



PEGASO PARANCHI



EC DECLARATION OF CONFORMITY

(According to the Machinery Directive 2006/42/EC -Annexe IIA)

The undersigned :

PEGASO PARANCHI S.R.L.

Via Ragazzi del 99, 1/3 – 20022 Castano Primo (Milan – **ITALY**)
Phone +39 (0)331 877698 Fax +39 (0)331 877698

Declare under own responsibility that the named machine :

ELECTRIC ROPE HOIST

Type : PB 322 M/A Capacity Kg. : 3200 Serial N°: 60397/M

Production year: 2012

Is in accordance with the Community Directive:

MACHINE DIRECTIVE 2006/42/CE

LOW VOLTAGE DIRECTIVE 2006/95/CE

ELECTROMAGNETIC COMPATIBILITY DIRECTIVE 2006/42/CE

Main technical regulations considered:

EN 12100 parte 1^a e 2^a	(Safety of the machinery)
EN 60204-32	(Safety of machinery electrical equipment of machines)
EN 60529	(Degrees of protection provided by enclosures –IP code)
FEM 1.001/98	(Rules for design of hoisting appliances)
FEM 9.511/86	(Classification of mechanisms)
FEM 9.755/93	(Measures for achieving safe working periods for serial hoist units – S.W.P.)
FEM 9.941/95	(Graphical symbol for control devices)
FEM 9.661/86	(Dimensions and design of rope reeving components)
FEM 9.683/95	(Selection of lifting and travel motors)
DIN 15400	(Lifting hooks-Materials, mechanical properties, lifting capacity and stress)
DIN 15401	(Lifting hooks for lifting appliances- Single hooks)
ISO 4301-1	(Lifting equipment classification)

**IT IS HEREBY DECLARE, IN ACCORDANCE TO THE ANNEXE III OF THE MACHINE
DIRECTIVE, THE "CE" MARKING IS PLACED ON THE MACHINE.
IN ACCORDANCE TO THE ANNEXE VII TECHNICAL DOCUMENTATION IS AVIABLE IN THE
MANUFACTURER'S OFFICES.**

Person authorized to compile the technical file:

Name and surname: **Felice Iomini**

Address: **Via Ragazzi del 99 n.1/3 –20022 Castano Primo (MI)- Italy**

Date: 26/09/2012

PEGASO PARANCHI SRL
Felice Iomini
(Responsabile del prodotto)

PEGASO PARANCHI SRL
Via Ragazzi del 99 n.1/3
20022 CASTANO PRIMO (MI)



Spett.le
DESMET BALLESTRA
Via Piero Portaluppi N. 17
20138 MILANO

ATTESTATO DI CONFORMITA'
CERTIFICATE OF CONFORMITY

La Pegaso Paranchi Srl dichiara che il prodotto sotto descritto è conforme alla Direttiva Macchine 2006/42/CE

La Pegaso Paranchi Srl declares that the products here under specified comply with Directive 2006/42/EC

Attestato/ Certificate n°	1GP0057
Tipo fune/Type rope	AZN625ACAR
Lunghezza/Lenght	68 m
Diametro fune/Rope diameter	11 mm
Diametro fili esterni/Outer wires diameter	0.7 mm.
Massa nominale/ Weight for meter	0.52 kg
Formazione/Construction	6X(12+(6)+6+1)F +IWRC
Avvolgimento/Type of lay	crociato dx-right hand ordinary lay
Classe di resistenza fili/Tensile strength	2160/Nmmq
Trefoli/Strands	non compattati-not compacted
Preformazione/Preformed	Si - Yes
Fili di acciaio/Steel wires	carbonio-carbon
Protezione fili/Protection of wire rope	zincato cl B.-galvanized class.B
Carico di rottura minimo/Minimum breaking load	94 kN 9400 da N 9588 Kg..
Carico di rottura effettivo /Actual breaking load	
Efficienza dell'applicazione/Application Efficiency	
Capocorda testa fusa /Spelter Socket	100%
Capocorda pressato/Swage Socket	90%
Manicotto Alluminio/ Aluminium Ferrull	90%

Castano Primo ,26/09/2012

RESPONSABILE PRODOTTO
PEGASO PARANCHI SRL



PEGASO PARANCHI srl

Sede Amministrativa e Stabilimento:
20022 CASTANO PRIMO (MI) - Italy
Via Ragazzi del 99, 1/3
Tel. 0331/877698 - Fax 0331/877698
e-mail: info@pegasoparanchi.it
Sede Legale: 20129 MILANO - Viale Piave, 7
REA n. 995219 della C.C.I.A.A. di Milano
C.F. e P. IVA 04182440158 - Cap. Soc. €. 48.546,94
Registro delle Impr. di Milano n. 183191 - Trib. di Milano

CERTIFICATO DI COLLAUDO

Testing report

CLIENTE / Customer

DESMET BALLESTRA SPA

ORDINE / Order

N. 121306 DEL 31/05/2012

**PARANCO ELETTRICO A FUNE
PORTATA
VELOCITA' SOLLEVAMENTO
POTENZA MOTORE
CORSA GANCIO
TENSIONE
DISEGNO
PESO**

: rope chain hoist	PB322M/A
: capacity	3200 Kg.
: lifting speed	1,3 m/min
: lifting motor power	1,25 Kw
: hook lifting	11,50 mt.
: voltage	415V 50 HZ
: drawing	60397-100-00
: weight	400 Kg.

ESITO COLLAUDO FUNZIONALE

Fuctional test results

POSITIVO

PEGASO PARANCHI SRL
Service Manager

Castano Primo, 25/09/2012



E.L.D. EUROPEAN LIFTING DEVICES
divisione della Feat Group SpA

Uffici amministrativi: 23842 Bosio Panni (Lc) Italy – Via Dei Livelli – Tel. (031) 3581411 – Fax (031) 876176 – cod. mecc. MI240750
Sede Operativa: 21044 Cavarria con Premezzo (VA) Italy – Via Portoni, 205 – Tel. (0331) 73571 – Fax (0331) 219933 – http://www.featgroup.com – e-mail: eld@featgroup.com

Certificato di collaudo / Test certificate UNI EN 10204 3.1 - n° 64496

Per ganci fucinati secondo DIN15404 parte 1 / For forged hooks in compliance with DIN 15404 part 1

Acquirente / Customer: PEGASO PARANCHI S.R.L.												Marcatura / Marking			
Costruttore / Manufacturer : E.L.D. Divisione della Feat Group SpA												1° riga / line 2° riga / line V 1,6 3° riga / line I-IE 4° riga / line da / from a / to 5° riga / line DIN			
Ordine n° / Purchase order no.: MAIL		Data ordine / Date order: 02/07/2012			Quantità/Quantity: 1										
DdT / Delivery note nr.: 200354 / V del 03/09/2012		Lotto/Batch:			Colata acciaieria/ Cast no. 87614										
Codice / Stock number:		Descrizione / Description:													
C.R. / Traceability code: I-IE		C.I.R.:		Portata stampigliata in t Lifting capacity in t: -											
Materiale/Raw material 34CrMo4 UNI EN10083-1		Analisi chimica – quantità in [%] / Chemical analysis – [%] values													
C Da/a	Si Da/a	Mn Da/a	P ≤	S ≤	N Da/a	Al ≥	Cr Da/a	Cu Da/a	Mo Da/a	Ni Da/a	Nb Da/a	V Da/a	Nb+V Da/a		
0,30 0,37	- 0,40	0,60 0,90	- 0,035	- 0,035	- -	0,020 -	0,90 1,20	- -	0,15 0,30	- -	- -	- -	- -		
Valori nominali / Rated Values		0,367	0,272	0,889	0,014	0,002	-	0,024	1,112	0,177	0,233	0,106	-		
		Portata del gancio in funzione della classe di meccanismo secondo DIN 15020/ISO 4301-1 Lifting capacity as a function of drive group according to DIN 15020/ISO 4301-1													
				1Bm/M3	1Am/M4	2m/M5	3m/M6	4m/M7	5m/M8						
		Portata/WLL [Kg] / Lifting capacity [Kg]		8000	6300	5000	4000	3200	-						
Caratteristiche meccaniche a 20°C / Mechanical properties at 20 °C															
Rm [N/mm²] ≥		ReH [N/mm²] ≥						Elongation [%] ≥		ISO V -40°C [J] ≥					
Dimensione di riferimento / Reference dimension [mm]	≤100 ≤600	>100 ≤600	≤24	>24 ≤50	>50 ≤100	>100 ≤150	>150 ≤375	>375 ≤600	<150	>150 ≤600	27				
Valori nominali / Rated Values	-	-	620	620	620	620	620	620	-	-					
Valori reali / Actual values	908,1	-	767, 5	-	-	-	-	-	16,6	-	50	36	65		
Trattamento termico / Heat treatment															
Normalizzazione a Normalizing at	-		° C per ° C for		-		ore in aria calma hours in calm air								
Tempra a Quenching at a	860				-		ore, raffreddamento in hours, accelerated cooling in acqua / water								
Rinvenimento a Stress relieving at	620				-		ore in aria calma hours in calm air								
Controllo dimensionale / Check for dimensional accuracy															
tutte le dimensioni [mm] rientrano nelle tolleranze ammesse / All dimensions lie within the specified limit deviations [mm]															
a1	a2	a3	b1	b2	d1	h1	I0	y	h2	I1	I2				
56	45	64	45	38	36	55	-	-	48	224	-				
Limiti di usura e deformazione del gancio in accordo a DIN 15405 Wear and deformation limit of the hook according to DIN 15405								y max	h2 min						
								-	46,6						
Prove non distruttive / Non-destructive test															
Controllo magnetico / Check for surface defects: ASTM E-709. Libero da difetti superficiali che ne pregiudicano l'utilizzo. Free of surface defects likely to affect safe usage.							Controllo ultrasuoni / Check for internal defects : ASTM A-388. Libero da difetti interni che ne pregiudicano l'utilizzo. Free of internal defects likely to affect safe usage.								
Note / Notes:	This certificate is related to unmachined hook / Questo certificato si riferisce al gancio non lavorato														

Responsabile di Divisione ing. P. Molinari

Cavarria con Premezzo, data 03/09/2012



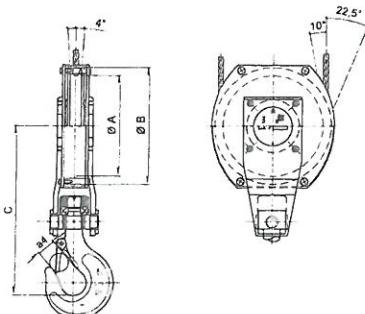
E.L.D. European Lifting Devices divisione della Feat Group S.p.A. Sede Legale: 20122 MILANO – Viale Majno, 17
Capitale Sociale € 8.000.000,00 interamente versato – Registro delle Imprese di Milano 256796 – R.E.A. Milano 1211374
Codice Fiscale e Partita IVA 08203090157 – Codice di identificazione Iva CEE: IT 08203090157



E.L.D. EUROPEAN LIFTING DEVICES
divisione della Feat Group SpA

Uffici amministrativi: 23842 Bosisio Parini (Lc) Italy – Via Dei Livelli – Tel. (031) 3581411 – Fax (031) 876176 – cod mecc MI240750
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Certificato di collaudo / Test certificate 3.1, UNI EN 10204, n° 64496

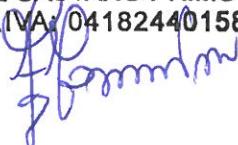
Acquirente / Customer: PEGASO PARANCHI S.R.L.			Targa / Plate																	
Costruttore / Manufacturer: E.L.D. European Lifting Devices			Identificazione del fabbricante Identification of manufacturer																	
Ordine n° Purchase order no.: MAIL	Data ordine / Date order: 02/07/2012	Quantità/Quantity: 1	Tipo Type																	
DdT / Delivery note nr.: 200354/V - 03/09/2012	Tipo di acciaio / Category Steel: Composto / Various		Identificativo numero Identification number	5319																
Codice / Stock number: 1UB05205	Descrizione / Description: BOZZELLO 2/1A 1x200/235-11 GS portata 3,2 t - M5		Portata [t] Lifting capacity [t.]	3,2																
C.R. / Traceability code: I-IE	C.I.R.: 5319	Peso circa/Weight approx. kg: 22,5	Gruppo DriveGroup	M5																
 Controllo dimensionale Check for dimensional accuracy <i>Tutte le dimensioni rientrano nelle tolleranze di fabbricazione ammesse</i> <i>All dimensions lie within the specified manufacturing limit deviations</i> <i>±4% [mm]</i>	Certificato numero Certificate number Logo CE CE Logo Limiti di usura e di deformazione in accordo con le istruzioni per l'uso se disponibili Wear and deformation limit according to instructions for use if available																			
Valori nominali / Rated values <table border="1"> <tr> <td>A</td><td>B</td><td>C</td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>200</td><td>235</td><td>359</td><td></td><td></td><td></td><td></td><td></td></tr> </table>	A	B	C						200	235	359									
A	B	C																		
200	235	359																		
<ul style="list-style-type: none"> Consultare le istruzioni per l'uso disponibili qui: http://www.eldivision.com/public/ist/IPU-1UB-1HB-1HA-1-i-77632.pdf Consult instructions for use available here: http://www.eldivision.com/public/ist/IPU-1UB-1HB-1HA-1-e-77632.pdf Il prodotto fornito è conforme a quanto concordato all'ordinazione. The above mentioned goods are in conformity with your purchase order. E.L.D. European Lifting Devices, divisione della Feat Group S.p.A. con sistema di qualità certificato ISO 9001:2000. Production following quality system according to ISO 9001:2000. Allegato certificato di collaudo UNI EN 10204 3.1 per il gancio Enclosure test certificate UNI EN 10204 3.1 for the hook 																				
Notes:																				

Responsabile di Divisione Ing. P. Molinari

Cavaria con Premezzo, data 03/09/2012



Copia conforme all'originale
PEGASO PARANCHI SRL
Via Ragazzi del 99, 1/3
20022 CASTANO PRIMO (MI)
P.IVA 04182440158






M.G.M. motori elettrici S.p.A.

Head Office and Production:

S.R. 435 Lucchese Km. 31
51030 - Serravalle Pistoiese, Italy
Tel. +39 (0573) 91511
Fax +39 (0573) 518138
http://www.mgmrestop.com
E-mail: mgm@mgmrestop.com

ATTESTATO DI CONTROLLO TEST REPORT

Motor Type: BA 90 LA4

DATI DI TARGA - NAMEPLATE DATA

Servizio – Duty	S3 – 60%
Poli – Poles	4
Potenza - Power (kW)	1,5
Grado di protezione - Protection degree	IP54
Tensione motore – Motor voltage (Volt) Δ/Y	240/415
Classe di isolamento - Insulation	F
Velocità - Speed (Rpm)	1400
Corrente motore - Full load motor current (A)	6,3 / 3,6
Cos φ	0,75
Frequenza – Frequency (Hz)	50

DATI D'INIZIO TEST - STARTING DATA

Temperatura ambiente - Ambient temperature (cold) (°C)	20,0
Temperatura avvolgimenti motore (a freddo) - Motor winding temperature (cold) (°C)	20,0
Resistenza avvolgimento motore (a freddo) - Motor winding resistance (cold) (Ω)	9,29
Resistenza avvolgimento freno (a freddo) - Brake resistance (cold) (°Ω)	51,3

PROVA DI RISCALDAMENTO A 100% DEL CARICO - TEMPERATURE TEST AT 100 % LOAD

Tensione - Voltage (V)	415
Potenza di ingresso - Power input (W)	1890
Potenza di uscita - Power output (W)	1500
Velocità - Speed (Rpm)	1399
Scorrimento - Slip	6,7%
Corrente motore – Motor current (A)	3,4
Cos φ	0,79
Coppia motore -Torque (Nm)	10,2
Temperatura ambiente (a caldo) - Ambient temperature (hot) (°C)	23,5
Temperatura avvolgimenti motore (a caldo) - Motor winding temperature (hot) (°C)	96,5
Resistenza avvolgimento motore (a caldo) - Motor winding resistance (hot) (Ω)	11,84
Sovratemperatura motore - Motor winding temperature rise (°C)	66,48

PROVA A VUOTO- NO LOAD TEST

Tensione-Voltage (V)	415
Corrente a vuoto - No load current (A)	2,14
Potenza d'ingresso – Power input (W)	156
Cos φ	0,105
RPM	1500

EFFICIENZA- EFFICIENCY (EN60034-2-1)

Classe di efficienza IE - IE Efficiency class (EN60034-30)	78,3 – IE1
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ALTRE CARATTERISTICHE TECNICHE – OTHER TECHNICAL DATA

Corrente di avviamento -Starting current (A)	17,5
Coppia minima - Pull up torque (Nm)	24,4
Coppia massima - Breakdown torque (Nm)	25,9
Coppia a rotore bloccato - Locked rotor torque (Nm)	25,3

ELETTROMAGNETE – BRAKE COIL

Tensione - Voltage (Volt) (Rectifier input)	415
Corrente - Current (hot) (A)	0,3
Resistenza - Resistance (hot) (Ω)	62,20
Sovrate Temperatura - Temperature rise (°C)	51,21

DIELECTRIC STRENGHT TEST

DESCRIPTION	VOLTAGE AND TIME	RESULT
MOTOR	2200V 1 min	OK
BRAKE	2200V 1 min	OK

INSULATION TEST

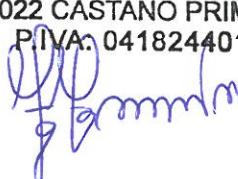
V= 500V DC	R> 75 MΩ
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Comments: R.P. – B14 – TROP.

Date: 12/09/12

Signature: J. Molle

Copia conforme all'originale
PEGASO PARANCHI SRL
 Via Ragazzi del 99, 1/3
 20022 CASTANO PRIMO (MI)
 P.IVA 04182440158





PIZZAMIGLIO SRL

Sede legale, amministrativa e attività produttive:

Via degli Imprenditori, 79
37067 Valeggio sul Mincio (Verona) – ITALY
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info@pizzamiglionsrl.com

CF P.IVA-Reg.Imp.di VR 03165700232 - REA 314197
Capitale sociale Euro 40.000,00 i.v.

DICHIARAZIONE DI CONFORMITÀ

DIRETTIVA MACCHINE 2006/42/CE

LA SOCIETÀ **PIZZAMIGLIO SRL**

DICHIARA, SOTTO LA PROPRIA RESPONSABILITÀ, CHE IL SEGUENTE PRODOTTO, SE INSTALLATO E MANTENUTO IN CONFORMITÀ ALLA SUA DESTINAZIONE D'USO, ALLE NORME IN VIGORE E ALLE ISTRUZIONI DEL COSTRUTTORE, È CONFORME ALLE DIRETTIVE COMUNITARIE E ALLE NORME TECNICHE DI SEGUITO INDICATE

LIMITATORE DI CARICO TIPO "COG 120/200 1C/2C ST"
(COMPONENTE LA CUI FUNZIONE CONSISTE, SE OPPORTUNAMENTE INSTALLATO E REGOLATO, NELL'IMPEDIRE IL SOLLEVAMENTO DI CARICHI SUPERIORI A QUELLI STABILITI)

IL PRODOTTO SOPRA IDENTIFICATO È CONFORME, PER QUANTO

TIPO	MATRICOLA	ANNO DI COSTRUZIONE	
COG120 F11 1C ST	4896H/12	2012	
FORZA			
MIN	MAX	PRE-TARATURA	
*620*daN	*2260* daN	I SOGLIA CONTATTO NC	*1600* daN
		II SOGLIA CONTATTO NC	daN

LA PRETARATURA VIENE EFFETTUATA STATICAMENTE IN FASE DI COLLAUDO, L'INSTALLATORE PUÒ COMUNQUE VARIARE LA SOGLIA DI INTERVENTO ENTRO I LIMITI MINIMO E MASSIMO SOPRA INDICATI AGENDO SULLE VITI (1) E DADO (2). VEDERE ISTRUZIONI SUL RETRO.

DATI ELETTRICI: AC15 240V 1,5A IP67 IEC/EN 60947-5-1

IL MICROINTERRUTTORE HONEYWELL 91MCE HA UNA VITA ELETTRICA/MECCANICA ATTESA DI 5×10^6 CICLI -

IL MICROINTERRUTTORE TELEMECANIQUE ZCMD25 HA UNA VITA ELETTRICA/MECCANICA ATTESA DI 5×10^6 CICLI ED È CONFORME ANCHE ALLE SEGUENTI NORME:

CSA-C22.2 No.14-95 Industrial Control Equipment

CSA-C22.2 No.94-M91 Special Purpose Enclosures

CSA-C22.2 No. 0.17-00 Evaluation of Properties of Polymeric Materials

DI COMPETENZA, ALLE SEGUENTI DIRETTIVE EUROPEE E NORME TECNICHE:

- DIRETTIVA 2006/42/CE "DIRETTIVA MACCHINE" IN QUANTO "COMPONENTE DI SICUREZZA" DI CUI ALL'ART.2 LETTERA C - INSERITO NELL'ALLEGATO V PUNTO 8 E, PER QUANTO DI COMPETENZA, ALLE SEGUENTI NORME TECNICHE:
- UNI EN 12077-2 "SICUREZZA DEGLI APPARECCHI DI SOLLEVAMENTO, REQUISISTI PER LA SALUTE E LA SICUREZZA, PARTE 2: DISPOSITIVI DI LIMITAZIONE E INDICAZIONE" EDIZIONE LUGLIO 2008.
- FEM 9.761 "LIFTING FORCE LIMITERS FOR CONTROLLING THE LOADING OF MOTORIZED SERIES HOIST MECHANISM" EDITION 01.1995

VALEGGIO SUL MINCIO, 09/08/2012

PEGASO PARANCHI SRL
Via Ragazzi del 99 1/3
20022 CASTANO PRIMO (MI)
P.IVA: 04182440158

Rev.13

PIZZAMIGLIO SRL

Copia
conforme
all'originale

PEGASO PARANCHI SRL

VIA RAGAZZI DEL 99 N.1/3 - 20022 CASTANO PRIMO (MI)

PARANCO ELETTRICO A FUNE / ELECTRIC ROPE HOIST

SERIE /SERIES : **PA -PB -PC**

TIPO / TYPE : **PB 322 M/A**

N. MATRICOLA /SERIAL NUMBER : **60397/M**

ANNO/YEAR : **2012**

Pegaso Paranchi srl.

Via Ragazzi del '99 1/3 - 20022 Castano Primo Mi Italy

MARKING

MANUFACTURER :

**PEGASO PARANCHI SRL
Via Ragazzi del '99 1/3
20022 CASTANO PRIMO - (MI)
0331/877698
FAX 0331/883410**

NAME PLATE

ON THE ROPE HOIST

MACHINE

ROPE HOIST

YEAR OF MANUFACTURE

2012

SERIAL NUMBER

60397/M

CAPACITY

3200 KG.

DOCUMENTATION

Se non altrimenti richiesto in sede di contratto, vengono forniti a corredo della macchina i seguenti documenti:

1. EC Statement of Compliance with Machinery Directive 89/392 EEC, 91/368 EEC and subsequent amendments
2. User's Guide and Maintenance Instructions

OPERATING AND MAINTENANCE INSTRUCTIONS

Pegaso Paranchi srl.

Via Ragazzi del '99 1/3 - 20022 Castano Primo Mi Italy

ELECTRIC ROPE HOIST

Safety instructions

Symbols

Safety at work

This symbol marks all information on safety at work where risks to life and limb are entailed.



Warning of electrical voltage

Covers such as hoods and caps which are marked with this symbol may only be opened by "skilled or suitably instructed personnel".



Warning of suspended load

It is forbidden for persons to stand under suspended loads. This entails risks to life and limb!



Safety in operation

Information marked with this symbol must be observed to avoid damage to the wire rope hoist or the goods transported.



In these operating instructions, these symbols mark particularly important information on risks and safety in operation.

Pegaso Paranchi srl.

Via Ragazzi del '99 1/3 - 20022 Castano Primo Mi Italy

Safety instructions

Use for intended purpose

.Wire rope hoists are intended solely for lifting freely movable loads. According to design, they are for stationary or mobile use.

.Do not carry out any alterations or modifications. Additional fitments must not prejudice safety.



Not allowed:

.Exceeding the safe working load

.Transporting persons

.Pulling loads at an angle

.Tearing loose, pulling or towing load

.Manipulating the overload cut- off

.Slack rope.

Safety-conscious operation

Our wire rope hoists are constructed according to the

state of the art and equipped with an overload cut-off to prevent overloads. In spite of this, dangers may arise due to incorrect use or use for an unintended purpose.

.Read the operating instructions before starting to work with the wire rope hoist.

Observe the "Duties of crane operator"



.Always work in a safety- conscious manner and avoid risks.

.Before starting work, find out where the EMERGENCY STOP facility is (usually in the control pendant).

.Do not use the emergency limit switch (final limit switch for highest and lowest hook position) as an operational limit switch.

-Report damage and defects to the wire rope hoist to the person responsible immediately.

-Do not use the wire rope hoist until the damage has been repaired.

.Do not remove information plates from the wire rope hoist.

Replace illegible or damaged plates.

Pegaso Paranchi srl.

Via Ragazzi del '99 1/3 - 20022 Castano Primo Mi Italy

Safety instructions

Organisational safety I precautions

.Only direct persons to operate the hoist if they have been

trained or instructed in its use.
Observe the legal minimum age!

.At regular intervals, check that work
is being carried out in a . safety-
conscious manner.

.Observe the intervals specified for
periodic tests. File the test reports in
the test log book.

.Store the operating instructions
within easy reach where the wire
rope hoist is operated.



General regulations

.Safety regulations and accident
prevention regulations.

.National regulations.



Installation commissioning. maintenance and repairs

Erection, commissioning.

For maintenance and repairs may only
be carried out by skilled personnel.

.Use only **original spare parts** for
repairs, otherwise the guarantee will
expire.

.Do not carry out any alterations or
modifications.

.Additional fitments must not
prejudice safety.

If the wire rope hoist is constantly
operated outside and exposed to the
elements, we recommend ,r fitting a
small roof or at least .parking. the
wire rope hoist under a roof.



Guarantee

.The guarantee expires if these
operating instructions are not
observed for installation, operation,
testing and maintenance.

Pegaso Paranchi srl.

Via Ragazzi del '99 1/3 - 20022 Castano Primo Mi Italy

Safety instructions

Periodic tests

Hoists and cranes must be tested by "a qualified person" at least once a year. The results of the test must be recorded and filed in the test log book.



The remaining service life of the hoist acc. to FEM 9.755 is also established during this test.

All tests must be initiated by the operator.

After sales service

With the purchase of this wire

rope hoist, you have decided on a high-quality piece of lifting equipment. Our after sales service will give you advice on its correct use.

In order to preserve the safety and constant availability of your wire rope hoist, we recommend concluding a maintenance contract according to which we undertake the "recurrent tests" for you.

Repairs will be carried out quickly and economically by our trained personnel.

* Definition of a qualified person: A qualified person is one with the necessary qualification, based on theoretical and practical knowledge, for the required activities as listed in the operating instructions.

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Commissioning wire rope hoist

First commissioning

The wire rope hoist has been tested by the manufacturer in accordance with the Machine Directive.

Commissioning must be carried out by a qualified person. The following tests must be carried out:

.Wire rope hoist completed with the correct original accessories supplied (e.g. bottom hook block),

Check that all electrical equipment has been correctly selected

.Electrical connection.

.Check that the seating of the fixing screws is firm and secure.

.Check the correct functioning of the runway end stops.

.The direction of motion of the load hook must correspond to the symbols on the control pendant.

.Check that all protective devices are present and function correctly.

.Check emergency hoist limit switch or combined operational and emergency hoist limit switch.

.Check overload cut-off.

.Confirmation that commissioning has been duly carried out in the test book in section "Confirmation of commissioning".

.Wire rope hoists in conjunction with a crane system are subjected to a test load before commissioning. To do this, the overload cut-off must be bridged:



Caution! Remove the bridges after completion of test!

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Operating wire rope hoist

Duties of crane operator

When working with wire rope hoists, the following must be observed:

.Every day before starting work, check brakes and limit switches and inspect the system for any visible defects.



.Discontinue working with the crane if there are any defects which might prejudice its safety in operation.

.At close of work, secure cranes which are exposed to wind with the wind safeguard mechanism.

.Do not move loads above people.



.Do not leave suspended loads unattended. The control facility must be within easy reach.

.Do not use emergency limit switch during normal operation.



.Do not load above nominal capacity.

.Pulling loads at angles, dragging loads, or towing vehicles with the load or load bearing element are forbidden!

.Do not heave up any loads which are jammed.

.Approach final positions for hoisting, lowering, and travel only if an operational limit switch is fitted.

.As far as possible, avoid inching operation (briefly switching on the motor to achieve small movements). This could damage switchgear and motors.



.Observe the safety instructions.

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Inspecting and servicing wire rope hoist

This section deals with the operational reliability, availability, and maintaining the value of your wire rope hoist.

Although this wire rope hoist is practically maintenance-free, the components subject to wear (wire rope, brake) must be inspected regularly. This is required by the accident prevention regulations. The inspections must be carried out by qualified persons.

General information on

inspection and maintenance
.Maintenance and repair work

may only be carried out when the wire rope hoist is unloaded.

.Switch off and padlock main isolator.

.Observe the requirements of the accident prevention regulations.

.A general overhaul must be carried out after the useful life of the hoist has expired.

.The inspection intervals given in the table apply for use in mechanism groups 1 Bm and 1 Am. If the hoist is operated in mechanism group 2 m or 3 m,

the maintenance intervals must be halved.

Lubricants and lubrication points.



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Inspecting and servicing wire rope hoist

Inspection table

- 1 Safety equipment 1 Brake
- 2 Hoist limit switch
- 3 EMERGENCY OFF, crane switch
- 4 Overload cut-off
- 5 Disconnecting switch and main isolator
- 6 Connections and potential compensation
- 7 Operating hour counter

Pos.	A	B	C
1	•	•	
2	•	•	
3	•	•	
4	•		•
5	•		•
6	•		•
7			•

Mechanical components

- 8 Load hook (cracks, cold deformation, wear)
- 9 Rope and rope anchorage 10 Rope guide
- 11 Limit switch bar
- 12 Drive parts (gearing, wheel flanges, etc.)
- 13 Bolt connections, welds
- 14 End stops, buffers
- 15 Oillevel (hoist gearbox)
- 16 Oillevel

8			•
9	•	•	
10			•
11	•		•
12			•
13			•
14	•		•
15			•
16			•

Electrical components

- 17 Power supply cable
- 18 Cable glands
- 19 Current collectors
- 20 Switching functions

17	•		•
18	•		•
19			•
20	•		•

- A Inspection on commissioning
- B Daily inspection on starting work
- C Periodic inspections every 12 months

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Inspecting and servicing wire rope hoist

Rope drive

Rope and ropeattachment

After commissioning a new wire rope hoist, or after replacing the rope, twisting may occur in the ci rope of multi-fall hoists. This can be seen from the bottom hook la block turning, particularly when unloaded. Twisting in the rope flt prejudices safety and service life.

Remove any twists!

Regularly inspect the rope for twisting. For this, run the hoist into highest and lowest hook positions without load.

If twisting is detected, untwist the rope immediately.

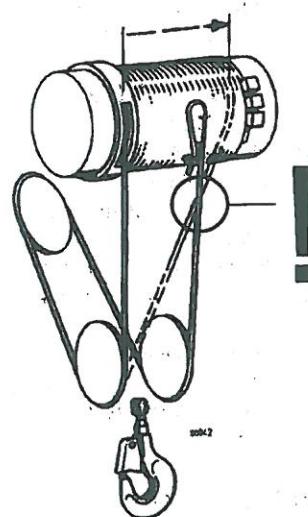
"Reeving rope" and . "Removing rope".

.Check rope. Take particular note of the sections of rope

near rope pulleys, return pulleys , or equalizing pulleys and in the region of the rope anchorage.

.If any of the following damage occurs, replace the rope immediately.

1. Excess visible wire fractures.
2. Nest of wire fractures or broken strand.
3. Diameter reduced by 10% due to corrosion or wear (independent of breakage).
4. Diameter reduced due to structural changes over lengthy sections.
5. Formation of baskets or loops, knots, necking, kinks or other mechanical damage.
6. Corkscrew-type deformation. Deformation deviation: ~ $1/3x$ rope diameter.
7. In addition, the rope must be removed in the event of damage as described in DIN 15020, page 2.



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REPLACEMENT OF THE ELECTROMAGNET

Loosen screw 27, remove the casing 26,

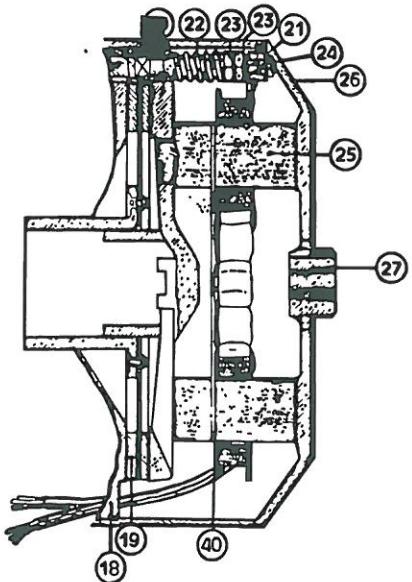
detach the six terminals from the clamp, unscrew the three nuts 24 and slip off

the studs 21 and the electromagnet 25. Put back on the studs the new electromagnet and be careful to reinsert the terminals and do not correspond the colors. Tighten the nuts 24 and check the electromagnet is working efficiently before you put back the protecting casing.

REPLACEMENT OF THE BRAKE'S DISK

Loosen screws 27 remove the casing
26 and unscrew the three nuts 24
without detaching the terminals.

Remove nuts 23 and springs 22.
Apply the new disk.



ADJUSTMENT OF THE BRAKING TORQUE

The Braking torque is proportional to the compression of the spring 22, which may be altered by handling the nuts 23. unscrewing to reduce screwing to increase.

ADJUSTMENT OF THE BRAKE CLEARANCE

The brake clearance 40 (I.E. the distance

the two cores of the electromagnet and the mobile anchor) should be between 0006-0012 inches wide one should check periodically the clearance because

the wear and tear of the brake's disk will cause it to widen by and by.

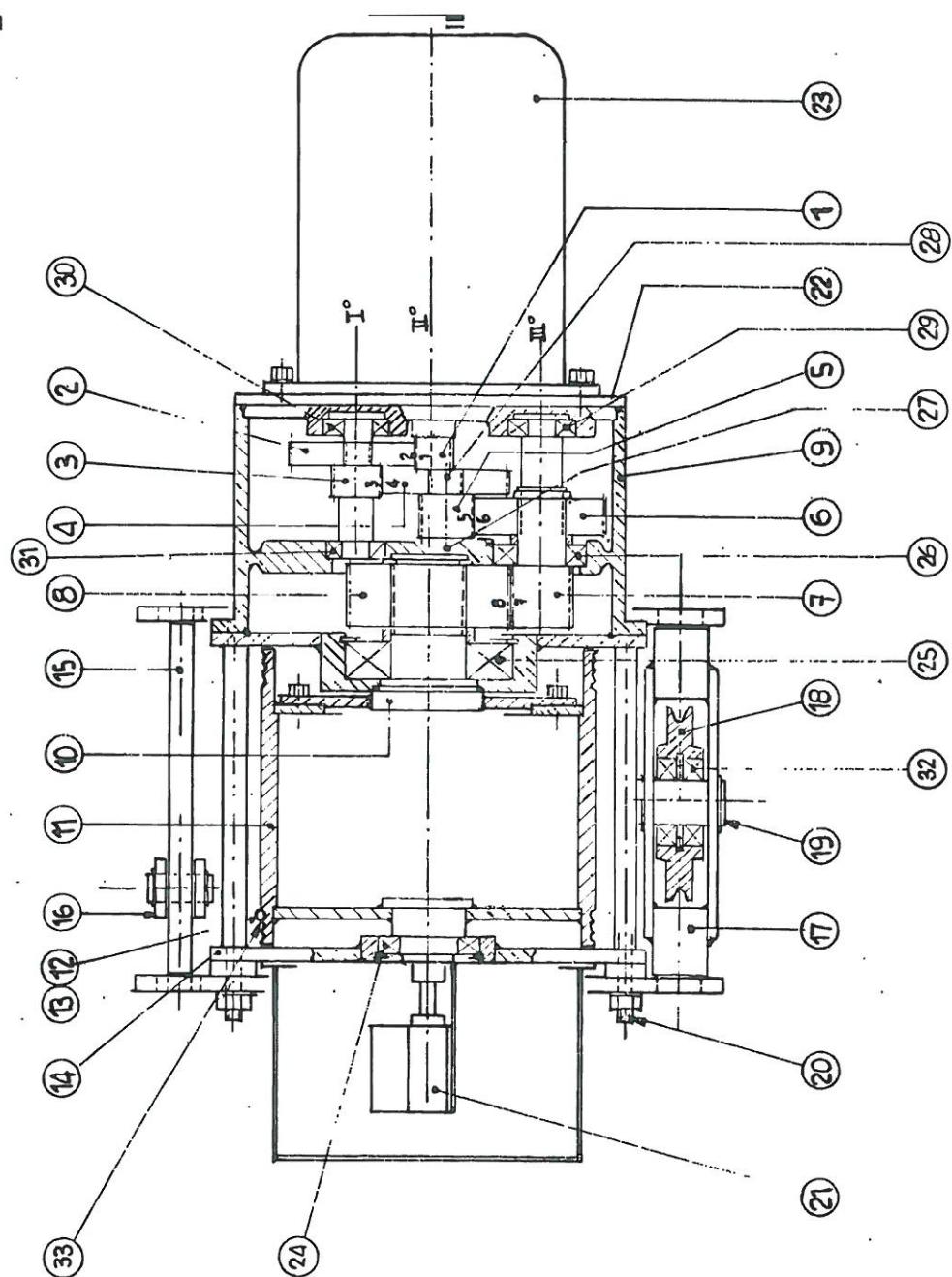
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ELECTRIC ROPE HOIST

COMPONENT LIST

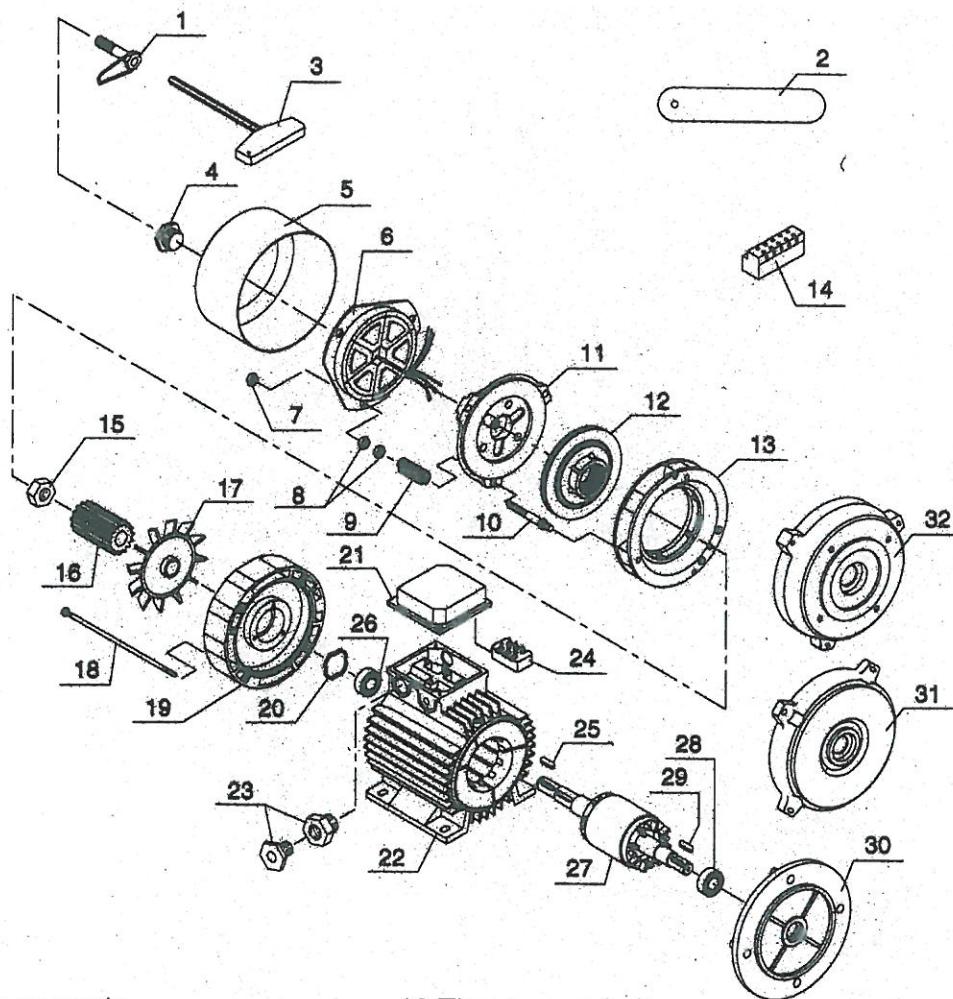
- 1 Motor pinion
- 2 First plate wheel
- 3 First shaft with pinion
- 4 Second plate wheel
- 5 Second shaft with pinion
- 6 Third plate wheel
- 7 Third shaft with pignon
- 8 Slow plate wheel
- 9 Reducer box
- 10Slow shaft
- 11Groveed drum
- 12Rope
- 13Rope guide
- 14Hoist flange
- 15Rope girder connection
- 16Rope connection
- 17Snatch block
- 18Pulley
- 19Pin
- 20Falls
- 21Limit switch
- 22Reducer cover
- 23For motor (see page)
- 24bearings



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MOTOR COMPONENT LIST



1 Vite di sbloccaggio manuale

2 Spessimetro mm 0,3

3 Chiave rotazione manuale

4 Vite blocca cuffia

5 Cuffia protezione freno

6 Elettromagnete trifase (o monofase D.C.)

7 Dado bloccamagnete

8 Dadi di regolazione

9 Molla freno

10 Colonnella di guida

11 Ancora mobile

12 Disco freno

13 Convogliatore con pista d'attrito

14 Raddrizzatore (semionda o onda intera)

15 Anello seeger o dado blocca ingranaggio

16 Mozzo dentato

17 Ventola

18 Tirante con dadi

19 Scudo lato freno

20 Anello compensato re

21 Scatola morsettiera singola o doppia

22 Carcassa motore

23 Bocchettone

24 Morsettiera

25 Chiavetta lato freno

26 Cuscinetto lato freno

27 Gruppo albero rotore

28 Cuscinetto lato comando

29 Chiavetta lato comando

30 Scudo a flangia 85

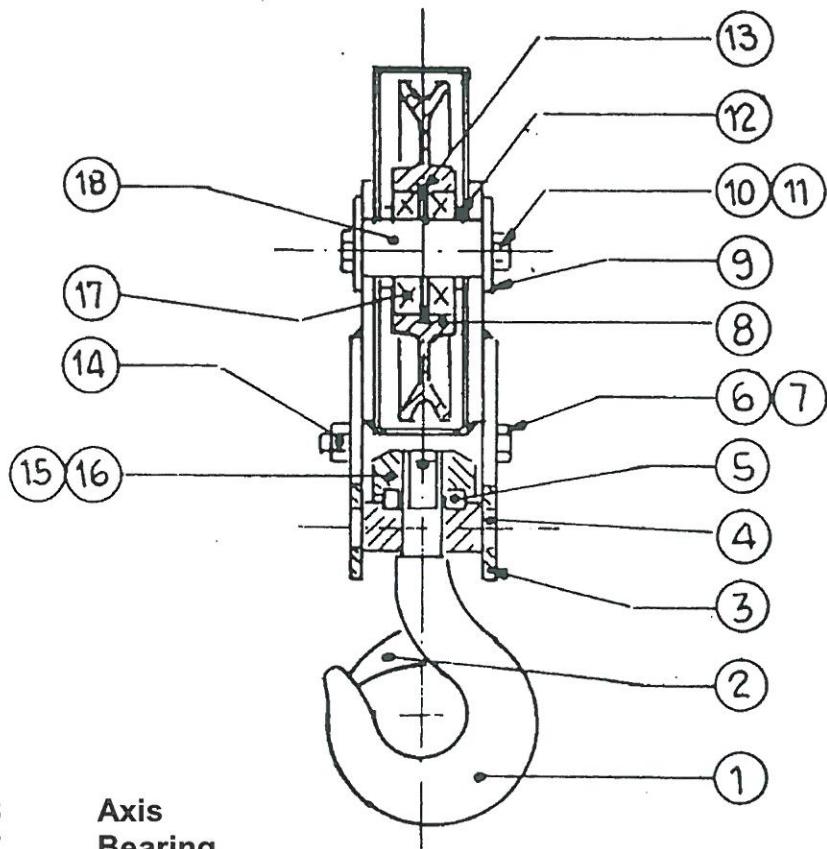
31 Scudo anteriore

32 Scudo a flangia 814

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BLOCK HOOK 2 TUGS

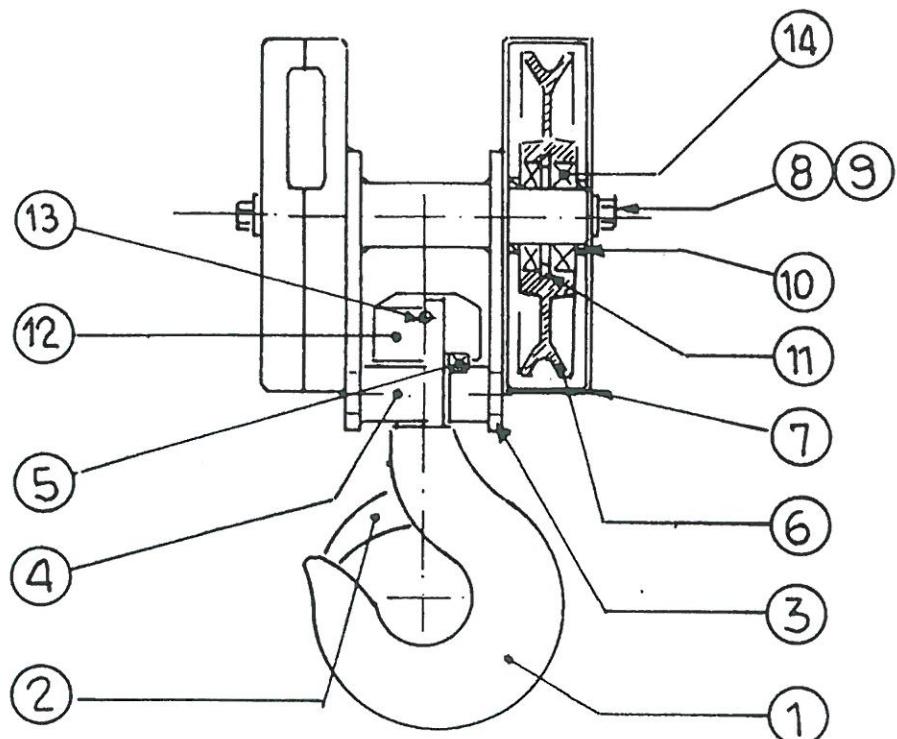


- | | |
|----|----------------|
| 18 | Axis |
| 17 | Bearing |
| 16 | Plug |
| 15 | Lock nut |
| 14 | Screw |
| 13 | Rubber ring |
| 12 | Space |
| 11 | Spring washer |
| 10 | Screw |
| 9 | Washer |
| 8 | Pulley |
| 7 | Spring washer |
| 6 | Screw nut |
| 5 | Thrust bearing |
| 4 | Cross beam |
| 3 | Semidoby |
| 2 | Catch |
| 1 | Hook |

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BLOCK HOOK 4/2 TUGS



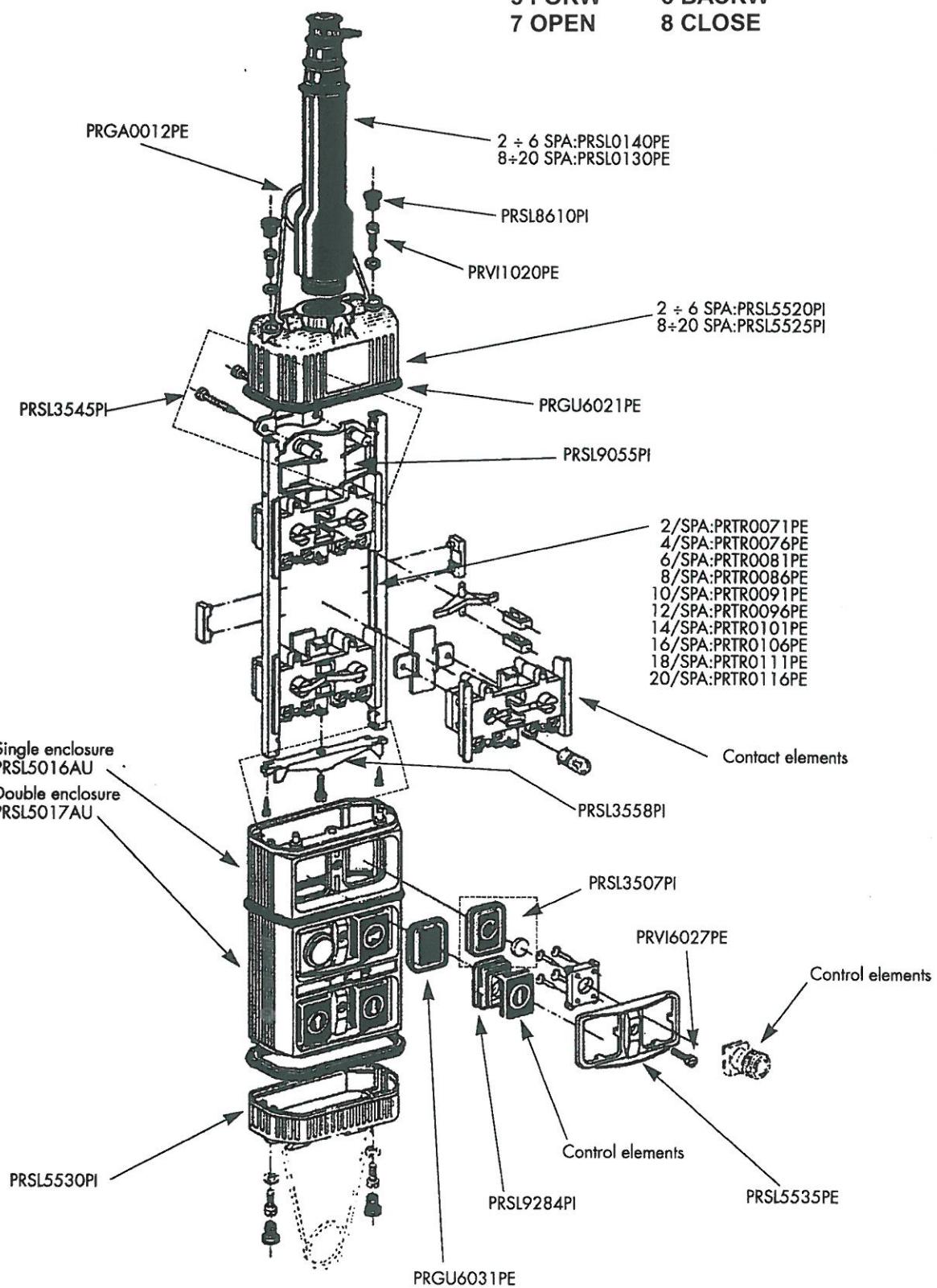
- | | |
|----|------------------|
| 14 | Bearing |
| 13 | Plug |
| 12 | Lock nut |
| 11 | Rubber ring |
| 10 | Space |
| 9 | Spring washer |
| 8 | Screw |
| 7 | Protection cover |
| 6 | Pulley |
| 5 | Thrust bearing |
| 4 | Cross beam |
| 3 | Semidoby |
| 2 | Catch |
| 1 | Hook |

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PENDANT CONTROL STATIONS SPA SERIES

1 RESET	2 STOP
3 UP	4 DOWN
5 FORW	6 BACKW
7 OPEN	8 CLOSE

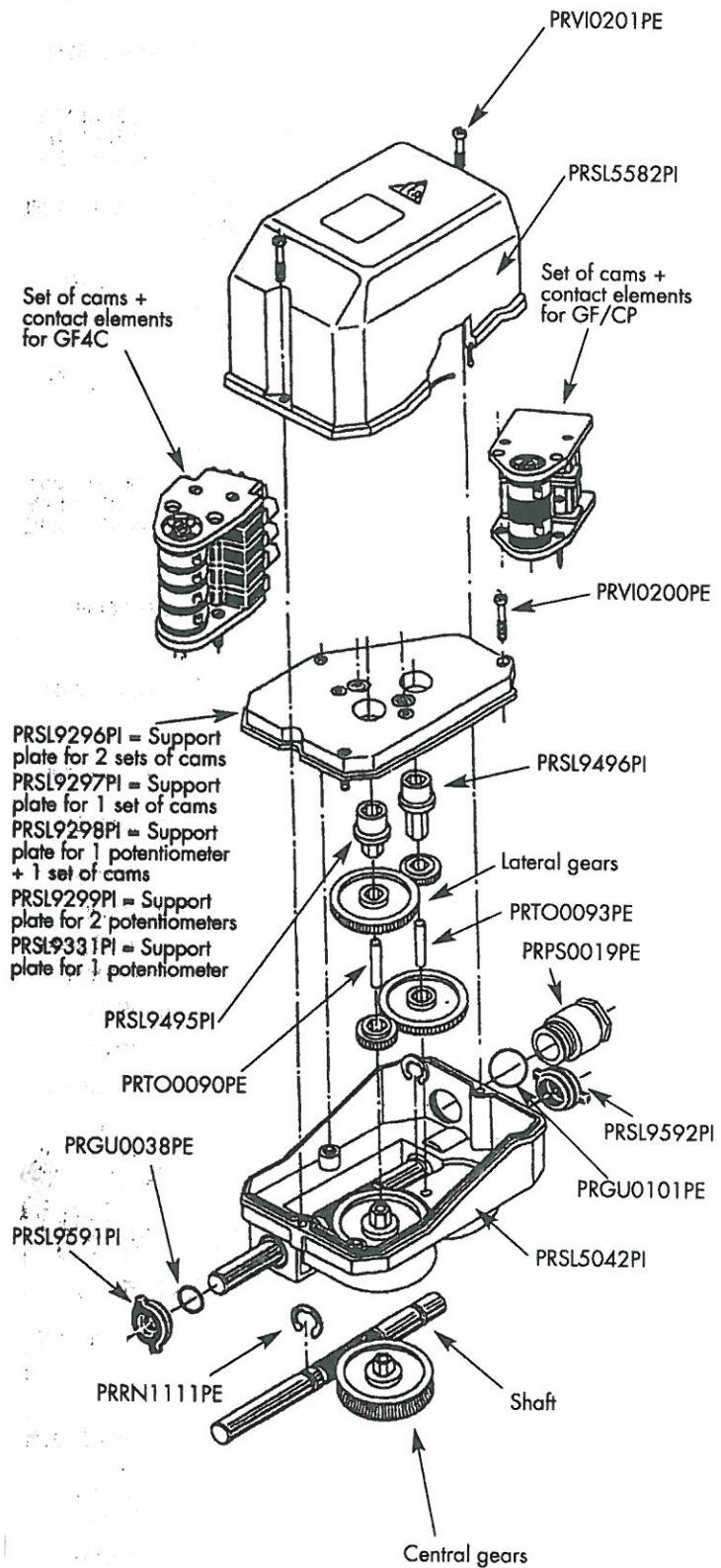
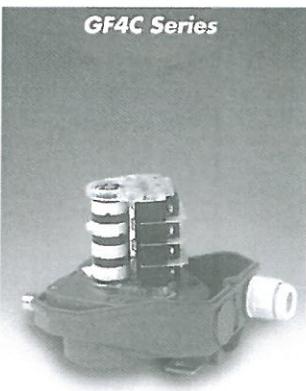


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WORM GEAR LIMIT SWITCH

SERIES GF4C



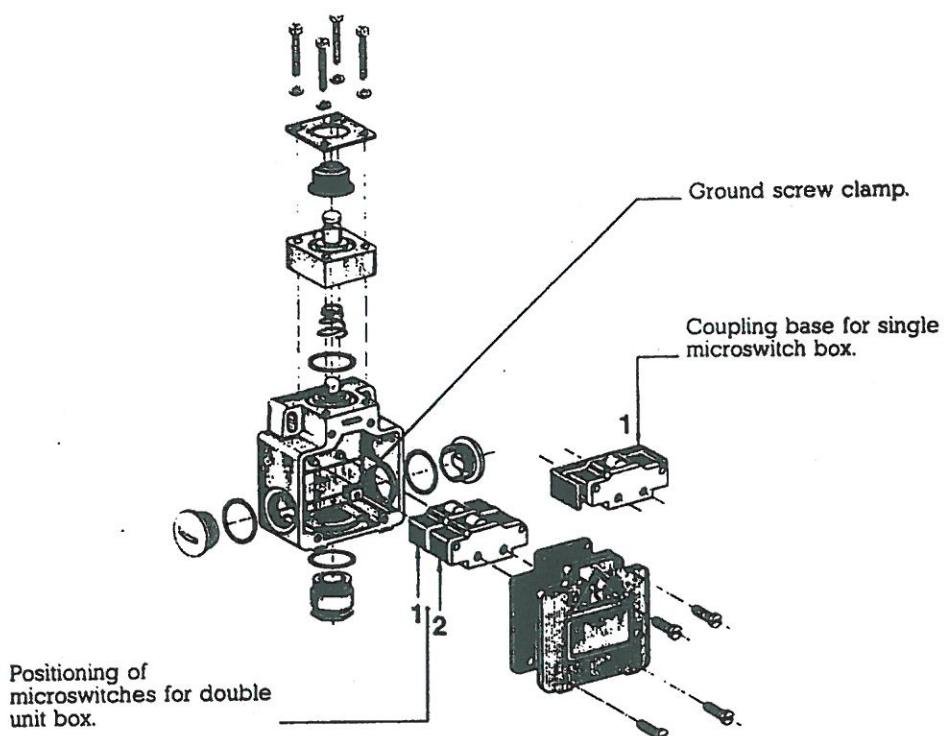
OPERATING AND

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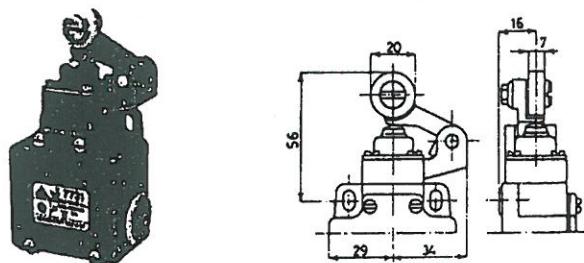
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LIMIT SWITCH FOR HOIST

Assembly of "7000" series limit switches



Central roller arm



Cat. NO. 7731

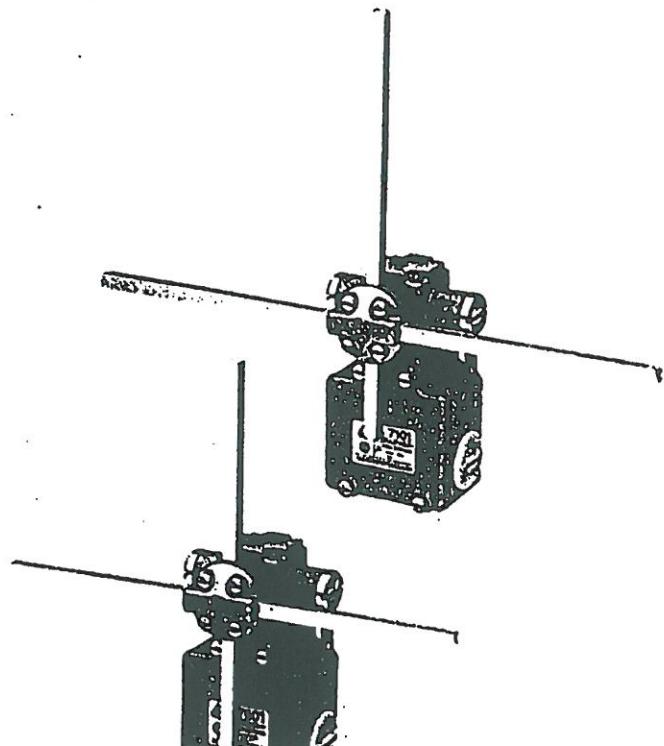
OPERATING AND MAINTENANCE INSTRUCTIONS

Pegaso Paranchi

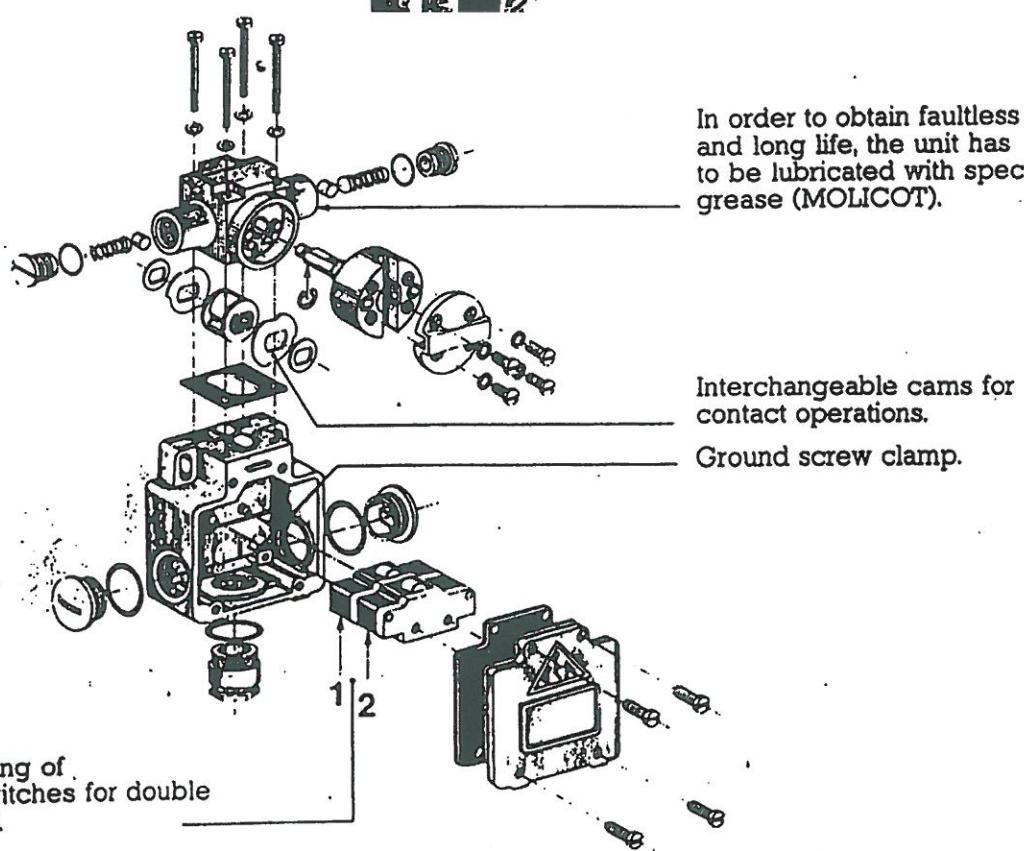
srl.

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LIMIT SWITCH TROLLEY 7102



In order to obtain faultless operations and long life, the unit has to be lubricated with special grease (MOLICOT).

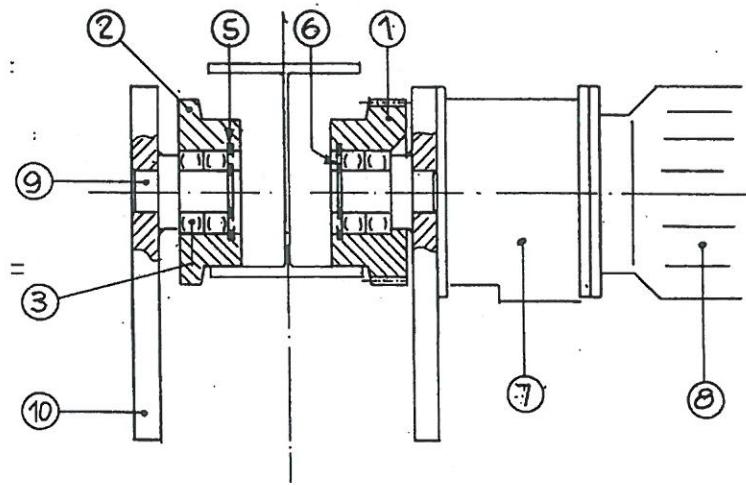
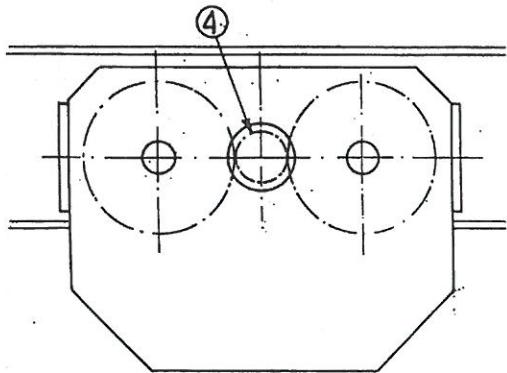


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TROLLEY TIPE " N "

COMPONENT LIST



1. Motor wheel
2. Wheel
3. Bearing
4. Pinion
5. Rubber ring
6. Rubber ring
7. Geared
8. Motor
9. Axis
10. Frame

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IMPORTANT PERMISE FOR ADJUSTING THE RISE AND DESCENT END STOP

The standard end stops mounted on the lifting systems are safety designed and must not, therefore, be used regularly or frequently as automatic stops at the ends of each definitive movement.

If automatic stops are necessary, supplementary work end stops must be employed, of adequate size and shape on the basis of the service requires. The constructing company does not, therefore, take any responsibility for the misuse of the standard end stops.

The type of end stop installed on the machine may be noted on the machine diagram in this manual or directly on the machine itself.

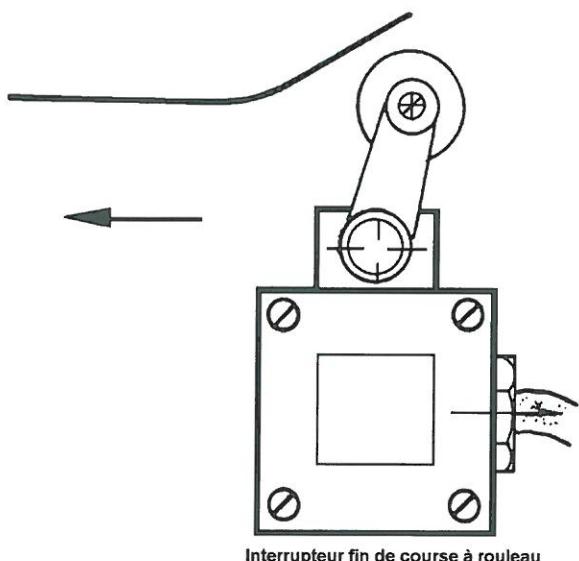
The standard lifting end stops, to be used exclusively as safety devices, are of three types: -operated by gears (activated by the drum shaft)

-operated by worm screw (activated by the drum shaft)

-externally operated with MICROCONTACTS (activated by the rope guide)

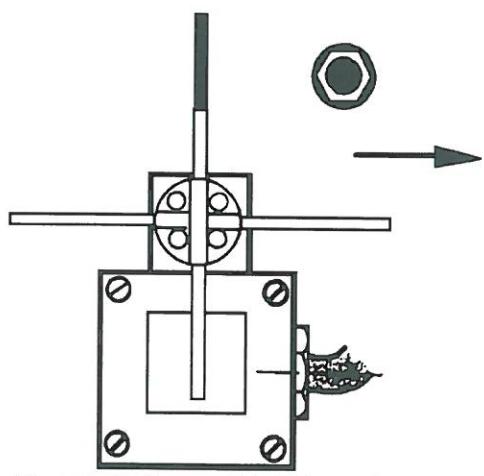
The machines are delivered with the rising and emergency end stops correctly positioned. For descent, the client must position at the moment of starting operating.

In any case, always leave two entire unused loops of the rope on the drum for each pulling end.



Interrupteur fin de course à rouleau

Roller end stop



Interrupteur fin de course à double lyre ou à croix

Double lyre or cross end stop

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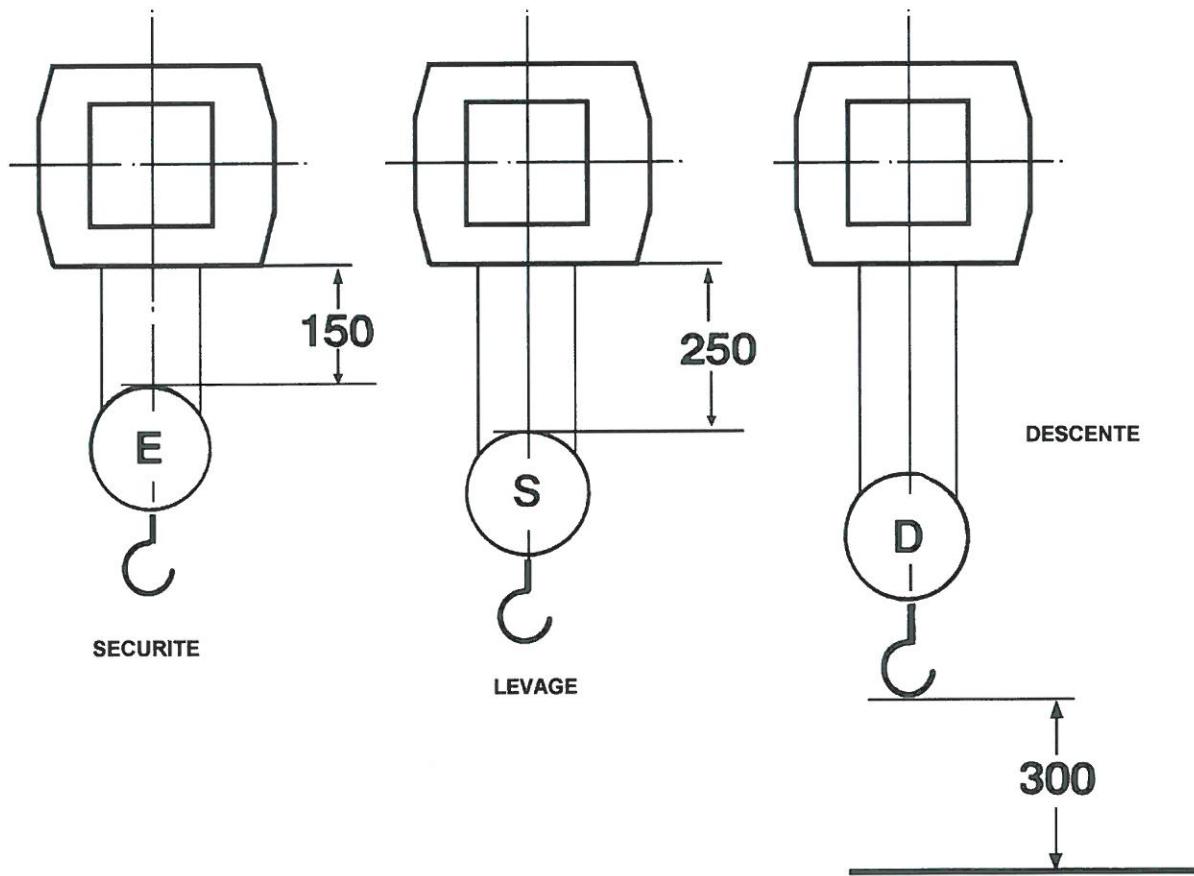
MINIMUM SAFETY SPACES RECOMMENDED TO OBSERVE DURING THE ADJUSTEMENT OF RISE AND DESCENT END STOPS

ATTENTION

When the emergency rise end stop enters into function it is no longer possible to continue operating the machine with the normal controls.

Procedure must be with one of the following two ways:

- .act on the line meter and, at the same time, let the hook down a few centimetres
- .make a provisional bridge between the emergency end stop contacts and lower the hook
- .check why the rise contact has not functioned, eliminate the problem and withdraw the end stop



All calibration operations of the end stops and re-setting the safety spaces must be carried out by specialised electricians authorised by their respective foremen.

OPERATING AND MAINTENANCE INSTRUCTIONS

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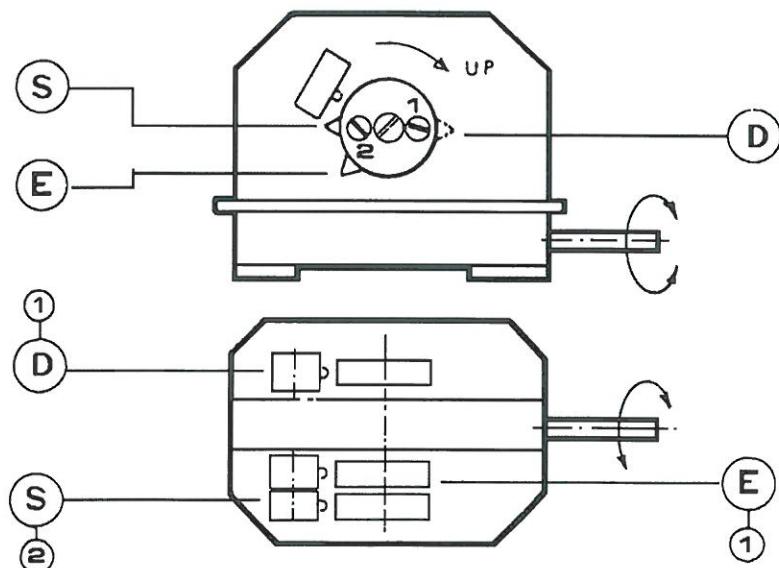
OPERATIONS FOR THE COMPLETE CALIBRATION OF THE WORM SCREW TYPE LIFTING END STOP (to be carried out by a specialised operator)

The safety end stop of this series is composed of a case containing the worm screw unit and the stop microcontacts. It is activated directly by the axle of the rope containing drum to which it is connected by a toothed junction or a hexagonal spindle. Removing the cover reveals the activating cams of the microswitches.

The blocking of the cams is achieved by operating on the central screw; the teeth are placed in the exact position to open the contact relative to the two directions of movement with the 1 and 2 lateral screws.

Rescrew the central screw and carry out a few lifting manoeuvres for an eventual successive setting up.

If a cam for activating the safety contact which acts on the (emergency) remote control line exists, make a slightly retarded phase shift in relation to the lift contact. First the emergency contact must be calibrated and then the lift contact and finally the descent contact, in that order. Screw up the central screws tightly and close the container accurately.



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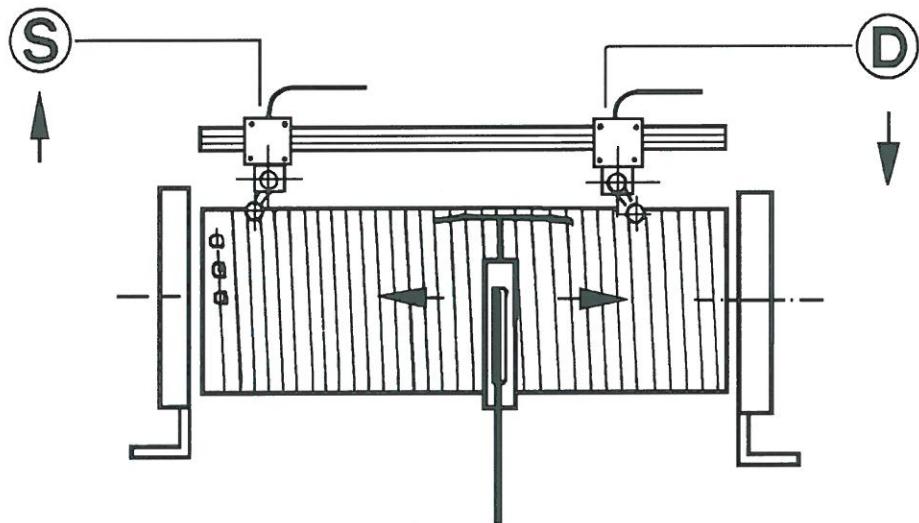
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LIFT END STOP WITH EXTERNAL MICROCONT ACTS

(to be carried out by a specialised operator)

These are employed for lifting hoists superior to standard dimensions.

The enclosed microswitches are placed on runners moveable along a section bar specifically placed in front of the drum. Activating the microswitches is obtained by a slide fixed to the rope guide sector; to calibrate, move the microswitch runners and block them in the positions corresponding to the stop spaces. Carry out a few trials and screw up the runner screws tightly.



For machines operating in humid or corrosive areas, the microswitches must be checked visually, lubricated and covered with water-repellent products, at least monthly.

CHECK AND SUBSTITUTION OF THE ROPE Check

Rope and ropeguide are wearable materials. Regular oiling will prolong their lives. It is often possible to improve the performance of the ropes by finding out the causes of their deterioration and then adopting types particularly resistant to those causes, or eliminating or reducing the causes themselves. Finding these causes of deterioration can generally be achieved by examining used ropes.

Substituting the rope is to be determined on the basis of the number and position of broken threads making up the strands, the degree of wear and corrosion, other damage or relevant alterations. Ropes must be substituted when the visible breakage in the threads has reached the maximum deterioration values indicated for one of the two lengths of reference in the table below, equal to 6 or 30 times the diameter of the rope.

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Ø ROPES	NUMERAL LIMIT FOR VISIBLE BROKEN THREADS					
	NUMBER OF BROKEN THREADS				LENGTH IN mm TO CHECK	
	CROSSED		PARALLEL		6 x d	30 x d
7	18	36	6	12	42	210
9	18	36	6	12	54	270
10	26	52	9	18	60	300
11	26	52	9	18	66	330
13	26	52	9	18	78	390
14	28	56	9	18	84	420
16	26	52	9	18	96	480
17	28	56	9	18	102	510

Bear in mind that breaks are often difficult to find because the ends of the broken threads remain in their original position and do not protrude from the surface of the rope. To see these breaks, it is necessary to remove the grease which covers the rope. It can be useful to run a piece of soft wood along the rope and, if possible bend the rope so that the ends of the threads are made to rise and, in this way, become visible.

Warning

- Checking the rope must be made UNLOADED
- For easier tracing of eventual breaks, the radius of curvature must correspond to, about, the radius of the pulley -The rope must be substituted, independently of the above valuation:
 - .when the total diameter of the rope has been reduced by 10% of the original diameter, even if only at one point .when a strand has broken completely or when, damage has reduced it to 40% of a useful section at some point .when the rope present dents, torsion or permanent bending caused by damage or by having been placed on sharp edges .when the core has escaped from the strand, even if at one point only
 - .when, even under tension, one or more strands appear loose and protruding from the rope.

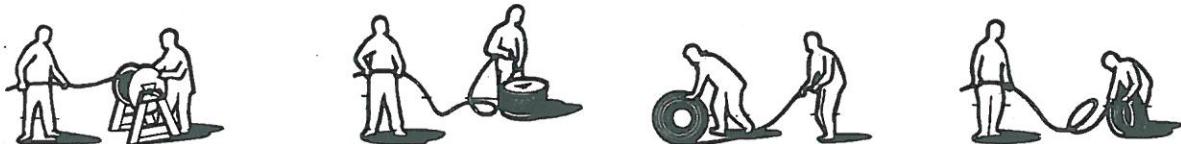
Substituting the rope

Find out before mounting a new rope whether the race of the pulley and the thread of the drum have been worn out and deformed by the passage of the old rope. In this case substitute the damaged pieces. Wind on the new rope without kinking so that bends do not form.

Correct winding Incorrect winding Correct winding Incorrect winding

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SAFETY NORMS FOR MANOEUVRERS

- Manoeuvering and using the crane is reserved for trained personnel only.
- Before beginning a shift, make sure that there is nothing on the tracks of the crane and try out the end stop and braking devices, signalling any eventual deficiencies to the competent authority.
- Never lift a load over the maximum capacity of the crane or a badly slung load. Refer to the load-carrying data written on the crane.
- Never begin a manoeuvre without having previously received the prescribed signal. -Warn of the beginning of a manoeuvre with the appropriate signal.
- Never start or stop the crane abruptly. Avoid colliding with the fixed stops placed at the end of the track.
- Avoid making the load oscillate in particular to make it descend in areas outside the vertical pull; avoid oblique pulling and towing operations.
- Avoid carrying and lifting loads over work and transit areas. When this cannot be absolutely avoided, warn with appropriate signals both at the beginning of the manoeuvre and during carrying the load.
- Before leaving the manoeuvering position unplug the main switch of the crane, put the control organs to zero and never leave a load suspended.
- Never leave materials or equipment on the walkways; keep the manoeuvering cabin clean and in order. Avoid leaving inflammable materials deposited.
- The main switch of the crane must be unplugged during repairs and maintenance when the crane is out of service. -For portai jib cranes or similar operating in the open air, hold down with tongs or analogous devices while suspending or terminating operations.

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-For cranes fed by flexible earthed cab

CARRYING CAPACITY OF THE SIAMESE CONNECTIONS																				
SIAMESE CONNECTIONS IN STEEL ROPE WITH TEXTILE CORE - res. 180 kg/sq.mm					SIAMESE CONNECTIONS IN GRADE 80 STEEL CHAIN				SF RING SIAMESE CONNECTIONS IN POLYSTYROL					BAND SIAMESE CONNECTIONS						
DIA METER OF ROPE					DIA METER OF CHAIN					NAME					WIDTH DIA OF					THICKNESS OF
mm	kg	kg	kg	kg	mm	kg	kg	kg	kg		kg	kg	kg	kg	kg	kg	kg	kg	kg	
8	650	■	1.300	920	7	1.200	980	1.680	2.500	SF1	1.000	800	2.000	1.400	50	1.350	1.080	2.700	2.700	POLYAMIDE OR NYLON
10	1.000	800	2.000	1.410	10	2.500	2.000	3.500	5.250	SF2	2.000	1.600	4.000	2.800	62	1.600	1.280	3.200	3.200	POLYAMIDE OR NYLON
12	1.400	1.000	2.800	2.000	13	4.000	3.200	5.600	8.400	SF3	3.000	2.400	6.000	4.200	75	1.800	1.440	3.600	3.600	POLYAMIDE OR NYLON
14	2.000	1.800	4.000	2.800	16	8.400	5.120	9.000	13.500	SF4	4.000	3.200	8.000	5.600	100	2.500	2.000	5.000	5.000	POLYAMIDE OR NYLON
16	2.500	2.000	5.000	3.500	20	10.000	8.000	14.000	21.000	SF5	5.000	4.000	10.000	7.000	150	3.250	2.600	6.500	6.500	POLYAMIDE OR NYLON
18	3.200	2.560	6.400	4.500	22	12.000	9.600	16.800	25.200	SF6	6.000	4.800	12.000	8.400	225	4.500	3.600	9.000	9.000	POLYAMIDE OR NYLON
20	4.000	3.000	8.000	5.650	26	16.000	12.800	22.400	32.000	SF8	8.000	6.400	16.000	11.200	300	6.000	4.800	12.000	12.000	POLYESTER
22	4.800	3.840	9.600	6.750	32	25.000	20.800	32.000	50.000	SF10	10.000	8.000	20.000	14.000			SAFETY COEFFICIENT = 6			
24	6.000	4.800	12.000	8.500		■	■	■	■	SF12	12.000	9.600	24.00	16.900	50	900	720	1.800	1.800	
26	6.600	5.000	13.200	9.330		■	■	■	■	SF15	15.000	12.000	30.000	21.200	62	1.100	880	2.200	2.200	
28	8.000	■	16.000	11.300		■	■	■	■	SF20	20.000	16.000	40.000	28.200	75	1.350	1.080	2.700	2.700	
30	9.000	■	18.000	12.700		■	■	■	■	SF25	25.000	20.000	50.000	35.300	100	1.800	1.440	3.600	3.600	
32	10.100	■	20.200	14.280		■	■	■	■	SF34	34.000	27.200	68.000	47.900	150	2.250	1.800	4.500	4.500	
36	12.600	■	25.200	17.800		■	■	■	■		■	■	■	■	200	2.700	2.160	5.400	5.400	
40	15.500	■	31.000	22.000		■	■	■	■		■	■	■	■		■	■	■	■	
SAFETY COEFFICIENT = 6					SAFETY COEFFICIENT = 5				SAFETY COEFFICIENT = 6					SAFETY COEFFICIENT = 5						

□ Carrying capacity refers to new Siamese connections □ When using Siamese connections with several arms, the maximum angle at the vertical of the most widely placed arms must be taken into account □ Siamese connections with angles at the vertical of more than 120° are advisably not to be used □

Pegaso Paranchi srl.

Via Ragazzi del '99 1/3 - 20022 Castano Primo Mi Italy

STORING

Packaged material can normally be stored in a closed environment up to five years as long as the temperature is not less than -20° or greater than + 70°C and the humidity no greater than 70%. For different values the packaging must be specifically constructed. If, for various reasons, the humidity exceeds the foreseen level or the duration of storing is longer, it will be necessary to carry out some preliminary operations before putting the machine into operation. Other packets must not be placed on top of the packaging.

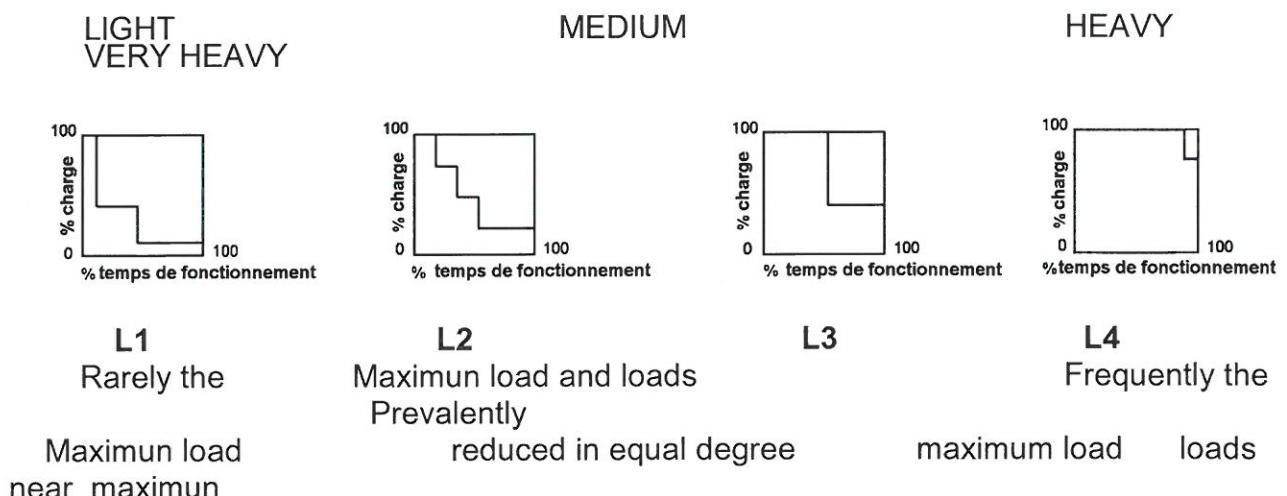
USAGE

The machine supplied is designed only for lifting loads vertically with free cables and therefore without the aid of more or less restraining guides for the ascending load.

The special cases in which the hoists or the winches are designed for specific purposes or horizontal or inclined traction, are specified in the attached documents or technical data. For end stop calibration, the employment limits of the machine must be verified in order to see if the use is compatible with the envisaged operational needs. If there is any uncertainty on this point, contact the constructing company immediately before putting into operation.

LIMITS OF EMPLOYMENT Classification of lifting apparatus according to FEM and ISO norms

a) Capacity: the nominal capacity of the machine is determined by the maximum weight to be lifted. b) State of stress: characterises the degree of stress which acts on the machine during its life-span.



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C) Utilisation class : duration of a machine as an orientative value expressed in T number of hours

HOURS	Utilisation class									
from	T0	T1	T2	T3	T4	T5	T6	T7	T8	T9
to	200	400	800	1600	3200	6300	12500	25000	50000	

Start classes for lifting engines

Gruppo	Avviamenti	Intermittenza
M1	90	15 %
M2	120	20 %
M3	150	25 %
M4	180	30 %
M5	240	40 %
M6	300	50 %
M7	360	60 %
M8	> 360	60 %

Start classes for travelling engine

Group FEM - ISO	Start	Intermittence (limitata a 10')
M1	60	10 %
M2	90	15 %
M3	120	20 %
M4	150	25 %
M5	180	30 %
M6	240	40 %
M7	300	50 %
M8	≥ 300	60 %

The constructor does assume responsabilità for improper use or for exceeding the number of cycles or working time with respect to that envisaged in the planning data

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TIGHTENING COUPLES FOR MAIN STRUCTURE JOINTS

Diametro nominale mm	Sezione resistente mm ²	Classe della vite									
		4,6		5,6		6,6		8,8		10,9	
		Ts (N - M)	Nb (KN)	Ts (N - M)	Nb (KN)	Ts (N - M)	Nb (KN)	Ts (N - M)	Nb (KN)	Ts (N - M)	Nb (KN)
12	84	34	14	49	19	55	23	94	39	127	53
14	115	53	19	73	29	87	31	143	53	204	73
16	157	83	26	112	35	138	43	234	73	317	99
18	192	115	32	155	43	187	52	320	89	436	121
20	245	164	41	220	55	268	67	456	114	620	155
22	303	224	51	299	68	361	82	616	140	840	191
24	353	283	59	379	79	461	96	787	164	1070	223
27	459	416	77	556	103	675	125	1150	213	1566	290

Ts = Tightening couple

Nb = Corresponding axial force

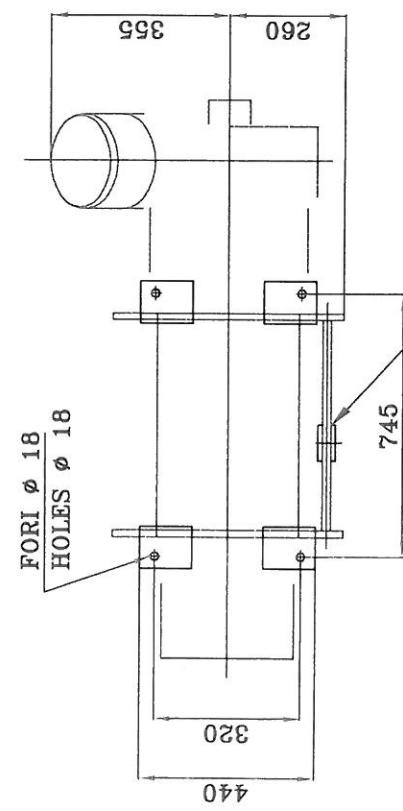
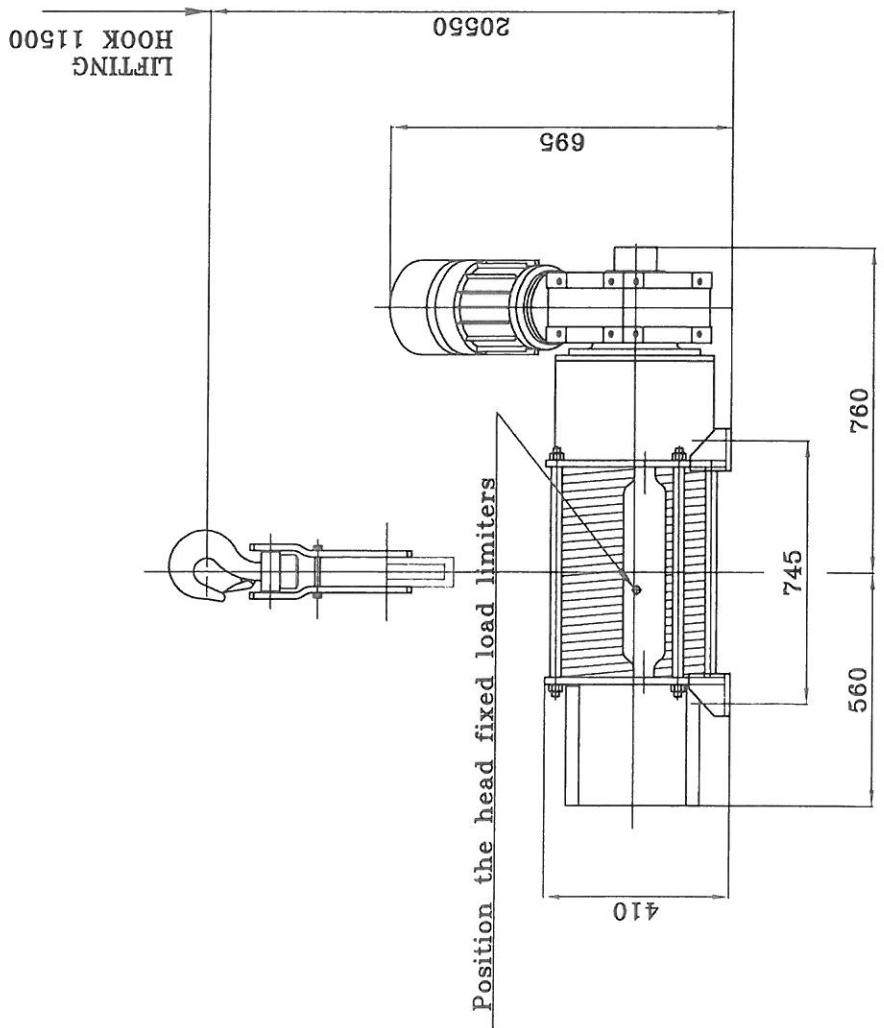


PEGASO PARANCHI srl

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C.I. e P. IVA 04102440158 - Cap. Soc. €. 48.546,94
Registro delle Imprese di Milano n. 183191 - Trib. di Milano

TYPE LUBRIFICANT

TYPE LUBRIFICANT (valido per temperature da - 10° a + 60° C)						
ORGANI DA LUBRIFICARE	AGIP	BP	ESSO	SHELL	TOTAL	NOTE
RIDUTTORE ((Reducer gear	BLASIA 187	GR-XP 220	SPARTAN EP 220	OMALA 220	CARTER 220	Olio + 40 - 0° C
FUNE (Rope)	AGIP GR MU/EP 1	MERCURY 2	SHIELD BK	CARDIUM COMP.D	TOTALUBE COMP.A	Grasso
EVENTUALI INGRANAGGI SCOPERTI, CUSCINETTI E GIUNTI CARDANICI (Naked gears,ball bearingand universal joint)	AGIP GR MU/EP 1	MERCURY 2	SHIELD BK	CARDIUM COMP.D	TOTALUBE COMP.A	Grasso



CHARACTERISTICS

ITEM	3200	Kg
CAPACITY	20	m
LIFTING HOOK	1.3	m/min
HOOK SPEED	1.5	KW
MOTOR POWER	415V-50Hz	3Ph
VOLTAGE	400	Kg
WEIGHT		

POS.	MATERIALI MA TERRELLA	N. PEZZI N. PIECES	PIEZO KG.	PIEZO KG.	DATA MODIF.	DATA FIRMA	NAME	DENOMINAZIONE DENOMINATION	
								OGGETTO OBJECT	TITOLO TITLE
								Desmet Ballestra - Vs. Cogni: 2F11A - Item 04 W 3	Electric rope hoist type : PB322M / A

PEGASO PEGASO PARANCHI
via ragazzi del 99 ,1/3
20022 Castano Primo(MI)

FORMATO
SIZE

60397-100-000

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A 3



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LIFTING FORCE LIMITER COG 120 COG 200

Instruction manual - Rev. 10

PIZZAMIGLIO SRL
- MANUFACTURERS OF LIFTING DEVICE COMPONENTS -

Company introduction

Pizzamiglio Srl company have been founded in 2002 by Pizzamiglio Renato yet founder (more than twenty years ago) of “Elettromeccanica F.lli Pizzamiglio”: in the past this company was specialized in offer maintenance services for al types of cranes and especially in bridge-crane.

In consideration to the costumer demand, the company started the construction of electrical plants for cranes and for industrial buildings.

In 1994 started the production of “feeding festoon systems” so the company became a factory company and increased his own business.

In 1996 started the construction and sale of electro-hydraulic brakes according DIN 15435 standard, metal bumpers and **over load guard systems (lifting force limiters)**.

In the same time continues the maintenance activity and direct experience of our technicians allows to introduce all the improvements on the products.

In 1997 the company moved to a new building and organize the production in a more rational factory layout.

In 1998 the product variety offered had been increased with the production of bus-bar system “trolley AQ”.

In 2001 the Quality System management of “Elettromeccanica F.lli Pizzamiglio” has been certified in according to ISO9002:94 standards.

In 2002 the company divides. Pizzamiglio Srl company acquires and move the production activity to a larger building.

Production range:

- Feeding festoon system “Olivares” for bridge-cranes, and similar.;
- Electro-hydraulic brakes according DIN 15435 standard;
- **Lifting force limiters;**
- Telescopic limit switch for bridge-cranes;
- Metal bumpers;
- Rubber bumpers;
- Bus-bar system “Trolley AQ” for bridge-cranes.

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Chapter

1

Introduction/foreword

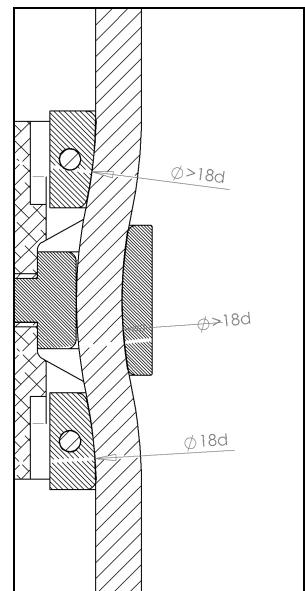
This manual has been arranged to help installers and maintenance operators of lifting force limiters COG 120 and COG 200 produced by Pizzamiglio srl company. It contains indications and warnings for correct installation and setting of the device for a product's long time life and safety use by the final user.

Carefully read this manual before install this device and observe all the rules

Pictures are been extracted from a solid drawing software so colors do not respect the true aspect of the product but are been chosen to bring in evidence the singles components.

Updates compared to previous revisions of the manual

Differently by the previous versions of this product and others similar goods existent in this device there are not two pulleys but two sectors of contrast with wide radius. Similarly the clamp keep a wide surface of contact with the rope in the stretch where the rope is diverted. Those three components, in each size of the product, respect a ratio 1:18. This innovation preserve the convenience of the small dimension giving obvious benefits in reduction of stress of the rope. Especially because the rope is led along the first sector, the clamp and the second sector in each inversion of bending that are required by the functioning principle.



That characteristic is present only in load limiter devices made by Pizzamiglio and the invention is protect by a patent pending.

Company and product data

Company data:

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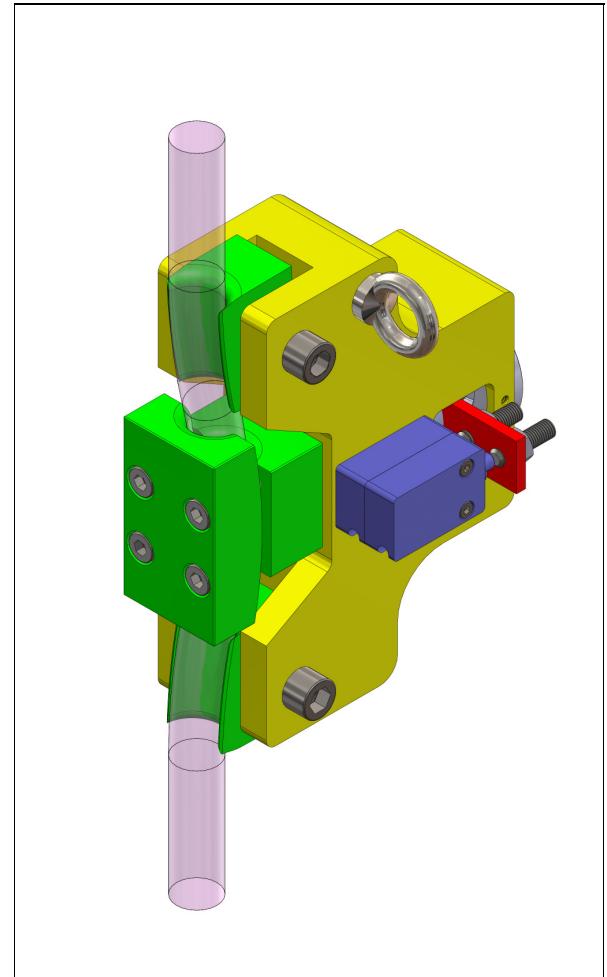
<http://www.pizzamigliosrl.com>

E-mail: info@pizzamigliosrl.com

Product data:

Name of the product:

Lifting force limiter **COG 120** and **COG 200**



Product descriptions

Overload guard COG 120 and COG 200 is an automatic device that prevents the crane to carry loads more heavy than the nominal capacity in consideration of dynamical effects during normal use.

This device is suitable for winches provided with one fixed-cape or with a compensating pulley. The overload guard have to be applied to the rope nearby the fixed-cape or on a branch of rope near the compensating pulley.

The appliance give one or more electrical contacts NO-NC that commutes when the load exceed in weight the settled value. Every contacts can commute simultaneously or at different values of weight in according to installer exigencies. Pay attention that each switch have a NO-NC contacts but them do not commute in the same position (value of force). By default we make the settings on the contact NC.

The body of the overload guard is an aluminium fusion that involves a set of conned-disk springs and a pivot that mast be fixed on the rope. The device checks constantly the tension of the rope. A cursor fixed on the pivot press the micro-switch when the force is higher than the settled.

COG 120 and COG 200 are sold factory-settled under costumer demand. Installer have to make a final setting with real load if necessary. This is a mechanical-device so the absence of electrical feed can't modify or change the setting.

Ambient: the device is fit both for indoors or outdoors installation because the switches has a protection grade IP67..

Warning: Do not install never these standard devices in explosive atmospheres.

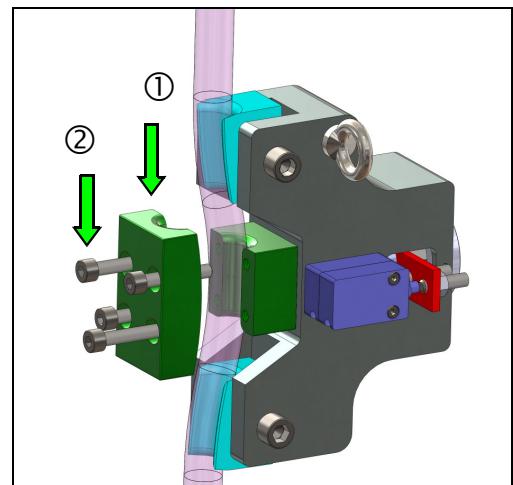
Types: Overload guard devices COG series are produced in different configurations for size of rope and number of switches (switching threshold).

Overload guard device must be fixed to the wire rope nearby the fixed-cape.



MECHANICAL INSTALLATION

1. Open the clamp ① by loosening the screws ②.
2. Install the device on the rope near the fixed-cape nearby the winch in tightening the screws. The wire rope have to stay between two wheels. The cable outlet have to be oriented on the low side.
3. If necessary set the hoist limit switch to prevent that the hook do not reach the device.
4. Check and set the hoist limit-switch of the winch: the hook haven't to bump the device!
5. Connect the cables on the electrical circuit. (see above)
6. Make to the final setting.



ELECTRICAL CONNECTION

The electrical connection of the overload guard type COG can be realized as indicated:

System A The contact can be connected to give the assent to lifting function contactor (or to an auxiliary contact to active lighting or acoustic disposals). Sometimes, when the load is NEAR the limit-set, this system can give an uncertain lifting function caused by beam swing. System B Interpose an auxiliary contact between the device's electrical contacts and the main contactor of the lifting function. This system removes the troublesome caused by beam swing.

SCHEMA DI COLLEGAMENTO LIMITATORE DI CARICO COG

LC1 contatto limitatore di carico
 LC2 contatto limitatore di carico di sicurezza
 1KA 1 relè ausiliario
 1KM 22 contattore salita
 1KM 21 contattore discesa
 P.S. pulsante salita
 P.D. pulsante discesa
 FCS finecorsa salita
 FCD finecorsa discesa

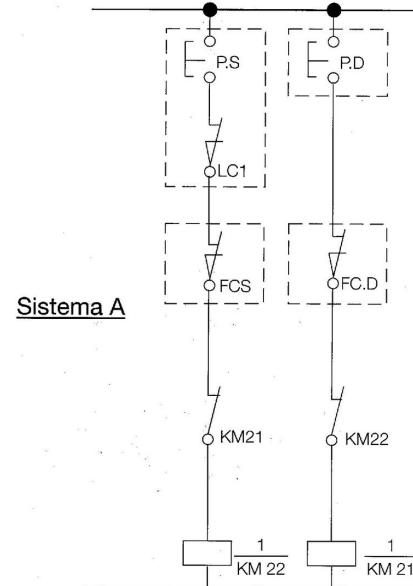
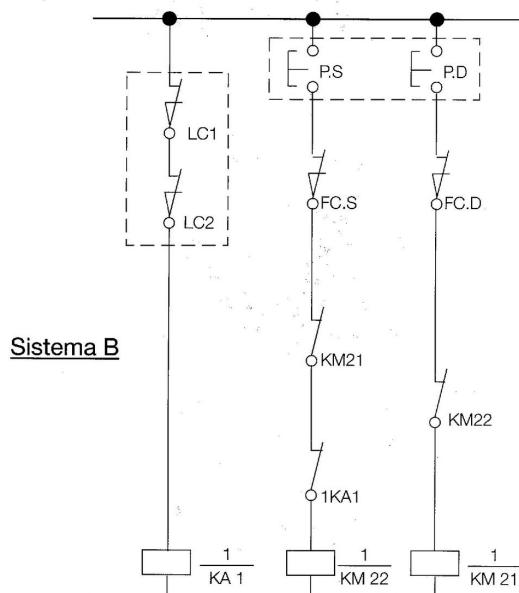


FIG. 2



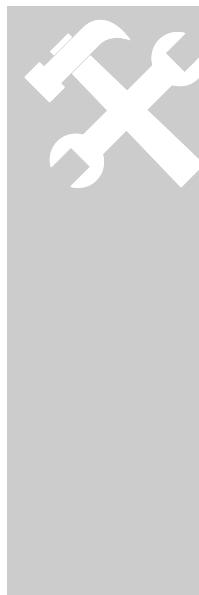
WARNING

DON'T TOUCH ELECTRICAL COMPONENTS IN TENSION

SETTING (HOW TO MODIFY THE ORIGINAL SETTING)

The overload guard made by Pizzamiglio srl is adjusted in factory with a static test but and data setting are indicated in the CE declaration document however may be that the installer have to make a final setting with a real load in attending these instructions. The final setting is the choice of the exact point of commutation of the micro-switch.

INSTRUCTIONS FOR THE ADJUSTMENT



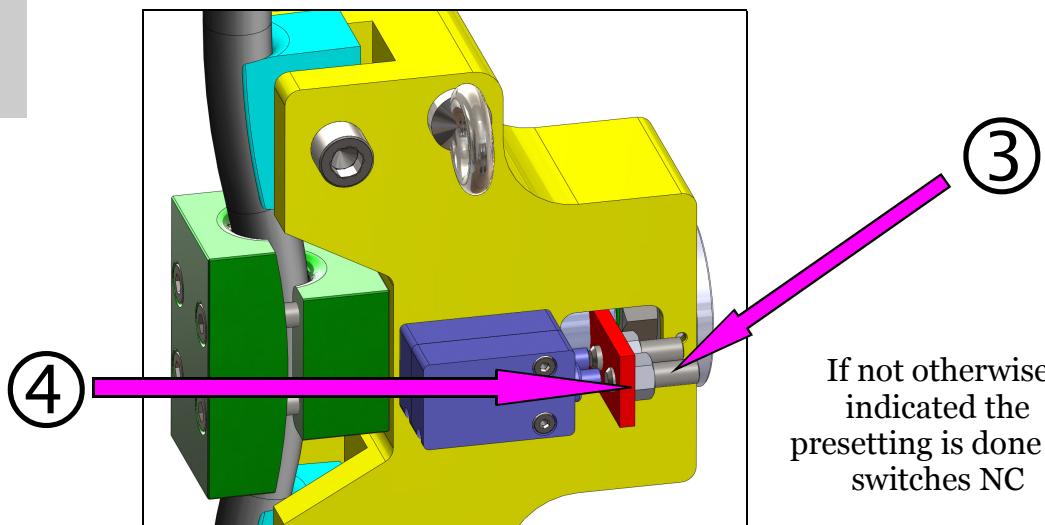
Suite the connection of the device press the slow hoist function.

If the motor don't starts release the button, lose the nut ④, lose the screw ③ until the motor starts.

Be sure of the setting by trying more times the right operation of the overload guard device.

Try to lift a load more heavy of 15% of the nominal capacity. The motor mast not to start.

Repeat again the test with a weight equal to the nominal capacity and if the motor work regularly tighten the nut ④.



Note

The set of overload guard device at 10% over the nominal capacity let the crane operate correctly also in consideration of swinging of the load and inertial forces. Winch capacity / number of ropes. **To guarantee the manufacturer setting there is a red seal whether in setting screw and nuts. The alteration of the seal entails the decline of the validity of the setting certificate..**

Technical features

Overload guard COG series are particularly resistant to heavy stress, can be installed within few minutes without cutting or unloading the wire rope. Ambient temperature limits: -25 / +70°C.

Available for ropes size from 6 to 26mm equipped with 1, or 2 micro-switch IP67 with cable 2m length (On demand can be arrange devices equipped with cable 5m length).

Rated capacity from 1000 to 8300 daN with ± 1% accuracy on the value of max capacity.

Type	Electrical characteristic	Diameter of the rope (mm)	Maximum Load	Number of thresholds	springsize	Setting range	
						Min	Max
COG 120 ST	240V ac 1,5 A IP 67 nc/no	6 ÷ 12	2800 daN	1 or 2	A	310 daN	1100 daN
					B	620 daN	2200 daN
					C	930 daN	2800 daN
COG 200 ST	240V ac 1,5 A IP 67 nc/no	13 ÷ 26	8300 daN	1 or 2	A	850 daN	3100 daN
					B	1700 daN	6200 daN
					C	2550 daN	8300 daN

Data contained in this publication are to be considered as indicative only. The manufacturer reserves the right to modify data without prior notice. For the electrical characteristics of the switches verify the data marked on the switch by the manufacturer.

Micro-switch have a commutation point NC and NO in different positions. Rules impose that load limiter utilized as safety devices must be connected on NC switches, so excepting express request, the presetting will be made on the contact “normally close”: at the exceeding of the threshold the contact opens.

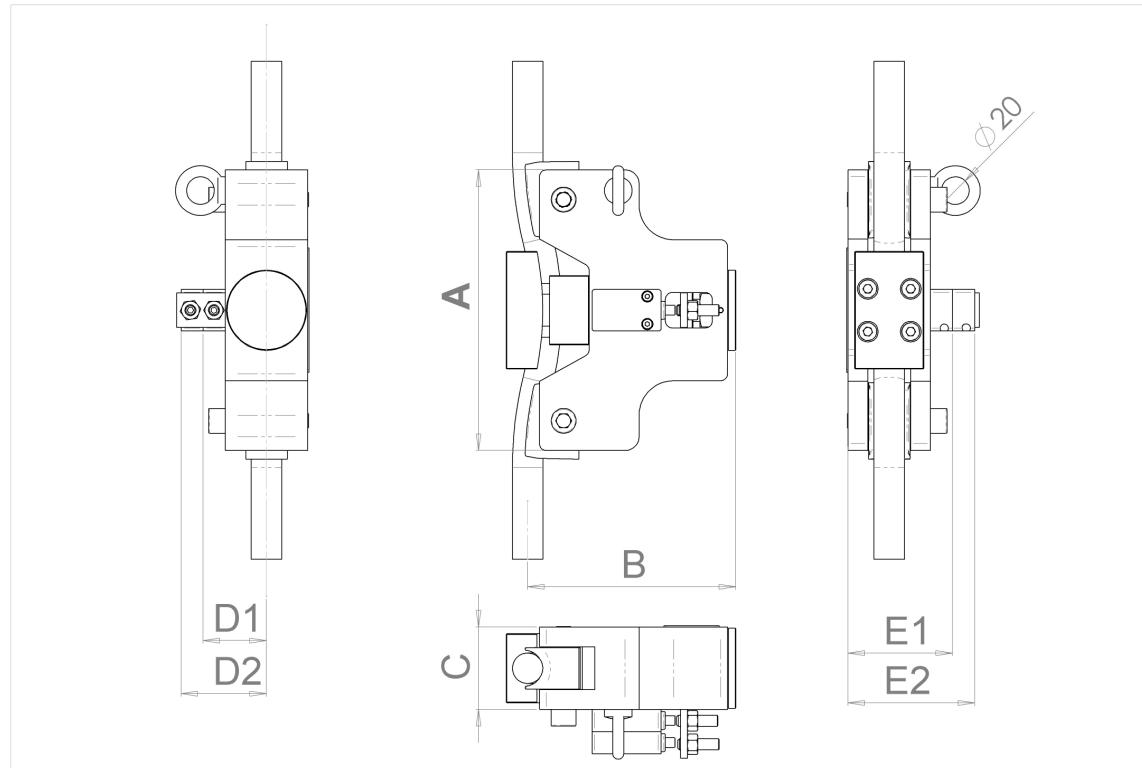
Note

In the order you have to indicate the size of rope, number of thresholds and setting force required. If you are installing the device on a winch where the fixed cape is a pulley, may be that you have to install also a counterbalance. Our technicians can help you in the choice fell free to contact-us for more details.



Overload guard device type COG 120 – COG 200

Protection degree IP67



Type	Threshold	Mass [kg]	Dimensions [mm]						
			A	B	C	D1	D2	E1	E2
COG 120 1C ST	1	~ 3,5	160	115	40	36	-	55	-
COG 120 2C ST	2	~ 3,5	160	115	40	-	52	-	71
COG 200 1C ST	1	~ 7	215	150	60	46	-	76	-
COG 200 2C ST	2	~ 7	215	150	60	-	62	-	92

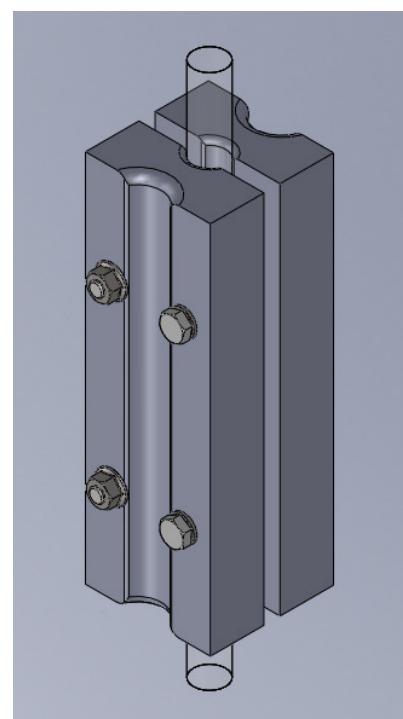
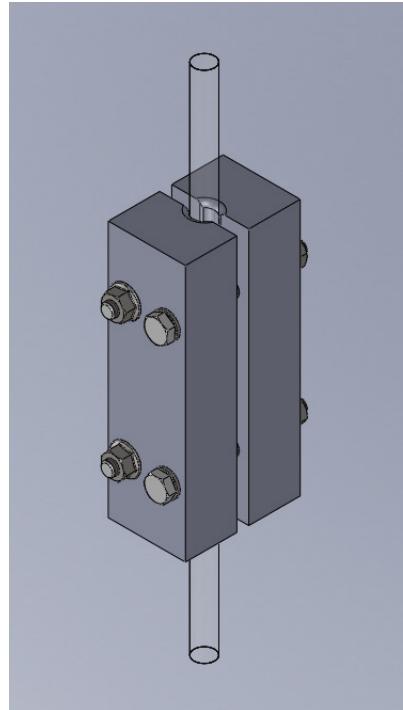
COUNTERBALANCES

If you install the load limiter on one of a branch of rope near the compensating pulley may be that you have to install a counterbalance on the opposite branch in order to prevent that the hook block reeving appear a bit sloping.

There are two sizes of counterbalances fit to balance the mass of the two types of load limiters. During the installation be sure to lock screws and nuts. The bigger type is fit for ropes from 13 o 19mm of diameter on one side and from 20 to 26mm on the other side. Instead the smaller type there is only one side fit for ropes from 6 to 12mm in diameter

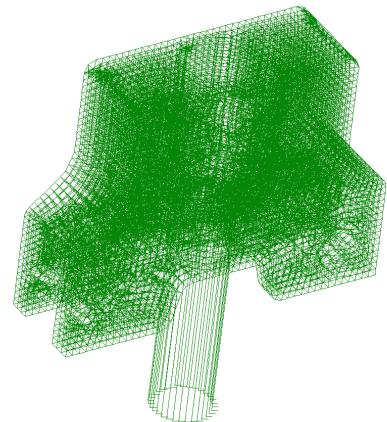
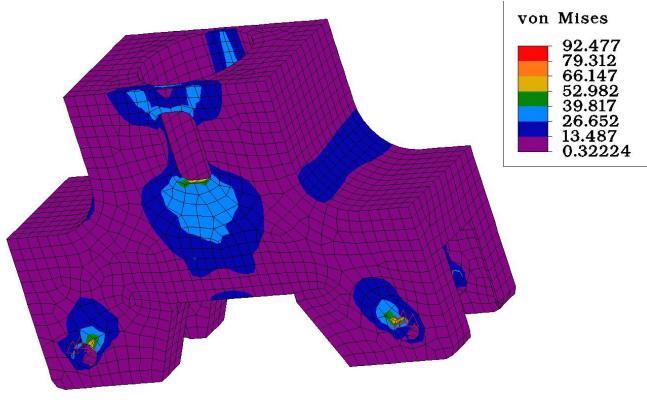
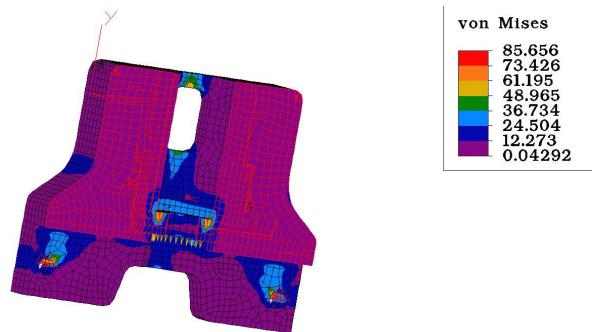
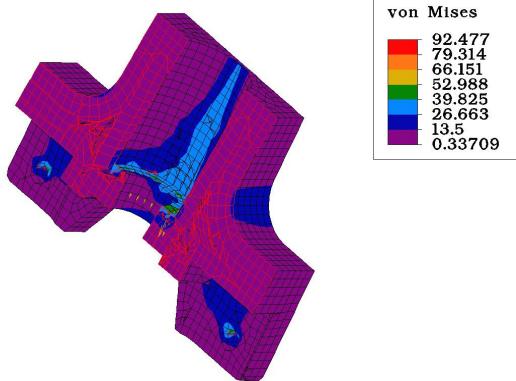
Both the counterbalances are made in galvanized steel. Screw and nuts also are galvanized. Dimensions of the counterbalances are the same of the correspondent size of load limiter

Type	Mass [kg]	Rope [mm]
COG CONTR 120	~3,5	$\varnothing 6 \div 12$
COG CONTR 200	~ 7	$\varnothing 13 \div 19$ $\varnothing 20 \div 26$



MATERIALS

Overload guard device type COG 120 and COG 200 have been engineered in considering all the forces. Of the system. The body is a whole aluminium fusion and the force is rated 160% more of nominal value. The body involves a set of conned-disc made in special steel. All pivots and sectors of contrast are galvanized. Main pivot works on a bronze ringlet.



Safety features

The installer have to choice an overload guard device suitable with the crane use in considering the ambient, weather, air humidity, capacity of the crane (force on the single rope), electromagnetic compatibility.

Warnings for installers and maintenance operators

Operate according your safety plan. Particularly use only certified ladders and scaffolds; use individual protection disposals and wear safety wear and shoes. Keep attention in your activity to safety of all persons around you. Recycle or sell-off the packaging materials in according to country laws.

Residual hazards

Some hazards are typical of installation or maintenance activity dues to electrical tension, altitude and hazards introduced from others operators' activities. Make attention!

Electric shock: don't touch components in tension.

Fall: use certified ladder, scaffolds and safety belts.

Instructions to the final user

The installer have to instruct the final user to don't make his-self maintenance if not expert in cranes maintenance, particularly don't modify setting of the device and not paint device's pivots because this operation can compromise the functionality of the overload guard. **Include the check of the functionality of the overload guard among the periodically checks of the crane. Particularly pay attention in checking also the stretch of rope near the limiting device also in opening the clamp.**

Declaration of conformity



DECLARATION OF CONFORMITY SAFETY OF MACHINERY 2006/42/CE

THE PIZZAMIGLIO SRL COMPANY

DECLARE, UNDER HIS OWN RESPONSIBILITY THAT THE FOLLOWING PRODUCT, IF CORRECTLY INSTALLED AND MAINTAINED FOR ITS INTENDED PURPOSE, ACCORDING TO THE CURRENT LAWS AND TO THE MANUFACTURER'S INSTRUCTIONS, COMPLIES WITH PROVISIONS OF EUROPEAN DIRECTIVES AND WITH THE TECHNICAL NORMS FOLLOWING INDICATED.

"LIMITATORE DI CARICO TIPO COG 120/200" / "LIFTING FORCE LIMITER TYPE COG120/200"
(ELECTROMECHANICAL COMPONENT THAT PREVENTS THAT A CRANE LIFTS HIGHER WEIGHT THAN THE ESTABLISHED)
THE PRODUCT ABOVE IDENTIFIED COMPLIES, WHERE APPLIES,

TYPE	SERIAL No.	YEAR
COGXX XC ST	XXXXXXX	XXXX
FORCE		
MIN	MAX	PRE-SETTING
XXX daN	XXX daN	1 st SWITCHING THRESHOLD 2 nd SWITCHING THRESHOLD XXX daN XXX daN

THE PRE-SETTING IS DONE STATICALLY SO, DURING THE INSTALLATION, THE OPERATOR CAN CHANGE SETTING BETWEEN THE MINIMUM AND MAXIMUM VALUES HERE INDICATED IN OPERATING IN SCREW (1) AND NUT (2).

ELECTRICAL CHARACTERISTICS: AC1 230V 1,5A IP67 IEC/EN 60947-5-1

THE LIMITSWITCH TELEMECANIQUE ZCMD25 COMPLIES WITH THE FOLLOWING STANDARDS:

CSA-C22.2 No.14-95 Industrial Control Equipment
CSA-C22.2 No.94-M91 Special Purpose Enclosures
CSA-C22.2 No. 0.17-00 Evaluation of Properties of Polymeric Materials

WITH PROVISIONS OF THE FOLLOWING EUROPEAN DIRECTIVES:

- EUROPEAN DIRECTIVE 2006/42/CE "SAFETY OF MACHINERY" AS "SAFETY COMPONENT"
ARTICLE 2 LETTER C – ENCLOSED IN ANNEX 5 POS.8

THE PRODUCT ALSO COMPLIES WITH PROVISIONS OF THE FOLLOWING TECHNICAL NORMS:

UNI EN 1207-2 "CRANES SAFETY, REQUIREMENTS FOR HEALTH AND SAFETY, PART 2: LIMITING AND INDICATING DEVICES" EDITION JULY 2008

- IEC 9761 "LIFTING FORCE LIMITERS FOR CONTROLLING THE LOADING OF MOTORIZED SERIES HOIST MECHANISM" EDITION 01, 1994

VALEGGIO SUL MINCIO - ITALY, XXXXX

PIZZAMIGLIO SRL
Chief Executive Officer
[Signature]

Rev. 13

FAQ - Questions and answers

Q. Is it possible to install the overload guard on cranes yet installed?

A. Yes, without cutting or unloading the rope.

Q. Is it possible to change factory setting?

A. Yes, but only between min. and max. values indicated on the certificate.

Q. When is necessary to install the counterbalance?

A. When the fixed-cape is a pulley, the weight of the device can put out axis. A counterbalance (of the same weight of the overload guard) solves the trouble.

Maintenance

Our overload guard COG series usually do not need maintenance. However check yearly the functionality of the device trying to lift a load exceeding the nominal capacity of the switching threshold; the lifting motor mast not to start. Verify also all the screws are closed. Concerning the rope: is necessary to check the rope near the limiting device also in opening the clamp because the stretch of the rope that crosses the device is stressed like the one that wind round a pulley. To make this check open the clamp and afterward re-establish the system. During this operation if are not removed the setting screws and the ones that fasten the limit switches, the setting remains unchanged.

Spare parts

There are not spare parts resalable separately. Please contact-us for more information.

Chapter

10

Warranty

We guarantee our products for 12 months from the delivery. The warranty applies only in reparation or change of parts that we recognize as faulty and excludes incidental o direct damages and cover only material fault. Warranty do not covers any defect that occurs due to careless or improper storage such as keeping the product under conditions of high temperature and humidity o improper maintenance or tempering.

Factory setting is not binding for Pizzamiglio srl company and may be changed by the installer between min and max limits. Parts or whole devices mast be returned carriage free. For any other commercial condition make reference to the sale contract.

Storage: store indoor at temperature between -25 and +70°C.

Data, draws and pictures contained in this publication are to be considered as indicative only. The manufacturer reserves the right to modify data without prior notice.

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TYPE LUBRIFICANT

TYPE LUBRIFICANT (valido per temperature da - 10° a + 60° C)

ORGANI DA LUBRIFICARE	AGIP	BP	ESSO	SHELL	TOTAL	NOTE
RIDUTTORE ((Reducer gear	BLASIA 187	GR-XP 220	SPARTAN EP 220	OMALA 220	CARTER 220	Olio + 40 - 0° C
FUNE (Rope)	AGIP GR MU/EP 1	MERCURY 2	SHIELD BK	CARDIUM COMP.D	TOTALUBE COMP.A	Grasso
EVENTUALI INGRANAGGI SCOPERTI, CUSCINETTI E GIUNTI CARDANICI (Naked gears,ball bearing and universal joint)	AGIP GR MU/EP 1	MERCURY 2	SHIELD BK	CARDIUM COMP.D	TOTALUBE COMP.A	Grasso