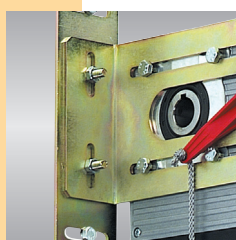


with remote control board



■ Wall mounting bracket



■ Release device by cords (Mod. 541-541 V)

### ■ The solution for industrial applications

The 541 gearmotors were specifically designed to satisfy all closing requirements in industrial and commercial environments, and are able to automate sectional doors, large ones included.

### ■ Sturdy and safe

The operation of the oil bath gearbox is guaranteed by a steel worm-screw coupled to a bronze ring-gear, enclosed in a solid die-cast aluminium body.

The gearmotor is non-reversing. In the event of a power cut, the door can be moved manually by using the "rapid" release cord device (standard supply for all models) or, in the 541 V versions, by manually activating the chain winch. If one of the two manual activation systems is activated, a safety microswitch prevents electrical operation.

### ■ The importance of versatility

The gearmotors were conceived for lateral fitting with "direct" transmission on the spring shaft, or with "indirect" transmission by chain.

The latter application make it possible to increase the automated system's versatility, enabling use even if lateral space is insufficient, or for particularly heavy doors.

The gearmotor is highly compact, in particular its width of only 92 mm makes it easy to install even where space is tight.

The use frequency of the gearmotors (almost intensive) means that they can be used also for particularly heavy duty cycles.

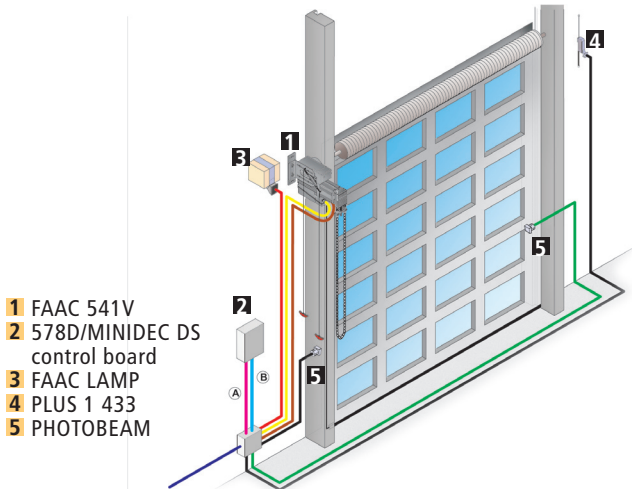
#### SPECIFICATIONS

Power supply 230 Vac (+6% -10%) 50-60Hz • Single-phase electric induction motor 1450 rpm • Max absorbed power 800W • Absorbed current 3.5 A • Thrust capacitor 20  $\mu$ F • Rotation speed 23 rpm • Winding thermal protection to 140 °C • Use frequency (S3) 40% • Through Shaft diam 25.4 mm (1") drive • Shaft rated torque 50 Nm • Drive max. revs 24 • Protection class IP 54 • Operating ambient temperature -20°C ÷ +55°C • Gearmotor maximum weight 14 kg • Oil type FAAC OIL XD 220 • Oil quantity 0.75 l • Transmission by steel worm-screw and bronze ring-gear in oil bath • Die-cast aluminium body • Travel-limit unit with micrometric screw • Rapid release device for manual activation with cord • Chain winch (models 541/541 V) for manual activation • Built-in encoder (models 541) for control via board 578 D

#### 578 D control board

Power supply 230 Vac (+6% -10%) 50 Hz • Absorbed power 10 W • Motor max load 1000 W • Accessories max load 0.5 A • Operating ambient temperature -20°C ÷ +55°C • Two Fuses • Function Logics: Automatic/"Stepped" automatic/Semi-automatic/Safety devices/Semi-automatic B / Dead-man C / "Stepped" semi-automatic / Mixed B/C logic • Programmable Work time (from 0 to 4 min.) • Programmable Pause time (from 0 to 4 min.) • Thrust Force Adjustable on 50 levels • Terminal board inputs Open - Partially Open - Opening safety devices - Closing safety devices - Stop - Edge - Power supply + earth - Opening and closing limit-switches - Encoder • On-connector inputs Opening and closing limit-switch - Encoder • Terminal board outputs: Flashing lamp - Motor - 24 Vdc accessories power supply - 24Vdc indicator-light - Timed output - Electric lock command - "traffic lights" - Fail safe • Rapid connector 5-pin card connection for MiniDec, Decoder or RP receivers • On-display Programming with three keys • Two programming modes: "basic" or "advanced" • "Basic" mode programmable functions Function Logic - Function logic - Pause time - Thrust force - Opening-closing direction • "Advanced" mode programmable functions: Torque at initial thrust - Braking - Fail safe - Pre-flashing - Indicator-light/Timed output/Electric lock or "traffic lights" command - Opening and closing safety devices logic - Encoder/Anti-crushing sensitivity - Deceleration - Partial opening time - Worktime - Assistance request - Cycle counter • Status indication: Display • Plastic enclosures compatibility: Mod. E - L - LM

## INSTALLATION LAYOUT



- 1 FAAC 541V
- 2 578D/MINIDEC DS control board
- 3 FAAC LAMP
- 4 PLUS 1 433
- 5 PHOTOBREAM

Low voltage cabling		Power cabling (230V)	
A	3 cables 3x0,5	B	2 cables 3x1,5+T
	1 cable 2x0,5		1 cable 2x1,5+T
	1 cable 6x0,5		1 cable 2x1,5

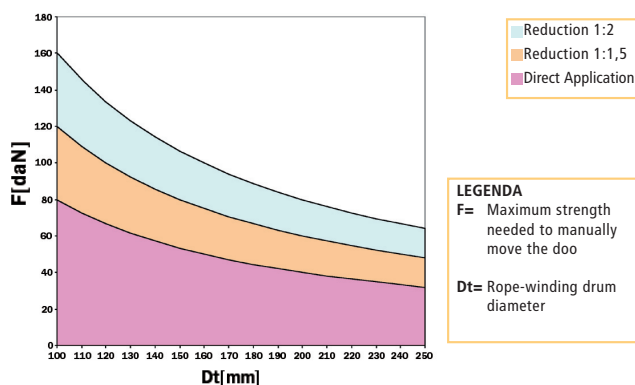
N.B.: Cable diameters in mm<sup>2</sup>

### Technical specifications of gearmotors 541

Power supply	230 Vac (+6% -10%) 50 (60) Hz
Electric motor	single-phase induction 1450 rpm
Max absorbed power	800 W
Absorbed current	3.5 A
Thrust capacitor	20 µF
Rotation speed	23 rpm
Winding thermal protection	140° C
Use frequency	40% S3
Drive	Through shaft diam. 25.4mm (1")
Shaft rated torque	50 Nm
Drive max revs	24
Protection class	IP54
Operating ambient temperature	-20°C ÷ +55°C
Gearmotor max weight	14 Kg
Type of oil	FAAC OIL XD220
Oil quantity	0.75 l

### (\*) GRAPH- APPLICATION RULES

In order to evaluate the correct operator application you need to measure first the required strength to lift the door (value normally indicated of the door documentation) and then the rope-winding drum diameter. The graph will allow to determine the possible application of the gear motor and the eventual need of a "out of the axis" reduction kit (see specific accessories needed for 541)



- 1 Three-dimensional adjustment plate (optional)
- 2 Limit switch assembly
- 3 Release device by cards (Mod. 541 - 541 V)
- 4 Chain winch (Mod. 541 V and 541 X)



### Specifications of 578 D control board (For 541 models-installation in "remote")

Power supply	230 Vac (+6%-10%) 50 Hz
Absorbed power	10 W
Motor max. load	1000 W
Accessories max. load	0,5 A
Operating ambient temperature	-20°C ÷ +55°C
Fuses	2
Function logics	Automatic/"Stepped" automatic/Semi-automatic/Safety/Semi-automatic B/Dead-man C/ "Stepped" semiautomatic
Work time	Programmable (from 0 to 4 min)
Pause time	Programmable (from 0 to 4 min)
Thrust force	Adjustable over 50 levels
Terminal board inputs	Open/Partially Open/Opening safety devices/Closing safety devices/Stop/Edge/Power supply + earth
On-connector inputs	Opening and closing travel-limit/Encoder
Terminal board outputs	Flashing lamp - Motor - 24Vdc power supply to accessories - 24Vdc indicator-light/Timed output - Failsafe
Rapid connector	5-pin card connection for Minidec, Decoder or RP receivers
Programming	Nr. 3 keys(+,-,F) and display, "basic" or "advanced" mode
"Basic" mode programmable functions	Function logic - Pause time - Thrust force - Gate direction
"Advanced" mode programmable functions	Thrust torque - Braking - Failsafe - Pre-flashing - Indicator-light/ Timed output - Opening and closing safety devices logic - Encoder (optional) for anti-crushing electronic safety device, management of slowdowns and partial opening in real-time - Slowdowns - Partial opening time - Work time - Assistance request - Cycle counter

Model	Use		Control board
	Applications	Use frequency %	
541	See graphic (*)	40% (S3)	Not included
541 V	See graphic (*)	40% (S3)	Not included
541 X	See graphic (*)	40% (S3)	Not included



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### DIMENSIONS

