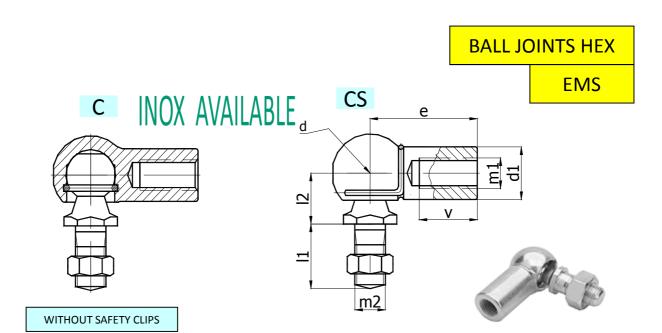


KIINNITTIMET 2015



Oinonen Tooling

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C-CS BALL JOINTS-BALL STUD WITH HEXAGONAL

Standard based on DIN 71802 - Metric sizes

For a quotation, please look at below types and select the part number(s) you require.

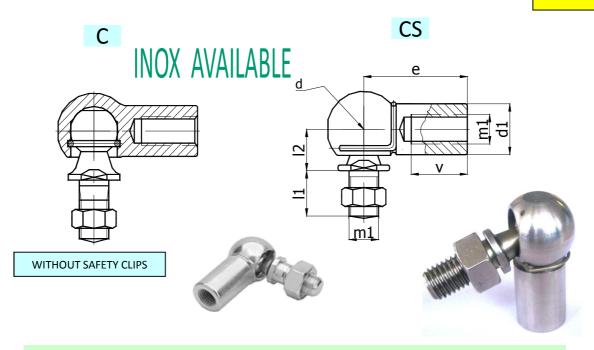
Material: 11S Mn Pb 30K (SAE 12L14),

Protective Finish: Zinc plated and yellow, white or black passivated. The assembly is lubricated. **You can look at technical pages for further information. See; Technical Pages.**

CC	DDE	d H9/h9	m1	m2	l1	I 2	d1	е	v	sw	weight (g)
HT1	HTS1	Ø8	M5	M5	10	9	8	22	10,2	8	15,2
HT2	HTS2	Ø10	M6	M6	13	11	10	25	11,5	10	25,2
HT2-M8	HTS2-M8	Ø10	M8	M8	13	11	10	25	11,5	13	25,2
HT2-21-M6	HTS2-21-M6	Ø10	M6	M6	12	11	10	21	11,5	10	22,2
HT2-21-M8	HTS2-21-M8	Ø10	M6	M8	13	11	10	21	11,5	13	22,2
HT2-19-M6	HTS2-19-M6	Ø10	M6	M8	13	11	10	19	11,5	13	20,2
HT2-19-M8	HTS2-19-M8	Ø10	M8	M8	13	11	10	19	11,5	13	20,2
HT2-18-M6	HTS2-18-M6	Ø10	M6	M6	12	11	10	18	11,5	10	19,2
HT2-18-M8	HTS2-18-M8	Ø10	M6	M8	13	11	10	18	11,5	13	19,2
HT3-25	HTS3-25	Ø13	M8	M8	16	13	13	25	14	13	45,3
HT3	HTS3	Ø13	M8	M8	16	13	13	30	14	13	53,1
HT4	HTS4	Ø16	M10	M10	19	16	16	35	15,5	17	103,8
HT5	HTS5	Ø16	M12	M12	19	16	16	35	15,5	17	103,8
HT6	HTS6	Ø19	M14X1.5	M14X1.5	27	20	22	45	21,5	20	220,9
HT7	HTS7	Ø19	M14X2	M14X2	27	20	22	45	21,5	20	220,9
HT8	HTS8	Ø19	M16	M16	27	20	22	45	21,5	20	220,9

C CS

EMS



C-CS BALL JOINTS

Standard based on DIN 71802 - Metric sizes

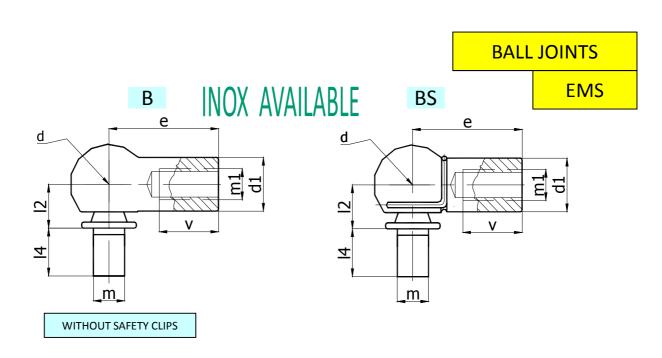
For a quotation, please look at below types and select the part number(s) you require.

Material: 11S Mn Pb 30K (SAE 12L14),

Protective Finish: Zinc plated and yellow, white or black passivated. The assembly is lubricated. You can look at technical pages for further information. See; Technical Pages.

CC	DE	d H9/h9	m1	l1	I2	d1	е	v	sw	weight (g)
T1	TS1	Ø8	M5	10	9	8	22	10,2	7	15,2
T2	TS2	Ø10	M6	12	11	10	25	11,5	8	25,2
T3	TS3	Ø13	M8	16	13	13	30	14	11	53,1
T4	TS4	Ø16	M10	19	16	16	35	15,5	13	103,8
T5	TS5	Ø16	M12	19	16	16	35	15,5	13	103,8
T6	TS6	Ø19	M14X1.5	27	20	22	45	21,5	16	220,9
T7	TS7	Ø19	M14X2	27	20	22	45	21,5	16	220,9
T8	TS8	Ø19	M16	27	20	22	45	21,5	16	220,9

C CS



B-BS BALL JOINTS

Standard based on DIN 71802 - Metric sizes

For a quotation, please look at below types and select the part number(s) you require.

Material: 11S Mn Pb 30K (SAE 12L14),

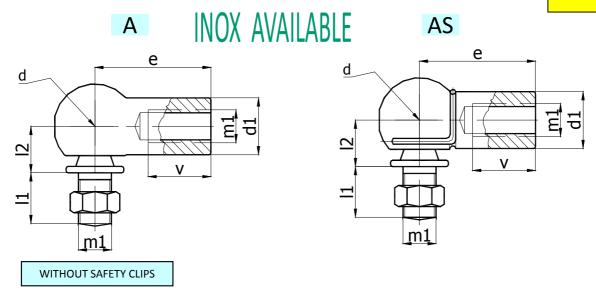
Protective Finish: Zinc plated and yellow, white or black passivated. The assembly is lubricated. **You can look at technical pages for further information. See; Technical Pages.**

OEM	CODE	d H9/h9	m1	m h11	I2	14	d1	е	v	weight (g)
TR1	TRS1	Ø8	M5	5	9	4	8	22	10,2	12,9
TR2	TRS2	Ø8	M5	5	9	7,5	8	22	10,2	13,4
TR3	TRS3	Ø10	M6	6	11	4,5	10	25	11,5	21,3
TR4	TRS4	Ø10	M6	6	11	8	10	25	11,5	22
TR5	TRS5	Ø13	M8	8	13	5	13	30	14	43,2
TR6	TRS6	Ø13	M8	8	13	10	13	30	14	45
TR7	TRS7	Ø16	M10	10	16	6	16	35	15,5	82,3
TR8	TRS8	Ø16	M10	10	16	13	16	35	15,5	86,6
TR9	TRS9	Ø16	M12	10	16	6	16	35	15,5	82,3
TR10	TRS10	Ø16	M12	10	16	13	16	35	15,5	86,6
TR11	TRS11	Ø19	M14X1.5	14	20	12	22	45	21,5	181
TR12	TRS12	Ø19	M14X2	14	20	12	22	45	21,5	181
TR13	TRS13	Ø19	M16	14	20	18	22	45	21,5	189

B BS

BALL JOINTS

EMS



A-AS BALL JOINTS

Standard based on DIN 71802 - Metric sizes

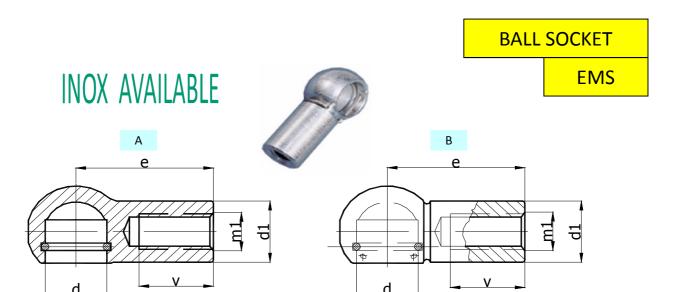
For a quotation, please look at below types and select the part number(s) you require.

Material: 11S Mn Pb 30K (SAE 12L14),

Protective Finish: Zinc plated and yellow, white or black passivated. The assembly is lubricated. **You can look at technical pages for further information. See; Technical Pages.**

CC	CODE d		m2	l1	I2	d1	Φ	V	weight (g)
TA1	TAS1	Ø8	M5	10	9	8	22	10,2	15,2
TA2	TAS2	Ø10	M6	12	11	10	25	11,5	25,2
TA3	TAS3	Ø13	M8	16	13	13	30	14	53,1
TA4	TAS4	Ø16	M10	19	16	16	35	15,5	103,8
TA5	TAS5	Ø16	M12	19	16	16	35	15,5	103,8
TA6	TAS6	Ø19	M14X1.5	27	20	22	45	21,5	220,9
TA7	TAS7	Ø19	M14X2	27	20	22	45	21,5	220,9
TA8	TAS8	Ø19	M16	27	20	22	45	21,5	220,9

A AS



BALL SOCKET **A** AND **B** FORM

Standard based on DIN 71805 - Metric sizes

For a quotation, please look at below types and select the part number(s) you require.

Below codes for B types. You should add "A" for types A. RD1-A

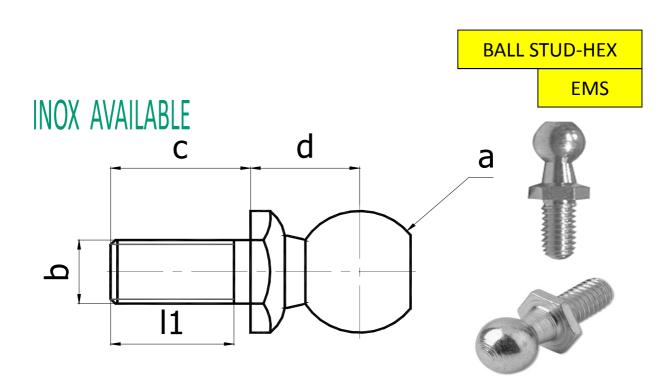
Material: 11S Mn Pb 30K (SAE 12L14),

Protective Finish: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.

CODE	d h9	m1	е	v	d1	weight (g)	
RD1	Ø8	M5	22	10,2	8	9,0	
RD2	Ø10	M6	25	11,5	10	14,2	
RD2-M8	Ø10	M8	25	11,5	10	14,2	
RD2-18-M6	Ø10	M6	18	11,5	10	10,2	
RD2-19-M8	Ø10	M8	19	11,5	10	10,2	
RD2-19-M6	Ø10	M6	19	11,5	10	10,2	
RD2-21-M6	Ø10	M6	21	11,5	10	11,2	
RD2-21-M8	Ø10	M8	21	11,5	10	11,2	B
RD2-22-M6	Ø10	M6	22	11,5	10	12,2	$\mathbf{\Sigma}$
RD2-22-M8	Ø10	M8	22	11,5	10	12,2	FORM
RD3	Ø13	M8	30	14	13	29,0	0
RD3-M10	Ø13	M10	30	14	13	29,0	F(
RD3-25	Ø13	M8	25	14	13	29,0	
RD4	Ø16	M10	35	15,5	16	57,0	
RD4-M8	Ø16	M8	35	15,5	16	57,0	
RD4-30	Ø16	M10	30	15,5	16	50,0	
RD4-30-M8	Ø16	M8	30	15,5	16	50,0	
RD5	Ø16	M12	35	15,5	16	57,0	
RD6	Ø19	M14X1.5	45	21,5	22	125,0	
RD7	Ø19	M14X2	45	21,5	22	125,0	
RD8	Ø19	M16	45	21,5	22	125,0	

FORM A: THE SAFETY CLIP IS NOT ON THE BALL SOCKET



BALL STUD WITH HEXAGONAL

Standard based on DIN 71803 - Metric sizes

For a quotation, please look at below types and select the part number(s) you require.

Material: 11S Mn Pb 30K (SAE 12L14),

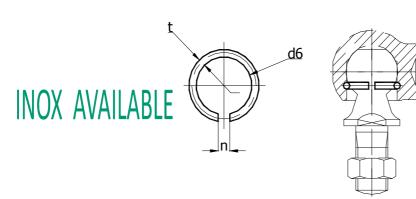
Protective Finish: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.

CODE	a/h9	b	d	С	11	sw	weight (g)
TOR1	Ø8	M5	9	10	8	8	15,2
TOR2	Ø10	M6	11	12	10	10	25,2
TOR3	Ø10	M8	11	12	10	10	25,2
TOR3-13	Ø10	M8	11	12	10	13	25,2
TOR4	Ø13	M8	13	16	14	13	53,1
TOR5	Ø16	M10	16	19	16	17	103,8
TOR6	Ø16	M12	16	19	16	17	103,8
TOR7	Ø19	M14X1.5	20	28	17	19	220,9
TOR8	Ø19	M14X2	20	28	17	19	220,9
TOR9	Ø19	M16	20	28	17	19	220,9

BALL CUP

EMS



OEM CODE	Description	d6	t	n	weight (g)
TN1	R 8	7.2	1.0	3.9	0.14
TN2	R10	8.9	1.2	4.5	0.26
TN3	R13	11.2	1.5	4.7	0.56
TN4	R16	13.9	1.8	5.5	0.93
TN5	R19	17.0	2.0	7.5	1.39

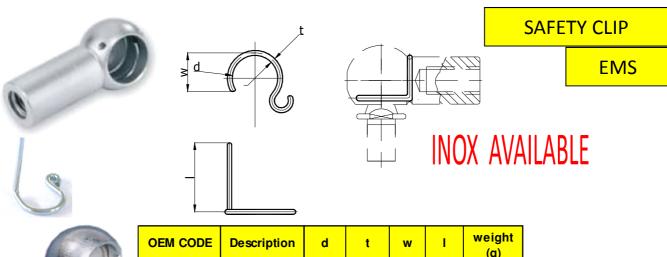
BALL CUP and SAFETY CLIP

Standard based on DIN 71805

For a quotation, please look at below types and select the part number(s) you require.

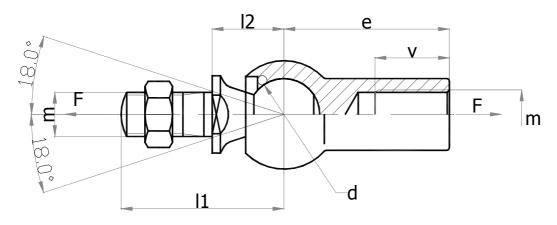
Material: DIN 17223

Protective Finish: Zinc plated and yellow, white or black passivated. You can look at technical pages for further information. See; Technical Pages.





OEM CODE	Description	d	t	w	ı	weight (g)
TRN1	S 8	7,0	1,0	6,5	12,0	0,21
TRN2	S 10	8,7	1,0	7,7	12,5	0,24
TRN3	S 13	11,0	1,2	9,5	15,7	0,46
TRN4	S 16	13,0	1,4	11,0	19,0	0,77
TRN5	S 19	20,0	1,5	16,5	24,0	1,10





AXIAL BALL JOINT

Standard based on DIN 71802 - Metric sizes

For a quotation, please look at below types and select the part number(s) you require.

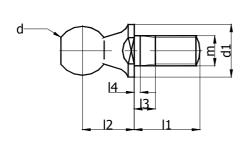
Material: 11S Mn Pb 30K (SAE 12L14),

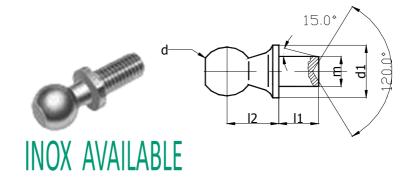
Protective Finish: Zinc plated and yellow, white or black passivated. The assembly is lubricated. **You can look at technical pages for further information. See; Technical Pages.**

CODE	d h9	m1	е	l1	12	v	Pull Force (N)	weight (g)
ORN1	Ø8	M5	22	19,2	9	10,2	30	15,2
ORN2	Ø10	M6	25	23,5	11	11,5	40	25,2
ORN3	Ø13	M8	30	29,5	13	14,0	60	53,1
ORN4	Ø16	M10	35	36	16	15,5	80	103,8
ORN5	Ø19	M14x1.5	45	48	20	21,5	100	220,9

BALL STUD

EMS





FORM C

FORM B

CODE	d h9	m	11	12	d1	I4 min	I3 max	sw	weight (g)	
R1	Ø8	M5	10,2	9	8	1,2	4,0	7	4,55	O
R2	Ø10	M6	12,5	11	10	1,2	4,0	8	8,5	
R3	Ø13	M8	16,5	13	13	1,5	5,3	11	17,7	Σ
R4	Ø16	M10	20,0	16	16	2,5	7,3	13	35,1	<u>片</u>
R5	Ø16	M12	20,0	16	16	2,5	7,3	13	35,1	
R6	Ø19	M14X1.5	28,0	20	19	5	10,8	16	71,2	
R7	Ø19	M14X2	28,0	20	19	5	10,8	16	71,2	
R8	Ø19	M16	28,0	20	19	5	10,8	16	71,2	

CODE	d h9	l1	12	m h11	d1	weight (g)	
OR1	Ø8	4,0	9	5	8	3,85	
OR2	Ø8	7,5	9	5	8	4,35	m
OR3	Ø10	4,5	11	6	10	7,1	
OR4	Ø10	8,0	11	6	10	7,8	R
OR5	Ø13	5,0	13	8	13	14,2	F
OR6	Ø13	10,0	13	8	13	16	0
OR7	Ø16	6,0	16	10	16	23,5	Щ
OR8	Ø16	13,0	16	10	16	29,6	
OR9	Ø19	12,0	20	14	19	56,2	
OR10	Ø19	18,0	20	14	19	63,7	

BALL STUD

Standard based on DIN 71803 - Metric sizes

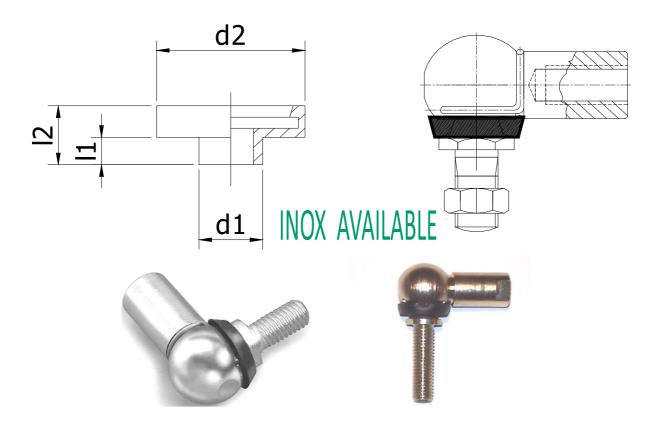
For a quotation, please look at below types and select the part number(s) you require.

Material: 11S Mn Pb 30K (SAE 12L14),

Protective Finish: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.

EMS



CODE	d h9	d2	d1	12	l1	weight KG/1000pcs
DO1	Ø8	12,0	5,5	4,5	1,5	0,240
DO2	Ø10	13,5	6,5	6,5	3,5	0,368
DO3	Ø13	17,5	7,5	7,5	3,5	0,847
DO4	Ø16	22,0	8,5	8,5	4,5	1,066
DO5	Ø19	25,5	12,5	12,5	7,0	1,975

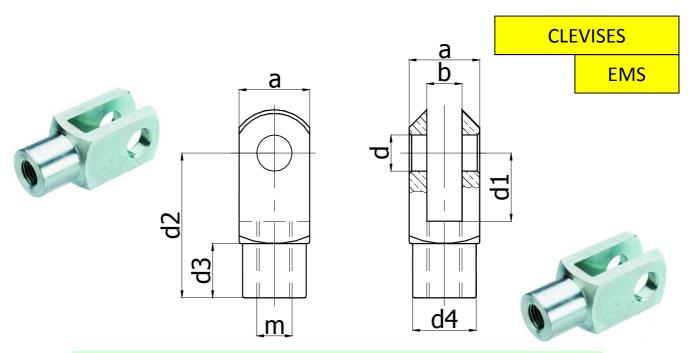
SEALING CAP

Protection against dust, dirt, water splashes, vapours.

For a quotation, please look at types and select the part number(s) you require.

Material: Neoprene

You can look at technical pages for further information. See; Technical Pages.



CLEVISES

Standard based on DIN 71752 - Metric sizes

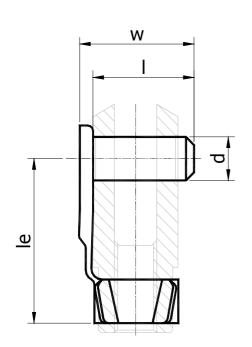
For a quotation, please look at below types and select the part number(s) you require.

Material: 11S Mn Pb 30K (SAE 12L14),

Protective Finish: Zinc plated and yellow, white or black passivated.

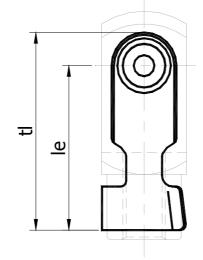
You can look at technical pages for further information. See; Technical Pages. With metric fine-pitch thread, m=M8x1,25 only add "FP" on the code. TO7FP

CODE	m 6H	а	d H9	b	d2	d4	d3	d1	m 6H	Weight (gr.)
TO1	4X8	8	4	4	16	8	6	8	M 4	5
TO2	4X16	8	4	4	24	8	6	16	M 4	7
TO3	5X10	10	5	5	20	9	7,5	10	M 5	9
TO4	5X20	10	5	5	30	9	7,5	20	M 5	12
TO5	6X12	12	6	6	24	10	9	12	M 6	15
TO6	6X24	12	6	6	36	10	9	24	M 6	20
TO7	8X16	16	8	8	32	14	12	16	M 8	36
TO8	8X32	16	8	8	48	14	12	32	M 8	52
TO9	10X20	20	10	10	40	18	15	20	M 10	72
TO10	10X40	20	10	10	60	18	15	40	M 10	102
TO11	12X24	24	12	12	48	20	18	24	M 12	115
TO12	12X48	24	12	12	72	20	18	48	M 12	167
TO13	14X28	27	14	14	56	24	22,5	28	M14	171
TO14	14X56	27	14	14	85	24	22,5	56	M14	250
TO15	16X32	32	16	16	64	26	24	32	M16	268
TO16	16X64	32	16	16	96	26	24	64	M16	392
TO17	20X40	40	20	20	80	34	30	40	M20X2,5	520
TO18	25X50	50	25	25	100	42	36	50	M24X3,0	1080
TO19	28X56	55	28	28	112	48	40	56	M27X3,0	1500
TO20	30X60	60	30	30	120	52	42	60	M30X3,5	1940
TO21	36X72	70	35	35	144	60	54	72	M36X4,0	2950
TO22	42X84	85	42	42	168	70	64	84	M42X4,5	6100





EMS





PIN and CLIPS OF CLEVISES

For a quotation, please look at below types and select the part number(s) you require.

Material: PIN: 11SMnPb30 CLIPS: CK67

Protective Finish: Zinc plated and yellow, white, black passivated. (Standard application) **You can look at technical pages for further information. See; Technical Pages.**

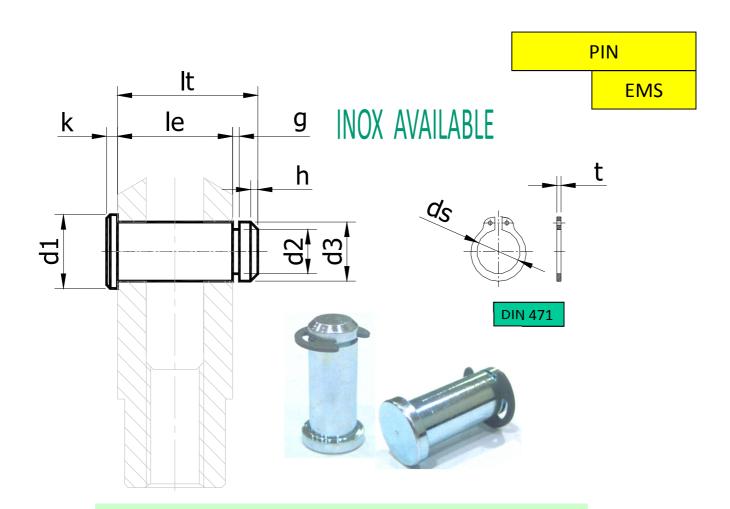
CLEVISES
TO1
TO2
TO3
TO4
TO5
TO6
TO7
TO8
TO9
TO10
TO11
TO12
TO13
TO14
TO15
TO16
TO17

CODE	d h1	I	w	le	tl	KG/PCS
TOC 1	4	ത	11,0	15,0	18,5	0,0016
TOC 2	4	ത	11,0	22,0	26,0	0,0020
TOC 3	5	12	13,5	19,0	23,0	0,0027
TOC 4	5	12	13,5	29,0	33,0	0,0029
TOC 5	6	14	16,0	23,0	28,0	0,0046
TOC 6	6	14	16,0	35,0	40,0	0,0050
TOC 7	8	19	21,5	31,0	37,0	0,0104
TOC 8	8	19	21,5	47,0	52,0	0,0115
TOC 9	10	23	26,0	39,0	45,0	0,0190
TOC 10	10	23	26,0	59,0	65,0	0,0210
TOC 11	12	28	31,0	47,0	53,0	0,0340
TOC 12	12	28	31,0	69,0	78,0	0,0345
TOC 13	14	31	34,0	52,0	62,0	0,0450
TOC 14	14	31	34,0	82,0	91,0	0,0500
TOC 15	16	36	39	62,0	73,0	0,0700
TOC 16	16	36	39	92,0	103,0	0,0715
TOC 17	20	45	50	76,0	88,0	0,1320









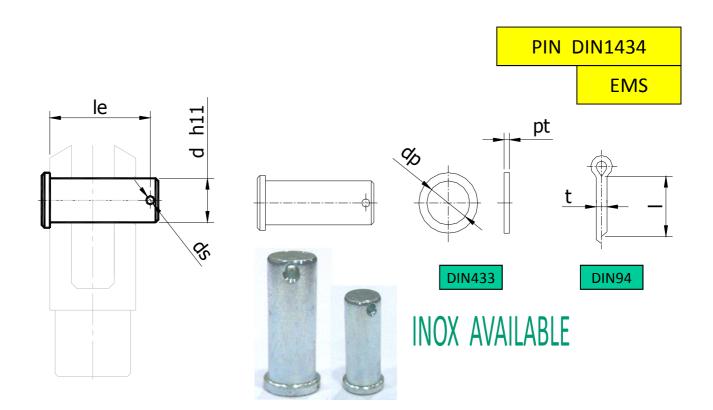
PIN OF CLEVISES

For a quotation, please look at below types and select the part number(s) you require.

Material: 11SMnPb30

Protective Finish: Zinc plated and yellow, white, black passivated. (Standard application) **You can look at technical pages for further information. See; Technical Pages.**

MOUNTING	CODE	DESCRIBTION	d3 h1	d1 h14	d2 h11	lt	le +3 +1	h	g	k	KG/PCS	ds	t
TO1, TO2	TOPB 1	4 X 10 X 8	4	6	3,2	10,0	8	0,5	0,65	1,5	0,0014	3,7	0,4
TO3, TO4	TOPB 2	5 X 12.5 X 10	5	8	4,0	12,5	10	0,5	0,75	1,5	0,0024	4,7	0,6
TO5, TO6	TOPB 3	6 X 15 X 12	6	9	5,0	15,0	12	1,0	0,75	2,0	0,0044	5,6	0,7
TO7, TO8	TOPB 4	8 X 19,5 X 16	8	12	6,0	19,5	16	1,0	0,95	2,0	0,0094	7,4	0,8
TO9, TO10	TOPB 5	10 X 24,5 X 20	10	14	8,0	24,5	20	1,0	1,15	2,0	0,0178	9,3	1,0
TO11, TO12	TOPB 6	12 X 29 X 24	12	16	9,0	29,0	24	1,5	1,15	3,0	0,0336	11,0	1,0
TO13, TO14	TOPB 7	14 X 31 X 27	14	18	11,0	31,0	27	1,5	1,15	3,0	0,0507	12,9	1,0
TO15, TO16	TOPB 8	16 X 38 X 32	16	20	12,0	38,0	32	1,5	1,15	3,5	0,0747	14,7	1,0
TO17	TOPB 9	20 X 46 X 40	20	26	17,5	46,0	40	1,5	1,50	4,0	0,0130	18,5	1,2
TO18	TOPB 10	25 X 56 X 50	25	28	22,0	56,0	50	1,5	1,50	4,0	0,0270	23,2	1,2
TO19	TOPB 11	28 X 62 X 55	28	34	24,0	62,0	55	2,0	2,00	4,0	0,0350	25,9	1,50
TO20	TOPB 12	30 X 68 X 60	30	36	25,0	68,0	60	2,0	2,00	5,0	0,0440	27,9	1,50
TO21	TOPB 13	35 X 78 X 70	35	40	30,0	78,0	70	2,0	2,00	5,0	0,0750	32,2	1,50
TO22	TOPB 14	42 X 93 X 85	42	50	35,0	93,0	85	2,0	2,00	5,0	0,1200	38,5	1,75



PIN OF CLEVISES

Standard based on DIN 1434

For a quotation, please look at below types and select the part number(s) you require.

Material: 11SMnPb30

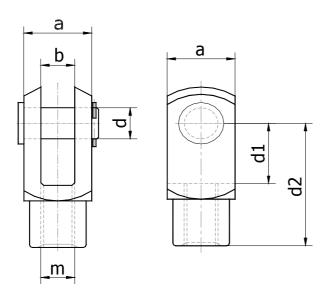
Protective Finish: Zinc plated and yellow, white, black passivated. (Standard application) **You can look at technical pages for further information. See; Technical Pages.**

MOUNTING	CODE	DESCRIBTION	d	le	KG/PCS	DIN 4	133	DIN 94
WOONTING	CODE	DESCRIBITION	h1	ש	KG/PC3	dp	pt	t X I
TO1, TO2	TOPS 1	4 X 12 X 9,2	4	9,2	0,0014	4,3	0,5	1,0 X 10
TO3, TO4	TOPS 2	5 X 16 X 12	5	12,0	0,0024	5,3	1,0	1,6 X 10
TO5, TO6	TOPS 3	6 X 18 X 14,6	6	14,5	0,0044	6,4	1,6	1,6 X 10
TO7, TO8	TOPS 4	8 X 25 X 18,8	8	18,7	0,0094	8,4	1,6	2,0 X 16
TO9, TO10	TOPS 5	10 X 28 X 23,5	10	23,2	0,0178	10,5	1,6	3,2 X 20
TO11, TO12	TOPS 6	12 X 35 X 28,0	12	28,2	0,0336	13	2,0	4,0 X 25
TO13, TO14	TOPS 7	14 X 40 X 32,5	14	31,2	0,0507	15	2,5	4,0 X 25
TO15, TO16	TOPS 8	16 X 45 X 36,5	16	36,2	0,0747	17	2,5	4,0 X 25
TO17	TOPS 9	20 X 54 X 47,0	20	47,0	0,0130	21	3,0	4,0 X 25
TO18	TOPS 10	25 X 67 X 59,0	25	59,0	0,0270	25	4,0	6,3 X 45
TO19	TOPS 11	28 X 72 X 63,5	28	63,5	0,0350	28	4,0	6,3 X 45
TO20	TOPS 12	30 X 75 X 67,0	30	67,0	0,0440	30	4,0	6,3 X 63
TO21	TOPS 13	36 X 87 X 76,0	35	76,0	0,0750	36	5,0	8,0 X 63
TO22	TOPS 14	42 X 104 X 94,0	42	90,0	0,1200	43	5,0	8,0 X 63

S.S. CLEVISES

EMS

INOX





CLEVISES

Standard based on DIN 71752 - Metric sizes

For a quotation, please look at below types and select the part number(s) you require.

Material: 303, 1.4305

Protective Finish: Zinc plated and yellow, white or black passivated.

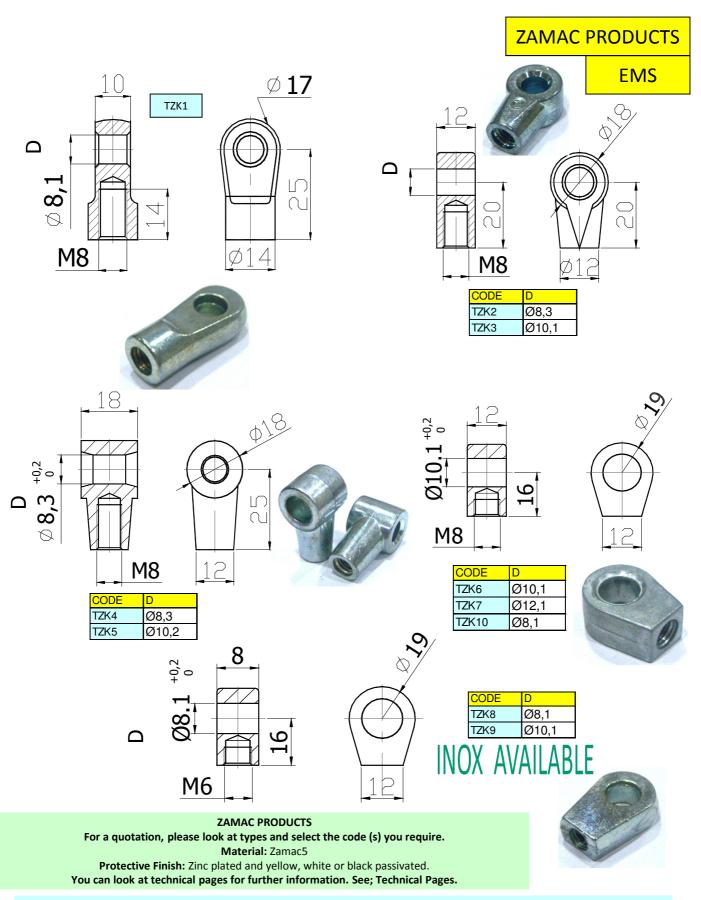
You can look at technical pages for further information. See; Technical Pages.

With metric fine-pitch thread, m=M8x1,25 only add "FP" on the code. TO7FP



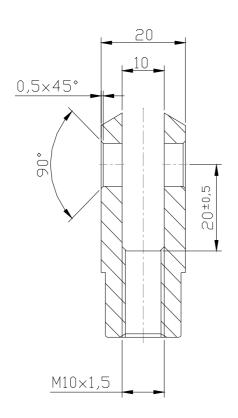
CODE	m 6H	d1	a	b	d2	d H9
TO 063	M4	8	8	4	18	4
TO 083	M6	12	12	6	24	6
TO 103	M8	16	16	8	32	8
TO 203	M10	20	20	10	40	10
TO 223	M14	28	28	14	56	14
TO 243	M14x1,5	28	28	14	56	14

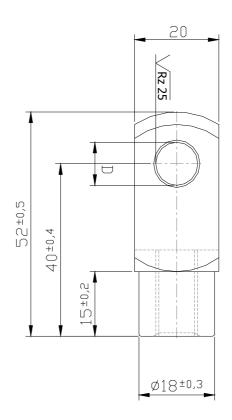




ZAMAC PRODUCTS

EMS





CODE	D
TZKC-01	Ø8,2
TZKC-02	Ø10,2
TZKC-03	Ø12,2

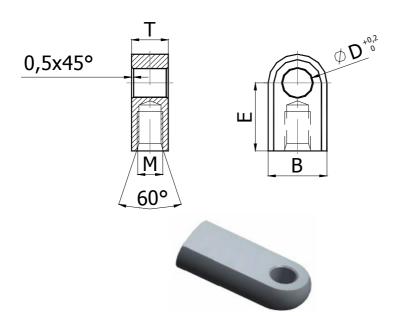
ZAMAC PRODUCTS

For a quotation, please look at types and select the code (s) you require.

Material: Zamac

Protective Finish: Zinc plated and yellow, white or black passivated.
You can look at technical pages for further information. See; Technical Pages.

EMS



CODE	D (+0,2)	T (+0,2)	M	Е	В
TDN016	6,1	10	M8	16	16
TDN068	6,1	10	M8	18	16
TDN728	7,28	10	M8	20	16
TDN16	8,1	12	M8	16	16
TDN018	8,1	10	M8	16	16
TDN817	8,1	10	M8	17	16
TDN198	8,1	10	M6	19	16
TDN20	8,1	12	M10	20	16
TDN829	8,1	10	M8	20	16
TDN22	8,1	12	M10	22	16
TDN190	10,1	10	M6	19	16

EYE PRODUCTS

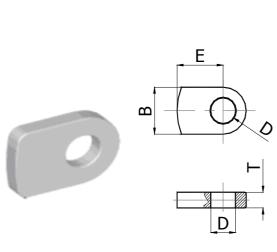
For a quotation, please look at below types and select the part number(s) you require.

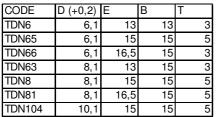
Material: 11S Mn Pb 30K (SAE 12L14),

Protective Finish: Zinc plated and yellow, white or black passivated.

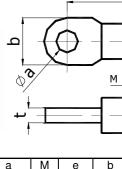
You can look at technical pages for further information. See; Technical Pages.

With metric fine-pitch thread, m=M8x1,25 only add "FP" on the code. TDN22-FP





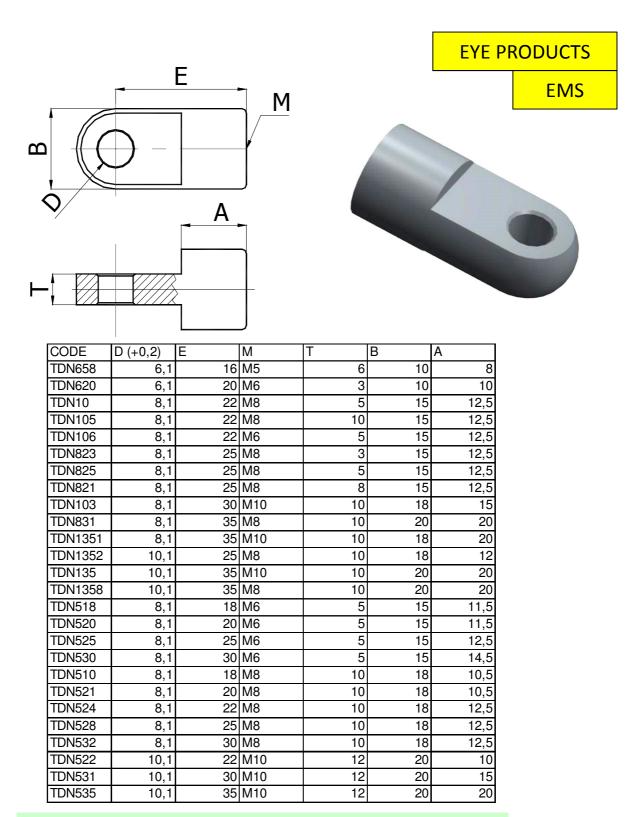




е



CODE	а	IVI	е	a	τ
TDN824	6,2	M6	15	13	3
TDN603	6,2	M6	20	15	3
TDN663	6,2	M6	22	15	3
TDN123	6,2	M6	22	15	5
TDN628	6,2	M8	22	15	10
TDN082	8,2	M6	22	15	3
TDN828	8,2	M6	22	15	5
TDN822	8,2	M8	22	15	5
TDN622	8,2	M6	25	15	5
TDN128	8,2	M8	25	15	5
TDN835	8,2	M8	30	15	5
TDN623	10,2	M6	25	15	5
TDN125	10,2	M8	25	15	5
TDN836	10,2	M8	30	15	5



EYE PRODUCTS

For a quotation, please look at below types and select the part number(s) you require.

Material: 11S Mn Pb 30K (SAE 12L14),

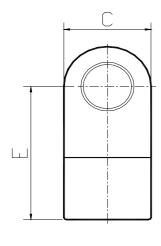
Protective Finish: Zinc plated and yellow, white or black passivated.

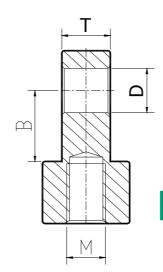
You can look at technical pages for further information. See; Technical Pages.

With metric fine-pitch thread, m=M8x1,25 only add "FP" on the code. TDN10-FP

S.S. EYE PRODUCTS

EMS









CODE	М	В	С	Т	E	D
TDNP 263	M4	7	8	4	12	4,1
TDNP 283	M6	9	10	6	16	6,1
TDNP 303	M6	12	14	5	26	6,1
TDNP 323	M6	12	14	5	26	8,1
TDNP 343	M8	13	15	10	19	8,1
TDNP 363	M8	16	18	10	30	8,1
TDNP 383	M8	16	18	10	30	10,1
TDNP 403	M10	16	18	10	30	8,1
TDNP 503	M14	17	22	14	38	14,1
TDNP 803	M14	17	22	14	27	14,1



TDNP 65

19,3 7 1,5 06,5 10 26

S.S. EYE PRODUCTS

For a quotation, please look at below types and select the part number(s) you require.

Material: 303, 1.4305

You can look at technical pages for further information. See; Technical Pages.

With metric fine-pitch thread, m=M8x1,25 only add "FP" on the code.

TDNP263-FP

INOX

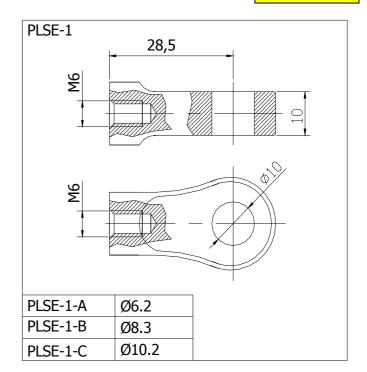
PLASTIC PARTS

EMS



Material: PA66 Colour: BLACK

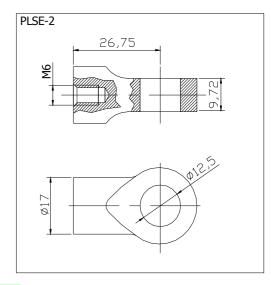






Material: PA66 Colour: BLACK





PLASTIC PARTS

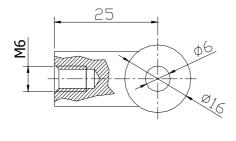
For a quotation, please look at types and select the code (s) you require.

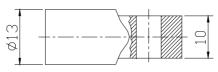
All the colours can be applied on the products. See; Technical Pages.



PLS-15

Material: PA66 Colour: BLACK

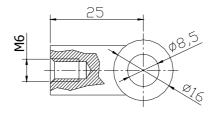


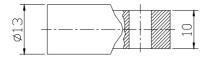




PLS-16

Material: PA66 Colour: BLACK

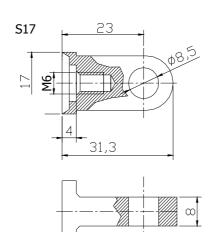






PLS-17

Material: PA66 Colour: BLACK







PLASTIC PARTS

For a quotation, please look at types and select the code (s) you require.

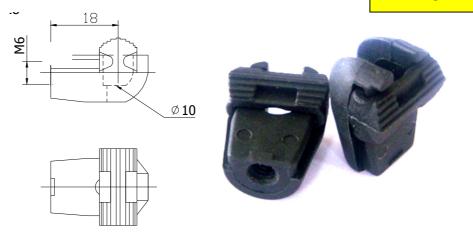
All the colours can be applied on the products. See; Technical Pages.



EMS

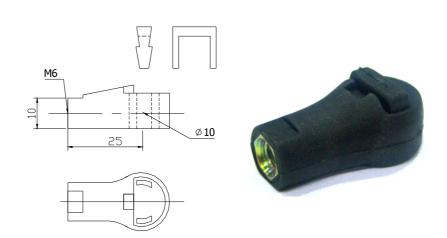
PLS-18

Material: PA66 Colour: BLACK



PLS-19

Material: PA66 Colour: BLACK



PLS-20

Material: PA66 Colour: BLACK



PLASTIC PARTS

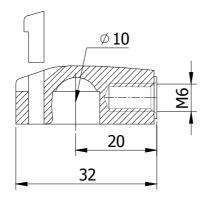
For a quotation, please look at types and select the code (s) you require.

All the colours can be applied on the products. See; Technical Pages.



PLS-21

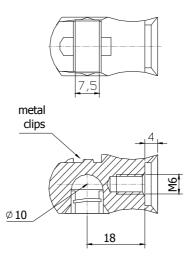
Material: PA66 Colour: BLACK





PLS-22

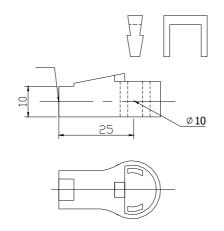
Material: PA66 Colour: BLACK





PLS-23

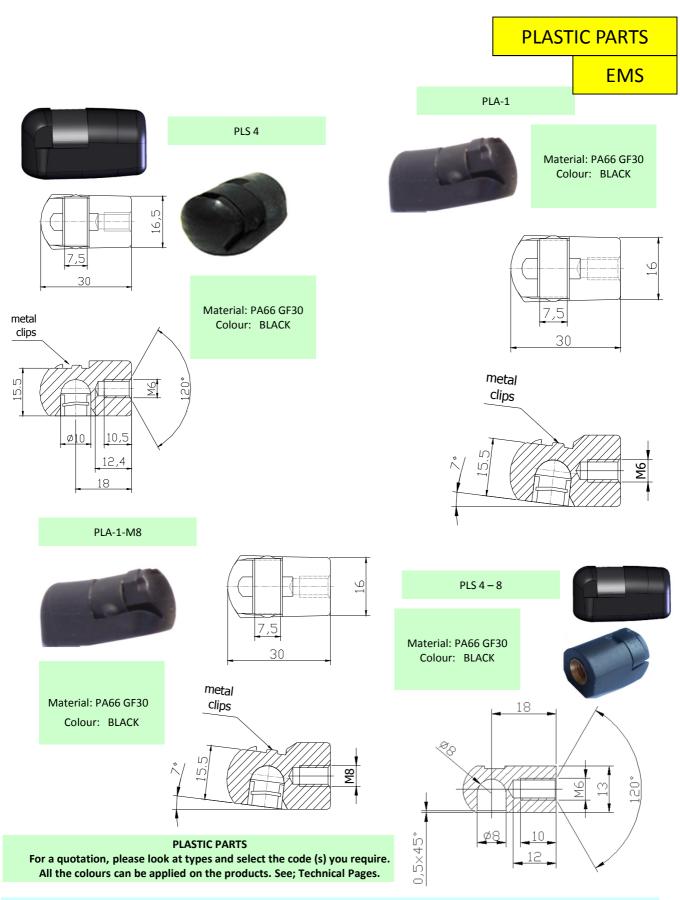
Material: PA66 Colour: BLACK

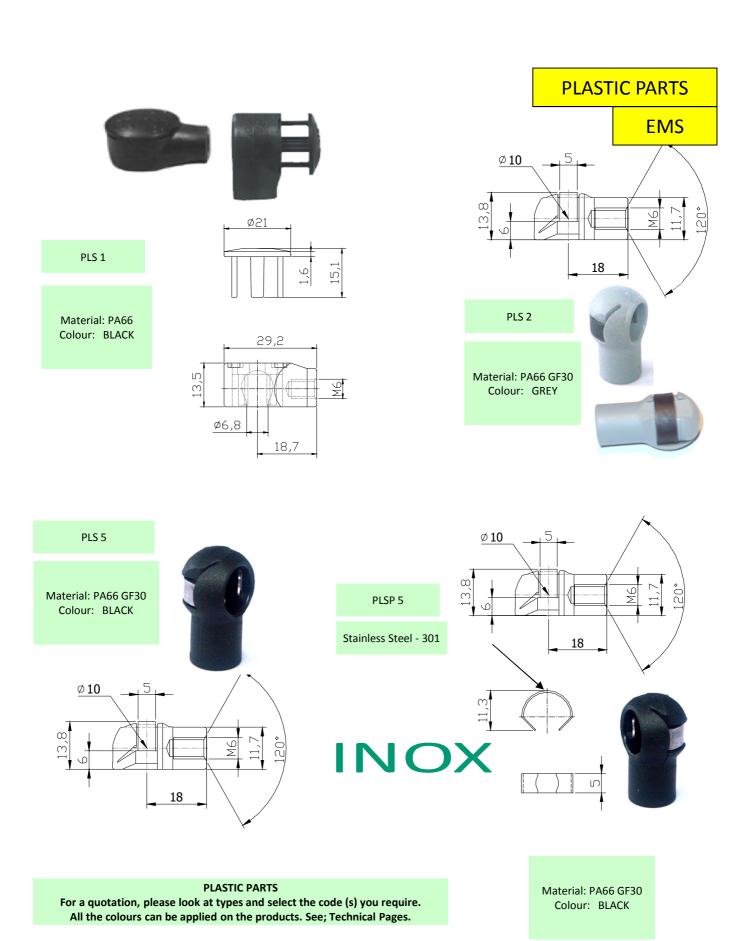


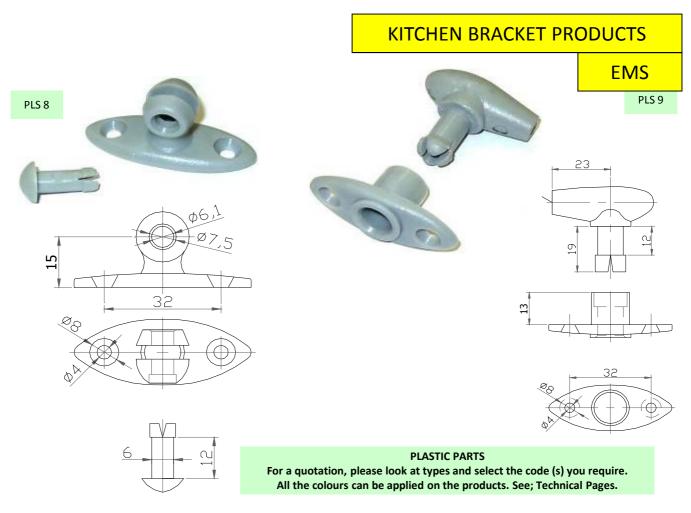


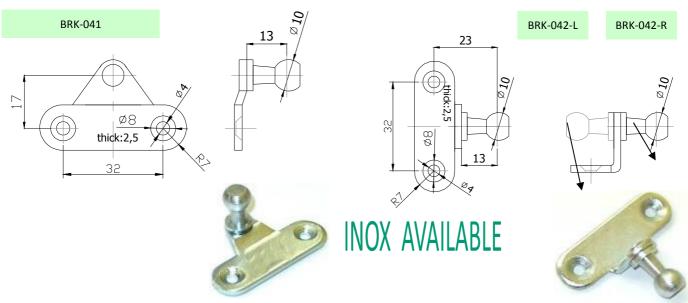
PLASTIC PARTS

For a quotation, please look at types and select the code (s) you require. All the colours can be applied on the products. See; Technical Pages.









BRACKET PRODUCTS

For a quotation, please look at types and select the code (s) you require.

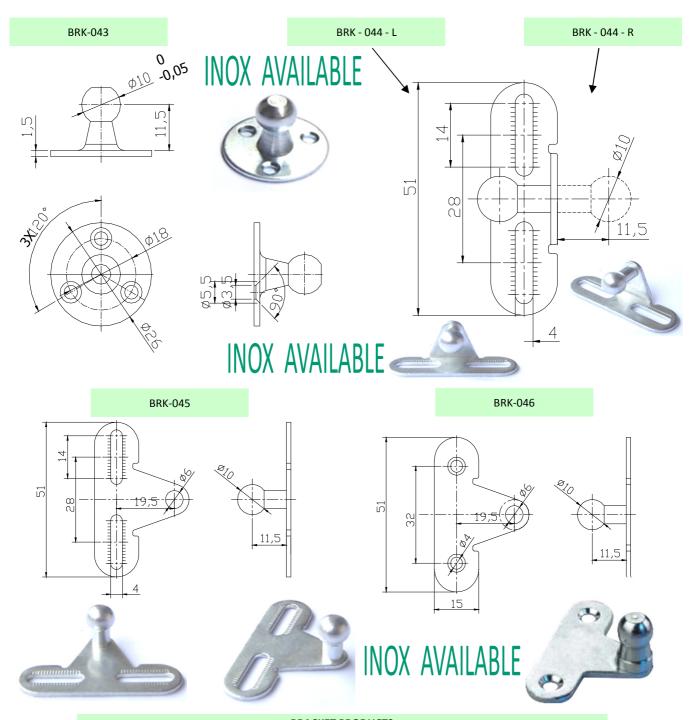
Material: Steel Sheet or Stainless Steel

Protective Finish: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.

KITCHEN BRACKET PRODUCTS

EMS



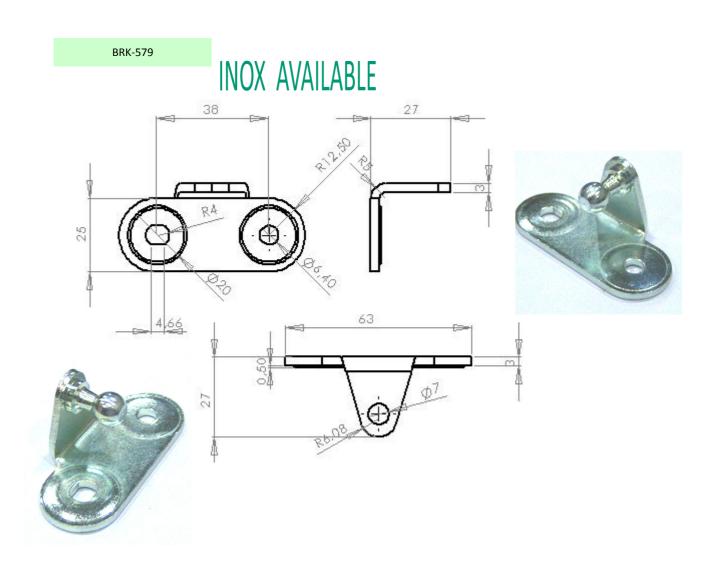
BRACKET PRODUCTS

For a quotation, please look at types and select the code (s) you require.

Material: Steel Sheet or Stainless Steel

Protective Finish: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.



BRACKET PRODUCTS

For a quotation, please look at types and select the code (s) you require.

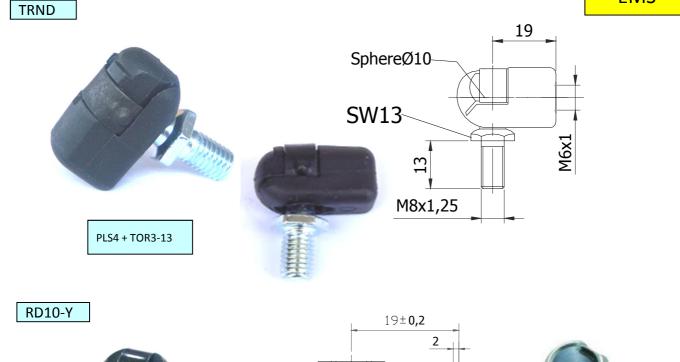
Material: Steel Sheet or Stainless Steel

Protective Finish: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.

SPECIAL PRODUCTS

EMS



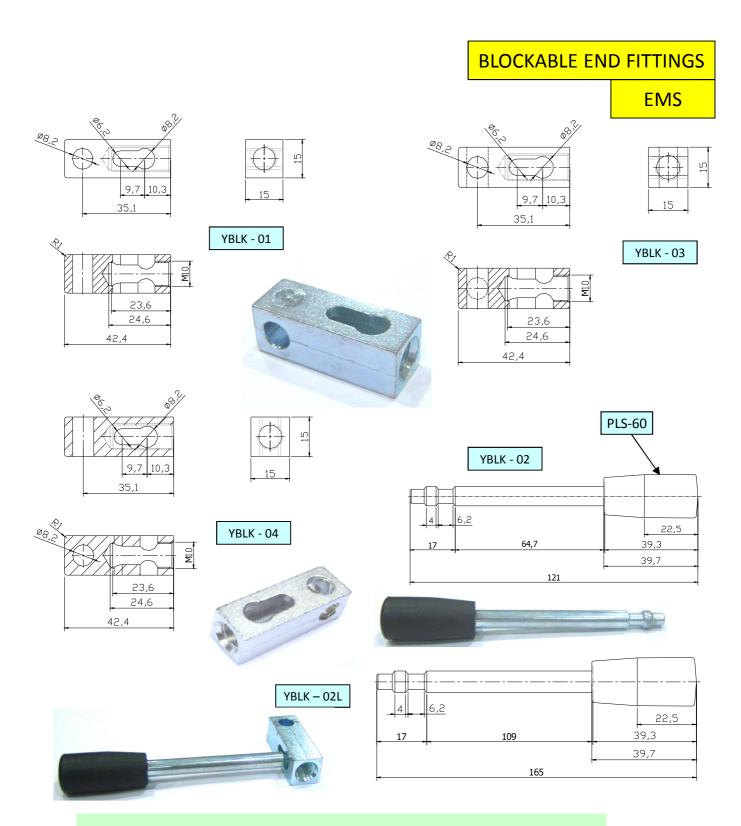
For a quotation, please look at below types and select the part number(s) you require.

Material: 11S Mn Pb 30K (SAE 12L14), Clips: CK67

Protective Finish: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.





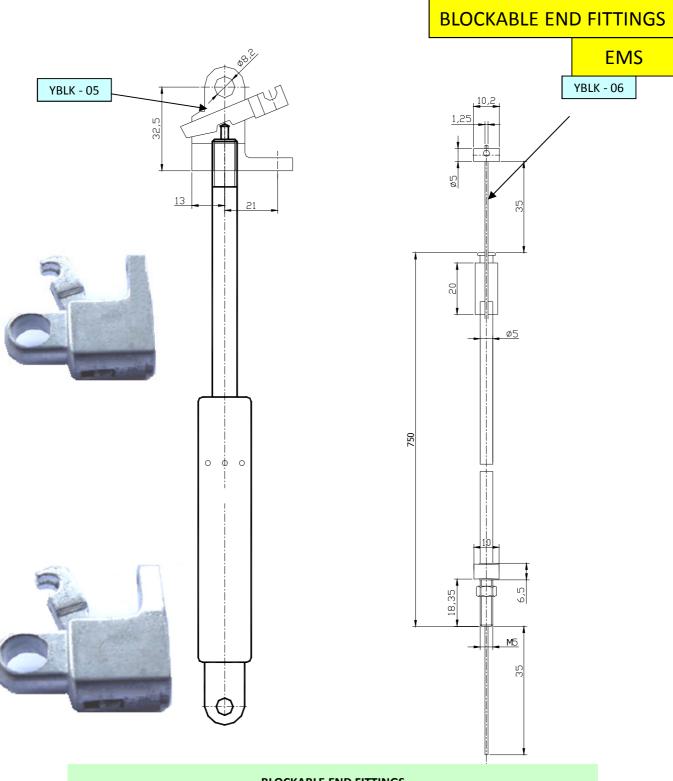
BLOCKABLE END FITTINGS

For a quotation, please look at types and select the code(s) you require.

Material: Body: Zamac, Shaft: 11S Mn Pb 30K (SAE 12L14), Handle: PA66 GF30

Protective Finish: Shaft, Body: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.



BLOCKABLE END FITTINGS

For a quotation, please look at types and select the code(s) you require.

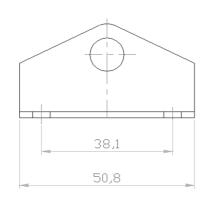
Material: YBLK05-Body: Zamac, Shaft: Zamac--YBLK06-wire, steel

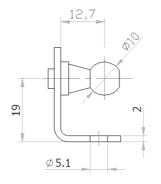
Protective Finish: Shaft, Body: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.



EMS

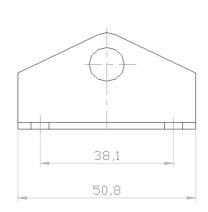


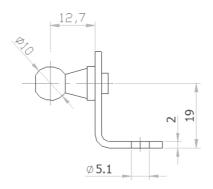


BRK-402R





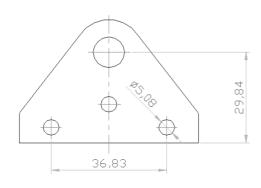


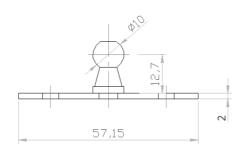


BRK-402L



INOX AVAILABLE





BRK-202



BRACKET PRODUCTS

For a quotation, please look at types and select the code (s) you require.

Material: Steel Sheet or Stainless Steel

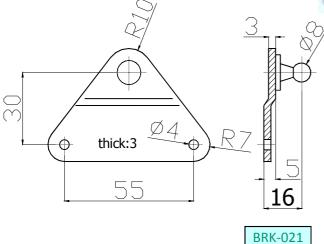
Protective Finish: Zinc plated and yellow, white or black passivated. **You can look at technical pages for further information. See; Technical Pages.**

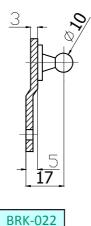


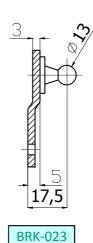




INOX AVAILABLE

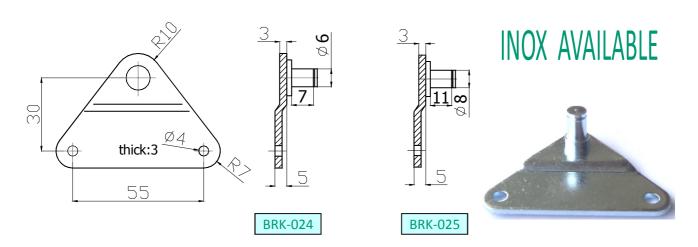






022 BRI

ALL THE BRACKETS ARE PRODUCED WITH THE SAME MOULD BUT WITH DIFFERENT FITTINGS



BRACKET PRODUCTS

For a quotation, please look at types and select the code (s) you require.

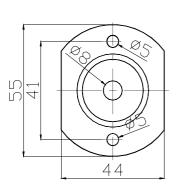
Material: Steel Sheet or Stainless Steel

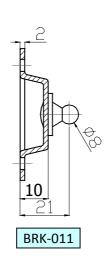
Protective Finish: Zinc plated and yellow, white or black passivated.

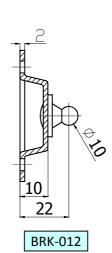
You can look at technical pages for further information. See; Technical Pages.

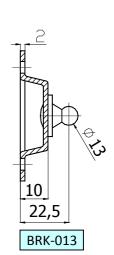
BRACKET PRODUCTS

EMS





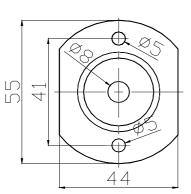




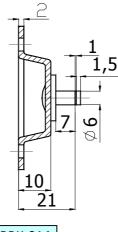
ALL THE BRACKETS ARE PRODUCED WITH THE SAME MOULD BUT WITH DIFFERENT FITTINGS





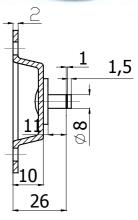


INOX AVAILABLE









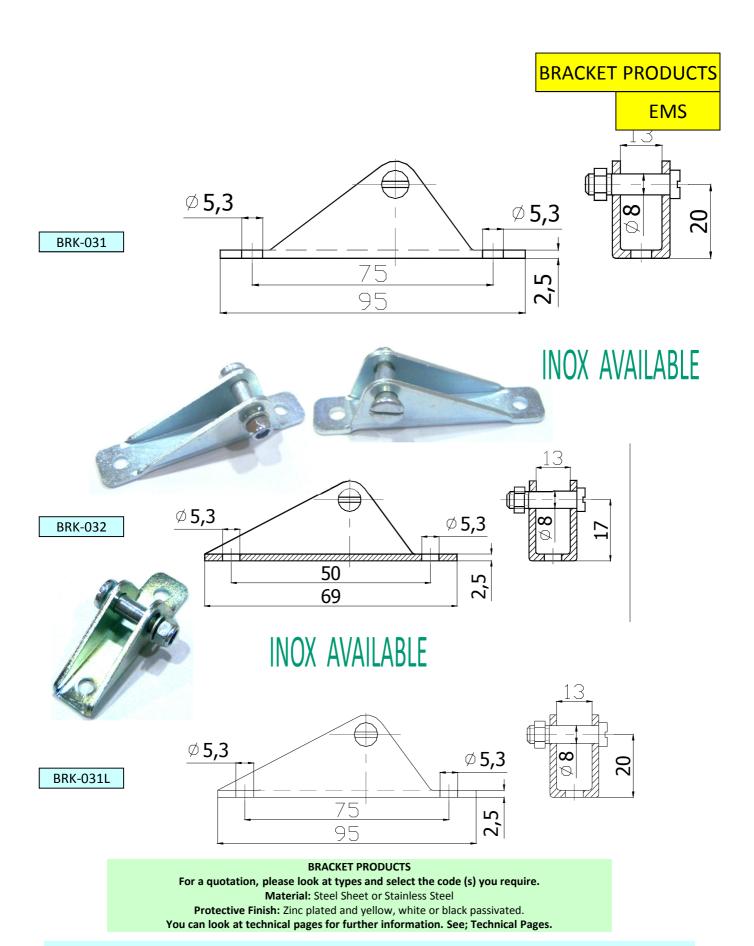
BRK-015

BRACKET PRODUCTS

For a quotation, please look at types and select the code (s) you require. Material: Steel Sheet or Stainless Steel

Protective Finish: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.

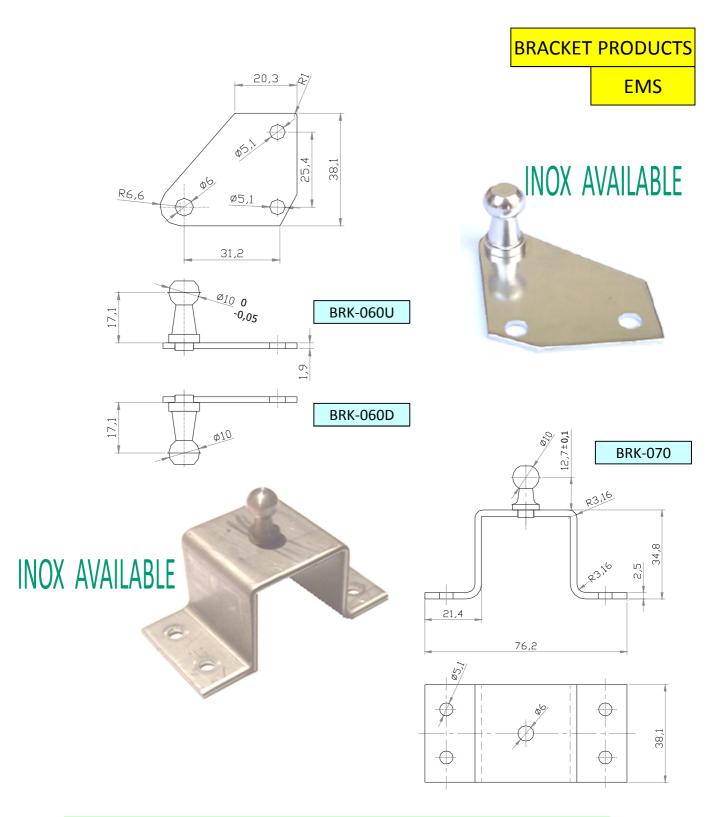




Material: Steel Sheet or Stainless Steel

Protective Finish: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.



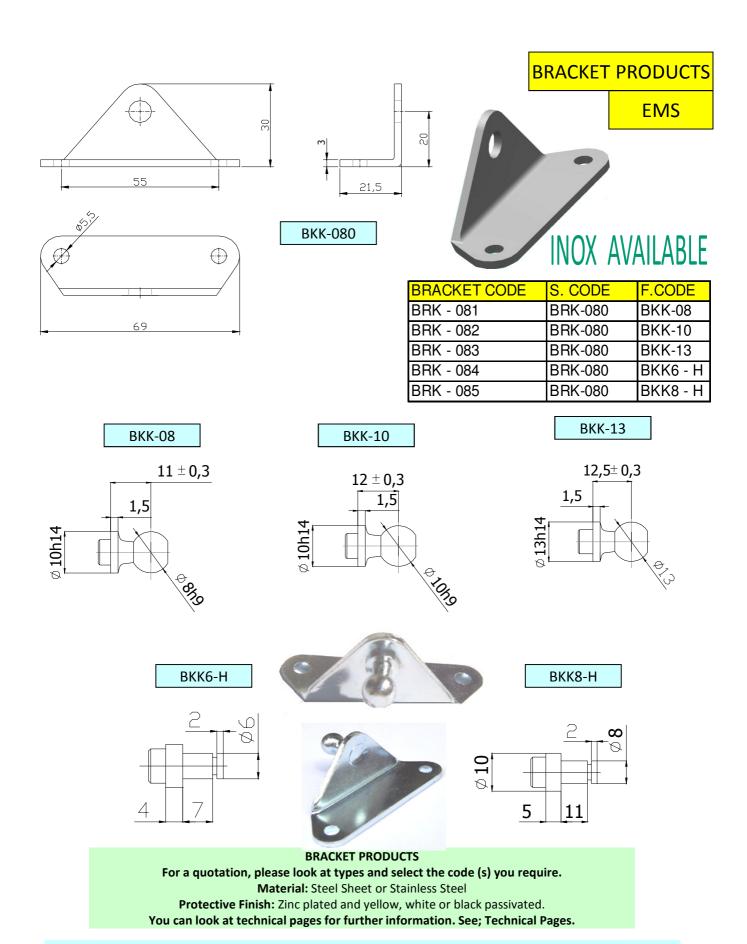
BRACKET PRODUCTS

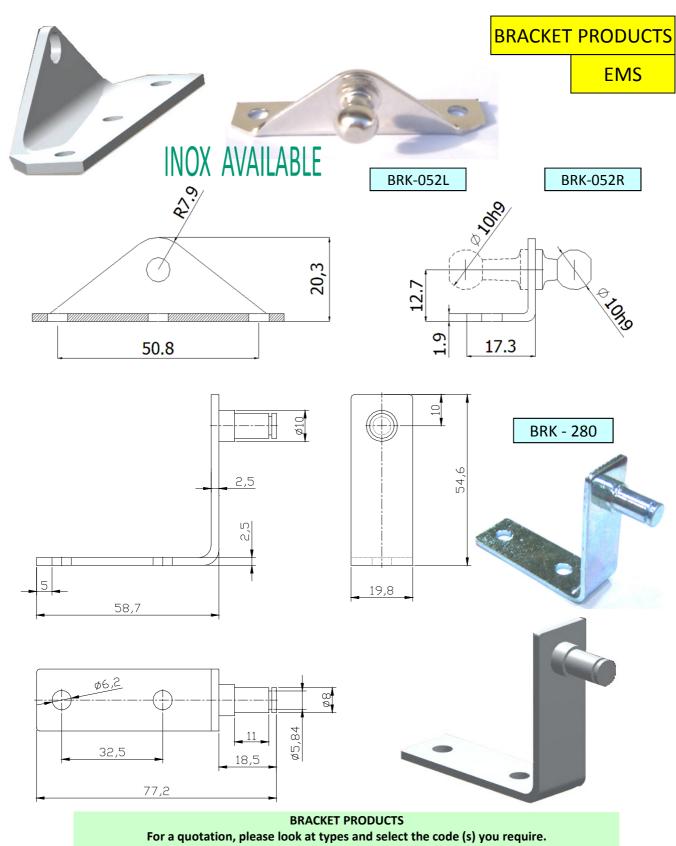
For a quotation, please look at types and select the code (s) you require.

Material: Steel Sheet or Stainless Steel

Protective Finish: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.





Material: Steel Sheet or Stainless Steel

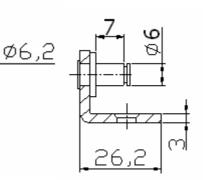
Protective Finish: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.

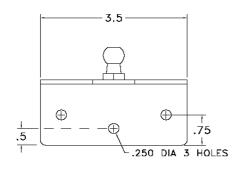


EMS

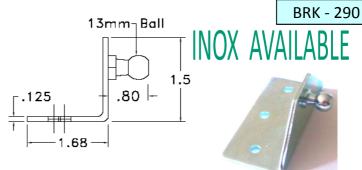
BRK - 284

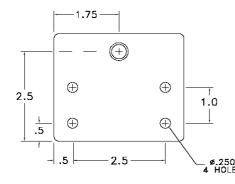


BRACKET CODE	S. CODE	F.CODE
BRK - 281	BRK-280	BKK-68
BRK - 282	BRK-280	BKK-610
BRK - 283	BRK-280	BKK-613
BRK - 284	BRK-280	BKK6-6H
BRK - 285	BRK-280	BKK8-8H

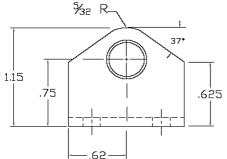


45













BRK - 292

BRACKET PRODUCTS

For a quotation, please look at types and select the code (s) you require.

Material: Steel Sheet or Stainless Steel

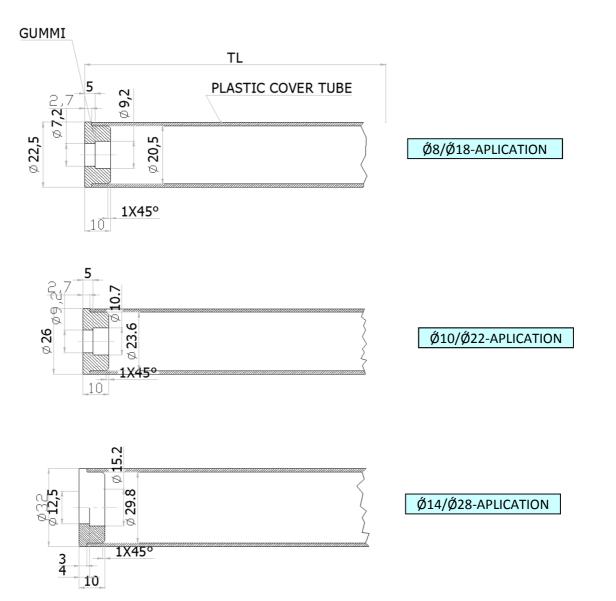
Protective Finish: Zinc plated and yellow, white or black passivated.

You can look at technical pages for further information. See; Technical Pages.



EMS





PROTECTION TUBE - PLASTIC

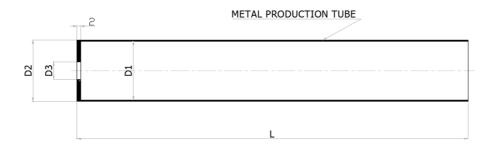
For a quotation, please look at types and select the APLICATION (s) you require.

Material: Plastic-black

You can look at technical pages for further information. See; Technical Pages.

LOCKING-PROTECTION TUBE-METAL

EMS



CODE	D3	D1	D2	L
MTP8-18-L				
MTP10-22-L				
MTP10-27-L				
MTP14-27-L				



LOCKING-PROTECTION TUBE-METAL

For a quotation, please look at types and select the MODEL (s) you require, and contact us for technical drawings.

Material: metal tube: Steel Sheet or Stainless Steel

Protective Finish: metal tube: painting.

You can look at technical pages for further information. See; Technical Pages.

Some of our brackets...



Please feel free to contact us for your new projects or for current items you have problem regarding quality or you pay expensive amounts.

Oinonen Tooling

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