ILIAD

READ CAREFULLY THIS PAGES FOR TO ADJUST CORRECTLY ALL THE FUNCTIONS OF YOUR HYDRAULIC EQUIPMENT FOR SWING DOORS.

DESCRIPTION OF MAIN FUNCTIONS.

This hydraulic equipment is provided of slowdown in the output movement direction of the shaft (in doors that opens to inside directions represents slowdown in door closing).

The slowdown in closing maneuver is totally independent to the force adjust. You can configure the force of the equipment to the minimum, and in parallel, you can adjust the slowdown to the maximum level.

This equipment allows configure the opening force and the closing force.

Another advantage of this hydraulic arm is that is provided of an anti-wind system that you can adjust proportionally to the force regulation.

Finally, and the most important characteristic of these product family are that you can configure the hydraulic arm for to operate reversible or irreversible in closing, and you can adjust the level of the irreversibility, since totally reversible, semi irreversible (with some grade of resistance) or completely reversible.

ADJUSTMENTS AVAILABLE

- IRREVERSIBILITY CONFIGURATION

REVERSIBLE:

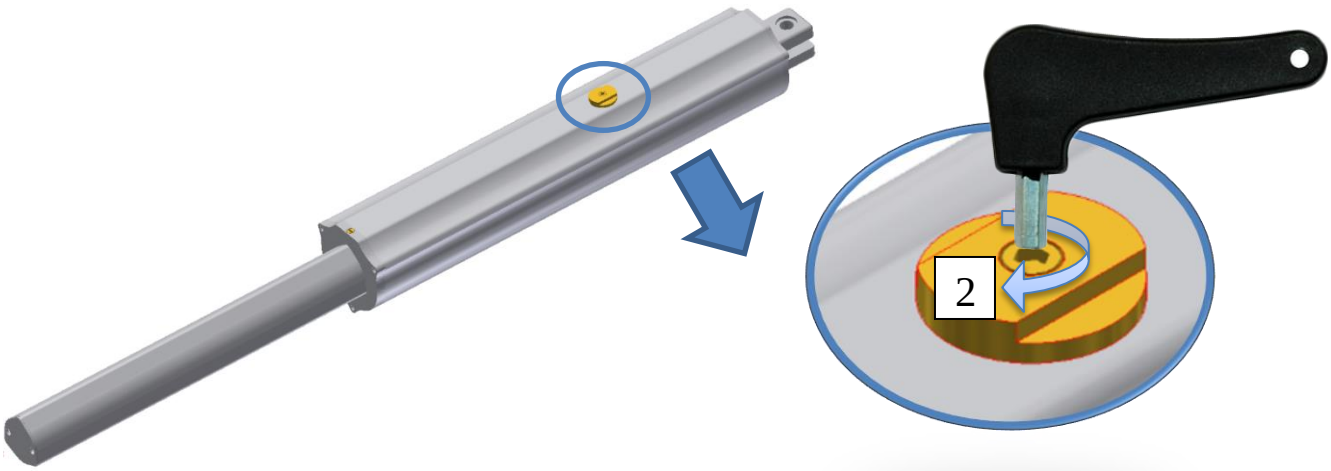
- Loosen the allen locking screw (2) throug the key and check that the screw is not tight. (Loosen approximately 1,5 turn from the maximum tighten)

IRREVERSIBLE:

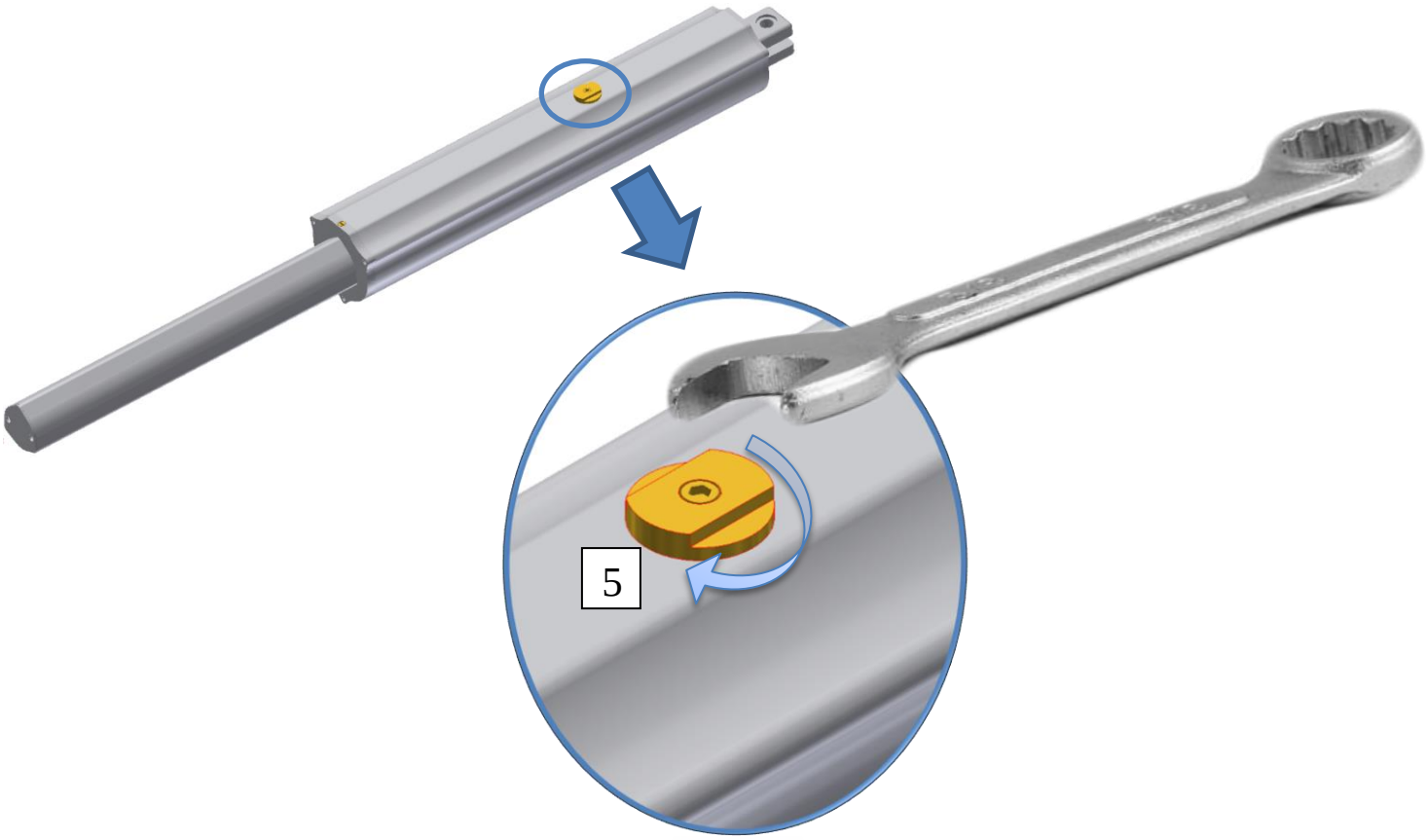
- Tighten the allen locking screw (2) to its maximum position.

SEMI IRREVERSIBLE:

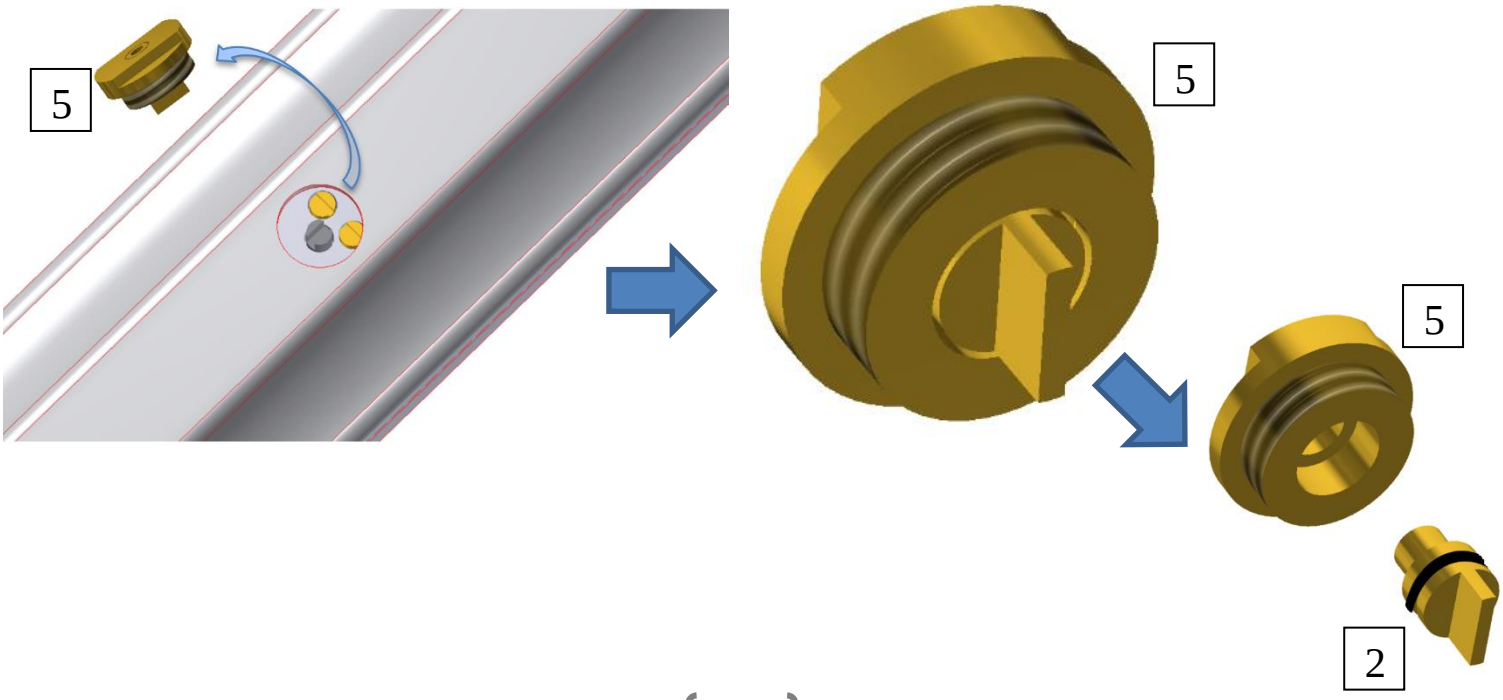
- Tighten the allen locking screw (2) until the desired position for to achieve the grade of lock needed.



- At first, loosen the screw of 3/4" (5) with 32 mm wrench.



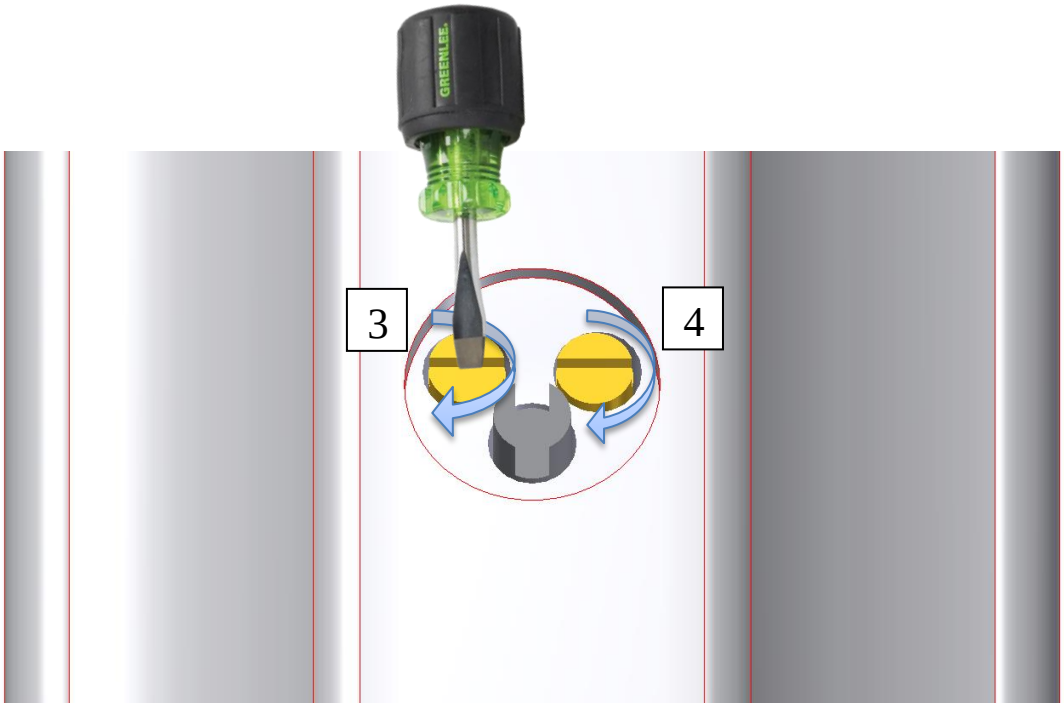
- Now, remove the 3/4" screw (5) carefully, because this screw can be separated of the allen locking screw (2).



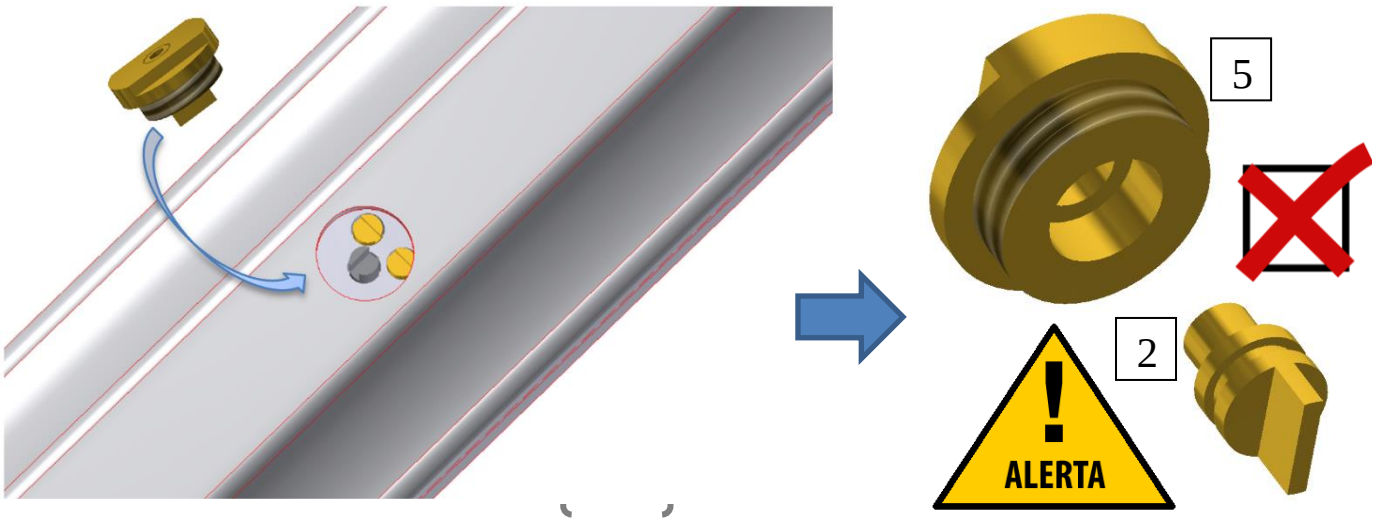
In this moment you can show the slotted screws for to adjust the opening and closing force. **YOU CAN ADJUST FUNCTIONS WITH EQUIPMENT OPERATING AND WITHOUT ¾" SCREW INSERTED.**

- If you want to increase the force when shaft is going inside to the equipment (in doors that opens to inside direction correspond to opening force), you have to tighten the slotted screw (3). If you want decrease this force, you have to loosen this screw (3).
- If you want to increase the force when shaft is going outside to the equipment (in doors that opens to inside direction correspond to closing force), you have to tighten the slotted screw (4). If you want decrease this force, you have to loosen this screw (4).

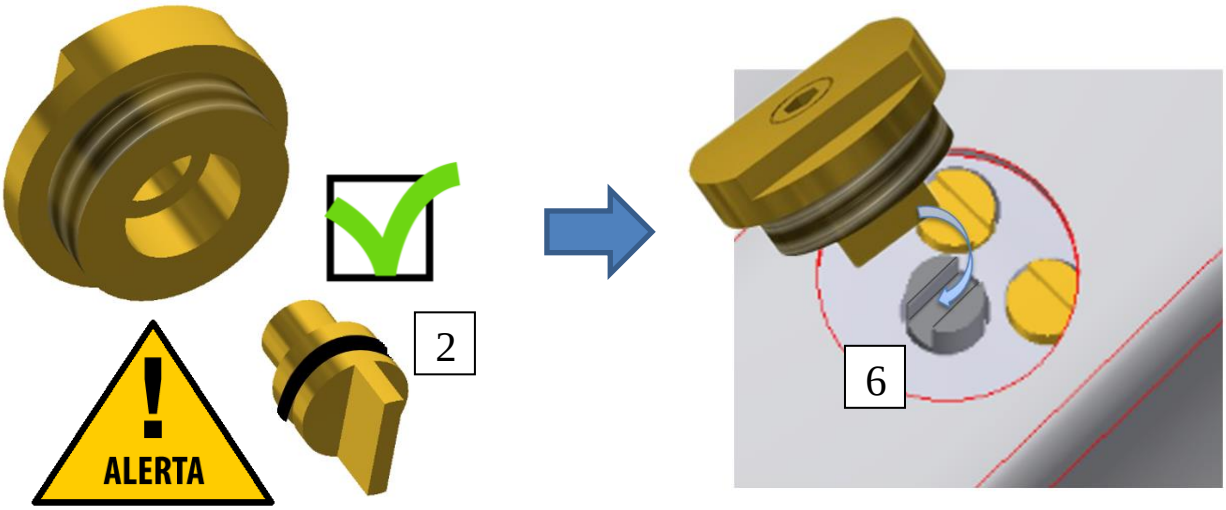
¡BE CAREFULL! Check that the slotted screws do not get out of the thread when you are loosen its.



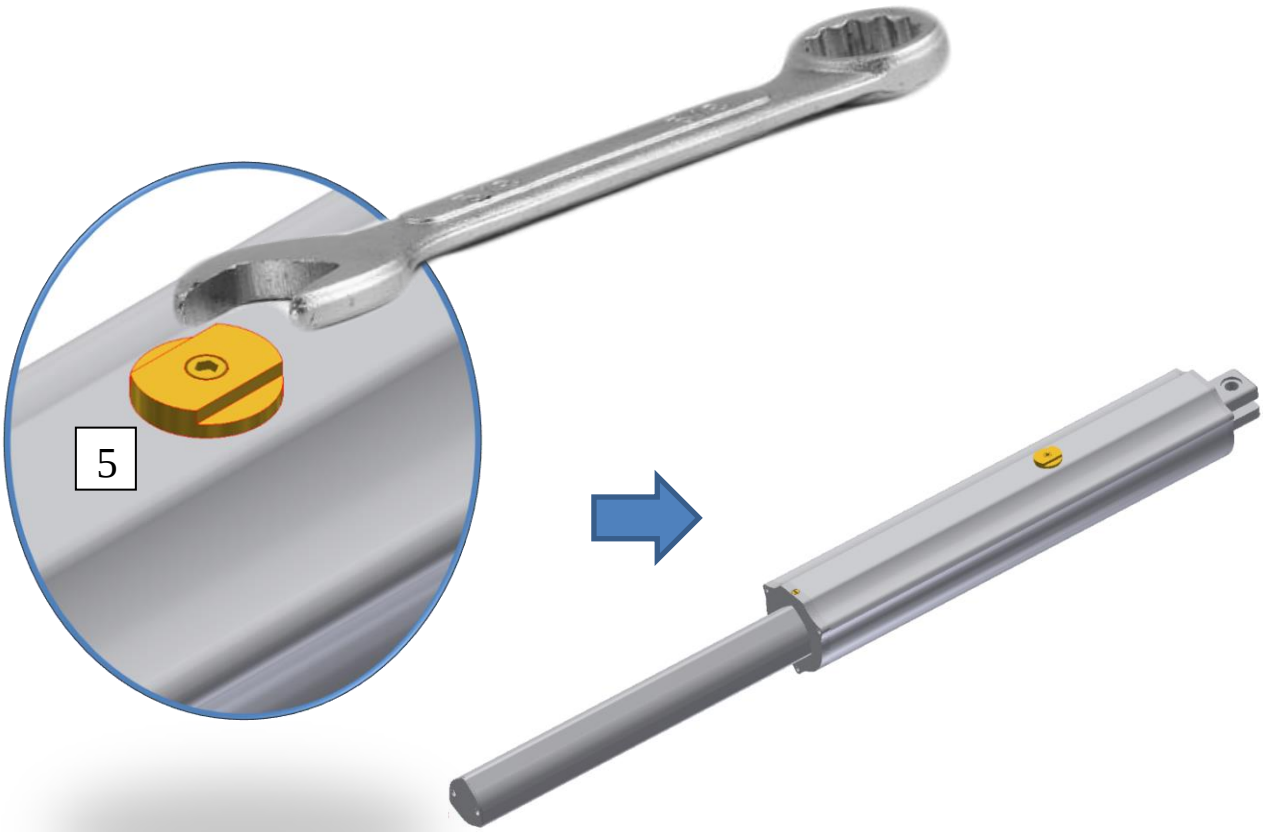
- When you have adjusted the opening and closing forces as you need, you have to insert the 3/4" screw. Check that allen locking screw (2) have mounted the o-ring still. Otherwise, you can not to assembly the system until you replace the loosen o-ring for to avoid oil leakages.



- After to check that allen locking screw have the o-ring inside, insert the piece into the 3/4" screw and align the flange of the allen locking screw (2) with the notch of the piece 6.



- Finally, tighten the 3/4" screw(5) with 32 mm wrench.



- ANTI-WIND ADJUST (With shaft inside the equipment)

- Our equipments are delivered adjusted with standard wind retention. If you want to modify the wind retention, you have to tighten the slotted screw (1) for to achieve more grade of retention or you have to loosen if you want to achieve less wind retention. This adjust is proportional to the force.

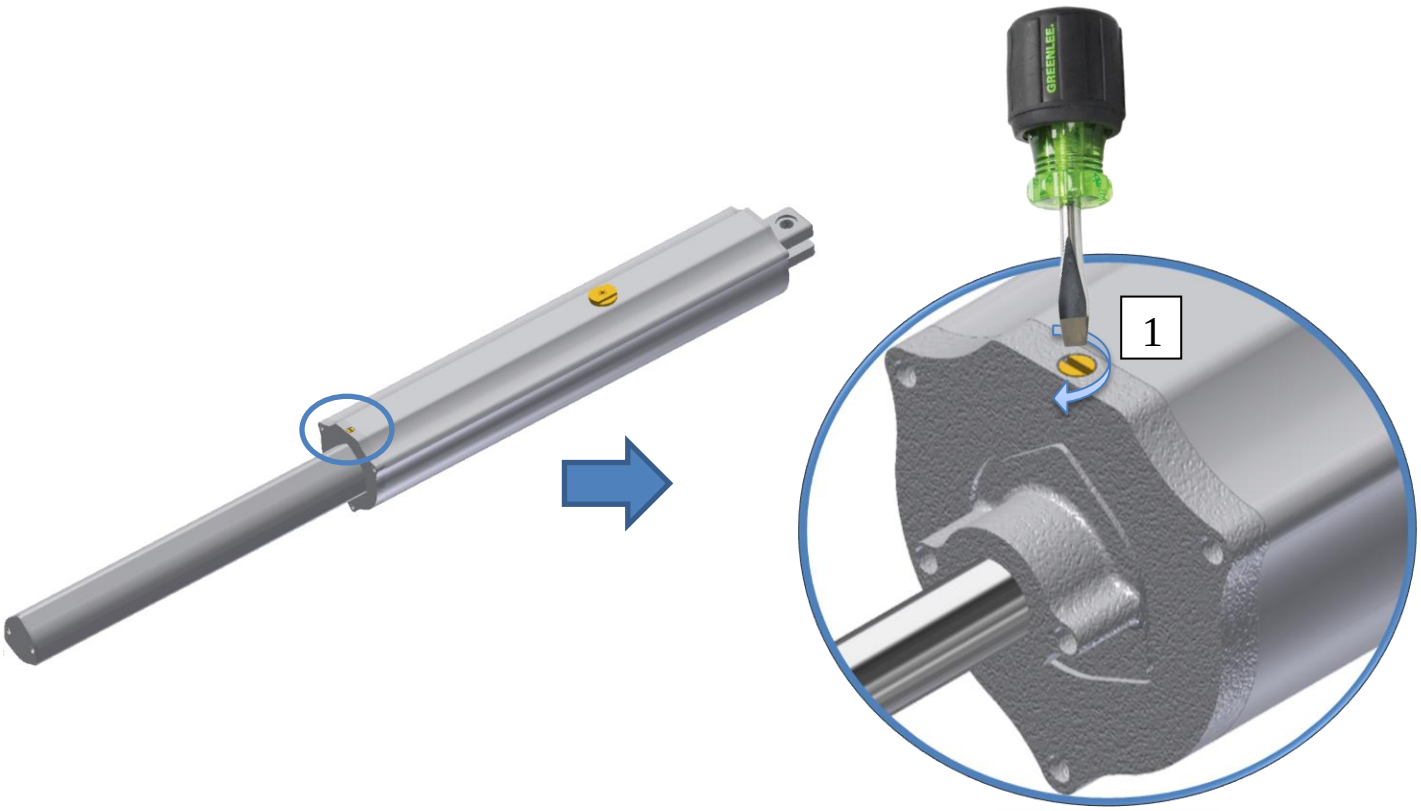
- SLOWDOWN ADJUST

- The slowdown regulation in closing is doing through the slotted screw (1) situated in the top of the arm. For to adjust following the next steps:

Closing Slowdown adjust:

- For to achieve a higher level of slowdown, tighten the slotted screw 1.
- For to achieve a lower level of slowdown, loosen the slotted screw 1.

***BE CAREFULL DO NOT EXTRAXT THE SCREWS OF THE THREAD.**



ATENTION: AFTER TO MAKE THE FUNCTION ADJUSTMENTS, CHECK THE OPERATING TIMES. IF YOU ADJUST AS HIGH LEVEL THE SLOWDOWN OR WIND-RETENTION THE OPERATING TIMES WILL BE DIFFERENTS.

STANDARD OPERATING TIMES:

REVERSIBLE/IRREVERSIBLE CONFIGURATION IN EQUIPMENTS OF 285 mm OF STROKE:

- TIME TO OPEN BEFORE SLOWDOWN: 16 Sg. APROX.
- TIME TO CLOSE BEFORE SLOWDOWN: 18 Sg.APROX.

REVERSIBLE/IRREVERSIBLE CONFIGURATION IN EQUIPMENTS OF 400 mm OF STROKE:

- TIME TO OPEN BEFORE SLOWDOWN: 21 Sg. APROX.
- TIME TO CLOSE BEFORE SLOWDOWN: 25 Sg.APROX.

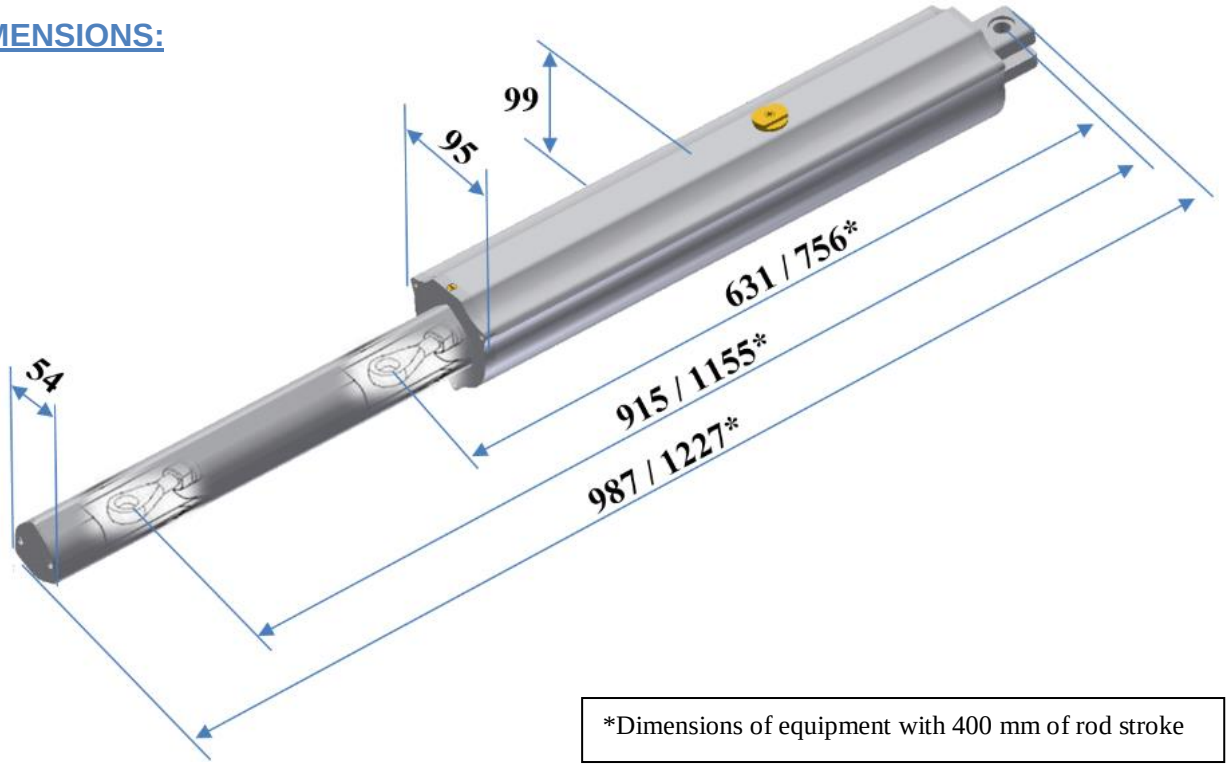
DIAGNOSIS OF IERREGULAR FUNCTIONING:

THE EQUIPMENT IS MOVING TOO SLOW: SOLUTION: tighten screw 3
THE EQUIPMENT CLOSE THE DOOR TOO SLOW: SOLUTION: tighten screw 4

TECHNICAL CHARACTERISTICS:

	ILIAD
Power Supply	230, 50Hz/120, 60Hz
Power Input	276W
Current	1,2 A
R.P.M	1450
Capacitor	14 µf / 250V
Class Protection	IP- 55
Thermal Protection	100ºC
Frequency of use	Intensive
Pump Flow	1.25 ltr.
Working Pressure	0/55 bars
Opening Force	5995N
Closing Force	7990N
Shaft Stroke	285 mm / 400 mm
Hydraulic Slowdown	17mm.
Adjustable Reversibility in Closing	Reversible / Irreversible / Semi-Irreversible
Weight	10 kg (stroke of 285 mm) 12 kg (stroke of 400 mm)

DIMENSIONS:



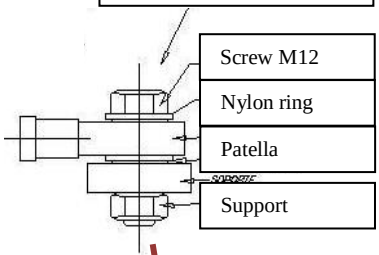
*Dimensions of equipment with 400 mm of rod stroke

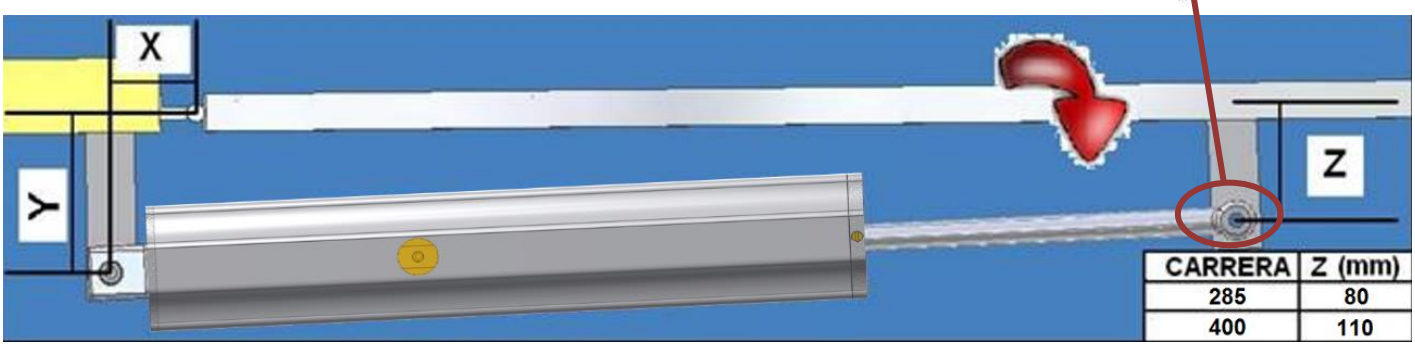
USE IN SWING DOORS: POSITIONING IN DOORS AND INSTALLATION OF THE EQUIPMENT.

INSTALLATION:

-Fix support 1 in pillar of the side the door where are hinges.
-Now, put the patella and support 2 in the top of the rod.
-Fix mechanism 1.
-Connect the hydraulic arm to the control board and activate movement since the rod go out to the maximum position.
-Disconnect the equipment, and fix support 2 to the door. Be careful do not to splash the rod with welding drops.

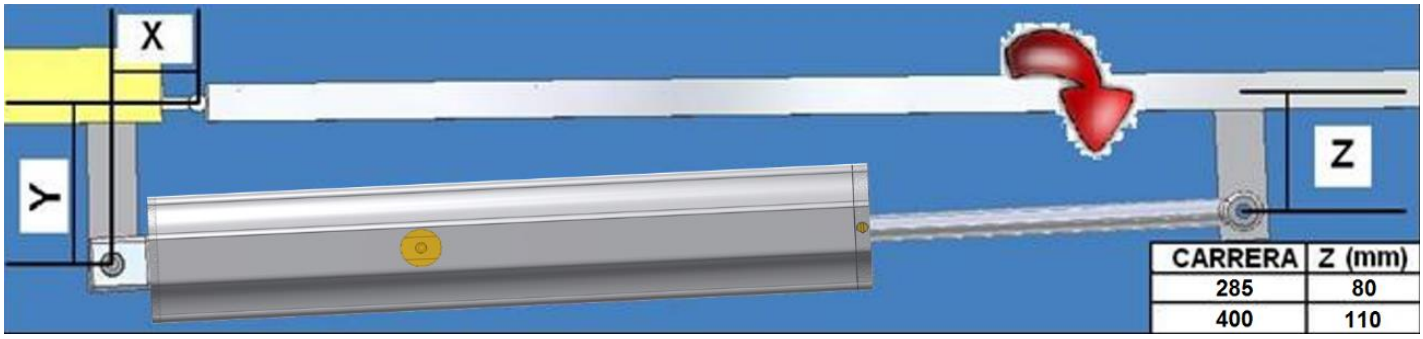
Do not tighten the screw very hard , se deformarían las arandelas de nylon, apretar con la tuerca inferior.





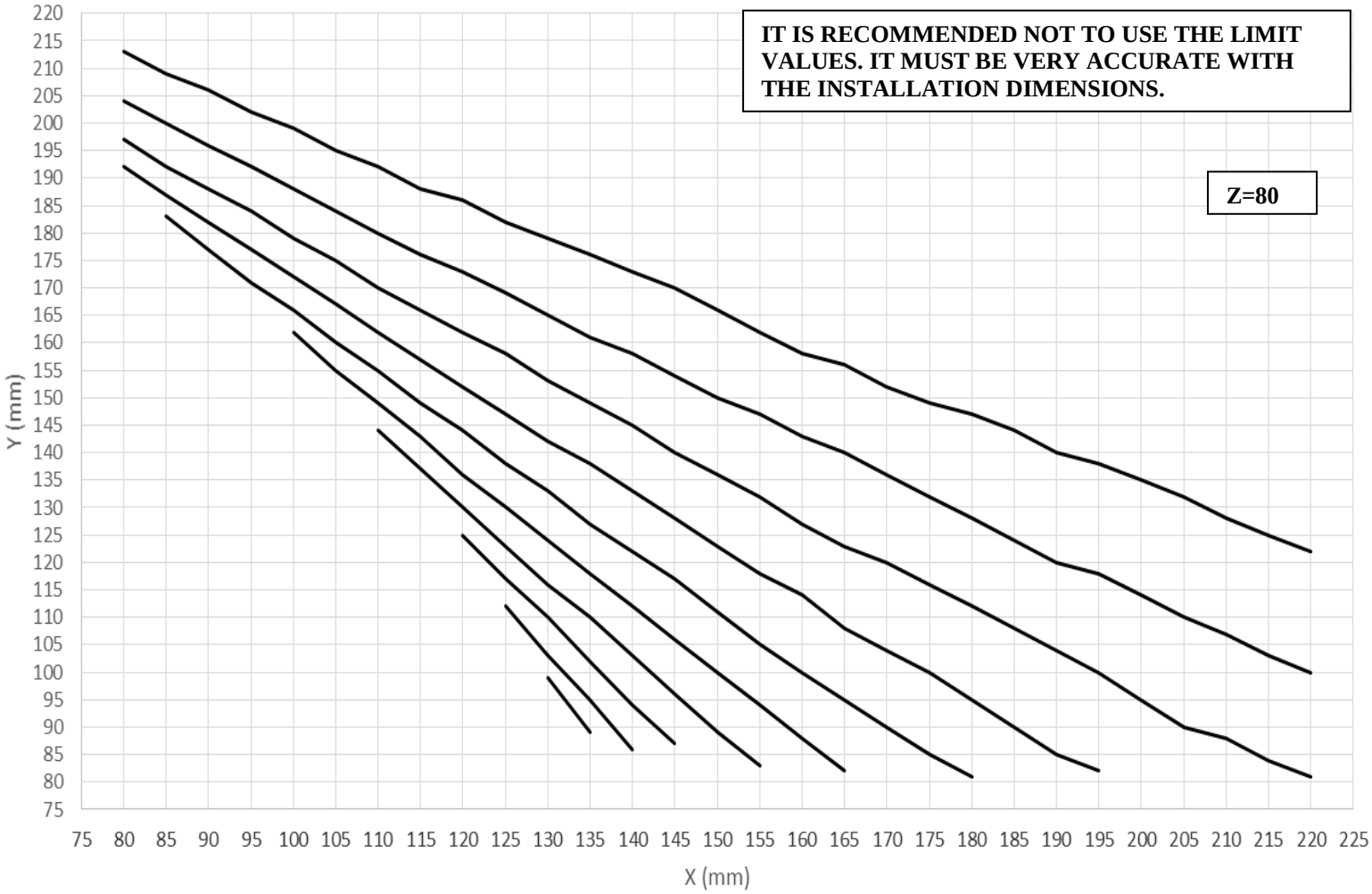
POSITIONING IN DOORS:

1-. EQUIPMENT OF 285 mm OF STROKE (OPENING DOOR TO INSIDE DIRECTION)



Use of tables

1-. Choose the value of X or Y needed. **(Measures from hinge center to fixing centers)**
2-. Draw a straight line until intersection with the desired opening angle
3-. Draw at this point a perpendicular line until cutting with the axis opposite to the chosen one (X or Y).
4-. All installation dimensions are already defined.

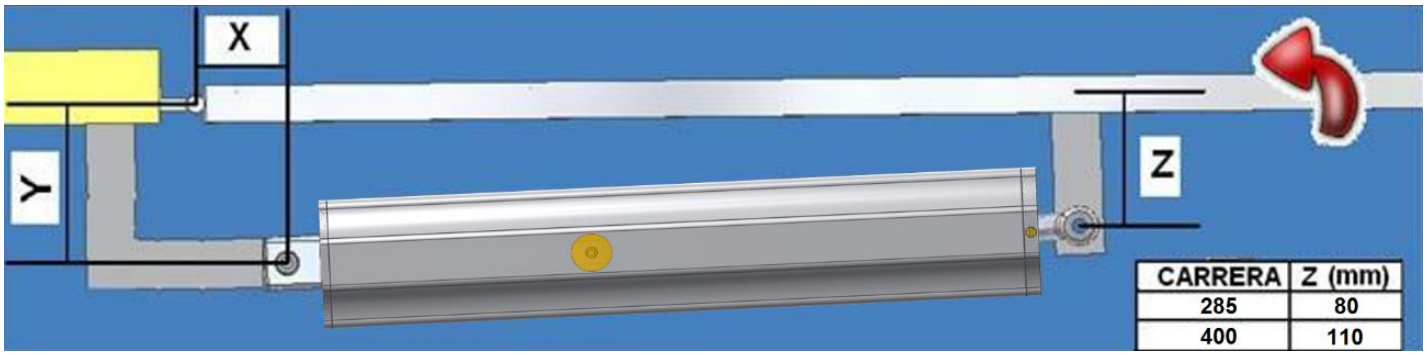


- If you prefer, you can choose the values of X and Y directly from the following tables:

mm	X	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
80º	Y	213	209	206	202	199	195	192	188	186	182	179	176	173	170	166
85º	Y	204	200	196	192	188	184	180	176	173	169	165	161	158	154	150
90º	Y	197	192	188	184	179	175	170	166	162	158	153	149	145	140	136
95º	Y	192	187	182	177	172	167	162	157	152	147	142	138	133	128	123
100º	Y	—	183	177	171	166	160	155	149	144	138	133	127	122	117	111
105º	Y	—	—	—	—	162	155	149	143	136	130	124	118	112	106	100
110º	Y	—	—	—	—	—	—	144	137	130	123	116	110	103	96	89
115º	Y	—	—	—	—	—	—	—	—	125	117	110	102	94	87	—
120º	Y	—	—	—	—	—	—	—	—	—	112	103	95	86	—	—
125º	Y	—	—	—	—	—	—	—	—	—	—	99	89	—	—	—

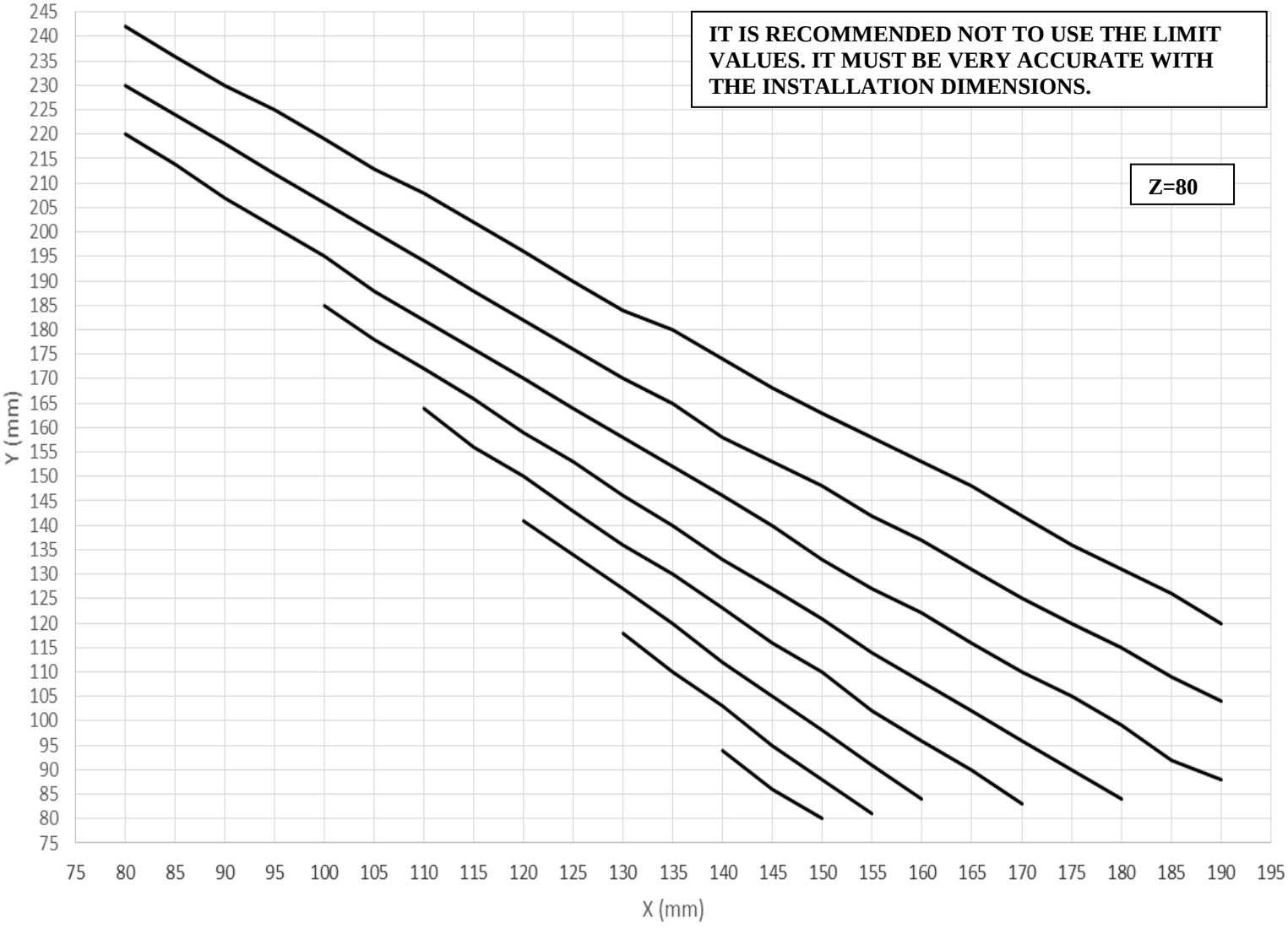
mm	X	155	160	165	170	175	180	185	190	195	200	205	210	215	220
80º	Y	162	158	156	152	149	147	144	140	138	135	132	128	125	122
85º	Y	147	143	140	136	132	128	124	120	118	114	110	107	103	100
90º	Y	132	127	123	120	116	112	108	104	100	95	90	88	84	81
95º	Y	118	114	108	104	100	95	90	85	82	—	—	—	—	—
100º	Y	105	100	95	90	85	81	—	—	—	—	—	—	—	—
105º	Y	94	88	82	—	—	—	—	—	—	—	—	—	—	—
110º	Y	83	—	—	—	—	—	—	—	—	—	—	—	—	—

2-. EQUIPMENT OF 285 mm OF STROKE (OPENING DOOR TO OUTSIDE DIRECTION)



Use of tables

1-. Choose the value of X or Y needed. **(Measures from hinge center to fixing centers)**
2-. Draw a straight line until intersection with the desired opening angle
3-. Draw at this point a perpendicular line until cutting with the axis opposite to the chosen one (X or Y).
4-. All installation dimensions are already defined.

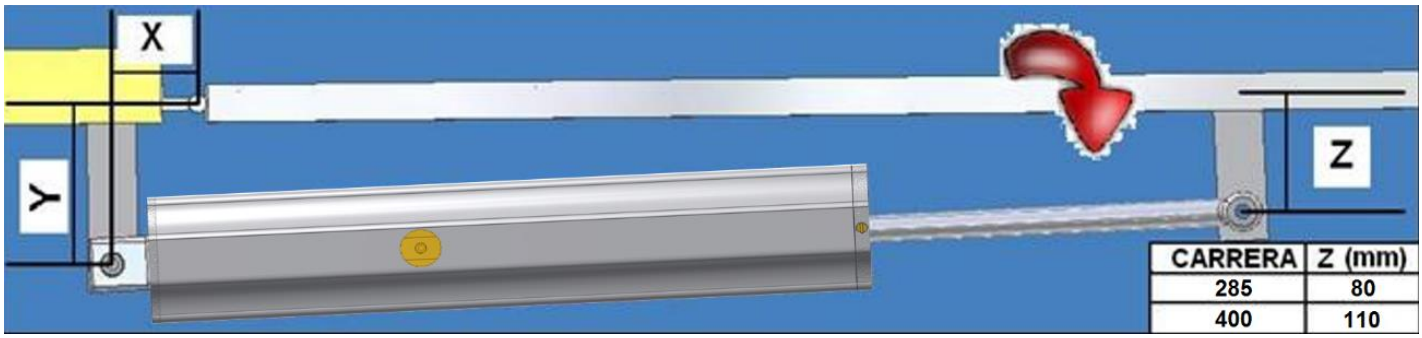


- If you prefer, you can choose the values of X and Y directly from the following tables:

mm	X	80	85	90	95	100	105	110	115	120	125	130	135
80º	Y	242	236	230	225	219	213	208	202	196	190	184	180
85º	Y	230	224	218	212	206	200	194	188	182	176	170	165
90º	Y	220	214	207	201	195	188	182	176	170	164	158	152
95º	Y	—	—	—	—	185	178	172	166	159	153	146	140
100º	Y	—	—	—	—	—	—	164	156	150	143	136	130
105º	Y	—	—	—	—	—	—	—	—	141	134	127	120
110º	Y	—	—	—	—	—	—	—	—	—	—	118	110

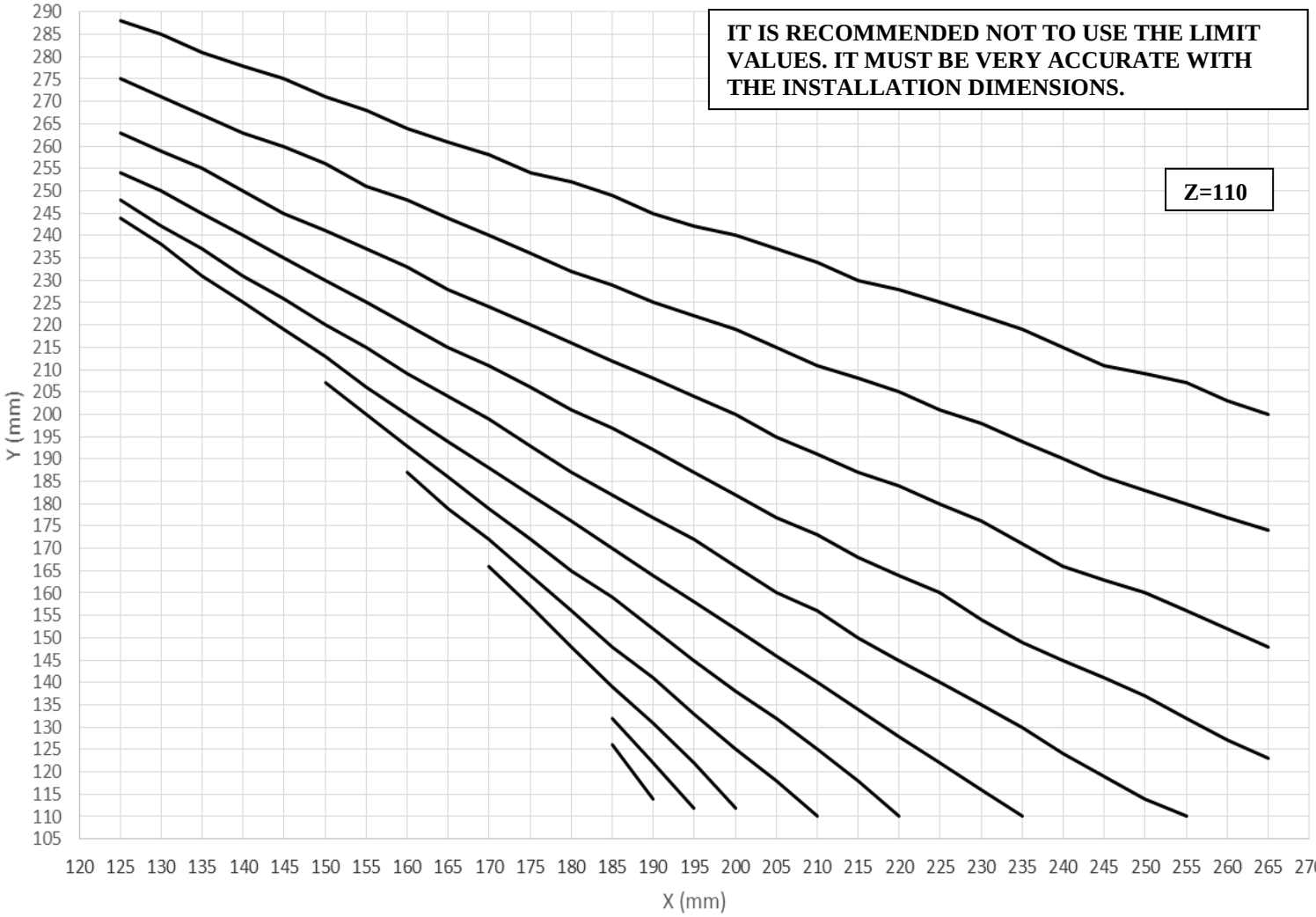
mm	X	140	145	150	155	160	165	170	175	180	185	190
80º	Y	174	168	163	158	153	148	142	136	131	126	120
85º	Y	158	153	148	142	137	131	125	120	115	109	104
90º	Y	146	140	133	127	122	116	110	105	99	92	88
95º	Y	133	127	121	114	108	102	96	90	84	—	—
100º	Y	123	116	110	102	96	90	83	—	—	—	—
105º	Y	112	105	98	91	84	—	—	—	—	—	—
110º	Y	103	95	88	81	—	—	—	—	—	—	—
115º	Y	94	86	80	—	—	—	—	—	—	—	—

3-. EQUIPMENT OF 400 mm OF STROKE (OPENING DOOR TO INSIDE DIRECTION)



Use of tables

1-. Choose the value of X or Y needed. **(Measures from hinge center to fixing centers)**
2-. Draw a straight line until intersection with the desired opening angle
3-. Draw at this point a perpendicular line until cutting with the axis opposite to the chosen one (X or Y).
4-. All installation dimensions are already defined.

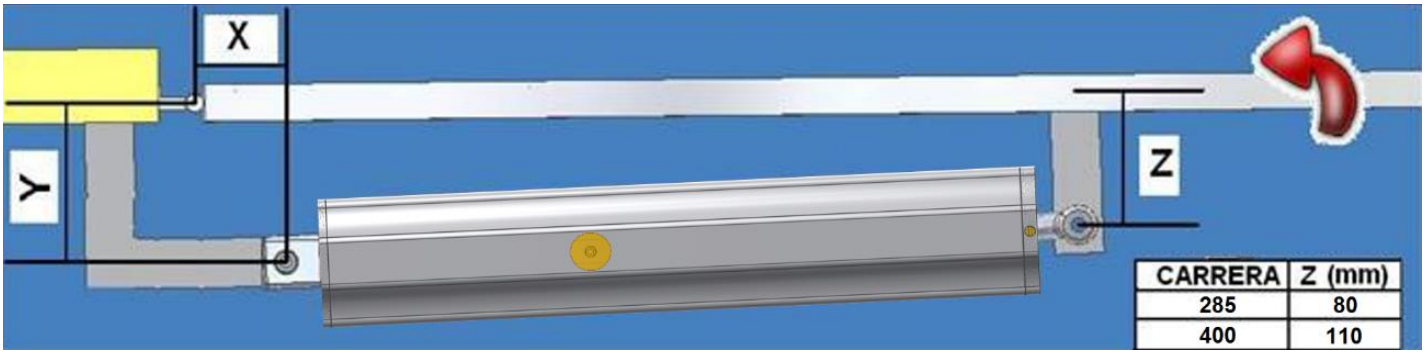


- If you prefer, you can choose the values of X and Y directly from the following tables:

mm	X	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195
80º	Y	288	285	281	278	275	271	268	264	261	258	254	252	249	245	242
85º	Y	275	271	267	263	260	256	251	248	244	240	236	232	229	225	222
90º	Y	263	259	255	250	245	241	237	233	228	224	220	216	212	208	204
95º	Y	254	250	245	240	235	230	225	220	215	211	206	201	197	192	187
100º	Y	248	242	237	231	226	220	215	209	204	199	193	187	182	177	172
105º	Y	244	238	231	225	219	213	206	200	194	188	182	176	170	164	158
110º	Y	—	—	—	—	—	207	200	193	186	179	172	165	159	152	145
115º	Y	—	—	—	—	—	—	—	187	179	172	164	156	148	141	133
120º	Y	—	—	—	—	—	—	—	—	—	166	157	148	139	131	122
125º	Y	—	—	—	—	—	—	—	—	—	—	—	—	132	122	112
130º	Y	—	—	—	—	—	—	—	—	—	—	—	—	126	114	—

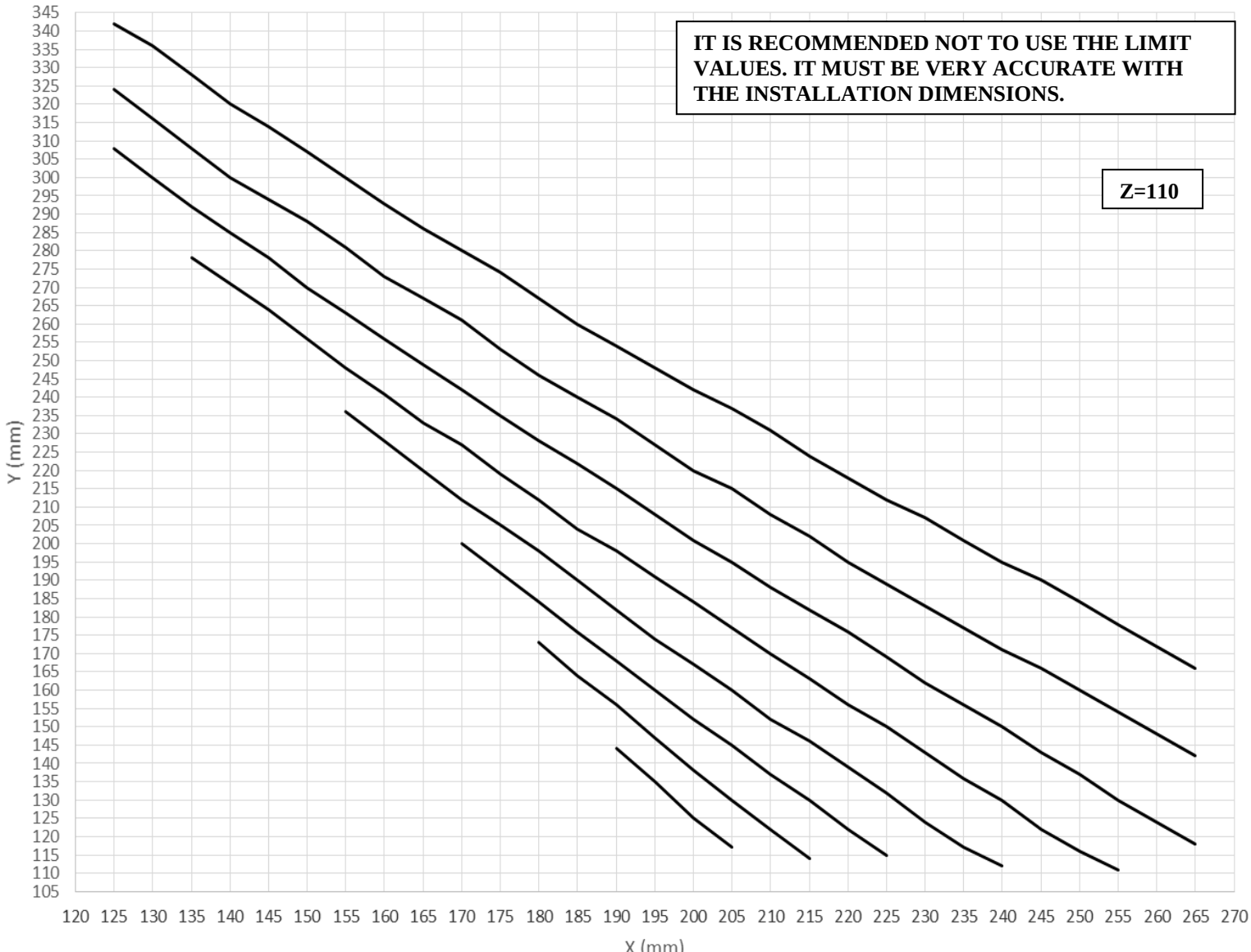
mm	X	200	205	210	215	220	225	230	235	240	245	250	255	260	265
80º	Y	240	237	234	230	228	225	222	219	215	211	209	207	203	200
85º	Y	219	215	211	208	205	201	198	194	190	186	183	180	177	174
90º	Y	200	195	191	187	184	180	176	171	166	163	160	156	152	148
95º	Y	182	177	173	168	164	160	154	149	145	141	137	132	127	123
100º	Y	166	160	156	150	145	140	135	130	124	119	114	110	—	—
105º	Y	152	146	140	134	128	122	116	110	—	—	—	—	—	—
110º	Y	138	132	125	118	110	—	—	—	—	—	—	—	—	—
115º	Y	125	118	110	—	—	—	—	—	—	—	—	—	—	—
120º	Y	112	—	—	—	—	—	—	—	—	—	—	—	—	—

4-. EQUIPMENT OF 400 mm OF STROKE (OPENING DOOR TO OUTSIDE DIRECTION)



Use of tables

1-. Choose the value of X or Y needed. **(Measures from hinge center to fixing centers)**
2-. Draw a straight line until intersection with the desired opening angle
3-. Draw at this point a perpendicular line until cutting with the axis opposite to the chosen one (X or Y).
4-. All installation dimensions are already defined.

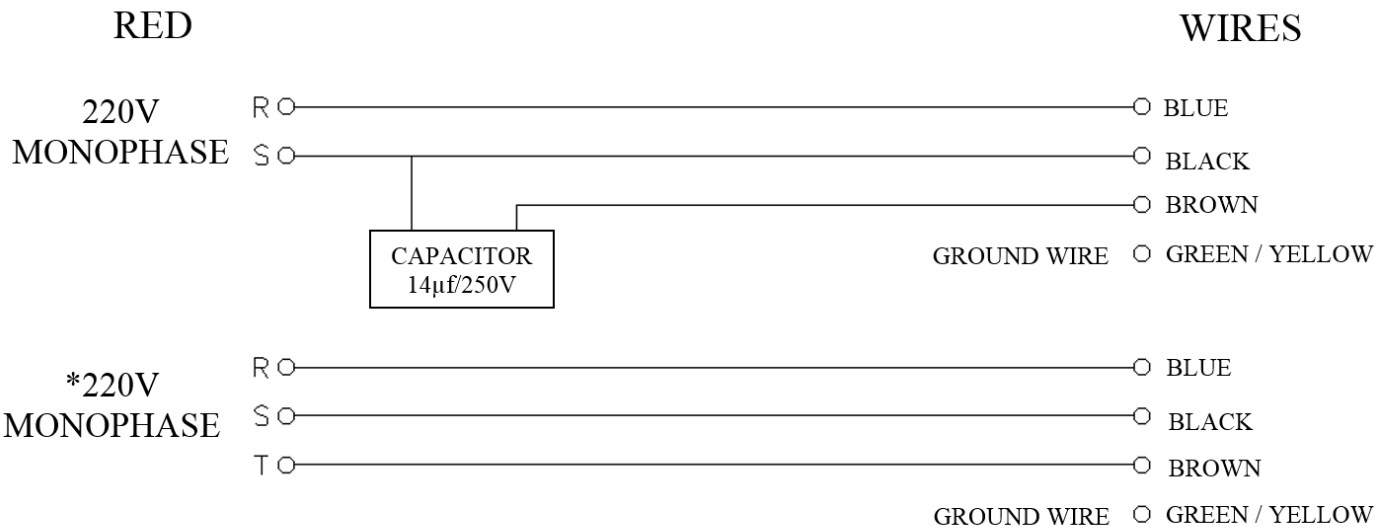


- If you prefer, you can choose the values of X and Y directly from the following tables:

mm	X	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195
80º	Y	342	336	328	320	314	307	300	293	286	280	274	267	260	254	248
85º	Y	324	316	308	300	294	288	281	273	267	261	253	246	240	234	227
90º	Y	308	300	292	285	278	270	263	256	249	242	235	228	222	215	208
95º	Y	—	—	278	271	264	256	248	241	233	227	219	212	204	198	191
100º	Y	—	—	—	—	—	—	236	228	220	212	205	198	190	182	174
105º	Y	—	—	—	—	—	—	—	—	—	200	192	184	176	168	160
110º	Y	—	—	—	—	—	—	—	—	—	—	—	173	164	156	147
115º	Y	—	—	—	—	—	—	—	—	—	—	—	—	—	144	135
120º	Y	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

mm	X	200	205	210	215	220	225	230	235	240	245	250	255	260	265
80º	Y	242	237	231	224	218	212	207	201	195	190	184	178	172	166
85º	Y	220	215	208	202	195	189	183	177	171	166	160	154	148	142
90º	Y	201	195	188	182	176	169	162	156	150	143	137	130	124	118
95º	Y	184	177	170	163	156	150	143	136	130	122	116	111	—	—
100º	Y	167	160	152	146	139	132	124	117	112	—	—	—	—	—
105º	Y	152	145	137	130	122	115	—	—	—	—	—	—	—	—
110º	Y	138	130	122	114	—	—	—	—	—	—	—	—	—	—
115º	Y	125	117	—	—	—	—	—	—	—	—	—	—	—	—
120º	Y	114	—	—	—	—	—	—	—	—	—	—	—	—	—

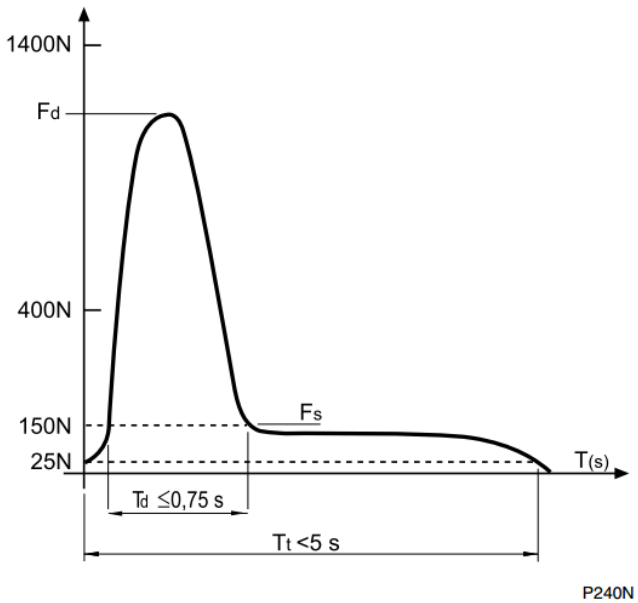
MOTOR CONNECTION



*BE CAREFULL: THIS CONNECTION IS NOT ADVISABLE BECAUSE THE THERMAL PROTECTION ONLY PROTECTS BLUE PHASE

DECLARATION OF CONFORMITY CE
(Directive 2006/42/CE ANNEX II, B) Old 98/37 CEE

We Declares that: The hydraulic automatism ILIAD, are built to be integrated into a machine or to be assembled with other machines to build a machine considered by Directive 2006/42/CE.
It is according to the following regulations: Directive of electro-magnetic compatibility (2004/108/CE, 93/68/CEE), Low Voltage Directive (2006/95/CE, 93/68/CEE).



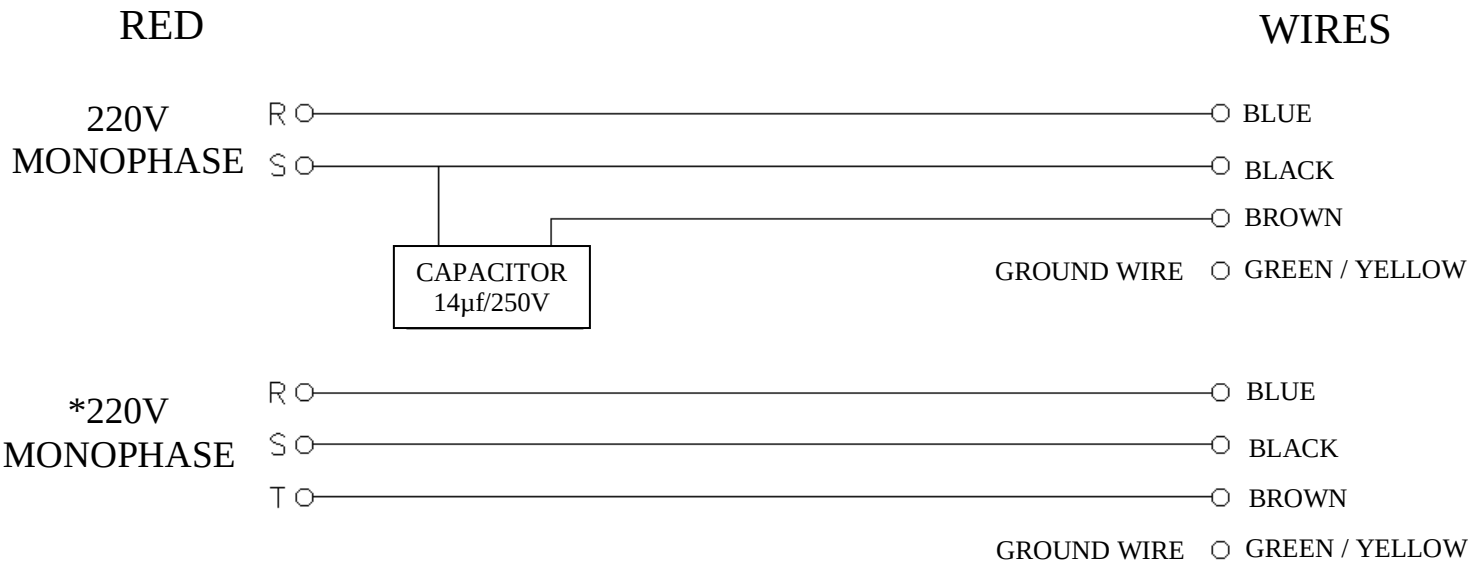
P240N

The ILIAD equipment are ready to be according to the UNE REGULATIONS 13.241-1-2004 through the correctly adjust and configuration (values and parameters of this regulation represented at graphic). It is not necessary the use of other passive security elements.

Further declares that it is prohibited put into service this equipment until the machinery in which it is incorporated is identified and according to Directive 2006/42/CE and to the national regulations corresponding.

Fd < 400 N in spaces between 50 mm and 500 mm
Fd < 1400 N in spaces > 500 mm

MOTOR CONNECTION



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