

旋轉器 介紹說明

SWIVELS Introduction



Electroline swivels neutralize torque energy and extend rope life.

RELIABILITY IS BUILT-IN...

- *Produced by state-of-the-art equipment in the United States.*
- *Quality control programs to MIL-I-45208 standards assure consistent performance.*
- *Each Gold Band Swivel is proof-tested and identified by a quality control number.*
- *Made of high strength alloy or stainless steel.*
- *Available with exclusive Electroline-wire/synthetic (including KEVLAR®) connectors.*
- *Swivels can be custom-designed and manufactured for unique applications.*
- *3 year warranty against defects in materials and workmanship on Esmet Gold Band Swivels.*

SWIVEL SELECTION CHART

Part Number	3000	6000	SSS*	Delrin**	SSP***
Rotation Resistance	High	Low	Low	Medium	Low
Corrosion Resistance	Moderate	Moderate	Moderate	Moderate	High
Water Pressure Resistance	Moderate	Moderate	Moderate	High	High
Impact Resistant	No	No	No	Yes	No
Cost	\$	\$\$	\$\$\$	\$\$\$	\$\$\$\$

* The SSS swivel is a stainless steel version of the 6000 series swivel with seals to resist external contaminants.

** The Delrin swivel is a version of the 3000 and 6000 series swivel with Delrin bearings for impact resistance.

*** The SSP swivel is a stainless steel version of the 6000 series swivel with additional features to neutralize pressure in deep water applications.

3000型滾桿軸承旋轉器

3000 SERIES ROLLER BEARING SWIVELS



HIGH PERFORMANCE AT LOWER COST

- Economically priced, these swivels contain a single roller bearing that accommodates shorter rope lengths such as those used with lifting equipment. (These applications do not require the exceptionally low torque capability provided by ball bearing-equipped swivels.)
- Models with rope diameters of more than 1/4" are equipped with Timken® tapered roller bearings.
- Made of alloy steel to exacting tolerances, these swivels are zinc plated for corrosion resistance. They provide an ultimate strength of 5 to 1 over SWL (Safe Working Loads).

HEX SHAPE FOR
MAXIMUM STRENGTH

HEX HEAD CLEVIS
BOLT WITH THREADS
AND COTTER PIN

ALL EXTERNAL
COMPONENTS ARE
COATED WITH ZINC TO
PROTECT FROM
CORROSION

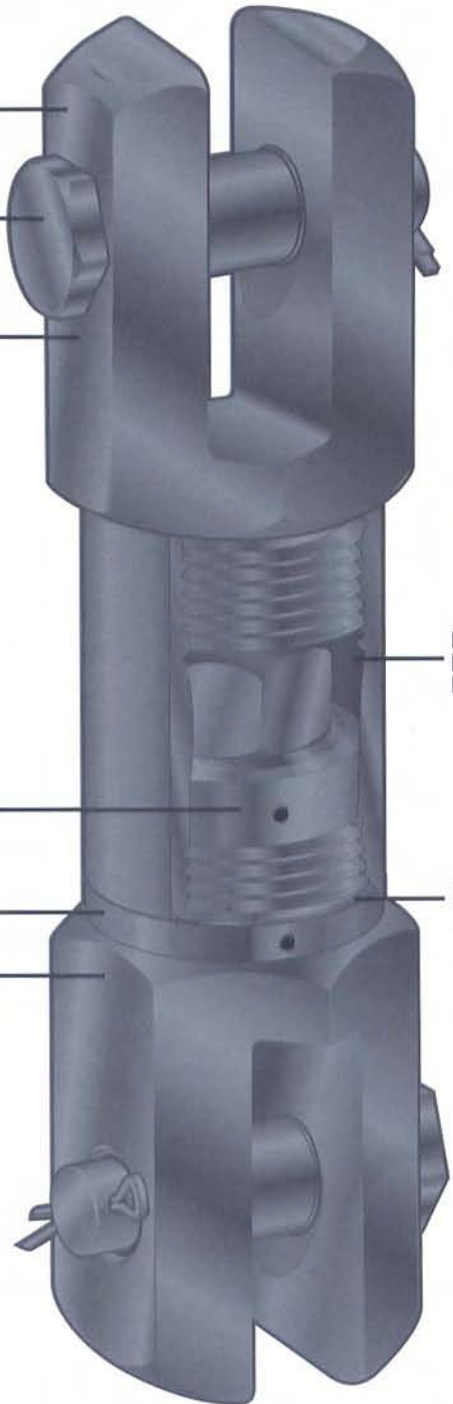
SIZES OVER 1/4"
ARE EQUIPPED
WITH TIMKEN®
ROLLER BEARINGS

THRUST PLATE

ONE-PIECE
CLEVIS AND STUD
DESIGN FOR
RELIABILITY

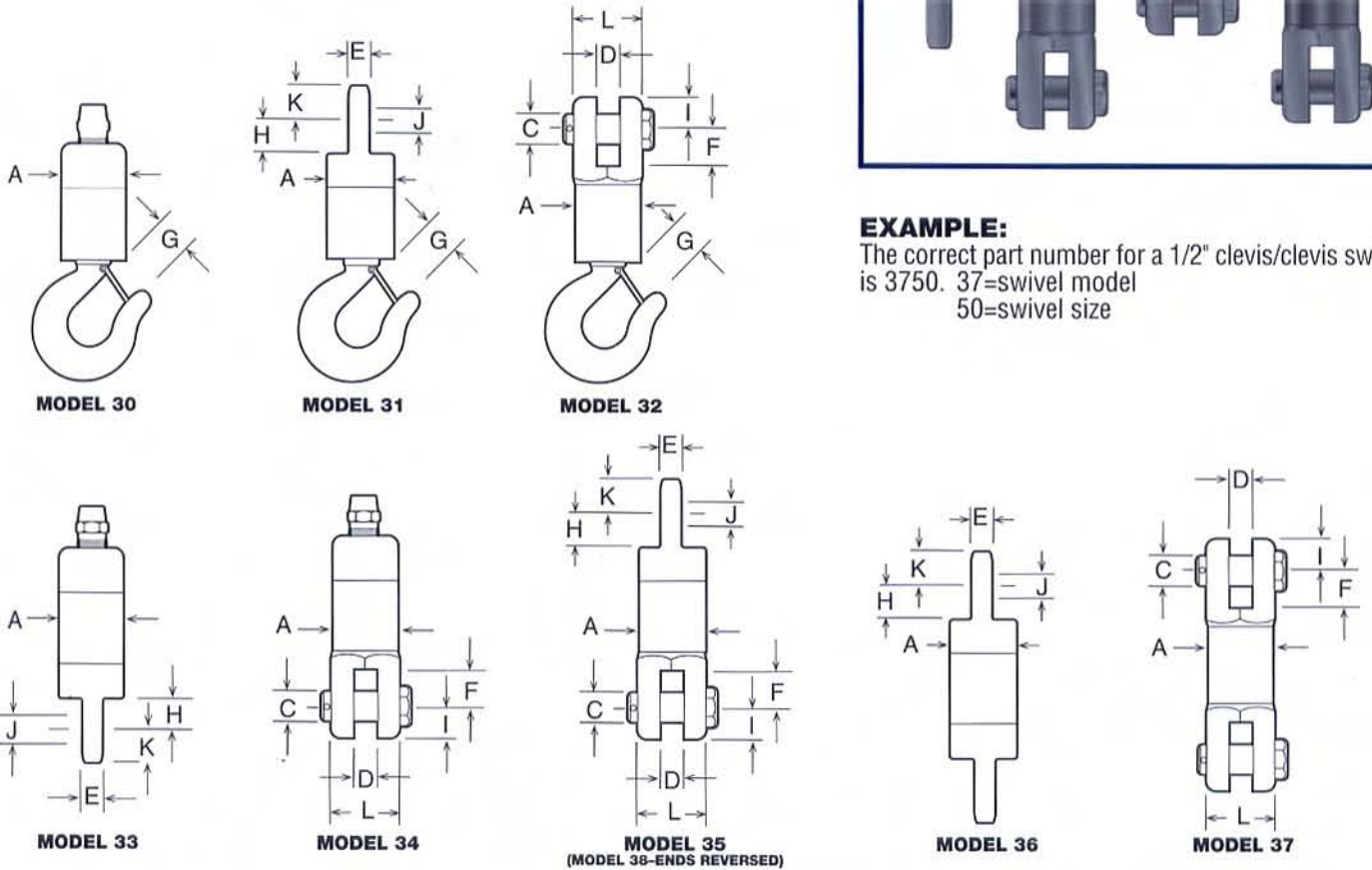
FILLED WITH
HIGH-PRESSURE
LUBRICANT

SEALED TO RETAIN
LUBRICANT



3000型滾桿軸承旋轉器尺寸圖

3000 SERIES ROLLER BEARING SWIVELS



EXAMPLE:
The correct part number for a 1/2" clevis/clevis swivel is 3750. 37=swivel model
50=swivel size

3000 SERIES ROLLER BEARING SWIVELS

Dimensions in inches

Size	SWL Tons	Wire Rope Size	A	C Pin Dia	D	E	F	G	H	I	J Hole Dia	K	L Hex Flat
12	.5	1/8	7/8	1/4	1/4	.234	1/2	N/A	1/2	7/16	1/4	3/8	
18	.62	3/16	1	5/16	5/16	.297	5/8	N/A	9/16	1/2	5/16	1/2	
25	.75	1/4	1-1/8	3/8	3/8	.359	3/4	N/A	5/8	9/16	3/8	5/8	
31	1.5	5/16	1-7/8	3/4	13/16	11/16	1-3/8	1	1	1	13/16	15/16	2
37	2	3/8	1-7/8	3/4	13/16	11/16	1-3/8	1-1/16	1	1	13/16	15/16	2
43	3	7/16	2-1/4	3/4	1	3/4	1-3/8	1-11/32	1-3/16	1-1/8	1	1-1/8	2-1/4
50	3	1/2	2-1/4	3/4	1	3/4	1-3/8	1-11/32	1-3/16	1-1/8	1	1-1/8	2-1/4
56	5	9/16	3	1	1-1/8	1	1-3/4	1-11/16	1-1/2	1-1/4	1-1/4	1-1/2	3
62	5	5/8	3	1	1-1/8	1	1-3/4	1-11/16	1-1/2	1-1/4	1-1/4	1-1/4	3
75	8.5	3/4	3-1/4	1-1/8	1-9/16	1-1/4	2-1/8	2-1/16	1-5/8	1-1/2	1-3/8	1-5/8	3-1/4
87	10	7/8	3-1/2	1-1/4	1-3/4	1-7/16	3-1/8	2-1/4	2-3/8	1-7/8	1-5/8	1-13/16	3-1/2
99	15	1	4	1-3/8	1-3/4	1-15/16	3-1/8	3	2-3/8	1-7/8	2	2-1/8	4

3000 SERIES ROLLER BEARING SWIVELS: OVERALL LENGTH

Dimensions in inches

MODEL Size	30	31	32	33	34	35/38	36	37
12				3-7/8	3-15/16	3-1/2	3-7/16	3-9/16
18				4-1/2	4-9/16	3-15/16	3-7/8	4
25				5-1/8	5-3/16	4-7/16	4-3/8	4-1/2
31	7	7-13/16	7-13/16	7-11/16	7-7/16	8-3/8	8-3/8	8-3/8
37	7-7/8	8-1/4	8-3/8	8-3/16	7-15/16	8-9/16	8-9/16	8-9/16
43	10-3/16	10-5/8	10-3/8	9-15-16	9-1/2	10-9/16	10-5/8	10-1/8
50	10-3/16	10-5/8	10-3/8	9-15-16	9-1/2	10-9/16	10-5/8	10-1/8
56	12-5/8	13-1/8	12-13/16	12-1/4	11-11/16	12-7/16	12-3/4	12-1/8
62	12-5/8	13-1/8	12-13/16	12-1/4	11-11/16	12-7/16	12-3/4	14
87	16-11/16	16-11/16	16-5/16	16-1/16	16-1/2	16-13/16	16-1/2	17-1/8
99	18-5/8	18-5/8	18-1/2	18-15/16	17-15/16	18-3/16	18-5/16	18-1/16



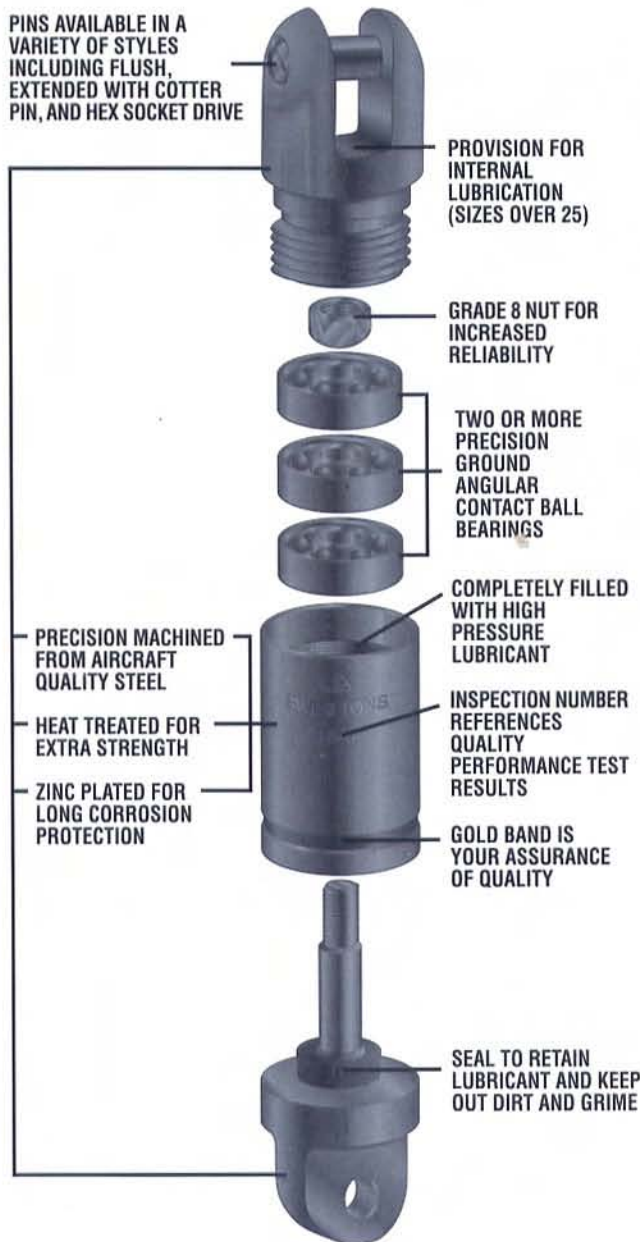
6000型金帶旋轉器

6000 SERIES GOLD BAND SWIVELS

STREAMLINED DESIGN AND MAXIMUM PERFORMANCE

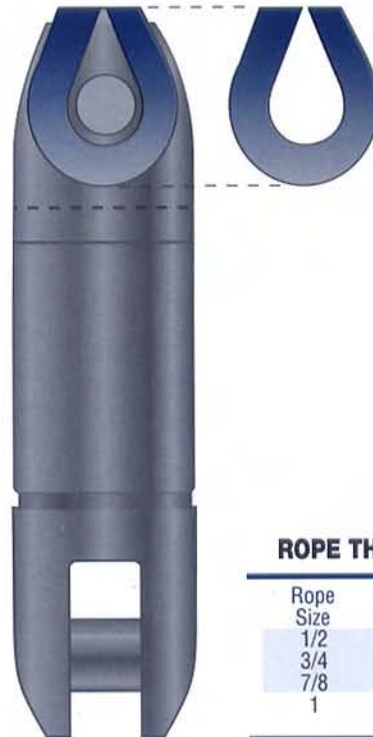
- Designed for high rotational speeds, these models react to low operational torque.
- They are the perfect swivel for longer ropes and cables.
- Manufactured with two or more flush ground angular contact ball bearings.
- Bearings are permanently lubricated with high-pressure grease and are sealed at the factory.
- Flush pins are used to accommodate overhead and underground electrical line stringing applications. Swivel ends are shaped to prevent snagging on sheaves and other potential obstructions.
- Heat treated high strength alloy steel (zinc plated for corrosion resistance), provides the strongest yet lightest swivel available. Ultimate strength is minimum 4.5 to 1 over SWL (Safe Working Load).
- All swivels proof-tested and certified.

PINS AVAILABLE IN A VARIETY OF STYLES INCLUDING FLUSH, EXTENDED WITH COTTER PIN, AND HEX SOCKET DRIVE



ROPE THIMBLE FOR CLEVIS SWIVELS

Attaching a wire or synthetic rope to a swivel can be accomplished by using the Electroline wire rope fitting (see page 4 for assembly procedures). This is the best method of attachment and is available on models 60, 63, and 64. If thimbles with clips are desired, the solid core thimbles shown below are recommended. The cast-steel thimbles are zinc plated and are designed to limit rope wear by preventing the rope from extending beyond the diameter of the swivel.

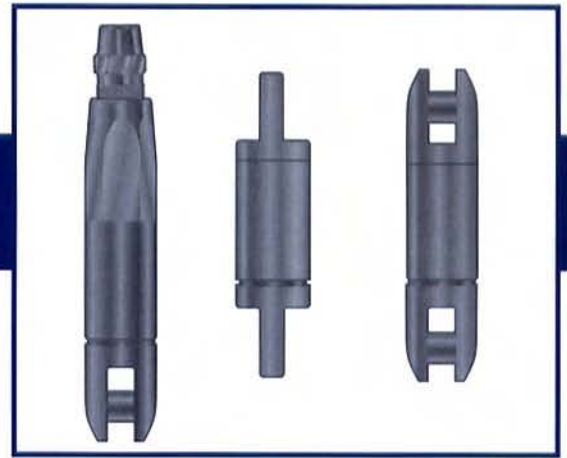


ROPE THIMBLES FOR CLEVIS SWIVELS

Rope Size	Thimble #
1/2	L713-4
3/4	L713-9
7/8	L713-8
1	L713-8

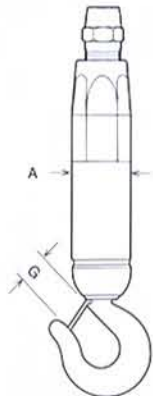
6000型金帶旋轉器尺寸圖

6000 SERIES GOLD BAND SWIVELS

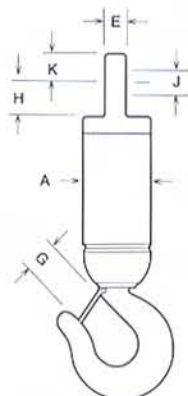


EXAMPLE:

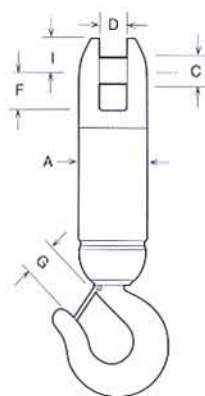
The correct part number for a 1/2" clevis/clevis swivel is 6750. 67=swivel model
50=swivel size



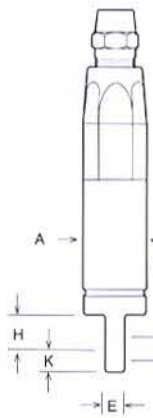
MODEL 60



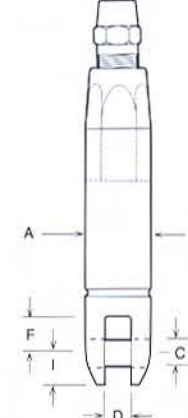
MODEL 61



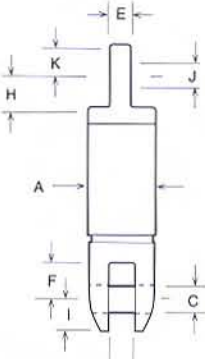
MODEL 62



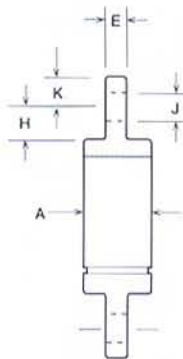
MODEL 63



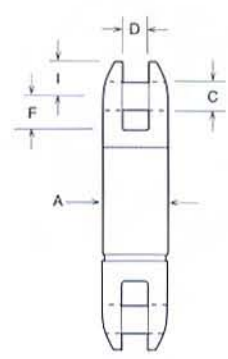
MODEL 64



MODEL 65
(MODEL 68-ENDS REVERSED)



MODEL 66



MODEL 67

6000 SERIES GOLD BAND SWIVELS

Dimensions in inches

Size	SWL Tons	Wire Rope Size	A	C Pin Dia	D	E	F	G	H	I	J HOLE DIA	K
12	0.5(.9)	1/8	7/8	5/16	5/16	1/4	15/32	7/8	3/8	3/8	1/4	3/8
25	.75(2)	1/4	1-1/4	3/8	19/32	5/16	11/16	31/32	1/2	7/16	3/8	7/16
37	1.5(4)	3/8	1-1/2	7/16	19/32	1/2	13/16	1	23/32	9/16	5/8	5/8
50	3 (5)	1/2	1-7/8	5/8	3/4	3/4	15/16	1-11/32	15/16	13/16	7/8	15/16
62	5 (8)	5/8	2-7/16	7/8	1	1	1-9/16	1-11/16	1-5/16	1-1/8	1-1/4	1-3/16
75	8.5(15)	3/4	2-7/8	1	1-9/32	1-1/4	2-1/8	2-1/4	1-5/8	1-1/4	1-3/8	1-1/2
81	8.5(15)	3/4	2-7/8	1-1/8	1-9/16	1-1/4	2-1/8	2-1/4	1-5/8	1-1/4	1-3/8	1-1/2
87	10(17)	7/8	3-5/8	1-1/2	1-3/4	1-23/32	3-1/2	3	2-27/32	1-3/4	1-5/8	1-13/16
99	15(20)	1	3-5/8	1-1/2	1-3/4	2	3-1/2	3	2-25/32	1-3/4	2	2-1/8
125	25	1-1/4	4-1/2	1-7/8	2	2-1/8	3-11/16	3-1/4	2-7/8	2-3/8	2-1/4	2-3/8
150	35	1-1/2	5-3/8	2	2	2-1/4	3-11/16	4	3-1/8	2-3/8	2-1/4	2-3/8

() For line stringing applications requiring a 3 to 1 Safe Working Load.

6000 SERIES GOLD BAND SWIVELS: OVERALL LENGTH

Dimensions in inches

MODEL Size	60	61	62	63	64	65/68	66	67
12	5-5/16	5-3/8	5-3/8	3-7/8	3-7/8	3-1/8	3-1/8	3-1/16
25	8-5/16	7-1/16	7-1/8	5-7/8	5-7/8	4-9/16	4-9/16	4-1/2
37	9-1/2	7-7/8	7-13/16	6-13/16	6-13/16	5-1/8	5-1/8	5-1/8
50	12-15/16	10-13/16	10-15/16	9-1/8	9-1/8	7-1/8	7-1/8	7-1/8
62	17-9/16	15-1/4	15-1/4	12-12/16	12-3/4	10-1/2	10-1/2	10-1/2
75	21-1/8	18-7/8	18-7/8	14-11/16	14-11/16	12-7/16	12-7/16	12-7/16
81	21-1/8	18-7/8	18-7/8	14-11/16	14-11/16	12-7/16	12-7/16	12-7/16
87	25-15/16	24-15/16	24-15/16	18	18	17	17	17
99	27-13/16	25-11/16	25-11/16	19-7/8	19-7/8	17-3/4	17-3/4	17-3/4
125	40-9/16	33-13/16	34	27-1/2	27-1/2	20-5/16	20-5/16	20-5/16
150	48-1/8	39-5/8	40	31	31	21-9/16	21-9/16	21-9/16

海洋學和特殊旋轉器

OCEANOGRAPHIC & SPECIALTY SWIVELS

Specialty Swivels, built using the same high-quality standards of Esmet Gold Band Swivels, include extra features for specific applications.

ESMET SEALED SWIVELS (SSS)

Designed for ocean surface applications. These swivels are grease filled and have an o-ring cap seal to prevent entry of sea water. They also contain angular contact ball bearings. All external components are of 316 stainless steel. Available in most Gold Band models, they are dimensionally identical to the 6000 series swivels.

ESMET DELRIN SWIVELS

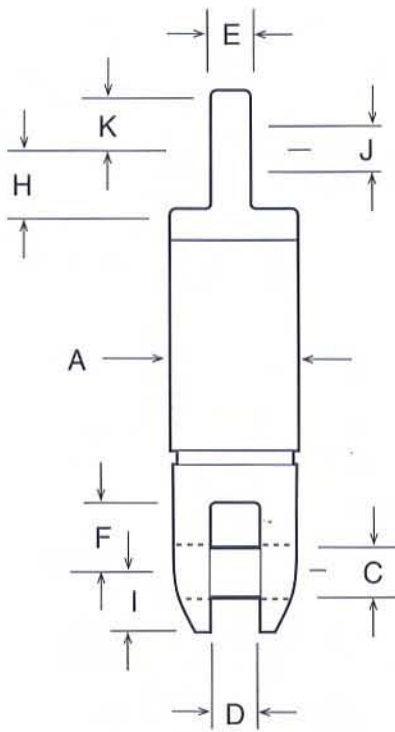
The ball bearings of all 3000 and 6000 series swivels can be replaced with a delrin thrust bearing that will not fracture under impact loads. The starting torque resistance of the delrin bearing is slightly higher than the ball bearings.

ESMET PRESSURE COMPENSATED SWIVELS (SSP)

Designed for deep ocean applications, these swivels are oil filled and include a diaphragm for pressure compensation. They also contain angular contact ball bearings. Available in Gold Band swivel models 65, 66, and 67 only. See the table below for dimensions.

ESMET FREE FLOODING OCEANOGRAPHIC SWIVELS (SSMS)

Manufactured in 316 stainless steel with a delrin thrust washer, these designs are not affected by the external pressure of ocean depths. The delrin thrust washer will not corrode from salt water entry as will steel ball bearings. They have no internal grease or oil to leak out and pollute the environment. Available in all sizes and most models of Gold Band swivels. SSMS swivels are dimensionally identical to the 6000 series swivels.



MODEL SSP65 SHOWN

DIMENSIONS FOR PRESSURE COMPENSATED SWIVELS (SSP)

Dimensions in inches

Size	SWL Tons	Wire Rope Size	A	C Pin Dia	D	E	F	H	I	J Pin Dia	K	Overall Length
25	.75	1/4	1-1/4	3/8	19/32	5/16	11/16	1/2	7/16	3/8	7/16	5
37	1.5	3/8	1-1/2	7-1/6	19/32	1/2	13/16	23/32	9/16	5/8	5/8	5-5/8
50	3	1/2	1-7/8	5/8	3/4	3/4	15/16	15/16	13/16	7/8	15/16	7-3/4
62	5	5/8	2-7/16	7/8	1	1	1-9/16	1-5/16	1-1/8	1	1-3/16	11-3/8
81	8	3/4	3-1/4	1-1/8	1-9/16	1-1/4	2-1/8	1-5/8	1-1/4	1-1/4	1-1/2	13-7/16
87	10	7/8	3-5/8	1-1/2	1-3/4	1-1/2	3-1/2	2-27/32	1-3/4	1-1/2	1-13/16	17-1/2
99	14	1	3-5/8	1-1/2	1-3/4	2	3-1/2	2-25/32	1-3/4	2	2-1/8	18-7/8
150	36	1-1/2	5-3/8	2	2	2-1/4	3-11/16	3-1/8	2-1/2	2-1/4	2-3/8	23-3/8

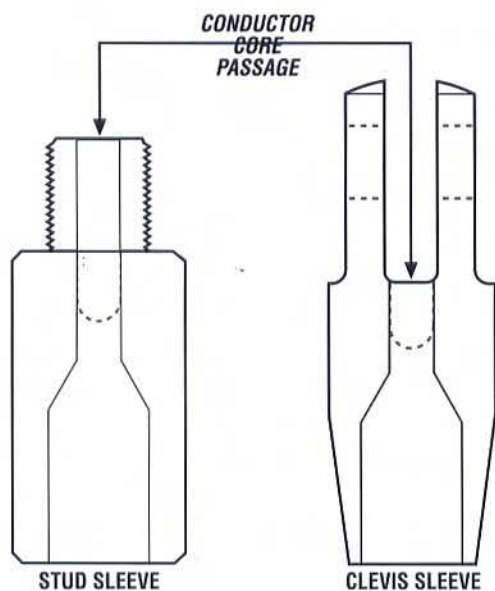
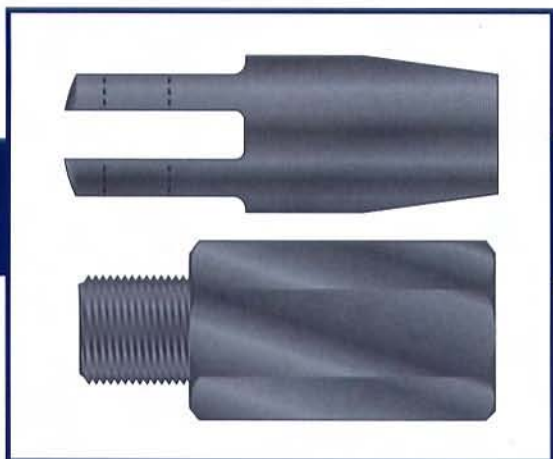


電氣-機械鋼索接頭

ELECTRO-MECHANICAL CABLE FITTINGS

Electroline fittings have proven to be a superior method of terminating steel, (single or double-armored) conductor core cable. Most Electroline wire rope fittings can be modified for E-M cable. Please consult Esmet for special requirements.

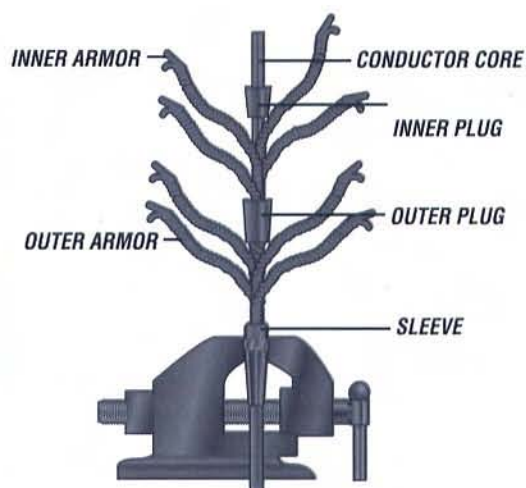
Assembly of the termination utilizes the same wedging principle employed by the Electroline wire rope terminations. Therefore, assembly is quick and easy, and provides holding strength unsurpassed by other cable terminations.



THE PASSAGE OF THE CONDUCTOR CORE THROUGH THE FITTING IS DEMONSTRATED FOR A TYPICAL TERMINATION



M-200 SERIES DUAL PLUG



RECOMMENDED ASSEMBLY METHOD FOR ELECTRO-MECHANICAL CABLE

To order, just add a "C" to any part number from the selection of wire rope fittings available in this catalog. For example, the correct part number for a forged, galvanized clevis for use with 1/2" E-M cable would be GDC-150-X (from pg. 8).