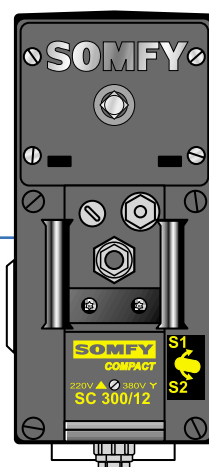


Box motors range

Box motor range	3
Selector chart	4
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Mounting	8
Accessory bracket	14
Plug end & accessories for motor & chain drive	15
Adjusting & wiring	21
Installation instructions	23
Technical specification and dimensions	24

BOX MOTOR RANGE

- Easy installation
- 3 phase models include a 24V control circuit allowing programmable configuration of operating mode; impulse or momentary
- Specific model available for sectional doors (30rpm de-clutching drive & 25.4mm hollow drive shaft)
- No separate motor starter required
- Volt free outputs for courtesy lighting
- Compatible with photocells
- Standard index of protection rating : IP45
- Integral test buttons
- Progressive limit switches with security limit switch
- Continuous running time : single phase 5 mins; three phase 25 mins
- Lubricated bearings and gearbox for life-time service
- Temperature range : -25°C to +85°C
- Integral thermal protection
- Integral electromagnetic brake

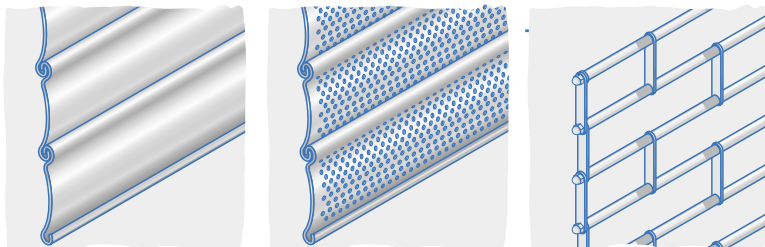


	MOTOR TYPE	Torque Nm	Speed rpm	Power supply
Rolling door	Compact 200/12	200	12	Monophase
	Compact 200/12 Tri	200	12	Triphases
	Compact 300/12 Tri	300	12	Triphases
	Compact 400/8 Tri	400	8	Triphases
Sectional door	Compact 80/30	80	30	Monophase
	Compact 100/30 Tri	100	30	Triphases

SELECTOR CHART FOR ROLLING SHUTTERS & GRILLS

To select a motor you need to know:

- 1 ■ The type of shutter (type of slat, weight per m²)
- 2 ■ The total weight of the slats (surface x weight per m²)
- 3 ■ The diameter of the tube.



1 ■ Type of slats

Select a slat style and gauge which suits the width of the installation
Please note that particular types of slats may bend easily over certain widths

2 ■ Total weight of shutter

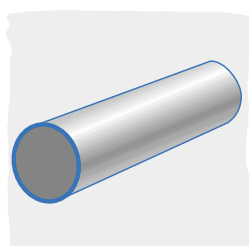
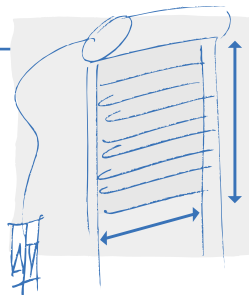
Calculate the total weight of the shutter:

- Width of slat
- Height

$$(\text{Width}) \times (\text{height}) \times (\text{weight per m}^2)$$

surface

= Total weight to motorise

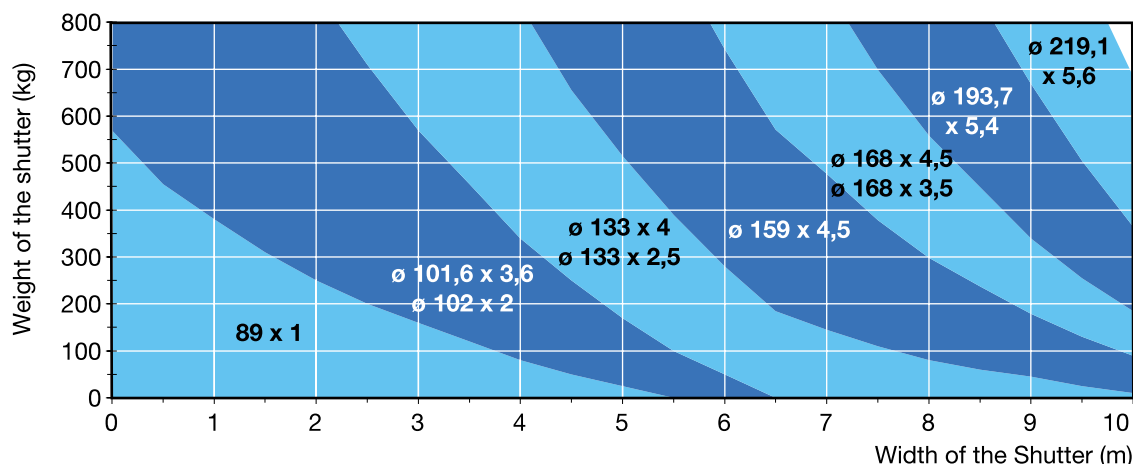


3 ■ Tube diameter

There is a minimum tube diameter around which the different types of slats will roll uniformly

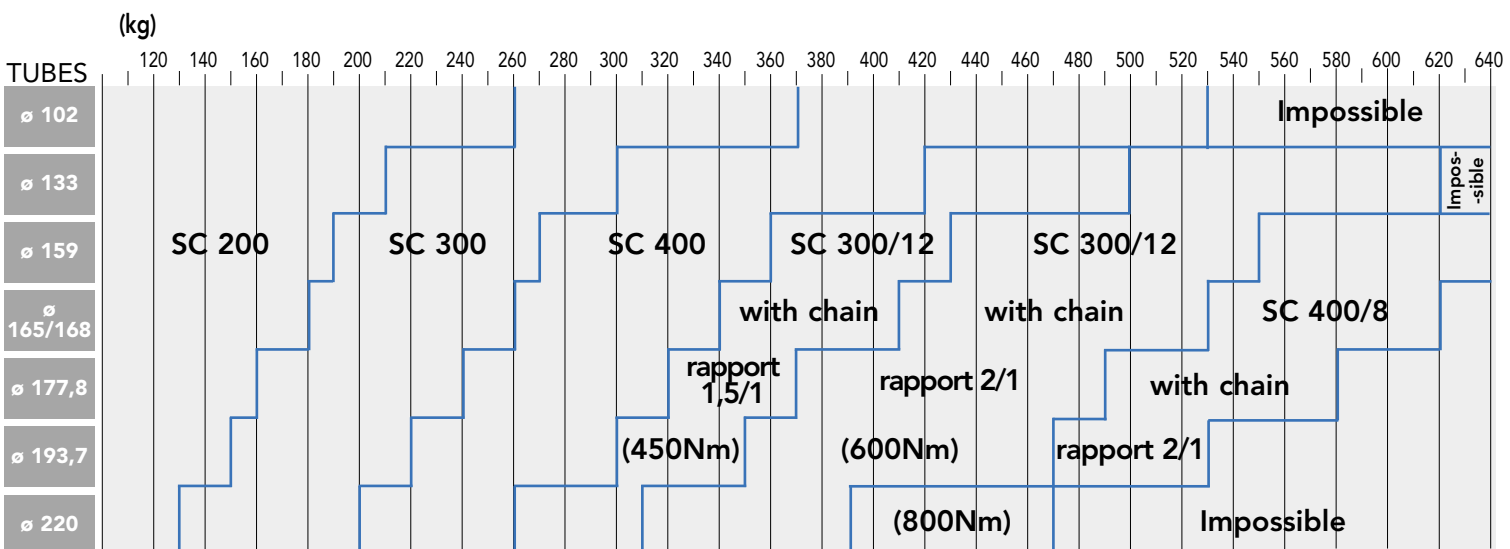
From the tube deflection chart on the next page select the tube size recommended according to the width and weight of the installation.

Load limit of each tube



Plot the weight of the shutter horizontally off the Weight axis, plot the overall width of the shutter assembly vertically off the Width axis, the two lines will meet within a suitable tube 'zone'. This is the minimum size and thickness of tube required to prevent tube deflection and allow the safe operation of the complete shutter assembly. Please consult our Technical Department for shutters which are heavier than 600kg or wider than 7.5m.

SELECTOR CHART FOR GRILLS & INDUSTRIAL DOORS



SAFETY BRAKES

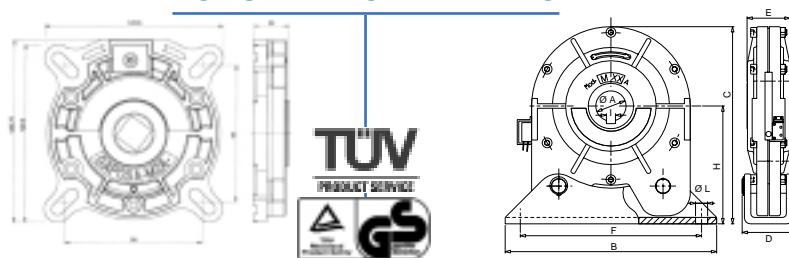
The safety brake comply to the new European Norms EN 12604 chapter 4.3.4 "Safeguarding against dropping of vertically operating door leaves.

The safety brake has a double function :

- support of the shutter shaft
- blocking of the shutter in case of a shutter suspension component failure.

In case of release of the safety brake, a safety device cuts automatically the electric power of the motor, avoiding so supplementary damages on the shutter and the motorization.

EUROPEAN STANDARDS



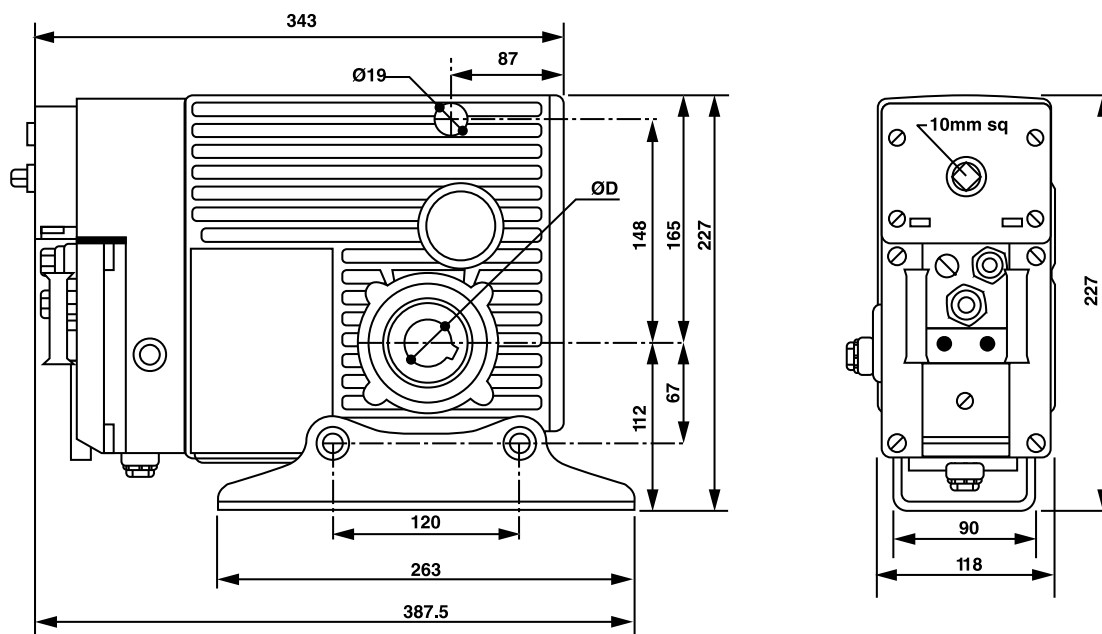
References	2004074	9550119	9550118	9550116
TECHNICAL CHARACTERISTICS				
Admissible torque (Nm)	258	404	708	1000
Locking torque (Nm)	978	1979	3299	3560
Working speed (r.p.m.)	16	14	12	12
Working speed (r.p.m.)	27	24	22	22
Weight (kg)	2,1	6,5	10	12,5
DIMENSIONS				
ø A	25	30	40	40
B	165	216	268	280
C	158	202	255	260
D	33	53		70
E	30	50	55	57
F	145	186	240	240
H	91	123	151	156
I		8		12
L	9	12	15	16

ABACUSES

Weight max.

Tube		89x1			102 x 2 101.6 x 3.6			133 x 2,5 133 x 4			159 x 4,5			168 x 3,5 168 x 4,5			193,7x 5,4			219,1 x 5,9		
REF : Safety brake		Width (m)																				
		3	5	7	3	5	7	3	5	7	3	5	7	3	5	7	3	5	7	3	5	7
2004074	3	285			360	245		314	314	214	279	278	278	267	266	265						
	5	285			312	245		284	283	283	260	260	259	252	251	250						
	7	285			279	245		259	259	258	242	241	259	235	235	234						
9550119	3							493	345		434	430	389	412	408	386	360	353	347			
	5							425	345		387	384	380	373	369	364	336	329	323			
	7							375	345		348	345	342	338	333	330	309	303	297			
9550118	3																509	505	499	446	439	432
	5																480	475	470	433	426	419
	7																444	440	435	408	402	396
9550116	3																823	816	809	721	711	701
	5																759	753	746	686	676	667
	7																692	687	681	637	629	619

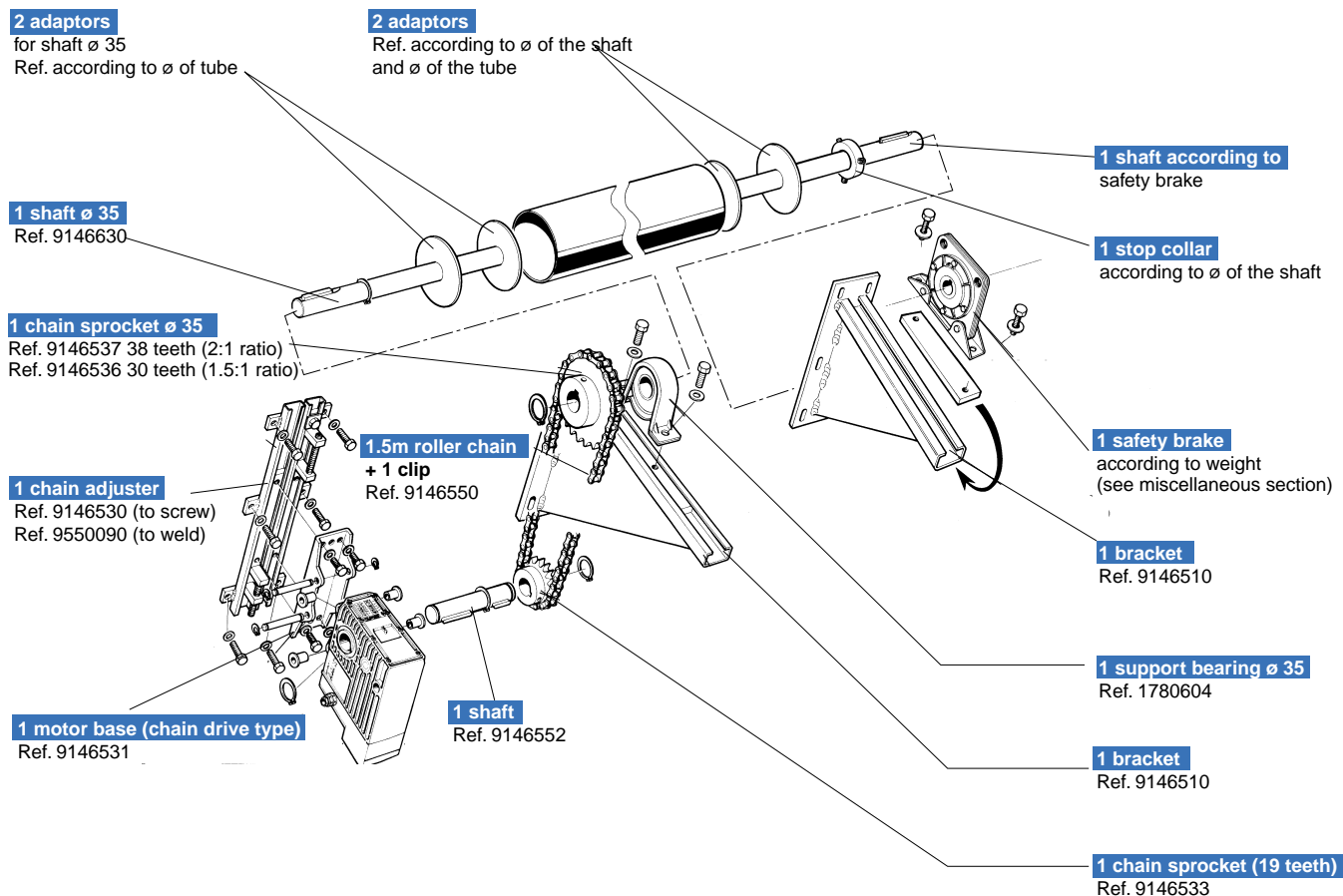
COMPACT MOTOR



Reference	Description	LSU* capacity	Mono 230/50Hz	Tri 230/400V	Tri 400V	Shaft ø 25	Shaft ø 30	Speed Rpm
1206000	SC 200/12 mono 220V	17	x				x	12
1206002	SC 200/12 mono 220V base	25	x				x	12
1206003	SC 200/12 tri 220/380V	17		x			x	12
1206030	SC 200/12 tri 220/380V	25		x			x	12
1206013	SC 200/12 tri 380V	17			x		x	12
1206014	SC 200/18 tri 380V base	17			x		x	18
1206006	SC 300/12 tri 220/380V	17		x			x	12
1206008	SC 300/12 tri 220/380V base	25		x			x	12
1206015	SC 300/12 tri 380V	17			x		x	12
1206017	SC 300/12 tri 380V base	25			x		x	12
1206010	SC 400/8 tri 220/380V	17		x			x	8
1206012	SC 400/8 tri 220/380V base	25		x			x	8
1206018	SC 400/8 tri 380V	17			x		x	8
1206024	SC 80/30 mono 220V	17	x			x		30
1206022	SC 100/25 tri 220V	17		x		x		25
1206023	SC 100/30 tri 220V	17			x	x		30
1206026	SC 100/30 tri 220V	17		x		x		30
1206028	SC 100/30 tri 220V	25		x		x		30
1206029	SC 100/30 tri 220V	17			x	x		30

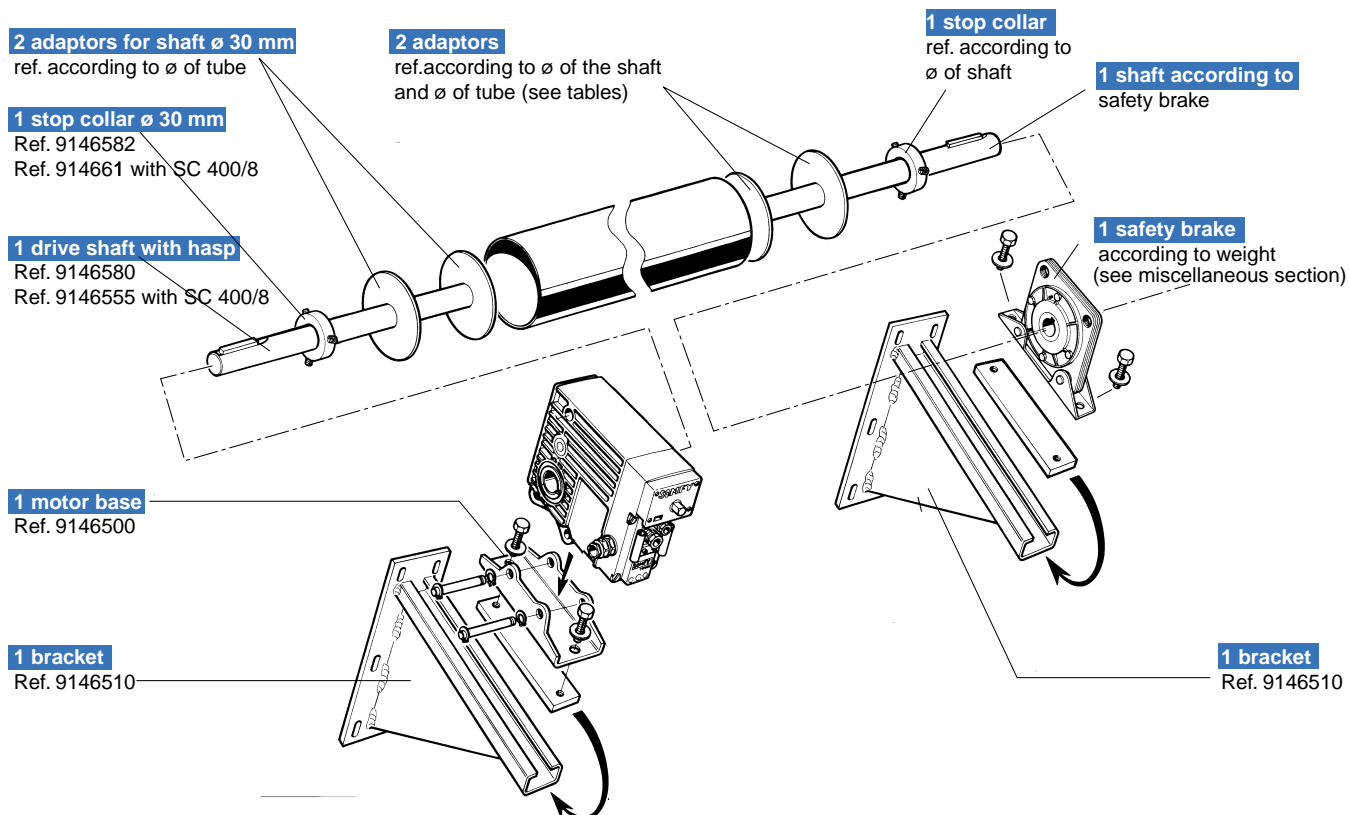
* Limit switch unit

MOUNTING WITH CHAIN DRIVE ON BRACKET WITH SAFETY BRAKE



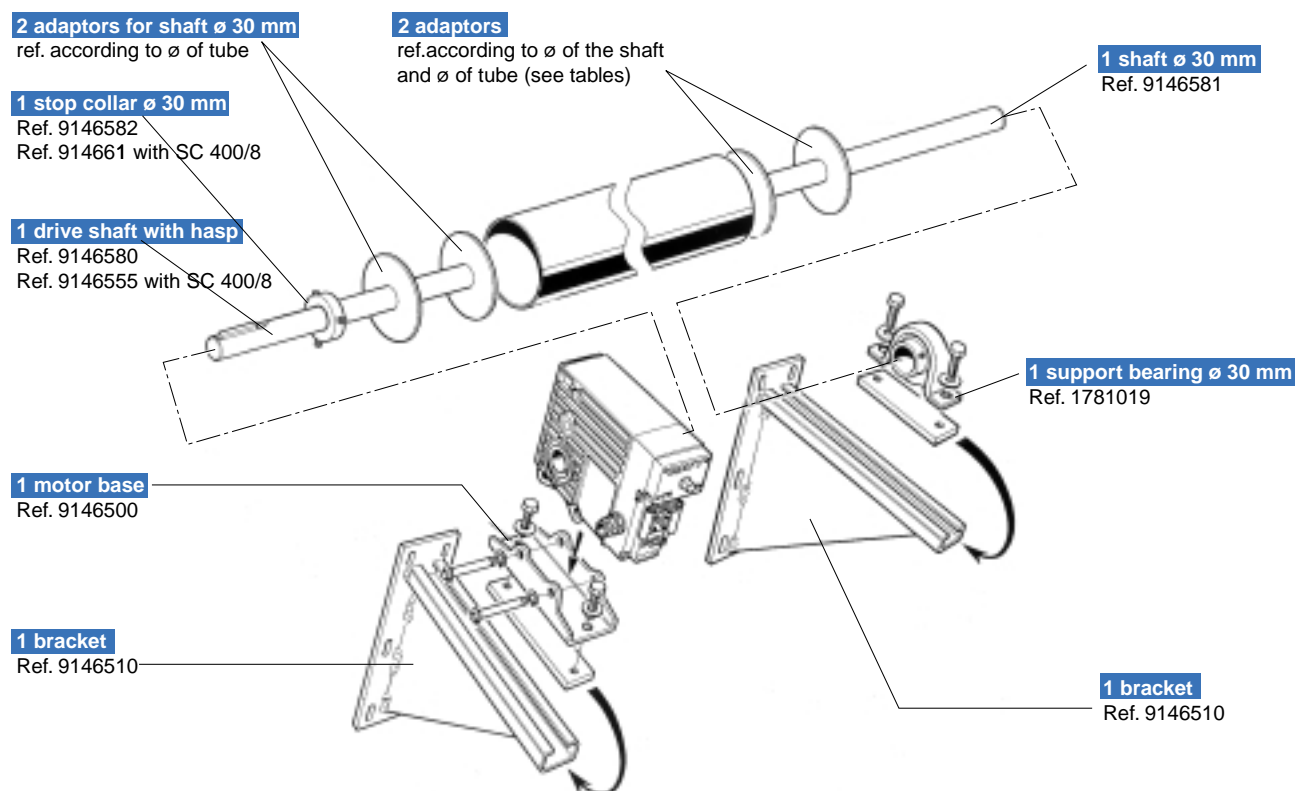
QTY	REFERENCE	DESCRIPTION
4	See disc table	Reference according to diameter of tube
1	9146630	Sprocket drive shaft
2	9146510	Bracket
1	1780604	Support bearing
1	Safety brake	See miscellaneous section for reference
1	Plug end shaft	According to safety brake
1	Stop collar	According to diameter of shaft
1	9146537	Chain sprocket 38 teeth
	or 9146536	Chain sprocket 30 teeth
1	9146533	Chain sprocket 19 teeth
1	9146550	1.5m roller chain & clip
1	9146531	Motor base (chain type)
1	9146530	Chain adjuster (to screw)
	or 9550090	Chain adjuster (to weld)
1	9146552	Motor drive shaft
1	Motor	See motor selector chart

MOUNTED ON BRACKET WITH SAFETY BRAKE



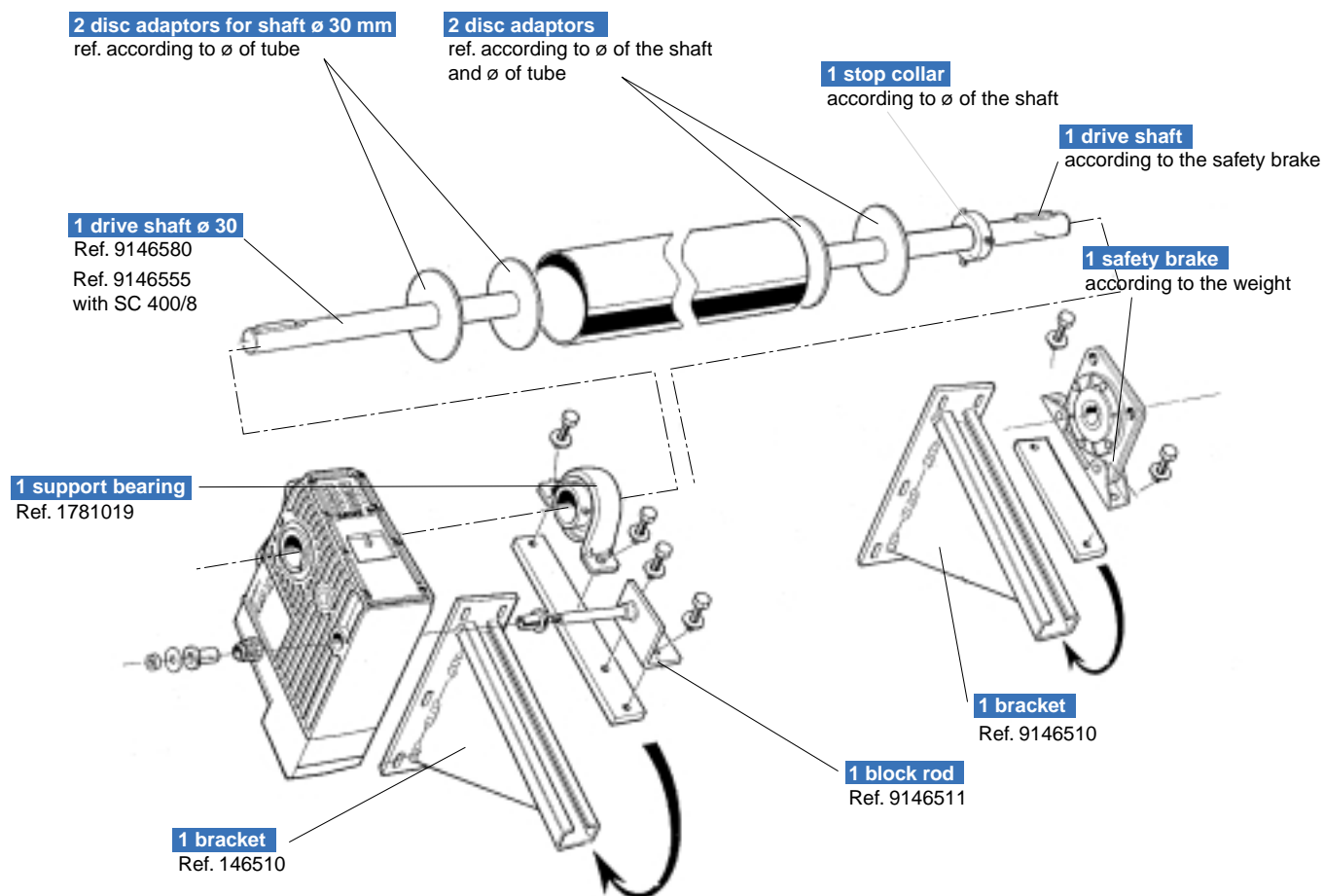
QTY	REFERENCE	DESCRIPTION
4	See disc table	Reference according to diameter of tube
1	Safety brake	See miscellaneous section for safety brake table
1	Plug end shaft	According to safety brake see miscellaneous
1	Stop collar	According to diameter of shaft
1	Stop collar	According to diameter of shaft
1	9146580	Drive Shaft with hasp
1	9146582	Stop collar
1	9146500	Motor base
2	9146510	Bracket
1	Motor	See motor selector chart

MOUNTED ON BRACKET WITH SUPPORT BEARING



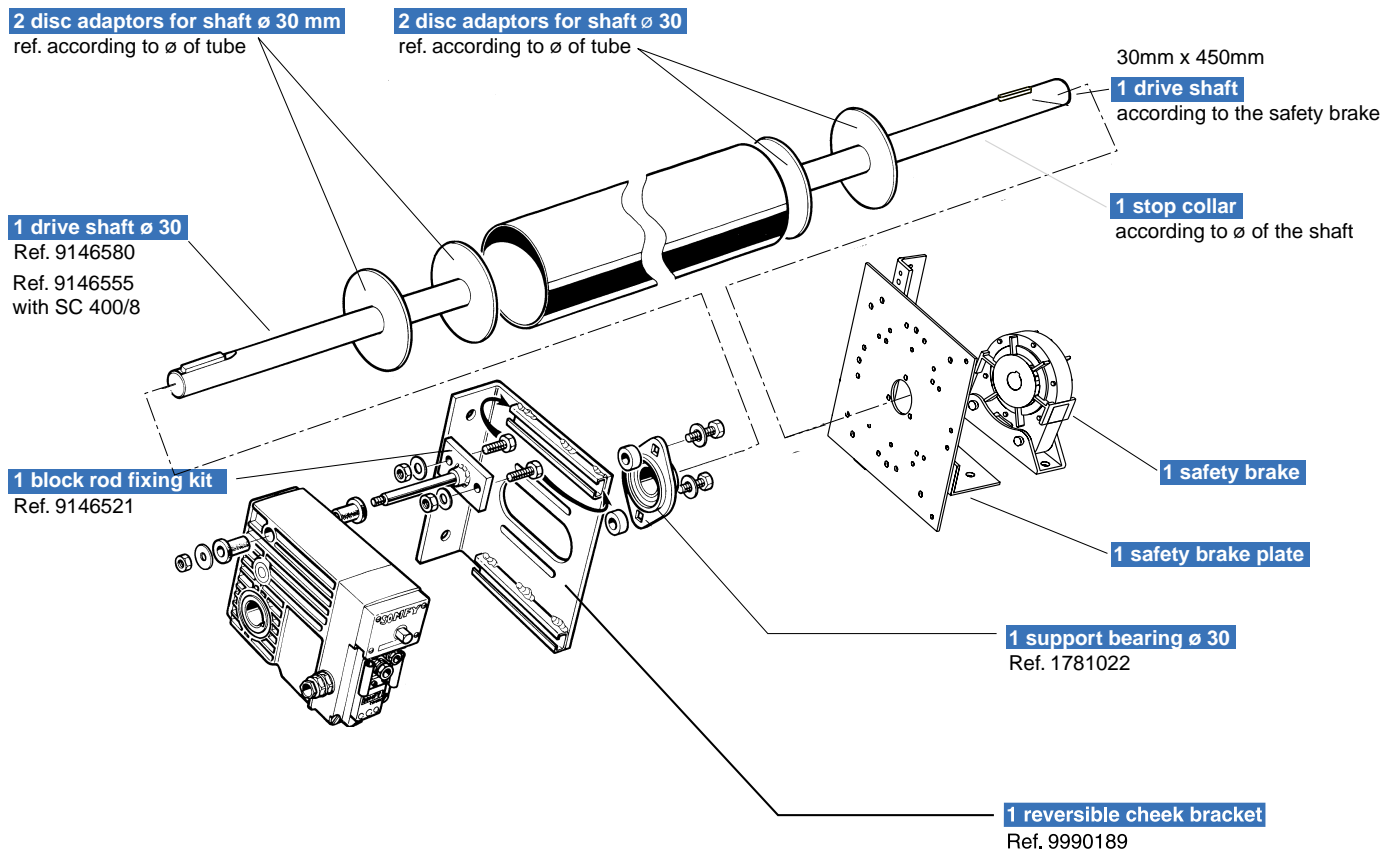
QTY	REFERENCE	DESCRIPTION
4	See disc table	Reference according to diameter of tube
1	Plug end shaft	According to safety brake see miscellaneous
1	Stop collar	According to diameter of shaft
1	9146580	Drive Shaft with hasp
1	9146581	Shaft
1	9146582	Stop collar
1	9146500	Motor base
2	9146510	Bracket
1	1781019	support bearing
1	Motor	See motor selector chart

FLOATING MOUNTING ON BRAKET WITH SAFETY BRAKE



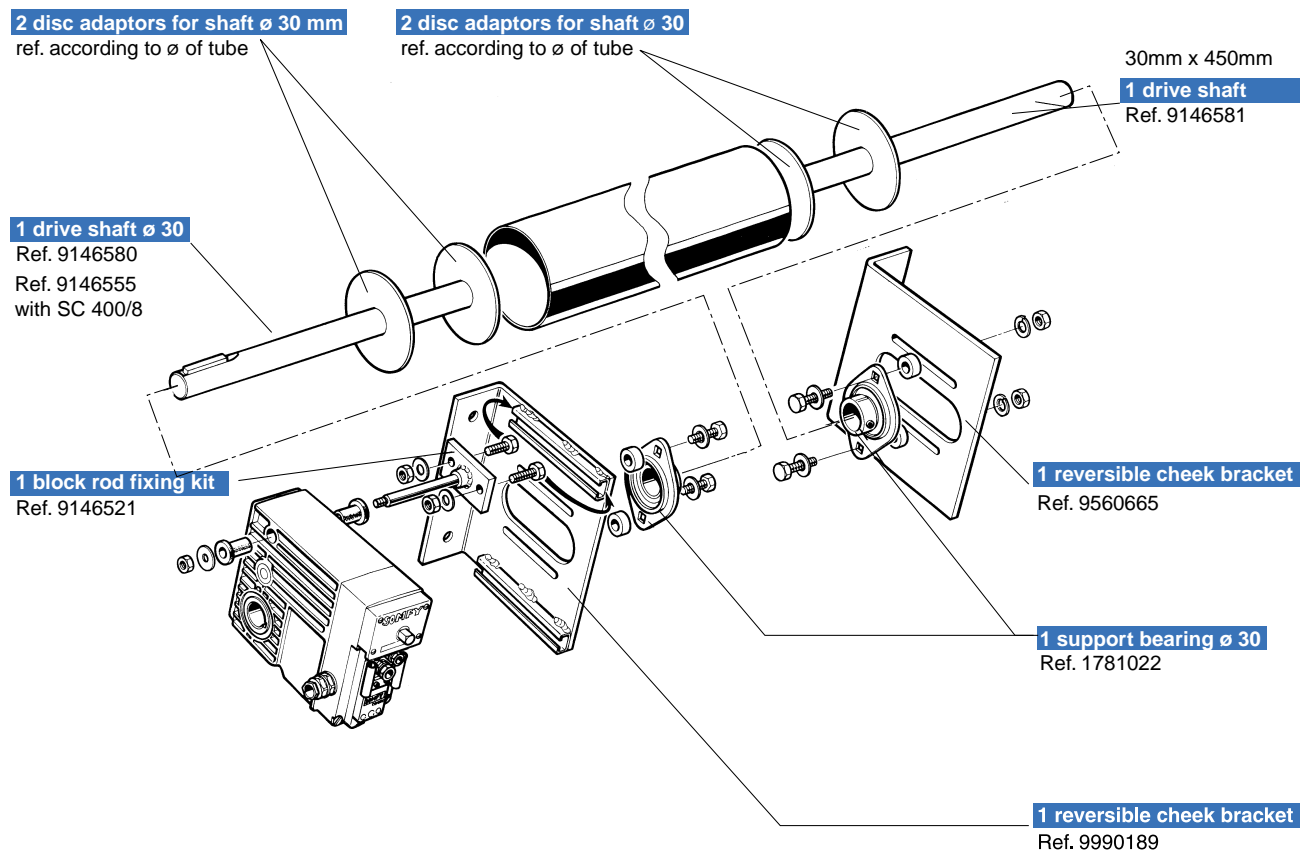
QTY	REFERENCE	DESCRIPTION
4	See disc table	Reference according to diameter of tube
1	Stop collar	According to ø of the shaft
1	Shaft	According to safety brake
1	safety brake	According to the torque
1	9146580/555	Drive Shaft
2	9146510	Bracket
1	9146511	block rod
1	1781019	support bearing
1	Motor	See motor selector chart

FLOATING MOUNTING ON ADJUSTABLE AXLE PLATES WITH SAFETY BRAKE



QTY	REFERENCE	DESCRIPTION
4	See disc table	Reference according to diameter of tube
1	9146580	Motor drive shaft
1	Plug end shaft	according to the safety brake
1	9146521	Block rod fixing kit
1	9001354	Plug end cheek bracket
1	9990189	Motor cheek bracket
2	1781022	Support bearing
1	Safety brake	See motor selector chart

FLOATING MOUNTING ON ADJUSTABLE AXLE PLATES



QTY	REFERENCE	DESCRIPTION
4	See disc table	Reference according to diameter of tube
1	9146580	Motor drive shaft
1	9146581	Plug end shaft
1	9146521	Block rod fixing kit
1	9560665	Plug end cheek bracket
1	9990189	Motor cheek bracket
2	1781022	Support bearing
1	Motor	See motor selector chart

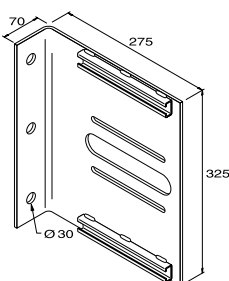
ACCESSORY BRACKET

■ Reversible and adjustable motor bracket

A reversible and adjustable motor bracket for the SC200/12 & SC300/12.
The block rod ref. 9146521 must be fitted with this bracket.

To be used with support bearing ref 1781022.

- material: Steel
- maxi load:
- Use limit:
- Weight: 4003 g
- Finish: Paint
- Maximum shutter weight: 390 kg



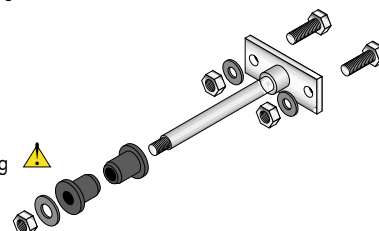
Ref. 9990189

■ Block rod

Block rod, prevents the Compact motor rotating when using motor end plate ref. 146524. Can be used with assemblers own 'cheek plates'.

Supplied with 2 M10 x 25mm fixing bolts and rubber bushes.

- material: Steel
- maxi load:
- Use limit:
- Weight: 440 g
- Finish: Galvanised
- Maximum shutter weight: 600 kg

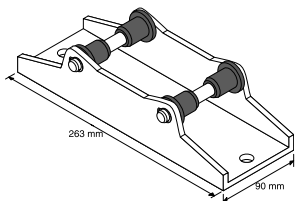


Ref. 9146521

■ Plate

A base plate to be fitted to COMPACT motors when using the adjustable bracket ref. 9146510.

- material: Steel
- maxi load:
- Use limit:
- Weight: 2700 g
- Finish: Paint
- Maximum shutter weight: 600 kg



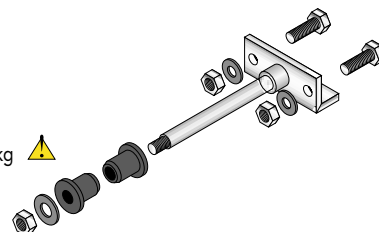
Ref. 9146500

■ Block rod

Block rod, prevents the Compact motor rotating when using motor end plate ref. 146524. Can be used with assemblers own 'cheek plates'.

Supplied with 2 M10 x 25mm fixing bolts and rubber bushes.

- material: Steel
- maxi load:
- Use limit:
- Weight: 440 g
- Finish: Galvanised
- Maximum shutter weight: 600 kg



Ref. 9146511

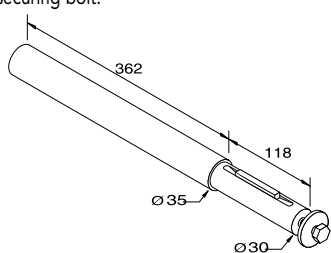
■ Motor drive shaft

Motor drive shaft, stepped dia. 30mm & 35mm, 480mm long.

Larger dia. section provides greater weld area with adaptor discs for use with the powerful SC400/8.

Supplied with woodruff key and 10mm securing bolt.

- material: Steel
- maxi load:
- Use limit:
- Weight: 3400 g
- Finish: Plain
- Maximum shutter weight:

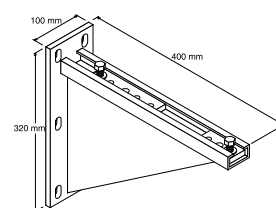


Ref. 9146555

■ Plug end bracket

Heavy duty adjustable motor or plug end bracket.
The base ref. 9146500 has to be fitted onto the motor when using this bracket.

- material: Steel
- maxi load:
- Use limit:
- Weight: 5270 g
- Finish: Paint
- Maximum shutter weight: 600 kg



Ref. 9146510

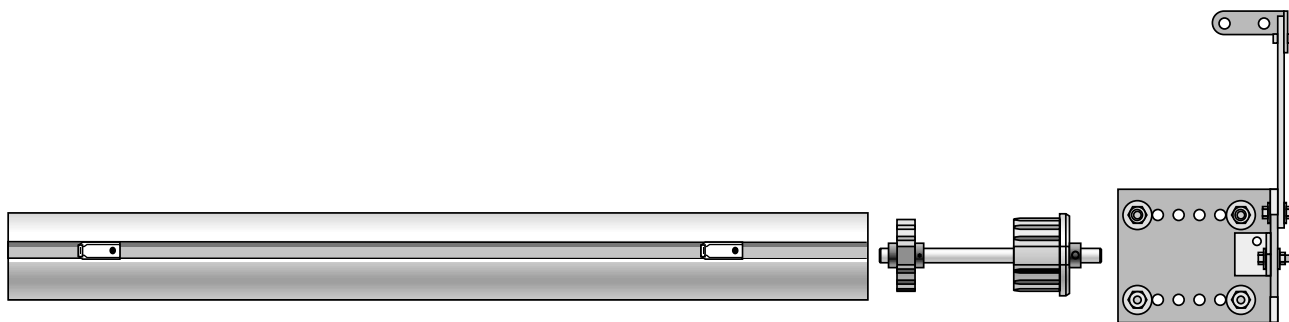
■ Plain shaft Ø 30 mm

- material: Steel
- maxi load: 1000 kg
- Use limit:
- Weight: 2490 g
- Finish:
- Length: 350 mm



Ref. 9146580

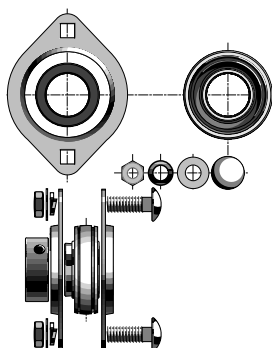
PLUG END FOR COMPACT MOTORS



■ Shaft support bearing Ø 30 mm

To be used with adjustable end plate with screw M 10x30

- material: Steel
- maxi load:
- Use limit:
- Weight: 570 g
- Finish: Galvanised
- Maximum shutter weight: 800 kg

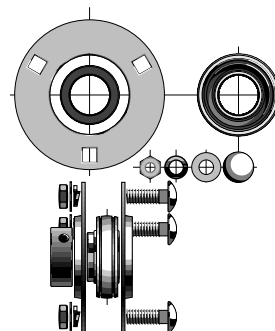


Ref. 1781022

■ Shaft support bearing Ø 30 mm

To be used with adjustable end plate with screw M 10x30

- material:
- maxi load:
- Use limit:
- Weight: 735 g
- Finish:
- Maximum shutter weight: 1000 kg




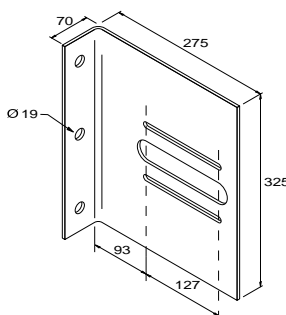
Ref. 1781020

■ Adjustable End plate

350 x 350 mm

A reversible and adjustable plug end bracket for the SC200/12 & SC300/12. To be used with corresponding motor bracket ref. 146524 and support bearing ref. 146528A.

- material: Steel
- maxi load:
- Use limit:
- Weight: 3770 g
- Finish: Paint
- Maximum shutter weight: 600 kg 

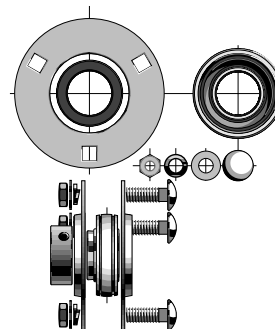


Ref. 9146526

■ Shaft support bearing Ø 35 mm

To be used with adjustable end plate with screw HM 10x30

- material:
- maxi load:
- Use limit:
- Weight: 945 g
- Finish:
- Maximum shutter weight: 1000 kg

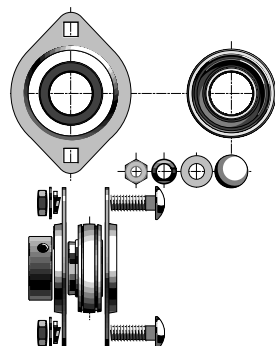


Ref. 9146631

■ Shaft support bearing Ø 35 mm

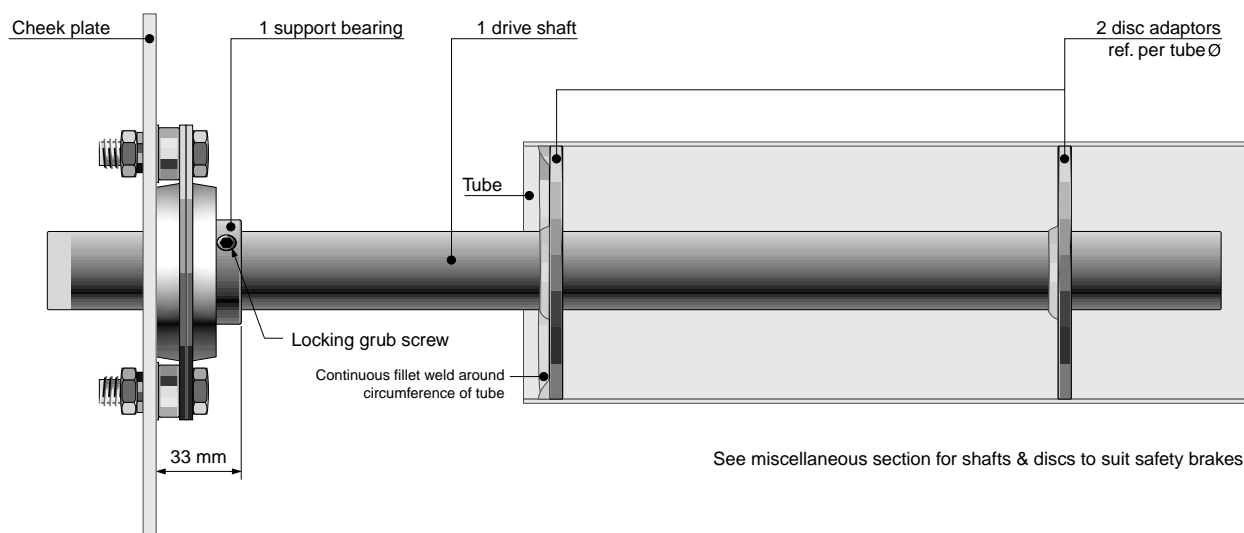
To be used with adjustable end plate with screw M 10x30

- material:
- maxi load:
- Use limit:
- Weight: 1500 g
- Finish:



Ref. 9530807

PLUG END FOR COMPACT MOTOR



See miscellaneous section for shafts & discs to suit safety brakes.

■ Plain shaft Ø 30 mm

- material:
- maxi load:
- Use limit:
- Weight: 1218g
- Length: 220 mm
- Maximum shutter weight: 1000 kg ⚠



Ref. 9146581

■ Plain shaft Ø 30 mm

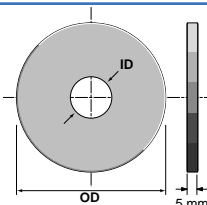
- material:
- maxi load:
- Use limit:
- Weight: 2490 g
- Length: 350 mm
- Maximum shutter weight: 1000 kg ⚠



Ref. 9146580

■ Plain steel disc adaptors Ø 30 mm

Ref	1781024	1781056	1781057	9990192	9990194	1781025	9990195	1781026
Tube	101,6 x 3,6	102 x 2	108 x 4	127 x 3,25	133 x 2,5	133 x 4	152,4x3,25	159 x 4,5
Weight	183 g	203 g	210 g		365 g			645 g



■ Plain shaft Ø 35 mm

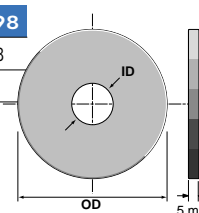
- material:
- maxi load:
- Use limit:
- Weight: 3900 g
- Length: 480 mm



Ref. 9146555

■ Plain Ø 35 mm steel disc adaptors

Ref	9990196	1781027	9990198
Tube	127 x 3,25	133 x 4	168,3x4,8
Weight	400 g	530 g	



■ Plain shaft Ø 40 mm

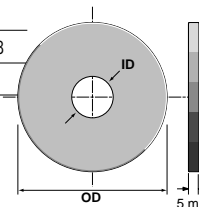
- material:
- maxi load:
- Use limit:
- Weight: 3900 g
- Length: 480 mm



Ref. 9146555

■ Plain Ø 40 mm steel disc adaptors

Tube	127 x 3,25	133 x 4	168,3x4,8
Weight	400 g	530 g	

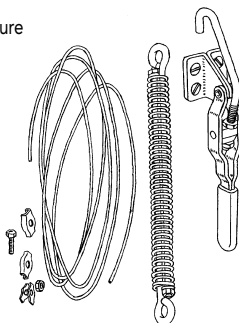


ACCESSORIES FOR COMPACT MOTOR

■ Declutching set for sectional door

Kit for horizontal mounting
To declutche the motor in case of power failure

- material:
- maxi load:
- Use limit:
- Weight: 580 g

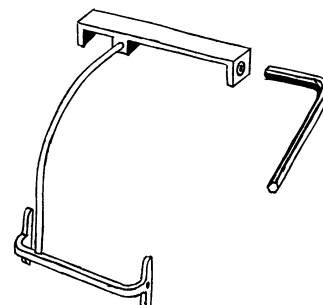


Ref. 9550037

■ Declutching set for sectional door

Kit for vertical mounting
To be used with ref. 9550037

- material:
- maxi load:
- Use limit:
- Weight: 400 g

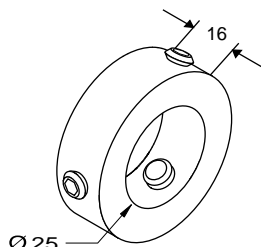


Ref. 9550043

■ Stop collar ø 25 mm

To be used with SC100/30 when fitted to sectional doors to prevent any lateral movement of the tube.
Supplied with 3 x M8 x 10 mm grub screws.

- material: Steel
- maxi load:
- Use limit:
- Weight: 160 g

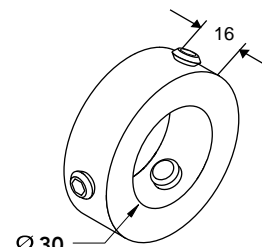


Ref. 9146583

■ Stop collar ø 30 mm

To be used with SC100/30 when fitted to sectional doors to prevent any lateral movement of the tube.
Supplied with 3 x M8 x 10 mm grub screws.

- material: Steel
- maxi load:
- Use limit:
- Weight: 160 g

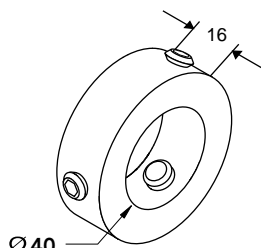


Ref. 9146582

■ Stop collar ø 40 mm

To be used with SC100/30 when fitted to sectional doors to prevent any lateral movement of the tube.
Supplied with 3 x M8 x 10 mm grub screws.

- material: Steel
- maxi load:
- Use limit:
- Weight: 192 g

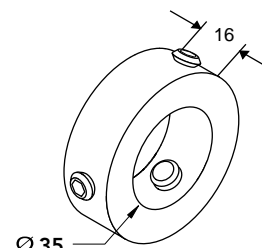


Ref. 9146641

■ Stop collar ø 35 mm

To be used with SC100/30 when fitted to sectional doors to prevent any lateral movement of the tube.
Supplied with 3 x M8 x 10 mm grub screws.

- material: Steel
- maxi load:
- Use limit:
- Weight: 172 g

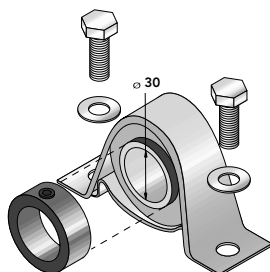


Ref. 9146611

■ Support bearing ø 30 mm

Support bearing ID 35mm to fit onto angle bracket ref. 9146510.
Supplied with 2 x M10 x 30 mm fixing bolts

- material: Steel
- maxi load:
- Use limit:
- Weight: 540 g
- Finish: Plated
- Maximum shutter weight: 600 kg ⚠

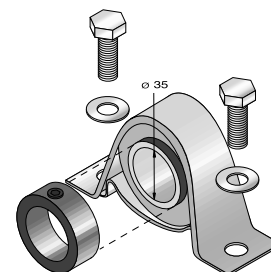


Ref. 1781019

■ Support bearing ø 35 mm

Support bearing ID 35mm to fit onto angle bracket ref. 9146510.
Supplied with 2 x M10 x 30 mm fixing bolts

- material: Steel
- maxi load:
- Use limit:
- Weight: 750 g
- Finish: Plated
- Maximum shutter weight: 600 kg ⚠



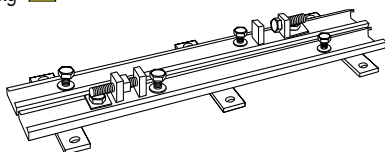
Ref. 1780604

COMPACT ACCESSORY CHAIN DRIVE

■ Chain adjuster

Chain adjuster bracket to be secured with bolts.
When using this bracket the base plate ref. 9146531 must be fitted to the motor.

- material: Steel
- maxi load:
- Use limit:
- Weight: 4320 g
- Finish:
- Maximum shutter weight: 600 kg ⚠

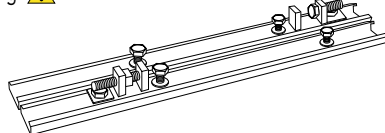


Ref. 9146530

■ Chain adjuster

Chain adjuster bracket to be welded.
When using this bracket the base plate ref. 9146531 must be fitted to the motor.

- material: Steel
- maxi load:
- Use limit:
- Weight: 4200 g
- Finish: Paint
- Maximum shutter weight: 600 kg ⚠

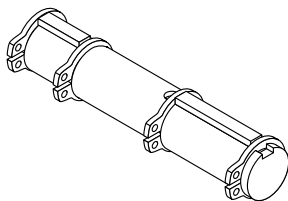


Ref. 9550090

■ Motor drive shaft

Motor drive shaft OD 30mm, supplied with woodruff keys & circlips.
To be used with sprocket ref 9146533.

- material: Steel
- maxi load:
- Use limit:
- Weight: 940 g
- Finish:
- Maximum shutter weight: 600 kg ⚠

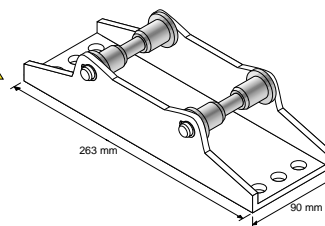


Ref. 9146552

■ Motor base

Special Compact motor base plate to be fitted when using bracket ref. 9146530 & 9146539.

- material: Steel
- maxi load:
- Use limit:
- Weight: 2250 g
- Finish:
- Maximum shutter weight: 600 kg ⚠

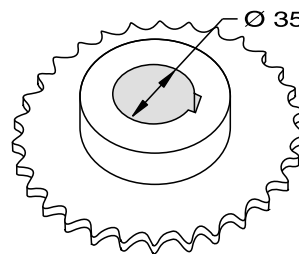


Ref. 9146531

■ Chain sprocket

Chain sprocket 30 teeth, ID 35mm to be fitted onto the barrel shaft ref. 9146630.
Reduction ratio 1.5:1

- material: Steel
- maxi load:
- Use limit:
- Weight: 3380 g
- Finish:
- Maximum shutter weight: 500 kg ⚠

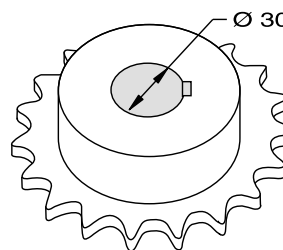


Ref. 9146536

■ Chain sprocket

Chain sprocket 19 teeth, ID 30mm to be fitted onto the motor drive shaft ref. 9146552.

- material: Steel
- maxi load:
- Use limit:
- Weight: 5000 g
- Finish:
- Maximum shutter weight: 600 kg ⚠



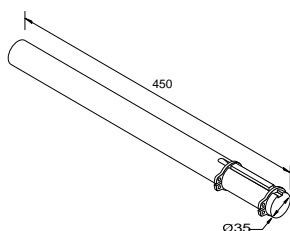
Ref. 9146533

COMPACT ACCESSORY CHAIN DRIVE

■ Barrel drive shaft

Supplied with woodruff key & circlips.
To be used with sprockets ref. 9146536 or 9146537

- material: Steel
- maxi load:
- Use limit:
- Weight: 3370 g
- Finish:
- Maximum shutter weight: 600 kg ⚠

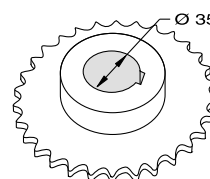


Ref. 9146630

■ Chain sprocket

Chain sprocket 38 teeth, ID 35mm to be fitted onto barrel shaft ref. 9146630.
Reduction ratio 2:1

- material: Steel
- maxi load:
- Use limit:
- Weight: 5000 g
- Finish:
- Maximum shutter weight: 600 kg ⚠

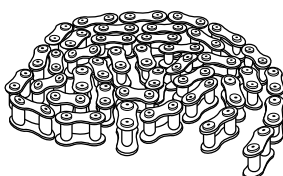


Ref. 9146537

■ Drive chain

1.5m roller drive chain.
To be used with sprockets ref. 9146533, 9146536 or 9146537.

- material: Steel
- maxi load:
- Use limit:
- Weight: 1720 g
- Finish:
- Maximum shutter weight: 600 kg ⚠

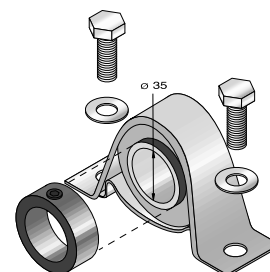


Ref. 9146550

■ Support bearing ø 35 mm

Support bearing ID 35mm to fit onto angle bracket ref. 9146510.
Supplied with 2 x M10 x 25mm fixing bolts

- material: Steel
- maxi load:
- Use limit:
- Weight: 770 g
- Finish: Plated
- Maximum shutter weight: 600 kg ⚠

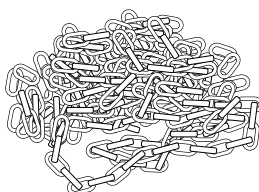


Ref. 1780604

■ Hand chain

Manual override hand chain for Compact motors.
Supplied in 10m lengths.

- material: Steel
- maxi load:
- Use limit:
- Weight: 1500 g
- Finish:

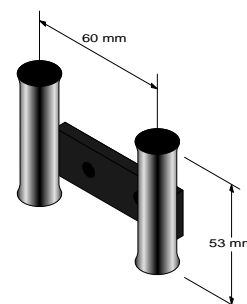


Ref. 9146501

■ Chain guide

Guide bracket for manual override chain, supplied with 2no Torx self tapping screws.

- material: Steel
- maxi load:
- Use limit:
- Weight: 80 g
- Finish: Galvanised

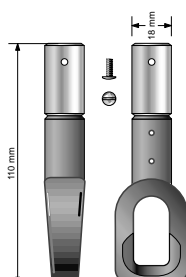


Ref. 9550114

■ Eye outlet

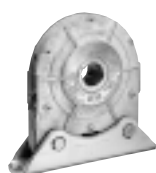
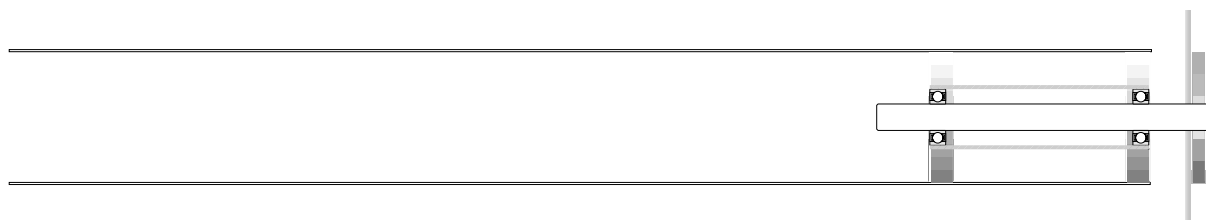
For use with Compacts, mounted vertically at low level.

- material: Plastic
- maxi load:
- Use limit:
- Weight: 80 g
- Finish: Plain



Ref. 9146501

SAFETY BRAKE FOR BOX MOTORS



■ Safety brake

Ref	2004074	9550119	9550118	9550116
Shaft Ø	25	30	40	40
Weight	21 kg	6,5 kg	10 kg	12,5 kg
Locking Torque Nm	978	1979	3299	3560
Admissible Torque Nm	258	404	708	1000

Ref. 2004074

■ Adjustable plug end with key

Shaft Ø 25 mm

Ref	2004196	2004197	2004076	2004198	2004199
Tube	1016x3,6	102x2	133x4	133x2,5	159x4,5
Weight	2700 g	2750 g	3000 g	3050 g	3800 g



■ Plain shaft Ø 30 mm

- material: steel
- maxi load: 1000 kg
- Weight: 1218g
- Length: 220 mm



Ref. 9146581

■ Plain shaft Ø 30 mm

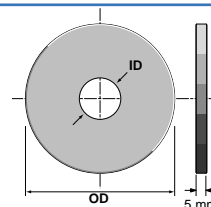
- material: steel
- maxi load: 1000 kg
- Weight: 2490 g
- Length: 350 mm



Ref. 9146580

■ Plain steel disc adaptors Ø 30 mm

Ref	1781024	1781056	1781057	9990192	9990194	1781025	9990195	1781026
Tube	101,6 x 3,6	102 x 2	108 x 4	127 x 3,25	133 x 2,5	133 x 4	152,4x3,25	159 x 4,5
Weight	183 g	203 g	210 g		365 g	365 g		645 g



■ Plain shaft Ø 40 mm

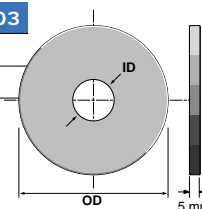
- material: steel
- maxi load: 1000kg
- Use limit:
- Weight: 4440 g
- Length: 300 mm



Ref. 1781028

■ Plain Ø 40 mm steel disc adaptors

Ref	1780600	1780601	1780603
Tube	133x4	168 x 4,5	133x2,5
Weight	330 g	-	330g



ADJUSTING & WIRING

Adjustments and testing

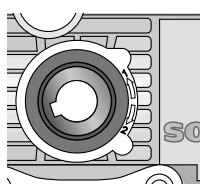
Upon completion of the mains wiring, replace the terminal lid ensuring that the terminal connector plugs into the PCB card correctly and secure via the four corner plastic screws.

Switch on the power supply.

Depress the top (blue) push button (direction 1).

The shaft should be rotating in the direction of the arrow adjacent to the output shaft on the motor body.

Depress the bottom (yellow) push button (direction 2).



The shaft should be rotating in the direction of the arrow adjacent to the output shaft on the motor body.

⚠ If the shaft rotates in the opposite direction:

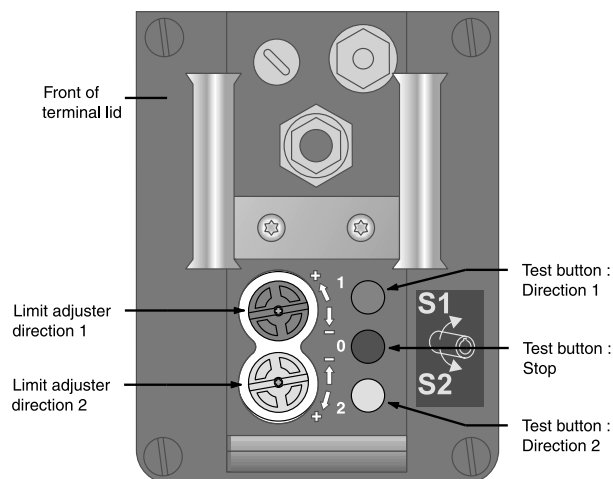
Release the push button at once.

Switch off the power supply.

Invert 2 phases, either in the motor or on the power supply line eg; L1 & L2. This will reverse the operation of the output shaft.

Switch on the power supply.

Check the motor directions again.



Limit switch adjustment

Operate the shutter by using the test buttons on the motor. Once the motor stops at its pre-set limit positions, increase the limit range by:

Using a suitable flat blade screwdriver, push the corresponding limit adjuster in and then turn in the "+" direction.

The top (blue) limit adjuster will correspond to the limit position of direction 1.

The bottom (yellow) limit adjuster will correspond to the limit position of direction 2.

In order to decrease the limit range in either direction, adjust the corresponding limit adjuster in the "-" direction.

Safety switches

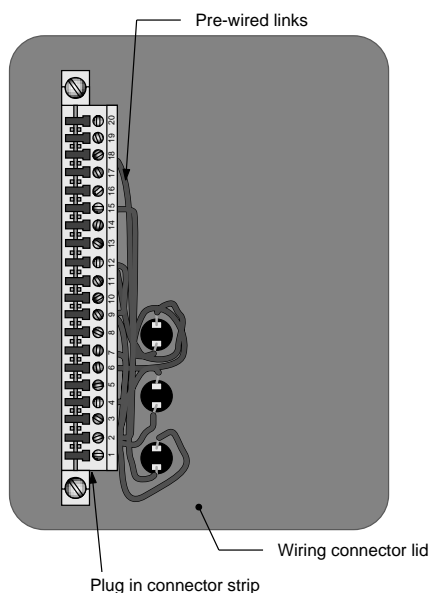
⚠ The Somfy 3-Ph motor is equipped with internal electrical safety contacts. In case the motor runs the wrong way (inversion of 2 phases), an internal micro-switch is activated, disconnecting the control circuit.

To re-connect it, first establish the correct direction of rotation (see previous TESTING section), then turn both limit adjusters in the "+" direction (3 to 4 turns).

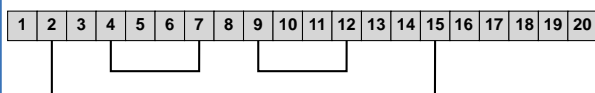
Test again and re-adjust the limit positions if necessary.

ADJUSTING & WIRING

Configuration



STANDARD LINKS - MOMENTARY OPERATION



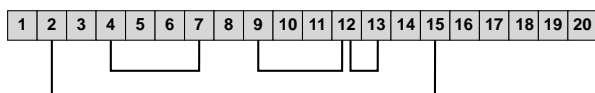
The terminal lid of the Compact is fitted with a partially wired terminal connector which plugs into the motor's circuit board. When delivered, the following links are already fitted to these terminals:

Link between terminal 4 & 7

Link between terminal 9 & 12

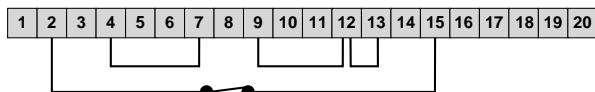
Link between terminal 2 & 15

IMPULSE - UP ONLY



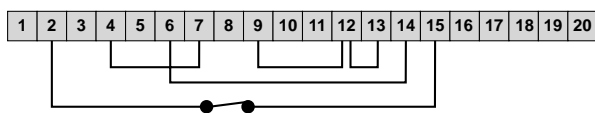
To convert from momentary operation or "dead man" mode to impulse or "constant drive" operation in the UP direction, fit a link between terminals 12 & 13 if direction 2 correspond to UP. Fit a link between terminals 6 & 14 if direction 1 correspond to UP.

IMPULSE - UP & STOP



Replace the link between 2 & 15 with a normally closed contact (refer to push button station in controls section), in order to generate a STOP command.

IMPULSE - UP, DOWN & STOP



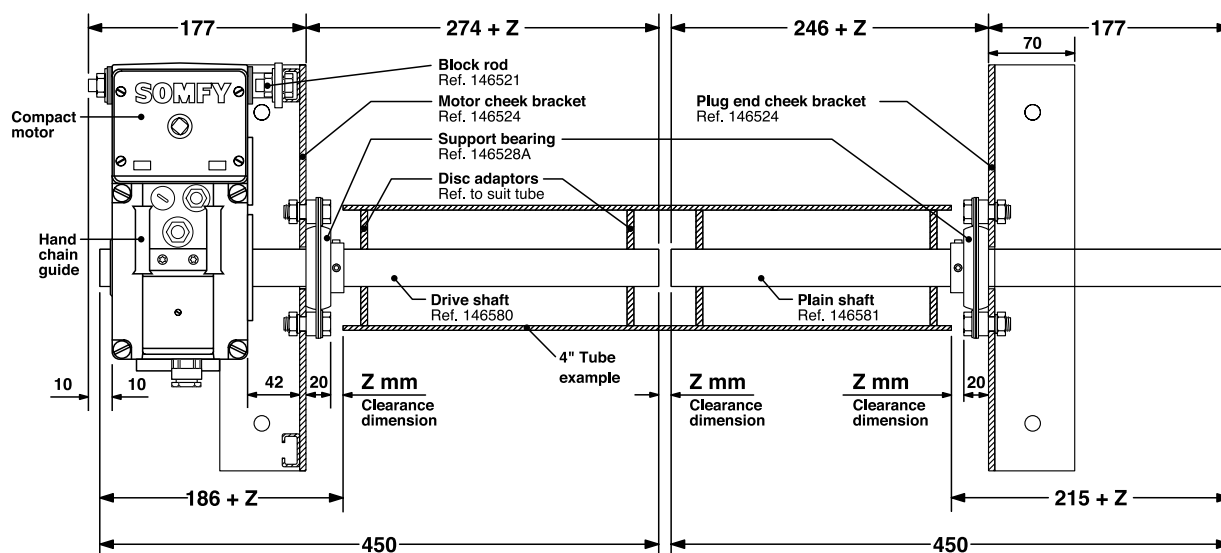
To convert from "momentary" operation to "impulse" operation in the DOWN direction, fit a link between terminals 6 & 14, or between terminals 12 & 13 if direction 2 correspond to down.

For actual diagrams of Compact & standard switch options, refer to Circuit Diagrams section.

CAUTION! - When converting the control configuration to "impulse" in the down direction, we advise that a safety device (safety edge, photo-cell etc.) be installed as a safety precaution.

INSTALLATION INSTRUCTIONS

■ Assembly drawing of typical installation

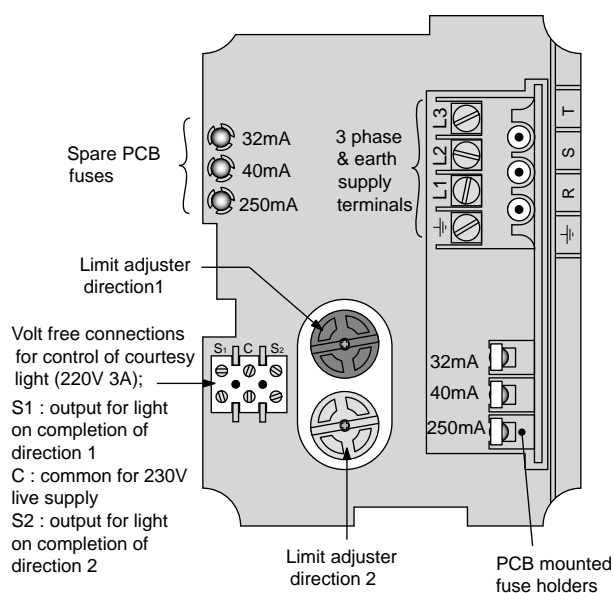


Minimum overall width of tube assembly = $10 + 2 \times 450 + Z$.

Where Z is the nominal clearance dimension.

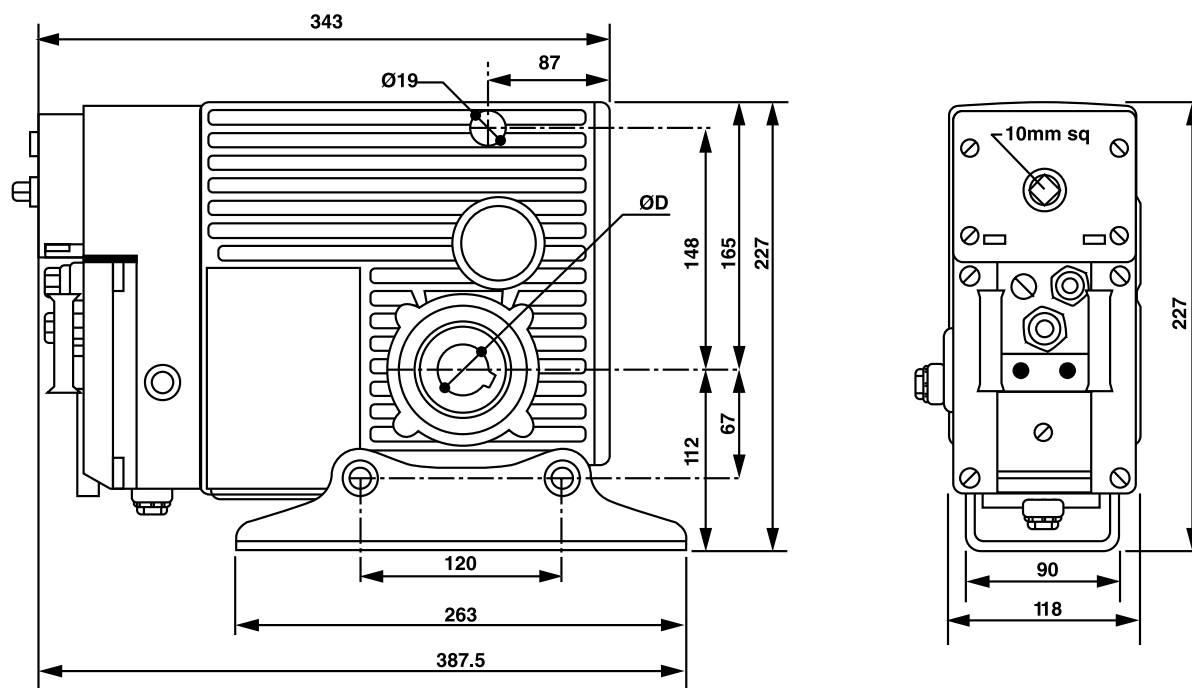
Note: See pages on plug ends for other assembly options.

■ Internal layout of main electrical connections - 3 phases motors



Removal of the terminal lid gains access to the mains power connections for the motor along with replacement pcb fuses and the volt free connections for controlling a courtesy light.

TECHNICAL SPECIFICATION AND DIMENSIONS BOX MOTORS



	Compact 200/12	Compact 200/12 TRI	Compact 300/12 TRI	Compact 400/8 TRI	Compact 80/30	Compact 100/30 TRI
Drive shaft (mm)	30	30	30	30	25,4	25,4
nominal torque (Nm)	200	200	300	400	80	100
nominal speed (tr/min)	12	12	12	8	30	30
Maximum rotation in one direction (turns)	17 or 25	17 or 25	17 or 25	17 or 25	17	17 or 25
Power (W)	940	720	1000	1000	940	1000
nominal voltage (V)	230	230/400	230/400	230/400	230	230/400
Current (A)	4,5	1,3	1,7	1,7	4,5	1,7
Running time before cutting (mn)	4	ED 40%	ED 40%	ED 40%	4	ED 40%
Thermal protection temperture (°C)	130	130	130	130	130	130
Manual override ratio	1/214	1/214	1/214	1/321	1/85	1/85
Protection index	IP45	IP45	IP45	IP45	IP45	IP45
Weight (kg)	16,3	15,9	18,7	16,5	16,5	17,5