

**MECHANICAL
WORM SCREW
JACKS
STAINLESS
STEEL**

Made in Italy



CHIARAVALLI GROUP world:
much more than a collection of perfects mechanical components



WORM SCREW

JACKS

NEW LINE STAINLESS STEEL

NEW PRODUCT LINE:
STAINLESS STEEL WORM SCREW JACKS CHX
(Chiaravalli High Tech STAINLESS STEEL)

The new product line is **MADE IN ITALY** and entirely
produced in **STAINLESS STEEL**
(except the worm wheel made of bronze)

**CHX worm screw jacks line is interchangeable with
the type CHS.**

Moreover CHX 100% STAINLESS STEEL
are suitable for food and naval industry and critical
environment.
Internally lubricated with grease compliant to standard
H1.

CHX WORM SCREW JACKS 100% MADE IN ITALY.





GENERAL FEATURES STAINLESS STEEL WORM SCREW JACKS CHX

DYNAMIC AND STATIC LOADS

CHX worm screw jacks works with dynamic and static loads in compression and traction. Not suitable to run with lateral, radial or overturning loads.

OPERATING TEMPERATURE

CHX worm screw jacks can run from -25°C to +120°C, verifying service factor ED.

LUBRICATION

CHX worm screw jacks are internally lubricated with Turmosynthgrease AL2502H1 (for food use).

The lubrication of trapezoidal screw is responsibility of the end user.

MATERIALS

Case, cover and worm: STAINLESS STEEL AISI-304L

Terminal and trapezoidal shaft: STAINLESS STEEL AISI-316

Worm Wheel: Bronze G CuSn 12

Inside ball bearings not in contact with the outside: STEEL Cr 6

Seals: Rubber Nitrile Butadiene NBR

SCREW AND SCREW END

CHX worm screw jacks have 3 terminals TP-TF-TL and trapezoidal shaft made of Stainless steel AISI-316

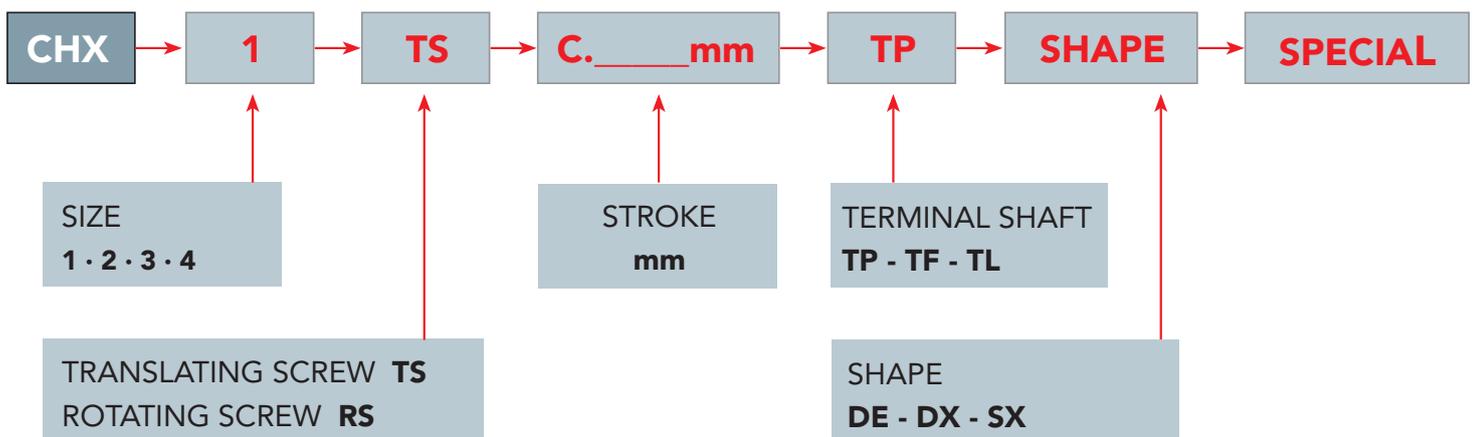
MOTORIZATION

CHX worm screw jacks can't be directly coupled to the motor.

CHX requires flange and coupling for connecting to the electric motor.



CODIFICATION STAINLESS STEEL WORM SCREW JACKS CHX





GENERAL FEATURES STAINLESS STEEL WORM SCREW JACKS CHX

FEATURES / SIZE		CHX 1	CHX 2	CHX 3	CHX 4
Rated Load kN max		5	10	25	50
Trapezoidal shaft features ISO-2903		18 x 4	20 x 4	30 x 6	40 x 7
Reduction ratio Normal	Speed	1/5	1/5	1/5	1/5
	Normal	1/20	1/10	1/10	1/10
	Slow	-	1/30	1/30	1/30
Performance η %	Speed	28	30	29	27
	Normal	23	28	25	25
	Slow	-	19	18	17
Trapezoidal screw weight x 100 mm = Kg		0,16	0,22	0,51	0,91
Jack weight without screw = Kg		2,8	5,6	13,5	29,9
Radial load on worm screw = N		95	198	292	450
Speed Nm		19	44	59	250
Torque in line Normal Nm		19	44	98	109
Slow Nm		-	35	112	130

POWER ESTABLISHING

Necessary power of a single jack

PN = Rated Power in Kw

PNC = Correct Rated Power in Kw

Cd = Load to move in KN

VL = Linear Speed of load in m/min.

η = S. J. Performance $\eta/100$

$\eta 1$ = Performance for 2 S. J. 95 %

Performance for 3 S. J. 90 %

Performance for additional S. J. + 5%

$\eta 2$ = Performance

Right Angle/Cardan Shaft/Chains

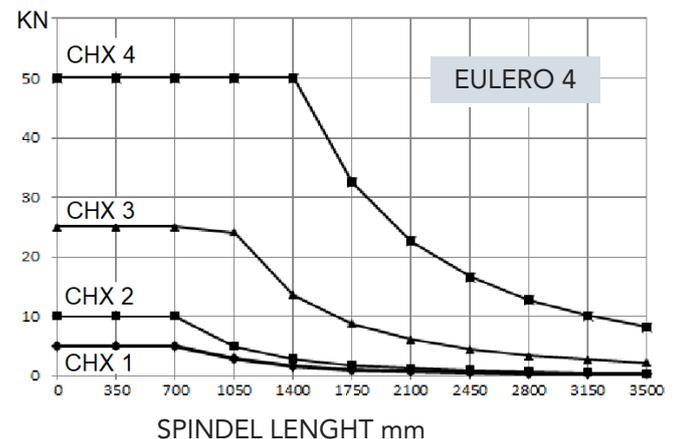
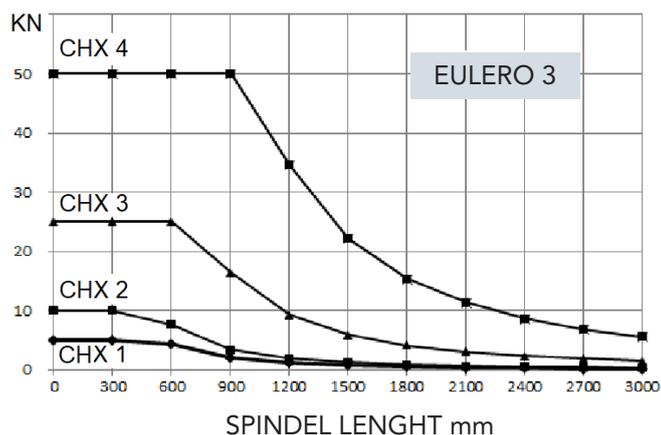
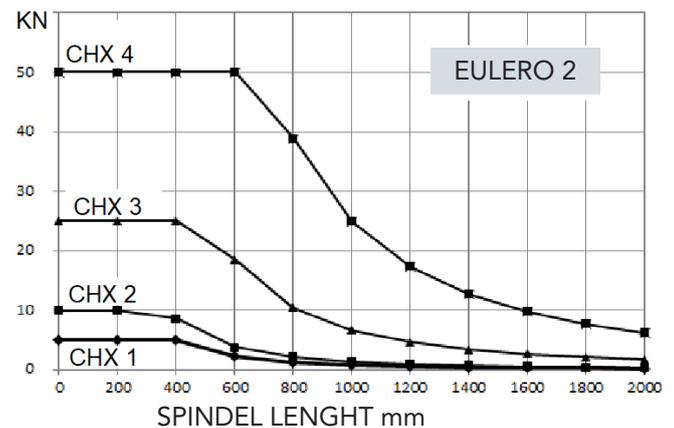
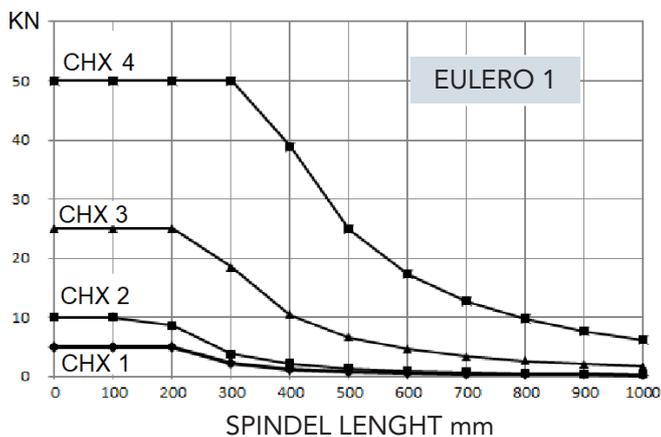
$\eta 3$ = Performance for structure/Guide/Etc.

S = Service factor

$$PN = \frac{Cd \times VL}{61,2 \times \eta}$$

$$PNC = \frac{Cd \times VL}{61,2 \times \eta \times \eta 1 \times \eta 2 \times \eta 3} \times S$$

CHART OF COLUMNS LOAD THREADED TRAPEZOIDAL SHAFT IN PRESSURE FOR EULERO



SAFETY FACTOR = 4 EULERO/TETMAJER



SERIES CHX TS

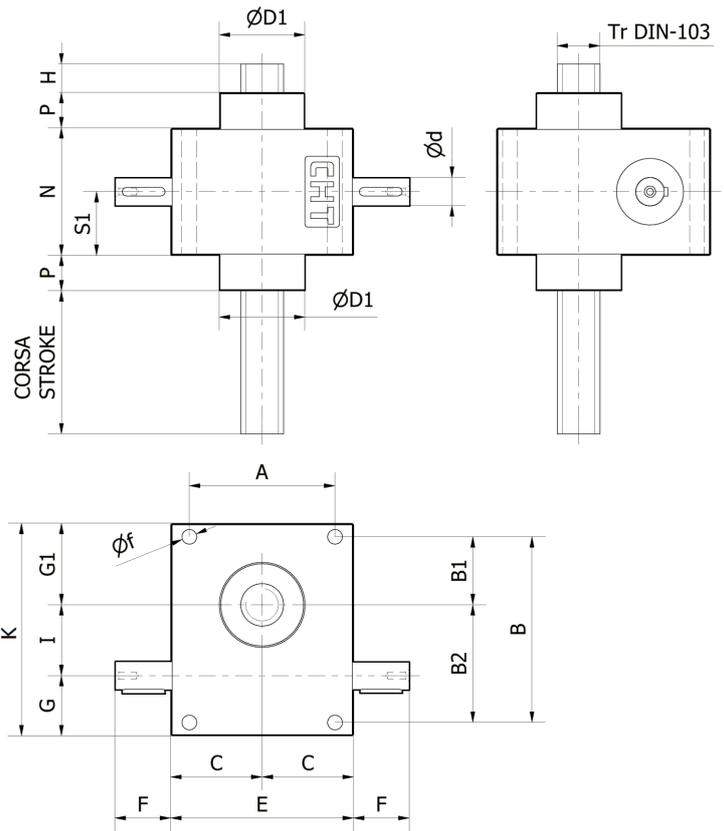
TRANSLATING SCREW

CASE DIMENSIONS

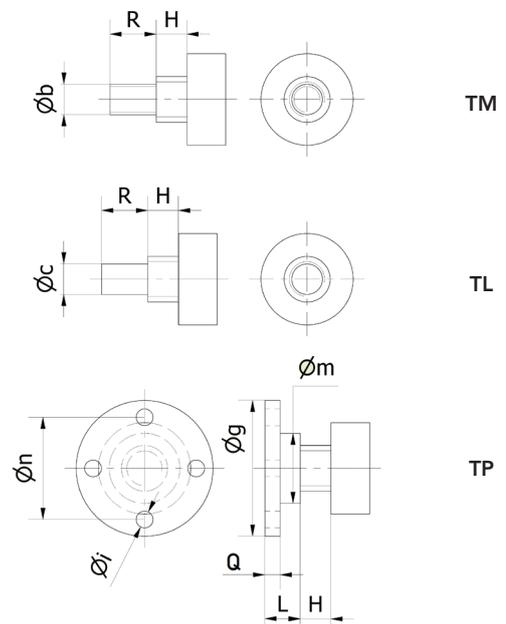
Type - Size	CHX 1	CHX 2	CHX 3	CHX 4
A	56	80	102	130
B	80	85	131	165
B1	28	30	48	60
B2	52	55	83	105
C	36	50	65	82,5
Ø d	9h7	12h7	20h7	25h7
Ø D1	30	44	60	70
E	78	100	130	165
f	8,4	9	10,5	12,5
F	20	25	39	52,5
G	30	32,5	42,5	50
G1	36	37,5	57,5	75
H	15	15	20	25
K	96	100	150	195
I	30	30	50	70
N	50	70	90	120
P	10	20	25	35
S1	25	35	45	60

TERMINAL DIMENSION

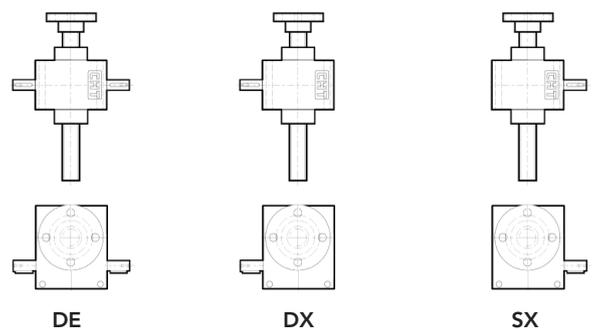
Type - Size	CHX 1	CHX 2	CHX 3	CHX 4
Ø b	M12 x1,5	M14 x1,5	M20 x2,5	M30 x3,5
Ø c	12	15	20	25
H	15	15	20	25
R	20	20	30	30
L	14	21	23	30
Q	8	8	10	15
Ø n	40	60	67	85
Ø l	7	11	11	13
Ø g	54	79	89	109
Ø m	26	39	46	60



TERMINALS



SHAPES



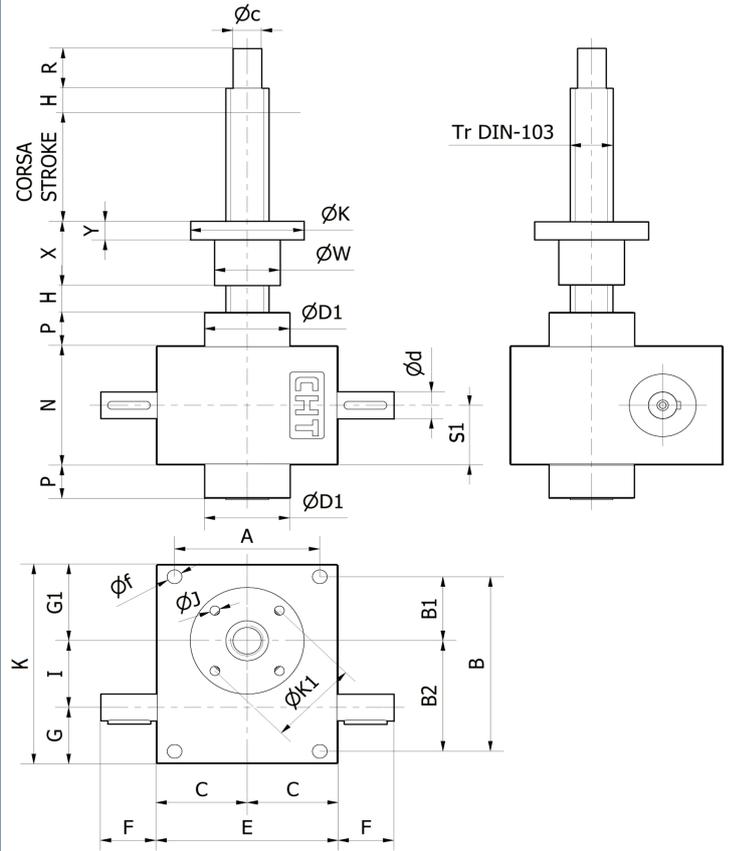


SERIES CHX RS

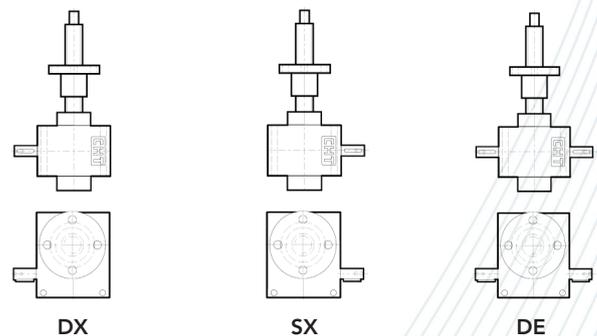
ROTATING SCREW

DIMENSIONS ROTATING SCREW JACK

Type - Size	CHX 1	CHX 2	CHX 3	CHX 4
A	56	80	102	130
B	80	85	131	165
B1	28	30	48	60
B2	52	55	83	105
C	36	50	65	82,5
Ø d	9h7	12h7	20h7	25h7
Ø D1	30	44	60	70
E	78	100	130	165
Ø f	8,4	9	10,5	12,5
F	20	25	39	52,5
G	30	32,5	42,5	50
G1	36	37,5	57,5	75
H	15	15	20	25
K	96	100	150	195
I	30	30	50	70
N	50	70	90	120
P	10	20	25	35
S1	25	35	45	60
Ø c	12	15	20	25
X	45	45	48	75
Y	12	12	14	15
Ø K	54	60	80	96
Ø K1	40	45	64	78
Ø W	26	32	46	60
Ø J	7	7	7	9
Tr	18 x 4	20 x 4	30 x 6	40 x 7



SHAPES

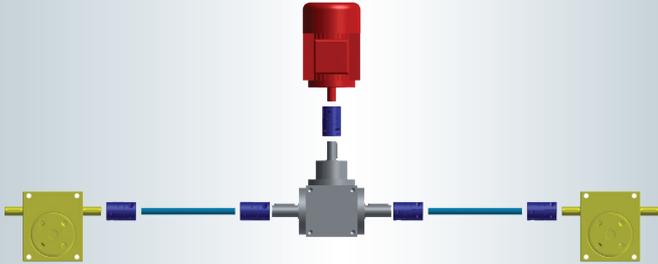




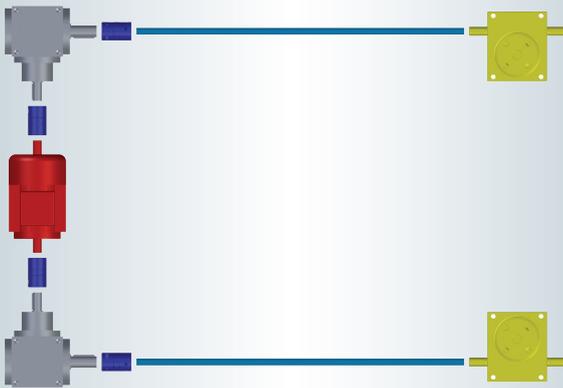
MOUNTING EXAMPLES



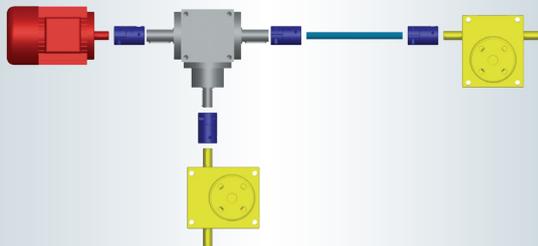
2.0



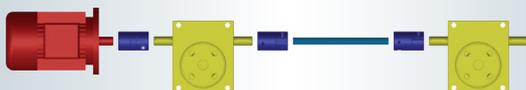
2.1



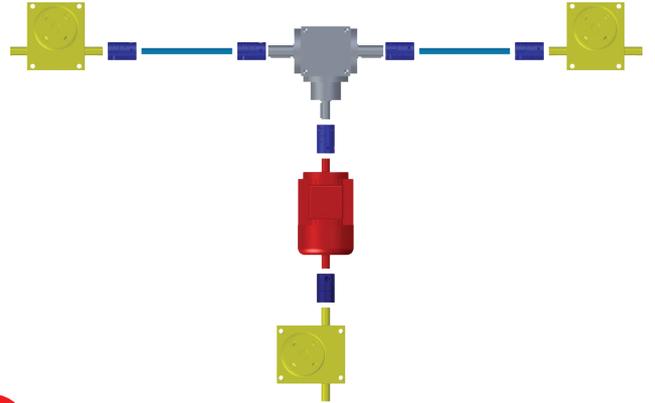
2.2



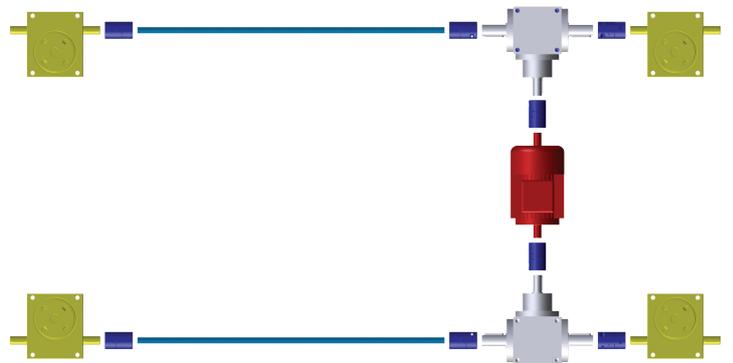
2.3



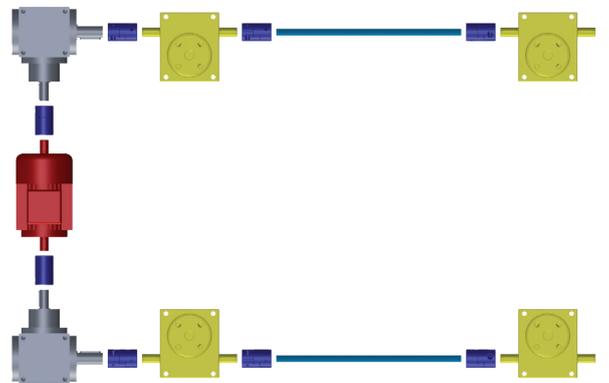
2.4



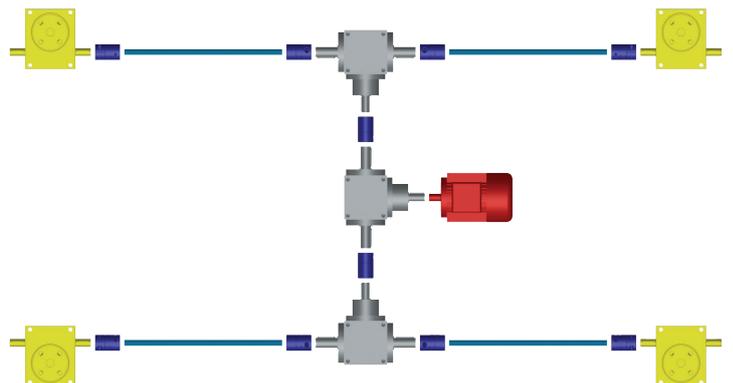
3.1



4.1



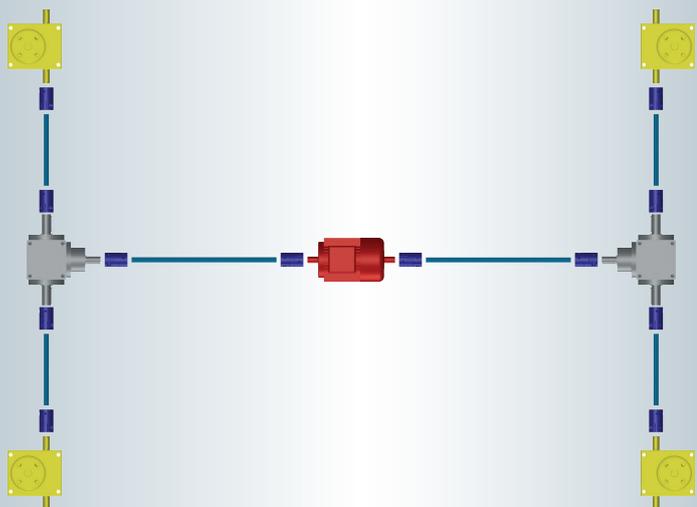
4.2



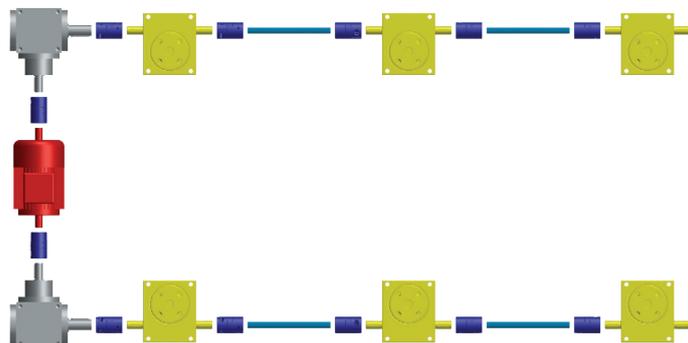
4.3



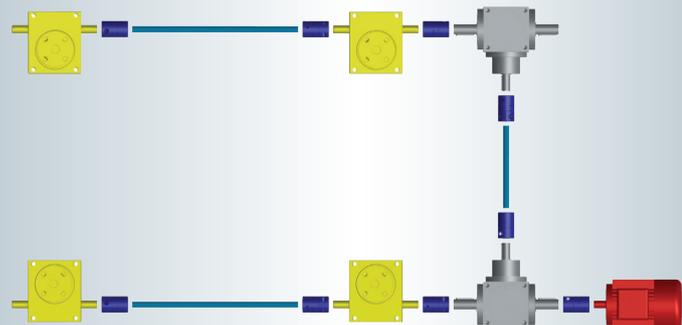
MOUNTING EXAMPLES



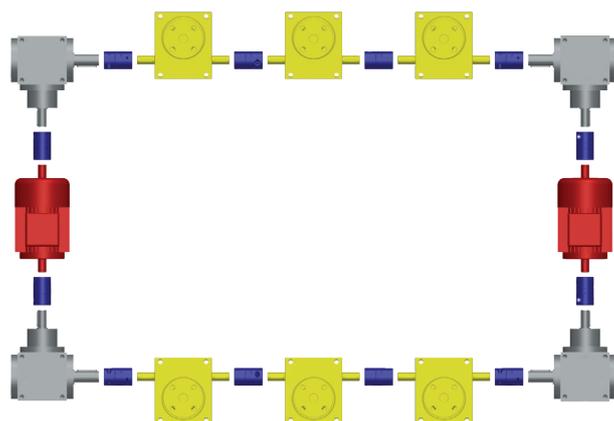
4.4



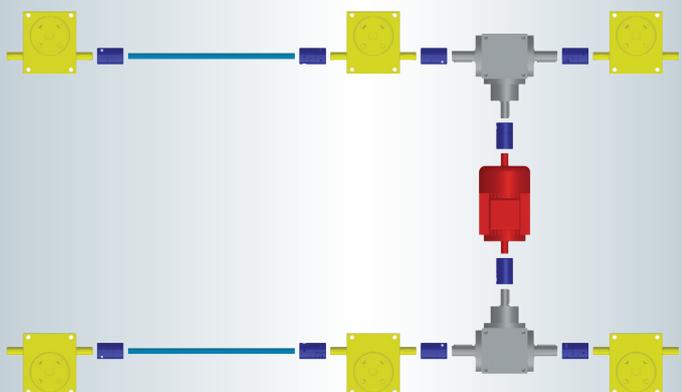
6.2



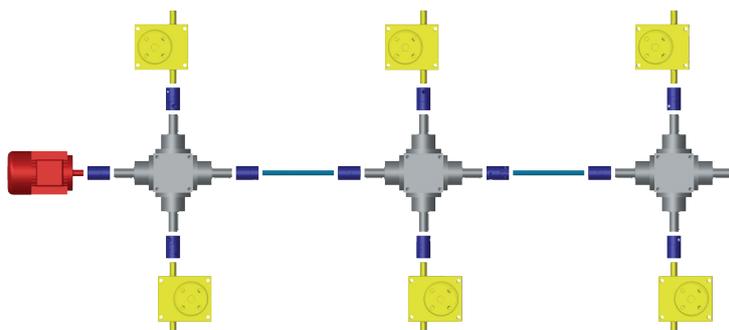
4.5



6.3



6.1



6.4



The Manufacturer **DISTRIBUTOR**



B2B next

*Chiaravalli Group SpA
E-commerce service*

FAST TRACK

*Daily Shipments
by air*



PRIORITY TRUCK SERVICE

Truck priority Shipments

ADVANCED SHIPPING

*Thirty hours Shipments
by air or truck*



YOUR SINGLE NEED IS OUR PRIORITY



GENERAL SALES CONDITIONS

1) ORDERS - Orders for special and standard material must always refer to offers made by CHIARAVALLI GROUP S.p.A. The orders are binding for the client.

Once work has commenced no cancellations or order reductions will be accepted unless the client reimburses the costs of the material and the work carried out up to the moment in which the order was suspended.

The quantity despatched can vary by $\pm 5\%$ compared to the quantity ordered.

2) PRICES - The prices are those in force at the date of order.

All prices are for goods delivered ex-works Premezzo, packing excluded. If there should be any increase in production and material costs over the duration of the supply, CHIARAVALLI GROUP S.p.A. reserves the right to adapt the prices accordingly, even for orders in course.

3) TERMS OF DELIVERY - Only the terms of delivery indicated by CHIARAVALLI GROUP SpA are to be considered valid. However, they must only be considered as indicative.

In the event of difficulty in the procurement of materials, strikes or in any event in all cases of force majeure, the terms of delivery will be automatically extended without CHIARAVALLI GROUP S.p.A. having to pay any reimbursement for damages.

The client is obligated to collect special material ordered when ready.

4) DELIVERIES - Deliveries are the responsibility of the purchaser and are carried out at his own risk and peril.

Any claims for shortages must be presented within 8 days of receipt of the goods.

If it is agreed that the cost of transport is to be paid, even if only in part, by CHIARAVALLI GROUP S.p.A., the latter reserves the right to choose the most economical means of transport.

5) PACKING - Packing will be invoiced at cost.

6) RETURNS - No returns for any reason will be accepted unless previously authorised and with packing, any customs clearance and the return paid for by the purchaser.

To cover warehouse and administrative expenses a debit note will be issued for approx. 15% of the value of the goods returned.

7) WARRANTY - CHIARAVALLI GROUP S.p.A. promises to repair or substitute free of charge any parts that they recognise as being defective. The questioned goods must be returned to the factory of CHIARAVALLI GROUP S.p.A., free of all expenses.

The warranty will be considered cancelled in the event that the parts returned as defective have been repaired or tampered with. The repair of defective parts carried out by the purchaser will only be accepted after authorisation from CHIARAVALLI GROUP S.p.A. and after their approval of the cost estimate. CHIARAVALLI GROUP S.p.A. does not accept responsibility or pay any reimbursement for damages that occur during the use of their products, even if defective.

Warranty is excluded for leakage of lubricant caused by wear of the oil seals.

8) RESPONSIBILITY - CHIARAVALLI GROUP S.p.A. does not accept responsibility or pay any reimbursement for damages that occur during the use of their products, even if defective.

CHIARAVALLI GROUP S.p.A. declines all responsibility in the execution of parts to a client's design under any patents.

9) PAYMENTS - Only payments carried out in the manner and terms agreed will be considered valid. Once the due date of payment has passed, CHIARAVALLI GROUP S.p.A. will calculate the interest on delayed payment at a rate that is 3% higher than the legal one, retaining the right to demand payment. In the event of delayed or missing payment by the purchaser, the company CHIARAVALLI GROUP S.p.A. reserves the right to suspend deliveries of the orders in course or to demand advance payment without having to pay any reimbursement or compensation to the purchaser. Any dispute regarding materials in manufacture or already possessed by the purchaser does not free the latter from the commitment of making the payment by the agreed date and for the whole amount of the invoice without making any deductions.

10) OWNERSHIP - All of the goods despatched remain the property of CHIARAVALLI GROUP S.p.A. until the invoice is fully paid.

11) COMPETENT COURT - Any controversy concerning business relations with CHIARAVALLI GROUP SpA will be dealt with under the jurisdiction of the Court of Busto Arsizio.

CHIARAVALLI GROUP SpA, do not accepts responsibility for any errors in the production of this catalogue and reserves the right to add to the drawings designs of the listed products any modification request by manufacturing requirements or due to evolution of the products.



CHIARAVALLI Cz a.s.
 Průmyslová 2083
 59401 Velké Meziříčí
 Česká republika
 Tel. +420 566 502 030
 www.chiaravalli.cz



CHIARAVALLI POLSKA Sp. z o.o.
 ul. Polna 133
 87 - 100 Toruń
 Polska
 Tel. + 48 56 623 30 00
 www.chiaravalli.pl



Via per Cedrate, 476
 21044 Cavaria con Premezzo (VA) · Italy
 Tel. +39 0331 214 511

www.chiaravalli.com
 chiaravalli@chiaravalli.com

