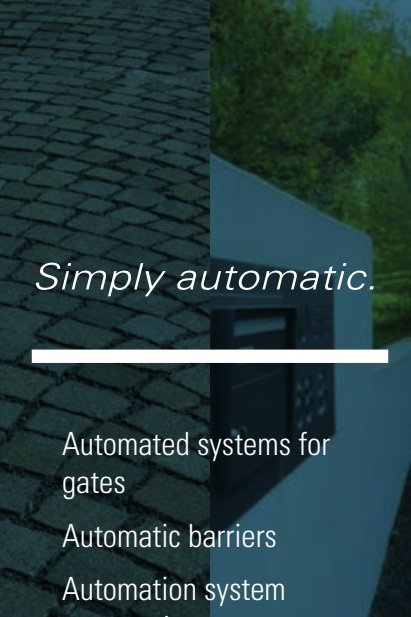


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Automation system accessories

Automatic doors



# Contents

<b>LOW VOLTAGE SWING GATE</b>	<b>7</b>
S418 Electro-mechanical operator for residential gates	8
390 Electro-mechanical operator for residential gates	10
415 Electro-mechanical operator for residential gates	12
770 In-Ground electro-mechanical operator for residential gates	14
S450H Hydraulic operator for residential and condominium gates	16
S800H ENC In-Ground hydraulic operator for residential gates	18
E024U 24VDC Control board for swing gate operators	22
<b>HIGH VOLTAGE SWING GATE</b>	<b>25</b>
412 Electro-mechanical operator for residential gates	26
415 Electro-mechanical operator for residential gates	28
402 Hydraulic operator for residential gates	30
422 Hydraulic operator for residential and condominium gates	32
400 Hydraulic operator for condominium and industrial gates	34
750 In-Ground hydraulic operator for residential and condominium gates	38
455D 115VAC / 230VAC Control Board for swing gate operators	42
Battery Back-up	43
<b>SLIDE GATE</b>	<b>45</b>
C720 - C721 Low voltage operators for residential slide gates	46
746 ER Operator for residential and condominium slide gates	48
844 ER Operator for commercial and industrial slide gates	50
<b>AUTOMATIC BARRIER</b>	<b>53</b>
615 BPR Hydraulic light duty automatic barrier	54
B680H Hydraulic automatic barrier	56
<b>TRAFFIC BOLLARDS</b>	<b>63</b>
J200 HA Automatic retractable bollard for residential areas	64
J200 SA Semi-Automatic retractable bollard for residential areas	66
J200 F Fixed bollard for residential areas	68
J275 HA Automatic retractable traffic bollard	70
J275 SA Semi-Automatic retractable traffic bollard	72
J275 F Fixed traffic bollard	74
J355 M30-P1 HA Automatic retractable security bollard	76
J355 M30-P1 F Fixed security bollard	78
J355 M50 HA Automatic retractable security bollard	80
J355 M50 F Fixed security bollard	82

<b>DOOR OPERATORS</b>	<b>85</b>
-----------------------	-----------

950 N2 Automatic system for swing-leaf doors	86
--	----

<b>ACCESSORIES</b>	<b>89</b>
--------------------	-----------

Transmitters and receivers	90
----------------------------	----

Photocells	91
------------	----

Loops and loop detectors	92
--------------------------	----

Safety Edges	94
--------------	----

Enclosures	95
------------	----

Warning Lights	96
----------------	----

Entry Systems	97
---------------	----

Miscellaneous	99
---------------	----

<b>EXPLODED VIEWS AND SPARE PARTS</b>	<b>101</b>
---------------------------------------	------------

390	102
-----	-----

412	103
-----	-----

415	104
-----	-----

S418	105
------	-----

400 CBAC	106
----------	-----

402 CBC	107
---------	-----

422 CBAC	109
----------	-----

400-422 Manual Release	112
------------------------	-----

400-422 Rear Flange	113
---------------------	-----

S450H CBAC	114
------------	-----

S800H CBAC	118
------------	-----

760	123
-----	-----

750	126
-----	-----

FSW 900	128
---------	-----

FSL 700	130
---------	-----

J275HA	132
--------	-----

# AUTOMATED SYSTEMS FOR SWING-LEAF GATES LOW VOLTAGE

## Type of installation

### external motor

<b>Residential</b>	<b>390</b>	<b>415</b>	<b>S418</b>	<b>S450H</b>
<b>Condominium</b>		<b>415</b>		
<b>Leaf max length</b>	<b>14 ft</b>	<b>15 ft</b>	<b>16 ft</b>	<b>12 ft CBAC</b>
				<b>14 ft SB</b>
<b>Leaf max weight</b>	<b>600 lb</b>	<b>700 lb</b>	<b>720 lb</b>	<b>1,000 lb</b>

### in-ground motor

<b>Residential</b>	<b>770N</b>	<b>S800H ENC</b>
<b>Condominium</b>		<b>S800H ENC</b>
<b>Leaf max length</b>	<b>10 FT</b>	<b>13 ft CBAC</b>
		<b>16 ft SBW</b>
<b>Leaf max weight</b>	<b>1100 lb</b>	<b>1,760 lb</b>



RESIDENTIAL

# S418

## Electromechanical swing gate operator

maximum leaf width

10-16 ft

maximum leaf weight

720 lb



- Sleek design
- Opening and closing mechanical stops built in
- Effective stroke of 13.8 in. (350mm)
- New “multi-position” bracket for non-welded installation
- Maximum safety thanks to the E024U control board reverse on contact feature
- Built in battery backup to ensure operation in case of power outage
- Compliant with UL325 for Class I,II,III and IV applications



### TECHNICAL SPECIFICATIONS

Input Voltage	24 Vdc
Max Power	35 W
Maximum thrust	404 lbf (180 daN)
Rod stroke	13.8 in (350 mm)
Rod stroke without mechanical stops	15.3 in (390 mm)
Minimum time to open 90°	10 sec
Operating ambient temperature	-4°F - 131°F (-20°C - +55°C)
Max leaf opening angle	110°
Use frequency	continuous
Operator Weight	13.2 lb (6 kg)
Dimensions (L x D x H)	32.5 x 4 x 4.9 in (825x104x125mm)
Protection class	IP 54

Gate Length	Max Gate Weight
10 ft ( 3.0 m )	up to 720 lb ( 326 kg )
12 ft ( 3.7 m )	up to 500 lb ( 227 kg )
14 ft ( 4.3 m )	up to 370 lb ( 168 kg )
16 ft ( 4.9 m )	up to 280 lb ( 127 kg )

### NOTE

- Mounting dimensions, wind factor and gate design will affect performance specification
- Use frequency is measured at an ambient temperature of 72 °F ( 20 °C ) . Temperature variation will affect it.
- An electric or magnetic lock is recommended for any gate longer than 12 ft (3.6 m).

**S418**

Model	Shipping Wt (approx)	Part No	Price
S418 - Single Kit	48 lb (21.8 Kg)	P104301.5	\$ 1,2347.00
S418 - Slave Kit	38 lb (16.8 Kg)	P10430115.5	\$ 1,030.00
S418 - Operator only	18 lb (8.2 Kg)	P10430115	\$ 799.00
S418 - LE Single Kit	48.5 lb (22 Kg)	P999001.1	\$ 1,762.00
S418 - LE Dual Kit	66 lb (30 Kg)	P999002.1	\$ 2,558.00
S418 - Basic Single Kit reflective photobeams	48 lb (21.8 Kg)	P104012.5	\$ 2,448.00

**The package S418 - Single Kit contains:**

Qty	Description	Part Number
1	Operator S418	P10430115
1	E024U Enclosure Kit	P3350.1
2	Batteries 12V 8 Ah	P3540
1	Receiver 433 RC Plug In	P787741
2	4-channel transmitter XT4 433 RC	P787453
1	Pair of XP 30 photobeam photocells	P785105
2	XP 30 adapters for conduit connection	P401064

**The package S418 - Slave Kit contains:**

Qty	Description	Part Number
1	Operator S418	P10430115
1	Junction Box for electrical connections	P3361.1
1	Cable AWG 12 - 2 conductors (operator) 40 ft *	P2197

(\* ) The AWG 12 cable can be used for connections of up to 50' of length between the operator and the control board.

**NOTE:** For a master/slave (bi-parting) application add a Slave Kit.

**The package S418 - LE Single Kit contains:**

Qty	Description	Part Number
1	Operator S418	P10430115
1	E024U Enclosure Kit type LE	P3350LE.1
2	Batteries 12V 8 Ah	3P540

**The package S418 - LE Dual Kit contains:**

Qty	Description	Part Number
2	Operator S418	P10430115
1	E024U Enclosure Kit type LE	P3350LE.1
2	Batteries 12V 8 Ah	P3540

**ACCESSORIES**

Description	Shipping Wt (approx)	Part Number	Price
Loop Detector Interface		P2670.1	\$ 357.00
10 Pin Plug in Loop Detector		P2681	\$ 231.00
XIB interface for Shadow Loop (see page 23)		P790062	\$ 40.00
XP 30 Photobeam Photocells Pair		P785105	\$ 313.00
XP 30 Stainless Steel Photobeam Photocells Pair		P7851051	\$ 379.00
XP 30 adapter for wall or column mount		P401065	\$28.00
XP 30 adapter for conduit connection		P401064	\$ 30.00
One Photobeam Mounting Post Standard (with foundation plate)	5 lb (2.2 Kg)	P401028/737630.5	\$ 158.00
One Photobeam Mounting Post Double (with foundation plate)	9 lb (4.1 Kg)	P401035/737630.5	\$ 254.00
Transmitter Rolling Code 433MHz		P787453	\$ 35.00
Receiver Rolling Code 433Mhz		P787741	\$ 61.00
Tuned Antenna Kit		P412003	\$ 113.00
Cable AWG 12 - 2 conductors 10 ft length		P2197	\$ 77.00
IRB-RET Retroreflective Photocell		P2800	\$ 392.00

# 390

## RESIDENTIAL

# Electromechanical swing gate operator with articulated arm

maximum leaf width

14 ft

maximum leaf weight

600 lb



- Non reversing operator, does not require external locks
- Easy to install, no modifications to the gates are necessary
- Ideal for gates mounted on large columns
- Adjustable limit switches (optional)
- Maximum safety thanks to the E024U control board reverse on contact feature
- Built in battery backup to ensure operation in case of power outage
- Compliant with UL325 for Class I,II,III and IV applications

### TECHNICAL SPECIFICATIONS

Input Voltage	24 Vdc
Power	40 W
Motor rotation speed	960 r.p.m.
Reduction ratio	1:700
Angle speed	8°/s
Leaf max. width	14 ft (4.3 m)
Leaf max. weight	600 lb (272 Kg)
Max. torque	184 lbf.ft (250 Nm)
Operating ambient temperature	-4°F - 131°F (-20°C - +55°C)
Use frequency	continuous
Operator Weight	25 lb (11.5 kg)
Dimensions (L x D x H)	16 x 5 x 5 in (410x130x130 mm)
Protection class	IP 44

### NOTE

- Mounting dimensions, wind factor and gate design will affect performance specification
- Use frequency is measured at an ambient temperature of 72 °F (20 °C) . Temperature variation will affect it.
- An electric or magnetic lock is recommended for any gate longer than 12 ft (3.6 m).

**390**

Model	Shipping Wt (approx)	Part Number	Price
390 - Single Kit	58 lb (26.3 Kg)	P104572.5	\$ 2950.00
390 - Slave Kit	48 lb (21.3 Kg)	P1045791.5	\$ 1585.00
390 - Operator plus two limit switches kit	24 lb (10.9 Kg)	P104579.5	\$ 1279.00
390 - Operator only	24 lb (10.9 Kg)	P104579	\$ 1170.00

**The package 390 - Single Kit contains:**

Qty	Description	Part Number
1	Operator 390	P104579
2	Limit Switch	P390682
1	E024U Enclosure Kit	P3350.1
2	Batteries 12V 8 Ah	P3540
1	Receiver 433 RC Plug In	P787741
2	4-channel transmitter XT4 433 RC	P787453
1	Pair of XP 30 photobeam photocells	P785105
2	XP 30 adapters for conduit connection	P401064

**NOTE:** For a master/slave (bi-parting) application add a Slave Kit.

**The package 390 - Slave Kit contains:**

Qty	Description	Part Number
1	Operator 390 with limit switches	P104579.5
1	Junction Box for electrical connections	P3361.1
1	Cable AWG 12 - 2 conductors cable (operator) 40 ft *	P2197
1	Cable AWG 18 - 3 conductors cable (limit switches) 40 ft	P2192

(\* ) The AWG 12 cable can be used for connections of up to 50' of length between the operator and the control board.

**ACCESSORIES**

**Standard Articulated arm**

Part No.	738705
Price	\$284


**Single limit switch kit  
(opening or closing)**

Part No.	390682
Price	\$37


**Steel Articulated arm**

Part No.	7387051
Price	\$298

Description	Shipping Wt (approx)	Part Number	Price
Loop Detector Interface		P2670.1	\$ 157.00
10 Pin Plug in Loop Detector		P2681	\$ 231.00
XIB interface for Shadow Loop (see page 23)		P790062	\$ 40.00
XP 30 Photobeam Photocells Pair		P785105	\$ 313.00
XP 30 Stainless Steel Photobeam Photocells Pair		P7851051	\$ 379.00
XP 30 adapter for wall or column mount		P401065	\$27.00
XP 30 adapter for conduit connection		P401064	\$ 30.00
One Photobeam Mounting Post Standard (with foundation plate)	5 lb (2.2 Kg)	P401028/737630.5	\$ 158.00
One Photobeam Mounting Post Double (with foundation plate)	9 lb (4.1 Kg)	P401035/737630.5	\$ 254.00
Transmitter Rolling Code 433MHz		P787453	\$ 34.00
Receiver Rolling Code 433Mhz		P787741	\$ 61.00
Tuned Antenna Kit		P412003	\$ 112.00
Cable AWG 12 - 2 conductors 10 ft length		P2197	\$ 79.00
Cable AWG 18 - 3 conductors 10 ft length		P2192	\$ 39.00
IRB-RET Retroreflective Photocell		P2800	\$ 392.00



# 415

## RESIDENTIAL CONDOMINIUM

# Electromechanical swing gate operator

maximum leaf width

15 ft

maximum leaf weight

700 lb



- "In-axis" thrust operator.
- Built in Limit switches.
- Die-cast aluminum body, entirely double-coat painted for longer life.
- Manual release device with simplified key-protected activation.
- Horizontal exit for cables to allow near to ground installation
- Maximum safety thanks to the E024U control board reverse on contact feature
- Built in battery backup to ensure operation in case of power outage
- Compliant with UL325 for Class I,II,III and IV applications



### TECHNICAL SPECIFICATIONS

Input Voltage	24 Vdc
Power	70 W
Thrust	630 lbf (280 daN)
Effective stroke	15.75 in (400 mm)
Minimum time to open 90°	16 sec
Leaf max. width	15' (4.6m)
Leaf max. weight	700 lb (318 Kg)
Operating ambient temperature	-4°F - 131°F (-20°C - +55°C)
Use frequency	continuous
Operator Weight	17.6 lb (8 Kg)
Dimensions (L x D x H)	36 x 4 x 6 in (904x105x148 mm)
Protection class	IP 54

### NOTE

- Mounting dimensions, wind factor and gate design will affect performance specification
- Use frequency is measured at an ambient temperature of 72 °F (20 °C) . Temperature variation will affect it.
- An electric or magnetic lock is recommended for any gate longer than 12 ft (3.6 m).

## 415

Model	Shipping Wt (approx)	Part No	Price
415 - Single Kit	58 lb (26.3 Kg)	P10441811.5	\$ 2,778.00
415 - Slave Kit	48 lb (21.3 Kg)	P104418115.5	\$1,128 .00
415 - Operator only	25 lb (11.3 Kg)	P104418115	\$ 1353.00

### The package 415 - Single Kit contains:

Qty	Description	Part Number
1	Operator 415	P104418115
1	E024U Enclosure Kit	P3350.1
2	Batteries 12V 8 Ah	P3540
1	Receiver 433 RC Plug In	P787741
2	4-channel transmitter XT4 433 RC	P787453
1	Pair of XP 30 photobeam photocells	P785105
2	XP 30 adapters for conduit connection	P401064

**NOTE:** For a master/slave (bi-parting) application add a Slave Kit.

### The package 415 - Slave Kit contains:

Qty	Description	Part Number
1	Operator 415	P104418115
1	Junction Box for electrical connections	P3361.1
1	AWG 12 - 2 conductors cable (operator) 40 ft *	P2197
1	AWG 18 - 3 conductors cable (limit switch) 40 ft	P2192

(\* ) The AWG 12 cable can be used for connections of up to 50' of length between the operator and the control board.

## ACCESSORIES

Description	Shipping Wt (approx)	Part Number	Price
Loop Detector Interface		P2670.1	\$ 157.00
10 Pin Plug in Loop Detector		P2681	\$ 231.00
XIB interface for Shadow Loop (see page 23)		P790062	\$ 40.00
XP 30 Photobeam Photocells Pair		P785105	\$ 313.00
XP 30 Stainless Steel Photobeam Photocells Pair		P7851051	\$ 380.00
XP 30 adapter for wall or column mount		P401065	\$ 28.00
XP 30 adapter for conduit connection		P401064	\$ 30.00
One Photobeam Mounting Post Standard (with foundation plate)	5 lb (2.2 Kg)	P401028/737630.5	\$ 158.00
One Photobeam Mounting Post Double (with foundation plate)	9 lb (4.1 Kg)	P401035/737630.5	\$ 254.00
Transmitter Rolling Code 433Mhz		P787453	\$ 35.00
Receiver Rolling Code 433Mhz		P787741	\$ 61.00
Tuned Antenna Kit		P412003	\$ 133.00
Cable AWG 12 - 2 conductors 10 ft length		P2197	\$ 77.00
Cable AWG 18 - 3 conductors 10 ft length		P2192	\$ 38.00
IRB-RET Retroreflective Photocell		P2800	\$ 394.00

# 770

## In-ground electromechanical operator

RESIDENTIAL

maximum leaf width

11 ft

maximum leaf weight

1100 lb



- Invisible operator
- Access the operator without removing the leaf
- Protection class IP 67
- Non reversible design
- Optional 140 ° and 180 ° opening kits
- Maximum safety thanks to the E024U control board reverse on contact feature
- Built in battery backup to ensure operation in case of power outage
- Compliant with UL325 for Class I,II,III and IV application

### TECHNICAL SPECIFICATIONS

Input Voltage	24 Vdc
Power	70 W
Max torque	221 lbf.ft (300 Nm)
Reduction ratio	1:1418
Angular speed	6°/sec
Max opening angle	110 ° (140 ° and 180 ° with optional kit)
Maximum leaf width	11 ft (3.5 m)
Maximum leaf weight	1100 lb (500 Kg)
Operating ambient temperature	-4°F - 131°F (-20°C - +55°C)
Use frequency	continuous
Operator Weight	26 lb (12 kg)
Operator dimensions	14 x 6 x 5.5 in (360x150x140 mm)
Support box dimensions	17 x 12 x 8 in (430x307x214 mm)
Protection class	IP 67

### NOTE

- Mounting dimensions, wind factor and gate design will affect performance specification
- Use frequency is measured at an ambient temperature of 72 °F (20 °C) . Temperature variation will affect it.
- An electric or magnetic lock is recommended for any gate longer than 12 ft (3.6 m).

**770**

Model	Shipping Wt (approx)	Part No	Price
770 - Single Kit	98 lb (44.5 Kg)	P106753.5	\$ 3,658.00
770 - Slave Kit	88 lb (39.5 Kg)	P10675315.5	\$ 2,062.00
770 - Single Kit Stainless Steel	98 lb (44.5 Kg)	P106753.5SS	\$ 3,930.00
770 - Slave Kit Stainless Steel	88 lb (39.5 Kg)	P10675315.5SS	\$ 2,580.00
770 - Operator only	24 lb (10.9 Kg)	P10675315	\$ 1,272.000

**The package 770 - Single Kit contains:**

Qty	Description	Part Number
1	Operator 770	P10675315
1	Support Box	P490065
1	E024U Enclosure Kit	P3350.1
2	Batteries 12V 8 Ah	P3540
1	Receiver 433 RC Plug In	P787741
2	4-channel transmitter XT4 433 RC	P787453
1	Pair of XP 30 photobeam photocells	P785105
2	XP 30 adapters for conduit connection	P401064

**NOTE:** For a master/slave (bi-parting) application add a Slave Kit.

**The package 770 - Slave Kit contains:**

Qty	Description	Part Number
1	Operator 770	P10675315
1	Support Box	P490065
1	Junction Box for electrical connections	P3361.1
1	AWG 12 - 2 conductors cable (operator) 40 ft *	P2197

(\* ) The AWG 12 cable can be used for connections of up to 50' of length between the operator and the control board.

**ACCESSORIES**

**Stainless steel support box package**

Part No.	490110
Price	\$758
Shipping Wt	36 lb (16.3 Kg)


**Support box package**

Part No.	490065
Price	\$47
Shipping Wt	36 lb (16.3 Kg)

**The support box package includes:**

The box (regular or stainless steel), a stainless steel lid, a bracket for leaf support with integrated manual release system, two release keys, installation accessories.


**Positive stop Kit for Open Position**

Part No.	722121
Price	\$58


**Positive stop Kit for Close Position**

Part No.	722122
Price	\$139

**Kit 140 ° opening**

Part No.	390612
Price	\$195

**Kit 180 ° opening**

Part No.	490111
Price	\$547

**Manual release lever**

Part No.	424010
Price	\$342

Description	Shipping Wt (approx)	Part Number	Price
Loop Detector Interface		2670.1	\$131
10 Pin Plug in Loop Detector		2681	\$193
XIB interface for Shadow Loop (see page 23)		790062	\$34
XP 30 Photobeam Photocells Pair		785105	\$261
XP 30 Stainless Steel Photobeam Photocells Pair		7851051	\$316
XP 30 adapter for wall or column mount		401065	\$23
XP 30 adapter for conduit connection		401064	\$25
One Photobeam Mounting Post Standard (with foundation plate)	5 lb (2.2 Kg)	401028/737630.5	\$132
One Photobeam Mounting Post Double (with foundation plate)	9 lb (4.1 Kg)	401035/737630.5	\$212
Transmitter Rolling Code 433MHz		787453	\$29
Receiver Rolling Code 433MHz		787741	\$51
Tuned Antenna Kit		412003	\$94
Cable AWG 12 - 2 conductors 10 ft length		2197	\$64
IRB-RET Retroreflective Photocell		2800	\$327



# S450H

## Hydraulic Swing Gate Operator

RESIDENTIAL

maximum leaf width

12-14 ft

maximum leaf weight

1000 lb



- Hybrid technology
- Integrated encoder to control operator position
- Useful stroke 12.2 in (311 mm)
- New “multi-position” bracket for non-welded applications
- Opening/Closing mechanical stops included
- Maximum safety thanks to the E024U control board reverse on contact feature
- Built in battery backup to ensure operation in case of power outage
- Compliant with UL325 for Class I,II,III and IV applications

### TECHNICAL SPECIFICATIONS

Model	S450H CBAC	S450H SB
Input voltage		24 Vdc
Power		60 W
Max Thrust		1124 lbf (500 daN)
Rod stroke		12.2 in (311 mm)
Minimum time to open 90°		12 sec
Maximum leaf width	14 ft (4.3 m)	17 ft (5.2 m)
Maximum leaf weight		1100 lb (500 Kg)
Operating ambient temperature		-4°F - 131°F (-20°C - +55°C)
Use frequency		continuous
Operator weight		14.3 lb (6.5 Kg)
Operator dimensions		43.8 x 3.3 x 4.7 in (1113x85x119 mm)
Protection class		IP 55
Hydraulic locks	installed	not installed

### NOTE

- Mounting dimensions, wind factor and gate design will affect performance specification
- Use frequency is measured at an ambient temperature of 72 °F (20 °C) . Temperature variation will affect it.
- An electric or magnetic lock is recommended for any gate longer than 12 ft (3.6 m).

**S450H**

Model	Shipping Wt (approx)	Oil type	Part No.	Price
S450H CBAC - Single Kit	58 lb (26.4 Kg)	Regular	104100.5	\$3,111
		Arctic	1041001577.5	\$3,111
S450H CBAC - Slave Kit	48 lb (21.4 Kg)	Regular	10410015.5	\$1,936
		Arctic	10410015177.5	\$1,936
S450H SB - Single Kit	58 lb (26.4 Kg)	Regular	104101.5	\$3,111
		Arctic	1041011577.5	\$3,111
S450H SB - Slave Kit	48 lb (21.4 Kg)	Regular	10410115.5	\$1,936
		Arctic	10410115177.5	\$1,936
S450H CBAC - Operator Only (with locks)	28 lb (12.2 Kg)	Regular	10410015	\$1,732
		Arctic	1041001577	\$1,732
S450H SB - Operator Only (without locks)	28 lb (12.2 Kg)	Regular	10410115	\$1,732
		Arctic	1041011577	\$1,732

**The package S450H - Single Kit contains:**

Qty	Description	Part Number
1	Operator S450H	Various
1	E024U Enclosure Kit	3350.1
2	Batteries 12V 8 Ah	3540
1	Receiver 433 RC Plug In	787741
2	4-channel transmitter XT4 433 RC	787453
1	Pair of XP 30 photobeam photocells	785105
2	XP 30 adapters for conduit connection	401064

**NOTE:** For a master/slave (bi-parting) application add a Slave Kit.

**The package S450H - Slave Kit contains:**

Qty	Description	Part Number
1	Operator S450H	Various
1	Junction Box for electrical connections	3361.1
1	AWG 12 - 2 conductors cable (operator) 40 ft *	2197
1	AWG 22 - 2 conductors cable (encoder) 40 ft	2193

(\* ) The AWG 12 cable can be used for connections of up to 50' of length between the operator and the control board.

**ACCESSORIES**

Description	Shipping Wt (approx)	Part Number	Price
Loop Detector Interface		2670.1	\$131
10 Pin Plug in Loop Detector		2681	\$193
XIB interface for Shadow Loop (see page 23)		790062	\$34
XP 30 Photobeam Photocells Pair		785105	\$261
XP 30 Stainless Steel Photobeam Photocells Pair		7851051	\$316
XP 30 adapter for wall or column mount		401065	\$23
XP 30 adapter for conduit connection		401064	\$25
One Photobeam Mounting Post Standard (with foundation plate)	5 lb (2.2 Kg)	401028/737630.5	\$132
One Photobeam Mounting Post Double (with foundation plate)	9 lb (4.1 Kg)	401035/737630.5	\$212
Transmitter Rolling Code 433MHz		787453	\$29
Receiver Rolling Code 433Mhz		787741	\$51
Tuned Antenna Kit		412003	\$94
Cable AWG 12 - 2 conductors 10 ft length		2197	\$64
Cable AWG 22 - 2 conductors 10 ft length		2193	\$10
IRB-RET Retroreflective Photocell		2800	\$327

# S800H ENC

## In-ground hydraulic operator

maximum leaf width

13-16 ft

maximum leaf weight

1760 lb



- Hybrid technology
- Integrated high resolution encoder for precise control of the operator position
- 100 ° and 180 ° opening angle versions
- Opening/Closing mechanical stops integrated
- Easy handling and installation thanks to the integrated handles
- Maximum safety thanks to the E024U control board reverse on contact feature
- Built in battery backup to ensure operation in case of power outage
- SBW version for use in areas subject to strong winds
- Compliant with UL325 for Class I,II,III and IV applications

### TECHNICAL SPECIFICATIONS

Model	S800H ENC CBAC	S800H ENC SBW
Input Voltage		24 Vdc
Power		60 W
Max. torque		442 lbf.ft (600 Nm)
Max. angle speed		8.2°/s
Max opening angle	113° (S800H 100°) - 187° (S800H 180°)	
Max Leaf width	13 ft (4 m)	16 ft (4.9 m)
Max Leaf weight	1760 lb (800kg)	
Operating ambient temperature	-4°F - 131°F (-20 °C to +55 °C)	
Use frequency	continuous	
Operator weight	29 lb S800H 100° (13.2Kg) - 37 lb S800H 180° (17.0 kg)	
Protection class	IP 67	
Hydraulic locks	included	not included

### NOTE

- Mounting dimensions, wind factor and gate design will affect performance specification
- Use frequency is measured at an ambient temperature of 72 °F (20 °C) . Temperature variation will affect it.
- An electric or magnetic lock is recommended for any gate longer than 12 ft (3.6 m).

**S800H**

Model	Opening angle	Shipping Wt (approx)	Part No.	Price
S800H CBAC Single Kit	100°	110 lb (50 Kg)	108710.5	\$4,416
	180°	120 lb (54 Kg)	108712.5	\$4,691
S800H CBAC Slave Kit	100°	100 lb (45 Kg)	108710151.5	\$3,279
	180°	110 lb (49 Kg)	108712151.5	\$3,452
S800H CBAC Single Kit Stainless Steel	100°	110 lb (50 Kg)	108710.5SS	\$4,867
	180°	120 lb (54 Kg)	108712.5SS	\$5,099
S800H CBAC Slave Kit Stainless Steel	100°	100 lb (45 Kg)	108710151.5SS	\$3,721
	180°	110 lb (49 Kg)	108712151.5SS	\$3,895
S800H SBW Single Kit	100°	110 lb (50 Kg)	108714.5	\$4,385
	180°	120 lb (54 Kg)	108715.5	\$4,691
S800H SBW Slave Kit	100°	100 lb (45 Kg)	108714151.5	\$3,279
	180°	110 lb (49 Kg)	108715151.5	\$3,452
S800H SBW Single Kit Stainless Steel	100°	110 lb (50 Kg)	108714.5SS	\$4,867
	180°	120 lb (54 Kg)	108715.5SS	\$5,099
S800H SBW Slave Kit Stainless Steel	100°	100 lb (45 Kg)	108714151.5SS	\$3,721
	180°	110 lb (49 Kg)	108715151.5SS	\$3,895
S800H ENC CBAC with hydraulic manual release, splined shaft collar and mounting bolts	100°	35 lb (16 Kg)	10871015.5	\$2,489
	180°	44 lb (20 Kg)	10871215.5	\$2,663
S800H ENC SBW with hydraulic manual release, splined shaft collar and mounting bolts	100°	35 lb (16 Kg)	10871415.5	\$2,489
	180°	44 lb (20 Kg)	10871515.5	\$2,663
S800H ENC CBAC Operator Only with locks	100°	29 lb (13 Kg)	108720	\$2,202
	180°	37 lb (17 Kg)	108722	\$2,378
S800H ENC SBW Operator Only without locks	100°	29 lb (13 Kg)	108724	\$2,202
	180°	37 lb (17 Kg)	108725	\$2,378

**The package S800H - Single Kit contains:**

Qty	Description	Part Number
1	Operator S800H ENC	Various
1	Hydraulic manual release	390035
1	Splined shaft collar with mounting bolts	390972
1	Support Box	Various
1	E024U Enclosure Kit	3350.1
2	Batteries 12V 8 Ah	3540
1	Receiver 433 RC Plug In	787741
2	4-channel transmitter XT4 433 RC	787453
1	Pair of XP30 Photobeams	785105
2	XP30 adapters for conduit connection	401064

**NOTE:** For a master/slave (bi-parting) application add a Slave Kit.

**The package S800H - Slave Kit contains:**

Qty	Description	Part Number
1	Operator S800H ENC	Various
1	Hydraulic manual release	390035
1	Splined shaft collar with mounting bolts	390972
1	Support Box	Various
1	Junction Box for electrical connections	3361.1
1	AWG 12 - 2 conductors cable (operator) 40 ft*	2197
1	AWG 22 - 2 conductors cable (encoder) 40 ft*	2193

(\* ) The AWG 12 cable can be used for connections of up to 50' of length between the operator and the control board.



# S800H

## ACCESSORIES



**Mechanical release lever**

Part No.	390878
Price	\$371
Shipping Wt	4.5 lb (2 Kg)



**Hydraulic release system**

Part No.	390035
Price	\$234
Shipping Wt	3 lb (1.4 Kg)



**Support box**

Part No.	490112
Price	\$586
Shipping Wt	40 lb (18.2 Kg)



**Stainless steel support box**

Part No.	490113
Price	\$1,029
Shipping Wt	40 lb (18.2 Kg)



**Splined shaft collar with mounting bolts**

Part No.	390972
Price	\$190
Shipping Wt	2 lb (0.9 Kg)



**S800H Extension arm**

Part No.	2148
Price	\$179
Shipping Wt	2 lb (0.9 Kg)



**S800H ENC Upgrade Kit**

Part No.	2685.1
Price	\$675
Shipping Wt	10 lb (22 Kg)

Description	Shipping Wt (approx)	Part Number	Price
Loop Detector Interface		2670.1	\$131
10 Pin Plug in Loop Detector		2681	\$193
XIB interface for Shadow Loop (see page 23)		790062	\$34
XP 30 Photobeam Photocells Pair		785105	\$261
XP 30 Stainless Steel Photobeam Photocells Pair		7851051	\$316
XP 30 adapter for wall or column mount		401065	\$23
XP 30 adapter for conduit connection		401064	\$25
One Photobeam Mounting Post Standard (with foundation plate)	5 lb (2.2 Kg)	401028/737630.5	\$132
One Photobeam Mounting Post Double (with foundation plate)	9 lb (4.1 Kg)	401035/737630.5	\$212
Transmitter Rolling Code 433MHz		787453	\$29
Receiver Rolling Code 433Mhz		787741	\$51
Tuned Antenna Kit		412003	\$94
Cable AWG 12 - 2 conductors 10 ft length		2197	\$64
Cable AWG 22 - 2 conductors 10 ft length		2193	\$10
IRB-RET Retroreflective Photocell		2800	\$327

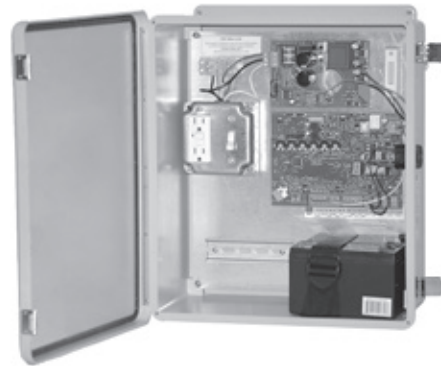
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# E024U

## 24V Control Board for Swing Gate Operators

To be used with the following low voltage Swing Gate Operators:

S418  
S450H  
S800H  
390  
415  
770



- UL325 and UL991 safety standard compliant
- Powerful and efficient switching Power Supply
- Easy Programming with trimmers and dip switches
- One pushbutton automatic time learning
- Self resetting fuses
- Built in battery backup
- Low current idle mode to preserve battery
- Opening and closing delays selectable for overlapping gates
- Speed and force adjustable with trimmers
- Control Board firmware upgradable via USB
- Solar Powered option

### TECHNICAL SPECIFICATIONS

Input Voltage	115 VAC (+10% -6%)
Input power	400 W max - 4W stand by
Motor output current max	7 A
Accessory Power	24 Vdc - 500 mA
Operating Temperature	-4°F - 131°F (-20°C - +55°C)
Dimensions	17.5 x 15.5 x 6.2 in (445x393x157mm)
Weight (without batteries)	15.5 Lbs (7 kg)
Protection class	NEMA type 3, 3R, 4, 4X, 12 and 13
Operating logics	Semiautomatic (E); Automatic (A); Security (S); Semiautomatic step by step (EP); Automatic step by step (AP); Security step by step (SP); Manned pulsed (B); Manned constant

E024U					
Description	Includes	Shipping Wt (approx)	Part Number	Price	
Enclosure Kit E024U	16" x 14" Fiberglass enclosure Backplate with accessory outlets and switch E024U control board and power supply Battery cable	26 lb (11.8 Kg)	3350.1	\$1,334	
425D to E024U Upgrade kit	Backplate with accessory outlet and switch E024U control Board and power supply Battery Cable	11 lb (5 Kg)	3351.1	\$896	
425D to E024U Upgrade kit with batteries	Backplate with accessory outlet and switch E024U control Board and power supply Battery Cable Batteries	23 lb (10.4 Kg)	3351B.1	\$979	
Enclosure Kit E024U type LE	16" x 14" Fiberglass enclosure Backplate E024U control board and power supply Battery cable	24 lb (10.8 Kg)	3350LE.1	\$990	
Enclosure Solar Kit E024U for electro-mechanical operators	16" x 14" Fiberglass enclosure Backplate with solar charger and switch E024U control board Battery cable Solar panel 30W	30 lb (13.6 Kg)	3352.1	\$1,769	
Enclosure Solar Kit E024U for hydraulic operators	16" x 14" Fiberglass enclosure Backplate with solar charger and switch E024U control board Battery cable Solar panel 30W	30 lb (13.6 Kg)	3353.1	\$1,925	
16" x 14" Enclosure	16" x 14" Fiberglass enclosure Pre-drilled backplate On/off switch Auxillary outlet	24 lb (10.8 Kg)	3350	\$594	
Enclosure Solar Kit E024U for electro-mechanical operators (no panels)	16" x 14" Fiberglass enclosure Backplate with solar charger and switch E024U control board Battery cable	30 lb (13.6 Kg)	3354.1	\$1,478	
Enclosure Solar Kit E024U for hydraulic operators (no panels)	16" x 14" Fiberglass enclosure Backplate with solar charger and switch E024U control board Battery cable	30 lb (13.6 Kg)	3355.1	\$1,635	

## ACCESSORIES



**E024U Control board**

Part No. 202025  
Price \$564



**Switching Power Supply**

Part No. 750007  
Price \$168



**Loop Detectors interface**

Part No. 2670.1  
Price \$131



**10 pin plug in loop detector**

Part No. 2681  
Price \$193



**XIB interface for Shadow Loop**

Part No. 790062  
Price \$34



**(2) 12V 8 Ah batteries with jumper**

Part No. 3540.5  
Price \$135  
Shipping Wt 6 lb (2.7 Kg)



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# AUTOMATED SYSTEMS FOR SWING-LEAF GATES HIGH VOLTAGE

## Type of installation

### external motor

<b>Residential</b>	<b>412</b>	<b>415</b>	<b>402</b>	<b>422</b>	<b>400</b>
<b>Condominium</b>		<b>415</b>		<b>422</b>	<b>400</b>
<b>Industrial</b>					<b>400</b>
<b>Leaf max length</b>	<b>14 ft</b>	<b>15 ft</b>	<b>10 ft</b>	<b>10 ft</b>	<b>16 ft CBAC</b>
					<b>18 ft SB</b>
					<b>20 ft SBS</b>
<b>Max leaf weight</b>	<b>500 lb</b>	<b>700 lb</b>	<b>900 lb</b>	<b>900 lb</b>	<b>1,300 lb CBAC 1,600 lb SB 2,000 lb SBS</b>

\*for a maximum weight of 280 lb

### underground motor

<b>Residential</b>	<b>750</b>
<b>Condominium</b>	<b>750</b>
<b>Leaf max length</b>	<b>13 ft</b>
<b>Max leaf weight</b>	<b>1,500 lb</b>

# 412

## RESIDENTIAL

# Electro-mechanical operator

maximum leaf width

14 ft

maximum leaf weight

500 lb



- Designed for light residential, single family use
- Mechanical lock in the open and close position
- Built in manual release in case of power failure
- Simple installation and maintenance.
- Anti-crushing safety thanks to the electronic control board
- UL 325 Compliant

### TECHNICAL SPECIFICATIONS

Input voltage	115 VAC (+10% -6%)
Power	280 W
Current	3 A
Thrust Capacitor	25 uF
Thrust force	719 lbf (320 daN)
Motor	Asynchronous single phase
90° opening time	Approx. 16 sec
Rod stroke	11.4 in (290 mm)
Leaf minimum width	6 ft (1.83m)
Leaf maximum width	14 ft (4.2 m)
Leaf maximum weight	500 lb (226.8 Kg)
Use frequency (cycles per hour)	18
Thermal protection on motor winding	284 °F (140 °C)
Operating ambient temperature	-4°F - 131°F (-20 °C to +55 °C)
Protection class	IP 44
Operator weight	14.3 lb (6.5 kg)
Dimensions (L x D x H)	39.3 x 3.5 x 7.7 in (1000x90x195mm)

### NOTE

- Mounting dimensions, wind factor and gate design will affect performance specification
- Use frequency is measured at an ambient temperature of 72 °F (20 °C) . Temperature variation will affect it
- An electric or magnetic lock is recommended for any gate longer than 12 ft (3.6 m)
- Positive gate stops, which limit gate travel, are required in the opened and closed positions

**412**

Model	Control Board Enclosure	Shipping Wt (approx)	Part No.	Price
412 Kit for Bi-Parting Gates	10 x 12 in.	50 lb (22.7 Kg)	412BP1.5	\$2,437
	14 x 16 in. prewired	55 lb (25 Kg)	412BP1S.5	\$2,713
412 DX Kit for single leaf Right Hinged Gate	10 x 12 in.	36 lb (16.3 Kg)	412DX1.5	\$1,733
	14 x 16 in. prewired	41 lb (18.6 Kg)	412DX1S.5	\$2,203
412 SX Kit for single leaf Left Hinged Gate	10 x 12 in.	36 lb (16.3 Kg)	412SX1.5	\$1,733
	14 x 16 in. prewired	41 lb (18.6 Kg)	412SX1S.5	\$2,203
412 DX operator for single leaf Right Hinged Gate		20 lb (9.1 Kg)	104475	\$820
412 SX operator for single leaf Left Hinged Gate		20 lb (9.1 Kg)	104476	\$820

**Note**

- The right leaf version (RH and LH) can be determined by looking from the inside of the property with gate leaves swinging towards you.

**The package 412 - Kit for Bi-Parting Gates contains:**

Qty	Description	Part Number
1	Operator 412 DX	104475
1	Operator 412 SX	104476
1	Fiberglass enclosure	various
1	455D control panel 115V	790944
1	Receiver 433 RC Plug In	787741
2	4-channel transmitter XT4 433 RC	787453
1	Pair of XP 30 photobeam photocells	785105
2	XP 30 adapters for conduit connection	401064

**The package 412 - Kit for Single Leaf Gates contains:**

Qty	Description	Part Number
1	Operator 412 DX or SX	104475 or 104476
1	Fiberglass enclosure	various
1	455D control panel 115V	790944
1	Receiver 433 RC Plug In	787741
2	4-channel transmitter XT4 433 RC	787453
1	Pair of XP 30 photobeam photocells	785105
2	XP 30 adapters for conduit connection	401064

**ACCESSORIES**

Description	Shipping Wt	Voltage	Part Number	Price
Positive Stop 412	5 lb (2.2 Kg)		2631	\$326
Capacitor 25 uF		115V	2705	\$16
XP 30 Photobeam Photocells Pair			785105	\$261
XP 30 Stainless Steel Photobeam Photocells Pair			7851051	\$316
XP 30 adapter for wall or column mount			401065	\$23
XP 30 adapter for conduit connection			401064	\$25
One Photobeam Mounting Post Standard (with foundation plate)	5 lb (2.2 Kg)		401028/737630.5	\$132
One Photobeam Mounting Post Double (with foundation plate)	9 lb (4.1 Kg)		401035/737630.5	\$212
Plug in Loop Detector VEK MNE1			2680	\$164
Shadow Detector Kit		115V	26671.5	\$279
Maglock Relay Kit			2352	\$51
Transmitter Rolling Code 433MHz			787453	\$29
Receiver Rolling Code 433Mhz			787741	\$51
Tuned Antenna Kit			412003	\$94

# 415

## RESIDENTIAL

# Electro-mechanical operator

maximum leaf width

15 ft

maximum leaf weight

700 lb



- "In-axis" thrust operator.
- Die-cast aluminium body, entirely double-coat painted for longer life.
- Manual release device with simplified key-protected activation.
- Built in sealed limit switches that can be used for slowdown or stops
- Horizontal exit for cables to allow near to ground installation (low installation).
- UL 325 Compliant



### TECHNICAL SPECIFICATIONS

Input Voltage	115 VAC (+10% -6%)
Power	300 W
Current	2.6 A
Thermal protection	284 °F (140 °C)
Thrust capacitor	25 uF
Thrust force	674 lbf (300 daN)
Motor	Asynchronous single phase
Rod stroke	15.7 in (400 mm)
90° opening time	approx. 19 sec
Leaf minimum width	7.5ft (2.3m)
Leaf maximum width	15 ft (4.6 m)
Leaf maximum weight	700 lb (317.5 Kg)
Usage frequency (cycles per hour)	25
Operating ambient temperature	-4°F - 131°F (-20 °C to +55 °C)
Weight of operator	17.6 lb (8 Kg)
Dimensions (L x D x H) in mm	35.6 x 4.1 x 5.8 in (940x105x148 mm)
Protection class	IP 54

### NOTE

- Mounting dimensions, wind factor and gate design will affect performance specification
- Use frequency is measured at an ambient temperature of 72 °F (20 °C) . Temperature variation will affect it
- An electric or magnetic lock is recommended for any gate longer than 12 ft (3.6 m)

**415**

Model	Control Board Enclosure	Shipping Wt (approx)	Part No.	Price
415 Basic Single Kit	10 x 12 in.	46 lb (20.9 Kg)	1044182.5	\$2,060
	14 x 16 in. prewired	51 lb (23.1 Kg)	1044182.5L	\$2,525
415 Operator only		25 lb (11.3 Kg)	1044182	\$952

**The package 415 - Basic Single Kit contains:**

Qty	Description	Part Number
1	Operator 415	1044182
1	Fiberglass enclosure	various
1	455D control panel 115V	790944
1	Receiver 433 RC Plug In	787741
2	4-channel transmitter XT4 433 RC	787453
1	Pair of XP 30 photobeam photocells	785105
2	XP 30 adapters for conduit connection	401064

**To make a master/slave (bi-parting) kit add this part**

Qty	Description	Part Number
1	Operator 415	1044182

**ACCESSORIES**

Description	Shipping Wt	Voltage	Part Number	Price
XP 30 Photobeam Photocells Pair			785105	\$261
XP 30 Stainless Steel Photobeam Photocells Pair			7851051	\$316
XP 30 adapter for wall or column mount			401065	\$23
XP 30 adapter for conduit connection			401064	\$25
One Photobeam Mounting Post Standard (with foundation plate)	5 lb (2.2 Kg)		401028/737630.5	\$132
One Photobeam Mounting Post Double (with foundation plate)	9 lb (4.1 Kg)		401035/737630.5	\$212
Plug in Loop Detector VEK MNE1			2680	\$164
Shadow Detector Kit		115V	26671.5	\$279
Maglock Relay Kit			2352	\$51
Transmitter Rolling Code 433MHz			787453	\$29
Receiver Rolling Code 433Mhz			787741	\$51
Tuned Antenna Kit			412003	\$94
Capacitor 25 uF		115V	2705	\$16



## RESIDENTIAL

# Hydraulic Swing Gate Operator

maximum leaf width

10

maximum leaf weight

900 lb



- Entry level hydraulic operator for residential application
- Compact design, ideal for tight space installations
- Hydraulic lock of the gate in closed positions
- Quiet operation
- Self lubricating for long life
- UL 325 Compliant

### TECHNICAL SPECIFICATIONS

Input voltage	115 VAC (+10% -6%) or 230 VAC (+6% -10%)
Power	220 W
Current	2A (115V) - 1 A (230V)
Motor	Asynchronous single phase
Rod stroke	9.8 in (250 mm)
90° opening time	approx. 12 sec
Pump flow rate	1 l/min
Thrust force	1124 lbf (500 daN)
Leaf minimum width	7.5ft (2.3m)
Leaf maximum width	5ft (1.5 m)
Leaf maximum weight	900 lb (410 Kg)
Usage frequency (cycles per hour)	55
Operating ambient temperature	-4°F - 131°F (-20 °C to +55 °C)
Thermal protection on motor winding	248 °F (120 °C)
Weight	14.3 lb (6.5 kg)
Protection class	IP 55
Dimensions (L x D x H)	37.7 x 3.3 x 2.4 in (959x85x61mm)

### NOTE

- Mounting dimensions, wind factor and gate design will affect performance specification
- Use frequency is measured at an ambient temperature of 72 °F (20 °C) . Temperature variation will affect it
- Positive gate stops, which limit gate travel, are required in the opened and closed positions

**402**

Model	Shipping Wt (approx)	Voltage	Oil Type	Part No.	Price
402 CBC Standard Basic Single Kit	39 lb (17.7 Kg)	115V	Regular	1044682.5	\$2,738
			Arctic	104468277.5	\$2,738
		230V	Regular	1044681.5	\$2,738
			Arctic	104468177.5	\$2,738

The package 402 - Basic Single Kit 115V contains:

Qty	Description	Part Number
1	Operator 402 CBC	Various
1	Prewired fiberglass enclosure 14x16 in	3300
1	455D control panel 115V	790944
1	Receiver 433 RC Plug In	787741
2	4-channel transmitter XT4 433 RC	787453
1	Pair of XP 30 photobeam photocells	785105
2	XP 30 adapters for conduit connection	401064

The package 402 - Basic Single Kit 230V contains:

Qty	Description	Part Number
1	Operator 402 CBC	Various
1	Prewired fiberglass enclosure 14x16 in	3303
1	455D control panel 230V	790945
1	Receiver 433 RC Plug In	787741
2	4-channel transmitter XT4 433 RC	787453
1	Pair of XP 30 photobeam photocells	785105
2	XP 30 adapters for conduit connection	401064

To make the above kit a master/slave (bi-parting) system add one of the following:

Model	Shipping Wt (approx)	Voltage	Oil Type	Part No.	Price
402 CBC Operator only	22 lb (10 Kg)	115V	Regular	1044682	\$1,398
			Arctic	104468277	\$1,398
		230V	Regular	1044681	\$1,398
			Arctic	104468177	\$1,398

**Note**

- The 402 CBC (lock in closed position) can be converted in CBA (lock in opened position). Call 1-800-221-8278 for more information.

**ACCESSORIES**

Description	Shipping Wt	Voltage	Part Number	Price
XP 30 Photobeam Photocells Pair			785105	\$261
XP 30 Stainless Steel Photobeam Photocells Pair			7851051	\$316
XP 30 adapter for wall or column mount			401065	\$23
XP 30 adapter for conduit connection			401064	\$25
One Photobeam Mounting Post Standard (with foundation plate)	5 lb (2.2 Kg)		401028/737630.5	\$132
One Photobeam Mounting Post Double (with foundation plate)	9 lb (4.1 Kg)		401035/737630.5	\$212
Positive Stop 402			3554	\$201
Plug in Loop Detector VEK MNE1			2680	\$164
Shadow Detector Kit		115V	26671.5	\$279
		230V	26672.5	\$239
Maglock Relay Kit			2352	\$51
Transmitter Rolling Code 433MHz			787453	\$29
Receiver Rolling Code 433Mhz			787741	\$51
Tuned Antenna Kit			412003	\$94

# 422

RESIDENTIAL  
CONDOMINIUM

## Hydraulic Swing Gate Operator

maximum leaf width

10 ft

maximum leaf weight

900 lb



- Versatile hydraulic operator for residential and light commercial application
- Hydraulic lock of the gate in opened and closed positions
- Key protected manual release
- Quiet operation
- Self lubricating for long life
- UL 325 Compliant

### TECHNICAL SPECIFICATIONS

Input voltage	115 VAC (+10% -6%) or 230 VAC (+6% -10%)
Power	220 W
Current	2A (115V) - 1 A (230V)
Motor	Asynchronous single phase
Rod stroke	9.8 in (250 mm)
90° opening time	approx. 12 sec
Pump flow rate	1 l/min
Thrust force	1124 lbf (500 daN)
Leaf minimum width	7.5ft (2.3m)
Leaf maximum width	5ft (1.5 m)
Leaf maximum weight	900 lb (410 Kg)
Usage frequency (cycles per hour)	55
Operating ambient temperature	-4°F - 131°F (-20 °C to +55 °C)
Thermal protection on motor winding	248 °F (120 °C)
Weight	15.4 lb (7 kg)
Protection class	IP 55
Dimensions (L x D x H) in mm	38.8 x 4.7 x 3.3 in (987x120x85mm)

### NOTE

- Mounting dimensions, wind factor and gate design will affect performance specification
- Use frequency is measured at an ambient temperature of 72 °F (20 °C) . Temperature variation will affect it
- Positive gate stops, which limit gate travel, are required in the opened and closed positions

## 422

Model	Shipping Wt (approx)	Voltage	Oil Type	Part No.	Price
422 CBAC Standard Basic Single Kit	39 lb (17.7 Kg)	115V	Regular	10420012.5	\$3,110
			Arctic	1042001277.5	\$3,110
		230V	Regular	1042001.5	\$3,110
			Arctic	104200177.5	\$3,110

The package 402 - Basic Single Kit 115V contains:

Qty	Description	Part Number
1	Operator 422 CBAC	Various
1	Prewired fiberglass enclosure 14x16 in	3300
1	455D control panel 115V	790944
1	Receiver 433 RC Plug In	787741
2	4-channel transmitter XT4 433 RC	787453
1	Pair of XP 30 photobeam photocells	785105
2	XP 30 adapters for conduit connection	401064

The package 402 - Basic Single Kit 230V contains:

Qty	Description	Part Number
1	Operator 422 CBAC	Various
1	Prewired fiberglass enclosure 14x16 in	3303
1	455D control panel 230V	790945
1	Receiver 433 RC Plug In	787741
2	4-channel transmitter XT4 433 RC	787453
1	Pair of XP 30 photobeam photocells	785105
2	XP 30 adapters for conduit connection	401064

To make the above kit a master/slave (bi-parting) system add one of the following:

Model	Shipping Wt	Voltage	Oil Type	Part No.	Price
422 CBAC Operator only	22 lb (10 Kg)	115V	Regular	10420012	\$1,669
			Arctic	1042001277	\$1,669
		230V	Regular	1042001	\$1,669
			Arctic	104200177	\$1,669

### Note

- The 422 CBAC (locks in closed and opened position) can be converted in SB (no locks). Call 1-800-221-8278 for more information.

## ACCESSORIES

Description	Shipping Wt	Voltage	Part Number	Price
XP 30 Photobeam Photocells Pair			785105	\$261
XP 30 Stainless Steel Photobeam Photocells Pair			7851051	\$316
XP 30 adapter for wall or column mount			401065	\$23
XP 30 adapter for conduit connection			401064	\$25
One Photobeam Mounting Post Standard (with foundation plate)	5 lb (2.2 Kg)		401028/737630.5	\$132
One Photobeam Mounting Post Double (with foundation plate)	9 lb (4.1 Kg)		401035/737630.5	\$212
Positive Stop 422			3555	\$201
Plug in Loop Detector VEK MNE1			2680	\$164
Shadow Detector Kit		115V	26671.5	\$279
		230V	26672.5	\$239
Maglock Relay Kit			2352	\$51
Transmitter Rolling Code 433MHz			787453	\$29
Receiver Rolling Code 433Mhz			787741	\$51
Tuned Antenna Kit			412003	\$94

# 400

## Hydraulic Swing Gate Operator

maximum leaf width

12-20 ft

maximum leaf weight

900-2000 lb



- Wide and versatile range from residential to heavy industrial gates
- Hydraulic lock of the gate in open and/or closed positions
- Quiet operation
- Self lubricating for long life
- Key protected manual release
- Compliant with UL325 for Class I,II,III, and IV applications



### TECHNICAL SPECIFICATIONS

Model	400 CBC	400 CBAC	400 SB	400 SBS	400 CBACR	400 CBAC EG	400 SB EG
Input voltage	115 VAC (+10% -6%) or 230 VAC (+6% -10%)						
Power	220 W						
Current	2A (115V) - 1 A (230V)						
Motor	Asynchronous single phase						
Thrust capacitor	25uF (115V) - 8uF (230V)						
Operating ambient temperature	-4°F - 131°F (-20 °C to +55 °C)						
Thermal protection on motor	248 °F (120 °C)						
Weight	19 lb (8.6 kg)				22 lb (10 kg)		
Protection class	IP 55						
Dimensions (L x D x H)	40.5 x 4.4 x 3.3 in (1,031x113x85 mm)					50.6 x 4.4 x 3.3 in (1,285x113x85 mm)	
Hydraulic Locking (1) = Closing (2) = Opening and Closing	(1)	(2)	None	None	(2)	(2)	None
Minimum Leaf Length	6ft (1.8m)	6ft (1.8m)	6ft (1.8m)	7.5ft (2.3m)	6ft (1.8m)	6ft (1.8m)	6ft (1.8m)
Maximum Leaf Length	16 ft (4.9 m)	16 ft (4.9 m)	18 ft (5.5 m)	20 ft (6.1 m)	12 ft (3.6 m)	18 ft (5.5 m)	20 ft (6.1 m)
Maximum Leaf Weight	1300 lb (589 Kg)	1300 lb (589 Kg)	1600 lb (726 Kg)	2000 lb (907 Kg)	900 lb (408 Kg)	1500 lb (680 Kg)	1800 lb (816 Kg)
Thrust force	1390 lbf (620 daN)	1390 lbf (620 daN)	1390 lbf (620 daN)	1740 lbf (775 daN)	1045 lbf (465 daN)	1045 lbf (465 daN)	1045 lbf (465 daN)
Pump flow rate	1 l/m	1 l/m	1 l/m	0.75 l/m	1.5 l/m	1.5 l/m	1.5 l/m
90° opening time	approx. 18 sec	approx. 18 sec	approx. 18 sec	approx. 24 sec	approx. 12 sec	approx. 18 sec	approx. 18 sec
Effective rod stroke	10.25 in (260mm)	10.25 in (260mm)	10.25 in (260mm)	10.25 in (260mm)	10.25 in (260mm)	15 in (380mm)	15 in (380mm)
Use Frequency (cycles per hour)	70	70	70	60	80	50	50

### NOTE

- Mounting dimensions, wind factor and gate design will affect performance specification
- Use frequency is measured at an ambient temperature of 72 °F (20 °C) . Temperature variation will affect it
- An electric or magnetic lock is recommended for any gate longer than 12 ft (3.6 m)
- Positive gate stops, which limit gate travel, are required in the opened and closed positions

**400**

Model	Shipping Wt (approx)	Voltage	Oil Type	Part No.	Price
400 CBAC Standard Basic Single Kit	54 lb (24.5 Kg)	115V	Regular	10420112.5	\$3,355
			Arctic	1042011277.5	\$3,355
		230V	Regular	1042011.5	\$3,355
			Arctic	1042011677.5	\$3,355
400 CBACR Rapid Basic Single Kit	54 lb (24.5 Kg)	115V	Regular	10420712.5	\$3,507
			Arctic	1042071277.5	\$3,507
		230V	Regular	1042071.5	\$3,507
			Arctic	104207177.5	\$3,507
400 CBAC EG (long) Basic Single Kit	54 lb (24.5 Kg)	115V	Regular	10420212.5	\$3,596
			Arctic	1042021277.5	\$3,596
		230V	Regular	1042021.5	\$3,596
			Arctic	104202177.5	\$3,596

The package 400 - Basic Single Kit 115V contains:

Qty	Description	Part Number
1	Operator 400 CBAC	Various
1	Prewired fiberglass enclosure 115V 14x16 in	3300
1	455D control panel 115V	790944
1	Receiver 433 RC Plug In	787741
2	4-channel transmitter XT4 433 RC	787453
1	Pair of XP 30 photobeam photocells	785105
2	XP 30 adapters for conduit connection	401064

The package 400 - Basic Single Kit 230V contains:

Qty	Description	Part Number
1	Operator 400 CBAC	Various
1	Prewired fiberglass enclosure 230V 14x16 in	3303
1	455D control panel 230V	790945
1	Receiver 433 RC Plug In	787741
2	4-channel transmitter XT4 433 RC	787453
1	Pair of XP 30 photobeam photocells	785105
2	XP 30 adapters for conduit connection	401064

To make the above kit a master/slave (bi-parting) system add one of the following:

Model	Shipping Wt	Voltage	Oil Type	Part No.	Price
400 CBAC Standard Operator only	29 lb (13.2 Kg)	115V	Regular	104201125	\$1,984
			Arctic	1042011577	\$1,984
		230V	Regular	1042011	\$1,984
			Arctic	1042011677	\$1,984
400 CBACR Rapid Operator only	29 lb (13.2 Kg)	115V	Regular	10420712	\$2,104
			Arctic	1042071277	\$2,104
		230V	Regular	1042071	\$2,104
			Arctic	104207177	\$2,104
400 CBAC EG (long) Operator only	29 lb (13.2 Kg)	115V	Regular	104202125	\$2,251
			Arctic	1042021277	\$2,251
		230V	Regular	1042021	\$2,251
			Arctic	104202177	\$2,251

**NOTE**

- Other operator models not listed above can be special ordered. Call 1-800-221-8278 for more information.



## ACCESSORIES



**Positive Stop 400 Std.**

Part No. 490109  
Price \$232



**Positive Stop 400 EG**

Part No. 490043  
Price \$232

Description	Shipping Wt	Voltage	Part Number	Price
XP 30 Photobeam Photocells Pair			785105	\$261
XP 30 Stainless Steel Photobeam Photocells Pair			7851051	\$316
XP 30 adapter for wall or column mount			401065	\$23
XP 30 adapter for conduit connection			401064	\$25
One Photobeam Mounting Post Standard (with foundation plate)	5 lb (2.2 Kg)		401028/737630.5	\$132
One Photobeam Mounting Post Double (with foundation plate)	9 lb (4.1 Kg)		401035/737630.5	\$212
Plug in Loop Detector VEK MNE1			2680	\$164
Shadow Detector Kit		115V	26671.5	\$279
		230V	26672.5	\$239
Maglock Relay Kit			2352	\$51
Transmitter Rolling Code 433MHz			787453	\$29
Receiver Rolling Code 433Mhz			787741	\$51
Tuned Antenna Kit			412003	\$94

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# 750

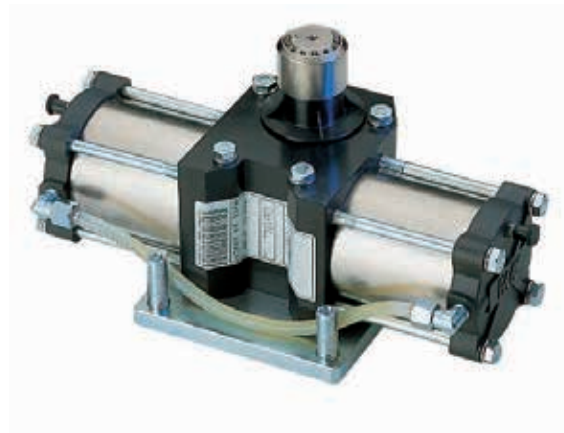
## In-ground hydraulic operator

maximum leaf width

13 ft

maximum leaf weight

1760 lb



- Invisible, quiet operator with separate drive unit and pump motor.
- The ideal solution for artistic gates
- Wide and versatile range from residential to commercial
- Hydraulic lock of the gate in open and closed positions
- Quiet operation
- Self lubricating for long life
- UL 325 Compliant

### TECHNICAL SPECIFICATIONS OF 750 PUMP MOTOR ASSEMBLY

Input voltage	115 VAC (+10% -6%) or 230 VAC (+6% -10%)
Power	220 W
Current	2A (120V) - 1 A (230V)
Motor	Asynchronous single phase
Pump flow rate	0.75 l/min
Operating ambient temperature	-4°F - 131°F (-20 °C to +55 °C)
Protection class	IP 55
Thermal protection on motor winding	248 °F (120 °C)
Use Frequency (cycles per hour)	45
Weight	16.5 lb (7.5 kg)
Dimensions (L x D x H) in mm	9.6 x 13.9 x 5.5 in (245x353x141mm)

### TECHNICAL SPECIFICATIONS OF 750 DRIVE UNIT

	100° opening	180° opening
Maximum rotation angle	118°	200°
Angle speed	8.5°/s	
Protection class	IP 67	
Effective torque	400 lbf.ft (543 Nm)	
Minimum leaf length	5ft (1.5 m)	
Maximum leaf length	13 ft (4 m) with external lock - 8 ft (2.4m) without external lock	
Maximum leaf weight	1760 lb (800 Kg)	

### NOTE

- Mounting dimensions, wind factor and gate design will affect performance specification
- Use frequency is measured at an ambient temperature of 72 °F (20 °C) . Temperature variation will affect it
- An electric or magnetic lock is recommended for any gate longer than 8 ft (2.4 m)
- Positive gate stops, which limit gate travel, are required in the opened and closed positions

**750**

Model	Shipping Wt (approx)	Voltage	Part No.	Price
750 CBAC Pump Motor Assembly with enclosure	15 lb (6.8 Kg)	115 V	107725.5	\$1,112
		230 V	1077251.5	\$1,112
750 CBAC Pump Motor Assembly only	12 lb (5.4 Kg)	115 V	107725	\$1,092
		230 V	1077251	\$1,092
750 100° Drive Unit	26 lb (11.8 Kg)		108757	\$1,152
750 180° Drive Unit	26 lb (11.8 Kg)		108758	\$1,328

**The 750 Drive Unit includes:** the drive unit, installation accessories, metal enclosure with stainless steel cover, extra oil.

**To assemble a 115V system for a sigle leaf gate you need:**

Qty	Description	Part Number
1	750 CBAC Pump Motor Assembly with enclosure	107725.5
1	750 100° Drive Unit	108757
1	455D with 14 x 16 in. fiberglass enclosure	455D115F.5
1	Foundation plate	737607
1	Flex hose connector kit	390421.5
1	Flexible hydraulic hose	390422

**To assemble a 115V system for a dual leaf gate you need:**

Qty	Description	Part Number
2	750 CBAC Pump Motor Assembly with enclosure	107725.5
2	750 100° Drive Unit	108757
1	455D with 14 x 16 in. fiberglass enclosure	455D115F.5
2	Foundation plate	737607
2	Flex hose connector kit	390421.5
2	Flexible hydraulic hose	390422

**COMPONENTS**



**Foundation plate**

Part No.	737607
Price	\$70



**Flex hose connector kit**

Part No.	390421.5
Price	\$83



**Flexible hydraulic hose**

Length 33 ft (10m)	390422
Price	\$149
Length 328 ft (100 m)	390439
Price	\$1,407



**Hydraulic pump enclosure**

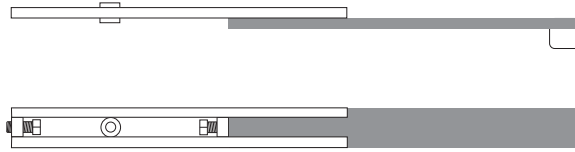
Part No.	720309
Price	\$108



**750 support box**

Part No.	490071
Price	\$423

**ACCESSORIES**



**U-channel style extension arm**

**Extension arm**

**Extension arm with positive stops**

Part No.	738704
Shipping Wt.	9 lb (4.1 Kg)
Price	\$125

Part No.	2141
Shipping Wt.	9 lb (4.1 Kg)
Price	\$122

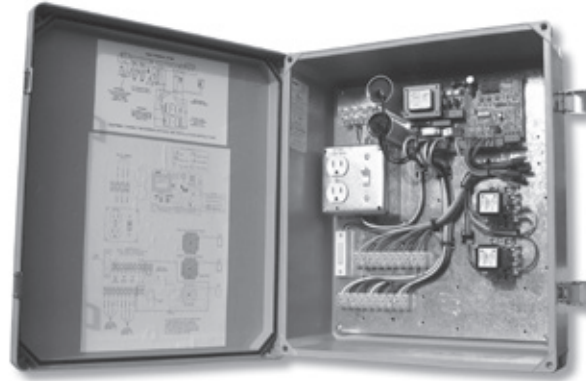
Part No.	2142
Shipping Wt.	9 lb (4.1 Kg)
Price	\$257

Description	Shipping Wt	Voltage	Part Number	Price
XP 30 Photobeam Photocells Pair			785105	\$261
XP 30 Stainless Steel Photobeam Photocells Pair			7851051	\$316
XP 30 adapter for wall or column mount			401065	\$23
XP 30 adapter for conduit connection			401064	\$25
One Photobeam Mounting Post Standard (with foundation plate)	5 lb (2.2 Kg)		401028/737630.5	\$132
One Photobeam Mounting Post Double (with foundation plate)	9 lb (4.1 Kg)		401035/737630.5	\$212
Plug in Loop Detector VEK MNE1			2680	\$164
Shadow Detector Kit		115V	26671.5	\$279
		230V	26672.5	\$239
Maglock Relay Kit			2352	\$51
Transmitter Rolling Code 433MHz			787453	\$29
Receiver Rolling Code 433Mhz			787741	\$51
Tuned Antenna Kit			412003	\$94

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# 455D

## 115VAC / 230VAC Control Board for Swing Gate Operators



- Operates a single leaf or bi-parting gate
- Programmable opening and closing slow down
- 8 different function logics
- Built in closing timer
- Fail safe function for photocells
- Opening and closing delays selectable for overlapping gates
- Electrical thrust force adjustable

### TECHNICAL SPECIFICATIONS

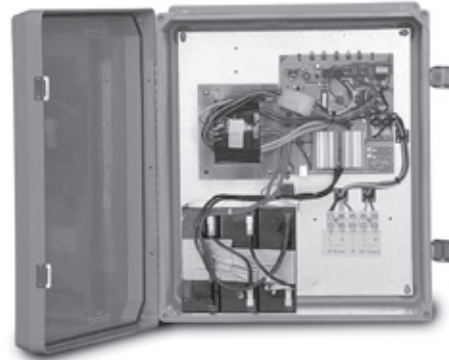
Input voltage	115 VAC (+10% -6%) or 230 VAC (+6% -10%)
Input power	10 W
Motor max. load	800 W
Accessory max. load	500 mA
Electric lock max load	15 VA
Operating Temperature	-4°F - 131°F (-20°C - +55°C)
Dimensions overall (L x D x H)	17.5 x 15.5 x 6.2" (445x393x157mm)
Weight (without batteries)	15.5 Lbs (7 kg)
Protection class	NEMA type 3, 3R, 4, 4X, 12 and 13
Number of operating logics	8
Protection Fuses	2

Description	Shipping Wt	Voltage	Part Number	Price
455D Control Board Replacement (pre new UL version 7)		115V	790919	\$769
		230V	790926	\$769
455D Control Board Replacement (post new UL version 7)		115V	790944	\$769
		230V	790945	\$769
455D with 14 x 16 in. fiberglass enclosure	25 lb (11.3 Kg)	115V	455D115F.5	\$1,288
		230V	455D220F.5	\$1,288
455D with 20 x 16 in. metal enclosure	35 lb (15.8 Kg)	115V	455D115A.5	\$1,525
		230V	455D220A.5	\$1,525
Fiberglass enclosure 14 x 16 in. prewired (without 455D board)	25 lb (11.3 Kg)	115V	3300	\$604
		230V	3303	\$604
Fiberglass enclosure 10 x 12 in. with backplate	10 lb (4.5 Kg)		2359	\$264



# 455D

## Battery Back-up



- Fail safe operation
- AC surge and lightning protection built-in
- LEDs indicate line / battery mode, low battery, replace battery status

### TECHNICAL SPECIFICATIONS

Nominal Input Voltage	120 VAC	230 VAC
Low Voltage transfer to Battery	99 VAC	159 VAC
Output Volt Amp Capacity	1050 VA	800 VA
Output Watt Capacity	705	475
Output Voltage regulation (Battery Mode)	+ / - 5%	
Frequency Compatibility	60 Hz	50 / 60 Hz
Battery Recharge rate	Less than 4 hours from 10% to 90%	
DC system voltage	18 V	12 V
Operating Temperature	32°F - 104°F (0°C - +40°C)	

Description	Shipping Wt	Voltage	Part Number	Price
Battery Backup Single Gate (controls one full system)	45 lb (16.8 Kg)	115V	3520	\$1,956
		230V	3521	\$1,956
Battery Backup Dual Gate (controls two separate full systems)	45 lb (16.8 Kg)	115V	3522	\$2,174
		230V	3523	\$2,174
Battery Backup replacement board		115V	3233	\$1,274
		230V	3234	\$830
12V Replacement battery for 230V version	6 lb (2.7 Kg)		3536	\$71
18V Replacement battery pack for 115V version	10 lb (4.5 Kg)		3533	\$218

### NOTE

Operating Mode: FAIL SAFE

- The battery backup operates so that during a power outage the gates are opened and left open until the power comes back. The operators will guarantee full access to the property during a power outage.

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# AUTOMATED SYSTEMS FOR SLIDE GATES

## Type of installation

Leaf max. weight	900 lb	1,400 lb	1,800 lb	4,000 lb
Residential	C720	746	C721	844
Condominium		746	C721	844
Industrial				844

# C720 - C721

RESIDENTIAL  
CONDOMINIUM

## Low voltage slide gate operators

max weight:

C720 900 lb  
C721 1800 lb



- Residential use (C720), commercial use (C721).
- New mobile-axis reduction gear.
- Exceptionally high mechanical efficiency >80%.
- Control unit with anti-crushing device and electronic encoder with reverse function upon detection of obstacle.
- Magnetic limit switches.
- Master-Slave function for controlling 2 opposing leaves

### TECHNICAL SPECIFICATIONS

Model	C720	C721
Input voltage	115 VAC (+10% -6%)	230 VAC (+6% -10%)
Motor power supply	24 Vdc	
Power	220 W	290 W
Current	7 A	12 A
Electric motor speed	3200 r.p.m.	3.600 r.p.m.
Thrust on gate	72 lbf (320 N)	119 lbf (530 N)
Leaf max weight	900 lb (408 Kg)	1800 lb (816 Kg)
Limit-switches	Magnetic	
Pinion	Z28 module 4	
Gate speed	59 ft/min (18 m/min)	
Use frequency	continuous	
Operating ambient temperature	-4°F - 131°F (-20°C - +55°C)	
Operator weight	17.6 lb (8 kg)	
Dimensions (L x D x H)	11.8 x 7 x 11 in (300x180x280mm)	
Protection class	IP 44	

### C720 - C721

Model	Shipping Wt (approx)	Part No	Price
C720	22 lb (10 Kg)	109322	\$1,025
C721	22 lb (10 Kg)	109321	\$1,636

The package includes: the electro-mechanical operator with control unit E 721, pinion for rack, release key, foundation plate, magnetic limit switches.  
NOTE: rack is not included.

### ACCESSORIES



**Galvanised rack plus fittings.**  
4 sections of 3.3 ft (1m) each

Part no.	490122.1
Price	\$250
Shipping Wt	24 lb (11 Kg)



**Nylon rack with steel reinforcement plus fittings.**  
4 sections of 3.3 ft (1m) each

Part no.	4901204.1
Price	\$188
Shipping Wt	11 lb (5 Kg)



**Battery kit XBAT 24**

Part no.	390923
Price	\$257
Shipping Wt	3.3 lb (1,5 Kg)

Description	Shipping Wt (approx)	Part Number	Price
E721 Control Board (replacement only)		63002485	\$522
XP 30 Photobeam Photocells Pair		785105	\$261
XP 30 Stainless Steel Photobeam Photocells Pair		7851051	\$316
XP 30 adapter for wall or column mount		401065	\$23
XP 30 adapter for conduit connection		401064	\$25
Transmitter Rolling Code 433MHz		787453	\$29
Receiver XF 433Mhz		319006	\$58

RESIDENTIAL  
CONDOMINIUM

# 746 ER

## Slide gate operator



max weight

1,400 lb

- Quick and easy installation thanks to the built-in, prewired control unit.
- Maximum anti-crushing safety with a twin-disk oil-bath clutch and electronic board with encoder for reverse on obstacle.
- Non reversing operator, no electric locks needed.
- Key protected manual release device.
- Inductive or magnetic limit switch (according to model).
- Adjustable mounting bracket for flexible positioning.
- Simplified programming via display and pushbuttons.

### TECHNICAL SPECIFICATIONS

Model	Z16	Z20
Input voltage	230 Vac (+6% -10%)	
Power	300 W	
Current	1.5 A	
Electric motor	0.3 KW (0.4 hp)	
Capacitor	12.5 uF	
Traction and thrust force	140 lbf (625 N)	112 lbf (500 N)
Motor rotation speed	1700 r.p.m.	
Reduction ratio	1:30	
Gate max weight	1400 lb (635 kg)	900 lb (408 Kg)
Gate speed	38 ft/min (11.6 m/min)	47 ft/min (14.3 m/min)
Gate max length	131 ft (40 m)	164 ft (50 m)
Use frequency	70%	
Thermal protection on motor winding	120 °C	
Clutch	Twin-disk in oil-bath	
Operating ambient temperature	-4°F - 131°F (-20°C - +55°C)	
Operator weight	31 lb (14 Kg)	
Dimensions (L x D x H)	10.8 x 7.5 x 13.2 in (275x191x336 mm)	
Protection class	IP 44	

## 746 ER

Model	Shipping Wt (approx)	Part no.	Price
746 ER Z20 Pinion	44 lb (20 Kg)	109773	\$1,790

The packages 746 ER Z20 pinion, designed for on-rack applications include: the operator with Z20 pinion and control board 780D, limit switch magnets, manual release key. NOTE: rack is not included.

## ACCESSORIES



**Foundation plate with side and height adjustments**

Part no.	737816
Price	\$81
Shipping Wt	6 lb (2.7 Kg)



**Galvanised rack plus fittings.  
4 sections of 3.3 ft (1m) each**

Part no.	490122.1
Price	\$250
Shipping Wt	24 lb (11 Kg)



**Pinion Z16 for rack**

Part no.	719130
Price	\$62



**Pinion Z20 for rack**

Part no.	719167
Price	\$62



**Safety edge XS 55 Kit**

Part no.	105688
Price	\$433



**CN 60 E Control unit for safety edge**

Part no.	785200
Price	\$215

Description	Shipping Wt (approx)	Part Number	Price
780 D Control Board (replacement only)	1 lb (.45 Kg)	7909212	\$682
Adapter kit replacement with 780D board and accessories	3 lb (1.4 Kg)	490114	\$701
Mounting pedestal 18 in. galvanized	18 lb (8.2 Kg)	2411	\$268
XP 30 Photobeam Photocells Pair		785105	\$261
XP 30 Stainless Steel Photobeam Photocells Pair		7851051	\$316
XP 30 adapter for wall or column mount		401065	\$23
XP 30 adapter for conduit connection		401064	\$25
Transmitter Rolling Code 433MHz		787453	\$29
Receiver Rolling Code 433MHz		787741	\$51



Automated systems for  
slide gates

CONDOMINIUM  
INDUSTRIAL

# 844 ER

## Slide gate operator

max weight

4000 lb



- Ideal for commercial and industrial applications
- Maximum anti-crushing safety with a twin-disk oil-bath clutch and electronic board with encoder for reverse on obstacle
- Non reversing operator, no electric locks needed
- Key protected manual release device.
- Inductive or magnetic limit switch (according to model).
- Adjustable mounting bracket for flexible positioning.
- Simplified programming via display and pushbuttons
- Compliant with UL325 for Class I,II,III and IV applications

### TECHNICAL SPECIFICATIONS

Model	Z16	Z20
Input voltage	115 VAC (+10% -6%)	
Power	650 W	
Current	7 A	
Electric motor	0.65 KW (0.87 hp)	
Capacitor	70 uF	
Traction and thrust force	247 lbf (1100 N)	198 lbf (880 N)
Motor rotation speed	1700 r.p.m.	
Reduction ratio	1:30	
Gate max weight	4000 lb (1814 Kg)	2200 lb (998 Kg)
Gate speed	38 ft/min (11.6 m/min)	47 ft/min (14.3 m/min)
Gate max length	131 ft (40 m)	164 ft (50 m)
Use frequency	70%	
Thermal protection on motor winding	120 °C	
Clutch	Twin-disk in oil-bath	
Operating ambient temperature	-4°F - 131°F (-20°C - +55°C)	
Operator weight	32 lb (14.5 Kg)	
Dimensions (L x D x H)	10.8 x 7.5 x 15.3 in (275x191x336 mm)	
Protection class	IP 44	

## 844 ER

Model	Shipping Wt (approx)	Part no.	Price
844 ER Z16 Pinion	44 lb (20 Kg)	1098371	\$2,507
844 ER Chain*	50 lb (22.7 Kg)	1098951.5	\$2,507

The packages 844 ER Z16 pinion, designed for on-rack applications include: the operator with Z16 pinion and control board 780D, limit switch magnets, manual release key. NOTE: rack is not included.

The package 844 ER Chain, designed for chain applications, includes: the operator with idle transmissions, Z16 sprocket and control board 780D, limit plates, chain mounting hardware with nickel plated master links, manual release key. NOTE: chain is not included. \*Product is discontinued. Limited qty available until stock is depleted

## ACCESSORIES



**Foundation plate with side and height adjustments**

Part no.	737816
Price	\$81
Shipping Wt	6 lb (2.7 Kg)



**Galvanised rack plus fittings. 4 sections of 3.3 ft (1m) each**

Part no.	490122.1
Price	\$250
Shipping Wt	24 lb (11 Kg)



**#40 Nickel plated chain 10 ft length with master links**

Part no.	2000
Price	\$74
Shipping Wt	5 lb (2.2 Kg)



**#40 Stainless steel chain 10 ft length with master links**

Part no.	2002
Price	\$232
Shipping Wt	5 lb (2.2 Kg)



**Pinion Z16 for rack**

Part no.	719130
Price	\$62



**Pinion Z20 for rack**

Part no.	719167
Price	\$62



**Pinion Z16 for chain**

Part no.	719137
Price	\$93



**Pinion Z20 for chain**

Part no.	719135
Price	\$101

Description	Shipping Wt (approx)	Part Number	Price
780 D Control Board (replacement only)	1 lb (.45 Kg)	79092113	\$682
XP 30 Photobeam Photocells Pair		785105	\$261
XP 30 Stainless Steel Photobeam Photocells Pair		7851051	\$316
XP 30 adapter for wall or column mount		401065	\$23
XP 30 adapter for conduit connection		401064	\$25
Transmitter Rolling Code 433MHz		787453	\$29
Receiver Rolling Code 433Mhz		787741	\$51
Audio alarm enclosure		5000	\$126

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# AUTOMATIC BARRIERS

## Type of installation

<b>Residential</b>	<b>615</b>	<b>B680H</b>
<b>Condominium</b>	<b>615</b>	<b>B680H</b>
<b>Industrial</b>		<b>B680H</b>
<b>Parking</b>		<b>B680H</b>
<b>Use frequency</b>	<b>50%</b>	<b>Continuous duty</b>
<b>Barrier arm max. length</b>	<b>13 ft</b>	<b>27 ft</b>
<b>Opening time (s)</b>	<b>6</b>	<b>1.5-6</b>

Automatic barriers

RESIDENTIAL  
CONDOMINIUM

# 615 BPR

## Automatic barrier

maximum barrier arm length

13 ft

opening time

6 s



- Ideal for light to moderate traffic applications
- Hydraulic operator with opening and closing locks
- Adjustable hydraulic pressure
- External triangular key operated manual release
- Built-in limit-switches
- Quiet operation

### TECHNICAL SPECIFICATIONS 615 BPR

Input voltage	115 VAC (+10% -6%) - 230 Vac (+6% -10%)
Power	220 W
Current	2A (115V) - 1 A (230V)
Motor rotation speed	1400 r.p.m.
Pump flow rate	1,5 l/min
Opening time	6 s
Max barrier arm length	13 ft (4 m)
Thermal protection on motor winding	248 °F (120 °C)
Operating ambient temperature	-4°F - 131°F (-20°C - +55°C)
Weight	75 lb (34 kg)
Barrier body treatment	100 micron epoxy zinc-plating anti-corrosion treatment
Paint	Polyester RAL 2004
Protection class	IP 44
Max. consecutive cycles at 68°F (20°)	220
Use frequency	50%
Dimensions (L x D x H)	10.6 x 5.5 x 40 in (270x140x1015 mm)
Thrust capacitor	8 µF 400 V

### 615 BPR CONTROL BOARD TECHNICAL SPECIFICATIONS

Motor max. load	800 W
Accessories max. current	250 mA
Operating ambient temperature	-4°F - 131°F (-20°C - +55°C)
Protection fuses	F1 = 6,3 A - 250 V - F2 = self-resetting
Function logics	6
Work time (time-out)	Self-learning (0-10 min with steps of 2.5 sec) - Default=10 min
Pause time	Self-learning (0-5 min with steps of 1.5 sec) - Default=30 sec
Terminal board inputs	Open - Close - Stop - Closing safety devices - Limit switches - Power supply
Terminal board outputs	Motor - Flashing lamp - Courtesy light and accessories power supply

## 615 BPR

Model	Shipping Wt (approx)	Part No.	Price
615 standard 115 VAC	79 lb (36 kg)	1049062	\$2,110
615 standard 230 VAC	79 lb (36 kg)	104906	\$2,110

The packages 615 include: barrier body, hydraulic transmission system complete with hydraulic control unit and double-acting piston, installation accessories, a triangular release key. No spring (to be added as per chart below)

NOTE: Make sure to order the barrier arm kit when ordering the operator

### Barrier arm Kits

	Actual Length	Spring	Shipping Wt (approx)	Part No.	Price
6 feet	71.5 in (1815 mm)	5.5	10 lb (4.5 Kg)	428087/615.5	\$323
8 feet	91.1 in (2315 mm)	6.0	12 lb (5.4 Kg)	428088/615.5	\$411
10 feet	110.8 in (2815 mm)	6.0	15 lb (6.8 Kg)	428089/615.5	\$458
13 feet	150.2 in (3815 mm)	7.0	19.5 lb (8.8 Kg)	428090/615.5	\$527

### Balancing springs

Ø	Part No.	Price
5.5	721008	\$68
6.0	721005	\$70
7.0	721006	\$94



### Standard rectangular barrier arms

Length	71.5 in (1815mm)
Part No.	428087
Price	\$220
Length	91.1 in (2315mm)
Part No.	428088
Price	\$300
Length	110.8 in (2815mm)
Part No.	428089
Price	\$342
Length	150.2 in (3815mm)
Part No.	428090
Price	\$411

Note:

The Barrier arm kits include:

- Alluminium barrier arm
- Spring
- Barrier arm bracket

## ACCESSORIES



### Skirted barrier arm kits

Length	6.5 ft (2m)
Part No.	428441
Price	\$408
Length	10 ft (3m)
Part No.	428446
Price	\$38



### Foundation plate

Part No.	490073
Price	\$68



### Articulated barrier arm kit max. ceiling height 10 ft (3 m)

Part No.	428137
Price	\$893



### Barrier arm bracket

Part No.	428342
Price	\$123



### 615 BPR control board

Part No. 115V	20228125
Part No. 220V	790281
Price	\$709



### Anti-vandalism valve

Part No.	401066
Price	\$463

Automatic barriers

# B680H

## Automatic barrier



CONDOMINIUM  
RESIDENTIAL  
INDUSTRIAL

maximum lane opening  
width

6.5-26.5 ft

opening time

1.5-6 s



- Hybrid technology: Hydraulic + Brushless motor
- Over 2,000,000 continuous use cycles without special maintenance
- Optional battery back-up
- Advantage of modular items: only one barrier model and two springs for sectional barrier arms measuring 7.5 to 27 ft, right or left version and for different speeds
- Removable covers available in 4 colors or stainless steel
- Opening speed (programmable): from 1.5 seconds for 7.5 ft barrier arms up to 6 seconds for 27 ft barrier arms.
- Easy-to-program and technologically advanced control unit: Integrated encoder (with reverse in the event of obstacle), two integrated Loop Detectors, and Master/Slave logic
- Optional: integrated flashing LED traffic light with anti-vandalism system and LED lights for barrier arm
- Compatible with 620 and 640 foundation plate

### TECHNICAL SPECIFICATIONS

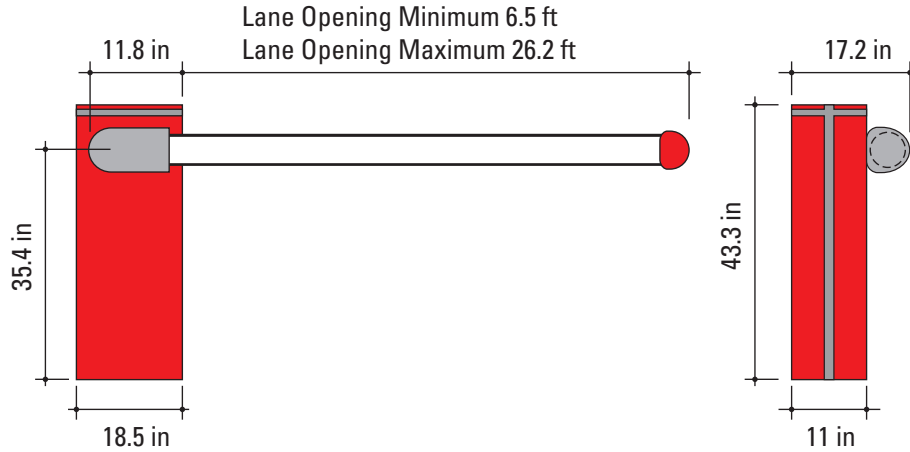
Power supply voltage	Switching: 100 to 240 Vac 50 (60) Hz
Electric motor	Brushless 36 Vdc
Absorbed power	240 W
Absorbed current	1.1 A (at 230 V)
Motor rotation speed	1,000 to 6,000 r.p.m.
Pump flow rate	3,2 l/min (max)
Electronic deceleration	Absolute magnetic encoder
Operating ambient temperature	-4°F - 131°F (-20°C - +55°C)
Weight	187 lb (143 lb body + 44 lb cover)
Type of oil	HP OIL
Barrier body treatment	100 micron epoxy zinc-plating anti-corrosion treatment + paint
Protection class	IP56 (TÜV certified)
Type of barrier arm	Round with safety edge and optional lights

### E 680 CONTROL BOARD TECHNICAL SPECIFICATIONS

Max motor load	240 W
Accessories power supply	24 Vdc
Max accessories load	800 mA
Operating ambient temperature	- 4°F - 131°F (-20°C - +55°C)
Protection fuses	4 self-resetting
Pause time	Programmable (from 0 to 4.1 min)
Motor power	Programmable on 50 levels
Motor speed	Programmable on 50 levels
Terminal board inputs	Loop 1, Loop 2, Open, Close, Safety during closing, Stop, Emergency, Power Supply, 36VDC, Battery XBAT, BUS 2-Easy
Connector inputs	Encoder, Bar release sensor, Integrated flashing light, USB (for updating firmware)
Terminal board outputs	Flashing lamp 24V, Brushless motor, Accessories power supply 24 VDC, 4 programmable outputs (one with relay)



**INSTALLATION DIMENSIONS EXAMPLE**



**SPECIAL KIT OFFERINGS (FOR 6.5-26.2 FT OPENINGS)**

Kit Type	Part No. with White RAL 9010 Cover	Part No. with Grey RAL 9006 Cover	Price
S Kits	1046801WH	1046801GY	\$3,550
L Kits	1046801WHL	1046801GYL	\$4,483

Above S kits include: body B680H, cover, S bracket and balancing spring.

Above L kits include: body B680H, cover, L bracket and balancing spring.

NOTE: Make sure to order the barrier arm when ordering the kit.

**COVERS**

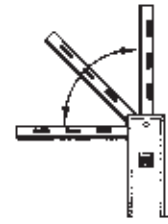
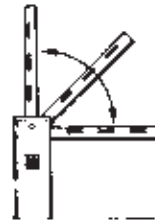


RAL 9006 Grey



RAL 9010 White

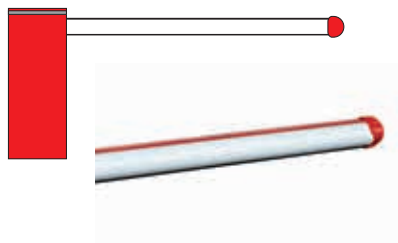
**ORIENTATION**



You can determine right or left barrier version by looking at the barrier from the door side (see drawing to left). The door usually faces the inside of the property.

**S BARRIER ARM KITS: UP TO 16.5 FT OPENING**

**One-piece S barrier arms**



Model	Part number	Orientation	Price
S arm 6.5 ft opening (7.5 ft barrier arm, one piece)	4280451.R	Right	\$240
	4280451.L	Left	
S arm 9.8 ft opening (10.8 ft barrier arm, one piece)	4280421.R	Right	\$286
	4280421.L	Left	
S arm 13 ft opening (14 ft barrier arm, one piece)	4280431.R	Right	\$388
	4280431.L	Left	
S arm 16.4 ft opening (17.4 ft barrier arm, one piece)	4280441.R	Right	\$490
	4280441.L	Left	

- All barrier arms are supplied with reflective stickers, protective rubber on the bottom side and are designed to fit lights on the top side.
- The barrier arm profiles feature an elliptic section for operation even in windy areas.

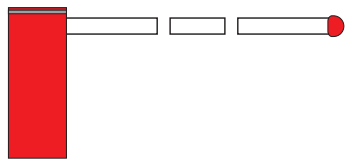
**UPCHARGE FOR LIGHTS PRE-INSTALLED ON S BARRIER ARM KITS**

Model	Part number	Price
Lights for 425045.1 S arm 6.5 ft opening	LED2M	\$169
Lights for 428042.1 S arm 9.8 ft opening	LED3M	\$189
Lights for 428043.1 S arm 13 ft opening	LED4M	\$204
Lights for 428044.1 S arm 16.4 ft opening	LED5M	\$225

Includes Lights, Connector Kit, and Assembly to Barrier Arm. Applies to complete vehicle barrier S kits.

## L BARRIER ARMS: FROM 16.5 FT TO 26.2 FT OPENING

### Sectional L barrier arms



Model	Part number	Price
L Coupling	428616	\$86
L Barrier arm first section 13 ft	428048	\$500
L Barrier arm final section 7 ft	428049	\$424
L Barrier arm final section 10 ft	428050	\$444
L Barrier arm final section 13 ft	428051	\$531

- All barrier arms are supplied with protective rubber on the bottom side and designed to fit lights on the top side.
- The barrier arm profiles feature an elliptic section for operation even in windy areas.
- The sectional barrier arm coupling is invisible once it is installed.
- Barrier arm lights are available, but require customer assembly

### CONFIGURATION EXAMPLES FOR L BARRIER ARMS

#### 20 FT EXAMPLE:

Part No	Description	Qty
1046801WHL	B680H L Kit	1
428616	L coupling	1
428048	L barrier arm first section 13 ft	1
428049	L barrier arm final section 7 ft	1
490117	Reflective strip kit	4

#### 23 FT EXAMPLE:

Part No	Description	Qty
1046801WHL	B680H L Kit	1
428616	L coupling	1
428048	L barrier arm first section 13 ft	1
428050	L barrier arm final section 10 ft	1
490117	Reflective strip kit	4

#### 26 FT EXAMPLE:

Part No	Description	Qty
1046801WHL	B680H L Kit	1
428616	L coupling	1
428048	first section L beam 13 ft	1
428051	L arm final section 13 ft	1
490117	Reflective strip kit	5

### L BARRIER ARM KITS

Model	Part number	Price
20 ft L barrier arm kit	428049/20.5	\$1,099
23 ft L barrier arm kit	428050/23.5	\$1,119
26 ft L barrier arm kit	428051/26.5	\$1,229

Includes L barrier arm first section, L barrier arm final section, L coupling, and reflective strips

**B680H FROM 7.5 FEET TO 27 FEET**

Model	Use			Control unit	Part number	Price
	Barrier arm length	Opening time	Use frequency			
Body B680H UL/CSA	From 7.5 ft to 27 ft	From 1.5 s to 6 s	Continuous (100%)	Built-in E680	1046801	\$2,948

**The B680H package without cover includes:** barrier with control unit and absolute encoder, hydraulic motion transmission system, accessories for installation, triangular release key.

NOTE: Does not include the bracket with balance spring (sold together under another part no.).

**COVERS**



**RAL 9006 Grey**

Part number	416019
Price	\$832



**RAL 9010 White**

Part number	416018
Price	\$832



**RAL 3020 Red**

Part number	416016
Price	\$832



**RAL 5011 Blue**

Part number	416017
Price	\$832



**RAL 9006 stainless steel**

Part number	416020
Price	\$2,948

**BRACKET AND BALANCING SPRING**



**S bracket and balancing spring**

Part number	428436
Price	\$357



**L bracket and balancing spring**

Part number	428437
Price	\$704



**Pivoting round barrier arm**

Length	9.8 ft (3m)
Part number	428176
Price	\$558



**Stainless steel breakaway bracket kit with sensor**  
(S spring required)

Part number	428163
Price	\$1,018

**Spring S**  
(for pivoting round barrier arms)

Part number	63000169
Price	\$289



**Foundation plate**

Part number	490139
Price	\$174



**Flashing light on barrier cover**

Part number	410022
Price	\$267



**Kit for connecting S/L round barrier arm lights**

Part number	390992
Price	\$58



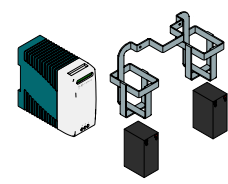
**Barrier arm lights 36 ft (11m)**

Part number	390993
Price	\$204



**Skirt kit 6.5 ft (2m)(\*\*)**

Part number	428441
Price	\$408



**Battery Backup Kit**

Part number	3545.1
Price	\$485



**E680 electronic board**

Part number	63000128
Price	\$917



**Skirt kit 10 ft (3m)(\*\*)**

Part number	428446
Price	\$538



**Reflective strip kit**

Part number	490117
Price	\$23



**Articulated barrier arm kit for S round barrier arm 13 ft (4 m) max**

Part number	428444
Price	\$776



**Sequencer**

Part number	2850.1
Price	\$180

**NOTE**

(\*) The anti-panic unit and the anti-vandal valve cannot coexist on the same barrier.  
 ♦ IMPORTANT: only use round barrier arm 428176 with this bracket  
 (\*\*\*) For S beams max skirt length is 14.8 ft For L beams max skirt length is 24.6 ft

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**ACCESSORIES FOR SPECIFIC USES**

**Anti-vandal valve for B680H (\*)**  
 It protects the hydraulic system if the barrier arm is forced

**Anti-panic unit 230 V (\*)**  
 For manual opening of the barrier arm in the event of a power failure

**Break out sensor for pivoting round barrier arms**

**Adjustable end foot for arms**

Part number 401069  
 Price \$406

Part number 401051  
 Price \$983

Part number 390828  
 Price \$156

Part number 428805  
 Price \$199

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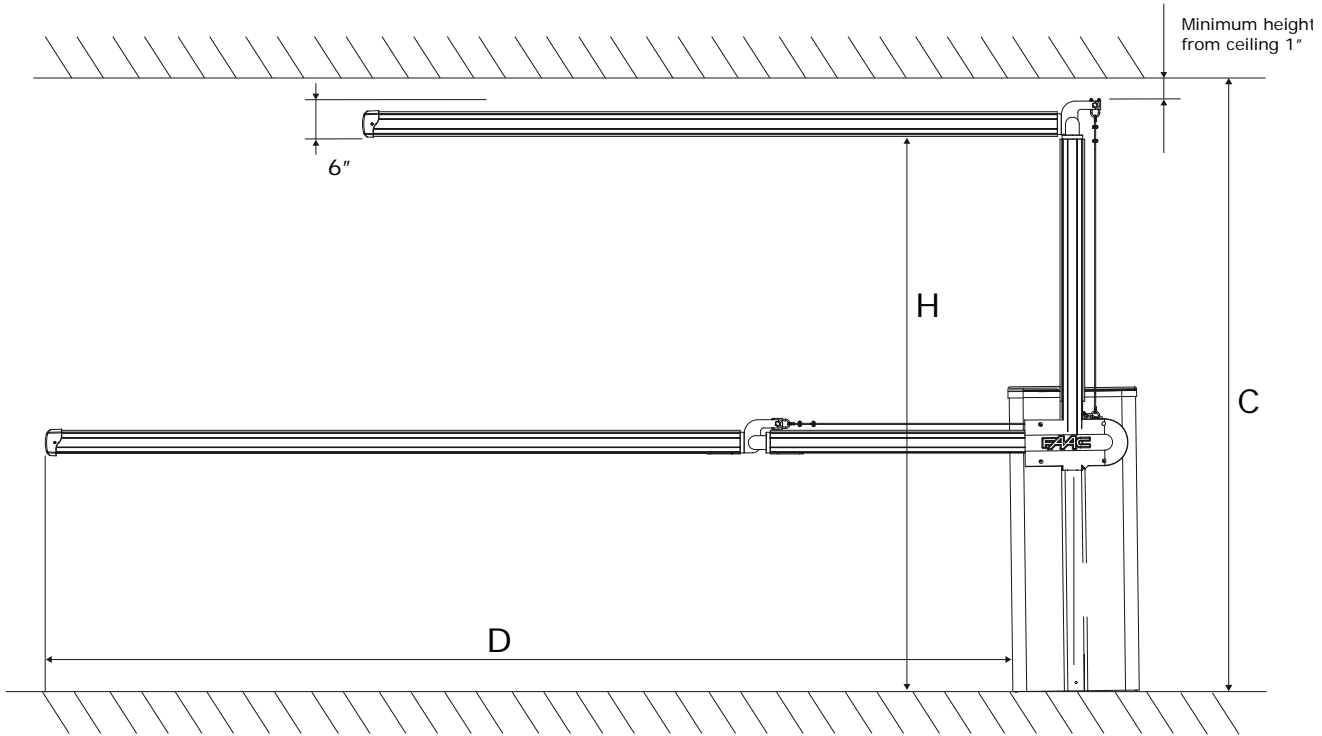
**SPARE S BARRIER ARMS**

Description	Part number	Price
S arm 6.5 ft opening (7.5 ft barrier arm, one piece)	428045	\$240
S arm 9.8 ft opening (10.8 ft barrier arm, one piece)	428042	\$286
S arm 13 ft opening (14 ft barrier arm, one piece)	428043	\$388
S arm 16.4 ft opening (17.4 ft barrier arm, one piece)	428044	\$490

**ARTICULATED S BARRIER ARM KITS UPCHARGE (ARM NOT INCLUDED)**

Description	Part number	Price
Upcharge for standard passage height of H=84 inches (Max barrier arm length = 13 ft)	428444.1-84	\$917
Upcharge for standard passage height of H=98 inches (Max barrier arm length = 13 ft)	428444.1-98	\$917
Upcharge for custom passage height of H=126 inches (Max barrier arm length = 13 ft)	428444.1-C	\$1,152

### B680H Articulated arm order form



Job Site: \_\_\_\_\_

Dimension C - Height from the bottom of the B680H to the lowest overhead obstruction: \_\_\_\_\_ inches

Dimension H - Height from the bottom of the B680H to the bottom of the arm \_\_\_\_\_ inches

Dimension D - Lane width measured from the front side of the B680H housing \_\_\_\_\_ inches

Right Arm \_\_\_\_\_ Left Arm \_\_\_\_\_

NOTES: Dimension C **must** be 7 in greater than Dimension H

Dimension D **max** = 157 in

Approval Signature: \_\_\_\_\_

*B680H Articulated arm order form*

# BOLLARDS

## SOLUTIONS TO CONTROL VEHICLE TRANSIT IN RESIDENTIAL, COMMERCIAL, INDUSTRIAL AND URBAN AREAS WITH LIMITED TRAFFIC, AS WELL AS FOR SAFETY APPLICATIONS IN PERIMETER PROTECTION.

Turnstiles solutions represent an elegant and functional alternative to fixed bollards, gates, barriers, chains and similar. The bollard defines pedestrian areas during peak times or permanently, it enables only authorized people (business owners, residents, hotel guests, garage customers, taxi, owners of parking spaces) to enter and/or exit from certain areas, it defines parking places, squares or sidewalks and protects sensitive areas, such as embassies, coastlines, military installations, etc.

Lines	Application	Type	Use
J200 line	RESIDENTIAL AREAS	(HA) Automatic	To control vehicle access to residential areas
		(SA) Semi-Automatic	To control access to areas occasionally open to traffic or difficult to wire
		(F) Fixed	To complete installations together with other retractable models for access road

Lines	Application	Type	Use
J275 line	COMMERCIAL, INDUSTRIAL AREAS AND URBAN PASSAGES	(HA) Automatic	To control vehicle access to commercial and industrial areas as well as urban passages
		(SA) Semi-Automatic	To control vehicle access to old town centers, areas difficult to wire or areas occasionally open to traffic
		(F) Fixed	To complete installations together with other retractable models for access road

Lines	Application	Type	Use
J355 line	CERTIFIED PERIMETER SAFETY	(HA) Automatic	To delimit, protect and control vehicle access to sensitive areas (embassies, military areas, etc.) and sites with special safety requirements
		(F) Fixed	To protect sensitive areas, fixed installations or together with other retractable models

## J200 HA

# Retractable bollard for traffic control in residential areas

type

automatic

height

23.6 in (600 mm)



- Easy to transport, store and install, thanks to the self-supporting structure - pit not required - and to its limited weight
- A streamlined product, configurable by selecting the desired installation accessories
- Simplified maintenance (just one person is needed)
- Fast and quiet movement

## DIMENSIONS AND TECHNICAL SPECIFICATIONS

Model	J200 HA 600
Drive	Hydraulic operator
Cylinder stroke	23.6 in (600 mm)
Cylinder diameter	7.9 in (200 mm)
Cylinder material, standard version	Steel S235JRG2 EN 10277 0.24 in (6mm) thick
Cylinder surface treatment	Cataphoresis and polyester powder painted RAL 7021 metallic dark grey
Cylinder material, stainless steel version	AISI 316 satin finished 0.24 in (6mm) thickness
Cylinder head	Aluminium RAL 9006
Rise time	Approx. 5 sec(*)
Descent time	Approx. 7 sec(*)
Input voltage	220-240 VAC; 50 / 60 Hz
Power	230 W(*)
Protection class	IP 67
Recommended use	Use in residential applications
Reflecting strip height	1 in (25 mm)
Manual lowering operation	With hydraulic circuit mechanical release
Total weight	198 lb (90 kg)
Operating ambient temperature	5°F - 131°F (-15 °C / +55 °C)
Operating ambient temperature with heater (optional)	-13°F - 131°F (-25 °C / +55 °C)
Overall dimensions	16 x 20 x 32 in (400x500x800 mm)
Foundation size (LxWxH)	28x28x43 in (700x700x1100 mm)

(\*) measured at 230V



**STANDARD VERSIONS IN PAINTED STEEL**

Models	Height	Shipping Wt (approx)	Part No	price
J200 HA 600	23.6 in (600 mm)	205 lb (93 Kg)	116500	\$7,013

The product features:

- steel cylinder, thickness 0.24 in (6 mm) cataphoresis treatment and painted
- powder paint dark grey metallised RAL 7021
- hydraulic lock in the up position (in the event of power a power outage) with special release key
- support structure to be cemented, cataphoresis treatment (pit not required)

**STANDARD VERSIONS IN SATIN FINISH STAINLESS STEEL AISI 316**

Models	Height	Shipping Wt (approx)	Part No	price
J200 HA 600	23.6 in (600 mm)	205 lb (93 Kg)	116505	\$8,657

The product features:

- cylinder in stainless steel thickness 0.24 in (6 mm) satin-finished
- hydraulic lock in the up position (in the event of power a power outage) with special release key
- supporting structure to be cemented, cataphoresis treatment (pit not required)

**CONTROL BOARD**



**JE275 bollard control board**  
controls up to 4 bollards, type J200 HA

Part No	116300
Price	\$693

**OPTIONAL ACCESSORIES**



**Pit heater for J200HA**

Part No	116501
Price	\$793



**Solenoid valve and pressure switch for J200HA**

Part No	116502
Price	\$719



**Acoustic buzzer for J200HA**

Part No	116503
Price	\$68



**LED lights kit for J200HA**

Part No	116504
Price	\$179

Traffic Bollards

# J200 SA

 RESIDENTIAL  
 AREAS

## Retractable bollard for traffic control in residential areas

type

semi-automatic

height

23.6 in (600 mm)



- Power supply and wiring not required
- Simple and safe movement, with easy to use unlocking key
- A streamlined product, configurable by selecting the desired installation accessories
- Easy to transport, store and install, thanks to the limited weight of the product
- Low position lock guaranteed against accidental release
- Simplified maintenance (just one person is needed)

### DIMENSIONS AND TECHNICAL SPECIFICATIONS

Model	J200 SA 600
Type of operator	Single-acting gas actuator
Height of cylinder from ground	23.6 in (600 mm)
Cylinder diameter	7.9 in (200 mm)
Cylinder material, standard version	Steel S235JRG2 EN 10277 0.24 in (6mm) thick
Cylinder surface treatment	Cataphoresis and polyester powder paint, dark grey metallised RAL 7021
Cylinder material, stainless steel version	AISI 316 satin finished 0.24 in (6mm) thickness
Cylinder head	Aluminium RAL 9006
Release device	Key operated (supplied)
Reflecting strip height	1 in (25 mm)
Standard reflecting strip colour	Orange
Overall Weight	181 lb (82 kg)
Dimensions WxDxH	16x20x32 in (400x500x800 mm)
Foundation size (LxWxH)	28x28x43 in (700x700x1100 mm)

### STANDARD VERSIONS IN PAINTED STEEL

Models	Height	Shipping Wt (approx)	Part No	Price
J200 SA 600	23.6 in (600 mm)	205 lb (93 Kg)	116508	\$5,098

The product features:

- cylinder in stainless steel, thickness (.19 in) 5 mm cataphoresis treatment and painted
- powder painted dark grey metallised RAL 7021
- supporting structure to cement, cataphoresis treatment (pit not required)

### STANDARD VERSIONS IN satin finish STAINLESS STEEL AISI 316L

Models	Height	Shipping Wt (approx)	Part No	Price
J200 SA 600	23.6 in (600 mm)	205 lb (93 Kg)	116509	\$6,967

The product features:

- cylinder in stainless steel thickness (.19 in) 5 mm satin-finished
- hydraulic lock in raised position (in the event of power failure) with special release key
- supporting structure to cement, cataphoresis treatment (pit not required)

### OPTIONAL ACCESSORIES



**LED lights kit for J200HA**

Part No	116504
Price	\$179



**Release key (Qty 5)**

Part No	390084
Price	\$104

Traffic Bollards

# J200 F

RESIDENTIAL  
AREAS

## Fixed bollard for traffic control in residential areas

type

fixed

height

23.6 in (600 mm)



- Power supply and wiring not required
- Simple installation and limited digging operations
- Aesthetically consistent with other retractable bollards in mixed installations
- Easy to transport, store and install, thanks to the limited weight of the product

### DIMENSIONS AND TECHNICAL SPECIFICATIONS

Model	J200 F H600
Cylinder height	23.6 in (600 mm)
Cylinder diameter	7.9 in (200 mm)
Cylinder material, standard version	Steel S235JRG2 EN 10277 0.24 in (6mm) thick
Cylinder surface treatment	Cathaphoresis and polyester powder painted RAL 7021 metallic dark grey
Cylinder material, stainless steel version	AISI 316 satin finished 0.24 in (6mm) thickness
Cylinder head	Aluminum RAL 9006
Standard reflecting strip	Height 1 in (25 mm)
Total weight	77 lb (35 kg)
Foundation size (LxWxH)	28x28x8 in (700x700x200 mm)

### STANDARD VERSIONS IN PAINTED STEEL

Models	Height	Shipping Wt (approx)	Part No	Price
J200 F 600	23.6 in (600 mm)	82 lb (37 kg)	116506	\$2,066

The product features:

- steel cylinder, thickness 0.24 in (6 mm) cataphoresis treatment and painted
- powder paint dark grey metallised RAL 7021
- supporting structure to be cemented, cataphoresis treatment (pit not required)

### STANDARD VERSIONS IN SATIN FINISH STAINLESS STEEL AISI 316

Models	Height	Shipping Wt (approx)	Part No	Price
J200 F 600	23.6 in (600 mm)	82 lb (37 kg)	116507	\$3,164

The product features:

- cylinder in stainless steel thickness 0.24 in (6 mm) satin-finished
- supporting structure to be cemented, cataphoresis treatment (pit not required)

### OPTIONAL ACCESSORIES



**LED lights kit for J200HA**

Part No	116504
Price	\$179

# J275 HA V2

## Retractable traffic bollard

Traffic Bollards

COMMERCIAL  
INDUSTRIAL AREAS  
VEHICLE TRANSIT

type

automatic

height

23.6 in (600 mm)  
31.5 in (800 mm)



- Guaranteed for high frequency use
- Supplied with the main accessories already included
- Extreme care in the selection of materials
- Simple maintenance (just one person is needed)
- Fast and silent movements
- Built-in hydraulic slow down for softer landing in opening

### DIMENSIONS AND TECHNICAL SPECIFICATIONS

Model	J275 HA V2 600	J275 HA V2 800
Drive	Hydraulic operator	
Cylinder stroke	23.6 in (600 mm)	31.5 in (800 mm)
Cylinder diameter	10.8 in (275 mm)	
Cylinder material, standard version	Fe 360 steel 0.28 in. thick (7mm)	
Standard cylinder surface treatment	Cathaphoresis and polyester powder paint RAL 7021 metallic dark grey	
Cylinder material, stainless steel version	AISI 316 satin finished 0.24 in (6mm) thickness	
Cylinder head	Aluminium RAL 9006	
Rise time	Approx. 5 sec(*)	Approx. 7 sec(*)
Descent time (standard)	Approx. 3.5 sec(*)	Approx. 4.5 sec(*)
Descent time (rapid)	Approx. 1.2 sec(*)	Approx. 1.5 sec(*)
Input voltage	220-240 VAC; 50 / 60 Hz	
Power	220 W(*)	
Protection class	IP 67	
Recommended use	Intensive (Traffic)	
Standard reflecting strip	Height 2.2 in (55 mm)	
Manual lowering operation	With hydraulic circuit mechanical release	
Impact resistance	38 KJoules/painted steel - 67 KJoules/stainless steel	
Crash resistance	128 KJoules/painted steel - 207 KJoules/stainless steel	
Total weight (Bollard + Pit)	247 + 121 lb (112+55kg)	287 + 143 lb (130k+ 65kg)
Operating ambient temperature	5°F - 131°F (-15 °C / +55 °C)	
Operating ambient temperature with heater (optional)	-13°F - 131°F (-25 °C / +55 °C)	
Foundation size (LxWxH)	39 x 39 x 49 in (1000x1000x1250 mm)	39 x 39 x 61 in (1000x1000x1540 mm)

(\*) measured at 230V

### STANDARD VERSIONS IN PAINTED STEEL

Models	Height	Shipping Wt (approx)	Part No	Price
J275 HA V2 600	23.6 in (600 mm)	400 lb (181 Kg)	116006	\$9,029
J275 HA V2 800	31.5 in (800 mm)	440 lb (200 Kg)	116007	\$9,585

The product features:

- cylinder in steel, thickness 0.28 in (7 mm) cathaphoresis treatment and painted
- powder paint dark grey metallised RAL 7021
- flashing light ring with central LED
- audible buzzer (active during movement)
- emergency lowering in the event of power outage (can be excluded)

### STANDARD VERSIONS IN SATIN FINISH STAINLESS STEEL AISI 316

Models	Height	Shipping Wt (approx)	Part No	Price
J275 HA V2 600	23.6 in (600 mm)	330 lb (150 Kg)	116036	\$11,091
J275 HA V2 800	31.5 in (800 mm)	375 lb (170 Kg)	116037	\$11,982

The product features:

- cylinder in stainless steel thickness 0.24 in (6 mm) satin-finished
- flashing light ring with central LED
- audible buzzer (active during movement)
- emergency lowering in the event of power outage (can be excluded)

### CONTROL BOARD



**JE275 bollard control board**  
controls up to 3 bollards type J275 HA

Part No	116300
Price	\$693

### INSTALLATION ACCESSORIES



**JP 275/600 pit for bollard H600 including counterframe**

Part No	1161001
Price	\$1,227



**JP 275/800\* pit extension for bollard H800\***

Part No	1161011
Price	\$224



**JH275 pit heater to extend operation down to -13° F (-25°C)**

Part No	116200
Price	\$793



**JC275 pit cover**

Part No	116201
Price	\$335

### NOTE

(\*) both parts are needed for the 800 mm version 116100 + 116101.

# J275 SA

Traffic Bollards

COMMERCIAL  
INDUSTRIAL AREAS  
VEHICLE TRANSIT

## Retractable traffic bollard

type

semi-automatic

height

23.6 in (600mm)



- Power supply and wiring not required
- Simple and safe movement, thanks to the special release key
- Supplied with the main accessories already included
- Low position lock guaranteed against accidental release
- Extremely simple maintenance

### DIMENSIONS AND TECHNICAL SPECIFICATIONS

Model	J275 SA 600
Drive	Gas actuator
Cylinder stroke	23.6 in (600 mm)
Cylinder diameter	10.8 in (275 mm)
Cylinder material, standard version	Fe 360 steel 0.28 (7mm) thickness
Standard cylinder surface treatment	Cataphoresis and polyester powder painted RAL 7021 metallic dark grey
Cylinder material, stainless steel version	AISI 316 satin finished 0.24 in (6mm) thickness
Cylinder head	Aluminium RAL 9006
Rising	Key release for automatic rising, with gas actuator
Lowering	Key release to lower, with pressure on the top of the cylinder
Standard reflecting strip	Height 2.2 in (55 mm)
Impact resistance	38 KJoules/painted steel - 67 KJoules/stainless steel
Crash resistance	128 KJoules/painted steel - 207 KJoules/stainless steel
Total weight (Bollard + Pit)	154 + 121 lb (70+55kg)
Foundation size (LxWxH)	39 x 39 x 49 in (1000x1000x1250 mm)



### STANDARD VERSIONS IN PAINTED STEEL

Models	Height	Shipping Wt (approx)	Part No	Price
J275 SA 600	23.6 in (600 mm)	280 lb (127 Kg)	116050	\$6,763.

The product features:

- cylinder in steel, thickness 0.28 in (7 mm) cathaphoresis treatment and painted
- powder paint dark grey metallised RAL 7021
- flashing lights ring with central LED\*
- mechanical lock in the up position with special release key (2 keys included)

### STANDARD VERSIONS IN SATIN FINISH STAINLESS STEEL AISI 316

Models	Height	Shipping Wt (approx)	Part No	Price
J275 SA 600	23.6 in (600 mm)	280 lb (127 Kg)	116060	\$8,428

The product features:

- cylinder in stainless steel thickness 0.24 in (6 mm) satin-finished
- flashing lights ring with central LED\*
- mechanical lock in the up position with special release key (2 keys included)

### INSTALLATION ACCESSORIES



**JP 275/600 pit for bollard H600**

Part No	1161001
Price	\$1,227

### OPTIONAL ACCESSORIES



**JC275 pit cover**

Part No	116201
Price	\$335



**Release key (Qty 5)**

Part No	390084
Price	\$104

### NOTE

\*The power supply unit (24V DC and the cable for the flashing light are not supplied.

# J275 F

## Fixed traffic bollard

COMMERCIAL  
INDUSTRIAL AREAS  
VEHICLE TRANSIT

type

fixed

height

23.6 in (600 mm)  
31.5 in (800 mm)



- Power supply and wiring not required
- Simple installation and limited digging operations
- Aesthetically consistent with other retractable bollards in mixed installation
- Possibility to remove the bollard to temporarily open the pedestrian area to traffic

### DIMENSIONS AND TECHNICAL SPECIFICATIONS

Models	J275 F 600	J275 F 800
Cylinder height	23.6 in (600 mm)	31.5 in (800 mm)
Cylinder diameter	10.8 in (275 mm)	
Cylinder material, standard version	Fe 360 steel 0.16 (4mm) thickness	
Standard cylinder surface treatment	Cathaphoresis and polyester powder painted RAL 7021 metallic dark grey	
Cylinder material, stainless steel version	AISI 316 satin finished 0.12 in (3mm) thickness	
Cylinder head	Aluminum RAL 9006	
Standard reflecting strip	Height 2.2 in (55 mm)	
Crash resistance	35 KJoules/Painted steel - 59 KJoules/stainless steel	
Total weight Bollard	75 lb (34 kg)	84 lb (38 kg)
Foundation size (LxWxH)	30x30x6 in (750x750x150 mm)	

### STANDARD VERSIONS IN PAINTED STEEL

Models	Height	Shipping Wt (approx)	Part No	Price
J275 F 600	23.6 in (600 mm)	80 lb (36 Kg)	116020	\$1,769
J275 F 800	31.5 in (800 mm)	89 lb (40 Kg)	116021	\$1,873

The product features:

- cylinder in stainless steel, thickness 0.16 in (4 mm) cathaphoresis treatment and painted
- powder paint dark grey metallised RAL 7021
- flashing lights ring with central LED\*

### SPECIAL VERSIONS IN SATIN FINISH STAINLESS STEEL AISI 316

Models	Height	Shipping Wt (approx)	Part No	Price
J275 F 600	23.6 in (600 mm)	80 lb (36 Kg)	116040	\$2,706
J275 F 800	31.5 in (800 mm)	89 lb (40 Kg)	116041	\$2,966

The product features:

- cylinder in stainless steel thickness 0.12 in (3 mm) satin-finished
- flashing lights ring with central LED\*

### INSTALLATION ACCESSORIES



**Fixed bollard mounting frame  
JPF275**

Part No	116120
Price	\$365

### OPTIONAL ACCESSORIES



**JC275 pit cover**

Part No	116201
Price	\$335

### NOTE

- (\*) The power supply (24 Vdc) and the cable (2 x AWG 16) for the LED lights are not supplied.  
 \*The power supply unit (24V DC and the cable for the flashing light are not supplied.

## J355 M30-P1 HA

## Retractable security bollard



type

automatic

height

39.4 in (1000 mm)

The AUTOMATIC bollard Turnstiles J355HA-M30-P1 is designed and tested for the protection of sensitive areas such as airports, embassies, consulates, banks, ports, etc.

The bollard Turnstiles J355HA-M30-P1 has been tested according to: "ASTM F 2656-07 - Standard Test Method for Vehicle Crash Testing of Perimeter Barriers", obtaining certification for the highest class of penetration possible. Classification M30-P1 indicates that the bollard Turnstiles J355 is able to stop a 15,000 lb (6,800 kg) truck travelling at 30 mile/h (50 km/h) with just 39 in (1 meter) of total penetration (P1).

- CERTIFIED according to Standard ASTM F 2656-07 M30
- Supplied with the main accessories already included
- Lock in the up position guaranteed even in the event of a power outage
- Extreme care in the selection of materials
- Also available in the EFO (Emergency Fast Operation) version for very fast rise time

## DIMENSIONS AND TECHNICAL SPECIFICATIONS

Model	J355 HA	J355 HA Stainless Steel
Drive		Hydraulic operator
Cylinder stroke		39.4 in (1.000mm)
Cylinder diameter		14 in (355 mm)
Cylinder material	Steel S355JR EN10210 0.63 in (16mm) thickness	
Cylinder surface treatment	Cathaphoresis and polyester powder painted RAL 7021 metallic dark grey	AISI 316L satin finished
Cylinder head	Aluminium RAL 9006	
Rise time	Standard version - approx. 6 sec (*)/ EFO version - approx. 1.5 sec(*)	
Descent time	Approx. 2 sec	
Input voltage	230 Vac +6% - 10%; 50 / 60 Hz	
Max Power	1,200W	
Maximum force	1,124 lbf (5,000 N)	
Hydraulic pump protection class	IP 67	
Recommended use	Security areas	
Reflecting strip height	2.2 in (55 mm)	
Impact resistance	150 Kjoules	
Crash resistance	656 KJoules (according to the ASTM standards F2656-07 - M30)	
Max thrust force	5000N	
Total weight (Bollard + Pit)	1,080 + 550 lb (490+250 kg)	
Operating ambient temperature	5°F - 131°F (-15 °C / +55 °C)	
Operating ambient temperature with heater (optional)	-13°F - 131°F (-25 °C / +55 °C)	
Foundation size (LxWxH)	126x63x71 in (3200x1600x1800 mm)	

(\*) measured at 230V

### STANDARD VERSIONS IN PAINTED STEEL

Models	Height	Shipping Wt (approx)	Part No	Price
J355 HA M30-P1	39.4 in (1,000 mm)	1,200 lb (550 Kg)	116301	<b>\$23,047</b>
J355 HA M30-P1 EFO			116302	<b>\$26,510</b>
J355 HA PIT		440 lb (200 Kg)	116110	<b>\$5,508</b>

The product features:

- steel cylinder, thickness 0.63 in (16 mm) with cataphoresis treatment and painted
- powder paint dark grey metallic RAL 7021
- flashing lights ring with central LED
- hydraulic lock in the up position (in the event of a power outage)
- watertight galvanized steel pit sheet with built-in drainage connection
- emergency circuit for a fast rise time (EFO version only)

### STANDARD VERSIONS IN SATIN FINISH STAINLESS STEEL AISI 316

Models	Height	Shipping Wt (approx)	Part No	Price
J355 HA M30-P1	39.4 in (1,000 mm)	1,200 lb (550 Kg)	116331	<b>\$25,327</b>
J355 HA M30-P1 EFO			116332	<b>\$28,917</b>
J355 HA PIT		440 lb (200 Kg)	116110	<b>\$5,508</b>

The product features:

- steel cylinder, thickness 0.63 in (16 mm) with cataphoresis treatment and sleeve in stainless steel satin-finished
- flashing lights ring with central LED
- hydraulic lock in the up position (in the event of a power outage)
- watertight galvanized steel pit sheet with built-in drainage connection
- emergency circuit for a fast rise time (EFO version only)

### CONTROL BOARD



**JE275 bollard control board**  
controls 1 J355 M30-P1 bollard

Part No	116300
Price	\$693



**Foundation pit for J355 M30 HA**

Part No	116110
Price	\$5,508

### OPTIONAL ACCESSORIES



**Pit heater for J355**

Part No	116202
Price	\$989



**J355 Manual release kit**

Part No	116102
Price	\$148

CERTIFIED  
PERIMETER  
PROTECTION

# J355 M30-P1 F

## Fixed security bollard

type

fixed

height

39.4 in (1000 mm)



Turnstiles J355F M30-P1 traffic bollard has successfully passed the ASTM F 2656-07 simulation testing. Turnstiles J355 traffic bollard is therefore suitable for the permanent protection of sensitive areas perimeters, alone or in combination with retractable (HA) models.

### DIMENSIONS AND TECHNICAL SPECIFICATIONS

Models	J355 F	J355 F Stainless Steel
Height of cylinder from ground	39.4 in (1.000mm)	
Cylinder diameter	14 in (355 mm)	
Cylinder head material	Steel S355JR EN 10210 0.63 in (16mm) thick	
Cylinder surface treatment	Cataphoresis and polyester powder paint, dark grey metallised RAL 7021	AISI 316L Satin finish
Cylinder head	Alluminium RAL 9006	
Reflecting strip height	2.2 in (55 mm)	
Standard reflecting strip colour	White	
Break-in resistance	656.000 J	
Overall weight	1437 lb (652 Kg)	1444 lb (655 Kg)
Foundation psize (LxWxH)	157x91x14 in (4000x2300x350 mm)	

### STANDARD VERSIONS IN PAINTED STEEL

Models	Height	Shipping Wt (approx)	Part No	Price
J355 F M30-P1	39.4 in (1,000 mm)	1,200 lb (550 Kg)	116321	\$9,780

The product features:

- cylinder in stainless steel, thickness 0.63 in (16 mm) cataphoresis treatment and painted
- powder painted dark grey metallised RAL 7021
- flashing lights ring with central LED\*
- underground modular structure

### STANDARD VERSIONS IN SATIN FINISH STAINLESS STEEL AISI 316L

Models	Height	Shipping Wt (approx)	Part No	Price
J355 F M30-P1	39.4 in (1,000 mm)	1,200 lb (550 Kg)	116341	\$11,210

The product features:

- steel cylinder, 0.63 in (16 mm) thick, with cataphoresis treatment and sleeve in stainless steel satin-finished
- flashing lights ring with central LED
- underground modular structure

### INSTALLATION ACCESSORIES



**Bottom Plate for J355 F**

Part No.	63000324
Price	\$989

### NOTES

\*The power supply unit (24V DC and the cable for the flashing light are not supplied.

## J355 M50 HA

## Retractable security bollard



- tested according to PaS 68:2013 and IWA 14-1:2013 Standards
- Hydraulic control unit integrated in the bollard
- Also available in EFO (Emergency Fast Operation) version for very rapid rising.

type

automatic

height

47.25 inches  
(1,200 mm)

## DIMENSIONS AND TECHNICAL SPECIFICATIONS

Model	J355 HA M50	J355 HA M50 INOX
Type of operator		Hydraulic Operator
Cylinder height from ground		47.25 in (1200 mm)
Cylinder diameter		14 in (355 mm)
Cylinder material	Steel S355JR EN 10210 (thickness 1.2 inches (30 mm))	
Cylinder treatment	Cataphoresis and polyester powder paint, dark grey metallised RAL 7021	AISI 316L satin finishing
Rising time	approx. 6 s (*) / EFO version approx. 2 seconds (*)	
Descent time	approx. 3 s (*)	
Release device	optional	
Power supply voltage	220-240V ~ 50/60Hz	
Max. power	3300 w (*)	
Hydraulic pump unit protection class	IP67	
Type of use	Use in security areas	
Max expressed force	9.000 N	
Impact resistance	-	
Crash resistance	1.852.000 J	
Pit weight	518 lb (235 Kg)	
Bollard weight	1874 lb (850 kg)	
Total weight	2392 lb ( 1085 Kg)	
Operating ambient temperature	5°F / +131°F (-15°C / +55°C)	
Operating ambient temperature with heater	-40°F / +131°F (-40°C / +55°C)	
Foundation size (LxWxH)	122 x 63 x 72.8 inches (3100 x 1600 x 1850 mm)	

(\*) measured at 230V



### STANDARD VERSIONS IN PAINTED STEEL

Models	Height	Shipping Wt (approx)	Part No	Price
J355 HA M50	47.25 in (1200 mm)	1874 lb (850 kg)	116351	\$40,290
J355 HA M50 EFO	47.25 in(1200 mm)	1874 lb (850 kg)	116352	\$45,798

The product features:

- a 30 mm steel cylinder cataphoresis treated and painted
- powder painted coated grey metallised RAL 7021
- flashing light ring with central LED
- hydraulic lock in raised position (in the event of a power failure)
- emergency circuit for fast rise (EFO version only)

### STANDARD VERSIONS IN satin finish STAINLESS STEEL AISI 316L

Models	Height	Shipping Wt (approx)	Part No	Price
J355 HA M50	47.25 in (1200 mm)	1896 lb ( 860 Kg)	116381	\$45,390
J355 HA M50 EFO	47.25 in (1200 mm)	1896 lb ( 860 Kg)	116382	\$49,878

The product features:

- a 30 mm steel cylinder cataphoresis treatment and satin-finished
- flashing light ring with central LED
- hydraulic lock in raised position (in the event of a power failure)
- emergency circuit for fast rise (EFO version only)

### ELECTRONIC CONTROL UNITS



JE275 Control unit\*

Part No	116300
Price	\$693

### INSTALLATION ACCESSORIES



Foundation pit for J355 M50 HA

Part No	116130
Price	\$7,242

### OPTIONAL ACCESSORIES



Pit heater for J355

Part No	116202
Price	\$989

### NOTES

\*Controls max 1 bollard J355 HA

CERTIFIED  
PERIMETER  
AREAS

# J355 M50 F

## Fixed security bollard



type

automatic

height

47.25 inches  
(1,200 mm)

- Tested according to the American standard ASTM F 2656-07.
- «Shallow Mounted» product: very low excavation depth needed.
- Total aesthetic consistency with other retractable bollards (HA); perfect for mixed installations.

### DIMENSIONS AND TECHNICAL SPECIFICATIONS

Model	J355 F M50	J355 F M50 INOX
Cylinder height from ground	47.25 in (1200 mm)	47.25 in (1200 mm)
Cylinder diameter	14 in (355 mm)	14 in (355 mm)
Cylinder material	Steel S355JR EN10210 (16mm thick)	
Cylinder treatment	Cataphoresis and polyester powder paint, dark grey metallised RAL 7021	INOX AISI 316L satin finish
Reflective strip height	55 mm	55 mm
Standard reflecting strip colour	White	White
Break in resistance	1.680.00 J	1.680.00 J
Total weight	1500 lb (680 Kg)	1500 lb (680 Kg)
Foundation Size (LxWxH)	157.5 x 90.5 x 13.8 in (4000 x 2300 x 350mm)	157.5 x 90.5 x 13.8 in (4000 x 2300 x 350mm)

### STANDARD VERSIONS IN PAINTED STEEL

Models	Height	Shipping Wt (approx)	Part No	Price
J355 F M50	47.25 in (1200 mm)	1500 lb (680 Kg)	116371	\$13,158

The product features:

- a 16 mm thick steel cylinder cathophoresis treated and painted
- powder painted coated grey metallised RAL 7021
- flashing light ring with central LED\*
- underground modular structure

### STANDARD VERSIONS IN satin finish STAINLESS STEEL AISI 316L

Models	Height	Shipping Wt (approx)	Part No	Price
J355 F M50	47.25 in (1200 mm)	1500 lb (680 Kg)	116391	\$15,810

The product features:

- a 16 mm thick steel cylinder cathophoresis treatment and satin-finished
- flashing light ring with central LED\*
- underground modular structure

### OPTIONAL ACCESSORIES



J355 F M50 Bottom Plate

Part No 63000948

Price \$1,237

### NOTES

\*The power supply unit (24V DC and the cable for the flashing light are not supplied).

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# PEDESTRIAN DOOR OPERATOR

# 950 N2

## Automatic swing door operator

NEW



- Electro-mechanical automated system with 24 VDC motor and return spring
- New integrated microprocessor control unit allows for accurate speed adjustments
- New USB port for firmware updates and configuration upload/download
- 8 input and 2 outputs now programmable with the new KP-EVO
- New multi-operators connections capabilities with dedicated BUS
- Anodized aluminum housing
- Can be installed on the lintel or directly on the door, outward or inward opening
- Reverses on obstacle detection for safe operations
- Integrated function selector for the logics: AUTOMATIC-MANUAL-OPEN
- Self-learning of opened, closed position and door weight
- Selectable "PUSH & GO" function
- Manual operation in case of power outage and closing with spring
- Mechanically and pinout compatible with the previous versions

### TECHNICAL SPECIFICATIONS

Input voltage	115 VAC (+10% -6%)
Power	100 W
Current	1 A
Motor voltage	24 VDC with encoder
Accessory power supply	24 VDC / 500 mA
Electrical lock power supply	24 VDC / 500 mA (NO / NC)
Opening angle	100 ° to 125 °
Opening speed	4 to 10 s (adjustable)
Closing speed	4 to 10 s (adjustable)
Use frequency	continuous
Operating ambient temperature	-4°F - 131°F (-20°C - +55°C)
Operator weight	22 lb (10 Kg)
Dimensions (L x D x H)	20.8 x 4.1 x 6.3 in (530x105x160mm)
Protection class	IP 23 (indoor use only)

Leaf length (in)	Max leaf weight (lb) Articulated arm	Max leaf weight (lb) Sliding arm
34	550	430
36	490	380
38	440	340
40	400	310
42	360	280
44	330	260

Leaf length (in)	Max leaf weight (lb) Articulated arm	Max leaf weight (lb) Sliding arm
46	300	240
48	275	215
50	255	200
52	240	185
54	220	170
56	205	160

## 950 N2

Model	Shipping Wt (approx)	Part No	Price
950 N2	26.5 lb (12 Kg)	10541512	\$1,723
Articulated (pushing) arm		390039	\$208
Sliding (pulling) arm		390040	\$208
Operator shaft extension 2 in (50mm)		390042	\$58
Operator shaft extension 3.15 in (80 mm)		390043	\$79

The 950 N2 package includes: the electro-mechanical operator with control unit, function selector and aluminium housing



### KP-EVO Programming Unit

- Allows to program all the functions of the operator using pushbuttons and a graphic LCD display with backlight
- Available programs: Manual, Automatic, Night, Open, One-Way, Partial Opening
- Timer function with backup battery (5 years lifetime)
- Up to 5 daily time slots
- Reset function
- Customizable password protection
- Interlock with or without memory
- Emergency command (opening/closing)
- Diagnostic display (version, number of cycles, etc.)
- Ideal for installers

Model	Part No	Price
KP-EVO	790022	\$395



### LK-EVO Function Selector

- Allows to program the main functions of the operator using pushbuttons
- LEDs for status and diagnostic information
- Narrow profile for easier installation on door frames
- Lock/Unlock and Reset functions

Model	Part No	Price
LK-EVO	790024	\$200

## NOTE

The KP-EVO is needed for Master-Slave (2 door leaves) programming

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# ACCESSORIES

# Transmitters and Receivers

## XT4 433 RC



### XT4 433 RC Transmitter 4 channels

Rolling code: the code varies whenever the transmitter is used. An algorithm recognizes and confirms the signal.  
Dimensions: 2 x 2.5 x 0.5 in (50 x 64 x 13 mm)

Model	Decoding	Description	Part No.	Price
XT4 433 RC	RC	Transmitter 4 channels	787453	\$29

## RP 433 RC



**1) Plug in Receiver:** can be plugged in directly to any Turnstiles electronic control board. Rolling code technology

Model	Description	Part No.	Price
RP1 433 RC	Receiver 1 channel	787741	\$51
RP2 433 RC	Receiver 2 channel	787742	\$86
RP Interface Board	Interface Board (for non-Turnstiles products)	787725	\$68

## XR2 433 RC



**2) External Receiver:** receiver and interface in a outdoor use enclosure. Relay output for connection to any type of controller. Rolling code technology

Model	Description	Part No.	Price
XR2 433	2-channel external receiver 433 MHz	787747	\$63

## Antenna RP / XR2



**3) Antenna RP / XR2:** receiver with bracket and coaxial cable to increase the range of the RP receivers / XF / XR

Model	Description	Part No.	Price
Antenna RP / XR2	Antenna RP/XR2 receiver with bracket and coaxial cable - length 16 ft (5 m) - 433 MHz to increase the range of RP/XF/XR receivers	412003	\$94

# Photocells

## PHOTOBEAMS



Model	XP 30	XP 30 INOX
Power supply voltage	24V	
Photocells max distance	100 ft (30 m)	
Installation type	wall/column	
Protection class	IP54	
Alignment	Automatic	
Auto-alignment angle	+/- 7° ( 65 ft / 20 m) +/- 13.5° (16 ft / 5m)	
Dimensions (LxDxH)	2.2 x 0.85 x 3.1 in (55.4 x 21.5 x 78.4 mm)	
Absorbed current	Rx (30 mA) + Tx (20 mA)	
Output types	Relay - N.C./N.O.	
Contact Ratings	60 VA / 24 W	
Temperature	-4°F - 131°F (-20°C - +55°C)	

Model	Description	Part No.	Price
XP 30	Wall photocell	785105	<b>\$261</b>
XP 30 INOX	Stainless steel wall photocell	7581051	<b>\$316</b>

**Note:** UL325 compliant when used with 455D, 780D, and E024U control boards

## XP 30 PHOTOBAM ADAPTERS



401064

401065

Model	Description	Part No.	Price
XP 30 Adapter	Photocell adapter for conduit connection	401064	<b>\$25</b>
XP 30 Adapter	Photocell adapter for wall or column mount	401065	<b>\$23</b>

## MOUNTING POSTS



Model	Description	Part No.	Price
Standard post	One standard post 22 in (575 mm) high, anodized aluminium, including foundation plate	401028/737630.5	<b>\$132</b>
Double post	One double post 44 in (1115 mm) high, anodized aluminium, including foundation plate. Holds photobeam and control switch.	401035/737630.5	<b>\$212</b>

**Note:** Photocells sets require 2 posts. For use with Photobeam only

## IRB-RET



Model	IRB-RET
Operating Mode	Retroreflective
Range	up to 60 feet (18.3 m)
Current Draw	60 mA
Protection Class	Nema 4X
Power Supply	6-40 Vdc
Power Protection	Thermal Fuse
Sensitivity Adjustment	Potentiometer
Contacts Type	N.O. / N.C.
Operating Ambient Temperature	-40°F - 140°F (-40°C - +60°C)

Model	Description	Part No.	Price
IRB-RET	Retroreflective Photocell	2800	<b>\$327</b>

**Note:** includes reflector and mounting bracket with hardware  
UL 325 compliant when used with 455D, 780D, and E024U control boards

# Loops and Loop Detectors

## SAW-CUT LOOPS

### Saw Cut Loops with Twisted Pair Lead-in 18 AWG, XLP insulation

Size	Twisted Pair Lead-in	Shipping Wt.	Part No.	Price
4 ft x 8 ft (1.2 m x 2.4 m)	30 ft (9.1 m)	4 lb (1.8 kg)	2567	\$289
	50 ft (15 m)	5 lb (2.3 kg)	2566	\$282
3 ft x 6 ft (0.9 m x 1.8 m)	20 ft (6.1 m)	4 lb (1.8 kg)	9000.0001	\$204

### Loop Sealant for Saw Cut Loops 30 fl. oz. (0.9 L) caulking cartridge

Sealant Type	Shipping Wt.	Part No.	Price
Grey	3 lb (1.4 kg)	2166	\$100
Black	3 lb (1.4 kg)	2180	\$100

Linear Feet of Coverage for One Cartridge					Linear Meters of Coverage for One Cartridge				
Saw Cut Depth in Inches	Saw Cut Width in Inches				Saw Cut Depth in cm	Saw Cut Width in cm			
	.13	.2	.25	.5		0.3	0.5	0.6	1.3
1	36 ft	24 ft	18 ft	9 ft	2.5	11 m	7.3 m	5.5 m	2.7 m
1.5	24 ft	18 ft	12 ft	6 ft	3.8	7.3 m	5.5 m	3.7 m	1.8 m
2	18 ft	12 ft	9 ft	4.5 ft	5.1	5.5 m	3.7 m	2.7 m	1.4 m

**Note:** the thickness of the loop wire is .13 in. (0.32 cm). The wire's height ranges from .55 in. (1.4 cm) to .34 in. (0.86 cm).

## PAVE-OVER LOOPS

### 0.5 in. (1.24 cm) Flexible Conduit Pave-Over Style Loops with Twisted Pair Lead-in

Size	Twisted Pair Lead-in	Shipping Weight	Part No.	Price
2 ft x 6 ft (0.6 m x 1.8 m)	30 ft (9.1 m)	4 lb (1.8 kg)	2593	\$209
	50 ft (15 m)	5 lb (2.3 kg)	2561	\$230
4 ft x 6 ft (1.2 m x 1.8 m)	30 ft (9.1 m)	4 lb (1.8 kg)	2594	\$235
	50 ft (15 m)	5 lb (2.3 kg)	2560	\$252
4 ft x 8 ft (1.2 m x 2.4 m)	30 ft (9.1 m)	4 lb (1.8 kg)	2595	\$273
	50 ft (15 m)	5 lb (2.3 kg)	2559	\$303
4 ft x 10 ft (1.2 m x 3.0 m)	30 ft (9.1 m)	4 lb (1.8 kg)	2596	\$257
	50 ft (15 m)	5 lb (2.3 kg)	2558	\$316
6 ft x 12 ft (1.8 m x 3.7 m)	30 ft (9.1 m)	4 lb (1.8 kg)	2597	\$294
	50 ft (15 m)	5 lb (2.3 kg)	2557	\$317

# Loops and Loop Detectors

## LOOP DETECTORS



### VEK MNE1-R24-B

- Power supply 10-30 V AC/DC max 1 W
- Relay outputs max 2A 230 VAC
- 11 pins circular connector
- Automatic adjustment of the operating frequency for best performance
- Self setting at power-up
- Loop fault signal
- Operating ambient temperature -35°F to +158°F (-37°C to +70°C)

Model	Part No.	Price
VEK MNE1-R240B	2680	\$164



### VEK MNSF

- Power supply 10-30 V AC/DC max 1 W
- Relay outputs max 2A 230 VAC
- 10 pins molex connector
- Automatic adjustment of the operating frequency for best performance
- Self setting at power-up
- Loop fault signal
- Operating ambient temperature -35°F to +158°F (-37°C to +70°C)

Model	Part No.	Price
VEK MNSF	2681	\$193



### DSP-15

- Works on in-ground inductive loops from 20 to 2000 uH
- Easily changed to fail safe or fail secure mode in the field.
- Power interruptions of short duration are ignored.
- Protected from damage if plugged into a higher voltage.
- Separate Power/Fail and Detect LEDs.

Model	Part No.	Price
DSP-15	2664	\$243

## NOTE

A rule of thumb for determining the height of a loop's inductive field is: the height of the inductive field is 2/3 the length of the loop's shortest side.

# Safety edge

**XS 55**

**Easy assembly thanks to an innovative solution with quick insertion terminal and butyl resin sealant**



Rubber profile height 55 mm  
Alluminium support profile  
Protection rating IP 65  
Operating ambient temperature -20°C to +55°C



The only conductive rubber edge Plug and Play on the market  
Create your safety edge in just a few minutes, following 4 simple steps:



Does not require any type of glue or long waiting times

Model	Description	Part No.	Price
	XS 55 Kit includes: 1 rubber profile 8.2 ft (2.5 m) 1 terminal with 8.2K resistor 1 terminal with cable 1 alluminium profile 8.2 ft (2.5 m)	105688	\$433
	CN 60 E Control unit	785200	\$215



**XS 55 Sensing edge 82 ft (25m)**

Part no.	428096
Price	\$2,070



**Terminal with XSP R8.2 resistor**

Part no.	428097
Price	\$48



**Terminal with XSP C0.5 cable**

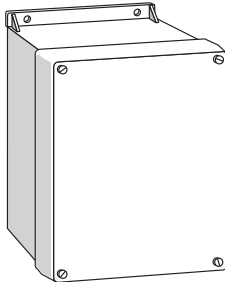
Part no.	428098
Price	\$55



**Aluminum profile 8.2 ft (2.5m)  
Qty 10**

Part no.	105687
Price	\$366

## MODEL FRP (FIBER REINFORCED PLASITC)



- Strong, high quality construction
- Rubberized gasket door seal
- Includes metal mounting plate with grounding lug
- Dimensions WxHxD: 10 x 12 x 5.5 in (254x305x14 mm)
- Weight: 6 lb (2.7 Kg)
- UL and CSA Listed

Model	Part No.	Price
Model FRP	2359	\$264

## MODEL L (LATCHING)



- Keyed latch on hinged door
- Rubberized gasket door seal
- Door can open to right or left
- Will accept DIN rail
- Molded standoffs for control panel mounting
- Three 1.13 in. (30 mm) pre-drilled holes (with plugs) in box bottom
- Dimensions WxHxD: 8.4 x 10.6 x 4.6 in (213x270x118 mm)
- Weight: 5 lb (2.3 Kg)

Model	Part No.	Price
Model L	720118	\$80

## MODEL FG 14 X 16



- Fiber Reinforced Enclosure
- Hinged lockable
- Strong, highest quality construction
- Rubberized gasket door seal
- Weather resistant
- Dimensions WxHxD: 14 x 16 x 6 in (355 x 406 x 152 mm)
- Weight: 8 lb (3.6 Kg)
- UL and CSA Listed

Model	Part No.	Price
Model FG	3312	\$411

# Warning lights

## Turnstiles LIGHT



- Connects to high voltage control boards
- Light flashes while gate opens and closes
- Protection class IP 55
- Dimensions 4 x 5.5 x 5 in (100x142x130 mm)

Model	Part No.	Price
FAACLIGHT 230 VAC / 40W	410013	\$82
FAACLIGHT 115 VAC / 40 W	410013.5	\$80
Replacement Bulb 230 VAC	2128	\$21
Replacement Bulb 115 VAC	2132	\$21



## DIGITAL INPUT KEYPAD



## DIGIKEY

- Installation: embedded or on column
- Power supply 24 Vdc
- Anti-tampering electronic protection
- Indicator-light and buzzer confirming activation
- Reset push-button
- Protection class IP 55

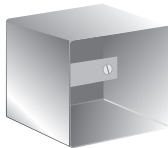
Model	Part No.	Price
DIGIKEY	404005	\$452

## DS DECODER FOR DIGIKEY

- Decoding card ("relay" output) driving Turnstiles electronic control units and/or auxiliary commands
- Power supply 12 - 24 Vdc/12 - 24 Vac
- 12-bit binary code (4,096 combinations)
- Max distance of Metal Digikey/Decoder: 100 m
- Operating ambient temperature -20°C to +55°C

Model	Part No.	Price
DS DECODER FOR DIGIKEY	785502	\$139

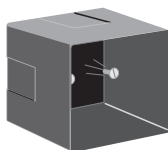
## HOUSING



## METAL HOUSING FOR DIGIKEY

- Dimensions (HxWxD): 2.75 x 2.75 x 2.25 in (70x70x57 mm)

Model	Part No.	Price
Metal Housing for Digikey	720037	\$47



## PLASTIC HOUSING FOR DIGIKEY

- Dimensions (HxWxD): 2.75 x 2.75 x 2.25 in (70x70x57 mm)

Model	Part No.	Price
Plastic Housing for Digikey	720043	\$17

**NEW**

## CELLULAR INTERCOM



- Calls your home phone and mobiles on roll-over when visitor presses call button
- Free home owner app to trigger gates, set up auto opening and closing times, create new access codes, receive notifications on entry, etc.
- Free installer app for remote programming and diagnostics
- Works with an AT&T (4G or 3G) or T-Mobile Micro SIM card
- Power Consumption: 300 mA on dial out, 2amp peak demand
- Power Supply: 12-24 dc (24v dc adapter included)
- 2 Relays
- Dimensions: 5.7 x 10.4 x 4.1 in (144x263x104 mm)
- Available February 2019

Model	Part No.	Price
Cellular Intercom 3G	4300	<b>\$2,200</b>
Cellular Intercom 4G	4400	<b>\$2,400</b>
Cellular Intercom 4G with video	4401	<b>\$4,350</b>

## ELECTRIC LOCKS



Description	Part No.	Price
12 Vac electric lock single cylinder with strike plate and 2 keys	712650/712651.5	<b>\$242</b>
12 Vac electric lock double cylinder with strike plate and 2 keys	712650/712652.5	<b>\$267</b>

## ELECTROMAGNETIC LOCKS



Description	Part No.	Price
Securitron M62-GF 24 VDC, 1200 lb (540 Kg) holding force Dimensions: 8 x 1.75 x 2.9 in (203 mm x 44 mm x 74 cm) Weight 14 lb (6.4 Kg)	2353	<b>\$896</b>
Z bracket	2690	<b>\$251</b>
Securitron M32F-24 24 VDC, 600 lb (270 Kg) holding force Dimensions: 8 x 1.5 x 1.88 in (203 mm x 38 mm x 48 cm) Weight 12 lb (5.4 Kg)	2354	<b>\$701</b>
Z bracket	3150	<b>\$348</b>
12 VAC external relay (necessary with 455D control board)	2352	<b>\$63</b>

## SURGE PROTECTORS

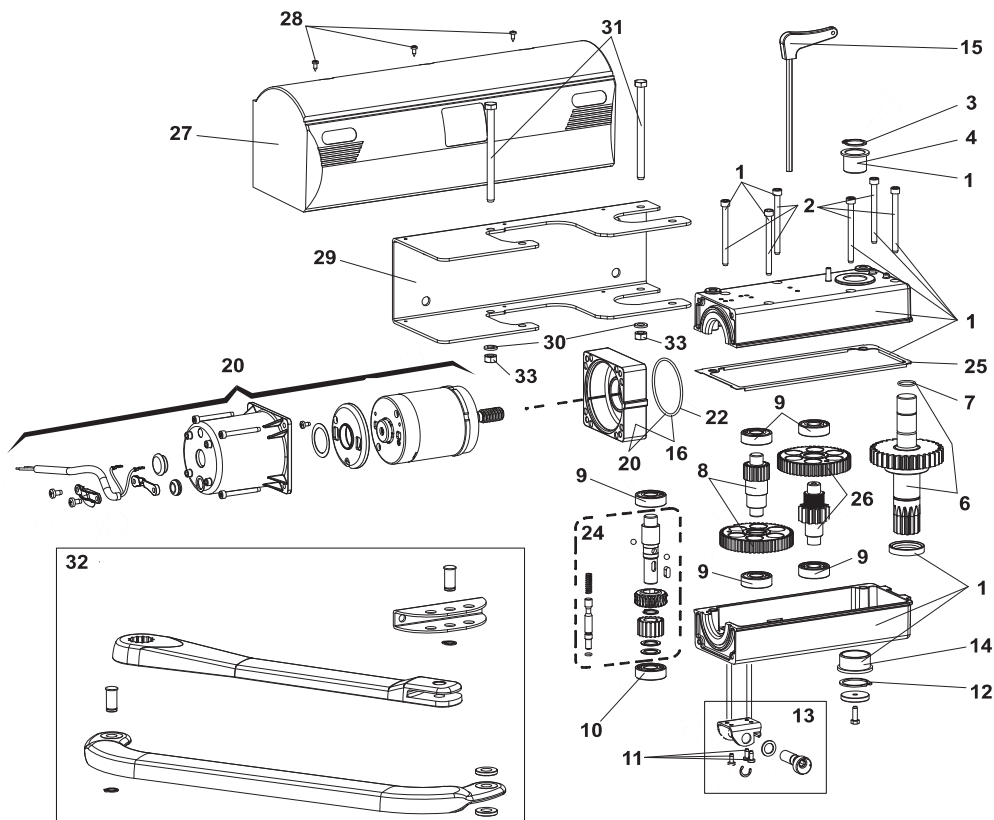


Description	Voltage	Part No.	Price
Surge protection device for AC circuits Protector type: SPD Type 2 Protection modes: L-G, L-N, N-G Response time < 1ns Self restoring Dimensions: 2.9 x 2.8 x 1.7 in (74x72x43mm) Weight 0.5 lb (227g)	120V	2355	<b>\$166</b>
	240V	2356	<b>\$170</b>
Surge protection device for up to 4 Low Voltage circuits Provides protection for power, LED and data lines Protection modes: Line-Ground (all) Connection method: #22-#16 AWG screw terminals Self restoring Dimensions: 1.6 x 3.0 x 1.6 in (41x76x41mm) Weight 4 oz (113g)		2357	<b>\$214</b>

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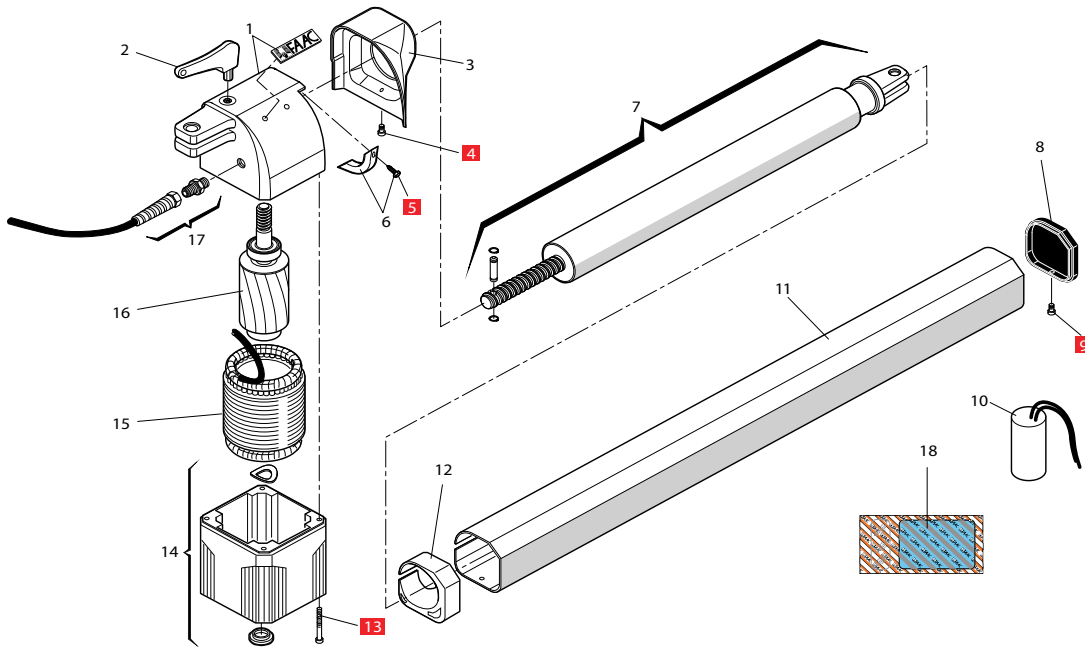
# EXPLODED VIEWS AND SPARE PARTS





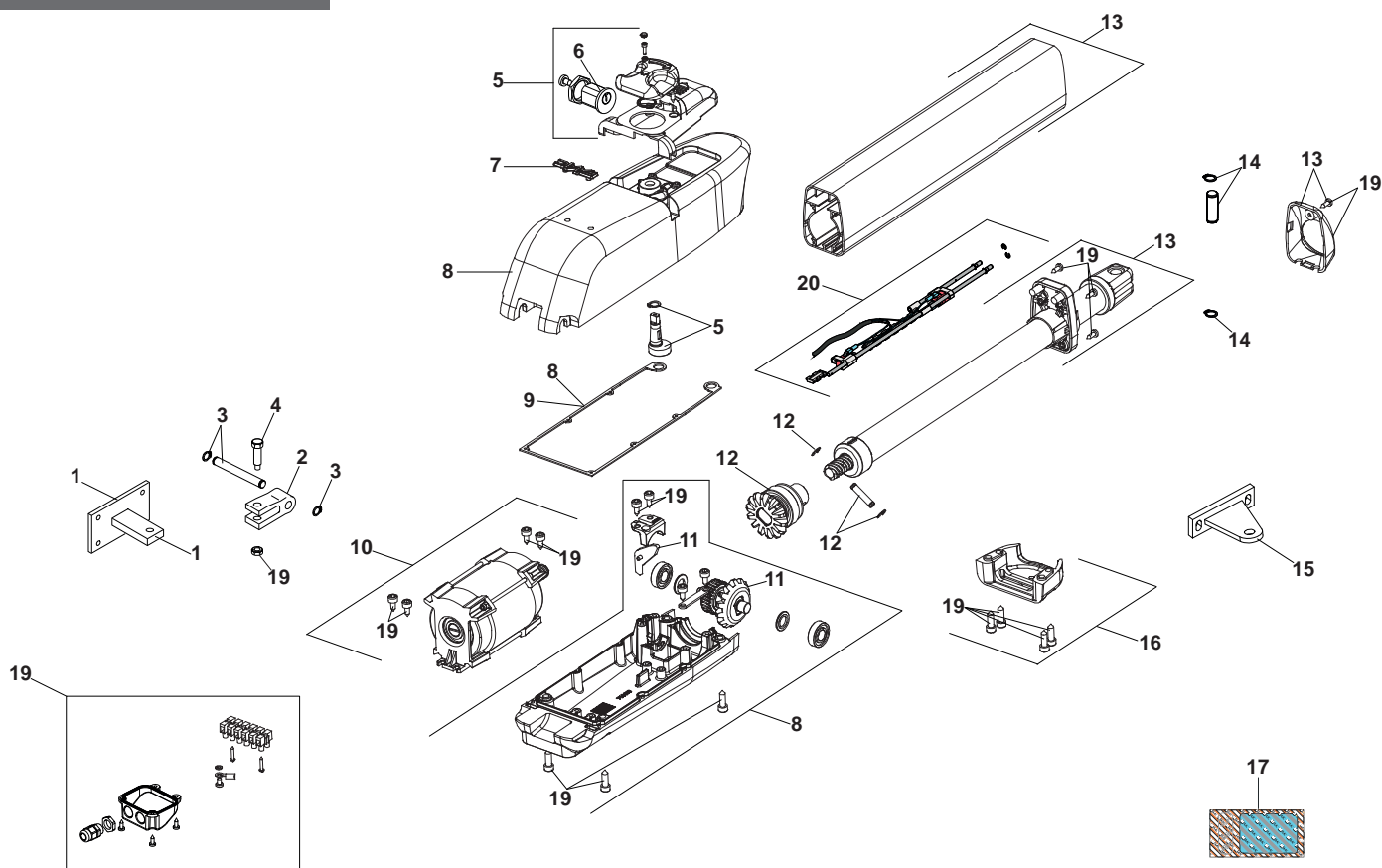
Part	Part Number	Description	List Price
01	428283	Body Complete Unit	\$207
02	701089	Tcei 6X 70 5931 8.8 Z	n/a
03	704028	Seeder E 22 Uni 7435	n/a
04	708026	Bush	n/a
06	63000856	Final Reduction Gear Group	\$124
07	7090210015	O-Ring 17.17X1.78	n/a
08	63000856	Final Reduction Gear Group	\$124
09	7070222	6202 Bearing	n/a
10	707025	Bearing 6202 Zz	n/a
11	XVT18B10100Z	Self Tapping M4x10 Screw	n/a
12	704041	C-Clip E30 Uni 7435	n/a
13	63001855	Manual Release	\$28
14	708045	Bushing	n/a
15	713001	Manual Release Key	\$13
16	63001145	Motor Flange Kit	n/a

Part	Part Number	Description	List Price
20	63000596	Motor 24 Vdc	\$353
22	ZORA2606160	O-Ring 2.62X61.60	n/a
24	409553	Release Assy	\$104
25	63001455	Gasket Body	n/a
26	718002	Gear Reduction Unit	\$108
27	727292	Protective Cover	\$16
28	XVA050350951	Self Tapping Screw 3.5X9.5	n/a
29	722471	Mounting Frame	\$83
30	XR002080020Z	Washer	n/a
31	XVT00F11100Z	Screw M8x110	n/a
32	738705	Articulated Arm	\$284
33	XDA01F10065Z	Nut M8	n/a



Part	Part Number	Description	List Price
01	799360	Motor Housing, SX Top Section	\$184
01	799359	Motor Housing, DX Top Section	\$184
02	713009	Manual Release Key, 412	\$12
03	7171345	Flange, Protective Cover,SX	\$20
03	7171335	Flange, Protective Cover,DX	\$20
04	n/a	Self Tapping Screw (3.5 x 13mm)	n/a
05	n/a	Self-Tapping Screw (5.5 x 15mm)	n/a
06	799358	Cylinder Collar	\$25
07	736060	Cylinder Assembly	\$209
08	727148	End Cap, Protective, SX	\$9
08	727147	End Cap, Protective, DX	\$10
09	n/a	Self-Tapping Screw (3.5 x 9.5mm)	n/a

Part	Part Number	Description	List Price
10	2705	Capacitor for 115V (25uf)	\$16
10	2707	Capacitor for 220V (8uf)	\$14
11	7272795	Protective Cover	\$88
12	722298	Protective Cover Support	\$22
13	n/a	Self Tapping Screw (5 x 18mm)	n/a
14	716074	Motor Housing, Bottom Section	\$57
15	746030	Stator (Motor) for 220V	\$120
15	746755	Stator (Motor) for 115V	\$141
16	746028	Rotor (Motor)	\$88
17	710919	Strain Relief	n/a
18	390009	Skin Pack (1 pack = 2 operators)	\$140
n/a	6020082	Plug for Manual Release	\$6



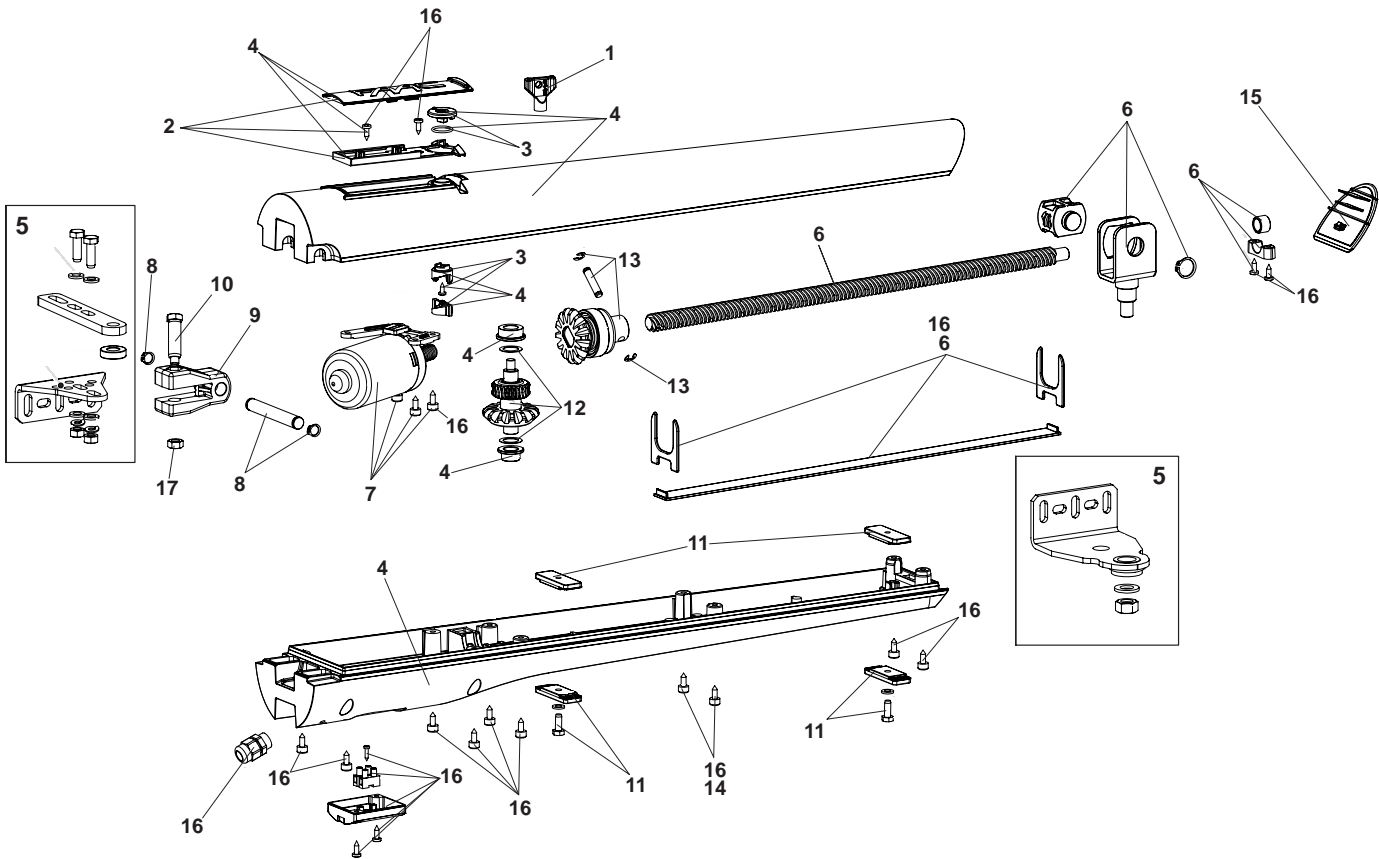
Part	Part Number	Description	List Price
01	72840065	Rear Mounting Bracket and Plate	\$62
02	7221115	Rear Fork	\$13
03	718366	Long Pin with C Clips	\$21
04	7182075	Short Pin	\$16
05	428403	Manual Release Assembly	\$74
06	7120885	Lock	\$28
07	732475	Turnstiles Logo	\$8
08	63000569	Operator Body Group	\$194
09	63000568	Gasket	\$25
10	60202205	24V Motor	\$416
11	60202215	Gear (Motor)	\$100
12	60202225	Gear (Piston)	\$79
13	490104	Cylinder and Cover	\$135
14	718354	Front Pin With C Clips	\$10
15	728271	Front Mounting Bracket	\$47
16	499399	Lower Front Cover	\$26
17	490106	Skin Pack	\$72
19	63000619	Small Parts Kit	\$36
20	490108	Limit Switch Assembly	\$115

**NOTE**

115 VAC Motor      p/n 770890      \$239  
 25uF Capacitor    p/n 2705        \$16

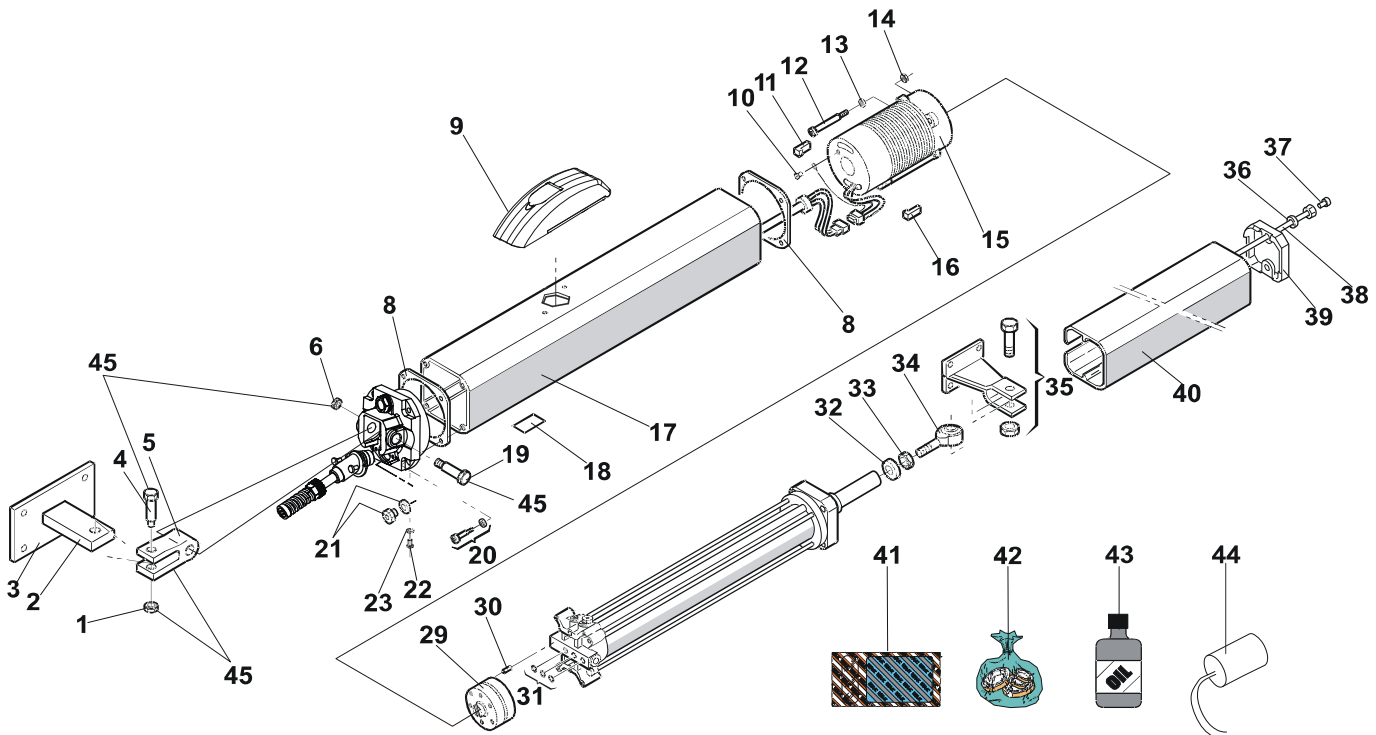


# S418



Part	Part Number	Description	List Price
01	713002	Manual Release Key	\$8
02	63001555	Manual Release Cover	\$23
03	63001565	Manual Release Assembly	\$19
04	63000563	Operator Body Group	\$204
05	63002565	Front and rear Bracket Kit	\$78
06	63001525	Worm Screw Assembly	\$97
07	63001615	Motor	\$189
08	718366	Long Pin	\$21
09	7228015	Rear Fork	\$42
10	7182075	Short Pin	\$16
11	63001625	Mechanical Stop	\$35
12	60202215	Gear and Release Assembly	\$100
13	60202225	Gear and Output Shaft Assembly	\$79
14	63001545	10 Screws ø4.8x13mm	n/a
15	63001535	Front Cap	\$16
16	63000621	Small Parts Kit	\$17
17	702106	Nut ES. 8	n/a

# 400 CBAC



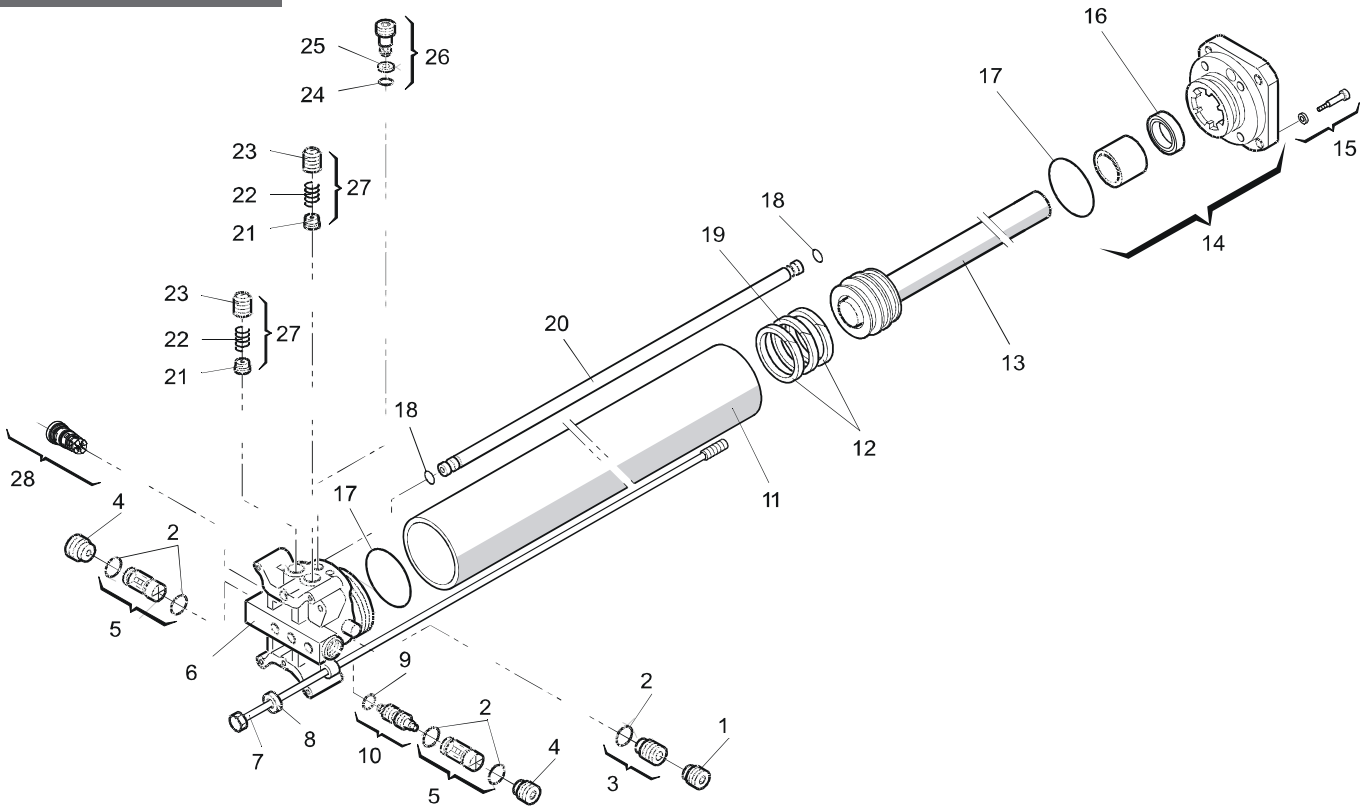
Part	Part Number	Description	List Price
01	2036	Galvanized Nut (8mm)	\$6
02	7220015	Rear Bracket	\$39
03	7284005	Rear Bracket Plate	\$23
04	7182075	Short Pin	\$16
05	7228015	Rear Fork	\$42
06	2037	Self-Locking Nut (8 mm)	\$6
08	70991015	Gasket (D80)	\$8
09	4185045.5	Locking Cap Kit	\$77
10	701803	Self Threading Screw (4mm)	n/a
11	7119475	Vibration Dampener	\$7
12	2365	Motor Bolt (4x50 mm)	\$6
13	2366	Lock Washer (4 mm)	\$7
14	2367	Hex Nut (4 mm)	\$6
15	77000425*	115V 1400 RPM Motor	\$202
16	7119485	Vibration Dampener	\$7
17	7161825	Operator Body 400	\$111
17a	7161835	Operator Body (EG)	\$128
18	7320065	Vent Screw Label	n/a
19	7182175	Long Pin	\$17
20	701829	T20 Torx (5 x 20mm)	n/a
21	7110015	Oil Plug	\$6
22	2275	Vent Screw (4x18 mm)	\$6
23	7094065	Gasket (copper)	\$6
29	3204425	1 Lt. Lobe Pump	\$191

Part	Part Number	Description	List Price
30	706152	Pump Pin (4x28mm)	n/a
31	7090010015	O-Ring	\$6
32	3060	Washer (Swivel)	\$5
33	2069	Swivel Jam Nut (10mm)	\$7
34	7073095	Swivel Joint square	\$85
35	7220355	Front Mounting Bracket	\$33
35a	7220365	Front Mounting Bracket (EG)	\$36
36	703401	Star Washer (5mm)	n/a
37	7119405	Protective Cover End Cap Plug	\$6
38	7019195	Tie-Rod (Protective Cover)	\$9
38a	7019225	Tie-Rod (Protective Cover EG)	\$10
39	4170015	Protective Cover End Cap	\$18
40	7272105	Protective Cover	\$67
40a	7272115	Protective Cover (EG)	\$79
41	3900985	Skin Pack: 400	\$165
41a	3900975	Skin Pack: 400 (EG)	\$166
42	2167.1	Seal Kit	\$96
43	714019 Qt.1	Turnstiles Oil: 1 qt.	\$26
43a	7140251 Qt.1	Turnstiles Arctic Oil: 1 qt.	\$72
44**	2707	Capacitor 8uF: 220V	\$14
45	7228015.1	Aluminum Fork Kit	\$74

## NOTE

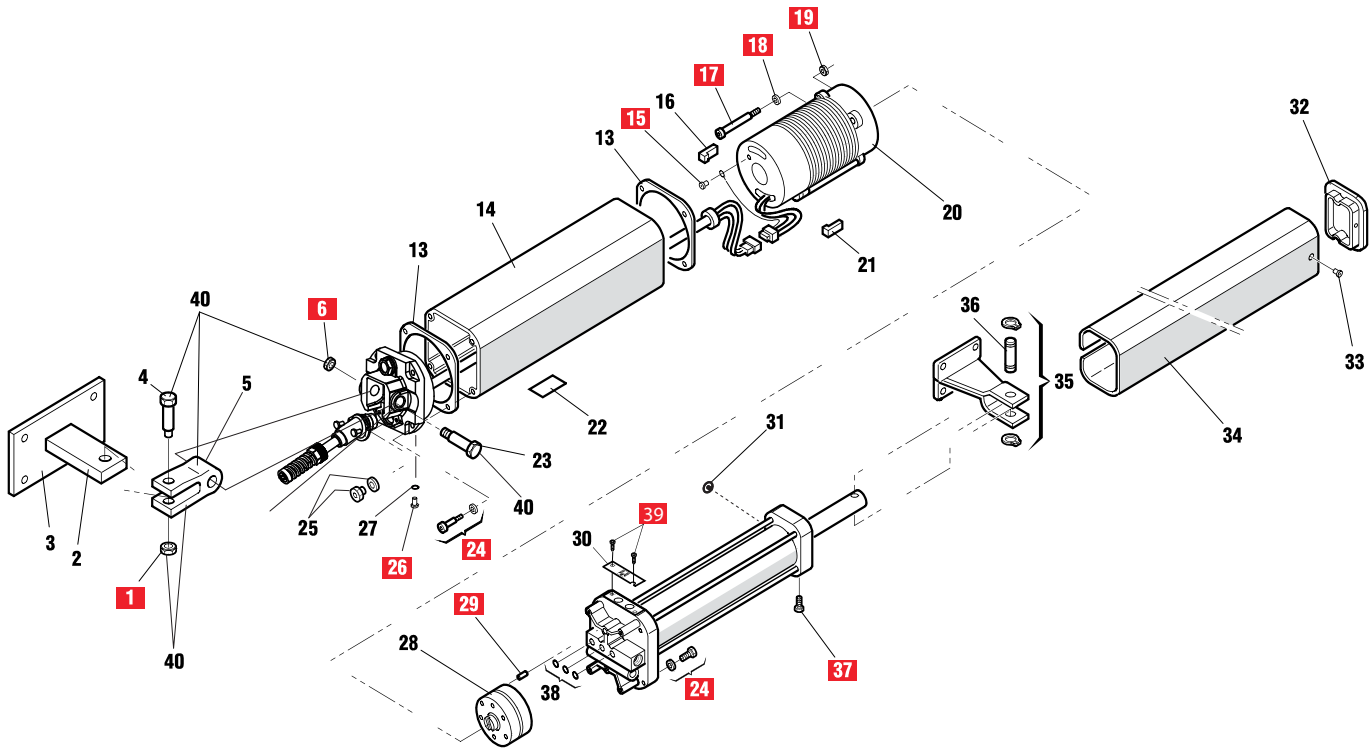
- \* 220 VAC 8 uF Motor                      p/n 7700205                      \$202
- \* 220 VAC 16 uF Motor                    p/n 77000415                    \$202
- \*\* 16uF Capacitor for 220 VAC Motor    p/n 2706                        \$15
- \*\* 25uF Capacitor for 115 VAC Motor    p/n 2705                        \$16

# 400 CBAC



Part	Part Number	Description	List Price	Part	Part Number	Description	List Price
01	7049135	Valve Retainer	\$7	14	4994625	Front Flange	\$95
02	70900500	O-Ring (10.82 x 1.78mm)	n/a	15	701829	Front Flange Bolt (M5 x 20 mm)	n/a
03	4404065	Inlet Valve	\$8	16	63000315	Seal Front Flange (Internal)	\$12
04	7049005	Retainer (Brass)	\$8	17	7090360025	O-Ring (Distribution flange)	\$7
05	4404085	Lock Valve (Bi-Metal)	\$13	18	7090815	O-Ring (Retract Tube)	\$7
06	4994655	Distribution flange (CBAC)	\$207	19	7049005	Guide Ring (Piston)	\$8
07	7230295	Tie-Rod (Cylinder)	\$10	20	7361335	Retract Tube	\$31
07a	7230305	Tie-Rod (Cylinder) (EG)	\$12	21	7310315	By-Pass Cap Spacer (see #27)	n/a
08	703204	Star Washer (5 mm)	n/a	22	7210025	By-Pass Cap Spring (see #27)	n/a
09	7090300015	O-Ring (7.66 x 1.78mm)	n/a	23	711021	By-Pass Cap (see #27)	n/a
10	4180285	Shuttle Piston	\$21	24	7090280015	O-Ring (Manual Release)	\$6
11	7366025	Cylinder	\$75	25	7043055	Spacer (Manual Release)	n/a
11a	7366015	Cylinder (Long/EG)	\$82	26	4180195	Manual Release	\$21
12	7091015	Piston Rod Seals	\$10	27	4180415	By-Pass Cap Kit	\$17
13	4350105	Piston Rod Assembly	\$113	28	4404095	Inlet Valve (Bi-Directional)	\$20
13a	4350115	Piston Rod Assembly (EG)	\$121				

# 402 CBC



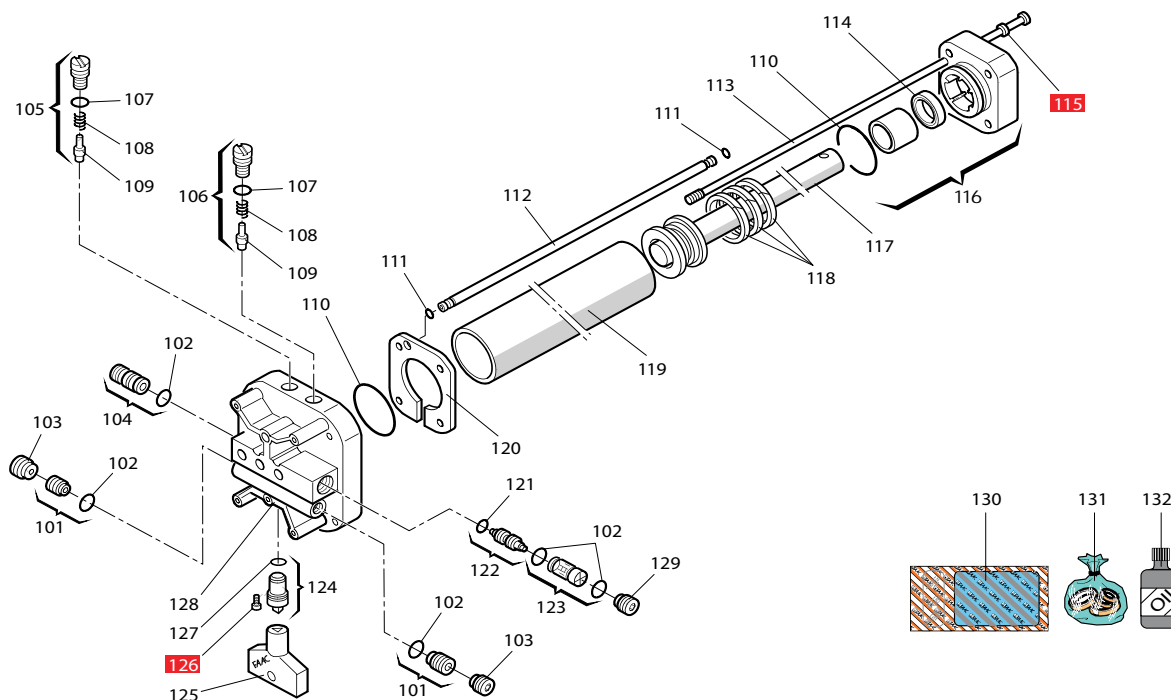
Part	Part Number	Description	List Price
01	2036	Galvanized Nut	\$6
02	7220015	Rear Bracket	\$39
03	7284005	Rear Bracket Plate	\$23
04	7182075	Short Pin	\$16
05	7228015	Rear Fork	\$42
06	2037	Self Locking Nut	\$6
13	70991015	Gasket (D80)	\$8
14	7450005	Operator Body	\$89
15	701431	Self Threading Screw	n/a
16	7119475	Vibration Dampener	\$7
17	2365	Motor Bolt (4x50mm)	\$6
18	2366	Lock Washer	\$7
19	2367	Hex Nut	\$6
20	77000425*	Motor 115V 1400rpm	\$202
21	7119485	Vibration Dampener	\$7
22	7320065	Vent Screw Label	n/a
23	7182175	Long Pin	\$17
24	701047	Socket Head Screw (5x20mm)	n/a

Part	Part Number	Description	List Price
25	7110015	Oil Plug	\$6
26	2274	Vent Screw	\$7
27	7094065	Copper Gasket	\$6
28	3204425	Cast Iron Pump 1 Lt	\$191
29	706122	Pump Pin	n/a
30	7203275	By-Pass Protection Cover	n/a
31	7260995	Spacers for Protective Cover	n/a
32	7271545	Protective Cover End Cap	\$8
33	7114025	Protective Cover Plug	\$5
34	7272085	Protective Cover	\$77
35	4304015	Front Mounting Bracket	\$22
36	7182355	Pin Front Bracket	\$7
37	701405	Black Plastic Screw	n/a
38	7090010015	O-Ring (4.48X1.78mm)	\$6
39	701497	Stainless Steel Screw 2.9x6.5mm	n/a
40	7228015.1	Aluminum Fork Kit	\$74

## NOTE

- \* 220 VAC 8 uF Motor                      p/n 7700205                      \$202
- \* 220 VAC 16 uF Motor                    p/n 77000415                    \$202
- \*\* 16uF Capacitor for 220 VAC Motor    p/n 2706                        \$15
- \*\* 25uF Capacitor for 115 VAC Motor    p/n 2705                        \$16

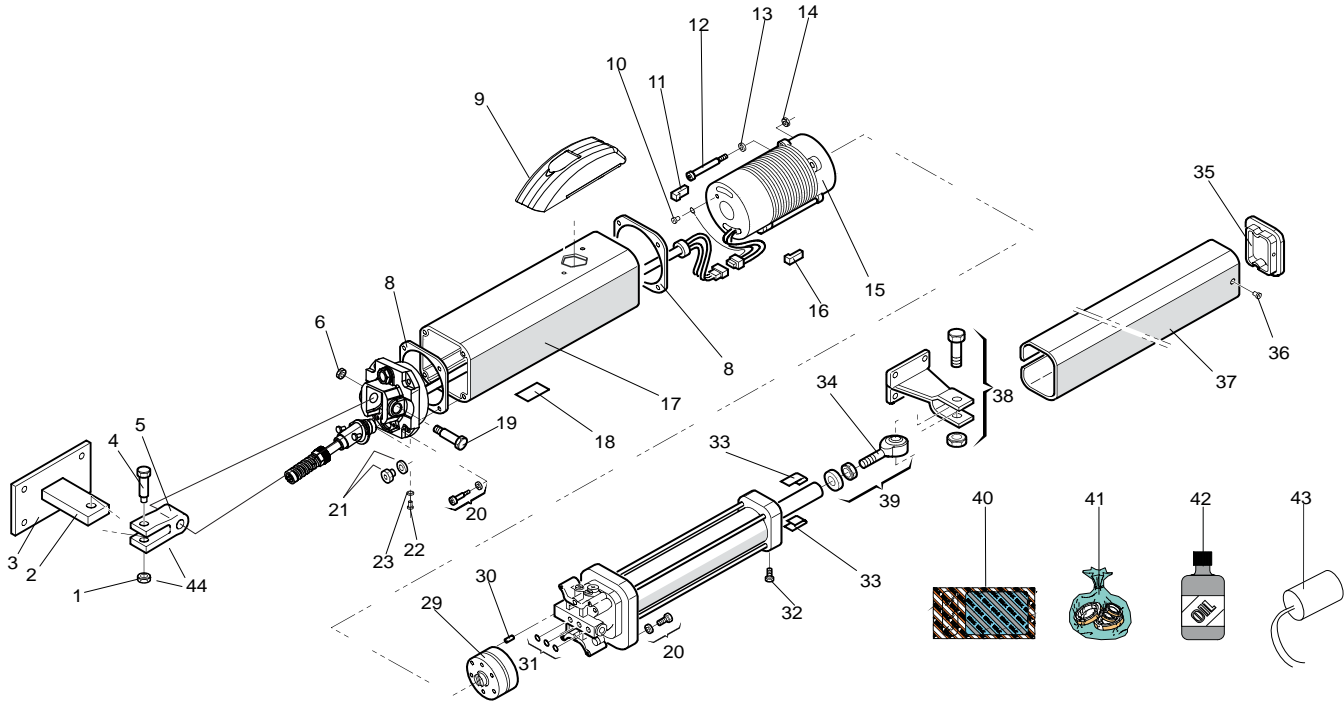
# 402 CBC



Part	Part Number	Description	List Price
101	4404065	Inlet Valve	\$8
102	7090050015	O-Ring (10.82x1.78mm)	n/a
103	7049135	Valve Retainer	\$7
104	4180205	Black Lock Valve	\$7
105	4180395	Brass By-Pass Valve	\$11
106	4180395	Brass By-Pass Valve	\$11
107	7090150015	O-Ring (9.25x1.78mm)	n/a
108	7210025	By-Pass Spring	n/a
109	7119335	By-Pass Cover	n/a
110	7090350025	O-Ring 34.60x2.62 (Front Flange)	\$7
111	7090635	O-Ring 5x1.5 (Retract Tube)	\$6
112	7361315	Retract Tube Alum.	\$36
113	7230225	Tie Rod Cylinder	\$8
114	63000655	Seal (Front Flange Internal)	n/a
115	703204	Star Washer	n/a

Part	Part Number	Description	List Price
116	4994165	Front Flange	\$74
117	4350065	Piston Assembly	\$112
118	7095035	Piston Rod Packing	\$23
119	7366065	Cylinder	\$83
120	7271555	Protective Cover Guide	\$7
121	7090300015	O-Ring (7.66x1.78mm)	n/a
122	4180285	Shuttle Piston	\$21
123	4404085	Lock Valve	\$13
124	4180355	Manual Release	\$21
125	713002	Manual Release Key	\$8
126	701039	Galvanized Screw 4x6mm	n/a
127	709069	O-Ring (7x1.5mm)	n/a
128	4994365	CBC Distribution flange	\$263
129	7049005	Brass Retainer	\$8
130	3906145	Skinpack 402	\$94
131	2168.1	Seal Kit For 402	\$115
132	714019 Qt.1	Turnstiles Oil: 1 qt.	\$26
132a	7140251 Qt.1	Turnstiles Arctic Oil: 1 qt.	\$72

# 422 CBAC



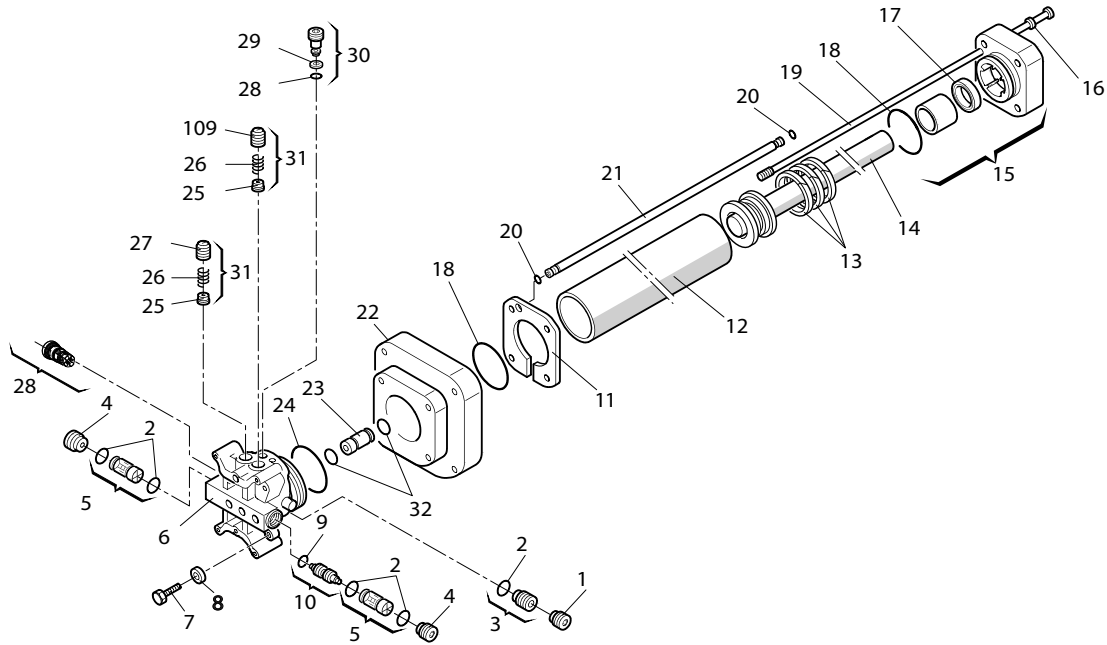
Part	Part Number	Description	List Price
01	2036	Nut 8mm	\$6
02	7220015	Rear braket motor	\$39
03	7284005	Rear bracket Plate	\$23
04	7182075	Short pin	\$16
05	7228015	Rear fork	\$42
06	2037	Self Locking Nut	\$6
08	70991015	Gasket (D80)	\$8
09	4185045.5	Locking Cap Kit	\$77
10	701803	Self Threading Screw 4x10mm	n/a
11	7119475	Vibration Dampener	\$7
12	2365	Motor Bolt 4 x 50 mm	\$6
13	2366	Lock Washer	\$7
14	702003	Hex Nut (4 mm)	\$6
15	77000425	Motor 115V 1400 rpm	\$202
16	7119485	Vibration Dampener	\$7
17	7161815	Operator Body	\$73
18	7320065	Vent Screw Label	n/a
19	7182175	Long pin	\$17
20	701829	Screw Torx 5x20 mm	n/a

Part	Part Number	Description	List Price
21	7110015	Oil Cap	\$6
22	2275	Vent Screw 4 x 20 mm	\$6
23	7094065	Copper washer	\$6
29	3204425	Cast iron pump 1 lt	\$191
30	706152	Pump Pin	n/a
31	7090010015	O-Ring 4.48x178 mm	\$6
32	701405	Self Threading Screw 3.5 x 9.5	n/a
33	7260285	Cover Antivibration Spacer	n/a
34	7073035	Swivel Joint	n/a
35	7271545	Protective Cover End Cap	\$8
36	711402	Protective Cover Plug	\$5
37	7272125	Protective Cover	\$79
38	7220515	Front Mounting Bracket	\$23
39	4900605	Swivel Joint Kit	\$53
40	3900995	Skin Pack	\$139
41	2172.1	Seal Kit	\$123
42	714019 Qt.1	Turnstiles Oil: 1 qt.	\$26
42	7140251 Qt.1	Turnstiles Arctic Oil: 1 qt.	\$72
43	2705	Capacitor for 115VAC Motor	\$16
44	7228015.1	Aluminum Fork Kit	\$74

**NOTE**

220 VAC 8 uF Motor                      p/n 7700205                      \$202  
 8uF Capacitor for 220 VAC Motor      p/n 2707                      \$14

# 422 CBAC

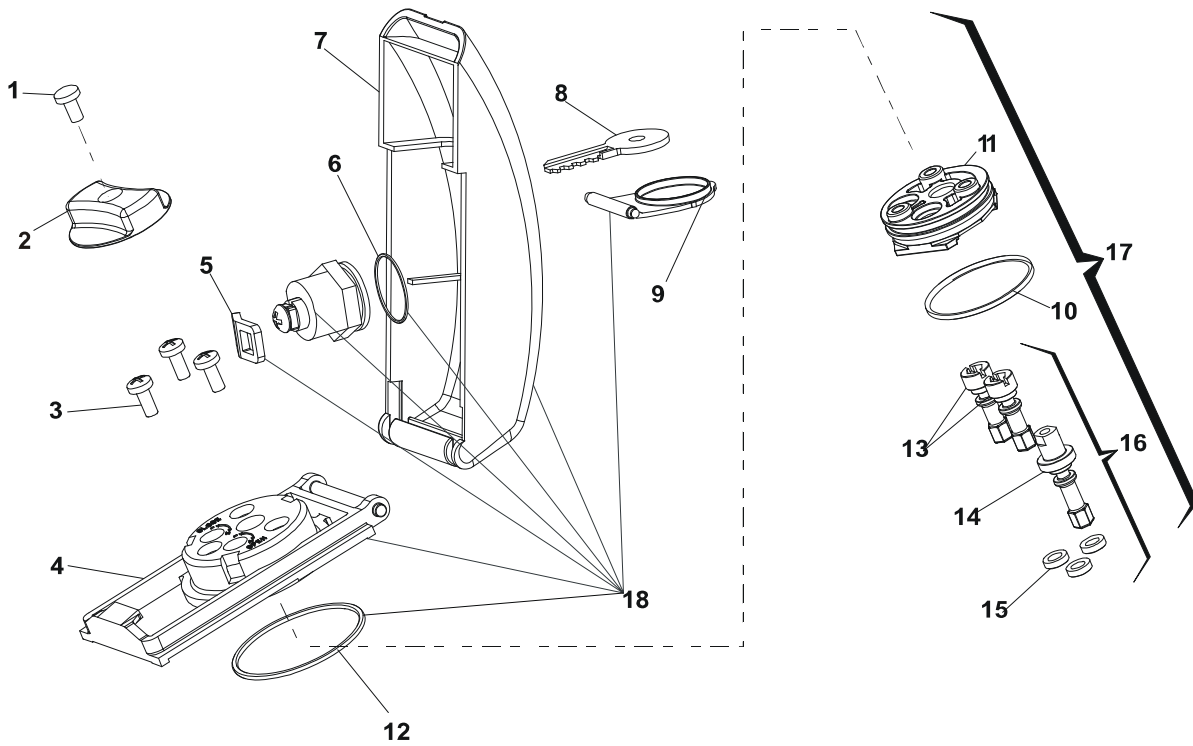


Part	Part Number	Description	List Price
01	7049135	Valox valve retaining ring nut	\$7
02	7090050015	O-Ring 10.82 x 1.78mm	n/a
03	4404065	Inlet Valve	\$8
04	7049005	Brass Valve Retainer	\$8
05	4404085	Stop valve in zamack	\$13
06	4994655	Distribution flange CBAC	\$207
07	701020	Screw 5 x 40 mm	n/a
08	703007	Washer	n/a
09	7090300015	O-Ring 7.66 x 1.78mm	n/a
10	4180285	Shuttle Piston with OR	\$21
11	7271555	Protective Cover Guide	\$7
12	7366065	Cylinder	\$83
13	7095035	Piston Rod Packing	\$23
14	4350085	Piston assembly	\$104
15	4994165	Front flange	\$74

Part	Part Number	Description	List Price
16	703204	Star Washer	n/a
17	63000655	Front Flange Seal (internal)	n/a
18	7090360025	O-ring 40.95 x 2.62	\$7
19	7230225	Tie Rod (Cylinder)	\$8
20	7090635	O-Ring 5 x1.5 mm	\$6
21	7361315	Retract tube alum.	\$36
22	499449	Mid Flange	\$75
23	7361035	Retract Tube Small	\$17
24	7090360025	O-ring 40.95 x 2.62	\$7
25	7310315	By-pass Spacer	n/a
26	7210025	By-pass Spring	n/a
27	4180415	By-pass Cap	\$17
28	4404095	Inlet Valve (Bi-directional)	\$20
29	7043055	Ring Spacer	n/a
30	4180195	Manual Release	\$21



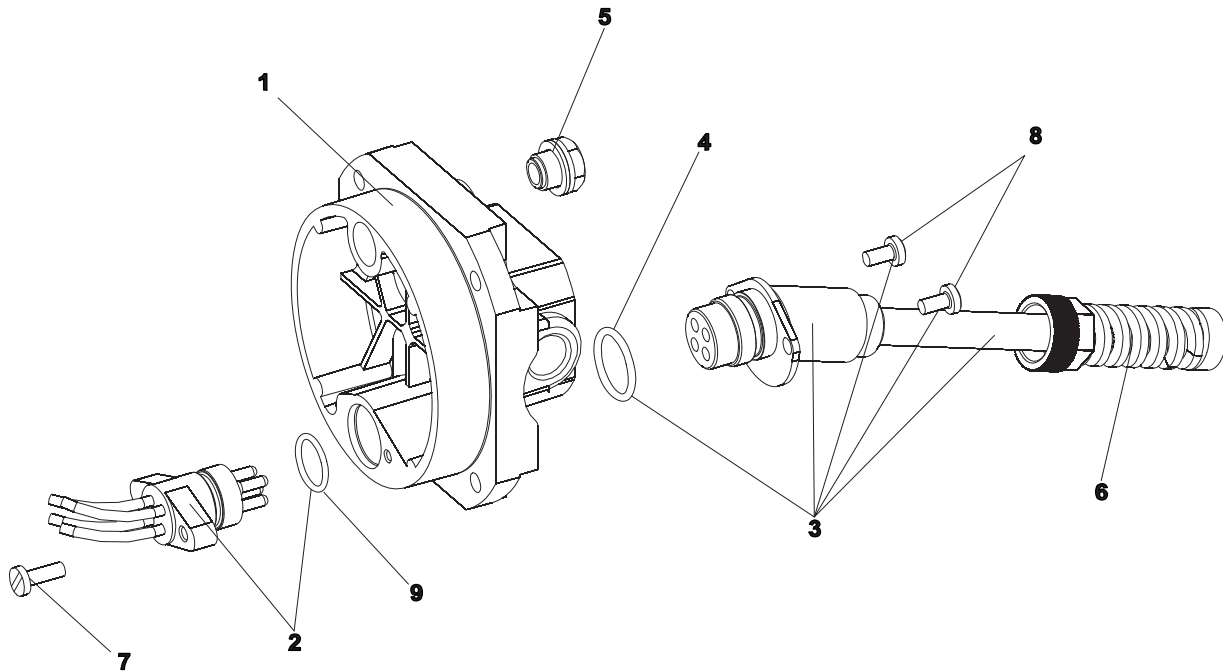
# 400 - 422 Manual Release



Part	Part Number	Description	List Price
01	2151	Knob Screw (ss) 4mm x 8mm	\$6
02	7290445	Manual Release Knob	\$13
03	701526	Screw (ss) 4 x 10mm	n/a
04	720344	Locking Cap Base	n/a
05	729043	Lock	n/a
06	7090290015	O-Ring (Lock Cylinder)	\$6
07	7275285	Top Cover	n/a
08	7131005	Key (Viro)	\$8
09	7275275	Cover, Key	\$7
10	7090855	O-Ring Extension Receptacle	\$6
11	722795	Extension Receptacle	n/a
12	7090865	O-Ring (Base to Body)	\$6
13	718358	By-Pass Extensions	n/a
14	718359	Manual Release Extensions	n/a
15	7090845	O-Ring, Extensions	\$7
16	490327	Extensions with O-Rings	\$32
17	490326	Manual Release Kit	\$38
18	4185045	Locking Cap Complete	\$48

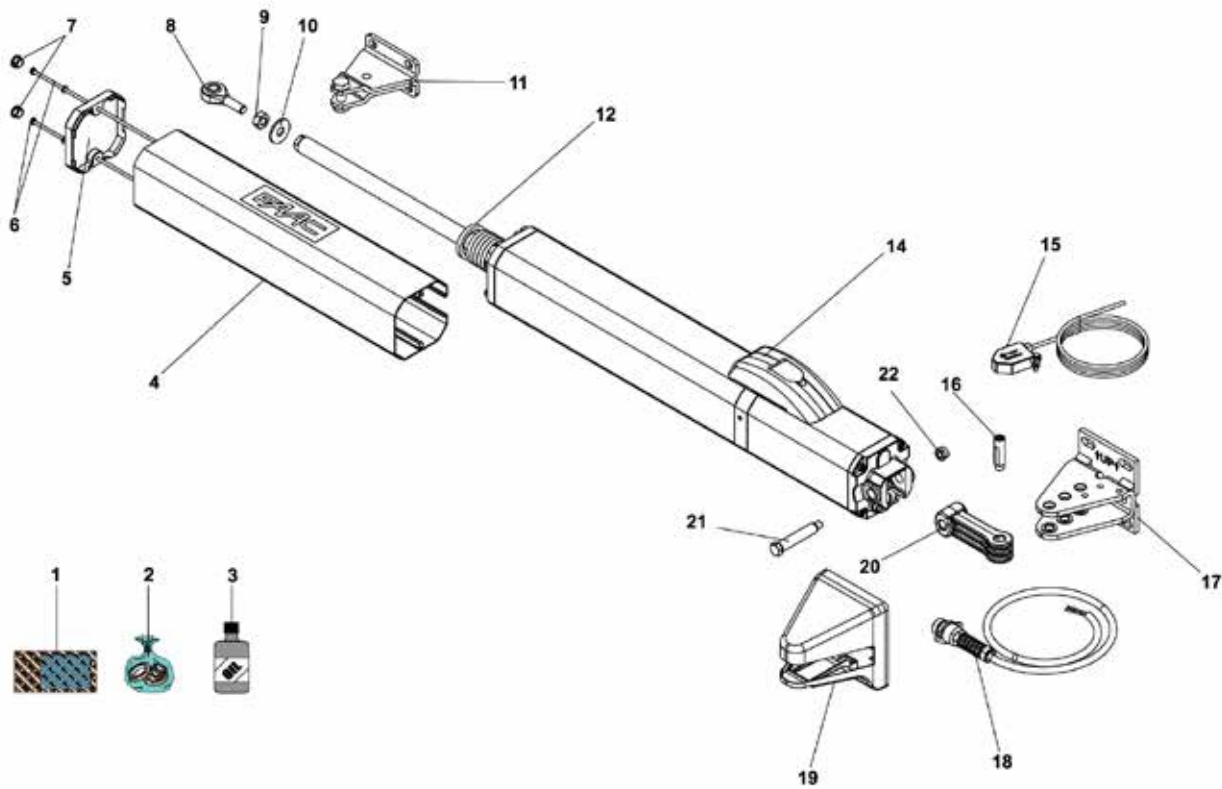


# 400 - 422 Rear flange



Part	Part Number	Description	List Price
01	7171485	Rear Flange	\$73
02	417010	Wiring Harness	\$24
03	63001005	Cable With Molded Connector	\$76
04	7090895	O-Ring 21x2 mm	n/a
05	7110015	Oil Plug	\$6
06	7109135	Cable Strain Relief	\$9
07	701479	Screw 3 x 12mm	n/a
08	701466	Screw 3 x 8 mm	n/a
09	7090905	O-Ring 14 x 1.5 mm	\$5

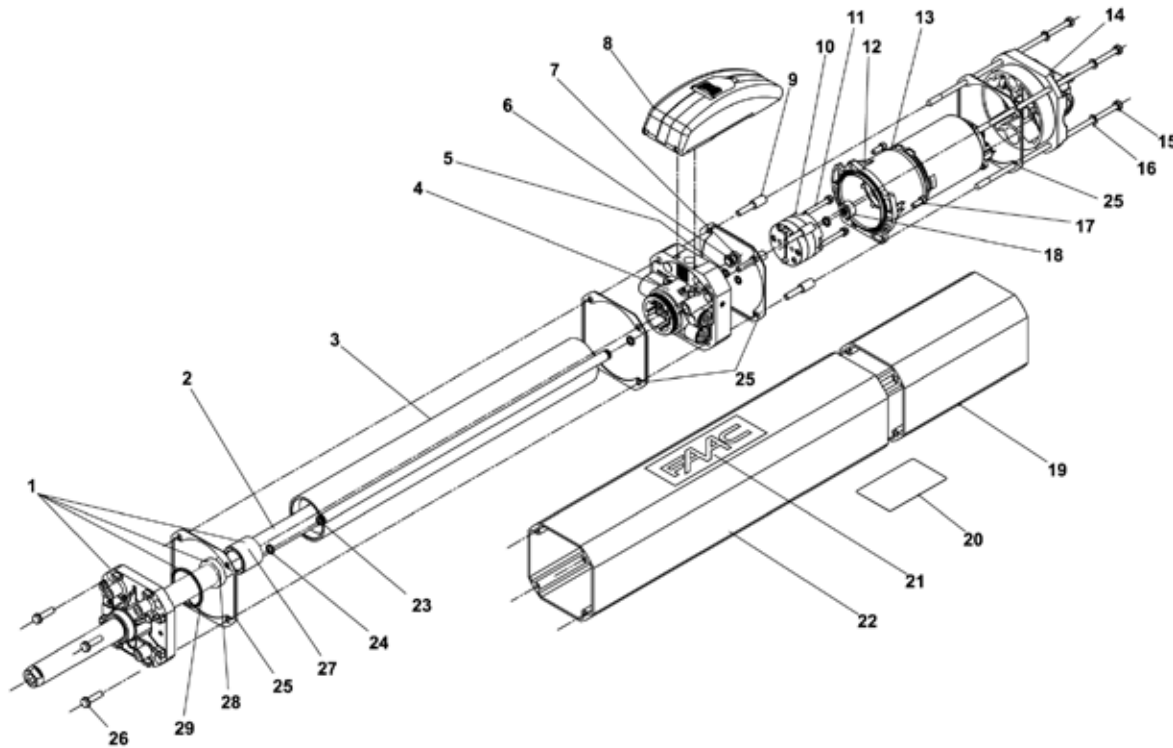
# S450H CBAC



Part	Part Number	Description	List Price
01	63001885	Skinpack	\$125
02	2181.1	Seal kit	\$183
03	714019 Qt.1	Turnstiles Oil: 1 qt.	\$26
03	7140251 Qt.1	Turnstiles Arctic Oil: 1 qt.	\$72
04	63001895	Protective Cover	\$94
05	4170015	Protective Cover End Cap	\$18
06	63001905	Tie Rod Protective Cover	\$14
07	7119405	Protective Cover End Cap Plug	\$6
08	4900605	Swivel Joint Kit (includes 9,10)	\$53
09	702101	Hex. Nut M10	n/a
10	703027	Washer 10 mm	n/a
11	63001945	Front Bracket	\$42

Part	Part Number	Description	List Price
12	63001975	Positive Stop Spacers Kit	\$28
14	63001985	Manual Release Assy	\$83
15	63001875	Encoder	\$188
16	63001965	Short Pin	\$35
17	63001915	Rear Bracket	\$92
18	63001935	Molded Cable Kit	\$62
19	63001925	Bracket Plastic Cover	\$30
20	63001955	Rear Bracket Joint	\$14
21	7182175	Long Pin	\$17
22	2037	Lock Nut 8 mm	\$6

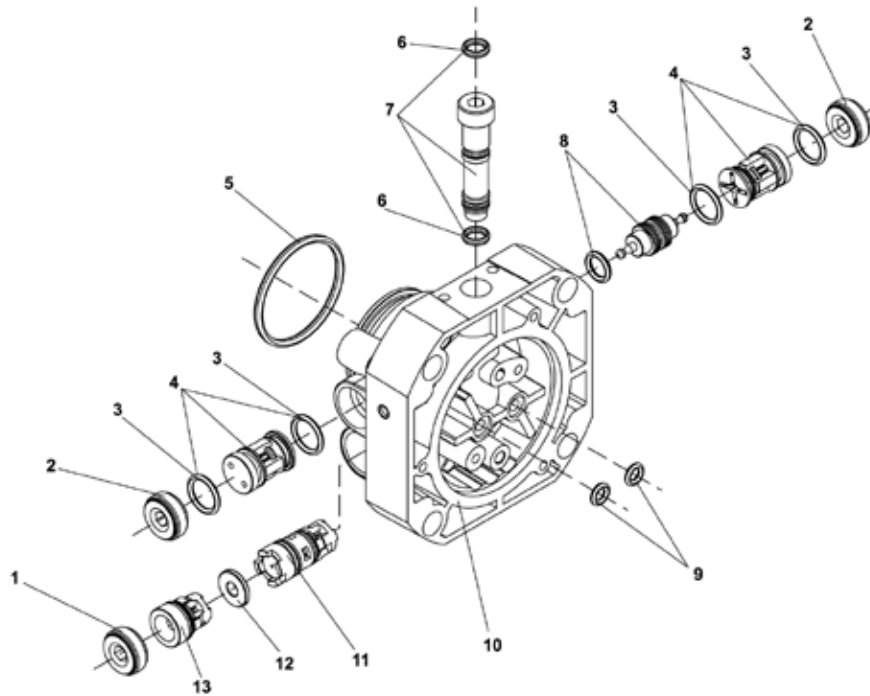
# S450H CBAC



Part	Part Number	Description	List Price
01	63000716	Front Flange	\$75
02	63000656	Piston	\$111
03	63000646	Cylinder	\$72
04	63000676	Cbac Distribution flange	\$217
05	7090010015	O-Ring 48 X 1.78 Mm	\$6
06	63000756	Plug Gasket	n/a
07	63000766	Plug	n/a
08	63001985	Manual Realease Assy	\$83
09	63000746	Tank Screw	\$11
10	63000696	1.5 L/Min Pump	\$167
11	701996	Screw M4x30 Torx Ss	n/a
12	63000626	Motor Cover	\$37
13	63000636	Motor Assembly	\$140
14	63000806	Rear Flange	\$56
15	63000786	Tie Rod	\$13

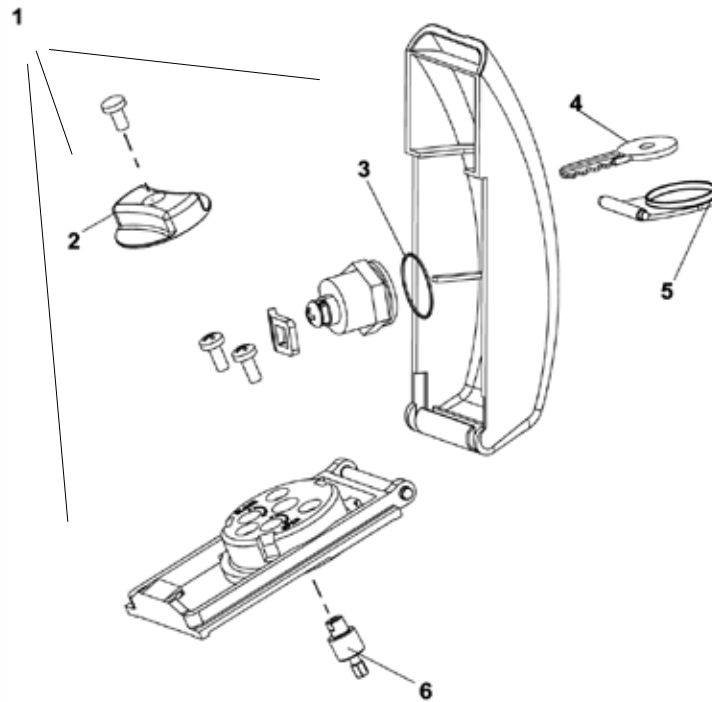
Part	Part Number	Description	List Price
16	703121	Lock Washer M5	n/a
17	701985	Screw M4x12 Torx T20 SS	n/a
18	63000706	Splined Joint	\$34
19	63000776	Motor Cover	\$72
20	903122	Label	n/a
21	63001865	Turnstiles Sticker	n/a
22	63000736	Tank	\$78
23	63000726	Retract Tube	\$30
24	7090815	O-Ring Retract Tube	\$7
25	63000013	Gasket D80	\$7
26	701829	Screw Torx M5x20 with Lock W	n/a
27	708009	Bushing 20X28x24.5mm	n/a
28	63000315	Seal	\$12
29	7090350025	O-Ring 34.60x2.62mm	\$7

# S450H Distribution flange



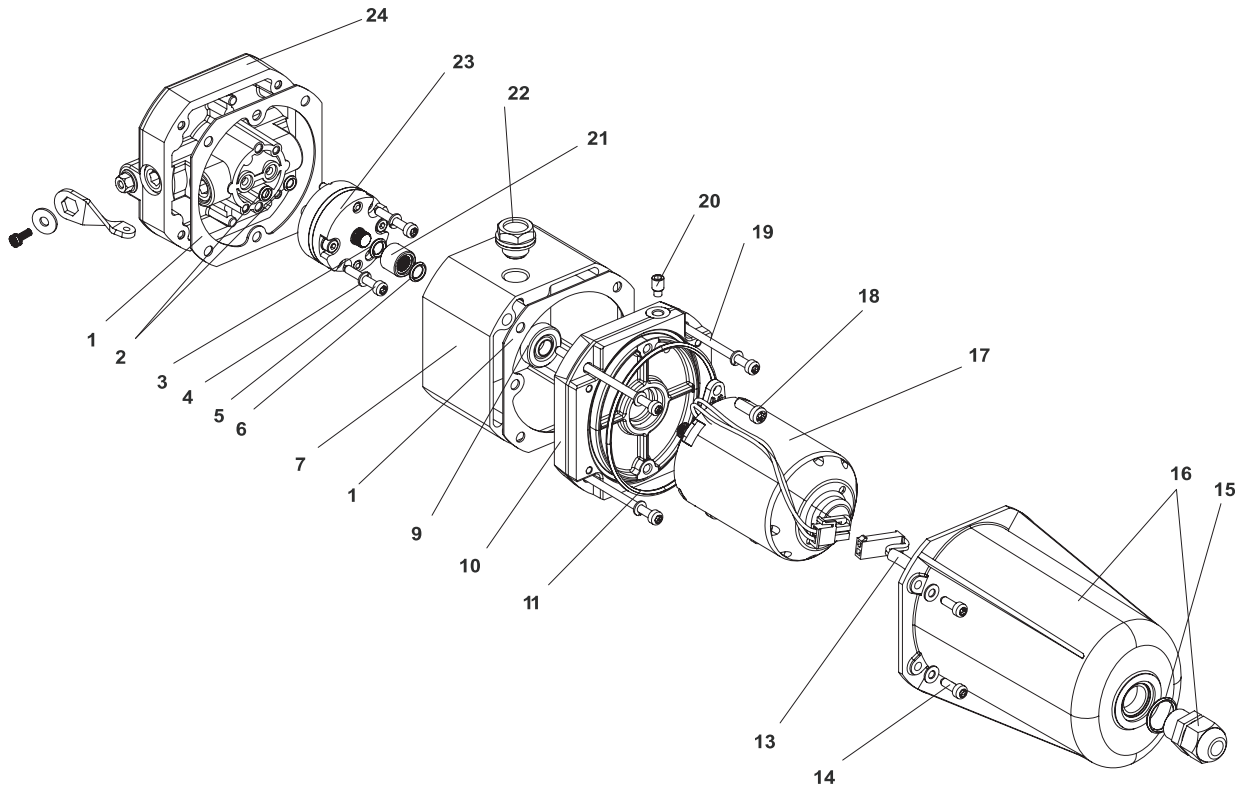
Part	Part Number	Description	List Price
01	63000816	Valve Retainer	\$10
02	63000816	Valve Retainer	\$10
03	7090050015	O-Ring 10.82X1.78 Mm	\$11
04	4404085	Lock Valve	\$13
05	7090350025	O-Ring 34.60X2.62 Mm	\$6
06	7090280015	O-Ring 5.28X1.78 Mm	\$29
07	63000826	Manual Release Valve	\$21
08	4180315	Shuttle Piston	\$6
09	7090010015	O-Ring 4.48X1.78 Mm	\$217
10	63000676	CBAC Distribution flange	\$20
11	4404095	Inlet Valve	\$6
12	63000836	Valve Spacer	\$8
13	4404065	Inlet Valve With Spring	\$7

# S450H Manual Release



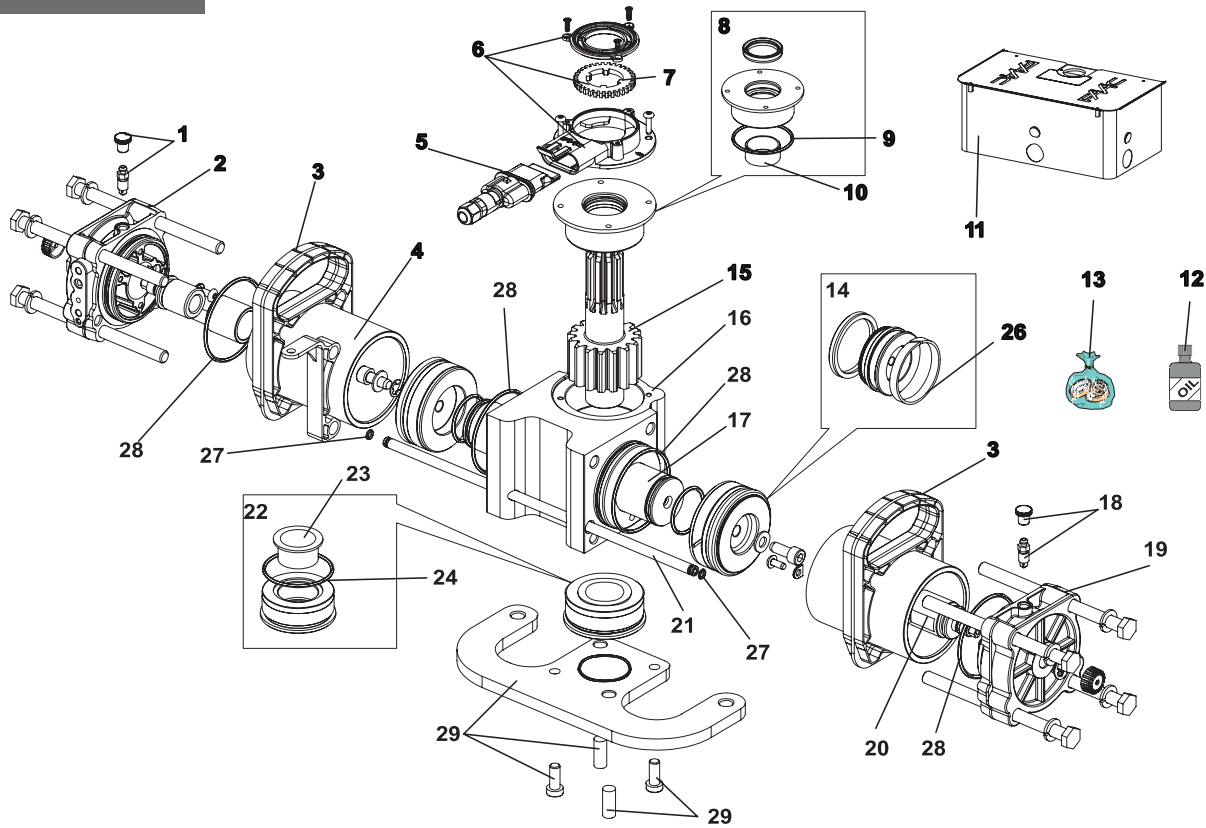
Part	Part Number	Description	List Price
01	63001985	Manual Release Assy	\$83
02	7290445	Release Knob	\$13
03	7090895	O-Ring 21 x 2 mm	\$8
04	7131005	Key Manual Release	\$7
05	7275275	Cover, Key	\$14
06	63000666	Release Pin	\$6
n/a	7090150015	O-Ring Release pin	\$6

# S800H Pump and Motor



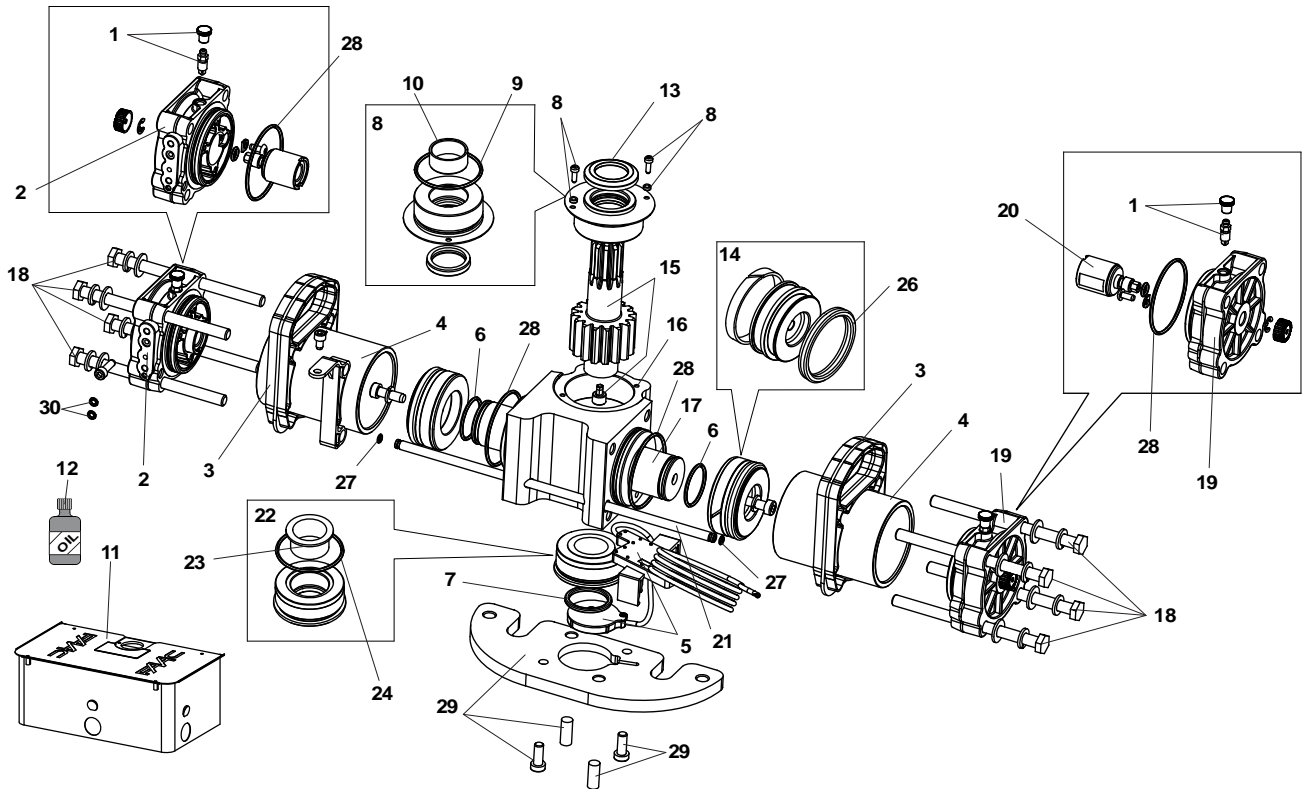
Part	Part Number	Description	List Price	Part	Part Number	Description	List Price
01	63000276	Tank Gasket	\$13	14	701103	Screw M4x12 mm SS	n/a
02	7090010015	O-Ring 4.48x1.78 mm	\$6	15	7090190015	O-Ring 14x1.78 mm	n/a
03	7090030015	O-Ring 6.75x1.78 mm	\$6	16	63002635	Motor Cover	\$54
04	703101	Lock Washer	n/a	17	63000376	Motor and Flange	\$195
05	701632	Screw M4x25 mm	n/a	18	701072	Screw 5x14 mm	n/a
06	7090030015	O-Ring 6.75x1.78 mm	\$6	19	70195	Screw M4x75 mm SS	n/a
07	63000266	Hydraulic Unit Tank	\$60	20	701245	Screw M6x8 mm	n/a
09	63000306	Gasket	\$7	21	63000256	Splined Joint	\$17
10	63000376	Motor and Flange	\$195	22	7110015	Oil Cap	\$6
11	7090100025	O-Ring 72.69x2.62 mm	n/a	23	63000246	0.5 Lt/min Pump	\$201
13	63001665	Motor Wire Harness	\$28	24	63000226	CBAC Distribution flange	\$225

# S800H Drive Unit 100°



Part	Part Number	Description	List Price	Part	Part Number	Description	List Price
01	63000016	Bleeding Valve	\$32	15	63000056	Pinion	\$136
02	63000136	Flange Left	\$138	16	63000046	Body	\$279
03	63002625	Handles	\$30	17	63000086	Rack 100 Degree	\$143
04	63000116	Cylinder 100 Degree	\$81	18	63000016	Bleeding Valve	\$32
05	63000125	Encoder	\$117	19	63000146	Flange Right	\$134
06	63000005	Encoder Support Kit	n/a	20	63000036	Positive Stop	\$63
07	63000115	Magnetic Discs	\$51	21	63000156	Retract Tube 100 Degree	\$27
08	63000076	Upper Bushing Group	\$92	22	63000066	Lower Bushing Group	\$77
09	63000176	O-Ring 55.25x2.62 mm	\$5	23	63000206	IGUS Bushing	n/a
10	63000186	IGUS Bushing	n/a	24	63000196	O-Ring 50.47x2.62 mm	n/a
11	490112	Load Bearing Box Steel	\$586	26	70992025	Gasket	\$21
12	714019 Qt.1	Turnstiles Oil: 1 qt.	\$26	27	7090635	O-Ring 5x1.5 mm	\$6
12	7140251 Qt.1	Turnstiles Arctic Oil: 1 qt.	\$72	28	7090490025	O-Ring 64.77x2.62 mm	\$7
13	2182.1	Seal Kit	\$189	29	63002465	Foundation Plate	\$91
14	63000106	Piston	\$95				

# S800H ENC Drive Unit 100°

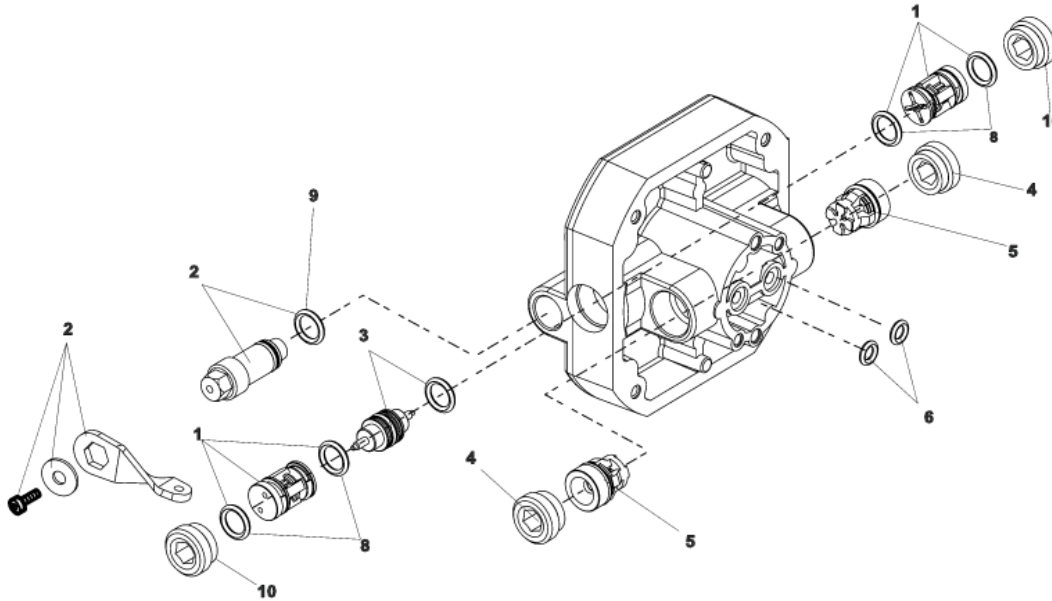


Part	Part Number	Description	List Price
01	63000016	Bleeding Valve	\$32
02	63000136	Flange Left	\$138
03	63002625	Handles	\$30
04	63000116	Cylinder 100°	\$81
05	63000559	Encoder	\$129
06	7090350025	O-Ring 34.60x2.62 mm	\$7
07	63000560	O-Ring 3.53x34.52 mm NBR 70	\$7
08	63000557	Upper Bushing Group	\$123
09	63000176	O-Ring 55.25x2.62 mm	\$5
10	63000186	IGUS Bushing	n/a
11	490112	Load Bearing Box Steel	\$586
12	714019 Qt.1	Turnstiles Oil: 1 qt.	\$26
13	7093225	Dust Cover	\$28
14	63000106	Piston	\$95

Part	Part Number	Description	List Price
15	63000558	Pinion	\$122
16	63000046	Body	\$279
17	63000086	Rack 100°	\$143
18	63000561	Hex Head Bolt M10 x 145 mm	n/a
19	63000146	Flange Right	\$134
20	63000036	Positive Stop	\$63
21	63000156	Retract Tube 100 Degree	\$27
22	63000554	Lower Bushing Group	\$62
23	63000206	IGUS Bushing	n/a
24	63000196	O-Ring 50.47x2.62 mm	n/a
26	70992025	Piston Seal	\$21
27	7090635	O-Ring 5x1.5 mm	\$6
28	7090490025	O-Ring 64.77x2.62 mm	\$7
29	63000553	Base Plate	\$143
30	7090010015	O-Ring 4.48x1.78	\$6
-	2182.1	Seal Kit	\$189

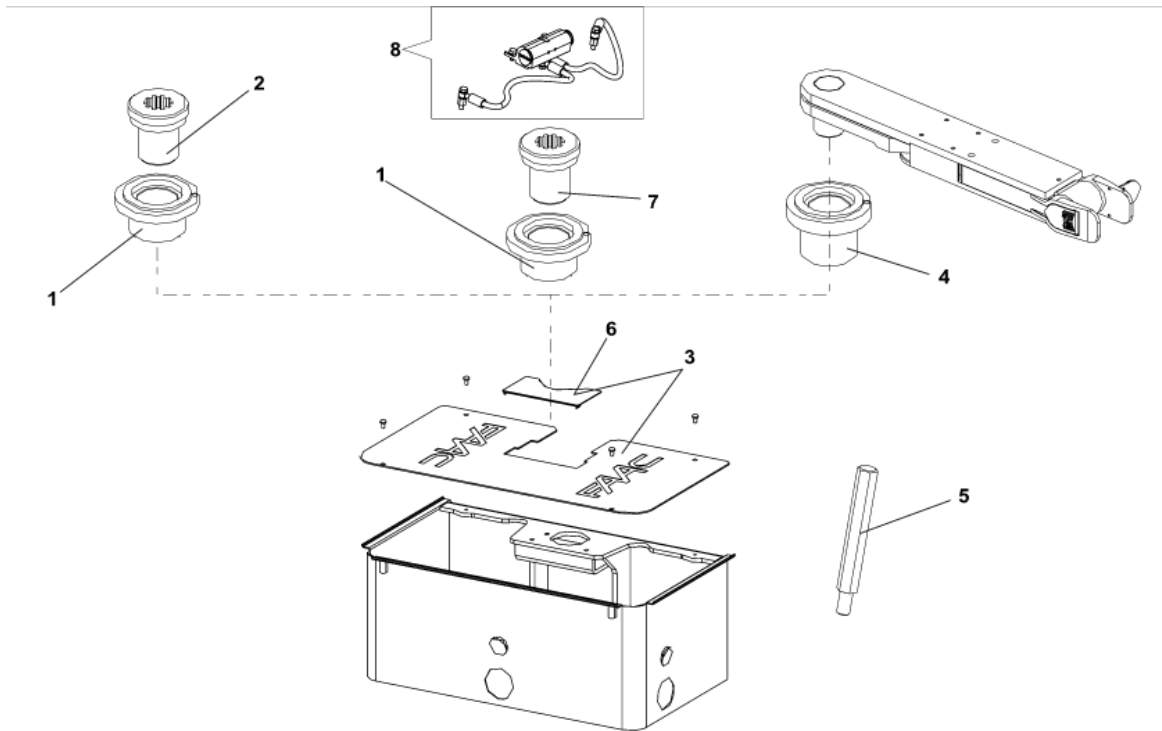


# S800H Distribution flange



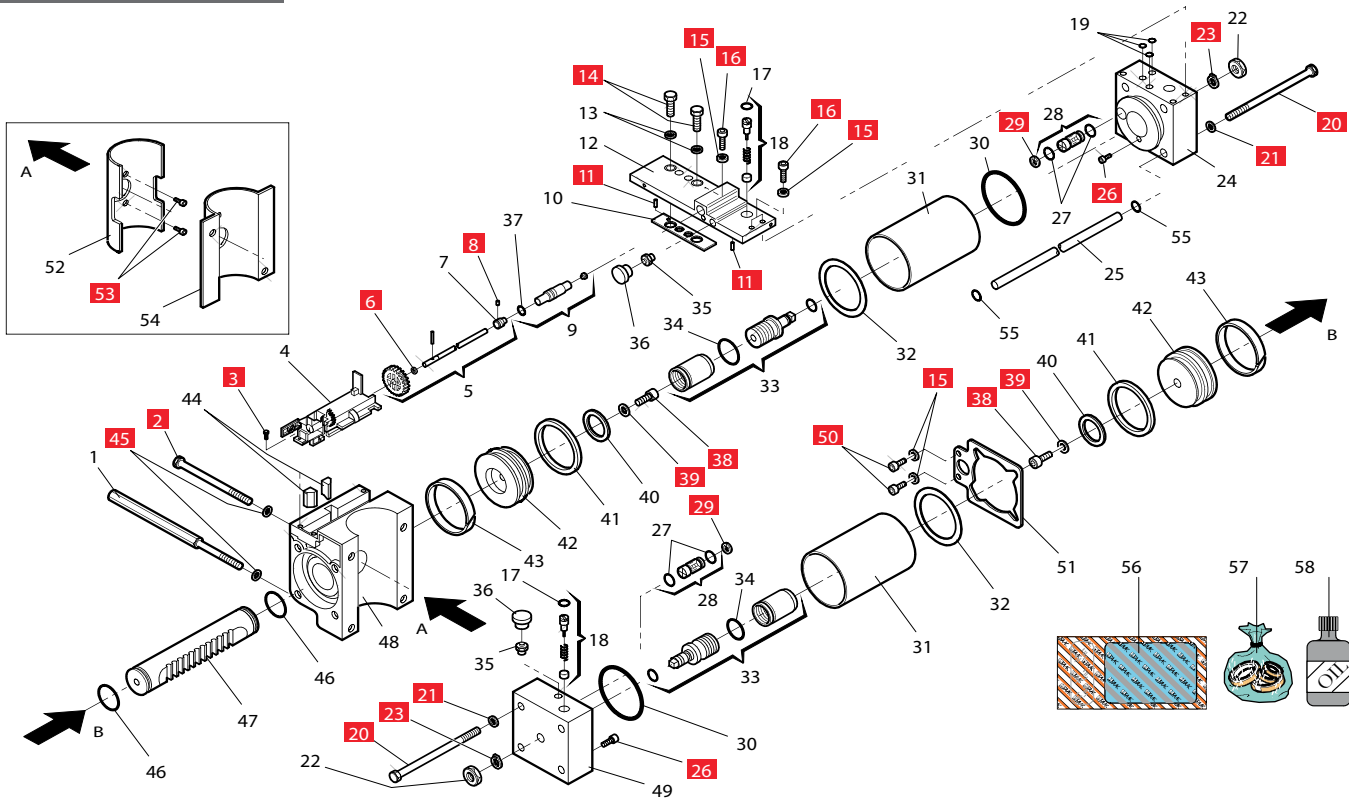
Part	Part Number	Description	List Price
01	4404085	Lock Valve Bi-Metal	\$13
02	63000336	Built-in Manual Release	\$41
03	4180315	Shuttle Piston	\$21
04	7049135	Valve Retaining Ring Nut	\$7
05	4404065	Inlet Valve	\$8
06	7090010015	O-Ring 4.48 X 1.78	\$6
08	7090050015	O-Ring 10.82 X 1.78	n/a
09	7090030015	O-Ring 6.75 X 1.78	\$6
10	7049005	Brass Valve Retaing Ring Nut	\$8

# S800H Load Bearing Box



Part	Part Number	Description	List Price
01	63000015	Bushing Group Low Profile	\$165
02	63000045	Splined Joint Low Profile	\$145
03	63000075	Load Bearing Box Lid	\$110
04	63000025	Bushing Group For Mech. Release	\$166
05	63000065	Operator Mounting Bolt	\$58
06	63002455	Cover Plate	\$10
07	63002445	Splined Joint High Profile	\$171
08	390035	Hydraulic Manual Release	\$234

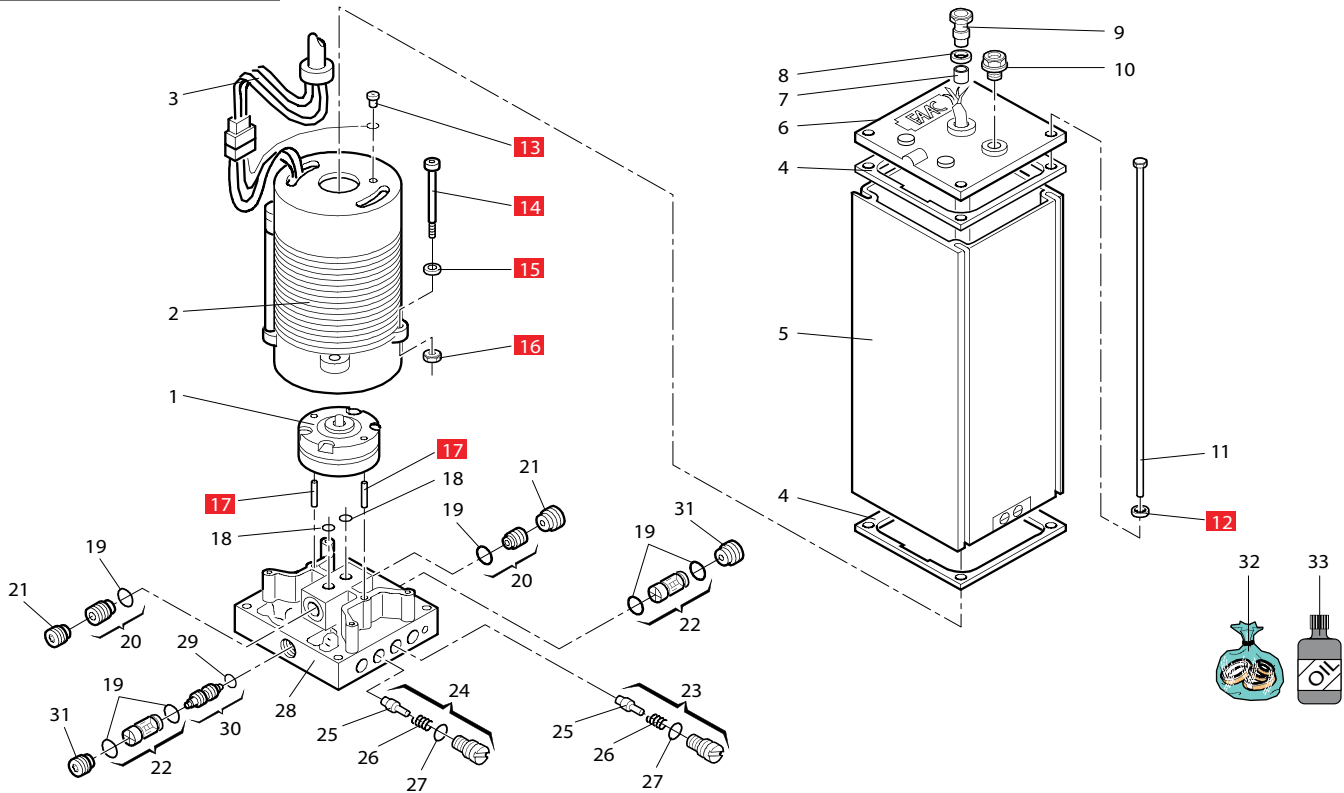
# 760 Drive Unit



Part	Part Number	Description	List Price
01	7019345	Mounting Bolt (Bottom)	\$23
02	7011345	Mounting Bolt (Top)	\$10
03	7014801	Stainless Steel Screw 4x12 mm	n/a
04	7201295	Manual Release Housing	\$18
05	4246385	Manual Release Rod	\$39
06	704026	Snap Ring	n/a
07	7182565	Manual Release Rod End	n/a
08	706915	Retaining Pin	n/a
09	4180295	Manual release	\$25
10	7099595	Gasket (Manifold)	\$26
11	n/a	Parallel Pin	n/a
12	499762	Manifold	\$176
13	7039285	Copper Washer	\$7
14	7110115	Banjo Bolt	\$13
15	703122	Lock Washer	n/a
16	7010881	Allen Head Bolt 6x20 mm	n/a
17	7090150015	O-Ring 9.25 x 1.78 mm	\$6
18	4180265	Brass By-Pass Cap (Brake)	\$25
19	7090010015	O-Ring 4.48 x 1.78 mm	\$6
20	7011355	Flange Bolt Stainless Steel 10x150	\$13
21	703123	Lock Washer	n/a
22	702502	Jack Counter Nut Brass Jam Nut	n/a
23	704027	Snap Ring	n/a
24	499760	Flange (Manifold Side)	\$455
25	7361365	Retract Tube	\$28
26	701367	Allen Head Screw 5 x 10 mm	n/a
27	7090050015	O-Ring 10.82 x 1.78 mm	n/a
28	4404085	Lock Valve	\$13
29	704104	Snap Ring	n/a
30	7090490025	O-Ring 64.77 x 2.62 mm	\$7

Part	Part Number	Description	List Price
31	7366135	Cylinder	\$119
32	7099585	Gasket (Cylinder)	\$9
33	7350275	Brake Group	\$46
34	7090160015	O-Ring 20.35 x 1.78 mm	n/a
35	7246025	Air Drain Valve	\$9
36	7110045	Cap	\$6
37	7090280015	O-Ring 5.28 x 1.78 mm	\$6
38	701087	Allen Head Bolt 8 x 20 mm	n/a
39	703002	Lock Washer	n/a
40	7094115	O-Ring Inner Piston	\$18
41	7092025	Piston Seal	\$21
42	7350275	Piston	\$46
43	7049195	Piston Seal (Inner)	\$29
44	7119485	Vibration Dampener	\$7
45	703114	Lock Washer SS	n/a
46	7090380025	O-Ring 29.82 x 2.62 mm	\$7
47	7193205	Rack	\$143
48	7160505	Ram Body	\$131
49	499761	Flange (Non-Manifold)	\$454
50	701822	Screw M5x12 Torx T20	n/a
51	7224215	Bracket (Pump to Drive)	\$10
52	7099575	Gasket (Drive to Box)	\$12
53	701484	Self Tapping Screw 4x6 mm	n/a
54	7276015	Rack Protecting Cover	n/a
55	7090665	O-Ring (Retracting Tube)	\$7
56	3905515	Skin Pack	\$100
57	2176.1	Seal Kit Drive Unit	\$198
58	714019 Qt.1	Turnstiles Oil: 1 qt.	\$26

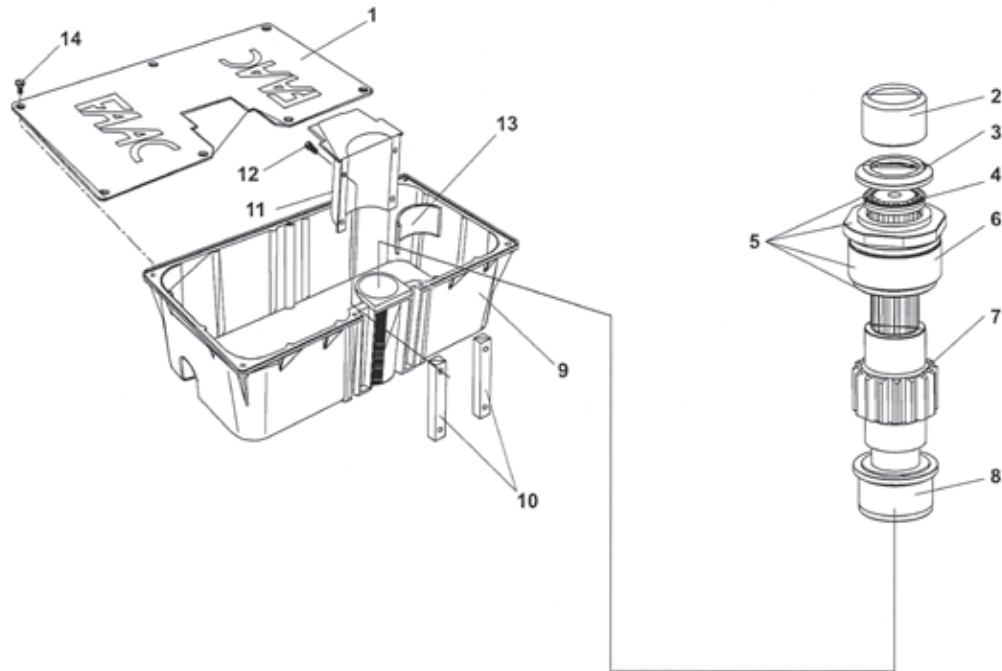
# 760 CBAC Pump



Part	Part Number	Description	List Price
01	3204435	Lobe Pump 0.75 lt.	\$191
02	77000425	115V 1400 rpm Motor	\$202
03	7514125	Electric Power Cord	\$63
04	7099315	Flange Gasket	\$9
05	7450115	Body (Pump Housing)	\$77
06	7276025	Flange (Upper)	\$31
07			
08	7109235	Strain Relief Kit	\$24
09			
10	7110015	Filler Cap	\$6
11	7230385	Tie Rod Pump (760)	\$13
12	703217	Star Washer Stainless Steel	n/a
13	2274	Vent Screw 4 x 8mm	\$7
14	2365	Motor Bolt 4 x 50mm	\$6
15	2366	Lock Washer (4mm)	\$7
16	2367	Hex Nut (4mm)	\$6
17	706152	Pump Pin (4mm x 28mm)	n/a
18	7090010015	O-Ring 4.48 x 1.78	\$6

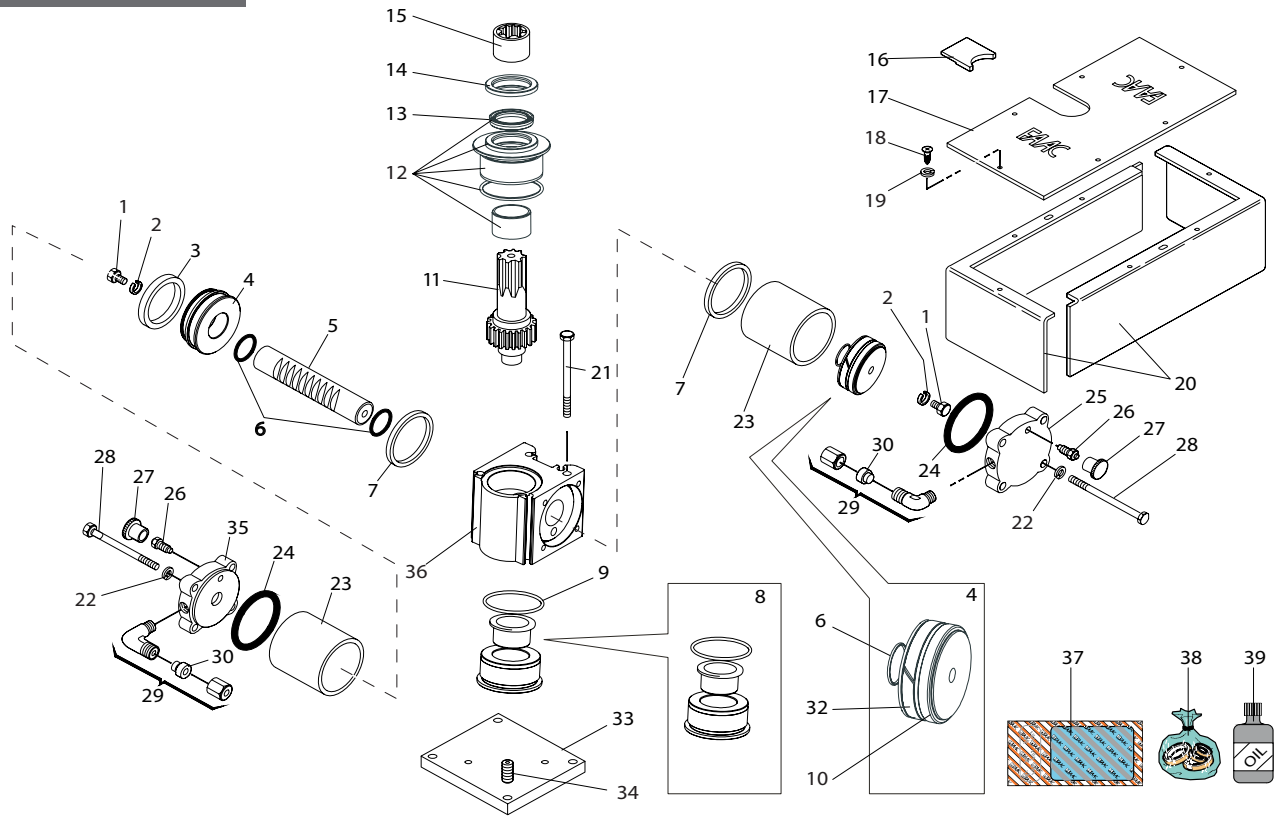
Part	Part Number	Description	List Price
19	7090050015	O-Ring 10.82 x 1.78	n/a
20	4404065	Inlet Valve	\$8
21	7049135	Valve Retainer	\$7
22	4404085	Lock Valve	\$13
23			
24	4180395	Brass By-Pass Cap, Plug and Spring	\$11
25			
26			
27	7090150015	O-Ring 9.25 x 1.78 mm	\$6
28	4994075	Distribution Flange	\$191
29	7090300015	O-Ring 7.66 x 1.78 mm	n/a
30	4180285	Shuttle Piston	\$21
31	7049005	Valve Retainer (Brass)	\$8
32	2170.1	Seal Kit	\$85
33	714019 Qt.1	Turnstiles Oil: 1 qt.	\$26

# 760 Load Bearing Box



Part	Part Number	Description	List Price
01	7276005	Load Bearing Box Cover	\$144
02	7309095	Splined Collar	\$36
03	7093225	Dust Cover	\$28
04	7095075	Seal (Top)	\$23
05	3907535	Bushing Group upper 760	\$132
06	7090765	O-Ring Upper Bushing	\$10
07	7192475	RAM Pinion New Style '05	\$171
08	3907525	Bushing Group Lower 760	\$95
09	4900985	Load Bearing Box	\$561
10	7280885	Mounting Bar	\$47
11	722419	Protective Cover for Gear	n/a
12	701021	Screw 8x35	n/a
13	7099575	Gasket	\$12
14	2070	Screw Box Cover	\$8

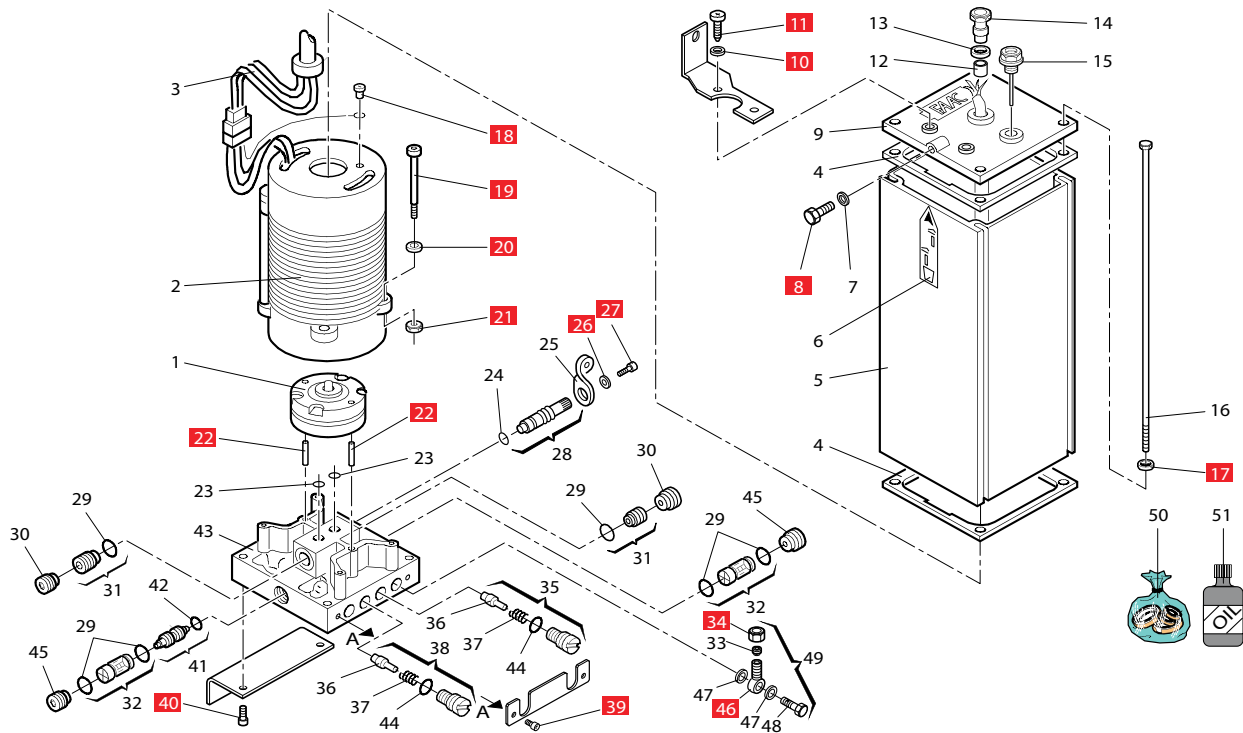
# 750 Drive Unit 100°



Part	Part Number	Description	List Price
01	701384	Bolt M 10x25	n/a
02	7094375	Bonded Seal Washer	\$7
03	7092025	Piston Ring	\$21
04	7350155	Piston	\$47
05	7193055	100 Degrees Rack	\$120
06	7090240015	O-Ring 26.70 x 1.78 mm	\$6
07	7099195	Cylinder Gasket	\$7
08	3907495	Bushing Group Bottom	\$113
09	63000196	O-Ring 50.47 x 2.62 mm	n/a
10	7092025	Piston Seal	\$21
11	7192465	Pinion	\$147
12	3907485	Bushing Group Top	\$113
13	7095075	Gasket	\$23
14	7093225	Dust Cover	\$28
15	7309095	Splined Joint Collar	\$36
16	7280445	Cover Plate	\$6
17	7270415	Foundation Box Lid	\$77
18	701415	Self Tapping Screw 3.9 x 9.5 SS	n/a
19	703106	Lock Washer SS	n/a

Part	Part Number	Description	List Price
20	7223205	Half Box	\$45
21	7011085	Bolt 750 Drive Body 8 x 100 mm	\$12
22	703108	Lock Washer	n/a
23	7366245	Cylinder 750 Drive 100 Degree	\$81
24	7090170015	O-Ring 66.40 x 1.78 mm	\$6
25	7170285	Left Side Flange	\$47
26	7246025	Bleeding Valve	\$9
27	7110045	Cap For Bleeding Valve	\$6
28	7011345	Mounting Bolt 8 x 110 mm*	\$10
29	390700	Banjo Bolt Kit	\$38
30	7102055	Ferrule Fitting	\$7
32	7049195	O-Ring	\$29
33	7287515	Leveling Plate	\$91
34	701217	Leveling Screw Stainless Steel	\$20
35	7170275	Right Side Flange	\$47
36	7161745	Body	\$220
37	39050915	Skin Pack Drive Unit	\$40
38	2171.1	Seal Kit Drive Unit	\$97
39	714019 Qt.1	Turnstiles Oil: 1 qt.	\$26
*	7011095	Mounting Bolt 180° 8x140mm	

# 750 CBAC Pump

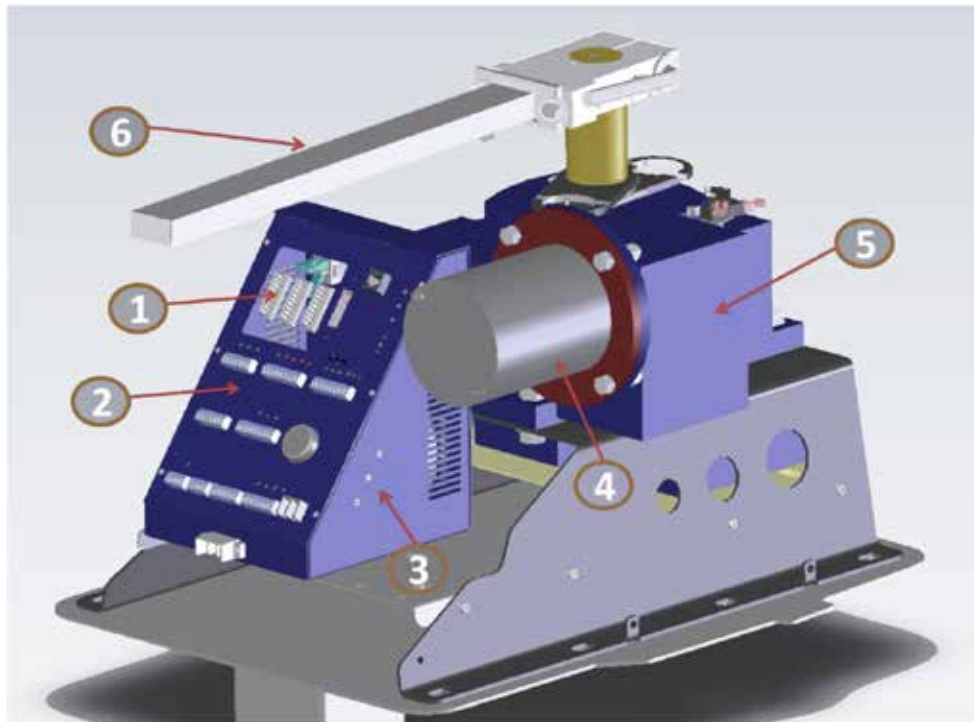


Part	Part Number	Description	List Price
01	3204385	Lobe Pump 0.75 Lt	\$191
02	77002025	115V 1400 rpm Motor	\$202
03	7514125	Motor Power Cable	\$63
04	7099315	Flange Gasket	\$9
05	7450115	Body (Pump Housing)	\$77
06	7320065	Vent Screw Label	n/a
07	7094065	Copper Washer 7x4x1 mm	\$6
08	2274	Screw 4x8 mm	\$7
09	7270535	Upper Flange Pump Unit	\$33
10	703103	Lock Washer	n/a
11	701755	Screw 6x10 mm	n/a
12	7109235	Strain Relief Kit	\$24
13	7112055	Filler Cap	\$8
14	7019145	Tie Rod	n/a
15	703204	Star Washer	n/a
16	2274	Screw 4x8 mm	\$7
17	2365	Motor Bolt 4x50 mm	\$6
18	2366	Lock Washer 4mm	\$7
19	2367	Nut 4 mm	\$6
20	706122	Pin Pump 4x28 mm	n/a
21	7090010015	O-Ring 4.48 x 1.78 mm	\$6
22	7090030015	O-Ringr 6.75 x 1.78 mm	\$6
23	7290155	Manual Release Lever	\$8

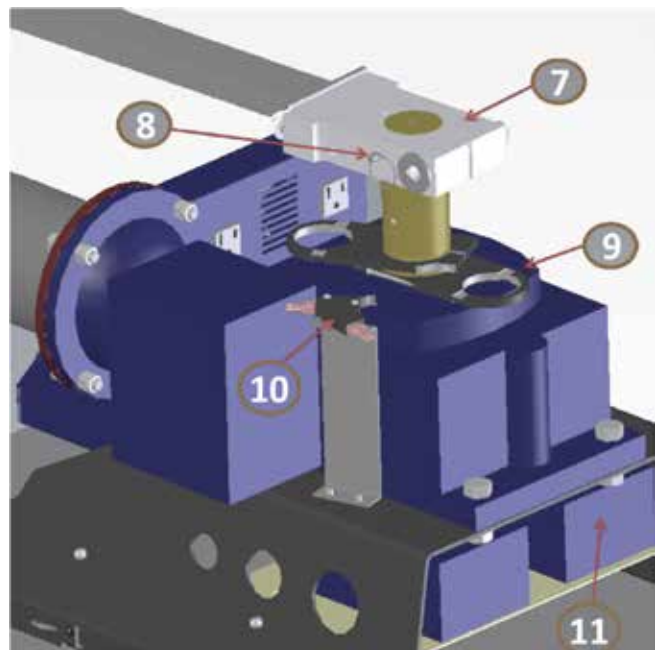
Part	Part Number	Description	List Price
24	703013	Washer	n/a
25	701039	Allen Bolt 4x6 mm	n/a
26	4180225	Manual Release	\$23
27	7090050015	O-Ring 10.82 x 1.78 mm	n/a
28	7049135	Valve Retaining Ring Nut	\$7
29	4404065	Inlet Valve	\$8
30	4404085	Lock Valve	\$13
31	7102055	Ferrule Fitting	\$7
32	702901	Nut M12x1	n/a
33	4180395	Brass By-Pass Cap, Plug and Spring	\$11
34	701497	Self Tapping Screw 2.9x6.5 SS	n/a
35	701028	Screw Sock.Hea. 5x8 mm	n/a
36	4180285	Shuttle Piston	\$21
37	7090440015	O-Ring 7.66x1.78 mm	\$6
38	499445	Distribution Flange	\$221
39	7090150015	O-Ring 9.25x1.78 mm	\$6
40	7049005	Brass Valve Retaina Ring	\$8
41	710920	Banjo Bolt	n/a
42	7039285	Washer	n/a
43	7110115	Fitting	n/a
44	390700	Banjo Bolt Kit	\$38
45	2170.1	Seal Kit Pump Unit	\$85
46	714019 Qt.1	Turnstiles Oil: 1 qt.	\$26



# FSW 900

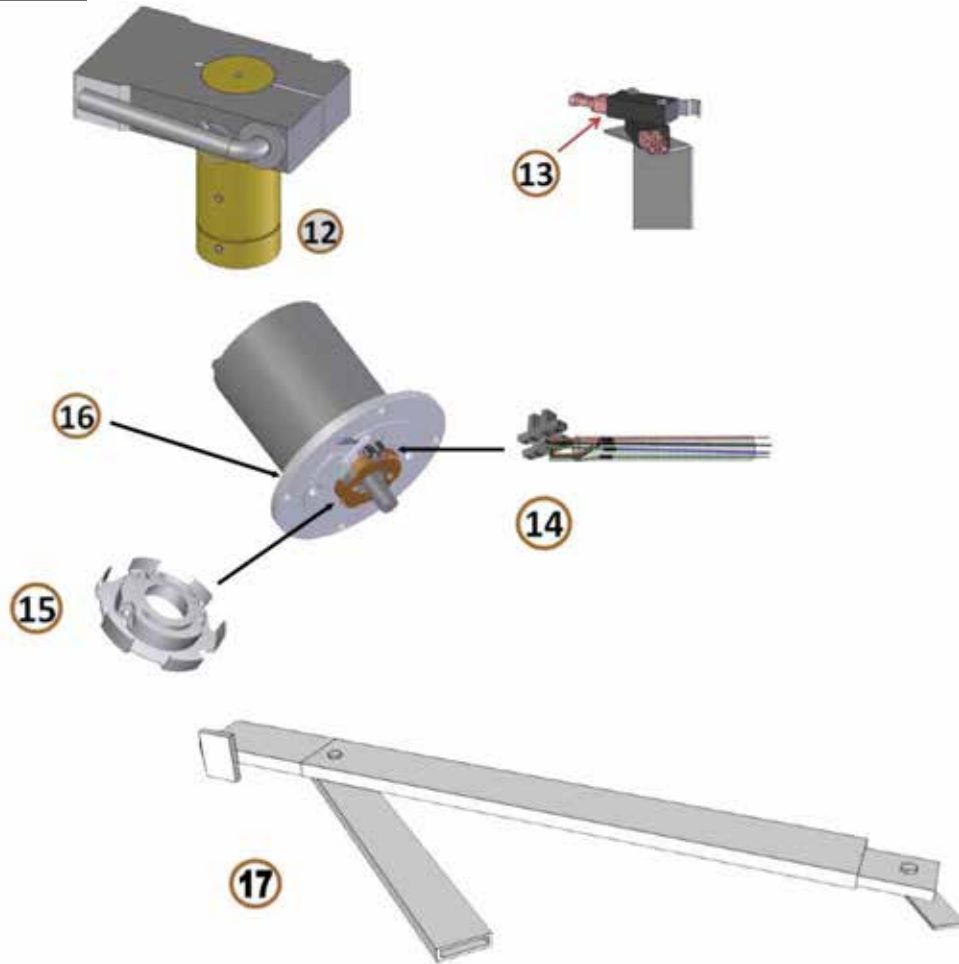


Part	Part Number	Description	List Price
01	n/a	Controller PCB with Heat Sink	n/a
02	GC3100	Controller PCB, Heat Sink and Faceplate Assembly pre-UL 2016	\$614
	GC3200	Controller PCB, Heat Sink and Faceplate Assembly	\$614
03	GC3000	Controller Assembly (No PCB, Faceplate)	\$1,227
04	Motor-0500-24	Motor - 500W, 24DC	\$185
05	SW-0020	Gearbox 900:1	\$859
06	SW-0004	Weld Arm Connector with 12" Bar	\$161
07	SW-0003	Swing Arm Connector	\$136
08	SW-0011	Clutch Alignment Pin	\$14
09	SW-0010	Swing Limit Cam	\$13
10	SW-1000	Limit Assembly Kit	\$50
11	3540.5	Battery (single)	\$135



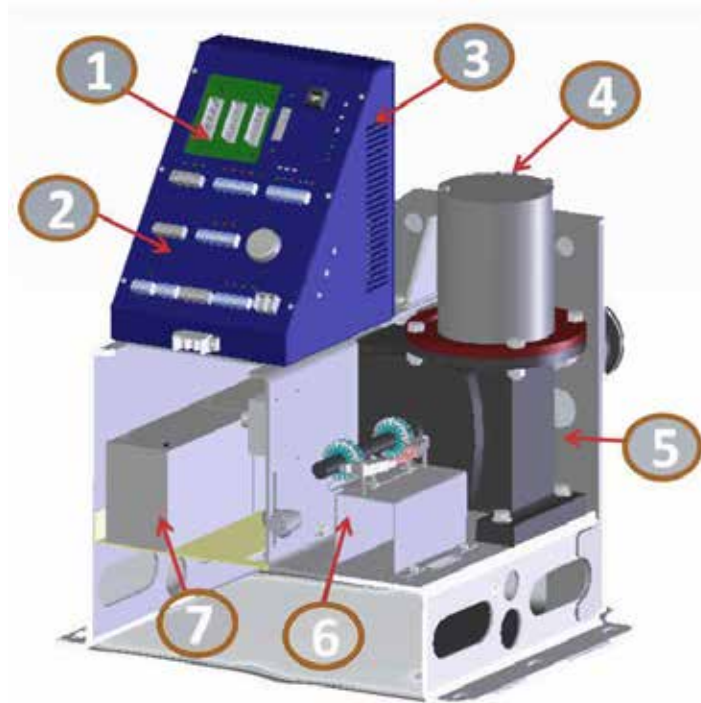


# FSW 900

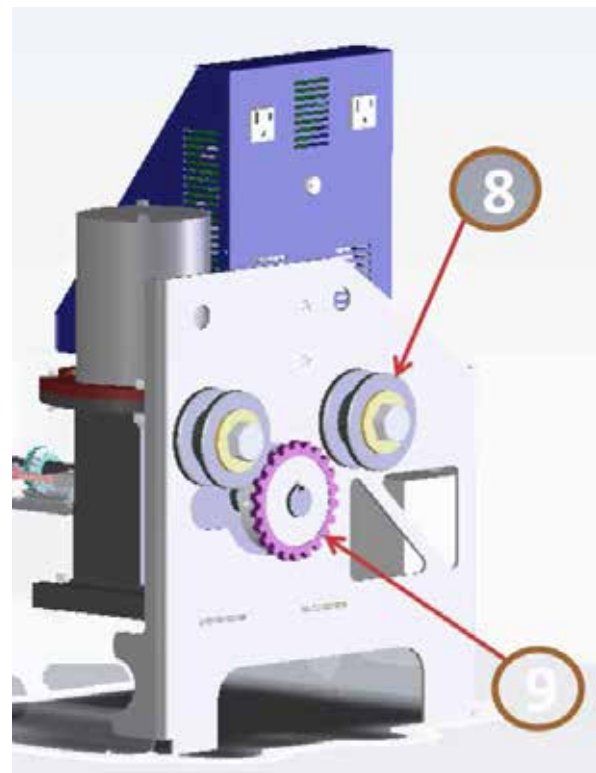


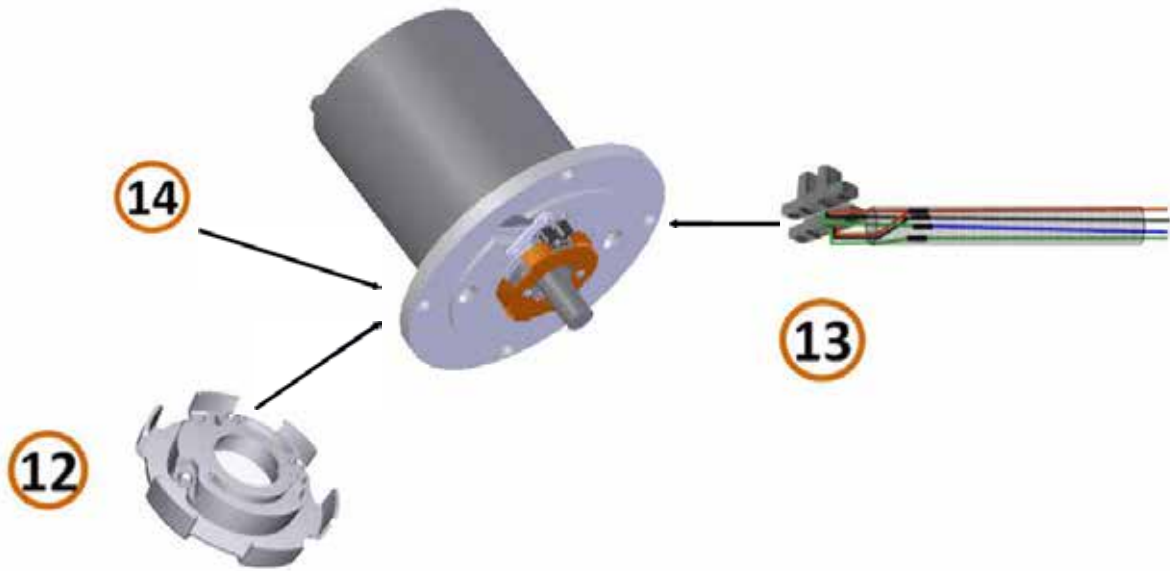
Part	Part Number	Description	List Price
12	SW-0001	Clutch Assembly Kit	\$224
13	Switch-0100	Limit Switch	\$11
14	Wire 1101SK	Sensors Wire Assembly with Screws	\$91
15	AAA0450	Sensor Cup Assembly	\$20
16	AAA-0402	Motor Adapter Plate	\$86
17	SW-0200	Swing Arm Assembly	\$143

# FSL 700

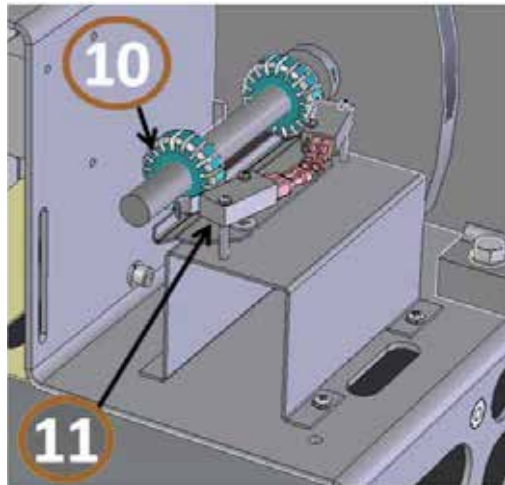


Part	Part Number	Description	List Price
01	n/a	Controller PCB with Heat Sink	n/a
02	GC3100	Controller PCB, Heat Sink and Faceplate Assembly pre-UL 2016	\$614
	GC3200	Controller PCB, Heat Sink and Faceplate Assembly	\$614
03	GC3000	Controller Assbly (No PCB, Faceplate)	\$1,227
04	Motor-0500-24	Motor - 500W, 24VDC	\$185
05	SL-0020	Gearbox 15:1	\$578
06	SL-1000	Limit Stand Assembly with Switches	\$63
07	3540.5	Battery (Single)	\$72
08	SL-1001	Chain Idler Assembly	\$38
09	SL-0002	Chain Sprocket	\$43

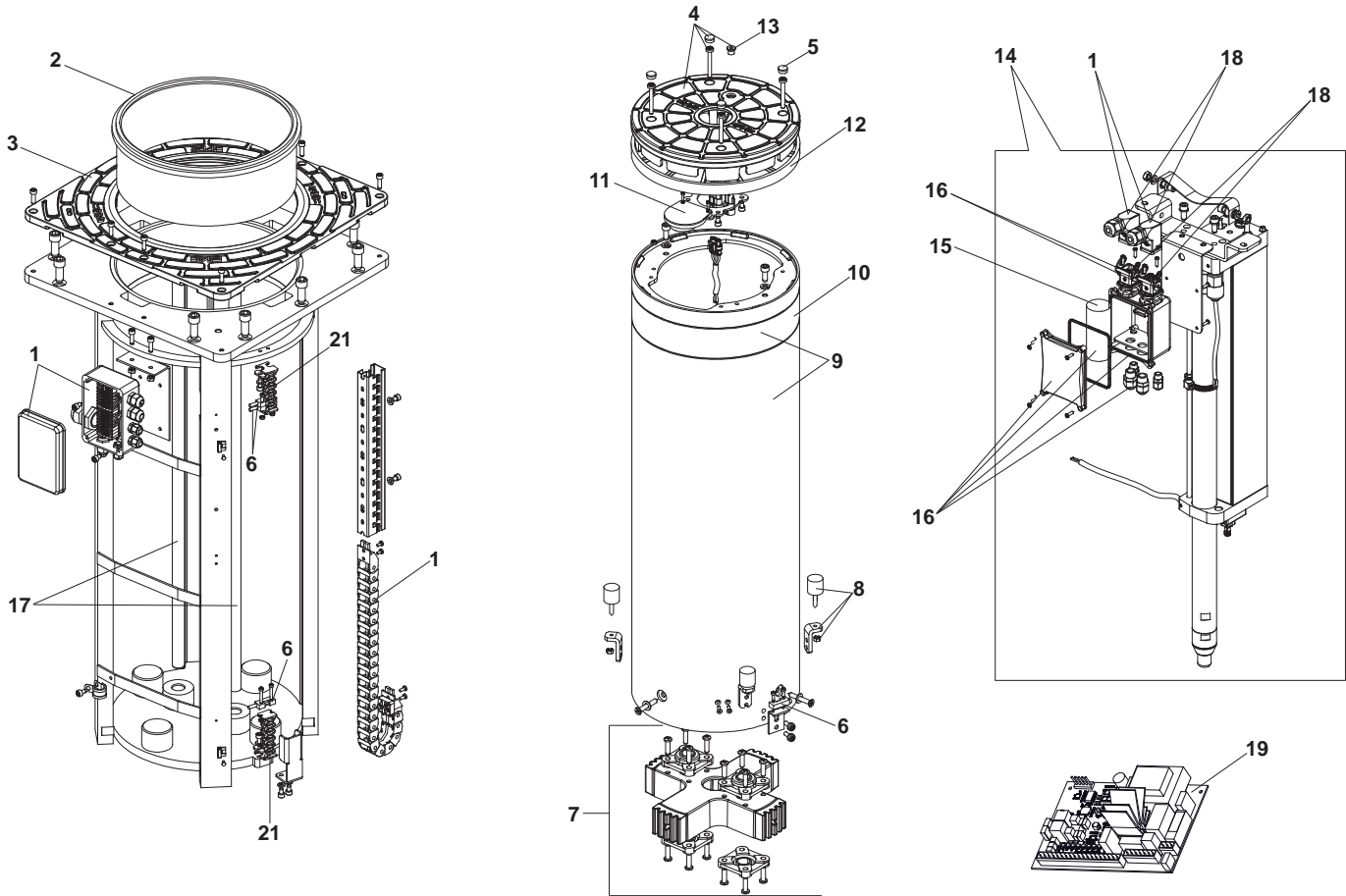




Part	Part Number	Description	List Price
10	SL-0010	Limit Nut	\$6
11	Switch-0100	Limit Switch	\$11
12	AAA0450	Sensor Cup Assembly	\$20
13	Wire1101SK	Sensors Wire Assembly with Screws	\$91
14	AAA-0402	Motor Adapter Plate	\$86

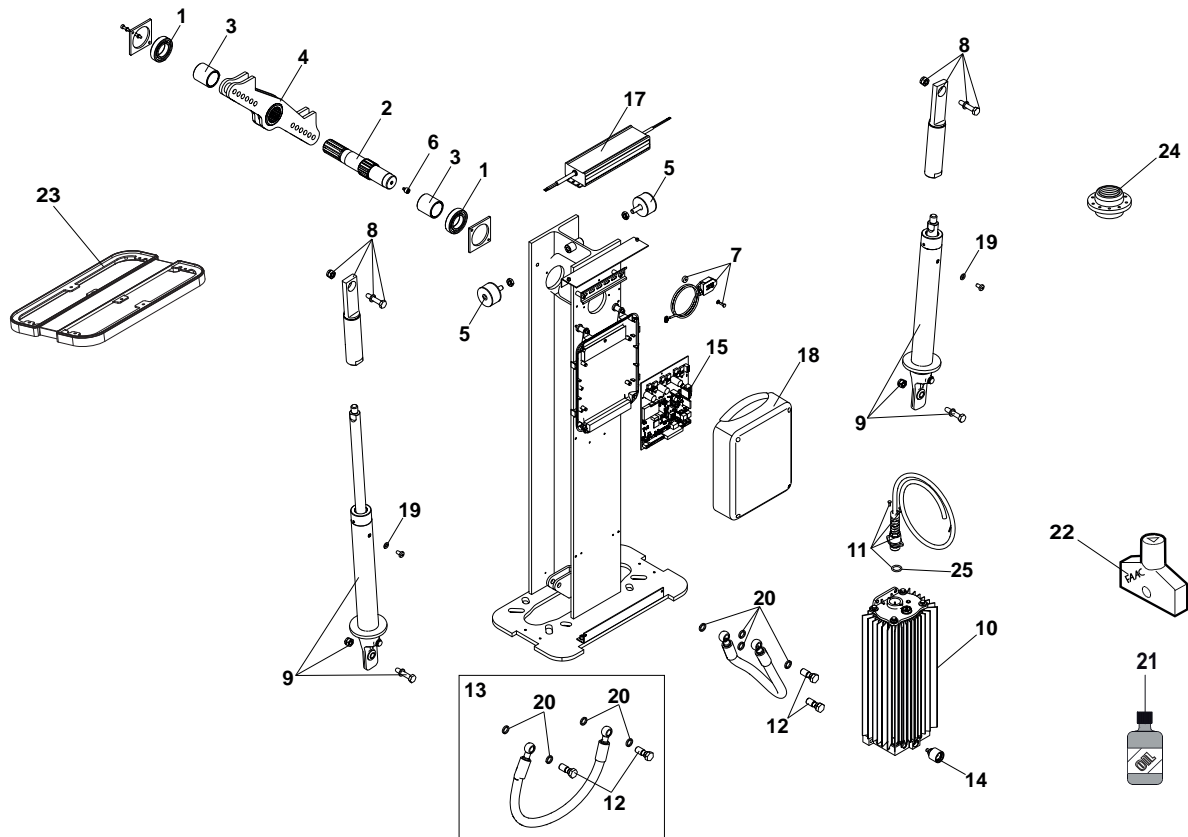


# J275HA



Part	Part Number	Description	List Price
01	63000927	Wire Harness H600	\$916
	63000957	Wire Harness H800	\$958
02	63002255	Top Bushing	\$56
03	63002265	Top Crown	\$313
04	63002235	Bollard Head	\$459
05	63002305	Bollard head bolts plastic caps	\$15
06	63002215	Limit Switch Kit	\$221
07	63000896	Cylinder Guide	\$330
08	63002225	Rubber Stops Assembly	\$40
	63000906	Cylinder H600 with Sticker	\$1,734
	63000936	Cylinder H800 with Sticker	\$1,945
10	63000167	Yellow Reflecting Sticker	\$51
11	63000593	Buzzer	\$69
12	63000594	LED Lamp	\$260
13	63000766	Manual Release Plug	\$7
14	63002246	Complete Hydraulic Unit H600	\$3,809
	63002316	Complete Hydraulic Unit H800	\$3,941
15	7601201	Capacitor 16uF-400V	\$16
16	63000178	Hydraulic Unit Connection Box	\$698
17	63002585	Guide Rods H600	\$376
	63002595	Guide Rods H800	\$458
18	63002645	H600 Connector Kit	\$438
	63002655	H800 Connector Kit	\$464
19	63000223	JE275 Control Board	\$632
21	63000228	Plastic Bracket Reed Sensor	\$24

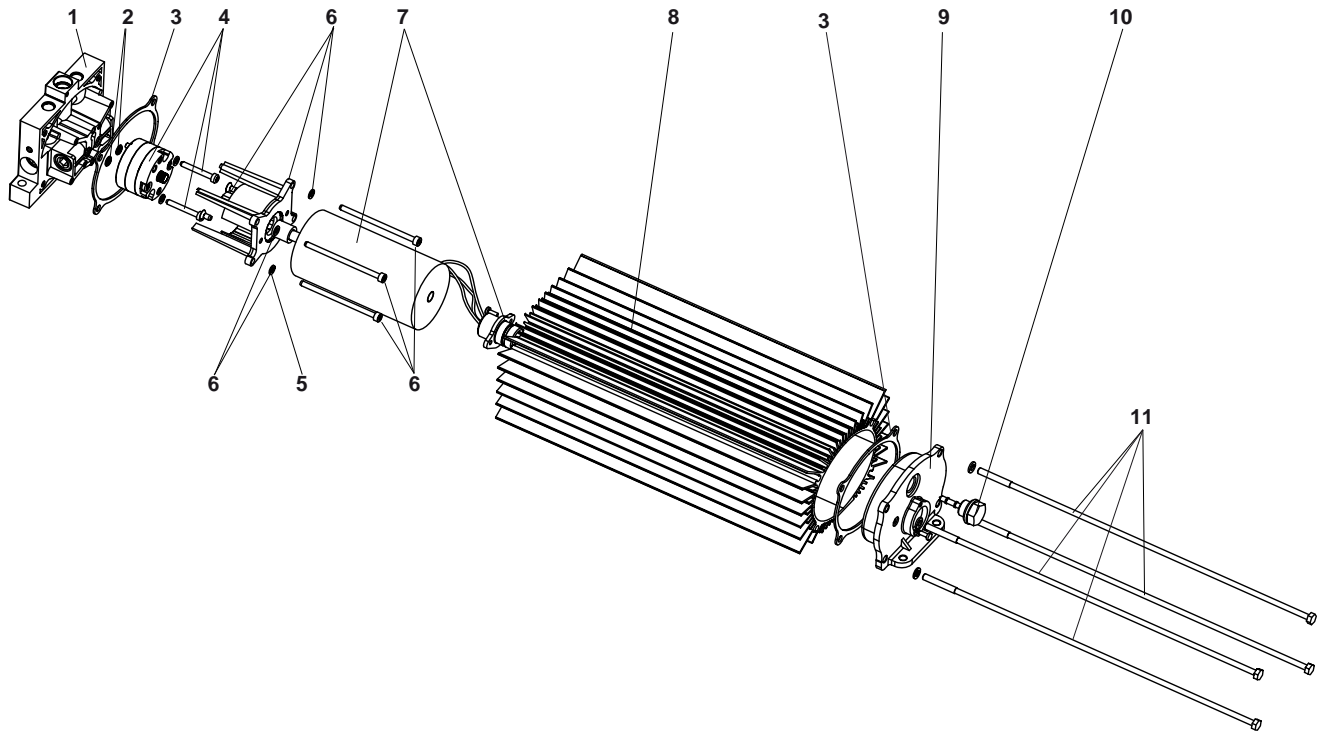
# B680H



Part	Part Number	Description	List Price
1	63000108	Bearing	\$19
2	63000118	Splined Shaft Kit	\$185
3	63000137	Lever Bearing Spacer	\$13
4	63000132	Rocker Arm	\$199
5	63000131	Positive Stops	\$97
6	63000138	Encoder Magnetic Sensor	\$16
7	63001009	Encoder	\$210
8	63000109	Fork With Ball Joint Group	\$16
9	63000133	Cylinder	\$480
10	63000129	Hydraulic Unit	\$592
11	63000113	Female Connector Kit	\$65
12	7110115	Eye Bolt	\$13
13	63000112	Hydraulic Hoses	\$67

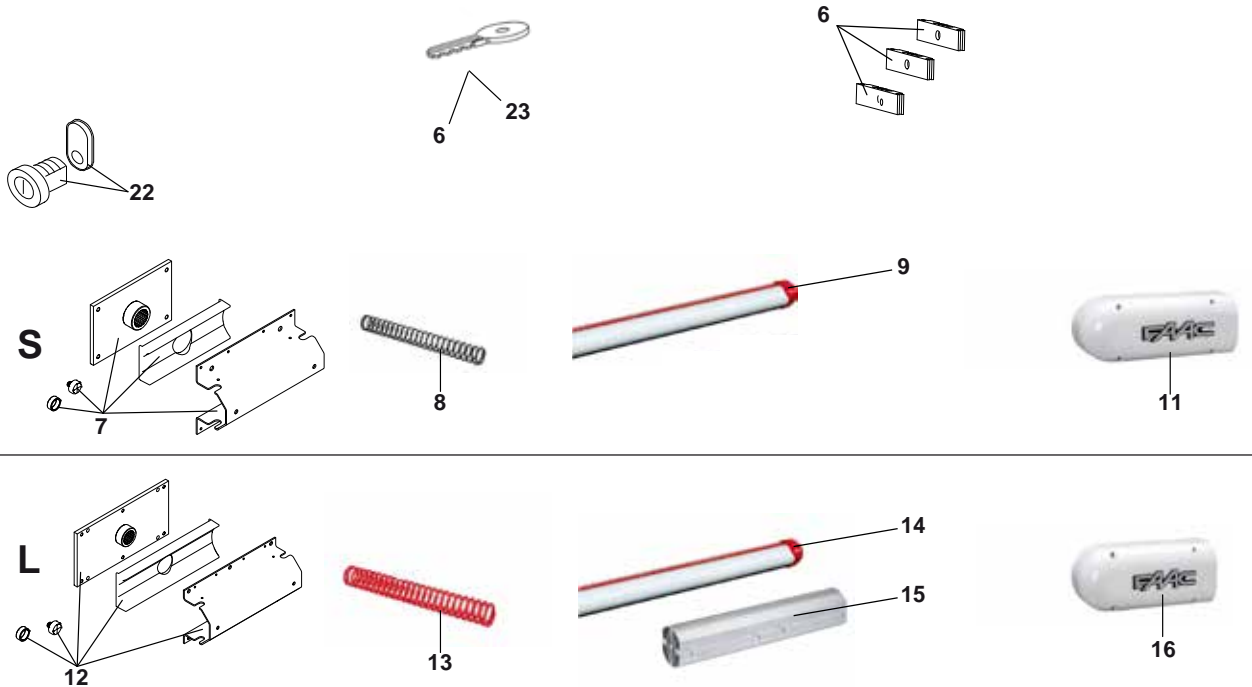
Part	Part Number	Description	List Price
14	63000117	Manual Release Assembly	\$36
15	63000128	Electronic Control Board	\$602
17	63000119	Power Supply	\$867
18	63000139	Control Board Box Cover	\$51
19	7094145	Bonded Seal Vent Screw	\$5
20	63003231	Bonded Seal Hydraulic Hoses	\$6
21	714019 Qt.1	Turnstiles Hydraulic Oil 1 qt.	\$26
22	713002	Manual Release Key	\$8
23	63000153	Led Lights Ring	\$47
24	63000089	Spring Tension Adjusting Nut	\$29
25	7090290015	Connector O-ring	\$6

# B680H



Part	Part Number	Description	List Price
1	63000162	Distribution Flange Assembly	\$230
2	7090010015	O-ring 4.48 X 1.78	\$6
3	63000154	Hydraulic Unit Gasket	\$12
4	63000696	1.5 L/Min Pump	\$167
5	703101	Lock Washer	\$350
6	63000123	Motor/Pump Interface Flange	\$8
7	63000122	Brushless Motor Assembly	n/a
8	63000159	Hydraulic Tank	\$138
9	63000124	Tank Cover	\$38
10	7112065	Oil Level Plug With Level Indicator	\$9
11	63000158	Hydraulic Unit Tie Rod	n/a

# B680H



Part	Part Number	Description	List Price
6	63000152	B680H Housing Accessories	\$49
7	63000087	S Bracket Assembly	\$291
8	63000169	S Spring	\$289
9	63000244	S Arm End Cap	\$14
11	63000088	S Bracket Plastic Cover	\$82
12	63000083	L Bracket Assembly	\$459
13	63000172	L Spring	\$602
14	63000247	L Arm End Cap	\$14
15	428616	L Arm Joint	\$86
16	63000084	L Bracket Plastic Cover	\$85
22	63000121	Lock Assembly	\$39
23	7131005	Door Key	\$8