

2021 CATALOG



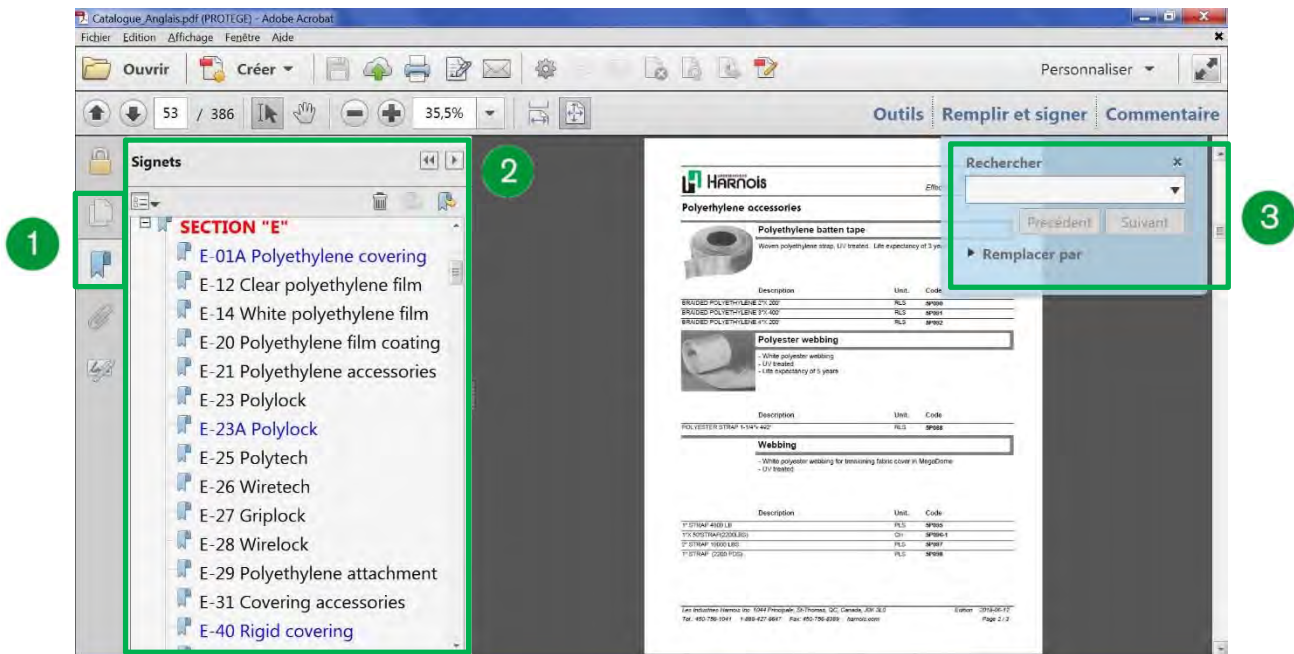
GREENHOUSES | EQUIPMENT | COVERING | SERVICE

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Welcome to the most recent edition of the HARNOIS catalog! One of a handful of greenhouse manufacturers offering such a complete range of greenhouse equipment and accessories under one roof, HARNOIS stands apart with unparalleled and competent service, delivered by a savvy and dedicated team of experts.

CATALOG NAVIGATION GUIDE

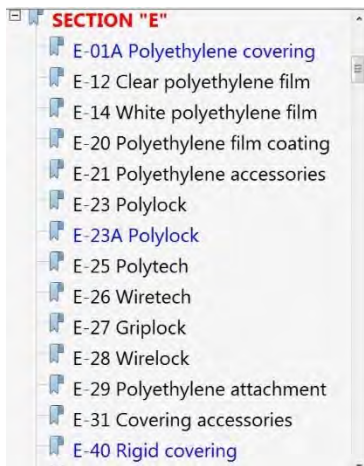
Here's what to expect when you flip the pages of the catalog:



1. Click on the bookmark icon to activate the bookmark side bar or on page view icon to switch to the pages side bar
2. Bookmark side bar
3. Search window (to activate, simultaneously press on CTRL and the F key on your keyboard)

The catalog is divided in sections, each identified by a title. If you are unsure where the information you are looking for is located, activate the search window as described in point 3 above. Type a keyword, such as "heating". The window will automatically indicate the number of occurrences for this keyword in the catalog. Then click on the little arrows ◀ and ▶ to navigate through these occurrences. Not finding what you are looking for? Our catalog only presents a portion of the products we sell. Call one of our sales representatives to find out if we carry what you are looking for!

Some pages are designed to provide additional technical information. They appear as a blue link in the bookmark side bar.



These pages contain useful information, designed to help you select the best item to suit your needs.

At any time, we invite you to contact our sales representatives who will be able to guide you through this catalog and advise you on the products offered.

Toll free (in Canada and USA): 1-888-427-6647

Elsewhere: 01-450-756-1041

By email: info@harnois.com

Harnois reserves the right to modify its product range at any time and without notice. Certain items might not be available in certain regions. A minimum order amount might be required to process overseas orders. Illustrations in this catalog may differ from the product supplied. Harnois holds no responsibility regarding the availability in stock of the items shown in this catalog. Call our representatives to enquire about availability of specific items.

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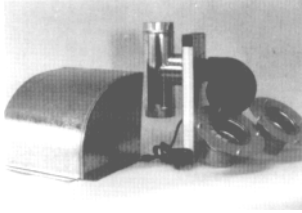
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Inflating kit



Inflating blower for double polyethylene

Inflating kit for outside installation (where outside humidity is lower than inside greenhouse humidity) to prevent condensation between the two covering films. Frame and protector in galvanized steel, plate for adjustment of flow. Frame with styrofoam insulation, fit on 1-1/4" purlin. Including adjustable blower on isolated frame with 4.75" diameter tee outlet, 2 films adapters and 20' of 4.75" diameter poly tube.

Description	Unit.	Code
INFLATING KIT MODEL 200	CH	2L200-1
INFLATING KIT MODEL 300	CH	2L300-1



Central blower for double poly (Canada)

Central blower with a capacity of 2300 cfm (3907m³/h).

Can accommodate an area of 115,000 square feet (1.1 hectare) of greenhouse. The system consists of a tubular fan with a power of 1/3 HP (0.25kW). The distribution is done in a 10" (0.245m) diameter line in galvanized steel. System is provided with a pressure sensor and a controller providing a constant pressure in the system.

There are 3 possible settings: 0.13, 0.14 and 0.15" of water (32, 34 or 37 Pascals).

Description	Unit.	Code
POLY BLOWER 2300 CFM	CH	3L2300-CAN
VERTICAL DIST. BLOWER	CH	3L9900
HORIZONTALE DIST. BLOWER	PLS	3L9905

Inflating kit



Central blower for double poly (Mexico)

Central blower with a capacity of 2300 cfm (3907m3/h).

Can accommodate an area of 115,000 square feet (1.1 hectare) of greenhouse. The system consists of a tubular fan with a power of 1/3 HP (0.25kW). The distribution is done in a 10" (0.245m) diameter line in galvanized steel. System is provided with a pressure sensor and a controller providing a constant pressure in the system.

There are 3 possible settings: 0.13, 0.14 and 0.15" of water (32, 34 or 37 Pascals).

Description	Unit.	Code
POLY BLOWER 2300 CFM	CH	3L2300

Double polyethylene inflating kit



BLOWER	2L200-1	2L300-1	3L2300 3L2300-CAN
CFM at 0.2"	131	450	2300
M3/h at 49 (Pascal)	222	764	3900
Volts	115 VAC	115 VAC	208/480
Phases	1	1	3
Amps	0.65	1.35	2.6 / 1.2
Hertz	60/50	60/50	60/50
RPM	2880	1640	0-1725
Surface of greenhouse (sq.ft)	0-4000	4000-15000	115000
Surface of greenhouse (hectare)	0-0.037	0.037-0.1393	1.1

Calculate 0.03 CFM/sq.ft of floor surface for any type of structures (Ovaltech, Nordique, etc.)

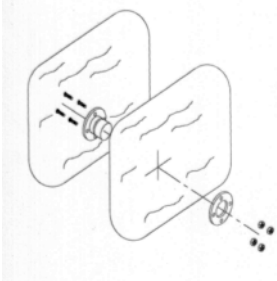
Inflating kit accessories



Plastic blower adapter

4" tube adapter for polyethylene film (plastic).

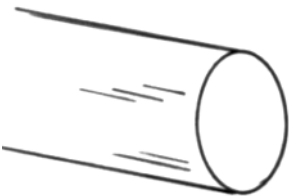
Description	Unit.	Code
4" TUBE ADAPTOR FOR POLY FILM	CH	1L010-1
2 INFL.ADAPT.+(5') 4-3/4" TUBE	CH	3AT10



Transfer kit

1-1/4" diameter polypropylene tube for films that transfers air from one space to another. Ideal for the transfer of air from roof to the walls using the same blower.

Description	Unit.	Code
1-1/4" PLASTIC FLANGE ADAPTOR	CH	8E020
PLASTIC TUBE 1-1/4"	PLS	8E021



Inflation tube

Description	Unit.	Code
4.75"DIA X 20' AIR INFLAT.TUBE	CH	2L013

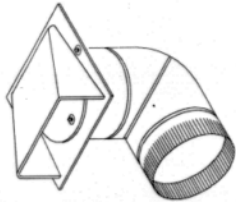


Flexible inflation tube

Description	Unit.	Code
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Inflating kit accessories

FLEXIBLE ALUM.CONDUCT 4"X 50'	CH	8E105
FLEXIBLE ALUM.CONDUCT 4"X 12'	CH	8E107
FLEXIBLE ALUM.CONDUCT 4"X 25'	CH	8E108



Inflation regulator

Air pressure regulator, with counterweight, lets evacuate the extra air between covering films, thus maintaining the optimal pressure at 0.15" of water column. This regulator is highly recommended for natural ventilation where the air volume varies with the rolling of the films or their height. Each kit includes a pressure regulator, 1 galvanized mounting plate, 1 adjustable galvanized 90 degrees 4" elbow, 10' of polyethylene 4.75" diameter and one 4"diameter galvanized adapter for polyethylene film.

Description	Unit.	Code
AIR DAMPER	CH	2A6815



Dwyer manometer

Manometer shows static pressure between two layers of film. Recommended static pressure is between 0.15" and 0.20" of water column. Suggested pressure for heating tube is 0.13".

Description	Unit.	Code
MANOMETER "DWYER" MARK II	CH	8C160
RED OIL/DENSITY.826 3/4oz/BTLE	CH	8C160A
Air filter kit A-606	CH	8C160-B

Pipe

Description	Unit.	Code
4" PIPE X 60" LONG 30 GA	CH	8E044

Inflating kit accessories

4" PIPE X 36" 30 GA #440113	CH	8E045
TEE 4"X 4"X 4" #466038	CH	8E046
14" PIPE 14" X 60" 28 GA	CH	8E047
CAP GALV 14" #467202	CH	8E048
CAP GALV 10" #467202	CH	8E527

Speed control

Description	Unit.	Code
SPEED CONTROLER MOMO	CH	8HC56

Blower parts



Blower with motor

Blower with motor for replacement.

Description	Unit.	Code
BLOWER NEW 131PC	CH	8J1TDP5
BLOWER 115V 60HZ 300PC	CH	8J1TDR7

Blower

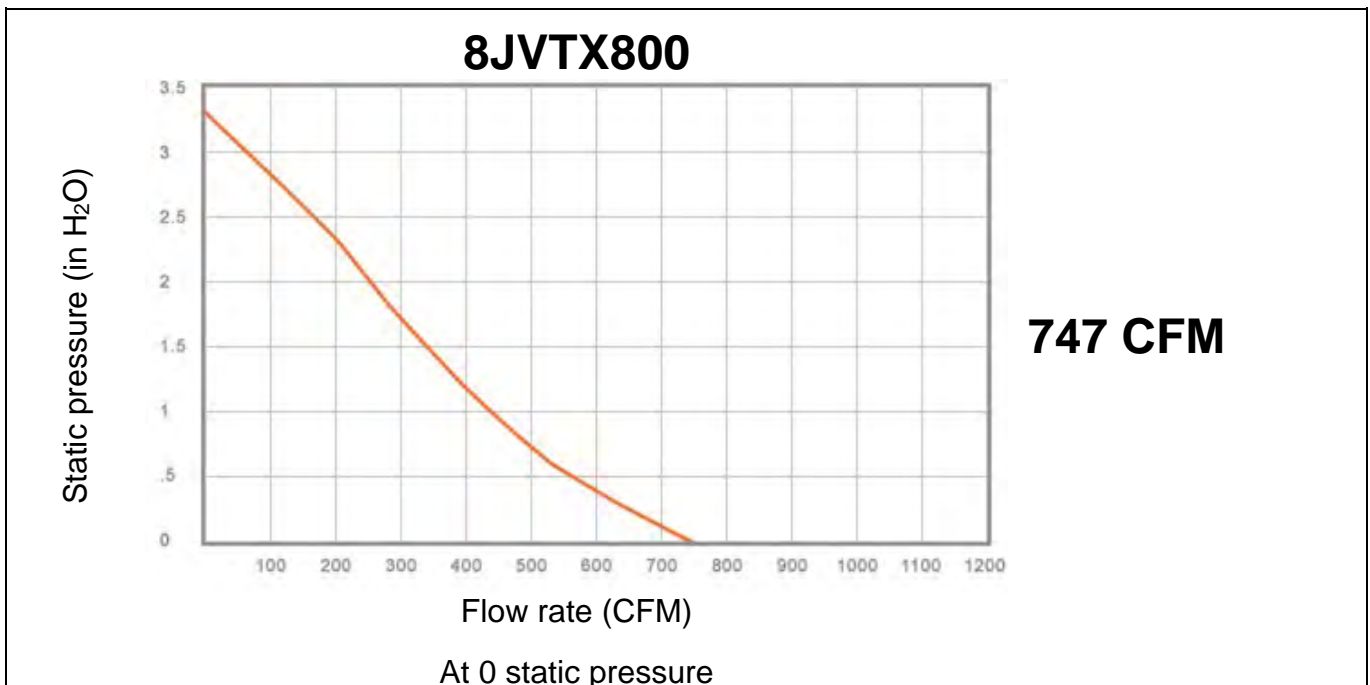
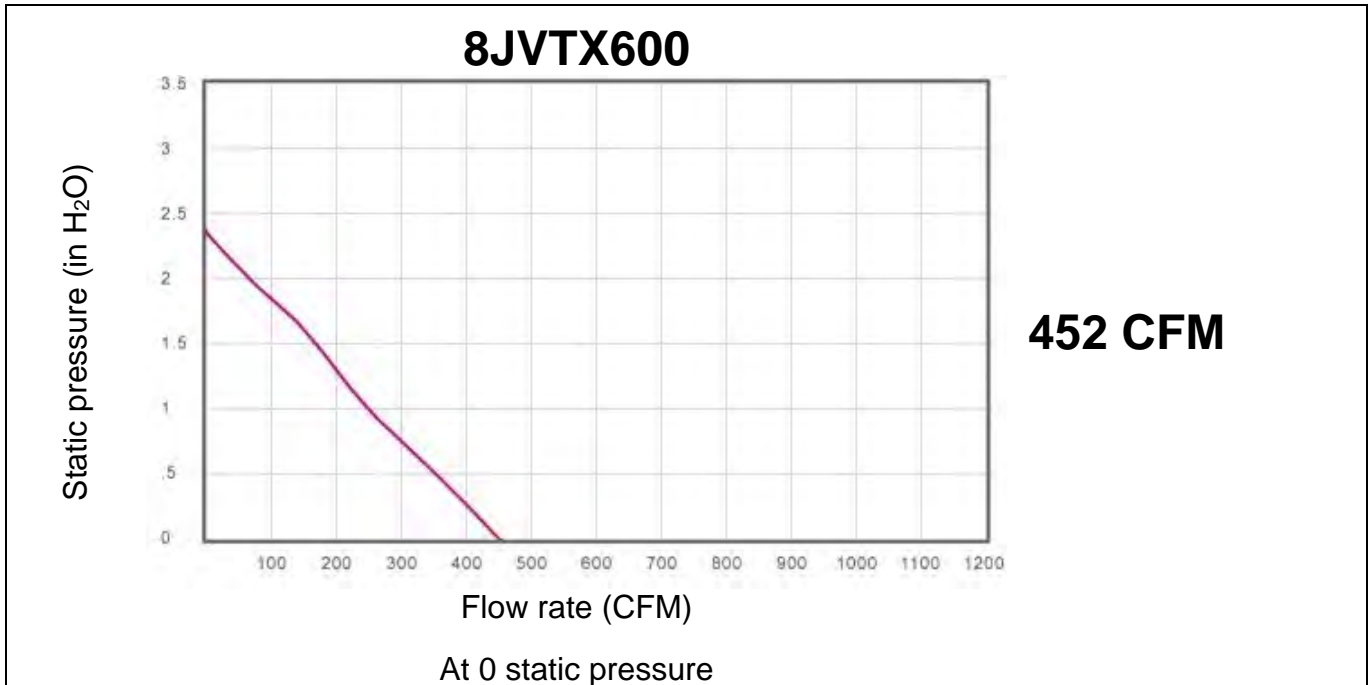


Blower

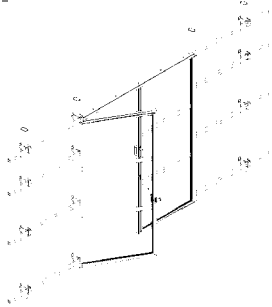
Description	Unit.	Code
BLOWER VORTEX 452 CFM	CH	8JVTX600
BLOWER VORTEX 747 CFM	CH	8JVTX800

Blower

Air performance graph



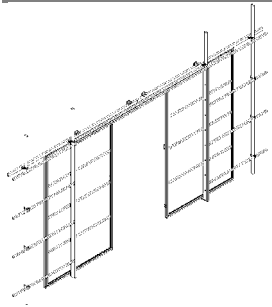
Greenhouse door



On hinges for steel end

Galvanized steel greenhouse doors. Hinge doors for steel greenhouse structure. Can be covered with triple polycarbonate only. Ideal for greenhouse partition walls. Each door kit includes door seal, lock, hinges. Covering accessories for triple polycarbonate included.

Description	Unit.	Code
48"X98"H SING HING DOOR ST G-E	EA	3F310
72"X98"H SING HING DOOR ST G-E	EA	3F312
48"X90"H SING HING DOOR ST G-E	EA	3F318
96"X98"H DBL HING DOOR ST G-E	EA	3F320
144"X98"H DBL HING DOOR ST G-E	EA	3F322
96"X90"H DBL HING DOOR ST G-E	EA	3F328

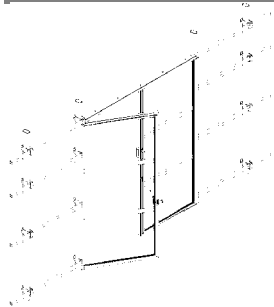


Sliding door for steel end

Galvanized steel greenhouse doors. Sliding doors for steel greenhouse structure. Can be covered with triple polycarbonate only. Ideal for greenhouse partition walls. Each door kit includes attachments, guides and lock. Covering accessories for triple polycarbonate included.

Description	Unit.	Code
48"X98" SING SLID DOOR ST G-E	EA	3F210
60"X122" SING SLID DOOR ST G-E	EA	3F212
72"X98" SING SLID DOOR ST G-E	EA	3F214
72"X142" SING SLID DOOR ST G-E	EA	3F216
48"X90" SING SLID DOOR ST G-E	EA	3F218
96"X98"H DBL SLID DOOR ST G-E	EA	3F220
120"X122"H DBL SLID DOOR ST GE	EA	3F222
144"X98"H DBL SLID DOOR ST G-E	EA	3F224
144"X142"H DBL SLID DOOR ST GE	EA	3F226
96"X90"H DBL SLID DOOR ST G-E	EA	3F228

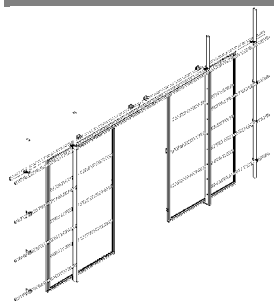
Greenhouse door



On hinges for wood end

Galvanized steel greenhouse doors. Hinge doors for wood greenhouse structure. Can be covered with triple polycarbonate only. Ideal for greenhouse partition walls. Each door kit includes door seal, lock, hinges. Covering accessories for triple polycarbonate included.

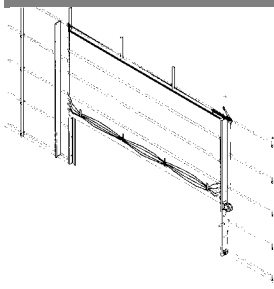
Description	Unit.	Code
48"X98"H SING HING DOOR W G-EN	EA	3F311
96"X98"H DBL HING DOOR W G-END	EA	3F321



Sliding door for wood end

Galvanized steel greenhouse doors. Sliding doors for wood greenhouse structure. Can be covered with triple polycarbonate only. Ideal for greenhouse partition walls. Each door kit includes attachments, guides and lock. Covering accessories for triple polycarbonate included.

Description	Unit.	Code
48"X98" SING SLID DOOR WO G-E	EA	3F211
96"X98"H DBL SLID DOOR W G-END	EA	3F221
120"X122"H DBL SLID DOOR W G-E	EA	3F223
96"X90"H DBL SLID DOOR W G-END	EA	3F229



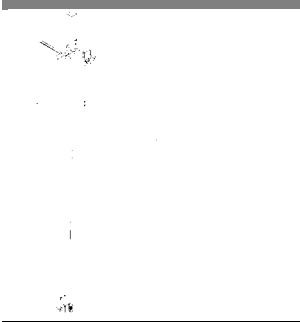
Curtain door

FOLD-UP curtain door, horizontal operation, including: 0.011" heavy duty polyethylene tarp (1 year warranty, life expectancy from 3 to 5 years depending use), cables, frame, hardware. Motorization or handcrank not included.

Description	Unit.	Code
10'W X 9'HT CURTAIN DOOR ST-FR	EA	3F351
12'W X 9'HT CURTAIN DOOR ST-FR	EA	3F352
12'W X 10'H CURTAIN DOOR ST-FR	EA	3F353

Greenhouse door

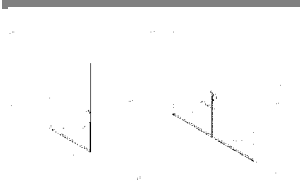
14'W X 10'H CURTAIN DOOR ST-FR	EA	3F354
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Hand crank

Operating system for curtain door.

Description	Unit.	Code
HANDCRANK FOR CURTAIN DOOR	EA	3F020



Door for cold frame

Polyethylene covering.

Description	Unit.	Code
48"X90"H SIN HINGE DOOR TUNNEL	EA	3F330
96"X90"H DBL HINGE DOOR 20-TUN	EA	3F331

Greenhouse door

Doors & accessories

1J159-2 ==> Steel door with panic bar, door closer and wire glass

- With steel frame (for industrial dome)
- Seen from the outside hinges are on the right and the opening towards the outside
- Assembled and painted white
- Overall dimension box : 35-1/2" x 82"
- Required size opening : 36" x 82-1/4"

1J160-1 ==> Steel door « embossed »

- With wooden frame
- Seen from the outside hinges are on the left and the opening towards the inside
- Overall dimension box: 35-1/2" x 82-1/2"
- Required size opening 36" x 82-3/4"

1J160-2 ==> Steel door « embossed »

- With wooden frame
- Seen from the outside hinges are on the right and the opening towards the inside
- Overall dimension box : 35-1/2" x 82-1/2"
- Required size opening : 36" x 82-3/4"

1J160-3 ==> Steel door « embossed »

- With wooden frame
- Seen from the outside hinges are on the left and the opening towards the outside
- Overall dimension box : 35-1/2" x 82-1/2"
- Required size opening : 36" x 82-3/4"

2B159 ==> Steel door (windowless door) with panic bar and door closer

- With wooden frame
- Seen from the outside hinges are on the right and the opening towards the outside
- Assembled and unpainted
- Overall dimension box : 35-1/2" x 82-1/2"
- Required size opening : 36" x 82-3/4"

Description	Unit.	Code
STEEL DOOR & FRAME 32X80 ASS.	EA	1J159-2
PANIC BAR HARDWARE COMPONENT	EA	1J159A
STEEL DOOR 34" X 80" x 4 5/8"L	EA	1J160-1
STEEL DOOR 34" X 80" x 4 5/8"R	EA	1J160-2
ST.DOOR 34"X80" x 4 5/8" L EXT	EA	1J160-3
DOOR HANDLE (WITH KEY)	EA	1J161
DOOR HANDLE LEVER ACTION	EA	1J163
GRAB HANDLE BLACK	EA	1J167

Greenhouse door

MAGNET 3 3/16" X 13/16"X 3/4"	EA	1J168
34x80 SERV.DOOR PANIC BAR+CYL.	EA	2B159

Door with handle

- Assembled steel door
- Required size opening: 40" x 86"
- Steel HC 20GA FL 3'X7' BRP MDR
- Hinge FBB191 4.5X4 C26DFNA
- Door closer 1430 PS TB
- Welded frame 16GA 5 7/8 3'X 7'
- SSA ASA FP PAR MDR
- Knob 533F C32D
- Safety latch 2100 SB
- Weatherstrip
- All assembled

Description	Unit.	Code
STEEL DOOR 3'X7' PANIC BAR	EA	1J165

Door opening accessories

Covering accessories for door opening.

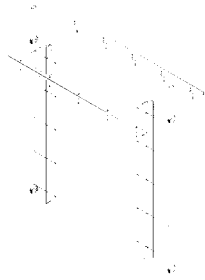
3F280 ==> Contour for opening 8' x 8' polyethylene covering

3F281 ==> Contour for opening 12' x 12' polyethylene covering

Description	Unit.	Code
PCSS OPENING CONTOUR FINISH	EA	3F270
CORRUG OPENING CONTOUR FINISH	EA	3F275
POLY OPENING CONTOUR FINISH	EA	3F280
POLY OPEN. CONTOUR WLOCK<12x12	EA	3F281

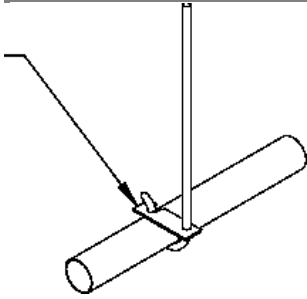
Greenhouse door

Framing



Description	Unit.	Code
RETRO 8'x 8' DOOR FRAMING	EA	3F285
RETRO 10'X10' DOOR FRAMING	EA	3F290
FRAMING FOR OVALE MAX. 10'X10'	EA	3F291
RETRO 12'X12' DOOR FRAMING	EA	3F295
FRAMING FOR 3-1/2" MAX.12'X12'	EA	3F296
FRAMING FOR 3-1/2" MAX.16'X16'	EA	3F298
RETRO DOOR SERVICE FRAMING	EA	3F299

Greenhouse accessories



Crosstie stiffener

Small steel plate being use of reinforcement to the crop support and can be added to the existing greenhouses. Fix to the support holding crossties; each set of plates added allows to support 300 lbs of additional load.

Description	Unit.	Code
PLATE 3/4 X 2-1/4 14GA	CH	00056-000-1

Anti-rust protection

Zinc paint

Anti-rust coating with very high zinc content.

Description	Unit.	Code
ZINC SPRAY WEICON 400ML 500HR	EA	1P1076-1

Anti-rust paint

Anti-rust paint.

Description	Unit.	Code
SIERRAS37 METALMAX 3.78 L WT	EA	RP09

Boltings

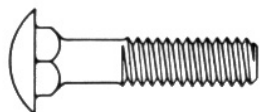
Eye bolt



Description	Unit.	Code
EYE BOLT 5/8"x 1 3/4"	EA	1C0014
EYE BOLT 5/8"x 4"	EA	1C0015
EYE BOLT 1/4" X 2"	EA	1C2925
EYE BOLT 1/4" X 3" FULL THREAD	EA	1C2927
EYE BOLT 1/4" X 4" FULL THREAD	EA	1C2928
EYE BOLT 1/4" X 5"	EA	1C2929
EYE BOLT 5/16" X 2-1/4" PLT	EA	1C2939
EYE BOLT 5/16" X 2-1/4" SS	EA	1C2939-SS
EYE BOLT 5/16" X 4" PLT	EA	1C2940
EYE BOLT 5/16" X 4" ST.STEEL	EA	1C2940-SS
5/16"X 6" EYE BOLT	EA	1C2942-1
EYE BOLT 3/8" X 4"	EA	1C2950
EYE BOLT 3/8" X 5" PL 1.065"ID	EA	1C2951

Carriage bolt - G5

Grade 5 carriage bolt with Ultraseal coating.

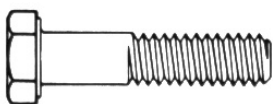


Description	Unit.	Code
CAR BOLT 1/4" X 1" G5 PLT	EA	1C0002
CAR BOLT 1/4" X 1-1/4"G5 PLT	EA	1C0003
CAR BOLT 1/4" X 1-1/2"G5 PLT	EA	1C0004
CAR.BOLT 1/4" X 1-3/4" PLT GR5	EA	1C0004-1
CAR BOLT 1/4" X 2" G5 PLT	EA	1C0005
CAR BOLT 1/4" X 2-1/4"G5 PLT	EA	1C0006
CAR BOLT 1/4" X 2-1/2"G5 PLT	EA	1C0007
CAR BOLT 1/4" X 3" G5 PLT	EA	1C0008
CAR BOLT 1/4" X 3-1/4"G5 PLT	EA	1C0009
CAR BOLT 1/4" X 3-1/2"G5 PLT	EA	1C0010

Boltings

CAR BOLT 1/4" X 4" G5 PLT FT	EA	1C0011
CAR BOLT 1/4" X 4-1/2"G5 PLT	EA	1C0012
CAR BOLT 1/4" X 5" G5 PLT	EA	1C0013
CAR BOLT 5/16" X 3/4" G5 PLD	EA	1C0020
CAR BOLT 5/16" X 1" G5 PLT	EA	1C0021
CAR BOLT 5/16" X 1-1/4" PLT G5	EA	1C0022
CAR BOLT 5/16" X 1-1/2" G5 PLT	EA	1C0023
CAR BOLT 5/16" X 2" G5 PLT FT	EA	1C0024
CAR BOLT 5/16"X 2-1/4"G5 PLT	EA	1C0025
CAR BOLT 5/16"X 2-1/2"G5 PLT	EA	1C0026
CAR BOLT 5/16" X 3" G5 PLT	EA	1C0027
CAR BOLT 5/16" X 2-3/4" G5 PLT	EA	1C0028
CAR BOLT 5/16"X 3-1/2"G5 PLT	EA	1C0029
CAR BOLT 5/16" X 4" G5 PLT	EA	1C0030
CAR BOLT 5/16"X 4-1/2"G5 PLT	EA	1C0031
CAR BOLT 5/16" X 5" G5 PLT	EA	1C0032
CAR BOLT 5/16" X 5 1/2" G5 PLT	EA	1C0033
CAR BOLT 5/16" X 5 1/2" G5	EA	1C0033-REG
CAR BOLT 5/16" X 6" G5 PLT	EA	1C0034
CAR BOLT 3/8" X 1" G5 PLT	EA	1C0041
CAR BOLT 3/8" X 2" G5 PLT	EA	1C0044
CAR. BOLT 3/8" X 2-1/4" G5 PLT	EA	1C0044-1
CAR BOLT 3/8" X 2-1/2"G5 PLT	EA	1C0046
CAR BOLT 3/8" X 3" G5 PLT	EA	1C0047
CAR BOLT 3/8" X 3-1/2"G5 PLT	EA	1C0049
CAR BOLT 3/8" X 4 1/2" G5 PLT	EA	1C0051

Hexagon bolt - G5



Hexagone bolt, grade 5, with Ultraseal coating.

Description	Unit.	Code
HEX BOLT 1/4" X 1/2" G5 PLT	EA	1C0200
HEX BOLT 1/4" X 5/8" G5 PLT	EA	1C0200-1
HEX BOLT 1/4" X 3/4" G5 PLT	EA	1C0201
HEX BOLT 1/4" X 1" G5 PLT	EA	1C0202
HEX BOLT 1/4" X 1-1/4"G5 PLT	EA	1C0203

Boltings

HEX BOLT 1/4" X 1-1/2"G5 PLT	EA	1C0204
HEX BOLT 1/4" X 2" G5 PLT	EA	1C0205
HEX BOLT 1/4" X 2-1/4" G5 PLT	EA	1C0206
HEX BOLT 1/4" X 2-1/2"G5 PLT	EA	1C0207
HEX BOLT 1/4" X 3-1/4" G5 PLT	EA	1C0208-1
HEX BOLT 1/4" X 3-1/2"G5 PLT	EA	1C0209
HEX BOLT 1/4" X 4" G5 PLT	EA	1C0210
HEX BOLT 1/4" X 4-1/2"G5 PLT	EA	1C0211
HEX BOLT 1/4" X 5" G5 PLT	EA	1C0212
HEX BOLT 1/4" X 5 1/2" G5 PLT	EA	1C0213
HEX BOLT 1/2" X 5-1/2" GR5 PLT	EA	1C0217
HEX BOLT 5/16" X 7" G5 PLT	EA	1C0234
HEX BOLT 1/4" X 3" G5 PLT	EA	1C0608
HEX BOLT 1/4" X 6" G5 PLT	EA	1C0614
HEX BOLT 5/16" X 3/4" G5 PLT	EA	1C0620
HEX BOLT 5/16" X 1" G5 PLT	EA	1C0621
HEX BOLT 5/16" X 1-1/4" G5 PLT	EA	1C0622
HEX BOLT 5/16" X 1-1/2" G5 PLT	EA	1C0623
HEX BOLT 5/16" X 2" G5 PLT	EA	1C0624
HEX BOLT 5/16" X 2-1/4" G5 PLT	EA	1C0625
HEX BOLT 5/16" X 2-1/2" G5 PLT	EA	1C0626
HEX BOLT 5/16" X 2-3/4" G5 PLT	EA	1C0626-1
HEX BOLT 5/16" X 3" G5 PLT	EA	1C0627
HEX BOLT 5/16" X 3-1/2" G5 PLT	EA	1C0629
HEX BOLT 5/16" X 4" G5 PLT	EA	1C0630
HEX BOLT 5/16" X 4-1/2" G5 PLT	EA	1C0631
HEX BOLT 5/16" X 5" G5 PLT	EA	1C0632
HEX BOLT 5/16" X 6" G5 PLT	EA	1C0633
HEX BOLT 3/8" X 3/4" G5 PLT	EA	1C0640
HEX BOLT 3/8" X 1" G5 PLT	EA	1C0641
HEX BOLT 3/8" X 1-1/4" G5 PLT	EA	1C0642
HEX BOLT 3/8" X 1-1/2" G5 PLT	EA	1C0643
HEX BOLT 3/8" X 2" G5 PLT	EA	1C0644
HEX BOLT 3/8" X 2-1/2" G5 PLT	EA	1C0646
HEX BOLT 3/8" X 3" G5 PLT	EA	1C0647
HEX BOLT 3/8" X 3-1/2" G5 PLT	EA	1C0649
HEX BOLT 3/8" X 4" G5 PLT	EA	1C0650
HEX BOLT 3/8" X 4-1/2" G5 PLT	EA	1C0651
HEX BOLT 3/8" X 5" G5 PLT	EA	1C0652
HEX BOLT 3/8" X 5-1/2"G5 PLT	EA	1C0652D

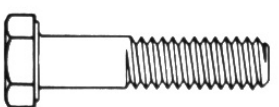
Boltings

HEX BOLT 3/8" X 6" G5 PLT	EA	1C0653
HEX BOLT 3/8" X 6-1/2" G5 PLT	EA	1C0654
HEX BOLT 3/8" X 7" G5 PLT	EA	1C0654A
HEX BOLT 3/8" X 8" G5 PLQ	EA	1C0655
HEX BOLT 3/8" X 8 1/2" GR5 PLQ	EA	1C0656
HEX BOLT 3/8" X 9" G5 PLT	EA	1C0658
HEX BOLT 3/8" X 11" G5	EA	1C0659
HEX BOLT 7/16" X 1" G5 PLT	EA	1C0661
HEX BOLT 7/16" X 1-1/2" G5 PLT	EA	1C0663
HEX BOLT 7/16" X 2" G5 PLT	EA	1C0664
HEX BOLT 7/16" X 2-1/2" G5 PLT	EA	1C0666
HEX BOLT 7/16" X 3" G5 PLT	EA	1C0667
HEX BOLT 7/16" X 3-1/2" G5 PLT	EA	1C0669
HEX BOLT 7/16" X 4" G5 PLT	EA	1C0670
HEX BOLT 7/16" X 4-1/2" G5 PLT	EA	1C0671
HEX BOLT 7/16" X 5" G5 PLT	EA	1C0672
HEX BOLT 7/16" X 6" G5 PLT	EA	1C0673
HEX BOLT 7/16" X 5-1/2" G5 PLT	EA	1C0674
HEX BOLT 7/16" X 8" G5 PLT ZN	EA	1C0678
HEX BOLT 7/16" X 9" G5 PLT	EA	1C0679
HEX BOLT 7/16" X 9 1/2" G5 PLT	EA	1C0680
HEX BOLT 1/2" X 1" G5 PLT	EA	1C0681
HEX BOLT 1/2" X 1-1/2" G5 PLT	EA	1C0683
HEX BOLT 1/2" X 2" G5 PLT	EA	1C0684
HEX BOLT 1/2" X 2-1/2" G5 PLT	EA	1C0686
HEX BOLT 1/2" X 3" G5 PLT	EA	1C0687
HEX BOLT 1/2" X 3-1/2" G5 PLT	EA	1C0689
HEX BOLT 1/2" X 4" G5 PLT	EA	1C0690
HEX BOLT 1/2" X 4-1/2" G5 PLT	EA	1C0691
HEX BOLT 1/2" X 5" G5 PLT	EA	1C0692
HEX BOLT 1/2" X 6" G5 PLT	EA	1C0693
HEX BOLT 1/2" X 6 1/2" G5 PLT	EA	1C0694
HEX BOLT 1/2" X 7" G5 PLT	EA	1C0695
HEX BOLT 1/2" X 8" G5 PLT	EA	1C0697
HEX BOLT 1/2" X 8-1/2" G5 PLT	EA	1C0698
HEX BOLT 1/2" X 10" G5 PLT	EA	1C0699-1
HEX BOLT 1/2" X 11" G5 PLT	EA	1C0700
HEX BOLT 1/2" X 12" G5 PLT	EA	1C0700-1
HEX BOLT 5/8" X 1-1/2" G5 PLT	EA	1C0703
HEX BOLT 5/8" X 2" G5 PLT	EA	1C0704

Boltings

HEX BOLT 5/8" X 2-1/2" G5 PLT	EA	1C0706
HEX BOLT 5/8" X 3" G5 PLT	EA	1C0707
HEX BOLT 5/8" X 3-1/2" G5 PLT	EA	1C0709
HEX BOLT 5/8" X 4" G5 PLT	EA	1C0710
HEX BOLT 5/8" X 4-1/2" G5 PLT	EA	1C0711
HEX BOLT 5/8" X 5" G5 PLT	EA	1C0712
HEX BOLT 5/8" X 5-1/2" G5 PLT	EA	1C0713
HEX BOLT 5/8" X 6-1/2" G5 PLT	EA	1C0715
HEX BOLT 3/4" X 2" G5 PLT	EA	1C0724
HEX BOLT 3/4" X 2-1/2" G5 PLT	EA	1C0726
HEX BOLT 3/4" X 4" G5 PLT	EA	1C0730
HEX BOLT 3/4" X 4-1/2" G5 PLT	EA	1C0731
HEX BOLT 3/4" X 5-1/2" G5 PLT	EA	1C0732
HEX BOLT 3/4" X 6" G5 PLT	EA	1C0733
HEX BOLT 3/4" X 12" G5 PLT	EA	1C0741
HEX BOLT 1" X 2-1/2" G5 PLT	EA	1C0746
HEX BOLT 1" X 2-3/4" G5 PLT	EA	1C0746-1
HEX BOLT 1" X 3" G5 PLT	EA	1C0747
HEX BOLT 1" X 4" G5 PLT	EA	1C0748
HEX BOLT 1" X 6 1/2" G5 PLT	EA	1C0752

Hexagon bolt - G8



Hexagone bolt, grade 8, with Ultraseal coating.

Description	Unit.	Code
HEX BOLT 3/8" X 2" G8 PLT	EA	1C0644-G8
HEX BOLT 3/4" X 14" G8 PLT	EA	1C0744
HEX BOLT 1" X 5" G8 PLT	EA	1C0751

Conical bolt

Boltings

CONICAL BOLT 9.53mm x 63.3mm EA 1C4301-1

"T" bolt

Description	Unit.	Code
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T BOLT 5/16" X 3/4" ZN PLATED	EA	1C4203
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"U" bolt



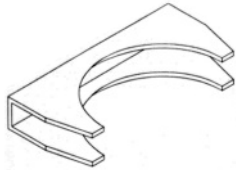
"U" bolt, round or square shape.

Description	Unit.	Code
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"U" BOLT 1"	EA	1CE1608
"U" BOLT 7/16-14 X 7 X 3-1/16	EA	1CE1609
"U" BOLT 3-1/8" HD	EA	1CE1609-HD
"U" BOLT 3/8-16(7X 3-1/8)SS	EA	1CE1609-SS
BENT U BOLT 2-1/4" X 4-1/2"	EA	1CE1610
"U" BOLT 2"	EA	1CE3213
U BOLT 5/16 x 2-1/8"x 4-5/8"	EA	1CE3401
UBOLT 2 1/8" HD	EA	1CE3401-HD
"U" BOLT 2-1/8" ST.STEEL	EA	1CE3401-SS
"U" BOLT 3"	EA	1CE4816
U BOLT 5/16"-18 2 7/8"x 5 3/4"	EA	1CE4817
"U" BOLT 1 1/2"	EA	1CE4818
"U" BOLT 1-1/4" GRADE 5	EA	1CF2212
BOULON EN "U" 1-1/4" ST.STEEL	EA	1CF2212-S
"U" BOLT 1-3/4" GR5	EA	1CF3015
"U" BOLT FOR SADDLE 2-1/4"	EA	1CF3813
SQUARE "U" BOLT 1" GR5	EA	1CT1600
SQUARE "U" BOLT 1-1/4"	EA	1CT1707-1
SQUARE "U" BOLT 2-3/4"	EA	1CT2810
SQUARE "U" BOLT 2-1/2"X 2"	EA	1CT4000

Boltings

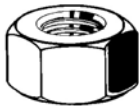
Saddle



Saddle for "U" bolt.

Description	Unit.	Code
SADDLE 1"	EA	1CV1606
SADDLE 1-1/4"	EA	1CV2606
SADDLE 1-3/4"	EA	1CV3506
SADDLE 2-1/4"	EA	1CV3806
SADDLE 2"	EA	1CV3905
SADDLE 2" HD	EA	1CV3905-HD
SADDLE 2" ST.STEEL	EA	1CV3905-SS
SADDLE 2-3/4" 3-1/4" C/C	EA	1CV5106
SADDLE 3" PLATED	EA	1CV5107
SADDLE 3" HD	EA	1CV5107-HD
SADDLE 3" ST. STEEL	EA	1CV5107-SS
SADDLE 3" FOR 7/16" U-BOLT	EA	1CV5108
SADDLE 1 1/2 FOR U BOLT 5/16"	EA	1CV5109

Hexagon nut



Description	Unit.	Code
HEX NUT 1/4" ST. STEEL	EA	1C0786-SS
HEX NUT 5/16" ST. STEEL	EA	1C0787-SS
HEX NUT 3/8" PLATED	EA	1C0788
HEX NUT 3/8" ST. STEEL	EA	1C0788-SS
HEX NUT 7/16" PLATED	EA	1C0789
HEX NUT 7/16" ST. STEEL	EA	1C0789-SS
HEX NUT 1/2" S/Steel	EA	1C0790-SS
HEX NUT 1/2" PLATED ZINC	EA	1C0790-ZN
HEX NUT 5/8" PLATED	EA	1C0791
HEX NUT 3/4" ST.STEEL	EA	1C0792-SS

Boltings

HEX NUT 1" PLATED	EA	1C0793
HEX NUT 1" HOT DIP	EA	1C0793-HD
HEX NUT 1" ST.STEEL	EA	1C0793-SS
SELF THREADING HEX NUT 1/4"	EA	1C0800

Black hexagon nut

Description	Unit.	Code
HEX NUT 7/8" BARE	EA	1C0794-N

Hexagon flanged nut

Description	Unit.	Code
HEX FLANGED NUT 1/4" PLATED	EA	1CB786
HEX FLANGED NUT 5/16" PLATED	EA	1CB787
HEX FLANGED NUT 3/8" PLATED	EA	1CB788
HEX FLANGED NUT 7/16" PLATED	EA	1CB789
HEX FLANGED NUT 1/2" PLATED	EA	1CB790
HEX FLANGED NUT 5/8" PLATED	EA	1CB791
HEX FLANGED NUT 3/4" PLATED	EA	1CB792

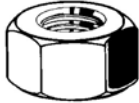
HD hex. flanged nut

Description	Unit.	Code
HEX FLANGED NUT 1/4" HOT DIP	EA	1CB786-HD
HEX FLANGED NUT 5/16" HOT DIP	EA	1CB787-HD
HEX FLANGED NUT 3/8" HOT DIP	EA	1CB788-HD

Boltings

HEX FLANGED NUT 7/16"HOT DIP	EA	1CB789-HD
HEX FLANGED NUT 1/2"HOT DIP	EA	1CB790-HD

SS hex. flanged nut



Description	Unit.	Code
HEX FLANGED NUT 1/4" ST.STEEL	EA	1CB786-SS
HEX FLANGED NUT 5/16" ST.STEEL	EA	1CB787-SS
HEX FLANGED NUT 3/8" ST.STEEL	EA	1CB788-SS
HEX FLANGED NUT 1/2" ST.STEEL	EA	1CB790-SS

Lagstud nut

Description	Unit.	Code
LAGSTUD NUT 1 IN PLT	EA	1C2531
LAGSTUD NUT 3/4" PLT	EA	1C2533
NUT LAGSTUD 1-1/4"	EA	1C2536

GV lagstud nut

Description	Unit.	Code
1" NUT LAGSTUD	EA	1C2531-GV
3/4" LAGSTUD NUT	EA	1C2533-GV
NUT 1-1/4" LAGSTUD	EA	1C2536-GV

Boltings

Coupling nut

Description	Unit.	Code
COUPLING NUT 5/16-18 x 1-1/2	EA	1C3151
COUPLING NUT 3/8-16 x 1-3/4 ZN	EA	1C3153

Washer



Description	Unit.	Code
FLAT WASHER 1"BLT SIZE PLT	EA	1C0375
FLAT WASHER 1"BLT SIZE HOT DIP	EA	1C0375-HD
WASHER 3/16H ALUMINIUM	EA	1C0379
FLAT WASHER 1/4"BOLT SIZ.PLT	EA	1C0380
FLAT WASHER 5/16"BLT SIZ.PLT	EA	1C0381
FLAT WASHER 5/16"BLT SIZ.H.DIP	EA	1C0381-HD
FLAT WASHER 3/8"BLT SIZE PLT	EA	1C0382
FLAT WASHER 7/16"BLT SIZ.PLT	EA	1C0383
FLAT WASHER 1/2"BLT SIZE PLT	EA	1C0384
FLAT WASHER 9/16"BLT SIZ.PLT	EA	1C03841
FLAT WASHER 5/8"BLT SIZE PLT	EA	1C0385
FLAT WASHER 3/4" BOLT SIZE	EA	1C0386
FLAT WASHER 7/32"ID 1"OD PLT	EA	1C0388
FLT WASH.5/16"ID 1-1/2"OD PL	EA	1C0389
LOCK WASHER 5/16" PLT	EA	1C0391
LOCK WASHER 1/2" ZN PLT	EA	1C0394
LOCK WASHER 3/4" PLT	EA	1C0396
LOCK WASHER 1" PLT	EA	1C0398
LOCK WASHER 1" HOT DIP	EA	1C0398-HD
LOCK WASHER 1 1/4" PLATED	EA	1C0399
WASHER NEO 1/8".I.D 1/2".O.D.	EA	1C2082

Boltings

WASHER NEO 1/4" I.D 5/8" O.D	EA	1C2083
WASHER NEO 5/16" I.D 3/4" O.D	EA	1C2084
WASHER NEO 3/8" I.D X 1" O.D.	EA	1C2085
WASHER NEO 7/16" I.D X 1" O.D.	EA	1C2086
WASH.NEO 5/16" ID X 1-1/8" GALV	EA	1C2087

Black washer

Description	Unit.	Code
FLAT WASHER 1/2" BLT SIZE BLACK	EA	1C0384-NR

SS washer



Description	Unit.	Code
FLAT WASHER 1/4" BOLT S.STEEL	EA	1C0380-S
FLAT WASHER 3/8" BLT SIZE ST.ST	EA	1C0382-SS
FLAT WASHER 1/2" BLT SIZE SS	EA	1C0384-SS
FLAT WASHER 13/64" ID 7/8" OD SS	EA	1C0388-SS
FLT WASH. 5/16" ID 1-1/2" OD S.S.	EA	1C0389-SS
LOCK WASHER 7/16" ST. STEEL	EA	1C0393-SS
LOCK WASHER 1" PLT ST.STEEL	EA	1C0398-SS
WASHER NEO 1/4" X 5/8" STAINLESS	EA	1C2083-S

Various washers

Description	Unit.	Code
FLAT WASHER 1/2" BLT SIZE Zinc	EA	1C0384-ZN

Boltings

FLAT WASHER .196"ID X 1"OD BB	EA	1C0388-BB
FLAT WASHER plast.P2000	EA	1C0388C
LOCK WASHER 5/8" HD GALVANIZED	EA	1C0395-HDG
WASHER 1-5/8" X 3-1/2" X 1/8"	EA	1C0402
"T" WASHER 3/8"	EA	1C4305

Lag screw



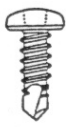
Description	Unit.	Code
WOOD SCREW 1/4"X 3-1/2" PLATED	EA	1C2505
WOOD SCREW 1/4"X 4" PLT U-SEAL	EA	1C2506
WOOD SCREW 3/8"X 4" PLT	EA	1C2515
WOOD SCREW 1/2"X5" PLT	EA	1C2516
WOOD SCREW 5/8"X6" Zinc Nickel	EA	1C2517

Anchor

Description	Unit.	Code
1/2" HDI ANCHOR	EA	1P027
ANCOR HILTI SVA 5/16X 1-5/8"	EA	1P031
3/8" HDI ANCHOR	EA	1P035
QUICK BOLT 3/8"X 3" INOX.	EA	1P1010
THREADED ROD 3/4" X 10"	EA	1P1025-C
THREADED ROD 3/4" X 10" HD	EA	1P1025-C-HD
THREADED ROD SS 3/4" X 10"	EA	1P1025-SS
THREADED ROD HAS-E 1/2 X 6.5"	EA	1P1026-A
QUICK BOLT 3/8" X 5" PLQ.	EA	1P1027
QUICK BOLT 3/8" X 5" ST.STEEL	EA	1P1027-SS
QUICK BOLT 1/2" X 5-1/2" PLQ.	EA	1P1028
QUICK BOLT 1/2"X 5-1/2"HOT DIP	EA	1P1028-HD
THREADED ROD 3/8" X 5" G5 ZINC	EA	1P1035-REG

Boltings

QUICK BOLT 5/8" X 6" PLQ.	EA	1P1037
THREADED ROD 5/8" X 7-1/2"	EA	1P1038-B
THREADED ROD 5/8" X 5"	EA	1P1038-C
THREADED ROD 5/8" X 5" HD	EA	1P1038-C-HD
THREADED ROD 5/8" X 7 1/2"SS	EA	1P1038-SS
QUICK BOLT 3/8" X 3" PLQ.	EA	1P1039
MEC. ANCHOR 3/4" X 8 1/2"	EA	1P1045A
T.Pro anchor	EA	1P1049-M
QUICK BOLT 5/8" X 5 PLT.	EA	1P1054
QUICK BOLT 5/8"X 4 3/4 HOT DIP	EA	1P1054-HD
ANCHOR HVU/HAS-E 5/8" X 12"	EA	1P1064
QUICK BOLT 3/8" X 3 3/4" PL	EA	1P1096
THREADED ROD 5/8" X 10"	EA	1P1097
THREADED ROD 5/8" X 10" HD	EA	1P1097-HD



Metal screw

Self-tapping and self-drilling screw.

Description	Unit.	Code
SELF TAP SCREW RND HEAD #6X3/8	EA	1C2204
SELF DRL.SCREW RND HEAD#8X1/2"	EA	1C2206
SELF DRL.SCREW RND HEAD#10X3/4	EA	1C2207
PAN HEAD TAP.SCREW #8 X 3/4"	EA	1C2209
SELF TAP.SCREW RND HEAD#8X1/2"	EA	1C2210
SELF TAP.SCREW HEX #10X5/8" SS	EA	1C2212-SS
SELF DRL. SCREW HEX #8 X 3/4"	EA	1C2213
SELF TAP.SCREW HEX #12X1/2"S.S	EA	1C2214
SELF DRL.SCREW RND H.#10X1-1/4	EA	1C2216
SELF DRL.SCREW RND SS#10X1-1/4	EA	1C2217
SELF DRL SCREW HEX #10 X 1/2"	EA	1C2220
SELF DRL SCREW HEX #10X1/2" SS	EA	1C2220-SS
SELF DRL SCREW HEX #10 X 3/4"	EA	1C2229
SELF DRL SCREW HEX #10 X3/4"HD	EA	1C2229-HD
SELF DR.SC. HEX #10 X 3/4" ST.	EA	1C2229-SS
SELF DRL SCREW HEX #12 X 1"	EA	1C2230
SELF DRIL SCREW HEX 12X 1 1/2"	EA	1C2231

Boltings

SELF DRIL SCREW RND 12X 14 x 1	EA	1C2232
SELF DRIL SCREW 12X 1-1/2"TEK5	EA	1C2236
SELF DRIL. 1/4" X 4" HEX	EA	1C2237
SELF DRIL SCREW 1/4x1-1/2"TEK5	EA	1C2242
SELF DRL SCREW #14X7/8"LAPTECK	EA	1C2246
SELF DRL SCREW #14X7/8"LAPTECK	EA	1C2246-SS
SELF DRL SCREW HEX #14 X 1"	EA	1C2247
SELF DRL SCREW HEX #14 X1-1/2"	EA	1C2248
SELF DRL SCREW HEX #14 X1-1/2"	EA	1C2248-SS
SELF DRL SCREW HEX #14 X 2"	EA	1C2249
S.DRL SCR#14X7/8"LAPTEK+NEO WH	EA	1C2252-B
SELF DRL SCREW HEX #14 X 3"	EA	1C2254
SELF DRIL. 1/4" X 3" HEX	EA	1C2255
SELF DRILL SCREW 3/8"x 1 1/2"	EA	1C2260
SELF DRL SCREW RND HEAD#8 X 1"	EA	1C2315
SELF DR SCREW #10 x 1 1/2" FL	EA	1C2320
SELF DRL SCREW #10 x 13/16" FL	EA	1C2325
SELF DR SCREW #12 x 2" FLAT.H	EA	1C2330
#12-24 X 3" SELF DRILL SCREW	EA	1C2331
#12-24 X 4" SELF DRILL SCREW	EA	1C2333

Magnetic bit



Description	Unit.	Code
MAGNETIC HEX BIT 5/16"	EA	1C2200
MAGNETIC HEX. BIT 3/8"	EA	1C2202
MAGNETIC HEX. BIT 7/16"	EA	1C2202-1

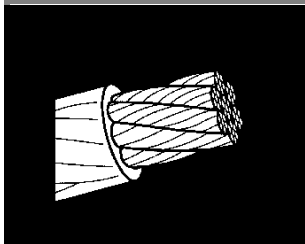
Square insert bit

Description	Unit.	Code
<p>Les Industries Harnois Inc. 1044 Principale, St-Thomas, QC, Canada, J0K 3L0 Tel.: 450-756-1041 1-888-427-6647 Fax: 450-756-8389 harnois.com</p>		
		<p>Edition 2021-07-29 Page 14 / 15</p>

Boltings

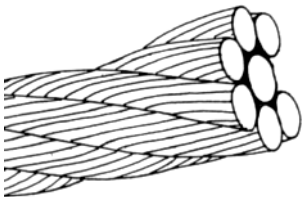
N0.2 SQUARE INSERT BIT	EA	1C2201
N0.3 SQUARE INSERT BIT 3"	EA	1C2205

Cable & cable clamp



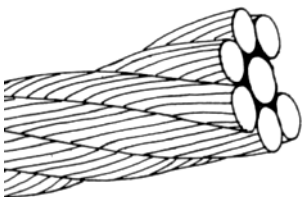
Coated cable

Description	Unit.	Code
WIRE 3/32"(7X7)COATED 3/16"	FT	1N0103
WIRE 1/8"(7X7)COATED 3/16"	FT	1N0104



Steel cable

Description	Unit.	Code
GV STEEL WIRE 1/16" 1X19	FT	1N0201
GV STEEL WIRE 1/8" 7X7	FT	1N0202
GV ST.WIRE 3/16"X 7X7	FT	1N0203
GV STEEL WIRE 3/8" 7 X 19	FT	1N0206
GV STEEL WIRE 1/4" 7 X 19	FT	1N0207
GV STEEL WIRE 1/2" 6 X 36	FT	1N0209
GV ST.WIRE 3/32"X 7X7	FT	1N0210



Stainless steel cable

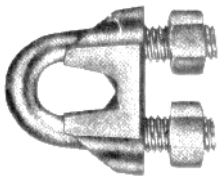
Description	Unit.	Code
STEEL WIRE 1/16" 7 X 7 S.STEEL	FT	1N0201-SS
STAINLESS STEEL WIRE 1/8" 7X	FT	1N0202-SS
ST.WIRE 3/16"X 7X7 ST.STEEL	FT	1N0203-SS
CABLE 1/4"S.S. X 31" ASSEMBLED	EA	1N020732SS
CABLE 1/4" S.S.X 51-7/8" ASSY	EA	1N020753SS
WIRE 1/4" 7 X 19 STAIN LESS	FT	1N0207-SS

Cable & cable clamp

WIRE 1/4" 7 X 19 STAIN LESS	FT	1N0207-SS
CABLE AC.Inox 1/4" x7x19x63'	EA	1N0207SS-063
CABLE AC.Inox 1/4" x7x19x72'	EA	1N0207SS-072
CABLE AC.Inox 1/4" x7x19x81'	EA	1N0207SS-081
CABLE AC.Inox 1/4" x7x19x92'	EA	1N0207SS-092
CABLE AC.Inox 1/4" x7x19x102'	EA	1N0207SS-102
CABLE AC.Inox 1/4" x7x19x114'	EA	1N0207SS-114
CABLE AC.Inox 1/4" x7x19x125'	EA	1N0207SS-125
CABLE AC.Inox 1/4" x7x19x135'	EA	1N0207SS-135
CABLE AC.Inox 1/4" x7x19x147'	EA	1N0207SS-147
S.STEEL CABLE 7x19 1/4" x 160'	EA	1N0207SS-160
STAINLESS-STL WIRE 1/8" (7X19)	FT	1N0208

Ass. cable galv. Steel

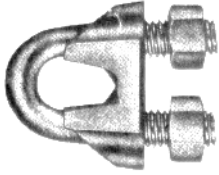
Description	Unit.	Code
CABLE 1/4"GALV.X 31" ASSEMBLED	EA	1N020732
CABLE 1/4"GALV.X 51-7/8" ASSY	EA	1N020753



Cable clamp

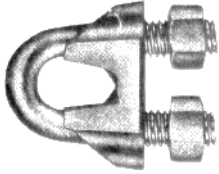
Description	Unit.	Code
WIRE U-BOLT 1/16"	EA	1N9001
WIRE U-BOLT 1/8"	EA	1N9002
WIRE U-BOLT 3/16"	EA	1N9003
WIRE U-BOLT 1/4"	EA	1N9004
WIRE U-BOLT 3/8"	EA	1N9006
WIRE U-BOLT 1/2"	EA	1N9007

Cable & cable clamp



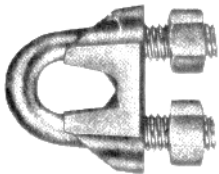
Stainless steel cable clamp

Description	Unit.	Code
WIRE U-BOLT 1/8" S-STEEL	EA	1N9002-S
WIRE U-BOLT 3/16" STAINLESS S.	EA	1N9003-SS
WIRE U-BOLT 1/4" ST.ST.	EA	1N9004-SS



Zinc cable clamp

Description	Unit.	Code
WIRE U-BOLT 1/8" ZINC NICKEL	EA	1N9002-ZN
WIRE U-BOLT 3/16" ZINC NICKEL	EA	1N9003-ZN
WIRE U-BOLT 1/4" ZINC NICKEL	EA	1N9004-ZN
WIRE U-BOLT 3/8" ZINC/NICKEL	EA	1N9006-ZN



Galv. cable clamp

Description	Unit.	Code
WIRE U-BOLT 1/4" HOT DIP	EA	1N9004-HD
WIRE U-BOLT 3/8" HOT DIP	EA	1N9006-HD

Turnbuckle



Turnbuckle (hook & eye)

Description	Unit.	Code
TURNBUCKLE 1/4" PLT HOOK-EYE	EA	1C3053



Turnbuckle (eye & eye)

Description	Unit.	Code
TURNBUCKLE 5/16"X4-1/2"EYE-EYE	EA	1C3065
TURNBUCKLE 3/8" X 6" EYE-EYE	EA	1C3080
TURNBUCKLE 1/2"X 6" EYE-EYE	EA	1C3087
TURNBUCKLE 1/2"X 12" EYE-EYE	EA	1C3089



Turnbuckle (eye & eye) drop-forged

Description	Unit.	Code
TURNBUCKLE STEEL GALV.3/4 X 18	EA	1C3066



Turnbuckle (eye & eye) stainless steel

Description	Unit.	Code
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Turnbuckle

TURNBUCKLE 5/16"X4-1/2"EYE-ESS	EA	1C3065-S
TURNB. 5/16"X4-1/2"EYE-EYE SS	EA	1C3065-SS
TURNBUCKLE 1/2"X6"EYE-EYE S.S.	EA	1C3087-SS

Turnbuckle (eye & eye) zinc



Description	Unit.	Code
TURNBUCKLE 1/2"X 6" EYE-EYE ZN	EA	1C3087-ZN

Page	Page title
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68	Bird net
61	BJ thermal screens
12	Clear polyethylene film
41	Corrugated polycarbonate
31	Covering accessories
42	Double polycarbonate
99	Fabric
27	Griplock
80	Groud strip joint
67	Insect screen
66	LS Econet insect screen
60	LS thermal screens
43	PCSS accessories
21	Polyethylene accessories
20	Polyethylene film coating
23	Polylock
25	Polytech
53	Shade cloth
54	Shade cloth
52	Shade cloth attachments
63	Thermal screens - Harnois
64	Thermal screens - Snelder
14	White polyethylene film
56	White shade cloth
28	Wirelock
26	Wiretech

Polyethylene covering

Minimum width required, including Polylock, rolling tube, drip molding, etc.

	W	S	PC	PL	PP	PV	RC	RL	VG
Old Nordique	21'- 4"	23'-9"	8'-6"	16'-0"	10'-0"		8'-5"	19'-1"	
	24'	26'-4"	10'-0"	17'-8"	10'-0"		9'-10"	20'-6"	
	25'	27'-4"	10'-6"	18'-0"	10'-0"		10'-4"	21'-0"	
	28'	30'-6"	12'-0"	20'-0"	10'-0"		12'-0"	22'-7"	
	30'	32'-6"	13'-0"	21'-0"	10'-0"		12'-11"	23'-7"	
Nordique NG UNTIL 2009	14'	16'-5"							
	16'	18'-6"							
	18'	20'-8"					7'-10"	17'-4"	
	21'- 4"	24'-2"	9'-1"	17'-1"	10'-0"	20'-5"	9'-7"	19'-1"	43"
	24'	27'-0"	10'-6"	18'-6"	10'-0"	23'-3"	11'-0"	20'-6"	43"
	25'	28'-2"	11'-1"	19'-1"	10'-0"	24'-5"	11'-7"	21'-1"	43"
	28'	31'-4"	12'-8"	20'-8"	10'-0"	27'-6"	13'-2"	22'-8"	43"
	30'	33'-5"	13'-8"	21'-9"	10'-0"	29'-7"	14'-3"	23'-9"	43"
31'- 6"	35'-0"	14'-6"	22'-6"	10'-0"	31'-2"	15'-0"	24'-6"	43"	
Nordique NG FROM 2010	14'	16'-5"							
	16'	18'-6"							
	18'	20'-8"					7'-10"	17'-4"	
	21'- 4"	24'-2"	8'-7"	17'-10"	11'-5"	20'-5"	9'-7"	19'-1"	43"
	24'	27'-0"	10'-0"	19'-3"	11'-5"	23'-3"	11'-0"	20'-6"	43"
	25'	28'-2"	10'-7"	19'-10"	11'-5"	24'-5"	11'-7"	21'-1"	43"
	28'	31'-4"	12'-2"	21'-7"	11'-5"	27'-6"	13'-2"	22'-8"	43"
	30'	33'-5"	13'-2"	22'-8"	11'-5"	29'-7"	14'-3"	23'-9"	43"
31'- 6"	35'-0"	14'-0"	23'-3"	11'-5"	31'-2"	15'-0"	24'-6"	43"	

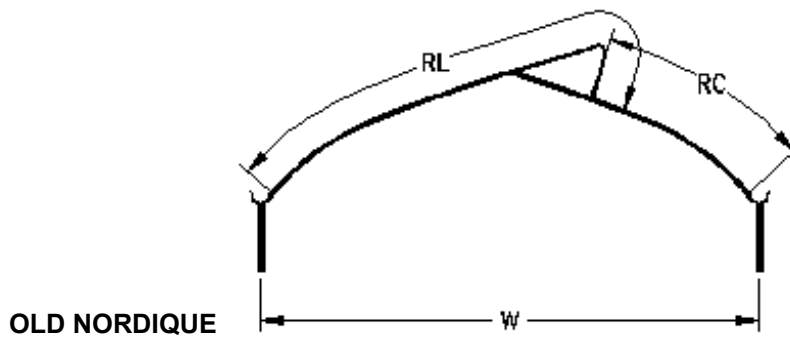
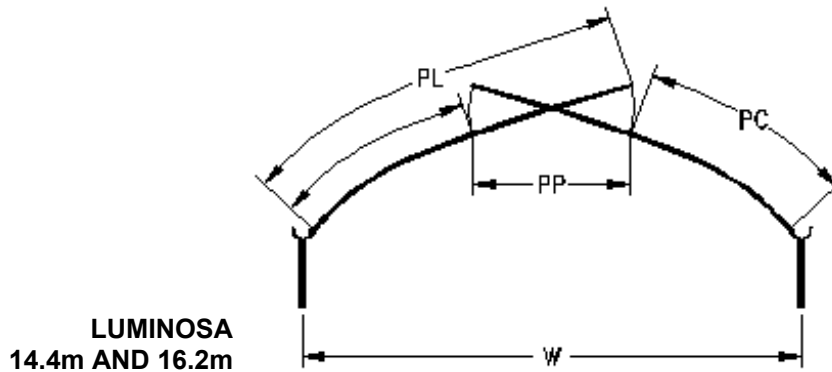
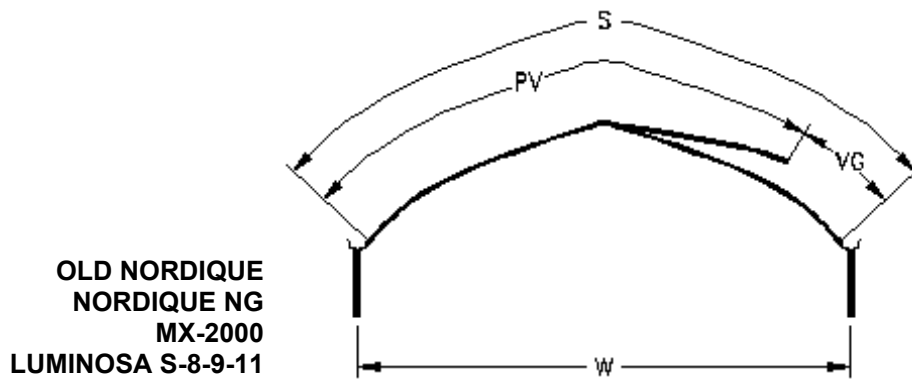
Width includes extra polyethylene (6" on each side)

	W	S	PV	VG
LUMINOSA S8-S9-S11	21'4"	26'-0"	22'-7"	4'-7"
	24'	29'-0"	25'-7"	4'-7"
	25'	30'-0"	26'-8"	4'-7"
	26'-3"	31'-4"	28'-0"	4'-7"
	28'	33'-4"	30'-1"	4'-7"
	30'	36'-1"	32'-3"	4'-7"
	31'-6"	37'-2"	33'-10"	4'-7"
	36'	42'-0"	36'-2"	6'-10"

Polyethylene covering

Width includes extra polyethylene

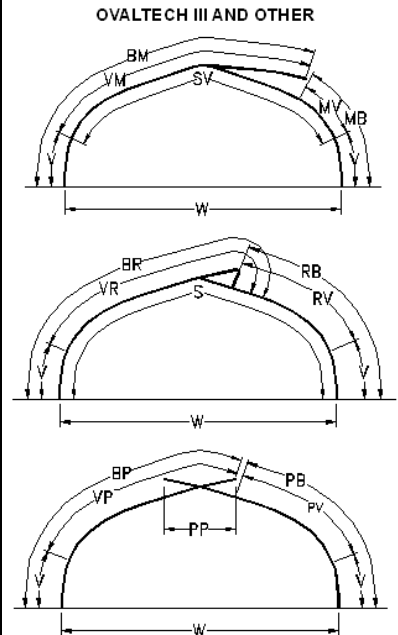
	W	S	PC	PL	PP
LUMINOSA	14.4m		Poly 21'		Poly 15'-6"
Mexico	16.2m		Poly 25'		Poly 15'-6"



Polyethylene covering

Minimum width required, including Polylock, rolling tube, drip molding, etc.

	W	S	SV	BM	BP	BR	MB	MV	PB	PP	PV	RB	RV	VM	VP	VR	V
SHELTER	18'-7"	28'															
	21'-6"	32'															
	25'	32'															
OVALTECH I	25'	37'-10"	25'8"			26'-3"						15'-7"	9'-7"			20'-3"	6'-8"
	27'	40'	27'11"			27'-4"						16'-8"	10'-8"			21'-4"	6'-8"
	30'	46'-2"	33'10"			30'-5"						19'-9"	13'-9"			24'-5"	6'-8"
OVALTECH III Until 2009	25'	43'-2"	31'-8"		26'-5"	28'-11"			18'-1"	10'	12'-1"	12'-3"	6'-3"		21'-5"	22'-11"	6'-8"
	30'	48'-4"	36'-10"	34'-8"	29'	31'-6"	13'-9"	7'-9"	20'-8"	10'	14'-8"	20'-10"	14'-10"	28'-8"	23'	25'-6"	6'-8"
	32'	50'-5"	38'-11"	36'-10"	30'	32'-7"	13'-9"	7'-9"	21'-8"	10'	15'-8"	21'-11"	15'-11"	30'-10"	24'	26'-7"	6'-8"
	35'	53'-8"	42'-2"	39'-10"	31'-8"	34'-2"	13'-9"	7'-9"	23'-4"	10'	17'-4"	23'-6"	17'-6"	33'-10"	25'-8"	28'-2"	6'-8"
OVALTECH III From 2010	25'	43'-2"	31'-8"		27'-1"	28'-11"			17'-7"	11'-5"	11'-7"	12'-3"	6'-3"		21'-1"	22'-11"	6'-8"
	30'	48'-4"	36'-10"	34'-8"	29'-8"	31'-6"	13'-9"	7'-9"	20'-2"	11'-5"	14'-2"	20'-10"	14'-10"	28'-8"	23'-8"	25'-6"	6'-8"
	32'	50'-5"	38'-11"	36'-10"	30'-9"	32'-7"	13'-9"	7'-9"	21'-3"	11'-5"	15'-3"	21'-11"	15'-11"	30'-10"	24'-9"	26'-7"	6'-8"
	35'	53'-8"	42'-2"	39'-10"	32'-4"	34'-2"	13'-9"	7'-9"	22'-10"	11'-5"	16'-10"	23'-6"	17'-6"	33'-10"	26'-4"	28'-2"	6'-8"
MAXIDOME	40'	48'				37'-1"						27'-10"	21'-10"			31'-1"	6'-8"
	50'					43'-1"						32'-5"	26'-5"			37'-1"	6'-8"
	60'					48'-5"						37'-9"	31'-9"			42'-5"	6'-8"
PLASTIGRO	30'	42'-6"															
TUNNEL	16'	28'															
	18'	32'															
	25'	32'															
VERTISER B	25'	40'															5'-6"
VERTISER H	25'	44'															7'-6"



██████████ 48' POLY WILL COVER FROM SIDE TO SIDE, OVER THE DOUBLE POLYLOCK

██████████ A 40' POLY CAN BE USED, BUT WILL NOT COVER PEAK VENT ROLL-UP


Polyethylene covering

Minimum width required, including Polylock, rolling tube, drip molding, etc.

	W	S	BP	LX7	LX10	PB	PP	PV	VP	V	X7	X10
OVALTECH III – 40' Until 2009	40'	59'-4"	34'-6"	46'-2"	37'-9"	26'-2"	10'	20'-2"	28'-6"	6'-8"	8'	14'

	W	S	BP	LX7	LX10	PB	PP	PV7	PV10	VP7	VP10	X7	X10
OVALTECH III – 40' From 2010	40'	59'-4"	35'-2"	45'-5"	37'-11"	25'-8"	11'-5"	18'-8"	14'-8"	28'-2"	24'-2"	8'	14'


 LENGTH OF COVER GIVEN AS INDICATION ONLY

 THE COVERING INCLUDES THE 24" FOR THE CENTER ROLL-UP TUBE

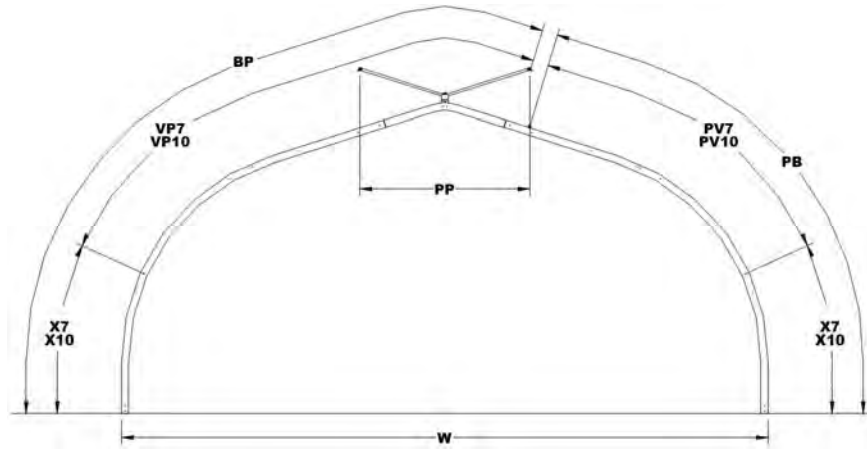
	W	S	MP	PM	LX6	LX7	LX10	VM6	VM7	VM10	MV6	MV7	MV10	BP	PB	PP	PV7	PV10	VP7	VP10	X6	X7	X10	
OVALTECH IV – 25'	25'	43'-5"	N/A	N/A	31'-5"	29'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7'-0"	8'-0"	N/A
OVALTECH IV – 30'	30'	48'-8"	35'-6"	14'-6"	36'-8"	34'-8"	N/A	29'-6"	28'-6"	N/A	8'-7"	7'-7"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7'-0"	8'-0"	N/A
OVALTECH IV – 32'	32'	50'-9"	37'-8"	14'-6"	38'-9"	36'-9"	N/A	30'-8"	30'-8"	N/A	8'-7"	7'-7"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7'-0"	8'-0"	N/A
OVALTECH IV – 35'	35'	55'-0"	36'-7"	19'-6"	N/A	41'-2"	32'-6"	N/A	29'-8"	25'-6"	N/A	12'-7"	8'-3"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8'-0"	14'-0"
OVALTECH IV – 40'	40'	60'-3"	41'-10"	19'-6"	N/A	46'-6"	37'-10"	N/A	35'-0"	30'-8"	N/A	12'-7"	8'-3"	35'-2"	25'-8"	11'-5"	18'-8"	14'-8"	28'-2"	24'-2"	N/A	8'-0"	14'-0"	
OVALTECH IV – 42'	42'	62'-4"	43'-11"	19'-6"	N/A	48'-7"	40'-10"	N/A	37'-0"	32'-9"	N/A	12'-7"	8'-3"	36'-6"	28'-8"	11'-5"	19'-4"	15'-3"	29'-3"	25'-1"	N/A	8'-0"	14'-0"	

*** WIDTH INCLUDES EXTRA POLYETHYLENE (6" ON EACH SIDE) ***

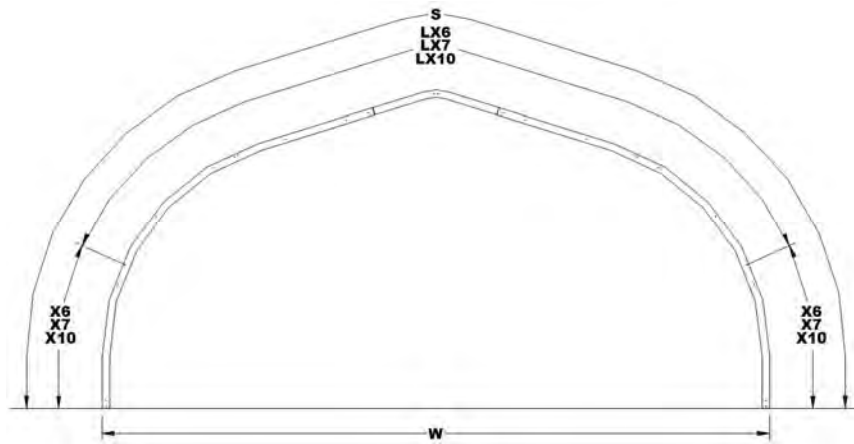
 LENGTH OF COVER GIVEN AS INDICATION ONLY

 THE COVERING INCLUDES THE 24" FOR THE CENTER ROLL-UP TUBE

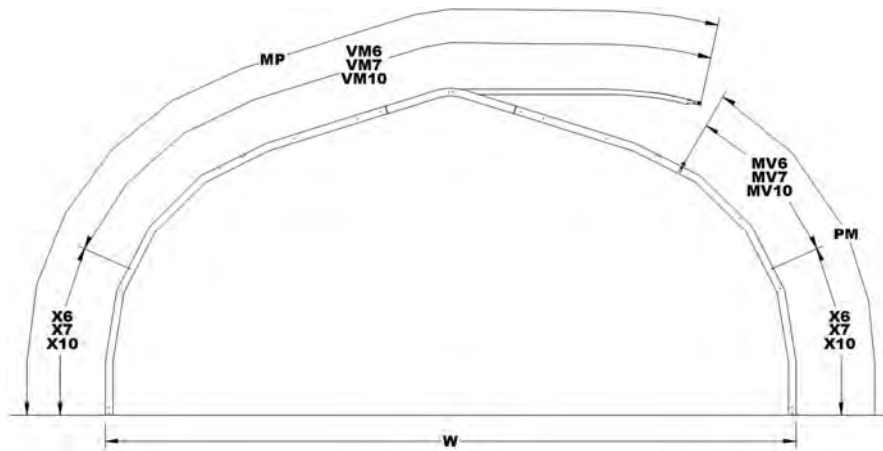
Polyethylene covering



Roof panel single or double polyethylene



Standard roof

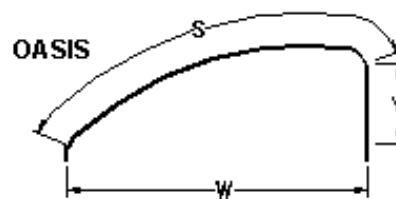
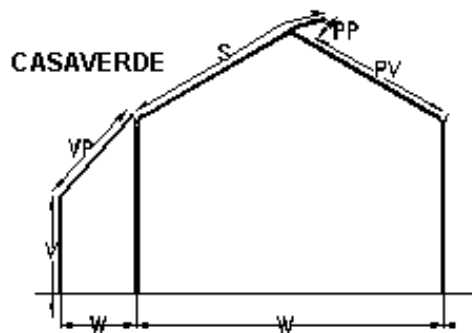
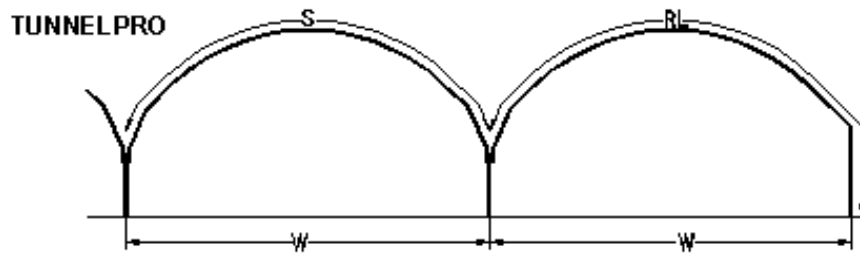


Half-roof panel

Polyethylene covering

Minimum width required, including Polylock, rolling tube, drip molding, etc.

	W	S	PP	PV	RL	V	VP
TUNNELPRO	28'	37'			42'-9"		
	31' (High)	41'-4"			47'-2"		
	31' (Low)	41'-4"			45'		
CASAVARDE	26'-3"	18'-7"	30"	12'-7"		10'-4"	9'-6"
OASIS 1 TO 4	36'	40'				7'	
OASIS 5	35'-9"	40'				7'	



Clear polyethylene film

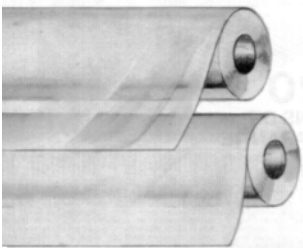


AD + thermal film 6 mil HS

Clear anti-drip and thermal film 6 mil high strength.

>>> UNTIL SUPPLIES LAST

Description	Unit.	Code
POLY AD THERMAL HS 6 MIL/16'	FT	5B39920616

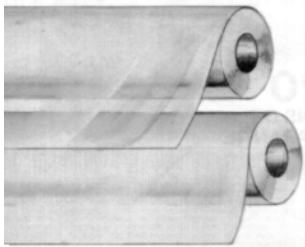


7.2 mil clear film HS

Clear film 7.2 mil high strength.

Description	Unit.	Code
POLY CLEAR HIGH STRE.7.2M/6'	FT	5B29960706
POLY CLEAR HIGH STR.7.2M/12.5'	FT	5B29960712
POLY CLEAR HIGH STRE.7.2M/14'	FT	5B29960714
POLY CLEAR HIGH STRE.7.2M/16'	FT	5B29960716
POLY CLEAR HIGH STRE.7.2M/18'	FT	5B29960718
POLY CLEAR HIGH STRE.7.2M/20'	FT	5B29960720
POLY CLEAR HIGH STRE.7.2M/25'	FT	5B29960725
POLY CLEAR HIGH STRE.7.2M/28'	FT	5B29960728
POLY CLEAR HIGH STRE.7.2M/32'	FT	5B29960732
POLY CLEAR HIGH STRE.7.2M/36'	FT	5B29960736
POLY CLEAR HIGH STRE.7.2M/40'	FT	5B29960740
POLY CLEAR HIGH STRE.7.2M/42'	FT	5B29960742
POLY CLEAR HIGH STRE.7.2M/48'	FT	5B29960748
POLY CLEAR HIGH STRE.7.2M/50'	FT	5B29960750
POLY CLEAR HIGH STRE.7.2M/54'	FT	5B29960754

Clear polyethylene film



7.2 mil clear film HS (length 105')

Clear film 7.2 mil high strength.

>>> Pre-cut roll (length 105')

Description	Unit.	Code
POLY CLEAR H.S.7.2M 12.5'X105'	RLS	5B29960712RL
POLY CLEAR H.S.7.2MIL 20'X105'	RLS	5B29960720RL
POLY CLEAR H.S.7.2MIL 25'X105'	RLS	5B29960725RL
POLY CLEAR H.S.7.2MIL 32'X105'	RLS	5B29960732RL
POLY CLEAR H.S.7.2MIL 40'X105'	RLS	5B29960740RL



AD + thermal film 7.2 mil HS

Clear anti-drip and thermal film 7.2 mil high strength.

Description	Unit.	Code
POLY AD THERMAL HR 7.2 MIL/48'	FT	5B39920748
POLY AD THERMAL HR 7.2 MIL/50'	FT	5B39920750
POLY AD THERMAL HR 7.2 MIL/54'	FT	5B39920754



AD + thermal film 7.2 mil long life

Clear anti-drip and thermal film 7.2 mil long life.

Description	Unit.	Code
POLY AD+TH LG LIFE 7.2M/12.5'	FT	5B75047212
POLY AD+TH LONG LIFE 7.2M/14'	FT	5B75047214
POLY AD+TH LONG LIFE 7.2M/16'	FT	5B75047216
POLY AD+TH LONG LIFE 7.2M/18'	FT	5B75047218
POLY AD+TH LONG LIFE 7.2M/20'	FT	5B75047220

Clear polyethylene film

POLY AD+TH LONG LIFE 7.2M/25'	FT	5B75047225
POLY AD+TH LONG LIFE 7.2M/28'	FT	5B75047228
POLY AD+TH LONG LIFE 7.2M/32'	FT	5B75047232
POLY AD+TH LONG LIFE 7.2M/36'	FT	5B75047236
POLY AD+TH LONG LIFE 7.2M/40'	FT	5B75047240
POLY AD+TH LONG LIFE 7.2M/42'	FT	5B75047242

White polyethylene film



3 mil white film (winter)

White film 70% 3 mil for winter protection.

Description	Unit.	Code
OVERWINTER WHITE 3 MIL 70%/32'	FT	5BGE0332
OVERWINTER WHITE 3 MIL 70%/40'	FT	5BGE0340



4 mil white film (45%)

Lifetime: 1 year

Description	Unit.	Code
SUPER UVA WHITE 4MIL 45% 36'1Y	FT	5BGB3436
SUPER UVA WHITE 4MIL 45% 40'1Y	FT	5BGB3440
SUPER UVA WHITE 4MIL 45% 44'1Y	FT	5BGB3444
SUPER UVA WHITE 4MIL 45% 48'1Y	FT	5BGB3448



7.2 mil white film (70%) HS

White film 70% 7.2 mil high strength.

Description	Unit.	Code
POLY WHITE 70% HS 7.2 MIL/6'	FT	5B65930706
POLY WHITE 70% HS 7.2 MIL/12'	FT	5B65930712
POLY WHITE 70% HS 7.2 MIL/16'	FT	5B65930716
POLY WHITE 70% HS 7.2 MIL/24'	FT	5B65930724
POLY WHITE 70% HS 7.2 MIL/32'	FT	5B65930732
POLY WHITE 70% HS 7.2 MIL/40'	FT	5B65930740
POLY WHITE 70% HS 7.2 MIL/48'	FT	5B65930748
POLY WHITE 70% HS 7.2 MIL/54'	FT	5B65930754

White polyethylene film



9 mil white film (70%)

Description	Unit.	Code
POLY WHITE 70% HS 9 MIL/20'	FT	5BGB0920
POLY WHITE 70% HS 9 MIL/35'	FT	5BGB0935
POLY WHITE 70% HS 9 MIL/40'	FT	5BGB0940

Polyethylene film coating



Kool Ray

This white product can be applied on different coverings to reflect sun infrared rays and cut down heat inside greenhouses. Use only on glass, fiberglass or polyethylene film. This product takes off by frost or brushing. Should dry for 24 hours before the rain.

Containers: 1 gallon

Application rage: Depending of the intensity of shade required by crop

Suggested use 8:1 (average water:Kool Ray)

Kool Ray is more efficient when applied by spraying.

Description	Unit.	Code
LIQUID SHADING K.RAY CLASSIC	EA	8H100-1



SunClear

"SunClear" to eliminate dripping due to condensation. Effective on all plastic covers, rigid or flexible and on glass. This product increases quantity of light inside greenhouse. Your plants will grow faster and better with SunClear.

Recommended dilution is 1 :100

Suggestion : container of 32 oz in 25 gallons us covers an area of approximately 10,000 square feet

Description	Unit.	Code
SUN CLEAR NO-DRIP COAT (QT)	EA	8H003
SUN CLEAR NO-DRIP COAT (5 GAL)	EA	8H003-5G

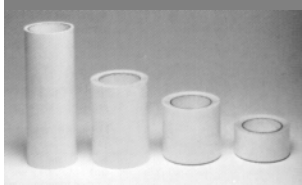
Polyethylene accessories



Clip for tube

A clip to secure the film to a round tube. Ideal for natural ventilation roll-up system on polyethylene covered greenhouse.

Description	Unit.	Code
TOOL FOR CLIP 5C21 AND 5C23	EA	2M901-1
1" FILM CLIP	EA	5C21
1-1/4" FILM CLIP	EA	5C23

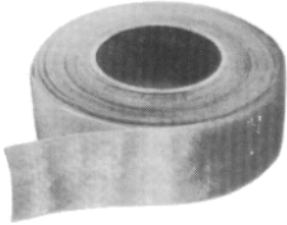


Adhesive tape

Adhesive tape used to repair perforation and tears in polyethylene films, UV resistant.

Description	Unit.	Code
GREY DUCT TAPE 2 " X 180'	RLS	5C05-1
DOUBLE FACE TAPE 4"X 50 METERS	RLS	5C07-1
DOUBLE FACE TAPE 1"X 50 METERS	RLS	5C07-2
ACRYLIC TAPE 10"X 48'	RLS	5C16-10
ACRYLIC TAPE 2"X 48'	RLS	5C16-2
ACRYLIC TAPE 4"X 48'	RLS	5C16-4
ACRYLIC tape 100mm x 15M	RLS	5C16-5
ACRYLIC TAPE 6"X 48'	RLS	5C16-6
ACRYLIC TAPE POLY 48mm X 66 M	RLS	5C17-48
TAPE WH/WH 10 OZ 12"X 50'	RLS	5C18-12
TAPE WH 72mm x 33 M	RLS	5C18-6
REDZONE PRO RESISTO 4"X75'	RLS	5C19-4.75

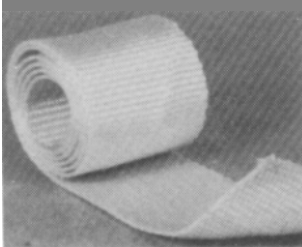
Polyethylene accessories



Polyethylene batten tape

Woven polyethylene strap, UV treated. Life expectancy of 3 years.

Description	Unit.	Code
BRAIDED POLYETHYLENE 2"X 200'	RLS	5P090
BRAIDED POLYETHYLENE 3"X 400'	RLS	5P091
BRAIDED POLYETHYLENE 4"X 200'	RLS	5P092



Polyester webbing

- White polyester webbing
- UV treated
- Life expectancy of 5 years

Description	Unit.	Code
POLYESTER STRAP 1-1/4"x 492'	RLS	5P088

Webbing

- White polyester webbing for tensioning fabric cover in MegaDome
- UV treated

Description	Unit.	Code
1" STRAP 4800 LB	FT	5P095
1"X 50'STRAP(2200LBS)	EA	5P096-1
2" STRAP 10000 LBS	FT	5P097
1" STRAP (2200 PDS)	FT	5P098

Polyethylene accessories

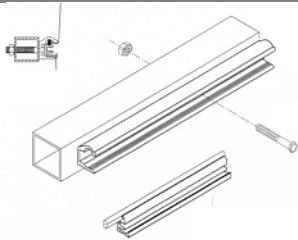


Strap fastener

Adjust the tension of the polyester strap with this fastener.

Description	Unit.	Code
POLYESTER STRAP FASTENER	EA	5P085

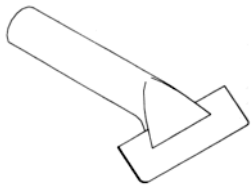
Polylock



Polylock kit

Polylock is an aluminum extrusion used to secure soft covering material, like polyethylene film, at the periphery. This system can lock one or two layers of films. Complete Polylock kit including: pre-drilled female part, male, rubber, wood screw or bolts and nuts.

Description	Unit.	Code
12' POLYLOCK KIT WITHOUT BOLT	CH	3M100
12'POLYLOCK KIT + 3/4" BOLTS	CH	3M102
12'POLYLOCK KIT + 1-1/2" BOLTS	CH	3M103
12' POLYLOCK KIT + 2" BOLTS	CH	3M104
12'POLYLOCK KIT +SCREWS 1-1/2"	CH	3M106
10'POLYLOCK KIT + 3/4" BOLTS	CH	3M120
10'POLYLOCK KIT + 1-1/2" BOLTS	CH	3M121
10' POLYLOCK KIT + 2" BOLTS	CH	3M122
10' POLYLOCK KIT WITHOUT BOLT	CH	3M123
10'POLYLOCK KIT +SCREWS 1-1/2"	CH	3M124



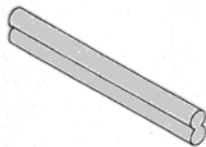
Polylock tool

Special Polylock tool help for insert installation.

Description	Unit.	Code
POLYLOCK HAND TOOL	CH	2M900

Polylock

Polylock rubber



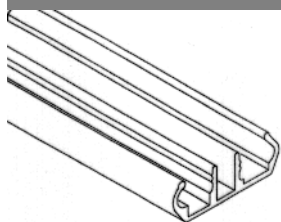
Rubber only.

	Grey rubber	Black rubber	White rubber
Code	5C43-1 / 5C43-3	5C44	5C46-1
Dimension	0.260"	0.236"	0.220"
Minimum film	0.004"	0.010"	0.018"
Maximum film	0.016"	0.024"	0.032"

Material thickness:
 Polyethylene films: 0.004" @ 0.008"
 Insect barrier: 0.010"
 10oz membrane shelter: 0.020"
 K tarp shelter: 0.025"
 VineGard vinyl: 0.015"
 Enduro shade: 0.025"

Description	Unit.	Code
POLYLOCK PLASTIC INSERT.260X6'	CH	5C43-1
POLYLOCK PLASTIC INSERT.260X5'	CH	5C43-3
POLYLOCK PLASTIC INSERT.236X6'	CH	5C44
POLY PLASTIC INSERT 6'FR CLOTH	CH	5C46-1

Double Polylock

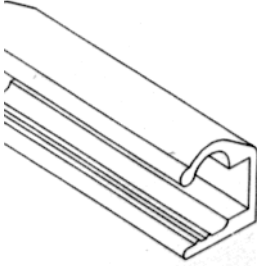


Flat double Polylock is used to fix two opposite polyethylene films on any plane surface (gable end, etc.).

Description	Unit.	Code
95-3/4" DOUBLE POLYLOCK	CH	2C302
DOUBLE FEM. POLYLOCK 143-3/4"	CH	5C35-9

Polylock

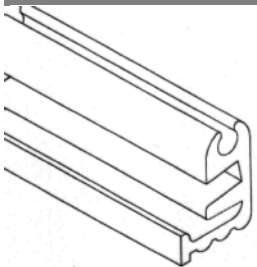
Female Polylock



Polylock female part.

Description	Unit.	Code
DRILLED POLYLOCK 5'	CH	2M935
10' FEMALE POLYLOCK (6 HOLES)	CH	2M936
143.75"FEM.POLYLOCK (9 HOLES)	CH	2M937-1
DRILLED POLYLOCK 6'	CH	2M938
4M FEM.POLYLOCK (9 HOLES)	CH	2N7130-1

Male Polylock



Male only, without rubber.

Description	Unit.	Code
6' MALE POLYLOCK	CH	5C42-1

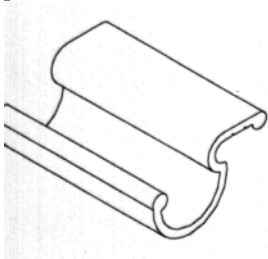
Polylock

Limit of use of the polylock with various types of covering

MATERIAL IN THE POLYLOCK	Grey rubber insert 5C43-1 / 5C43-3 .260"	Black rubber insert 5C44 .236"	Natural rubber insert 5C46-1 / 5C46-3 .220"	Remarks
Minimal thickness	.004	.010	.018	
Maximal thickness	.016	.024	.032	
.008 + .008	Max.	OK	---	
.008 + .008 + Econet .010	---	Max.	OK	
.008 + insect .010	---	OK	---	
.006 + .004	OK	---	---	
.006 + .004 + Econet .010	---	OK	---	
.006 + Econet .018 (Mexico)	---	OK	---	
Green poly fabric 12 oz	---	Max.	OK	Include welding
.006 + poly fabric 12 oz	---	---	OK	
.012 + poly fabric 12 oz	---	---	Max.	2 polylock tools

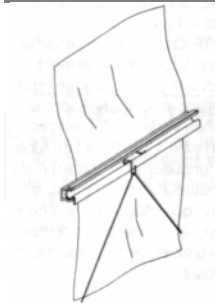
Note: Do not use wirelock extrusion with poly fabric 12 oz.

Polytech



Polytech II male part

Description	Unit.	Code
72" MALE POLYTECH	CH	5C81

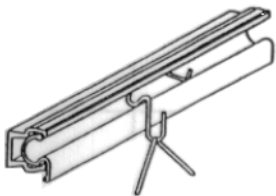


Nylon rope

Nylon ropes to minimized flapping of roll-up system on natural ventilation. The rope size depends on the size and angle of natural vent opening.
 UV resistant.

Rope natural ventilation:
 Arch at 5' = 2.65/ft (by side)
 Arch at 6' = 2.38/ft (by side)
 Arch at 8' = 2.30/ft (by side)

Description	Unit.	Code
WHITE NYLON ROPE 1/8"	PLS	1N1004
1/4" NYLON ROPE WHITE	PLS	1N1005

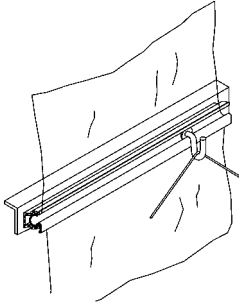


Polytech II clip

Clip-hook for polytech II.

Description	Unit.	Code
CLIP-HOOK FOR POLYTECH II	CH	5C73

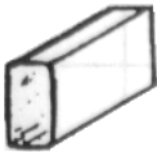
Polytech



Polytech III clip

Clip-hook for polytech III.

Description	Unit.	Code
POLYTECH III HOOK	CH	1P085-1

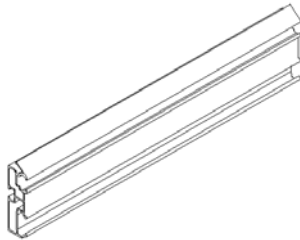


Polytech I clip

Polytech 1 clip (use on every 18 inches minimum).

Description	Unit.	Code
PVC SECURING INSERT POLYTECH I	CH	2M943

Wiretech



Wiretech

DOUBLE MOLDING

This versatile molding is quick and easy to install. Being structural, it does not require any additional support, which makes it possible to save time and money when installing.

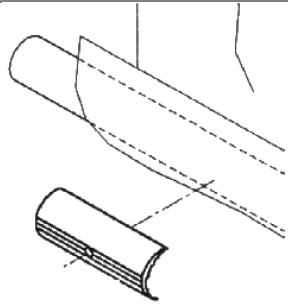
Equipped with a snow deflector, its double configuration allows installing the polythene of greenhouse's roof separately from roll-ups polythene, which justify the use of polythene less wider and easier to handle.

Ex.: 2 rolls of 40' for the roof + 2 rolls of 12' for roll-ups instead of 2 rolls of 54' width

Union is necessary to assemble end to end is the #2B1355 which requires 2 bolts #1C0621 and 2 nuts #1CB787 by union.

Description	Unit.	Code
UNION FOR 5C911	CH	2B1355
144" WIRETECH ALU. EXTRUSION	CH	5C911
120" WIRETECH ALU. EXTRUSION	CH	5C940

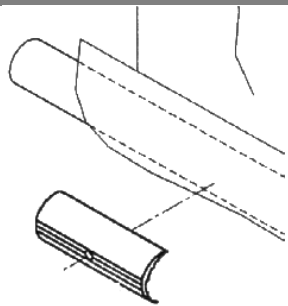
Griplock



1" Griplock

Griplock is the safest way to secure films to pipe. Ideal for shade cloth or for center roll-up natural ventilation systems. Screw Griplock directly onto round tube 1" diameter.

Description	Unit.	Code
SELF DRL.SCREW RND HEAD#8X1/2"	CH	1C2206
TUBE 1"R X 143-7/8"+ 3"SW GV	CH	2A216
96"DRILL.ALU.GRIPLOCK(FOR 1")	CH	2A6964
2.5" PLASTIC GRIPLOCK(FOR 1")	CH	5C1002

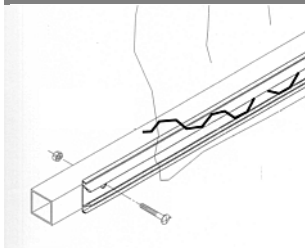


1-1/4" & 2" Griplock

Griplock is the safest way to secure films to pipe. Ideal for shade cloth or for center roll-up natural ventilation systems. Screw Griplock directly onto round tube 1-1/4"(for BVK plastic Griplock and 1-1/4" or 2" diameter for aluminum Griplock).

Description	Unit.	Code
95 3/4 GRIPLOCK (1-1/4 & 2)	CH	00288-000-1
SELF DRL.SCREW RND HEAD#8X1/2"	CH	1C2206
1 1/4"R X 12'3"SW.ROLLING TUBE	CH	2A7600
2.5" PLASTIC GRIPLOCK(1-1/4")	CH	5C1003
95-3/4" GRIPLOCK (1 1/4 & 2")	CH	5C33

Wirelock



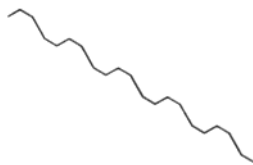
Wirelock kit

This aluminum extrusion is used to lock greenhouse film. Use 1 or 2 wires to secure the film inside the female extrusion. This method allows you to fit one film separate from a second.

Wirelock can be used to secure polyethylene film on gable end ribs, on top of natural ventilation, on opening outline (doors, windows), etc. Wirelock kit including pre-drilled female part, one length of spring wire (depending on kit), screws or bolts and nuts (square tube not included).

Description	Unit.	Code
12' WIRELOCK KIT WITHOUT BOLT	EA	3M200
12' WIRELOCK KIT + 1" BOLTS	EA	3M202
12' WIRELOCK KIT + 1-1/2" BOLTS	EA	3M203
12' WIRELOCK KIT + 2" BOLTS	EA	3M204
12' WIRELOCK KIT + 1/4-20 M-BOLT	EA	3M205
12' WIRELOCK KIT + 1-1/2" SCREW	EA	3M206
12' WIRELOCK KIT + LAPTECK	EA	3M208
10' WIRELOCK KIT + 1" BOLTS	EA	3M220
10' WIRELOCK KIT + 1-1/2" BOLT	EA	3M221
10' WIRELOCK KIT + 2" BOLTS	EA	3M222
10' WIRELOCK KIT WITHOUT BOLTS	EA	3M223
10' WIRELOCK KIT + 1-1/2" SCREW	EA	3M224
10' WIRELOCK KIT + 1/4-20 M-BOLT	EA	3M225

Wire-Plast spring wire

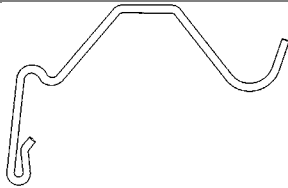


Wirelock spring wire.

We use one wire to hold one or two films; a second wire will be required to maintain gable end poly in the same female molding.

Description	Unit.	Code
2.2mm x 2m WIRE-PLAST	EA	1N2018

Wirelock



Wirelock hook

Description	Unit.	Code
SPRING HOOK (WIRELOCK)	EA	1N2019



Wirelock female part

Description	Unit.	Code
FEMALE WIRELOCK 10' DRILLED	EA	2A2106
95-3/4" WIRELOCK EXTRUSION	EA	5C77-1
191-3/4" WIRELOCK EXTRUSION	EA	5C77-2
71-3/4" WIRELOCK EXTRUSION	EA	5C77-3
143-3/4" WIRELOCK EXTRUSION	EA	5C77-4
59-3/4" WIRELOCK EXTRUSION	EA	5C77-5
119-3/4" WIRELOCK EXTRUSION	EA	5C77-6

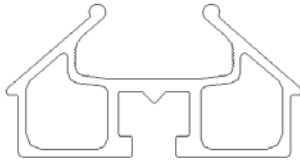


Light wirelock

Description	Unit.	Code
SMALL WIRELOCK 10' (6 HOLES)	EA	2A2108-1
SMALL WIRELOCK 12' (9 HOLES)	EA	2A2109-1
SMALL WIRELOCK 14' 9 HOLES	EA	2A2111-1
SMALL WIRELOCK 157-3/8 4m 9HOL	EA	2N7135
127-7/8"LIGHT WIRELOCK (3.25m)	EA	5C823-10PT
71-3/4" LIGHT WIRELOCK	EA	5C823-3PT
143-5/8" LIGHT WIRELOCK	EA	5C823-4PT

Wirelock

118" LIGHT WIRELOCK (3m)	EA	5C823-5PT
119-5/8" LIGHT WIRELOCK	EA	5C823-6PT
157-3/8" LIGHT WIRELOCK (4m)	EA	5C823-8PT
177" LIGHT WIRELOCK (4.495m)	EA	5C823-9PT

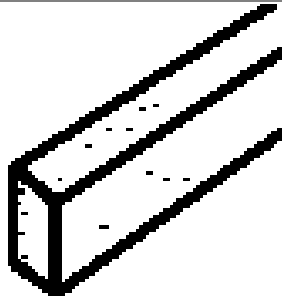


Tube

Union is necessary to assemble end to end is the #2B1356-1 which requires 4 bolts #1C0621 and 4 nuts #1CB787 by union.

Description	Unit.	Code
5' WIRELOCK TUBE 2"	EA	2A2112
6' WIRELOCK TUBE	EA	2A2113
2" X 8" WIRELOCK TUBE UNION	EA	2B1356-1
WIRELOCK TUBE 2"X 119-3/4"	EA	5C692
WIRELOCK TUBE 2"X 143-3/4"	EA	5C693

Covering accessories



Square foam

Polyvinyl square foam molding; use lengthwise along single polycarbonate and fiberglass panel or on end panels with 1J140 type vinyl flashing.

Roll of 12'6".

Description	Unit.	Code
1"X 1"X 12.5'SQ POLYVINYL FOAM	PLS	5D04



Neoprene foam

Neoprene molding. Suggested uses :

5D02-1..Spacer on PCSS roof purlins

5D05.....Between PCSS and 1J140 vinyl flashing

5D09.....Both sides of ridge on slice rib section

5D18.....Vermax greenhouse

5D22.....Around opening panel, fans, doors and in the polytech section of the wiretech

5D24-1..To install male polytech under pressure in polytech II molding

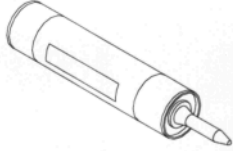
5D28.....Post gasket for Oasis

5D34-1..For chimney and shutter for MegaDome

Description	Unit.	Code
12.5'SELF ADHESIF FOAM 3/4 X 1	RLS	5D02-1
NEOPRENE 5/8" X 1" X 12.5'	RLS	5D05
FOAM NEOPRENE 3/4" X 1" X 10'	RLS	5D09
1/2" X 1"X11.5' NEOPRENE S.ADH	RLS	5D17-1
5/16" X 1" NEOPRENE	PLS	5D18
1/8"THx7/16"WDX10'SELF.ADH.NEO	RLS	5D22
SELF-ADHESIVE FOAM 3/8" X 3/8"	PLS	5D24-1
GASKET EPDM 2-3/4" ID X 4" OD	CH	5D28
1/4"TH 1-1/2"WDX25'SELF.AD.NEO	RLS	5D34-1

Covering accessories

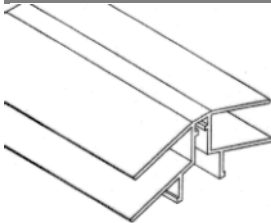
Silicone



Silicone caulking; covers approximately 25 feet depending application.
 5D10-1 and 5D10-1B : Used for greenhouses
 5D10-S and 5D10-SB : Used for MegaDome

Description	Unit.	Code
CLEAR SILICONE CARTRIGE	CH	5D10-1
WHITE SILICONE CARTRIGE	CH	5D10-1B
ALUMINIUM SILICONE CARTRIDGE	CH	5D10-1C
GREY RTV SILICONE CARTR.	CH	5D10-2
SUPRA SEALANT CARTRIGE	CH	5D10-S
BUTYL SEALANT CARTRIGE WHITE	CH	5D10-SB
BUTYL SEALANT CARTRIGE GREY	CH	5D10-SG

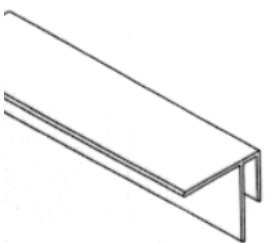
Ridge flashing



Aluminum ridge cap molding.

Description	Unit.	Code
12' TOP EXTRUSION	CH	2A6738
6' TOP EXTRUSION	CH	2A6739

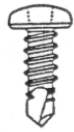
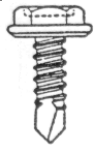
Single flashing



Single vinyl flashing (straight).

Description	Unit.	Code
3.0m SINGLE 3/4"VINYL FLASHING	CH	1J140
1.0m SINGLE 3/4"VINYL FLASHING	CH	1J141

Covering accessories



Metal screws

Wood screw + washer.

Description	Unit.	Code
#12x1"SELF DRILL.SCREW+WASHER	CH	5D11
#12x1"SELF DRILL.SCREW+WASH WT	CH	5D11-B
#12x1-1/2"SELF DRIL.SCREW+WASH	CH	5D12
#12x1-1/2"DRILLSCREW+1-1/8"NEO	CH	5D15
WASHER NEO 1/4"ID x 1-1/8"OD	CH	5D16
#10x1"WOODSCREW+SEALING WASHER	CH	5D30

Wood screws

Description	Unit.	Code
WOOD SCREW #12 X 1 1/2" PLT.	CH	RN28214
#14x1-1/2"WOODSCREW(SQU.SOC.)	CH	RN28216

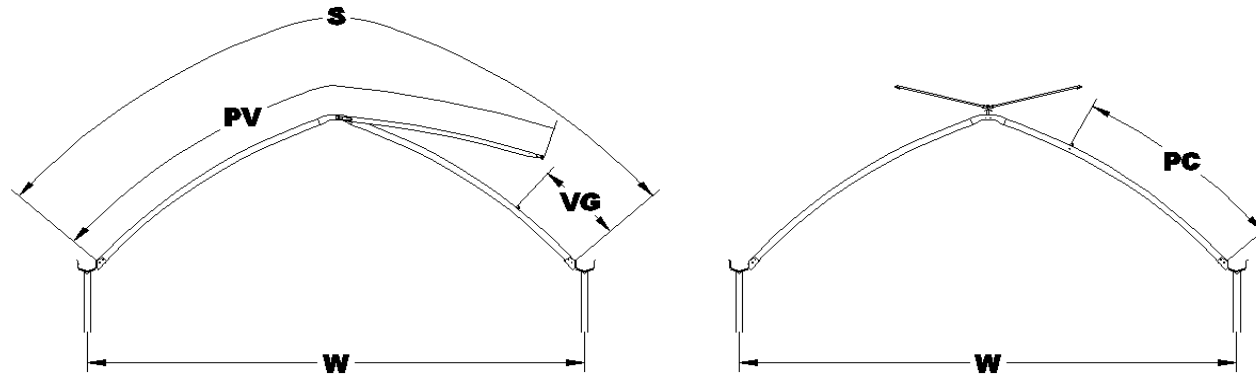
Neoprene washer



Sealing washer only.

Description	Unit.	Code
WASHER NEO 1/8"ID 1/2"O.D.	CH	1C2082
WASHER NEO 1/4"ID 5/8"O.D.	CH	1C2083
WASHER NEO 5/16"ID 3/4"O.D.	CH	1C2084
WASHER NEO 3/8"ID.X 1"O.D.	CH	1C2085
WASHER NEO 7/16"ID.X 1"O.D.	CH	1C2086

Polyethylene covering, half-roof, rigid panel

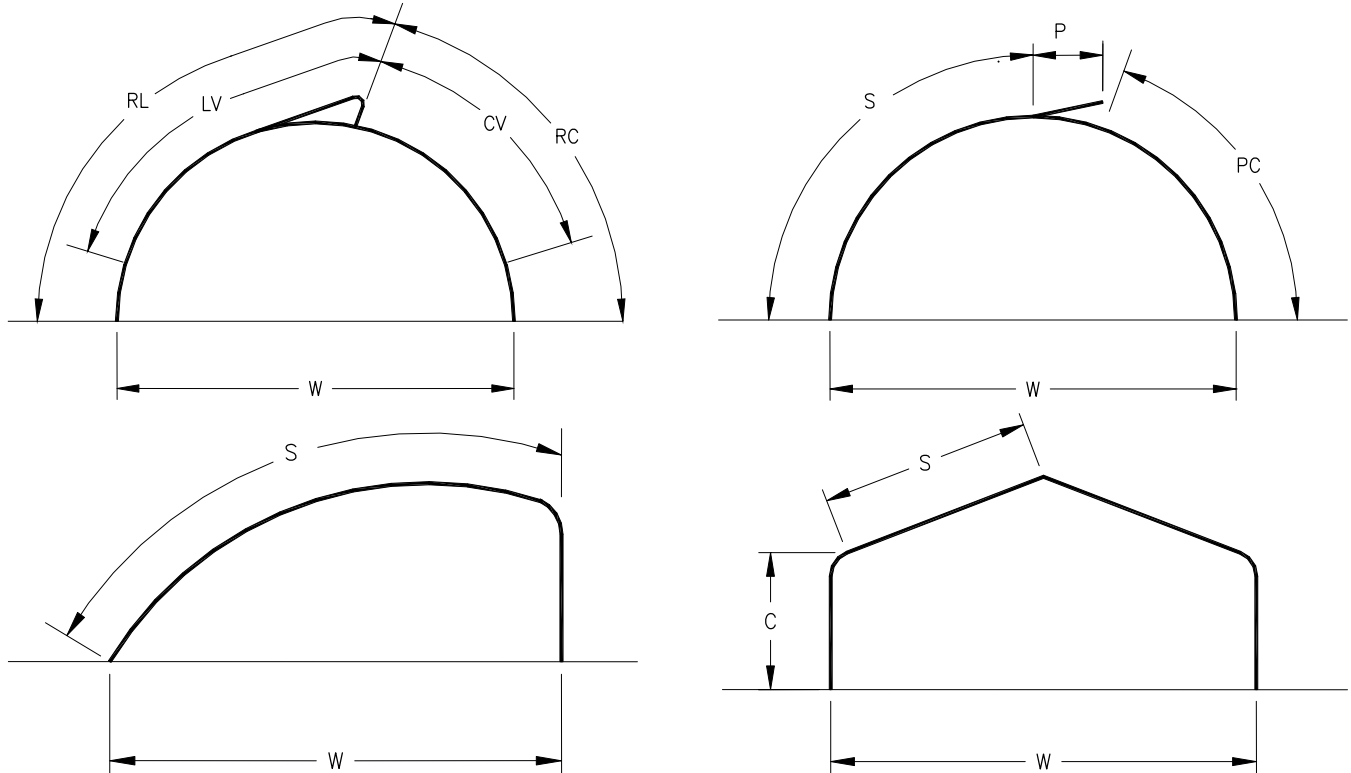


	W	S		PC 4' RIGID PANEL			PL	PP	PV		RC	RL	VG				
LUMINOSA SERIE 8	21'-4"	25'-0"	+ 6" =	25'-6"	8'-8"	+ 6" =	9'-2"	N/A	N/A	21'-11"	+ 6" =	22'-5"	N/A	N/A	3'-10"	+ 6" =	4'-4"
	24'	27'-11"	+ 6" =	28'-5"	10'-2"	+ 6" =	10'-8"	N/A	N/A	24'-10"	+ 6" =	25'-4"	N/A	N/A	3'-10"	+ 6" =	4'-4"
	25'	29'-0"	+ 6" =	29'-6"	10'-8"	+ 6" =	11'-2"	N/A	N/A	25'-11"	+ 6" =	26'-5"	N/A	N/A	3'-10"	+ 6" =	4'-4"
	26'-3"	30'-4"	+ 6" =	30'-10"	11'-5"	+ 6" =	11'-11"	N/A	N/A	27'-3"	+ 6" =	27'-9"	N/A	N/A	3'-10"	+ 6" =	4'-4"

	W	S		PC 4' RIGID PANEL			PL	PP	PV		RC	RL	VG				
LUMINOSA SERIE 9	28'	32'-5"	+ 6" =	32'-11"	12'-5"	+ 6" =	12'-11"	N/A	N/A	29'-4"	+ 6" =	29'-10"	N/A	N/A	3'-10"	+ 6" =	4'-4"
	30'	34'-7"	+ 6" =	35'-1"	13'-6"	+ 6" =	14'-0"	N/A	N/A	31'-6"	+ 6" =	32'-0"	N/A	N/A	3'-10"	+ 6" =	4'-4"
	31'-6"	36'-2"	+ 6" =	36'-8"	14'-3"	+ 6" =	14'-9"	N/A	N/A	32'-1"	+ 6" =	32'-7"	N/A	N/A	3'-10"	+ 6" =	4'-4"

	W	S		PC 4' OR 5' RIGID PANEL			PL	PP	PV		RC	RL	VG				
LUMINOSA SERIE 11	36'	41'-0"	+ 6" =	41'-6"	TO DETERMINE			N/A	N/A	35'-5"	+ 6" =	35'-11"	N/A	N/A	6'-1"	+ 6" =	6'-7"

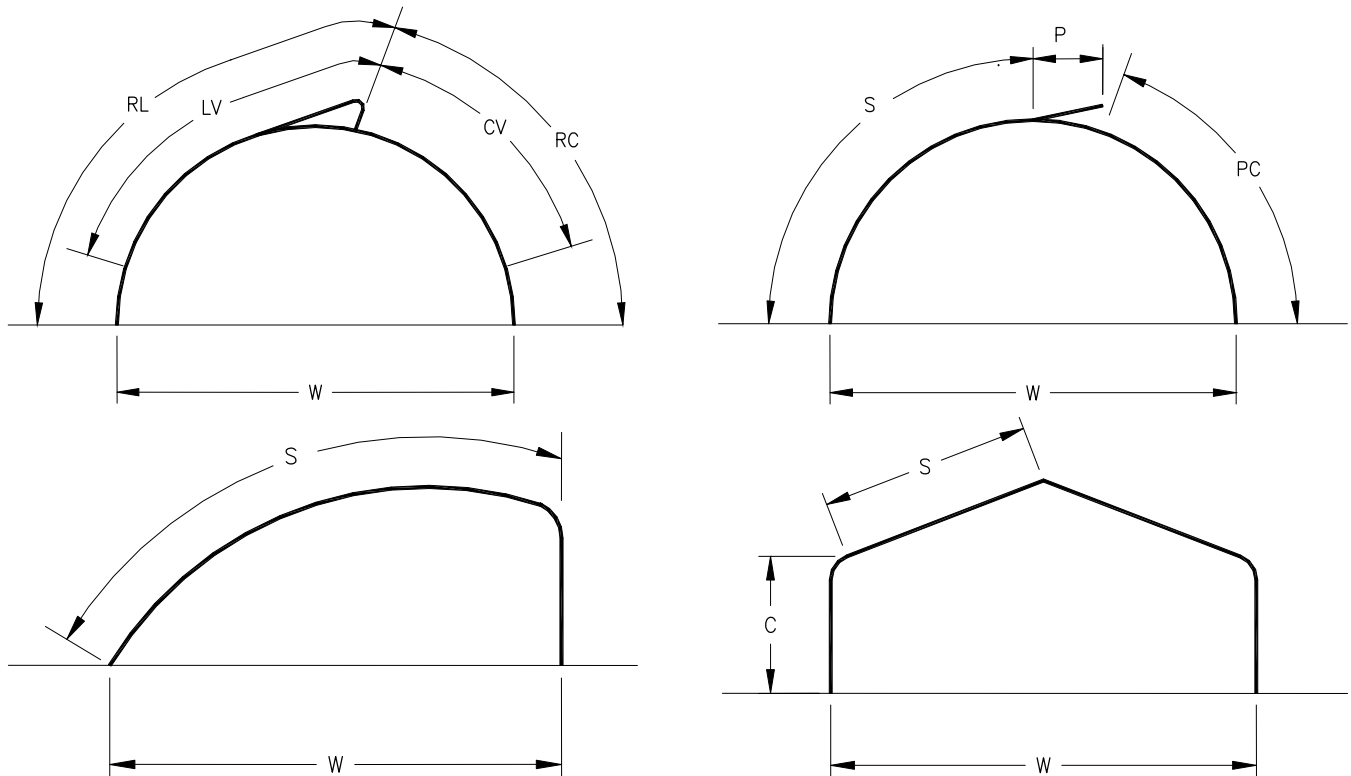
Polyethylene covering, half-roof, rigid panel



For corrugated polycarbonate, add 3" to all length except "P"

	W	S	PC	P	RC	CV	RL	LV	C
MAXIDOME	40'	30' 2"			26'	20'	34'	28'	
	50'	35' 6"			31' 5"	25' 5"	36' 5"	30' 5"	
	60'	41'			36' 10"	30' 10"	44' 10"	38' 10"	
OLD NORDIQUE	21' 4"	11' 9"	7' 10"	4'	7' 3"		16' 5"		
	24'	13' 2"	9' 3"	4'	8' 8"		17' 10"		
	25'	13' 8"	9' 10"	4'	9' 2"		18' 4"		
	28'	15' 4"	11' 4"	4'	10' 9"		19' 10"		
	30'	16' 3"	12' 5"	4'	11' 10"		20' 10"		
NORDIQUE NG	14'	7' 10"	4'	4'					
	16'	8' 11"	5' 1"	4'					
	18'	10'	6' 2"	4'					
	21' 4"	11' 9"	7' 11"	4'	8' 2"		16' 6"		
	24'	13' 2"	9' 4"	4'	9' 7"		17' 11"		
	25'	13' 9"	9' 11"	4'	10' 2"		18' 6"		
	28'	15' 3"	11' 5"	4'	11' 8"		20'		
	30'	16' 4"	12' 6"	4'	12' 9"		21' 1"		
31' 6"	17' 1"	13' 4"	4'	13' 7"		21' 11"			

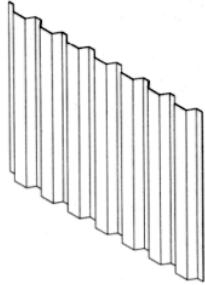
Polyethylene covering, half-roof, rigid panel



Length of sheet of triple polycarbonate or corrugated polycarbonate required to cover splice or complete roof

	W	S	PC	P	RC	CV	RL	LV	C
OASIS 1 to 4	36'	40'							
OASIS 5	35' 9"	40'							
OVALTECH 1	25'	18' 5"	14' 7"	4'	14' 3"	8' 3"	23' 1"	17' 1"	
	27'	19' 6"	15' 8"	4'	15' 4"	9' 4"	24' 2"	18' 2"	
	30'	22' 7"	18' 9"	4'	18' 5"	12' 5"	27' 3"	21' 3"	
OVALTECH 3	25'	21' 1"	17' 5"	4'	16' 10"	10' 10"	26' 3"	20' 3"	
	30'	23' 8"	20'	4'	19' 5"	13' 5"	28' 10"	22' 10"	
	32'	24' 9"	21' 1"	4'	20' 5"	14' 5"	29' 10"	23' 10"	
	35'	26' 4"	22' 8"	4'	22'	16'	31' 6"	25' 6"	
VERTISER B	25'	15'							5'
VERTISER H	25'	15'							7'

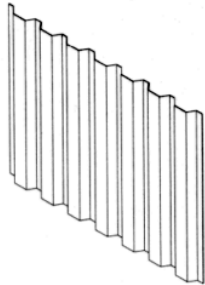
Corrugated polycarbonate



Clear

- CORRUGATED POLYCARBONATE**
- Up to 90% light transmission
 - Filtering out harmful ultraviolet light
 - High impact resistance
 - Exceptionally resistant to weathering
 - Flexible and easy to install
 - Temperature ranging:
 -40°F to +250°F (-40°C to + 121.11°C)
 - 10 years limited warranty against yellowing and loss of light transmission

Description	Unit.	Code
Corrugated sheet 50"x 8' clear	EA	5K6208
Corrugated sheet 50"x 10'clear	EA	5K6210
Corrugated sheet 50"x 12'clear	EA	5K6212
Corrugated sheet 50"x 14'clear	EA	5K6214
Corrugated sheet 50"x 16'clear	EA	5K6216
Corrugated sheet 50"x 18'clear	EA	5K6218
Corrugated sheet 50"x 24'clear	EA	5K6224
CORRUGATED SHEET 50"X 32'CLEAR	EA	5K6232



White

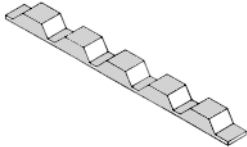
- CORRUGATED POLYCARBONATE**
- Up to 48% light transmission
 - Filtering out harmful ultraviolet light
 - High impact resistance
 - Exceptionally resistant to weathering
 - Flexible and easy to install
 - Temperature ranging:
 -40°F to +250°F (-40°C to + 121.11°C)
 - 10 years limited warranty against yellowing and loss of light transmission
- MINIMUM QUANTITY 2,000 LBS

Description	Unit.	Code
CORRUGATED SHEET 50"X 12'WHITE	EA	5K6212-B
CORRUGATED SHEET 50"X 14'WHITE	EA	5K6214-B

Corrugated polycarbonate

Corrugated sheet 50"x 16'white	EA	5K6216-B
CORRUGATED SHEET 50"X 18'WHITE	EA	5K6218-B
Corrugated sheet 50"x 24'white	EA	5K6224-B
Corrugated sheet 50"x 32'white	EA	5K6232-B

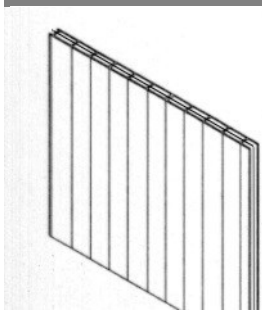
Molding



EPDM molding, 1" wide.

Description	Unit.	Code
CORRUGATED FOAM CLOSURE STRIP	FT	5D19

Double polycarbonate



Clear

DOUBLE POLYCARBONATE

- Up to 81% light transmission
- Impact performance over a wide temperature range, -40°F to +248°F (-40°C to +120°C)
- R-value (insulating capacity) : 1,7
- 10 years limited written warranty against discoloration, loss of light transmission and loss of strength due to weathering

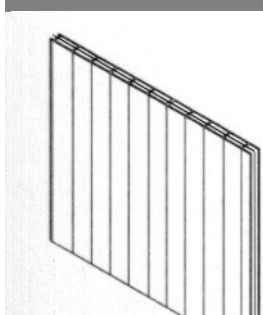
Description	Unit.	Code
PCSS CLEAR 8mm ND 48" X 96"	EA	5K4808
PCSS CLEAR 8mm ND 47-1/4"x168"	EA	5K4814
PCSS CLEAR 8mm ND 71-1/4"x 96"	EA	5K6808
PCSS CLEAR 8mm ND 71-1/4"x120"	EA	5K6810
PCSS CLEAR 8mm ND 71-1/4"x144"	EA	5K6812
PCSS CLEAR 8mm ND 71-1/4"x168"	EA	5K6814
PCSS CLEAR 8mm ND 71-1/4"x192"	EA	5K6816
PCSS CLEAR 8MM ND 71-1/4"X216"	EA	5K6818
PCSS CLEAR 8MM ND 71-1/4"X240"	EA	5K6820
PCSS CLEAR 8MM ND 71-1/4"X264"	EA	5K6822
PCSS CLEAR 8mm ND 71-1/4"x288"	EA	5K6824
PCSS CLEAR 8mm ND 71-1/4"x324"	EA	5K6827
PCSS CLEAR 8mm ND 71-1/4"x384"	EA	5K6832
PCSS CLEAR 8mm 78"X 84 2WALL	EA	5K7807
PCSS CLEAR 8mm 78"X 96" 2WALL	EA	5K7808
PCSS CLEAR 8mm 78"X 120" 2WALL	EA	5K7810
PCSS CLEAR 8mm 78"X 144" 2WALL	EA	5K7812
PCSS CLEAR 8mm 78"X 168" 2WALL	EA	5K7814
PCSS CLEAR 8mm 78"X 192" 2WALL	EA	5K7816
PCSS CLEAR 8mm 78"X 216" 2WALL	EA	5K7818
PCSS CLEAR 8mm 78"X 228" 2WALL	EA	5K7819
PCSS CLEAR 8mm 78" x 236" (6M)	EA	5K7819-1
PCSS CLEAR 8mm 78"X 240" 2WALL	EA	5K7820
PCSS CLEAR 8mm 78"X 252"2WALL	EA	5K7821
PCSS CLEAR 8mm 78"X 288" 2WALL	EA	5K7824
PCSS CLEAR 8mm ND 80.75"x 192"	EA	5K8016
PCSS CLEAR 8mm ND 80.75"x 216"	EA	5K8018

Double polycarbonate

PCSS CLEAR 8mm ND 80.75"x 240"

EA

5K8020



White

DOUBLE POLYCARBONATE

- Up to 20% light transmission
- Impact performance over a wide temperature range, -40°F to +248°F (-40°C to +120°C)
- R-value (insulating capacity) : 1,7
- 10 years limited written warranty against discoloration, loss of light transmission and loss of strength due to weathering

ON REQUEST ONLY

Description	Unit.	Code
PCSS White 8mm ND 71-1/4"x 96"	EA	5K6708-B
PCSS White 8mm 71-1/4"x118-1/2"	EA	5K6710-B
PCSS White 8mm ND 71-1/4"x144"	EA	5K6712-B
PCSS White 8mm ND 71-1/4"x168"	EA	5K6714-B
PCSS White 8mm ND 71-1/4"x192"	EA	5K6716-B
PCSS White 8MM ND 71-1/4"X216"	EA	5K6718-B
PCSS White 8MM ND 71-1/4"X240"	EA	5K6720-B
PCSS WHITE 8mm ND 71-1/4"x288"	EA	5K6724-B



White/black/white

"Macrolux" polycarbonate white/black/white

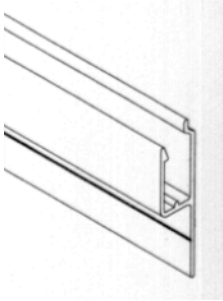
- Light transmission: 0%
- High thermal insulation
- High resistance to shock at extreme temperatures
- R-value (insulating capacity) : 1,7
- 10 year non prorated warranty

Description	Unit.	Code
PCSS OPAQUE 8mm 71-1/4" x 96"	EA	5K6808-BO
PCSS OPAQUE 8mm 71-1/4" x 144"	EA	5K6812-BO
PCSS OPAQUE 8mm 71-1/4" x 168"	EA	5K6814-BO
PCSS OPAQUE 8mm 71-1/4" x 192"	EA	5K6816-BO

Double polycarbonate

PCSS OPAQUE 8mm 71-1/4" x 216"	EA	5K6818-BO
PCSS OPAQUE 8mm 71-1/4" x 240"	EA	5K6820-BO
PCSS OPAQUE 8mm 71-1/4" x 288"	EA	5K6824-BO
PCSS OPAQUE 8mm 71-1/4" x 384"	EA	5K6832-BO
0% L.Transm.8mm 2 w.78" x 168"	EA	5K7814-BO
0% L.Transm.8mm 2 w.78" x 216"	EA	5K7818-BO
0% L.Transm.8mm 2 w.78" x 240"	EA	5K7820-BO

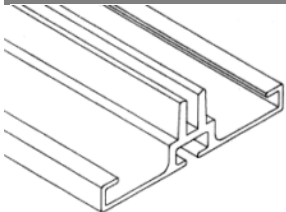
PCSS accessories



Bottom extrusion

"U" aluminum extrusion for the bottom of 8mm PCSS.

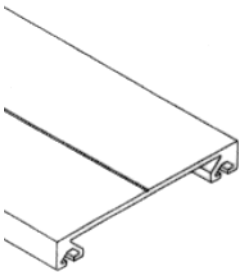
Description	Unit.	Code
144" PCSS ALUM. MOULDING	EA	5C79-1



Base extrusion

Aluminum base molding.

Description	Unit.	Code
10'ALUM.BASE MOLDING FOR PCSS	EA	5C721
12'ALUM.BASE MOLDING FOR PCSS	EA	5C722
16'ALUM.BASE MOLDING	EA	5C723

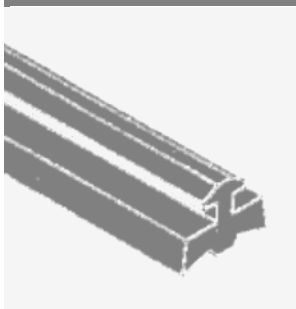


Cap extrusion

Aluminum base molding. Use with 1C2214 screws.

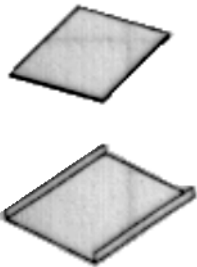
Description	Unit.	Code
10' BASE MOULDING CAP	EA	2A6952
12' BASE MOULDING CAP	EA	2A6953
16' BASE MOULDING CAP	EA	2A6954

PCSS accessories



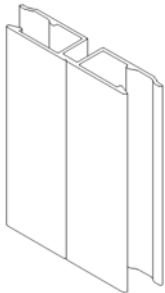
Gasket for extrusion

Description	Unit.	Code
SEALING RUBBER FOR EXTRUSION	FT	5C660



Extrusion union

Description	Unit.	Code
BASE MOULDING CAP UNION	EA	2A6950
ALUMINIUM BASE UNION	EA	2A6951



"H" extrusion

Aluminum extrusion to join triple polycarbonate panels.

Description	Unit.	Code
10'(H)ALUM.MOLDING FOR 8mmPCSS	EA	5C735-1
12'(H)ALUM.MOLDING FOR 8mmPCSS	EA	5C736-1

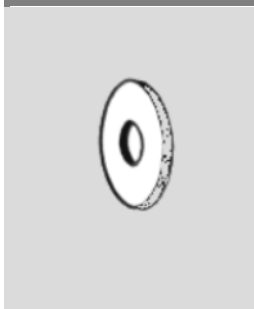


Tool

Holding washer #5D25 tool for easier installation.

Description	Unit.	Code
HOLDING TOOL FOR 5D25 WASHER	EA	2M920

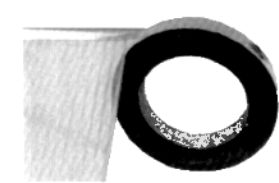
PCSS accessories



Nylon washer

Nylon spacers installed between polycarbonate and purlin prevent corrosion near screws. Drill hole 7/16"Ø in PCSS.

Description	Unit.	Code
NYLON WASHER .390"ID X 1.12"OD	EA	5D25



Aluminium tape

Aluminum adhesive tape to seal top of triple polycarbonate.

Description	Unit.	Code
2" X 150'ALUM.SEALING TAPE	RLS	5K202
1" X 150'ALUM.SEALING TAPE	RLS	5K203-2

Shade cloth attachments

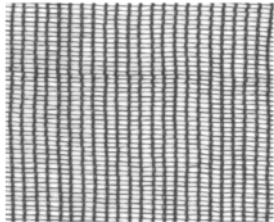


Clip

Clip for monofilament shade cloth.

Description	Unit.	Code
11 PINS FASTENER FOR AGRINET	CH	8M000

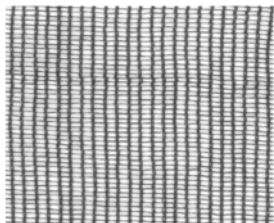
Shade cloth



40%

Shade cloth, locked stitch black round filament, monofilament, polyethylene high density, 40% shading, weight 140 gr/m2, U.V. stabilized.

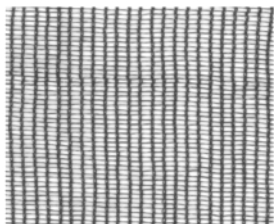
Description	Unit.	Code
40% SHADED FABRIC 6'WIDE	FT	8MK406
40% SHADED FABRIC 12'WIDE	FT	8MK412



40% with a seam

Shade cloth, locked stitch black round filament, monofilament, polyethylene high density, 40% shading, weight 140 gr/m2, U.V. stabilized.

Description	Unit.	Code
40% SHADED FABRIC 14'WIDE	FT	8MK414
40% SHADED FABRIC 18'WIDE	FT	8MK418
40% SHADED FABRIC 20'WIDE	FT	8MK420

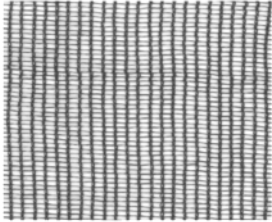


50%

Shade cloth, locked stitch black round filament, monofilament, polyethylene high density, 50% shading, weight 150 gr/m2, U.V. stabilized.
Used mainly in garden centers.

Description	Unit.	Code
50% SHADED FABRIC 6' WIDE	FT	8MK506
50% SHADED FABRIC 8'WIDE	FT	8MK508
50% SHADED FABRIC 12'WIDE	FT	8MK512
50% SHADED FAB. 20'WIDE black	FT	8MK520
50% SHADED FAB.26'WIDE black	FT	8MK526

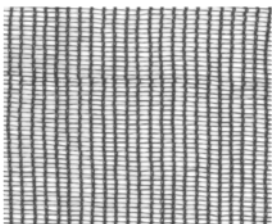
Shade cloth



50% with a seam

Shade cloth, locked stitch black round filament, monofilament, polyethylene high density, 50% shading, weight 150 gr/m2, U.V. stabilized.
Used mainly in garden centers.

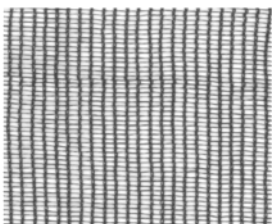
Description	Unit.	Code
50% SHADED FABRIC 14'WIDE	FT	8MK514
50% SHADED FABRIC 16'WIDE	FT	8MK516
50% SHADED FABRIC 18'WIDE	FT	8MK518
50% SHADED FABRIC 24'WIDE	FT	8MK524
50% SHADED FABRIC 28'WIDE	FT	8MK528
50% SHADE FABRIC 30'WIDE	FT	8MK530
50% SHADED FABRIC 32'WIDE	FT	8MK532
50% SHADED FABRIC 40'WIDE	FT	8MK540
50% SHADED FABRIC 50'WIDE	FT	8MK550



60%

Shade cloth, locked stitch black round filament, monofilament, polyethylene high density, 60% shading, weight 160 gr/m2, U.V. stabilized.

Description	Unit.	Code
60% SHADED FABRIC 8'WIDE	FT	8MK608
60% SHADED FABRIC 12'WIDE	FT	8MK612



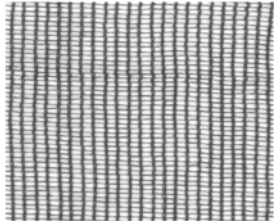
60% with a seam

Shade cloth, locked stitch black round filament, monofilament, polyethylene high density, 60% shading, weight 160 gr/m2, U.V. stabilized.

Description	Unit.	Code
60% SHADED FABRIC 20'WIDE	FT	8MK620

Shade cloth

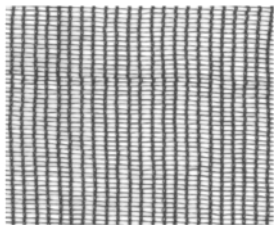
60% SHADED FABRIC 24'WIDE	FT	8MK624
60% SHADED FABRIC 28'WIDE	FT	8MK628



70%

Shade cloth, locked stitch black round filament, monofilament, polyethylene high density, 70% shading, weight 240 gr/m2, U.V. stabilized.
 >>> UNTIL SUPPLIES LAST

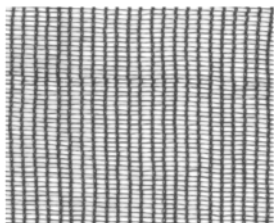
Description	Unit.	Code
70% SHADED FABRIC 8'WIDE	FT	8MK708
70% SHADED FABRIC 12'WIDE	FT	8MK712
70% SHADED FABRIC 20'WIDE	FT	8MK720



80%

Shade cloth, locked stitch black round filament, monofilament, polyethylene high density, 80% shading, weight 300 gr/m2, U.V. stabilized.
 >>> UNTIL SUPPLIES LAST

Description	Unit.	Code
80% SHADED FABRIC 8'WIDE	FT	8MK808
80% SHADED FABRIC 12'WIDE	FT	8MK812

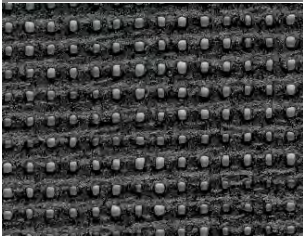


80% with a seam

Shade cloth, locked stitch black round filament, monofilament, polyethylene high density, 80% shading, weight 300 gr/m2, U.V. stabilized.

Description	Unit.	Code
80% SHADED FABRIC 20'WIDE	FT	8MK820

Shade cloth



Shade cloth

Shade is manufactured from high quality vinyl impregnated polyester yarn, and is woven and heat set for stability. It is fire retardant (approved by the California fire Marshall).

Description	Unit.	Code
70% ENDU BLACK SHADE 75" WIDE	PLS	6J122-PL

White shade cloth

50% white shade cloth

- Made of high density polyethylene & warp knitted
- Preventing from harmful ultra violet ray
- Temperature control
- Weight : 150Gr/m2
- Maximum width : 8 m (26')
- Decrease hail, wind, bird, insect, as well as UV damage to crops

Description	Unit.	Code
50% SHADED FAB. 20'WIDE WHITE	FT	8MK520B
50% SHADED FAB. 26'WIDE WHITE	FT	8MK526B

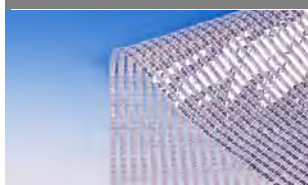
LS thermal screens



Tempa 5557 D FB

Energy saving: 57%
 Shading level in direct light: 55%
 Shading level in diffused light: 61%
 UV light transmission: 8%
 Install shiny side sunside
 Warranty: 5 years

Description	Unit.	Code
TEMPA 5557 D FB 3.35M WIDE	FT	6J134-1
TEMPA 5557 D FB 4M WIDE	FT	6J135

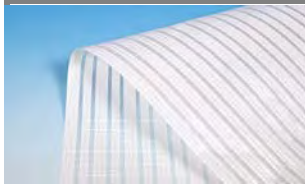


Tempa 5555 FR

Energy saving: 55%
 Shading level in direct light: 55%
 Shading level in diffused light: 59%
 UV light transmission: 34%
 Flame retardant
 Install shiny side sunside
 Warranty: 5 years

Description	Unit.	Code
TEMPA 5555 FR AW .8 M WIDE	FT	6J133
TEMPA 5555 FR AW 0.6M WIDE	FT	6J138

LS thermal screens



Harmony 5747 FR

Energy saving: 47%
Shading level in direct light: 57%
Shading level in diffused light: 62%
UV light transmission: 43%
Flame retardant
Warranty: 5 years

Description	Unit.	Code
Harmony 5747 FR .8M wide	FT	6J133-1
Harmony 5747 FR 4M wide	FT	6J137-1

BJ thermal screens



BJ85

Heat retention type:
- Heat retention rate 70%
- Light shading rate 85%

Description	Unit.	Code
BJ85 THERMAL SCREEN 1M WIDE	PLS	6J136
BJ85 THERMAL SCREEN 4M WIDE	PLS	6J139
BJ85 THERMAL SCREEN 3.25M WIDE	PLS	6J139-1
BJ85 THERMAL SCREEN 4.3M WIDE	PLS	6J139-2

Thermal screens - Harnois

Replacement parts

Thermal screen parts for "Harnois" rack system.

Description	Unit.	Code
6MM X 14.3MM T-BOLT SS METRIC	EA	1C4200
Winch drum #0113100	EA	1N2024
Plastic wheel without bearing	EA	1P1002-1
BUSHING FOR 10mm BEARING 8mmID	EA	1P1003
1"DIA X 1" ALUM.COLLAR	EA	1T6803
CLAMP 32mm L=25mm ALUM.	EA	5R1022
WIRE STRAINER #3	EA	6J004-1
CLAMP 90° 27mm ALUM.	EA	6J022
N-BRACKET/PLASTIC DIAB.WHEEL	EA	6J031
PVC WHEEL FOR 6J031	EA	6J031-A
S-HOOK/PLASTIC	EA	6J035
"TS"-RUBBER SEAL.EPDM	FT	6J036
Buis 27x1.50/L4070 verz	EA	G1703271504070
RW603/3.0/240/1PH	EA	RW60301

Thermal screens - Snelder

Replacement parts

Replacement parts for "Snelder" screen-wire system.

Description	Unit.	Code
Pin screen weight plastic	EA	0131001
Screenhook eggshape plastic	EA	0131050
Slip block SC system	EA	0131071
Multiscreenclip SC	EA	0131080
TRUSS CLIP PROTECTOR	EA	0131120
Clip-on tube 12x12\L400 PVC	EA	0151029
Rev.pulley gable wall 4" alu	EA	0241043
Rev pulley 4" 50/60x20-30	EA	0241078
V-Pulley 1"	EA	0242040
Rollerguider 0252302	EA	0252302
Roll screen guide support	EA	0252304
Bearing plate tube 2"/H100 GAL	EA	0253030
Bearing support sendz K25 H381	EA	0253200
Wire strainer #3 L118/B55 Galv	EA	0263020
Coupling straight L142x4 galv.	EA	0281152
Coupling piece 55x15x4 galv	EA	0281154
Rivet Din 7337 4.0x20	EA	101132015
Overhang clamp 86x22/B20 alu	EA	1623049
Plate	EA	1623051
Glazing bar alu L=3150	EA	1632013
Roll tube 2 grooves 63/L6400 a	EA	1632023
Screen prof. SC B45\H55\L6400	EA	1632090
Screen prof. SC B45\H55\L8000	EA	1632091
Connector roll tube DG 63/L220	EA	1632116
PP wit/zwart/wit/plaat	EA	1634027
Double acting tape 12mm	EA	1634800
Stainless steel staples	EA	1634900
Stapler rapid 1	EA	1634901
Susp.V-pulley 20x1\L.225 alu	EA	1671080
Ridgeclamp for Alcoa sust L40	EA	1682012
Cardan joint 2\750\51	EA	3412020

Thermal screens - Snelder

Tube swaged 19x0,8/L6470 Galv	EA	3551080
Closing strip glazing bar	EA	3926902
Weight discs 51x4\G6.5 Galv.	EA	4331001
Coated cable 2.5-1x7/H/L1000	EA	5361207
Coated cable 2.5-1x7/H/L500 Ga	EA	5361208
Coated cable 2.5-1x7/R/L100 Ga	EA	5361209
Cable 3-7x7/H/500 S.Steel	EA	5361273
Cable 3-7x7/H/L1000 stainless	EA	5361275
Polyest.wire clear 2.2/H/L1750	EA	5461040
TUBE ROND 2"X3.65/6m LONG GALV	EA	5851080-1
Wire tensi.set 2"\5.0 +3xM8x12	EA	5882013
Bolt M6 x 100 galv	EA	5891043
Bolt M8 x 65 Galv	EA	5891057
Bolt M8x75/22 8.8 ISO 1014 Ga	EA	5891059
Tapbolt M8x20 8.8 ISO 4017 Gal	EA	5891264
Tapbolt M8x30 8.8 ISO 4017 Gal	EA	5891266
Nut M8.8 ISO 4032 Galv	EA	5891414
Locknut M6 8.8 Din 985 Galv	EA	5891453
Locknut M8 8.8 Din 985 Galv	EA	5891454
Self drilling screw 6.3x19 Gal	EA	5891502
Truss clip 25\B35 s.steel	EA	6531012
Purlin clamp H40/B30 Galv.	EA	6531051
Scr.finger truss clip 66\B10	EA	6531126
Cloth clip SC profile SS	EA	6562084
Tapbolt M6x10 A2 ISO 4017 SS	EA	6591231
Trussbrace 25mm	EA	6631013
Trussclip wire 63.5 x 38.1 mm	EA	6631019
Trussclip wire mod 63.5*63.5	EA	6631021
Overhang support 89x64 galv	EA	7070112
Reversal pulley 4"89x64mm	EA	7080111
Overhang support 89 x 64 Galv	EA	7080112
Reversal pulley 4"63.5x38.1mm	EA	7080113
Bearing sup.under 63.5x38.1mm	EA	7080114
Cable protection VK10/P20/L100	EA	8278110
Rubber seal black 35	M	8331131
Counter plate clampplate wires	EA	8421536
Clamp pla.85-105/H100 W.screen	EA	8422145
RB120-13-48/115/1/60/36	EA	8550140
Montageset Kabelrups VK10/RB	EA	8550510
Chain coupl.set 5/8/z16/S/B1-B	EA	8590011

Thermal screens - Snelder

Bulldog grip 3/16"/M5X23	EA	8992011
S-hook 40x12mm galv #45	EA	8993013

LS Econet insect screen



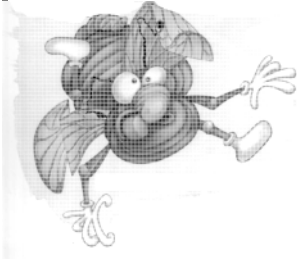
LS Econet 4045

LS ECONET is a ventilation screen for keeping harmful insects outside the greenhouse and useful insects inside.

- Hole size: 0.40 x 0.45 mm
- Material: 100% polyolefin
- Weight: 73 g/m²
- Ventilation reduction: 30%
- Direct light: 96%
- Diffused light: 88%
- Warranty: 5 years under all types of greenhouse covering and 3 years with outdoor use

Description	Unit.	Code
LS ECONET 4045 3.5 METERS WIDE	FT	6J4045-1

Insect screen



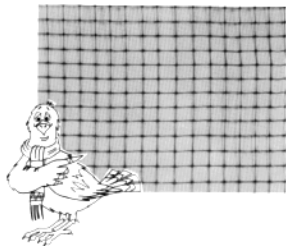
Insect screen

Insect screen, aphids and others.
 Transparent polyethylene monofilament fabric.
 Meshes are 0.011" x 0.032" (50 mesh)
 UV treated
 Weight per square meter: about 120-140 gr
 Aphid: .013"
 Shade: about 20%

6J153: Material used primarily for CasaVerde, but stored for small local sales

Description	Unit.	Code
INSECT BARRIER 1.20M WIDE	FT	6J150
INSECT BARRIER 2.0M WIDE	FT	6J151
INSECT BARRIER 2.5M WIDE	FT	6J152
INSECT BARRIER 3.0M WIDE	FT	6J153
INSECT BARRIER 4.0M WIDE	FT	6J154

Bird net



"Ornex" bird net

Polypropylene net protects openings against birds. Excellent for natural ventilation openings.

0.006" wire

3/8" x 3/8" squares

Breaking load: 75 lbs/ft²

Weight 0.0024 lbs/ft²

ATTENTION: Photodegradable net, do not sell for long time use

WE CANNOT SEW THIS PRODUCT

Description	Unit.	Code
ORNEX NET 13' LARGE	PLS	6J118
ORNEX NET 39"WIDE	PLS	6J119
ORNEX NET 6'-5" WIDE	PLS	6J120

Ground strip joint



Ground strip joint

Black PVC strip completes area between bottom of the structure and the ground. This smooth strip is screwed on the last purlin or baseboard and the bottom part is buried in the ground. PVC strip is resistant to frost or structure movement. U.V. stabilized.
 Thickness: 0.04"

Description	Unit.	Code
9" HIGH GROUND STRIP	PLS	5BN409
9" X 120' GROUND STRIP JOINT	RLS	5BN4091
18"X 120' GROUND STRIP JOINT	RLS	5BN4093

Fabric

6 oz

Description	Unit.	Code
POLYFABRIC WHITE 6oz 144" WIDE	PLS	5TP111-144

12 oz

Description	Unit.	Code
144" POLYTARP WHITE/WHITE	PLS	5TP113-PL
144" POLYTARP WHITE/GREEN	PLS	5TP114-PL
144" POLYTARP WHITE/SILVER	PLS	5TP115-PL
144" POLYTARP WHITE/WHITE 30%	PLS	5TP118-PL
144" POLYTARP WHITE/TAN	PLS	5TP119-PL
144" POLYTARP WHITE/BLUE	PLS	5TP122-PL
144" POLYTARP WHITE/RED	PLS	5TP123-PL

Fire retardant 12 oz

Description	Unit.	Code
144" POLYTARP WHITE/GREEN FR	PLS	5TP116-PL
144" POLYTARP WHITE/WHITE FR	PLS	5TP117-PL
144" POLYTARP WHITE/TAN FR	PLS	5TP120-PL
144" POLYTARP WHITE/BLUE FR	PLS	5TP124-PL
144" POLYTARP WHITE/SILVER FR	PLS	5TP125-PL
144"WIDE POLYTARP WH/WH F.R.M1	PLS	5TP129-PL

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11	Motorized shutter
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6	Residential ventilation
25	Ridder motorization
20	Vertical fan Canarm
19	Vertical fan V-FloFan

Forced ventilation of greenhouses selection guide

1. THE VENTILATION OF AIR CONDITIONING: SOURCE DATA:

A) ELEVATION ABOVE SEA LEVEL

↓ QUEBEC

CORRECTION FACTOR IN FOOT REGARDING ELEVATION FROM SEA LEVEL								
Elevation (feet)	-1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000
Correction factor	1.0	1.04	1.08	1.12	1.20	1.25	1.30	1.36

B) LIGHT INTENSITY (FOOT CANDLES)

↓ QUEBEC

CORRECTION FACTOR FOR MAXIMUM LIGHT RECEIVED INSIDE THE GREENHOUSE IN CANDLES FEET									
Candles feet	5,000	5,500	6,000	6,500	7,000	7,500	8,000	9,000	10,000
Correction factor	1.0	1.10	1.20	1.30	1.40	1.50	1.60	1.80	2.00

N.B.: Consider the shade system.

C) EXTERNAL AND INTERNAL TEMPERATURE DIFFERENTIAL

CORRECTION FACTOR OF TEMPERATURE DIFFERENTIAL BETWEEN AIR INLET AND AIR OUTLET							
Temp. degree F	10	9	8	7	6	5	4
Correction factor	0.70	0.78	0.88	1.00	1.17	1.40	1.75

D) SHORT DISTANCE BETWEEN AIR INLET AND AIR OUTLET

CORRECTION FACTOR FOR A SHORT DISTANCE BETWEEN AIR INLET AND AIR OUTLET								
Distance (feet)	20	25	30	35	40	45	50	55
Correction factor	2.25	2.00	1.85	1.70	1.60	1.50	1.40	1.35
Distance (feet)	60	65	70	75	80	85	90	95
Correction factor	1.30	1.25	1.20	1.15	1.12	1.08	1.05	1.02
100' and more no correction factor								

VENTILATION NEEDS CALCULATION

In order to compute required CFM, the following formula is applied:

- Width of greenhouse(s) x length x 8 (constant) = number of cubic foot
- Number of cubic feet x factor(s) of conversion

N.B.: For the Montreal region, conversion factors should be as follow:

- 1,000 feet altitude: Conversion factor 1.0
- Light intensity: 6,000 P.C. conversion factor of 1.20
- Temperature differential: 7 degrees F: Conversion factor of 1.0

FAN(S) CHOICE

- Ventilator choice in CFM has to be made for a static pressure of 0.10" of water.
- Determine the number of "STEP" of wished ventilation.

If "STEP" of ventilation: -STEP 1: 30% of capacity
 -STEP 2: 70% of capacity for 2 STEP
 30% of capacity for 3 STEP
 -STEP 3: 40% of capacity
 Example: 12,000 CFM ↓ 3 fans of 4,000

Forced ventilation of greenhouses selection guide

CHOICE OF AIR INLETS

It is recommended that the air speed does not exceed 250 feet per minute. So, the number of CFM divided by the length = the number of square feet of opening

Thumb's rule standard is 2 square feet per every 1,000 CFM.

INSECTS BARRIERS INFLUENCE

Insect barrier creates an air restriction, so fan has to compensate and will develop more static pressure.

Compensation will vary according to barrier's choice. Higher material density increase air restriction, and fan works.

For example: For an air speed of 250 feet per minute the static pressure loss will be:

	Additional Pressure
Econet L: 0.02" =	0.12
Econet T: 0.15" =	0.25

However the static pressure losses are valid as long as the material is clean. It is strongly recommended to clean the material on a valid regular base.

To avoid the increase of fans quantity, and the electric consumption, a good practice is to increase fabrics surface area. Thumb's rule is 3:1 ratio of fabrics square footage vs air inlet square footage.

WINTRY VENTILATION

Ventilation level recommended is 1/10 of the summery ventilation capacity. This ventilation can be achieve by a positive pressure fan and a static air outlet (not motorized with a cover outside), or by an extraction fan. In that case, air inlet should be design for air speed of a 450 feet per minute. Cold air being heavier then warm air, it should be brought further inside to avoid temperature drop at the opening proximity.

It is recommended, when possible, that the air inlet be installed on the high portion of the greenhouse, it will facilitate the blending between warm and cold air.

RE-CIRCULATING FAN

The main purpose of the re-circulating fans is to reduce stagnant air layer at plant foliage level, and by the same token, to have better temperature uniformity.

Experiences tells that the optimum air velocity is between 40 and 100 feet per minute. Higher speed reduce yield by stressing plants with a too high transpiration.

Which system to propose:

We have to remember that the movement of air is affected by the natural obstacles of the greenhouse. A flower producer will need a different system then one used by a vegetable producer.

1. HAF system (horizontal air flow) works by moving the air horizontally.

How to design: - 3 to 4 CFM per greenhouse floor sq. ft.

- Distance between fans should be 30 times fan diameter (18" diam. = 45 ft)
- Distance over plant shall be 3 to 4 feet
- See drawing

Advantages: - Several small ventilators offer a better distribution of air
- Slow air movement favors growth

Disadvantages: - Purchase cost
- Electrical installation cost
- Very low efficiency for productions with stake

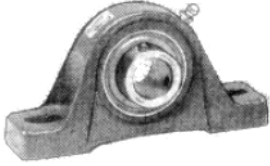
FAN-JET

The most popular fan with motorized louvers is the Fan-Jet. The use of a tube for air distribution assures a better temperature uniformity. That system creates upward, downward and horizontal air movement. It goes from the tube to the sides vertically and from the sides to the fan horizontally.

The Fan - jet provided with motorized louvers is generally used as first stage ventilation. Nominally the Fan - jet can maintain a temperature differential of 15 degrees.

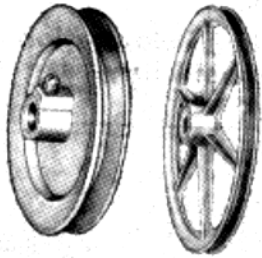
DESIGN: Refer to Harnois tables

Harnois fan parts



Ball bearing

Description	Unit.	Code
BEARING PILLOW BLOCK 1" 1RG	CH	RHA1325



Pulley

Description	Unit.	Code
AJUSTABLE PULLEY 3" X 5/8	CH	RE7113104
POULIE 4in x 1/2 Bel x 5/8 sh	CH	RE7117105
PULLEY 6"DIAM. 1600 PDS WLL	CH	RE7117109
PULLEY 8"DIAM.	CH	RE7117110

Euroemme fan



36" fan

36" Euroemme fan, 1 or 3 speed, belt driven, stainless steel precoated propeller, rear mesh guard, solid galvanized steel shutters with centrifugal opening system.

- 1 speed motor: 220V, 1 phase, 60 Hz, 3/4HP, 10.6/5.3Amps.

- 3 speed system: Uses the same electrical input as the 1 speed, but the motor is three phased. A variable frequency drive converts the current from 1 to 3 phases and allows to program 3 (or 2) variable speeds; the drive acts also as a relay and an overload protection.

- Air flow at top propeller speed (560 RPM):

13095 cfm @ 0.0" H2O

12036 cfm @ 0.075" H2O

10576 cfm @ 0.15" H2O

- Galvanized steel housing: 42-3/4" X 42-3/4" X 17-3/4"

- 62 Db

Description	Unit.	Code
FAN EM36 3/4HP 1SPD.	EA	2HBE36
FAN EM36 3/4HP 3SPD.	EA	2HBE37-1

Components for 36"

Description	Unit.	Code
3/4HP 1 SPEED MARATHON MOTOR	EA	1R0751412
3/4HP 230/460 MARATHON MOTOR	EA	1R0751413
COMPLETE CENTRIFUGAL SYSTEM	EA	6BE36-A
1HP 220V/1 INVERTER	EA	LX139-3
POULIE 4in x 1/2 Bel x 5/8 sh	EA	RE7117105

Euroemme fan



50" fan

50" Euroemme fan, 1 or 3 speed, belt driven, stainless steel propeller, rear mesh guard, solid galvanized steel shutters with centrifugal opening system.

-1 speed motor: 220V, 1 phase, 60Hz, 1HP, 12.8/6.4Amps.

-3 speed system: Uses the same electrical input as the 1 speed, but the motor is three phased. A variable frequency drive converts the current from 1 to 3 phases and allows to program 3 (or 2) variable speeds; the drive acts also as a relay and an overload protection.

-Air flow at top propeller speed (387 RPM): 22160 cfm @ 0.0"H2O / 19680 cfm @ 0.075"H2O / 18080 cfm @ 0.15"H2O

-Galvanized steel housing: 54-5/8" X 54-5/8" X 17-3/4"

- 67 Db

Description	Unit.	Code
FAN EM50 1HP 1SPD.	EA	2HBE50
FAN EM50 1HP 3SPD.	EA	2HBE51-1

Components for 50"

Description	Unit.	Code
1HP MOTOR MARATHON	EA	1R1001412
1HP 230/460 3PH MOTOR Techtop	EA	1R1001413
COMPLETE CENTRIFUGAL SYSTEM	EA	6BE50-A
COMPLETE CENTRAL PULLEY	EA	6BE50-B
S-STEEL PROPELLER FOR EM50	EA	6BE50-E
1HP 220V/1 INVERTER	EA	LX139-3
POULIE FIXE 3" X 5/8" CLE 3/16	EA	RE3112104
AJUSTABLE PULLEY 3" X 5/8	EA	RE7113104

Euroemme fan

Features and advantages of the Euroemme fans

- The centrifugal shutter system keeps the efficiency of the fans at peak all the time by keeping the shutters fully open.
- Shutters are tightly closed when fan is not operating, preventing any air leakage.
- Shutters do not need to be cleaned regularly.
- Shutters are made of galvanized steel, which is stronger than aluminum and plastic.
- The safety mesh on the back opens like a door for easier maintenance and cleaning.
- 50" fan has a new propeller for higher efficiency and airflow. While keeping the same blade configuration, new blades have a special re-enforced profile for better resistance to high static pressure conditions.

**Centrifugal shutter system
(fan is not operating)**



**Centrifugal shutter system
(fan is operating)**



Canarm fan



Direct drive

These fans are sturdily constructed from all-aluminum extrusions, direct drive, horizontal discharge for industrial, commercial and farm applications.

Suitable for general ventilation of factories, garages, warehouses and other commercial and industrial buildings.

Motors are totally enclosed, ball bearing with thermal protection.

Description	Unit.	Code
EXHAUST FAN 12"	EA	6BE112
EXHAUST FAN 18"	EA	6BE118
EXHAUST FAN 24"	EA	6BE124

Motor

Description	Unit.	Code
REPLACEMENT MOTOR FOR 6BE112	EA	6BE112-A

Parts

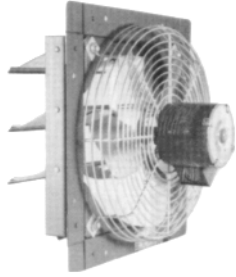
Description	Unit.	Code
PROPELLER FOR FAN 18"	EA	6BE118-A

Canarm fan

Model	Blade diameter	RPM	HP (single phase)	Voltage (single phase)	Amps (FLA) (single phase)	Weight (Lb)	dB(A) @5 ft.	CFM @ static pressure			Framing dimensions
								0.00"	0.10"	0.125"	
6BE112	12"	1625	1/4	115	1.8	27	63	1640	1540	1510	14" x 14"
6BE118	18"	1625	1/3	115	4.0	37	73	3200	3090	3040	20" x 20"
6BE124	24"	1100	1/3	115	5.4	45	70	5000	4500	4300	26" x 26"

Other voltages are available, please contact technical support.

Residential ventilation



Residential fan

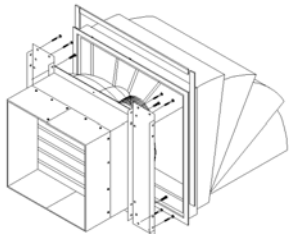
"DAYTON" low flow: These fans are specially designed for residential greenhouses. Can be thermostat controlled or by switch.

Diam.: 10" - 520 CFM - 1/30 HP - 115 volts
60Hz - 1.4 Amps - 1550 RPM

Dimension: 10-1/2" x 10-1/2"

Description	Unit.	Code
SHUTTER MOUNTED 10 EX. FAN	CH	8J2C819

Positive pressure fan



Positive pressure kit

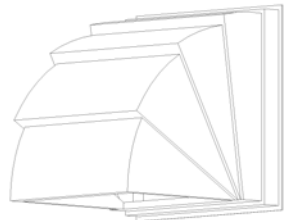
Positive pressure fan.
 Includes: Weather hood, fan and poly tube adapter.

3H010
 Volts: 115
 Amps: 4.1
 Rpm: 1700
 12" (frame: 14" x 14" x 4") for poly tube 18" diam.

3H012
 Volts: 115
 Amps: 4.1
 Rpm: 1740
 18" (frame: 19-3/4" x 19-3/4" x 4") for poly tube 24" diam.

Static pressure (inch of water)	0.0	0.1	0.125			
MODEL	MOTOR		CFM			dBA
3H010	MARATHON 1/4	1450	1175	1100		63
3H012	CANARM 1/3	4300	3100	2900		71

Description	Unit.	Code
POSITIVE PRESSURE FAN 12"	CH	3H010
POSITIVE PRESSURE FAN 18"	CH	3H012



Housing

Plastic outside wheater hood for 12" and 18" fan.

Description	Unit.	Code
WHITE WEATHER HOOD 22"x 22"	CH	1P030

HAF Canarm



18" HAF fan

Canarm's HAF18 horizontal airflow fan is designed to provide gentle circulation of air in greenhouses and other agricultural applications. It features open guard spacing for better air distribution and a hanging bracket, 115V, 8 foot grounded cord & plug included. When suspended, the fan can be rotated up and down and swivel 360° for optimal control of air stream. Suitable for wet locations.

Blade diameter: 18"
 Motor size: 1/15 HP totally enclosed
 Phs: 1
 Volts: 115
 Amps: 0.9
 Motor: 1,400 RPM
 Speed: Variable
 CFM: 4,000
 Shipping weight: 22 lbs

Description	Unit.	Code
HAF 18 IN CANARN	CH	6BE018

Motorized shutter



Standard

Standard, attached, opposed with Belimo motorization AFBUP-S, 24a 240VAC.

CODE	NOMINAL DIMENSION	OPENING REQUIRED
6BCT92020	20x20	17-1/2 x 17-1/2
6BCT93636	36x36	33-1/2 x 33-1/2
6BCT94848	48x48	45-1/2 x 45-1/2

Description	Unit.	Code
MOTO SHUTTER 9000 20 X 20	CH	6BCT92020
MOTO SHUTTER 9000 36 X 36	CH	6BCT93636
MOTO SHUTTER 9000 48 X 48	CH	6BCT94848



Extreme cold temperature

Extreme temperature, attached, opposed with Belimo motorization AFBUP-S, 24a 240VAC.

CODE	NOMINAL DIMENSION	OPENING REQUIRED
6BCTECT2020	20x20	17-1/2 x 17-1/2
6BCTECT3636	36x36	33-1/2 x 33-1/2
6BCTECT4848	48x48	45-1/2 x 45-1/2

Description	Unit.	Code
MOTO SHUTTER ECT 20 X 20	CH	6BCTECT2020
MOTO SHUTTER ECT 36 X 36	CH	6BCTECT3636
MOTO SHUTTER ECT 48 X 48	CH	6BCTECT4848

Motorized shutter



Motorized shutter

Motorized shutter entirely made of aluminium. Including "Multi product" actuator 120 vac/0.5 amp, 60hz. Each blade seal with rubber seal.
 Motor 110 V.

Code	Shutter	Opening
6BS18	22"x22"	22"x22"
6BS24	30"x30"	30"x30"
6BS30	36"x36"	36"x36"

Description	Unit.	Code
MOTORIZED SHUTTER FOR 18"C-FAN	CH	6BS18
MOTORIZED SHUTTER FOR 24"C-FAN	CH	6BS24
MOTORIZED SHUTTER FOR 30"C-FAN	CH	6BS30

Actuator

Description	Unit.	Code
Actuator for 6BS24	CH	6BS25

Air inlet shutter



Aluminum shutter

Aluminum shutter without motorization.
Open manually or under greenhouse air pressure.

Code	Shutter	Overall square	Opening required
8J4C558	18"	21"	18-1/2" x 18-1/2"
8J3C308	24"	27"	24-1/2" x 24-1/2"
8J3C309	30"	33"	30-1/2" x 30-1/2"
8J3C310	36"	39"	36-1/2" x 36-1/2"
8J3C311	42"	45"	42-1/2" x 42-1/2"
8J3C312	48"	51"	48-1/2" x 48-1/2"

Description	Unit.	Code
24" ALUMINIUM SHUTTER	CH	8J3C308
30" ALUM. SHUTTER	CH	8J3C309
36" ALUM. SHUTTER	CH	8J3C310
42" ALUM. SHUTTER	CH	8J3C311
48" ALUM. SHUTTER	CH	8J3C312
18" ALUMINIUM SHUTTER	CH	8J4C558



57" aluminum shutter

Aluminum ventilation shutter.

Code	Shutter	Overall square
8J3C360	57"	60-1/4"

Description	Unit.	Code
57" ALUM. SHUTTER	CH	8J3C360
Motor kit for 8J3C360	CH	8J3C361

Air inlet shutter



Motorized shutter

Motorized shutter.
 110 volts motor.
 Can be operated with thermostat.
 1-1/4" square galvanized steel frame.

Code	Frame	Nb of motor
2HV18	21" x 21"	1
2HV24-1	27" x 27"	1
2HV30	33" x 33"	1
2HV36	39" x 39"	1
2HV42	45" x 45"	2
2HV48	51" x 51"	2

Description	Unit.	Code
MOTORIZED SHUTTER 18"	CH	2HV18
MOTORIZED SHUTTER 24"	CH	2HV24-1
MOTORIZED SHUTTER 30"	CH	2HV30
MOTORIZED SHUTTER 36"	CH	2HV36
MOTORIZED SHUTTER 42"	CH	2HV42
MOTORIZED SHUTTER 48"	CH	2HV48

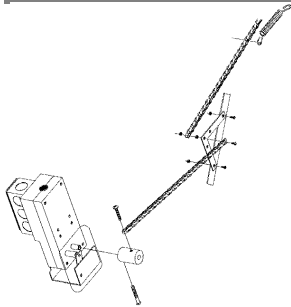


Replacement motor

Dayton shutter motor only.
 Volt 120/240
 Amp. 0.26/0.15
 60Hz

Description	Unit.	Code
LOUVER MOTOR	CH	8J2C904

Air inlet shutter

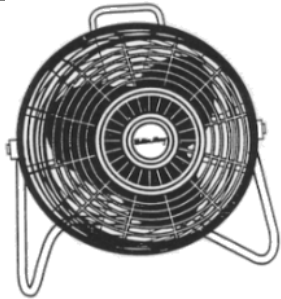


Motor and chain

Motor rack + chain + roller.
Volt 120/240
Amp. 0.26/0.15
60Hz

Description	Unit.	Code
SHUTTER MOTOR & CHAIN	CH	2H031

HAF fan



20" HAF fan

20" high velocity air circulator.
3 speeds, 120 volts, 60 Hz, 2.98 amps, 1/4 HP
Speed CFM
High 5000
Medium 4000
Low 2800
THESE ARE APPROXIMATE VALUES

Description	Unit.	Code
3 SPEED HIGH VELOCITY 20" FAN	CH	8J3XJ43-2



12" HAF fan

Circulating fan "CANARM".
3 speeds, 120 volts, 60 Hz, 0.88 amps, 1/10 HP
Speed CFM
High 1500
Medium 1200
Low 800

Description	Unit.	Code
12" HIGH VELO.FLOOR FAN 3 SPD.	CH	6BE105

HAF Schaefer



20" circulating fan

"SCHAEFER" circulating fan maintains constant greenhouse temperature. White vinyl housing prevents shadowing, aluminum blade, variable speed motor (control required), moisture resistant.

Diam.	Rpm/cfm	HP	Volts	AMPS
6BC11: 20"	1725/5516	1/3	115/230	3.8/1.9

Description	Unit.	Code
20"CIRCULATION FAN	CH	6BC11



12" circulating fan

"SCHAEFER" circulating fan maintains constant greenhouse temperature. White vinyl housing prevents shadowing, aluminum blade, variable speed motor (control required), moisture resistant.

Diam.	Rpm/cfm	HP	Volts	AMPS
6BC12: 12"	1725/1554	1/10	115/230	1.3/.65

Description	Unit.	Code
12" CIRCULATING FAN	CH	6BC12
REPLACEMENT MOTOR FOR 6BC12	CH	6BC13



Speed control

Manual variable speed controls, 115/230 volts.

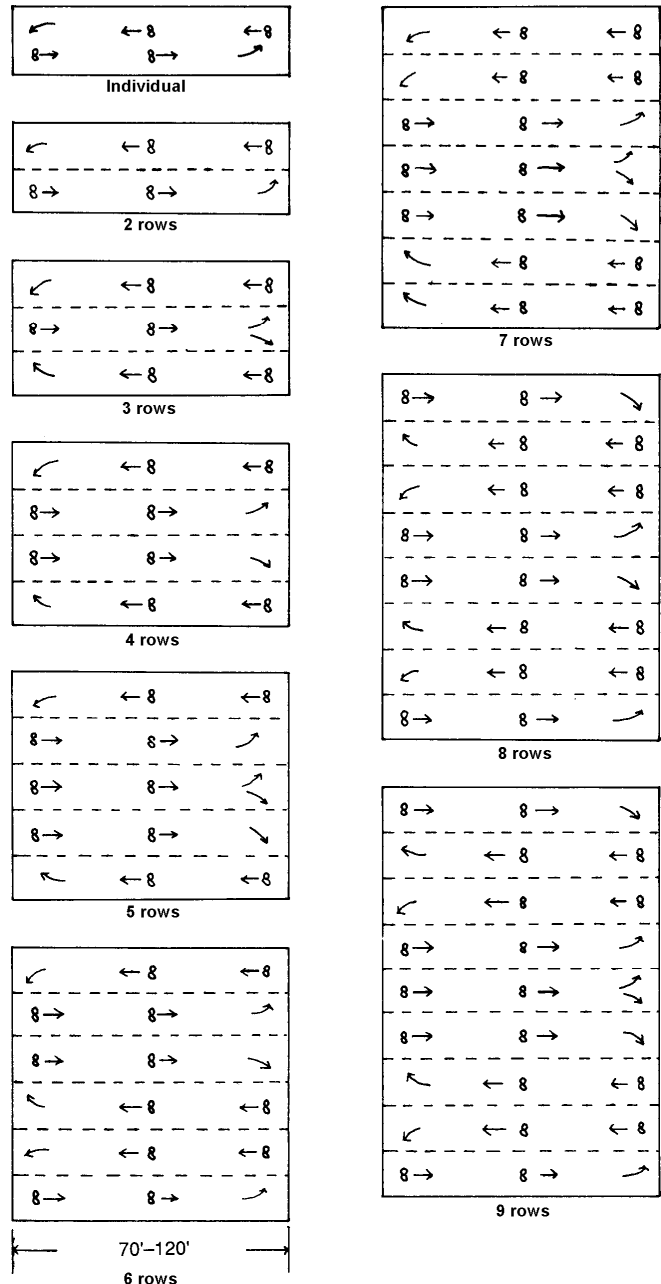
Description	Unit.	Code
SPEED CONT SHEAFER 12.5 AMPS	CH	6BC14

HAF system

Typical installation



1. Add a row of fans for each additional 50 feet of greenhouse length.
2. For greenhouses with 3 bays, air in the 2 outside bays should move in the same direction. For greenhouses with odd numbers of bays, air in the center 3 bays should flow in the same direction.
3. Total fan capacity in cubic feet per minute (cfm) should equal one-fourth the greenhouse volume. We offer 12", 18" and 20" diameter H.A.F.



Fan layout for horizontal air flow systems to provide uniform temperature distribution.

Source: Greenhouse, Engineering 1990

HAF Eco Fan



Eco Fan

Horizontal recirculation fans ensure the uniform climate throughout the greenhouse which delivers proven benefits. The movement of air allows the leaves to transpire more easily, thereby preventing overheating and scorch. By promoting healthier growth, air movement also leads to improved disease resistance. The Eco Fan is the ideal solution for either serial or parallel applications.

The body is made of a synthetic material, resistant to corrosion in humid climate.

>>> Can be hanged by 3 steel cables (not included) or by a bracket (not included).

ADVANTAGES:

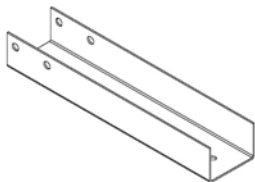
- Optimum price-quality ratio
- Efficient ventilation for any crop
- Functional design, specifically for horticulture
- Very long life
- Minimum loss of light due to its compact design
- Low noise level: maximum noise level at 6,56' (2 m) distance: 61,2 dB(A)
- Low energy consumption: 13.5 cfm/w; 43w(1000m3/h)

SPECIFICATIONS:

- Weight (excl. grills): 27,56 lbs (12,5 kg)
- Length: 9,84" (250 mm)
- Inlet side diameter: 22.9" (582 mm)
- Outlet side diameter: 18.19" (462 mm)
- Permissible ambient temperature: from 32 to 113°F (0 to 45°C)
- Required mains frequency: 60 Hz
- Ventilation capacity: 2766 cfm (4700 m3/h)
- Throw: 131,23' (40 m)
- Rpm: 1225 rpm
- Mains voltage: 230 V
- Maximum current requirement: 0,9 A
- Electrical capacity: 205 W
- Variable speed control available

Description	Unit.	Code
GREENHOUSE FAN ECO 220V	EA	8HC50

Support



Description	Unit.	Code
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HAF Eco Fan

2-1/2 X 12 FAN SUPPORT	EA	2H6317
2-1/2 X 12 FAN SUPPORT	EA	2H6317-1



Fanmaster

One Fanmaster can control a maximum of 12 Eco Fan (#8HC50).

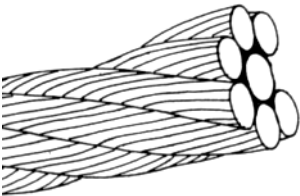
Description	Unit.	Code
SPEED MASTER 20 AMPS	EA	8HC55

HAF support



Support

Description	Unit.	Code
GRIPPLE FOR 1/16" WIRE	CH	1N8000



Stainless steel cable

Description	Unit.	Code
STEEL WIRE 1/16" 7 X 7 S.STEEL	PLS	1N0201-SS

Vertical fan V-FloFan



V-FloFan

ON REQUEST ONLY

>>> Not UL or CSA approved

With the V-FloFan, Vostermans Ventilation offers the grower the opportunity to reduce the negative impacts, due to humidity, in a simple and energy efficient way. The vertical and horizontal airflows result into an active microclimate on crop level.

The V-FloFan, which is a prerequisite for:

- Optimal air distribution in the greenhouse with the purpose to create an optimal climate and crop
- To control the humidity level on crop level
- Creating an active microclimate on the crop level and leaves
- Constant low airspeed in the crop overall
- Reduction of the energy costs through vertical airflow with assimilation lighting

The V-FloFan, a recirculation fan with very unique features:

- An optimal vertical airflow through a special aerodynamic shaped conical outlet to guide the airflow
- The V-FloFan is applicable for several cultivation systems and crops through a conical outlet to guide the airflow
- Reduced number of fans per surface-unit in comparison to similar systems
- Energy efficient motors/fans, developed and produced according to future directives

A speed control (not included) can be connected to the circulator.

Technical data:

120V

60 Hz

1140 RPM

Description	Unit.	Code
GREENHOUSE FAN V-Flo	EA	6VV16

Vertical fan Canarm



Vertical air flow fan

- Engineered and designed for spacious applications where maximum floor coverage is required
 - Reversible motor for both winter heat destratification and summer time cooling (#6BE061 required)
 - Fan is sealed and suitable for high moisture applications
 - Variable speed motor (all motors are impedance protected, PSC type variable speed with permanently lubricated ball bearing motors) (#6BE061 required)
 - When used with MC series speed controls (#6BE061) the speed range is infinite
- Coverage: Up to 3,000 sq.ft.
 Fan size: 60"
 Max RPM: 292
 Air velocity 5' from fan: 650 ft/min
 Air delivery @ floor: 46,000 cfm
 Amps high: 0.84
 Watts high: 101
 Down rod length: 16"
 Shipping weight: 24,65 lbs
 Power supply: 120VAC

Description	Unit.	Code
EXHAUST FAN 60" VERTICAL	CH	6BE060



Control

- CONTROL FOR VERTICAL AIR FLOW FAN**
- A slide switch is provided to change the direction of the fan from updraft to downdraft
 - Up to 4 fans can operate on a single control
 - Infinite speed adjustment screw
 - Minimum speed adjustment screw
 - Designed to fit a standard 3"x5" electrical box
 - Mount in a dry location such as the control room
 - Max # of fans/control: 4
 - Power supply: 120V/60Hz
 - Ampere rating: 5.0

Description	Unit.	Code
SPEED AND ROTATION CONTROL	CH	6BE061

Motorization (parts)

Motorization (parts) AFA

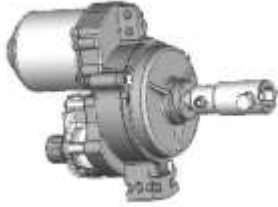
Description	Unit.	Code
LAFERT MOTOR 1/3HP 230/1/60	CH	1P124-A
LIMIT SWITCH 220VAC	CH	1P124-B
KLIXON POUR 1P124-A	CH	1P124-D
BEARING SKF #6006-ZZ	CH	1P124-F
BEARING SKF #6203ZZC3	CH	1P124-G
BEARING SKF #6200-ZZ	CH	1P124-H
BEARING SKF #6005-2RSC3	CH	1P124-I
METRIC OIL SEAL #562752	CH	1P124-J
OIL SEAL #6661	CH	1P124-K
OIL SEAL #9748	CH	1P124-L
VK30 X 8 END COVER	CH	1P124-M
ETAIT EN 2010 #28X62X10	CH	1P124-N
CONDENSOR 16uF	CH	1P124-W
MOTOR 1/3HP 220/1/60 Cantoni	CH	1P126-C
16KG UNIREX GREASE EP O	CH	1P126-D2
WORM WHEEL FOR 1P126 (BRASS)	CH	1P126-F
WORM SHAFT FOR 1P126	CH	1P126-G
HELICAL GEAR 15.85 FOR 1P126	CH	1P126-H
HELICAL GEAR 14.00 FOR 1P126	CH	1P126-H14
PINION FOR 1P126 (PLASTIC)	CH	1P126-I
DRIVING GEAR FOR 1P126	CH	1P126-J
DRIVEN GEAR FOR 1P126	CH	1P126-N
SHAFT FOR GEAR BOX (SMALL)	CH	1P126-R
REBUILT GEARBOX	CH	1P126-REC
OIL SEAL FOR GEAR BOX	CH	1P126-S
MOTOR ONLY .5HP 220V 1PH	CH	1P128-A
CAPACITOR FR MOTOR 20 UF	CH	1P128-B
CAPACITOR FR MOTOR 40 UF	CH	1P128-B1
LIMIT SWITCH FOR RACK	CH	1P129

Motorization (parts)

Motorization (parts) Woosung

Description	Unit.	Code
ROLLER GUIDE FOR 1P127-5	CH	1P127-4
ELECT. ROLL UP 1/10HP GMD-100	CH	1P127-5
ELECT.ROLL UP 1/10HP GMD-180-S	CH	1P127-6
ADAPTOR FOR 1P127-1	CH	1P127-C
Bushing for 1P127-5	CH	1P127-E

Motorization



Motorization

Gear motor 24 volts D.C., 0.1 HP. 3,6 RPM, integrated limit switches (60 turns maximum adjustment); opening roll-up of 60" height in 3 minutes. Torque of 440 lbs in., or 50 Newton-meters.

Starter reverser converter included, power inlet 110 or 220 VAC 0.6/.03 amp.

Inside or outside installation, for all roll-up.

Selection sheet :

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Description	Unit.	Code
ELECT. ROLL UP 1/10HP GMD-100	EA	1P127-5
MOT.1/10HP 100N R-UP 72" W-REL	EA	3H2056
MOTOR 24 VDC	EA	3H2083
AFA REPLACEMENT	EA	3H2087
AFA REPLACEMENT / 200	EA	3H2088
MOT.1/10HP 100N R-UP84" WO-REL	EA	3H2099

Ridder motorization



Motorizations

The motor gearboxes are maintenance-free, compact power units for driving ventilation, screen and flap ventilation systems in greenhouses and livestock sheds.

All motor gearboxes feature a self-braking worm gear transmission. This transmission ensures that the output shaft is braked when the drive unit is stopped. The combination of carefully matched pinion and worm reductions results in a very quiet mechanical transmission.

The motor gearboxes feature a patented integrated linear limit switch system with duty and safety switches having excellent switching precision. The maximum switching range of the limit switch system equates to 97 revolutions of the drive shaft. By using a potentiometer with the optional built-in set, it is possible to precisely feed back the positions of a drive system to a (climate) computer.

The motor gearboxes are finished with a graphite grey powder coating and are supplied including fixing bolts and spring washers.

Selection sheet :

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Description	Unit.	Code
RW045/1-09/115/1/P/CU/97	EA	RW04501
RW045/1.2/240/1HP	EA	RW04502
RW045/1.2/208/3PH	EA	RW04503
RW45-3-09\208-480\3\C\97	EA	RW04504
RW045/5/240/1HP	EA	RW04505
RW45-2-09\115\1\60\P\CU\97	EA	RW04506
RW200/41/208/3PH	EA	RW20001
RW241/1.2/115/1HP	EA	RW24101
RW241/1.0/240/1PH	EA	RW24102
RW241-09/208-480/3/P/CU/86	EA	RW24103
RW241-09\230\1\86\IP55	EA	RW241-09
RW242-18/220-240/1/86	EA	RW24201
RW242/2.0/208/480/3PH	EA	RW24203
RW243/3.0/240/1PH	EA	RW24301
RW243/3.0/208/3PH	EA	RW24302
RW401/1.0/115/1PH	EA	RW40101
RW401/1.0/208/3PH	EA	RW40102
RW402/2.0/240/1HP	EA	RW40201

Ridder motorization

RW402-25\208-480\3\CU\86	EA	RW402MX
RW403/3.2/240/1PH	EA	RW40301
RW403/3.6/208/3PH	EA	RW40302
RW403-44/600/3/60/C/86	EA	RW40304
RW403-37\400-450\3\86	EA	RW403MX
RW403-37\400-450\3\86\1\CH	EA	RW403UNI
RW405/6.0/208/3PH	EA	RW40501
RW603/3.0/240/1PH	EA	RW60301
RW603/3.0/208/3PH	EA	RW60302

Parts

Description	Unit.	Code
POTENTIOMETER R1K\S10	EA	RW045/200+1KPOT
MOTOR GASKET	EA	RW04501-B
PIGNON	EA	RW04501-D
CONDENSOR 31.5uF FOR 76102	EA	RW04501-F
CAPACITOR 88-108MFD	EA	RW108MFD
POTMETER BUILT IN SET RW400	EA	RW200+POTSET
GEAR FOR 502330 #48-103	EA	RW24101-D
PLASTIC PINION #103 TEETH	EA	RW24101-E
Motor only for RW24201	EA	RW24201-1
GASKET REDUCER FOR RW242	EA	RW24201-A
PLASTIC PINION #48-87 TEETH	EA	RW24201-D
Belt 170XL/z85	EA	RW281110
REPLACEMENT MOTOR FOR RW40201	EA	RW40201-1
CONDENSOR 12uF FOR 761032	EA	RW40301-A
REPLACEMENT MOTOR	EA	RW40301-MOT
REPLACEMENT MOTOR FOR RW403UNI	EA	RW403UNI-MOT
Pulley z30/D28/ABS	EA	RW417726
Pulley z48/D12/ABS	EA	RW417727
Klixon Type 660 ATTOCCO 4C	EA	RW700018
STARTING RELAY 95-254V 50/60HZ	EA	RWRP001
CAP 20 UF	EA	RWRP002
CAP 80 UF	EA	RWRP003

Ridder motorization

CAPACITOR 8UF/400/450/50/60	EA	RWRP004
CAPACITOR 30UF/260/50/60/SD	EA	RWRP005
END CYCLE SCREW M4 X 8	EA	RWRP006
END CYCLE SCREW M4 X 16	EA	RWRP007
MOTOR Y575 0.44KW 3PH	EA	RWRP008
037Kw 1800Rpm 230/460 3ph	EA	RWRP009
BUTTOM GEAR 400 LS	EA	RWRP010
BELT 400 LS	EA	RWRP011
RIDDER POSITIONNING UNIT	EA	RWRPU

Tools

Description	Unit.	Code
TORQUE WRENCH 1/4 DRIVE	EA	1N600
SOCKET 9/16" 1/4" DRIVE	EA	1N601
ALLEN KEY 4MM 1/4"DRIVE	EA	1N602
4" SCREW DRIVER FLAT HEAD 3/16	EA	1N604

Synthetic grease

Grease for rack and pinion

White grease, base of lithium and zinc oxide.

- Stability at high and low temperature
- Resistant to extreme temperatures (-40°C/-40°F to 260°C/500°F)
- Resistant to rust and corrosion
- Reduces wear caused by metal-to-metal contact

Description	Unit.	Code
SYNTHETIC GREASE 14 oz	EA	6D025-1

Ridder motorization

Power roller Ridder

Description	Unit.	Code
RPR100-4-30\400\3\43\GC	EA	RWPR001
TUBE RPR-H2900-X150-OB	EA	RWPR002
MOUNTING BRACKET RPR-UM-WC	EA	RWPR003
CABLE CARRIER VK16-P20-L1000-B	EA	RWPR004
MOUNTING SET CABEL PROT.RPR100	EA	RWPR005
RPR-GC SET-4M	EA	RWPR006
COUNTER WEIGHT RPR-GC-10.5KG	EA	RWPR007
RETURN PULLEY UNIT RPR-GC	EA	RWPR008
CABLE TREE RPR-3F+ES-L4000	EA	RWPR009
MOUNTING BRACKET RPR-BB	EA	RWPR010
COUPLING WB35-P20-L102-M8-A-GC	EA	RWPR011
COUPLING WB35-P20-L102-M8-AL	EA	RWPR012
MOUNTING BRACKET RPR TOP FIX	EA	RWPR013

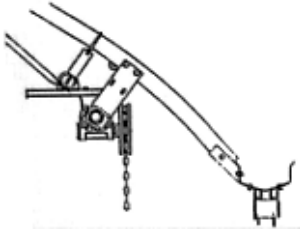
Ridder Motorization

Specifications

Code "Varnet"	Art. No.	Motor gearboxe	M (Nm) – 60 Hz	n (/min) – 60 Hz	Volt	Amps	Power Kw	Phase	CSA	m (Kg)
RW04501	535360	RW45-1-09\110-115\1\60\CU\97	120	1,2	110-120	2,5	0,09	1	●	16,5
RW04502	502005	RW045\1.2\220-240\1PH	120	1,2	220/240	1,13	0,11	1		16,5
RW04503	535206	RW045\1.2\208-480\3PH	120	1,2	200-277 380-480	0,85 0,5	0,11	3	●	16,5
RW04504	535266	RW45-3-09\208-480\3\C\97	120	3,6	200-277 380-480	0,85 0,5	0,11	3	●	16,5
RW04505	502040	RW045\5\220-240\1PH	80	3,6	220-240	1,13	0,11	1		16,5
RW04506	535365	RW45-2-09\115\1\60\PI\CU\97	100	2,4	110-120	2,5	0,09	1	●	16,5
RW20001	535950	RW200\41\208-480\3PH	200	41	200-277 346-480	8 4,4	1,8	3	●	38
RW24101	502334	RW241\1.2\110-115\1PH	200	1,2	110-120	2,5	0,09	1	●	29,0
RW24102	502330	RW241\1.0\220-240\1PH	240	1,2	220/240	1,13	0,11	1		28,5
RW24103	535400	RW241\1.0\208-480\3PH	240	1,2	200-277 380-480	0,85 0,5	0,11	3	●	30,0
RW241-09	537240	RW241-09\230\1\86\IP55	240	1,2	220-240	1,13	0,11	1		28,5
RW24201	532406	RW242-18\220-240\1\86	240	2,4	220-240	2,25	0,22	1		31,0
RW24203	535430	RW242\2.0\208-480\3PH	240	2,4	200-277 380-480	1,9 1,3	0,30	3	●	32
RW24301	502340	RW243\3.0\220-240\1PH	240	3,6	220/240	2	0,30	1	●	32,0
RW24302	535460	RW243\3.0\208-480\3PH	240	3,6	200-277 380-480	1,9 1,3	0,30	3	●	32,0
RW40101	502206	RW401\1.0\115\1PH	400	1,2	110-120	4	0,18	1	●	31,0
RW40102	535600	RW401\1.0\208-480\3PH	400	1,2	200-277 380-480	1,05 0,6	0,14	3	●	30,0
RW40201	533411	RW402\2.0\220-240\1PH	400	2,4	220/240	2	0,30	1	●	31,5
RW402MX	535630	RW402-25\208-480\3\CU\86	400	2,4	200-277 380-480	1,9 1,3	0,30	3	●	31,0
RW40301	502240	RW403-37\230\1\OC\C\86	400	3,6	220/240	2,7	0,44	1	●	33,0
RW40302	502210	RW403-37\400\3\86	400	3,0	230/400	1,9/1,1	0,37	3		31,0
RW40304	502219	RW403-44\600\3\60\C\86	400	3,1	346 600	1,5 0,86	0,44	3	●	32
RW403MX	502210	RW403-37\400\3\86	400	3,0	230/400	1,9/1,1	0,37	3		31
RW403UNI	502210	RW403-37\400\3\86	400	3,0	230/400	1,9/1,1	0,37	3		32,0
RW40501	535690	RW405\6.0\208-480\3PH	400	6,0	200-277 380-480	3,6 1,9	0,66	3	●	34,5
RW60301	502440	RW603\3.0\220-240\1PH	600	3,6	220-240	4,5	0,66	1	●	40,0
RW60302	535750	RW603\3.0\208-480\3PH	600	3,6	200-277 380-480	3,6 1,9	0,66	3	●	36,5

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Hand crank



Hand crank for roof

Manual vent operator including support, gear and shaft coupling.
 See table (page F-27A).

Description	Unit.	Code
MANUAL OPENING UNIT 9' CHAIN	CH	2H6409
MANUAL OPENING UNIT 13' CHAIN	CH	2H6413



Hand crank for roll-up

Manual crank. It has a reduction ratio of 5.5: 1 with an integrated self-blocking mechanism that makes it very safe to use. For roll-up tube 1" and 1-1/4". 200 feet maximum.

Description	Unit.	Code
HANDCRANK 5.5:1	CH	1P1020

Hand crank for roof

Manual vent

Nordique NG	Height under gutter	21'4"	24'	25'	28'	30'	31'6"
Gutter ventilation	10'	2H6409	2H6409	2H6409	2H6409	2H6409	2H6409
	12'	2H6413	2H6413	2H6413	2H6413	2H6413	2H6413
	14'	2H6413	2H6413	2H6413	2H6413	2H6413	2H6413
	16'	2H6413	2H6413	2H6413	2H6413	2H6413	2H6413

Half-roof vent	10'	2H6409	2H6409	2H6409	2H6409	2H6409	2H6409
	12'	2H6413	2H6413	2H6413	2H6413	2H6413	2H6413
	14'	2H6413	2H6413	2H6413	2H6413	2H6413	2H6413
	16'	2H6413	2H6413	2H6413	2H6413	2H6413	2H6413

Ridge vent panel	10'	2H6413	2H6413	2H6413	2H6413	2H6413	2H6413
	12'	2H6413	2H6413	2H6413	2H6413	2H6413	2H6413
	14'	2H6413	2H6413	2H6413	2H6413	2H6413	2H6413
	16'	2H6413	2H6413	2H6413	2H6413	2H6413	2H6413

Ovaltech III	25'	30'	32'	35'	40'
Half-roof vent	✘	2H6409	2H6409	2H6409	✘

Ridge vent panel	✘	2H6413	2H6413	2H6413	2H6413
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Circulating tube



4 mil. circulating tube

Poly 0.004 UV treated 4 years.
Tubes sold by foot (small quantities)

For codes ending by -LB.

Tubes sold per roll - price per pound.

6E2505-LB:roll 24 pds=1000' approx.(must be sold by multiple of 24 lb only)

6E2512-LB:roll 61 pds=1000' approx.(must be sold by multiple of 61 lb only)

6E2514-LB:roll 70 pds=1000' approx.(must be sold by multiple of 70 lb only)

6E2518-LB:roll 68 pds= 750' approx.(must be sold by multiple of 68 lb only)

6E2524-LB:roll 62 pds= 500' approx.(must be sold by multiple of 62 lb only)

6E2530-LB:roll 56 pds= 350' approx.(must be sold by multiple of 56 lb only)

Description	Unit.	Code
POLY TUBE 4MIL FOR 4-3/4"DIAM.	FT	6E2505
POLY TUBE 4MIL 4-3/4 DIAM.	LBS	6E2505-LB
POLY TUBE 4MIL FOR 10"DIAM.	FT	6E2510
POLY TUBE 4MIL FOR 12"DIAM.	FT	6E2512
POLY TUBE 4MIL 12" DIAM.	LBS	6E2512-LB
POLY TUBE 4MIL FOR 14"DIAM.	FT	6E2514
POLY TUBE 4MIL 14" DIAM.	LBS	6E2514-LB
POLY TUBE 4MIL FOR 18"DIAM.	FT	6E2518
POLY TUBE 4MIL 18" DIAM.	LBS	6E2518-LB
POLY TUBE 4MIL FOR 24"DIAM.	FT	6E2524
POLY TUBE 4MIL 24" DIAM.	LBS	6E2524-LB
POLY TUBE 4MIL FOR 32"DIAM.	FT	6E2530
POLY TUBE 4MIL 32" DIAM.	LBS	6E2530-LB

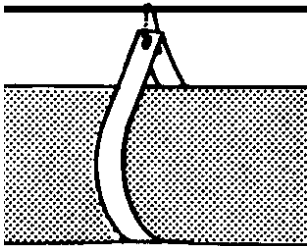


6 mil. circulating tube

Poly 0.006 UV treated.

Description	Unit.	Code
POLY TUBE 6MIL BLACK 12"DIAM.	FT	6E2612-NOIR

Circulating tube



Poly vent support

Poly tubing support.
 To install at every 8 to 10 feet.

Description	Unit.	Code
HANGING SUPPORT FOR 12"DIAM.	EA	6E3005
HANGING SUPPORT FOR 18"DIAM.	EA	6E3006
HANGING SUPPORT FOR 24"DIAM.	EA	6E3007
HANGING SUPPORT FOR 30"DIAM.	EA	6E3008

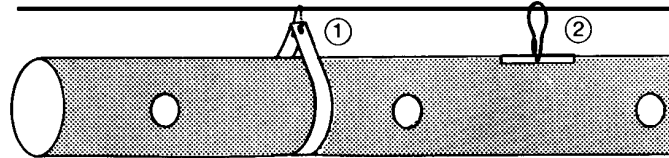
Accessories

Description	Unit.	Code
RESEALABLE BEADED TIES	EA	6E3010
SPARE EYELET	EA	6E3011

Circulating tube

Technical data

HOLES	CFM at 0.15"
1"Ø	6
1 1/2"Ø	12
2"Ø	21
2 1/4"Ø	28
2 1/2"Ø	35
2 3/4"Ø	41
3"Ø	52



Drawing 1 Tube support batten

Drawing 2 Plastic clips and hooks

CIRCULATING TUBES

Ø	Supports spacing
10" - 12" - 18"	at 10'
20" - 24"	at 8'
30"	at 6'

DRILLING OF CIRCULATING TUBES / TUBE LENGTH TO DRILLED

	50'			75'			100'			125'			
	Holes	Spa.	CFM	Holes	Spa.	CFM	Holes	Spa.	CFM	Holes	Spa.	CFM	
Circulator #1 - 2600 CFM 18"Ø Motor 1/4 HP	2 3/4" Ø	24" c/c	2050	2 3/4" Ø	36" c/c	2050	2 3/4" Ø	48" c/c	2050	-	-	-	Tube 18"Ø
Circulator #2 - 4600 CFM 24"Ø Motor 1/3 HP	-	-	-	-	-	-	2 3/4" Ø	24" c/c	4100	3" Ø	36" c/c	4264	Tube 24"Ø
Circulator #3 - 5600 CFM 24"Ø Motor 1/2 HP	-	-	-	-	-	-	3" Ø	24" c/c	5200	2 3/4" Ø	24" c/c	5084	Tube 24"Ø
Circulator #4 - 6500 CFM 30"Ø Motor 1/2 HP	-	-	-	-	-	-	-	-	-	2 3/4" Ø	24" c/c	5084	Tube 30"Ø

	150'			175'			200'			
	Holes	Spa.	CFM	Holes	Spa.	CFM	Holes	Spa.	CFM	
Circulator #1 - 2600 CFM 18"Ø Motor 1/4 HP	-	-	-	-	-	-	-	-	-	Tube 18"Ø
Circulator #2 - 4600 CFM 24"Ø Motor 1/3 HP	2 3/4" Ø	36" c/c	4100	2 1/2" Ø	36" c/c	4060	2 3/4" Ø	48" c/c	4100	Tube 24"Ø
Circulator #3 - 5600 CFM 24"Ø Motor 1/2 HP	3" Ø	36" c/c	5200	2 3/4" Ø	36" c/c	4756	3" Ø	48" c/c	5200	Tube 24"Ø
Circulator #4 - 6500 CFM 30"Ø Motor 1/2 HP	2 3/4" Ø	24" c/c	6150	3" Ø	36" c/c	6032	2 3/4" Ø	36" c/c	5412	Tube 30"Ø

CHART FOR OFF CENTER TUBES

Tube 12" and 14"	3" off center
18"	5" off center
24"	7" off center
30"	9" off center

Circulating tube

Technical data

HEATING TUBES

1. Find total CFM per heating unit.

$$\frac{\text{BTU}}{100} = \frac{\text{TOTAL CFM}}{\text{CFM}}$$

Oil heating system

100,000 BTU = 1,150 CFM

160,000 BTU = 1,800 CFM

275,000 BTU = 3,000 CFM

or

others

$$\frac{\text{BTU}}{100} = \text{CFM}$$

2. Find how many tubes and their diameter.

$$\frac{\text{TOTAL CFM}}{\text{NB TUBE}} = \frac{\text{CFM}}{\text{TUBE}} \leq \frac{\text{MAX. CFM}}{\text{TUBE}}$$

Ø TUBE	CFM MAX./TUBE*		
	0-100'	150'	200'
12"Ø	470	380	330
14"Ø	710	570	490
18"Ø	1,400	1,125	950
24"Ø	2,950	2,375	2,050
30"Ø	5,400	4,250	3,700

*For 0.05" maximum total pressure loss

3. Figure diameter and holes spacing for 60%*.

***We punch holes only 60% total capacity, grower will calibrate and punch other ones.**

$$\frac{\text{CFM}}{\text{TUBE}} \times \frac{.60\%}{\text{CFM/holes}} = \text{NB holes}$$

$$\frac{\text{Nb holes}}{2} \times \text{Length} = \text{Holes spacing}$$

Spacing available

12", 18", 24", 36", 48", 72"

SPECIAL	12"
OR	14"
Ø	
1/3 x 1/3 x 1/3	

FIRST	1/3	WITHOUT HOLE
SECOND	1/3	1" DIAM. 36"
LAST	1/3	1" DIAM. 18"

Climate control



Heating-Ventilation / Single-stage thermostat

- Single-stage thermostat "CANARM"
- One stage for heating or cooling
 - NEMA 4X enclosure
 - Robust, weather-resistant housing
 - Corrosion resistant materials for long life
 - Low mass, high surface area of stainless steel coiled sensor provides rapid response to temperature change
 - UL listed and CSA certified
 - Temperature range from: -30°F to 120°F (-34°C to 49°C)
 - Temperature differential : 3.5°F
 - 120V/16A, 208V/9.2A, 240V/8A

Description	Unit.	Code
SINGLE-STAGE THERMOSTAT	EA	6CT631A1



Heating-Ventilation / Two-stage thermostat

- Two-stage thermostat "CANARM"
- Two stages for heating or cooling
 - Robust, rain tight, weatherproof control
 - Corrosion resistant materials for long life
 - High level of accuracy and sensitivity
 - UL listed, CSA NEMA 4X and N.E.C. (National electric code)
 - Features 2 SPDT staged switches to support a variety of applications
 - Temperature range from: -30°F to 120°F (-34°C to 49°C)
 - Fixed temperature differential of 3°F between the two stages
 - 120V/16A, 208V/9.2A, 240V/8A

Description	Unit.	Code
DOUBLE-STAGE THERMOSTAT	EA	6CT631B1

iGrow 1400 climate control



iGrow 1400

HEATING/COOLING

- Up to 12 stages of heating and cooling control
- Heating and cooling stages are programmable
- Programmables stage overrides (1 time only or every day)
- Stage separation programmable to 0.1 degree
- 4 setpoint time periods each with ramping option
- Setpoint time periods are astronomically adjustable

HUMIDITY CONTROL

- Flexible dehumidification & humidification control
 - * 2 stages of dehumidification for outside temp above threshold
 - * 1 stage of dehumidification for outside temp below threshold
 - * Heat boost option
 - * Cycle timing option
 - * 1 stage of humidification

EQUIPMENT CONTROLLED

- Controls the following type of equipment:
 - * On/off devices (e.g. fan, HAF, heat/cool pad, etc.)
 - * Reversing vent motors (wind/rain overrides)
 - * Reversing curtain motors
 - Shade and energy control
 - Light, time, and temperature based
 - Thermal blanket shock protection
 - * Irrigation control valves
 - Scheduled (14-days schedule with up to 6 start times per day)
 - Trigger options (accumulated light, start pulse)
 - Misting/fogging control with humidity overrides
 - * Mixing valve
 - * Bottom heat (up to 5 independent zones)
 - * CO2 pumps
 - CO2 threshold subject to light conditions, time of day, temperature state
 - * HID lights
- Programmable individual equipment overrides (1 time only or everyday)

Description	Unit.	Code
IGROW1400+SENSOR T-H ENGLISH	EA	6CT100A
IGROW1400+SENSOR T-H FRENCH	EA	6CT100F

iGrow 1400 climate control



1400 weather station

- Temperature sensor
- Solar sensor, wind speed sensor
- Wind direction sensor
- Rain sensor, junction box
- Cable and pole not included

Description	Unit.	Code
WEATHER STATION IGROW 1400	EA	6CT110

1400 accessories

Description	Unit.	Code
KEYPAD SCREEN FOR 1400	EA	6CT100-1
HOT WATER TEMP. SENSOR SER1000	EA	6CT113
TEMP SENS AIR ANALO IGROW1400	EA	6CT114
LIGHT SENSOR W/M2-KLUX	EA	6CT115
MAIN PC BOARD FOR 1400	EA	6CT118
ENVIRONMENTAL CONTROL SOFTWARE	EA	6CT120
CO2 MONITOR 0-2000 PPM	EA	6CT130
USB TO SERIAL CONVERTER RS-232	EA	6CT140
SOIL MOISTURE 3-5VOLTS	EA	6CT199

"Vaisala" CO2 sensor

Description	Unit.	Code
SENSOR ELEMENT	EA	6CT133

iGrow 1400 climate control

POWER SUPPLY 24V DR-15-24	EA	6CT135
POWER SUPPLY 12V DR-15-12	EA	6CT135-12
RAIL POWER SUPPLY 24VDC	EA	6CT135-24

Electrical components

Controls & components

Description	Unit.	Code
MAGNETIC STARTER 24VDC	EA	2H6243-R
UNIVERSAL CONTROLLER	EA	2H6243-RA
CROSSBOW INCLINOMETER	EA	2H6243-RB-1
2-3/4"X4-3/4"X 1/16"ALUM.PLATE	EA	2H6243-RC
TRANSMITTER SUPPORT	EA	2H6281
REFLECTOR SUPPORT	EA	2H6282
SNOW LEVEL SENSOR BASE	EA	2H6283
WATER PROBE 4-20MA DECAG. 10CM	EA	6CT200
REPEATER CORDLESS	EA	8HC701
5 METER WIRE FOR ANTENNA	EA	8HC703
Wifi lightning protector	EA	8HC705
PROG. RELAY FOR AQUABOOM	EA	8HC803
BOITIER PR LIMIT SWITCH	EA	8ZB0001
ROD FOR LIMIT SWITCH	EA	8ZB0002
HEAD FOR LIMIT SWITCH	EA	8ZB0003
TIGE SOUPLE	EA	8ZB0004
TIGE SOUPLE #ZCKY91	EA	8ZB0005
TOGGLE SWITCH DPDT 10A/250VTS	EA	8ZB005
SWITCH PROTETOR	EA	8ZB006
TOGGLE SWITCH DPDT	EA	8ZB007
TRANSFO 50VA 240/24VCA	EA	8ZB009
TRANSFO 150VA 120/24VCA	EA	8ZB010
TRANSFO 1000VA MC1KF 240V-120V	EA	8ZB010-1000
TRANSFO 350VA 120/24VCA	EA	8ZB010-350
TRANSFO 750VA MC750F 240V-120V	EA	8ZB010-750
TRANSFO 750VA 480/240 FER	EA	8ZB011
TRANSFO 1KVA 480/240 60HZ	EA	8ZB012
TRANSFO #MC250I 240V TO 120V	EA	8ZB017
TRANSFO 750VA #MAMC750F	EA	8ZB018
8 PINS ROUND 24VAC 2P2T RELAY	EA	8ZD001
8 PINS ROUND 2P2T 120VAC RELAY	EA	8ZD002

Electrical components

11 PINS RD 3P2T 120VAC RELAY	EA	8ZD003
BASE FOR 8 PINS ROUND RELAY	EA	8ZD005
BASE FOR 11 PINS ROUND RELAY	EA	8ZD006
Relay 11 pin round off delay	EA	8ZD008
24+120VAC 8 PINS ROUND TIMER	EA	8ZD009
DOUBLE TIMER OMERON DC24	EA	8ZD012-1
24-240VAC MULTI-FONCTION TIMER	EA	8ZD020
Mono fonct.relay flash asym	EA	8ZD020FL
BLOC CONTACT	EA	8ZD033-1
TRACK DIM 1 METER	EA	8ZD101-1
2P2T 24VAC "ICE CUBE" RELAY	EA	8ZD122
BASE FOR RELAY "ICE CUBE" 2P2T	EA	8ZD1221
"ICE CUBE" REALY 4P2T 24VAC	EA	8ZD142
BASE FOR RELAY "ICE CUBE" 4P2T	EA	8ZD1421
FUSE HOLDER # 011565725	EA	8ZD175
FUSE HOLDER & Del	EA	8ZD175-1
FUSES GMA 1 AMP 5/BOX 5 X 20MM	EA	8ZD176
FUSES GMA 2 AMP 5/BOX 5 X 20MM	EA	8ZD177
FUSES GMA 4 AMP 5/BOX 5 X 20MM	EA	8ZD178
FUSES GMA 6 AMP 5 X 20MM	EA	8ZD179
PLAQUE DE FIN # 011695115	EA	8ZD180
BREAKER 5 AMPS	EA	8ZD181
Bte 5 fusible 3 amp Aquaboom	EA	8ZD187
TERMINAL IDENTIFICATION	EA	8ZD200
ONE LEVEL TERMINAL	EA	8ZD203
END PLATE FOR TERMINAL 1 LEVEL	EA	8ZD204
END BRAKET FOR TERMINAL	EA	8ZD205
JUMPER FOR TERMINAL	EA	8ZD206
FUSE HOLDER	EA	8ZD305
FUSE AT 05 (5 AMPS)	EA	8ZD310
FUSE BREAKER AT 10 AMPERES	EA	8ZD311
FUSE AT 01 (1 AMP)	EA	8ZD315
IGNITION SWITCH	EA	8ZD320
"ICE CUBE" RELAY 2P2T 12VDC	EA	8ZD325
1P1T 24VAC RELAY	EA	8ZD400
MINUTE RELAY 1P1T 24 VAC	EA	8ZD400T
BASE FOR RELAY 1P1T	EA	8ZD401
"ICE CUBE" RELAY 4P2T 120VAC	EA	8ZD402
"ICE CUBE" RELAY 2P2T 120VAC	EA	8ZD403
RELAY AUTO OFF-ON 1P2T 24VAC	EA	8ZD404

Electrical components

SLIM RELAY 2P2T 24VAC	EA	8ZD405
SLIM RELAY 2P2T BASE	EA	8ZD406



Soil moisture sensor

4-20 mA 5cm soil moisture sensor for Maximizer.
 This sensor is used to get the water content of a substrate. Gives a value to the controller between 0 and 100% depending on the humidity of the substrate. Can replace a tensiometer, is much cheaper and less fragile (on the other side, the tensiometer gives a voltage reading).
 Type: Volumetric water content (VWC)
 Accuracy: +/-6% VWC with generic calibration for supported growing media up to 65% VWC
 Output: 4-20 mA current proportional to VWC
 Operating environment temperature: -40 to 80°C
 Physical properties dimensions: 8,9 cm x 1.8 cm x 0.7 cm
 Cable: 2 m or 5 m, 3 wire (22 AWG) (American wire gauge)

Description	Unit.	Code
WATER PROBE 4-20MA 5CM	EA	6CT202



Tensiometer

Instrument used to check the quantity of water available for your plants in the soil. It measures the energy or force it takes to roots to remove water retained by soil particles.

Description	Unit.	Code
SOIL MOISTURE SENSOR 4-20MA	EA	6CT203

Electronic control

Description	Unit.	Code
TRANSMITTER #MS-121	EA	8ZE301

Electrical components

BRASS ADAPTOR	EA	8ZE301-A
KIT 1P21 M1	EA	8ZE600-A
CONTROL PANEL KEYPAD + POT.	EA	8ZE600-C
KIT 1P21 M2	EA	8ZE603-A
VLT MICRO DRIVE 5HP 480VAC 3HP	EA	8ZE604
DRIVE 2HP 3/3 230	EA	8ZE605
DRIVE 1HP 1 PHASE 230V	EA	8ZE606
CONVERTER USB TO RS-485/422	EA	8ZE640-1
ELECTRONIC ALARM 6-28VDC	EA	8ZE731

Electrical wires

Description	Unit.	Code
WHITE 14GA TEW ELECTRIC WIRE	M	8ZX14-BLANC
BLUE 14GA TEW ELECTRIC WIRE	M	8ZX14-BLEU
NOIR 14GA TEW ELECTRIC WIRE	M	8ZX14-NOIR
RED 14GA TEW ELECTRIC WIRE	M	8ZX14-ROUGE
GREEN 14GA TEW ELECTRIC WIRE	M	8ZX14-VERT
WIRE 18-2 CONDUCT.SHIELD GREY	FT	8ZX18-2S
WIRE 18-3 CONDUCT.SHEILD GREY	FT	8ZX18-3S
WIRE 18-4 CONDUCT.SHIELD GREY	FT	8ZX18-4S
ELEC.WIRE 18/7 COND.SHEILDER	FT	8ZX18-7S
CABLE 18/9 9 CONDUCT	M	8ZX18-9S
ELECT.WIRE 20/4 PAIR IND SHLD	FT	8ZX20-4PIS
CABLE 20/6 PAIR SHIELDED	FT	8ZX20-6PSP
RJ-45 CONNECTOR	EA	8ZXRJ-45



Control interface

Description	Unit.	Code
CONTROLE INTERFACE 6 SWITCHS	EA	2H4506

Electrical components

CONTROLE INTERFACE 7 SWITCHS	EA	2H4507
CONTROLE INTERFACE 8 SWITCHS	EA	2H4508
CONTROLE INTERFACE 9 SWITCHS	EA	2H4509
CONTROLE INTERFACE 10 SWITCHS	EA	2H4510
CONTROLE INTERFACE 11 SWITCHS	EA	2H4511
CONTROLE INTERFACE 12 SWITCHS	EA	2H4512
CONTROLE INTERFACE 13 SWITCHS	EA	2H4513
CONTROLE INTERFACE 14 SWITCHS	EA	2H4514
CONTROLE INTERFACE 15 SWITCHS	EA	2H4515



Rotative relay

Description	Unit.	Code
TURN BUTTON RELAY OP/CL	EA	8HC361
BARRETTE 24 POLES	EA	8HC362
BOX AC 24"X 24"X 8" NEMA4	EA	8ZF024



Power panel

Description	Unit.	Code
SWITCH 32A3PN4X	EA	8HC73
BOX AC 24"X 24"X 8" NEMA4	EA	8ZF024

Motor starter

Description	Unit.	Code
STARTER 1/8HP 1PH 240V	EA	8ZE107-1

Electrical components

STARTER 1/8HP 1PH 115V	EA	8ZE107-115
STARTER 1/8HP 1PH 240V	EA	8ZE107L
STARTER 1/4&1/2HP 220VAC 1PH	EA	8ZE109-02
REVERSED RELAY FOR 8ZE109	EA	8ZE109-3
OVERLOAD RELAY 4.5-6.3A	EA	8ZE111-1
STARTER 3PH 0.11KW	EA	8ZE114L
STARTER 1/3HP-5WIRE.1PH 220V	EA	8ZE116
Overload relay 1.4-2.0A	EA	8ZE116-1
RELAY START .107-115-114-133-1	EA	8ZE121
STARTER RELAY KIT FOR 8ZE116	EA	8ZE124
STARTER RELAY FOR 8ZE116+140	EA	8ZE124-1
LOVATO CONTACTOR	EA	8ZE124L
STARTER 1/10HP SWIT.110/220V	EA	8ZE133-1
TRANSFO REMPL. FOR 8ZE133-1	EA	8ZE133-1B
DIODE BRIDGE 35A	EA	8ZE133-1C
CONTACTOR 1.5HP 240VAC BOB.24	EA	8ZE133-2A
STARTER 1/10HP SWIT.110/220V	EA	8ZE133L
POWER SUPPLY 24VDC 10A	EA	8ZE133L-A
OVERLOAD RELAY 4-6.5A	EA	8ZE1341-D
MOT.START.0.37KW 240V 1PH 2.7A	EA	8ZE134L
OVERLOAD RELAY 2.5-4A	EA	8ZE134L-A
MOTOR STARTER 25A	EA	8ZE137-1
MOTOR STARTER FOR RW402	EA	8ZE140
MOTOR STARTER FOR RW402	EA	8ZE140L
MOTOR STARTER FOR RW 242	EA	8ZE141
RELAY PROTECTOR FOR 8ZE141	EA	8ZE141-A
MOTOR STARTER FOR RW 242	EA	8ZE141L
Inverter switch Lovato	EA	8ZE141L-A
MOTOR STARTER 0.37KW208VAC 3HP	EA	8ZE142L
STARTER FOR RW403MX	EA	8ZE143L
Overload Lovato 1.6AM	EA	8ZE143L-A
MOTOR STARTER 0.66KW208VAC 3HP	EA	8ZE144L
Overload relay 6.3 tp 10 amps	EA	8ZE145L-A
MOTOR START. 0.66KW 240VAC 1PH	EA	8ZE146L
INVE 0.37KW 240V 1PH 2.7A	EA	8ZE147L
INVERS.Polydrive.42Kw 208v3PH	EA	8ZE148L
M.STARTER 208v/480/600 4-6.3A	EA	8ZE149L
INVERSEUR 0.09KW 120V 1PH 2.2A	EA	8ZE150L

iGrow 800 climate control



iGrow 800 (+ sensors temperature and humidity)

INCLUDED SENSORS TEMPERATURE AND RELATIVE HUMIDITY

- Air temperature probe: -40° to 120°F ±0.1°C
- Relative humidity: 0 to 95% ±3%

CONTROL FEATURES:

- MODEL 800: 8 equipment control outputs
- 3 daily setpoints (day, night, DIF)
- 2 heatings and 6 cooling stages
- 2 dehumidification stages
- Full data and sensor logging (option #6CT111 required)
- Onboard and removable USB memory
- Data graphing and analysis capabilities
- Special analysis tools:
 - Equipment run-time recorded
 - Energy metering
 - Return on investment calculator
- Internet connectivity through optional RJ45 port (option #6CT111 required)

CONTROLLED EQUIPMENT:

- Alarms (with audible notification)
- Thermal curtain
- Pump for evaporation curtain
- Shutters
- Opening panel
- Misting
- HAF fans
- Exhaust fan
- Grow lights via timer

OPTIONAL ACCESSORIES:

- Weather station #6CT137
- Wind speed #6CT138
- Communications Module #6CT111
- DISM & junction box CO2 #6CT013

Description	Unit.	Code
IGROW 800 VCTH	EA	6CT108-VCTH

iGrow 800 climate control



iGrow 800 (only)

- MODEL 800: 8 equipment control outputs
- 3 daily setpoints (day, night, DIF)
- 2 heatings and 6 cooling stages
- 2 dehumidification stages
- Full data and sensor logging (option #6CT111 required)
- Onboard and removable USB memory
- Data graphing and analysis capabilities
- Special analysis tools:
 - Equipment run-time recorded
 - Energy metering
 - Return on investment calculator
- Internet connectivity through optional RJ45 port (option #6CT111 required)

Description	Unit.	Code
IGROW 800 VC	EA	6CT108-VC
Main board Igrow 800	EA	6CT108-VC-A
ICD Igrow 800 screen	EA	6CT108-VC-B



Weather station 800

- Wind speed sensor
- Rain sensor, junction box
- Outdoor temperature sensor
- Light intensity sensor (klux to w/m2)

Description	Unit.	Code
FIXATION KIT FOR WEATHER STAT.	EA	3F525
WEATHER STATION IGROW 800	EA	6CT137
ANEMOMETER FOR SERIE 100/1000	EA	6CT138

iGrow 800 climate control



Rain sensor

An optical rain detection sensor.
Detects rain to notify your iGrow controller if vents should be closed.

Description	Unit.	Code
OPT. RAIN SENS.SERIE 100/1000	EA	6CT139

800 accessories

Description	Unit.	Code
Expansion board Igrow 800	EA	6CT108-E
S COMMUNICATIONS MODULE	EA	6CT111
T/RH SENSOR FOR 100/1000	EA	6CT112
SENSOR REPLA.TEMP/HUM S BOARD	EA	6CT112-1

Interface control

Includes: - PVC housing
- Transfo 115-230/24 of 150 VA
- Control relays
- Track for relays
- Electrical drawing

Description	Unit.	Code
LINK ACCESSORIES 800	EA	3F4508

iGrow 800

It is necessary to add auxiliary relay controls with this control (6CT108-VCTH) in order to ensure a decent longevity. Otherwise its longevity will be reduced.

Control relays integral parts of the control have the ability to switch a signal with a maximum capacity of 2 amps and that for 1,000,000 times. If we reduce the signal to 1 Amp then we will be good for 5,000,000 times and if we cut again, we could still go up to 1,000,000,000 or 1,000 times more cycle if we do not use auxiliary control relay.

Another good reason to use auxiliary control relay, is the relay controls which are an integral part of the control have no protection. If a connection error, a broken wire or a broken coil starter happens, then this control relay is no longer functional and is not replaceable. Eventually, this could lead to the need to change the controller.

For these reasons, we created one serpack for the 800. In addition, we took this opportunity to include a series of connection plans.

For each controller, observe the following prescription:

6CT108-VCTH	iGrow 800 VCTH	Basic control with temperature and relative humidity sensor
6CT111	S COMMUNICATIONS MODULE	Option for communication
6CT137	WE.STAT. Igrow 800	Security option depending on weather option (only one for several controls considering each controller has an S module)
6CT138	ANEMOMETER FOR SERIE 100/1000	For wind speed protection only (only one for several controls considering each controller has an S module)
3F4508	LINK ACCESSORIES 800	Mandatory
3F525	FIXATION KIT FOR WEATHER STAT.	Support kit for weather station

iGrow 800

Communication strategy

There are two ways to access your controllers' iGrow 800 by remote: Free Link4cloud and paid software, the iControl 100. In both cases, you will need to purchase an "S module" for each controller.

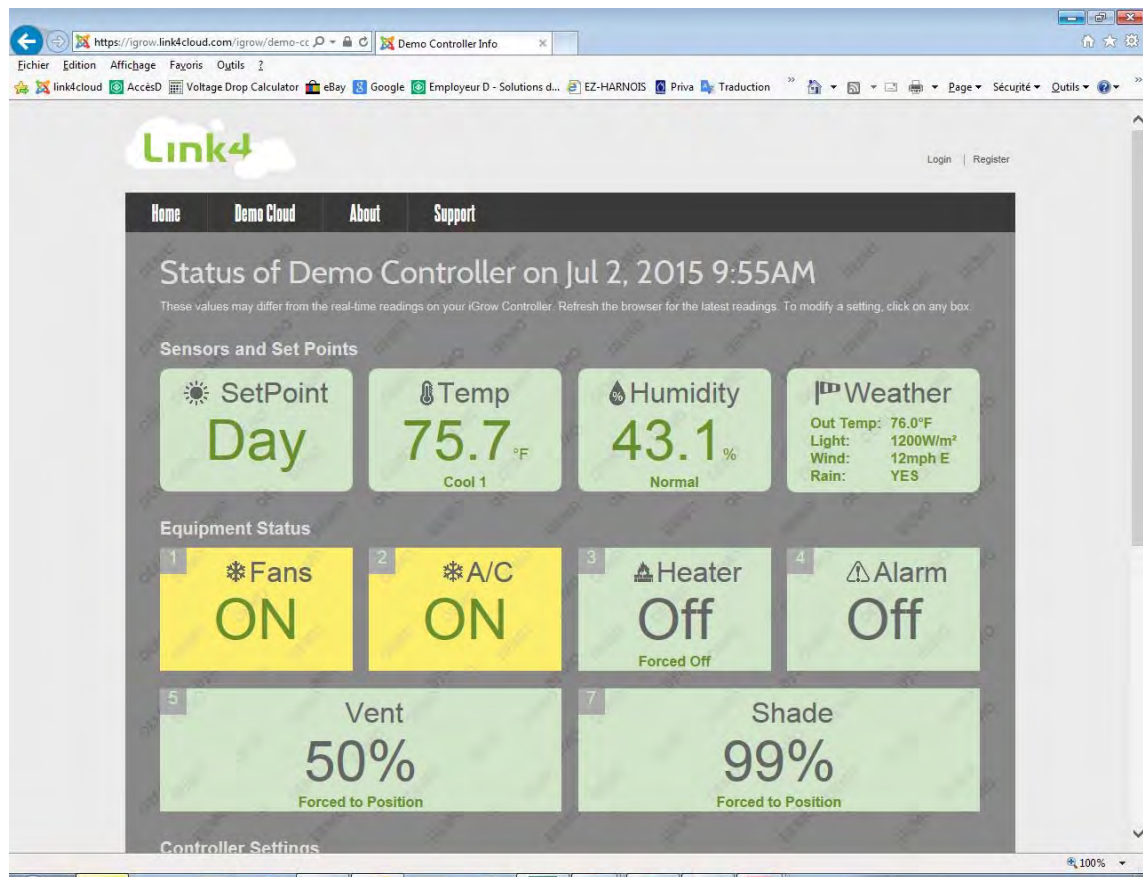
With the Link4cloud, you will have access to the controller as if you were there, you can change the data and read data remotely.

The connection is made with a cable RJ45 (standard network cable that can have a maximum length of 100 meters).

Each controller must be connected to a wire network and a router or on Ethernet switch.

Simply go to the address <https://igrow.link4cloud.com/> and create a free account and follow the instructions to add your controllers.

If there is a USB key into the iGrow, you can access the data stored on it. Example: temperature and other data that have been previously stored on the USB key. The data is in CSV format. You can then use these data to make graphs in Microsoft Excel.



iGrow 800

Communication strategy

iControl 100

The iControl 100 software allows you to connect controllers together with a wire (a 4 conductors wire twisted and shielded by pair). It uses the same communication network that the weather station.

The communication wire can reach up to 300 meters.

So you will just have to connect a wire to your computer, if you already have a communication wire for weather station.

To access all your controllers at the same time, you only have to open the iControl 100 software.

You can subsequently create groups of controllers with the same settings, give names to your controllers, copy the settings from one controller to another, change the settings on multiple controllers at once.

The program window will turn red in case of alarm.

You can also update the controls directly from the software.

You can also customize the data you want to see in the main menu.

You will also have access to base graphics on what is available in the iGrow.

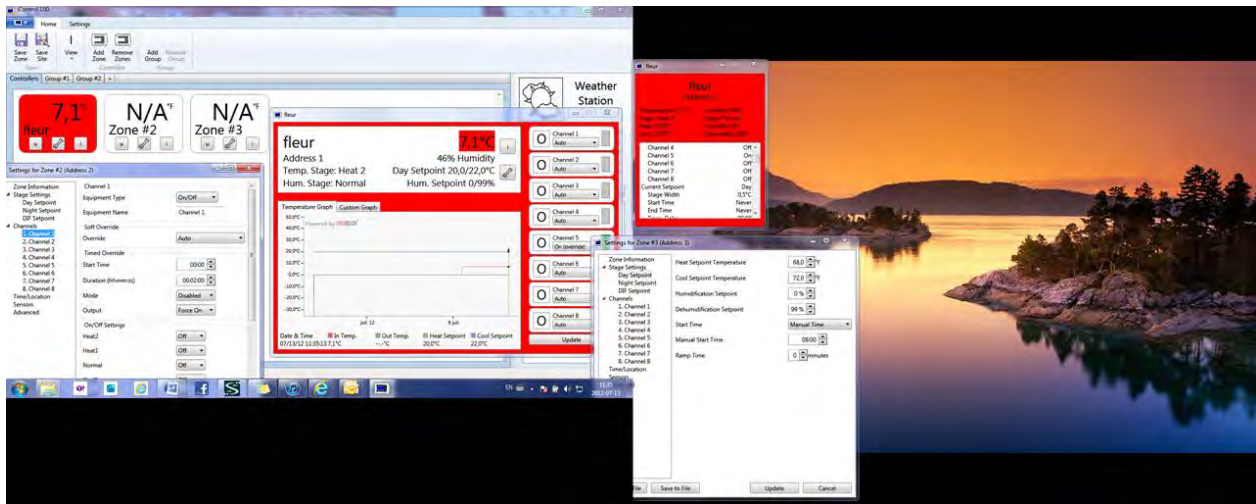
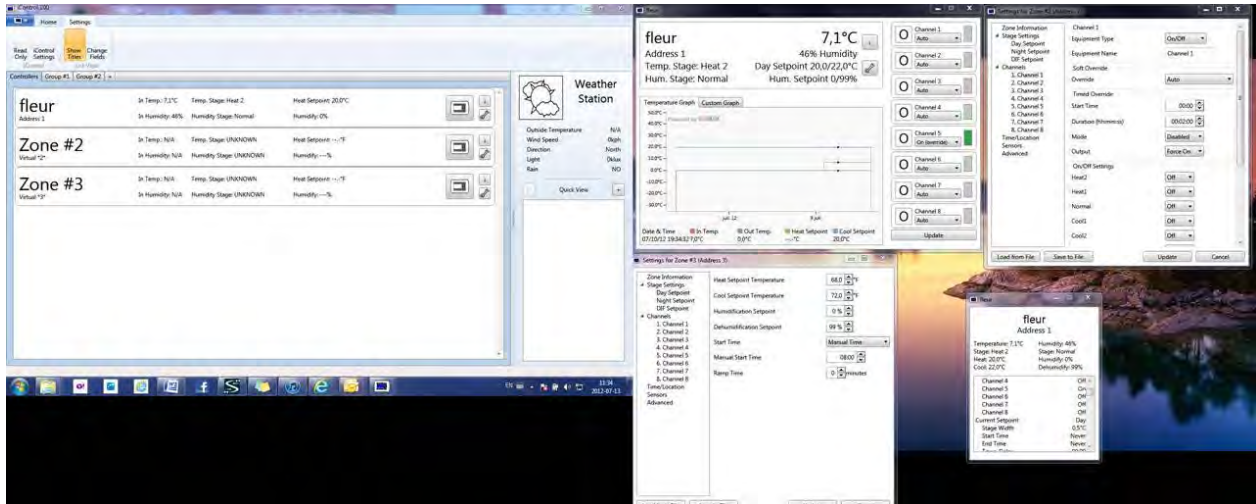
There is also a function to automatically record data on the USB drive.

You can then remove the USB from the controller and connect it to a computer to make graphs in Microsoft Excel.

You must purchase a license of iControl 100 for each iGrow 800.

iGrow 800

Communication strategy



Access to control, via Internet

To access to the control by Internet, you must use software to take control of the computer that communicates with the iGrow.

There are several free software on internet as Logmein, Teamviewer, Joinme software, etc.

You can also configure a VPN connection or use the Windows remote desktop.

There are also free remote access software and with charge for smart phones and tablets.

iPonic 614 climate control



iPonic 614

INCLUDED SENSORS:

- Air temperature probe + humidity probe
- CO2 probe: 0 - 2000 ppm
- Light sensor

CONTROL FEATURES:

- 8 outputs 115 VAC programmable
- 3 daily (day, night, DIF) set points
- Full data and sensor logging
- Onboard memory and USB port
- Data graphing and analysis capabilities

SPECIAL FEATURES: (OPTION #6CT111)

- Internet connectivity through optional RJ45 port
 - Provides access to: - iPonic Cloud
 - Alarm by email
 - SMS
 - Smartphone application and Windows compatible
 - Micro SD card slot

CONTROLLABLE EQUIPMENT:

- Alarms
- Heating
- Air conditioning
- Humidification
- Dehumidification
- Fan
- CO2 inject
- Growing light
- Irrigation valve
- Irrigation pump

Description	Unit.	Code
S COMMUNICATIONS MODULE	CH	6CT111
IPONIC-614	CH	6CT121

Heating by microtube



Union

Union for microtube.

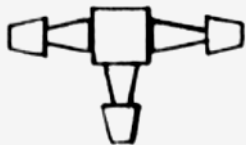
Description	Unit.	Code
MICROTUBE SPLICE UNION	CH	6K03



Elbow

Alimentation elbow for microtube.

Description	Unit.	Code
MICROTUBE "L" FITTING	CH	6K01



Tee

Alimentation tee for microtube.

Description	Unit.	Code
MICROTUBE "T" FITTING	CH	6K02



Support

Biotherm reusable support.

Description	Unit.	Code
MICROTUBE GRABBER-TRAK	PLS	6K04

Heating by microtube



Microtube

Biotherm microtube

Description	Unit.	Code
MICROTUBING (1000') PER COIL	RLS	6K10

Heating

Estimation of thermal energy required

METRIC UNITS	ENGLISH UNITS
$Q = \frac{K \times S \times (T_i - T_e)}{1000}$	$Q = 1.2 \times A \times u \times (T^1 - T^2)$ <p style="text-align: right;">(1.2 = safety factor)</p>
Q = Required kilowatts	Q = Btu required per hour
K = Heat transfer coefficient (watts/m ² °C)	A = Total surface exposed (in square feet)
- Double poly K = 3.97 - Single poly K = 7.38 - Single glass K = 6.47 - Fiberglass K = 5.68 - Double polycarbonate K = 3.41 - Triple polycarbonate K = 2.95	u = Heat transfer coefficient(Btu/hre ft ² °F)
S = Total surface exposed (in square meter)	- Double poly u = 0.70 - Single poly u = 1.30 - Single glass u = 1.14 - Fiberglass u = 1.00 - Double polycarbonate u = 0.60 - Triple polycarbonate u = 0.52
T_i = Minimum inside temperature (in °C)	T¹ = Minimum inside temperature (in °F)
T_e = Minimum outside temperature (in °C)	T² = Minimum outside temperature (in °F)

1 BTU = 3,96 kilocalories
 1 kilowatt = 3412 BTU/hre

ENERGETIC EFFICIENCY		
SOURCE	EFFICIENCY	ENERGETIC LOAD
Propane	85%	110,000 Btu/gallon
Electricity	100%	3,413 Btu/kWh
#2 grade oil	75%	167,400 Btu/gallon
Coal	75%	13,000 Btu/lbs
Natural gas	80%	1,000 Btu/ft ³
Heavy oil 1.5% SO ₂	75%	184,300 Btu/gallon
2.5% SO ₂	75%	182,000 Btu/gallon
Hard wood	70%	7,500 Btu/lbs
Soft wood	70%	7,700 Btu/lbs
Sawdust	60%	6,000 Btu/lbs

1°F WARMER = HEATING COSTS  5%

Furnaces



PTP model

- Designed especially for greenhouses
- Stainless steel heat exchanger comes standard on all units to withstand corrosive combustion air found inside a greenhouse
- 10-year heat exchanger warranty is standard
- Constructed with Modine's proven tubular heat exchanger design
- Installs quickly and easy with field wiring connections and knockouts for quick access to gas and electricity
- Standard power exhaust simplifies side-wall or roof venting with small diameter vent pipe
- Permanently-lubricated motor for trouble-free dependability
- 80% thermal efficiency
- Made in the USA

Description	Unit.	Code
AEROTH MOD PTP INOX 150K GAZ N	CH	6KPTP150N
AEROTH MOD PTP INOX 150K PROP.	CH	6KPTP150P
AEROTH MOD PTP INOX 175K GAZ N	CH	6KPTP175N
AEROTH MOD PTP INOX 175K PROP.	CH	6KPTP175P
AEROTH MOD PTP INOX 200K GAZ N	CH	6KPTP200N
AEROTH MOD PTP INOX 200K PROP.	CH	6KPTP200P
AEROTH MOD PTP INOX 250K GAZ N	CH	6KPTP250N
AEROTH MOD PTP INOX 250K PROP.	CH	6KPTP250P
AEROTH MOD PTP INOX 300K GAZ N	CH	6KPTP300N
AEROTH MOD PTP INOX 300K PROP.	CH	6KPTP300P
AEROTH MOD PTP INOX 350K GAZ N	CH	6KPTP350N
AEROTH MOD PTP INOX 350K PROP.	CH	6KPTP350P
AEROTH MOD PTP INOX 400K GAZ N	CH	6KPTP400N
AEROTH MOD PTP INOX 400K PROP.	CH	6KPTP400P

Furnaces

Furnace support

3H4506

Furnace support set for Ovaltech and Luminosa (with brace)
(imperial and metric)

3H4507

Furnace support set, unit with fan for Ovaltech and Luminosa (with brace)
(imperial and metric)

3H4512

Furnace support set for Luminosa (with truss)
(imperial and metric)

3H4513

Furnace support set, unit with fan for Luminosa (with truss)
(imperial and metric)

Description	Unit.	Code
FURNACE SUPPORT SET (BRACE)	CH	3H4506
FURNACE/BLOWER SUP.SET (STIFF)	CH	3H4507
FURNACE SUPP SET (FOR TRUSS)	CH	3H4512
FURNACE/BLOWER SUP.SET (TRUSS)	CH	3H4513

Furnaces

Technical data

	PTP model						
	150	175	200	250	300	350	400
BTU/Hr Input ¹	150,000	175,000	200,000	250,000	300,000	350,000	400,000
BTU/Hr Output ¹	120,000	140,000	160,000	200,000	240,000	280,000	320,000
Mounting height (ft) ²	15	14	15	18	19	18	21
Heat throw (ft.) (@ Max Mtg Ht) ²	51	50	53	62	69	65	74

- 1 Ratings shown are for elevations up to 2,000 ft. For elevations above 2,000 feet, ratings should be reduced at the rate of 4% for each 1,000 feet above sea level. Reduction of ratings requires use of a high altitude kit.
- 2 Data taken at 55°F air temperature rise. At 65°F ambient and unit fired at full-rated input. Mounting height as measured from bottom of unit, and without deflector hoods.

CO2 generator



250 MBTU model

- High-grade stainless steel design
- Easy to operate and fully automatic, require a CO2 sensor or thermostat
- Failure alarm
- Automatic ignition
- Flame monitored by ionization probe
- Air pressure switch with paper filter
- NG-LPG gas conversion manual valve
- Room thermostat socket
- Overheating thermostat
- C.S.A.

FEATURES

Thermal power capacity: 264,686 BTU/h
 Airflow: 2766 cfm
 Temperature rise: 103°F (@ 68°F ambient) in conformity to the CSA test
 Power: 500W - 5 A
 Power requirement: 120V 60Hz
 Dimensions: 45.1 x 23.2 x h = 17.4" : weight 101 lbs
 Shipping dimensions: 46.9 x 26 x h = 24.57" : weight 134 lbs
 Efficiency: 99%

Description	Unit.	Code
CO2 generator 250K BTU	CH	6KTL250BTU-1

CO2 generator



400 MBTU model

- High-grade stainless steel design
- Easy to operate and fully automatic, require a CO2 sensor or thermostat
- Failure alarm
- Automatic ignition
- Flame monitored by ionization probe
- Air pressure switch with paper filter
- NG-LPG gas conversion manual valve
- Room thermostat socket
- Overheating thermostat
- C.S.A.

FEATURES

Thermal power capacity: 402,767 BTU/h

Airflow: 4120 cfm

Temperature rise: 103°F (@ 68°F ambient) in conformity to the CSA test

Power: 940W - 8.7 A

Power requirement: 120V 60Hz

Dimensions: 46.7 x 26.9 x h = 21.1" : weight 123 lbs

Shipping dimensions: 48.8 x 29.5 x h = 28.27" : weight 163 lbs

Efficiency: 99%

Description	Unit.	Code
CO2 generator 400K BTU	CH	6KTL400MBTU-1

CO₂

Technical data (general information)

Natural gas or propane gas

Net capacity	Greenhouse area	
250,000 Btu/h	15,000-20,000 sq. ft.	To inject 10 gr/M ² /h of CO ₂
400,000 Btu/h	25,000-30,000 sq. ft.	

CO₂

125 ppm: Stop of plant growth
330 ppm: Normal concentration of the outside air
1000-1500 ppm: Optimal growth
1500 ppm: 4800 sq. ft. = 60,000 Btu/hour = 12.5 Btu/hour/sq. ft.
2000 ppm: Maximum for plants
5000 ppm: Damage to human health

CAPACITY OF THE CO₂ GENERATOR = SQ.FT. OF GREENHOUSE X 12.5 = _ _ _ BTU/HOUR

Page **Page title**

70	Aquaboom (parts)
88	Aquaboom accessories
87	Aquaboom hose
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1	Chapin tube-weights
20	Drip irrigation 16 mm
14	Drip irrigation parts
15	Drip irrigation tools
11	Dripper
62	Fog
68	Ground Aquaboom
69	Ground Aquaboom track
75	Kit for irrigation
52	Micro-irrigation
53	Micro-irrigation
84	Nozzle holder
47	Olson Ojet
65	Overhead Aquaboom
55	Overhead watering
40	Pressure regulator
41	Pressure regulator
9	Shrubber
85	Spraying system nozzle

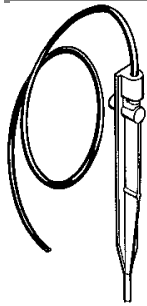
Chapin tube-weights



Brass insert

Brass insert for protection of .128 OD tube. Punch chuck LD7710 and LD7711 bit could be use.
>>> UNTIL SUPPLIES LAST

Description	Unit.	Code
BRASS INSERT FOR .128 OD TUBE	CH	LC002

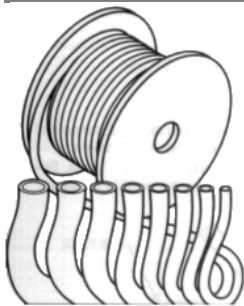


Spray-Tube

Spray-Tube uses 24" tubes 0.36"x0.128" or 0.050"x0.128". Shut off Spray-Tube by inserting supply tube into lind hole on back.

Pot dimension	gpm	0.036" psi	0.050" psi
6"- 8"	0.07	3.2	1.1
10"-12"	0.08	4.1	1.4
5-15 gal	0.10	6.2	2.1
20 gal.+	0.12	8.5	2.9

Description	Unit.	Code
SPRAY-TUBE TYPE "P" FOR POT	CH	LC225



Supply tube

Supply tube.

Description	Unit.	Code
PVC MICRO TUBE .125 ID X.187OD	PLS	LD6901
TUBING .125ID X.187 OD.(2500')	RLS	LD69010
TUBING .125ID X .187 OD.(1000'	CH	LD69013
TUBING .160ID X .220OD / FOOT	PLS	LD7009
TUBING .160ID X .220OD (1000')	RLS	LD70092

Shrubber



Shrubber

Dripper with 22 incremental adjustment from off to 10 gph. Working pressure from 20 to 45 PSI. Ideal for landscaping; a dripper to spider bubbler of 2 feet diameter. Screw on poly pipe or Olson riser, use punch tool type LP01 (see G-47 section).
>>> UNTIL SUPPLIES LAST

Description	Unit.	Code
SHRUBBLER 0 TO 13 GPH 10-32THD	CH	SCA01

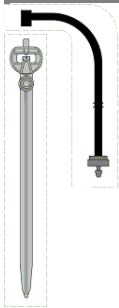
Dripper



Insert dripper

Emitter turbulent flow offering the same flow at a specific pressure (use yellow punch for barb insert # LD7712). Can receive #4 tubing.

Description	Unit.	Code
1/2GPH(BLUE) DRIP EMITTERS BXB	EA	LG0305
3/4 GPH PC DRIPPER (BROWN)	EA	LG0307-1
1GPH(GREEN) DRIP EMITTER BXB	EA	LG0310
DRIPPER 2GPH RED BARB/BARB	EA	LG0320



Stake and dripper

Description	Unit.	Code
GREY PCNL SPRAY STAKE DOUBLE	EA	LC235
ORANGE/GREY PCNL DRIPPER 6.6GH	EA	LC236

Arrow dripper



Dripper stick with labyrinth at angle position.
 Use with tube no. 3 #LD6901 or Netafim tubing.

Description	Unit.	Code
6"ANGLE ARROW DRIPPER 2L/H	EA	LC224-2I

Dripper



Angle stake

Stake with angle barb inlet, for # 3 tubing.

Description	Unit.	Code
6"ANGLE ARROW DRIPPER FOR .125	EA	LC224-1



Tube

Flexible tube to facilitate emitters positioning in pots.
 Tube 0.125"ID x 0.187"OD.

Description	Unit.	Code
PVC MICRO TUBE .125 ID X.187OD	FT	LD6901
TUBING .125ID X.187 OD.(2500')	RLS	LD69010
TUBING .125ID X .187 OD.(1000'	EA	LD69013



White tube

Description	Unit.	Code
MICRO PE SFLX WH 5/3 .197X.125	RLS	LN77
MICRO PE SFLX WH 5/3 .197X.125	FT	LN77-1

Dripper



"SlimLine EZ Close" weight

The "SlimLine EZ Close" weight keeps microtubing from moving outside the flower box when the irrigation system is turned on/off. Easy shut-off and prevention of water and fertilizer spillage and waste on plants or paths.

Description	Unit.	Code
SLIMLINE EZ CLOSE WEIGHT	EA	LN98

Adapter

Adapters for tube #3:
 1 outlet ==> LN95
 2 outlets ==> LN32-1
 4 outlets ==> LN31-1

Description	Unit.	Code
4-WAY MANIFOLD	EA	LN31-1
2-WAY MANIFOLD	EA	LN32-1
SHUT-OFF VALVE FOR TUBE 4/7	EA	LN36
3mm FLEX TUBE ADAPTER(NIPPLE)	EA	LN94
ADAPT. SPIGOT / BARB.125	EA	LN95

Dripper



Pressure – flow rate relation										
	m.w.h m.c.a	5	10	15	20	25	30	35	40	45
LG0305	2,2 l/h	2,1	2,1	2,2	2,2	2,2	2,2	2,1	2,1	2,1
LG0307-1	3,2 l/h	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,1
LG0310	4,0 l/h	3,8	4,0	4,0	4,0	4,1	4,1	4,1	4,1	4,0
LG0320	7,8 l/h	7,6	7,9	7,8	7,8	7,8	7,8	7,9	7,8	7,8
120 mesh minimum recommended filtration										



Drip irrigation parts



Tee

Tee for # 3 drip irrigation tubing.

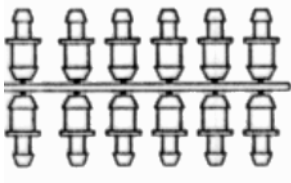
Description	Unit.	Code
TEE 1/8"BARB/THREAD/THREAD	EA	LC200



Tube adapter

No. 3 nipple insert (also can use LP6091 adapter).
 (Use #LD7712 yellow punch with #LD7710 bit holder).

Description	Unit.	Code
BARB X THREAD CONNECTOR .125ID	EA	LC221



Goof plug

Goof plug, double-sized for closing holes in tubing.
 LG9000 ==> Closes holes from 0.110" to 0.250"

Description	Unit.	Code
DUAL PLUG 1/4" TUBE	EA	LG9000



Harnois stick

Insert "Harnois" stick for no.4 tubing.

Description	Unit.	Code
5" HARNOIS STAKE FOR #4 TUBING	EA	LC223

Drip irrigation parts



Tube stabilizer

Stabilizer for tube, allows to maintain the tube and is dripper in the container.

Description	Unit.	Code
PLASTIC STAKE FOR.187 OD TUBE	EA	LC222A

Drip irrigation tools



Bit holder

Punch chuck for different bits.

Description	Unit.	Code
DP-E PUNCH HANDLE ONLY/EJECTOR	EA	LD7710



Tip only

Tips for punch chuck.

Tip size	Hole	Emetter shaft
LD7711 (red)	.100"	.130" - .160"
LD7712 (yellow)	.125"	.165" - .190"
LD7713 (green)	.135"	.200" - .250"

Description	Unit.	Code
RED TIP ONLY FOR .100	EA	LD7711
YELLOW TIP ONLY FOR .125	EA	LD7712
GREEN TIP ONLY FOR .135	EA	LD7713



Ejector punch

Ejector style hole punches.

Description	Unit.	Code
EJECTOR STYLE HOLE PUNCHES 2.5	EA	LD7714

Drip irrigation tools

Replacement tip



Description	Unit.	Code
2.5MM REPLACEMENT TIP/EJECTOR	EA	LD7714-1

Drip irrigation 16 mm

White tube

Description	Unit.	Code
WHITE TUBING.820ID/.940OD/500'	RLS	LAR822
WHITE TUBING.820ID/.940OD/FOOT	PLS	LAR8221



Adapter for PVC pipe

16mm PVC pipe adapters. Use # LD0317 adapter with #LD0317A grommet for PVC pipe 1-1/2" and more (drill hole 19mm). Use #LD0716 adapter with #LD0516 grommet for PVC pipe 2" and up.

Description	Unit.	Code
ADAPTER 19mmX16mm FOR PVC PIPE	CH	LD0716
ADAPTER 19mm X 19mm POLY TUBE	CH	LD0716A



In-line valve

16mm shut off valve.

>>> UNTIL SUPPLIES LAST

Description	Unit.	Code
SHUT OFF VALVE 16MM	CH	LD0816

Drip irrigation 16 mm

Support hook



Description	Unit.	Code
DRIPLINE SUPPORT HOOK FOR 1"	CH	LD599

Pressure regulator



PRV-075 series

- Adjustable pressure regulator
- 3/4" FPT x 3/4" FPT
- Maximum inlet pressure: 125 psi
- Plastic body

KKPRV075A: min. 07 psi / max. 20 psi for flow from 0.2 to 22 gpm
 KKPRV075B: min. 12 psi / max. 35 psi for flow from 0.2 to 22 gpm
 KKPRV075C: min. 28 psi / max. 60 psi for flow from 0.2 to 22 gpm
 KKPRV075D: min. 50 psi / max. 85 psi for flow from 0.2 to 22 gpm

Description	Unit.	Code
ADJUST.YEL.3/4"PRESSURE REGUL.	EA	KKPRV075A
ADJ.REGULATOR 3/4" 12-35PSI	EA	KKPRV075B
ADJUST.RED 3/4"PRESS.REGULATOR	EA	KKPRV075C
ADJUST.BLACK 3/4"PRESS.REGULAT	EA	KKPRV075D



PRV-100 series

- Adjustable pressure regulator
- 1" FPT x 1" FPT
- Maximum inlet pressure: 125 psi
- Plastic body

KKPRV100C: min. 14 psi / max. 28 psi for flow from 2 to 35 gpm
 KKPRV100D: min. 28 psi / max. 60 psi for flow from 2 to 35 gpm

Description	Unit.	Code
ADJUST.RED 1"PRESS.REGULATOR	EA	KKPRV100C
1" PRESSURE REDUCER BLACK	EA	KKPRV100D

Pressure regulator



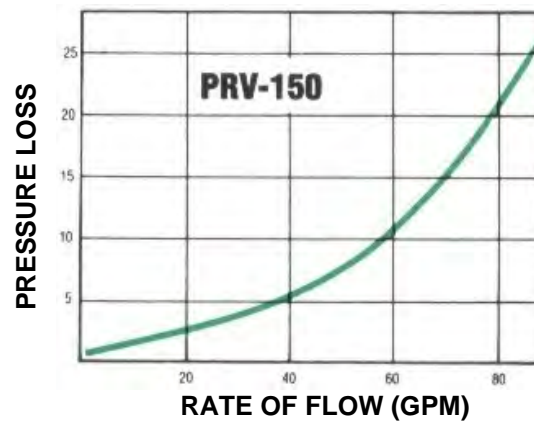
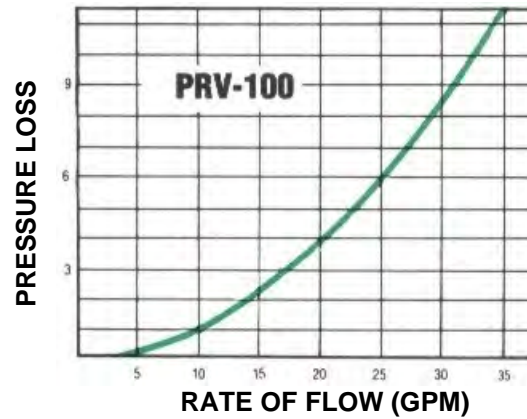
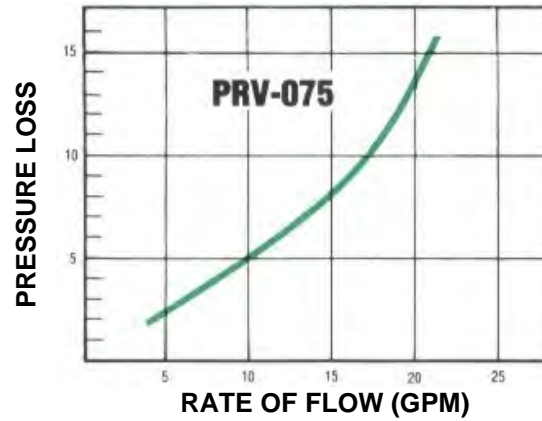
PRV-150 series

- Adjustable pressure regulator
- 1-1/2" FPT x 1-1/2" FPT
- Maximum inlet pressure: 150 psi
- Brass body

KKPRV150C: min. 14 psi / max. 28 psi for flow from 2 to 80 gpm
 KKPRV150D: min. 20 psi / max. 50 psi for flow from 2 to 80 gpm

Description	Unit.	Code
1-1/2" RED SPRING REGULATOR	EA	KKPRV150C
1-1/2" BLACK SPRING REGULATOR	EA	KKPRV150D

Pressure regulator



Pressure regulator

PRV-.75 serie



Pressure regulator for flow from 3.5 to 20 GPM.
3/4" FPT inlet, 3/4" MPT outlet.

Description	Unit.	Code
PRESSURE REGULATOR 3/4"- 9PSI	CH	KKN109
PRESSURE REGULATOR 3/4"-12psi	CH	KKN112
PRESSURE REGULATOR 3/4"-15PSI	CH	KKN115
PRESSURE REGULATOR 3/4"-35PSI	CH	KKN135

PRV-1.5 serie



Pressure regulator for flow from 7 to 40 GPM.
1-1/2" MPT inlet and outlet.

Description	Unit.	Code
PRESSURE REGULATOR 1.5"-20PSI	CH	KKN220
PRESSURE REGULATOR 1-1/2-50psi	CH	KKN250

PRV-2 (4) serie



Pressure regulator for flow from 15 to 80 GPM.
2" FPT inlet and outlet.

Description	Unit.	Code
PRESSURE REGULATOR 2"-35PSI	CH	KKN435

Pressure regulator

Procedure for choosing a Netafim pressure regulator

STEP 1: Determine flow and pressure of irrigation system

The choice of a pressure regulator is determined by the required operating pressure and by the flow of the irrigation system.

STEP 2: Choose the pressure regulator's diameter

12 to 16 gpm per spring is considered a medium flow.

STEP 3: Choose spring (color) according to pressure required

Take into consideration pressure losses in irrigation system after the regulator.

PRESSURE REGULATOR

MODEL	CATALOG #	PRESSURE OUTPUT		FLOW RANGE GPM
		PSI	M	
3/4" Low Flow	31-PRV-.75-LF	15	11	0.5-5
3/4" (1 spring)	31-PRV-.75-06	9	6	3.5-20
	31-PRV-.75-11	15	11	
	31-PRV-.75-14	20	14	
	31-PRV-.75-18	25	18	
1 1/2" (2 springs)	31-PRV-1.5-06	9	6	7-40
	31-PRV-1.5-11	15	11	
	31-PRV-1.5-14	20	14	
	31-PRV-1.5-18	25	18	
2" x 4 (4 springs)	31-PRV-2 (4)-06	9	6	15-80
	31-PRV-2 (4)-11	15	11	
	31-PRV-2 (4)-14	20	14	
	31-PRV-2 (4)-18	25	18	
2" x 6 (6 springs)	31-PRV-2 (6)-06	9	6	25-120
	31-PRV-2 (6)-11	15	11	
	31-PRV-2 (6)-14	20	14	
	31-PRV-2 (6)-18	25	18	
3" x 10 (10 springs)	31-PRV-3 (10)-06	9	6	35-200
	31-PRV-3 (10)-11	15	11	
	31-PRV-3 (10)-14	20	14	
	31-PRV-3 (10)-18	25	18	

PRESSURE REGULATOR SPRINGS

SPRING COLOR	NOMINAL OUTLET PRESSURE	
	PSI	M
Black	9	6
Purple	12	8
Blue	15	11
Stainless	20	14
Yellow	25	18
Red	35	25
White	43	30
Orange	50	35
Brown	57	40
Green	65	45

*Head loss at maximum flow rate is high, and depends on adequate inlet pressure (see graph 2).

Any outlet pressure from 9 to 65 psi can be factory set.

Pressure regulator

Procedure for choosing a Netafim pressure regulator

NOTE 1

Graphs 1, 2 and 3 are used to evaluate pressure losses relatively to flow variation.

NOTE 2

Pressure adjustment spacers are available.

To increase pressure to level required by the irrigation system.

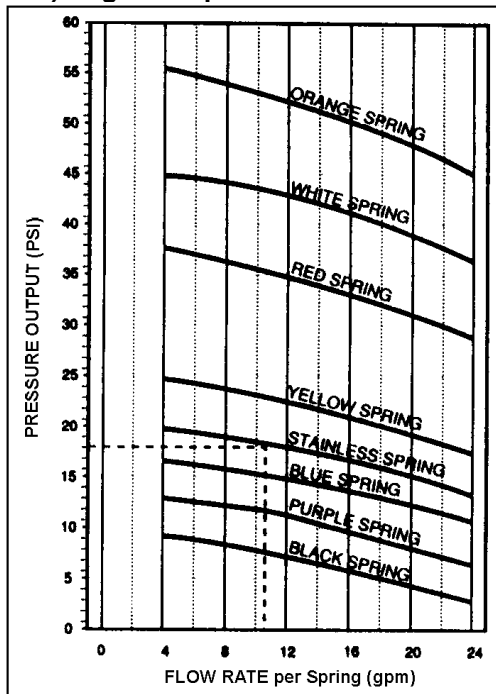
Each spacer will raise pressure by 2 psi.

NOTE 3

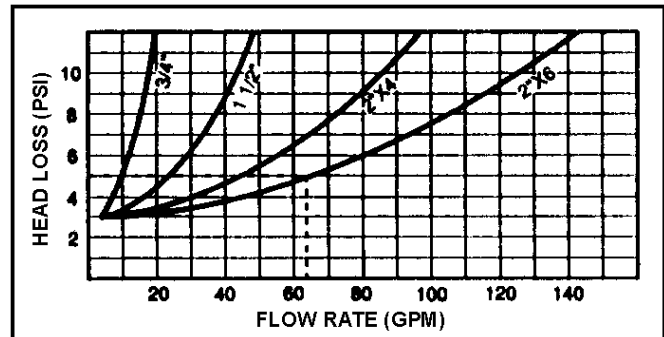
At low flow rate (0.5 to 5 gpm) it is required to use a Netafim 3/4" pressure regulator.

This model is not in stock. It is preferable to use Bernad 3/4" model.

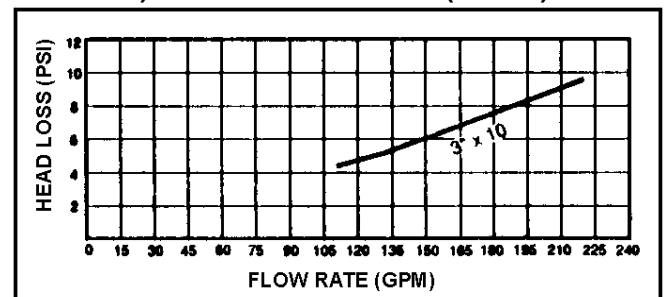
1) Regulated pressure vs flow rate



2) Head loss vs flow rate



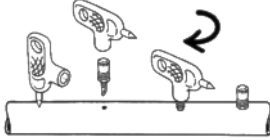
3) Head loss vs flow rate (3" x 10')





Olson Ojet

Installation tool



"O-Jet" tool.

Description	Unit.	Code
KEY PUNCH & JET CAP REMOVER	CH	LP01

Micro-irrigation

Nozzle grommet



Insert only (for 27/64" hole).

Description	Unit.	Code
INSERT RUBBER 3/8"	CH	LV120

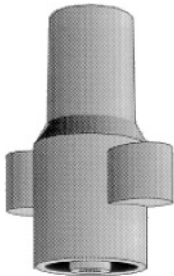
Leak prevention device



Leak prevention device. Use low pressure device # LN06-1 (black/ opens between 15 and 20 psi) with sprinkling and misting nozzles; use high pressure device # LN06H (blue/ opens between 55 and 60 psi) with fog nozzles.

Description	Unit.	Code
DAN LPD LOW PRESSURE	CH	LN06-1
DAN LPD HIGH PRESSURE	CH	LN06H

Antimist



The antimist is used to produce large uniform droplets. This prevents misting and promotes efficient application of water to your targeted area. Use the same color as the nozzle.

Description	Unit.	Code
DAN ANTIMIST GREEN	CH	LN40
DAN ANTIMIST ORANGE	CH	LN41
DAN ANTIMIST YELLOW	CH	LN42
DAN ANTIMIST BLUE	CH	LN43

Micro-irrigation



Assembled nozzle

Bridge with nozzle and mist spreader.
 Use with #LN06-1 parts.

Description	Unit.	Code
BRIDGE LPD/GRN.GR./GRN.A.M/NOZ	CH	LN44
BRIDGE LPD/YEL.FLT/YEL.A.M/NOZ	CH	LN45
BRIDGE LPD/YEL.FLT/GRN.A.M/NOZ	CH	LN46
BRIDGE LPD/YEL.FLT/ORA.A.M/NOZ	CH	LN47
BRIDGE LPD/GRN GR./YEL.A.M.NOZ	CH	LN48
BRIDGE LPD BLACK RD/BLUE AM/NO	CH	LN51
BRIDGE LPD BLACK RD /YEL.AM/NO	CH	LN52
BRIDGE LPD BLACK RD /GRN AM/NO	CH	LN53
BRIDGE LPD/BLACK RD/OR.AM&NOZ.	CH	LN54



Bridge

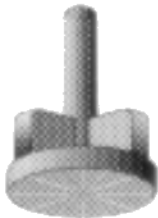
Description	Unit.	Code
DAN BRIDGE	CH	LN03



Upside down spinner

Description	Unit.	Code
DAN KIWI GREEN	CH	LN13

Micro-irrigation



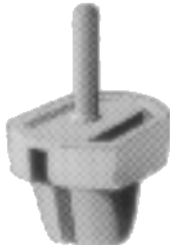
Flat spreader

Description	Unit.	Code
DAN MISTING VIOLET 6-7"DIAM.	CH	LN02
DAN FLAT YELLOW	CH	LN12



Round spinner

Description	Unit.	Code
DAN ROUND SPINNER BLACK	CH	LN14



Oblong spinner

Description	Unit.	Code
ORANGE OBLONG SPINNER	CH	LN16



Nozzle

Description	Unit.	Code
DAN NOZZLE VIOLET 9.5GPH AT 30	CH	LN04
DAN NOZZLE GRAY 18.5GPH AT 30	CH	LN05

Micro-irrigation

DAN GREEN NOZZLE	CH	LN08
DAN NOZZLE ORANGE	CH	LN09
DAN NOZZLE YELLOW	CH	LN10
BLUE NOZZLE .075"	CH	LN11



Assembled nozzle

Description	Unit.	Code
DAN GREENSPIN ORANGE NOZ.& LPD	CH	LN73
DAN GREENSPIN ORANGE NOZ.	CH	LN73-A



"Super-mister"

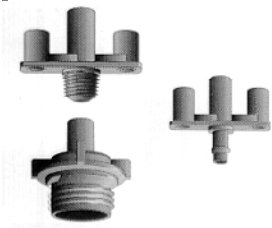
Description	Unit.	Code
BRIDGELESS MISTER GREEN NOZ/LP	CH	LN75
FOGGER WIDE ANGLE GREEN NOZ.	CH	LN75-A



"Super fogger"

Description	Unit.	Code
2-WAY SUPER FOGGER - 3.3GPH	CH	LN87

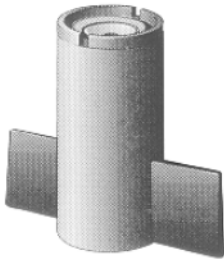
Micro-irrigation



Adapter

Adaptor for nozzle (use green bit for #LN17 adapter).

Description	Unit.	Code
DAN BUTTERFLY CONE THREADED	CH	LN01
1/2" MALE ADAPTOR BASE	CH	LN07
DAN BUTTERFLY BARB	CH	LN17
MOUNT THREAD 3/16"	CH	LN35



Fog nozzle

Fog nozzle. Minimum pressure of 60 psi. Use with blue leak prevention device # LN06H.
 (Substitute of LN30, see LN37 for the cross).

Description	Unit.	Code
DAN FOG BLUE 1.8GPH AT 30PSI	CH	LN21
ORANGE DAN-FOGGER 3.6gph	CH	LN23



Mist cross

Description	Unit.	Code
4-WAY CROSS FOR FOGGER	CH	LN30

Micro-irrigation


Fogger

Low pressure (55 psi) fog system using single nozzle. Filtration required, 120 mesh minimum.

USE	NOZZLE	FLOW	INSTALLATION	NOZZLES SPACING	LINES SPACING	HEIGHT
Cooling	LN21 (blue)	1.6 gph	Inclined upward at 45°	20"	10'	---
Propagating	LN21 (blue)	1.6 gph	Down	24"	24"	48"
	LN23 (orange)	3.2 gph	Down	30"	30"	48"
	LN26 (red)	5.2 gph	Down	36"	36"	48"






Fogger nozzle cross holder LN30.

Fog system using nozzles on crosses. 140 mesh filtration required; 65 psi working pressure.

USE	INSTALLATION
COOLING	Foggers should be placed 6'-10' apart*. Place lines as high as possible above the crop or near intake windows. Normal cycle time is 1-6 seconds every 1-2 minutes.
*	<p>Overhead view</p> 
PROPAGATING	Install nozzles from 30" to 60" above crop, spaced at each 36" on the line by altering angle*. Cover tables from 5' to 6' wide.

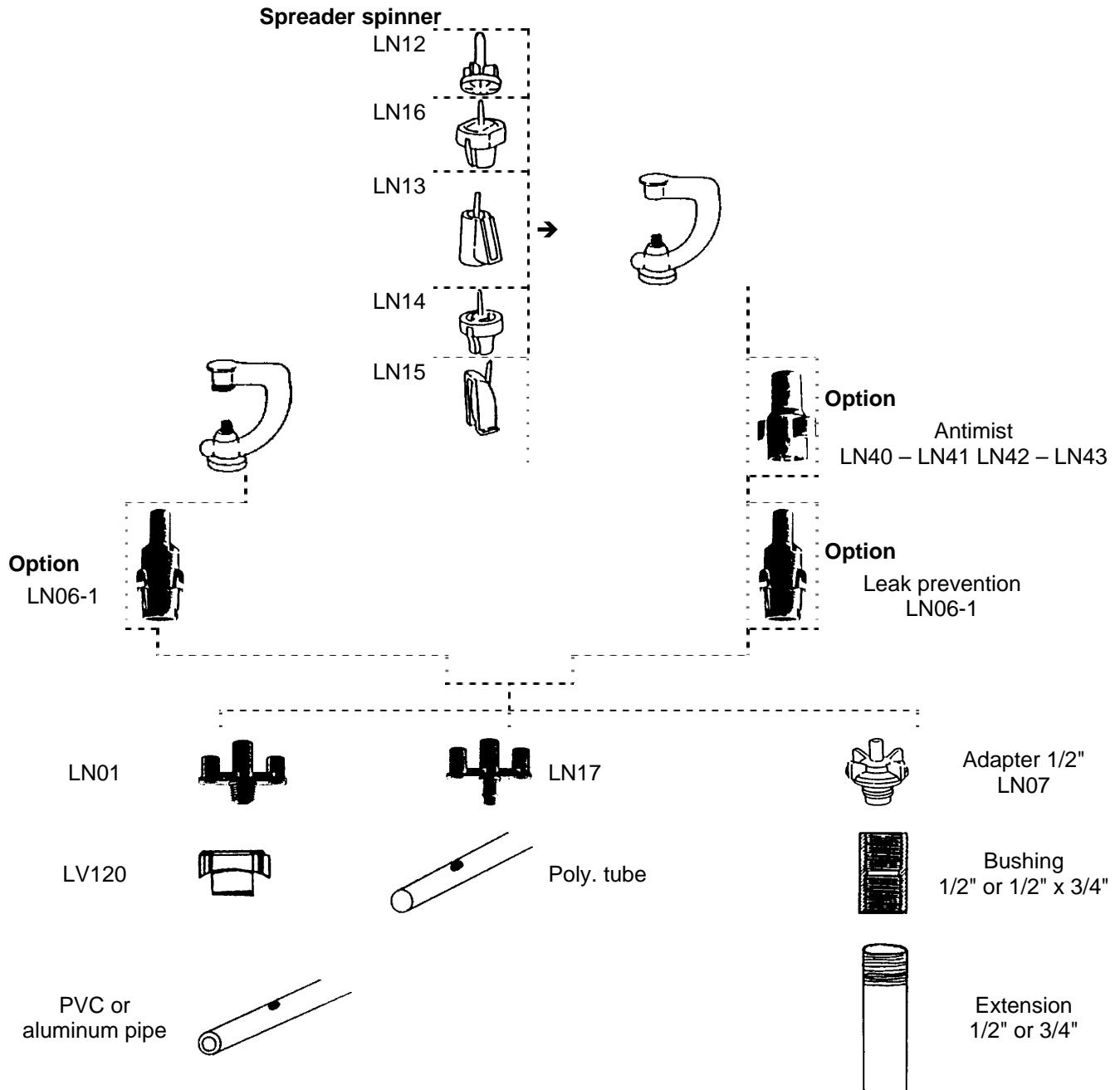
Micro-irrigation

Sprinkler

SPREADER SPINNER	STRIP	NOZZLE	HT.	STRIP %	COEF.
"Y" LN12 Yellow flat 	4'	Green	10"	63.6	95
	5'	Green	10"	78.2	94
	6'	Orange	10"	81.7	86
	8'	Blue	10"	84.5	89
"G" LN13 Green upside down 	8'	Orange	10"	82.8	91
	10'	Yellow	10"	90.5	91
	12'	Blue	10"	93.9	85
	14'	Blue	4'	73.4	96
	15'	Blue	4'	78.7	96
	16'	Blue	4'	83.9	96
	16'	Yellow	6'	79.4	96
	18'	Blue	4'	92.9	95
	18'	Blue	6'	86.8	97
	20'	Green	4'	94.6	82
	20'	Blue	6'	94.4	95
	22'	Orange	6'	97.9	89
"BR" LN14 Black round 	10'	Yellow	4'	79.3	93
	12'	Yellow	4'	92.2	91
	12'	Blue	6'	78.6	89
	14'	Orange	10"	92.6	84
	14'	Blue	6'	89.3	88
	15'	Blue	6'	93.9	87
	16'	Orange	10"	93.4	89
	18'	Blue	10"	91.	82
"BSW" LN15 Black single wing 	15'	Orange	10"	88.3	89
"O" LN16 Oblond orange 	20'	Orange	10"	81.1	95
	22'	Orange	10"	88.5	95
	24'	Orange	10"	94.6	93

Micro-irrigation

Sprinkler



Micro-irrigation

NOZZLES (SUPPLIER #)	CODE HARNOIS	OPTIMUM PRESSURE 30 PSI		Max. length of nozzle spaced at 3' (max. loss 2 PSI or V < 5'/sec.)	
		PRESSURE	FLOW GPH	PVC 1/2" SCH. 40	AL. 1 1/4"
VIOLET 0.032" (#77-930504)	LN04	15	6.7	105'	300'
		20	7.8	90'	261'
		25	8.7	81'	240'
		30	9.5	75'	210'
		40	11.0	63'	192'
BROWN 0.035" (#77-930500)	N/I	15	8.2	87'	242'
		20	9.5	75'	210'
		25	10.7	66'	195'
		30	11.7	60'	189'
		40	13.5	54'	177'
GREY 0.044" (#77-930509)	LN05	15	13.4	54'	177'
		20	15.5	45'	165'
		25	17.3	39'	156'
		30	19.0	36'	150'
		40	21.9	36'	138'
GREEN 0.055" (#77-930502)	LN08	15	20.0	36'	144'
		20	23.0	33'	132'
		25	25.8	30'	126'
		30	28.2	27'	117'
		40	32.6	24'	105'
ORANGE 0.060" (#77-930505)	LN09	15	23.0	33'	132'
		20	26.6	30'	120'
		25	29.7	27'	111'
		30	32.6	24'	105'
		40	37.6	21'	93'
YELLOW 0.067" (#77-930506)	LN10	15	30.0	27'	111'
		20	35.0	24'	99'
		25	39.1	21'	90'
		30	42.9	18'	84'
		40	49.5	15'	72'
BLUE 0.075" (#77-930503)	LN11	15	38.0	21'	93'
		20	43.9	18'	81'
		25	49.0	18'	72'
		30	53.7	15'	66'
		40	62.0	12'	57'
IVORY 0.079" (#77-930501)	N/I	15	45.1	18'	78'
		20	52.1	15'	69'
		25	58.2	12'	63'
		30	63.8	12'	57'
		40	73.6	12'	51'
RED 0.087" (#77-930507)	N/I	15	49.3	18'	72'
		20	56.9	12'	63'
		25	63.7	12'	57'
		30	69.7	12'	54'
		40	80.5	9'	48'
BLACK 0.094" (#77-930508)	N/I	15	57.6	12'	63'
		20	66.5	12'	54'
		25	74.3	12'	51'
		30	81.4	9'	48'
		40	94.0	9'	45'

Micro-irrigation

Suggestions for sprinkling

Bench width in feet	UPRIGHT			INVERTED 2'			INVERTED 4'			INVERTED 6'		
	Spreader	Antimist	Leak prevention	Spreader	Antimist	Leak prevention	Spreader	Antimist	Leak prevention	Spreader	Antimist	Leak prevention
4	LN12	LN40	LN06-1	LN12	LN40	LN06-1						
5	LN12	LN40	LN06-1	LN12	LN41	LN06-1						
6	LN12	LN41	LN06-1	LN12	LN41	LN06-1						
7	LN13	LN41	LN06-1	LN12	LN41	LN06-1						
8	LN13	LN41	LN06-1				LN12	LN41	LN06-1	LN14	LN40	LN06-1
10	LN13	LN40	LN06-1				LN14	LN41	LN06-1	LN14	LN41	LN06-1
12	LN15	LN41	LN06-1				LN14	LN41	LN06-1	LN14	LN41	LN06-1
14	LN15	LN41	LN06-1				LN13	LN41	LN06-1	LN13	LN41	LN06-1
15	LN15	LN41	LN06-1				LN13	LN41	LN06-1	LN13	LN41	LN06-1
16	LN15	LN41	LN06-1				LN13	LN41	LN06-1	LN13	LN41	LN06-1

MISTING SUGGESTIONS		
Bench	Antimist	Leak prevention
3	---	LN06-1
4	---	LN06-1

HUMIDIFYING SUGGESTIONS	Nozzle	Cross	Leak prevention
Indoor light fog	4 x LN21	LN30	LN06H
Indoor medium fog	4 x LN23	LN30	LN06H
Open-air heavy fog	4 x LN26	LN30	LN06H

COOLING SUGGESTIONS	@ 60 PSI	Nozzle	Leak prevention
Light fog	1.6 gph	LN21	LN06H
Medium fog	3.2 gph	LN23	LN06H
Heavy fog	5.2 gph	LN26	LN06H

Micro-irrigation

Nozzles

FOR GREENHOUSE 25' AND 27'

- LN06-1 – Leak prevention device
- LN41 – Anti-mist device orange
- LN03 – Bridge for mini-sprinkler
- LN09 – Orange nozzle
- LN14 – Black round spinner

30 PSI = 19. GPH

40 PSI = 20.9 GPH

FOR GREENHOUSE 30'

- LN06-1 – Leak prevention device
- LN42 – Anti-mist device yellow
- LN03 – Bridge for mini-sprinkler
- LN10 – Yellow nozzle
- LN14 – Black round spinner






30 PSI = 24.4 GPH

40 PSI = 27. GPH

Note: - We can also invert black nozzle
- Nozzle with anti-mist device, the flow is lesser. Refer to the chart.

Micro-irrigation

Spinner performance

				THROW DIAMETER IN FEET AT 8" HEIGHT						
										
ANTI-MIST COLOR	NOZZLE COLOR	PRESSURE (PSI)	FLOW (GPH)	BLACK SINGLE WING	BLACK ROUND	ORANGE OBLONG	INSECT PROOF	GREEN "KIWI HEIGHT"		
								2 FT	4 FT	6 FT
	VIOLET 0.032"	15	6.7	13.8	15.5	---	18.5	15.5	17.2	18.9
		20	7.8	14.8	16.2	---	18.5	16.2	17.8	19.4
		25	8.7	16.8	17.6	---	18.9	17.6	19.3	21.0
		30	9.5	19.0	19.0	---	19.4	19.0	20.8	22.5
		40	11.0	19.6	---	---	---	20.0	22.8	22.8
	BROWN 0.035"	15	8.2	15.5	15.5	---	20.8	15.5	18.9	20.7
		20	9.5	17.8	16.2	---	21.5	16.2	19.4	21.0
		25	10.7	18.5	17.6	---	22.1	17.6	20.9	22.8
		30	11.7	19.2	19.0	---	22.6	19.0	22.4	24.4
		40	13.5	19.6	---	---	---	20.0	22.8	22.8
	GREY 0.044"	15	13.4	18.9	---	---	20.8	17.2	22.4	24.1
		20	15.5	21.0	---	---	21.5	17.8	24.3	24.3
		25	17.3	22.5	18.4	---	22.9	19.3	25.2	26.0
		30	19.0	24.0	19.0	---	24.2	20.8	26.0	27.7
		40	21.9	24.6	---	---	---	22.8	26.0	27.7
	GREEN 0.055"	15	20.0	22.4	18.9	---	21.5	18.9	22.4	25.8
		20	23.0	24.3	19.4	26.9	21.6	19.4	24.3	26.9
		25	25.8	25.0	20.1	28.2	22.0	21.8	25.2	28.8
		30	26.2	25.6	20.8	30.5	24.2	24.2	26.0	27.7
		40	32.6	27.7	---	30.9	---	24.2	27.4	27.7
GREEN 0.035"	GREEN 0.055"	20	9.4	---	9.2	---	9.2	---	---	---
		25	9.9	---	11.5	---	10.4	---	---	---
		30	10.9	---	13.8	---	11.5	---	---	---
		40	11.8	---	14.0	---	12.9	---	---	---
LN40		ORANGE 0.060"	15	23.0	22.4	---	---	21.5	18.9	24.1
	20		26.6	24.3	20.7	27.5	21.5	19.4	24.3	27.6
	25		29.7	25.0	21.0	29.0	23.8	21.8	26.0	28.5
	30		32.6	25.8	21.9	30.5	26.0	24.2	27.7	29.4
	40		37.6	25.7	22.5	30.9	---	24.2	27.7	29.4
ORANGE 0.047"	ORANGE 0.060"	20	15.7	---	15.4	---	13.8	---	---	---
		25	17.3	---	16.7	---	15.9	---	---	---
		30	19.0	---	18.0	---	16.0	---	---	---
		40	20.9	---	18.0	---	19.4	---	---	---
LN41		YELLOW 0.067"	15	30.0	22.4	---	---	---	18.9	24.1
	20		35.0	24.3	---	29.1	---	19.4	25.9	29.3
	25		39.1	25.0	---	29.8	---	21.0	27.7	30.2
	30		42.9	25.8	---	30.5	---	22.5	29.4	31.2
	40		49.5	27.7	---	30.9	---	24.2	29.4	31.2
YELLOW 0.055"	YELLOW 0.067"	20	20.3	---	15.4	---	15.4	---	---	---
		25	22.3	---	16.7	---	17.4	---	---	---
		30	24.4	---	18.0	---	19.4	---	---	---
		40	27.0	---	18.5	---	20.0	---	---	---
LN42		BLUE 0.075"	15	38.0	24.1	---	---	---	---	---
	20		43.8	25.9	---	30.8	---	---	---	---
	25		49.0	26.6	---	31.5	---	---	---	---
	30		53.7	27.2	---	32.1	---	---	---	---
	40		82.0	29.2	---	32.5	---	---	---	---
BLUE 0.060"	BLUE 0.075"	20	27.5	---	15.4	---	16.9	---	---	---
		25	29.7	---	17.7	---	19.0	---	---	---
		30	32.6	---	19.7	---	21.0	---	---	---
		40	35.5	---	21.5	---	21.5	---	---	---
LN43		IVORY 0.079"	15	45.1	25.8	---	---	---	---	---
	20		52.1	25.9	---	30.8	---	---	---	---
	25		59.2	27.7	---	31.5	---	---	---	---
	30		63.8	29.4	---	32.1	---	---	---	---
	40		73.6	30.7	---	32.5	---	---	---	---
	RED 0.087"	15	49.3	27.8	---	---	---	---	---	---
		20	58.9	29.1	---	30.8	---	---	---	---
		25	63.7	29.8	---	32.3	---	---	---	---
		30	69.7	30.5	---	33.7	---	---	---	---
		40	80.5	30.7	---	34.1	---	---	---	---
	BLACK 0.094"	15	57.6	27.6	---	---	---	---	---	---
		20	66.5	30.8	---	32.4	---	---	---	---
		25	74.3	31.9	---	33.9	---	---	---	---
		30	81.4	32.9	---	35.3	---	---	---	---
		40	94.0	35.1	---	35.7	---	---	---	---

Micro-irrigation



Tool

Punch for tubing.

Description	Unit.	Code
PUNCH FOR BARB 3.2MM	CH	LN54P



Tube

Stabilizer tube, assembled.

Description	Unit.	Code
12" TUBE ASSEMBLY/STABILIZER	CH	LN60
DAN 18" TUBE ASS. C/W STAB	CH	LN61
24" TUBE ASSEMBLY/STABILIZER	CH	LN62
DAN 36" TUBE ASS. C/W STAB	CH	LN64
48" TUBE ASSY./STABILIZER	CH	LN65

Micro tubing for extension

Description	Unit.	Code
PVC MICRO TUBING 4/7	PLS	LN96-1

Micro-irrigation



Connector for tube

Description	Unit.	Code
BARB CONNECTOR FOR TUBE 4/7	CH	LN96

Micro-irrigation

Watering

BENCH CROP + OVERHEAD WATERING

Always: Anti-Mist – Nozzle – Spreader – 30 PSI – Spacing 36"

	BENCH WIDTH						
	4'	5'	6'	7'	8'	10'	12'
Nozzle kit	LN46 GR-GR-Y	LN47 OR-OR-Y	LN47 OR-OR-Y	LN47 OR-OR-Y	LN53 GR-GR-B	LN53 GR-GR-B	LN53 GR-GR-B
Height	2'	2'	2'	2'	4'	6'	6'

Nozzle and anti-mist

GR = green
OR = orange
YE = yellow
BL = blue

Spreader spinner

Y = yellow
B = black
GK = green kiwi

BENCH CROP – UPRIGHT SPRINKLER

MPT spigot – Anti-Mist – Nozzle – Spreader – 35 PSI – Spacing 36"

	BENCH WIDTH						
	4'	5'	6'	7'	8'	10'	12'
Nozzle kit	LN46 GR-GR-Y	LN46 GR-GR-Y	LN47 OR-OR-Y	LN47 OR-OR-Y	LN49 OR-OR-GK	LN49 OR-OR-GK	
Height	12"	12"	12"	12"	12"	12"	

COLD FRAME – IRRIGATION

35 PSI – Anti-Mist – Nozzle – Spreader

	GREENHOUSE WIDTH						
	14'-15'-16'	18'-20'-22'	24'-25'-26'	27'-28'	30'-32'	35'	40'
Nozzle kit	LN48 YE-YE-GK	LN50 BL-BL-GK	LN52 YE-YE-B	LN52 YE-YE-B	LN51 BL-BL-B	LN50 BL-BL-GK	LN50 BL-BL-GK
Spacing	36"	36"	36"	36"	40"	36"	36"
Height	48"	60"	60"	72"	72"	48"	60"
Number of line	1	1	2	2	2	2	2
Spacing between lines			13'	14'	15'	17'	20'

Pipe sizing table according to the length
Gallons per minute per line

Nozzles	LINE LENGTH						
	25	50	75	100	125	150	200
GR	620 1.5	620 3	620 4.5	690 6	690 7.5	3/4 9	1 12
OR	620 2.7	640 5.4	3/4 8.1	1 10.8	1-1/4 13.5	1-1/4 16.2	1-1/4 21.6
YE	690 3.7	3/4 7.4	1 11.1	1-1/4 14.8	C-1 2x9.3	C1 2x11.1	C1-1/4 2x14.8
BL	3/4 5	1 10	1-1/4 15	C1 2x10	C1-1/4 2x12.5	C1-1/4 2x15	CC1 3x10

Flow by nozzle

GR – green – 11 gph
OR – orange – 19 gph
YE – yellow – 25 gph
BL – black – 35 gph

Overhead watering



SpinNet model

Description	Unit.	Code
SPINET RED MIST RED BODY BLUE	CH	LMN01
SPINET RED MIST RED BODY GREY	CH	LMN02



Micro tubing

Description	Unit.	Code
24"HANGING ASSEMBLY FOR SPRINK	CH	LMN24A
36"HANGING ASSEMBLY FOR SPRINK	CH	LMN36
48"HANGING ASSEMBLY FOR SPRINK	CH	LMN48



Check valve

Description	Unit.	Code
CHECK VALVE PURPLE PIN 28PSI	CH	LMN02-A

Overhead watering



CoolNet nozzle

CoolNet fogger 4 nozzles
5 liters per hour at 1.32 gph at 60 psi

>>> UNTIL SUPPLIES LAST

Description	Unit.	Code
COOLNET 5L/H WITH CROSS	CH	LMN0

Fog



Parts

Description	Unit.	Code
BRASS NOZZLE W/ S.S ORIFICE	CH	LM005
ANTI-DRIP CHECK VALVE	CH	LM007

Overhead Aquaboom



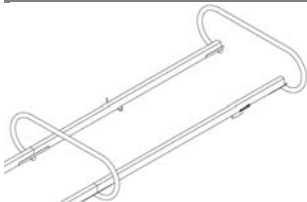
Overhead Aquaboom

Motorized unit for watering boom. Included features: aluminum frame, 2-1/2" rubber-coated wheels, 1" water-hose inlet with 110 volts electric valve, 0-100 PSI pressure gage, 1" ball valve on each of the 2 boom outlets (adaptable to 3/4 or 1"), +/- 6" height adjustment of boom outlet.

XL0070-1: Fixed speed model, 18 feet per minute.
 Motor: 110VAC, 1/3 HP, 1 phase, 4.4 Amps.

XL0080: Variable speed model :
 -Speed control from 8 to 38 ft/min.
 -Manual start and automatic stop
 -One way or round way watering option
 -Ramp and water inlet flushing option.
 Motor 1/2 HP, 9.2 Amps, with variable frequency drive;
 1 phase, 110VAC input.

Description	Unit.	Code
OVERHEAD AQUABOOM FIX.SPEED	CH	XL0070-1
VS OVERHEAD AQUABOOM	CH	XL0080



Track

Overhead Aquaboom track for 10' or 12' support spacing, according to greenhouse.

Description	Unit.	Code
10' SUSPENDED AQUABOOM RAIL	PLS	3S340
12' SUSPENDED AQUABOOM RAIL	PLS	3S350

Overhead Aquaboom

Attachment kit

Hardware to attach an Aquaboom overhead track to the greenhouse structure.
 Choose kit according to the following chart:

	Structure			
Spacing	1-1/4" Stiffener	1-1/4" Square truss	Mini oval truss	Rectang. truss 1x2
10'	3S400	3S402	3S404	3S406
12'	3S401	3S403	3S405	3S407

Description	Unit.	Code
1.25"-T ATTACH KIT AQUAB 10'SP	PLS	3S400
1.25"-T ATTACH KIT AQUAB 12'SP	PLS	3S401
SQ-TRUSS ATTACH KIT AQUAB 10'S	PLS	3S402
SQ-TRUSS ATTACH KIT AQUAB 12'S	PLS	3S403
OV-TRUSS ATTACH KIT AQUAB 10'S	PLS	3S404
OV-TRUSS ATTACH KIT AQUAB 12'S	PLS	3S405
NG-TRUSS ATTACH KIT AQUAB 10'S	PLS	3S406
NG-TRUSS ATTACH KIT AQUAB 12'S	PLS	3S407



Limit switch stopper

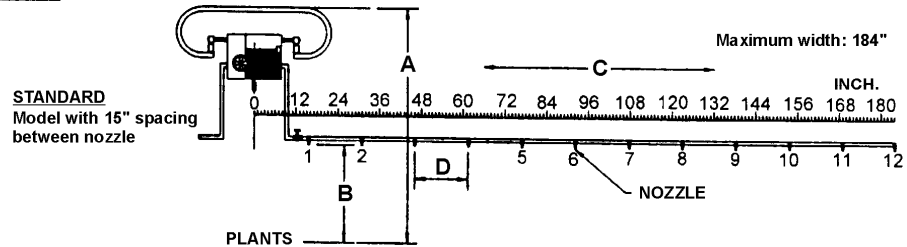
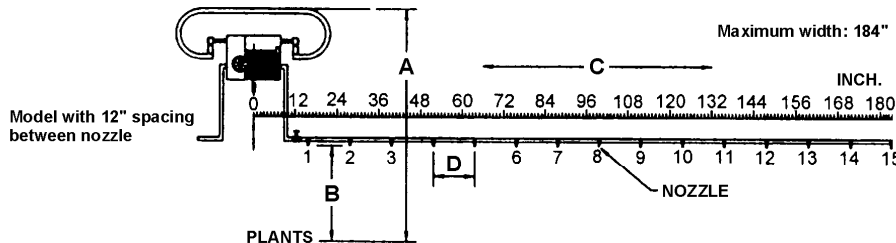
Allows you to modify the travel of the aquaboom by moving the limit switch (start and end travel). No tool necessary to modify the location of the limit switch.
 For overhead aquaboom only.

Description	Unit.	Code
LIMIT SWICTH STOPPER	CH	XL356-2

Overhead aquaboom

Work sheet

CUSTOMER NO.:	ORDER NO.:	SHIP TO:		
CUSTOMER:				
		TEL.:		
		SHIP DATE:	DATE	VIA
CONTACT:				
TEL.:	FAX.:			
Request date:	Quote required by:	REPRESENTATIVE:		



Greenhouse model: _____

Width: _____

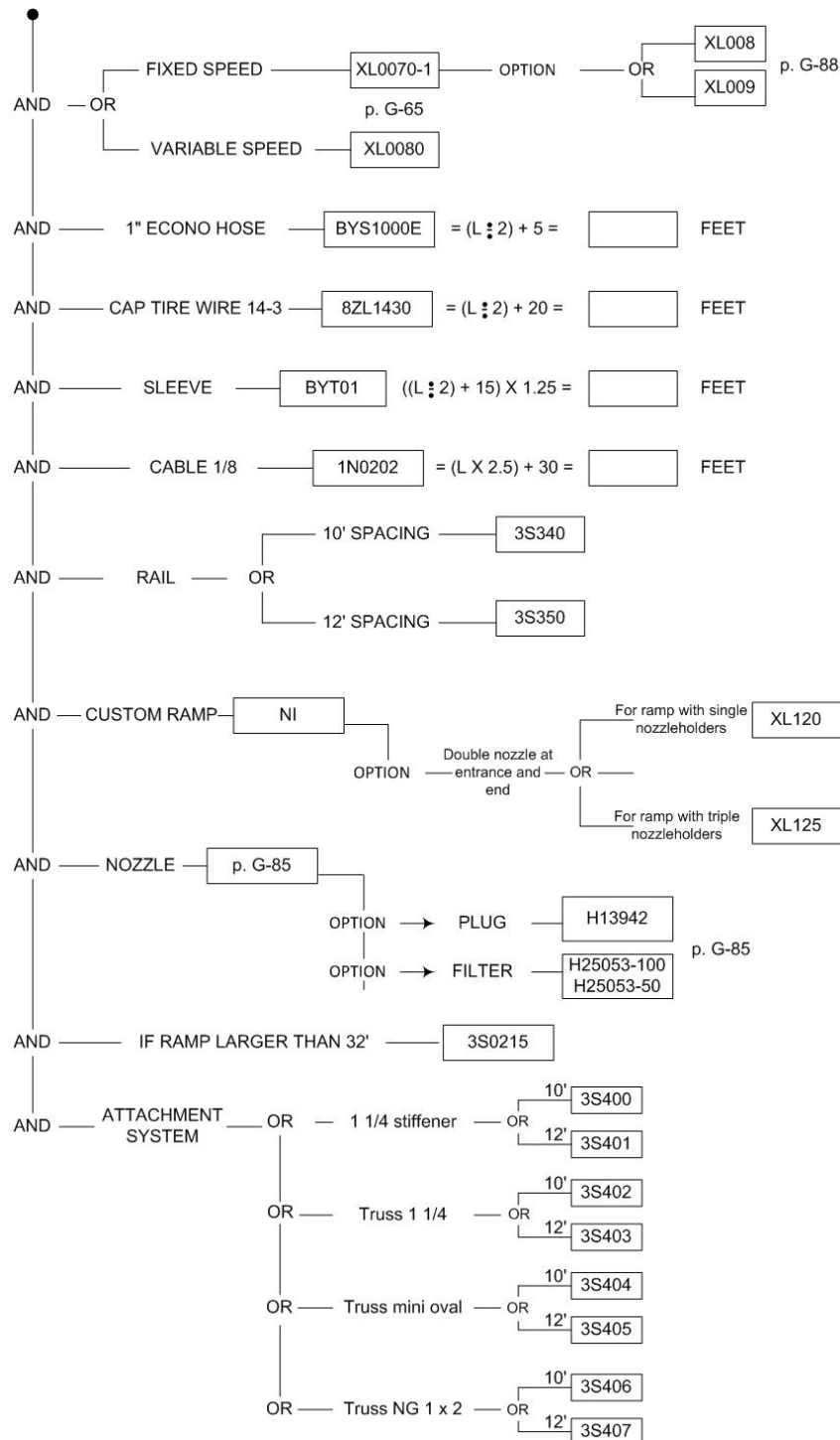
Length: _____ Maximum 300 feet

NOTE: FOR BOOMS WIDER THAN 184", CHECK FEASIBILITY

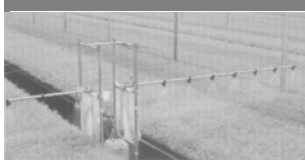
A	Height between plants and top of rail support	If nozzle spacing = 12" → "A" min. = 48-1/2" If nozzle spacing = 15" → "A" min. = 51-1/2"
B	Height between nozzles and plants	If nozzle spacing = 12" → "B" = 15" If nozzle spacing = 15" → "B" = 18"
C	Boom width each side (min. 104" - max. 184" standard)	Keep 6" free at the end of boom on each side. Draw a cut line on "C" scale.
D	Nozzles spacing	Real nozzle spacing could be slightly different from choice made. An adjustment will be made to fit boom width with number of nozzle holders.
E	Double swivel nozzle at boom entrance	Nozzles on double nozzle holders will be +/-2" lower than the others. The double swivel nozzle holder is fixed on a single nozzle holder. If a boom with triple nozzle holders is used, the entrance and/or end nozzle holder will be changed for a single one at the factory.
F	Double swivel nozzle at boom end	

Overhead aquaboom

Components listing



Ground Aquaboom



Ground Aquaboom

Motorized unit for watering boom. Included features: aluminum frame, 2-1/2" rubber-coated wheels, 1" water-hose inlet with 110 volts electric valve, 0-100 PSI pressure gage, 1" ball valve on each of the two boom outlets (adaptable to 3/4 and 1"), adjustable height of boom outlet between 13 and 60" above wheels.

XL1000: Fixed speed model, 18 feet per minute.

Motor: 110VAC, 1/3 HP, 1 phase, 4.4 Amps

(Replaces XL004-1, XL001-1, XL002-1 and XL001-ECO models)

XL1050: Variable speed model

-Speed control from 8 to 38 ft/min.

-Manual start and automatic stop

-One way or round way watering option

-Ramp and water inlet flushing option

Motor: 1/2 HP, 9.2 Amps, with variable frequency drive;
1 phase, 110VAC input.

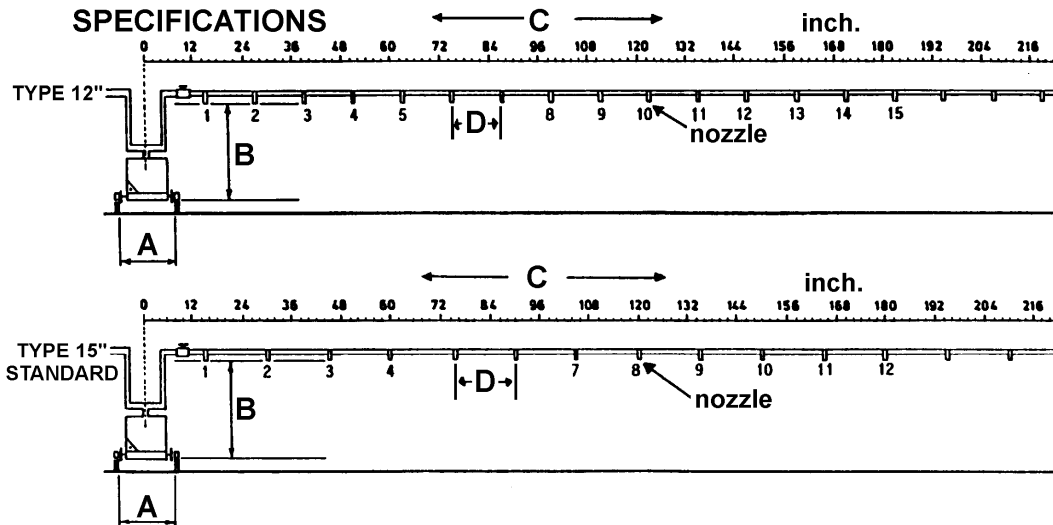
(Replaces XL0040, XL0010, XL0020 and XL0050 models)

Description	Unit.	Code
GROUND AQUABOOM 13/60 FIX.SPD.	CH	XL1000
GROUND AQUABOOM 13/60 VAR.SPD.	CH	XL1050

Ground aquaboom

Work sheet

CUSTOMER NO.:	ORDER NO.:	SHIP TO:		
CUSTOMER:				
		TEL.:		
		SHIP DATE:	DATE	VIA
CONTACT:				
TEL.:	FAX.:			
Request date:	Quote required by:	REPRESENTATIVE:		



Greenhouse model: _____

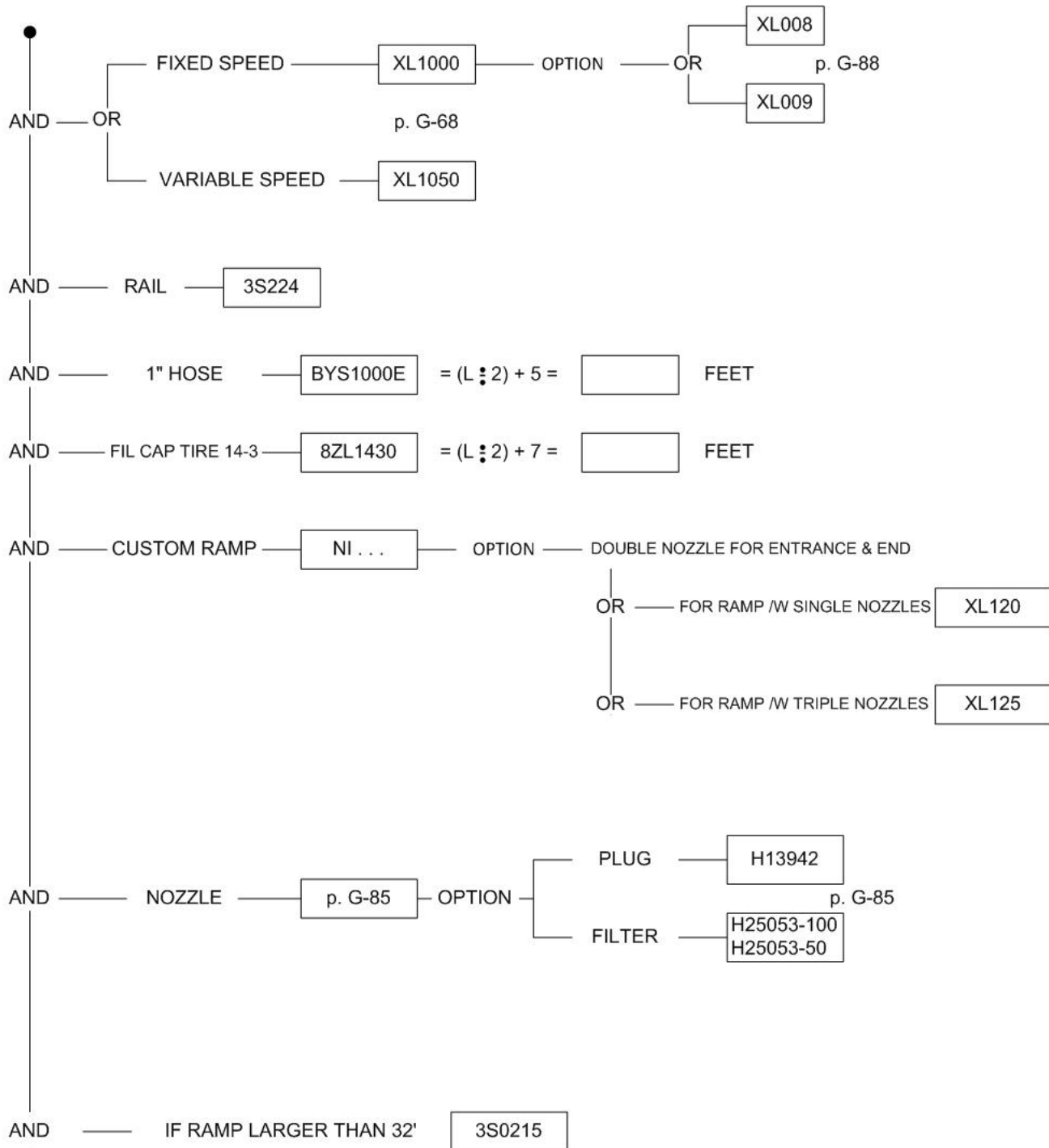
Width: _____

Length: _____ Maximum 150 feet

A	Aisle width (min. 18" – max. 24")	Standards width 24"
B	Height between nozzles and plants	If nozzle spacing = 12" → "B" = 15" If nozzle spacing = 15" → "B" = 18"
C	Boom width each side (if wider than 184", add 3S0215) (min. 104" - max. 184" standard)	Keep 6" free at the end of boom on each side. Draw a cut line on "C" scale.
D	Nozzles spacing	Real nozzle spacing could be slightly different from choice made. An adjustment will be made to fit boom width with number of nozzle holders.
E	Double swivel nozzle at boom entrance	Nozzles on double nozzle holders will be +/-2" lower than the others. The double swivel nozzle holder is fixed on a single nozzle holder. If a boom with triple nozzle holders is used, the entrance and/or end nozzle holder will be changed for a single one at the factory.
F	Double swivel nozzle at boom end	

Ground aquaboom

Components listing



Ground Aquaboom track



Ground track

Aquaboom tracks for on ground installation. 1-1/4" square tube galvanized steel.
 Track 24" apart, 12" high support every 6'.
 (For XL1000 - XL1050)

Description	Unit.	Code
RAIL AQUABOOM 24" LAR <= 150' LG	PLS	3S224

Removable stopper

Description	Unit.	Code
LIMIT SWICTH STOPPER START	CH	XL376
LIMIT SWICTH STOPPER END	CH	XL377

Aquaboom (parts)

Replacement parts

Replacement parts for Aquaboom.

1R0501405 : Replacement motor for variable speed overhead aquaboom

Description	Unit.	Code
MOTOR BLUE LINE 1/2HP 208V 3PH	CH	1R0501405
7" RAIL UNION	CH	XL325

Kit for irrigation



Valve on mainline 3/4"

The 3XKIT01 includes:
CK032
CK288
SB412007

Description	Unit.	Code
VALVE ON MAINLINE 3/4"	CH	3XKIT01



Valve on mainline 1"

The 3XKIT02 includes:
CK033
CK289
SB412010

Description	Unit.	Code
VALVE ON MAINLINE 1"	CH	3XKIT02



Valve on secondary line 3/4"

The 3XKIT03 includes:
CK032
CK092
CK202
CK288
SB412007

Description	Unit.	Code
VALVE ON LINE 3/4"	CH	3XKIT03

Kit for irrigation



Valve on secondary line 1"x3/4"

The 3XKIT04 includes:
 CK032
 CK202
 CK288
 CK289
 CK541
 SB412007

Description	Unit.	Code
VALVE ON LINE 1"x3/4"	CH	3XKIT04



Valve on secondary line 1"x1"

The 3XKIT05 includes:
 CK033
 CK093
 CK203
 CK289
 SB412010

Description	Unit.	Code
VALVE ON LINE 1"X 1"	CH	3XKIT05



Valve on secondary line 3/4"x1/2"

The 3XKIT06 includes:
 CK031
 CK201
 CK286
 CK288
 CK540
 SB412005

Description	Unit.	Code
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Kit for irrigation

VALVE ON LINE 3/4"X 1/2"	CH	3XKIT06
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Valve on secondary line 1"x1/2"

The 3XKIT07 includes:
 CK031
 CK201
 CK286
 CK289
 CK542
 SB412005

Description	Unit.	Code
VALVE ON LINE 1"X 1/2"	CH	3XKIT07



Adding elect. valve 1"

The 3XKIT08 includes:
 CF210020
 K557200A
 KF004

Description	Unit.	Code
ADD FOR ELECT.VALVE 1"	CH	3XKIT08



Adding elect. valve 3/4"

The 3XKIT09 includes:
 CF207020
 CF439131
 K557200A
 KF004

Description	Unit.	Code
ADD FOR ELECT.VALVE 3/4"	CH	3XKIT09

Kit for irrigation



Adding elect. valve 3/4" low flow

The 3XKIT10 includes:
 CF207020
 K4DV01
 KF004

Description	Unit.	Code
ADD FOR ELECT.VALVE 3/4"LOW FL	CH	3XKIT10



Adding regulator 3/4"

The 3XKIT11 includes:
 CF207020
 CF405007
 CF430007
 CF439098
 Note: Regulator and pressure gauge not included

Description	Unit.	Code
ADD FOR REGULATOR 3/4"	CH	3XKIT11



Adding regulator 3/4" on pipe 1"

The 3XKIT13 includes:
 CF207020
 CF405007
 CF430010
 CF439098
 CF439131
 Note: Regulator and pressure gauge not included

Description	Unit.	Code
ADD REGULATOR 3/4"ON TUBING 1"	CH	3XKIT13

Kit for irrigation



Adding filter 3/4"

The 3XKIT14 includes:
 CF430007
 KM390-13

Description	Unit.	Code
ADD FILTER 3/4"	CH	3XKIT14



Adding filter 1"

The 3XKIT15 includes:
 CF430010
 KM3901-13

Description	Unit.	Code
ADD FILTER 1"	CH	3XKIT15

Adding injector 3/4"

The 3XKIT16 includes:
 CK032
 CK092
 CK152
 CK288
 KPCM01
 SB412007

Description	Unit.	Code
ADD INJECTOR 3/4"	CH	3XKIT16

Kit for irrigation

Adding injector 3/4"/pipe 1"

The 3XKIT17 includes:

CK032
 CK033
 CK152
 CK288
 CK289
 CK541
 KPCM01
 SB412007
 SB412010

Description	Unit.	Code
ADD INJECTOR 3/4"ON TUBING 1"	CH	3XKIT17

Adding 2nd injector in serial

The 3XKIT18 includes:

CF430007
 CK032
 CK288
 KPCM01

Description	Unit.	Code
ADD OF 2ND INJECTOR IN SERIAL	CH	3XKIT18

Water inlet valve 3/4"

The 3XKIT19 includes:

CK052
 CK288
 SB50043

Description	Unit.	Code
-------------	-------	------

Kit for irrigation

INLET VALVE 3/4" CH **3XKIT19**

Adapt. Veba on line 1"

The 3XKIT20 includes:
 CF430010
 CK033
 XLV10

Description	Unit.	Code
ADAPT.VEHA ON LINE 1"	CH	3XKIT20

Fitting for pump outlet 1"

The 3XKIT22 includes:
 CC105
 CC145
 CC705
 CK289
 CYC100A
 CYF100A

Description	Unit.	Code
FITTINGS FOR OUTLET 1"ON PUMP	CH	3XKIT22




Second. end line 1"x1"

The 3XKIT24 includes:
 CK033
 SB41110
 CK289
 CK153
 CK203

Description	Unit.	Code
END LINE ON 1"X 1"	CH	3XKIT24


Kit for irrigation



Second. end line 1"x3/4"

The 3XKIT25 includes:
 CK661
 CK032
 SB41107
 CK289
 CK288
 CK202

Description	Unit.	Code
END LINE ON 1"X3/4"	CH	3XKIT25



Second. end line 1"x1/2"

The 3XKIT26 includes:
 SB41105
 CK289
 CK286
 CK153
 CK031
 CK201
 CK302

Description	Unit.	Code
END LINE ON 1"X 1/2"	CH	3XKIT26

Kit for irrigation



Second. end line 3/4"

The 3XKIT27 includes:
 CK152
 CK032
 SB41107
 CK288
 CK202

Description	Unit.	Code
END LINE ON 3/4"	CH	3XKIT27



Second. end line 3/4"x1/2"

The 3XKIT28 includes:
 CK031
 SB41105
 CK288
 CK286
 CK660
 CK201

Description	Unit.	Code
END LINE ON 3/4" X 1/2"	CH	3XKIT28



Kit of Plasson valve on 3/4"

The 3XKIT29 includes:
 CK288
 CK582
 SL1
 SL2

Description	Unit.	Code
KIT OF PLASSON VALVE ON 3/4"	CH	3XKIT29

Kit for irrigation



Kit of Plasson valve on 1"

The 3XKIT30 includes:
CK289
CK584
SL1
SL2

Description	Unit.	Code
KIT OF PLASSON VALVE ON 1"	CH	3XKIT30

Aquaboom injector



Injection pump

Max. working pressure: 70 psi (4.82 bar)
 Max. fluid temperature: 130°F (54°C)
 Max. ambient temperature: 14° to 110°F (-10° to 43°C)
 Max. viscosity: 1,000 Centipoise
 Max. suction lift: 10' water 0 psig
 Output adjustment range: 5-100% stroke length
 Duty cycle: Continuous
 Enclosure: NEMA type 3R, (IP23)
 115 VAC
 0.74 AMP
 Flow: 0.24 to 4.9 gph (0.95 to 18.9 lph)
 >>> Blue-White tank available on request

Description	Unit.	Code
INJECTION PUMP #C15N404X000V00	CH	KPE1501

Parts for 1501

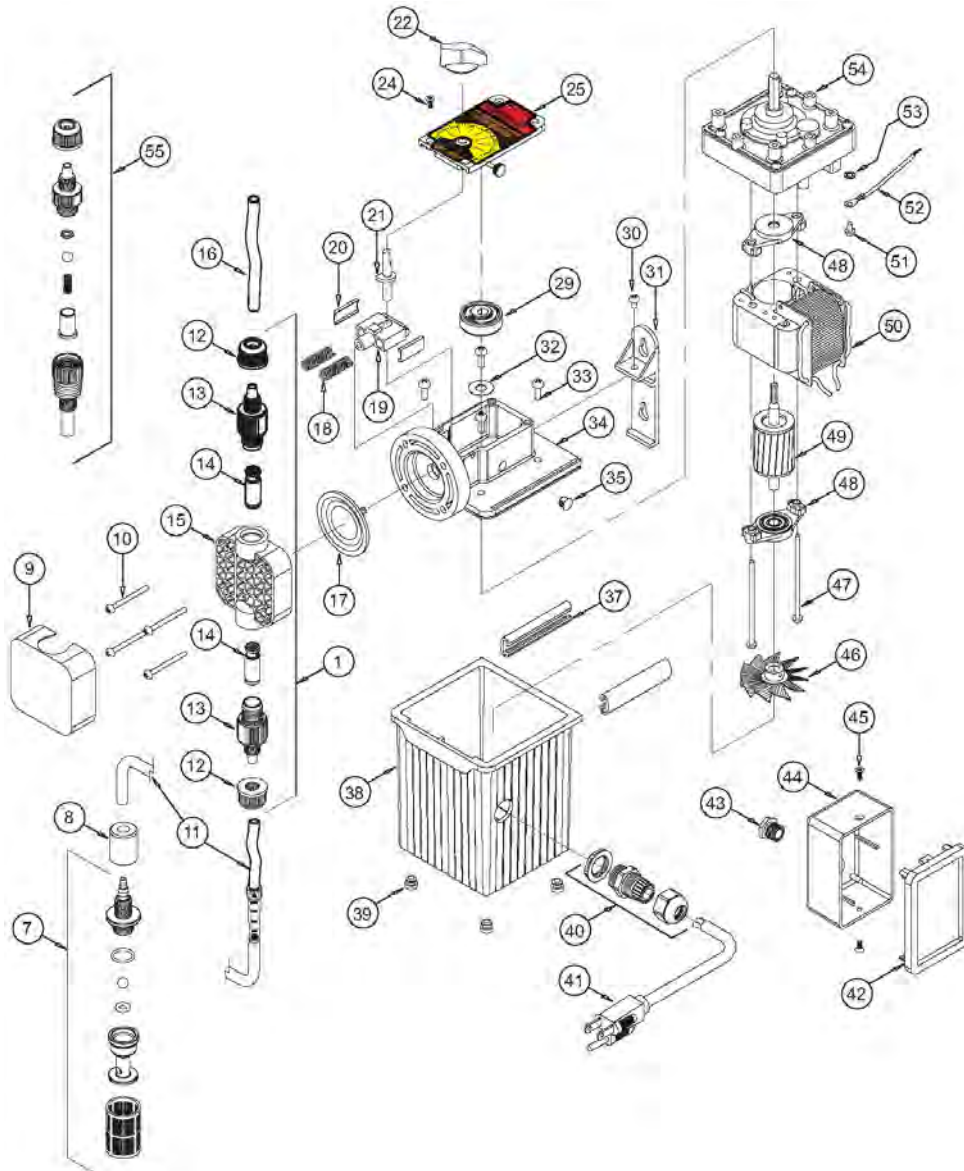
Description	Unit.	Code
FOOT VALVE S/A_C-340V.VT	CH	KPE1501-07
TUBE INDICATOR GLASS 3/8"X5'	CH	KPE1501-11
TUBE NUT FOR 1500	CH	KPE1501-12
ADAPT.BULLET VITON	CH	KPE1501-13
ADAPT.AND CATRIDGE BULLET ASSY	CH	KPE1501-1314
CARTRIDGE BULLET VALVE	CH	KPE1501-14
DIAPHRAGM	CH	KPE1501-17
RETURN SPRING	CH	KPE1501-18
STIRR UP (PART #19)	CH	KPE1501-19
SLIDE BEARING	CH	KPE1501-20
OFFSET CAM (PART #21)	CH	KPE1501-21
TOP COVER ASSEMBLY W/ BEARING	CH	KPE1501-25
DRIVE CAM	CH	KPE1501-29
BRACKET WALL MOUNT FOR 1500	CH	KPE1501-31

Aquaboom injector

SPACER ROTOR	CH	KPE1501-32
FAN 1.80" (PART #46)	CH	KPE1501-46
BEARING BRACKET WITH BEARING	CH	KPE1501-48
ROTOR ASSY.WITH SHAFT & SPACER	CH	KPE1501-49
STATOR STANDARD 115V.	CH	KPE1501-50
GEARBOX FOR 1500	CH	KPE1501-54
INJECTION VALVE FOR 1500	CH	KPE1501-55
COVER FOR 1501	CH	KPE1501-56

Injection pump

Parts



#	Parts
7	KPE1501-07
11	KPE1501-11
12	KPE1501-12
13	KPE1501-13
13-14	KPE1501-1314
14	KPE1501-14
15	KPE1501-15

#	Parts
17	KPE1501-17
18	KPE1501-18
19	KPE1501-19
20	KPE1501-20
21	KPE1501-21
29	KPE1501-29
31	KPE1501-31

#	Parts
32	KPE1501-32
46	KPE1501-46
48	KPE1501-48
49	KPE1501-49
50	KPE1501-50
54	KPE1501-54
55	KPE1501-55

Injection pump

Parts

#	Parts	Description	Qty
1	C-535A6-6	Pumphead Kit, HDN Viton	1
	C-535A6-6E	Pumphead Kit, HDN EP	1
7	71000-324	FootValve S/A, C-340V, VT	1
	71000-325	FootValve S/A, C-340E, EP	1
8	90008-068	Ceramic weight, C-346	1
9	70004-074	Cover P/Head, HD Chem-Feed logo	1
	70004-071	Cover P/Head, HD Noir logo	1
	70004-086	Cover P/Head, HD Micro logo	1
10	90011-141	Screw 10-32 x 1.25	4
11	70000-638	Tube Indicator Glass 3/8 x 5FT	1
	76000-171	Tube Suction 1/4 x 5FT	1
12	90002-077	Tube Nut, .25T, P.P.	2
	90002-047	Tube Nut, .37T, P.P.	2
13	71000-204	Adapter S/A Bullet .37T Viton	2
	71000-205	Adapter S/A Bullet .37T EP	2
	71000-224	Adapter S/A Bullet .37T Silicon	2
	71000-225	Adapter S/A Bullet .25T Viton	2
	71000-226	Adapter S/A Bullet .25T EP	2
	71000-227	Adapter S/A Bullet .25T Silicon	2
14	71000-195	Cartridge Bullet Valve S/A, Double-Ball	2
15	90002-146	P/Head Noir Molded, P.P.	1
16	76000-168	Tubing D/Charge, 3/8 x 5FT	1
	76000-169	Tubing D/Charge, 1/4 x 5FT.	1
17	70000-683	Diaphragm S/A 2.0 15N, Viton/TFE	1
	70000-682	Diaphragm S/A 2.0 15N, EP/TFE	1
	71000-058	Diaphragm S/A 1.6 15N, Viton/TFE	1
	71000-057	Diaphragm S/A 1.6 15N, EP/TFE	1
18	90006-006	Return Spring	2
19	76000-172	Stirr-up	1
20	90002-001	Slide Bearing	2
21	90001-132	Offset Cam #1 .125"	1
	90001-133	Offset Cam #2 .055"	1
	90001-134	Offset Cam #3 .187"	1
	90001-141	Offset Cam #4 .100"	1
22	90002-017	Dial Knob	1
24	90011-168	Screw #6 x .62 PH oval 'A'	4
25	C-1503N-3	Top Cover Assembly with bearing	1
29	70000-131	Drive Cam S/A #1 .125"	1
	70000-133	Drive Cam S/A #2 .055"	1
	70000-132	Drive Cam S/A #3 .187"	1
	70000-722	Drive Cam S/A #4 .100"	1

Injection pump

Parts

#	Parts	Description	Qty
30	90011-122	Screw 10-32 x .50 PHL PAN	1
31	90002-106	Bracket Wall Mount	1
32	90011-014	Spacer, Rotor	1
33	90011-122	Screw 10-32 x .50 PHL PAN	4
34	76000-530	Motor Mount, Large Diaphragm	1
	76001-171	Motor Mount, Small Diaphragm	1
35	90008-138	Plug .312 Hole Black	1
36	90006-597	Gasket, Motor Mount	1
37	76000-630	Slide Clamp	2
38	C-1501NR	Motor Cover for power cord models	1
	C-1508PN-2	Motor cover for junction box models	1
39	90003-513	Bumper Feet	4
40	70000-589	Connector Liq-Tite w/nut	1
41	90010-110	Cord 18/3 SJTW/A 115V, U.S., NEMA 5/15 plug	1
	90010-128	Cord 18/3 SJTW/A 220V, Euro, CEE 7/VII (A) plug	1
	90010-133	Cord 18/3 SJTW/A 230V, U.S., NEMA 6/15 plug	1
42	71000-133	Cover, Junction Box with Gasket and Label	1
43	90007-515	Bushing, Junction Box Connector, Alum.	1
44	76000-522	Junction Box, Valox	1
45	90011-129	Screw, Cover, 6-32 X .25 Phil Pan SS Black	2
46	90006-598	Fan, 1.80" Diameter, Alum.	1
47	90011-022	Screw, Motor, 8-32 X 2.5" Phillips Steel	2
48	70000-028	Bearing Bracket With Bearing	2
49	70000-027	Rotor Assembly With Shaft And Spacers	1
50	70000-018	Stator S/A, 115V60Hz Standard Blue-Black	1
	70000-019	Stator S/A, 115V60Hz Thermal Brown-Blue	1
	71000-019	Stator S/A, 220V50Hz Standard Brown-Black	1
	71000-020	Stator S/A, 220V50Hz Thermal Brown-Yellow	1
	70000-020	Stator S/A, 230V60Hz Standard Red-Black	1
	70000-021	Stator S/A, 230V60Hz Thermal Red-Yellow	1
	70000-072	Stator S/A, 24V60Hz Standard Blue-White	1
51	90011-024	Ground Screw 8-32 x .25 Hex SL ST	1
52	90010-127	Lead Wire, ground, Green	1
53	90011-078	Washer, Ground Screw, #8 Intrl/Star	1
54	71000-268	Gearbox, 14 RPM	1
	71000-269	Gearbox, 30 RPM	1
	71000-270	Gearbox, 45 RPM	1
	71000-271	Gearbox, 60 RPM	1
	71000-272	Gearbox, 125 RPM	1
	71000-273	Gearbox, 250 RPM	1
55	70000-439	Injection Valve S/A 37T VIT 1/2 PSI	1
(N/s)	90010-153	Cycle Timer 5 Sec. 24V-115V-230V 50/60 Hz	1
(N/s)	90010-151	Cycle Timer 1 Min. 24V-115V-230V 50/60 Hz	1

Nozzle holder



Swivel nozzle holder

Double swivel kit (nozzle not included), connects to a single nozzle holder.

Description	Unit.	Code
DOUBLE SWIVEL (SING.NOZ.BOOM)	CH	XL120
DOUBLE SWIVEL (TRIP.NOZ.BOOM)	CH	XL125



Single nozzle holder

3/4" or 1" saddle with single nozzle holder and drip stopping valve (nozzle not included).

Description	Unit.	Code
SINGLE NOZZLE HOLDER 3/4" PIPE	CH	XLH802
UNIJET QUICK COUPLING 1"-1 BAR	CH	XLH804



Triple nozzle holder

3/4" or 1" saddle with triple nozzle holder and drip stopping valve (nozzle not included).

Description	Unit.	Code
TRIPLE NOZZLE HOLDER 3/4" PIPE	CH	XLH800
"1" 3-WAY NOZ.HOLDER / CAP	CH	XLH805

Nozzle holder



Quadruple nozzle holder

Description	Unit.	Code
FOURTH NOZ.HOLDER 3/4" PIPE	CH	XLH807

Spraying system nozzle



VS nozzle

80° Visiflo(VS) nozzle
Minimum operating pressure for VS nozzle = 30 psi

>>> 110° Visiflo nozzle available on request only

Description	Unit.	Code
XRTEEJET S.S.VISIFLO ORANGE	CH	H18001VS
XRTEEJET S.S.VISIFLO YELLOW	CH	H18002VS
XRTEEJET S.S.VISIFLO BLUE	CH	H18003VS
XRTEEJET S.S.VISIFLO RED	CH	H18004VS
XRTEEJET S.S.VISIFLO BROWN	CH	H18005VS
XRTEEJET S.S.VISIFLO GRAY	CH	H18006VS
XRTEEJET S.S.VISIFLO WHITE	CH	H18008VS



TR nozzle

80° nozzle Total Range(TR)
Minimum operating pressure = 30 psi
Use 100 mesh strainer with H18001-- or H180015-- nozzle and 50 mesh strainer with other nozzles.

>>> UNTIL SUPPLIES LAST

Description	Unit.	Code
TOTAL RANGE ORANGE FLAT TIP	CH	H18001TR
TOTAL RANGE YELLOW FLAT TIP	CH	H18002TR
TOTAL RANGE BLUE FLAT TIP	CH	H18003TR
TOTAL RANGE RED FLAT TIP	CH	H18004TR
TOTAL RANGE GRAY FLAT TIP	CH	H18006TR
TOTAL RANGE WHITE FLAT TIP	CH	H18008TR
TOTAL RANGE FLAT TIP	CH	H18010TR
TOTAL RANGE FLAT TIP	CH	H18015TR

Spraying system nozzle



Plug

Description	Unit.	Code
BLANK PLUG BRASS	CH	H13942



Strainer

Steel strainer.

Description	Unit.	Code
STRAINER ASSY.BRASS 50MESH	CH	H25053-50



Cap

>>> UNTIL SUPPLIES LAST

Description	Unit.	Code
CAP BRASS	CH	H21325

Nozzle

Technical information

	Color	FLOW (GPM)						
		15 PSI	20 PSI	30 PSI	35 PSI	40 PSI	45 PSI	60 PSI
H18001--	Orange	0.06	0.07	0.09	0.094	0.1	0.11	0.12
H180015--	Green	0.09	0.11	0.13	0.14	0.15	0.16	0.18
H18002--	Yellow	0.12	0.14	0.17	0.19	0.2	0.21	0.24
H18003--	Blue	0.18	0.21	0.26	0.28	0.3	0.32	0.37
H18004--	Red	0.24	0.28	0.35	0.37	0.4	0.42	0.49
H18005--	Brown	0.31	0.35	0.43	0.47	0.5	0.53	0.61
H18006--	Grey	0.37	0.42	0.52	0.56	0.6	0.64	0.73
H18008--	White	0.49	0.57	0.69	0.75	0.8	0.85	0.98
H18010--	Metal	0.61	0.71	0.87	0.94	1	1.06	1.22

Maximum number of nozzles for a maximum speed of 5 ft/sec★

NOZZLE MODEL	3/4" PIPE		1" PIPE	
	12" spacing Nb max.	15" spacing Nb max.	12" spacing Nb max.	15" spacing Nb max.
8001	17	20	24	24
80015	17	20	24	24
8002	17	20	24	24
8003	17	20	24	24
8004	16	16	24	24
8005	13	13	23	23
8006	10	10	19	19
8008	8	8	14	14
8010	6	6	11	11

★ 45 PSI flow

Aquaboom hose



1" hose

Hose without fitting.
 Maximum 150 psi.

Description	Unit.	Code
"ECONO" 1" RED HOSE	PLS	BYS1000E
Econo 1"X190'HOSE FOR AQUABOOM	CH	BYS1190E
Econo 1"X300'RED HOSE AQUABOOM	CH	BYS1300E



3/4" hose

Hose without fitting.
 Maximum 200 psi.

Description	Unit.	Code
"ECONO"3/4"HOSE	PLS	BYS0700E
"ECONO" 3/4"X300' HOSE	CH	BYS07300E
3/4"MALE BRASS PRO HOSE	CH	SB58141
3/4"FEMALE BRASS PRO HOSE	CH	SB58142

Aquaboom accessories



Cycle controller

This controller has a manual start, giving the opportunity for the Aquaboom to make a forward-backward travel and stop automatically. 110 volts operation. For ground model; an electric valve is required.

Description	Unit.	Code
AUTOMATIC STOPPING CONTROL AQU	CH	XL009



Controller for timer

This controller is used with 24 volts irrigation timer or computer. It starts the Aquaboom following the programmed schedule on the timer. At the end of the programmed cycle, the unit goes back to his original starting point. On the ground model, an electric valve is required.

Including connections box, limit switch, relay.
 Note: Use with K557212 or K557201 valve if required.

Description	Unit.	Code
CONTROL.FOR TIMER-COMPUTER	CH	XL008



Electric wire

Flexible 115 volts electric wire.

Description	Unit.	Code
CAP TIRE WIRE 14-3	PLS	8ZL1430
FIL CAP TIRE 16-3	PLS	8ZL1630

Aquaboom accessories

Expandable sleeve

1-1/4" expandable sleeve for hose and wire (add 25% to desired length).

Description	Unit.	Code
1-1/4" BLACK EXTENSIVE SLEEVE	PLS	BYT01

Steel wire

Galvanized steel cable for overhead Aquaboom.

Description	Unit.	Code
GV STEEL WIRE 1/8" 7X7	PLS	1N0202

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Flood tables

48" wide table / 20" high

20" high flood table structure, without tray

Description	Unit.	Code
FLOOD TABLE STRUC 48L 20H 1325	PLS	3F10340
FLOOD TABLE STRUC 48L 20H 1585	PLS	3F10341
FLOOD TABLE STRUC 48L 20H 1845	PLS	3F10342
FLOOD TABLE STRUC 48L 20H 2000	PLS	3F10343
FLOOD TABLE STRUC 48L 20H 285	PLS	3F10344
FLOOD TABLE STRUC 48L 20H 545	PLS	3F10345
FLOOD TABLE STRUC 48L 20H 805	PLS	3F10346
FLOOD TABLE STRUC 48L 20H 1065	PLS	3F10347

48" wide table / 24" high

24" high flood table structure, without tray

Description	Unit.	Code
FLOOD TABLE STRUC 48L 24H 1325	PLS	3F10350
FLOOD TABLE STRUC 48L 24H 1585	PLS	3F10351
FLOOD TABLE STRUC 48L 24H 1845	PLS	3F10352
FLOOD TABLE STRUC 48L 24H 2000	PLS	3F10353
FLOOD TABLE STRUC 48L 24H 285	PLS	3F10354
FLOOD TABLE STRUC 48L 24H 545	PLS	3F10355
FLOOD TABLE STRUC 48L 24H 805	PLS	3F10356
FLOOD TABLE STRUC 48L 24H 1065	PLS	3F10357

Flood tables

48" wide table / 32" high

32" high flood table structure, without tray

Description	Unit.	Code
FLOOD TABLE STRUC 48L 32H 1325	PLS	3F10370
FLOOD TABLE STRUC 48L 32H 1585	PLS	3F10371
FLOOD TABLE STRUC 48L 32H 1845	PLS	3F10372
FLOOD TABLE STRUC 48L 32H 2000	PLS	3F10373
FLOOD TABLE STRUC 48L 32H 285	PLS	3F10374
FLOOD TABLE STRUC 48L 32H 545	PLS	3F10375
FLOOD TABLE STRUC 48L 32H 805	PLS	3F10376
FLOOD TABLE STRUC 48L 32H 1065	PLS	3F10377

60" wide table / 18" high

18" high flood table structure, without tray

Description	Unit.	Code
FLOOD TABLE STRUC 60L 18H 1325	PLS	3F10460
FLOOD TABLE STRUC 60L 18H 1585	PLS	3F10461
FLOOD TABLE STRUC 60L 18H 1845	PLS	3F10462
FLOOD TABLE STRUC 60L 18H 2000	PLS	3F10463
FLOOD TABLE STRUC 60L 18H 285	PLS	3F10464
FLOOD TABLE STRUC 60L 18H 545	PLS	3F10465
FLOOD TABLE STRUC 60L 18H 805	PLS	3F10466
FLOOD TABLE STRUC 60L 18H 1065	PLS	3F10467

Flood tables

60" wide table / 20" high

20" high flood table structure, without tray

Description	Unit.	Code
FLOOD TABLE STRUC 60L 20H 1325	PLS	3F10380
FLOOD TABLE STRUC 60L 20H 1585	PLS	3F10381
FLOOD TABLE STRUC 60L 20H 1845	PLS	3F10382
FLOOD TABLE STRUC 60L 20H 2000	PLS	3F10383
FLOOD TABLE STRUC 60L 20H 285	PLS	3F10384
FLOOD TABLE STRUC 60L 20H 545	PLS	3F10385
FLOOD TABLE STRUC 60L 20H 805	PLS	3F10386
FLOOD TABLE STRUC 60L 20H 1065	PLS	3F10387

60" wide table / 24" haut

24" high flood table structure, without tray

Description	Unit.	Code
FLOOD TABLE STRUC 60L 24H 1325	PLS	3F10390
FLOOD TABLE STRUC 60L 24H 1585	PLS	3F10391
FLOOD TABLE STRUC 60L 24H 1845	PLS	3F10392
FLOOD TABLE STRUC 60L 24H 2000	PLS	3F10393
FLOOD TABLE STRUC 60L 24H 285	PLS	3F10394
FLOOD TABLE STRUC 60L 24H 545	PLS	3F10395
FLOOD TABLE STRUC 60L 24H 805	PLS	3F10396
FLOOD TABLE STRUC 60L 24H 1065	PLS	3F10397

Flood tables

60" wide table / 32" high

32" high flood table structure, without tray

Description	Unit.	Code
FLOOD TABLE STRUC 60L 32H 1325	PLS	3F10410
FLOOD TABLE STRUC 60L 32H 1585	PLS	3F10411
FLOOD TABLE STRUC 60L 32H 1845	PLS	3F10412
FLOOD TABLE STRUC 60L 32H 2000	PLS	3F10413
FLOOD TABLE STRUC 60L 32H 285	PLS	3F10414
FLOOD TABLE STRUC 60L 32H 545	PLS	3F10415
FLOOD TABLE STRUC 60L 32H 805	PLS	3F10416
FLOOD TABLE STRUC 60L 32H 1065	PLS	3F10417

60" wide table / 36" high

36" high flood table structure, without tray

Description	Unit.	Code
FLOOD TABLE STRUC 60L 36H 1325	PLS	3F10400
FLOOD TABLE STRUC 60L 36H 1585	PLS	3F10401
FLOOD TABLE STRUC 60L 36H 1845	PLS	3F10402
FLOOD TABLE STRUC 60L 36H 2000	PLS	3F10403
FLOOD TABLE STRUC 60L 36H 285	PLS	3F10404
FLOOD TABLE STRUC 60L 36H 545	PLS	3F10405
FLOOD TABLE STRUC 60L 36H 805	PLS	3F10406
FLOOD TABLE STRUC 60L 36H 1065	PLS	3F10407

Flood tables

72" wide table / 20" high

20" high flood table structure, without tray

Description	Unit.	Code
FLOOD TABLE STRUC 72L 20H 1325	PLS	3F10420
FLOOD TABLE STRUC 72L 20H 1585	PLS	3F10421
FLOOD TABLE STRUC 72L 20H 1845	PLS	3F10422
FLOOD TABLE STRUC 72L 20H 2000	PLS	3F10423
FLOOD TABLE STRUC 72L 20H 285	PLS	3F10424
FLOOD TABLE STRUC 72L 20H 545	PLS	3F10425
FLOOD TABLE STRUC 72L 20H 805	PLS	3F10426
FLOOD TABLE STRUC 72L 20H 1065	PLS	3F10427

72" wide table / 24" high

24" high flood table structure, without tray

Description	Unit.	Code
FLOOD TABLE STRUC 72L 24H 1325	PLS	3F10430
FLOOD TABLE STRUC 72L 24H 1585	PLS	3F10431
FLOOD TABLE STRUC 72L 24H 1845	PLS	3F10432
FLOOD TABLE STRUC 72L 24H 2000	PLS	3F10433
FLOOD TABLE STRUC 72L 24H 285	PLS	3F10434
FLOOD TABLE STRUC 72L 24H 545	PLS	3F10435
FLOOD TABLE STRUC 72L 24H 805	PLS	3F10436
FLOOD TABLE STRUC 72L 24H 1065	PLS	3F10437

Flood tables

72" wide table / 32" high

32" high flood table structure, without tray

Description	Unit.	Code
FLOOD TABLE STRUC 72L 32H 1325	PLS	3F10450
FLOOD TABLE STRUC 72L 32H 1585	PLS	3F10451
FLOOD TABLE STRUC 72L 32H 1845	PLS	3F10452
FLOOD TABLE STRUC 72L 32H 2000	PLS	3F10453
FLOOD TABLE STRUC 72L 32H 285	PLS	3F10454
FLOOD TABLE STRUC 72L 32H 545	PLS	3F10455
FLOOD TABLE STRUC 72L 32H 805	PLS	3F10456
FLOOD TABLE STRUC 72L 32H 1065	PLS	3F10457

Fixed or mobile table



Table base

- Galvanized steel table on plate 3x9
- Generally covered with expanded metal
- Sold in length, multiple 8' length
- Legs at 6' c/c
- Standard widths available: 48", 60", 66", 72", 76" and 88"

Description	Unit.	Code
BENCH BASE 32" x 6'c/c (48")	PLS	3FP0632
BENCH BASE 40" x 6'c/c (60")	PLS	3FP0640
BENCH BASE 44" x 6'c/c (66")	PLS	3FP0644
BENCH BASE 48" x 6'c/c (72")	PLS	3FP0648
BENCH BASE 52" x 6'c/c (76")	PLS	3FP0652
BENCH BASE 64" x 6'c/c (88")	PLS	3FP0664



Table top

Table top for "Dramex" covering
 ("Dramex" not included)

Description	Unit.	Code
48" BENCH TOP FOR DRAMEX 8'	PLS	3F08481
60" BENCH TOP FOR DRAMEX 8'	PLS	3F08601
66" BENCH TOP FOR DRAMEX 8'	PLS	3F08661
72" TABLE TOP FOR DRAMEX 8'	PLS	3F08721
76" TABLE TOP FOR DRAMEX 8'	PLS	3F08761
88" TABLE TOP FOR DRAMEX 8'	PLS	3F08881

Fixed or mobile table



Hand crank

Rolling bench hand crank system sold separately.

Description	Unit.	Code
ROLLING BENCH HAND CRANK	CH	3F050

Fixed or mobile table



Loading capacity at square feet
48" ⇔ 15 pounds
60" ⇔ 12 pounds
66" ⇔ 12 pounds
72" ⇔ 10 pounds
76" ⇔ 10 pounds
88" ⇔ 8 pounds

Maximum displacement of mobile tables
48" ⇔ 16"
60" ⇔ 20"
66" ⇔ 22"
72" ⇔ 24"
76" ⇔ 24"
88" ⇔ 24"

Suggested "Dramex" for table width
48" ⇔ 1KD1348
60" ⇔ 1KD1349
66" ⇔ 1KD1354
72" ⇔ 1KD1350
76" ⇔ 1KD1351
88" ⇔ 1KD1359

Ovaltech III benches



5' spacing

Side benches attached to the structure of the Ovaltech III greenhouse only. They have two shelves, as shown; the lower one is 44-1/2" deep, and the upper one is 22-1/4" deep. The customer decides of their length, by multiples of 5'. The loading capacity is 10 lbs/square foot.

3F173: BENCH STRUCTURE

This kit contains: table frames to fix on the greenhouse's arches, 1-1/4" round tubing to support the Dramex covering (or standard 11" X 22" growing trays), and the required hardware.

3F178: TABLE EXTENSION KIT

This kit contains 1-1/4" round and square tubing to extend the bench up to the greenhouse gable, when desired (see sales method below).

3F180: TABLE END KIT

This kit contains only steel angles to finish off the bench ends, when they aren't extended up to the gable.

3F183: DRAMEX KIT

Contains Dramex covering for the two shelves, a plastic edge protector, and required hardware.

Sales method:

1- Specify 3F173 length:

Structure spacing must always be left between bench end and gable.

Length = (greenhouse length – 5' spacing), or any other smaller length that is a multiple of structure.

2- Choose table endings:

Choose, for every bench end, a 3F178 kit to extend the bench up to the gable (the table will therefore be 5' longer for each extended end).

3- Specify Dramex length, if required:

The Dramex covering length needed is equal to the total bench length, including extensions to the gable, if any.

Description	Unit.	Code
5'C/C SIDE TABLE FOR OVALT III	FT	3F173
5' TABLE EXTENS. KIT OVALT III	EA	3F178
5 & 6' TABLE END KIT OVALT III	EA	3F180
5' TABLE DRAMEX KIT OVALT III	FT	3F183

Ovaltech III benches



6' spacing

Side benches attached to the structure of the Ovaltech III greenhouse only. They have two shelves, as shown; the lower one is 44-1/2" deep, and the upper one is 22-1/4" deep. The customer decides of their length, by multiples of 6'. The loading capacity is 10 lbs/square foot.

3F172: BENCH STRUCTURE

This kit contains: table frames to fix on the greenhouse's arches, 1-1/4" round tubing to support the Dramex covering (or standard 11" X 22" growing trays), and the required hardware.

3F177: TABLE EXTENSION KIT

This kit contains 1-1/4" round and square tubing to extend the bench up to the greenhouse gable, when desired (see sales method below).

3F180: TABLE END KIT

This kit contains only steel angles to finish off the bench ends, when they aren't extended up to the gable.

3F182: DRAMEX KIT

Contains Dramex covering for the two shelves, a plastic edge protector, and required hardware.

Sales method:

1- Specify 3F172 length:

Structure spacing must always be left between bench end and gable.

Length = (greenhouse length – 6' spacing), or any other smaller length that is a multiple of structure.

2- Choose table endings:

Choose, for every bench end, between a 3F177 kit to extend the bench up to the gable (the table will therefore be 6' longer for each extended end).

3- Specify Dramex length, if required:

The Dramex covering length needed is equal to the total bench length, including extensions to the gable, if any.

Description	Unit.	Code
6'C/C SIDE TABLE FOR OVALT III	FT	3F172
6' TABLE EXTENS. KIT OVALT III	EA	3F177
5 & 6' TABLE END KIT OVALT III	EA	3F180
6' TABLE DRAMEX KIT OVALT III	FT	3F182

Bench accessories



Dramex (LD)

3/4" #13 regular galvanized metal mesh (not flattened).
 Flattened expanded metal available on special order only.

Description	Unit.	Code
DRAMEX 47-3/4"SWD X 95-3/4"LWD	CH	1KD1348
DRAMEX 59-3/4"SWD X 95-3/4"LWD	CH	1KD1349
DRAMEX 71-3/4"SWD X 95-3/4"LWD	CH	1KD1350
DRAMEX 75-3/4"SWD X 95-3/4"LWD	CH	1KD1351
DRAMEX 35-3/4"SWD X 95-3/4"LWD	CH	1KD1353
DRAMEX 65-3/4"SWD X 95-3/4"LWD	CH	1KD1354
71 3/4"SWD X 44"LWD DRAMEX	CH	1KD1355
71 3/4"SWD X 21 3/4"LWD DRAMEX	CH	1KD1356
59 3/4"SWD X 44"LWD DRAMEX	CH	1KD1357
59 3/4"SWD X 21 3/4"LWD DRAMEX	CH	1KD1358
87-3/4"SWD X 95-3/4"LWD DRAMEX	CH	1KD1359



Dramex (RD)

3/4" #13 galvanized expanded metal.

Description	Unit.	Code
DRAMEX 47 3/4LWD x 98 SWD 10Ga	CH	1KD1361

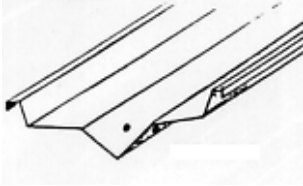


Edge protector

Edge protector, white plastic 8' long.

Description	Unit.	Code
SIDE ANGLE PROTECTOR 8'	CH	5K110
PROTEC. CAP 1/8" X 8'	CH	5K111

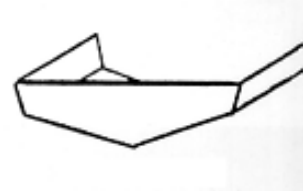
Pot shelf



Pots shelf

10' long steel galvanized gutter with bolts and nuts.
 Gutter can accommodate pots up to 5-1/4" diameter.
 Each ends are predrilled and cutted to join into one another.

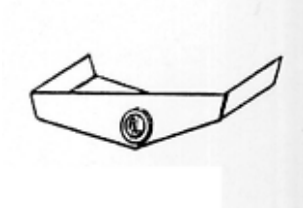
Description	Unit.	Code
10' POT SHELF	EA	3R001



End cap

End gutter (with bolts and nuts).

Description	Unit.	Code
SHELF END CAP	EA	3R002



Starting end

End gutter + coupling 1" F.P.T. (with bolts and nuts).

Description	Unit.	Code
POT DRAIN END	EA	3R003

Hook

Description	Unit.	Code
"S" HOOK 1-3/4" PLT	EA	1C2899

Fixtures



In inventory

The housing is made of extruded aluminum for better heat dispersion and protected against UV. The reflectors are made of 99.95% aluminum that will guarantee the highest light output.

Description	Unit.	Code
LAMP 400W 120V 4.2A DEEP	CH	3F4121
LAMP 400W 120V 4.2A MEDIUM	CH	3F4122
LAMP 400W 208V 2.4A DEEP	CH	3F4201
LAMP 400W 208V 2.4A MEDIUM	CH	3F4202
LAMP 400W 208V 2.4A WIDE	CH	3F4203
LAMP 400W 240V 2.1A DEEP	CH	3F4241
LAMP 400W 240V 2.1A MEDIUM	CH	3F4242
LAMP 400W 240V 2.1A WIDE	CH	3F4243
LAMP 400W 277V 1.7A DEEP	CH	3F4271
LAMP 400W 277V 1.7A MEDIUM	CH	3F4272
LAMP 400W 277V 1.7A WIDE	CH	3F4273
LAMP 400W 347V 1.3A DEEP	CH	3F4341



On request only

The housing is made of extruded aluminum for better heat dispersion and protected against UV. The reflectors are made of 99.95% aluminum that will guarantee the highest light output.

Description	Unit.	Code
COMPLETE LAMP 600W 208V "WIDE"	CH	8F605
COMPLETE LAMP 600W 240V "DEEP"	CH	8F606
COMPLETE LAMP 600W 277V "DEEP"	CH	8F610
COMPLETE LAMP 600W 277V "MED"	CH	8F611
COMPLETE LAMP 600W 277V "WIDE"	CH	8F612
COMPLETE LAMP 600W 347V "DEEP"	CH	8F613
COMPLETE LAMP 600W 480V "DEEP"	CH	8F616
COMPLETE LAMP 600W 480V "MED"	CH	8F617

Fixtures

COMPLETE LAMP 600W 480V "WIDE"	CH	8F618
COMPLETE LAMP 600W 120V "ECO"	CH	8F620
COMPLETE LAMP 600W 208V "ECO"	CH	8F621
COMPLETE LAMP 600W 240V "ECO"	CH	8F622
COMPLETE LAMP 600W 277V "ECO"	CH	8F623
COMPLETE LAMP 600W 347V "ECO"	CH	8F624
COMPLETE LAMP 600W 480V "ECO"	CH	8F625

Calculation of lighting

General information

To quickly find the number of lamps 400W or 430W necessary for a given surface, multiply the number of square feet or square meters of the section to be lighted by the corresponding factor to the wished lighting.

Nb LUX / M2 desired	Nb candle ft/m2 desired	#W / M2 P.A.R. desired	For number of light HPS 400W		For number of light HPS 430W	
			Nb square ft X by a factor of:	Nb square meters X by a factor of:	Nb square ft X by a factor of:	Nb square meters X by a factor of:
3264	303	8	0,008	0,086	0,007	0,074
3672	341	9	0,009	0,097	0,008	0,084
4080	379	10	0,010	0,108	0,009	0,093
4488	417	11	0,011	0,118	0,010	0,102
4896	455	12	0,012	0,129	0,010	0,112
5304	493	13	0,013	0,140	0,011	0,121
5712	531	14	0,014	0,151	0,012	0,130
6120	569	15	0,015	0,161	0,013	0,140
6528	607	16	0,016	0,172	0,014	0,149
6936	645	17	0,017	0,183	0,015	0,158
7344	683	18	0,018	0,194	0,016	0,167
7752	721	19	0,019	0,205	0,016	0,177
8160	759	20	0,020	0,215	0,017	0,186
8568	797	21	0,021	0,226	0,018	0,195
8976	835	22	0,022	0,237	0,019	0,205
9384	873	23	0,023	0,248	0,020	0,214
9792	911	24	0,024	0,258	0,021	0,223
10200	949	25	0,025	0,269	0,022	0,233
10608	987	26	0,026	0,280	0,022	0,242
11016	1025	27	0,027	0,291	0,023	0,251
11424	1063	28	0,028	0,301	0,024	0,260
11832	1101	29	0,029	0,312	0,025	0,270
12240	1139	30	0,030	0,323	0,026	0,279
12648	1177	31	0,031	0,334	0,027	0,288
13056	1215	32	0,032	0,344	0,028	0,298

Calculation of lighting

General information

STANDARD LIGHT LEVELS FOR CROPS

Crop	Lux	Micromols	Foot candles
Tomatoes / Cucumbers	12,000 – 15,000	160 – 200	1100 – 1400
Lettuce	6,000 – 8,000	80 – 105	550 – 750
Herbs	7,500	100	700
Propagation	6,000 – 6,500	80 – 85	550 – 600
Daytime extension	3,800	50	350
Photo period / Night interruption	110 – 160	1 – 2	10 – 15

Calculation of lighting

General information

Electronic vs. Magnetic Fixtures

Advantages of Electronic

- 5% lower power consumption
- Less decrease in bulb output over first 10 000 hours
- 50% lighter in weight than magnetic
- Operate at a cooler temperature
- Creates less shade than magnetic

Disadvantages of Electronic

- Sensitive to power fluctuation
- Higher replacement cost after warranty: new printplates (ballasts) are expensive
- Higher initial capital investment
- Higher installation cost: more expensive breakers needed to handle inrush current
- Long delivery times: roughly 12-16 weeks
- Light bulbs are more expensive

Advantages of Magnetic

- Proven product: used for over 30 years
- Lower maintenance cost: defective parts can be identified and replaced
- Lower installation cost: no special breakers needed
- Designed to withstand power fluctuation up to +/- 10% and maintain same light output
- Heat from fixture assists in heating of greenhouse
- Better delivery times, roughly 3 weeks
- Replacement light bulbs are less expensive

Disadvantages of Magnetic

- Higher power consumption
- Heavy (31 lbs each)
- Creates more shade than electronic

Lamp parts

Ignitor



Description	Unit.	Code
ADVANCE IGNITOR 1000W	CH	8F010

Reflector

Description	Unit.	Code
WIDE REFLECTOR	CH	8F422
ECOMAX REF2.5 4 6 7.5 WATTS	CH	8F423
ECOMAX REFLECTOR FOR 1000 W	CH	8F424

Bulb



Description	Unit.	Code
G.E. 400W BULB REPLACEMENT	CH	8F002
BULB 600 WATT	CH	8F426

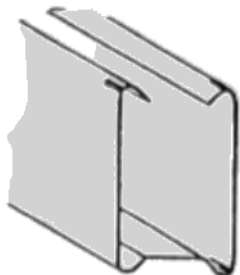
Advance capacitor



Description	Unit.	Code
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Lamp parts

CAPACITOR ADVANCE 1000W CH **8F011**



Track

Description	Unit.	Code
ALUM TRACK 24'	CH	8F018

Track support

3F034: With tube
3F035: With truss

Description	Unit.	Code
KIT FIXATION HARNOIS	CH	3F034
KIT FIXATION	CH	3F035



Track union

Description	Unit.	Code
RAIL HALF COUPLING	CH	2F014

Accessories

Description	Unit.	Code
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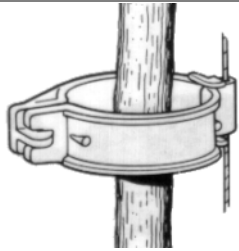
Lamp parts

"C"BRACKET Galv & NUT AND bolt

CH

8F430

Growing accessories



Stem clip

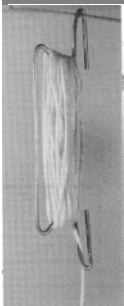
Description	Unit.	Code
TC-20 TOMATO CLIP	CH	8D75



Stake twine

Plastic twine for stake the plantations of tomatoes, cucumbers or others.

Description	Unit.	Code
POLI-TWINE CLEAR/GREEN 14000'	CH	8D90



Tomato hook

Vertical reversible model, galvanized steel.

Description	Unit.	Code
VERTICAL TOMATO'S HOOK	CH	8D73



Reinforcement of stalk

Minimize stem damages by crop overweight.

Description	Unit.	Code
TRUSS SUPPORT	CH	8D71

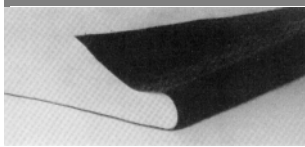
Growing accessories



Support of stalk

Description	Unit.	Code
JOBU "C"HOOK	CH	8D72A

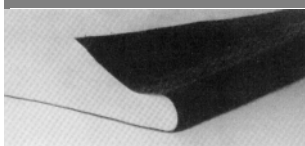
Black & white films



4 mil films

Black and white ground film (4 mil).

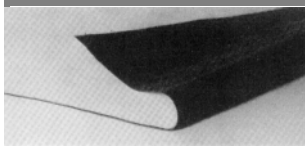
Description	Unit.	Code
POLY BLACK/WHITE 4 MIL.12'WIDE	FT	5BGN0412



6 mil films

Black and white ground film (6 mil).

Description	Unit.	Code
POLY BLACK/WHITE 6 MIL.16'WIDE	FT	5BGN0616
POLY BLACK/WHITE 6 MIL.25'WIDE	FT	5BGN0625
POLY BLACK/WHITE 6 MIL.32'WIDE	FT	5BGN0632

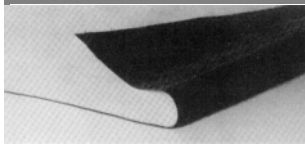


9 mil films

Black and white ground film (9 mil).

Description	Unit.	Code
POLY BLACK/WHITE 9 MIL.16'WIDE	FT	5BGN0916
POLY BLACK/WHITE 9 MIL.25'WIDE	FT	5BGN0925
POLY BLACK/WHITE 9 MIL.32'WIDE	FT	5BGN0932

Black & white films

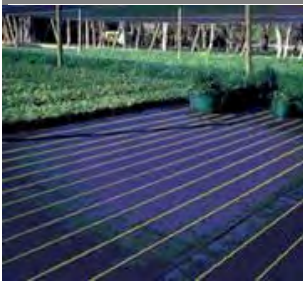


Polyethylene skirt

Polyethylene skirt for hydroponic culture trenches.
Black and white.
Untreated UV.
Thickness: 0.0055"

Description	Unit.	Code
FILM BLACK/WHITE 5.5m24"X1000'	EA	5AE62410
FILM BLACK/WHITE.006 30"X1000'	EA	5AE63010

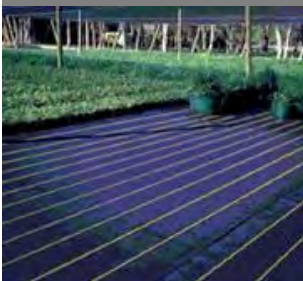
Ground cover



Black ground cover

"SUNSTONE" ground cover
 100 g/square meter
 Polypropylene 19x11 with lines at each 12"
 Permeability: 15 liters/sqare meter/sec.

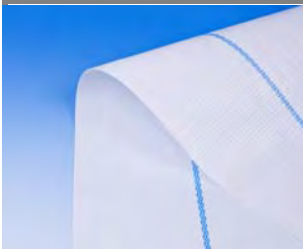
Description	Unit.	Code
BLACK GR/COVER 12 ft X 300 ft	RLS	5AL012
BLACK GROUNDCOVER 12' WIDE	PLS	5AL012-1
BLACK GR/COVER 14.9f/wx300ft/L	RLS	5AL0149
GROUNDCOVER BLACK 14'9" WIDE	PLS	5AL0149-1



With seam

"SUNSTONE" ground cover
 100 g/square meter
 Polypropylene 19x11 with lines at each 12"
 Permeability: 15 litres/sqare meter/sec.

Description	Unit.	Code
GROUNDCOVER BLACK 23'8" WIDE	PLS	5AL020-1
GROUNDCOVER BLACK 26'3" WIDE	PLS	5AL025-1
GROUNDCOVER BLACK 29'2" WIDE	PLS	5AL030-1



White ground cover

"LS SVENSSON" ground cover
 100 g/square meter
 100% polypropylene with blue lines at each 25 cm
 Permeability: 10 litres/sqare meter/sec.

Description	Unit.	Code
WHITE GR COVER 13.5' X 300'	RLS	5AL13.5

Ground cover

WHITE GR COVER 13.5'

PLS

5AL13.5-1

Anchor for ground cover

Allows to secure ground cover.

Description	Unit.	Code
ANCHOR FOR GROUND COVER	CH	5AF0

Alarm system



Sensaphone 400

INPUT ZONES:

- Flexible inputs that support:
 - Normally open or normally closed contacts
 - Temperature sensors: - 20°F to 150°F
 - 4 channels in the model 400
- Automatic input type configuration
- Programmable recognition times
- Internal calibration

ALARM NOTIFICATION:

- 4 phone numbers in the model 400
- Makes voice phone calls with customized messages for easy identification
- Built-in alarm test function to simulate and test the notification process
- Includes telephone line seizure

VOICE MESSAGES:

- Built in vocabulary for keypad programming and sensor readings
- Record custom voice phrases in your own voice to describe each input zone
- Record site identification message

MICROPHONE

- Internal microphone for custom voice message recording
- Monitor high sound alarms
- Microphone can also be used for remote listen-in feature

OUTPUT RELAY

- Low voltage NO/NC output relay included
- Manual or automatic alarm response switching

REMOTE ACCESS:

- Call in with any Touch-Tone phone to check the status of all monitored conditions
- Make programming changes remotely from any Touch-Tone phone
- Remotely control the output relay

LOCAL ACCESS:

- Keypad and speaker for local programming
- Easy voice-prompted programming
- Password-protected to restrict programming access

COMPATIBILITY:

- The Sensaphone 400 is a direct replacement for the model 1104 and "CottageSitter"

POWER SUPPLY:

- Comes with plug-in power supply
- 24 hour battery backup using 6 size C alkaline batteries (not included)
- Automatically monitors for power failure alarms
- International power options available

BUILT IN "COTTAGESITTER" CONTROL: The built in relay can be used to remotely change the temperature of a dual setback thermostat.

Description	Unit.	Code
SENSAPHONE 400 FOUR CHANNEL	CH	8C217

Alarm system



Sensaphone 800

INPUT ZONES:

- Flexible inputs that support:
 - Normally open or normally closed contacts
 - Temperature sensors: - 20°F to 150°F
 - 8 channels in the model 800
- Automatic input type configuration
- Programmable recognition times
- Internal calibration

ALARM NOTIFICATION:

- 8 phone numbers in the model 800
- Makes voice phone calls with customized messages for easy identification
- Built-in alarm test function to simulate and test the notification process
- Includes telephone line seizure

VOICE MESSAGES:

- Built in vocabulary for keypad programming and sensor readings
- Record custom voice phrases in your own voice to describe each input zone
- Record site identification message

MICROPHONE

- Internal microphone for custom voice message recording
- Monitor high sound alarms
- Microphone can also be used for remote listen-in feature

OUTPUT RELAY

- Low voltage NO/NC output relay included
- Manual or automatic alarm response switching

REMOTE ACCESS:

- Call in with any Touch-Tone phone to check the status of all monitored conditions
- Make programming changes remotely from any Touch-Tone phone
- Remotely control the output relay

LOCAL ACCESS:

- Keypad and speaker for local programming
- Easy voice-prompted programming
- Password-protected to restrict programming access

COMPATIBILITY:

- The Sensaphone 800 is a direct replacement for the model 1108

POWER SUPPLY:

- Comes with plug-in power supply
- 24 hour battery backup using 6 size C alkaline batteries (not included)
- Automatically monitors for power failure alarms
- International power options available

BUILT IN "COTTAGESITTER" CONTROL: The built in relay can be used to remotely change the temperature of a dual setback thermostat.

Description	Unit.	Code
SENSAPHONE 800 - 8 CHANNEL	CH	8C218

Alarm system



Web600

ALARM NOTIFICATION METHODS:

- E-mail, text messages, SMS
- 8 alarm escalation levels
- Comprehensive scheduling per input, profile, and alarm destination

DESTINATIONS:

- 8 programmable user profiles
- 4 programmable alarm destinations per profiles

COMMUNICATION TYPES:

- E-mail - SMS
- Test messages
- Web page - supported formats HTTP, PDA, WAP, and XML
- SNMP - MIB with traps, GET, GETNEXT, and SET
- MODBUS@/TCP slave conformance class 0 and 1

COMMUNICATION PORTS:

- Ethernet 10/100 base-t

INPUT:

- 6 universal inputs
 - Normally closed/normally open dry contact
 - Temperature sensor >>>> #8C214-1
 - 4-20m A current loop
- 12 bit resolution

RELAY OUTPUT:

- Rated for 1A 30VAC/ 1A 30VDC maximum

DATA LOGGING:

- 32,000 samples (all samples include data date and time)
- 1 second to 1 month sampling rate
- User programmable channel selection
 - Zones 1 - 6
 - Battery
 - Input power

STANDARDS:

- FCC part 15-B compliant

LOCAL INDICATORS:

- Alarm status LED
- Power status LED
- Ethernet link and activity LEDs

POWER REQUIREMENTS:

- 120V AC 50/60Hz (standard)
- Optional battery backup, module (FGD-W610-B) >>>> #8C2182
- Provides 2 hours of backup

OPERATING CONDITIONS:

- 0-90% RH, non-condensing
- 0-50°C (32-122°F)

PHYSICAL PROPERTIES:

- 5,5" x 3.25" x 1.25"
- 0.5 lbs

Alarm system

Description	Unit.	Code
SENSAPHONE WEB 600	CH	8C2181
BATTERY BACK UP FOR WEB SENSE	CH	8C2182

Sensor

Temperature sensor resistant to weathering (for 8C217 and 8C218)

Description	Unit.	Code
WEATHERPROOF TEMP. SENSOR	CH	8C214-1

ThermAlarm



Alarm

6 volts-DC electronic alarm for Thermalarm.

Description	Unit.	Code
ELECTRONIC ALARM 6-28VDC	CH	8ZE731



Thermalarm

Alarm system warns you when temperature is anormally up or down. It is a must to protect your crop.

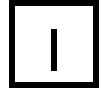
Thermometer 6" diameter.

Double adjustment for low and high temperature.

Use with alarm and 6 volts-DC battery.

Alarm: 6 V-DC.

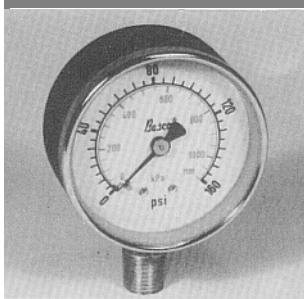
Description	Unit.	Code
ALARM THERMOMETER	CH	8C200



Page **Page title**

5	Flowmeter
16	Hygrometer
1	Pressure gauge

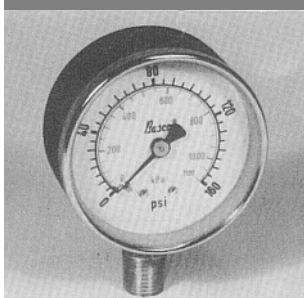
Pressure gauge



Heavy duty pressure gauge

These water pressure gauges can be permanently installed on equipments or pipe, used with needle adapter or Pitot tube for measuring pressure on nozzle output. Threaded 1/4" MPT. Oil filled gauge for a better resistance to the vibrations. Psi and Kpa graduation.

Description	Unit.	Code
GAUGE LIQUID FILLED 0- 30psi	EA	DF2003
GAUGE LIQUID FILLED 0- 60psi	EA	DF2006
GAUGE LIQUID FILLED 0-100psi	EA	DF2010
GAUGE LIQUID FILLED 0-300psi	EA	DF2030



Standard pressure gauge

Economic pressure gauge, 1/4" MPT.

Description	Unit.	Code
PRESSURE GAUGE STD 0-30psi	EA	DF1003
PRESSURE GAUGE STD 0-60psi	EA	DF1006
PRESSURE GAUGE STD 0-100psi	EA	DF1010
PRESSURE GAUGE STD 0-160psi	EA	DF1016
PRESSURE GAUGE STD 0-200PSI	EA	DF1020

Pressure gauge



Needle for pressure gauge

Installation of needle check adapter avoids damaging pressure gauge and minimizes number of gauges required. Interior lip closes under pressure. Use of pressure gauge equipped with special needle allows a constant pressure reading at anytime. Operating up to 140 psi.

Needle for pressure gauge (1/4" FPT) #LR02

Adapter for needle check (1/4" MPT) #LR01

Description	Unit.	Code
PRESSURE CHECK POINT METAL COM	EA	LR01
RUBBER GROMMET FOR CHECK POINT	EA	LR01-A
PRESSURE CHECK NEEDLE	EA	LR02

Flowmeter



In-line flowmeter

Flowmeter for on-line insertion; calculates the injection of fertilizing or flow water.

Description	Unit.	Code
FLOWMETER 0-1GAL.1/2"MPT POLY	CH	KPF44375
O'RING FOR FLOWMETER F44375LH8	CH	KPF44375-A
FLOWMETER 0.1-1.0gpm 3/8"FPT	CH	TCCF40375

Hygrometer



Hygrometer

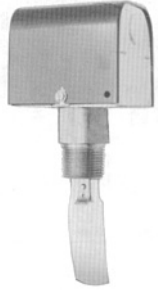
Quickly measures relative humidity (outdoor or indoor). Very precise. Use distilled water and add a drop of chlorine. Instructions included. Includes spare wick.

Description	Unit.	Code
HANGING HYGROMETER	CH	8C111

Page **Page title**

7 Flow switch

Flow switch



Flow switch

Installation on tee with 1" outlet; blades according to pipe size (1 to 6"). Open or close function; adjustable according to flow.

	Description	Unit.	Code
FLOW SWITCH		CH	8ZAFS43
BLADES' KIT FOR FS43		CH	8ZAFS43P

Page	Page title
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60	"Kamlock" fitting
42	Clamp
45	Elbow for polyethylene
55	Galvanized bushing
56	Galvanized cap & plug
52	Galvanized coupling
54	Galvanized cross & tee
53	Galvanized elbow
57	Galvanized flange
58	Galvanized nipple
80	Garden hose
1	IPS PVC pipe
47	Plug for polyethylene
43	Polyethylene adapter
44	Polyethylene coupling
40	Polyethylene pipe
83	Pressure hose
30	PVC cement
2	PVC pipe
11	Sch. 40 - PVC adapter
15	Sch. 40 - PVC bushing
16	Sch. 40 - PVC cap
12	Sch. 40 - PVC coupling
14	Sch. 40 - PVC cross & tee
13	Sch. 40 - PVC elbow
10	Sch. 40 - PVC pipe
17	Sch. 40 - PVC union
21	Sch. 80 - PVC adapter
25	Sch. 80 - PVC bushing
22	Sch. 80 - PVC coupling
24	Sch. 80 - PVC cross & tee
23	Sch. 80 - PVC elbow
27	Sch. 80 - PVC flange & union

Page **Page title**

28	Sch. 80 - PVC nipple
20	Sch. 80 - PVC pipe
46	Tee for polyethylene
31	Teflon tape
91	Traveller hose

IPS PVC pipe



160 psi pipe to be stuck

SDR26 / 160 psi (water at 23°C (73.4°F) max.)
UV untreated
Must be buried

Description	Unit.	Code
WHITE PVC BE 2" X 20' SDR26	EA	BF92060
WHITE PVC BE 2-1/2"X20' SDR 26	EA	BF92560
WHITE PVC BE 3" X 20' SDR 26	EA	BF93062
WHITE PVC BE 4"X20'SDR26 C40	EA	BF94060

PVC pipe



Pipe for assembly

White PVC pipe, RECOVERY
 Various thicknesses (120 psi, 160 psi, 200 psi or sch. 40) for assembly

Description	Unit.	Code
PVC PIPE 1" X 5' WHITE	EA	BP1005
PVC PIPE 3" X 10' WHITE	EA	BP3010

Sch. 40 - PVC pipe

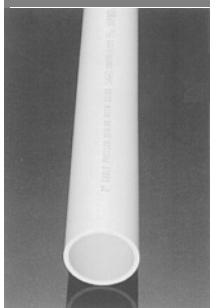


Bell-end

Sch. 40 PVC white pipe with bell-end. UV untreated. Resistance to pressure is reduced of 50% with use of threaded couplings.

DIAM.	MAX. PSI
1-1/2"	330
2"	280
3"	260

Description	Unit.	Code
WHITE PVC PE 1-1/2"X20' SCH 40	EA	BF71560
2"SCH.40PVC PIPE(WHITE)-20'BOE	EA	BF72060
3"SCH.40PVC PIPE(WHITE)-20'BOE	EA	BF73060



Standard

Sch. 40 PVC white pipe with standard end. UV untreated. Resistance to pressure is reduced of 50% with use of threaded couplings.

DIAM.	MAX. PSI
1/2"	600
3/4"	480
1"	450

Description	Unit.	Code
1/2"SCH.40 PVC PIPE(WHITE)-20'	EA	BF70560
WHITE PVC PE 3/4"X10' SCH.40	EA	BF70730
WHITE PVC BE 3/4"X20' SCH 40	EA	BF70760
WHITE PVC PE 1"X20' SCH 40.	EA	BF71060

Sch. 40 - PVC pipe

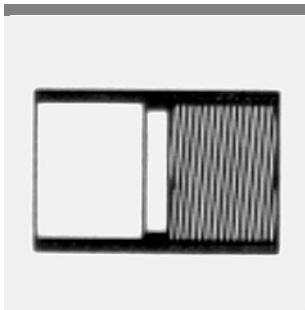
Plain end

Sch. 40 PVC white pipe with plain end. UV untreated. Resistance to pressure is reduced of 50% with use of threaded couplings.

DIAM.	MAX. PSI
2"	280

Description	Unit.	Code
WHITE PVC PE 3"X20' SCH. 40	EA	BF73060PE

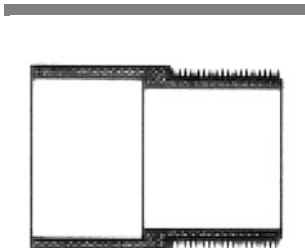
Sch. 40 - PVC adapter



Female adapter

Slip x FPT adapter.
 White sch. 40 PVC.

Description	Unit.	Code
FEM.ADAPT.1/2"SLIPxFPT PVC 40	CH	CF435005
FEM.ADAPT.3/4"SLIPxFPT PVC 40	CH	CF435007
FEM.ADAPT.1" SLIPxFPT PVC 40	CH	CF435010
FEM.ADAPT.1 1/4"SLIPxFPT PVC40	CH	CF435012
FEM.ADAPT.1 1/2"SLIPxFPT PVC40	CH	CF435015
FEM.ADAPT.2" SLIP xFPT PVC 40	CH	CF435020
FEM.ADAPT.3" SLIPxFPT PVC 40	CH	CF435030



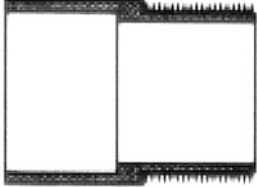
Male adapter

Slip x MPT adapter.
 White sch. 40 PVC.

Description	Unit.	Code
MALE ADAPT.1/2"SLIPxMPT PVC 40	CH	CF436005
MALE ADAPT.3/4"SLIPxMPT PVC 40	CH	CF436007
MALE ADAPT.1" SLIPxMPT PVC 40	CH	CF436010
MALE ADAPT 1 1/4"SLIPxMPTPVC40	CH	CF436012
MALE ADAPT.1 1/2"SLIPxMPTPVC40	CH	CF436015
MALE ADAPT. 2"SLIPxMPT PVC 40	CH	CF436020
MALE ADAPT.2 1/2"SLIPxMPTPVC40	CH	CF436025
MALE ADAPT. 3" SLIPxMPT PVC 40	CH	CF436030

Sch. 40 - PVC adapter

Reduced male adapter

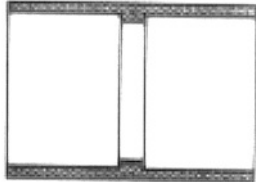


Slip x MPT reduced adapter.
White sch. 40 PVC.

Description	Unit.	Code
REDUCING M.ADAPT.1-1/4X1-1/2	CH	CF436169

Sch. 40 - PVC coupling

Slip coupling

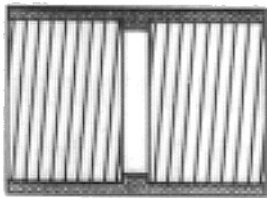


Slip x slip coupling.
 White sch. 40 PVC.

CF429060: UNTIL SUPPLIES LAST

Description	Unit.	Code
COUPLING SLIP 1/2" PVC 40	CH	CF429005
COUPLING SLIP 3/4" PVC 40	CH	CF429007
COUPLING SLIP 1" PVC 40	CH	CF429010
COUPLING SLIP 1-1/4" PVC 40	CH	CF429012
COUPLING SLIP 1-1/2" PVC 40	CH	CF429015
COUPLING SLIP 2" PVC 40	CH	CF429020
COUPLING SLIP 2-1/2" PVC 40	CH	CF429025
COUPLING SLIP 3" PVC 40	CH	CF429030
COUPLING SLIP 4" PVC 40	CH	CF429040
COUPLING SLIP 6" PVC 40	CH	CF429060
COUPLING SLIP 8" PVC 40	CH	CF429080

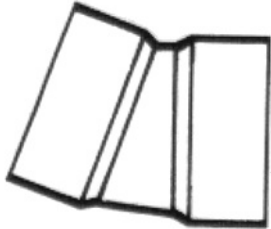
Threaded coupling



FPT x FPT coupling.
 White sch. 40 PVC.

Description	Unit.	Code
THREADED COUPLING 1/2" PVC 40	CH	CF430005
THREADED COUPLING 3/4" PVC 40	CH	CF430007
THREADED COUPLING 1" PVC 40	CH	CF430010

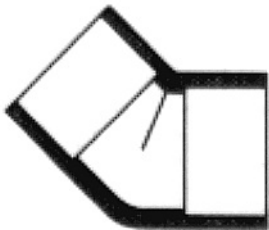
Sch. 40 - PVC elbow



22 degrees elbow

White PVC elbow, 22 degrees, schedule 40. IPS slip socket x slip socket.

Description	Unit.	Code
22-1/2* ELBOW SLIP PVC40 3"	EA	CF416030
22-1/2* ELBOW SLIP PVC40 6"	EA	CF416060

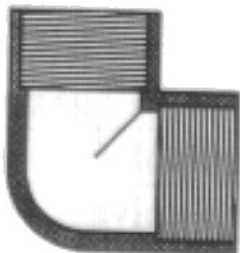


45 degrees elbow

White PVC elbow, 45 degrees, schedule 40. IPS slip socket x slip socket.

CF417040: UNTIL SUPPLIES LAST

Description	Unit.	Code
45* ELBOW S X S PVC40 3/4"	EA	CF417007
45* ELBOW S X S PVC40 1"	EA	CF417010
45* ELBOW S X S PVC40 1-1/4"	EA	CF417012
45* ELBOW S X S PVC40 1-1/2"	EA	CF417015
45* ELBOW S X S PVC40 2"	EA	CF417020
45* ELBOW S X S PVC40 2-1/2"	EA	CF417025
45* ELBOW S X S PVC40 3"	EA	CF417030
45* ELBOW S X S PVC40 4"	EA	CF417040
45* ELBOW S X S PVC40 6"	EA	CF417060

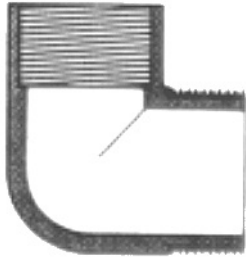


90 degrees elbow

White PVC elbow, 90 degrees, schedule 40. IPS, FPT x FPT.

Description	Unit.	Code
90*ELBOW(FPTxFPT)PVC40 3/4"	EA	CF408007

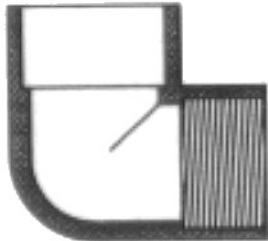
Sch. 40 - PVC elbow



90 degrees elbow

White PVC elbow, 90 degrees, schedule 40. IPS, MPT x FPT.

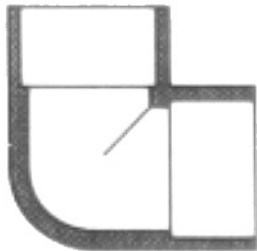
Description	Unit.	Code
90*STREET ELBOW MxF PVC40 3/4"	EA	CF412007
90*STREET ELBOW MxF PVC40 1"	EA	CF412010



90 degrees elbow

White PVC elbow, 90 degrees, schedule 40. IPS slip socket x FPT.

Description	Unit.	Code
90*ELBOW(SLIPxFIPT)PVC40 3/4"	EA	CF407007
90*ELBOW(SLIPxFIPT)PVC40 1"	EA	CF407010
90*ELBOW(SLIPxFIPT)PVC40 2"	EA	CF407020
90*ELBOW(SLIPxFIPT)PVC40 3"	EA	CF407030



90 degrees elbow

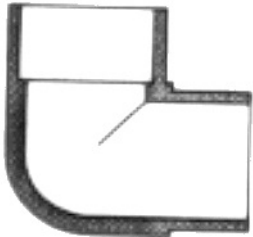
White PVC elbow, 90 degrees, schedule 40. IPS slip socket x slip socket.

CF406040: UNTIL SUPPLIES LAST
 CF406060: UNTIL SUPPLIES LAST
 CF406080: UNTIL SUPPLIES LAST

Description	Unit.	Code
90* ELBOW S X S PVC40 1/2"	EA	CF406005
90* ELBOW S X S PVC40 3/4"	EA	CF406007
90* ELBOW S X S PVC40 1"	EA	CF406010
90* ELBOW S X S PVC40 1-1/4"	EA	CF406012
90* ELBOW S X S PVC40 1-1/2"	EA	CF406015

Sch. 40 - PVC elbow

90° ELBOW S X S PVC40 2"	EA	CF406020
90° ELBOW S X S PVC40 2-1/2"	EA	CF406025
90° ELBOW S X S PVC40 3"	EA	CF406030
90° ELBOW S X S PVC40 4"	EA	CF406040
90° ELBOW S X S PVC40 6"	EA	CF406060
90° ELBOW S X S PVC40 8"	EA	CF406080

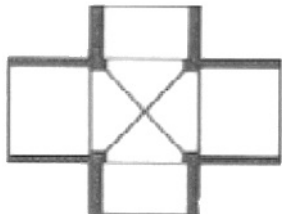


90 degrees elbow

White PVC elbow, 90 degrees, schedule 40. IPS slip socket x spigot end.

Description	Unit.	Code
90° STREET ELBOW (S) PVC40 2"	EA	CF409020

Sch. 40 - PVC cross & tee



Cross

White PVC cross, schedule 40. IPS slip socket ends.

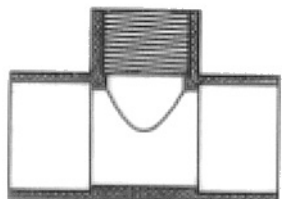
Description	Unit.	Code
CROSS SLIP - 3" PVC 40	EA	CF420030



Threaded tee

Female PVC threaded tee.

Description	Unit.	Code
TEE FPT 3/4" PVC40	EA	CF405007
TEE FPT 1" PVC40	EA	CF405010
TEE FPT 2" PVC40	EA	CF405011

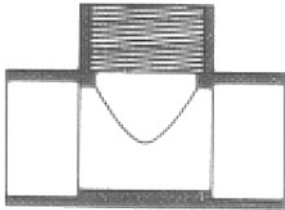


Slip reduced FPT tee

White PVC tee, schedule 40. IPS slip socket x FPT x slip socket.

Description	Unit.	Code
TEE SLIP PVC40 1" X 3/4" FPT	EA	CF402131
TEE SLIP PVC40 1-1/2"X3/4" FPT	EA	CF402210
TEE SLIP PVC40 2" X 3/4" FPT	EA	CF402248
TEE SLIP PVC40 2" X 1" FPT	EA	CF402249
TEE SLIP PVC40 3" X 1" FPT	EA	CF402335

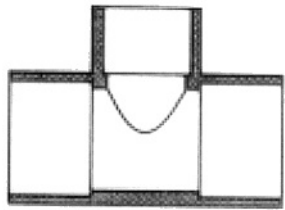
Sch. 40 - PVC cross & tee



Slip tee x FPT x slip

White PVC tee, schedule 40. IPS slip socket x FPT x slip socket.

Description	Unit.	Code
TEE SLIP PVC40 3/4" X 3/4" FPT	EA	CF402007
TE COLLE PVC40 1" X 1" FPT	EA	CF402010

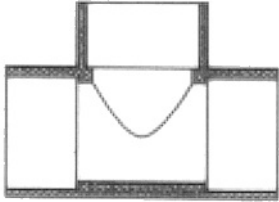


Slip reduced tee

White PVC tee, schedule 40. IPS slip socket x reduced slip x slip socket.

Description	Unit.	Code
TEE SLIP PVC40 1" X 3/4"	EA	CF401131
TEE SLIP PVC40 2-1/2" X 2"	EA	CF401292
TEE SLIP PVC40 3" X 3/4"	EA	CF401334
TEE SLIP PVC40 3" X 1"	EA	CF401335
TEE SLIP PVC40 3" X 1-1/2"	EA	CF401337
TEE SLIP PVC40 3" X 2"	EA	CF401338
TEE SLIP PVC40 2-1/2" X 4"	EA	CF401421
TEE SLIP PVC40 4" X 3"	EA	CF401422
TEE SLIP PVC40 2-1/2" X 6"	EA	CF401529
TEE SLIP PVC40 6" X 3"	EA	CF401530
TEE SLIP PVC40 6" X 4"	EA	CF401532
TEE SLIP PVC40 2-1/2" X 8"	EA	CF401579
TEE SLIP PVC40 8" X 3"	EA	CF401580
TEE SLIP PVC40 8" X 4"	EA	CF401582

Sch. 40 - PVC cross & tee



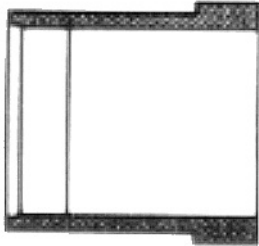
Slip tee

White PVC tee, schedule 40. IPS slip socket x slip x slip socket.

CF401040: UNTIL SUPPLIES LAST
 CF401080: UNTIL SUPPLIES LAST

Description	Unit.	Code
TEE SLIP PVC40 1/2"	EA	CF401005
TEE SLIP PVC40 3/4"	EA	CF401007
TEE SLIP PVC40 1"	EA	CF401010
TEE SLIP PVC40 1-1/4"	EA	CF401012
TEE SLIP PVC40 1-1/2"	EA	CF401015
TEE SLIP PVC40 2"	EA	CF401020
TEE SLIP PVC40 2-1/2"	EA	CF401025
TEE SLIP PVC40 3"	EA	CF401030
TEE SLIP PVC40 4"	EA	CF401040
TEE SLIP PVC40 6"	EA	CF401060
TEE SLIP PVC40 8"	EA	CF401080

Sch. 40 - PVC bushing

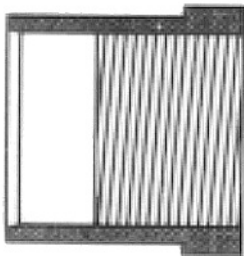


Slip x spigot bushing

White PVC reducer, schedule 40. IPS slip socket x spigot end.

CF437420: UNTIL SUPPLIES LAST

Description	Unit.	Code
REDUC.SLIP 1"x3/4" PVC 40	EA	CF437131
REDUC.SLIP 1 1/4"x1" PVC 40	EA	CF437168
REDUC.SLIP 1 1/2"x1" PVC 40	EA	CF437211
REDUC.SLIP 2"x1" PVC 40	EA	CF437249
REDUC.SLIP 2"x1-1/4" PVC 40	EA	CF437250
REDUC.SLIP 2"x1-1/2" PVC 40	EA	CF437251
REDUC.SLIP 2-1/2"x1-1/2" PVC40	EA	CF437291
REDUC.SLIP 3"x2" PVC 40	EA	CF437338
REDUC.SLIP 3"x2-1/2" PVC 40	EA	CF437339
REDUC.SLIP 4"x2" PVC 40	EA	CF437420
REDUC.SLIP 4"x 2-1/2" PVC 40	EA	CF437421
REDUC.SLIP 6"x4" PVC 40	EA	CF437532
REDUC.SLIP 8"x6" PVC 40	EA	CF437585



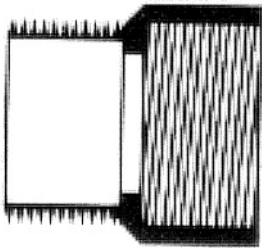
FPT x spigot bushing

White PVC reducer, schedule 40. IPS FPT x spigot end.

Description	Unit.	Code
REDUC.3/4"SLPx1/4"FPT PVC 40	EA	CF438098
REDUC.3/4"SLPx1/2"FPT PVC 40	EA	CF438101
REDUC. 1"SLP.x1/8"FPT PVC 40	EA	CF438127
REDUC. 1"SLP.x1/2"FPT PVC 40	EA	CF438130
REDUC. 1"SLPx3/4" FPT PVC 40	EA	CF438131
REDUC.1-1/2"SLPx3/4"FPT PVC 40	EA	CF438210
REDUC. 1-1/2"SLPx1"FPT PVC 40	EA	CF438211
REDUC.1-1/2"SLPx1-1/4"FTPVC40	EA	CF438212
REDUC.2"SLPx3/4"FPT PVC 40	EA	CF438248

Sch. 40 - PVC bushing

REDUC.2"SLIPx1" FPT PVC 40	EA	CF438249
REDUC.2"SLPx1-1/2" FPT PVC 40	EA	CF438251
REDUC.3"SLPx2" FPT PVC 40	EA	CF438338



MPT x FPT bushing

White PVC reducer, schedule 40. IPS FPT x MPT.

Description	Unit.	Code
REDUC.1/2"MPTx1/4" FPT PVC 40	EA	CF439072
REDUC.3/4"MPTx1/4" FPT PVC 40	EA	CF439098
REDUC.3/4"MPTx3/8" FPT PVC 40	EA	CF439099
REDUC.3/4"MPTx1/2" FPT PVC 40	EA	CF439101
REDUC.1"MPTx1/2" FPT PVC 40	EA	CF439130
REDUC.1"MPTx3/4" FPT PVC 40	EA	CF439131
REDUC.1-1/4"MPTx1" FPT PVC 40	EA	CF439168
BUSHING 1-1/2"MPT x 3/4"FPT	EA	CF439210
REDUC.1-1/2"MPTx1" FPT PVC 40	EA	CF439211
REDUC.1-1/2"MPTx1-1/4"FPVPVC40	EA	CF439212
REDUC.2"MPTx1"FPT PVC 40	EA	CF439249
REDUC.2"MPTx1-1/4" FPT PVC 40	EA	CF439250
REDUC.2"MPTx1-1/2" FPT PVC 40	EA	CF439251
REDUC.2"MPTx3/4 FPT PVC40	EA	CF439252

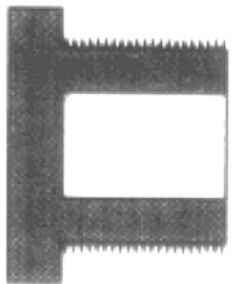
Sch. 40 - PVC cap



Threaded cap

White PVC cap, schedule 40. IPS FPT.

Description	Unit.	Code
CAP 1/2" FPT PVC 40	EA	CF448005
CAP 3/4" FPT PVC 40	EA	CF448007
CAP 1-1/4" FPT PVC 40	EA	CF448012
CAP 2" FPT PVC 40	EA	CF448020



Threaded cap

White PVC cap, schedule 40. IPS MPT.

Description	Unit.	Code
PLUG 1/2"MPT PVC 40	EA	CF450005
PLUG 3/4" MPT PVC 40	EA	CF450007
PLUG 1" MPT PVC 40	EA	CF450008
PLUG 1-1/4" MPT PVC 40	EA	CF450012
PLUG 2-1/2" MPT PVC 40	EA	CF450013



Female cap

White PVC cap, schedule 40. IPS slip.

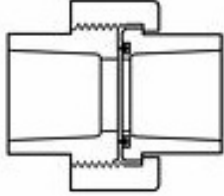
Description	Unit.	Code
CAP FEMALE SLIP 3/4" PVC 40	EA	CF447007
CAP FEMALE SLIP 1" PVC 40	EA	CF447010
CAP FEMALE SLIP 1-1/4" PVC 40	EA	CF447012
CAP FEMALE SLIP 1-1/2" PVC 40	EA	CF447015
CAP FEMALE SLIP 2" PVC 40	EA	CF447020
CAP FEMALE SLIP 2-1/2" PVC 40	EA	CF447025

Sch. 40 - PVC cap

CAP FEMALE SLIP 3" PVC 40	EA	CF447030
CAP FEMALE SLIP 4" PVC 40	EA	CF447040

Sch. 40 - PVC union

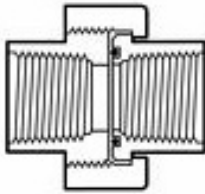
Union (slip)



PVC union (slip), schedule 40.

Description	Unit.	Code
UNION (SLIP) 1/2" PVC 40	CH	CF457005
UNION (SLIP) 3/4" PVC 40	CH	CF457007
UNION (SLIP) 1" PVC 40	CH	CF457010
UNION (SLIP) 1-1/4" PVC 40	CH	CF457012
UNION (SLIP) 1-1/2" PVC 40	CH	CF457015
UNION (SLIP) 2" PVC 40	CH	CF457020
UNION (SLIP) 2-1/2" PVC 40	CH	CF457025
UNION (SLIP) 3"PVC 40	CH	CF457030

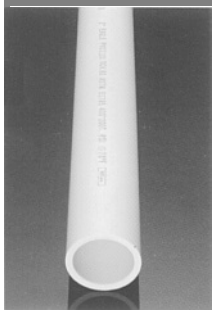
Threaded union



PVC threaded union, schedule 40.

Description	Unit.	Code
1"FPT UNION PVC CED.40	CH	CF458010
1-1/2"FPT UNION PVC CED.40	CH	CF458015
2"FPT UNION PVC CED.40	CH	CF458020

Sch. 80 - PVC pipe



Standard

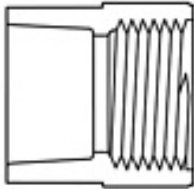
Sch. 80 PVC gray pipe with standard end. UV untreated. Resistance to pressure is reduced of 50% with use of threaded couplings.

DIAM.	MAX. PSI
1/2"	850
3/4"	690
1"	630
1-1/4"	520
1-1/2"	470
2"	400
2-1/2"	420
3"	370
4"	300

Description	Unit.	Code
GRAY PVC PE 1/2" X 20' SCH.80	EA	BF80560
GRAY PVC PE 3/4" X 10' SCH.80	EA	BF80730
3/4"SCH.80PVC PIPE(GREY)-20 FT	EA	BF80760
GRAY PVC PE 1" X 20' SCH.80	EA	BF81060
1-1/2"SCH.80PVC(GREY)- 20 FT	EA	BF81560
GRAY PVC PE 3" X 20' SCH. 80	EA	BF83060

Sch. 80 - PVC adapter

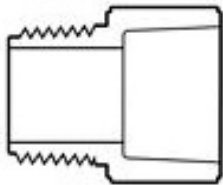
Female adapter



Slip x FPT adapter.
Gray sch. 80 PVC.

Description	Unit.	Code
FEM.ADAPT.1 1/2"SLIPxFPT PVC80	EA	CF835015
FEM.ADAPT.2" SLIP xFPT PVC 80	EA	CF835020
FEM.ADAPT.3" SLIPxFPT PVC80	EA	CF835030

Male adapter

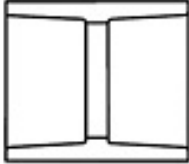


Slip x MPT adapter.
Gray sch. 80 PVC.

Description	Unit.	Code
MALE ADAPT.3/4"SLIPxMPT PVC 80	EA	CF836007
MALE ADAPT. 1"SLIPxMPT PVC 80	EA	CF836010
MALE ADAPT 1 1/4"SLIPxMPTPVC80	EA	CF836012
MALE ADAPT. 2"SLIPxMPT PVC 80	EA	CF836020

Sch. 80 - PVC coupling

Slip coupling

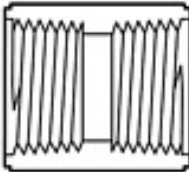


Gray PVC coupling, schedule 80.
 IPS slip socket x slip socket.

CF829040: UNTIL SUPPLIES LAST

Description	Unit.	Code
COUPLING SLIP 1" PVC 80	CH	CF829010
COUPLING SLIP 2" PVC 80	CH	CF829020
COUPLING SLIP 4" PVC 80	CH	CF829040

Threaded coupling

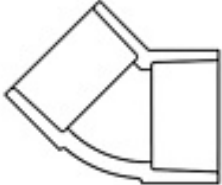


Gray PVC threaded coupling, schedule 80.

Description	Unit.	Code
COUPLING FPT 3/4"SCHEDULE 80	CH	CF830007
COUPLING FPT 1-1/2"SCHEDULE 80	CH	CF830015
COUPLING FPT 2"SCHEDULE 80	CH	CF830020

Sch. 80 - PVC elbow

45 degrees elbow



Gray PVC elbow, 45 degrees, schedule 80. IPS slip socket x slip socket.

Description	Unit.	Code
45* ELBOW S X S PVC80 4"	EA	CF817040

90 degrees elbow

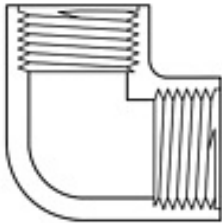


Gray PVC elbow, 90 degrees, schedule 80. IPS slip socket x slip socket.

CF806040: UNTIL SUPPLIES LAST

Description	Unit.	Code
90* ELBOW SLIP 3/4"SCD 80	EA	CF806007
90* ELBOW SLIP 1"SCD 80	EA	CF806010
90* ELBOW SLIP 2" PVC 80	EA	CF806020
90* ELBOW SLIP 4" PVC 80	EA	CF806040

90 degrees elbow

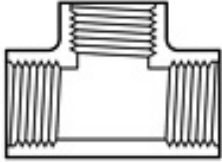


Gray PVC elbow, 90 degrees, schedule 80. IPS, FPT x FPT.

Description	Unit.	Code
90* ELBOW FPT.X FPT.PVC 80 1"	EA	CF808010
90* ELBOW FPT.X FPT.PVC 80	EA	CF808020

Sch. 80 - PVC cross & tee

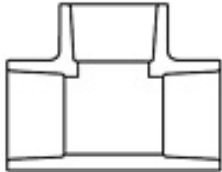
Threaded tee



Gray PVC tee, schedule 80. IPS FPT x FPT x FPT.

Description	Unit.	Code
THREADED TEE 1" PVC 80	CH	CF805010
THREADED TEE 2" PVC 80	CH	CF805020

Slip tee

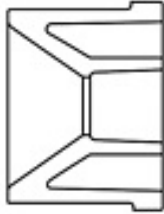


Gray PVC tee, schedule 80. IPS slip socket x slip socket x slip socket.

CF801040: UNTIL SUPPLIES LAST

Description	Unit.	Code
TEE SLIP 3/4" PVC 80	CH	CF801007
TEE SLIP 1" PVC 80	CH	CF801010
TEE SLIP 2" PVC 80	CH	CF801020
TEE SLIP 4" PVC 80	CH	CF801040

Sch. 80 - PVC bushing



Slip x spigot bushing

Gray PVC reducer, schedule 80. IPS slip socket x spigot end

Description	Unit.	Code
REDUC.SLIP 2"X 1" PVC 80	EA	CF837249
REDUC.SLIP 3" X 2" PVC 80	EA	CF837338
REDUC.SLIP 4"X 3" PVC 80	EA	CF837422



FPT x spigot bushing

Gray PVC reducer, schedule 80. IPS FPT x spigot end.

Description	Unit.	Code
REDUC.SLIP 3/4"X1/2"FPT PVC 80	EA	CF838101
REDUC.SLIP 1-1/2"X1" FPT PVC80	EA	CF838211
REDUC.2"SLP X 1-1/4"FPT PVC 80	EA	CF838250

Sch. 80 - PVC flange & union

Flange



Gray PVC flange, schedule 80. IPS slip socket.

CF854040: UNTIL SUPPLIES LAST

Description	Unit.	Code
FLANGE (LOOSE RING) 2" PVC80	EA	CF854020
FLANGE (LOOSE RING) 3" PVC 80	EA	CF854030
FLANGE (LOOSE RING) 4" PVC 80	EA	CF854040
FLANGE (LOOSE RING) 6" PVC 80	EA	CF854060

Union

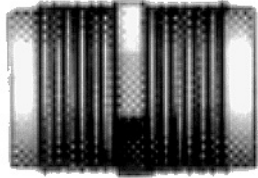


Gray PVC union, schedule 80. IPS slip socket x slip socket.

Description	Unit.	Code
UNION (SLIP) 1" PVC 80	EA	CF857010
UNION (SLIP) 1-1/2" PVC 80	EA	CF857015
UNION (SLIP) 2" PVC 80	EA	CF857020
UNION (SLIP) 3" PVC 80	EA	CF857030

Sch. 80 - PVC nipple

Close nipple



Gray PVC close nipple, schedule 80. IPS MPT x MPT.

Description	Unit.	Code
CLOSE NIPPLE PVC80 3/4"	EA	CF207013
CLOSE NIPPLE PVC80 1"	EA	CF210015
CLOSE NIPPLE PVC80 2"	EA	CF220020
CLOSE NIPPLE 1/4" PVC 80	EA	CF880005

Nipple



Gray PVC nipple, schedule 80. IPS MPT x MPT.

CF207120: UNTIL SUPPLIES LAST

Description	Unit.	Code
NIPPLE PVC80 1/2" X 1-1/2"	EA	CF205012
NIPPLE PVC80 1/2" X 2"	EA	CF205020
NIPPLE PVC80 1/2"X 36"	EA	CF205360
NIPPLE PVC80 3/4" X 2"	EA	CF207020
NIPPLE PVC80 3/4" X 4"	EA	CF207040
NIPPLE PVC80 3/4" X 6"	EA	CF207060
NIPPLE PVC80 3/4" X 12"	EA	CF207120
NIPPLE PVC80 1" X 2"	EA	CF210020
NIPPLE PVC80 2" X 2-1/2"	EA	CF220021
NIPPLE PVC80 2" X 3"	EA	CF220022
NIPPLE PVC80 2" X 4"	EA	CF220024
NIPPLE 1/4"X 6" PVC 80	EA	CF880060

PVC cement



PVC clear cement

Medium density, fast drying, for overground pipe up to 4" diameter.

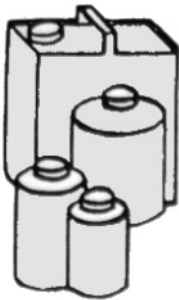
Description	Unit.	Code
705 1/2 PINT PVC CLEAR	EA	CFA030
705 CEMENT PINT PVC CLEAR	EA	CFA031
705 CEMENT QUART PVC CLEAR	EA	CFA032
705 CEMENT GALLON PVC CLEAR	EA	CFA033



PVC gray cement

Medium density, medium drying.
 - 705 type for pipe up to 4" diameter
 - 711 type for pipe up to 12" diameter

Description	Unit.	Code
QUART OF CEMENT #705 "GREY"	EA	CFA132
GALLON OF CEMENT #711 "GREY"	EA	CFA233



Empty can

Description	Unit.	Code
QUART EMPTY MT CAN NO CAP	EA	CFA022

PVC cement

Clear primer



Clear primer (P-70).

Description	Unit.	Code
P-70 PRIMER 1/2 PINT PVC CLEAR	EA	CFA000
P-70 PRIMER PINT PVC CLEAR	EA	CFA001
P-70 PRIMER QUART PVC CLEAR	EA	CFA002
P-70 PRIMER GALLON PVC CLEAR	EA	CFA003

Sealant

Description	Unit.	Code
GREAT BLUE SEALANT 475ML	EA	CFA005

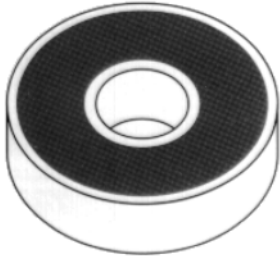
Cement and cleaner for PVC

PVC assembly

AVERAGE NUMBER OF JOINTS/32 OUNCES OF IPEX CEMENT AND CLEANER*													
Pipe diameter (inches)	1/2	3/4	1	1-1/2	2	3	4	6	8	10	12	15	18
Number of joints	300	200	125	90	60	40	30	10	5	2-3	1-2	3/4	1/2

*These figures are estimates based on laboratory test. Due to the many variables in the field, these figures should be used as a general guide only.

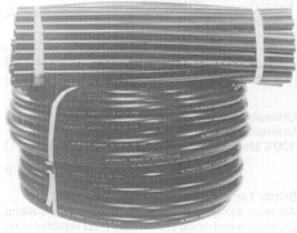
Teflon tape



Teflon tape

Description	Unit.	Code
TEFLON TAPE	CH	CCT01

Polyethylene pipe



75 psi pipe

Description	Unit.	Code
PLASTIC PIPE 75PSI 1/2 X...FT.	PLS	BK05
PLASTIC PIPE 75PSI 1/2"X 100'	RLS	BK0510
PLASTIC PIPE 75PSI 1/2"X 122'	CH	BK0512
PLASTIC PIPE 75PSI 1/2"X 144'	CH	BK0514
PLASTIC PIPE 75PSI 1/2"X3000'	CH	BK05300
PLASTIC PIPE 75PSI 1/2"X 400'	RLS	BK0540
PLASTIC PIPE 75PSI 3/4"X 100'	RLS	BK0710
PLASTIC PIPE 75PSI 3/4"X 400'	RLS	BK0740
PLASTIC PIPE 75PSI 1" X 100'	RLS	BK1010
PLASTIC PIPE 75PSI 1" X 300'	RLS	BK1030
PLASTIC PIPE 75PSI 1-1/4"X100'	RLS	BK1210
PLASTIC PIPE 75PSI 1-1/4"X300'	RLS	BK1230
PLASTIC PIPE 75PSI 1-1/2"X100'	RLS	BK1510
PLASTIC PIPE 75PSI 1-1/2"X 250	RLS	BK1525
PLASTIC PIPE 75PSI 2" X100'	RLS	BK2010
PLASTIC PIPE 75PSI 2" X 200'	RLS	BK2020

Clamp



75 PSI "Oetiker" clamp

Stainless steel clamp for 75 PSI polyethylene pipe.

>>> UNTIL SUPPLIES LAST

Description	Unit.	Code
1/2" 75 PSI OETIKER CLAMP	CH	CL198R
3/4" 75PSI OETIKER CLAMP	CH	CL256R

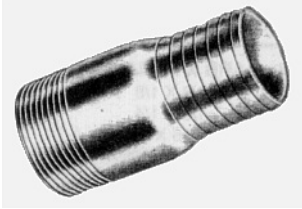


Clamp

All stainless steel clamp.

Description	Unit.	Code
ALL S.S.CLAMP 1/2" (14-27mm)	CH	CK286
ALL S.S. CLAMP 3/4" (18-32mm)	CH	CK288
ALL S.S. CLAMP 1" (21-38mm)	CH	CK289
ALL S.S. CLAMP 1-1/4"(21-44mm)	CH	CK290
ALL S.S. CLAMP 1-1/4 TO 1-1/2	CH	CK291
ALL S.S. CLAMP 1-1/2 TO 2"	CH	CK292
ALL S.S. CLAMP 2" (40-63mm)	CH	CK293
ALL S.S. CLAMP 2-1/2"(52-76mm)	CH	CK295
ALL S.S. CLAMP 3" (72-95mm)	CH	CK296
ALL S.S. CLAMP 4" (91-114mm)	CH	CK297
ALL S.S. CLAMP 6" (143-165mm)	CH	CK298
ALL S.S. CLAMP 6" TO 10"	CH	CK298A
SS.CLAMP #HAS188	CH	CK299

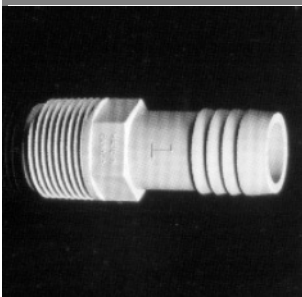
Polyethylene adapter



Galvanized adapter

Galvanized steel male adapter (MPT x insert) for polyethylene pipe.

Description	Unit.	Code
GALV. MALE ADAPTOR 3/4"	EA	CK052
GALV. MALE ADAPTOR 1"	EA	CK053
GALV. MALE ADAPTOR 1-1/4"	EA	CK054
GALV. MALE ADAPTOR 1-1/2"	EA	CK055
GALV. MALE ADAPTOR 2"	EA	CK056

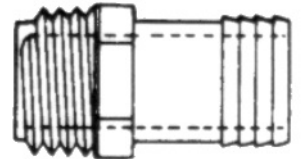


Nylon adapter

Nylon male adapter (MPT x insert) for polyethylene pipe.

Description	Unit.	Code
NYLON MALE ADAPTOR 1"	EA	CK043

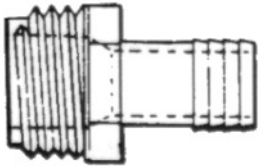
Poly adapter



Plastic male adapter (MPT x insert) for polyethylene pipe.

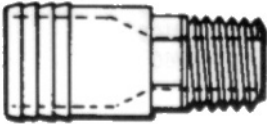
Description	Unit.	Code
PVC MALE ADAPTOR 1/2"	EA	CK031
PVC MALE ADAPTOR 3/4"	EA	CK032
PVC MALE ADAPTOR 1"	EA	CK033
POLY MALE ADAPTOR 1-1/4"	EA	CK034
POLY MALE ADAPTOR 1-1/2"	EA	CK035
POLY MALE ADAPTOR 2"	EA	CK036

Polyethylene adapter



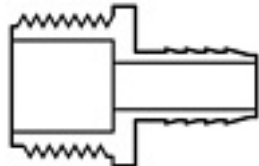
Reduced adapter

Plastic reduced male adapter (MPT x insert) for polyethylene pipe.



Description	Unit.	Code
MALE ADAPT.3/4"MPTx1" INSERT	EA	CK811
MALE ADAPT 3/4"MPTx1/2" INSERT	EA	CK818
MALE ADAPT 1"MPTx3/4" INSERT	EA	CK820

Enlarged adapter



PVC enlarged male adapter for polyethylene pipe.

Description	Unit.	Code
REDUC.MALE ADAPT.1"MPTX1-1/4"	EA	CK812

Female adapter



PVC female adapter for polyethylene pipe.

Description	Unit.	Code
FEMALE ADAPTER 1-1/2"	EA	CK064

Polyethylene coupling

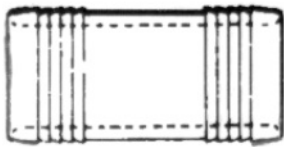
Galvanized coupling



Galvanized steel coupling (insert x insert) for polyethylene pipe.

Description	Unit.	Code
GALV. COUPLING 1"	CH	CK023

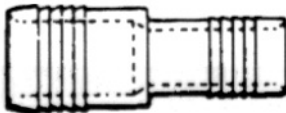
Plastic coupling



Plastic coupling (insert x insert) for polyethylene pipe.

Description	Unit.	Code
PVC COUPLING 1/2"	CH	CK001
PVC COUPLING 3/4"	CH	CK002
PVC COUPLING 1"	CH	CK003
PVC COUPLING 1-1/4"	CH	CK004
PVC COUPLING 1-1/2"	CH	CK005
PVC COUPLING 2"	CH	CK006

Reduced coupling

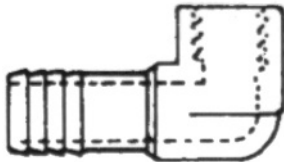


Plastic reduced coupling (insert x insert) for polyethylene pipe.

Description	Unit.	Code
POLY REDUCING COUPLG 3/4 X 1/2	CH	CK300
POLY REDUCING COUPLING 1 X 3/4	CH	CK301
POLY REDUC. COUPLING 1-1/4 X 1	CH	CK303
POLY REDUC COUPLING 1-1/2 X 1	CH	CK307
POLY REDUC. COUPLING 2 X 1"	CH	CK312

Elbow for polyethylene

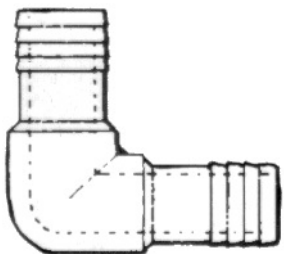
Insert x FPT



Plastic elbow (insert x FPT) for polyethylene pipe.

Description	Unit.	Code
PVC COMBIN.RED.ELB 3/4x1/2 FPT	EA	CK741
PVC COMBIN.RED.ELB 3/4x3/4 FPT	EA	CK742
PVC COMBIN.RED.ELB 1 X 3/4 FPT	EA	CK744
PVC COMBIN.RED.ELBOW 1 X 1 FPT	EA	CK745
PVC COMBIN.RED.ELB.1-1/2X1"FPT	EA	CK752
PVC COMBIN.RED.ELB.1-1/2X1-1/4	EA	CK753
PVC COMBIN.RED.ELB.1-1/2X1-1/2	EA	CK754

Insert x insert



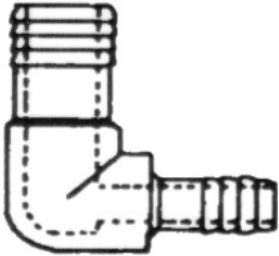
Plastic elbow (insert x insert) for polyethylene pipe.

Description	Unit.	Code
POLY 90* ELBOW 1/2"	EA	CK151
POLY 90* ELBOW 3/4"	EA	CK152
POLY 90* ELBOW 1"	EA	CK153
POLY 90* ELBOW 1-1/2"	EA	CK155
POLY 90* ELBOW 2"	EA	CK156

PVC elbow

Description	Unit.	Code
PVC 90* ELBOW 3/4"	EA	CK152PVC

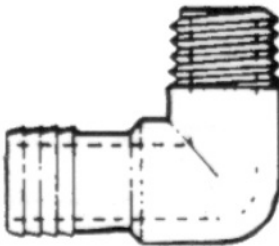
Elbow for polyethylene



Reduced insert x insert

Plastic reduced elbow (insert x insert) for polyethylene pipe.

Description	Unit.	Code
PVC REDUCING ELBOW 3/4 X 1/2	EA	CK660
PVC REDUCING ELBOW 1 X 3/4	EA	CK661

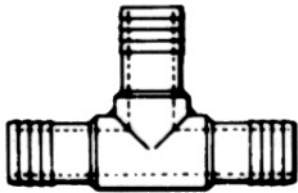


Insert x MPT

Plastic elbow (insert x MPT) for polyethylene pipe.

Description	Unit.	Code
PVC COMBIN.ELBOW 1/2 X 1/2 MPT	EA	CK700
PVC COMBIN.ELBOW 3/4 X 3/4 MPT	EA	CK701
PVC COMBIN.ELBOW 1" X 1"MPT	EA	CK702

Tee for polyethylene



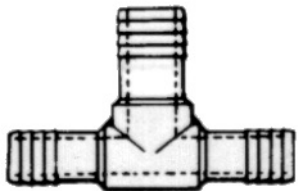
Tee

Standard tee (insert x insert x insert) for polyethylene pipe.

Description	Unit.	Code
POLY TEE 1/2"	EA	CK091
POLY TEE 3/4"	EA	CK092
POLY TEE 1"	EA	CK093
POLY TEE 1-1/2"	EA	CK095
POLY TEE 2"	EA	CK096

PVC tee

Description	Unit.	Code
3/4" PVC TEE	EA	CK092PVC



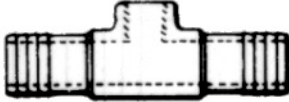
End tee

End line tee (insert x insert x insert) for polyethylene pipe.

Description	Unit.	Code
BULL HEAD TEE 3/4 X 3/4 X 1"	EA	CK759

Tee for polyethylene

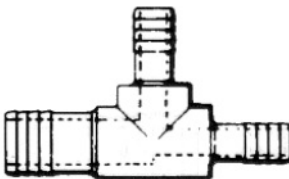
Line tee / FPT outlet



Line tee with threaded outlet (insert x FPT x insert) for polyethylene pipe.

Description	Unit.	Code
PVC COMBIN. TEE 3/4 X 1/2 FPT	EA	CK581
PVC COMBIN. TEE 3/4 X 3/4 FPT	EA	CK582
PVC COMBIN. TEE 1 X 1/2 FPT	EA	CK583
PVC COMBIN. TEE 1 X 3/4 FPT	EA	CK584
PVC COMBIN. TEE 1 X 1 FPT	EA	CK585
PVC COMBIN. TEE 1-1/4x3/4 FPT	EA	CK587
PVC COMBIN. TEE 1-1/2 X 3/4 FPT	EA	CK591
PVC COMBIN. TEE 1-1/2 X 1 FPT	EA	CK592
PVC COMBIN. TEE 2 X 1 FPT	EA	CK597

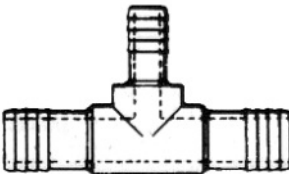
Reduced line tee



Reduced line tee (insert x insert x insert) for polyethylene pipe.

Description	Unit.	Code
POLY REDUC TEE 1 X 3/4 X 3/4	EA	CK772

Reduced tee



Standard reduced tee (insert x insert x insert) for polyethylene pipe.

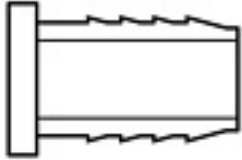
Description	Unit.	Code
POLY REDUCING TEE 3/4 X 1/2	EA	CK540
POLY REDUCING TEE 1 X 3/4	EA	CK541
POLY REDUCING TEE 1 X 1/2	EA	CK542
PVC REDUCING TEE 1-1/4 X 3/4	EA	CK544
PVC REDUCING TEE 1-1/4 X 1/2	EA	CK545

Tee for polyethylene

PVC REDUCING TEE 1-1/2 X 1-1/4	EA	CK546
POLY REDUCING TEE 1-1/2 X 1	EA	CK547
PVC REDUCING TEE 2 X 1-1/2	EA	CK550

Plug for polyethylene

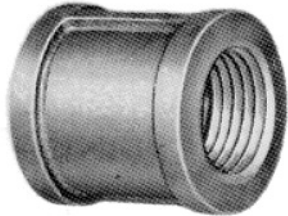
Plug



Plastic plug (insert) for polyethylene pipe.

Description	Unit.	Code
PVC INSERT PLUG 1/2"	CH	CK201
PVC INSERT PLUG 3/4"	CH	CK202
PVC INSERT PLUG 1"	CH	CK203

Galvanized coupling



Coupling

Description	Unit.	Code
GALV. COUPLING 1/4"	EA	CC002
GALV. COUPLING 1"	EA	CC006
GALV. COUPLING 1-1/2"	EA	CC008



Reduced coupling

CC215: UNTIL SUPPLIES LAST

Description	Unit.	Code
G.RED.COUPLING 1 X 3/4 NO LEAD	EA	CC210
G.RED.COUPLING 1-1/4X1 NO LEAD	EA	CC215
G.RED.CPLER 1-1/2X1-1/4 NOLEAD	EA	CC221
G.RED.COUPLING 1-1/2X1 NO LEAD	EA	CC222
G.RED.CPLER 2 X 1-1/2 NO LEAD	EA	CC228

Galvanized elbow



90 female elbow

Description	Unit.	Code
GV.ELBOW F.F.90*1/2"NO LEAD	CH	CC063
GV.ELBOW F.F.90*3/4"NO LEAD	CH	CC064
GV.ELBOW F.F.90*-1"NO LEAD	CH	CC065
GV.ELBOW FF.90*1-1/4"NO LEAD	CH	CC066
GV.ELBOW F.F.90*-2"NO LEAD	CH	CC068



90 male/female elbow

Description	Unit.	Code
GALV.ELBOW M.F.90*-3/4"NO LEAD	CH	CC024
GALV.ELBOW M.F.90*-1"NO LEAD	CH	CC025
GALV.ELB. M.F.90*1-1/4"NO LEAD	CH	CC026
GALV.ELBOW M.F.90* 2"NO LEAD	CH	CC028

Galvanized cross & tee



Cross

Description	Unit.	Code
GALV. CROSS 1" NO LEAD	CH	CC165
GALV. CROSS 1-1/2" NO LEAD	CH	CC167



Tee

Description	Unit.	Code
GALV. TEE 3/4" NO LEAD	CH	CC104
GALV. TEE 1" NO LEAD	CH	CC105
GALV. TEE 2" NO LEAD	CH	CC108

Galvanized bushing

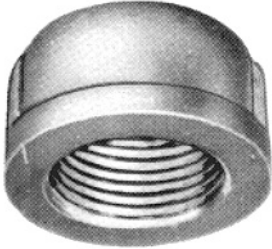


Bushing

CC415: UNTIL SUPPLIES LAST

Description	Unit.	Code
GALV.BUSHING 3/8X1/4 NO LEAD	EA	CC411
GALV.BUSHING 1/2X1/8 NO LEAD	EA	CC415
GALV.BUSHING 3/4X1/2 NO LEAD	EA	CC416
GALV.BUSHING 3/4X3/8 NO LEAD	EA	CC417
GALV.BUSHING 1 X 3/4 NO LEAD	EA	CC420
GALV.BUSHING 1 X 1/4 NO LEAD	EA	CC423
GALV.BUSHING 1-1/4 X 1 NO LEAD	EA	CC425
GALV.BUSHING 1-1/4X3/4 NO LEAD	EA	CC426
GALV.BUSHING1-1/4X3/8G.NO LEAD	EA	CC428
G.BUSHING 1-1/2X1-1/4 NO LEAD	EA	CC431
GV.BUSHING 2 X 1-1/2 NO LEAD	EA	CC438
GV.BUSHING 2X1-1/4 NO LEAD	EA	CC439
GV.BUSHING 2 X 1 NO LEDAD	EA	CC440

Galvanized cap & plug



Female cap

Description	Unit.	Code
GALV. CAP 3/4" NO LEAD	CH	CC124
GALV. CAP 1" NO LEAD	CH	CC125



Male plug

Description	Unit.	Code
GALV. PLUG 1/4" NO LEAD	CH	CC141
GALV. PLUG 1/2" NO LEAD	CH	CC143
GALV. PLUG 3/4" NO LEAD	CH	CC144
GALV. PLUG 1" NO LEAD	CH	CC145
GALV. PLUG 1-1/4" NO LEAD	CH	CC146

Galvanized flange

Gasket

Description	Unit.	Code
GASKET FLANGE 4"	EA	CD13400



Union

Description	Unit.	Code
GALV. UNION 3/4" NO LEAD	EA	CC184
GALV. UNION 1" NO LEAD	EA	CC185

Galvanized nipple

Close nipple



Description	Unit.	Code
GALV. CLOSE NIPPLE 3/4"	CH	CC704
GALV. CLOSE NIPPLE 1"	CH	CC705
GALV. CLOSE NIPPLE 1-1/4"	CH	CC706

2" nipple



Description	Unit.	Code
GALV. NIPPLE 1/2" X 2"	CH	CC723
GALV. NIPPLE 3/4" X 2"	CH	CC724
GALV. NIPPLE 1" X 2"	CH	CC725
GALV. NIPPLE 1-1/4" X 2"	CH	CC726

3" nipple



Description	Unit.	Code
GALV. NIPPLE 1/2" X 3"	CH	CC743

Galvanized nipple



4" nipple

CC766: UNTIL SUPPLIES LAST

Description	Unit.	Code
GALV. NIPPLE 1" X 4"	CH	CC765
GALV. NIPPLE 1-1/4" X 4"	CH	CC766



6" nipple

Description	Unit.	Code
GALV. NIPPLE 1" X 6"	CH	CC805



8" nipple

Description	Unit.	Code
GALV. NIPPLE 1" X 8"	CH	CC845



12" nipple

Description	Unit.	Code
GALV. NIPPLE 1" X 12"	CH	CC905

"Kamlock" fitting



Male x FPT

Couplings FPT x "Kamlock" male.

Description	Unit.	Code
PART A POLY. 3/4" M.K X F.P.T	CH	CYA075P
PART A ALUM.2" M.K X F.P.T	CH	CYA200A



Male x MPT

Couplings MPT x "Kamlock" male.

Description	Unit.	Code
PART F ALUM. 3/4" M.K.X M.P.T	CH	CYF075A
PART F ALUM. 1" M.K. X M.P.T	CH	CYF100A
PART F ALUM.1-1/2" M.K.X M.P.T	CH	CYF150A
PART F ALUM 2" M.K. X M.P.T.	CH	CYF200A



Male x hose

Aluminum couplings hose insert x "Kamlock" male.

Description	Unit.	Code
KAMLOCK ALUM 3/4"M.K.X HOSE	CH	CYE075A
PART E ALUM. 1" M.K. X HOSE	CH	CYE100A
PART E POLY. 1" M.K. X HOSE	CH	CYE100P
PART E ALUM. 2" M.K.X HOSE	CH	CYE200A

"Kamlock" fitting

Female x FPT



Couplings FPT x "Kamlock" female.

Description	Unit.	Code
PART D POLY. 3/4" F.K.X F.P.T	CH	CYD075P
PART D ALUM.1" F.K. X F.P.T	CH	CYD100A
PART D ALUM 2" F.K. X F.P.T	CH	CYD200A
PART D ALUM 2-1/2"F.K.X F.P.T	CH	CYD250A

Female x MPT



Couplings MPT x "Kamlock" female.

Description	Unit.	Code
PART B ALUM. 3/4" F.K. X M.P.T	CH	CYB075A
PART B ALUM. 1" F.K.X M.P.T	CH	CYB100A
PART B ALUM.2" F.K. X M.P.T	CH	CYB200A
PART B ALUM. 3" F.K X M.P.T	CH	CYB300A

Female x hose



Couplings hose insert x "Kamlock" female.

Description	Unit.	Code
KAMLOCK ALUM 3/4"F.K. X HOSE	CH	CYC075A
PART C ALUM. 1"F.K. X HOSE	CH	CYC100A
PART C POLY. 1"F.K. X HOSE	CH	CYC100P
PART C ALUM. 1-1/4"F.K. X HOSE	CH	CYC125A
PART C ALUM 2" F.K. X HOSE	CH	CYC200A
PART C ALUM. 3" F.K. X HOSE	CH	CYC300A

"Kamlock" fitting

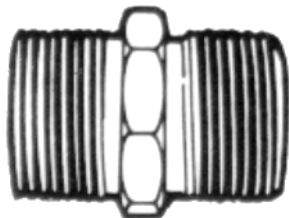


Gasket

Gasket for "Kamlock" couplings.

Description	Unit.	Code
GASKET FOR KAMLOCK 3/4"	CH	CYJ075
GASKET FOR KAMLOCK 1"	CH	CYJ100
GASKET FOR KAMLOCK 2"	CH	CYJ200

Garden hose



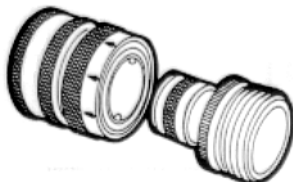
MPT x MHT coupling

Description	Unit.	Code
3/4" MHT X 3/4" MPT & 1/2" FPT	CH	SB50041



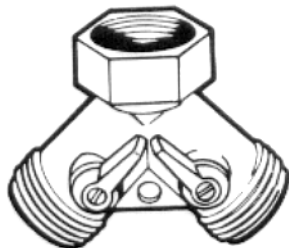
Swivel coupling

Description	Unit.	Code
3/4" FHT X 3/4" FPT HOSE-PIPE	CH	SB50043
3/4" FHT X 1/2" FPT HOSE-PIPE	CH	SB50044



Quick coupling

Description	Unit.	Code
QUICK CONNECT 3/4" FEM. X MALE	CH	SB58285



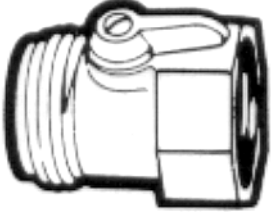
Double valve

Double outlet zinc shut-off valve 3/4" FHT x 3/4" MHT x 3/4" MHT.

Description	Unit.	Code
ZINC HOSE Y W/SHUT-OFF VALVE	CH	SB58084

Garden hose

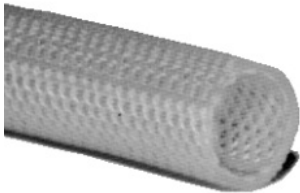
Single valve



Description	Unit.	Code
ZINC SHUT-OFF COUPLING 3/4"HT	CH	SB58087

Pressure hose

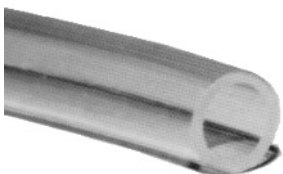
Reinforced vinyl hose



Clear vinyl hose.
 (T° 20°C - 70°C)
 (T° 68°F - 158°F)

Description	Unit.	Code
HOSE BRAIDED VINYL 1/2" 200PSI	PLS	BYQ05
HOSE BRAIDED VINYL 3/4" 150PSI	PLS	BYQ07
HOSE BRAIDED VINYL 1" 125PSI	PLS	BYQ10

Clear vinyl hose



Clear vinyl hose.
 (T° 20°C - 70°C)
 (T° 68°F - 158°F)

>>> UNTIL SUPPLIES LAST

Description	Unit.	Code
HOSE CLEAR VINYL 1/4" 55PSI	PLS	BYL02-1
HOSE CLEAR VINYL 3/8" 45PSI	PLS	BYL04-1
HOSE CLEAR VINYL 1" 25PSI	PLS	BYL07-1

Traveller hose

Hose

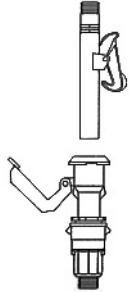
MT440 => Purchase in roll of 100' only

Description	Unit.	Code
DUROLEX 10 - 3" 150psi	FT	MT430
OROFLEX 10 - 4" 150psi	FT	MT440

Page	Page title
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7	Coupling and bushing
60	Orbit sprinkler
5	Plasson
75	Valves boxes

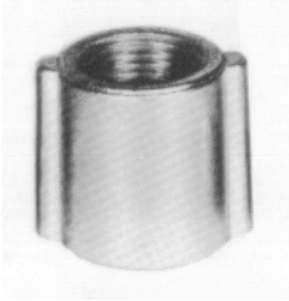
Plasson



Plasson quick valve

Description	Unit.	Code
QUICK COUPLING VALVE 3/4"	CH	SL1
RISER FOR QCV 3/4"	CH	SL2
VALVE BODY (LOWER) - 3/4"	CH	SL5

Coupling and bushing



Coupling

Zamac coupling.

Description	Unit.	Code
SLEEVE COUPLING 1/2" ZAMAC	EA	SM15
SLEEVE COUPLING 3/4" ZAMAC	EA	SM16

Aluminum coupling

Description	Unit.	Code
BAGUE ALUM. 3/4"	EA	CA01075



Bushing

Reducer bushing zamac MPT x FPT.

Description	Unit.	Code
BUSHING 3/4" X 1/2" ZAMAC	EA	SM09

Orbit sprinkler



Impact sprinkler

Impact head sprinkler, with distance deflector and two nozzles included.

Description	Unit.	Code
1/2" MPT PLASTIC IMPACT	CH	SB55010

Orbit sprinkler

Performance

#SB55010 & #SB55026 SPRINKLERS

Nozzles	Pressure PSI	Flow gpm	Radius ft	Precipitation " / hre □
#2 (9/64")	25	3.0	33	0.26
	30	3.3	37	0.23
	35	3.5	39	0.22
	40	3.7	42	0.20
	45	3.8	43	0.18
	50	4.0	44	0.19
	55	4.4	46	0.20
#3 (5/32")	25	3.5	31	0.24
	30	3.8	34	0.22
	35	4.0	37	0.20
	40	4.2	38	0.18
	45	4.4	39	0.17
	50	4.5	40	0.18
	55	4.8	41	0.18

Valves boxes

10" round valve box

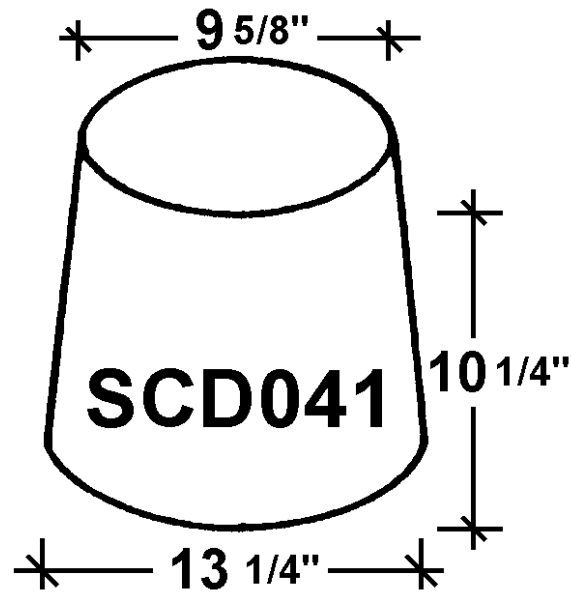


10" round valve box with cover.

Description	Unit.	Code
10" CIRCULAR VALVE BOX	CH	SCD041

Valve box

Dimensions





Page **Page title**

2	Ball valve & union
10	Brass ball valve
12	Brass gate valve
30	Electric valve
5	Float valve
20	Mist/Propagation
1	PVC ball valve
18	Reducing valve
40	Valve parts

PVC ball valve



E serie FPT x FPT

Economic PVC ball valve.

Description	Unit.	Code
1/2"FPT COMPACT PVC BALL VALVE	EA	SB41105
3/4"FPT COMPACT PVC BALL VALVE	EA	SB41107
1"FPT COMPACT PVC BALL VALVE	EA	SB41110
1-1/4"FPT COMPACT PVC BALL VLV	EA	SB41112
UTILITY COMP.B.VALV.PVC 1-1/2"	EA	SB41115
2"FPT COMPACT PVC BALL VALVE	EA	SB41120



E serie slip x slip

Economic PVC ball valve.

Description	Unit.	Code
UTILITY COMP.B.VLV PVC 1/2"SL	EA	SB412005
UTILITY COMP.B.VLV PVC 3/4"SL	EA	SB412007
UTILITY COMP.B.VALVE PVC 1"SL	EA	SB412010
UTILITY COMP.B.VALV.PVC 1-1/4S	EA	SB412012
UTILITY COMP.B.VALV.PVC 1-1/2S	EA	SB412015
UTILITY COMP.B.VALVE PVC 2"SL	EA	SB412020
4"SLIP PVC BALL VALVE	EA	SB412040

Ball valve & union



Ball valve & union

Ball valve and union.
235 psi.

Description	Unit.	Code
3/4"TRUE UNION STD BALL VALVE	CH	CF3639007
1"TRUE UNION STD BALL VALVE	CH	CF3639010
2"TRUE UNION STD BALL VALVE	CH	CF3639020

Float valve



Float valve

1" MPT brass float valve.

Description	Unit.	Code
BRASS FLOAT VALVE 1" ASSY.	CH	XDE1100

Brass ball valve

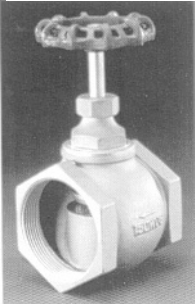


Standard serie

Brass ball valve, closure in a quarter turn. FPT x FPT.

Description	Unit.	Code
BALL VALVE 1/4" BRASS	CH	DC4025
BALL VALVE 1/2" BRASS	CH	DC4050
BALL VALVE 3/4" BRASS	CH	DC4075
BALL VALVE 1" BRASS	CH	DC4100
BALL VALVE 1-1/2" BRASS	CH	DC4150
BALL VALVE 2" BRASS	CH	DC4200
BALL VALVE 3" BRASS	CH	DC4300

Brass gate valve



Standard serie

Brass gate valve, FPT x FPT.

Description	Unit.	Code
GATE VALVE 1/2" BRASS	CH	DC1050
GATE VALVE 3/4" BRASS	CH	DC1075
GATE VALVE 1" BRASS	CH	DC1100
GATE VALVE 2" BRASS	CH	DC1200
GATE VALVE 3" BRASS	CH	DC1300

Reducing valve

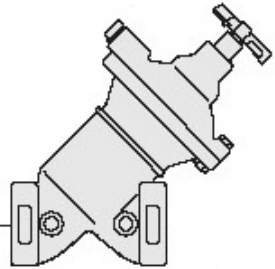
100 series



- Temperature range: water up to 185°F
- Pressure rating: 145 PSI
- Operating pressure range: 7-145 PSI

Description	Unit.	Code
PRESSURE REDUCING VALVE 2"FPT	CH	KK120552
PRESSURE REDUCING VALVE 3"FPT	CH	KK120553

300 series



- Temperature range: water up to 140°F
- Pressure rating: 145 PSI
- Operating pressure range: 10-145 PSI

Description	Unit.	Code
PRESSURE REDUCING VALVE 2"	CH	KK320552

Mist/Propagation

3/4" PVC valve low flow



Flow: .1 to 28 gpm
Operating pressure: 10-150 PSI
3/4" with solenoid and flow control

Description	Unit.	Code
3/4"PVC VALVE-24V. LOW FLOW	CH	K4DV01
PVC VALVE 3/4"115V. LOW FLOW	CH	K4DV02

1" PVC valve low flow



Flow: .2 to 35 gpm
Operating pressure: 10-150 PSI
1" with solenoid and flow control

Description	Unit.	Code
1"PVC VALVE-24V. LOW FLOW	CH	K4DV11
1" PVC VALVE 115V LOW FLOW	CH	K4DV12

Electric valve



Flow control

With flow control; manual operation. Pressure from 5 to 150 PSI; flow from 30 to 150 GPM. Construction in nylon and fiberglass.

Description	Unit.	Code
2"ELECTRONIC VALVE RAINB.24V	CH	K557027
1"NPT VALVE WITH FLOW CONTROL	CH	K557211
1"NPT VALVE 115V.FLOW CONTROL	CH	K557212



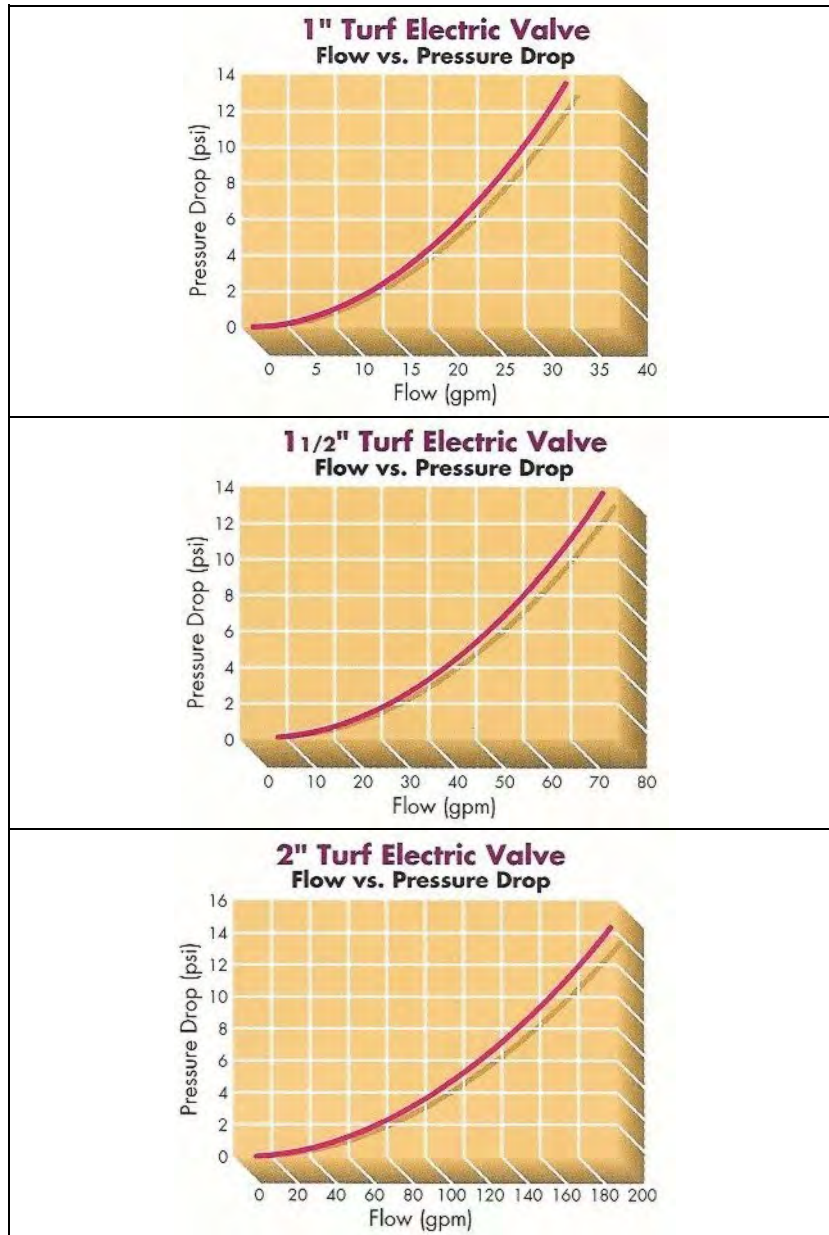
Standard

1" F.P.T. PVC valve. Without flow control; manual operation with internal purge. Pressure from 15 to 150 PSI; flow from 5 to 40 GPM. PVC body.

Description	Unit.	Code
1"ELEC.IN-LINE THREAD W-O CTRL	CH	K557200A

Orbit electric valve

Pressure loss



Valve parts



| **Actuator**

Description	Unit.	Code
COIL 24VOLTS FOR VLV RAINB.2"	CH	K557026G
SOLENOID ASS.24 VOLTS ORBIT	CH	KA100246
SOLENOID ASSEMBLY 115 VOLTS	CH	KA100248
24VAC SOLENOID	CH	KA100249

Page **Page title**

60	Electric wire
30	Galcon controller
9	Rain sensor

Rain sensor



Rain Bird sensor

The Rain Bird rain sensor saves water by automatically measuring precipitation amounts and suspends irrigation cycles when watering is unnecessary. Suitable for use with controllers that can actuate up to ten 24 VAC, 7 VA solenoid valves per station, plus one master valve.
Device suitable for 24 VAC.

Description	Unit.	Code
RAIN BIRD RAIN SENSOR	CH	K701-1

Galcon controller



Controller

- Operate up to 6 valves and master valve (starter pump)
- Can operate 2 valves at the same time
- Operates valves of 24 VAC
- 4 start times per day, per valve in calendar mode
- Simple programming with 4 buttons
- Manual operation optional
- Automatic short circuit valve detection, isolates the shorted valve and displays a visible alarm
- Can be programmed with emergency power, without connection AC
- Up to 30 days of delay in case of rain

SPECIFICATIONS OPERATION

- Program: independent program for each valve
- Watering duration of stations: segments of 1 second up to 24 hours
- Watering schedule:
 - Segments of 1 minute up to 5 minutes
 - Segments of 5 minutes up to 15 minutes
 - Segments of 15 minutes up to 45 minutes
 - Segments of 1 hour up to 23 hours
 - Segments of 1 day up to 30 days
 - 7 day calendar
- Beginning operation in irrigation mode: Up to 4 starts per day
- Beginning operation in propagation mode: 1 start each minute
- Sensor: Start and stop
- Irrigation window which allows propagation to a defined period of the day
- Window open: AM or PM
- Window close: AM or PM

ELECTRICAL SPECIFICATIONS

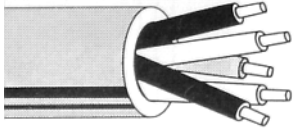
- Input: 120 VAC, 60 Hz
- Output: 24 VAC, 0.27 amps per station
- Maximum output: 24 VAC, 0.83 amps
- Emergency power: 9 V alkaline batteries (not included)

DIMENSIONS

- Height: 6-1/4" (16 cm)
- Width: 4" (10 cm)
- Depth: 1-1/2" (3.8 cm)

Description	Unit.	Code
6 STATIONS CONTROLLER 8056S AC	EA	K4DC01-1

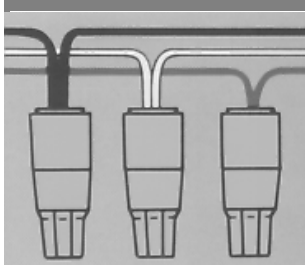
Electric wire



18 gauge electric wire

Maximum length in one piece:
 8ZX18-2S: 100m / 328'
 8ZX18-4 : 75m / 246'
 8ZX18-6 : 75m / 246'
 8ZX18-8 : 75m / 246'

Description	Unit.	Code
WIRE 18-2 CONDUCT.SHIELD GREY	PLS	8ZX18-2S
WIRE 18-4 FOR CONTROLLER LOW V	PLS	8ZX18-4
WIRE 18-6 FOR CONTROLLER LOW V	PLS	8ZX18-6
WIRE 18-8 FOR CONTROLLER LOW V	PLS	8ZX18-8



King connector

Description	Unit.	Code
BLACK/WHITE WIRE CONNECTOR	CH	KF004

Electric wire



Electrical 24 VCA valves: 0.48 amp

Maximum distance vs gage of wire

WIRE GAGE	1 VALVE	2 VALVES
#22	380 feet	190 feet
#20	610 feet	305 feet
#18	980 feet	490 feet
#16	1,550 feet	775 feet
#14	2,470 feet	1,235 feet

Maximum resistance allowed for one valve and its wire should be 12.5 OHMS.
For 2 valves 6.5 OHMS.

Page **Page title**

1	Amiad filter
10	Disk filter
40	MixRite injector

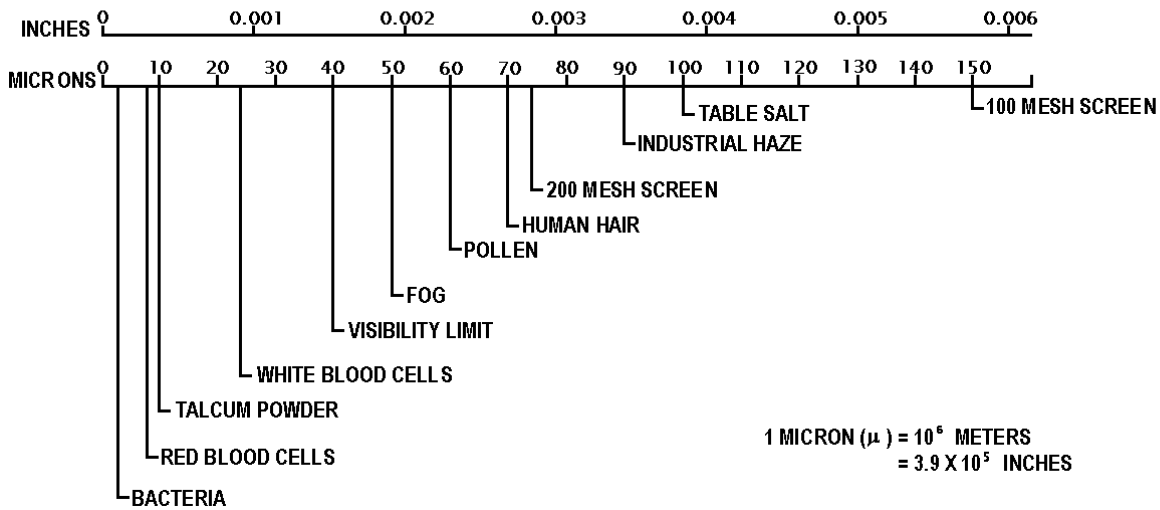
Filtration

FILTERS CLASSIFICATION VS. SCS

CATEGORY	MILLIMETERS	INCHES	MESH (1)	SAND FILTRATION (2)
Very rough sand	1.00 -2.00	0.0393 -0.0786	18-10	
Rough sand	0.50 -1.00	0.0197 -0.0393	35-18	approximate
Medium sand	0.25 -0.50	0.0098 -0.0197	60-35	1/10
Fine sand	0.10 -0.25	0.0039 -0.0098	160-35	of diameter
Very fine sand	0.05 -0.10	0.0029 -0.0039	270-160	of sand
Silt	0.002 -0.05	0.00008 -0.0020	400+/-270	
Clay	- than 0.002	- than 0.00008		

(1) Standard mesh (2) For round sand (From Wilson 1977)

PARTICLE SIZE COMPARISON AND CONVERSION CHART



MESH	Inches	MICRONS	MESH	Inches	MICRONS	MESH	Inches	MICRONS
3250	0.0002	6	130	0.0043	110	24	0.028	718
1600	0.0005	14	120	0.0046	118	20	0.034	872
750	0.0010	25	110	0.0051	131	18	0.039	1000
325	0.0016	40	100	0.0055	149	16	0.045	1154
250	0.0024	62	90	0.0061	156	14	0.051	1308
200	0.0029	74	80	0.0070	179	12	0.060	1538
180	0.0033	85	70	0.0078	200	10	0.075	1923
170	0.0035	90	60	0.0092	238	8	0.097	2488
160	0.0038	97	50	0.0117	300	6	0.132	3385
150	0.0041	100	40	0.015	385	5	0.159	4077
140	0.0042	108	30	0.020	513	4	0.203	5205

Amiad filter



3/4" Amiad filter

3/4"MPT x 3/4"MPT filter
Max. 140 PSI Ratio 1:11
Cylinder: 1.2" x 5"
Weight: 9oz
Type: 101-0052
Pressure loss: 2.5 PSI to 12 gpm

Description	Unit.	Code
COMPLETE FILTER 3/4"-200 MESH	EA	KM390-08
COMPLETE FILTER 3/4"-155 MESH	EA	KM390-10
COMPLETE FILTER 3/4"-120 MESH	EA	KM390-13
COMPLETE FILTER 3/4"-50 MESH	EA	KM390-3



1" Amiad filter

1"MPT x 1"MPT filter
Max. 140 PSI Ratio 1:13
Cylinder: 2" x 5"
Weight: 1.4 lb
Type: 112-0052
Pressure loss: 4.0 PSI to 30 gpm

Description	Unit.	Code
COMPLETE FILTER 1"-200 MESH	EA	KM3901-08
COMPLETE FILTER 1"-155 MESH	EA	KM3901-10
COMPLETE FILTER 1"-120 MESH	EA	KM3901-13
COMPLETE FILTER 1"-50 MESH	EA	KM3901-3

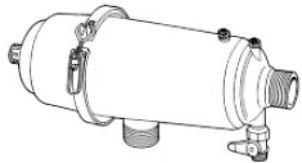
Amiad filter



1-1/2" Amiad filter

1-1/2"MPT x 1-1/2"MPT filter
Max. 140 PSI Ratio 1:9
Cylinder: 2.06" x 10"
Weight: 3.75 lb
Type: 116-0052
Pressure loss: 2.0 PSI to 60 gpm

Description	Unit.	Code
COMPLETE FILTER 1-1/2"155 MESH	EA	KM39110-10
COMPLETE FILTER 1-1/2"120 MESH	EA	KM39110-13
COMPLETE FILTER 1-1/2"-50 MESH	EA	KM39110-3



2" Amiad filter

2"MPT filter
Max. 140 PSI, 110 GPM
2 PSI pressure loss
Type 123-0059 super
Model can be different.

Description	Unit.	Code
COMPLETE FILTER 2"S.S.CYL.200M	EA	KM3929-08
COMPLETE FILTER 2"S.S.CYL.155M	EA	KM3929-10
COMPLETE FILTER 2"S.S.CYL.120M	EA	KM3929-13
COMPLETE FILTER 2"S.S.CYL.50M.	EA	KM3929-3



3/4" screens

Description	Unit.	Code
CYLINDER AMIAD 3/4" 200M BLACK	EA	KM390708

Amiad filter

RED CYLINDER AMIAD 3/4"-120M.	EA	KM390713
BLUE CYLINDER AMIAD 3/4"-50M.	EA	KM39073



1" screens

Description	Unit.	Code
BLACK CYLINDER AMIAD 1"-200M.	EA	KM3901708
CYLINDER AMIAD 1" 155M YELL.	EA	KM3901710
CYLINDER AMIAD 1" 120M RED	EA	KM3901713
BLUE CYLINDER AMIAD 1"-50MESH	EA	KM390173



1-1/2" screens

Description	Unit.	Code
CYLINDER AMIAD 1-1/2" 200M BL.	EA	KM3911708
CYLINDER AMIAD 1-1/2" 155M YEL	EA	KM3911710
CYLINDER AMIAD 1-1/2" 120M RG	EA	KM3911713
CYLINDER AMIAD 1-1/2"-50M BLUE	EA	KM391173



2" screens

Description	Unit.	Code
2" MOULDED SS CYL. 50 MESH	EA	KM39297203
2" MOULDED SS CYL. 120 MESH	EA	KM39297213

Disk filter



Disk filter

- Self-cleaning filter made of polyamide reinforced with fiberglass
- Disk filter 3"
- Closing system: stainless steel clamp
- Maximum working pressure: 10 bar at 20°C
- Nominal flow rate: 30 m3/h
- Filtering cartridge: disks with deflector
- Filtrating surface: 1400 cm2
- Minimum backwashing pressure: 3 bar

Description	Unit.	Code
DISC FILTER 3"- 120 MESH	EA	KMD30120

Parts

Description	Unit.	Code
ROTO DISK CART 120MSH XLRG	EA	KMD30120-B
O RING FOR ROTOFLTR COVER	EA	KMD30120-C

MixRite injector



.08 to 11 gpm injector

The water powered self-priming dosing pumps for the accurate injection of a wide variety of liquid additives (fertilizers, medicines, vitamins, detergents, etc.) into water and other liquids used in agriculture and industry.

Work with a minimum pressure loss and assure a precise injection rate can matter the flow as much as it is inside the specifications.

- Activated by the water current
- Easy to install and to operate
- Flow from 0.08 to 11 gallons per minute
- Pressure: 3 to 90 PSI
- Multiple options available
- UV resistant
- Total resistance to acid up to 20%

Description	Unit.	Code
DEMA MIXRITE 572 0.4-4%	EA	KPCM01
DEMA MIXRITE 572PVDF .4-4%	EA	KPCM01A
MIXRITE 2501 FIXED 0.8%	EA	KPCM02
MIXRITE PUMP 570 .2% TO 2%	EA	KPCM07



0.8 to 22 gpm injector

The water powered self-priming dosing pumps for the accurate injection of a wide variety of liquid additives (fertilizers, medicines, vitamins, detergents, etc.) into water and other liquids used in agriculture and industry.

Work with a minimum pressure loss and assure a precise injection rate can matter the flow as much as it is inside the specifications.

- Activated by the water current
- Easy to install and to operate
- Flow from 0.8 to 22 gallons per minute
- Pressure: 14.7 to 120 PSI
- Injection rate: 0.2 to 2%
- Multiple options available
- UV resistant
- Total resistance to acid up to 20%
- SUPPORT NOT INCLUDED

Description	Unit.	Code
MIXRITE TF-5 ADJUST. 0.2 TO 2%	EA	KPCM05

MixRite injector



2 to 45 gpm injector

The water powered self-priming dosing pumps for the accurate injection of a wide variety of liquid additives (fertilizers, medicines, vitamins, detergents, etc.) into water and other liquids used in agriculture and industry.

Work with a minimum pressure loss and assure a precise injection rate can matter the flow as much as it is inside the specifications.

- Activated by the water current
- Easy to install and to operate
- Flow from 2.5 to 45 gallons per minute
- Pressure: 14 to 120 PSI
- Multiple options available
- UV resistant
- Pressure loss: 1.45 PSI to 2 GPM
13.00 PSI to 45 GPM
- SUPPORT NOT INCLUDED

Description	Unit.	Code
MIXRITE TF10-002 0.2%-2% 1.5"	EA	KPCM10



8.8 to 110 gpm injector

The water powered self-priming dosing pumps for the accurate injection of a wide variety of liquid additives (fertilizers, medicines, vitamins, detergents, etc.) into water and other liquids used in agriculture and industry.

Work with a minimum pressure loss and assure a precise injection rate can matter the flow as much as it is inside the specifications.

- Activated by the water current
- Easy to install and to operate
- Flow from 8.8 to 110 gallons per minute
- Pressure: 14 to 87 PSI
- Multiple options available
- UV resistant
- Pressure loss: 1.4 PSI to 8.8 GPM
14.5 PSI to 110 GPM
- SUPPORT NOT INCLUDED

Description	Unit.	Code
TF25-002 0.2%-2.5% 2"MPT	EA	KPCM25
TF25.005ON/OFF 1%-5.5% 2"MPT	EA	KPCM25A

MixRite injector



Assembled

Injector with concentrate tank (12 or 15 gallons) mounted on a cart.

Description	Unit.	Code
PORTABLE MIX-CART HARNOIS	EA	XKPB03



By-pass kit

Description	Unit.	Code
KIT BY-PASS 1"DIA. + FILTREUR	EA	XKPE002



Injector & hose

Description	Unit.	Code
KIT D'INJECTION + BOYAU + RACC	EA	XKPE003



Tank

Description	Unit.	Code
5 GAL. PLASTIC TANK	EA	KP05G
TANK 15GAL. 14"DIA. X 27"H.	EA	RP040A