

**SWIVEL 1-4**



**SWIVEL 5-7**



**SWIVEL 8-10**



**SNAP 23-26**



**SWIVEL WITH SNAP 11-18**



**SWIVEL WITH SPEED SNAP 19-22**



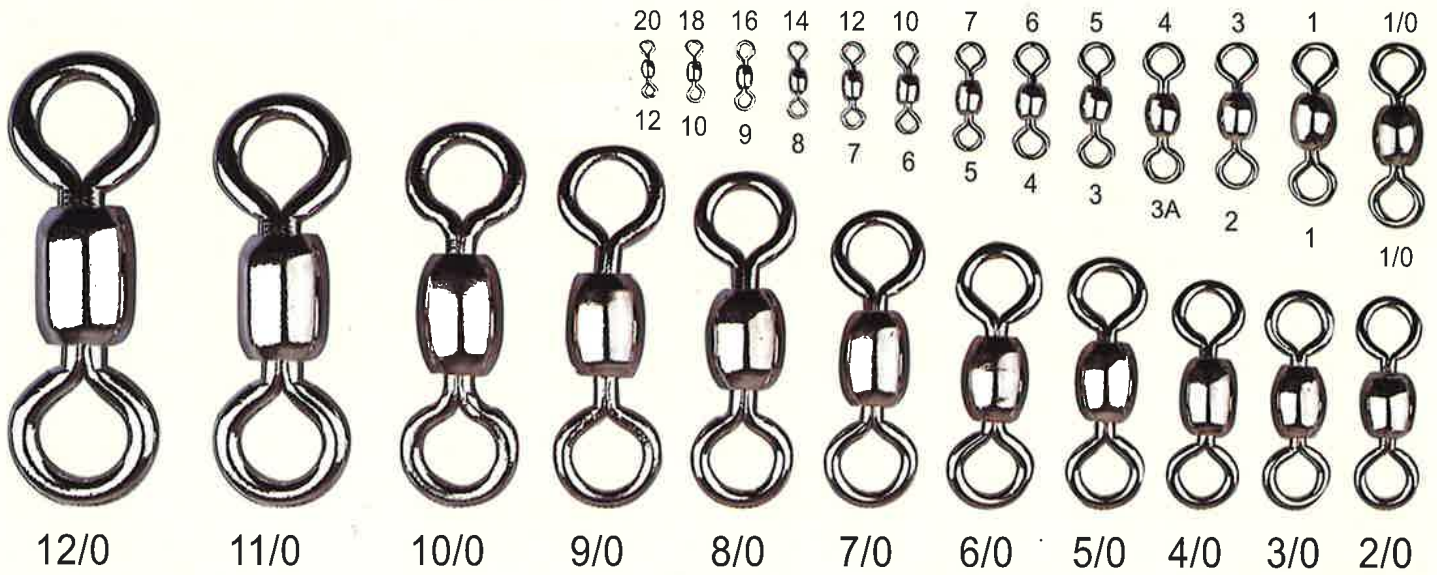
**NEW 27-36**



**NEW 37-40**

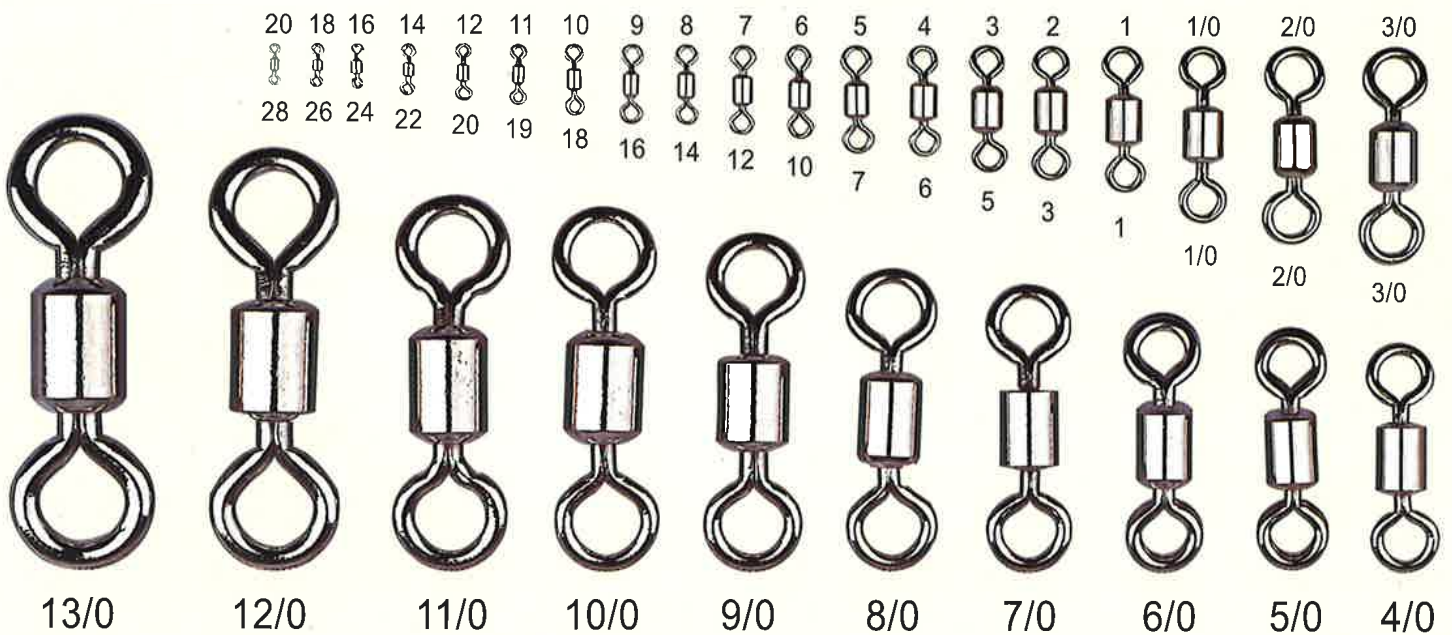


## CRANE SWIVEL



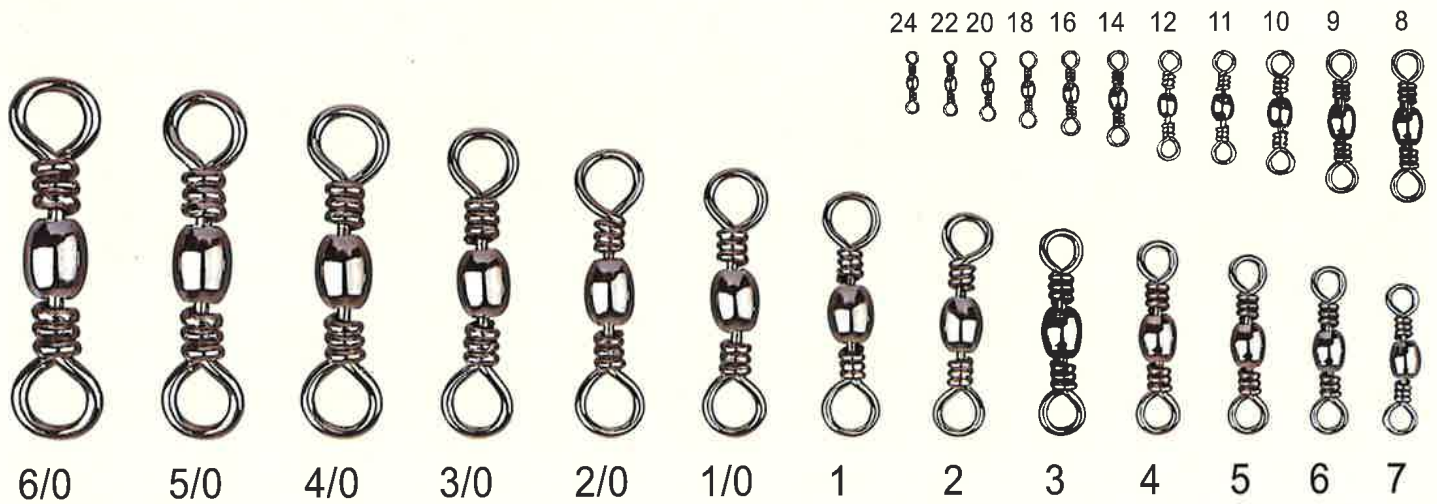
SX-201 SX-201-1	12/0	11/0	10/0	9/0	8/0	7/0	6/0	5/0	4/0	3/0	2/0	1/0	1	2	3A	3	4	5	6	7	8	9	10	12
	12/0	11/0	10/0	9/0	8/0	7/0	6/0	5/0	4/0	3/0	2/0	1/0	1	3	4	5	6	7	10	12	14	16	18	20
TEST (AVERAGE kg)				324	295	177	175	168	140	130	102	95.1	50	45.5	44.4	43.6	35.8	27.4	21.2	14.7	13.8	12.9		
TEST (AVERAGE kg)				374	316	230	202	186	172	151	134	121	85	68	59	50	46	43	33	32	20			

## ROLLING SWIVEL



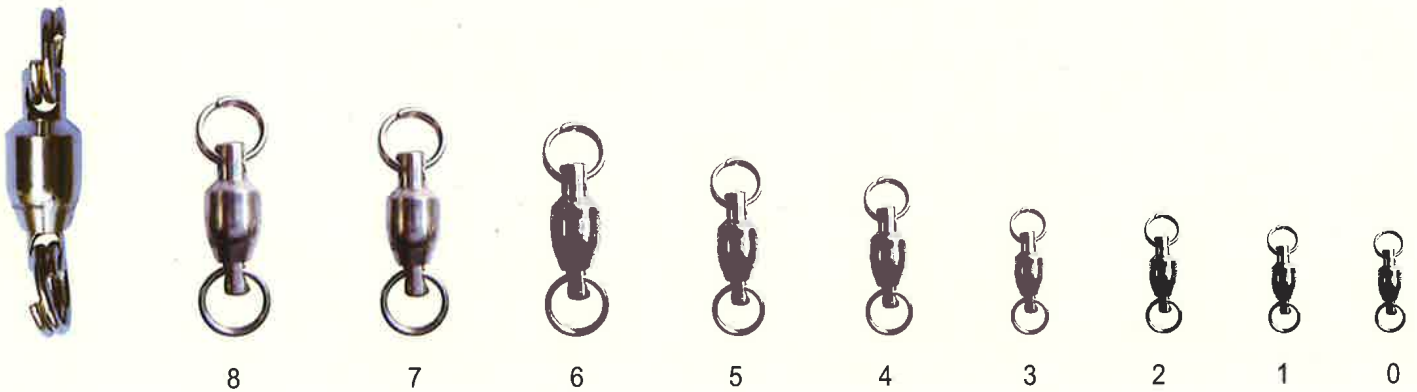
SX-101 SX-101-1	13/0	12/0	11/0	10/0	9/0	8/0	7/0	6/0	5/0	4/0	3/0	2/0	1/0	1	2	3	4	5	6	7	8	9	10	12	14
	13/0	12/0	11/0	10/0	9/0	8/0	7/0	6/0	5/0	4/0	3/0	2/0	1/0	1	3	5	6	7	10	12	14	16	18	20	22
TEST (AVERAGE kg)						199	190	153	121	103	79.4	62.8	61.9	49.1	40.6	38	36.2	32.3	27.6	18.8	17	16.3	11.2	8.12	7.92
TEST (AVERAGE kg)						240	222	190	155	132	109	89	75	62	55	48	43	38	32	24	21				

## BARREL SWIVEL

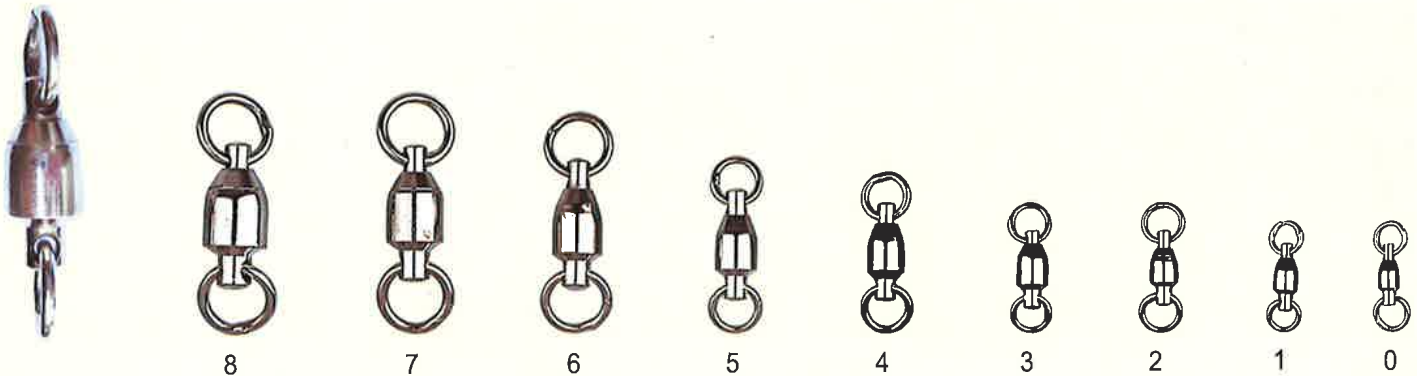


SX303	6/0	5/0	4/0	3/0	2/0	1/0	1	2	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24
TEST (AVERAGE kg)	132	114	101	83	65	63	44.8	44.4	40.1	36.5	29	28.2	25.6	24.3	20.6	20	15.1	14.4	12.4	10.1	8.88	8.8	8.08	7.84
SX303-1	6/0	5/0	4/0	3/0	2/0	1/0	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	22	24	
TEST (AVERAGE kg)	174	144	115	95	77	76	60	60	45	45	36	36	32	32	32	23	21	17	16	12	12	10	8	

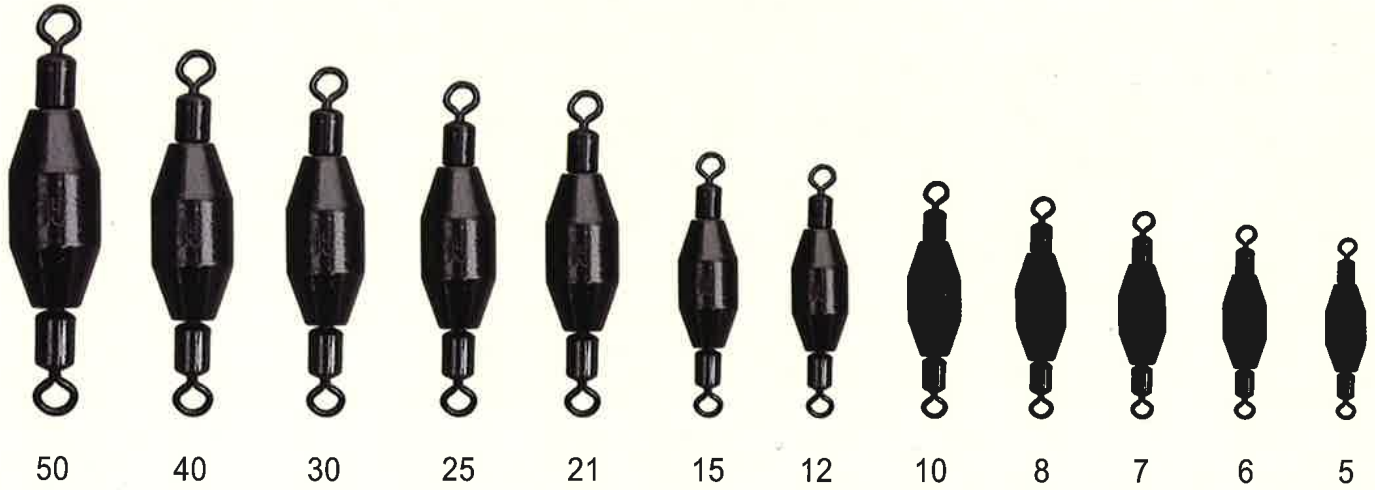
## BALL BEARING SWIVEL WITH TWO SPLIT RINGS



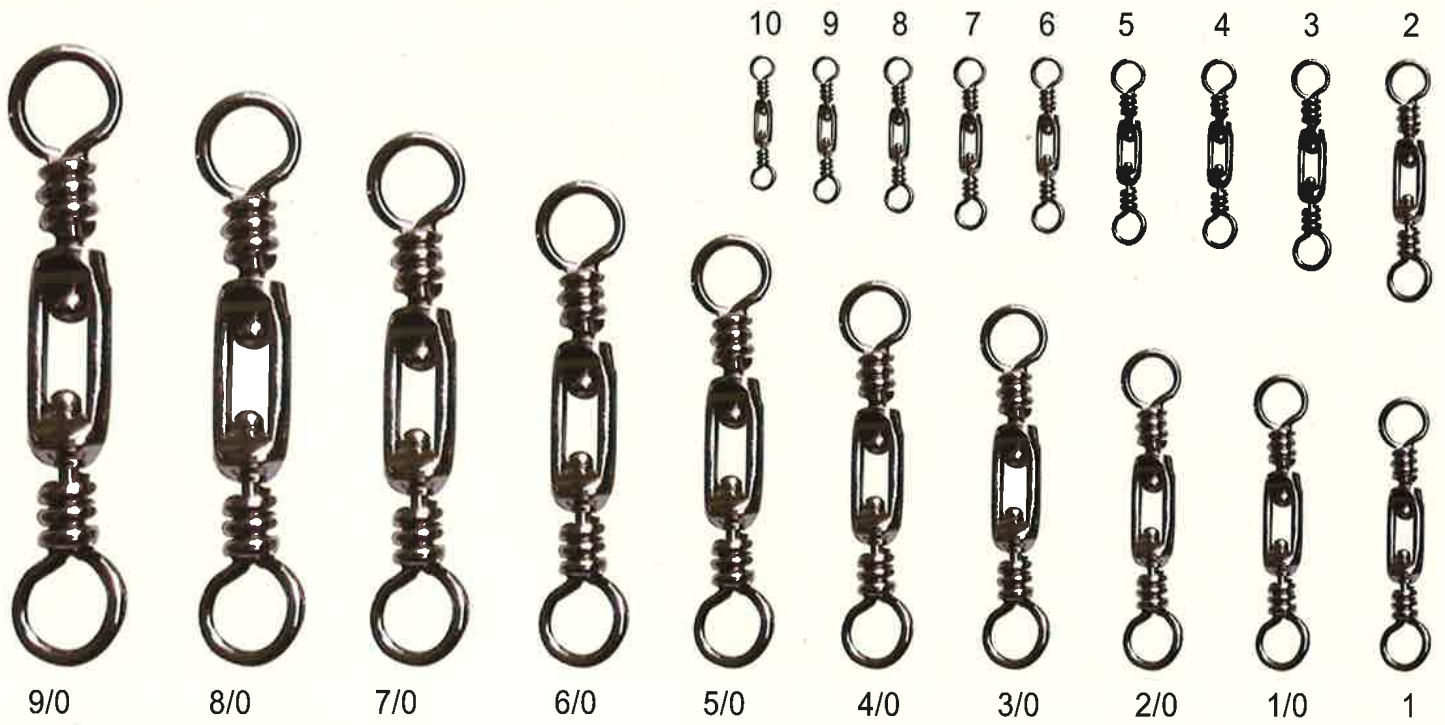
## BALL BEARING SWIVEL WITH TWO SOLID RINGS



**ROLLING SWIVEL WITH BARREL BRASS WEIGHT**



**BOX SWIVEL**



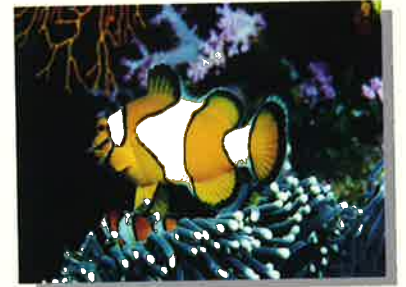
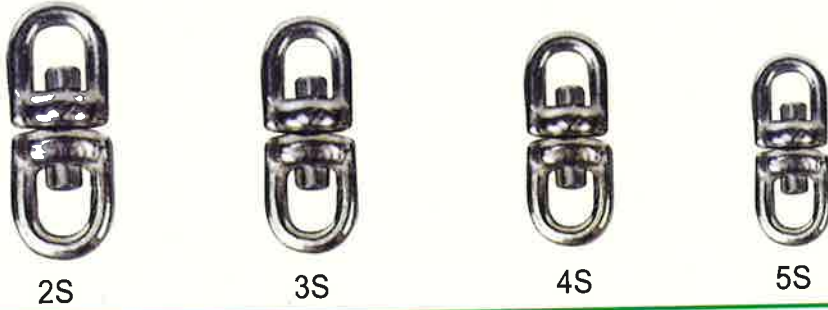
**HEAVY SWIVEL**



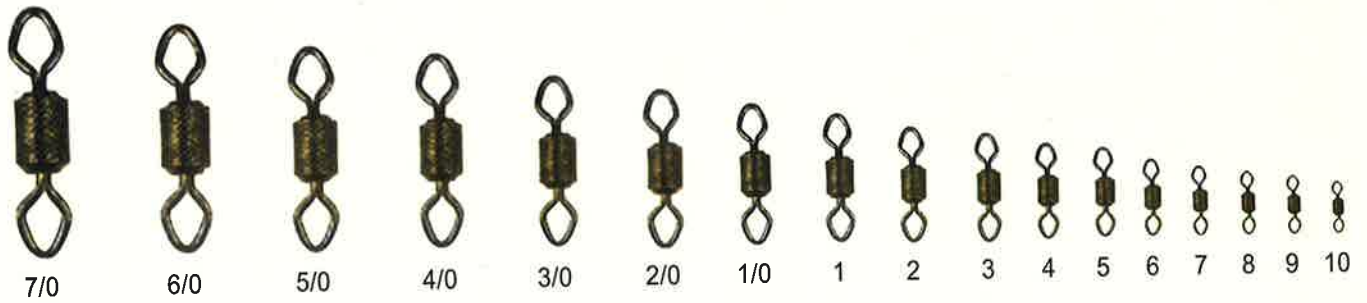
**SINGLE SWIVEL STAINLESS STEEL**



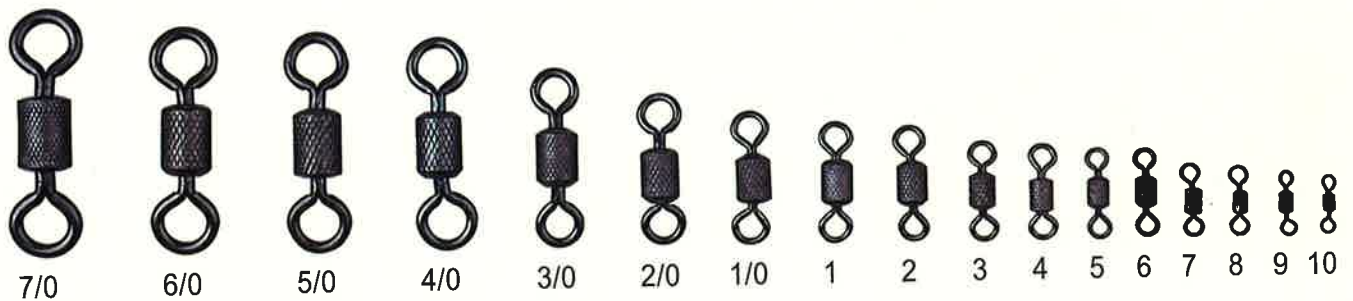
**DOUBLE SWIVEL STAINLESS STEEL**



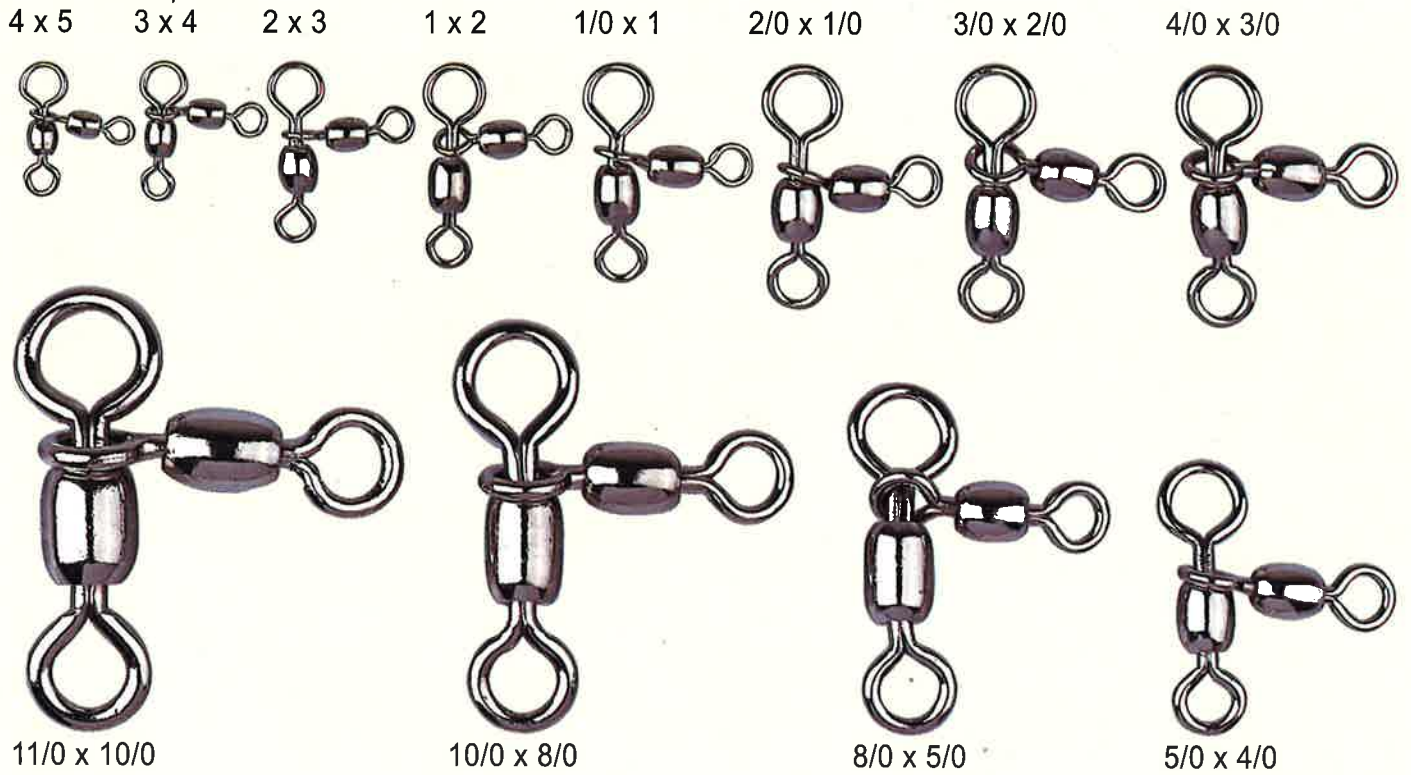
**ROLLING RIBBED SWIVEL W/DIAMOND EYES**



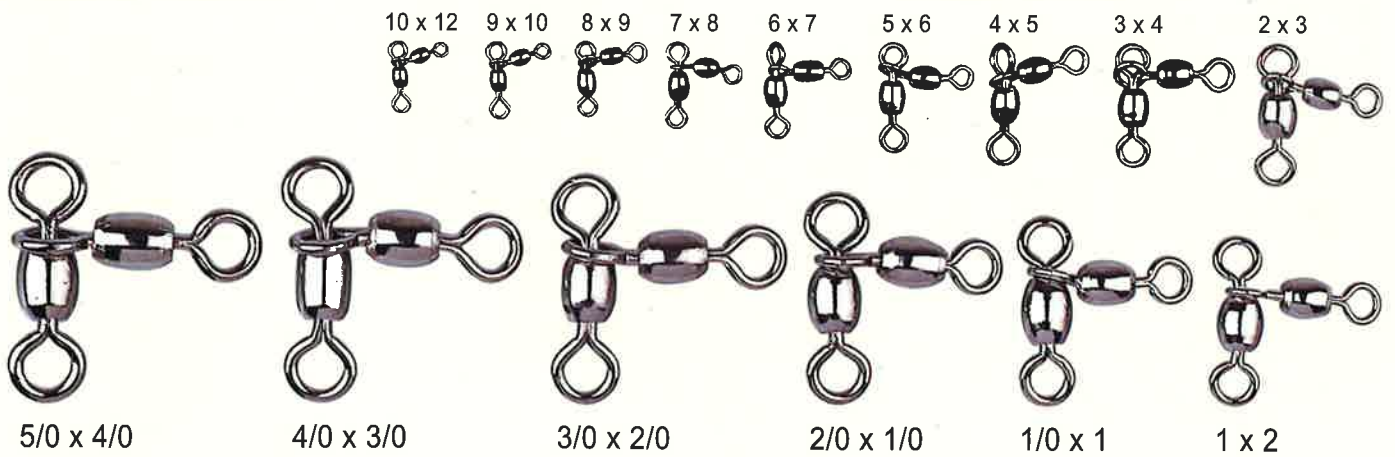
**ROLLING RIBBED SWIVEL**



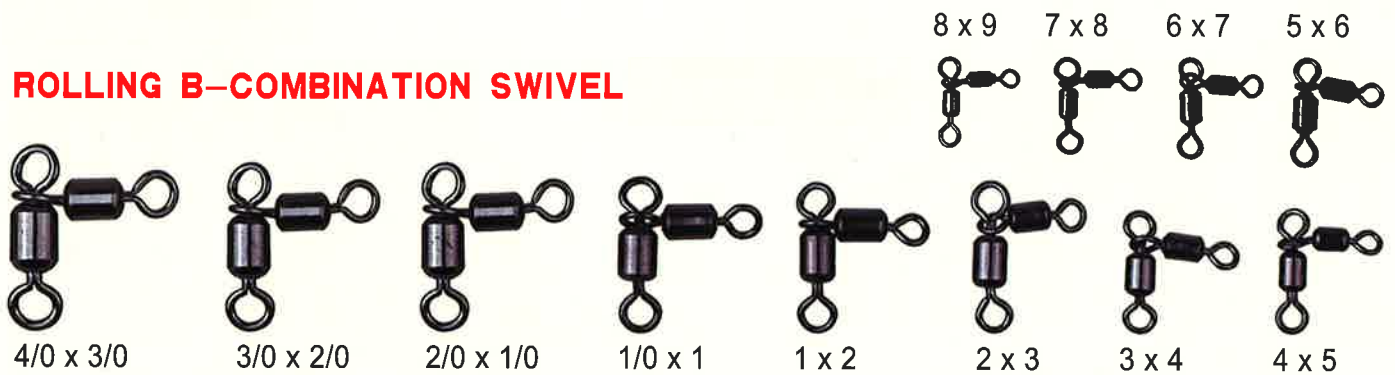
**CRANE A-COMBINATION SWIVEL**



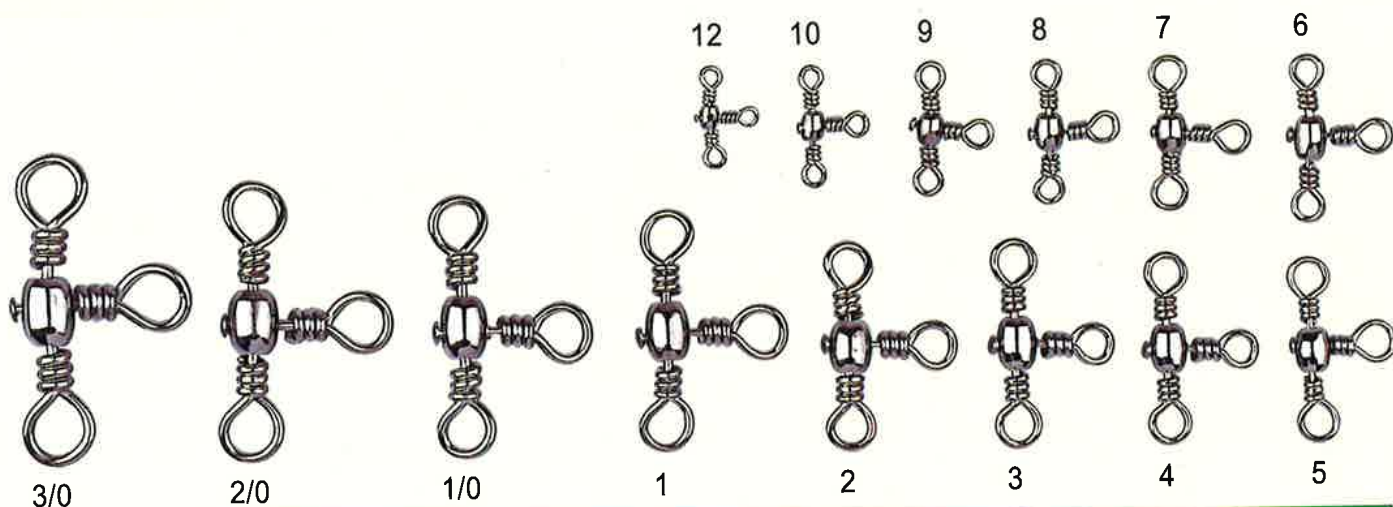
**CRANE B-COMBINATION SWIVEL**



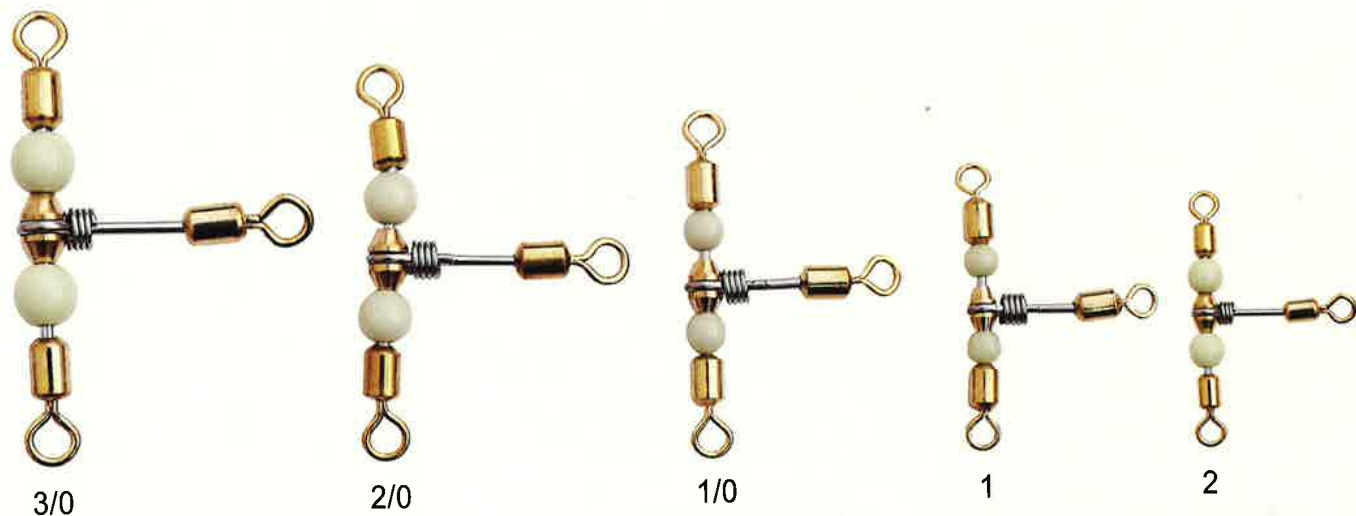
**ROLLING B-COMBINATION SWIVEL**



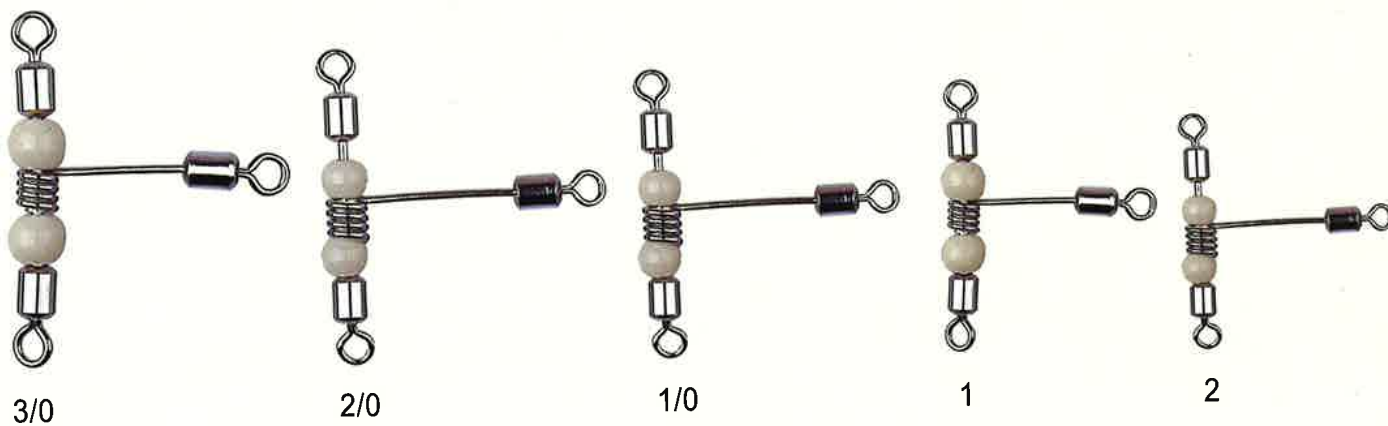
## BARREL CROSSLINE SWIVEL



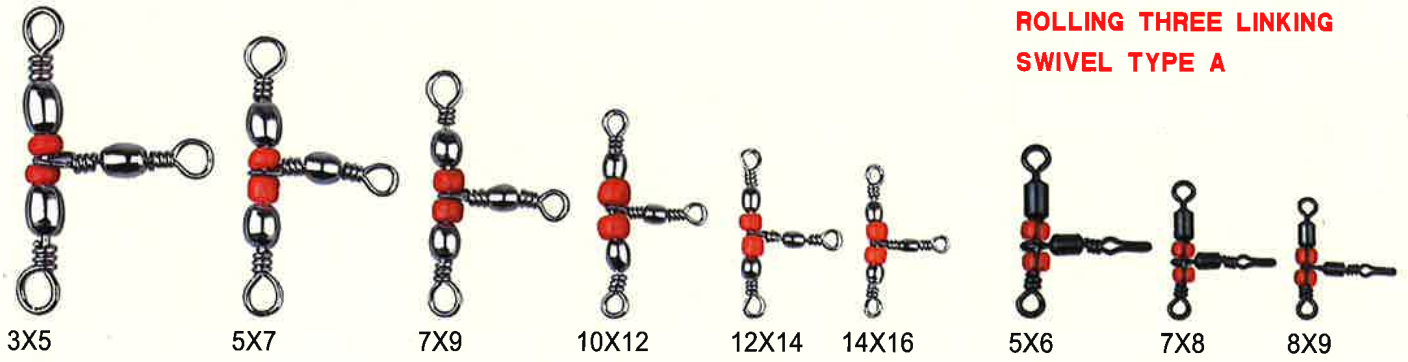
## ROLLING T-TYPE SWIVEL-A



## ROLLING T-TYPE SWIVEL-B



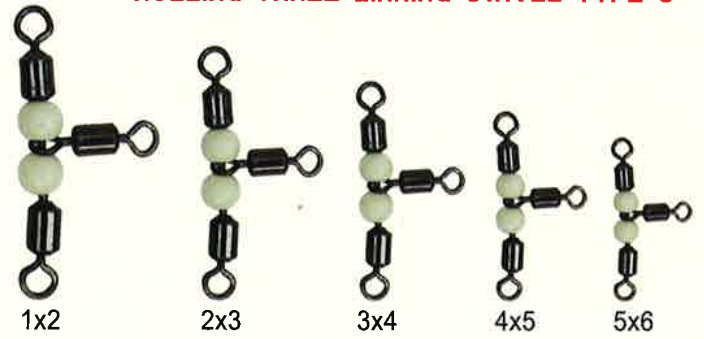
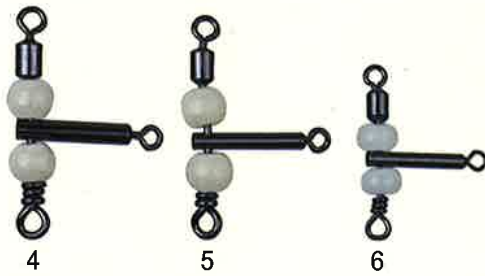
**TRIPPLE SWIVEL**



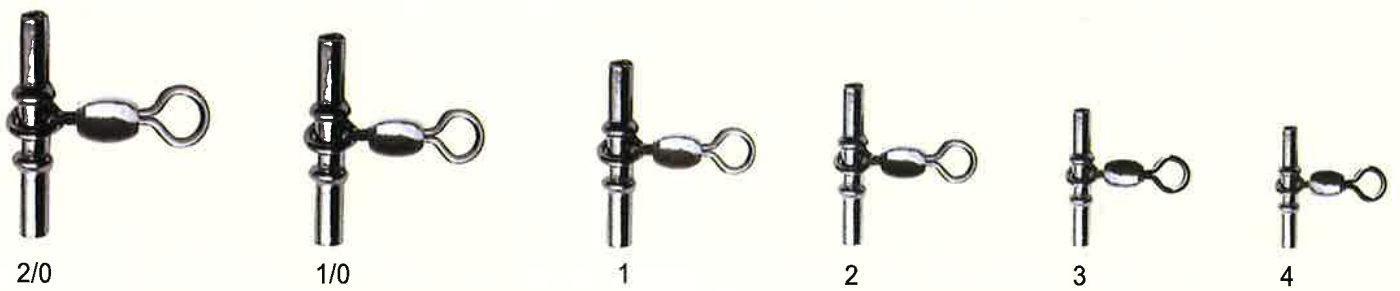
**ROLLING THREE LINKING SWIVEL TYPE A**

**ROLLING THREE LINKING SWIVEL TYPE B**

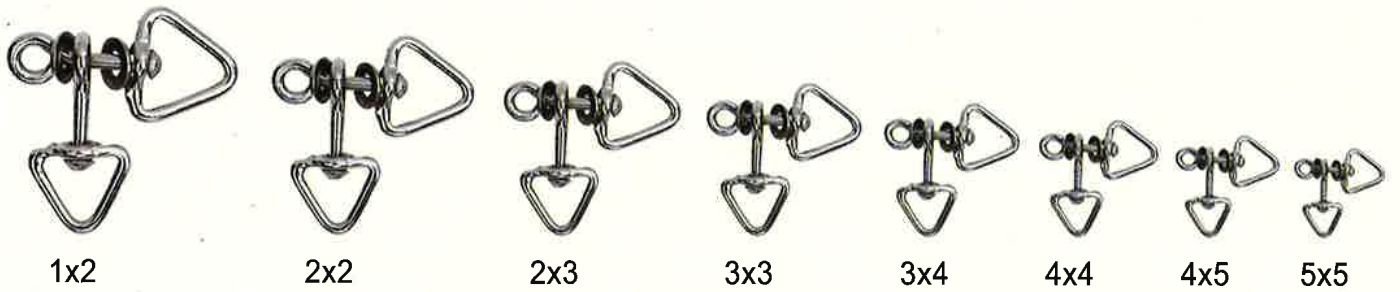
**ROLLING THREE LINKING SWIVEL TYPE C**



**CROSS-LINE CRANE SWIVEL**

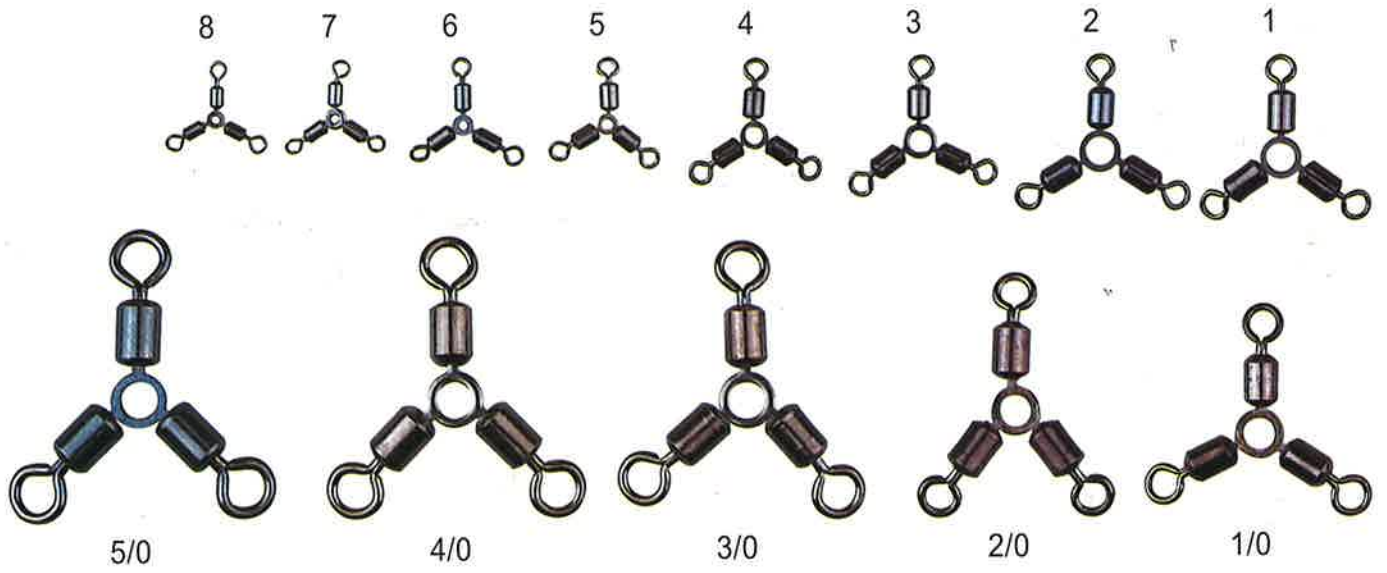


**TRIANGLE COMBINATION SWIVEL**

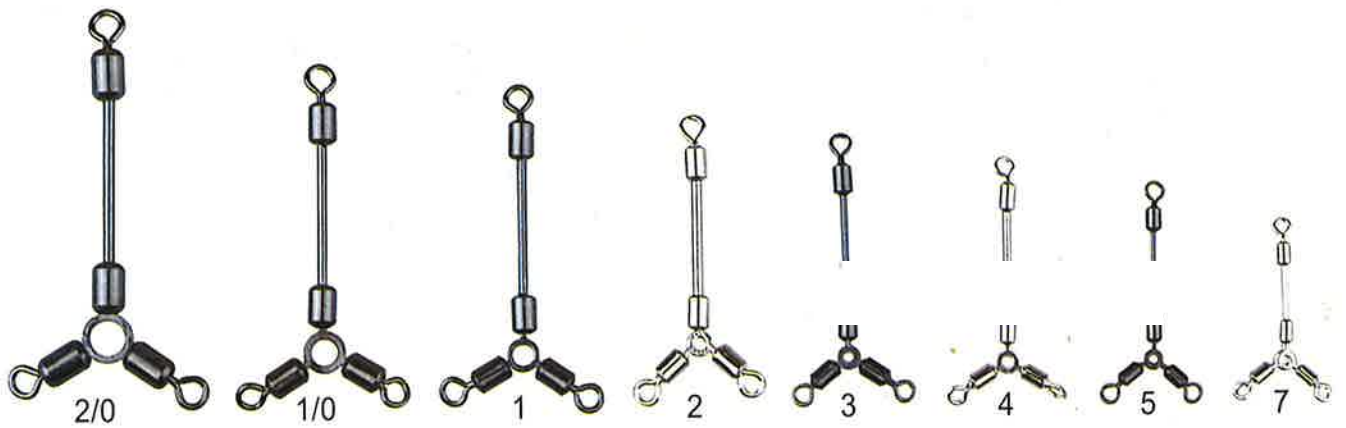




## ROLLING A-3WAY SWIVEL



## ROLLING B-3WAY SWIVEL



## ROLLING C-3WAY SWIVEL



**CRANE THREE WAY SWIVEL**



5/0



4/0



3/0

**BARREL 3-WAY SWIVEL**

10

9

8

7

6

5

4

3

2

1



5/0



4/0



3/0



2/0



1/0

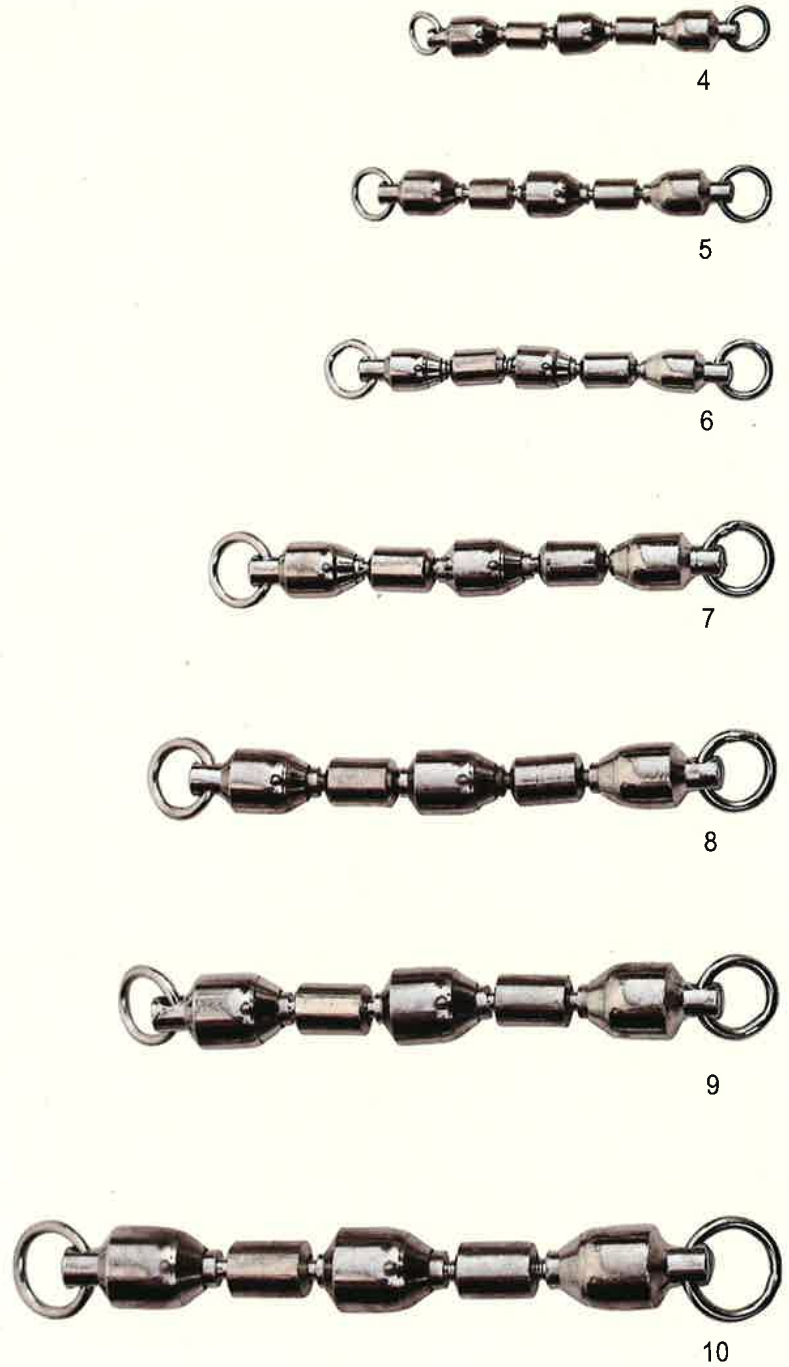
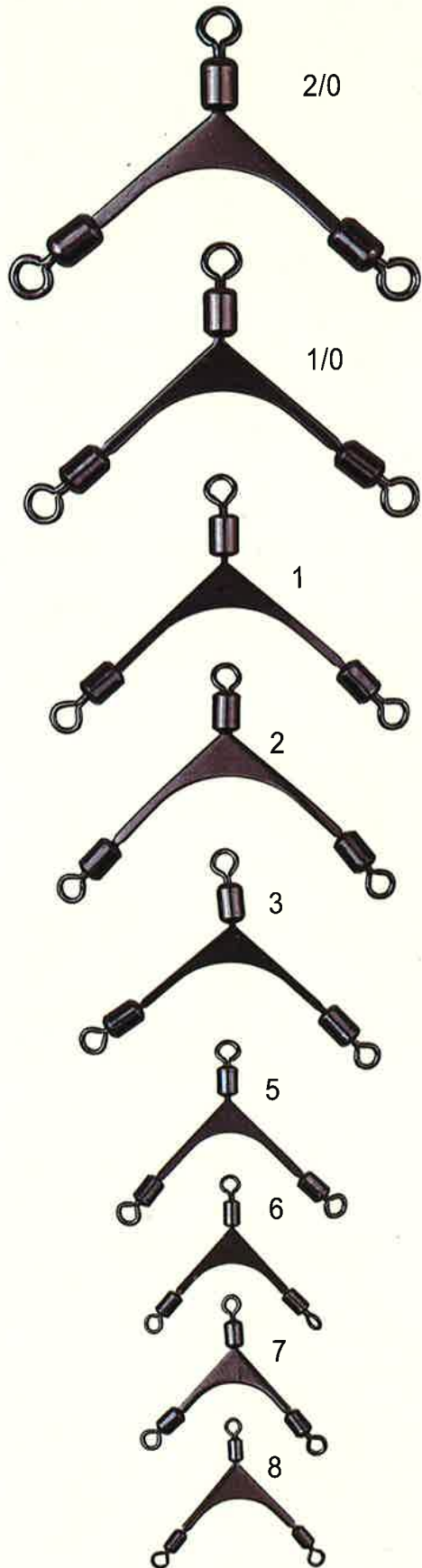
**HEAVY THREE WAY SWIVEL**



**HEAVY FOUR WAY SWIVEL**

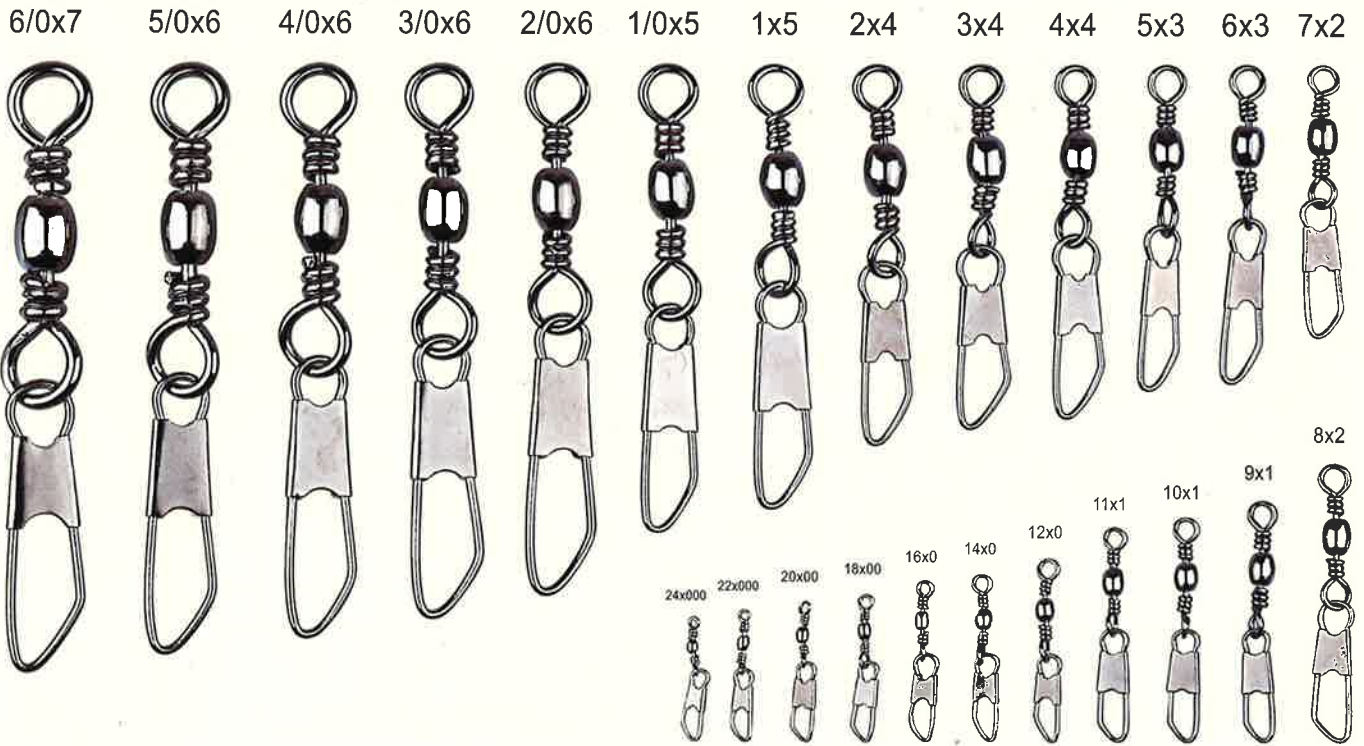


**ROLLING POIE SWIVEL**



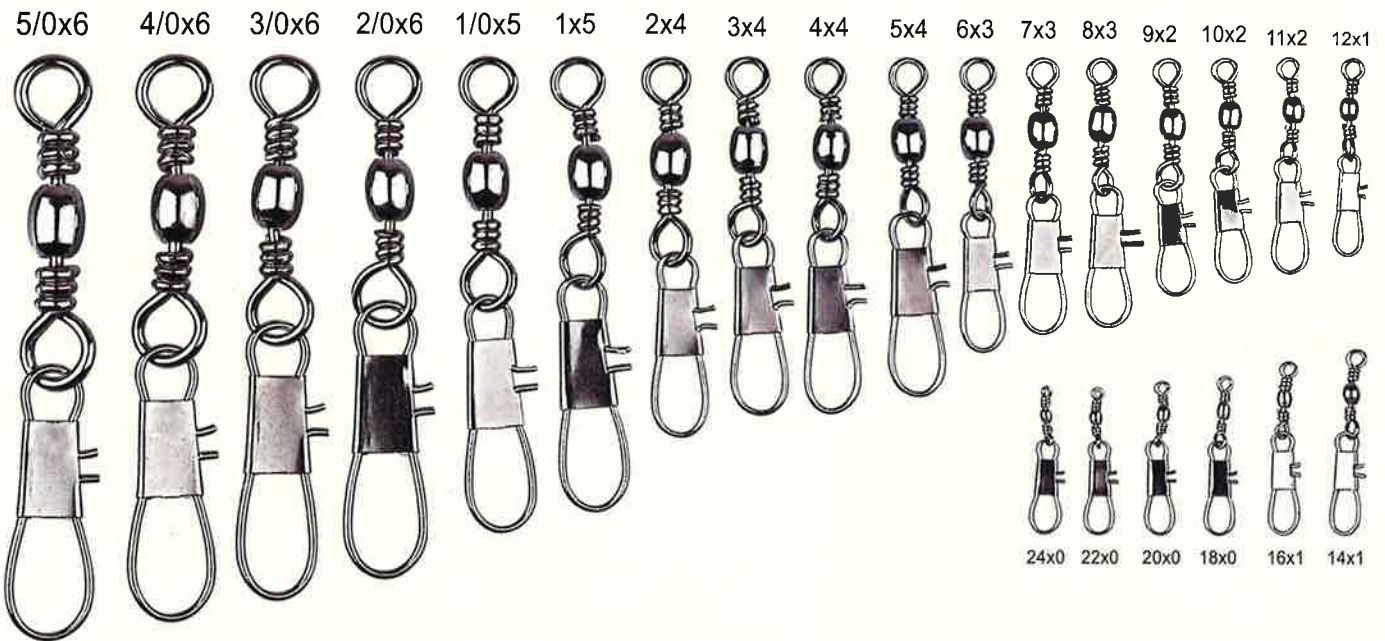
**5 LINKING BALL BEARING SWIVEL**

## BARREL SWIVEL WITH SAFETY SNAP



SX-303A	6/0x7	5/0x6	4/0x6	3/0x6	2/0x6	1/0x5	1x5	2x4	3x4	4x4	5x3	6x3	7x2	8x2	9x1	10x1	11x1	12x0	14x0	16x0	18x00	20x00	22x000	24x000
TEST (AVERAGE kg)	44.5	36.7	36.7	36.7	36.7	22.9	22.9	21.2	21.2	21.2	18.4	18.4	11.2	11.2	8.72	8.72	8.72	8.64	8.64	8.64	7.64	7.64	6.52	6.52

## BARREL SWIVEL WITH INTERLOCK SNAP



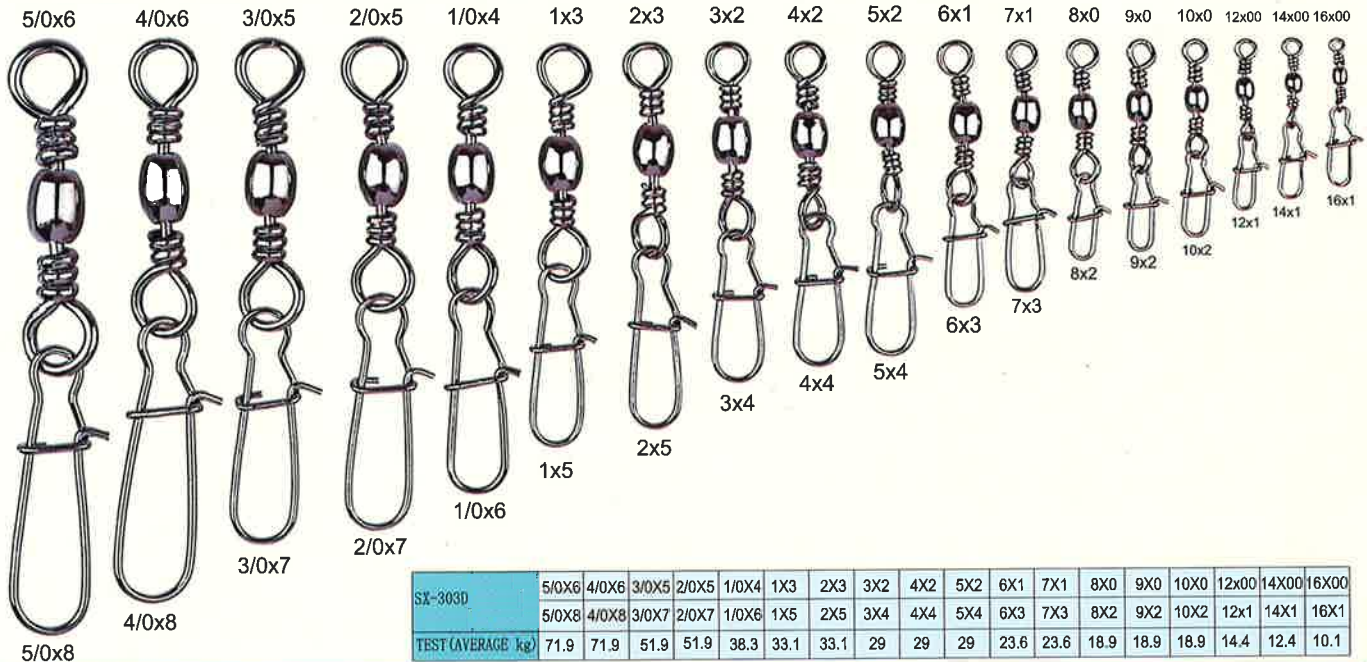
SX-303B	5/0x6	4/0x6	3/0x6	2/0x6	1/0x5	1x5	2x4	3x4	4x4	5x4	6x3	7x3	8x3	9x2	10x2	11x2	12x1	14x1	16x1	18x0	20x0	22x0	24x0
TEST (AVERAGE kg)	41.2	41.2	41.2	41.2	36.6	36.6	28.8	28.8	28.8	28.8	22	22	22	15	15	15	13.8	13.8	13.8	8	8	8	8

## BARREL SWIVEL WITH LOCK SNAP



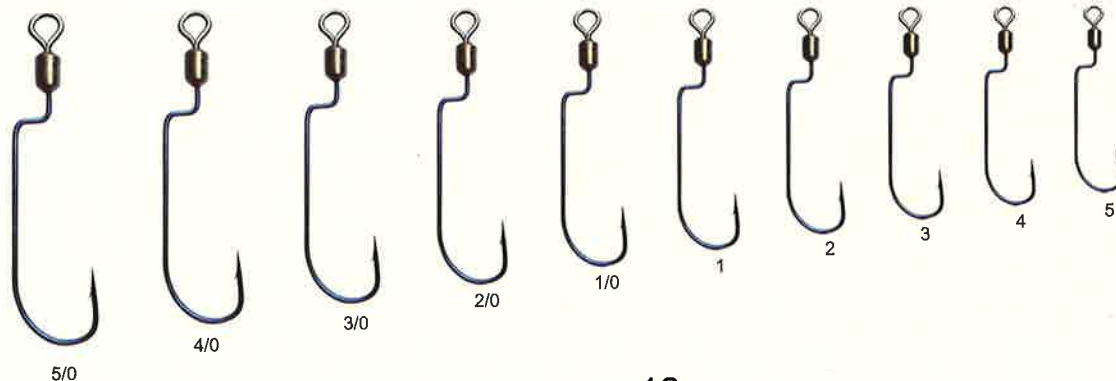
SX-303C	6/0x6	5/0x6	4/0x6	3/0x6	2/0x6	1/0x5	1x5	2x4	3x4	4x4	5x3	6x3	7x2	8x2	9x2	10x1	10x1	12x0	14x0	16x00	
	6/0x8	5/0x8	4/0x8	3/0x8	2/0x8	1/0x7	1x7	2x6	3x6	4x6	5x5	6x5	7x4	8x4	9x4	10x3	10x3	12x2	14x2	16x1	
TEST (AVERAGE kg)	95.8	95.8	95.8	83	65	61.4	44.8	44.4	40.1	36.5	29	28.2	25.6	24.3	20.6	20	14.4	12.4	10.1		

## BARREL SWIVEL WITH NICE SNAP



SX-303D	5/0x6	4/0x6	3/0x5	2/0x5	1/0x4	1x3	2x3	3x2	4x2	5x2	6x1	7x1	8x0	9x0	10x0	12x00	14x00	16x00
	5/0x8	4/0x8	3/0x7	2/0x7	1/0x6	1x5	2x5	3x4	4x4	5x4	6x3	7x3	8x2	9x2	10x2	12x1	14x1	16x1
TEST (AVERAGE kg)	71.9	71.9	51.9	51.9	38.3	33.1	33.1	29	29	29	23.6	23.6	18.9	18.9	18.9	14.4	12.4	10.1

## ROLLING SWIVEL WITH HOOK



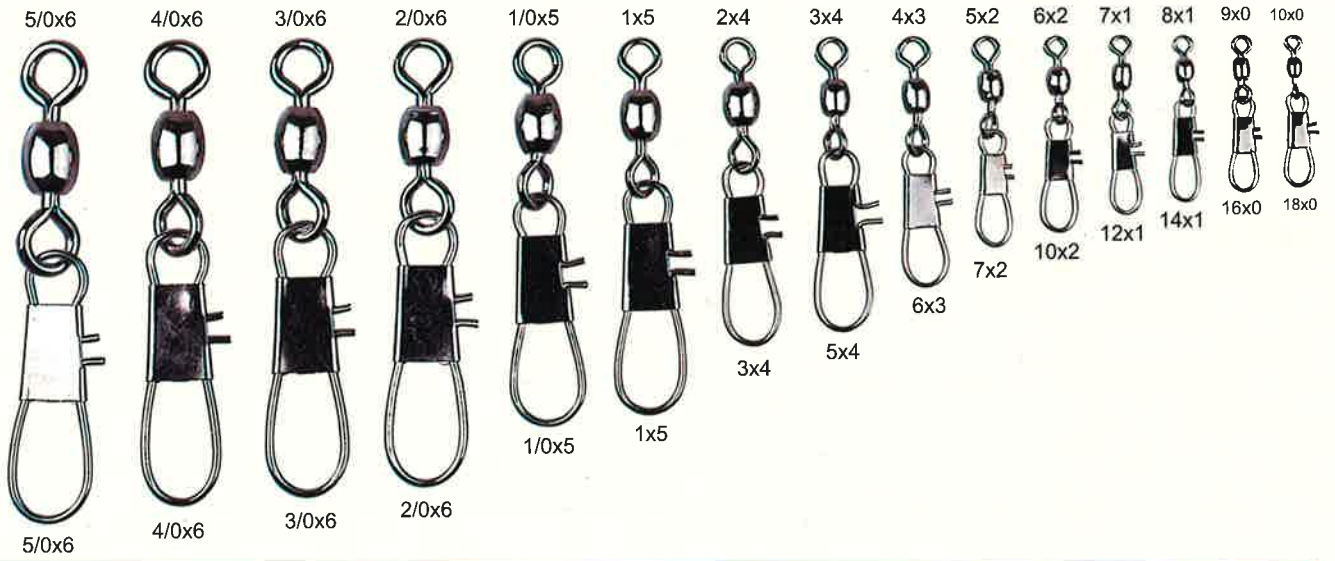
## CRANE SWIVEL WITH HOOK SNAP

SX-201E	5/0X6	4/0X6	3/0X6	2/0X5	1/0X5	1X5	2X4	3AX4	3X4	3X4	4X3	5X3	6X2	7X2	8X2	9X1	10X1	12X1
TEST (AVERAGE kg)	5/0X8	4/0X8	3/0X8	2/0X7	1/0X7	1X7	3X6	4X6	5X6	6X5	7X5	10X4	12X4	14X4	16X3	18X3	20X3	
				32.4	32.4	32.4	25.4	25.4	25.4	25	25	20.1	20.1	14.7	13.8	12.9		

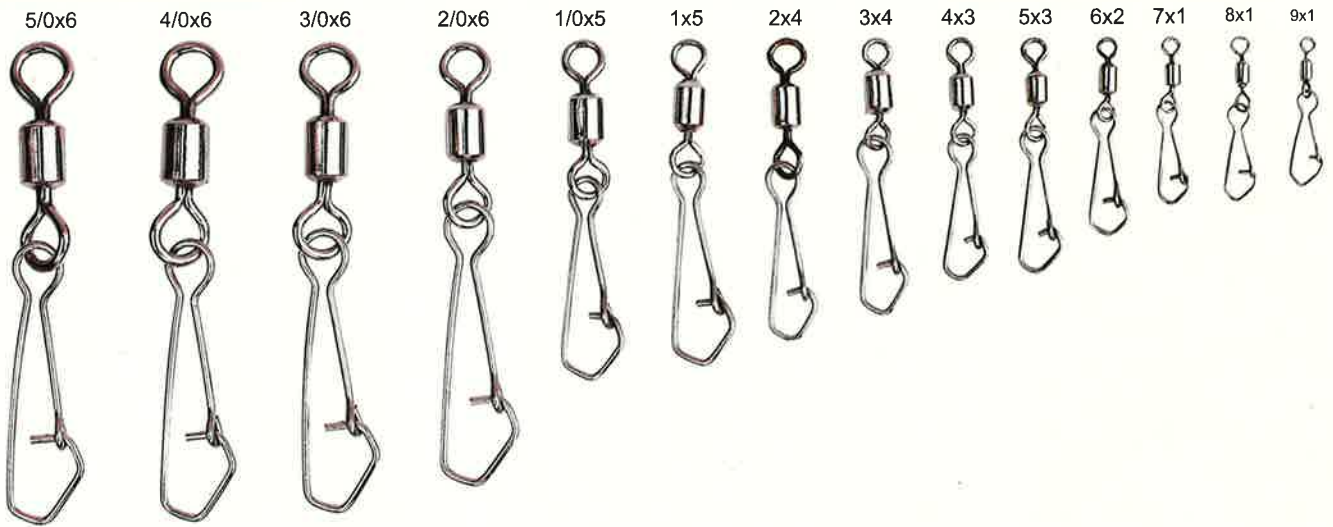
## CRANE SWIVEL WITH NICE SNAP

## CRANE SWIVEL WITH COST LOCK SNAP

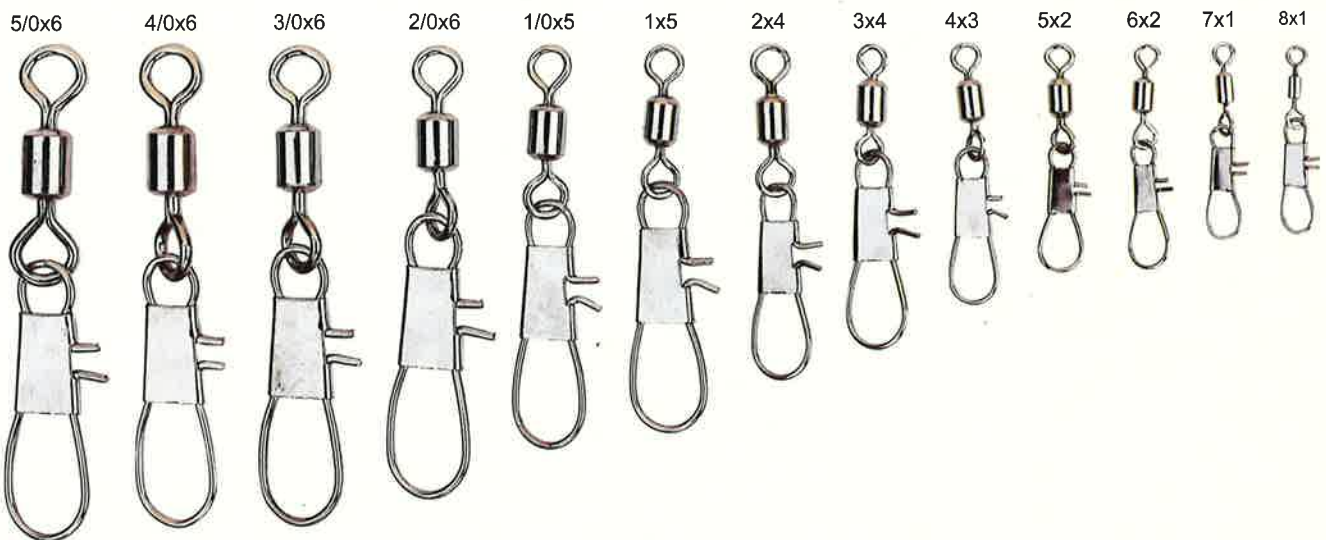
## CRANE SWIVEL WITH INTERLOCK SNAP



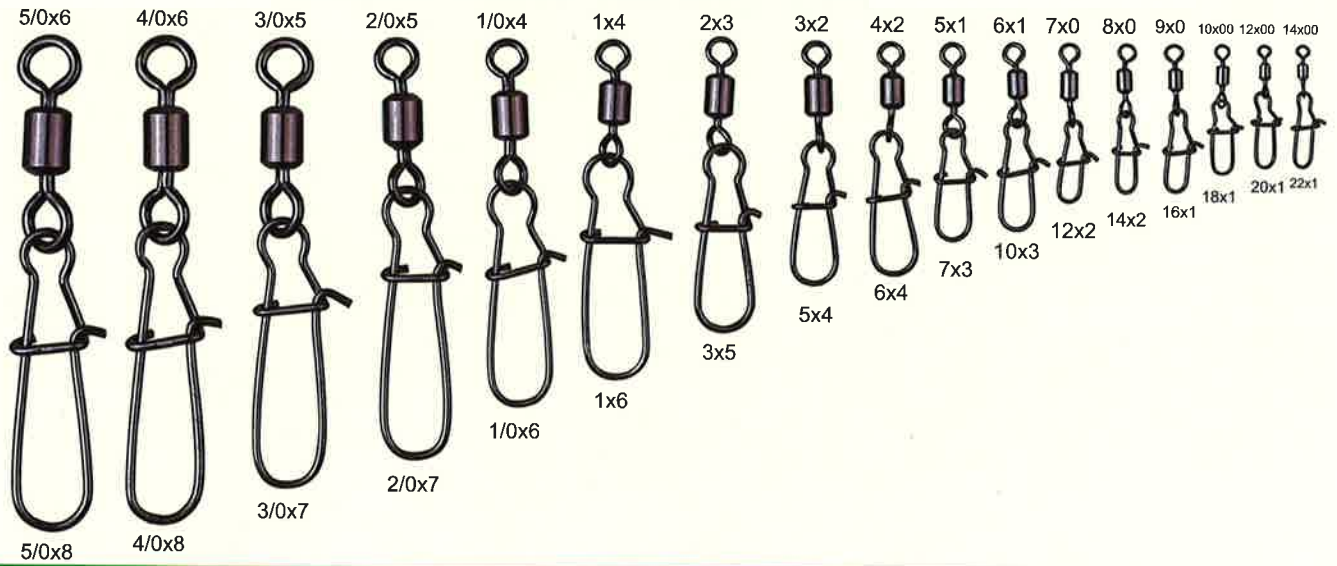
## ROLLING SWIVEL WITH HOOK SNAP



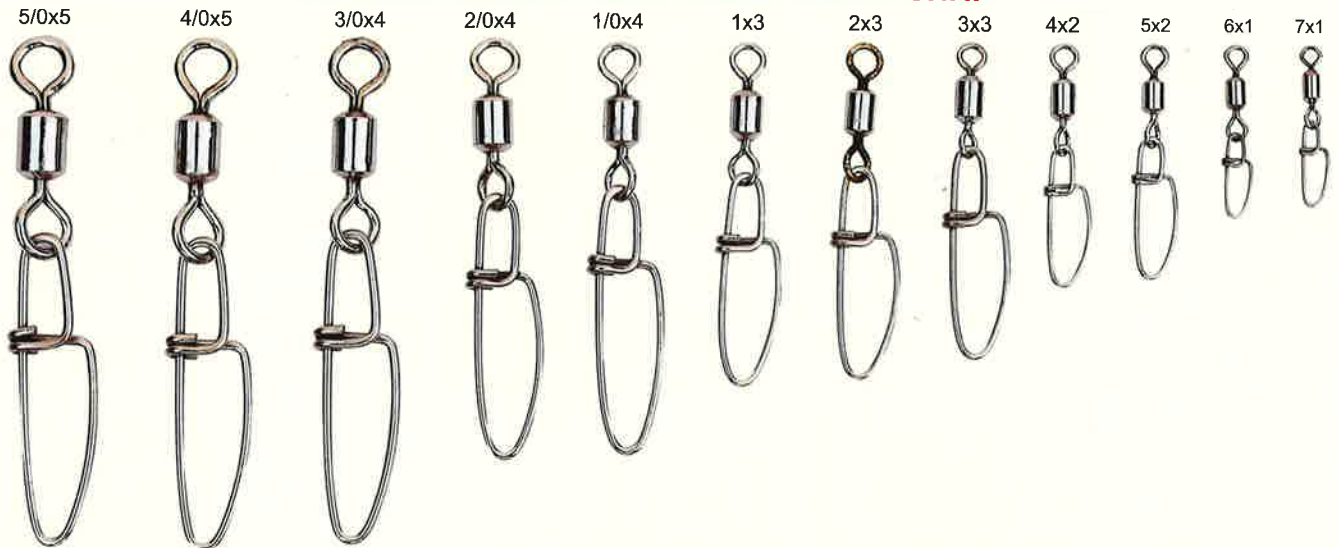
## ROLLING SWIVEL WITH INTERLOCK SNAP



**ROLLING SWIVEL WITH NICE SNAP**



**ROLLING SWIVEL WITH COST LOCK SNAP**

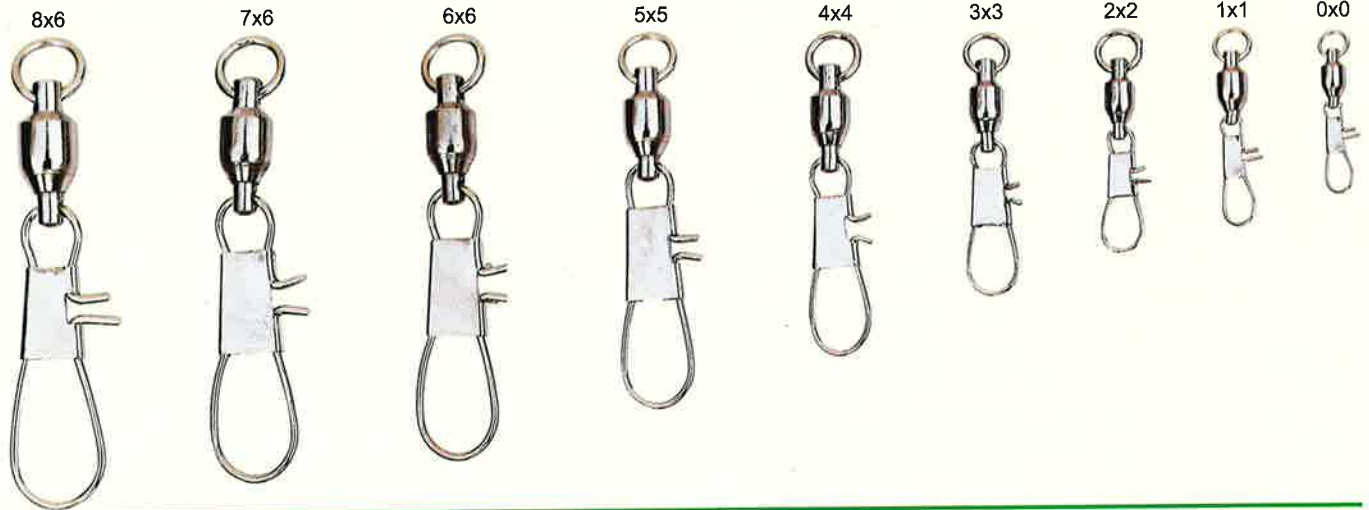


**CRANE SWIVEL WITH COASTLOCK SNAP**

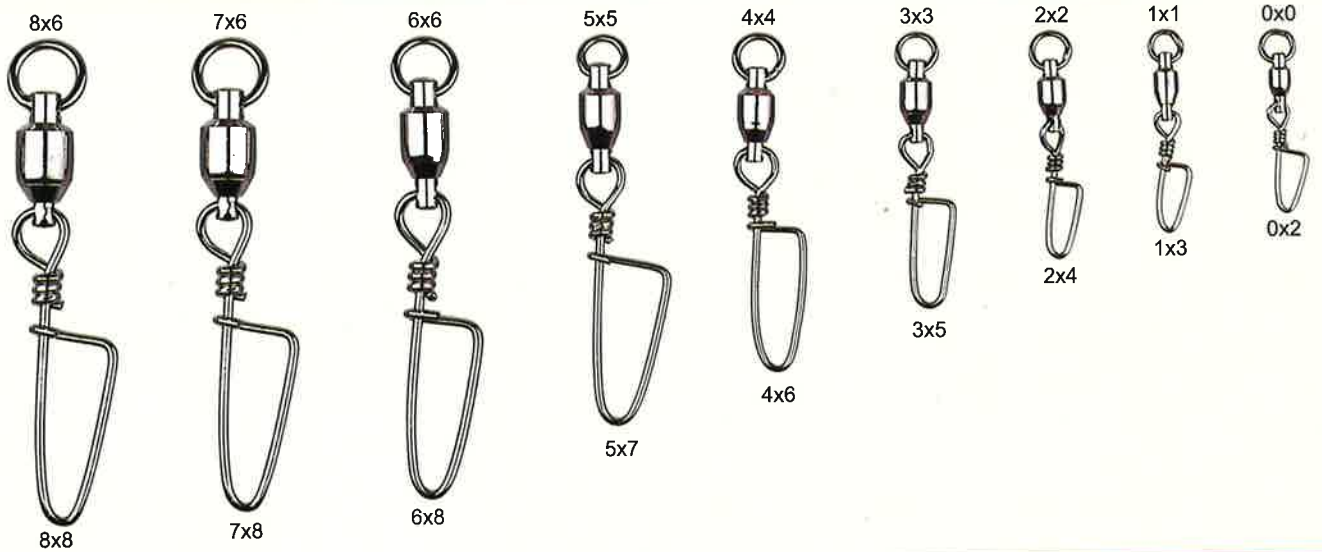




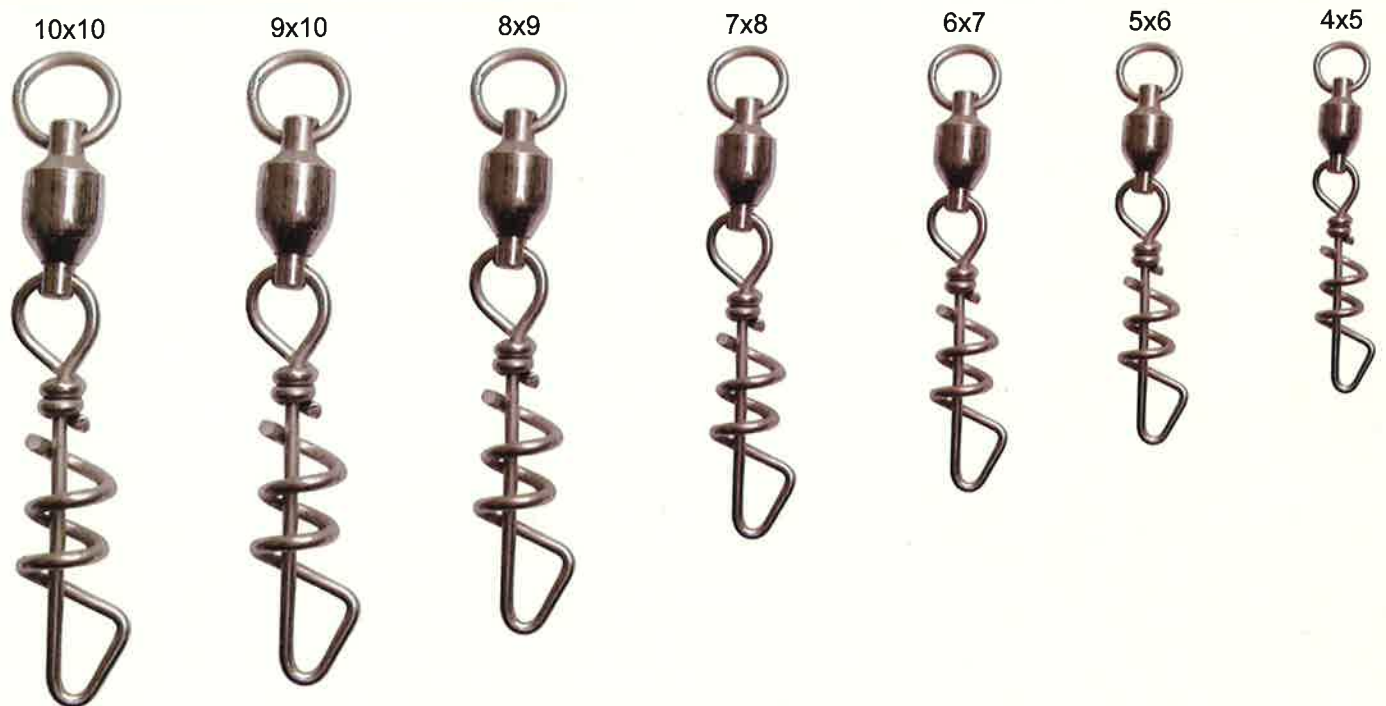
**BALL BEARING ONE SOLID RING WITH INTERLOCK SNAP**



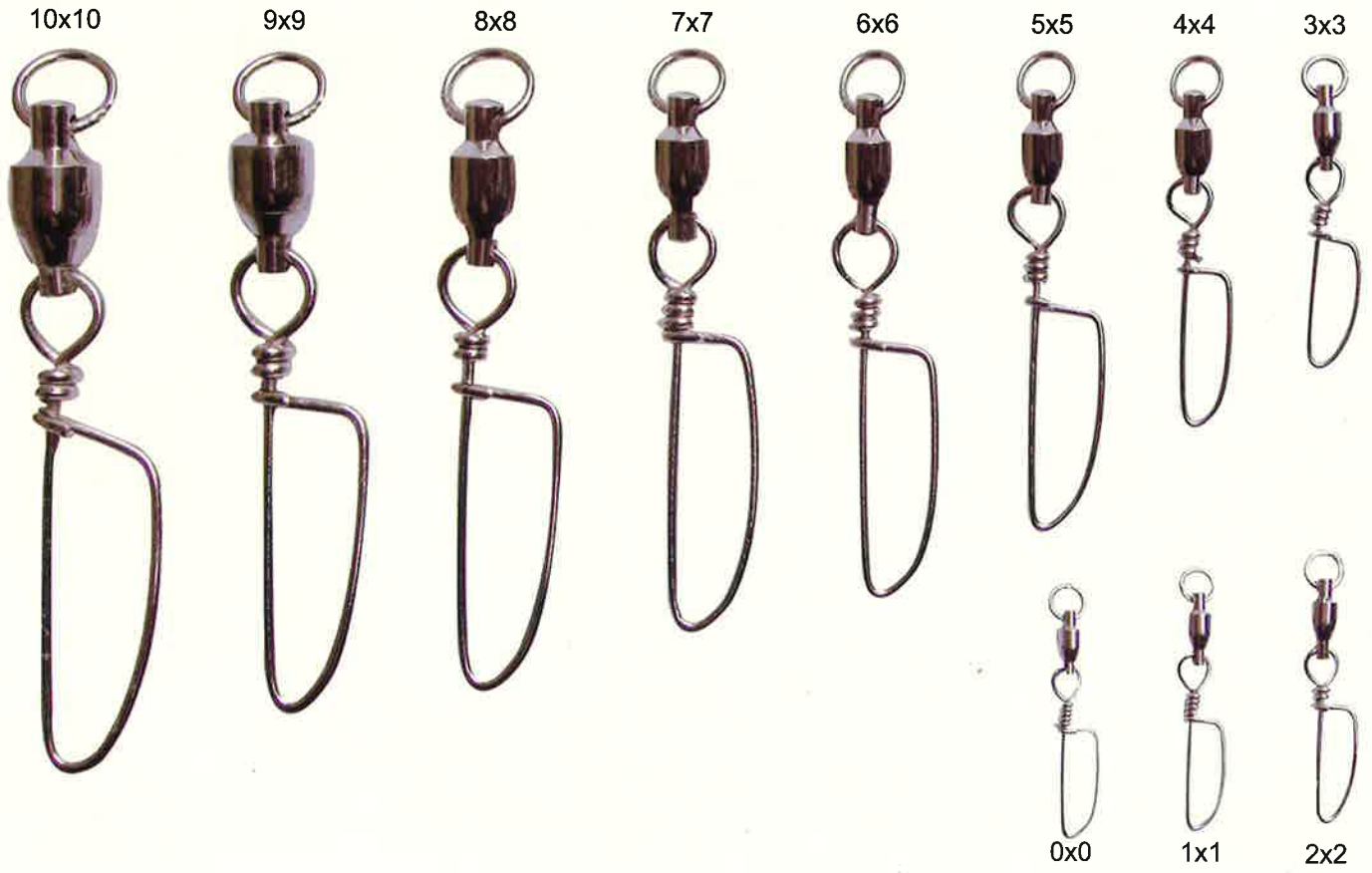
**BALL BEARING ONE SOLID RING WITH LOCK SNAP**



**BALL BEARING ONE SOLID RING WITH CORKSCREW SNAP**



**BALL BEARING ONE SOLID RING WITH COASTLOCK SNAP**



**HEAVY SWIVEL WITH COASTLOCK SNAP**





12mm



10mm



9mm



8mm



7mm



6mm



5mm



4mm

**HEAVY SWIVEL WITH CORKSCREW SNAP**



10x10



9x9



8x8



7x7



6x6



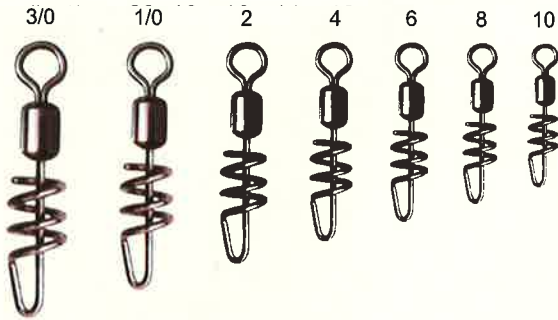
5x5



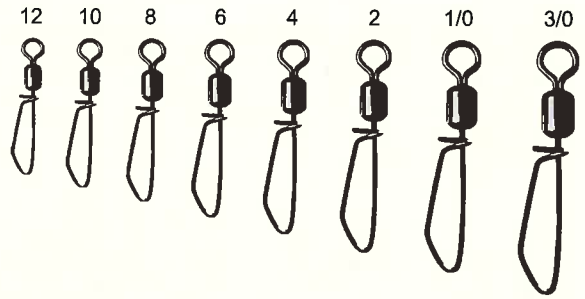
4x4

**5 LINKING BALL BEARING SWIVEL WITH COASTLOCK SNAP**

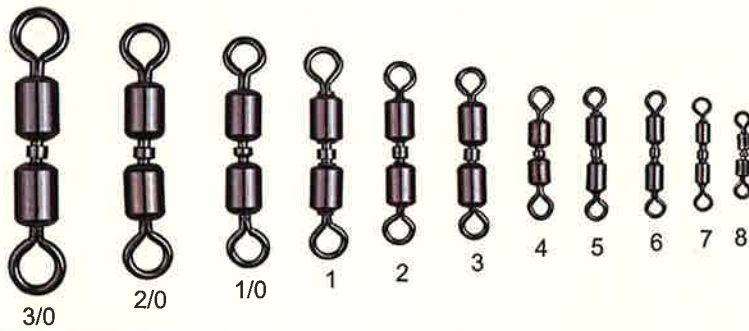
**ROLLING SWIVEL WITH SCREWED SNAP**



**ROLLING SWIVEL WITH T-SHAPE SNAP**

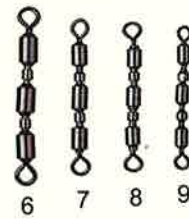


**ROLLING DOUBLE SWIVELS**

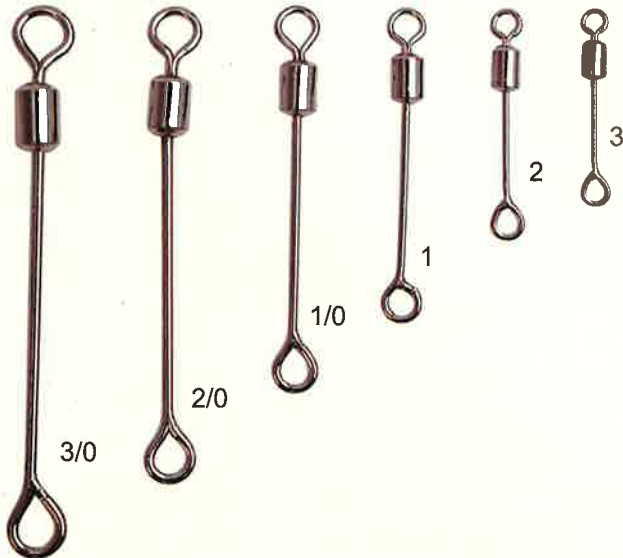


**BARREL THREE LINKING SWIVELS**

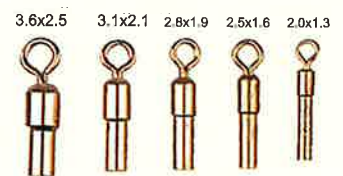
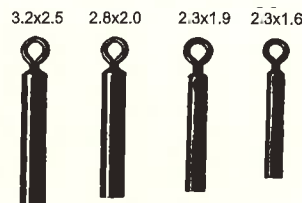
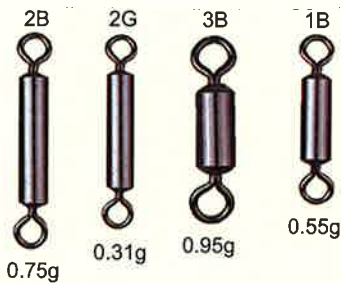
**ROLLING THREE LINKING SWIVELS**



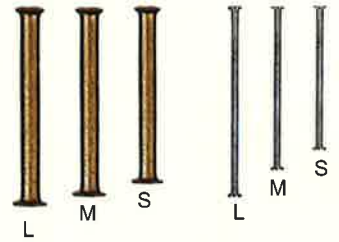
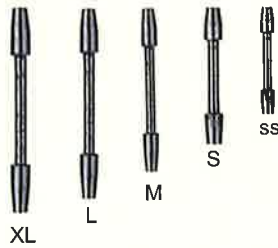
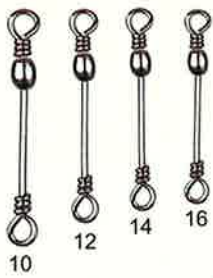
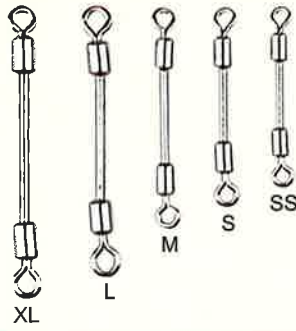
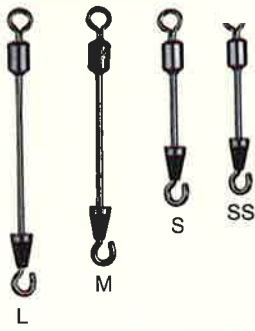
**ROLLING METAL ASSIST RIG**



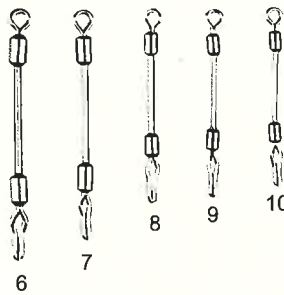
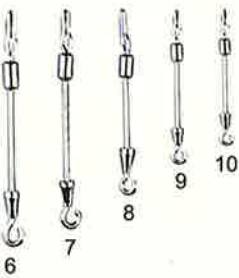
**ROLLING HAMMER SWIVEL**



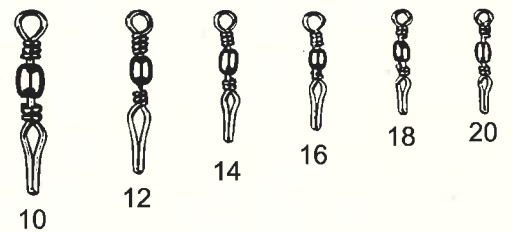
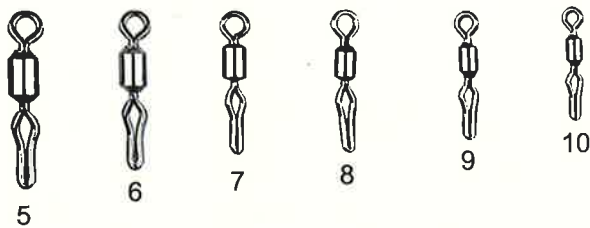
**T SPEED SNAP**



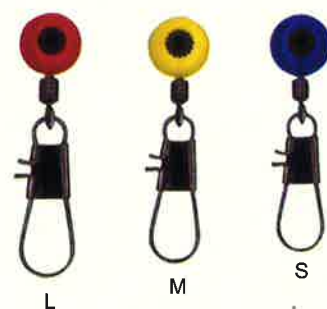
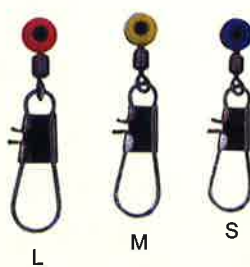
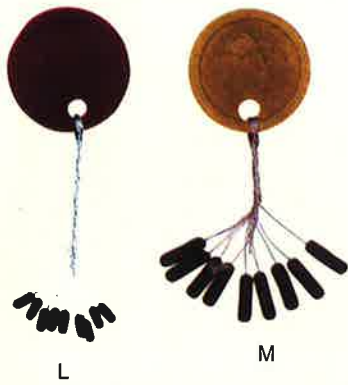
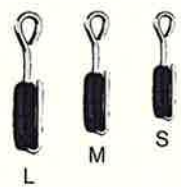
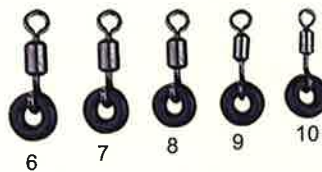
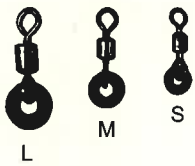
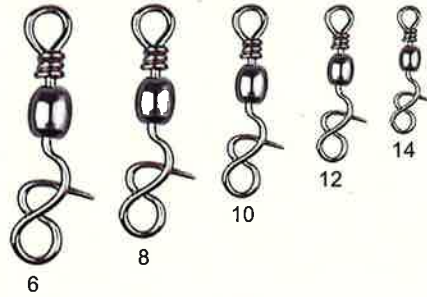
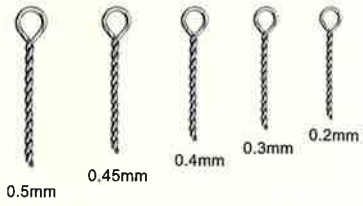
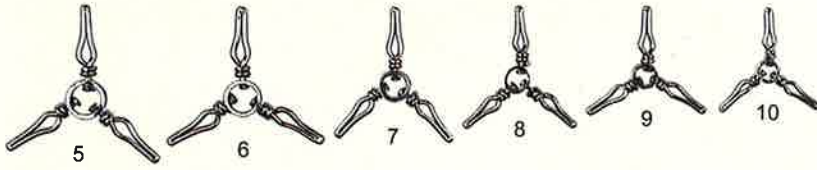
**SPEED SNAP CLIP**



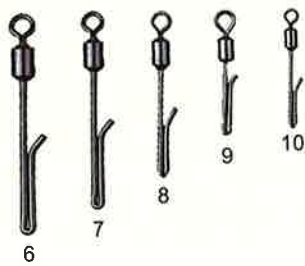
**BARREL & LINE CLIP**



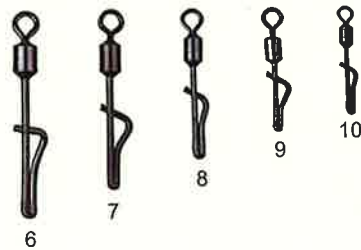
**BARREL 3-WAY CLIP**



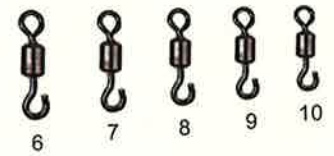
**ROLLING SPEED SWIVEL A**



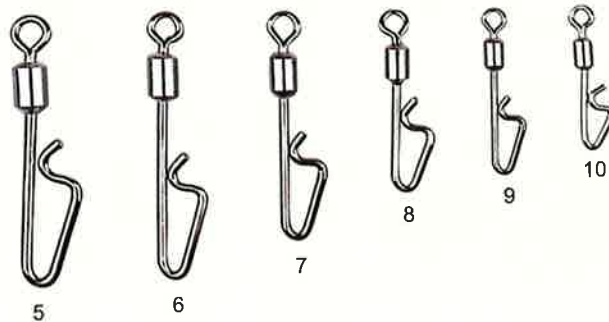
**ROLLING SPEED SWIVEL B**



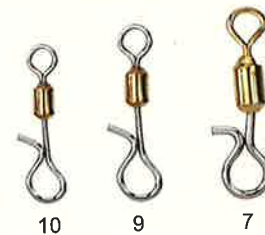
**ROLLING SPEED SWIVEL C**



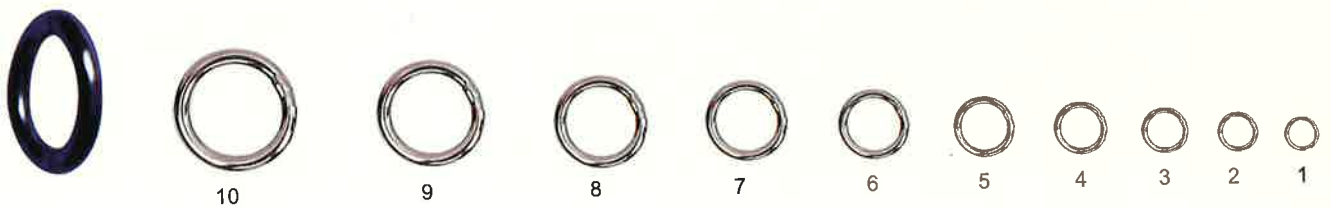
**ROLLING SPEED SWIVEL D**



**ROLLING SPEED SWIVEL E**



**RING B**

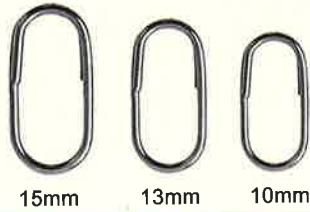


**RING A**

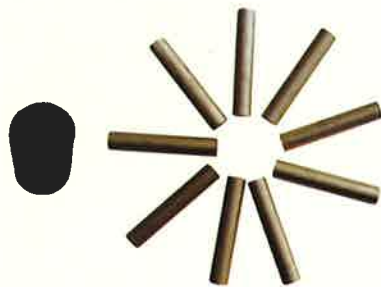
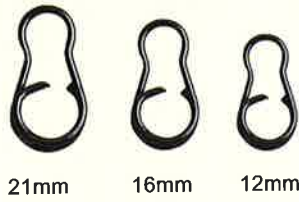


NO.	1	2	3	4	5	6	7	8	9	10
	0.7x4.0	0.8x4.6	1.1x5.1	1.2x5.8	1.3x6.5	1.4x7.2	1.5x8.2	1.8x9.2	2.0x10.0	2.2x12.0
	5.4mm	6.2mm	7.3mm	8.2mm	9.1mm	10.0mm	11.2mm	12.8mm	14.0mm	16.4mm
TESTLE	15	25	70	70	80	85	110	180	220	240

**OVAL SPLIT RINGS**

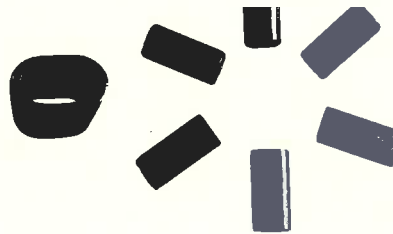


**BENT HEAD OVAL SPLIT RING**



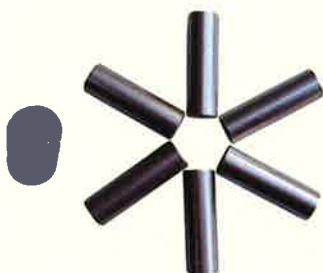
A	13.0×10.2mm
B	12.0×9.1mm
C	11.0×8.2mm
D	10.0×7.2mm
E	9.0×6.5mm
F	8.0×5.8mm
G	7.5×5.1mm
H	7.0×5.1mm
I	6.6×4.7mm
J	6.3×4.5mm
K	6.0×4.3mm
L	5.5×3.9mm
M	5.0×3.6mm
N	4.45×3.0mm
O	3.6×2.4mm
P	3.9×2.6mm
Q	3.4×2.3mm
R	3.1×2.1mm
S	2.8×1.9mm
T	2.5×1.6mm
U	2.2×1.4mm
V	2.0×1.3mm
W	1.8×1.1mm
X	1.6×1.0mm
Y	1.5×0.9mm

**OVAL ALUMINUM SLEEVE**



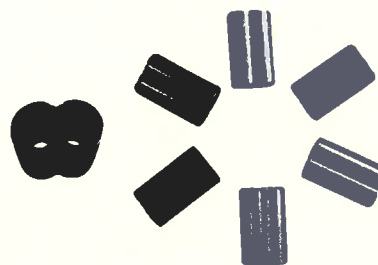
A	5.2x10.4x18mm
B	5.0x10.0x18mm
C	4.5x9.0x18mm
D	4.2x8.4x18mm
E	3.7x7.4x18mm
F	3.3x6.6x18mm
G	3.1x6.2x18mm
H	3.0x6.0x18mm
I	2.8x5.6x18mm
J	2.6x5.2x18mm
K	2.5x5.0x18mm
L	2.4x4.8x18mm
M	2.3x4.6x18mm
N	2.1x4.2x18mm
O	2.0x4.0x18mm
P	1.9x3.8x18mm
Q	1.7x3.4x18mm
R	1.5x3.0x18mm
S	1.3x2.6x15mm
T	1.1x2.2x10mm
U	0.9x1.8x10mm
V	0.7x1.4x10mm

**ROUND ALUMINUM SLEEVE**



A	6.5X3.7X12mm
B	6.1X3.5X12mm
C	5.3X3.0X12mm
D	5.2X2.9X10mm
E	5.1X2.8X10mm
F	4.9X2.7X10mm
G	4.7X2.5X10mm
H	4.4X2.3X10mm
I	4.2X2.1X10mm
J	4.0X1.9X8mm
K	3.8X1.7X8mm
L	3.4X1.5X8mm
M	2.9X1.3X8mm
N	2.0X1.1X10mm

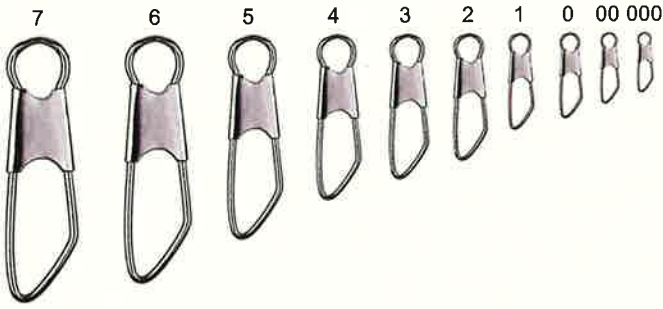
**DOUBLE ALUMINUM SLEEVE**



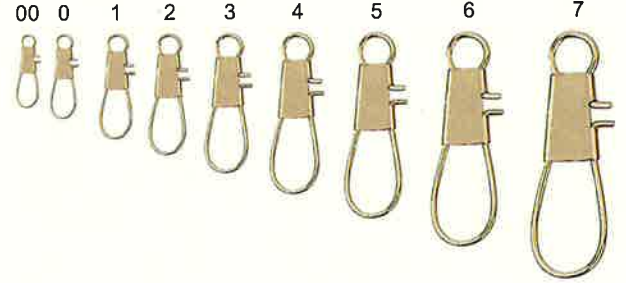
A	6.0X12X20mm
B	5.0X10X20mm
C	4.5X9.0X20mm
D	4.0X8.0X20mm
E	3.0X6.0X15mm
F	2.5X5.0X15mm
G	2.3X4.6X15mm
H	2.1X4.2X15mm
I	1.9X3.8X15mm
J	1.7X3.4X15mm
K	1.5X3.0X12mm
L	1.3X2.6X12mm
M	1.1X2.2X12mm
N	0.9X1.8X12mm
O	0.7X1.4X12mm



**SAFETY SNAP**



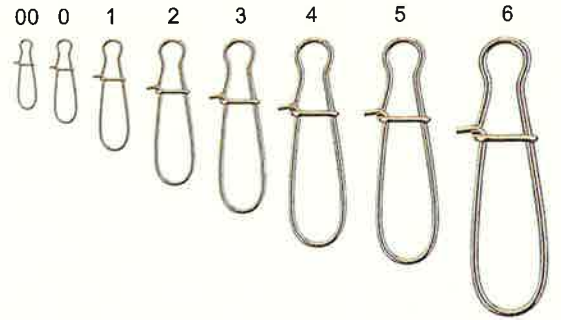
**INTERLOCK SNAP**



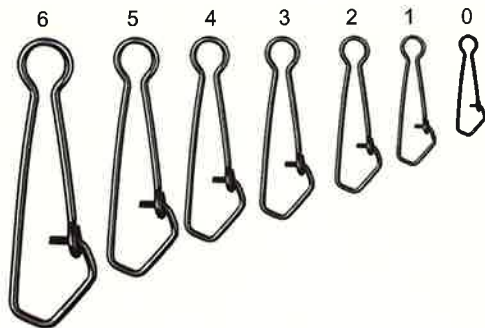
**LOCK SNAP**



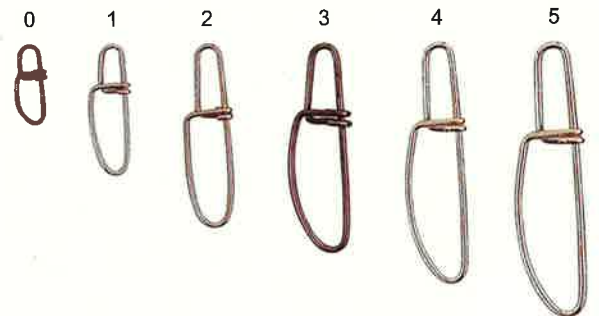
**NICE SNAP**



**HOOK SNAP**



**COST LOCK SNAP**



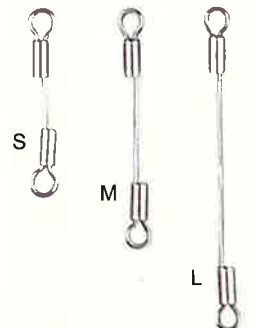
**SCANDI SNAP**

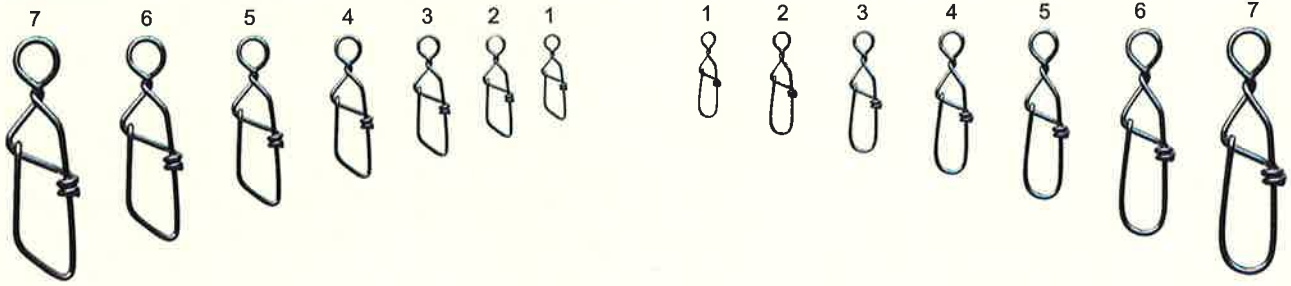


**HAWAII SNAP**

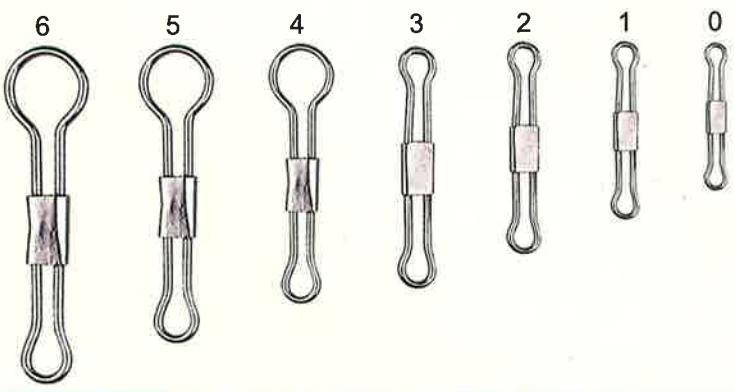
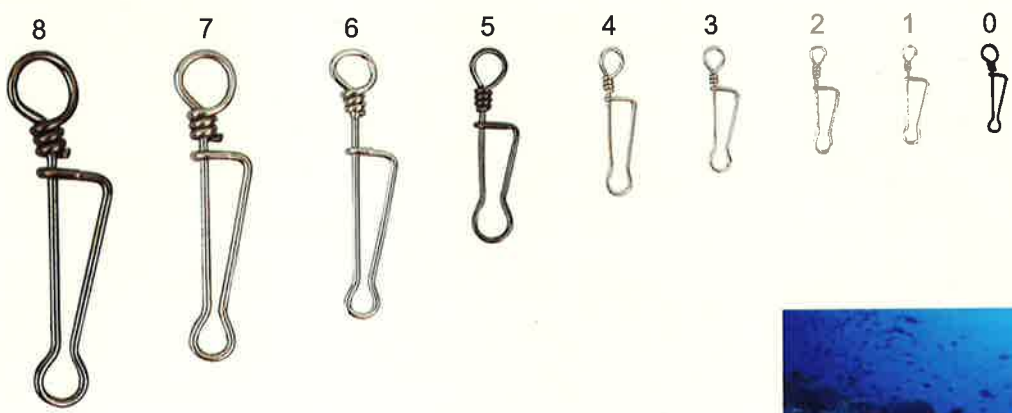


**TWO-SIDE SNAP**

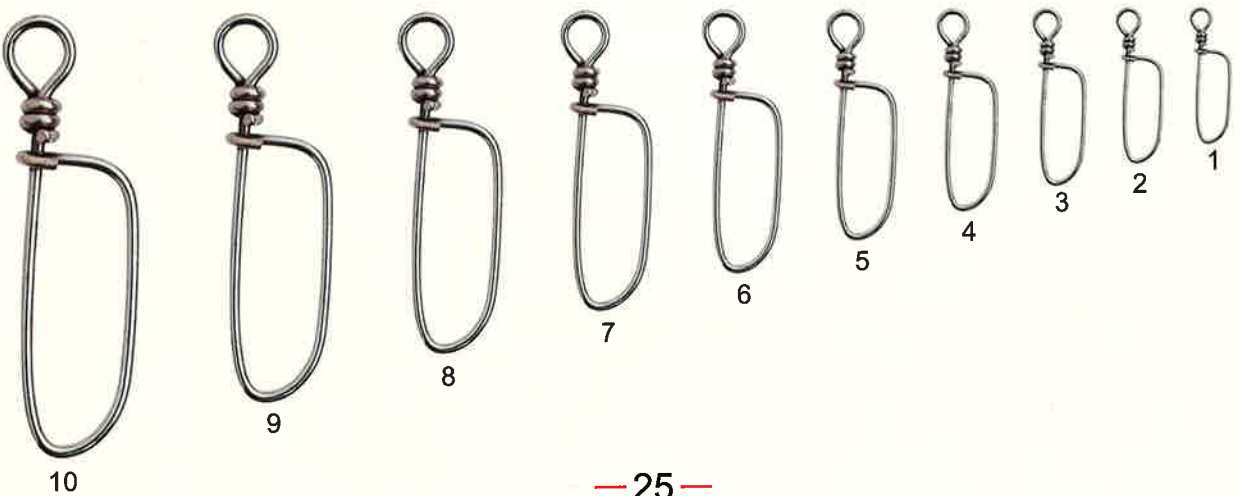




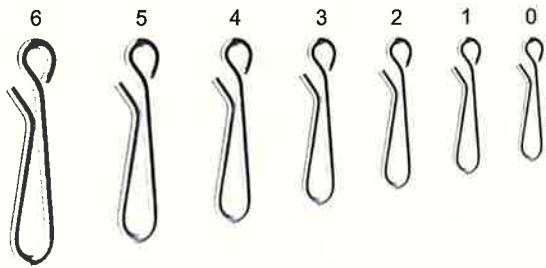
**ITALLAN SNAP**



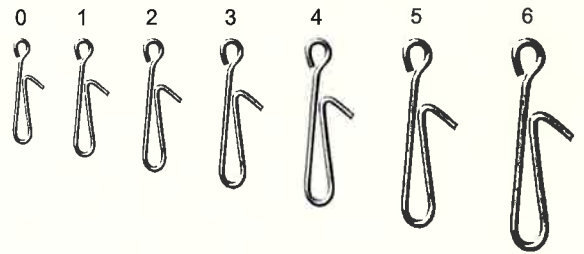
**COASTLOCK SNAP**



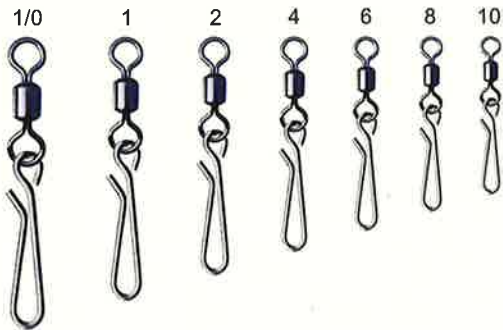
**HANGING SNAP(A)**



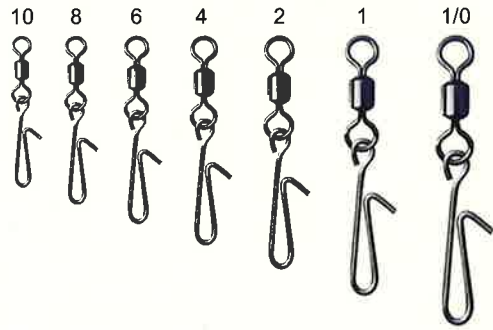
**HANGING SNAP(B)**



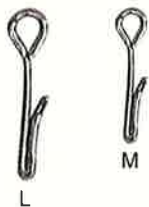
**ROLLING SWIVEL WITH HANGING SNAP(A)**



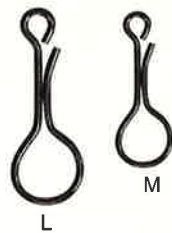
**ROLLING SWIVEL WITH HANGING SNAP(B)**



**Q SHANPED SANP(A)**



**Q SHANPED SANP(B)**



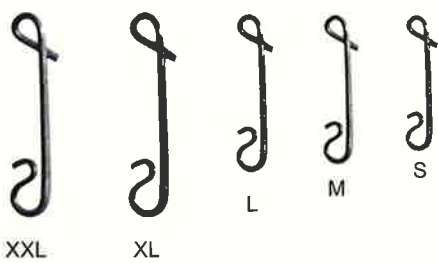
**BACK TO BACK SNAP**



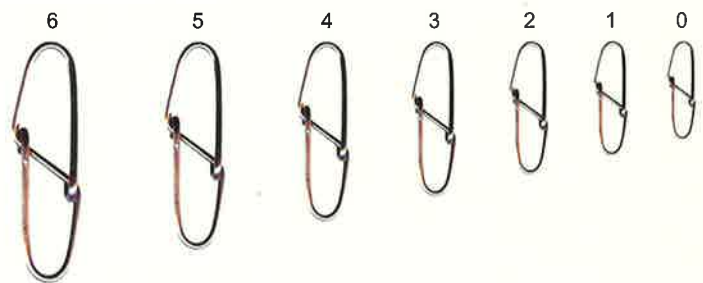
**DOUBLE WAY SNAP**

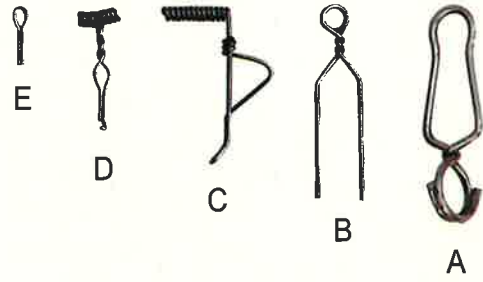
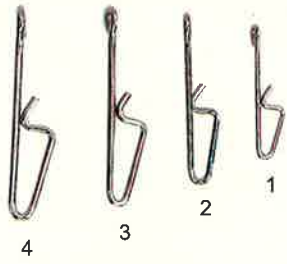


**WRAPPING SNAP**



**DIAMOND INSURANCE SNAP**





A



B



C



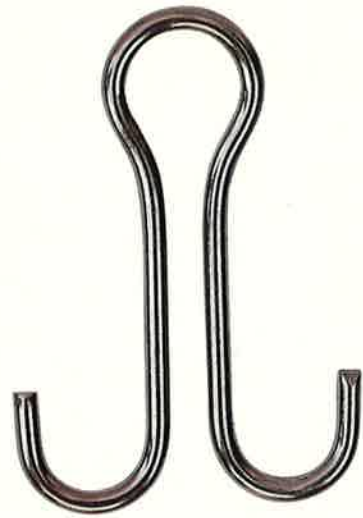
D



S



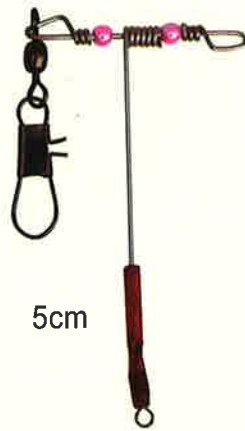
M



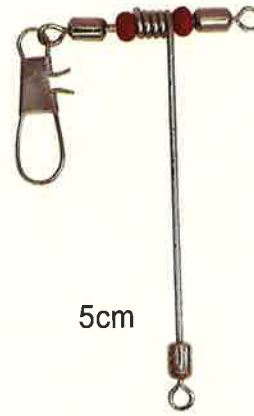
L



10cm



5cm



5cm



10cm



A



B

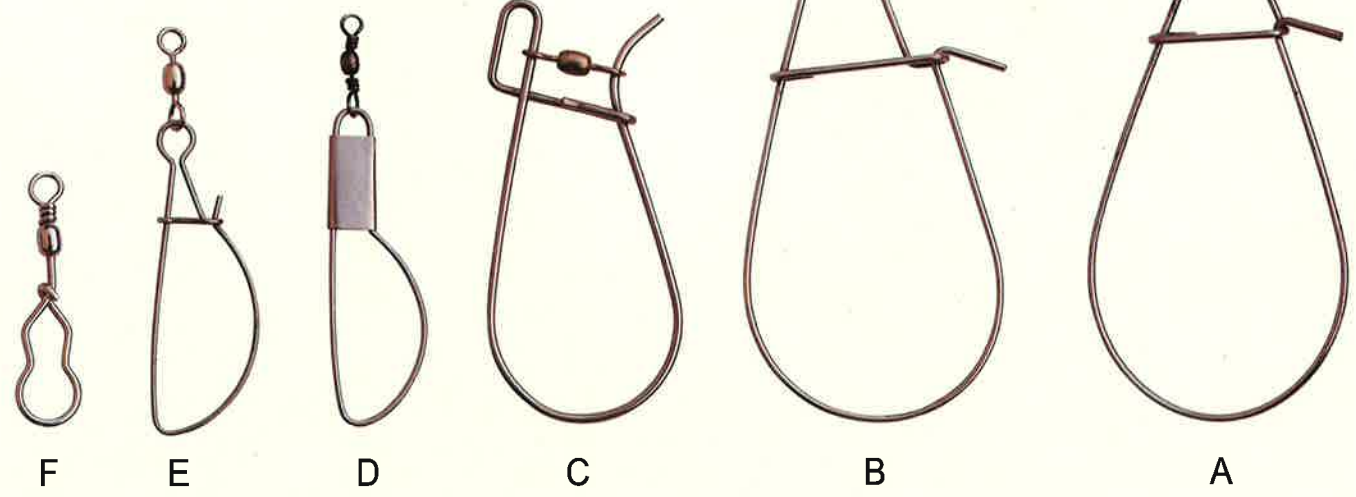
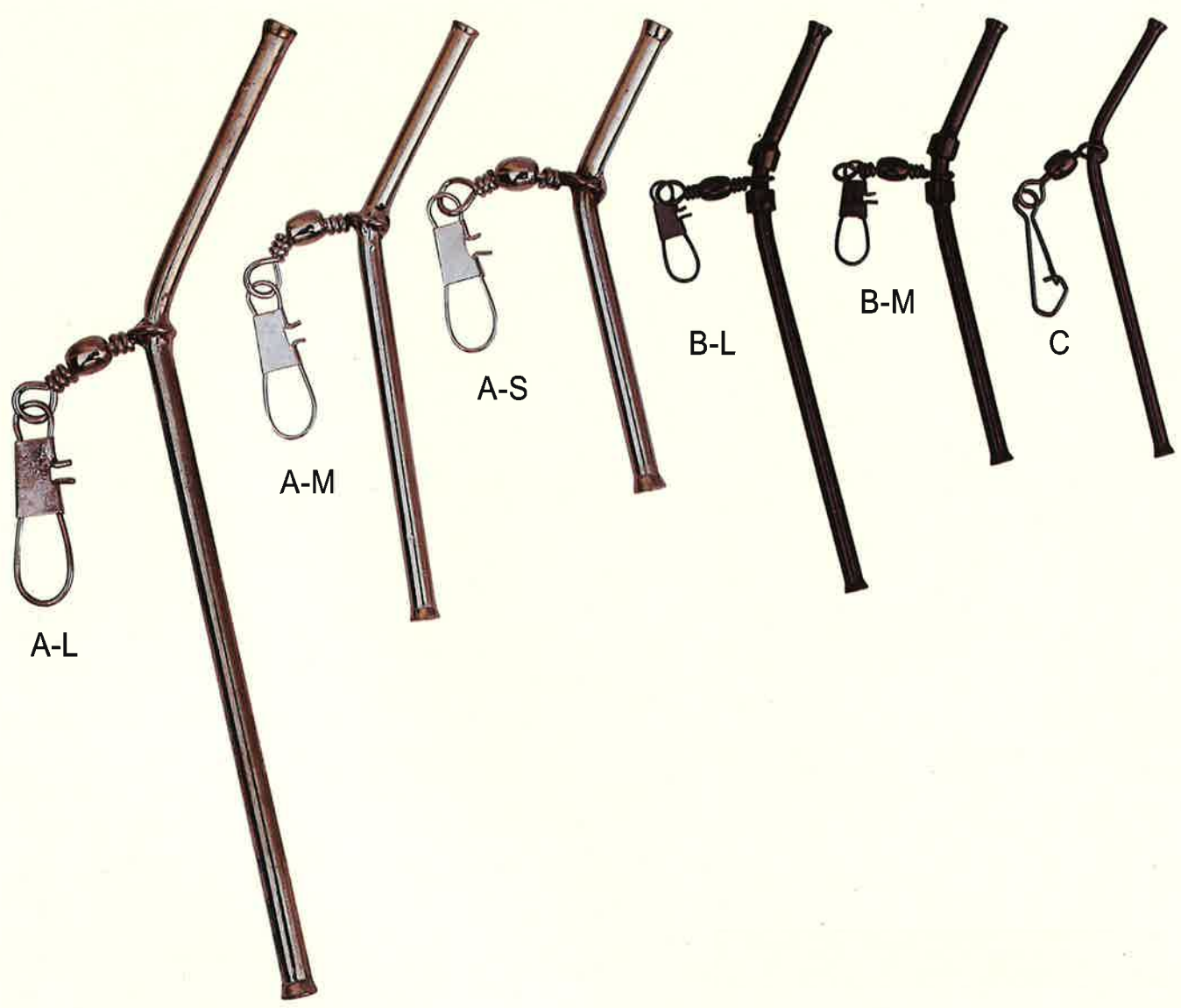


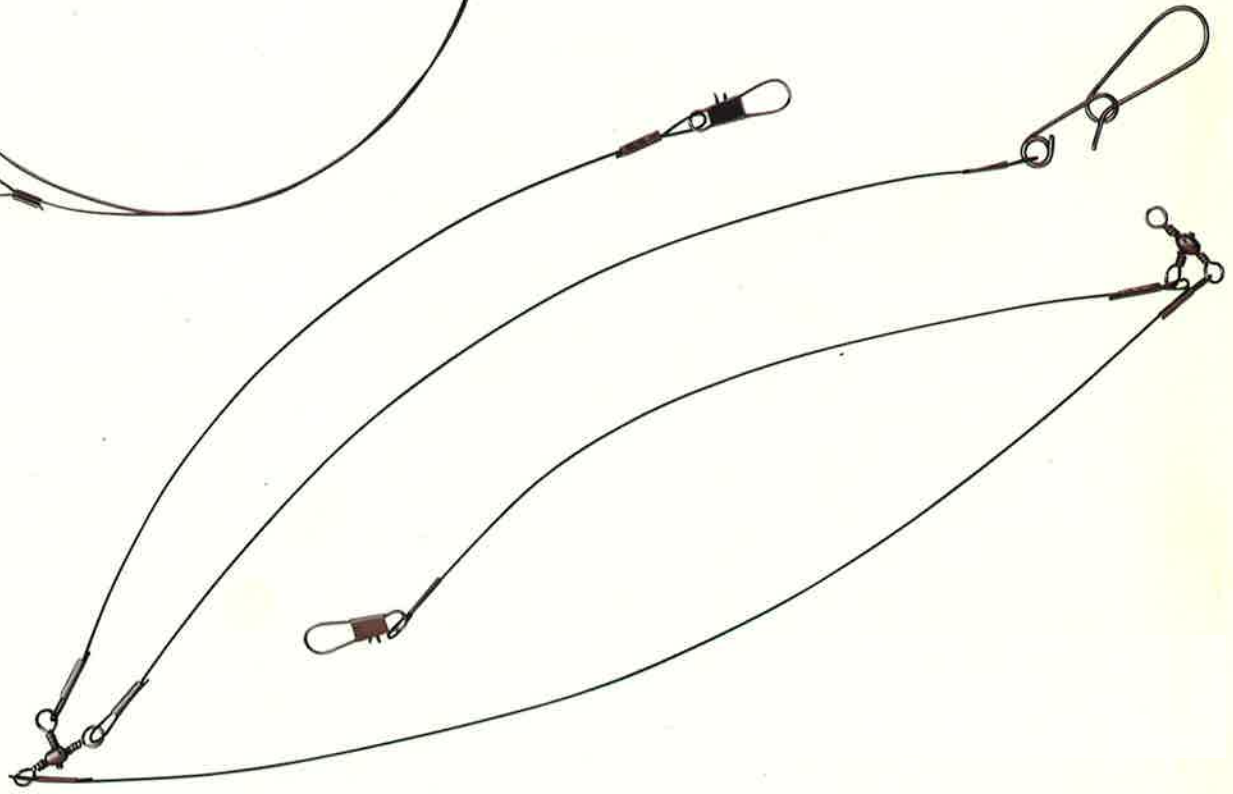
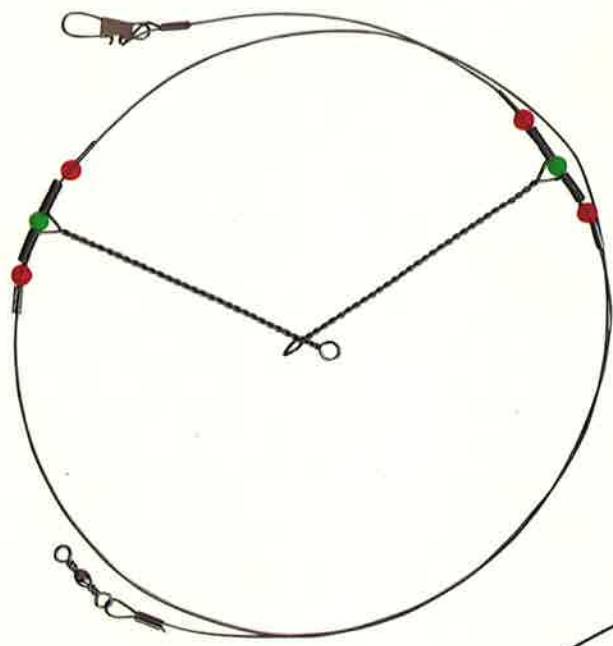
C

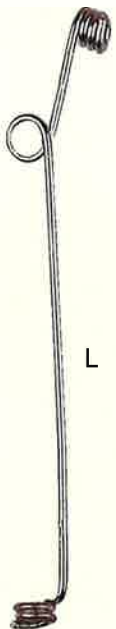
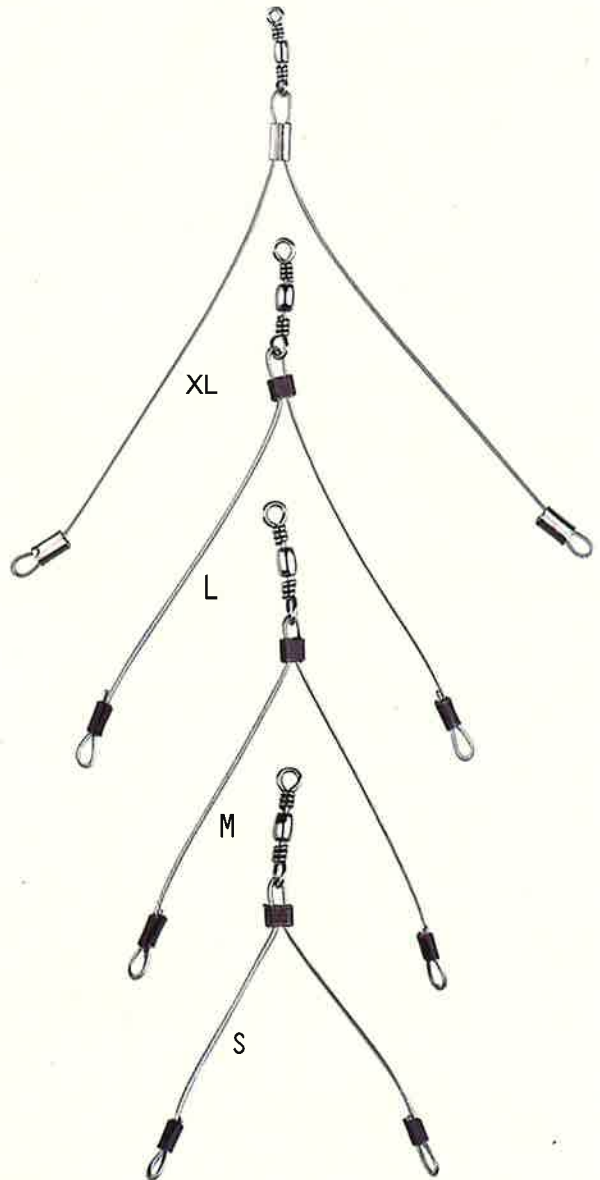
Type	Size
S-1	φ 3.8 x 125mm)
S-2	φ 3.5 x 125mm)
S-3	φ 3.0 x 110mm)
S-4	φ 2.6 x 100mm)
S-5	φ 2.0 x 80mm)
S-6	φ 1.8 x 60mm)

Type	Size
1	A-TYPE SNAP 1"+SINGLE SWIVEL 1"
2	A-TYPE SNAP 2"+SINGLE SWIVEL 2"
3	A-TYPE SNAP 3"+SINGLE SWIVEL 3"
4	A-TYPE SNAP 4"+SINGLE SWIVEL 4"
5	A-TYPE SNAP 5"+SINGLE SWIVEL 5"
6	A-TYPE SNAP 6"+SINGLE SWIVEL 6"

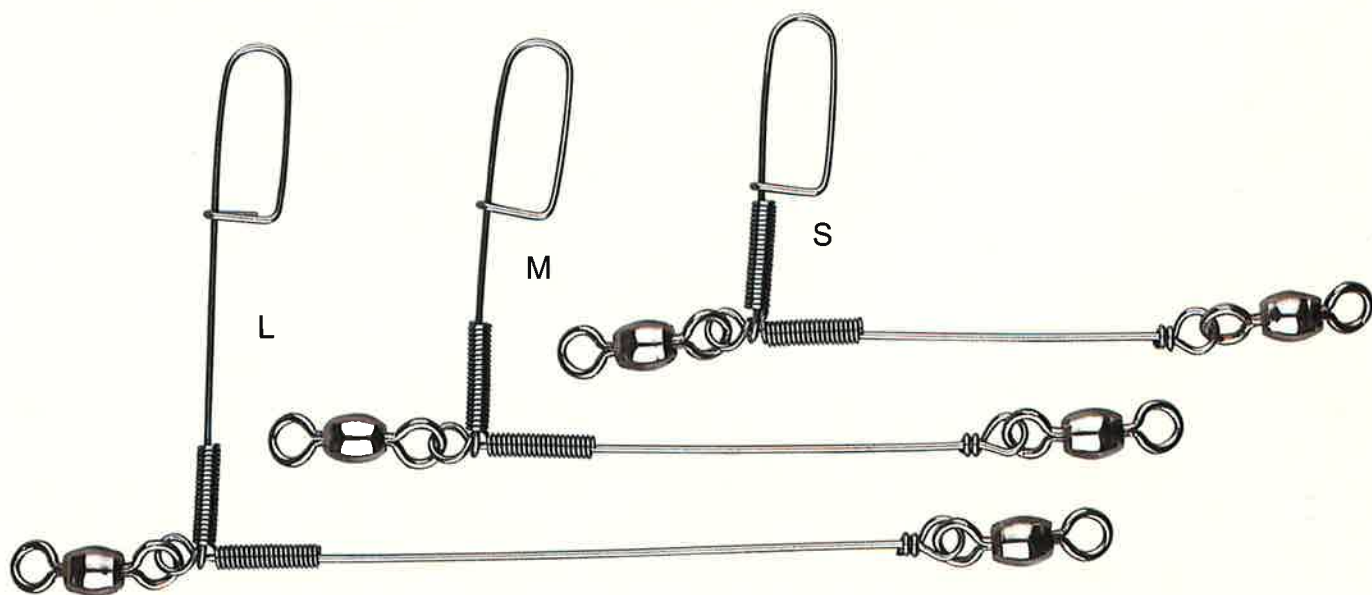
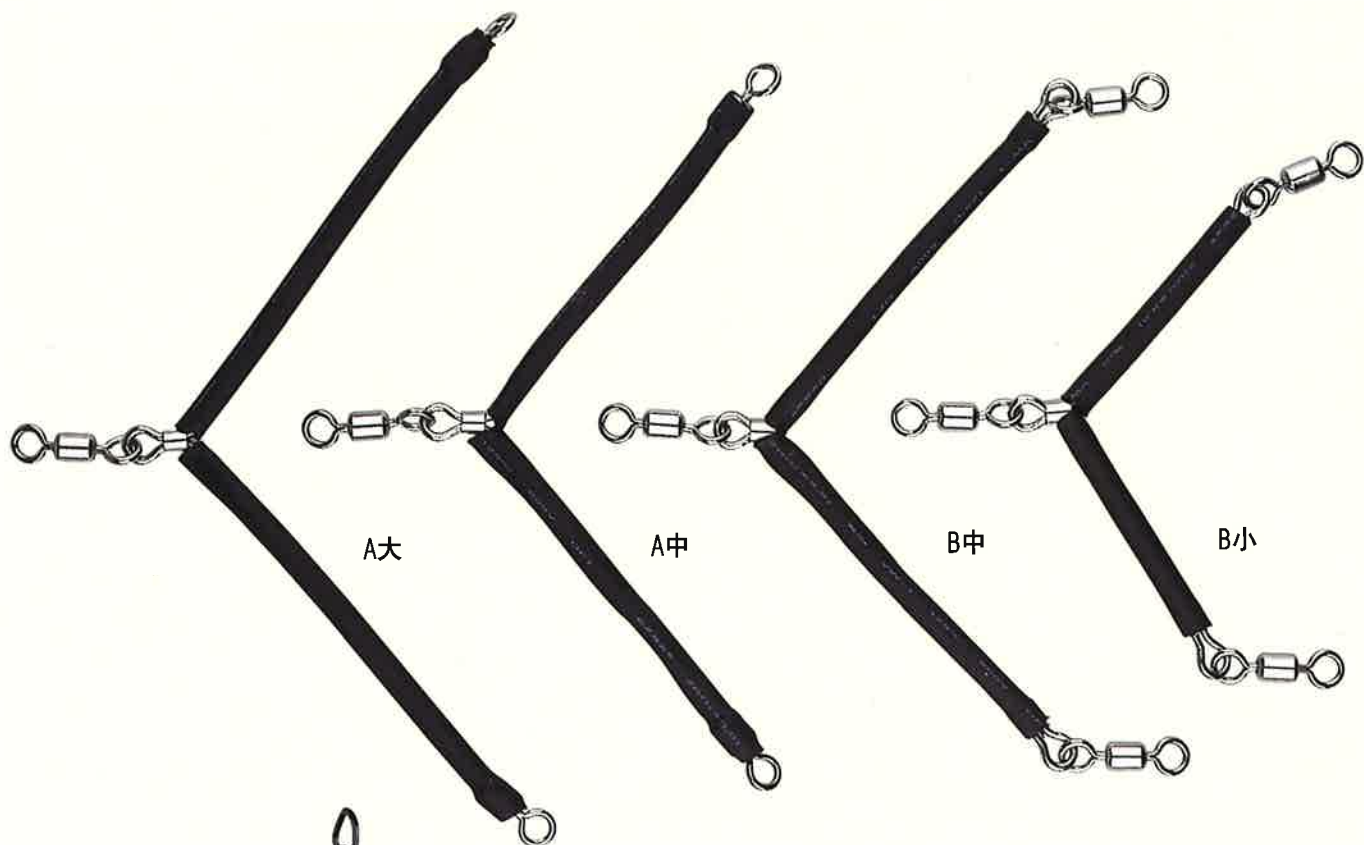
Type	Size
1	B-TYPE SNAP 1"(φ 3.75 X 135mm)+SINGLE SWIVEL 1"
2	B-TYPE SNAP 2"(φ 3.5 X 125mm)+ SINGLE SWIVEL 2"
3	B-TYPE SNAP 3"(φ 3.0 X 115mm)+SINGLE SWIVEL 3"
4	B-TYPE SNAP 4"(φ 2.6 x 100mm)+SINGLE SWIVEL 4"

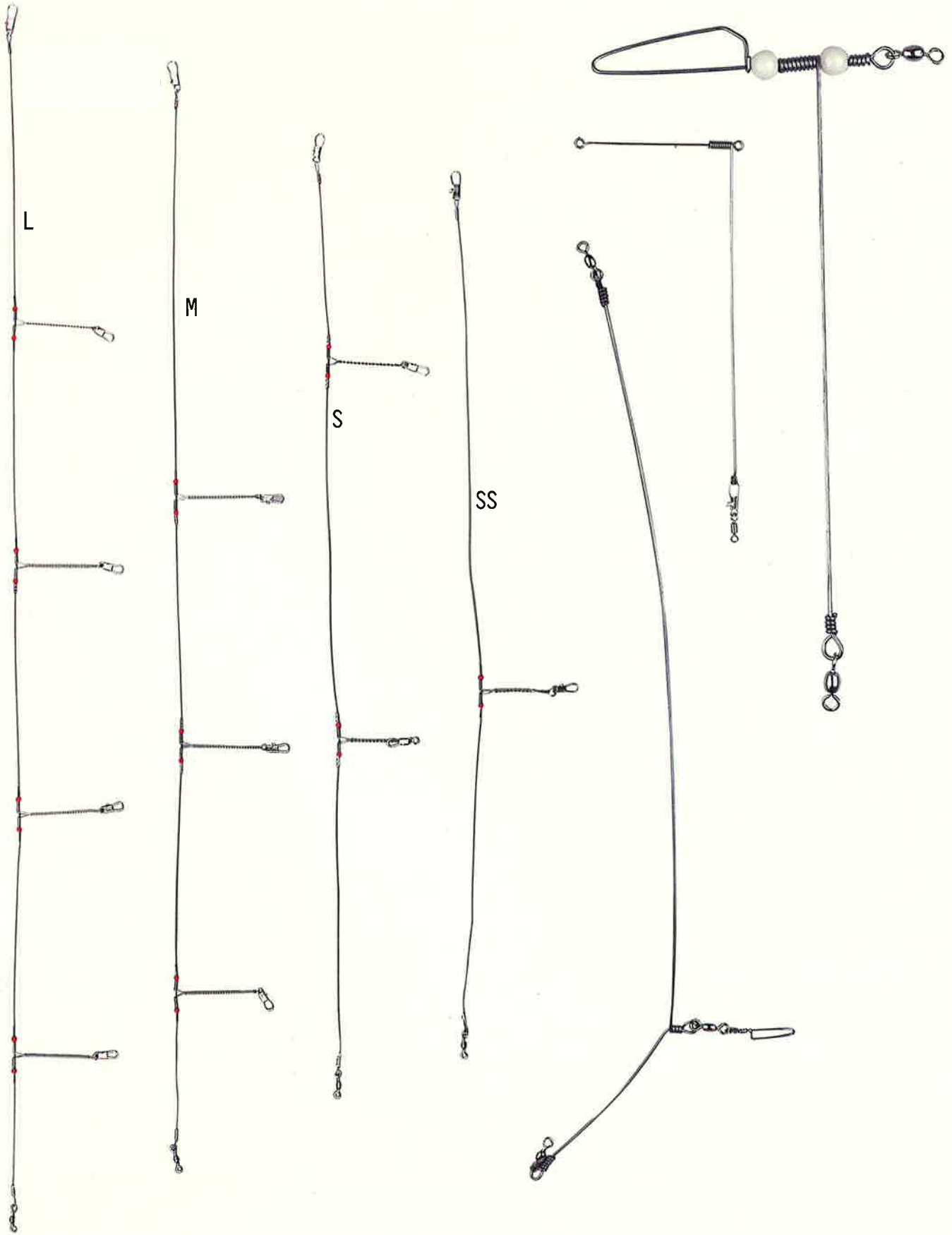


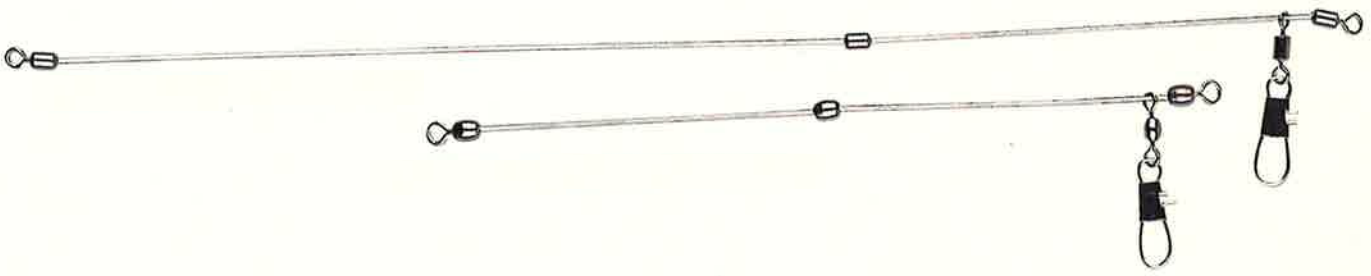
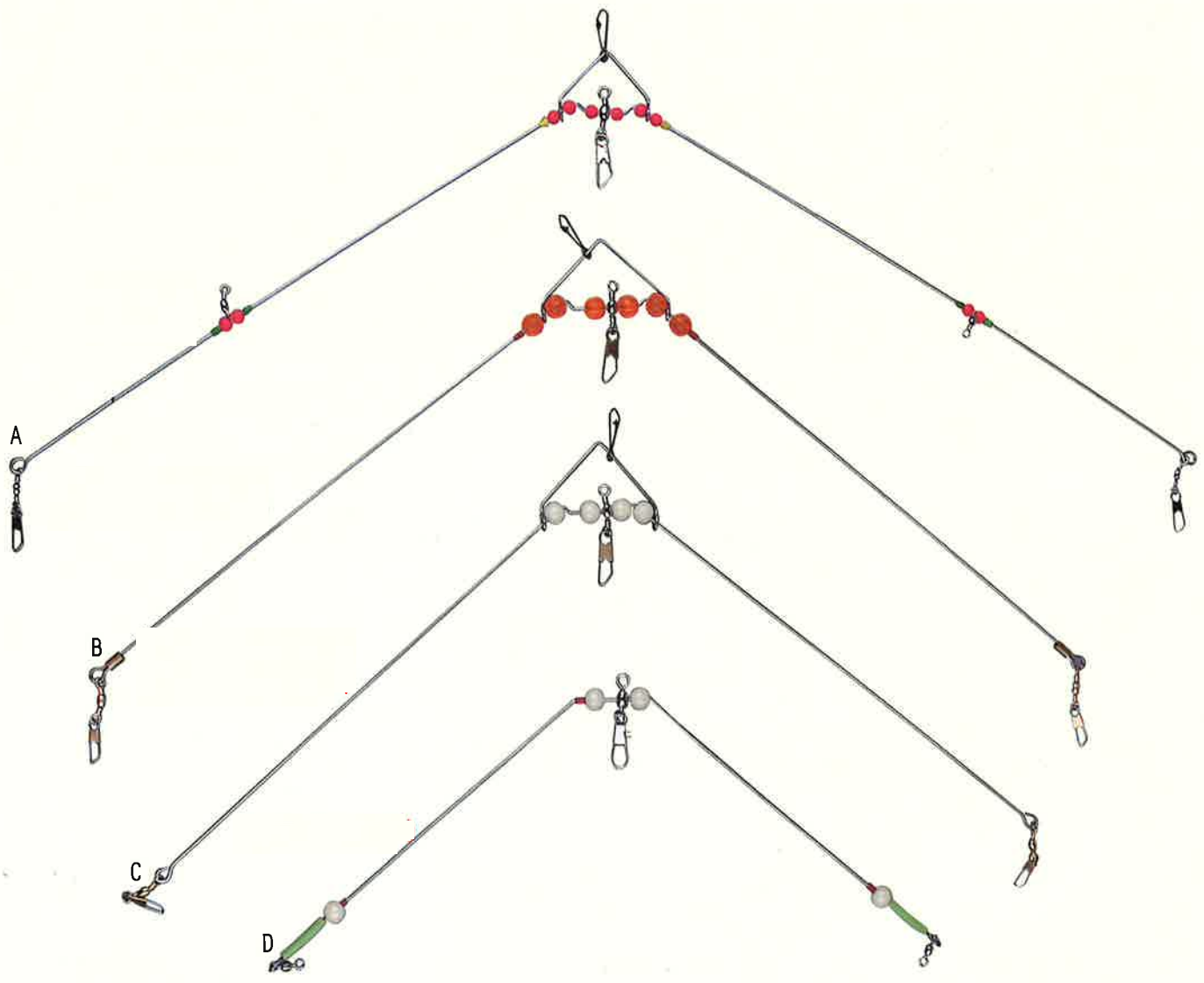


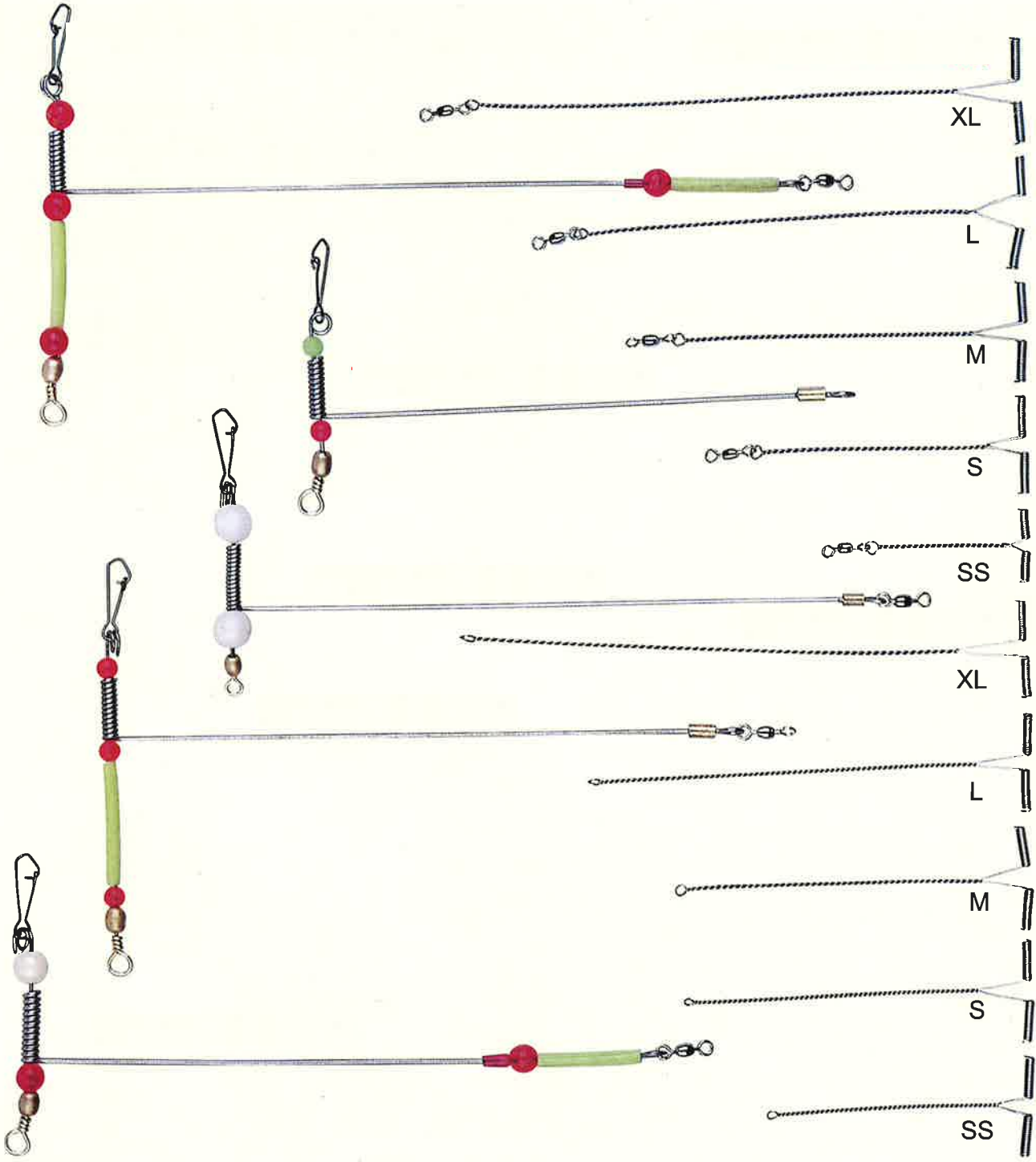












**WIRE LEADER**

