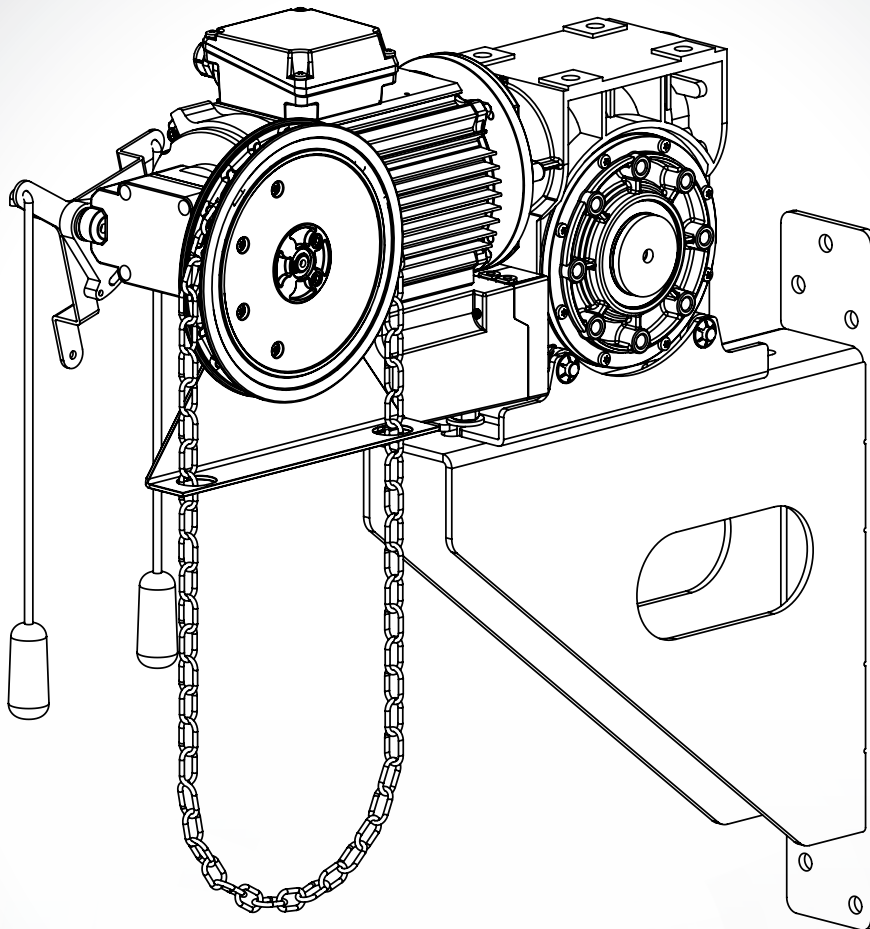




INSTALLATION MANUAL

PART 1 OF 2



Direct Drive Door Operator

Installation and User Manual for D-Drive Direct Drive Door Operator
This manual should be read in conjunction with D-Drive Wall Control (PART 2 of 2)

Chamberlain Australia Pty Ltd
Unit 1, 75 Epping Rd
North Ryde NSW 2113
Ph: 1800 GRIFCO
www.grifco.com.au

Chamberlain New Zealand Ltd
17B Arrenway Drive, Rosedale 0623
Auckland
Ph: 0800 653 667
www.grifco.co.nz

Ref: D-M-DDO-000-D



GRIFCO®

SAFETY INSTRUCTIONS



WARNING: THESE ARE IMPORTANT SAFETY INSTRUCTIONS.
FOLLOW ALL INSTRUCTIONS AS INCORRECT INSTALLATION CAN LEAD TO SEVERE INJURY OR DEATH
SAVE these instructions

This commercial roller door operator has been designed and tested to offer safe service provided it is installed, operated, maintained and tested in strict accordance with the instructions and warnings contained in this manual.



WARNING

Mechanical

When you see this Safety Symbol and Signal Words on the following pages, they will alert you to the possibility of serious injury or death if you do not comply with the warnings that accompany them. The hazard may come from something mechanical.

- Sticking or binding doors must be repaired. Commercial doors, brackets and their hardware are under extreme tension and can cause serious personal injury. Do not attempt to loosen, move or adjust them. Call for commercial door service.
- Do not wear rings, watches or loose clothing while installing or servicing a commercial door operator.
- To avoid serious personal injury from entanglement, remove all ropes connected to the commercial door before installing the door operator.
- After the installation a final test of the full function of the system and the full function of the safety devices must be done.
- When operating a biased-off switch, make sure that other persons are kept away.
- The operator cannot be used with a driven part incorporating a wicket door (unless the operator cannot be operated with the wicket door open).
- Operator may become hot during operation. Appropriate clearance and/or shielding should be supplied by the installer to ensure any cabling, wiring and/or other items cannot come in contact with the operator. If temperature rise exceeds 50°C all fixed wiring insulation must be protected, for example, by insulating sleeving having an appropriate temperature rating.
- Do not allow children to play with operator wall controls or remote controls. Keep remote controls away from children.
- Permanently fasten all supplied labels adjacent to the wall control as a convenient reference and reminder of safe operating procedures.
- Disengage all existing commercial door locks to avoid damage to commercial door. Install the wall control (or any additional push buttons) in a location where the commercial door is visible during operation. Do not allow children to operate push button(s) or remote transmitter(s). Serious personal injury from a closing commercial door may result from misuse of the operator.
- Activate operator only when the door is in full view, free of obstructions and operator is properly adjusted. No one should enter or leave the building while the door is in motion.
- The actuating member of a biased-off switch is to be located within direct sight of the door but away from moving parts. Unless it is key operated, it is to be installed at a minimum height of 1500mm and not accessible to the public.
- Make sure that people who install, maintain or operate the door follow these instructions. Keep these instructions in a safe place so that you can refer to them quickly when you need to.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- Use the operator for its intended purpose. The operator is designed lifting non-spring balanced roller doors.
- Automatic Drive - Keep away from the area of the door as it may operate unexpectedly.
- Ensure that entrapment when operating the door in the open direction is avoided.
- This product is for indoor use only.
- If the opener is installed at a height less than 2.5 metres from floor level or any other level from which the opener can be accessed (eg mezzanine) the installer is responsible to fit guards as appropriate to prevent access to moving mechanisms to reduce risk of entrapment.



WARNING

Electrical

When you see this Safety Symbol and Signal Words on the following pages, they will alert you to the possibility of serious injury or death if you do not comply with the warnings that accompany them. The hazard may come from electric shock.

- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Installation and wiring must be in compliance with your local building and electrical codes. Connect the power supply cord only to properly earthed mains.
- Moisture and water can destroy the electronic components. Make sure under all circumstances that water moisture or storage moisture cannot penetrate the electronics. The same applies for openings and cable entries.
- An electrician must disconnect electric power to the commercial door operator before making repairs or removing covers.



CAUTION

When you see this Signal Word on the following pages, it will alert you to the possibility of damage to your commercial door and/or the commercial door operator if you do not comply with the cautionary statements that accompany it.

CONTENTS

INTRODUCTION	4
SYSTEM OVERVIEW.....	4
PARTS FOR INSTALLATION CHECKLIST	5
INSTALLATION	6
MOUNT PLATFORM.....	6
OPERATOR AND BEARING	7
MANUAL CHAIN ENGAGING CORD.....	9
OPERATION	10
HAND CHAIN	10
SPECIFICATION	11
OPERATOR	11
MOUNTING PLATFORM	14
MAINTENANCE	15
WARRANTY	16
NOTES	18

INTRODUCTION

This document outlines the specification and installation details of the Grifco Direct Drive Operator. It does not include details for the installation of the Wall Control, electrical connection, operation instructions, or door installation details.

For Wall Control, Electrical connections, and Operation instructions, refer to the supplied Grifco Wall Control manual.

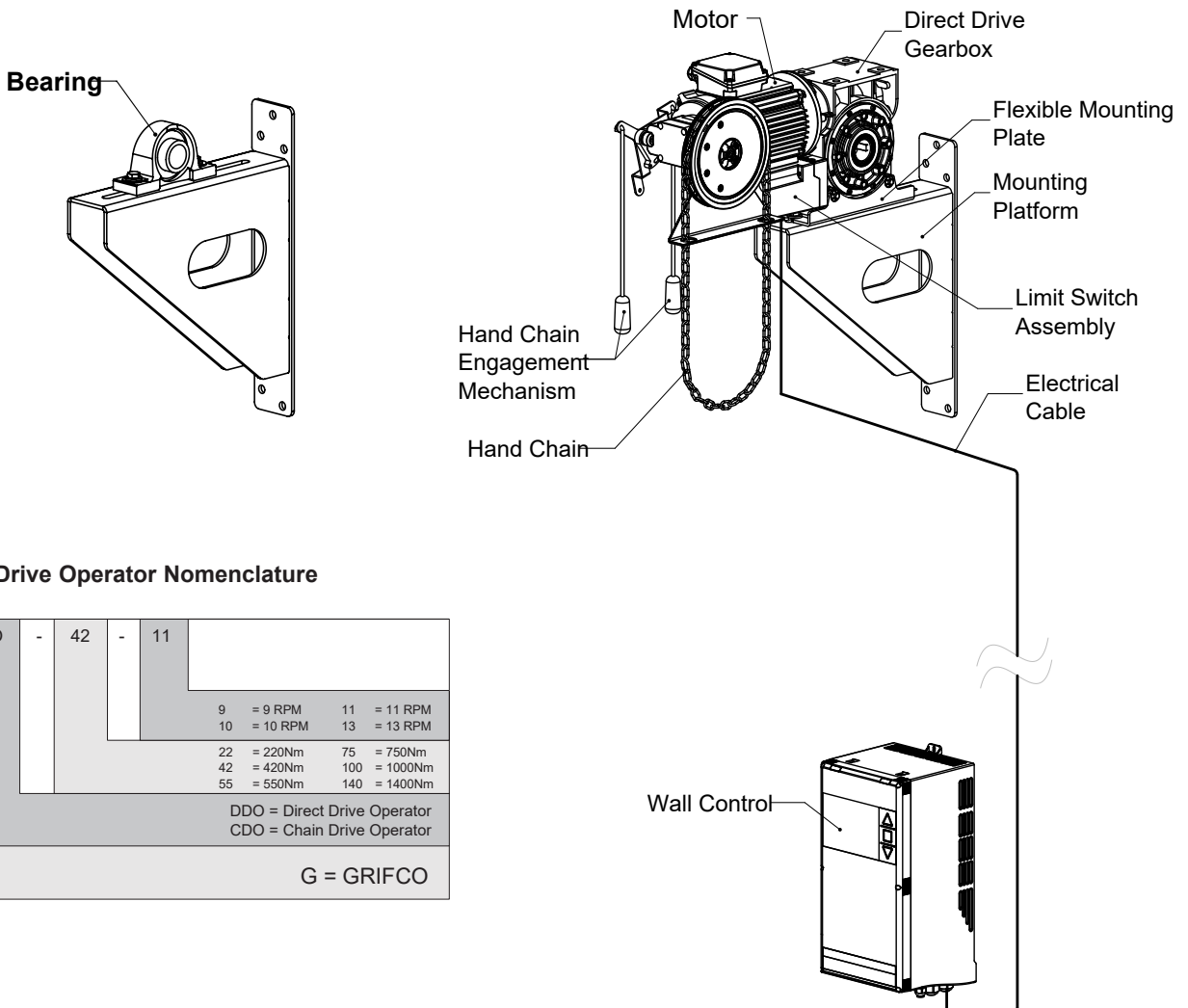
For details of door installation refer to the installation guide supplied by the door manufacturer.

Please use the table below to ensure the correct Direct Drive Operator for the correct Wall Control.

The D-Drive Direct Drive Operator is designed to automate Non-Spring Balanced Roller Shutters.

Operator and Wall Control System	Operator	Wall Control	Fastener Kit
GDD-42-11-SS	GDDO-42-11	DDC-22	DDMB01: M12 KIT
GDD-55-11-SS	GDDO-55-11	DDC-22	DDMB01: M12 KIT
GDD-75-10-SS	GDDO-75-10	DDC-22	DDMB02: M16 KIT
GDD-100-10-SS	GDDO-100-10	DDC-22	DDMB02: M16 KIT
GDD-140-09-SS	GDDO-140-9	DDC-22	DDMB02: M16 KIT
GDD-22-13-VS	GDDO-22-13	DDI-07	DDMB01: M12 KIT
GDD-42-11-VS	GDDO-42-11	DDI-12	DDMB01: M12 KIT
GDD-55-11-VS	GDDO-55-11	DDI-15	DDMB01: M12 KIT
GDD-75-10-VS	GDDO-75-10	DDI-15	DDMB02: M16 KIT
GDD-100-10-VS	GDDO-100-10	DDI-15	DDMB02: M16 KIT

SYSTEM OVERVIEW



Grifco D-Drive Operator Nomenclature

G	DDO	-	42	-	11	
			9		11	= 9 RPM = 11 RPM
			10		13	= 10 RPM = 13 RPM
			22		75	= 220Nm = 750Nm
			42		100	= 420Nm = 1000Nm
			55		140	= 550Nm = 1400Nm
			DDO = Direct Drive Operator			
			CDO = Chain Drive Operator			
G = GRIFCO						

INTRODUCTION

PARTS FOR INSTALLATION CHECKLIST

PARTS	QTY	NOTES	CHECK
Operator	1	Use Operator selection table above to ensure correct Operator is supplied. Check Drum Shaft diameter matches the Operator hollow shaft drive.	
Mounting Brackets	2	Ensure the appropriate brackets are used for the application.	
Bearing	1	Ensure correct Bearing is supplied and internal diameter matches the Drum shaft diameter	
Hand Chain kit	1	Ensure correct length of chain is supplied for the application	
Manual Chain Engaging Cord kit	1	Ensure the correct length of Cord is supplied for the application	
Encoder/Internal Solenoid Brake Cable	1	Ensure the correct length of electrical cable is supplied for the application. Note: The encoder/internal solenoid brake cable is supplied connected to the Operator connector box and is ready to connect to the Grifco Wall Control unit. Do not attempt to disconnect cable from the Operator.	
Shielded Motor Cable	1	Ensure the correct length of electrical cable is supplied for the application.	
Fastener kit	1	Ensure fastener kit is supplied	
Shaft Key	1	Ensure shaft key is supplied	
Retaining Ring	2	Ensure retaining rings are supplied	
Wall mounting fasteners	-	Not supplied	

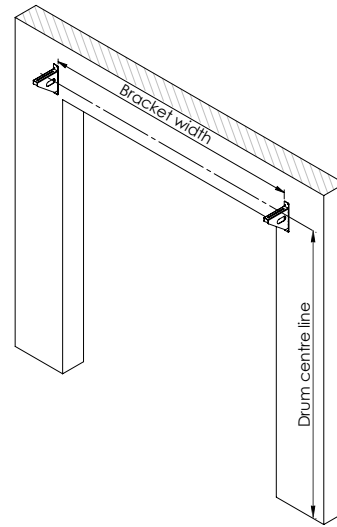
INSTALLATION

MOUNT PLATFORM

- Mark the wall with bracket positions as defined by the door manufacturer.

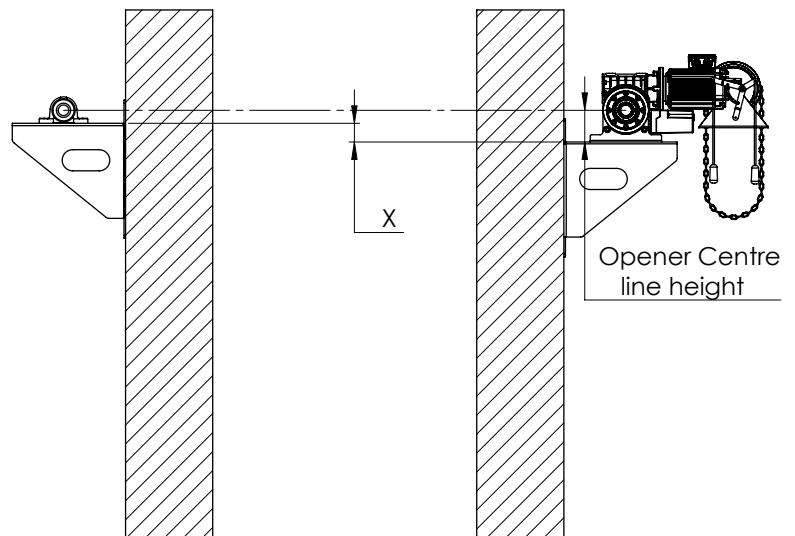
NOTE: The Operator is not handed; it can be positioned on either side of a door that best suits the application and available side-room.

See Operator installation section for changing the hand chain side.



- Ensure the bracket heights are correctly set to allow for the different centre heights of the Operator and the Bearing.

Operator Models	Operator Centreline Height	'X'
GDDO-22-13	120mm	71mm
GDDO-42-11		
GDDO-55-11		
GDDO-75-10	135mm	71mm
GDDO-100-10		
GDDO-140-9		

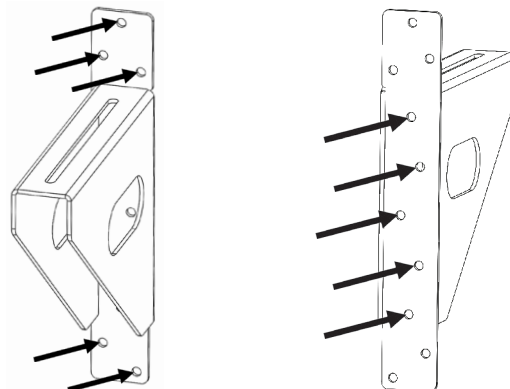


(40mm bearing centre height: 49mm)

(55mm bearing centre height: 64mm)

- Attach the brackets onto the wall using ALL available mounting holes. (Mounting fasteners are not provided.)

NOTE: Method of bracket installation is dependent on the building structure and must be suitably engineered to ensure robust and safe installation.



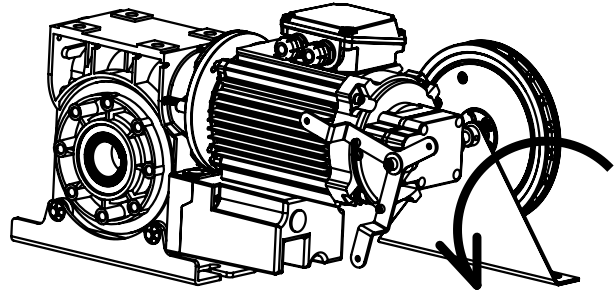
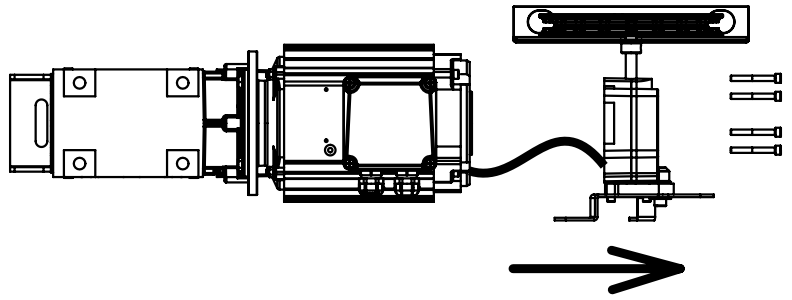
INSTALLATION

OPERATOR AND BEARING

CHANGE THE SIDE OF THE HAND CHAIN ASSEMBLY:

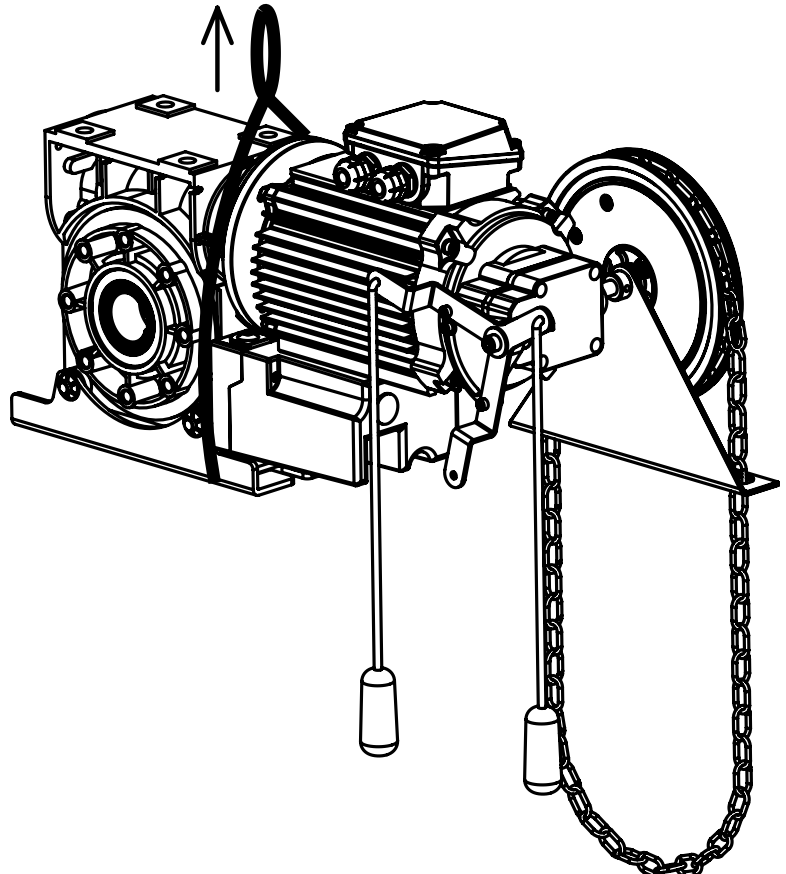
NOTE: ONLY PERFORM THIS STEP IF REQUIRED:

- Remove 4 bolts fixing the assembly to the back of the motor.
- Rotate the assembly 180 degrees and replace bolts.
- Rotate the hand chain guide piece and pull cord housing to re-align in the down position



LIFTING POINTS (Lifting Eyebolts not supplied)

- Use sling as shown for models without eye bolts (GDDO-22-13, GDDO-42-11, GDDO-55-11)



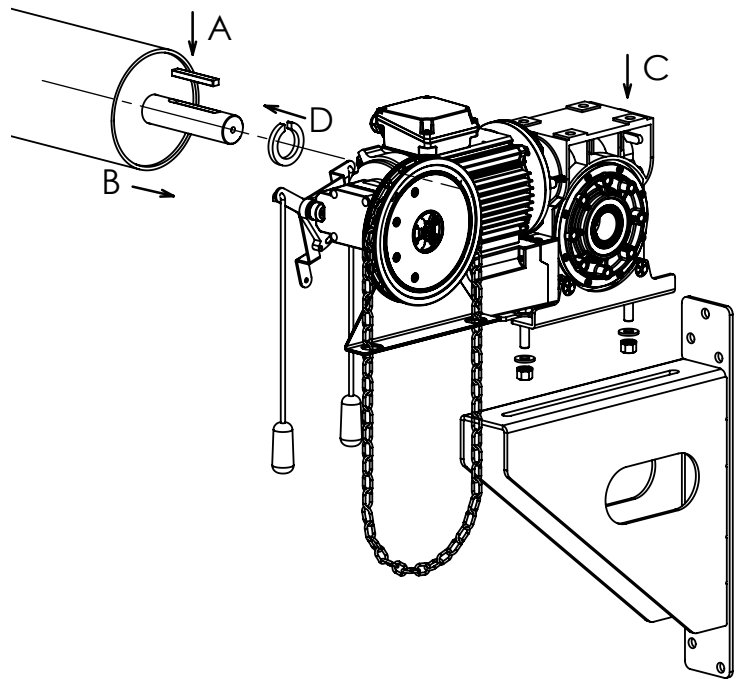
CAUTION

**OPERATORS ARE HEAVY.
TAKE CARE WHEN LIFTING**

INSTALLATION

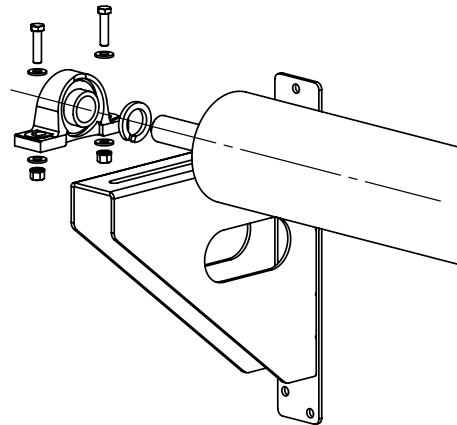
- Insert the drive shaft key (A) into the drive shaft.
- Slide the retaining ring (D) over the drum shaft.
- Slide the operator onto the drum shaft (B).
- Mount the operator (C) onto the mount bracket.
- Weld the retaining ring (D) into position to prevent axial float.
- Apply copper paste to drum shaft before insertion (5ml tube supplied).

NOTE: The operator can also be mounted in vertical orientation. (Additional vertical mount bracket sold separately.)

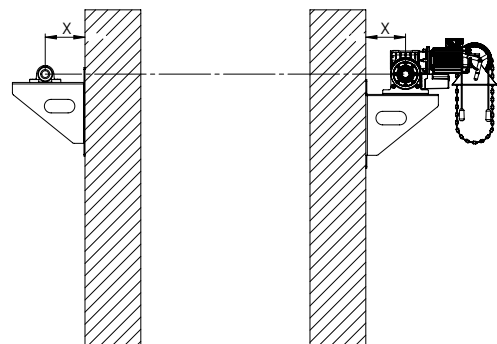


- Slide the retaining ring (D) over the drum shaft.
- Slide the Bearing onto the shaft.
- Mount the bearing onto the mount bracket.
- Weld the retaining ring into position to prevent axial float.

NOTE: Bearing to have correct orientation as shown.



- Adjust the position of the Operator and Bearing away from the wall (X) as defined by the door manufacturer.

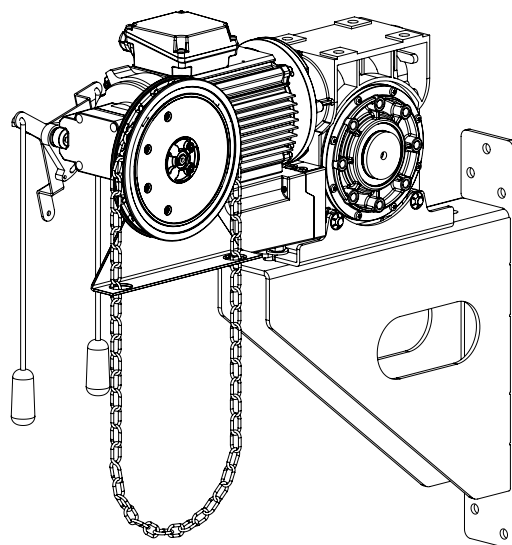


INSTALLATION

- Fit supplied hand chain over the chain wheel and through the chain guide holes
- Link the chain together using the supplied chain link

NOTE: Ensure hand chain is untangled and un-twisted before joining.

Hand Chain should be kept out of the way when not in use through the supplied wall mounted keeper.



MANUAL CHAIN ENGAGING CORD

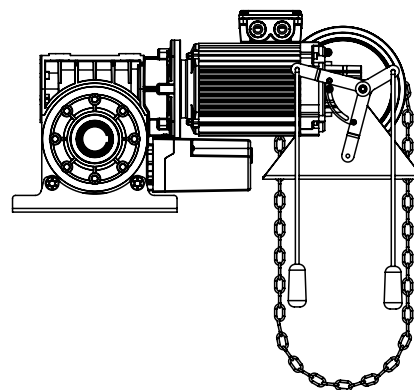
- Take the supplied Manual Chain Engaging Cord and cut to the required lengths so that ends are accessible from the ground.
- Tie each length to the cable loops extending from the emergency switch.
- Connect the RED and GREEN plastic pull-cord ends.

NOTE:

RED cord is for switching Operator **OFF** and engaging Hand Chain.

GREEN cord is for switching Operator **ON** and disengaging Hand Chain

Check the function of each cable loop before attaching the coloured plastic ends.



INSTALLATION OF THE BRAKE RELEASE CORD

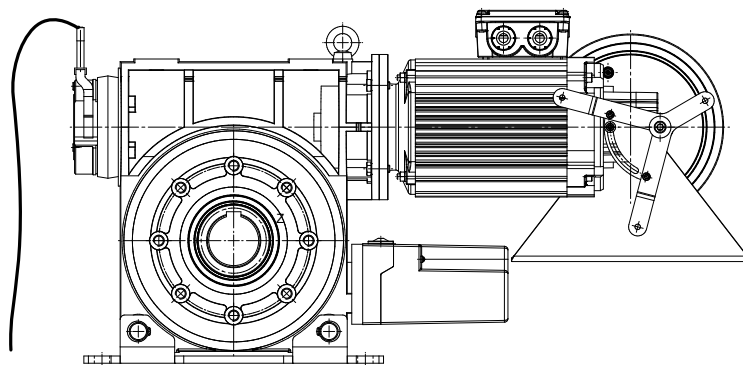
This step is applicable only to the following models:

GDDO-75-10

GDDO-100-10

GDDO-140-9

- Screw the provided Brake Handle into the brake actuator (horse shoe shape).
- Tie the release cord to the Brake Handle and hang to the rear of the drive as shown.
- Ensure the brake release cord is suitably retained to the wall to ensure no risk of entanglement with other equipment, moving objects or persons.



Brake Handle

HAND CHAIN

Engaging the Hand Chain: POWER OFF OPERATOR

- Gently pull the cord with the RED handle downwards as far as possible. The control voltage will be interrupted and the door can no longer be operated electrically.
- Release the hand chain from its wall keeper.
- Move the door in the OPEN or CLOSE direction by pulling on the hand chain.

Disengaging the Hand Chain: POWER ON OPERATOR

- Gently pull the cord with the GREEN handle downwards as far as possible. The control voltage will be switched on again and the door can be operated electrically.
- Attach the emergency hand chain to its wall keeper.

NOTE: When not in use, ensure chain, cables, and cords are securely attached to wall to avoid the risk of pedestrian and vehicular entanglement.

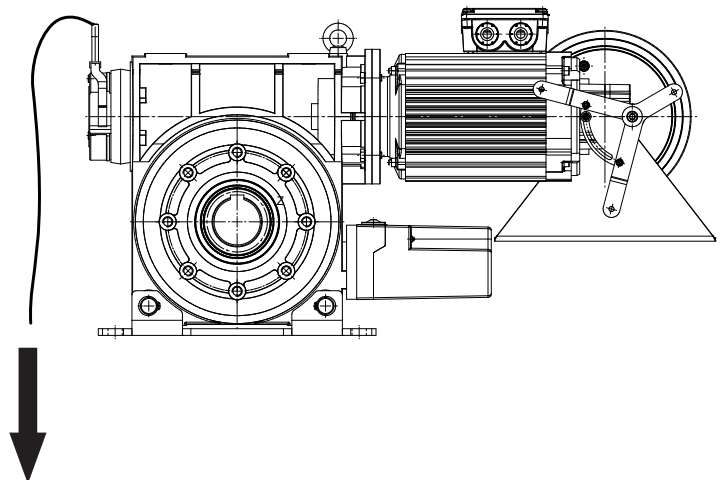
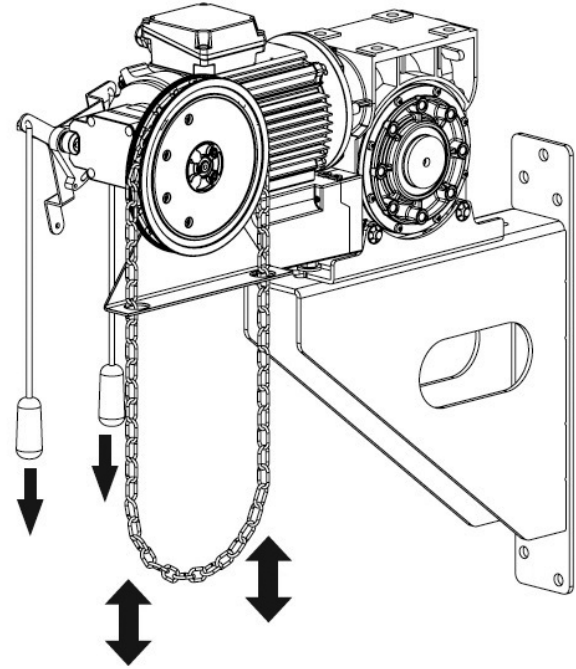
NOTE: To reduce load on the hand chain, the brake may need to be released if applicable. Refer to the next step.

OPERATION OF BRAKE RELEASE CORD

This step is applicable only to the following models:

GDDO-75-10
GDDO-100-10
GDDO-140-9

- Before operating the door via hand chain, pull the brake release cord firmly, and tie off to a suitable cleat or fixed point.



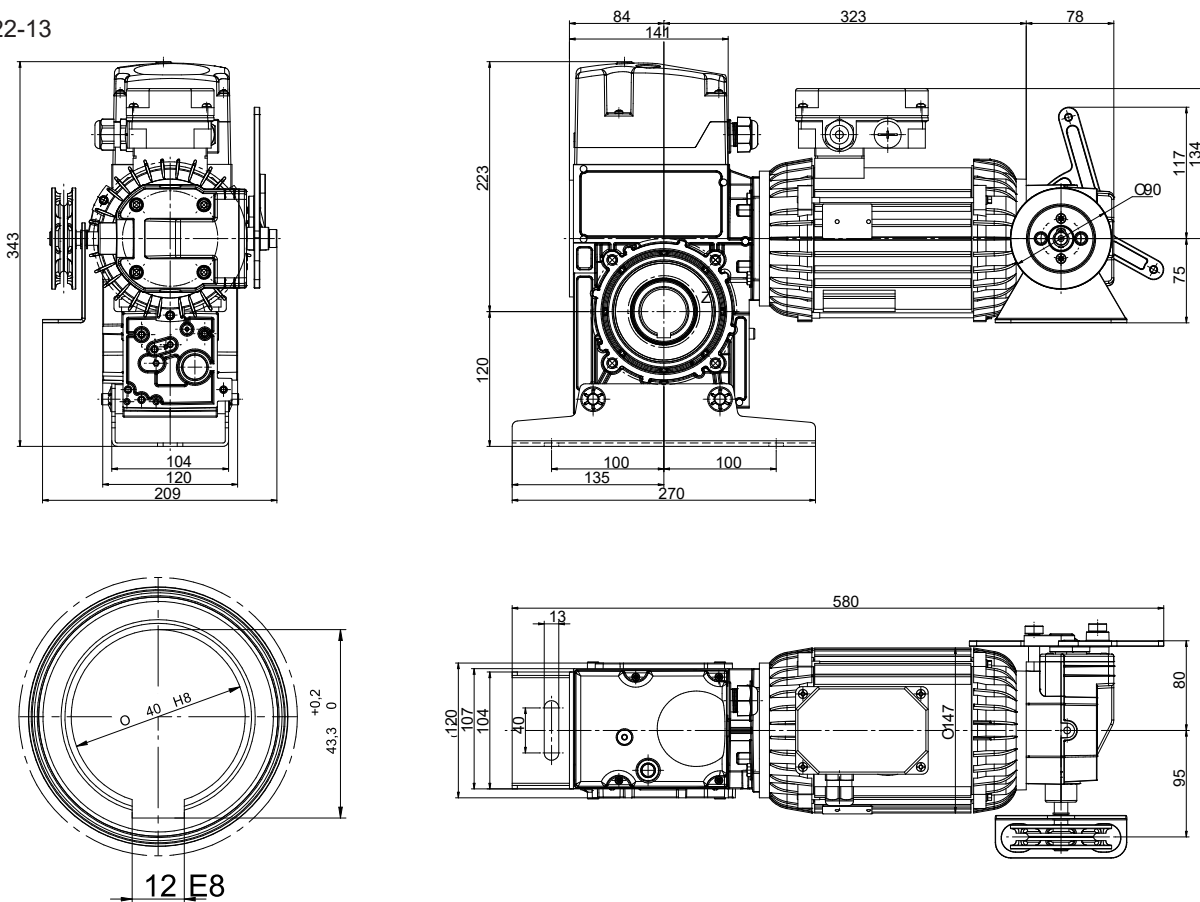
CAUTION

Ensure the brake release cord is untied before operating electrically.

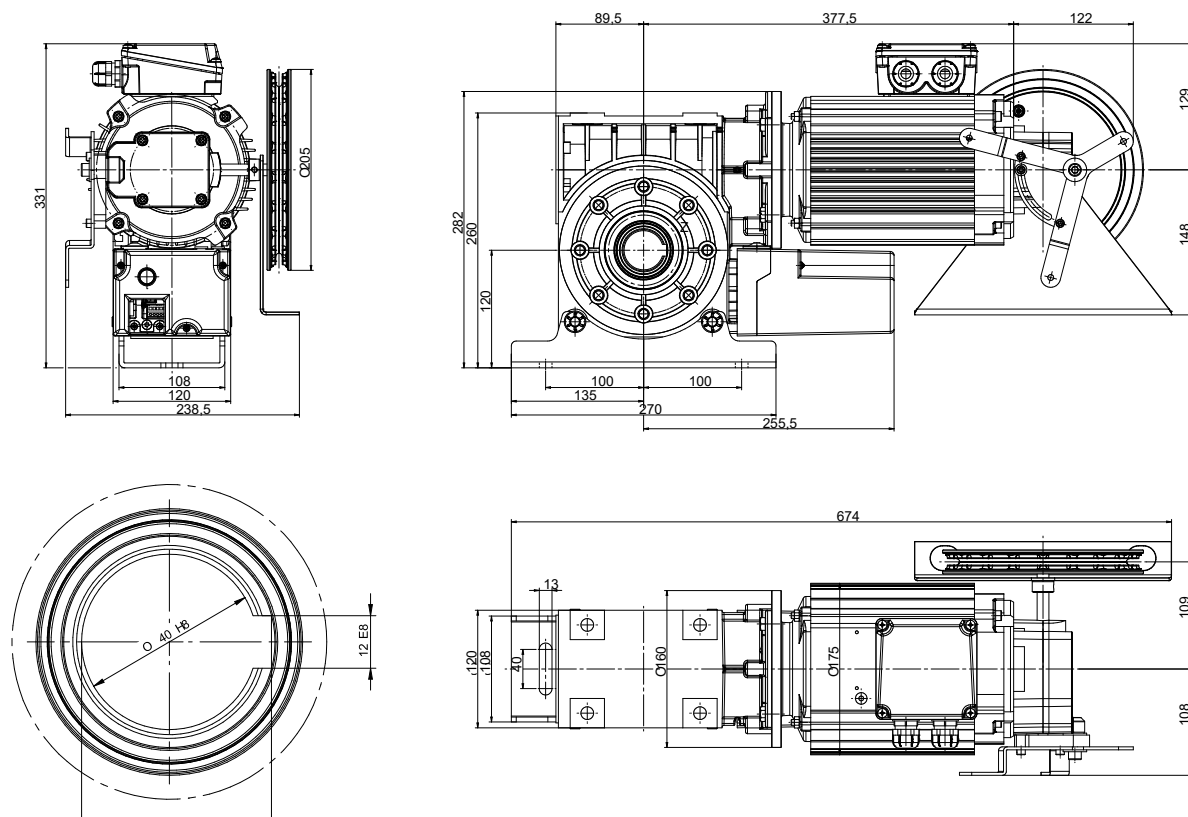
SPECIFICATION

OPERATOR

GDDO-22-13

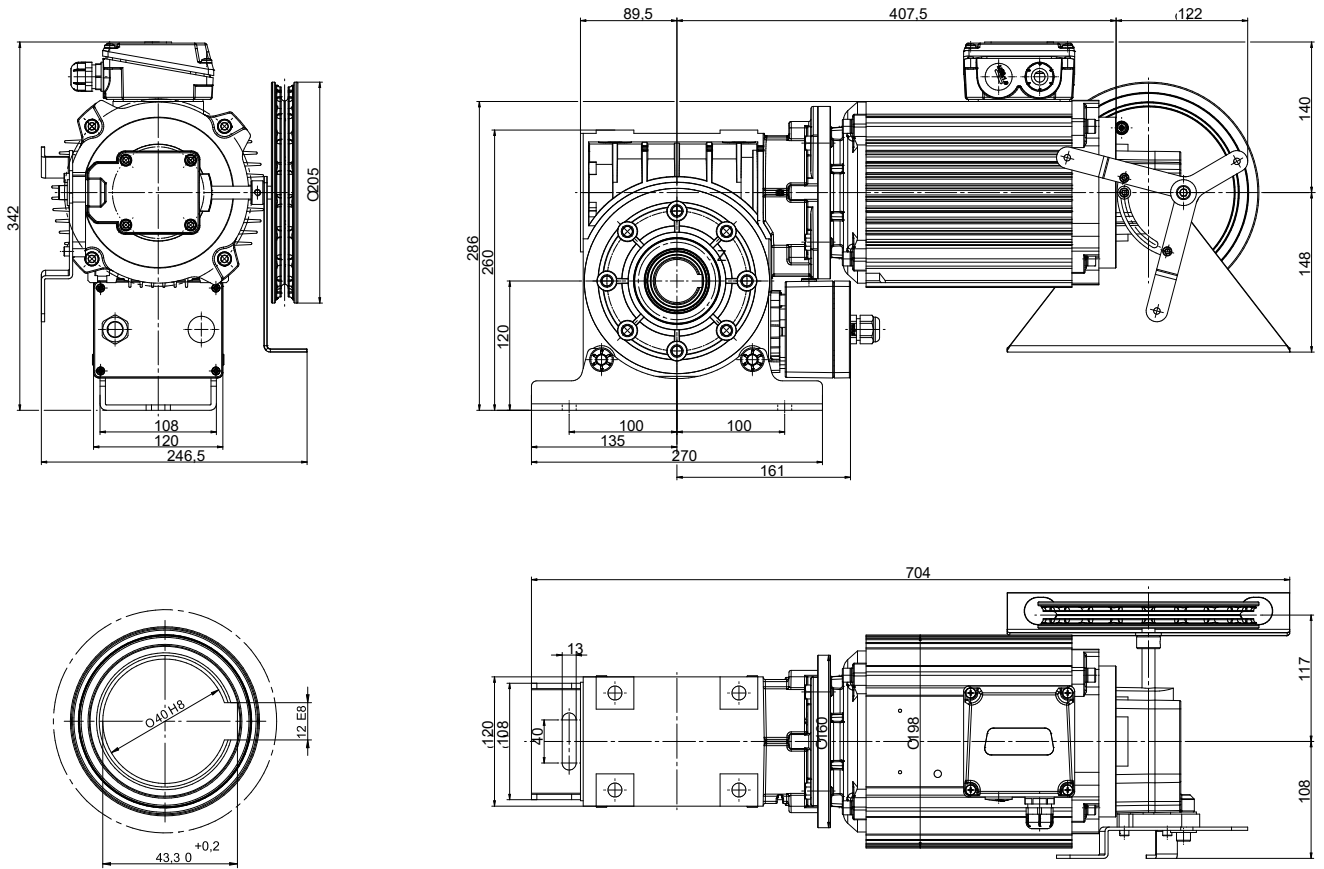


GDDO-42-11

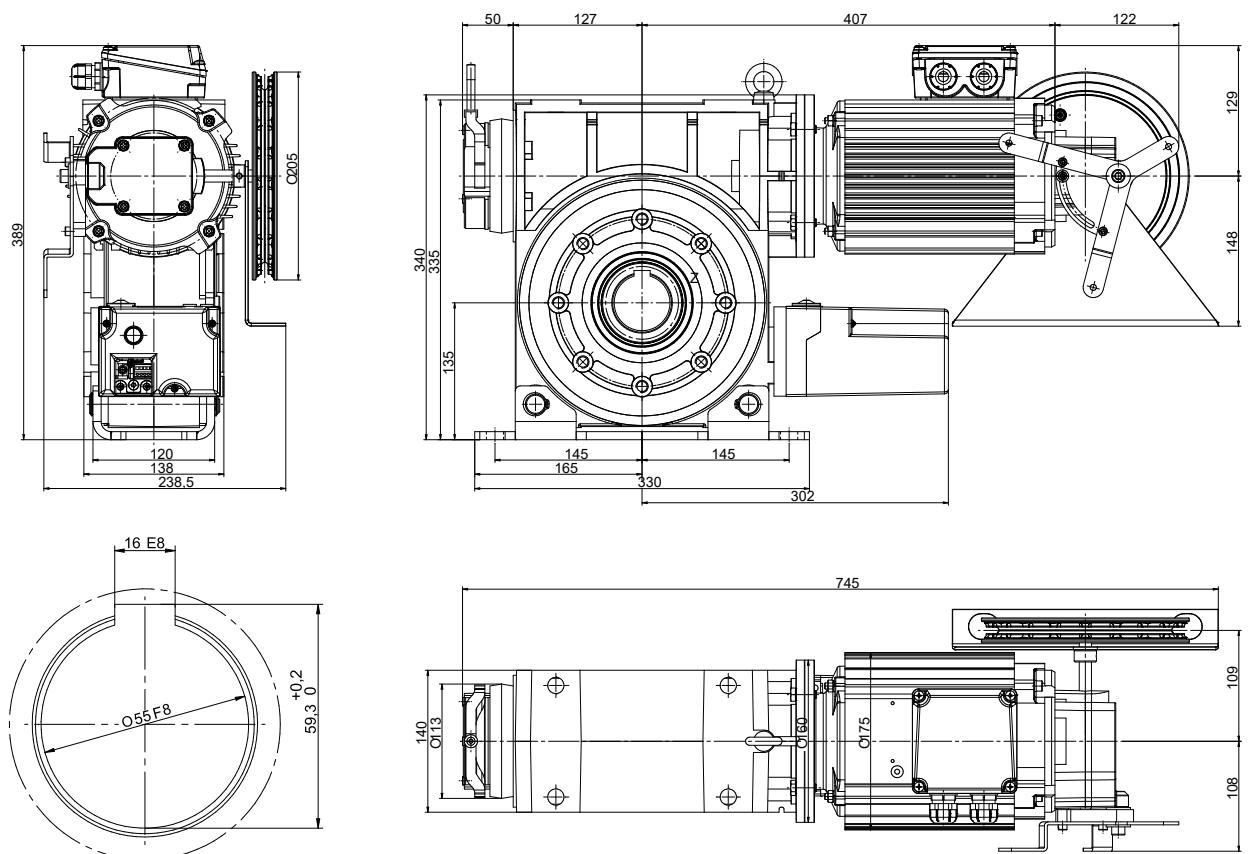


SPECIFICATION

GDDO-55-11

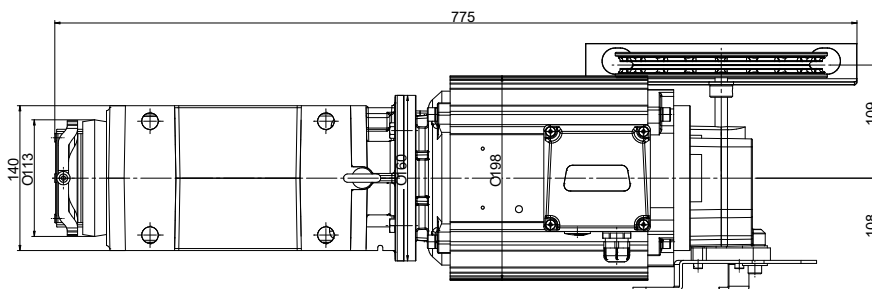
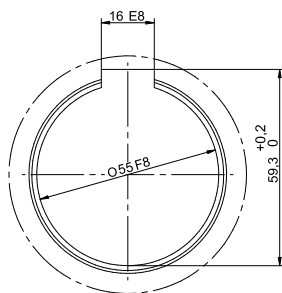
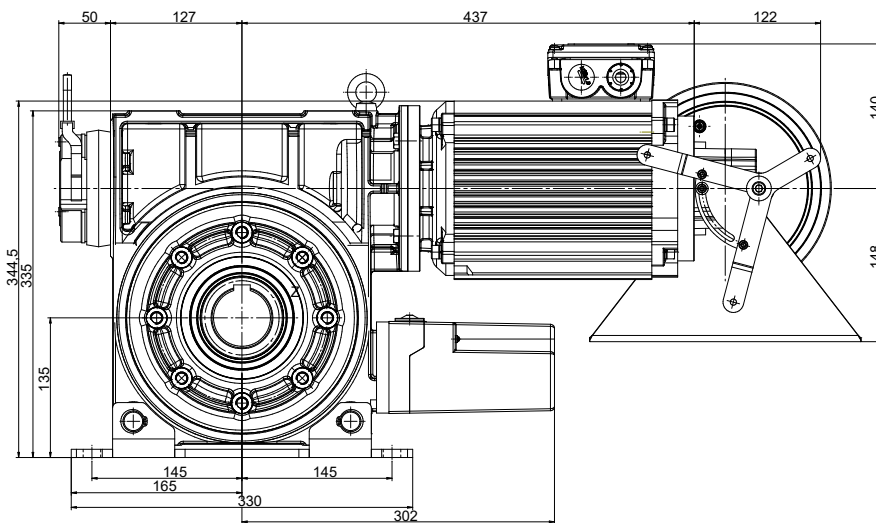
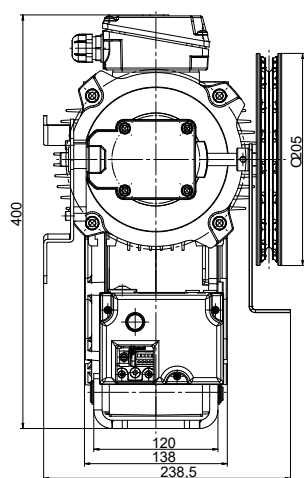


GDDO-75-10

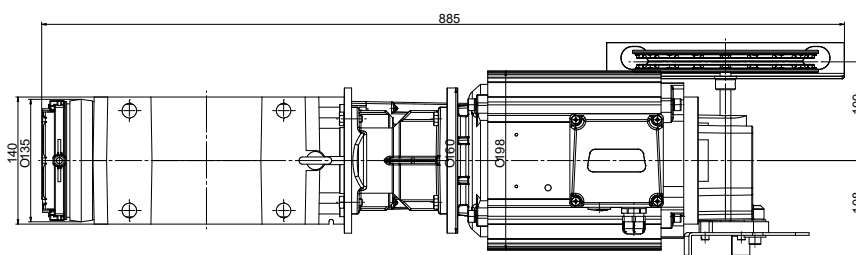
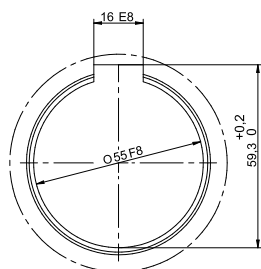
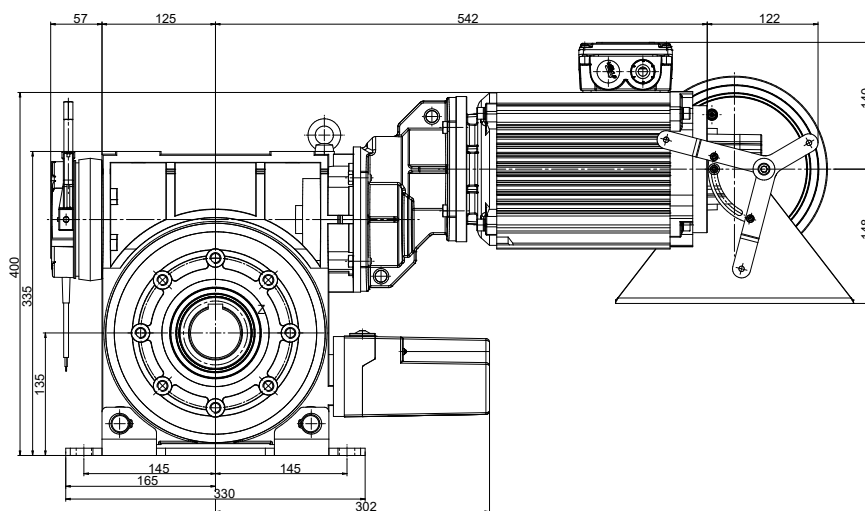
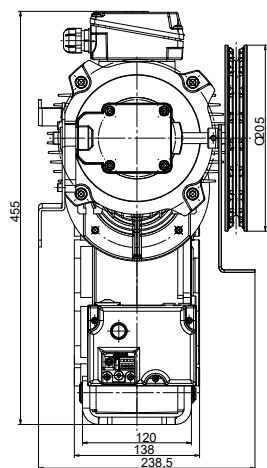


SPECIFICATION

GDDO-100-10

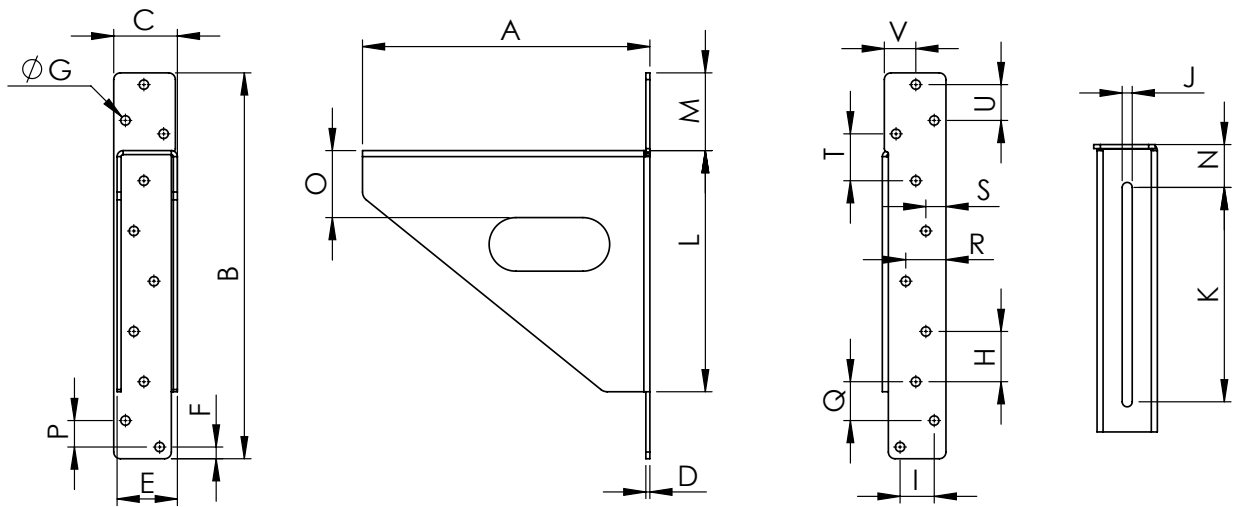


GDDO-140-9

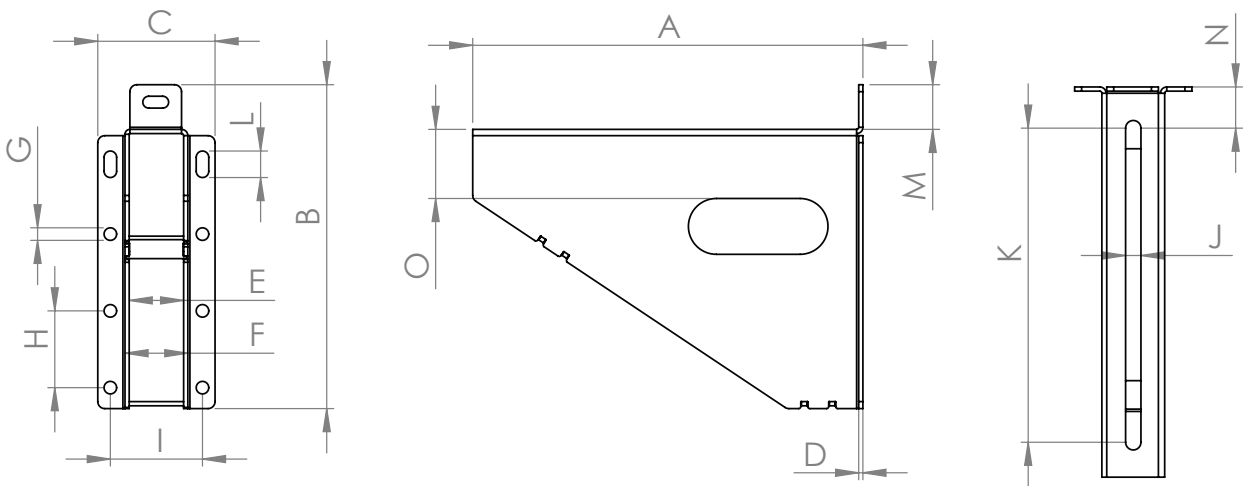


SPECIFICATION

MOUNTING PLATFORM



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	Load Capacity	Weight	
DDMP-01	429	576	95	6	90	18	14	75	51	15	320	360	116	64	100	38	58	60	30	70	54	47	4000	12	
Units	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Load Capacity	Weight
DDMP-02	559	464	168	6	78	90	18	110	132	22	450	38	64	59	100	7000	16
Units	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg



CAUTION

The maximum load each bracket can support is the 'Load capacity'. The calculation of determining the weight on each bracket must factor in the weight of the drum, the roller shutter curtain, the Operator and the dynamic forces of stopping and starting the door.

SPECIFICATION

	220Nm Direct	420Nm Direct	550Nm Direct	750Nm Direct	1000Nm Direct	1400Nm Direct
Type	Direct	Direct	Direct	Direct	Direct	Direct
Starting Torque Nm	220	420	550	750	1000	1400
Run Torque Nm	180	400	450	650	750	1250
Speed rpm	13	11	11	10	10	9
Manual operation	Chain	Chain	Chain	Chain	Chain	Chain
Power kW	0.75	1.5	1.5	1.5	2.2	2.2
Voltage V	3~230/400	3~230/400	3~230/400	3~230/400	3~230/400	3~230/400
Current A	4.1/2.4	6.4/3.7A	8.7/5.0	7.6/4.4	9.2/5.3	9.2/5.3
Cycles/ hr @ max. shaft revs	9	8	8	7	7	6
Max Output Shaft revs	20	20	20	20	20	20
Output Shaft Dia mm	40	40	40	55	55	55
Op Temp °C	+5, +40	+5, +40	+5, +40	+5, +40	+5, +40	+5, +40
Weight kg	23	36	42	57	63	71
Solenoid Brake	No	No	No	Yes	Yes	Yes
Anti-drop feature	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Factory Motor winding connection	Delta (VFD only)	Star	Star	Star	Star	Star
IP Rating	IP20	IP20	IP20	IP20	IP20	IP20
Gearbox size	Size 3	Size 4	Size 4	Size 6	Size 6	Size 6

MAINTENANCE

Frequently examine the installation for instability, signs of wear or damage to cables, and mounting. Do not use if repair or adjustment is necessary. Power must be turned off before servicing, cleaning or adjusting the operator.

Certain mechanical aspects of the installation as applicable must be checked, see below:

Monthly

- Examine the installation for signs of wear or damage to cables, and mounting. Do not use if repair or adjustment is necessary *
- Check PE / IR beam/s and bump edge functionality where applicable

Quarterly

- Check tightness of fixing bolts and screws. Adjust if required *
- Check correct electrical operation
- Check manual operation via hand chain
- Conduct door maintenance in accordance with door manufactures guidelines

* SERVICE MUST BE CARRIED OUT BY A QUALIFIED TECHNICIAN

Refer to the Wall Control manual for further information regarding maintenance and maintenance schedules.

WARRANTY

CHAMBERLAIN WARRANTY

Limited Warranty in Australia and New Zealand

1. Your consumer rights and guarantees

This Limited Warranty is provided by Chamberlain Australia Pty Ltd. Chamberlain New Zealand Limited (Chamberlain), contact details in Section 5 below. This Limited Warranty applies to a Grifco® Commercial unit (Unit) purchased in Australia and New Zealand, and gives you benefits which are in addition to your consumer rights and remedies under the Australian Consumer Law (or corresponding New Zealand consumer protection laws).

You can find out more information about your consumer rights and guarantees which the law provides in Australia at www.accc.gov.au in New Zealand at www.consumerprotection.govt.nz. We also provide this statement as required under the Australian Consumer Law:

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

2. What does our Limited Warranty cover?

Chamberlain warrants that, when purchased new in Australia or New Zealand, the Unit (all parts of the Unit other than globes and batteries) is free from defects in materials and workmanship (Limited Warranty) for the Limited Warranty period, subject to the terms and conditions of this Limited Warranty.

The Limited Warranty period (for Accessories see below) is 2 years (24 months) from the date of purchase or when a recommended cycle count for the purchased operator has been reached (whichever comes first)

The Limited Warranty period for remote controlled transmitters and accessories included with the Unit (Accessories) is 12 months from the date of purchase.

The Limited Warranty for genuine spare parts is free from defects in material and workmanship for a period of 6 months from date of purchase.

3. Limited Warranty Conditions

The following terms and conditions apply to your Limited Warranty:

our Limited Warranty is effective from date of purchase as indicated in Section 2 above;
proof of purchase of the Unit is required;

Please also see the User Manual for the Unit available on our website, or provided at the time of purchase.

4. What is not covered

Batteries and globes are not covered under the Chamberlain Limited Warranty
Travel costs incurred by Chamberlain or its authorised dealer in either travelling to and from areas outside a capital city area. These costs will be at the purchaser's expense.
Additional access costs incurred by Chamberlain or its authorised dealer in obtaining access to premises where the Unit is not readily accessible. These costs will be at the purchaser's expense.

Our Limited Warranty covers defects as explained, and does not cover all problems and mishaps that may occur in relation to the Unit including:

you got what you asked for but simply changed your mind, found it cheaper somewhere else, decided you did not like the purchase or had no use for it; you misused the Unit in any way that caused the problem; you knew of or were made aware of any deficiencies with the Unit before date of purchase;
use of the Unit with controls or third party devices or software which has not been supplied, or pre-approved, by Chamberlain;
problems relating to or residing in third party hardware, software or other items with which our product is used;
any loss of data related to you or provided by you, or loss related to downtime associated with use of the product whether through power outage, failure of internet or wireless connectivity, network disruptions, or otherwise;
non-compliance with the relevant instructions in the User Manual;
tampering, neglect abuse, wear and tear, accident, electrical storm, excessive use or conditions other than normal use;
problems with, or relating to, hardware, including but not limited to the

springs, hinges, guides:

problems caused by electrical faults or replacement of batteries or light bulbs, blown fuses, electrical surges, power surges or power strikes, fire, flood, rain, water, lightning or storms;
water or moisture ingress that causes corrosion or electrical malfunction; corrosion caused by sea air if located near a waterway, beach etc; lack of proper maintenance, service or care of the Unit; and/or damage caused by insects, pests or other after sale damage caused by events or accidents outside Chamberlain's reasonable control and not arising under normal and standard operating conditions.

5. Where you need help with our product

If you have a problem with the Unit or if you are concerned it may be defective, please contact our Customer Service team below:

Australia Phone toll free 1800 474 326
Fax toll free 1800888121
Address Unit 1, 75 Epping Road North Ryde, NSW 2113
Email customerservice@chamberlainanz.com
Website <https://www.grifco.com.au/>

New Zealand Phone toll free 0800 653 667
Auckland Phone 09 477 2823
Fax toll free 0800653 663
Email customerservice@chamberlainanz.com
Website <https://www.grifco.co.nz/>

As a first step, our Customer Service team will provide product support assistance to help you try to resolve the problem and in some cases, replacement parts for "do it yourself repairs". If our technical team need to see the product to determine the nature of the fault we will arrange an inspection by a trained technician, or ask that you send the product to us.

If your product was installed at your premises by an authorised dealer, please contact the installer indicated in your sales documents for prompt on-site service, or consult our Customer Service team if you need help in finding a local service technician. A service fee for on-site service may apply.

Authorisation from Chamberlain is required for warranty service under this Limited Warranty.

6. Delivery Charges

If an inspection is required in order to determine the nature of the fault please send the Unit freight paid and well packaged in accordance with our instructions. Any costs associated with transporting the Unit will be at Chamberlain's cost if the Unit has breached a statutory consumer guarantee. Repairs and replacement parts provided under this Limited Warranty are free of charge (and repaired items or replacement parts for Units found to be defective will be returned to you at our cost), and warranted by Chamberlain for the remaining portion of the original warranty period. However, if you make a claim under this Limited Warranty, and this Limited Warranty does not apply, or if the law does not provide you with a statutory right or remedy as a consumer, you may be required to pay labour, assessment and/or freight costs and delivery charges to repair, replace and/or return the Unit to you.

7. How to register your product

Please register your Unit and contact details at this link <https://www.grifco.com.au/warranty-registration>, so that we or your authorised installer can locate your details and provide you with product support assistance as quickly as possible, and keep you up to date with product updates. Registration can also be done by contacting Chamberlain Customer Service.

8. Important Reminder

All other guarantees (other than your statutory rights and guarantees as a consumer under applicable laws) are excluded to the fullest extent that we may lawfully do so. Unless the law requires us to do so, we do not accept any other liability, such as compensation for damages, injury or loss.

Last updated; 21st April 2022

NOTE: Refer to D-M-ACG-100 GRIFCO D-Drive Wall Control Instruction manual for Cycle-Count warranty conditions.