg·m ²]
SG-P11-050-003-12-HH-782X-00000	10	16	28	12'	3300	4000	0.9	500	600	97	0.07x10 ⁻⁴

Suggested motors



103-H7823 SERIES



MOUNTING OPERATION MODE:

■ Tightening torque M=5 Nm

■ Locking bolt M4

■ R.T.A. Quality Control

SG-P11-070-003-12-SM-286X-00000

PLANETARY GEARBOXES

SG 070

$i=003$

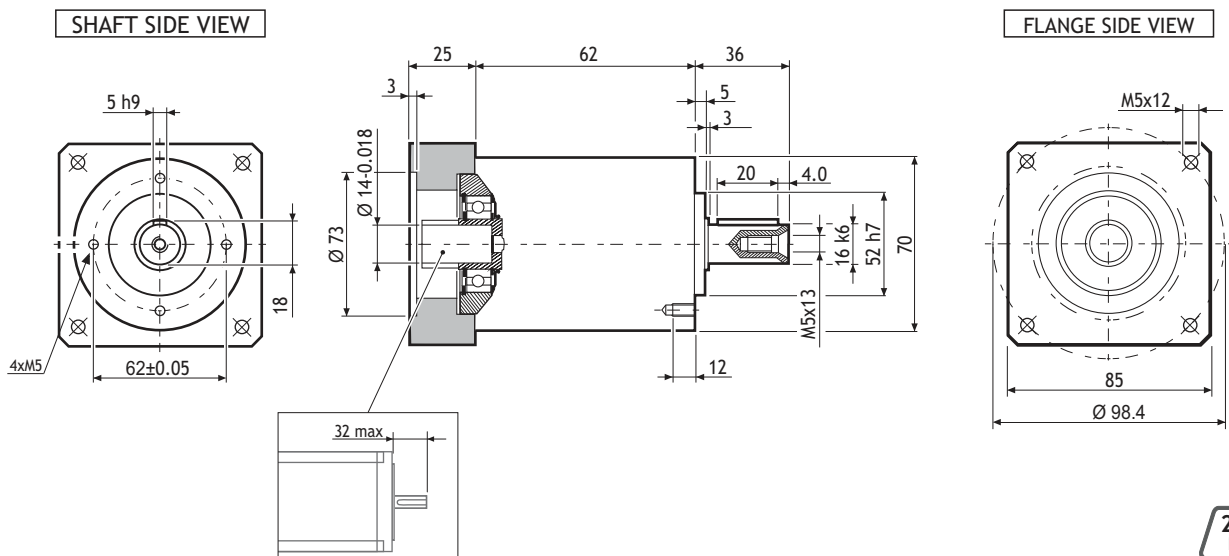
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MADE IN ITALY

IP64

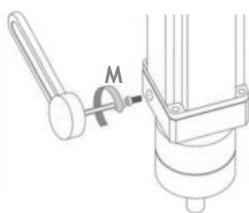


Dimensions (Units:mm)



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kgm ²]
SG-P11-070-003-12-SM-286X-00000	18	30	60	12'	3300	4000	3	1300	1400	97	0.14x10 ⁻⁴

Suggested motors



SM 2862 SERIES



SM 2863 SERIES



MOUNTING OPERATION MODE: ■ Tightening torque M=5 Nm

■ Locking bolt M4

■ R.T.A. Quality Control

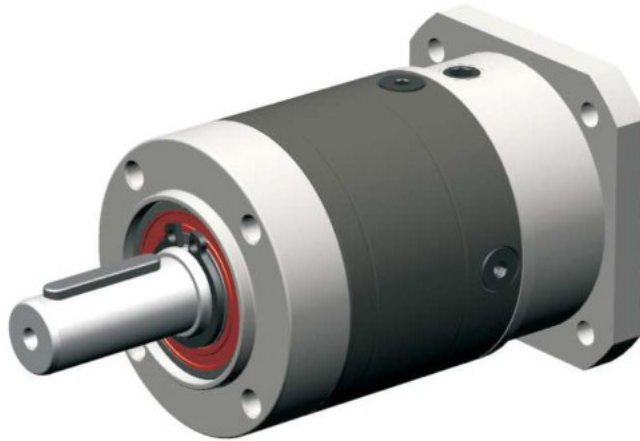
SG-P12-040-005-15-HH-52XX-00000

PLANETARY GEARBOXES

SG 040

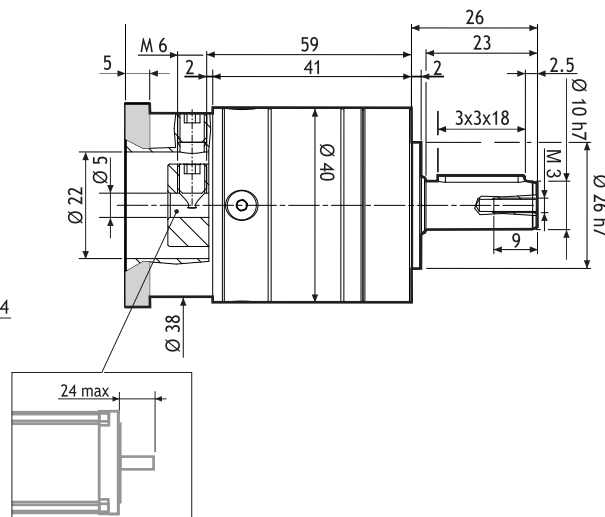
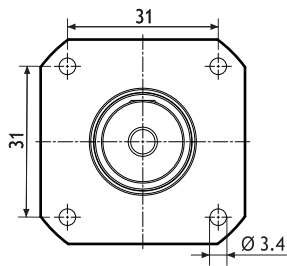
 $i=005$ $\varphi < 15'$ MADE
IN
ITALY

IP64

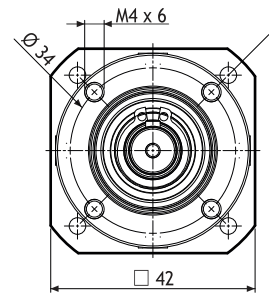


Dimensions (Units:mm)

SHAFT SIDE VIEW

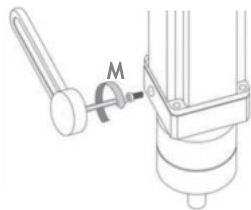


FLANGE SIDE VIEW



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kg ^m ²]
SG-P12-040-005-15-HH-52XX-00000	12	18	30	<15'	5000	8000	0.8	220	200	98	1.6x10 ⁻⁶

Suggested motors



103-H5205 SERIES



103-H5208 SERIES



103-H5210 SERIES



MOUNTING OPERATION MODE:

■ Tightening torque M=5 Nm

■ Locking bolt M4

■ R.T.A. Quality Control

SG-P11-050-005-12-HH-712X-00000

PLANETARY GEARBOXES

SG 050

$i=005$

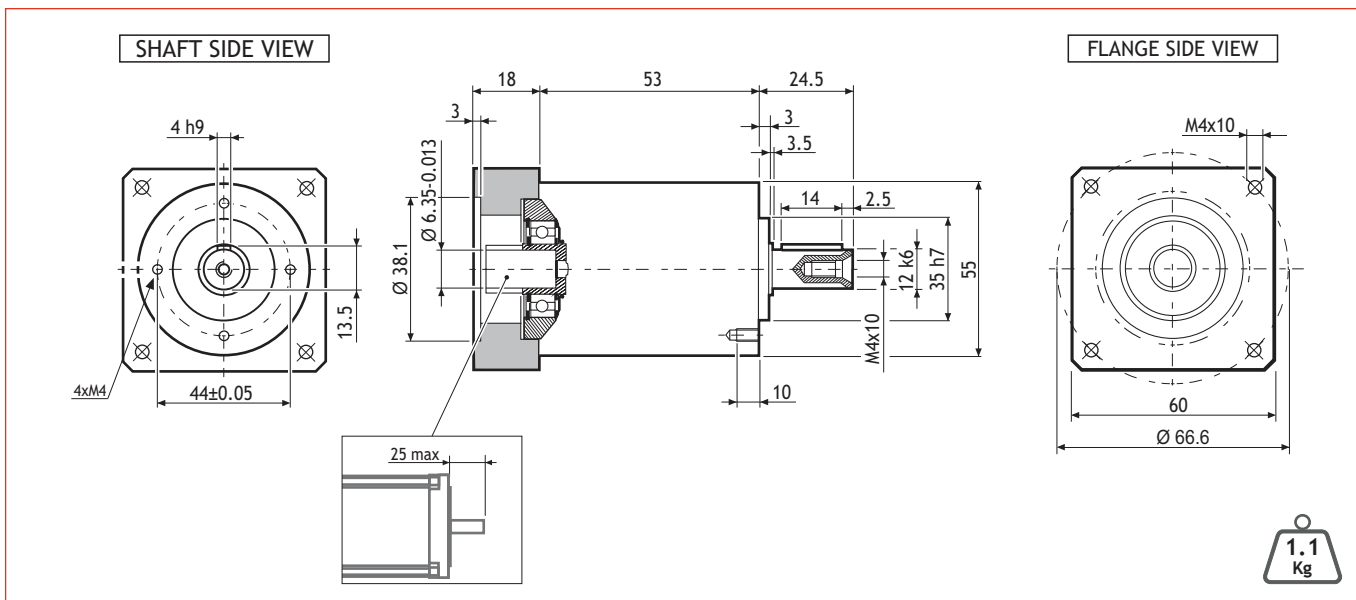
$\varphi=12'$

MADE IN ITALY

IP64



Dimensions (Units:mm)



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kgm ²]
SG-P11-050-005-12-HH-712X-00000	12	20	30	12'	3500	5000	0.9	500	600	97	0.05x10 ⁻⁴

Suggested motors

103-H7123 SERIES

103-H7126 SERIES

MOUNTING OPERATION MODE: ■ Tightening torque M=5 Nm ■ Locking bolt M4 ■ R.T.A. Quality Control

SG-P11-050-005-12-HH-782X-00000

PLANETARY GEARBOXES

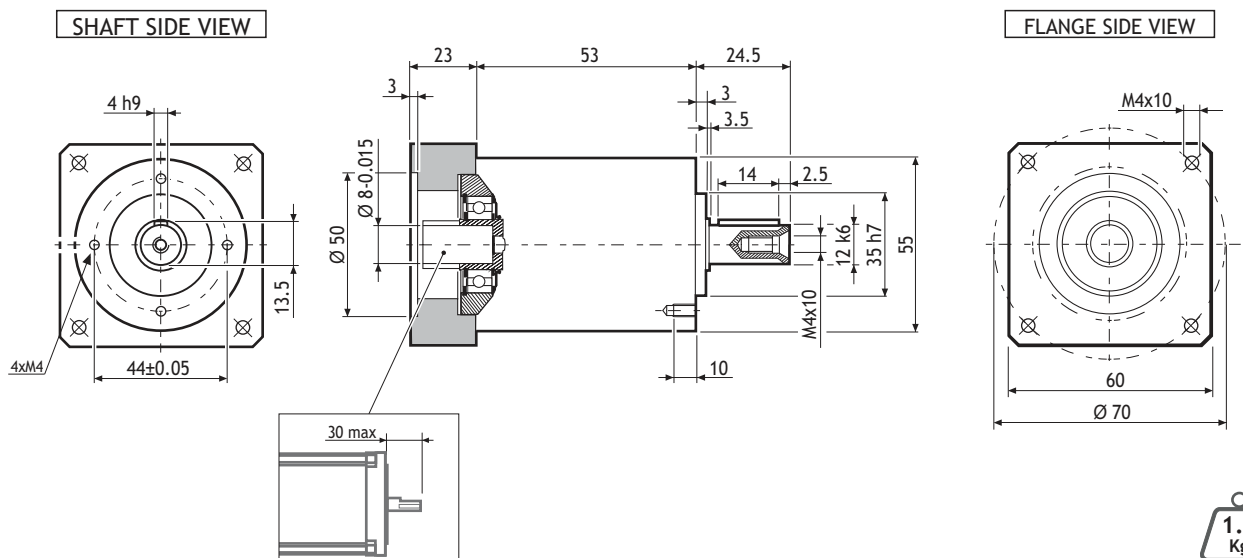
SG 050

 $i=005$ $\varphi=12'$ MADE
IN
ITALY

IP64

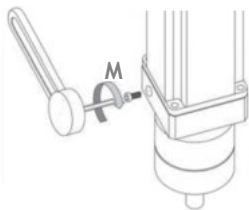


Dimensions (Units:mm)



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kgm]
SG-P11-050-005-12-HH-782X-00000	12	20	30	12'	3500	5000	0.9	500	600	97	0.05x10 ⁻⁴

Suggested motors



103-H7823 SERIES



MOUNTING OPERATION MODE:

■ Tightening torque M=5 Nm

■ Locking bolt M4

■ R.T.A. Quality Control

SG-P11-050-005-12-SM-2861-00000

PLANETARY GEARBOXES

SG 050

$i=005$

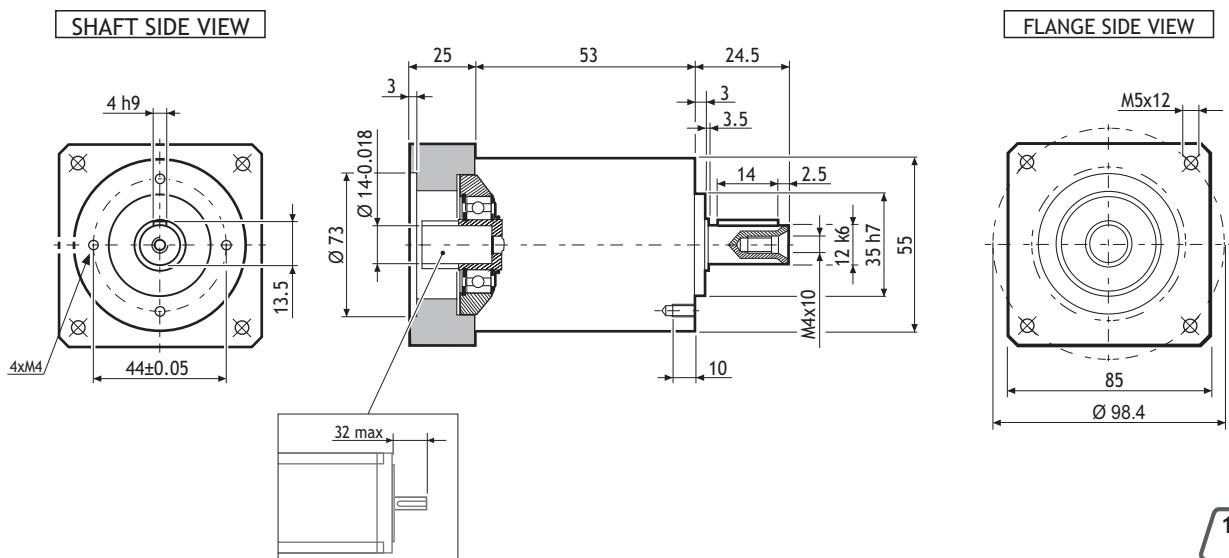
$\varphi=12'$

MADE IN ITALY

IP64

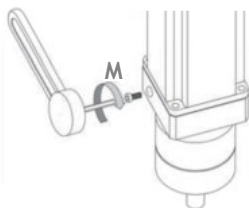


Dimensions (Units:mm)



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kgm ²]
SG-P11-050-005-12-SM-2861-00000	12	20	30	12'	3500	5000	0.9	500	600	97	0.07x10 ⁻⁴

Suggested motors



SM 2861 SERIES



MOUNTING OPERATION MODE: ■ Tightening torque M=5 Nm ■ Locking bolt M4 ■ R.T.A. Quality Control

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STEPPING MOTORS
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MOTORS WITH ENCODER

MOTORS WITH BRAKE

STEPPER GEARBOXES

SG-P11-070-005-12-SM-286X-00000

PLANETARY GEARBOXES

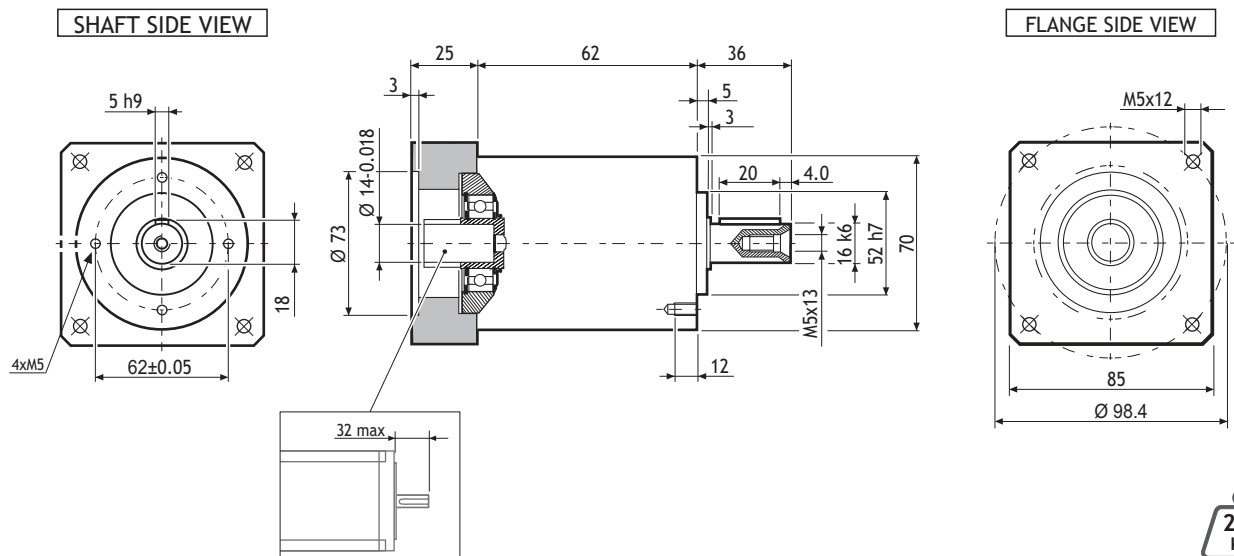
SG 070

 $i=005$ $\varphi=12'$ MADE
IN
ITALY

IP64

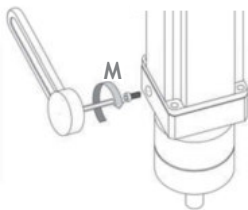


Dimensions (Units:mm)



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kg·m ²]
SG-P11-070-005-12-SM-286X-00000	25	35	70	12'	3500	5000	3	1300	1400	97	0.09x10 ⁻⁴

Suggested motors



SM 2862 SERIES



SM 2863 SERIES



MOUNTING OPERATION MODE:

■ Tightening torque M=5 Nm

■ Locking bolt M4

■ R.T.A. Quality Control

SG-P11-050-009-12-HH-712X-00000

PLANETARY GEARBOXES

SG 050

$i=009$

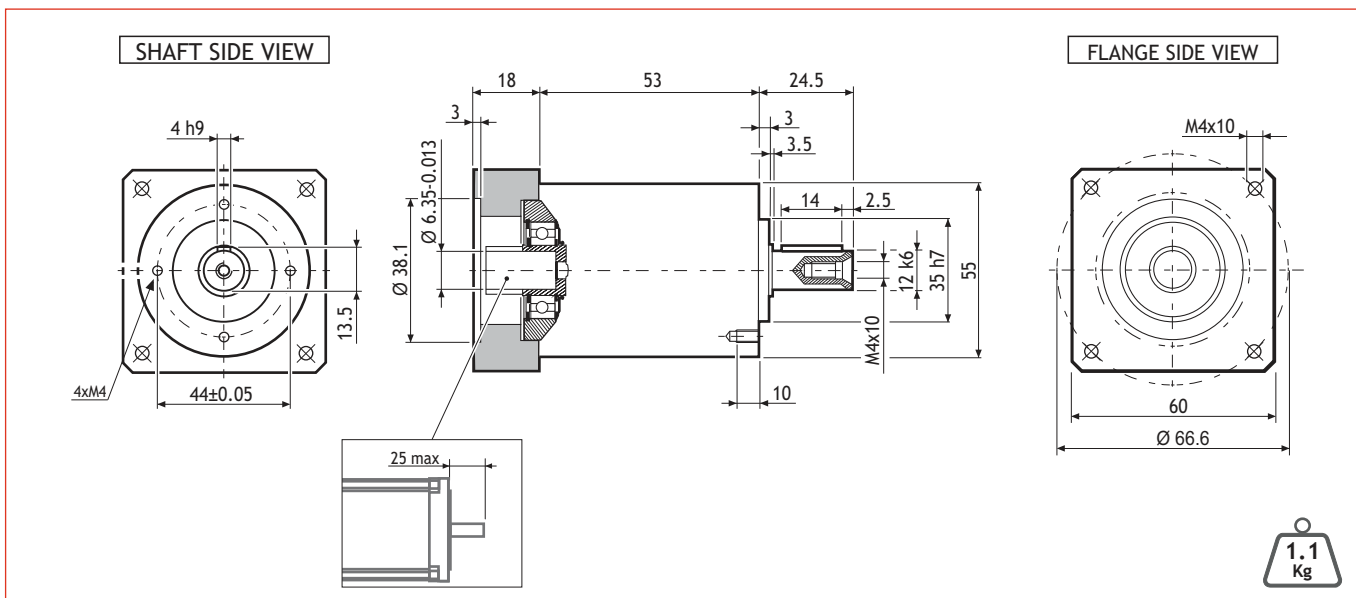
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MADE IN ITALY

IP64

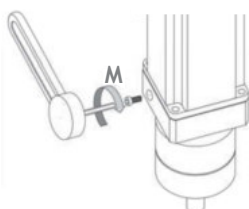


Dimensions (Units:mm)

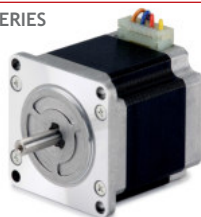


MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kgm ²]
SG-P11-050-009-12-HH-712X-00000	10	16	28	12'	4000	6000	0.9	500	600	97	0.04x10 ⁻⁴

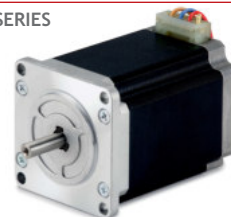
Suggested motors



103-H7123 SERIES



103-H7126 SERIES



MOUNTING OPERATION MODE:

■ Tightening torque M=5 Nm

■ Locking bolt M4

■ R.T.A. Quality Control

INTRODUCTION

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MOTORS WITH BRAKE

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SG-P12-040-010-15-HH-52XX-00000

PLANETARY GEARBOXES

SG 040

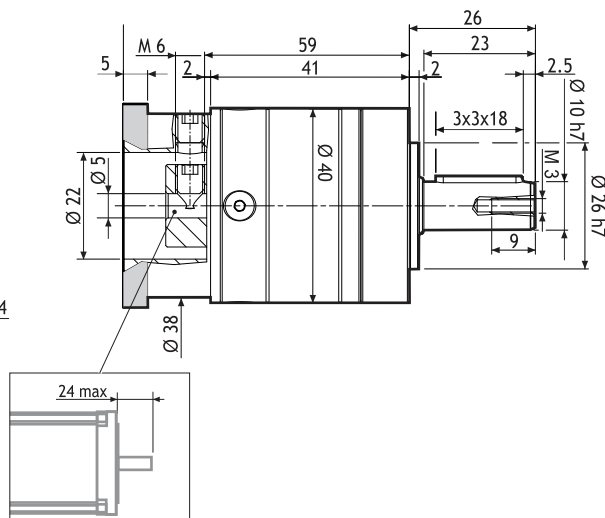
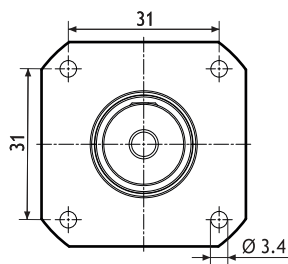
 $i=010$ $\varphi < 15'$ MADE
IN
ITALY

IP64

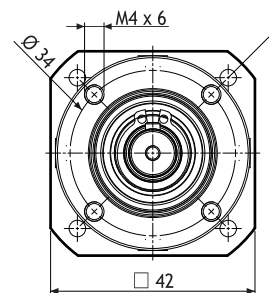


Dimensions (Units:mm)

SHAFT SIDE VIEW

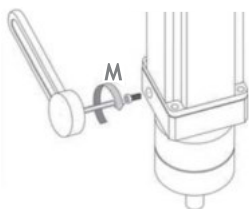


FLANGE SIDE VIEW



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kg·m ²]
SG-P12-040-010-15-HH-52XX-00000	6	9	25	<15'	5000	8000	0.8	220	200	98	1.2x10 ⁻⁶

Suggested motors



103-H5205 SERIES



103-H5208 SERIES



103-H5210 SERIES



MOUNTING OPERATION MODE:

■ Tightening torque M=5 Nm

■ Locking bolt M4

■ R.T.A. Quality Control

SG-P11-070-010-12-HH-782X-00000

PLANETARY GEARBOXES

SG 070

$i=010$

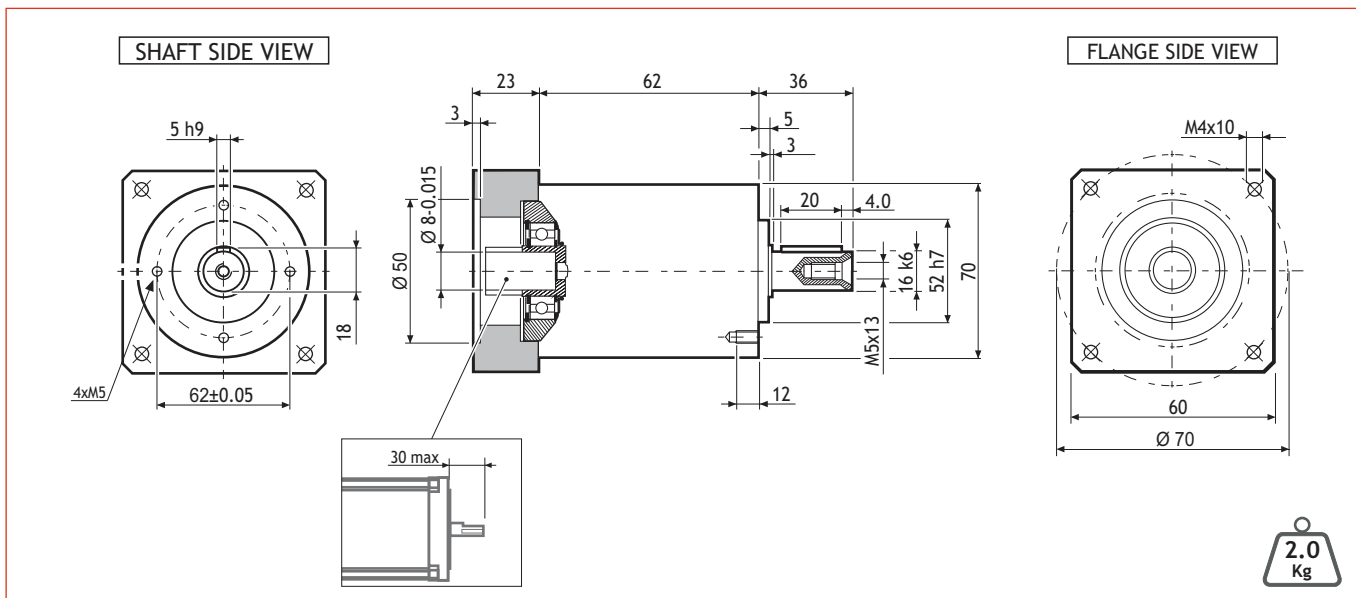
$\varphi=12'$

MADE IN ITALY

IP64



Dimensions (Units:mm)



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kgm]
SG-P11-070-010-12-HH-782X-00000	18	30	60	12'	4000	6000	3	1300	1400	97	0.06x10 ⁻⁴

Suggested motors



103-H7823 SERIES



MOUNTING OPERATION MODE: ■ Tightening torque M=5 Nm ■ Locking bolt M4 ■ R.T.A. Quality Control

SG-P11-070-010-12-SM-2861-00000

PLANETARY GEARBOXES

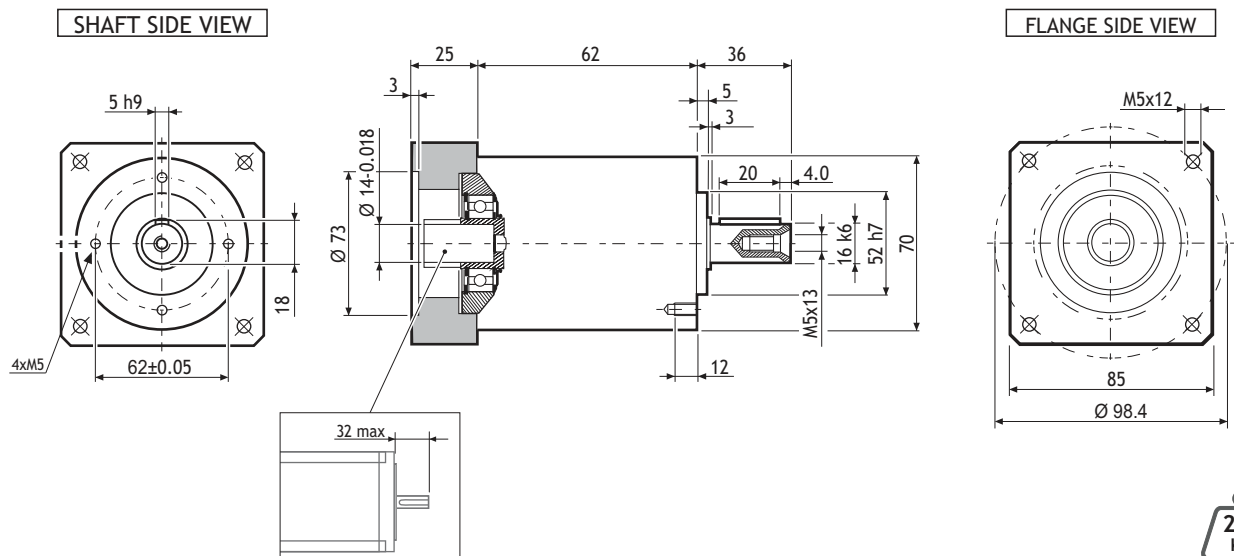
SG 070

 $i=010$ $\varphi=12'$ MADE
IN
ITALY

IP64

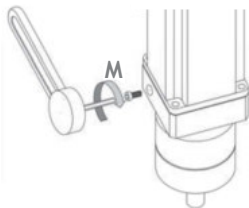


Dimensions (Units:mm)



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kg·m ²]
SG-P11-070-010-12-SM-2861-00000	18	30	60	12'	4000	6000	3	1300	1400	97	0.04x10 ⁻⁴

Suggested motors



SM 2861 SERIES



MOUNTING OPERATION MODE: ■ Tightening torque M=5 Nm

■ Locking bolt M4

■ R.T.A. Quality Control

SG-P11-090-010-12-SM-286X-00000

PLANETARY GEARBOXES

SG 090

$i=010$

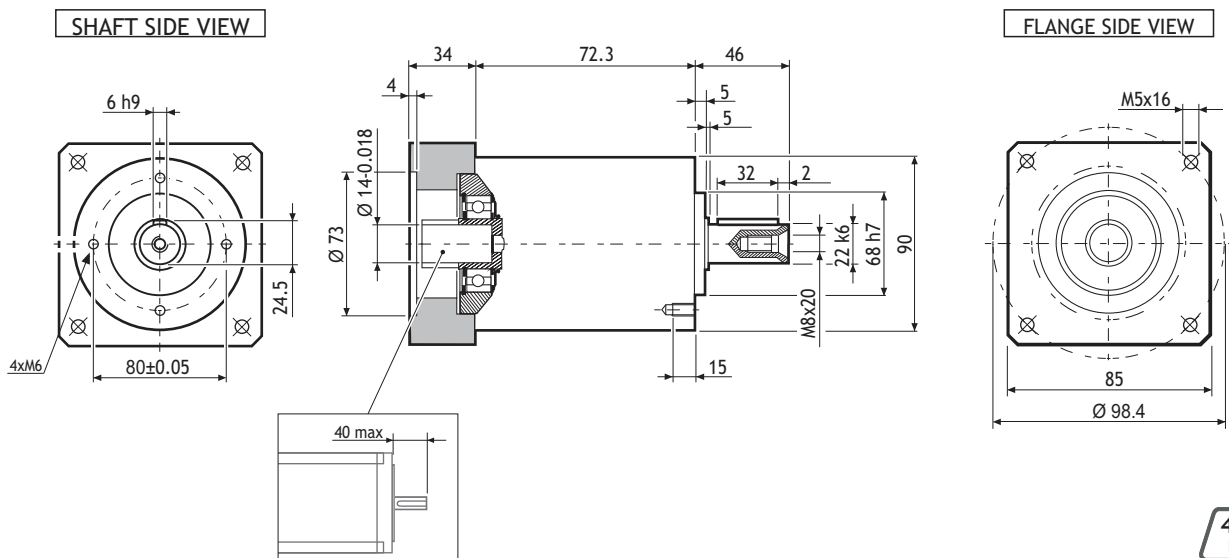
$\varphi=12'$

MADE IN ITALY

IP64

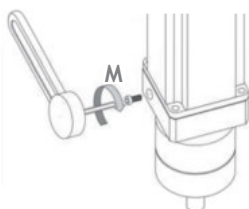


Dimensions (Units:mm)



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kgm ²]
SG-P11-090-010-12-SM-286X-00000	37	70	150	12'	4000	6000	9	2200	1900	97	0.35x10 ⁻⁴

Suggested motors



SM 2862 SERIES



CRAUS

SM 2863 SERIES



CRAUS

MOUNTING OPERATION MODE:

■ Tightening torque M=11 Nm

■ Locking bolt M6

■ R.T.A. Quality Control

SG-P12-040-025-19-HH-52XX-00000

PLANETARY GEARBOXES

SG 040

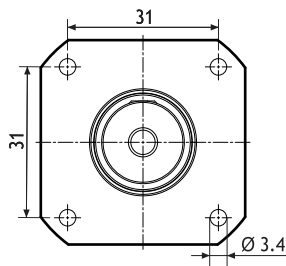
 $i=025$ $\varphi < 19'$ MADE
IN
ITALY

IP64

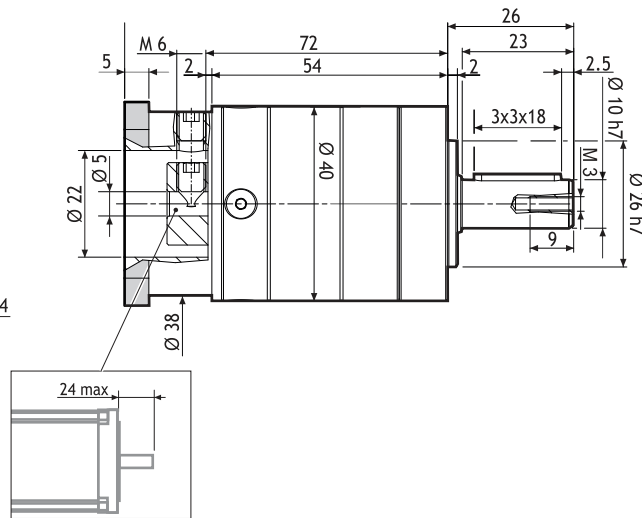
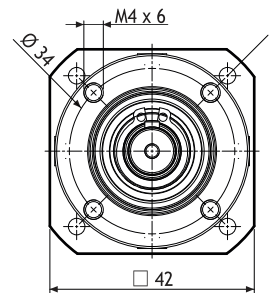


Dimensions (Units:mm)

SHAFT SIDE VIEW

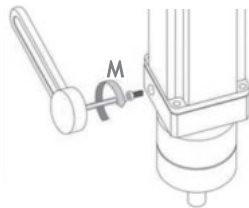


FLANGE SIDE VIEW



MODEL	Rated output torque [Nm]	Maximum acceleration output torque [Nm]	Emergency step output torque [Nm]	Backlash [arcmin]	Nominal input speed [min ⁻¹]	Maximum momentary input speed [min ⁻¹]	Torsional stiffness [Nm/arcmin]	Maximum radial force applying on output shaft [N]	Maximum axial force applying on output shaft [N]	Gear efficiency [%]	Gear moment of inertia [Kg ^m ²]
SG-P12-040-025-19-HH-52XX-00000	12	18	30	<19'	5000	8000	0.8	220	200	97	1.5x10 ⁻⁶

Suggested motors



103-H5205 SERIES



103-H5208 SERIES



103-H5210 SERIES



MOUNTING OPERATION MODE:

■ Tightening torque M=5 Nm

■ Locking bolt M4

■ R.T.A. Quality Control